



Achieving Digital Equity

The Oakland Town Link Program Playbook

By Vinhcent Le and Christine Phan

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THE GREENLINING INSTITUTE

The Greenlining Institute works towards a future where communities of color can build wealth, live in healthy places filled with economic opportunity, and are ready to meet the challenges posed by climate change. Greenlining is building an abundant future that brings investments and opportunities into our communities – what we call Greenlining. Since 1993, we have successfully advocated and negotiated initiatives directing more than \$800 billion in corporate and public investments into communities of color in California and across the nation.

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Representatives from #OaklandUndivided, The Town Link Program, The City of Oakland and community organizations shared Oakland's digital equity needs with leadership from the NTIA and the California Department of Technology in August 2022. Photo Credit: #OaklandUndivided

Executive Summary:

Communities across the United States have a once in a generation opportunity to close the digital divide with the passage of the Digital Equity Act which provides \$2.69 billion in grant funding to states, local governments, and community organizations to address barriers to digital equity. This report provides an overview of learnings and recommendations from the Town Link digital inclusion program which can help local governments and community organizations apply for digital equity grants and develop their own digital inclusion program. The Town Link program was a partnership between The Greenlining Institute, the City of Oakland and community based organizations focused on increasing access to affordable internet, digital literacy skills and computing devices for Oakland families facing barriers to digital equity and inclusion.

Key Findings:

- Stark connectivity barriers persist in Oakland's low-income households. Only 58% of surveyed households with an annual household income of \$20,000 or less have home internet access.
- Low-cost plans are unpopular among qualified households. Only 55% of survey respondents earning less than \$20,000 a year or less with internet access subscribed to low-cost internet plans.
- Oakland residents continue to lack access to laptops and computers. Over a quarter of respondents overall reported no access to a computer at home and that number rose to nearly 40% for Latino respondents.
- Many residents face significant digital literacy gaps. 15-25% of respondents reported they are not confident doing key online tasks that are relevant to economic opportunity and participation in everyday life, such as searching for jobs or accessing government services using the internet.

- Oakland residents are unaware of key digital inclusion programs. Approximately 67% of respondents were not aware of the Affordable Connectivity Program (ACP) at the time of the survey. Households that were aware of and qualified for ACP and Lifeline were most likely to cite difficulty in enrollment as the reason they did not utilize these programs.

Key Recommendations:

- **Invest In Multi-Sector Coalitions:** Digital equity coalitions are a collective of organizations operating within a collaborative structure to achieve a shared set of digital equity goals. These coalitions can help local communities achieve their digital equity goals, raise the profile of local digital inclusion efforts and create alignment between multiple stakeholders.
- **Develop Data-Driven and Locally Relevant Prioritization Criteria:** The Digital Equity Act (DEA) asks localities to target a broad list of “covered populations” in their digital equity efforts. To maximize the impact of DEA grants, digital inclusion efforts should be further targeted toward the neighborhoods and populations that have the lowest broadband adoption rates or are the most economically disadvantaged within DEA covered populations.
- **Simplify Participation for Community Based Organizations (CBOs):** Cities interested in working with multiple community partners in their digital inclusion program should address barriers to CBO participation to help include smaller organizations that may be a good fit but lack the experience or confidence to participate in these programs. This can include providing technical assistance and simplifying the application process.
- **Focus on Recruiting Trusted Messengers with Pre-existing Communication Channels with Priority Communities:** Organizations such as libraries or other direct service organizations that provide food, housing assistance, or other services to community members are strongly positioned as trusted messengers and should be encouraged to become digital navigators, even if they do not have prior experience with digital inclusion work. These organizations will typically have existing intake and referral services and can add digital navigator services to their portfolio more readily than an organization that has to develop this capability and community relationships from the ground up.

Introduction

In late 2020, the City of Oakland in California and The Greenlining Institute partnered to develop the Town Link program to build digital equity and address Oakland's digital divide which impacted nearly 94,000 Oakland residents who did not have access to internet connectivity or a computer.¹ For families in an increasingly connected and online society, these connectivity gaps limit access to economic opportunities, worsens educational, employment and health outcomes and deepens income inequality.² These major gaps in internet access, particularly among communities of color and low-income families, led Greenlining and Oakland to create the Town Link digital inclusion program which was designed to promote digital literacy, affordable internet options and access to computing devices while prioritizing Oakland's digitally disconnected communities. The Town Link program also sought to identify best practices to guide future efforts to increase digital literacy and inclusion among Oakland's persistently unconnected households.

Achieving Digital Equity: The Oakland Town Link Program Playbook provides an overview of Oakland's digital equity strategy, data on Oakland's digital access barriers, and recommendations for local governments interested in taking advantage of funding available under the Digital Equity Act to develop digital inclusion programs within their communities. This report is a supplement to resources from organizations like the National Digital Inclusion Alliance (NDIA) that provide step-by-step guides to developing local digital inclusion programs.³ Recommendations from this report can inform how communities develop their own digital equity plans and help ensure that those with the least access to the internet, such as low-income families and communities of color are centered within digital inclusion programs and have the devices, skills, and internet access they need to fully participate in today's society.⁴

Key Definitions:

Digital Divide refers to the economic, educational, and social inequalities between those who have computers and online access and those who do not.

Digital Equity is where all individuals and communities have internet access as well as the digital tools and skills needed for full participation in our society, democracy, and economy.

Digital Inclusion refers to the activities necessary to create digital equity. These activities focus on:

- Affordable, robust broadband internet service;
- Internet-enabled devices that meet the needs of the user;
- Access to digital literacy training;
- Quality Technical Support
- Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration

Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology. (NDIA)



#OaklandUndivided present strategies for closing the digital divide in Oakland. Photo Credit #OaklandUndivided.”

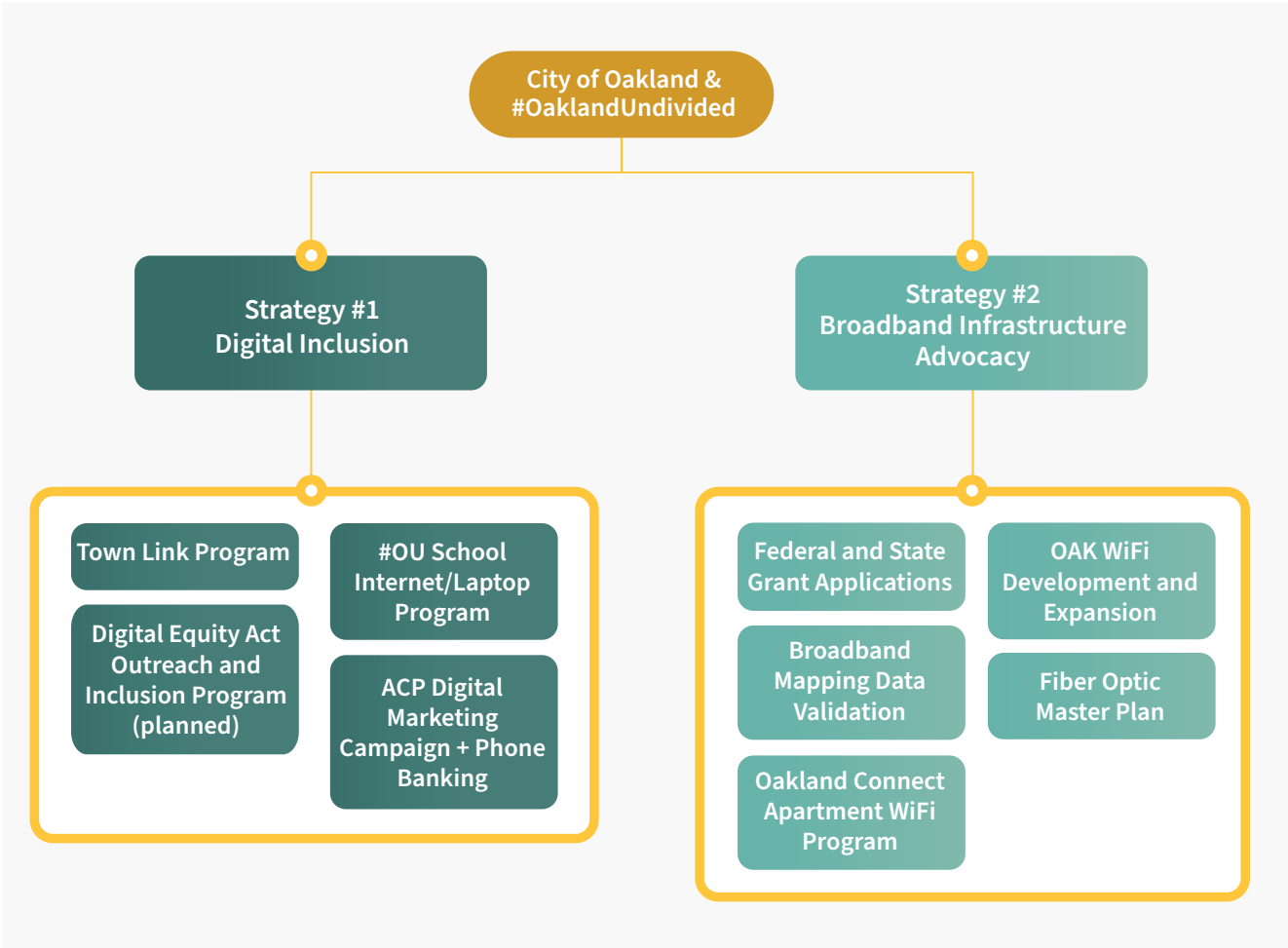
Oakland’s Digital Equity Strategy

In the wake of the COVID-19 pandemic, Oakland made a commitment to address the stark digital divide within the city spurring the development of Oakland’s digital equity strategy and the formation of a collective impact initiative known as #OaklandUndivided (#OU).⁵ #OU partners include local government, schools, non-profits, philanthropy organizations, and businesses from across Oakland and California that joined together to address digital access needs in Oakland’s schools and neighborhoods.⁶

A key component of Oakland’s strategy focuses on improving Oakland’s broadband infrastructure by pursuing opportunities within state and federal infrastructure programs. Improved access to fiber internet infrastructure is critical to catalyze Internet Service Provider (ISP) competition and investment, as well as to improve internet speeds and reliability for residents.⁷ Additional fiber infrastructure is also key to improve the reach of Oakland’s public Wi-Fi system—Oak WiFi.⁸ As part of this strategy, Oakland and #OU worked together to successfully advocate for fiber internet infrastructure in Oakland’s underserved communities and funding for broadband infrastructure planning.⁹ #OU is currently working with the Oakland Housing Authority and other local partners to verify the accuracy of state and federal broadband maps and provide corrections, this is necessary because inaccurate maps impact Oakland’s ability to access broadband infrastructure funding. Other elements of this infrastructure strategy include connecting Oakland apartments to free WiFi networks and the continued development of Oakland’s fiber optic master plan and the Oak WiFi network.¹⁰

Oakland’s infrastructure development strategy is complemented by a robust digital inclusion program. The centerpiece of this strategy is #OU’s schools-based computer and hotspot connectivity program which has distributed over 25,000 laptops and 10,000 hotspots to Oakland students.¹¹ Oakland’s digital inclusion strategy also includes a digital marketing and outreach campaign as well as the Town Link program. Accompanying these programs are continued efforts to pursue state and federal funding opportunities to help implement programs that connect Oakland residents to the internet as well as improve awareness of programs such as Oak WiFi, the Affordable Connectivity Program (ACP), and LifeLine.

