Thank you for reading this draft of the Delaware Digital Equity Plan (the "Plan"). The Delaware Broadband Office is eager to hear your thoughts on creating an effective guide to closing the digital skills divide and enhancing digital access and careers.

The Plan was developed using a State Digital Equity Planning Grant under the Digital Equity Act included in the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law. These planning grants are part of the larger State Digital Equity Capacity Grant Program, the purpose of which is to promote the achievement of digital equity, support digital inclusion activities, and build capacity for efforts by States relating to the adoption of broadband by residents of those States. Through these Plans, each State will, among other things, identify barriers to digital equity in the State and strategies for overcoming those barriers.

Public comments, interviews, and other data collected in November and early December will all be considered for future Plan revisions. We would welcome invitations to meet with your community, information on the digital equity-related work you are doing, and the expertise you have to share on the needs of Delawareans that might be addressed by greater digital access. Online surveys, which we are working to translate for Spanish- and Haitian Creole-speaking Delawareans, will remain live for anyone to contribute.

Public comments on the Plan will be accepted through December 4, 2023 to give us time to carefully review them for the revised draft Plan due to the National Telecommunications and Information Administration (NTIA) by December 14. Send comments to digitalequity@delaware.gov or William Penn Building, c/o Delaware Broadband Office, 801 Silver Lake Blvd., Dover, DE 19904.

NTIA's feedback on that draft will guide the final Plan to be submitted by January 28, 2024. In 2024, the Plan will be a central feature in implementation strategies for future digital equity funding. We're just getting started and hope you'll choose to be part of it.

Delaware Digital Equity Plan (DRAFT)

Delaware Broadband Office

Department of Technology and Information

State of Delaware

September 2023

Contents

1 Executive summary 1

1.1 Vision and principles for digital equity 1

1.2 Current state of digital equity: barriers and assets 2

1.3 Needs assessment 3

1.4 Collaboration and stakeholder engagement 5

1.5 Implementation plan 6

2 Introduction and vision for digital equity 8

2.1 Vision 8

2.2 Alignment with existing efforts to improve outcomes 10

2.2.1 Economic and workforce development goals, plans, and outcomes 15

2.2.2 Educational outcomes 17

2.2.3 Health outcomes 19

2.2.4 Civic and social engagement 20

2.2.5 Delivery of other essential services 21

2.3 Strategy and objectives 21

2.3.1 Strategies 21

2.3.2 Measurable objectives and key performance indicators 24

3 Current state of digital equity: Barriers and assets 38

3.1 Asset inventory 38

3.1.1 Digital inclusion assets by covered population 38

3.1.2 Existing digital equity plans 48

3.1.3 Existing digital equity programs 48

3.1.4 Broadband adoption 49

3.1.5 Broadband affordability 50

3.2 Needs assessment 52

3.2.1 Covered populations in Delaware 57

3.2.2 Access to broadband service 61

3.2.3 Digital literacy 72

3.2.4 Telemedicine 77

3.2.5 Online security and privacy 79

3.2.6 Device adoption 82

3.2.7 Online accessibility and inclusivity of public resources and services 85

4 Collaboration and partner engagement 87

4.1 Coordination and outreach strategy 87

4.1.1 Full geographic coverage 88

4.1.2 Meaningful engagement and outreach to diverse stakeholder groups 89

4.1.3 Multiple awareness and participation mechanisms 92
4.1.4 Clear procedures to ensure transparency 92
4.1.5 Outreach and engagement of unserved and underserved communities 93

4.2 Collaboration to implement this Plan 93

5 Implementation plan, key activities, and timeline 95

5.1 Barrier: Lack of broadband availability 96

5.2 Barrier: Low-income households struggle to afford broadband services, devices, and technical support 96

5.3 Barrier: Lack of digital and tech-related job opportunities and skill development for marginalized, covered, and low-income populations 98

5.4 Barrier: Low-income and senior households lack digital skills 100

5.5 Barrier: Communities lack resources and expertise for digital equity efforts 102

6 Conclusion 104

Appendix A: Organizations that DTI identified as potential partners 105

Appendix B: Residential broadband and digital equity needs assessment survey 111

Does your household receive home internet service – not mobile data? 112

Does your household purchase home internet service from an internet service provider? 113

We understand that you don't purchase a home internet service. If you access the internet at home in other ways, which of the following about your service at home is correct: 114

What are the reasons why your household does not purchase home internet service? 115

Of the reasons you picked for not purchasing a home internet service, which do you and the members of your household consider to be the most important? 115

How reliable is your home internet service? For example, unreliable service could mean that the service is not available, or experiences sudden drops in speed. 116

Are you currently enrolled in the Affordable Connectivity Program, Lifeline, or a subsidy program offered by your Internet Service Provider? 117

Please estimate how much you pay per month for your home internet service. 119

Please estimate how much you are willing to pay per month for high-speed, reliable home internet service. 120

For each of the following devices, how many does your household use that are in good working condition? 121

Thinking about the computing device you primarily use, if it were lost or damaged beyond repair, how long do you think it would take you to replace it? 132

Please rate how confident you or the primary user are in doing the following activities on the internet? 133

To what extent do you agree or disagree with the following statements about your internet and computer skills? 139

How many people live in your household, and what are their approximate ages? *144*

What is your approximate annual household income? *145*

What race/ethnicities are represented in your household? *146*

Are you or anyone else living in your household a(n): *146*

Appendix C: Partner Questionnaires **147**

Survey instrument 1: Broadband Equity, Access, and Deployment Digital Equity needs assessment *148*

Survey instrument 2: Delaware agency asset inventory survey *151*

Survey instrument 3: Delaware community anchor institution survey *159*

Survey instrument 4: Internet service provider survey *165*

Survey instrument 5: Delaware Digital Equity Program inventory survey *169*

Survey instrument 6: Digital equity and inclusion for historically marginalized populations ("Covered Populations") *173*

Survey instrument 7: Workforce development opportunity survey *177*

Figures

Figure 1: Portions of state populations belonging to a covered group 59
Figure 2: Map of covered groups in Delaware 61
Figure 3: Map of units served by 25/3 Mbps 64
Figure 4: Map of units served by 100/20 Mbps 65
Figure 5: ACP enrollment in Delaware by county 71
Figure 6: Overview of stakeholder engagement process 87
Figure 7: Overview of comprehensive outreach and engagement efforts 90
Figure 8: Virtual stakeholder meetings 91
Figure 9. Percent of households that receive home internet service 112
Figure 10. Percent of at-risk households that receive home internet service 112
Figure 11. Percent of households that purchase home internet service 113
Figure 12. Percent of at-risk households that purchase home internet service 113
Figure 13. Number of households without home internet service who access the internet in other ways 114
Figure 14. Reasons households do not purchase home internet service 115
Figure 15. Most important reason households do not purchase home internet service 115
Figure 16. Reliability of home internet service 116
Figure 17. Reliability of home internet service by at-risk groups 116
Figure 18. Percent of households with home internet service that are enrolled in subsidy programs 117
Figure 19. Percent of households with home internet service that are enrolled in subsidy programs by household income 117
Figure 20. Percent of at-risk households with home internet service that are enrolled in subsidy programs 118
Figure 21. Monthly cost of home internet service 119
Figure 22. Monthly cost of home internet service by household income 119
Figure 23. Amount willing to pay for high-speed, reliable home internet service 120
Figure 24. Amount willing to pay for high-speed, reliable home internet service by household income 120
Figure 25. Number of computing devices in the household 121
Figure 26. Average number of computing devices in the household (among households with at least one device) 121
Figure 27. Number of computers by household income 122
Figure 28. Number of tablets by household income 123
Figure 29. Number of smartphones by household income 123
Figure 30. Number of computers by student in household 125
Figure 31. Number of tablets by student in household 125
Figure 32. Number of smartphones by student in household 126
Figure 33. Number of computers by household size 127
Figure 34. Number of tablets by household size 127
Figure 35. Number of smartphones by household size 128
Figure 36. Number of computers by children in household (at least one household member under age 18) 129
Figure 37. Number of tablets by children in household (at least one household member under age 18) 129
Figure 38. Number of smartphones by children in household (at least one household member under age 18) . 130
Figure 39. Number of computers by seniors in household (at least one household member age 65 or older) ... 130
Figure 40. Number of tablets by seniors in household (at least one household member age 65 or older) 131
Figure 41. Number of smartphones by seniors in household (at least one household member age 65 or older) 131
Figure 42. How long it would take to replace a lost or damaged computing device 132

Figure 43. How long it would take to replace a lost or damaged computing device by household income..... 132
Figure 44. Confidence in using the internet for various activities..... 133
Figure 45. Very confident in using the internet for various activities by household income..... 135
Figure 46. Very confident in using the internet for various activities by children in household (at least one household member under age 18)..... 137
Figure 47. Very confident in using the internet for various activities by seniors in household (at least one household member age 65 or older)..... 138
Figure 48. Agreement with statements about internet skills..... 139
Figure 49. I can use and adjust privacy settings on social media by household income..... 139
Figure 50. I can identify false or misleading information by household income..... 140
Figure 51. I can recognize and avoid online fraud by household income..... 140
Figure 52. I can use and adjust privacy settings on social media by children in household..... 141
Figure 53. I can identify false or misleading information by children in household..... 141
Figure 54. I can recognize and avoid online fraud by children in household..... 142
Figure 55. I can use and adjust privacy settings on social media by seniors in household..... 142
Figure 56. I can identify false or misleading information by seniors in household..... 143
Figure 57. I can recognize and avoid online fraud by seniors in household..... 143
Figure 58. Percent of households with at least one member in each age category..... 144
Figure 59. Average number of household members per age category (among households with at least one household member in that age group)..... 144
Figure 60. Number of household members (household size)..... 145
Figure 61. Approximate annual household income..... 145
Figure 62. Race/ethnicity..... 146
Figure 63. Percent of households with at least one household member in each at-risk group..... 146

Tables

Table 1: Key barriers and obstacles for covered populations 4
Table 2: Digital inclusion assets by covered population(s) 39
Table 3: Existing digital equity programs 48
Table 4: Broadband affordability assets 51
Table 5: Reported reasons for no home internet use 53
Table 6: Key barriers and obstacles for covered populations 53
Table 7: Portion of Delaware and U.S. in various covered groups' 60
Table 8: Portion of units served with internet at various speeds in Delaware and the U.S. 63
Table 9: Regression analysis of portion of census tract belonging to covered groups and portion of units served 66
Table 10: Internet adoption rates in Delaware and the U.S. 67
Table 11: Internet adoption rates in covered and non-covered groups 68
Table 12: Internet adoption rates in various covered groups 69
Table 13: Affordable Connectivity Program enrollment in Delaware and the U.S. 69
Table 14: Digital literacy in Delaware and the U.S. 73
Table 15: Digital literacy in Delaware covered groups 74
Table 16: Digital literacy in aging and younger populations 74
Table 17: Digital literacy in people with disabilities and people without disabilities 75
Table 18: Digital literacy in low and higher-income populations 75
Table 19: Digital literacy in veteran and non-veteran populations 76
Table 20: Digital literacy in racial/ethnic minority and white populations 76
Table 21: Telemedicine digital literacy in Delaware and the U.S. 77
Table 22: Telemedicine digital literacy in covered and non-covered groups 77
Table 23: Telemedicine digital literacy in various covered populations 79
Table 24: Main online security or privacy concerns in Delaware and the U.S. 80
Table 25: Main online security or privacy concerns in covered and non-covered groups 80
Table 26: Main online security or privacy concerns in various covered groups 81
Table 27: Portion of individuals dissuaded from performing online activities by privacy or security concerns in Delaware and the U.S. 82
Table 28: Portion of individuals dissuaded from performing online activities by privacy or security concerns in covered and non-covered groups 82
Table 29: Device adoption rates in Delaware and the U.S. 83
Table 30: Device adoption rates in Delaware covered groups 84
Table 31: Device adoption rates in various covered groups 85
Table 32: Stakeholder engagement outreach list 105
Table 33. Number of computing devices by household income 122
Table 34. Number of computing devices in at-risk households 124
Table 35. Number of computing devices by household size 126
Table 36. Number of computing devices by ages of householders (percent of households with at least one householder in each age group) 128
Table 37. Confidence in using the internet for various activities by household income 134
Table 38. Confidence in using the internet for various activities by ages of householders 136

1 Executive summary

The State of Delaware recognizes the transformative power of technology in fostering an inclusive and prosperous society for all Delaware residents. Delaware seeks to promote digital equity to ensure that all residents, regardless of their background or location, have equal opportunities to access education, health care, job prospects, government services, and information critical to personal growth and well-being.

To these ends, the Delaware Department of Technology and Information (DTI) hereby submits to the National Telecommunications and Information Administration of the U.S. Department of Commerce (NTIA) this Statewide Digital Equity Plan (the Plan). DTI is designated by the State of Delaware as the Eligible Entity for purposes of the federal Digital Equity Act.

As detailed in this Plan, DTI has conducted a comprehensive outreach effort, developed a data-driven broadband and digital equity needs assessment, and identified a clear implementation path for achieving digital equity objectives. The Plan includes all 15 requirements outlined in NTIA's State Digital Equity Planning Grant Program Notice of Funding Opportunity (NOFO).

1.1 Vision and principles for digital equity

Broadband access and digital equity are integral to the well-being of the State of Delaware in the 21st century, serving as a linchpin for economic opportunity and community development, offering a pathway to increased innovation, entrepreneurship, and overall prosperity.

The State of Delaware envisions a future where every individual, regardless of their location or background, has full access to high-speed internet connectivity and the tools necessary to harness its transformative potential. In this vision, urban and rural communities alike can fully participate in the digital economy. In this vision, comprehensive infrastructure investment will eliminate connectivity gaps, bridging the urban-rural divide and fostering a connected ecosystem that empowers residents, businesses, and governments to thrive in a digital society.

In this vision, digital equity goes beyond infrastructure, emphasizing digital literacy and skills development as critical components. Residents are equipped with the knowledge to confidently navigate the digital landscape, access online resources, and protect their privacy and security. Digital skills training is integrated into educational curricula, workforce development programs, and community initiatives to create an informed and empowered citizenry. Furthermore, the vision envisions targeted support for underserved communities, ensuring that they are not left behind in the digital transformation.

To achieve this vision for digital equity, DTI will work with its local, nonprofit, and institutional partners toward achieving the following five critical elements of digital equity:

1. Access to affordable, reliable internet connectivity at home
2. Access to a personal computing device and opportunity to maintain it
3. Opportunity to learn digital skills
4. Tools and information to be safe online
5. Online State resources that are accessible and usable

Delaware's digital equity efforts will be guided by a set of core principles that prioritize inclusivity, effectiveness, and sustainability:

1. **Inclusivity and Accessibility**: Efforts will prioritize inclusivity, accommodating different needs and preferences.
2. **Equitable Access**: Efforts will focus on equitable access to affordable high-speed internet connectivity, computing devices, and necessary software.
3. **Community Engagement and Collaboration**: Efforts will prioritize active participation and collaboration among government agencies, community organizations, private sector partners, educational institutions, and residents.
4. **Sustainability**: Plans will aim for long-term sustainability.
5. **Data-Driven Decision Making**: Plans will use data to inform strategy, program design, implementation, and evaluation.

1.2 Current state of digital equity: barriers and assets

Delaware has been a pioneer in digital equity and broadband deployment for decades. The State of Delaware's innovative efforts have positioned Delaware as one of the most connected states in the country and provide valuable best practices to be leveraged in efforts to close the remaining gaps.

Impactful interagency collaboration among DTI, the Delaware Department of Transportation (DelDOT), and the Delaware Department of Education (DOE) has led to an extensive statewide infrastructure network and meaningful partnerships to serve residents.

DTI and its agency partners have set Delaware's Digital Accessibility Policy[1] (see Section 2.2) that is designed to ensure that everyone has access to digital State assets.

Through a comprehensive external engagement process conducted in preparation for this Plan (see Section 4), the State has identified the current state of digital equity—while also identifying potential partners, assets, and existing programs that will play a key role in enabling the successful implementation of this Plan. The comprehensive asset inventory (see Section 3.1) lists State and local programs as well as the work of nonprofits. In Delaware, digital equity work is ongoing, often positioned within broader work addressing diversity, equity, inclusion, and access (DEIA).

1.3 Needs assessment

Through data collection, community engagement,[2] and analysis,[3] DTI has identified a range of barriers associated with the needs of Delaware households and communities. These are described in detail below. In brief, the key identified challenges include:

1. Lack of broadband availability to households in those areas not yet reached by preceding efforts
2. Low-income households struggle to access and afford broadband services, devices, and technical support
3. Low-income and senior households lack digital skills

[1] "Digital Accessibility Policy," DTI, https://webfiles.dti.delaware.gov/pdfs/pp/Digital%20Accessibility%20Policy.pdf; "Digital Accessibility for the State of Delaware," DTI, https://accessibility.dti.delaware.gov/; "Mission of the GIC," GIC, https://gic.delaware.gov/mission-government-information-center/.

[2] The State's comprehensive stakeholder outreach program included extensive efforts to identify the needs of all Delawareans with an emphasis on those belonging to covered populations. Outreach and data collection efforts were made to assess the baseline from which the State is working and to identify the barriers to Digital Equity faced generally and by each of the covered populations in Delaware. The research and analysis are based on available and relevant data from the American Community Survey (ACS), NTIA's Internet Use Survey (administered as a supplement to the Current Population Survey), FCC's National Broadband Map, and DTI's custom scientific phone survey (administered in 2023). As described in detail in Section **Error! Reference source not found.**, the data and analysis are intended to facilitate understanding of the extent to which: (1) broadband internet service is available to and adopted by residents; (2) residents are confidently performing various digital skills; (3) residents are aware of and impacted by online security and privacy concerns; (4) computer devices are abundant and adequate for meaningful internet use; and (5) online government resources and services are accessibly built and maintained.

[3] Analysis was undertaken to benchmark Delaware against national averages, and to benchmark its residents belonging to covered populations against those that do not belong to covered populations. Analytical tools include a range of statistical tools and models, including regression analysis, in order to isolate factors and make appropriate conclusions regarding correlation and causation, thereby shaping the selection of metrics.

The table below summarizes key barriers for each covered population identified through this outreach.

Table 1: Key barriers and obstacles for covered populations

Covered population	Identified barriers and obstacles
Aging individuals	Lack of digital skills and comfort levels to use online tools to access telemedicine, public service, social and civic opportunities, or entertainment; lack of internet adoption; need for digital literacy programs.
Incarcerated individuals	Lack of adequate broadband services and adequate funding for digital literacy and workforce training inside correctional institutions; lack of digital literacy and job training for formerly incarcerated to expand job opportunities.
Individuals who are members of a racial or ethnic minority	Barriers that come from historic underrepresentation; crossover barriers with limited English speaking, low-income population.
Individuals who primarily reside in a rural area	Lack of access to affordable and reliable broadband that, in turn, creates barriers to developing digital skills; lack of access to public computing spaces and support for digital literacy and workforce develop skills.
Individuals with disabilities	Necessary adaptive technology can be expensive, scarce, and hard to use; need for specialized digital literacy training; affordability of services and appropriate devices; relevant online content.
Individuals with language barriers	Limited or lack of relevant and accessible content; lack of knowledge or access to accessibility tools to support online activity; lack of in-language digital skills training.
Individuals in low-income households	Unaffordable cost of service for speeds and data capacity necessary to meet critical needs such as education and working from home; lack of knowledge or access to discount subsidy programs.
Veterans	Delaware's veterans face crossover challenges with aging individuals, individuals from racial and ethnic minorities,

Covered population	Identified barriers and obstacles
	individuals with disabilities, individuals living in rural areas, and low-income individuals. These challenges are compounded in rural areas where lack of terrestrial and cellular broadband access is coupled with the inherent limitations of smartphones as inadequate to participate in video conference sessions, or access other online veterans' services such as telemedicine. There is a need to improve veterans' access to workforce training and digital skills improvement that could expand employment opportunities beyond skills developed in the military.

1.4 Collaboration and stakeholder engagement

DTI's approach to collaborating with key constituencies and stakeholders in the State has been thorough, extensive, and inclusive. The agency conducted a comprehensive and coordinated external engagement process in preparation of this Plan.

The comprehensive stakeholder outreach program included extensive efforts to identify the needs of covered populations. Outreach and data collection efforts included questionnaires, mapping efforts, desk research, and meetings with key State and local stakeholders to develop broadband strategic plans and objectives; current and ongoing outreach and engagement with key stakeholders during local and regional meetings; and data collection through end user surveys with ongoing analysis of results.

This outreach approach included:

- **In-person engagements in all Delaware counties** to solicit input, insights, priorities, and guidance
- **Stakeholder organization engagement** through virtual workshops and distribution of online surveys for government agencies, nonprofit entities, internet service providers, community anchor institutions, and other institutional stakeholders
- **Scientific phone survey of Delaware households** on digital equity topics
- **Ongoing meetings** with State agencies, community organizations, key stakeholders, and constituents that represent covered populations and those already working on addressing digital equity needs in Delaware

DTI conducted a series of virtual workshops with government agencies and anchor institutions, community-based organizations representing covered populations, and internet service providers. In parallel to outreach through in-person engagements, DTI used a statistically valid data collection methodology to conduct a statewide residential phone survey to inform this Plan and capture resident input across the State. DTI also consulted with higher education and workforce organizations in workforce development.