Figure 1.1: An Overview of Oakland’s Digital Equity Strategy



This chart provides a snapshot of several key components of Oakland’s digital equity strategy.



Photo Credit: Sonrisa Cooper

The Town Link Model

The Town Link program was conceived by Oakland’s Department of Race and Equity alongside the city’s IT Department with the broad goal of increasing digital equity in Oakland by addressing gaps in: (1) basic and advanced digital literacy; (2) internet capable device ownership and (3) internet affordability—all of which contribute to lower broadband adoption rates for Oakland’s digitally disconnected communities.¹² Additionally, the Town Link program sought to identify best practices for digital inclusion programs and strategies for cultivating local partners that could provide digital navigator services on an ongoing basis. The Town Link program structure described below can serve as a model for broad community-based digital inclusion programs that involve multiple community partners and trusted messengers that center priority communities facing barriers to broadband adoption.

Greenlining was selected as the lead organization for the program and developed partnerships with 18 additional organizations to achieve the goals of the Town Link program. Greenlining partnered with EveryoneOn to provide digital literacy courses to Oakland residents and with TechExchange, a local device refurbisher, to source devices for the program.¹³ Greenlining then selected 10 local trusted messengers through a competitive application process to

Digital Navigators are individuals who address the whole digital inclusion process — home connectivity, devices, and digital skills — with community members through repeated interactions. Digital Navigators are familiar with resources that relate to digital equity, and they help residents learn to use critical online services that provide guidance with food support, rent, education, employment, childcare, government benefits and more. They recommend resources and check back with the client. (NDIA)

serve as outreach partners and provide digital navigator services for the duration of the program. Partner responsibilities included recruiting Oakland residents for EveryoneOn’s digital literacy courses and conducting outreach to connect residents to resources like the Affordable Connectivity Program (ACP). Greenlining also worked with EducationSuperHighway who provided ACP enrollment assistance for residents and programmatic training for partner staff. Finally, the Town Link program included partnerships with five tech-based workforce development organizations that provided scholarships and stipends to recruit and support Oakland priority residents interested in careers requiring advanced digital skills such as coding, digital UX design, and professional IT. services.

Figure 1.2: Town Link Program Structure



The Town Link program model focused on partnering with a wide variety of organizations that could reach multiple priority communities and providing these partners with programmatic support for devices, digital literacy instruction and ACP enrollment.



The two-year-anniversary celebration of #OaklandUndivided at Martin Luther King Jr. Elementary School in Oakland, CA.
Photo Credit: #OaklandUndivided.”

Town Link Program Impact

Town Link partners began to provide digital navigator services in early 2022 and worked to recruit Oakland residents for EveryoneOn’s six-week digital literacy courses, refer clients to affordable internet resources, and distribute computing devices. Town Link partners completed their education and outreach campaigns by the end of 2022, successfully connecting thousands of Oakland residents to digital inclusion resources to achieve the initial goals of the program:

- 1. Goal:** Build digital literacy through trainings and educational programs;
 - Impact: Town Link outreach partners hosted 17 digital literacy courses lasting six weeks each and reaching 230 Oakland residents.
- 2. Goal:** Support advanced digital literacy and workforce development opportunities;
 - Impact: Town Link workforce development partners provided stipends and scholarships to support the recruitment and instruction of 91 students.
- 3. Goal:** Increase enrollment in free and affordable broadband programs through outreach and education campaigns;
 - Impact: Town Link outreach campaigns reached over 9,600 Oakland residents through pop-up events, help desks, phone banking, SMS texting, social media, e-mail, and outreach flyers.
- 4. Goal:** Gather survey data on Oakland broadband access barriers;
 - Impact: Town Link partners collected over 760 survey responses identifying Oakland digital access barriers.
- 5. Goal:** Distribute devices to low-income residents;
 - Impact: Town Link partners distributed 260 refurbished laptops which included a one-year warranty and tech support provided by The Tech Exchange, a local tech hub and device refurbisher.
- 6. Goal:** Engage local trusted messengers to become digital navigators
 - Impact: Greenlining recruited 10 outreach partners for the program. Four partners continue to provide digital navigator services after the grant period.

Town Link Survey Results and Findings

Town Link program partners conducted a survey throughout 2022 to identify digital access barriers within Oakland. The survey was developed with community input on questions and framing and the survey was targeted to a set of “priority” residents that have the largest internet access needs. These survey results provide a look at the internet connectivity needs, device ownership trends, digital literacy gaps, and awareness of digital inclusion programs like LifeLine and ACP within Oakland. The findings here are not representative of Oakland as a whole; however, they provide insight into the needs of hard to reach populations and can help Oakland develop and target future citywide digital inclusion efforts and partnerships aimed at closing the digital divide.

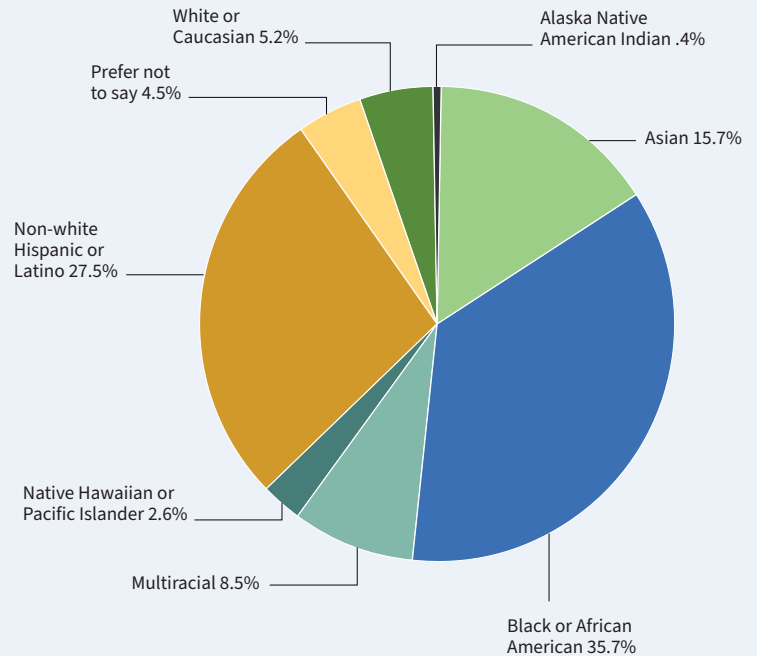
Oakland Priority Communities and Survey Demographics:

Nearly all elements of the Town Link program from the partnership to the survey were designed to target “priority communities” that have demonstrated barriers to internet connectivity. The survey reached a total of 766 Oakland residents and results indicated that this prioritization process was successful in reaching seniors, low-income residents, and communities of color who historically have below average internet adoption rates.

Annual Household Income	Percentage (%)
Less than \$20,000	37.8%
\$20,000-\$39,999	24.7%
\$40,000-\$59,999	14.6%
\$60,000-\$99,999	7.3%
\$100,000 or more	3.1%
Decline to state/answer	12.4%

Age	Percentage (%)
Below 18	5.9%
18-24	7.6%
25-34	16.8%
25-35	2.1%
35-49	25.2%
50-64	19.4%
65 and up	21.4%
Decline to state/answer	1.6%

Chart 1: Race of Town Link Survey Respondents



Internet Access:

Stark Connectivity Barriers Persist in Low-Income Households

Greenlining asked how respondents connected to the internet at home¹⁴ and found large connectivity gaps, particularly among low-income households. Black and Latino respondents are also more likely to report a lack of internet access at home and are less likely to subscribe to lower cost internet plans—these differences are more pronounced at lower income levels. The results point to the importance of increasing awareness of programs like ACP among eligible communities and for efforts specifically targeting Oakland’s Black and Latino neighborhoods.

During the pandemic my daughter was doing school online, and there was really no help on paying the internet bills for that time. Internet should be free, especially families with kids in online or hybrid school.

- Survey Respondent

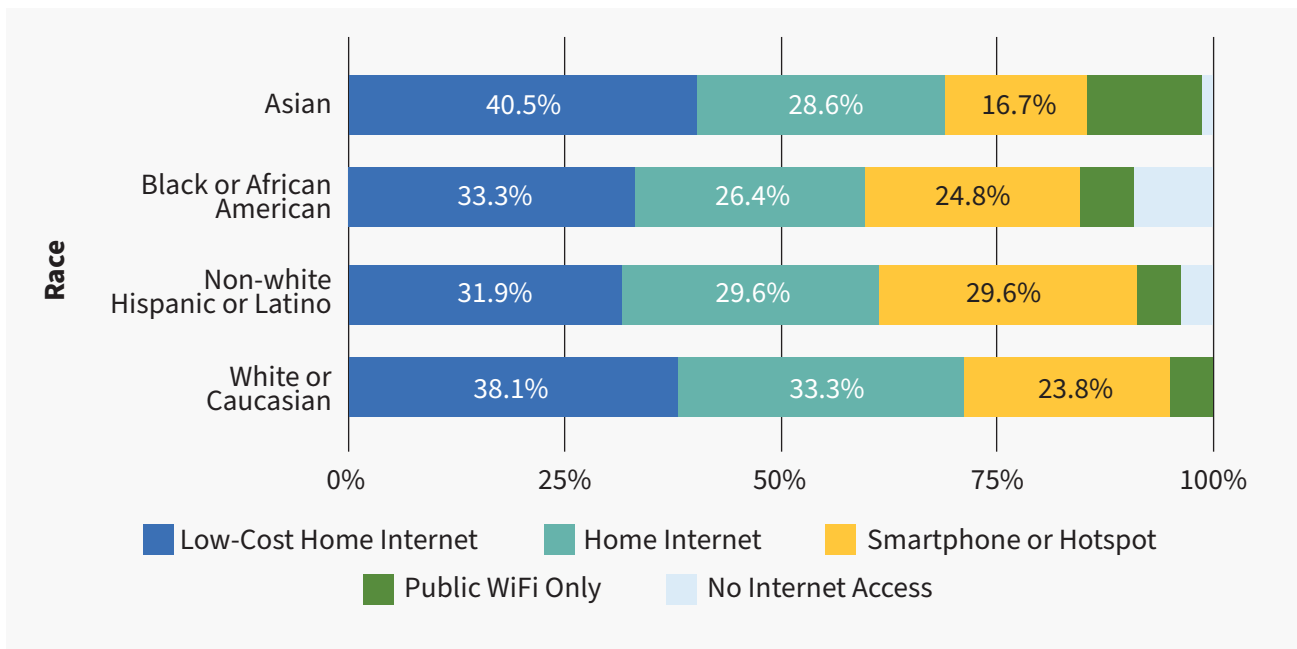
I am underpaid but still don’t qualify for some programs due to the fact that I live alone, am unmarried and don’t have children. This has resulted in me having to pay high rates for problematic services like the internet.

- Survey Respondent

- **67% of respondents to the Town Link survey reported having access to an internet subscription at home, whereas more broadly representative American Community Survey (ACS) estimates for Oakland put that number at 83.7%.¹⁵**
- Only 58% of surveyed households with an annual household income of \$20,000 or less have home internet access compared to over 90% for those with an annual household income of \$60,000 and above.
- Latino and Black respondents earning \$40,000 a year or less are approximately 10% more likely to report a lack of a home internet subscription than white respondents.

Internet Access	Percentage (%)
Home Internet Subscription (e.g. Cable, Satellite, DSL, Fiber) <ul style="list-style-type: none"> Low Cost (\leq\$30/mo.) (22%) Standard Cost (45%) 	67%
No Home Internet Subscription Smartphone or Hotspot (23%) <ul style="list-style-type: none"> Public Wi-Fi (5.5%) No Internet Access (4.5%) 	33%

Chart 2: Internet Access in Oakland Households Earning \$40,000 or Less Annually

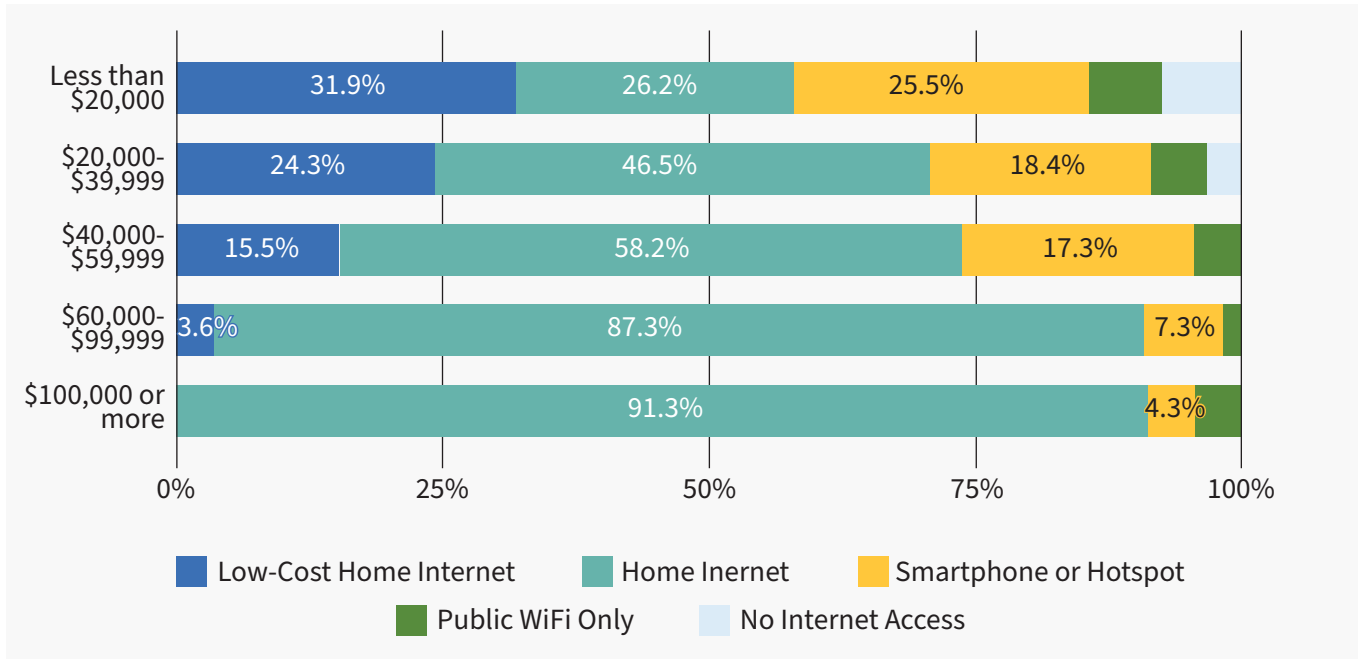


- Low-Cost Plans Are Unpopular Among Qualified Households:** Survey respondents that have home internet access often choose higher-cost plans even though they would likely qualify for low cost plans (\$30 or less) that would be free after ACP discount.
 - Only 55% of respondents earning \$20,000 a year or less with internet access subscribed to low-cost internet plans.
 - Black and Latino households are less likely to subscribe to low-cost plans, indicating a need to target these communities in future outreach efforts.
 - Comments from respondents noted that it was difficult to sign up for these programs or the internet speeds offered were too slow for their needs. ISPs should work on improving their marketing, service quality and enrollment processes for low-cost internet programs.

I tried to sign up for a program that reduces your internet cost & it was so complicated. Xfinity gave me the wrong info to call, I finally put in an application and had to contact back Xfinity and they didn't know how to process it. So I had to forget about it because I had other priorities but I would have liked to take advantage of the program.

- Survey Respondent

Chart 3: Internet Access in Oakland Across All Household Incomes



Device Access:

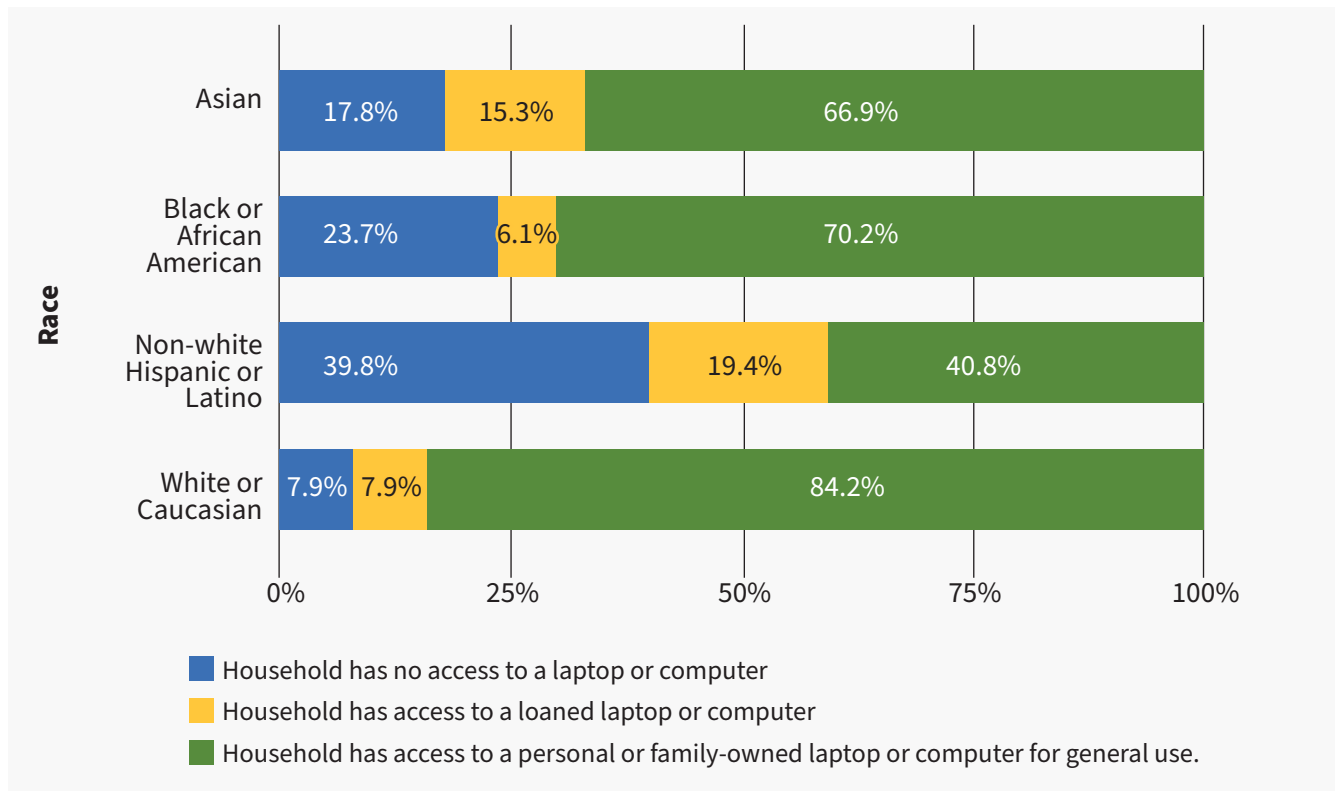
Oakland Residents Continue to Lack Access to Laptops and Computers

Homes without access to a desktop or laptop computer face greater barriers to internet connectivity and productivity. Greenlining asked respondents about their access to these devices at home and found nearly one quarter of respondents did not have access to a household computer and reported a significant reliance on loaned devices—this device gap was most apparent in Oakland’s Latino households. These results point to the continued importance of ongoing, targeted funding for device ownership and loaner programs to close the device gap.

- 26.5% of Town Link respondents reported no access to a computer at home and 11% reported a reliance on loaner computers. These results show a larger gap than ACS 2021 estimates which indicate that 17.3% of Oakland residents do not have access to desktop or laptop computers at home.
- Nearly 40% of Latino respondents indicated they had no access to a laptop or computer at home and 19% reported a reliance on loaner laptops.

Access to a computer or laptop at home	Percentage (%)
Household has access to a loaned computer or laptop	11.3%
Household has access to a personal or family-owned laptop or computer.	62.2%
Household has no access to a laptop or computer.	26.5%

Chart 4: Access to a Computer or Laptop at Home



Access to a computer or laptop at home	Asian	Black or African American	Non-white Hispanic or Latino	White or Caucasian
Household has no access to a laptop or computer	17.8%	23.7%	39.8%	7.9%
Household has access to a loaned laptop or computer	15.3%	6.1%	19.4%	7.9%
Household has access to a personal or family-owned laptop or computer	66.9%	70.2%	40.8%	84.2%

Digital Literacy:

Low-Income Residents Face Significant Digital Literacy Gaps

Households that have not had the training, resources, or opportunities to develop digital literacy skills are less likely to subscribe to the internet and are even less likely to benefit from it. Greenlining asked respondents to discuss how they use the internet and rate their confidence level in performing different tasks. The results show that a significant portion of internet users are not confident in using the internet for everyday tasks, with low-income and Latino residents facing the largest digital skills deficits.

- Respondents use the internet for a variety of tasks but are less likely to utilize the internet for job-related opportunities such as applying for jobs online and working from home.
- Depending on the activity, 15-25% of the respondents reported they are not confident doing key online tasks that are relevant to economic opportunity and participation in everyday life, such as searching for jobs online.
- Lower-income and Latino residents in particular were most likely to report they are not confident when it comes to performing increasingly important online tasks. For example, Latino residents were more than twice as likely to report they are not confident in using the internet to access government services.