1.5 Implementation plan

Digital equity in Delaware will likely involve multiple initiatives and efforts associated with each strategy and objective. DTI looks forward in particular to the opportunity to use its Digital Equity Capacity Grant to support and develop further digital equity capacity in Delaware, in partnership with the many local and regional entities that have participated in DTI's community engagement work over the past year.

At the same time, DTI notes that the ability to develop and sustain these initiatives is dependent on the availability of resources and the many other priorities policymakers have for those resources. For that reason, these potential initiatives are offered as examples of what may be possible if resources are available.

Consistent with its longtime efforts to expand broadband, DTI has designed these initiatives in the most pragmatic way possible—to be actionable, measurable, and sustainable—rather than risk designing more ambitious initiatives that are not financially or practically actionable.

As described in detail (including activities and timelines) in Section 2.3 and Section 5, the following are potential strategies aligned with each key digital equity challenge:

1. Barrier: Lack of broadband availability

   Strategy: Increase access to residential broadband infrastructure

2. Barrier: Low-income households struggle to afford broadband services, devices, and technical support

   Strategy 1: Increase Affordable Connectivity Program enrollment and ISP low-cost program enrollment among eligible households

   Strategy 2: Increase low-cost service offerings

   Strategy 3: Expand access to computing devices and tech support, particularly those provided locally

   Strategy 4: Develop data and informational resources to enable application of a digital equity lens to infrastructure and program decisions

3. Barrier: Lack of digital and tech related job opportunities and skill development for marginalized, covered, and low-income populations

    Strategy 1: Increase capacity for job training programs with pipeline access to good-paying jobs in the tech sector and digital economy

    Strategy 2: Increase outreach and recruitment by job training organizations, including governmental and nonprofit, in historically under-represented populations

4. Barrier: Low-income and senior households lack digital skills

    Strategy 1: Enable digital skills development through training courses

    Strategy 2: Expand opportunity to learn online safety and privacy

    Strategy 3: Expand accessibility of information

5. Barrier: Communities lack resources and expertise for digital equity efforts

    Strategy 1: Build collaboration among State, local, and nonprofit entities

    Strategy 2: Build capacity for digital skill building in governmental and nonprofit entities

2 Introduction and vision for digital equity

2.1 Vision

Broadband access and digital equity are integral to the well-being of the State of Delaware in the 21st century, serving as a linchpin for economic opportunity and community development, offering a pathway to increased innovation, entrepreneurship, and overall prosperity.

The State of Delaware envisions a future where every individual, regardless of their location or background, has full access to high-speed internet connectivity and the tools necessary to harness its transformative potential. In this vision, urban and rural communities alike can fully participate in the digital economy. In this vision, comprehensive infrastructure investment will eliminate connectivity gaps, bridging the urban-rural divide and fostering a connected ecosystem that empowers residents, businesses, and governments to thrive in a digital society.

In this vision, digital equity goes beyond infrastructure, emphasizing digital literacy and skills development as critical components. Residents are equipped with the knowledge to confidently navigate the digital landscape, access online resources, and protect their privacy and security. Digital skills training is integrated into educational curricula, workforce development programs, and community initiatives to create an informed and empowered citizenry. Furthermore, the vision encompasses targeted support for underserved communities, ensuring that they are not left behind in the digital transformation.

In this vision, all Delaware residents will have access to the following **five critical elements of digital equity:**

1. **Access to affordable, reliable internet connectivity at home:** Access to affordable and reliable internet connectivity at home is a cornerstone of digital equity as it ensures that individuals, regardless of their socioeconomic background, can participate fully in the digital world. In an increasingly interconnected society, essential services, education, job opportunities, and civic engagement largely occur online. Affordable internet access enables equal access to critical information and resources that drive personal and professional growth.

2. **A computing device and opportunity to maintain it**: A computing device is a necessary element of effective internet use and a gateway to education, employment, health care, and social interactions. Access to a computing device, with technical support to maintain it, means that all Delaware residents have the tools necessary to succeed in the digital age.

3. **Opportunity to learn digital skills and find empowering careers in the digital economy**: The opportunity to learn digital skills is a linchpin of digital equity because it empowers

individuals to harness the potential of technology effectively and safely. Digital literacy is essential for navigating online platforms, communicating, evaluating information, and engaging in the modern world. For those that choose it, digital literacy can create the opportunity to move beyond skill building for personal enrichment and into a career in the digital economy, promoting general digital literacy, taking opportunities to assist, being role models in the community, and enriching the digital ecosystem in Delaware.

4. **Tools and information to be safe online**: Providing tools and information to be safe online is a critical component of digital equity, ensuring that all individuals can navigate the digital landscape securely. Cyber threats, scams, and privacy breaches are risks faced by everyone online.

5. **Online State resources that are accessible and usable**: Ensuring that online State resources are accessible and usable for all residents supports equal access to government services, information, and civic participation. An inclusive approach to digital design ensures that individuals with disabilities, limited digital literacy, or language barriers can fully engage with State resources.

Delaware's digital equity efforts will be guided by a set of core principles that prioritize inclusivity, effectiveness, and sustainability. These principles lay the foundation for ensuring that State of Delaware digital equity efforts address the digital divide comprehensively, prudently, and responsibly. DTI therefore adopts the following framework principles for digital equity efforts:

- **Inclusivity and accessibility:** Digital equity programs should prioritize inclusivity. Programs should be designed with accessibility and flexibility in mind, accommodating different needs and preferences.

- **Equitable access:** Efforts should focus on equitable access to affordable high-speed internet connectivity, computing devices, and necessary software. This involves identifying underserved areas and populations, working to bridge the urban-rural digital divide, and ensuring that economic disparities do not hinder access to essential digital tools and services.

- **Community engagement and collaboration:** Efforts should prioritize active participation and collaboration among government agencies, community organizations, private sector partners, educational institutions, and residents. Engaging stakeholders ensures that strategies align with local needs, leverage available resources, and create a collective impact.

- **Sustainability:** Digital equity planning should aim for long-term sustainability. Sustainable funding models, public-private partnerships, and leveraging existing infrastructure can contribute to the ongoing success of these programs.

- **Data-driven decision making:** Using data to inform strategy, program design, implementation, and evaluation is vital. Regularly collecting and analyzing data helps identify gaps, measure outcomes, and refine strategies for continuous improvement.

By adhering to these core principles, DTI seeks to develop a Digital Equity Plan that affords all individuals the opportunity to harness the benefits of the digital world.

2.2 Alignment with existing efforts to improve outcomes

DTI's role in administering broadband infrastructure development and digital equity efforts is fully aligned with State priorities. This section of the Plan describes other State of Delaware programs and priorities and how they align with, and in some cases complement, this Plan and DTI's overall broadband expansion efforts. Virtually every agency in Delaware, as well as each agency's component divisions and bureaus, has a policy regarding diversity, equity, inclusion, and accessibility (DEIA), but not every agency has a policy or plan focusing on digital equity. That said, digital equity initiatives will likely form a part of DEIA work at many State agencies.

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
Economic & workforce development	Delaware Workforce Development Board, Delaware Department of Labor	Three Year Strategic Plan, 2023-2025[4]	Increase equity, expand economic prosperity for all Delawareans	Improved opportunities for covered populations
	Delaware Arts Alliance	Creative Economy and Cultural Tourism Recovery and Growth Plan[5]	Advance the State's creative economy	Improved opportunities for covered populations
	Delaware	Delaware's IT	Facilitate an	Improved access

[4] "Three Year Strategic Plan, 2023-2025," Delaware Workforce Development Board, https://laborfiles.delaware.gov/main/wdb/Delaware_Workforce_Development_Board_Strategic_Plan.pdf.
[5] Plan in development with expected publication in spring/summer 2024; "Creative Economy," Delaware Arts Alliance, https://www.delawareartsalliance.org/creativeeconomy/.

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	Prosperity Partnership	Talent Strategy[6]	innovation ecosystem with an inclusive tech talent pipeline	and opportunities for covered populations
	Department of Human Resources Division of Diversity & Inclusion	Equal Employment Opportunity/Affirmative Action Annual Report/Plan Requirements for Executive Branch Agencies (Revised 2023)[7]	Requires Cabinet secretaries to describe their equal employment and affirmative action strategies and performance for their departments' workforce.	Improved opportunities for covered populations
Education	Delaware Division of Libraries	Delaware's Library Services and Technology Act Grants to States Five-Year Plan (2023-2027)[8]	One of three goals is "ensure equitable access"	Improved services for covered populations
	Delaware Division of Libraries	Delaware Libraries Outdoor Learning & Experiences[9]	Tailor library services to the needs of each community	Improved services for covered populations
	Delaware Division of	2022-2026 Strategic Plan[10]	Goal 3 is Diversity, Equity,	Improved access and services for

[6] "Delaware's IT Talent Strategy: A Roadmap for Building an Inclusive Tech Workforce," Delaware Prosperity Partnership, https://www.choosedelaware.com/wp-content/uploads/2021/04/2020-10-30-Delawares-IT-Talent-Strategy.pdf.

[7] "Equal Employment Opportunity/Affirmative Action Annual Report/Plan Requirements for Executive Branch Agencies (Revised 2023)", Department of Human Resources, https://dhr.delaware.gov/diversity/documents/plan-requirements.pdf?ver=0615

[8] "Delaware's Library Services and Technology Act Grants to States Five-Year Plan (2023-2027)," Delaware Division of Libraries, https://libraries.delaware.gov/wp-content/uploads/sites/123/2022/08/Delaware-LSTA-5yr-Plan-2023-2027.pdf; "Planning for the Future," Delaware Division of Libraries, https://libraries.delaware.gov/planning-future/.

[9] "Delaware Libraries Outdoor Learning & Experiences," Delaware Division of Libraries, https://libraries.delaware.gov/wp-content/uploads/sites/123/2021/03/2021.3.16-Final-DE-Libraries.pdf; "Planning for the Future," Delaware Division of Libraries, https://libraries.delaware.gov/planning-future/.

[10] "2022-2026 Strategic Plan," Delaware Division of Historical and Cultural Affairs, https://history.delaware.gov/wp-content/uploads/sites/179/2022/01/2022-2026-HCA-Strategic-Plan_Digital.pdf.

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	Historic and Cultural Affairs		Accessibility, Inclusion (DEAI)	covered populations
	Delaware Department of Technology and Information	Connect Delaware[11]	Support student success	Improved access for covered populations
	Delaware Technical & Community College	Strategic Directions 2021-2025[12]	A "Strategic Direction" is to "Institutionalize the values of diversity, equity, and inclusion." The "Trend Area" of "Learning Transformation" acknowledges that the shift of students to more online courses must include considerations of equity and accessible course design and how digital equity is impacted by "social, technological, and economic issues."	Improved services for covered populations
	Delaware Department of Education	Delaware's Plan to Ensure Equitable Access to Excellent Educators for All Students 2015-	Plan focuses on strategies to secure "equitable access to the most capable and well-prepared educators" as a method to close	Improved services for covered populations

[11] "Connect Delaware Students," DTI, https://broadband.delaware.gov/pages/index.shtml?dc=caresAct.
[12] "College Strategic Directions," DTCC, https://www.dtcc.edu/sites/default/files/strategic_directions_booklet.pdf

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
		2025 [13]	the student achievement gap.	
Health	Department of Services for Children, Youth and Their Families (DSCYF)	Strategic Plan 2021[14]	One goal is improved diversity, equity, and inclusion	Improved opportunities for covered populations
	Delaware Health and Social Services (DHSS) Division of Services for Aging and Adults with Physical Disabilities (DSAAPD)	State Plan on Aging 2020-2024[15]	Strategies to improve online services to support accessibility and the agency's mission of inclusion	Improved access for covered populations
	DHSS Division of Public Health (DPH)	2019-2023 Strategic Plan[16]	Strategic priority to achieve health equity	Improved health for covered populations
	DHSS Division of Developmental Disabilities Services	2019 1915(c) HCBS Waiver 2019-2024[17]	Describes how Medicaid-funded services, including employment, will be provided in individuals' home or community instead of institutions	Improved opportunities for covered populations

[13] "Plan to Ensure Equitable Access to Excellent Educators for All Students 2015-2025", DOE, https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/Domain/390/Delaware%20Excellent%20Educators%20for%20All%20Plan.pdf

[14] "Strategic Plan 2021," DSCYF, https://kidsfiles.delaware.gov/pdfs/dscyf-strategic-plan-fy2022-fy2027.pdf.

[15] "Delaware State Plan on Aging October 1, 2020 to September 30, 2024," DSAAPD, https://dhss.delaware.gov/dhss/dsaapd/files/state_plan_on_aging_20_24.pdf.

[16] "Delaware Division of Public Health 2019-2023 Strategic Plan," DPH, https://dhss.delaware.gov/dhss/dph/files/dphstrategicplan.pdf.

[17] "2019 1915(c) HCBS Waiver 2019-2024", DDDS, https://dhss.delaware.gov/dhss/ddds/files/hcbs2019to2024.pdf

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	DHSS Division of Medicaid and Medical Assistance	Diamond State Health Plan Quality Strategy 2023[18]	A Guiding Principle is to work "with other Department of Health divisions, [Managed Care Organizations], and community resources to promote health equity"	Improved health for covered populations
Civic and social engagement	DTI and the Government Information Center (GIC)	Digital Accessibility Policy[19]	All State of Delaware Information and Communication Technology (ICT) is accessible to and usable by individuals with disabilities	Improved access for covered populations
	Architectural Accessibility Board (AAB), Department of Facilities Management (DFM)	State of Delaware Architectural Accessibility Standards[20]	Ensure that State facilities are safely accessible to all	Improved access for covered populations
	Department of Natural Resources and Environmental Control (DNREC)	Environmental Justice initiative[21]	Greater outreach to communities that disproportionately face adverse environmental impacts	Improved access for covered populations

[18] https://dhss.delaware.gov/dhss/dmma/files/dqs_2023_09_29.pdf
[19] "Digital Accessibility Policy," DTI, https://webfiles.dti.delaware.gov/pdfs/pp/Digital%20Accessibility%20Policy.pdf; "Digital Accessibility for the State of Delaware," DTI, https://accessibility.dti.delaware.gov/; "Mission of the GIC," GIC, https://gic.delaware.gov/mission-government-information-center/.
[20] "State of Delaware Architectural Accessibility Standards," DFM, https://dfm.delaware.gov/aab/documents/aabstand.pdf.
[21] "Environmental Justice at DNREC," DNREC, https://dnrec.alpha.delaware.gov/environmental-justice/.

Measurable objective	Key agency partners	Plan	Goals / priorities	Digital equity alignment
	Department of Natural Resources and Environmental Control (DNREC)	Statewide Comprehensive Outdoor Recreation Plan[22]	Includes goal of Accessible Recreation with strategies for accessibility for persons with disabilities	Improved access and services for covered populations
Delivery of essential services	Delaware Office of Highway Safety	FY 2023 Highway Safety Plan[23]	Use data to reduce traffic crashes that disproportionately impact some communities	Improved safety for covered populations
	Delaware Department of Transportation (DelDOT)	Framework for Excellence	Equitable and accessible transportation for all	Improved access for covered populations
	Domestic Violence Coordinating Council (DVCC)	Strategic Plan 2023 - 2026[24]	Improve the response to domestic violence and abuse so as to reduce the incidents thereof using methods that include online training	Improved safety for covered populations

2.2.1 Economic and workforce development goals, plans, and outcomes

The Delaware Workforce Development Board in its Three-Year Strategic Plan, 2023-2025[25] sets targets for outcomes and data collection, including equity goals. For example, one goal is "1% increase in underrepresented workers attaining high-value certifications." The plan states, "Educational and economic equity are foundational to the health of our state. Today, opportunity

[22] "Building an Outdoor Legacy in Delaware", Division of Parks & Recreation, https://destateparks.com/wwwroot/downloads/SCORP/SCORP%202018.pdf
[23] "FY 2023 Highway Safety Plan," Delaware Office of Highway Safety, https://ohs.delaware.gov/pdfs/Reporting%20Forms/HSP/FY2023_HSP.pdf.
[24] "Strategic Plan 2023 – 2026," DVCC, https://dvcc.delaware.gov/wp-content/uploads/sites/87/2023/06/DVCC-Strategic-Plan_2023-2026-FINAL.pdf.
[25] "Three Year Strategic Plan, 2023-2025," Delaware Workforce Development Board, https://laborfiles.delaware.gov/main/wdb/Delaware_Workforce_Development_Board_Strategic_Plan.pdf.

is not fairly distributed. Our goal is to dramatically reduce the gaps that exist today based on race and ethnicity." The plan calls for the collection of data, tracking outcomes for those in training programs, and surveying employers and other partners.

The Delaware Arts Alliance (DAA) is in the process of developing a Creative Economy and Cultural Tourism Recovery and Growth Plan (expected spring/summer 2024),[26] supported by American Rescue Plan Act (ARPA) funding through the Delaware Division of Small Business as part of the Economic Development Administration's (EDA) American Rescue Plan Travel, Tourism & Outdoor Recreation program. Based on input from diverse stakeholders, DAA intends to create a "first of its kind in the nation" policy and investment roadmap to grow the State's creative economy with a focus on women-led and minority-led initiatives, very small businesses, and the general workforce. DAA will create an online map of arts and culture assets in the State "as a resource for government agency planning" and individual exploration, as well as a policy agenda at the State, county, and local level.

The Delaware Prosperity Partnership (DPP), a public-private partnership that supports Delaware's innovation ecosystem through business development, financing, and incentives,[27] issued a 2020 strategic plan (Delaware's IT Talent Strategy)[28] with a roadmap to developing an inclusive tech workforce in the State. The plan found IT needs by employers from entry level to highly specialized positions, which could be addressed by upskilling those already in the field and expanding education pathways. The strategy includes input from over 50 business, education, nonprofit, and workforce development stakeholders as well as interviews with underserved individuals, justice-involved citizens, and people re-entering the workforce.[29]

The State of Delaware's Division of Diversity and Inclusion in the Department of Human Resources lays out the requirements for executive branch agencies to plan and report on their efforts, including defined metrics, to achieve equal opportunities in their own workforces in "Equal Employment Opportunity/Affirmative Action Annual Report/Plan Requirements for Executive Branch Agencies (Revised 2023).[30] Strategic priorities include cultivating an inclusive

[26] "Creative Economy," Delaware Arts Alliance, https://www.delawareartsalliance.org/creativeeconomy/.
[27] "Innovation Ecosystem," Delaware Prosperity Partnership, https://www.choosedelaware.com/why-delaware/innovation/.
[28] "Delaware's IT Talent Strategy: A Roadmap for Building an Inclusive Tech Workforce," Delaware Prosperity Partnership, https://www.choosedelaware.com/wp-content/uploads/2021/04/2020-10-30-Delawares-IT-Talent-Strategy.pdf.
[29] "DPP Announces Plan to Create a More Inclusive Tech Talent Pipeline for Delaware," DPP, March 8, 2021, https://www.choosedelaware.com/press-releases/delaware-creates-more-inclusive-tech-talent-pipeline/.
[30] "Equal Employment Opportunity/Affirmative Action Annual Report/Plan Requirements for Executive Branch Agencies (Revised 2023)", Department of Human Resources, https://dhr.delaware.gov/diversity/documents/plan-requirements.pdf?ver=0615

climate, building management capacity to lead a diverse workforce, and equitable access to professional development.

2.2.2 Educational outcomes

The Library Services and Technology Act (LSTA) authorizes State program grants to certified State Library Administrative Agencies (SLAA). In order to be eligible for funding, SLAAs must submit a five-year plan for implementation that is consistent with the stated purposes of LSTA and with the priorities of the "Grants to States" program. Delaware's Library Services and Technology Act Grants to States Five-Year Plan (2023-2027)[31] complies with the Five-Year State Plan Guidelines for State Library Administrative Agencies 2023-2027[32] promulgated by the federal Institute of Museum and Library Services (IMLS). The Division of Libraries sets three goals: build strong libraries, ensure equitable access, and build thriving communities. Based on a needs assessment conducted for the LSTA plan, the Division of Libraries expects to spend the majority of LSTA funding on ensuring equity of access, including offering digital literacy training and digital literacy skills evaluation. The Division of Libraries also expects to provide LSTA funding to Delaware Library Access Services (DLAS), which provides access to library resources in accessible formats to those who are blind or otherwise print-disabled. DLAS is the Delaware regional branch of the National Library Service for the Blind and Print Disabled (NLS) of the Library of Congress (LOC). The Division of Libraries will also use LSTA funding to enhance the Delaware Library Consortium's online searchable catalog of the holdings of libraries in Delaware. The Division of Libraries aims to position local libraries as "the community help desk at the heart of the community in partnership with a wide range of strategic partners."

The Delaware Division of Libraries's plan titled "Delaware Libraries Outdoor Learning & Experiences"[33] is a 310-page report discussing the specific needs of each community served by each public library service area, along with plans for the use of outdoor space. Needs vary by community and include adult continuing education, digital literacy and free Wi-Fi, art festivals, activities for families, and programming designed to appeal to young entrepreneurs. For example, the Seaford District Library service area serves the poorest school district in Delaware, and the library has served as a food distribution site—it also provides access to education programs including English as a Second Language (ESL), General Educational Development (GED,

[31] "Delaware's Library Services and Technology Act Grants to States Five-Year Plan (2023-2027)," Delaware Division of Libraries, https://libraries.delaware.gov/wp-content/uploads/sites/123/2022/08/Delaware-LSTA-5yr-Plan-2023-2027.pdf; "Planning for the Future," Delaware Division of Libraries, https://libraries.delaware.gov/planning-future/.