Chart 5: Reasons for Internet Usage

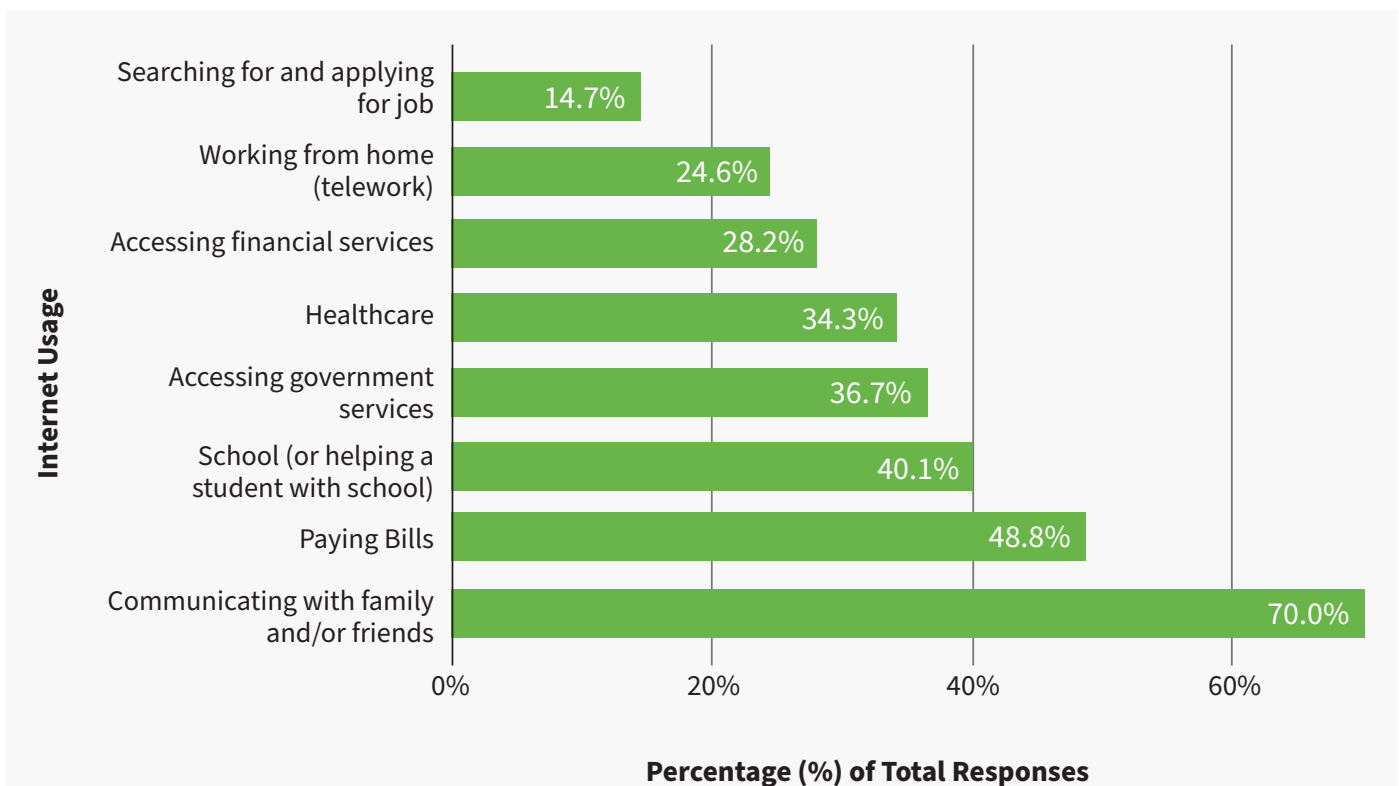


Chart 6: Percentage of Respondents 'Not Confident' in Performing Digital Tasks

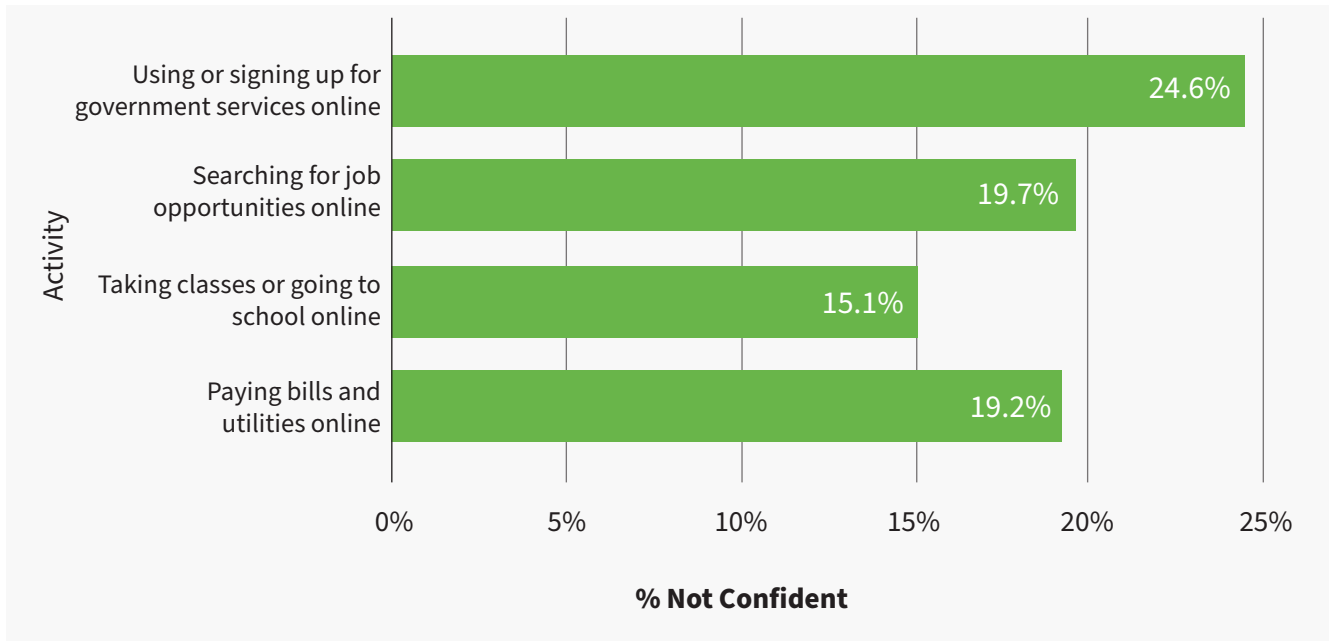


Chart 7: Race and Percentage of Respondents 'Not Confident' in Accessing Online Government Services

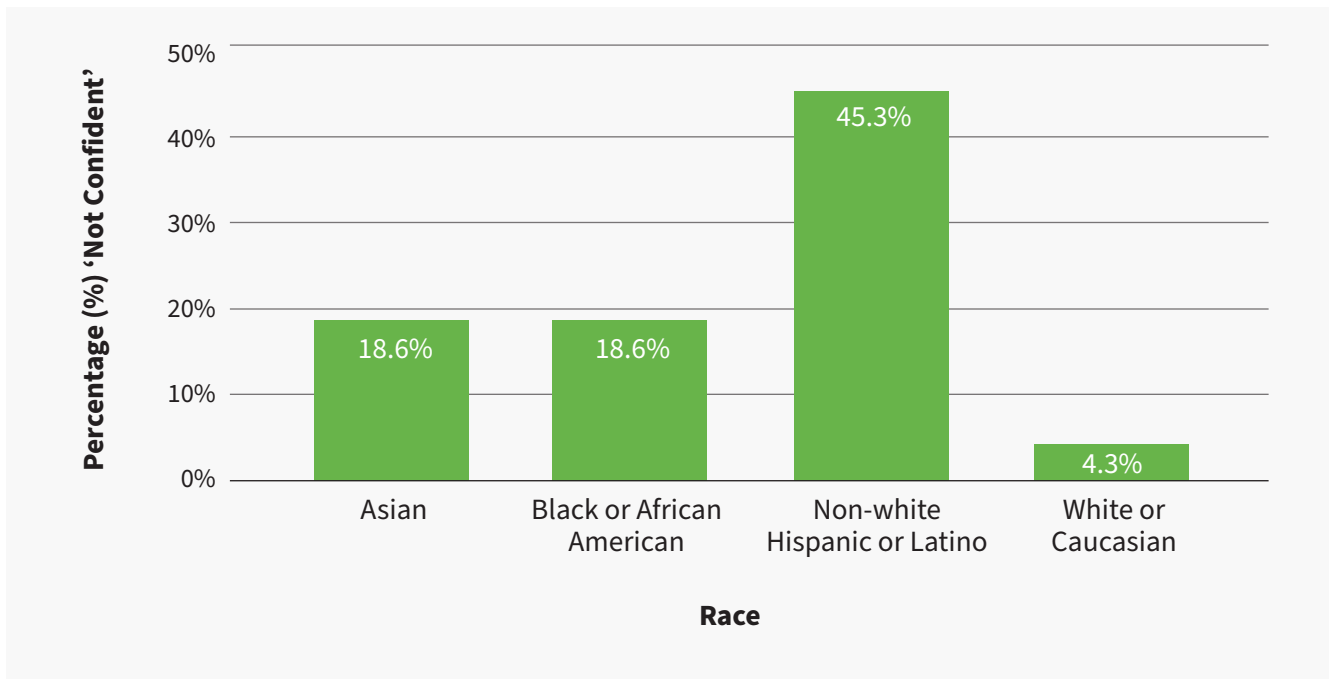
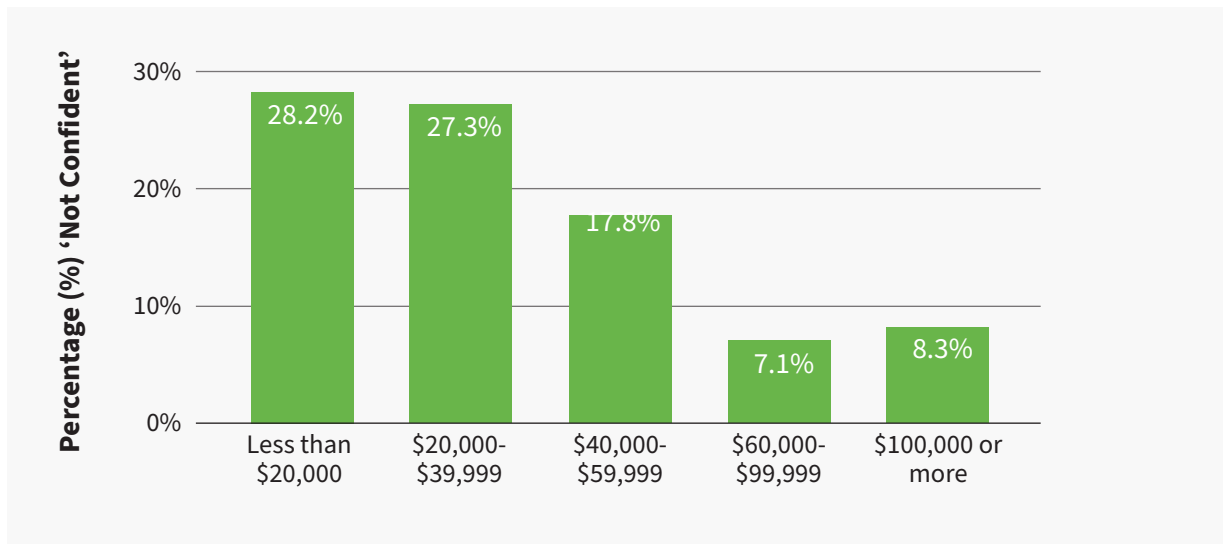


Chart 8: Income and Percentage of Respondents 'Not Confident' in Accessing Online Government Services



Awareness:

Oakland Residents Lack Awareness of Digital Inclusion Programs

Many Oakland residents are eligible for internet connectivity programs like ACP and LifeLine that can provide free or low-cost internet access. Greenlining surveyed residents on whether they knew about these programs as well as OakWiFi, Oakland's free public access network, and found a significant number of residents had not heard about these resources. This further underscores the need for awareness and outreach programs.