[32] "Five-Year State Plan Guidelines for State Library Administrative Agencies 2023-2027, IMLS, https://www.imls.gov/sites/default/files/2021-03/fiveyearstateplanguidelines2023-2027.pdf.

[33] "Delaware Libraries Outdoor Learning & Experiences," Delaware Division of Libraries, https://libraries.delaware.gov/wp-content/uploads/sites/123/2021/03/2021.3.16-Final-DE-Libraries.pdf; "Planning for the Future," Delaware Division of Libraries, https://libraries.delaware.gov/planning-future/.

a high school equivalency credential), and literacy. Libraries in each of the State's counties offer "telehealth kiosks," which provide internet access and a private space to conduct appointments and access a variety of social services;[34] Delaware Libraries also partnered with AmeriCorps VISTA to hire Digital Navigators in summer 2023.[35] Other library service areas emphasize civic and social engagement in addition to education.

The Delaware Division of Historic and Cultural Affairs, in its 2022-2026 Strategic Plan,[36] sets five goals. Goal 3 is Diversity, Equity, Accessibility, Inclusion (DEAI). The first objective supporting Goal 3 is "HCA assets will be welcoming both physically and digitally." HCA aims to increase online access to collections, among its priorities. More broadly, diversity informs the first tenet of the vision of HCA: "We actively engage individuals to share how Delaware History is meaningful in their lives. We provide opportunities for communities to explore a diversity of historical and cultural perspectives that inform and inspire decisions about the future."

Through the Connect Delaware initiative, DTI supports student success by providing free broadband services for low-income students (see Section 3.1.3 for additional description of the program).[37]

Delaware Technical and Community College has recognized that changing student demographics and demand for online course content will require new approaches to course design and considerations of digital equity.[38] The College notes that their student body's diversity requires tailored approaches to support students from enrollment through completion of their studies and that supporting rural communities is "critical to stimulate and foster entrepreneurial opportunities." This underscores the importance of expanding broadband infrastructure and digital skills to rural communities so they can compete for these opportunities.

The Delaware Department of Education's "Plan to Ensure Equitable Access to Excellent Educators for All Students 2015-2025" focuses on the problems faced by students in high-need schools due to having disproportionately less experienced and lower-rated teachers with high turnover when compared to Delaware schools overall.[39] The plan targets students in high-need schools, from

[34] Kristina DeRobertis, "Delaware Libraries Broadening Horizons with More Telehealth Kiosks," WBOC, August 11, 2023, https://www.wboc.com/news/delaware-libraries-broadening-horizons-with-more-telehealth-kiosks/article_30cfff78-387d-11ee-af39-bbc9aa106f2b.html.
[35] "Opportunities," Delaware Division of Libraries, https://libraries.delaware.gov/opportunities/.
[36] "2022-2026 Strategic Plan," Delaware Division of Historical and Cultural Affairs, https://history.delaware.gov/wp-content/uploads/sites/179/2022/01/2022-2026-HCA-Strategic-Plan_Digital.pdf.
[37] "Connect Delaware Students," https://broadband.delaware.gov/pages/index.shtml?dc=caresAct.
[38] "College Strategic Directions," DTCC, https://www.dtcc.edu/sites/default/files/strategic_directions_booklet.pdf
[39] "Plan to Ensure Equitable Access to Excellent Educators for All Students 2015-2025", DOE, https://www.doe.k12.de.us/cms/lib/DE01922744/Centricity/Domain/390/Delaware%20Excellent%20Educators%20for%20All%20Plan.pdf

low-income families, those of color or English language learners, with disabilities, and those in urban schools with separate data for Wilmington.

2.2.3 Health outcomes

The Strategic Plan 2021[40] of the Department of Services for Children, Youth and Their Families (DSCYF) delivers a frank assessment of DSCYF's problems and highlights as one of five goals, "Cultural responsiveness – diversity, equity, and inclusion, multigenerational staff." The plan calls for the use of the internet to better serve families and also to improve coordination within DSCYF. One opportunity and strength, noted in the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, is "Delivering services in a virtual world" and one opportunity—not a strength—is "Weave DEI into all aspects of DSCYF work."

The Delaware State Plan on Aging (October 1, 2020 to September 30, 2024) by the Delaware Health and Social Services (DHSS) Division of Services for Aging and Adults with Physical Disabilities (DSAAPD), which has the mission to "promote dignity, respect, and inclusion for older adults and people with disabilities," includes strategies to increase online options to improve the accessibility of its core service objectives.[41] DSAAPD plans to expand its online information hub, the Aging and Disability Resource Center (ADRC),[42] to support online self-assessment and referral to services and resources.

The DHSS Division of Public Health 2019-2023 Strategic Plan includes achieving health equity as one of its four strategic priorities, with a focus on addressing systematic disparities for populations with particular risks, including covered populations, and social determinants of health.[43]

The Division of Developmental Disabilities' Home and Community-Based Services Waiver[44] is designed to help clients receive services in their communities rather than institutions. This promotes independence, allows individuals with disabilities to better direct their services toward personal goals, and creates more opportunities for employment, with priority placed on competitive employment, by funding job coaches and other supports.

[40] "Strategic Plan 2021," DSCYF, https://kidsfiles.delaware.gov/pdfs/dscyf-strategic-plan-fy2022-fy2027.pdf.
[41] "Delaware State Plan on Aging October 1, 2020 to September 30, 2024," DSAAPD, https://dhss.delaware.gov/dhss/dsaapd/files/state_plan_on_aging_20_24.pdf.
[42] "Delaware Aging and Disability Resource Center," Delaware Health and Social Services, https://dhss.delaware.gov/DSAAPD/adrc.html.
[43] "Delaware Division of Public Health 2019-2023 Strategic Plan," DPH, https://dhss.delaware.gov/dhss/dph/files/dphstrategicplan.pdf.
[44] "2019 1915(c) HCBS Waiver 2019-2024", DDDS, https://dhss.delaware.gov/dhss/ddds/files/hcbs2019to2024.pdf

The recently released Diamond State Health Plan Quality Strategy[45] outlines the Division of Medicaid and Medical Assistance's plans to provide quality services through their managed care organizations. The Quality Strategy includes focus on health and service disparities affecting Medicaid clients. One of the criteria used to assess provider network adequacy includes "telemedicine, e-visits, and/or other evolving and innovative technology solutions."

2.2.4 Civic and social engagement

The Digital Accessibility Policy,[46] maintained by DTI and GIC, aims to create an inclusive digital world where people of all abilities can have equal access to the information, resources, and opportunities that the internet provides. State of Delaware websites play a crucial role in providing information and services to the residents and businesses in Delaware. It is essential that our websites are digitally accessible so that everyone has equal access to the resources and information they need. Accessible websites are more user-friendly and cost-effective, as a broader range of people can use them without needing additional accommodations. Ensuring digital accessibility on State government websites is not only a legal requirement under the Americans with Disabilities Act (ADA), but also reflects Delaware's commitment to creating a more inclusive and equitable society for all.

The State of Delaware Architectural Accessibility Standards[47] are maintained by the Architectural Accessibility Board (AAB), part of the Department of Facilities Management (DFM). The architectural accessibility standards are the physical counterpart to the Digital Accessibility Policy described above.

The Department of Natural Resources and Environmental Control's (DNREC) environmental justice initiative "seeks equity for minority and low-income communities that may be disproportionately exposed—and vulnerable—to adverse environmental impacts."[48] In its initial stage, DNREC seeks to improve opportunities for covered populations to learn about and comment on projects seeking permits in their communities and report potential environmental violations.[49]

[45] "Diamond State Health Plan Quality Strategy", Division of Medicaid and Medical Assistance, https://dhss.delaware.gov/dhss/dmma/files/dqs_2023_09_29.pdf
[46] "Digital Accessibility Policy," DTI, https://webfiles.dti.delaware.gov/pdfs/pp/Digital%20Accessibility%20Policy.pdf; "Digital Accessibility for the State of Delaware," DTI, https://accessibility.dti.delaware.gov/; "Mission of the GIC," GIC, https://gic.delaware.gov/mission-government-information-center/.
[47] "State of Delaware Architectural Accessibility Standards," DFM, https://dfm.delaware.gov/aab/documents/aabstand.pdf.
[48] "Environnemental Justice at DNREC," DNREC, https://dnrec.alpha.delaware.gov/environmental-justice/.
[49] "Public Participation," DNREC, https://dnrec.alpha.delaware.gov/environmental-justice/participation/.

DNREC's Division of Parks and Recreation describes their aims to make programs and facilities more inclusive in "Building an Outdoor Legacy in Delaware."[50] This edition of the State Comprehensive Outdoor Recreation Plan, to be updated in 2023, outlines recommendations to make outdoor recreational and green spaces more equitably distributed and accessible to low-income or minority Delawareans and Delawareans with disabilities.

2.2.5 Delivery of other essential services

The FY 2023 Highway Safety Plan[51] of the Delaware Office of Highway Safety states, "Equity is a fundamental principle in transportation safety. The transportation system must be safe for all road users in all communities, for all modes of transportation, and for people of all incomes, races, ethnicities, ages, and abilities." The Office of Highway Safety is directing crash remediation efforts towards "underserved communities disproportionately impacted by traffic crashes." At the same time, the Office of Highway Safety is working to upgrade its crash data collection efforts for the Electronic Crash Reporting System (E-Crash) while also using other sources of data. Safety can be an essential service, according to NTIA guidance.

The Delaware Department of Transportation's (DelDOT) Framework for Excellence establishes equity in transportation as a core principle, based on "mobility as a right." DelDOT seeks to close systemic gaps to ensure an equitable, accessible transportation network that "allows people to have safe access to employment, education, healthcare and recreation."[52]

The Strategic Plan 2023 - 2026[53] of the Domestic Violence Coordinating Council (DVCC) calls for the continued development of online training, stating, "It is important to acknowledge that training is an ongoing and continual priority."

2.3 Strategy and objectives

This section of the Plan describes, at a high level, the key strategies and objectives of the Plan, which are designed to address the key digital equity challenges described below. Additional detail regarding the strategies and their associated initiatives is provided in Section 5, which details DTI's plans for execution.

2.3.1 Strategies

In brief, DTI adopts the following strategies (see Section 5 for detail), organized based on the barrier they are designed to address:

---

[50] "Building an Outdoor Legacy in Delaware", Division of Parks & Recreation, https://destateparks.com/wwwroot/downloads/SCORP/SCORP%202018.pdf

[51] "FY 2023 Highway Safety Plan," Delaware Office of Highway Safety, https://ohs.delaware.gov/pdfs/Reporting%20Forms/HSP/FY2023_HSP.pdf.

[52] "Framework for Excellence," DelDOT, https://deldot.gov/About/deldot/index.shtml?dc=excellence.

[53] "Strategic Plan 2023 – 2026," DVCC, https://dvcc.delaware.gov/wp-content/uploads/sites/87/2023/06/DVCC-Strategic-Plan_2023-2026-FINAL.pdf.

1. **Barrier: Lack of broadband availability.** Lack of broadband availability acts as a significant barrier to achieving digital equity, as it creates a stark divide between those who can access the wealth of online resources and opportunities and those who cannot. Without reliable internet connectivity, individuals are deprived of crucial educational materials, job search platforms, health care information, government services, and social interactions that have become integral to modern life. Through this Digital Equity Plan—and DTI's associated broadband infrastructure plans—the State of Delaware seeks to ensure the availability of broadband for all Delaware residents.

   Strategy : Increase access to residential broadband infrastructure

2. **Barrier: Low-income households struggle to afford broadband services, devices, and technical support.** The struggle of some Delaware residents to afford broadband services, devices, and technical support restricts their ability to fully engage in the digital world. The data show that the costs associated with internet subscriptions, necessary hardware, and technical assistance disproportionately affect lower-income families in Delaware, preventing them from accessing essential online resources such as education, job opportunities, and government services. Through this Digital Equity Plan, DTI seeks to increase affordability of broadband services and devices through collaboration with local, State, and community partners.

   Strategy 1: Increase enrollment in the Affordable Connectivity Program and ISPs' low-cost programs

   Strategy 2: Increase low-cost service offerings

   Strategy 3: Expand access to computing devices and tech support, particularly those provided locally

3. **Barrier: Lack of digital and tech-related job opportunities and skill development for marginalized, covered, and low-income populations.** Opportunities to participate in the digital (or digitized) economy will require residents of Delaware to have the skills needed to partake in those jobs. These workforce development challenges are particularly acute for many members of covered populations.

   Strategy 1: Increase capacity for job training programs with pipeline access to good-paying jobs in the tech section

Strategy 2: Increase outreach and recruitment by job training organizations, including governmental and nonprofit, in historically under-represented populations

4. **Barrier: Low-income and senior households lack digital skills, including to protect security and privacy.** The data show that low-income and senior individuals in Delaware disproportionately lack digital skills, including the ability to protect security and privacy online. This challenge represents a significant barrier to participation in the digital world because it leaves those individuals unable to navigate online platforms or access vital information online. Lack of digital skills can not only limit their access to educational resources, job opportunities, and essential services but also expose them to risks such as cybercrimes and privacy breaches. Bridging this gap in digital skills can enable individuals to confidently and safely engage online, ensuring that they are not left behind in an increasingly digital society and that they can fully benefit from its opportunities. Through this Digital Equity Plan, DTI seeks to develop partnerships and strategies to expand access to digital skills training and support local entities that train Delaware residents to access the internet and to do so with their safety and privacy protected.

   Strategy 1: Enable digital skills development through training courses

   Strategy 2: Expand opportunity to learn online safety and privacy

   Strategy 3: Expand accessibility of information

5. **Barrier: Communities lack resources and expertise for digital equity efforts.** The areas of Delaware that demonstrate the greatest need are precisely those areas that are most likely to lack the resources to address them. But through partnerships and collaboration, even the areas that face the greatest challenges will find the resources to address local digital equity needs. When they do so, digital access will ameliorate other problems.

   Strategy 1: Build collaboration among State, local, and nonprofit entities

   Strategy 2: Build capacity for digital skill building in governmental and nonprofit entities

2.3.2 Measurable objectives and key performance indicators

In connection with each of the key digital equity challenges described above, DTI has established the following measurable objectives and key performance indicators (KPI) toward achieving digital equity in Delaware.

2.3.2.1 Barrier: Lack of broadband availability

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Every Delaware resident can access 25/3 Mbps at home	Percentage of locations with access to 25/3 broadband	X%	90%	98%	National Broadband Map
	Percentage for aging individuals	X%	90%	98%	
	Percentage for incarcerated individuals (other than in a federal facility)	Data not available	90%	98%	
	Percentage for veterans	X%	90%	98%	
	Percentage for individuals with disabilities	X%	90%	98%	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for individuals with a language barrier	X%	90%	98%	
	Percentage for members of racial or ethnic minorities	X%	90%	98%	
	Percentage of rural residents	X%	90%	98%	
Every Delawarean can access 100/20 Mbps at home	Percentage of locations with access to 100/20 broadband	80%	90%	98%	National Broadband Map
	Percentage for aging individuals	X%	90%	98%	
	Percentage for incarcerated individuals (other than in a federal facility)	Data not available	90%	98%	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for veterans	X%	90%	98%	
	Percentage for individuals with disabilities	X%	90%	98%	
	Percentage for individuals with a language barrier	X%	90%	98%	
	Percentage for members of racial or ethnic minorities	X%	90%	98%	
	Percentage of rural residents	X%	90%	98%	
Every Community Anchor Institution that wants it can access 1/1 Gbps	Percentage of CAIs locations with access to 1/1 Gbps	Data currently under development by DTI to support BEAD challenge process	85%	98%	DTI data based on CAI and agency surveys

2.3.2.2 Barrier: Low-income households struggle to afford broadband services, devices, and technical support

Measurable objective	KPI	Baseline (current state)	5-year goal	10-year goal	Data source
Increase enrollment in the Affordable Connectivity Program and ISPs' low-cost programs	Percentage of eligible households participating in ACP	X%	60%	70%	USAC
Increase the percentage of ISPs that offer low-cost products for lower-income households	Percentage of ISPs that offer low-cost products for lower-income households	X%	95%	95%	USAC[54]
All Delaware residents have access to a workable, internet-enabled computing device	Percentage of all survey respondents who report that they can get a broken or lost computing device fixed or replaced within a month	X%	93%	95%	DTI phone survey

[54] Baseline estimate based on ACP participation data from USAC and known ISPs in Delaware from DTI's internal data.

Measurable objective	KPI	Baseline (current state)	5-year goal	10-year goal	Data source
Members of covered populations have access to a workable computing device	Percentage of all covered population survey respondents who report that they can get a broken or lost computing device fixed or replaced within a month	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	DTI phone survey
	Percentage for aging individuals	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for incarcerated individuals (other than in a federal facility)	Data not available	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for veterans	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	

Measurable objective	KPI	Baseline (current state)	5-year goal	10-year goal	Data source
	Percentage for individuals with disabilities	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for individuals with a language barrier	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for members of racial or ethnic minorities	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage of rural residents	X%	93% (to achieve parity with the general population)	95% (to achieve parity with the general population)	

2.3.2.3 Barrier: Lack of digital and tech-related job opportunities and skill development for marginalized, covered, and low-income populations

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Members of covered populations have access to digital and tech-related workforce training opportunities	Number of workforce development and training programs	X	This goal is in development	This goal is in development	DTI data

2.3.2.4 Barrier: Low-income and senior households lack digital skills, including to protect security and privacy

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
All Delaware residents are able to use the internet if they so choose	Average number of key digital skills performed (out of 17 measured)	X/17	10/17	15/17	NTIA Internet Use Survey
Members of covered populations are able to use the internet if	Average number of key digital skills performed by members of covered populations (out of 17 measured)	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	NTIA Internet Use Survey

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
they so choose	Average for aging individuals	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
	Average for incarcerated individuals (other than in a federal facility)	Data not available	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
	Average for veterans	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
	Average for individuals with disabilities	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
	Average for individuals with a language barrier	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
	Average for members of racial or ethnic minorities	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Average of rural residents	X/17	10/17 (to achieve parity with the general population)	15/17 (to achieve parity with the general population)	
All Delaware residents can access information or training to learn how to protect their security online	Percentage of all survey respondents who say they are confident they can protect their security online	X/17	85%	95%	DTI phone survey
Members of covered populations can access information or training to learn how to protect their security online	Percentage of all covered population survey respondents who say they are confident they can protect their security online	Data currently in development by DTI	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	DTI phone survey
	Percentage for aging individuals	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for incarcerated individuals	Data not available	85% (to achieve parity with the	95% (to achieve parity with	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	(other than in a federal facility)		general population)	the general population)	
	Percentage for veterans	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for individuals with disabilities	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for individuals with a language barrier	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for members of racial or ethnic minorities	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage of rural residents	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
All Delaware residents can access	Percentage of all survey respondents	X%	85%	95%	DTI phone survey

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
information or training to learn how to protect their **privacy** online	who say they are confident they can protect their **privacy** online				
Members of covered populations can access information or training to learn how to protect their **privacy** online	Percentage of all covered population survey respondents who say they are confident they can protect their **privacy** online	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	DTI phone survey
	Percentage for aging individuals	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for incarcerated individuals (other than in a federal facility)	Data not available	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for veterans	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for individuals with disabilities	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for individuals with a language barrier	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage for members of racial or ethnic minorities	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
	Percentage of rural residents	X%	85% (to achieve parity with the general population)	95% (to achieve parity with the general population)	
All Delaware residents can access government services online	Percentage of all survey respondents who say they use the internet to access government services online	X%	50%	75%	NTIA Internet Use Survey

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Members of covered populations can access government services online	Percentage of all covered population survey respondents who say they are confident accessing government services online	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	NTIA Internet Use Survey
	Percentage for aging individuals	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	
	Percentage for incarcerated individuals (other than in a federal facility)	Data not available	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	
	Percentage for veterans	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	
	Percentage for individuals with disabilities	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
	Percentage for individuals with a language barrier	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	
	Percentage for members of racial or ethnic minorities	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	
	Percentage of rural residents	X%	85% (to achieve parity with the general population)	90% (to achieve parity with the general population)	

2.3.2.5 Barrier: Communities lack resources and expertise for digital equity efforts

Measurable objective	KPI	Baseline (current state)	Short-term goal	Long-term goal	Data source
Partnership opportunities are available via convening events	Number of convening events per year	X	6	12	DTI data
Capacity building through promoting the hiring of digital navigators	Number of digital navigators hired & trained to support 1:1 capacity building	X	This goal is in development	This goal is in development	DTI data

3 Current state of digital equity: Barriers and assets

This section describes the current state of digital equity in Delaware, as documented through rigorous and comprehensive data collection and outreach efforts. It describes the resources and relationships available to DTI to promote digital equity; presents detailed asset inventories related to digital equity and broadband adoption, affordability, and access; and presents a needs assessment.

3.1 Asset inventory

This section identifies assets that promote digital equity for each of the State's covered populations, including resources, programs, plans, and strategies from public and private entities.

3.1.1 Digital inclusion assets by covered population

Through its outreach and research, DTI has identified key digital inclusion assets that support covered populations in the State, including workforce development training and employment services related to broadband adoption; technical assistance programs aimed at supporting digital inclusion; and nonprofits, partnerships, and coalitions that work toward digital inclusion. Table 2 lists a selection of representative digital inclusion assets and indicates the primary population(s) they serve.