- Low-income residents were more likely to be aware of and utilize programs like ACP and OakWiFi, but overall 60% or more of those surveyed lacked awareness of these programs.
- Households that were aware of and qualified for ACP and Lifeline but not enrolled were most likely to cite difficulty in enrollment and poor experiences with the programs as a reason for not enrolling in these programs.
- Several respondents commented on the Oak WiFi network, asking for faster speeds and in-home access to the network. This underscores the need to improve the fiber infrastructure supporting the Oak WiFi network and the deployment of Oakland's Apartment Connect program.

I am usually the person helping my parents navigate the internet, but the services should be made to be easier to access for Spanish speaking families. I am also not sure if these services or programs are available for people with no documents, which is another barrier. I think it should be a priority for whoever is making these decisions to create services that are accessible and free to all that need them.

- Survey Respondent

Chart 9: Awareness of LifeLine, ACP and Oak WiFi Programs

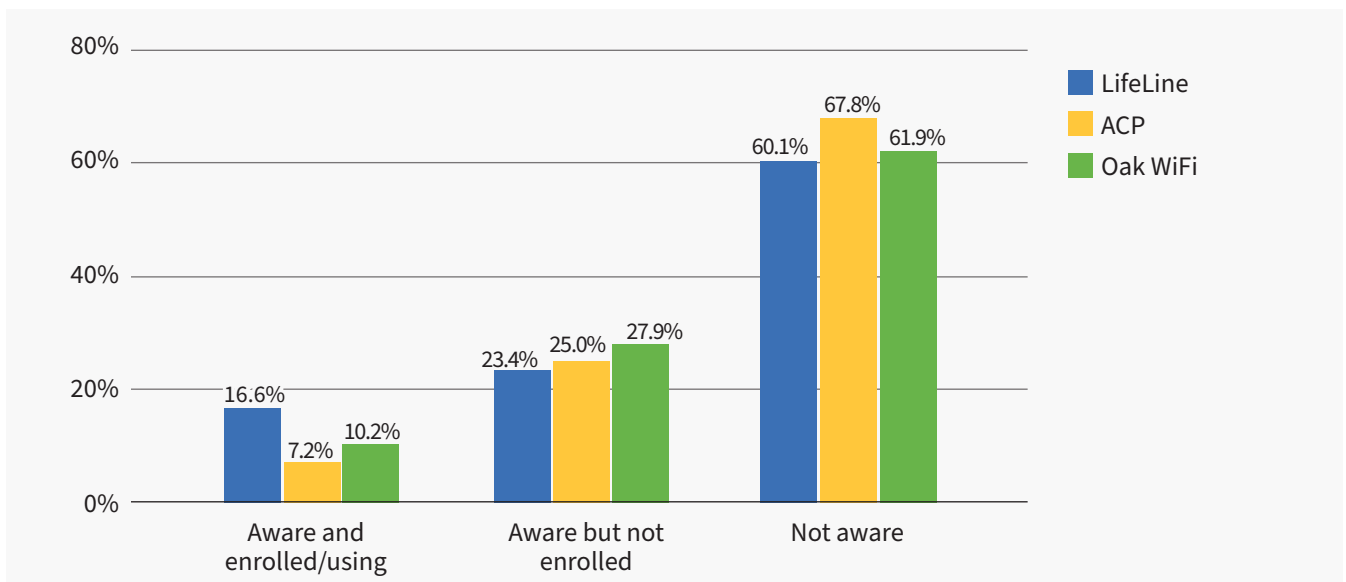
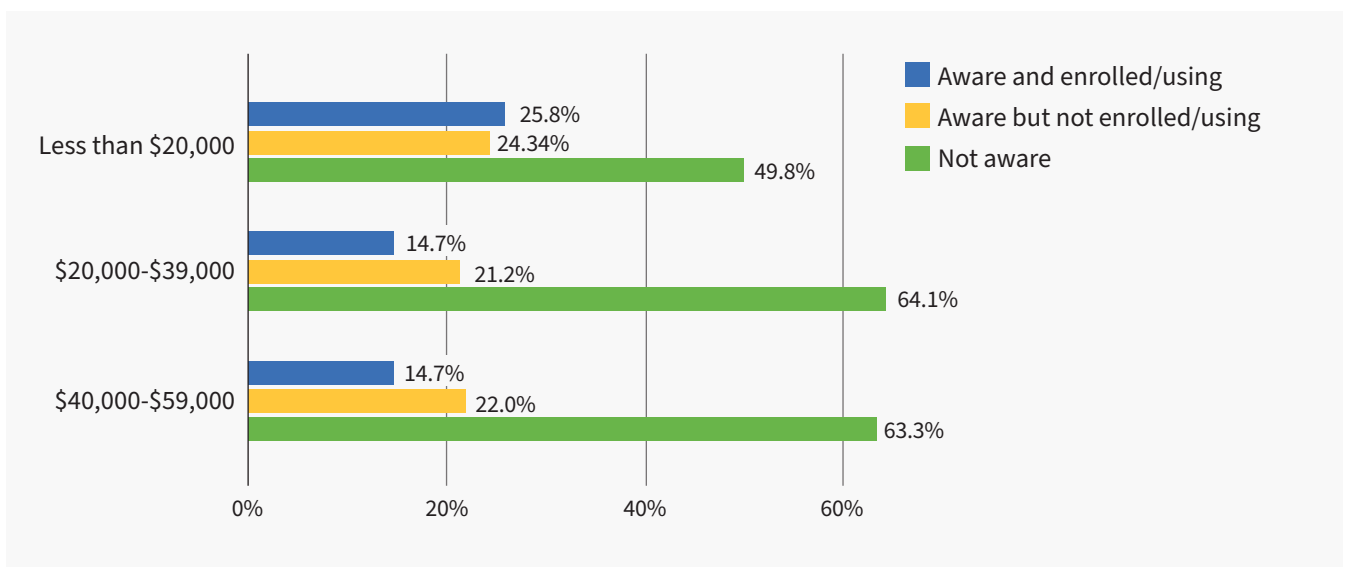


Chart 10: Income and LifeLine Program Awareness



I am Oakland born and raised, and would like to see more of these programs made more accessible and easy to understand for our community. Whenever I look at these types of services online or other government programs, I have to ask others for help or spend a very long time researching the sites.

- Survey Respondent

Chart 11: Reasons for Non-Enrollment/Usage

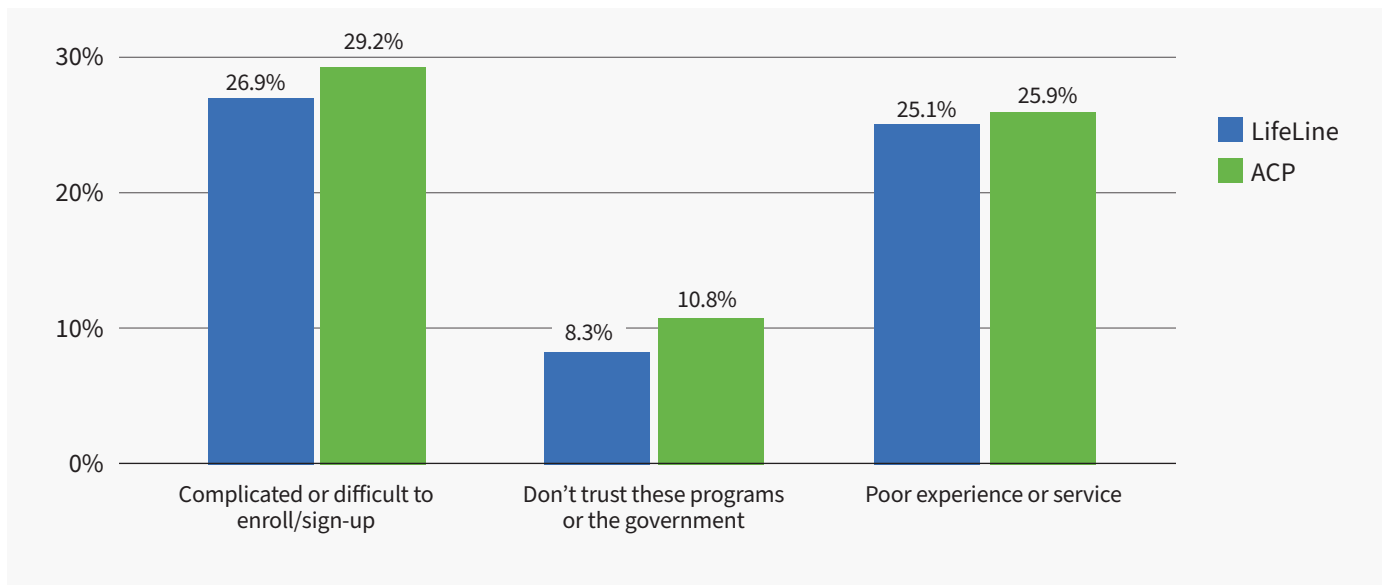




Photo Credit: #OaklandUndivided

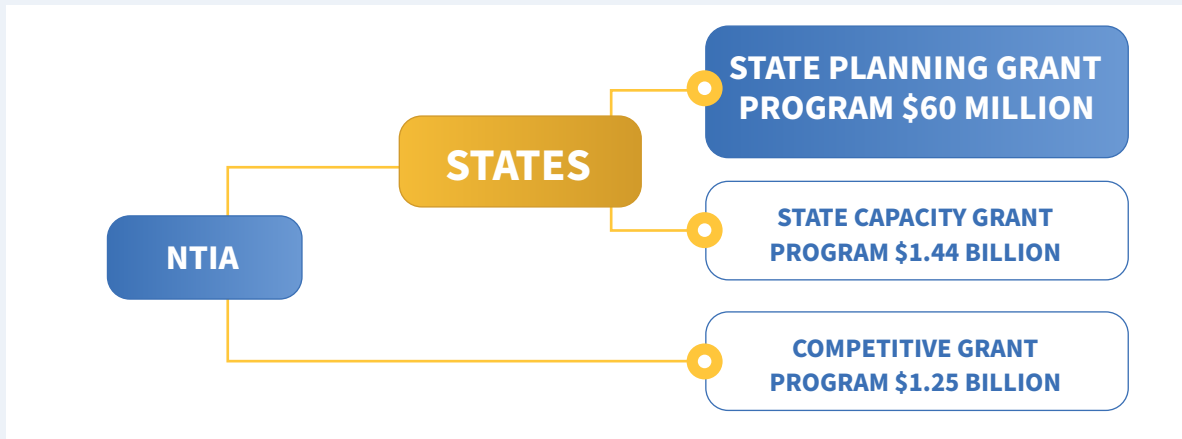
Recommendations for Digital Equity Act Programs

The following recommendations are based on Greenlining’s experience with the Town Link program and are intended for cities interested in developing digital inclusion programs for their communities. These lessons can help localities take advantage of Digital Equity Act (DEA) funding which makes states, local governments, community-based organizations, and nonprofits eligible for up to \$2.69 billion in grant funding to close the digital divide. In order to access state funds, states must develop digital equity plans showing how they plan to promote the availability and affordability of broadband technology; online accessibility and inclusivity of public resources; digital literacy; awareness of, and the use of, cybersecurity measures; and availability and affordability of consumer devices and technical support. Local governments, community-based organizations and other eligible entities will be eligible to apply for funding from their state or directly from the NTIA to implement local digital inclusion programs by 2024. Entities interested in applying for Digital Equity Act grants should begin to identify barriers to digital equity in their communities and to develop a local digital inclusion strategy. This preparation will allow eligible entities to be ready when the NTIA and states release their digital equity plans and guidelines for applying for state and federal digital equity grants. The following recommendations focus on different elements and stages in the design, development, and implementation of a local digital inclusion program based on Greenlining’s experience with the Town Link program.