Table 2: Digital inclusion assets by covered population(s)

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
Digital literacy programming initiative through Delaware's public libraries	Literacy Delaware and the Delaware Division of Libraries announced a partnership in 2022 to expand capacity for literacy programming through the State's public libraries, including a new digital literacy initiative that will leverage resources from the Northstar Digital Literacy program.[55]	x		x	x	x	x	x	x
Delaware Division of Libraries	Delaware's public libraries serve as community hubs where staff offer informal one-on-one training on internet usage as resources allow—often to help patrons from a covered population, according to input received through the stakeholder engagement and outreach efforts conducted in preparation of this Plan. Libraries in each county offer "telehealth kiosks" that provide internet access and a private space to conduct appointments and access social services.[56] Teleservice Navigators, available twice a week, also help residents apply for the Affordable Connectivity Program.[57] Delaware Libraries and	x		x	x	x	x	x	x

[55] Literacy Delaware press release, "New Delaware Division of Libraries Partnership," August 23, 2022, https://literacydelaware.org/article.
[56] Kristina DeRobertis, "Delaware Libraries Broadening Horizons with More Telehealth Kiosks," WBOC, August 11, 2023, https://www.wboc.com/news/delaware-libraries-broadening-horizons-with-more-telehealth-kiosks/article_30cfff78-387d-11ee-af39-bbc9aa106f2b.html.
[57] "Teleservice Navigator," Delaware Libraries, https://delawarelibraries.libcal.com/event/11265361.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
	AmeriCorps VISTA also hired Digital Navigators to work in library branches in summer 2023.[58]								
NERDiT CARES device donation program	Wilmington-based NERDiT CARES, a 501(c)3 nonprofit organization, operates a device donation program.[59]								x
Comcast Learning Center	Comcast hosts several short digital skills training videos for veterans[60] using resources from nonprofit PsychArmor,[61] as well as a similar training module for seniors using tools from the nonprofits Generations on Line and OATS.[62]	x		x					
Delaware Office for the Deaf and Hard of Hearing	The Office provides information, education, advocacy, training, and services, including help finding assistive technology resources.[63]				x				
Delaware Office of Veterans Services	The Office provides advocacy and assistance to veterans.[64]			x					
Easterseals	This non-profit supports a broad population, including individuals with disabilities, with health				x				

[58] "Opportunities," Delaware Division of Libraries, https://libraries.delaware.gov/opportunities/.
[59] NERDiT CARES, "About Us," https://www.nerditcares.org/about/.
[60] Comcast, "Veterans' Guide to Navigating the Web," https://www.xfinity.com/learn/internet-service/internet-essentials/learning/internet-basics/veterans-guide-to-navigating-the-web.
[61] PsychArmo, https://psycharmor.org/.
[62] Comcast, "Seniors' Guide to Navigating the Web," https://www.xfinity.com/learn/internet-service/internet-essentials/learning/internet-basics/seniors-guide-to-navigating-the-web.
[63] Delaware Department of Labor, Delaware Office for the Deaf and Hard of Hearing, https://labor.delaware.gov/divisions/dvr/dodhh/.
[64] Delaware Commission of Veterans Affairs, https://vets.delaware.gov/service-officers/.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
	care, education, and employment services.[65] Easterseals Delaware offers various resources and support around assistive technology, including a Resource and Technology Demonstration Center in its New Castle location where visitors can browse and try assistive devices.[66]								
Sussex County's Advisory Committee on Aging and Adults with Physical Disabilities	The Committee advocates for and provides assistance to older residents and residents with disabilities in Sussex County and the State.[67]	x			x				
Code Purple of Kent County, Delaware	This non-profit provides a variety of assistance programs for residents experiencing homelessness, abuse, financial struggles, and/or drug addiction, as well as those impacted by the pandemic.[68]				x				x
Delaware Council on Farm and Food policy	This statewide group addresses food security and agriculture-related issues, including mapping; they could serve as a conduit or efforts to identify and address rural digital needs.							x	

[65] Easterseals, "History," https://www.easterseals.com/de/who-we-are/history/.
[66] "Making Life Accessible," Easterseals Delaware & Maryland's Eastern Shore, https://www.easterseals.com/de/explore-resources/making-life-accessible/.
[67] "Advisory Committee on Aging and Adults with Physical Disabilities," Sussex County, https://sussexcountyde.gov/advisory-committee-aging-and-adults-physical-disabilities.
[68] Code Purple Delaware, http://www.codepurplekentcounty.com/.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
Government Information Center – Accessibility Central	The Government Information Center works to help make State agency websites accessible. Web accessibility refers to the inclusive practice of removing barriers that prevent interaction or access to websites by people with disabilities. For example, accessible websites are inclusive to all, including those with a visual impairment, hearing impairment, or those that cannot use a mouse and keyboard to navigate a website. When sites are correctly designed, developed and edited, all users have equal access to information and functionality.[69]				x				
Tech Council of Delaware	Statewide entity that makes available tech internships with certification awards including cybersecurity training with a goal to "build and expand an inclusive tech talent pipeline."[70]						x		x
Delaware State Housing Authority	The agency has a direct connection with covered populations under the definition of BEAD; strong communication channels and programing opportunities.								x
New Castle County Vocational	Includes multiple IT and networking programs.[71]								

[69] "Government Information Central – Accessibility Central," https://gic.delaware.gov/accessibility-central/.
[70] Tech Council of Delaware, https://techcouncilofdelaware.org/.
[71] New Castle County Vocational Technical School District, https://www.nccvotech.com/

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
Technical School District									
Polytech School District	Adult Education: Trade & Apprenticeships includes IT intro courses, cybersecurity technician, electronic systems technician, industrial machine systems technician, and network technician programs. ESL classes are also offered. Polytech High School offers engineering design (including digital circuitry), and computer technology courses.[72]								
Sussex Tech	Vocational technical school district with a program in networking technologies.[73]								
Delaware Alliance of Nonprofit Associations	Umbrella organization that the State can work with to channel communication of digital equity opportunities to member organizations who have potentially eligible clients.								
Latin American Community Center	This community-based nonprofit provides refurbished computers and adult digital literacy classes.[74]					x	x		

[72] Polytech School District, https://www.polytechschooldistrict.com/
[73] Sussex County Vocational Technical School District, https://www.sussexvt.org/hs/home/technical-courses/cisco-networking/.
[74] "Adult Education," LACC Delaware, https://www.thelatincenter.org/adult-education.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
Center for Disabilities Studies at the University of Delaware	The Delaware Assistive Technology Initiative (DATI) helps to connect Delawareans with disabilities with assistive technology, training, and resources. Many services are provided at no cost.[75]				x				
Student Freedom Initiative (SFI)	SFI, a DC-based organization that primarily serves historically black colleges and universities (HBCUs) and minority-serving institutions (MSIs) and the surrounding communities, offers a program called Connect101 in partnership with Connect Humanity.[76] Connect101 is designed to ensure HBCUs and their communities have the knowledge and financial resources needed to fully participate in the digitizing economy.[77]						x		
Delaware Department of Technology and Information (DTI)	DTI provides training and resources to increase the accessibility of State websites.[78]				x				
I Am My Sister's Keeper (IAMMSK)	This community-based organization offers STEM-related programming to engage young women around technology and advocates for digital								

[75] Delaware Assistive Technology Initiative, https://dati.org/aboutus/index.html.
[76] https://connecthumanity.fund/.
[77] "Connect 101," Connect Humanity, https://connect-humanity.shorthandstories.com/connect-101/index.html#group-section-About-psWZQaYiTS.
[78] "Digital Accessibility," DTI, https://accessibility.dti.delaware.gov/.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
	inclusion.[79] A representative also indicated to DTI that the MSK Community Center is an internet hub for the community, providing internet service to an eight-block area in Wilmington.								
La Esperanza	La Esperanza, a neighborhood organization and community center for the Latino community,[80] offers support for applicants to broadband subsidy programs such as the Affordable Connectivity Program (ACP). The organization also loans and/or donates devices (computers, tablets), provides hotspots and free or subsidized internet access, and offers free computer skills classes for adults and youth.					x	x		
CHEER, Inc.	This nonprofit organization provides free internet access to seniors.[81]	x							
Compudopt	Compudopt, a non-profit, provides refurbished laptops to low-income families through a giveaway program and offers digital literacy training.[82]								x
American Association of Retired Persons	AARP Delaware hosted a virtual event in September 2023 to educate veterans on common	x		x					

[79] "Youth and Teen Girls Programming in Wilmington," IAMMSK, https://www.iammsk.org/about
[80] "About," La Esperanza Center, https://www.laesperanzacenter.org/about/.
[81] "About Us," CHEER, https://www.cheerde.com/about-us/.
[82] "Compudopt Computer Giveaway," Compudopt, https://www.compudopt.org/computergiveaway.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
(AARP) Delaware	online scams and how to avoid fraud.[83] A variety of digital literacy resources are available to members through the national organization, including information on online privacy[84] and free virtual digital skills classes through the Senior Planet program.[85]								
West End Neighborhood House	This organization, which primarily serves individuals who have lower incomes in Wilmington's West Side, offers digital literacy training through the Adult Literacy component of its education and employment program.[86]								x
Modern Maturity Center	This community center for aging individuals in Dover offers low-cost cellphone and computer tutoring by appointment,[87] and will host DTI in October 2023 to provide cybersecurity education.	x							
Delaware Department of Education – Prison Education program	Computer labs are available at Delaware State prisons, and students in the DoE's Prison Education program can earn certifications in computer skills.[88] The program also offers a C-Tech Network Wiring course at the Howard R.		X						

[83] "Fraud Forum to Help Veterans Spot Scams," The AARP Bulletin, July 1, 2023, https://states.aarp.org/delaware/fraud-forum-to-help-veterans-spot-scams.
[84] "Scam, Fraud Alerts," AARP, https://www.aarp.org/money/scams-fraud/#01/?intcmp=AE-SCM-FRD-FRC.
[85] "Online Classes for Seniors," Senior Planet, https://seniorplanet.org/classes/.
[86] "Adult Literacy," West End Neighborhood House, https://westendnh.org/programs/adult-literacy/.
[87] "Programs," Modern Maturity Center, http://www.modern-maturity.org/programs.htm.
[88] "Prison Education," Delaware Department of Education, https://www.doe.k12.de.us/domain/429.

Asset name	Description	Aging	Incarcerated	Veterans	Disabilities	Language barrier	Racial/ethnic minority	Rural	Low-income
	Young Correctional Institution that teaches the skills necessary to become a certified entry-level technician in the network cabling industry.[89]								

[89] "Prison Education – Howard R. Young Correctional Institution," Delaware Department of Education, https://www.doe.k12.de.us/Page/2938.

3.1.2 Existing digital equity plans

County and local governments and agencies throughout Delaware are working on diversity, equity, inclusion, and access (DEIA) issues—and many have DEIA plans and programs—but DTI is not aware of any that have digital equity plans. This gap highlights the role this Plan can play in the coordination of numerous valuable efforts across the State.

3.1.3 Existing digital equity programs

The following table lists digital equity programs by local and regional entities in the State.

Table 3: Existing digital equity programs

Program name	Description
Statewide initiative to increase awareness of the Affordable Connectivity Program (ACP)	Governor Carney and municipal leaders in 2023 launched an initiative to increase awareness of the ACP, in partnership with nonprofit EducationSuperHighway.[90]
Training and Technology Center Services, Delaware Division for the Visually Impaired (DVI), Delaware Health and Social Services (DHSS)	For the visually impaired, offers training assistance with devices, evaluates and detects training needs, and provides additional services. Programs include training in the use of Apple products because the iPad, iPhone, and iPod Touch already have accessibility features. Also offers the use of DVI's public computer labs, at DVI's Biggs and Milford locations, for practice and self-training.[91]
Delaware Office of Veterans Services (OVS) Health Resources	In addition to OVS clinics and centers, OVS connects veterans to the U.S. Department of Veterans Affairs' web portal that offers information and services.[92]
New Castle County Youth Workforce Development Program	Offers training in a number of careers and skills—including coding—to income-eligible youth ages 14 to 21.[93]
Delaware Division of Libraries, Northstar Digital Literacy	The Delaware Division of Libraries offers free Northstar Digital services to improve digital skills.[94]

[90] "Governor Carney Launches Statewide Initiative to Increase Affordable Connectivity Program Adoption," Governor John Carney, March 21, 2023, https://news.delaware.gov/2023/03/21/icymi-governor-carney-launches-statewide-initiative-to-increase-affordable-connectivity-program-adoption/.
[91] "Training and Technology Center Services," DVI, https://dhss.delaware.gov/dvi/trainingsvcs.html.
[92] "Health Resources," OVS, https://vets.delaware.gov/us-department-veterans-affairs/.
[93] "New Castle County Youth Workforce Development Program," New Castle County, https://www.newcastlede.gov/859/Youth-Workforce-Development-Program.
[94] "Northstar," Delaware Libraries, https://lib.de.us/northstar/. See also: Delaware Division of Libraries, https://libraries.delaware.gov/.

Program name	Description
Delaware Libraries' #GetConnected DE program	Delaware Libraries' #GetConnected DE program[95] offers device lending and other services. A Teleservice Navigator helps patrons apply for benefits including the Affordable Connectivity Program.[96] The program also offers free privacy booths so patrons can take a job interview or health consultation.
Digital DE, an offering of the Delaware Department of Education (DDOE)	Digital DE provides online instructional and digital literacy resources for educators and families through a searchable, accessible, and free website.[97]
Connect Delaware	This program, launched in 2020 and initially supported by CARES Act funding, was designed to support student success by providing free broadband services for low-income students in school districts and charter schools[98] via a process that did not place on students and their families the burden of signing up for the program. Instead, each school in Delaware filled out a needs assessment and DTI placed bulk orders with ISPs. As of the writing of this Plan, the program continues with support from ARPA funding.
Capital School District of Dover Delaware partners for online learning	The Capital School District of Dover, Delaware, is partnering with nonprofit Digital Promise and Verizon for the Verizon Innovative Learning Schools program, which equips students and teachers at select schools with free technology devices and internet access and provides access to educational resources.[99]

3.1.4 Broadband adoption

According to the most recent NTIA data (November 2021), 76 percent of Delaware residents use internet at home[100] and 81.7 percent of residents use internet at any location.[101]

A variety of programs and organizations work to support broadband adoption by Delawareans in general and covered populations in particular, as catalogued in Table 2. These entities range from local organizations that provide computer access and digital skills classes for the individuals they

[95] "How may we help you #GetConnectedDE?," Delaware Libraries, https://getconnected.delawarelibraries.org/.
[96] For the Teleservice Navigator schedule, see https://delawarelibraries.libcal.com/calendar/.
[97] "Digital DE," DDOE, https://education.delaware.gov/educators/academic-support/standards-and-instruction/digital-de/.
[98] "Connect Delaware Students," https://broadband.delaware.gov/pages/index.shtml?dc=caresAct.
[99] "32 Schools Join Verizon Innovative Learning's 10th Cohort," Digital Promise Press Release, March 15, 2023, https://digitalpromise.org/wp-content/uploads/2023/03/VILS-C10-Announcement-Press-Release.pdf.
[100] "Digital Nation Data Explorer: Internet Use at Home," NTIA, November 2021 data, https://ntia.gov/other-publication/2022/digital-nation-data-explorer.
[101] "Digital Nation Data Explorer: Internet Use (Any Location)," NTIA, November 2021 data, https://ntia.gov/other-publication/2022/digital-nation-data-explorer.

serve to the statewide network of public libraries, which act as trusted community hubs for internet access, training, and technical support.

In addition to identifying the current ecosystem supporting digital inclusion through its outreach, DTI was also able to build potential new connections to support broadband adoption efforts. For example:

- A representative of the Delaware Division of Libraries attended an outreach session and stated that libraries are loaning devices and hotspots to the public and could further help distribute devices.
- A representative of Communication Service for the Deaf,[102] a nonprofit located in Austin, Texas, attended an outreach session and expressed an interest in partnering to deliver services to the deaf in Delaware.
- A representative of the Delaware Office of Veterans Services (OVS) attended an outreach session and offered to assist DTI via information sharing.
- A representative of Bloosurf, an ISP, attended an outreach session and said that it has designed an in-person class/demonstration to walk seniors through all the possibilities of high-speed internet: Wi-Fi 6, 4K streaming, teleconferencing, VoIP, and more.

The State has also worked to ensure students have adequate connectivity by providing free broadband access for low-income students since 2020 through the Connect Delaware program (described in Table 3). Through the program, the State's 19 school districts and 23 charter schools collectively requested a total of 25,789 devices; as of the writing of this Plan, the program continues with approximately 3,481 active devices (the total number of devices fluctuates each month).

3.1.5 Broadband affordability

The Federal Communications Commission's (FCC) Affordable Connectivity Program (ACP), which offers eligible households a discount of $30 per month on their internet service ($75 for households on qualifying Tribal lands) and a one-time discount of up to $100 towards the purchase of a device, is one of the most significant programs available to low-income Delaware households to reduce the cost of broadband service.

However, less than a third (30 percent) of households in the State that are potentially eligible for the ACP subsidy participate in the program, which lags the national average of 36 percent (see

[102] Communication Service for the Deaf, https://www.csd.org.

section 3.2.2). Approximately 109,000 Delaware households who could benefit from the program have yet to enroll.

In 2023, Governor Carney and a coalition of municipal leaders and community partners launched a statewide initiative to increase awareness and enrollment in the ACP through local outreach, supported by training and enrollment materials from EducationSuperHighway.[103]

Some ISPs in the State also offer plans for eligible low-income subscribers that provide service at effectively no cost when customers enroll in the ACP. The table below identifies a sampling of ISPs' discounted service and device programs and related broadband affordability assets in the State, which are available to all covered populations.

Table 4: Broadband affordability assets

Asset name	Description
Education SuperHighway ACP outreach partnership	Tools include an online mobile assistant that simplifies the ACP enrollment process,[104] a free certification course that trains digital equity advocates to help community members enroll,[105] and a resource hub with free and customizable marketing materials to increase awareness of the ACP and promote enrollment.[106]
Comcast Internet Essentials program	Comcast, an ISP, offers the Internet Essentials plan, priced at $9.95 per month, which is available to qualifying low-income and other households in Delaware.[107] Comcast Internet Essentials delivers speeds up to 50 Mbps and Comcast Internet Essentials Plus delivers up to 100 Mbps for $29.95 per month.[108] Households that subscribe to Internet Essentials can purchase a new Dell laptop or Chromebook for $149.99 plus tax.[109]
Mediacom Connect to Compete plan	Mediacom, an ISP which provides service in Sussex County, offers the Connect to Compete plan, in partnership with nonprofit EveryoneOn, to qualifying households for $9.95 per month plus taxes, delivering download speeds up to 25 Mbps.

[103] "Governor Carney Launches Statewide Initiative to Increase Affordable Connectivity Program Adoption – State of Delaware News," News release, March 21, 2023, https://news.delaware.gov/2023/03/21/icymi-governor-carney-launches-statewide-initiative-to-increase-affordable-connectivity-program-adoption/.
[104] "ACP Enrollment Assistant," https://getacp.org/delaware.
[105] "LearnACP," EducationSuperHighway, https://www.educationsuperhighway.org/learnacp/.
[106] "Affordable Connectivity Program – Resource Hub," EducationSuperHighway, https://www.educationsuperhighway.org/acpbenefit/resource-hub/.
[107] Comcast, application for Internet Essentials plan, https://apply.internetessentials.com/.
[108] Comcast, "Internet Essentials," https://www.xfinity.com/learn/internet-service/internet-essentials.
[109] Comcast, "Low-Cost Computer," https://internetessentials.com/low-cost-computer.

Asset name	Description
	Mediacom also offers the C2C Plus plan for $30.00 per month plus taxes, delivering download speeds up to 100 Mbps.[110]
Breezeline Internet Assist and Internet Assist Plus plans	Breezeline, an ISP that serves some areas of the State, offers two low-cost plans to qualifying low-income customers: Internet Assist, which offers 15/1 Mbps service for $9.99 to qualifying new subscribers only;[111] and Internet Assist Plus, which offers customers who sign up for Breezeline service through the ACP 100/10 Mbps service for $29.95 per month ($0 with application of the ACP discount).[112]
Verizon Forward Program	The Verizon Forward Program provides an additional discount on Verizon Home Internet plans for customers enrolled in the ACP, offering Verizon's 300/300 Mbps Fios fiber plan at no cost and plans with higher speed tiers at a discounted rate. (The program also offers Verizon 5G Home Internet at no cost where available.)[113]

3.2 Needs assessment

The State's comprehensive partner outreach program included extensive efforts to identify the needs of all Delawareans with an emphasis on those belonging to covered populations. Outreach and data collection efforts were made to assess the baseline from which the State is working and to identify the barriers to digital equity faced generally and by each of the covered populations in Delaware.

The State's research and analysis are based on available and relevant data from the American Community Survey (ACS), NTIA's Internet Use Survey (administered as a supplement to the Current Population Survey), and the FCC's National Broadband Map. Analysis was undertaken to benchmark Delaware against national averages, and to benchmark its residents belonging to covered populations against those that do not belong to covered populations.

The data and analysis are intended to facilitate understanding of the extent to which:

[110] Mediacom, "Connect to Compete," https://mediacomc2c.com/. See also: EveryoneOn, https://www.everyoneon.org/about-us.
[111] "Internet Assist Program," Breezeline, https://www.breezeline.com/support/internet/internet-assist-program.
[112] "Affordable Connectivity Program (ACP) Enrollment," Breezeline, https://www.breezeline.com/acp.
[113] "Free Internet with the Verizon Forward Program and ACP," Verizon, https://www.verizon.com/home/free-verizon-internet/.

1. Broadband internet service is available to and adopted by residents
2. Residents are confidently performing various digital skills
3. Residents are aware of and impacted by online security and privacy concerns
4. Computer devices are abundant and adequate for meaningful internet use
5. Online government resources and services are accessibly built and maintained

In brief, a lack of need or interest in home internet use is the primary reason cited by Delaware households that do not subscribe to broadband. This is followed by the issues of affordability of service and a lack of access to adequate computer devices. Reasons cited for a lack of home internet use are outlined in Table 5.

Table 5: Reported reasons for no home internet use[114]

Reasons for no home internet use	Delaware
Can't afford it	6%
Not worth the cost	4%
Can use it elsewhere	4%
Not available in area	1%
Don't need or not interested	69%
Online privacy or security concerns	4%
No or inadequate computing device	6%

The data indicate that Delaware's digital equity needs encompass access to affordable broadband services, increased enrollment in broadband service subsidy programs, device access, and digital literacy training. The table below summarizes key barriers for each covered population identified through this assessment.

Table 6: Key barriers and obstacles for covered populations

Covered group	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
Low-income households	It is likely that very-low-income households are disproportionately	Low-income populations display the most urgent needs for	Low-income individuals indicate need for digital skills and	Low-income individuals report needs for increased awareness of	Low-income populations display the most urgent needs for

[114] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

Covered group	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
	less covered by broadband	more affordable broadband[115]	telemedicine training[116]	and confidence in protecting themselves from online security and privacy threats[117]	increased device access[118]
Aging populations	–	Aging individuals display needs for greater internet adoption[119]	Aging individuals indicate the most urgent need for digital skills and telemedicine training[120]	Aging individuals report needs for increased confidence in protecting themselves from online security and privacy threats[121]	Aging individuals display a need for greater device adoption[122]
Incarcerated individuals	–	While no data are currently available in these areas, Delaware is endeavoring to develop relevant data			
Veterans	–	–	Veterans indicate a need for digital skills and	Veterans report needs for increased confidence in protecting themselves from online	–

[115] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[116] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[117] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[118] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[119] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[120] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[121] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[122] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Covered group	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
			telemedicine training[123]	security and privacy threats[124]	
Individuals with disabilities	–	Individuals with disabilities display a need for greater internet adoption[125]	Individuals living with disabilities indicate need for digital skills and telemedicine training[126]	Individuals with disabilities report needs for increased confidence in protecting themselves from online security and privacy threats[127]	Individuals living with disabilities have a greater need, in general, for adaptive technology and other specialized devices[128]
Individuals with language barriers	–	While no data are currently available in these areas, Delaware is endeavoring to develop relevant data			
Individuals who are English learners (alone)	–	English language learners display a need for greater internet adoption[129]	–	English language learners report needs for confidence in protecting themselves from online	English language learners display a need for greater device adoption[131]

[123] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[124] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[125] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[126] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[127] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[128] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[129] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[131] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Covered group	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
				security and privacy threats[130]	
Individuals who have low levels of literacy (alone)	–	While no data are currently available in these areas, Delaware is endeavoring to develop relevant data			
Racial and ethnic minorities	–	–	Racial and ethnic minorities indicated need for telemedicine training[132]	Racial and ethnic minorities report needs for increased confidence in protecting themselves from online security and privacy threats[133]	Racial and ethnic minorities display a material gap in desktop or laptop ownership[134]
Rural residents	Rural individuals are in the most urgent need of increased broadband availability[135]	While no data are currently available in these areas, Delaware is endeavoring to develop relevant data			

[130] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[132] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[133] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[134] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[135] U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023.

3.2.1 Covered populations in Delaware

To understand the challenges of digital equity for "covered populations" or "covered groups," it is necessary to define those groups. Due to the unique constraints of each data source, various analyses focus on different subsets of covered groups. Based on the availability of reliable data,[136] the covered groups analyzed in this needs assessment are as follows:

Covered group	Covered definition	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
Low-income households	Any individual in a household earning less than 150 percent of the federal poverty line	✓	✓	✓	✓	✓
Aging populations	Any individual who is 60 years of age or older	✓	✓	✓	✓	✓
Incarcerated individuals	Any individual currently or formerly incarcerated in a non-federal correctional facility	✓				
Veterans	Any individual formerly on active duty	✓	✓	✓	✓	✓
Individuals with disabilities	Any individual living with a self-identified physical or mental disability	✓	✓	✓	✓	✓

[136] This Plan relies on rigorously collected and reliable data to make statistically-significant conclusions regarding each covered group. The data used include those collected by the U.S. Census Bureau through the American Community Survey. Where the data are not available, the Plan does not attempt to speculate.

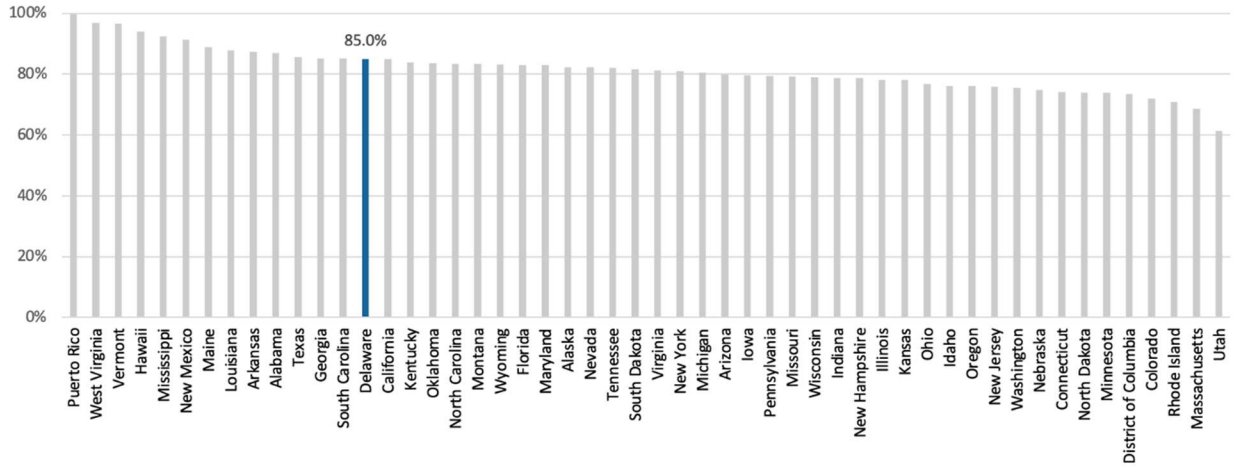
Covered group	Covered definition	Broadband availability	Broadband adoption	Digital skills	Online security	Device adoption
Individuals with language barriers	Any individual that either reports an English language proficiency less than "very well" or with a literacy level beneath that of a grade 1 student	✓				
Individuals who are English learners (alone)	Any individual that either reports an English language proficiency less than "very well"	✓	✓	✓	✓	✓
Individuals who have low levels of literacy (alone)	Any individual with a literacy level beneath that of a grade 1 student	✓				
Racial and ethnic minorities	Any individual that is not white (non-Hispanic) alone	✓	✓	✓	✓	✓
Rural inhabitants	Any individual living outside of a census identified metropolitan area	✓				

In Delaware specifically, a relatively large portion of the State belongs to covered populations, with 85.0 percent[137] of the State belonging to a covered group. This implies that the interests of covered groups closely align to those of the whole State: Delaware as a whole and its covered groups are not likely to have misaligned priorities because the latter make up the vast majority of the former. Therefore, by planning to increase digital equity for covered populations, the State

[137] U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023.

is taking meaningful steps to address the entirety of its digital equity needs. The portion of Delaware belonging to at least one covered group is contextualized in Figure 1 below.

Figure 1: Portions of state populations belonging to a covered group[138]



Within Delaware, most individuals belonging to covered groups live in rural areas, are racial or ethnic minorities, have a relatively low income, are older than 59 years old, and/or have low levels of literacy. These covered groups are much larger in the State than those defined by incarceration status, English language proficiency, and veteran status. Perhaps most notable is the size of Delaware's rural population: An estimated 43.5 percent of the State lives in a rural area (as opposed to only 28.5 percent nationally). Delaware and national demographics are illustrated in Table 7 below.

[138] U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023.

Table 7: Portion of Delaware and U.S. in various covered groups[139, 140]

Covered group	Delaware	Nation	Gap
Any covered group	85.0%	81.5%	3.5%
Low income	17.9%	20.1%	-2.2%
Aging	26.7%	22.9%	3.8%
Incarcerated	0.7%	0.6%	0.1%
Veteran	7.0%	5.3%	1.7%
Disabled	14.2%	13.3%	0.9%
Language barrier	17.8%	21.4%	-3.6%
English language learner	5.0%	8.4%	-3.4%
Low literacy	20.3%	21.9%	-1.6%
Minority	38.7%	40.6%	-1.9%
Rural	43.5%	28.5%	15.0%

The demographic groups illustrated above are not mutually exclusive and many individuals belonging to a covered group belong to multiple covered groups; for example, many individuals living in rural areas are also low-income. Further, many of these traits are related, and possibly causally so—for example, individuals living with disabilities have higher tendencies to be on fixed incomes because of their disabilities. In this case, their presence in one covered group (individuals living with disabilities) directly affects their likelihood to appear in another covered group (individuals living in lower-income households). Additionally, individuals living with disabilities are in many cases more likely to be precluded from meaningful use of the internet by their relatively low income as opposed to their disability. Therefore, caution is urged in attributing causes of broadband outcomes to the nature of the affected covered groups.

This implies an unintuitive idea that digital equity interventions may not be most impactful by targeting the covered group that appears in most urgent need. To continue the example, individuals living with disabilities might present in some cases as the covered group with the most urgent needs, but tailoring support to low-income households and lowering the costs of

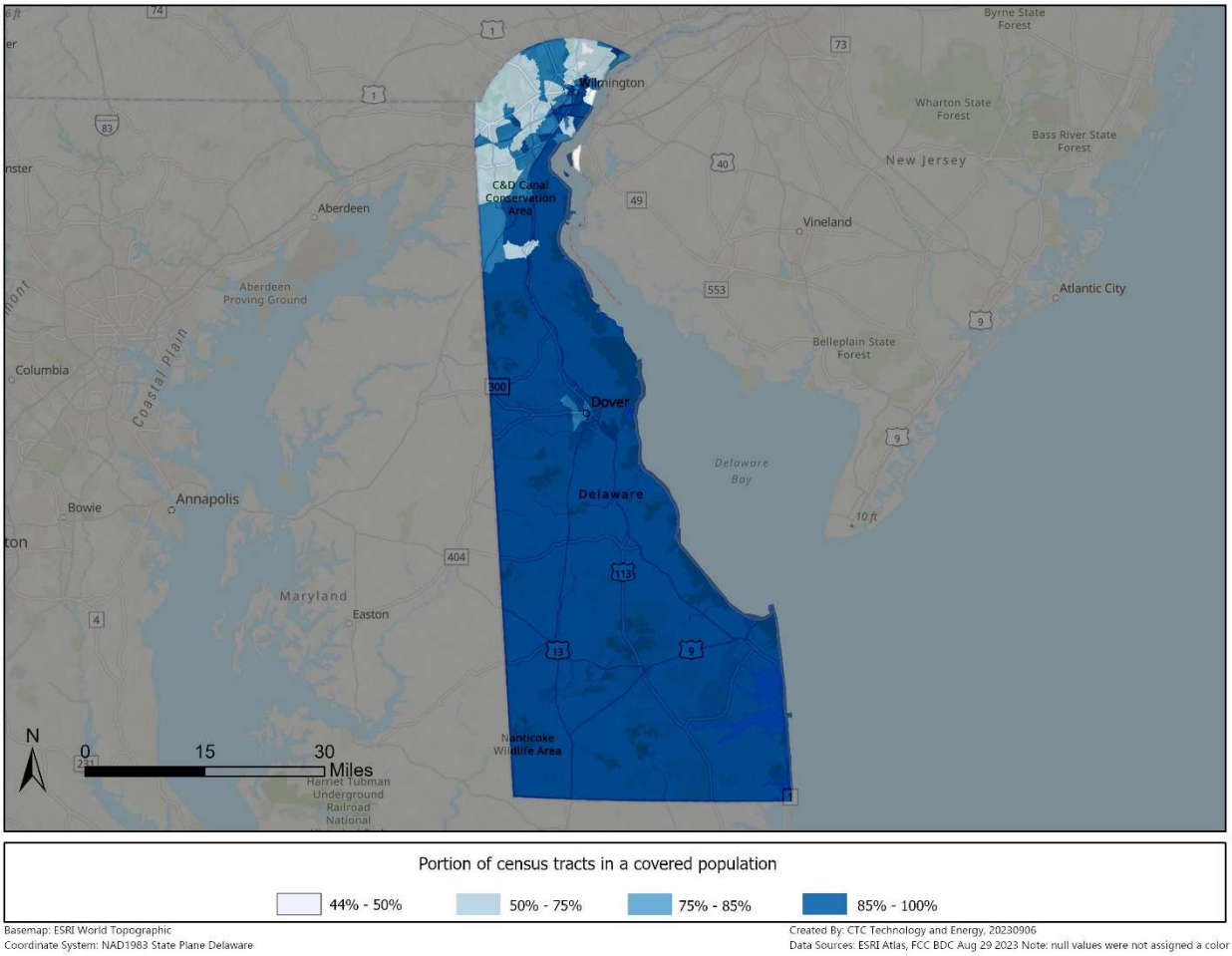
[139] U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023.

[140] These data are sourced from the Census Bureau's Digital Equity Act of 2021 collection, which includes ACS and NTIA Internet Use Survey data as well as imputations from external data sources such as the National Center for Education Statistics to create the most comprehensive set of covered populations data. However, the data set is slightly outdated, sourcing ACS data from 2019 (most recent) to as far back as 2015. Additionally, the full data set is difficult to update given the limited documentation on the imputations performed. Therefore, for many of the remaining sections wherein analysis is performed on more specific broadband barriers rather than wholistic demographic statistics, more easily repeatable analysis is performed on more up-to-date data from ACS and the NTIA Internet Use Survey (via the Current Population Survey). As a tradeoff with the increased data quality and useability, some insight into covered populations is lost, especially with regard to formerly incarcerated individuals and individuals with low levels of literacy.

broadband acquisition may be the most effective path towards impacting individuals living with disabilities.

Individuals belonging to covered groups are present throughout the entirety of Delaware, and, definitionally, they are uniformly present outside of urban and suburban environments. The geographic distribution of covered groups is shown in Figure 2 below.

Figure 2: Map of covered groups in Delaware[141]



3.2.2 Access to broadband service

Access to broadband service is the primary prerequisite for using the internet meaningfully to participate in the increasingly digital economy and world. For that reason, the State has completed a robust geographic analysis of broadband service offerings, a regression analysis of

[141] U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023.

covered group presence and broadband availability, a comparative analysis of internet adoption rates across covered groups, and an analysis of ACP uptake and eligibility to understand resident's remaining needs in terms of access to broadband internet service. These analyses show:

1. Delaware outperforms the rest of the nation in most meaningful indicators of broadband availability.
2. Individuals living in rural areas face the most urgent needs for broadband availability.
3. Delaware trails the nation in all indicators of internet adoption and subscription rates.
4. Covered groups in Delaware are uniformly adopting the internet less frequently than individuals that do not belong to a covered group. This gap is largest when compared across incomes.
5. Delaware lags behind the national average for the percentage of eligible households enrolled in the ACP subsidy program, suggesting Delaware still has a large opportunity for enrollment growth.

3.2.2.1 Availability of service

Of all Delaware households that do not use internet at home, only an estimated 1 percent[142] claim that a main reason for their lack of internet use is a lack of available internet service. While this is not the most frequently cited cause, the availability of service is an absolute condition for all other digital opportunities, and therefore deserves substantial attention.

Delaware outperforms the nation in all meaningful indicators of broadband availability, except when observing the highest speeds. When considering all internet delivery technologies (including those that are known to be less reliable such as satellite-based services), the FCC reports that Delaware and the nation are entirely served through speeds of 25/3 Mbps (which is the federal threshold for broadband service of any kind). However, Delaware has 4.9 percentage points more units served by speeds of at least 100/20 Mbps than the national rate.

This trend continues once service is limited to wireline technologies which are known to be more reliable than other internet-delivering technologies. 96.7 percent of units in Delaware are within a coverage footprint for wireline internet delivering 25/3 Mbps, as opposed to 89.8 percent nationally. Across every speed but one reported by the FCC, Delaware outpaces the nation in

[142] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.

wireline coverage. Similar trends hold true for licensed fixed wireless, which can be helpful for delivering service to rural areas that present difficulty for wireline construction.

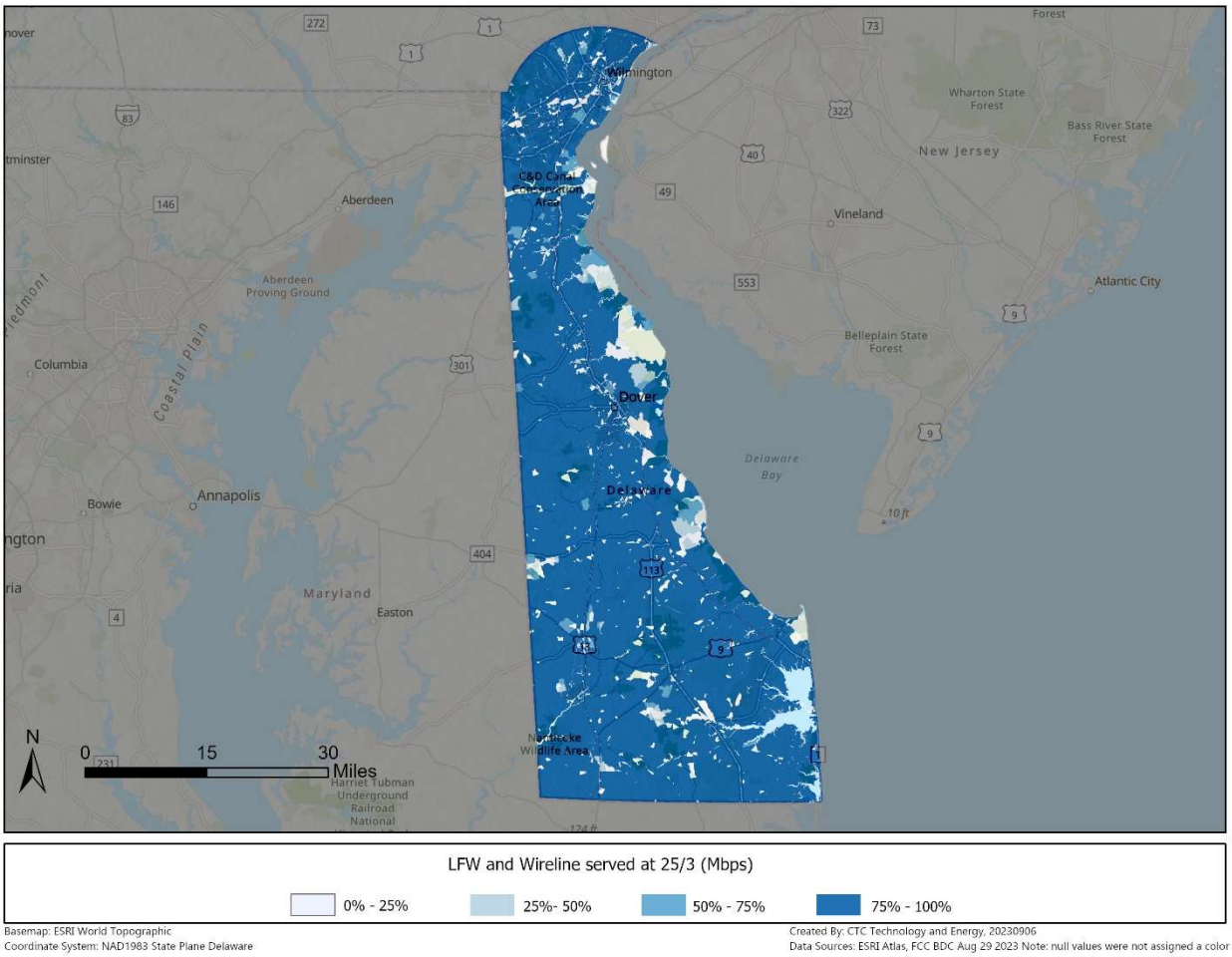
Table 8: Portion of units served with internet at various speeds in Delaware and the U.S.[143]

	Coverage (in Mbps)	Delaware	Nation	Gap
All technologies	0.2 / 0.2	100.0%	100.0%	0.0%
	10 / 1	100.0%	100.0%	0.0%
	25 / 3	100.0%	100.0%	0.0%
	100 / 20	97.0%	92.1%	4.9%
	250 / 25	96.7%	87.2%	9.5%
	1000 / 100	11.0%	33.2%	-22.2%
	Coverage (in Mbps)	**Delaware**	**Nation**	**Gap**
Wireline	0.2 / 0.2	96.8%	93.4%	3.3%
	10 / 1	96.7%	91.7%	5.1%
	25 / 3	96.7%	89.8%	6.9%
	100 / 20	96.7%	88.4%	8.3%
	250 / 25	96.7%	86.6%	10.1%
	1000 / 100	11.0%	32.3%	-21.3%
	Coverage (in Mbps)	**Delaware**	**Nation**	**Gap**
Licensed fixed wireless	0.2 / 0.2	85.7%	79.5%	6.2%
	10 / 1	67.6%	54.9%	12.8%
	25 / 3	67.6%	51.7%	15.8%
	100 / 20	15.2%	19.2%	-4.1%
	250 / 25	0.8%	2.6%	-1.8%
	1000 / 100	0.0%	0.2%	-0.2%

Certain areas of Delaware see low levels of coverage because private ISPs choose to invest elsewhere, where return on investment will presumably be greater. The availability of wireline or robust licensed fixed wireless broadband service in Delaware tends to correlate with the density of population. In more densely populated areas, there are more potential customers relative to construction costs. As a result, consistent with patterns throughout the United States, service in Delaware is frequently spotty in rural areas, as shown below for speeds of 25/3 Mbps (Figure 3), and 100/20 Mbps (Figure 4).