Figure 14: DEA Funding Opportunities & Eligibility

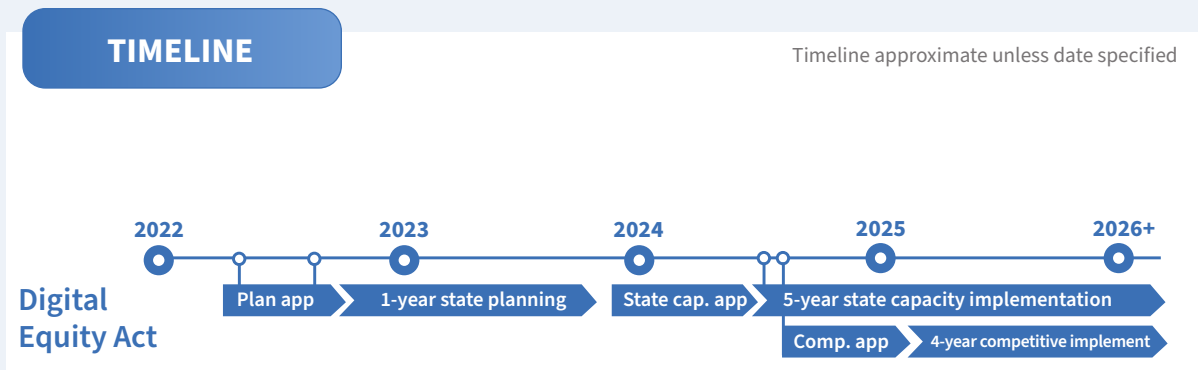
State Digital Equity Capacity Grant Program: Provides \$1.44 billion over five fiscal years to states, possessions/territories, and Tribal entities for the purpose of implementing their State Digital Equity Plans.

Digital Equity Competitive Grant Program: Provides \$1.25 billion in grant awards over five fiscal years for private sector, public sector, and nonprofit entities to advance digital equity and engage in digital inclusion activities.



Taken from the National Digital Inclusion Alliance

- **Digital Equity Competitive Grant Program:** Provides \$1.25 billion in grant awards over five fiscal years for private sector, public sector, and nonprofit entities to advance digital equity and engage in digital inclusion activities.



Local governments, community based organizations and other eligible entities will be eligible for Digital Equity Act grant funding by 2024. Timeline adapted from NTA

Digital inclusion activities that are likely to be eligible for DEA grant funding include:

- User training with respect to cybersecurity, privacy, and other digital safety matters;
- Digital literacy/upskilling (from beginner-level to advanced);
- Computer science, coding, and cybersecurity education programs;

- Broadband sign-up assistance and programs that provide technology support;
- Multi-lingual outreach to support adoption and digital literacy;
- Prisoner education to promote pre-release digital literacy, job skills, online job acquisition skills, etc.;
- Digital navigator services.

[Resource] NTIA Digital Equity Act Resources - The National Telecommunications and Information Administration (NTIA) website provides access to official resources, FAQs, as well as templates, guides and toolkits for state and local governments as well as CBOs interested in developing digital equity programs.

<https://broadbandusa.ntia.doc.gov/resources/grant-programs/digital-equity-programs>

Program Planning:

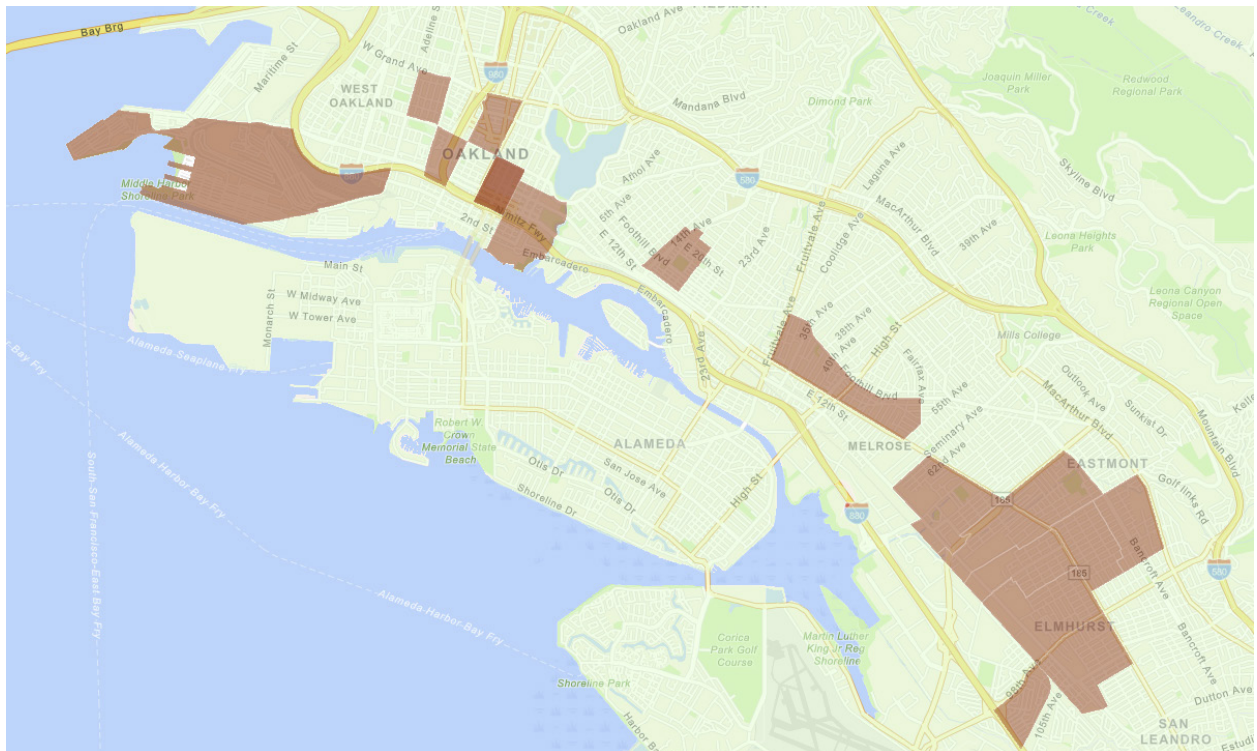
One of the initial steps to develop a digital inclusion program is to create an implementation plan that includes setting concrete, measurable goals, developing budgets, and establishing the structure of the program. The following recommendations are useful for cities as they begin to develop their digital inclusion program plans:

- **[Recommendation] Coordinate with State DEA Administering Entities:** Pursuant to the DEA requirements, each state will appoint an “Administering Entity” who is required to work with local communities to develop a Digital Equity Plan that outlines how the state will address barriers to digital equity. Local communities should identify and collaborate with their state’s Administering Entity to ensure their particular community needs are properly reflected in the plan. This can include attending listening sessions and providing written comments when the state releases its plan. A proactive and collaborative relationship can help localities prepare for and develop successful DEA grant applications when these funds become available.
- **[Resource] NDIA: State Digital Equity Plan Toolkit** - This toolkit provides recommendations, step by step instructions and outlines to help states build their DEA digital equity plan. City governments can use this toolkit as well to help prepare their own local plans. <https://www.digitalinclusion.org/state-digital-equity-plan-toolkit/>
- **[Recommendation] Invest In Multi-Sector Coalitions:** Digital equity coalitions are a collective of organizations operating within a collaborative structure to achieve a shared set of digital equity goals. Digital equity coalitions can help local communities achieve their digital equity goals, raise the profile of local digital inclusion efforts and create alignment between multiple stakeholders. Greenlining benefited greatly from its participation in the #OaklandUndivided coalition. The #OaklandUndivided coalition worked together to fundraise for digital inclusion programs, apply for grants, share Oakland perspectives with state and federal policymakers and helped Greenlining publicize the Town Link program and recruit outreach partners. Local governments should seek DEA or external funding to catalyze the development of digital inclusion coalitions and to hire full time staff that can coordinate events, meetings, and actions with coalition partners.

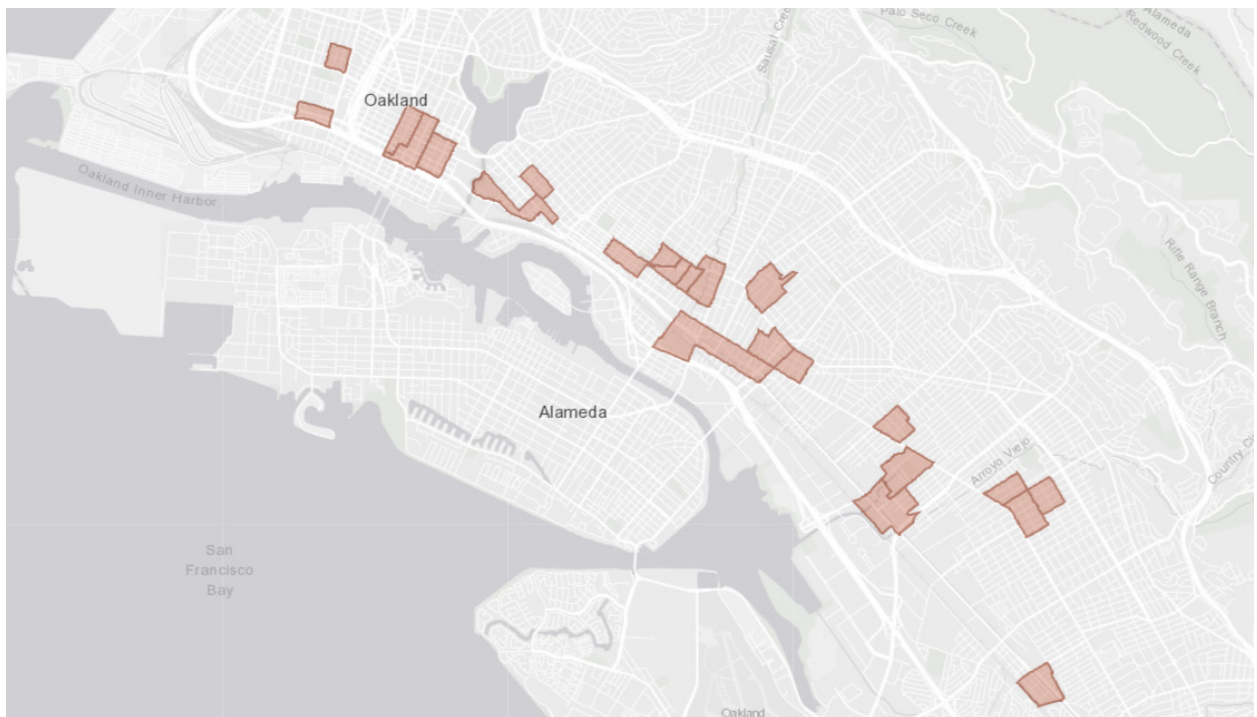


#OU and Town Link coalition partners met with the FCC to discuss upcoming broadband opportunities and Oakland's digital equity needs. Photo credit: #OaklandUndivided

- **[Resource] The NDIA Coalition Guidebook:** The NDIA guidebook details the benefits of forming a community-wide, placed-based coalition and provides lessons on how to build sustainable and effective digital equity coalitions. <https://www.digitalinclusion.org/download/17110/>
- **[Recommendation] Collect Comprehensive Data on Community Assets and Internet Access Barriers:** DEA funded digital inclusion programs are required to address barriers to digital equity for specified covered populations. Communities should identify local digital access gaps as well as assets to inform program goals and streamline the development of DEA grant applications. This analysis can provide insight into which covered populations, partner organizations, and neighborhoods to target and prioritize within their community. Key data to collect include:
 - Qualitative data on internet access barriers, and potential partner organizations from interviews with community leaders, organizations, and businesses;
 - Data on broadband internet access and affordability; digital device availability and affordability and digital literacy;
 - Geographic data from the FCC and NTIA identifying specific neighborhoods with lower internet adoption and barriers to internet access;
 - Economic indicators associated with lower access to broadband such as race, income, rent burden, age and limited English proficiency.