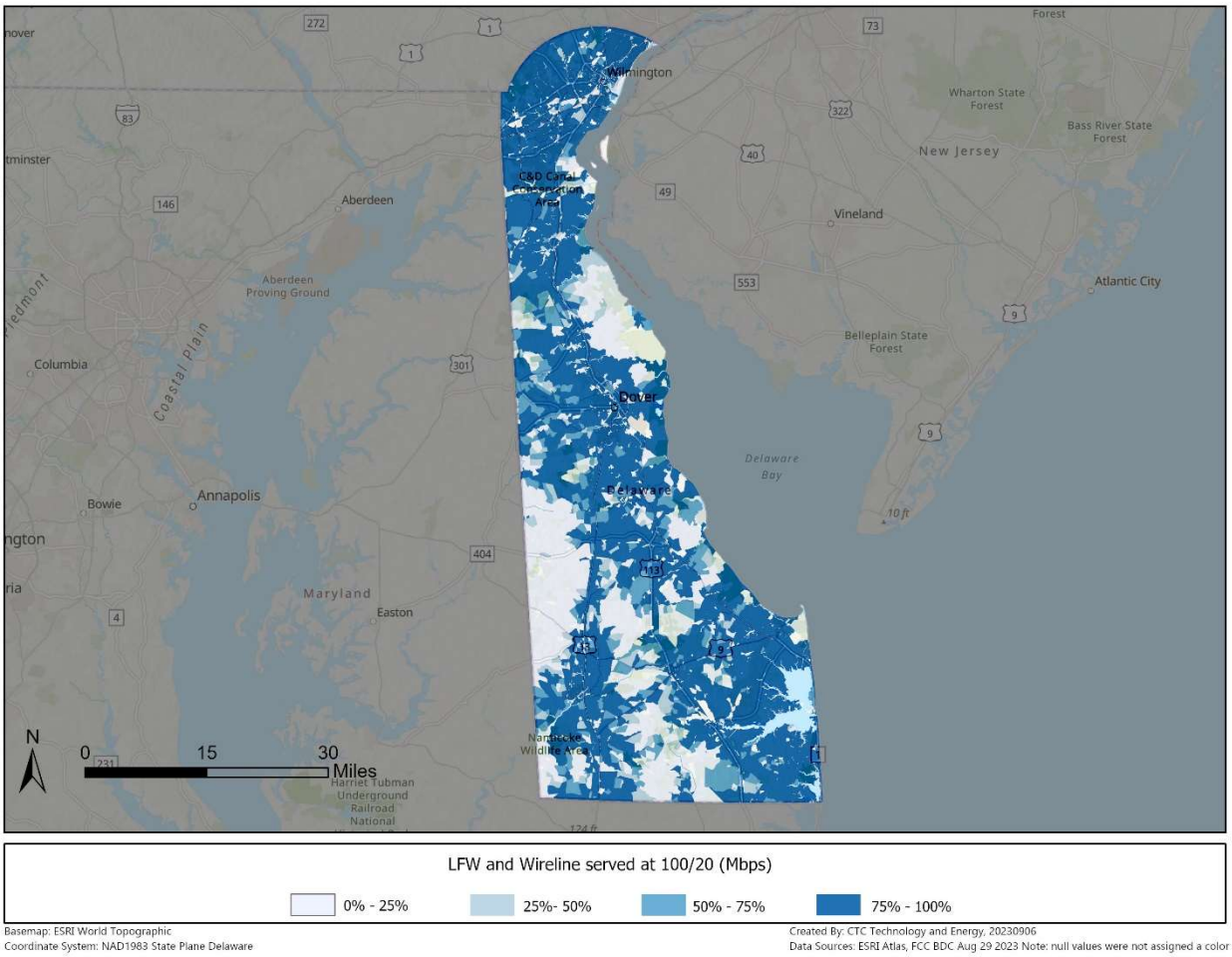
[143] FCC, National Broadband Map, Last updated August 16, 2023. Accessed August 29, 2023.

Figure 3: Map of units served by 25/3 Mbps[144]



[144] FCC, National Broadband Map, Last updated August 9, 2023. Accessed August 29, 2023.

Figure 4: Map of units served by 100/20 Mbps[145]



A regression analysis was undertaken by comparing the prevalence of various covered groups in each census tract in Delaware with the portion of units unserved by at least one broadband internet option with speeds of 25/3 Mbps or greater. The resulting correlation was extremely weak, with an R^2 value of 0.13 (possibly as a result of a small number of viable census tracts in the county[146]). However, the analysis does further underline the relationship between rurality and broadband availability, as it was the most statistically significant correlation of all covered groups by a wide margin.

Only one other covered group achieved statistical significance in relation to availability: The portions of a census tract identified as a racial or ethnic minority was negatively correlated with the portion of unserved units, meaning that an increase in racial or ethnic minorities indicated

[145] FCC, National Broadband Map, Last updated August 9, 2023. Accessed August 29, 2023.
[146] Delaware contains a relatively small number of census tracts, made smaller by data cleaning and imperfect data sets which whittled the total number of observations down to 175.

an increase in broadband availability. This can possibly be explained by racial and ethnic minorities being concentrated in urban areas where broadband is widely available,

The full results of the regression analysis are presented in Table 9.

Table 9: Regression analysis of portion of census tract belonging to covered groups and portion of units served[147]

Regression Statistics	
Multiple R	0.365
R Square	0.133
Adjusted R Square	0.086
Standard Error	0.017
Observations	175

Variables	Coefficients	Standard Error	t Stat	P-value	Statistically significant
Intercept	0.011	0.008	1.309	0.192	
Income	0.009	0.014	0.630	0.530	
Aging	-0.011	0.020	-0.578	0.564	
Incarceration status	0.027	0.023	1.158	0.248	
Veteran status	-0.097	0.066	-1.468	0.144	
Disability status	-0.009	0.043	-0.213	0.832	
Language barrier (including low literacy)	0.074	0.044	1.674	0.096	
English proficiency	-0.091	0.049	-1.831	0.069	
Race and ethnicity	-0.019	0.009	-2.045	0.042	✓
Rurality	0.010	0.004	2.667	8.43E-03	✓

Neither broadband availability nor many of these demographic characteristics are uniform throughout census tracts or binary in nature. For example, extremely low-income groups tend to cluster in areas much smaller than census tracts, and they face distinct availability obstacles to other individuals that still belong to the "low-income" covered group. It is overwhelmingly likely that low-income households are less well served than higher-income households, although those trends have not appeared statistically when evaluating this exact partitioning of the State. It is possible that a more granular study would reveal more informative relationships between various covered groups and service availability.

Ultimately, Delawareans would benefit from investment in increased service availability. For rural residents specifically, additional service availability could have significant impacts on digital equity.

[147] Portion of census tract populations belonging to various covered groups from U.S. Census Bureau, Digital Equity Act of 2021, State Data. https://www.census.gov/programs-surveys/community-resilience-estimates/partnerships/ntia/digital-equity.html. Accessed August 29, 2023. Portion of units served in each census tract from FCC's National Broadband Map. Accessed August 29, 2023. A number of outlier tracts were removed.

3.2.2.2 Adoption of service

Of all Delaware households that do not use internet at home an estimated 6 percent[148] claim that a main reason for their lack of internet use at home is an inability to afford service. Therefore, challenges relating to service affordability, and the closely linked concept of reliability, seem to be a non-negligible obstacles to digital equity for many Delawareans.

According to the American Community Survey, 93.4 percent of Delaware residents have a home internet subscription of any kind—surpassing the national rate by 3.1 percentage points. Accordingly, Delaware also outperforms the national rate in portion of residents with a wireline home internet subscription with a rate of 80.1 percent compared to the national rate of 75.5 percent.

Delaware, however, does report a portion of residents relying solely on a cellular data plan that is similar to the national figure: 11.4 percent in Delaware and 10.9 percent nationwide. Reliance upon cellular data for home internet service is considered insufficient for obtaining the many benefits of broadband. Mobile-only individuals typically cite affordability, their smartphone being good enough, and/or having access to broadband somewhere else as the reasons for not having home internet connectivity.

Table 10: Internet adoption rates in Delaware and the U.S.[149]

Internet in the house	Delaware	Nation	Gap
Internet subscription of any kind	93.4%	90.3%	3.1%
Internet subscription via wireline technology (i.e. fiber, cable, DSL)	80.1%	75.5%	4.6%
Only subscription via cellular data plan	11.4%	10.9%	0.5%

Within Delaware, individuals belonging to covered groups fare somewhat worse than others in home internet adoption. Only 91.3 percent of individuals belonging to a covered group report having a home internet subscription as compared to 98.3 percent of those outside of covered groups. The gap widens for wireline internet connections, for which 77.4 percent of individuals belonging to covered groups claim adoption compared to 86.6 percent of non-covered groups.

[148] U.S. Census Bureau, Current Population Survey Public Use Microdata, November 2021. Accessed August 29, 2023.
[149] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Table 11: Internet adoption rates in covered and non-covered groups[150]

Internet in the house	Covered groups	Non covered groups	Gap
Internet subscription of any kind	91.3%	98.3%	-6.9%
Internet subscription via wireline technology (i.e. fiber, cable, DSL)	77.4%	86.6%	-9.2%
Only subscription via cellular data plan	11.8%	10.3%	1.6%

Individuals living in low-income households constitute the covered group with the largest adoption gaps. Low-income individuals are 15.4 percentage points less likely than higher-income individuals to have a home internet subscription, and they are 17.7 percentage points less likely to have a wireline internet subscription.

Individuals with disabilities and aging populations constitute two more groups with meaningful adoption gaps; they were 12.3 and 8.8 percentage points, respectively, less likely to have a wireline internet subscription than their non-covered group counterparts.

English language learners do not significantly lag behind fluent speakers for internet adoption of any kind (a gap of 3.5 percentage points). However, the gap significantly widens for wireline internet subscription (14.0 percentage points) and the group has the largest rate of cellular data-only users of any covered population (20.2 percent), which is considered insufficient for full use of the internet.

Full breakdowns of each covered group's adoption rates are included in Table 12.[151]

[150] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[151] This Plan follows the U.S. Census Bureau's standards on reporting data related to the terms "minority" and "white." See: "About the topic of race," U.S. Census Bureau, https://www.census.gov/topics/population/race/about.html.

Table 12: Internet adoption rates in various covered groups[152]

	Internet in the house	Low income	Higher income	Gap
Income	Internet subscription of any kind	81.2%	96.6%	-15.4%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	66.1%	83.8%	-17.7%
	Only subscription via cellular data plan	13.5%	10.8%	2.7%
	Internet in the house	**Minority**	**White alone**	**Gap**
Race	Internet subscription of any kind	92.8%	93.8%	-1.0%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	78.4%	81.3%	-2.9%
	Only subscription via cellular data plan	12.6%	10.6%	2.1%
	Internet in the house	**Aging**	**Younger**	**Gap**
Age	Internet subscription of any kind	89.3%	94.9%	-5.6%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	73.7%	82.6%	-8.8%
	Only subscription via cellular data plan	13.0%	10.7%	2.2%
	Internet in the house	**With disabilities**	**Without disabilities**	**Gap**
Disability	Internet subscription of any kind	85.0%	94.7%	-9.7%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	69.5%	81.8%	-12.3%
	Only subscription via cellular data plan	12.4%	11.2%	1.2%
	Internet in the house	**English learner**	**Fluent**	**Gap**
English proficiency	Internet subscription of any kind	90.1%	93.5%	-3.5%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	66.9%	80.8%	-14.0%
	Only subscription via cellular data plan	20.2%	10.9%	9.3%
	Internet in the house	**Veteran**	**Non-veteran**	**Gap**
Veteran status	Internet subscription of any kind	93.0%	93.4%	-0.4%
	Internet subscription via wireline technology (i.e. fiber, cable, DSL)	76.4%	80.4%	-4.0%
	Only subscription via cellular data plan	14.7%	11.2%	3.5%

Given the reported frequency of inability (and unwillingness) to pay for home internet use, it can be concluded that the State has substantial needs for interventions to bring down the cost of home internet subscriptions for low-income households.

Perhaps the most widely known and used intervention to lower the cost of internet access is the Affordable Connectivity Program (ACP). The ACP subsidizes up to $30 per month for broadband for qualifying households and may include a one-time subsidy toward buying a laptop or tablet. However, the ACP is known to be chronically undersubscribed—which is especially true in Delaware where only about 30 percent of eligible households have enrolled. This gap highlights the significant opportunity for growth.

Table 13: Affordable Connectivity Program enrollment in Delaware and the U.S.[153]

	Delaware	Nation
Households enrolled	45,950	19,903,735
Households estimated elligible	154,963	55,266,900
Portion of elligible households enrolled	30%	36%

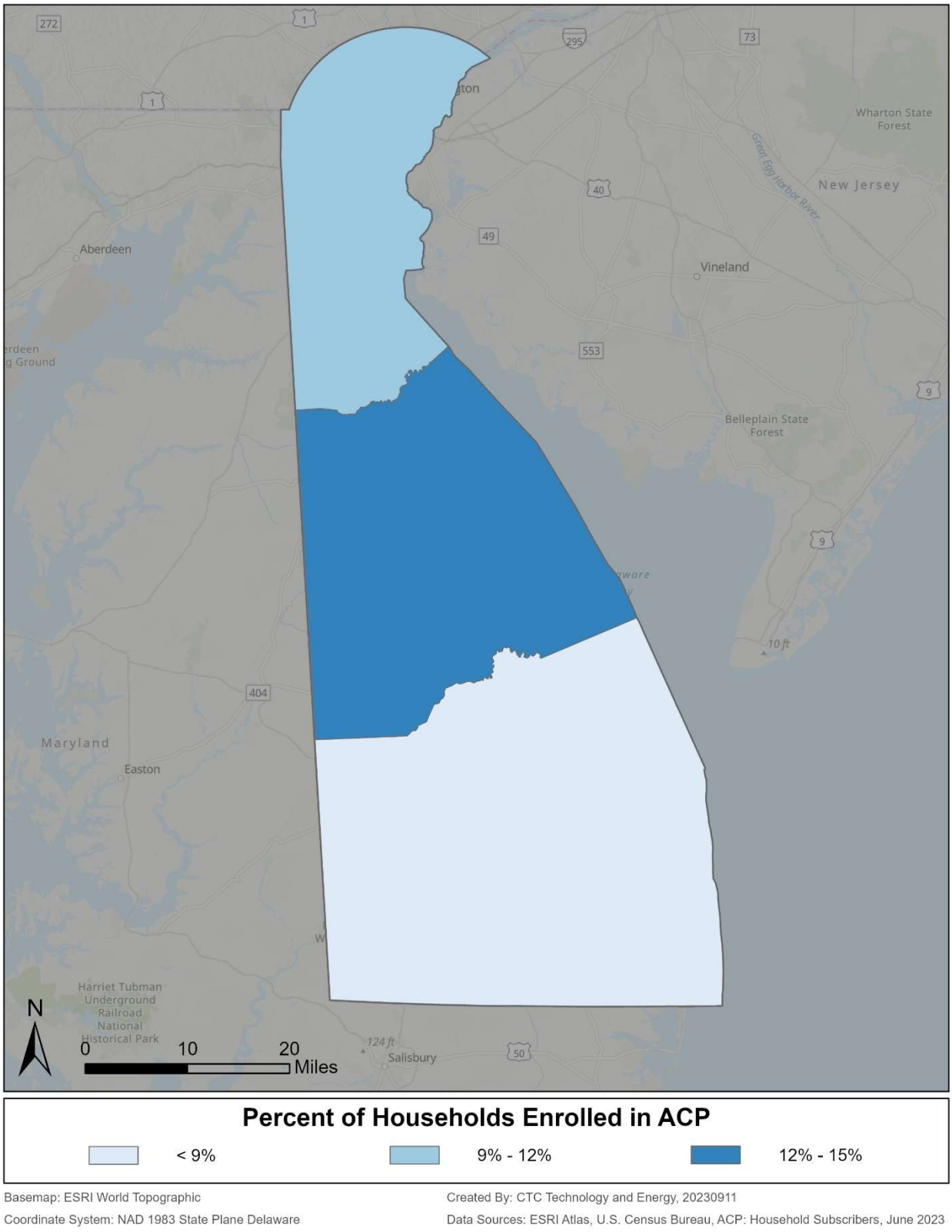
[152] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[153] Enrollment counts from USAC's ACP Enrollment and Claims Tracker, accurate as of August 28, 2023. https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/. Accessed

Households can be determined to be eligible through many criteria, including if they earn up to 200 percent of the federal poverty level or participate in one of many federal or State support programs (e.g., National School Lunch Program). As a result, eligibility for the program is highly aligned with members of covered groups. An estimated 45 percent of individuals belonging to covered groups are eligible for the ACP.

Figure 5 shows the percentage of households in each county that participate in the ACP.

August 29, 2023. Estimates of eligible households based on proprietary model that uses American Community Survey Public Use Microdata to estimate number of households qualifying for ACP via several of its eligibility criteria.

Figure 5: ACP enrollment in Delaware by county



3.2.3 Digital literacy

For individuals to meaningfully use the internet, they must practice and be confident in their ability to perform digital skills. Although some individuals may have internet service and a working computer, they are frequently functionally limited by an inability to navigate the internet effectively. In Delaware, 69 percent of residents without home internet expressed that they were not interested in or did not need home internet. This finding suggests that many Delaware residents may be more inclined to use the internet at home if they understand the full use, and therefore value, of having fluency in various digital skills.

Utilizing data from the Current Population Survey and the NTIA Internet Use Survey, the State of Delaware evaluated the extent to which various covered populations engage in key online activities. These key findings are as follows:

1. Delaware performs similarly to the nation in frequency of online digital skill use, but within the State, members of covered groups underperform compared to non-covered groups.

2. Individuals living in low-income households, individuals at or above 60 years of age, individuals living with disabilities, and veterans express the most urgent need for digital skills programming.

3. Delaware tends to outperform compared to the nation across all measured telemedicine-related online activities and members of covered groups tend to underperform compared to non-covered groups within the State.

4. Though to varying degrees of urgency, all covered groups (for which there are available data) express need for telemedicine digital skills programming.

Generally, Delaware performs similarly to the nation in frequency of digital skills use. Across 17 measured online activities, the biggest discrepancy between the State and nation is in accessing government services online (such as registering to vote), where Delaware trails the nation by a gap of 6.3 percentage points. Nevertheless, while the national figures help contextualize the State's positionality relative to the country, the nation does not represent the ceiling for achievement. Furthermore, although Delaware does not deviate strongly from national rates of digital skills use, there is still great opportunity for improvement in the State.

Table 14: Digital literacy in Delaware and the U.S.[154]

Online activity	Delaware	Nation	Gap
Uses text messaging or instant messaging	94.0%	93.3%	0.7%
Uses email	92.5%	91.8%	0.7%
Uses online social networks	69.0%	74.6%	-5.6%
Shops, makes travel reservations, or uses other consumer services online	79.7%	74.1%	5.6%
Uses online financial services like banking, investing, paying bills	76.6%	74.3%	2.3%
Watches videos online	70.8%	70.1%	0.6%
Participates in online video or voice calls or conferencing	67.5%	65.6%	1.9%
Streams or downloads music, radio, podcasts, etc.	56.7%	60.0%	-3.3%
Requests services provided by other people via the internet	43.5%	43.0%	0.5%
Accessing government services	32.0%	38.4%	-6.3%
Takes class or participates in job training online	22.9%	25.7%	-2.9%
Interacts with household equipment using the internet	23.0%	22.3%	0.7%
Telecommutes using the internet	26.0%	27.7%	-1.6%
Searches for a job online	23.5%	21.3%	2.2%
Posts or uploads blog posts, videos, or other original content	19.4%	17.0%	2.4%
Uses the internet to sell goods	10.4%	10.5%	-0.1%
Offers services for sale via the internet	8.6%	8.8%	-0.2%

Individuals belonging to covered populations almost uniformly practice digital skills at a lower rate than those that do not belong to covered populations. Here, the largest gaps can be found in telecommuting using the internet (24.5 percentage point gap), streaming or downloading music, radio, podcasts, etc. (19.2 percentage point gap), and searching for a job online (18.8 percentage point gap).

The only digital skill for which individuals in covered groups outpace their counterparts is in accessing government services, which only 33.2 percent of those in covered groups performed recently compared to 31.0 percent of those in non-covered groups. It is possible that members of covered populations have greater need for government services and subsidies—potentially explaining the greater familiarity in performing this online activity.

[154] NTIA, 2021 Internet Use Survey. Accessed August 29, 2023.