Greenlining used the NTIA Indicators of Broadband Needs map to identify neighborhoods to target within the Town Link program.¹⁶



Greenlining used the City of Oakland’s “Equity Zones” maps which use economic indicators to identify disadvantaged communities. These equity zones were used to refine and develop priority criteria and neighborhoods in the Town Link program.¹⁷

- **[Resource] NTIA Asset Mapping Guide:** This report provides guidance for digital equity practitioners conducting community asset mapping activities to support impactful, long-term digital equity programs that leverage existing community expertise and resources. https://broadbandusa.ntia.doc.gov/sites/default/files/2022-09/Asset_Mapping_Guide.pdf
- **[Recommendation] Develop Data-Driven and Locally Relevant Prioritization Criteria:** The DEA asks localities to target a broad list of “covered populations” in their digital equity efforts. To maximize the impact of DEA grants, digital inclusion efforts should be further targeted toward the neighborhoods and populations that have the lowest broadband adoption rates or are the most economically disadvantaged within DEA covered populations. The Town Link used similar prioritization criteria to guide the recruitment of outreach partners and how these partners developed their outreach and education campaigns.

Comparing Town Link Priority Communities to Digital Equity Act Covered Populations:

The Greenlining Institute developed a list of “priority communities” in advance of the codification of the Digital Equity Act which prescribes a similar set of “covered populations” that communities are required to target in DEA funded digital equity and inclusion efforts. Cities should undertake to refine DEA covered populations to target subpopulations within their community that face the biggest barriers to digital equity.

Town Link Priority Communities

- Residents of Oakland Equity Zones and low broadband adoption neighborhoods
- Low-Income residents (200% Federal Poverty Line, \$51,500 for a family of 4)
- Unhoused Residents
- Latino Residents
- Re-entry populations
- Immigrants and English second language residents
- Senior Residents (60+)
- Black or African American Residents
- Indigenous Residents

Digital Equity Act Covered Populations:

- Individuals who live in households with an annual income not more than 150% of the federal poverty level.
- Aging individuals (60 and above).
- Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility.
- Veterans.
- Individuals with disabilities.
- Individuals with a language barrier, including individuals who are English learners or have low levels of literacy.
- Individuals who are members of a racial or ethnic minority group.
- Individuals who primarily reside in a rural area.

- **[Recommendation] Develop Baseline Goals and Funding Criteria:** Local digital inclusion programs should have measurable goals that allow a community to track its progress towards achieving digital equity and to inform DEA grant applications. Establishing measurable goals for a digital inclusion program will depend on identifying community needs and making an assessment of what to achieve and prioritize within a given budget. Cities can consider the following funding guidelines based on Greenlining’s experience with the Town Link program and the California Advanced Services Fund adoption program:
 - *Digital Literacy Instruction:* \$900 per participant (including devices);
 - Digital Literacy Instruction: \$350 per participant;
 - Digital Literacy Recruitment: \$150 per participant (can include providing limited tech support, space for classes, and distributing devices);
 - *Devices:* \$400 per device;
 - *Outreach, Education and Enrollment Support:*
 - Costs vary depending on the type of contact. High-touch contacts such as through phone calls, two-way texting and in-person events require greater capacity and skills and should be compensated at a significantly higher rate than low-touch methods (flyers, e-mails, social media etc.);
 - *Survey Costs:* \$0-30 per response depending on length of the survey and participation incentives;
 - *General and Administrative Costs:* Up to 20% of project costs.

Trackable metrics for these activities include the number of students served, the number of devices distributed and for outreach, the number of inbound or outbound calls, messages sent, residents served, or number of staff-hours spent providing outreach services. These funding guidelines can be considered a floor and come with the caveat that costs will vary significantly depending on the scope of the program, the experience level of partners, and the characteristics of the community. For example, Town Link program partners reported that many residents were over surveyed and financial incentives were necessary to ensure participation.

- **[Recommendation] Design for Long-Term Impact:** Cities should consider developing digital inclusion programs with longer term sustainability goals in mind. For example, communities can invest in building the capacity of local partners to do digital inclusion work even after DEA funding ceases. Several Town Link partners continued to offer digital navigator services after the end of the program thanks to the training and resources provided to partner staff as part of the program.

Program Structure and Partnerships:

In order to increase the reach and impact of a local digital inclusion program, it is helpful to partner with local organizations to provide digital navigator services and to reach the greatest number of residents that face barriers to digital equity. The following recommendations can help a community design a program that can attract quality partners with strong community relationships.

- **[Recommendation] Adapt Program Structure to Community Capacity and Needs:** Digital inclusion programs can involve many partners or as few as one. The Town Link program partnered with 10 outreach organizations to take advantage of the deep pool of local organizations that expressed interest in participating in the Town Link program. Alongside these benefits are drawbacks such as greater coordination costs between partners and smaller share of funding for each partner. Communities should structure their digital inclusion programs in a way that takes into account their community needs and goals, the number of potential partners, and the capacity and reach of both partner organizations and lead organizations.
- **[Recommendation] Simplify Participation for Community Based Organizations (CBOs):** Cities working with multiple partners in their digital inclusion program should address barriers to CBO participation to help include smaller organizations that may be a good fit but lack the experience or confidence to participate in these programs. Digital inclusion programs should have informational sessions with potential local partners and include a short, and iterative application process that focuses on examining the existing resources and community connections an organization can bring to the table in any digital inclusion effort. Organizers should also provide technical assistance to interested organizations and advance pay where possible. Together these measures can ensure a wide variety of CBOs are encouraged to apply and have the resources necessary to begin their work.

Local governments often have rules that make it difficult to simplify CBO participation, in those cases, cities should consider designating another organization that may have more flexible processes for distributing grants as the lead for their digital inclusion program. In designating a lead organization (whether that be local government or nonprofit organization), always consider the existing relationship the organization has with potential outreach partners/digital navigators.

- **[Recommendation] Focus on Recruiting Trusted Messengers with Pre-existing Communication Channels with Priority Communities:** Organizations such as libraries or other direct service organizations that provide food, housing assistance, or other services to community members are strongly positioned as trusted messengers and digital navigators due to their existing relationships and work they do within the community. These organizations will typically have existing intake and referral services and can add digital navigator services to their portfolio more readily than an organization that has to develop this capability and community relationships from the ground up.

Greenlining recruited Town Link partners through a competitive application process, and as part of this process, staff contacted dozens of candidate organizations to encourage them to apply and address any questions or concerns they may have. As part of this outreach, Greenlining emphasized that experience working on digital inclusion issues was not a requirement as many organizations were hesitant to add a new and different scope of work to their everyday operations.

The Town Link Program Partners:

- **Allen Temple Baptist Church:**
 - Allen Temple is a Baptist church located in East Oakland and provides ministry services to a primarily Black congregation, housing for Black Senior Citizens, support for unhoused residents, and COVID-19 services.
- **El Timpano**
 - El Timpano focuses on Latino and Mayan communities, reaching 10% of Oakland's Spanish-speaking community, using a two-way SMS texting platform which provides news and information on public health guidance, renter protection policies, vaccines, and food distribution sites. El Timpano also uplifts residents' stories by gathering residents' stories on pressing issues and facilitating two-way conversations.
- **Homies Empowerment**
 - Homies Empowerment is an independent, youth-development organization which started as a volunteer-run after-school program and evolved to teach ethnic studies and leadership courses in Oakland schools. Homies Empowerment operates a community FREEdom Store which distributes fresh produce and other essentials to 400 individuals and families weekly. Homies Empowerment also operates a care center that provides access to computers and internet as well as assistance with utility bills, job searches, housing, and eviction issues.
- **Oakland Workers' Fund (OWF)**
 - Oakland Workers Fund works closely with the Oakland community to support and uplift unemployed and displaced food service workers. OWF directly redistributes donations to food-service workers who are in most need of financial relief. OWF connects community members to multiple resources including relief funds, housing rights, Covid testing, free and accessible health care services, free groceries, and translation services. OWF's financial redistribution aids applicants in paying their rent, bills, childcare, groceries, hospital costs, funeral costs, and other urgently needed support through times of crisis.
- **Vietnamese American Community Center of the East Bay (VACCEB)**
 - VACCEB offers ESL courses, citizenship courses, Digital Literacy, and senior health services to low-income residents. VACCEB case managers also assist in filling out naturalization forms, public benefits enrollment, interpretation services and referrals. VACCEB's Employment Services program offers employment support in resume building, application assistance, mock interviews, and job placement. VACCEB's food program provides 120,000 meals to over 4,000 low-income senior, refugee, and immigrant families within the East Bay each month.
- **Center for Empowering Refugees and Immigrants (CERI)**
 - CERI provides culturally-relevant mental health and other social services to more than 400 clients and their families, primarily working with Southeast Asian (Cambodian, Burmese, and Vietnamese) community members. This includes mental health, non-clinical crisis counseling, and emotional support services as well as workforce development programs.

- **Roots Community Health Center**

- Roots Community Health Center uplifts those impacted by systemic inequities and poverty through medical and behavioral health care, health navigation, workforce development, housing, outreach, and advocacy services. Roots' annual impact includes providing approximately 16,000 clinical visits, 6,000 meals and 5,000 navigation and coaching visits to residents in Oakland and the South Bay.

- **The Unity Council (TUC)**

- The Unity Council is a non-profit Social Equity Development Corporation with a 55-year history in the historically Latino Fruitvale neighborhood of Oakland. The Unity Council's programs reach more than 12,000 individuals and families annually in five languages. TUC's programs include: early childhood education, youth mentorship and leadership development, employment services, career readiness training, housing and financial stability, senior citizen services, affordable housing and neighborhood development, and arts and cultural events.

- **St. Mary's Center (SMC)**

- St. Mary's Center is an Oakland independent non-profit social service organization with five service locations, including 41 units of transitional housing. SMC serves over 1,000 seniors and 40 preschool families a year, many suffering from homelessness and other poverty-related challenges. Services include counseling, case management, housing navigation, money management and access to food, health, technology, and senior-friendly social activities including a robust social justice program.

- **Building Opportunities for Self Sufficiency (BOSS)**

- BOSS programs build opportunity, skills, assets, social connections, and stability for very low-income individuals, families, and communities in Oakland. BOSS provides shelter and housing for homeless disabled individuals, transition age youth, disabled adults and individuals with HIV/AIDS, reentry individuals and also provides on-site case management, life skills activities, and support services, including assistance finding permanent housing and employment. BOSS operates three Neighborhood Impact Hubs which employ former gang members and justice involved individuals to provide workforce development services, food and rental assistance, violence prevention programs, community building activities, and health care services.

- **[Recommendation] Invest in Capacity Building for Outreach Partners:** Digital inclusion programs should have an eye towards long-term sustainability and one way of achieving this is to build capacity within a community to do this work on a long-term and on-going basis. Capacity building efforts should include opportunities for CBO partners to collaborate and share strategies with one another, providing access to shared resources and media for outreach campaigns as well as multiple training sessions to educate intake staff at partner organizations on how to pitch and enroll residents into programs like the ACP.
- **[Resource] EducationSuperHighway's LearnACP Course:** EducationSuperHighway instructors provided training to Town Link partner staff and have distilled those lessons into the LearnACP course. This free course provides training to equip digital navigators with the knowledge and resources to enroll community members in the Affordable Connectivity Program. <https://www.educationsuperhighway.org/learnacp/>

- **[Resource] NDIA Digital Inclusion Startup Manual:** This toolkit outlines different approaches to structuring and establishing a digital equity program. <https://startup.digitalinclusion.org/pdfs/NDIA%20Digital%20Inclusion%20Startup%20Manual.pdf>
- **[Resource] The California Advanced Services Fund Program Guidelines:** The California Advanced Services Fund Adoption Account awards grants to increase publicly available or after-school broadband access and digital inclusion, such as grants for digital literacy training programs and public education to communities with limited broadband adoption. The program page provides administrative guidelines and application forms that cities can use to help inform their own digital inclusion programs. <https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/california-advanced-services-fund/casf-adoption-account>

Digital Inclusion Outreach Campaigns:

A key part of any digital inclusion campaign is outreach to increase access to affordable internet options among low adoption communities. Town Link partner responsibilities included developing an outreach and education campaign to educate Oaklanders on free or affordable internet resources like LifeLine, ACP, and Oak WiFi as well as providing devices and recruiting residents for digital literacy classes. The following recommendations provide some guidelines to help cities and communities design effective outreach campaigns.

- **[Recommendation] Encourage Campaigns with Two-Way Communication:** Greenlining found that outreach and education campaigns that provided two-way communications with community members were the most effective in driving enrollment. Community members appreciated being able to get near real time responses to their questions around eligibility and being able to verify that these opportunities could be trusted at in-person events or by texting and speaking with staff at outreach CBOs. For example, staff at El Timpano shared resources on the ACP through their SMS platform and were able to follow-up and answer individual questions around the program via text and phone contacts. Communities should encourage this type of “high-touch” outreach through their application processes and funding considerations for subgrantee partners.
- **[Recommendation] Provide Additional Funding for Enrollment Support:** Digital navigators typically connect residents to appropriate resources to help them enroll in programs like the ACP. However, some digital navigators also provide in-person, step-by-step enrollment assistance to interested residents. Partners indicated that guiding community members through enrollment processes often consumed significant staff time and resources. Digital inclusion programs should provide additional funding for CBOs that offer in-person enrollment assistance for programs like ACP and LifeLine. Alternatively, partners should connect interested residents to local or statewide call centers that can provide this type of enrollment assistance.
- **[Recommendation] Iterate and Refine Outreach Plans with Partners:** Many potential partners for digital inclusion programs have strong community relationships but limited experience with conducting outreach and providing digital navigator services. Therefore, digital inclusion programs should give partner organizations the latitude to design an outreach plan that works best for their community and the ability to iterate and revise those plans. After Greenlining selected 10 outreach partners for the Town Link program, Greenlining, EveryoneOn and EducationSuperHighway met with them in 1:1 strategy sessions to iterate on the outreach plans they developed during the application process. This allowed for greater collaboration,

sharing of expertise and allowed partners to think through how to most effectively tap into their existing strengths and relationships with Oakland residents to drive greater internet connectivity.

A Snapshot of TownLink Outreach Campaigns:

El Timpano: El Timpano used a SMS messaging strategy to spread awareness of and answer questions about digital inclusion resources for Oakland’s Latino and Mayan immigrant communities. The SMS messages reached over 2,000 community members, primarily in East Oakland. El Timpano also conducted in-person outreach and enrollment events at schools, libraries, and the Oakland Coliseum Swap Meet with the assistance of EducationSuperHighway.

Oakland Workers Fund (OWF): OWF connected over 500 community members to resources regarding the ACP, LifeLine, and Oakland’s free Wi-Fi program through mass and personalized emails, text communications, and social media posts reaching OWF’s network of support recipients. OWF also distributed flyers in priority neighborhoods such as Chinatown, Fruitvale, and the Lower Bottoms.

Building Opportunities for Self Sufficiency (BOSS): BOSS connected 500 Oakland residents to digital inclusion resources at three BOSS Neighborhood Impact Hubs and through a flyers, tabling, and digital media campaign. BOSS Impact Hubs connect low-income, unhoused, and re-entry populations to housing, food, and employment opportunities based on a one-on-one intake and needs assessment process.

Homies Empowerment: Homies Empowerment approached their campaign through a texting and flyers campaign and by integrating ACP enrollment into their weekly FREEdom store events. The FREEdom store is a community hub located in East Oakland where residents can go to get food, clothing, hygiene products, and vaccines, as well as education and information on different assistance programs. The FREEdom store sees a minimum of 450 families a week and their text announcements reach 3,000 people. Homies worked with EducationSuperHighway to help educate and enroll community members into the program as they visited the store for food, clothes, or to get assistance with utility bills, evictions, or job searches.



Staff from Homies Empowerment, #OaklandUndivided and EducationSuperHighway at an ACP outreach event.
Photo Credit: Homies Empowerment

Digital Literacy Courses: Providing digital literacy training on basic computer and internet usage skills is a key element to closing the digital divide. Low-income residents and communities of color are more likely to report that they are not confident in using the internet to search for a job, take classes online, or use the internet for government services. Town Link partners enrolled Oakland residents into six week courses hosted by EveryoneOn where they would meet virtually up to twice a week for lessons on a variety of introductory topics such as how to navigate the internet or use Zoom and Google Suite. The following are recommendations to help communities design an effective digital literacy program.

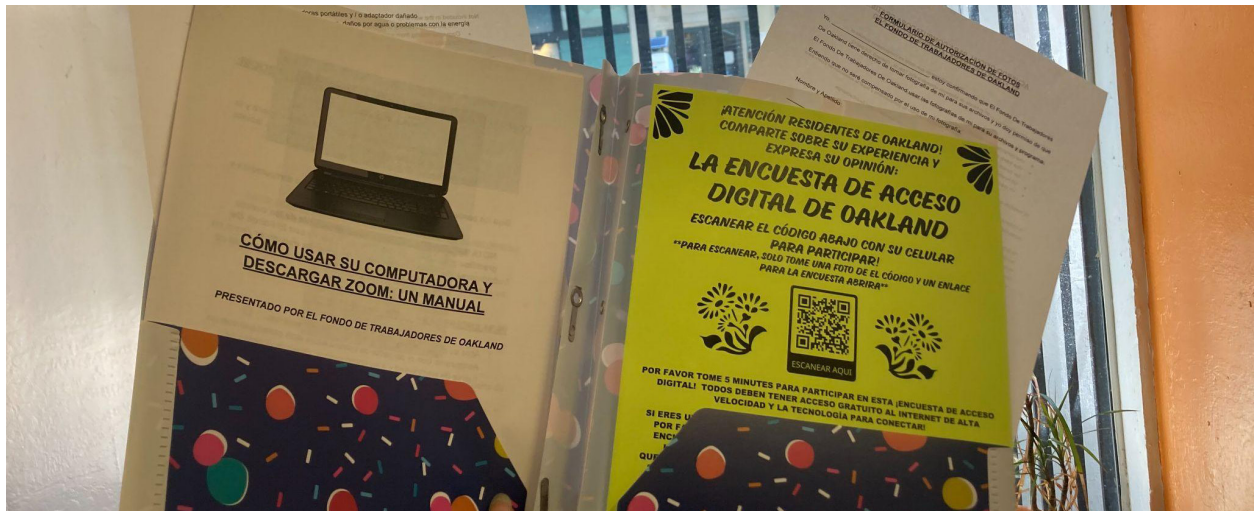
- **[Recommendation] Encourage Live and In-Person Instruction:** Feedback from CBO partners shows a preference for hybrid or in-person instruction where CBO staff or the instructor is available in-person to help class participants with questions and troubleshooting issues that may be difficult to resolve over a video connection. Communities should provide shared spaces at libraries or community centers to enable organizations without their own physical meeting space to hold digital literacy classes.
- **[Recommendation] Adapt Classes to Participant Skill Levels:** Town Link partners shared that one of the key issues with the digital literacy classes was that participants often had considerable variation in their digital literacy skills and some of the coursework that was simple for some was too difficult for others. Partners suggested developing an intake form to gauge digital skills and to group participants with similar skill levels together.
- **[Recommendation] Offer In-Language Instruction Options:** Participants in digital literacy classes shared that they appreciated the option to receive instruction in Spanish and asked for more language options. EveryoneOn worked with partner organizations to recruit classes with shared linguistic needs and to hire multilingual instructors. Communities developing digital literacy programs should ensure that their curriculum can be adapted and taught in other languages. This can also help participants connect to internet resources that are culturally relevant.

Access to Computing Devices:

The final element of most digital inclusion programs is ensuring that community members have access to computers. A major reason for the digital divide is a lack of computing devices at home. For low-income families, a \$200 Chromebook is unaffordable and out of reach, meaning families must rely on computer labs, phones, or borrowed devices to connect to the internet. The Town Link program distributed 260 refurbished laptops which came with a one-year warranty and technical support to low-income residents, at no cost to them. Recipients and CBO partners were appreciative of the devices noting that they were critical recruitment tools for digital inclusion courses.

- **[Recommendation] Partner With Non-Profit Computer Refurbishers:** Acquiring laptops and devices in quantity may be logistically difficult for many organizations doing digital inclusion work. Where possible, communities should work with professional nonprofit computer-refurbishing organizations that can provide tech support, warranty service, and devices in bulk and at a lower cost than purchasing new equipment.

- **[Recommendation] Provide Startup Support for Device Recipients:** Several Town Link partners distributed laptops to residents and developed their own introductory guide on how to login and use the computer after realizing that some recipients had issues with initial setup tasks for the computer, which include setting up internet access or downloading programs like Zoom for the first time. This type of support was necessary in nearly all of the classes, and digital inclusion programs should provide in-person initial setup support when distributing devices or in advance of digital literacy classes.



A welcome folder prepared by staff of the Oakland Workers Fund to provide information to laptop recipients and help them login and use their computer in advance of digital literacy courses. Photo Credit: Oakland Workers Fund

Conclusion

The digital divide presents a significant barrier to economic opportunity and full participation in today’s society, particularly for communities of color and low-income families. Communities across the nation now have a once in a generation opportunity to close that gap and achieve digital equity with the passage of legislation, such as the Digital Equity Act, that commits billions of dollars of investment into digital inclusion programs and broadband infrastructure. To make the most of this opportunity, cities must target their digital inclusion efforts to the communities that face the largest barriers to digital equity. The Town Link program and the recommendations in this report present one model for community digital inclusion efforts that tap into the strength and resources of local community based organizations to ensure priority communities have the skills, tools and information they need to get connected to the Internet and the opportunities it enables.

Endnotes

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