Table 15: Digital literacy in Delaware covered groups[155]

Online activity	Covered group	Non-covered group	Gap
Uses text messaging or instant messaging	91.6%	98.6%	-7.0%
Uses email	90.5%	96.3%	-5.8%
Uses online social networks	64.1%	79.3%	-15.2%
Shops, makes travel reservations, or uses other consumer services online	76.7%	86.6%	-9.8%
Uses online financial services like banking, investing, paying bills	71.5%	87.6%	-16.1%
Watches videos online	65.1%	81.1%	-16.1%
Participates in online video or voice calls or conferencing	64.6%	73.7%	-9.1%
Streams or downloads music, radio, podcasts, etc.	50.4%	69.5%	-19.2%
Requests services provided by other people via the internet	39.4%	53.8%	-14.4%
Accessing government services	33.2%	31.0%	2.1%
Takes class or participates in job training online	18.4%	28.6%	-10.2%
Interacts with household equipment using the internet	19.0%	30.5%	-11.5%
Telecommutes using the internet	18.0%	42.5%	-24.5%
Searches for a job online	16.8%	35.5%	-18.8%
Posts or uploads blog posts, videos, or other original content	16.0%	26.9%	-10.9%
Uses the internet to sell goods	7.6%	15.0%	-7.4%
Offers services for sale via the internet	6.8%	11.1%	-4.3%

Apart from racial or ethnic minorities, all covered populations (for which there are data) significantly underperform in regular use of digital skills. Accordingly, these groups practice very few, if any, measured online activities more frequently than their non-covered counterparts—suggesting that digital skills training is a key need for all four of these groups.

Table 16: Digital literacy in aging and younger populations[156]

Online activity	Aging	Younger	Gap
Uses text messaging or instant messaging	86.2%	98.3%	-12.0%
Uses email	88.9%	94.4%	-5.5%
Uses online social networks	52.2%	78.0%	-25.8%
Shops, makes travel reservations, or uses other consumer services online	78.3%	80.5%	-2.2%
Uses online financial services like banking, investing, paying bills	68.6%	80.9%	-12.3%
Watches videos online	53.3%	80.2%	-26.9%
Participates in online video or voice calls or conferencing	59.6%	71.8%	-12.1%
Streams or downloads music, radio, podcasts, etc.	36.1%	67.9%	-31.8%
Requests services provided by other people via the internet	30.2%	50.7%	-20.5%
Accessing government services	35.8%	30.0%	5.8%
Takes class or participates in job training online	11.0%	29.2%	-18.2%
Interacts with household equipment using the internet	16.0%	26.8%	-10.7%
Telecommutes using the internet	16.1%	31.4%	-15.3%
Searches for a job online	2.5%	34.8%	-32.3%
Posts or uploads blog posts, videos, or other original content	6.8%	26.1%	-19.3%
Uses the internet to sell goods	6.7%	12.4%	-5.7%
Offers services for sale via the internet	6.3%	9.9%	-3.6%

[155] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[156] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Table 17: Digital literacy in people with disabilities and people without disabilities[157]

Online activity	People with disabilities	People without disabilities	Gap
Uses text messaging or instant messaging	83.7%	95.7%	-11.9%
Uses email	83.3%	94.0%	-10.7%
Uses online social networks	68.5%	69.0%	-0.5%
Shops, makes travel reservations, or uses other consumer services online	71.9%	81.0%	-9.1%
Uses online financial services like banking, investing, paying bills	61.3%	79.0%	-17.7%
Watches videos online	59.6%	72.5%	-12.9%
Participates in online video or voice calls or conferencing	61.0%	68.6%	-7.6%
Streams or downloads music, radio, podcasts, etc.	36.2%	60.0%	-23.8%
Requests services provided by other people via the internet	34.5%	45.0%	-10.4%
Accessing government services	37.2%	31.2%	6.0%
Takes class or participates in job training online	11.4%	24.7%	-13.3%
Interacts with household equipment using the internet	15.0%	24.3%	-9.2%
Telecommutes using the internet	13.3%	28.0%	-14.7%
Searches for a job online	16.4%	24.6%	-8.2%
Posts or uploads blog posts, videos, or other original content	8.6%	21.1%	-12.4%
Uses the internet to sell goods	5.0%	11.3%	-6.3%
Offers services for sale via the internet	4.6%	9.3%	-4.6%

Table 18: Digital literacy in low and higher-income populations[158]

Online activity	Low income	Higher income	Gap
Uses text messaging or instant messaging	91.7%	94.6%	-2.9%
Uses email	84.0%	94.5%	-10.4%
Uses online social networks	67.6%	69.3%	-1.7%
Shops, makes travel reservations, or uses other consumer services online	68.5%	82.3%	-13.8%
Uses online financial services like banking, investing, paying bills	70.2%	78.0%	-7.8%
Watches videos online	60.5%	73.1%	-12.7%
Participates in online video or voice calls or conferencing	64.3%	68.3%	-4.0%
Streams or downloads music, radio, podcasts, etc.	48.5%	58.6%	-10.1%
Requests services provided by other people via the internet	38.6%	44.7%	-6.1%
Accessing government services	24.3%	33.8%	-9.5%
Takes class or participates in job training online	16.6%	24.3%	-7.7%
Interacts with household equipment using the internet	23.5%	22.9%	0.7%
Telecommutes using the internet	6.1%	30.6%	-24.5%
Searches for a job online	23.4%	23.5%	-0.1%
Posts or uploads blog posts, videos, or other original content	15.5%	20.3%	-4.8%
Uses the internet to sell goods	7.4%	11.1%	-3.7%
Offers services for sale via the internet	6.0%	9.2%	-3.2%

[157] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[158] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Table 19: Digital literacy in veteran and non-veteran populations[159]

Online activity	Veteran	Non-veteran	Gap
Uses text messaging or instant messaging	89.6%	94.2%	-4.6%
Uses email	90.7%	92.4%	-1.7%
Uses online social networks	61.6%	69.0%	-7.4%
Shops, makes travel reservations, or uses other consumer services online	72.1%	81.0%	-8.9%
Uses online financial services like banking, investing, paying bills	74.7%	78.1%	-3.3%
Watches videos online	53.4%	71.8%	-18.5%
Participates in online video or voice calls or conferencing	68.1%	66.7%	1.4%
Streams or downloads music, radio, podcasts, etc.	42.5%	56.9%	-14.4%
Requests services provided by other people via the internet	27.4%	45.7%	-18.4%
Accessing government services	38.5%	32.4%	6.1%
Takes class or participates in job training online	10.7%	22.0%	-11.3%
Interacts with household equipment using the internet	22.1%	23.1%	-1.0%
Telecommutes using the internet	19.5%	27.4%	-7.9%
Searches for a job online	7.7%	23.9%	-16.2%
Posts or uploads blog posts, videos, or other original content	10.0%	20.2%	-10.3%
Uses the internet to sell goods	6.6%	10.6%	-4.0%
Offers services for sale via the internet	4.7%	8.7%	-4.1%

Racial or ethnic minorities do not demonstrate a particularly urgent need for increased digital skills training. In fact, Delaware residents who are members of a racial or ethnic minority outperform white Delaware residents in a majority of measured online activities. That said, the frequency of online activity performance does not necessarily imply competence or success in those activities. Therefore, digital skills training still may have a meaningful impact on this group.

Table 20: Digital literacy in racial/ethnic minority and white populations[160]

Online activity	Minority	White alone	Gap
Uses text messaging or instant messaging	96.6%	93.2%	3.4%
Uses email	94.7%	91.8%	2.9%
Uses online social networks	66.0%	69.9%	-3.9%
Shops, makes travel reservations, or uses other consumer services online	81.4%	79.2%	2.3%
Uses online financial services like banking, investing, paying bills	72.5%	77.9%	-5.4%
Watches videos online	77.3%	68.6%	8.7%
Participates in online video or voice calls or conferencing	65.3%	68.3%	-3.0%
Streams or downloads music, radio, podcasts, etc.	67.0%	53.3%	13.7%
Requests services provided by other people via the internet	49.9%	41.4%	8.5%
Accessing government services	29.2%	33.0%	-3.8%
Takes class or participates in job training online	23.0%	22.8%	0.2%
Interacts with household equipment using the internet	26.1%	22.0%	4.1%
Telecommutes using the internet	20.3%	27.9%	-7.6%
Searches for a job online	30.1%	21.3%	8.8%
Posts or uploads blog posts, videos, or other original content	26.1%	17.1%	8.9%
Uses the internet to sell goods	6.8%	11.6%	-4.9%
Offers services for sale via the internet	4.9%	9.8%	-4.9%

[159] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[160] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

3.2.4 Telemedicine

Increasingly, there is a use and need for a distinguished set of digital skills involved in telemedicine and remote health care. These activities include communicating with health professionals over the internet, researching health information online, using an electronic health monitoring device (e.g., sending data to a provider from a smart watch or pacemaker), and accessing health or health insurance records online. Delaware outperforms the nation in frequency of performance of each of these telemedicine activities.

For these set of metrics, it is difficult to definitively claim what a successful state should hope to report—while certainly a state should attempt to make the following telemedicine activities accessible to their residents, many residents do not have an urgent need for frequent medical care or may deem their access to in-person health care adequate to the extent that these online resources are not necessary. With these caveats, it appears as though many Delaware residents are taking advantage of the potential that telemedicine provides, while still leaving room for improvement.

Table 21: Telemedicine digital literacy in Delaware and the U.S.[161]

Telemedicine activity	Delaware	Nation	Gap
Communicates with a health professional over the internet	54.2%	48.1%	6.1%
Researches health information online	55.9%	52.9%	2.9%
Uses an electronic health monitoring service	11.5%	8.4%	3.0%
Accesses health or insurance records online	53.6%	53.1%	0.6%

Among Delawareans belonging to covered groups, telemedicine is less frequently practiced compared to non-covered populations. These gaps are especially prevalent in researching health information online (9.5 percentage point gap) and accessing health or insurance records online (11.5 percentage point gap). However, individuals in covered groups perform about the same as non-covered groups in the rate of use of electronic health monitoring services—with both groups reporting rates of approximately 53.9 percent—but this outcome may be skewed by a higher rate of medical needs among covered populations rather than a higher degree of digital literacy.

Table 22: Telemedicine digital literacy in covered and non-covered groups[162]

Telemedicine activity	Covered groups	Non-covered groups	Gap
Communicates with a health professional over the internet	53.9%	53.9%	0.0%
Researches health information online	52.4%	61.9%	-9.5%
Uses an electronic health monitoring service	8.4%	14.8%	-6.4%
Accesses health or insurance records online	49.5%	61.0%	-11.5%

Among the covered populations, individuals living in low-income households exhibit the most urgent needs for increased telemedicine skills—based on both their reported frequency of

[161] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[162] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

participation in telemedicine (which is notably low) and given the difficulties in traveling long distances and at inconvenient times for lower-income individuals.

Delaware residents that are of racial or ethnic minorities also notably lag behind white individuals for frequency of participation in telemedicine activities. Given how engaged racial or ethnic minorities are as compared to white individuals for non-telehealth-related online activities, one would not expect this kind of a discrepancy. However, these data might be explained by socio-cultural factors related to a historic mistrust of the American medical establishment by racial or ethnic minorities.[163] Therefore, these data may indicate that racial or ethnic minorities in Delaware would benefit from a concerted focus upon further education in digital skills related to telemedicine, but additional care may be required to market and deploy this programming in ways that build communal trust.

Veterans also underperformed compared to non-veterans for all measured telemedicine activities. This gap might be explained by a higher degree of concern regarding online security and privacy risks related to using the internet such as telemedicine. However, it is also possible that these data are indicative of a greater deficiency regarding the digital skills of veterans in Delaware, given their performance across non-telemedicine online activities. Regardless, veterans demonstrate a relatively urgent need for telemedicine skills education.

Adults who are 60 years of age or older may also benefit from specific telemedicine education given their underperformance in nearly all telemedicine activities.

[163] "Trust and Mistrust in Americans' Views of Scientific Experts," Pew Research Center, 2019, https://www.pewresearch.org/science/2019/08/02/americans-generally-view-medical-professionals-favorably-but-about-half-consider-misconduct-a-big-problem/. Accessed September 7, 2023.

Table 23: Telemedicine digital literacy in various covered populations[164]

	Telemedicine activity	Low income	Higher income	Gap
Income	Communicates with a health professional over the internet	40.5%	57.4%	-17.0%
	Researches health information online	39.2%	59.7%	-20.5%
	Uses an electronic health monitoring service	5.7%	12.8%	-7.1%
	Accesses health or insurance records online	30.2%	59.0%	-28.9%
	Telemedicine activity	**Aging**	**Younger**	**Gap**
Age	Communicates with a health professional over the internet	59.1%	51.6%	7.6%
	Researches health information online	54.3%	56.7%	-2.5%
	Uses an electronic health monitoring service	6.0%	14.4%	-8.4%
	Accesses health or insurance records online	50.4%	55.3%	-4.9%
	Telemedicine activity	**Veteran**	**Non-veteran**	**Gap**
Veteran status	Communicates with a health professional over the internet	45.1%	55.0%	-9.9%
	Researches health information online	53.3%	55.4%	-2.1%
	Uses an electronic health monitoring service	5.6%	11.3%	-5.7%
	Accesses health or insurance records online	47.1%	54.3%	-7.2%
	Telemedicine activity	**With disabilities**	**Without disabilities**	**Gap**
Disability	Communicates with a health professional over the internet	58.2%	53.6%	4.6%
	Researches health information online	47.5%	57.2%	-9.7%
	Uses an electronic health monitoring service	10.0%	11.7%	-1.7%
	Accesses health or insurance records online	58.4%	52.8%	5.5%
	Telemedicine activity	**Minority**	**White alone**	**Gap**
Race	Communicates with a health professional over the internet	46.9%	56.6%	-9.7%
	Researches health information online	50.2%	57.7%	-7.5%
	Uses an electronic health monitoring service	7.4%	12.8%	-5.4%
	Accesses health or insurance records online	38.9%	58.5%	-19.6%

3.2.5 Online security and privacy

Theft, fraud, phishing, and misinformation are all commonplace on the internet, and fully realizing digital equity in Delaware requires users to be safe from such online risks. In Delaware, 4 percent of all households that do not use the internet at home cited online security or privacy concerns as a reason for their lack of use. Further, in the past year, 21.9 percent of individuals in covered groups report having been the victim of an online security or privacy breach. Therefore, the State of Delaware has used data from the Current Population Survey and the NTIA Internet Use Survey to evaluate the extents to which various covered populations perceive and feel confident in their ability to disarm online security and privacy threats. The key findings are as follows:

1. Delaware residents are slightly less concerned by online security and privacy concerns when compared against the nation.

2. Identity theft and credit card fraud are the two online security breaches that are concerning to most Delaware residents.

[164] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

3. There are reasons to believe that members of covered groups are slightly more aware of online security and privacy concerns when compared against non-covered groups, with this concern most prevalent in veterans and aging individuals.

4. Members of covered groups do not appear meaningfully more dissuaded than non-covered groups to undertake various online activities as a result of security or privacy concerns.

Identity theft and credit card fraud were the two online security risks that concerned the most Delaware residents. This is in line with the national ranking. Other concerns such as third-party tracking, government tracking, and online threats were of less concern.

Table 24: Main online security or privacy concerns in Delaware and the U.S.[165]

(Non-exclusive) main online security or privacy concerns	Delaware	Nation	Gap
Identity theft	53.0%	50.7%	2.3%
Credit card fraud	38.5%	42.1%	-3.6%
Third party tracking	23.3%	26.4%	-3.2%
Government tracking	16.7%	19.0%	-2.3%
Online threats	18.9%	23.1%	-4.3%
Other	8.8%	13.1%	-4.3%

Individuals belonging to covered groups are nearly uniformly more concerned about online security or privacy risks than those not in a covered group. The increased concern over security and privacy among covered populations could be caused by increased awareness of extant risks, from which one might conclude that non-covered populations could benefit from additional educational programming. This seems particularly likely given that there is little evidence to suggest that non-covered groups are better equipped to protect themselves from these risks.

Table 25: Main online security or privacy concerns in covered and non-covered groups[166]

(Non-exclusive) main online security or privacy concerns	Covered groups	Non-covered groups	Gap
Identity theft	53.1%	52.4%	0.6%
Credit card fraud	40.4%	33.7%	6.7%
Third party tracking	24.0%	22.7%	1.3%
Government tracking	17.7%	15.3%	2.3%
Online threats	20.2%	17.0%	3.2%
Other	8.9%	9.0%	-0.1%

Among the specific covered groups, veterans and individuals at or above 60 years of age tend to be the most concerned about these risks. Lower-income individuals expressed the least concern over these issues. Similarly, while it is not inherently beneficial to increase concern around

[165] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[166] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

privacy and security, online security education may increase awareness of these concerns in a positive way, especially for lower-income households.

Table 26: Main online security or privacy concerns in various covered groups[167]

	(Non-exclusive) main online security or privacy concerns	Low income	Higher-income	Gap
Income	Identity theft	36.4%	56.8%	-20.4%
	Credit card fraud	27.1%	41.1%	-14.0%
	Third party tracking	14.4%	25.3%	-10.9%
	Government tracking	10.0%	18.2%	-8.2%
	Online threats	15.4%	19.7%	-4.3%
	Other	11.0%	8.4%	2.6%
	(Non-exclusive) main online security or privacy concerns	**Aging**	**Younger**	**Gap**
Age	Identity theft	64.7%	46.6%	18.0%
	Credit card fraud	47.0%	33.9%	13.0%
	Third party tracking	24.5%	22.6%	1.9%
	Government tracking	21.1%	14.2%	6.9%
	Online threats	21.4%	17.5%	3.8%
	Other	7.0%	9.8%	-2.8%
	(Non-exclusive) main online security or privacy concerns	**Veterans**	**Non-veterans**	**Gap**
Veteran status	Identity theft	66.1%	51.0%	15.0%
	Credit card fraud	52.3%	35.9%	16.3%
	Third party tracking	41.3%	22.2%	19.1%
	Government tracking	33.5%	15.5%	18.1%
	Online threats	30.1%	18.3%	11.8%
	Other	15.8%	8.3%	7.6%
	(Non-exclusive) main online security or privacy concerns	**With disabilities**	**Without disabilities**	**Gap**
Disability	Identity theft	46.6%	54.0%	-7.3%
	Credit card fraud	43.6%	37.7%	5.9%
	Third party tracking	26.6%	22.7%	3.8%
	Government tracking	17.8%	16.5%	1.3%
	Online threats	18.1%	19.0%	-0.9%
	Other	16.5%	7.6%	8.9%
	(Non-exclusive) main online security or privacy concerns	**Minority**	**White alone**	**Gap**
Race	Identity theft	57.5%	51.5%	6.0%
	Credit card fraud	41.8%	37.4%	4.4%
	Third party tracking	26.5%	22.2%	4.2%
	Government tracking	11.0%	18.6%	-7.6%
	Online threats	21.2%	18.1%	3.1%
	Other	6.0%	9.8%	-3.7%

It may be more meaningful for the identification of barriers to examine the impacts of concern rather than level of concern. An estimated 18.4 percent of Delaware residents chose not to buy goods or services online in the past year because of concerns regarding privacy or security. Similarly, 16.4 percent chose not to express an opinion on a controversial or political issue online for these reasons. Delaware residents appear similarly dissuaded from online activities because of security concerns to the rest of the nation. While the goal is for all individuals to feel safe and

[167] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

confident in their performance of online activities, it remains possible that these data are more suggestive of the degree of awareness among Delaware residents rather than their capacity for self-protection.

Table 27: Portion of individuals dissuaded from performing online activities by privacy or security concerns in Delaware and the U.S.[168]

Concerns about privacy or security stopped someone in your household from:	Delaware	Nation	Gap
Conducting financial transactions online	5.0%	3.2%	1.8%
Buying goods or services online	18.4%	18.0%	0.4%
Posting photos or other information to social media	11.2%	13.5%	-2.3%
Expressing an opinion on a controversial or political issue online	16.4%	13.7%	2.8%
Searching for infromation on a web search engine	11.9%	13.0%	-1.1%

In general, members of covered populations do not meaningfully differ from non-covered populations by these metrics. Therefore, it is likely that security and privacy-based educational programming may be similarly beneficial to covered and non-covered populations.

Table 28: Portion of individuals dissuaded from performing online activities by privacy or security concerns in covered and non-covered groups[169]

Concerns about privacy or security stopped someone in your household from:	Covered groups	Non-covered groups	Gap
Conducting financial transactions online	5.1%	5.0%	0.0%
Buying goods or services online	20.3%	13.6%	6.6%
Posting photos or other information to social media	12.7%	8.5%	4.2%
Expressing an opinion on a controversial or political issue online	15.9%	18.1%	-2.2%
Searching for infromation on a web search engine	11.5%	13.1%	-1.6%

3.2.6 Device adoption

Meaningful use of the internet requires the meaningful use of internet-enabled devices such as desktop and laptop computers, tablets, and, in some instances, smartphones. Accordingly, 6 percent of Delaware residents who do not use internet at home reported "no or inadequate computing device" as a barrier to their households' connectivity. Therefore, the State of Delaware has used data from the American Community Survey to evaluate the extent to which Delaware residents as a whole, and various covered populations specifically, have access to computer devices in their homes. The key findings are as follows:

1. Delaware outpaces the nation in desktop or laptop access rates.
2. Device access rates are uniformly lower for members of covered groups compared to non-covered groups.
3. Low-income households are in the most urgent need of increased desktop or laptop computer access, and individuals who are 60 or older, individuals living with a disability,

[168] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.
[169] U.S. Census Bureau, Current Population Survey Public Use Microdata, 2021. Accessed August 29, 2023.

and English language learners also significantly lag behind their non-covered counterparts.

The State of Delaware performs similarly to the nation in computer device ownership of any kind, with 95.2 percent of individuals claiming to have access to a computer in the house compared to 95.0 percent nationally. However, these devices are not uniformly capable. While tablets and smartphones are increasingly effective for many online tasks, they are still ultimately not adequate for full realization of digital opportunities. In Delaware 85.8 percent of individuals have access to a desktop or laptop in their home, which is 5.3 percentage points more than the national rate of 80.5 percent. Device adoption statistics for the State and nation are presented in Table 29 below:

Table 29: Device adoption rates in Delaware and the U.S.[170]

Computer in the house	Delaware	Nation	Gap
Computer device of any kind	95.2%	95.0%	0.2%
Desktop or laptop	85.8%	80.5%	5.3%
Tablet	72.4%	63.8%	8.6%
Smartphone only	5.7%	9.1%	-3.4%

Device ownership is reportedly somewhat stratified by membership in covered groups. For example, 99.1 percent of individuals not belonging to a covered groups have access to a computer at home, while only 93.5 percent of individuals belonging to covered groups report the same access. This device gap grows when limiting the inquiry to desktop or laptop devices, or to tablets, to which members of covered groups are reportedly 12.1 and 13.5 percentage points less likely to have access at the home, respectively.

Additionally, 6.9 percent of members of covered groups (compared to 2.9 percent of non-covered groups) report only having access to a smartphone at home. While this is technically counted as a computer device of any kind, a smartphone alone is insufficient for a myriad of key online activities. These data suggest that device ownership is still a meaningful barrier to connectivity for members of covered groups in Delaware.

[170] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Table 30: Device adoption rates in Delaware covered groups[171]

Computer in the house	Covered groups	Non-covered groups	Gap
Computer device of any kind	93.5%	99.1%	-5.6%
Desktop or laptop	82.2%	94.3%	-12.1%
Tablet	68.4%	81.9%	-13.5%
Smartphone only	6.9%	2.9%	4.0%

Among various covered groups, individuals living in low-income households display the most urgent needs for adequate computer devices. Low-income individuals greatly underperformed higher-income individuals in ownership of computer devices of any kind (13.5 percentage point gap), desktop or laptop computers (23.9 percentage point gap), and tablet computers (21.4).

People with disabilities and aging individuals also demonstrate relatively urgent needs for adequate computer devices—with a gap between people with disabilities and people without disabilities of 15.7 percentage points and a gap between aging and younger individuals of 6.9 percentage points for laptop or desktop device ownership. These gaps might be explained by accessibility concerns regarding various devices. As such, accessibility concerns regarding devices themselves serve to reemphasize the need for *adequate* devices.

English language learners also exhibit a need in device adoption. Only 77.1 percent own a desktop or laptop, and an outsized portion of English language learners only use a smartphone at the home (14.4 percent). This is related to their tendency to only subscribe to cellular data plans, although it is unclear which factor influences the other. In either case, smartphone only use is not sufficient for fully realizing the benefits of internet use.

[171] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

Table 31: Device adoption rates in various covered groups[172]

	Computer in the house	Low income	Higher income	Gap
Income	Computer device of any kind	84.5%	98.0%	-13.5%
	Desktop or laptop	66.9%	90.8%	-23.9%
	Tablet	55.4%	76.8%	-21.4%
	Smartphone only	11.0%	4.3%	6.7%
	Computer in the house	**Minority**	**White alone**	**Gap**
Race	Computer device of any kind	94.9%	95.3%	-0.4%
	Desktop or laptop	82.5%	88.0%	-5.5%
	Tablet	69.6%	74.2%	-4.5%
	Smartphone only	8.3%	4.0%	4.3%
	Computer in the house	**Aging**	**Younger**	**Gap**
Age	Computer device of any kind	92.3%	96.2%	-3.9%
	Desktop or laptop	80.8%	87.7%	-6.9%
	Tablet	63.7%	75.7%	-12.0%
	Smartphone only	6.2%	5.5%	0.7%
	Computer in the house	**With disabilities**	**Without disabilities**	**Gap**
Disability	Computer device of any kind	89.2%	96.1%	-6.8%
	Desktop or laptop	72.2%	87.9%	-15.7%
	Tablet	59.6%	74.4%	-14.8%
	Smartphone only	10.2%	5.0%	5.2%
	Computer in the house	**English learner**	**English fluency**	**Gap**
English proficiency	Computer device of any kind	97.4%	95.0%	2.3%
	Desktop or laptop	77.1%	86.3%	-9.2%
	Tablet	61.1%	73.0%	-11.8%
	Smartphone only	14.4%	5.2%	9.2%
	Computer in the house	**Veteran**	**Non-veteran**	**Gap**
Veteran status	Computer device of any kind	94.4%	95.2%	-0.8%
	Desktop or laptop	88.3%	85.7%	2.7%
	Tablet	67.8%	72.6%	-4.9%
	Smartphone only	4.1%	5.8%	-1.7%

3.2.7 Online accessibility and inclusivity of public resources and services

Without accessible online content and resources, many individuals will be precluded from meaningfully using the internet. In addition to the above, experts consider the accessibility of online content and services to be an essential measurement for benchmarking digital equity. Unfortunately, no robust data sets currently exist.

[172] U.S. Census Bureau, American Community Survey Public Use Microdata, 2021. Accessed August 29, 2023.

In order for accessibility to be measured, a finite choice of websites and online resources must be selected. And for accessibility best practices to be actualized, web developers from each of those (assumedly) diverse sources must play key roles. In practice, measuring or coordinating holistic web accessibility is not realistic, but localities can ensure all online government resources and services are accessible to residents.

An audit of government websites would organize, document, and measure the accessibility of the various resources and services offered online. There are low-burden means by which State or local agencies can review individual websites via online accessibility calculators. These calculators examine source code for websites to check against the most recent WCAG 2.1[173] online accessibility standards. These standards include best practices for content perceivability, resource operability, information understandability, and tool robustness.

[173] W3C, Web Content Accessibility Guidelines (WCAG) 2.1. https://www.w3.org/TR/WCAG21/. Accessed August 19, 2023.

4 Collaboration and partner engagement

This section of the Plan describes DTI's approach to engaging and collaborating with key stakeholders and partners throughout Delaware through a thorough, extensive, inclusive, and transparent engagement process. To develop this Digital Equity Plan, as well as the plans required for the Broadband Equity, Access, and Deployment (BEAD) Program, DTI undertook the activities described below.

4.1 Coordination and outreach strategy

This section describes the comprehensive external engagement process the Department of Technology and Information (DTI) conducted in preparation for this Plan. DTI intends to continue its stakeholder engagement and outreach efforts around digital equity and broadband deployment in the State—particularly to engage with Covered Populations and stakeholders that historically may not have had as much representation in public planning processes.

Figure 6: Overview of stakeholder engagement process

DTI is Delaware's central information technology (IT) organization and is chartered to deliver both core technology services to State organizations and to guide technology direction and investments. To achieve DTI's mission of delivering high-quality and cost-effective broadband solutions, DTI has established a strong collaborative relationship with local and State agencies and the organizations they serve.

Delaware has a strong track record of collaboration and successful inclusive engagement with respect to broadband deployment. DTI followed through on this commitment when designing and implementing a truly inclusive engagement process so that all State residents had multiple opportunities to participate and share their meaningful feedback to help craft the Five-Year Action Plan.

DTI developed an inclusive engagement model to facilitate feedback on the creation of this Plan from diverse stakeholder groups throughout Delaware. DTI utilized its existing relationship with Delaware stakeholders to identify and engage with private individuals, community anchor institutions, elected officials, faith-based communities, rural communities, labor unions, industry entities, civil rights organizations, small businesses, and the unserved, underserved, and underrepresented communities of Delaware. The stakeholder engagement process also included representatives of the Covered Populations[174] that have been identified as core stakeholder groups.

The stakeholder engagement effort was comprised of email outreach, 13 statewide meetings with a complete range of stakeholders, four public forums across the State, a phone survey of Delaware residents, polls during the presentations, follow-up stakeholder surveys, and a Digital Equity Needs Assessment survey.

DTI actively collected and updated its stakeholder list throughout the engagement process to further diversify and expand outreach efforts. In total, 204 organizations with hundreds of associated contacts were invited to attend DTI's engagements.

The stakeholder engagement effort comprised email outreach, 13 statewide meetings with a complete range of stakeholders, five public forums across the State, a phone survey of Delaware residents, polls during the presentations, follow-up stakeholder surveys, and a Digital Equity Needs Assessment survey made available on DTI's website for both stakeholders and the public. The process demonstrates collaboration with local and regional entities (governmental and non-governmental), reflecting DTI's effort to facilitate an inclusive and effective engagement model.

4.1.1 Full geographic coverage

DTI engaged the full geographic range of Delaware through both stakeholder outreach and public engagement.

DTI maintains ongoing communication with the organizations and agencies that it services—including Legislative, Executive, and Judicial government branches, public schools, and other

[174] Per IIJA Section 60302(8) (Digital Equity Act of 2021), the covered populations are:
1. Individuals who live in covered households;
2. Aging individuals;
3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
4. Veterans;
5. Individuals with disabilities;
6. Individuals with a language barrier, including individuals who—
   a. Are English learners; and
   b. Have low levels of literacy;
7. Individuals who are members of a racial or ethnic minority group; and
8. Individuals who primarily reside in a rural area.

government and non-government agencies that serve Delaware. Additionally, the executive broadband director engages in outreach by interview with specific agencies and organizations.

To ensure the entirety of the State had the opportunity to engage with the planning efforts, DTI began its stakeholder outreach by hosting a Virtual Statewide Kickoff Meeting on February 23, 2023. The Virtual Statewide Kickoff Meeting invitation was distributed to 204 identified stakeholder contacts throughout Delaware. DTI then hosted 12 more virtual stakeholder meetings. Invitations to the meetings were sent out to stakeholders statewide. Attendees in both the Statewide Kickoff Meeting and the 12 additional virtual stakeholder meetings were asked to answer brief survey questions through an online poll during the meeting about the broadband and digital equity needs of their organization, their constituents, and the State of Delaware.

DTI first engaged the public through a residential phone survey. The survey interviewed a random sample of adult Delaware residents sourced from a commercially available dataset of phone numbers about broadband availability, digital skills, and their broadband needs.

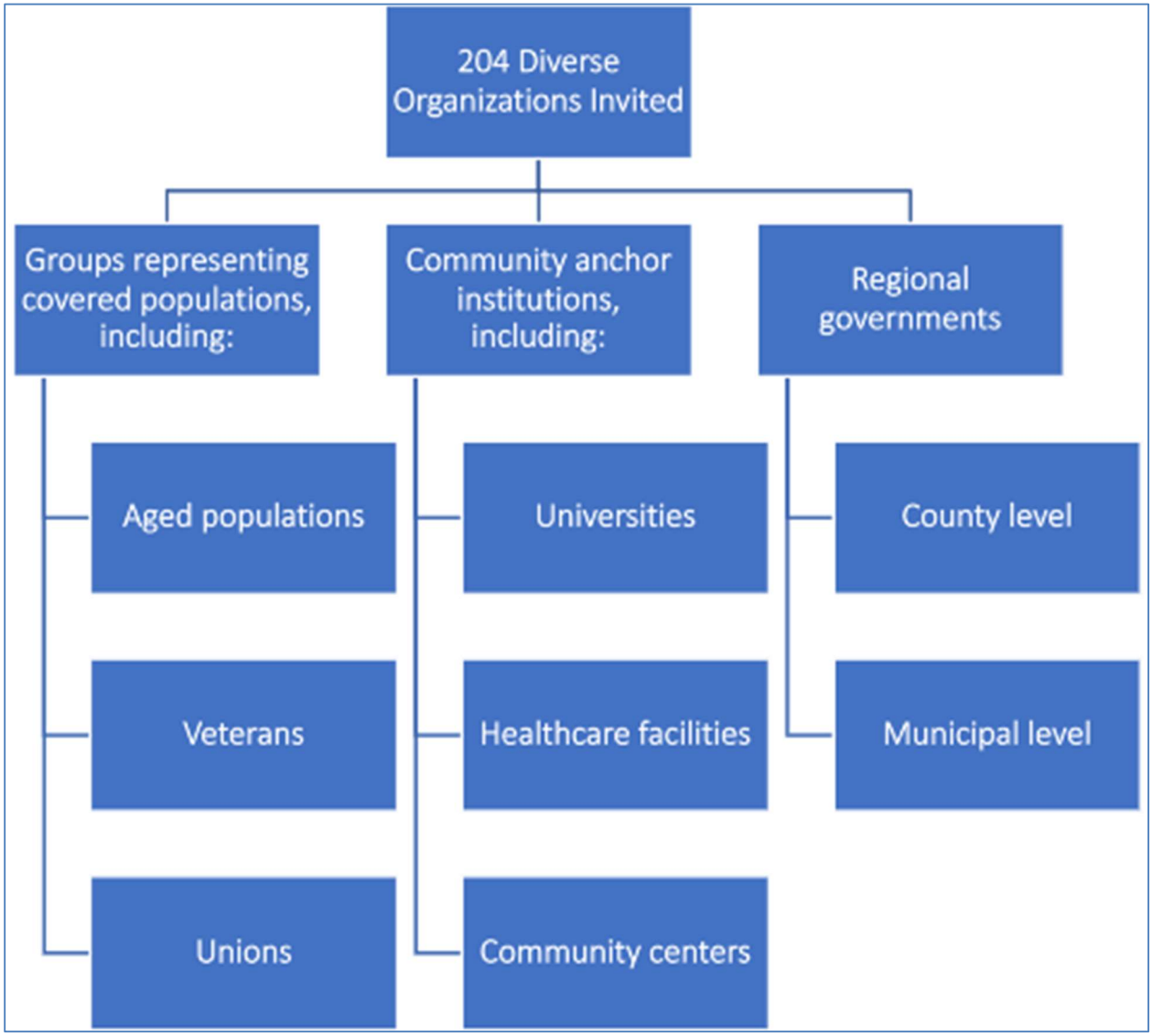
DTI also held five hybrid public forums in the City of Dover on March 1st, the City of Georgetown on March 2nd, the Town of Middletown on March 6th, the City of Seaford on March 14th, and the City of Wilmington on March 15th. The public forums provided a broad review of digital equity and broadband concepts, current initiatives and projects, and how the public can engage in digital equity and broadband planning and development. The forum was open for questions, comments, and feedback from the public. Each in-person forum was also livestreamed to allow online participants the ability to ask questions and provide feedback.

The locations of the forums were selected to maximize full geographic coverage of the State. These engagements were held at local libraries with the intent of maximizing accessibility for underrepresented communities by hosting the events at locations that provide and enable community services and support.

4.1.2 Meaningful engagement and outreach to diverse stakeholder groups

At each engagement DTI conducted, several strategies were implemented to ensure the attendees had a comprehensive understanding of Delaware's goals and were able to provide meaningful feedback. This included a substantive overview of the program as well as opportunities throughout the stakeholder engagements for all participants to provide input.

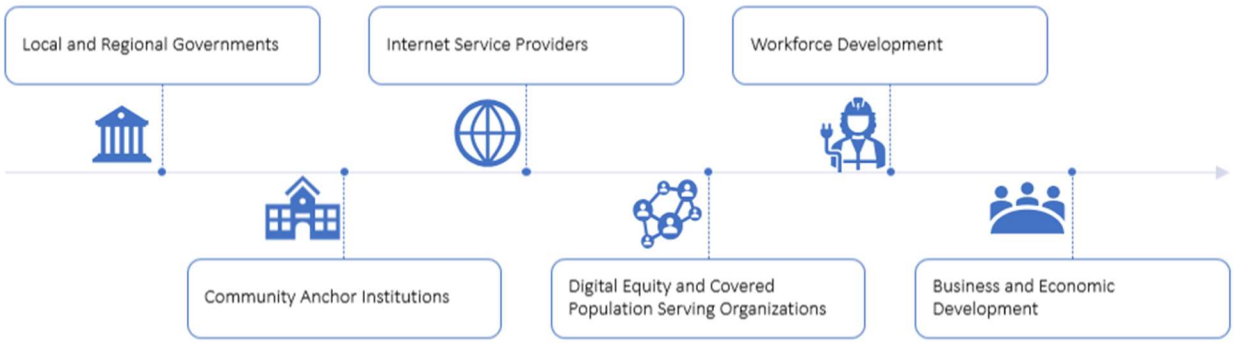
Figure 7: Overview of comprehensive outreach and engagement efforts



DTI leveraged its existing collaborative relationship with stakeholders to expand its already inclusive, diverse outreach list. Entities on the list included organizations representing aged populations (Laurel Senior Center, AARP, Lillian Smith Senior Center), unions (Communications Workers of America), universities (University of Delaware, Delaware State University), regional governments, school districts, health care facilities, internet service providers, organizations representing veterans (Veteran Awareness Center), community centers (Latin American Community Center), industry-associated organizations (EducationSuperHighway), and many more representing the diverse communities of Delaware. A total of 204 organizations with hundreds of associated contacts were ultimately invited to attend DTI's engagements.

The virtual stakeholder meetings that followed the initial statewide meeting were targeted to specific stakeholder groups that highlighted the broad range of stakeholder interests and constituents (see Appendix A): Local and Regional Governments on March 15th and 16th; Community Anchor Institutions on March 22nd and 23rd; Internet Service Providers on March 29th and March 30th; Digital Equity and Covered Population Serving Organizations on April 5th and 6th; Workforce Development on April 12th and 13th, and Business and Economic Development on April 19th and 20th. Stakeholders had the opportunity to ask questions and provide feedback on challenges, needs, and potential opportunities specific to their constituents and community.

Figure 8: Virtual stakeholder meetings



DTI also held five public forums in person at local libraries to encourage community participation in a familiar and accessible location. Each in-person engagement offered a hybrid option that allowed a resident from anywhere in Delaware to both watch the live presentation and submit feedback in real time.

After evaluating the effectiveness of these larger public meetings, DTI supplemented this outreach with one-on-one meetings and presentations given by invitation at regular meetings of membership organizations. Presentations given to audiences of hundreds of community leaders at luncheons and membership meetings of organizations like the Delaware State Chamber of Commerce, the Delaware League of Local Governments, and at a variety of digital equity focused nonprofits have successfully solicited greater input on community needs and what existing digital equity programs are already in place in Delaware.

Feedback from some of these meetings included:

- Delaware Council on Farm and Food Policy – Serving as a resource for food security and agriculture issues for the State, the Council maps both resources and needs. The Council has a critical reach into communities where rural poverty is highest and as such could be beneficial with respect to digital equity outreach.

- Tech Council of Delaware – This statewide council has several important IT workforce development opportunities available to residents, including Cyber-Security and Tech internships.

- Delaware State Housing Authority – This statewide agency has a direct reach into covered populations and offers potential partnership on future digital adoption and access expansion.

- Delaware Department of Corrections – Potential opportunities exist for defined workforce training as part of State programs.

During each engagement, DTI considered the recipient's level of familiarity with broadband. To assure the public and stakeholders could make informed insights about their and their constituents' broadband and digital equity needs, DTI provided a custom overview of broadband history, usage, and functionality. DTI then reviewed its major broadband initiatives and funding for both infrastructure and digital equity made available through BEAD.

4.1.3 Multiple awareness and participation mechanisms

For the statewide meeting and the 12 virtual stakeholder meetings, DTI sent a mass invite through email to all contacts on the stakeholder list in advance of the forums. DTI offered two dates for the virtual stakeholder meetings to allow stakeholders to select the date that best fit their schedule.

The public meetings were advertised on the Delaware State website, DTI's website and social media pages, and the Delaware Public Meeting Calendar.

In addition to the meetings, stakeholders and the public were able to provide feedback through surveys. Links to targeted stakeholder surveys were provided during meetings and in a post-meeting follow-up email. A Digital Equity Needs Assessment survey was also made available on DTI's website to enable stakeholder feedback from both expert representatives and the public.

4.1.4 Clear procedures to ensure transparency

DTI took significant steps to ensure compliance with all applicable laws and best practice procedures. Participants were able to attend meetings anonymously and closed-caption transcripts were available in real time to enable additional engagement for some participants with differing abilities. The surveys allowed respondents to choose which questions to answer, which allowed individuals to control the level of personal detail provided.

Information was collected from meeting chats, Q&A sessions, and surveys. If contact information was provided, individuals were added to the stakeholder list. The intent to include the participants in future stakeholder outreach was clearly communicated during meetings.

After meetings, the slide deck was sent to all attendees that provided their contact information along with all invited stakeholders for that topic (e.g., the Community Anchor Institutions meeting slide deck was sent to all health care facilities, libraries, schools, higher education facilities, and other relevant organizations.)

4.1.5 Outreach and engagement of unserved and underserved communities

DTI took a proactive approach in advance of all forums to engage representatives of and organizations that serve defined Covered Populations by ensuring the contact list used for outreach was both comprehensive and inclusive.

DTI additionally engaged with unserved and underserved communities by ensuring accessibility to materials, meetings, and information. The stakeholder virtual presentations were accompanied by closed captions. All advertisements for the public meetings were published in multiple languages (English, Spanish, and Creole) as requested by the libraries where the events were hosted.

The public meetings were hosted at local libraries to facilitate participation at a location that is both accessible and provides vital community support. All State library locations are accessible and compliant with the Americans with Disabilities Act (ADA) in accordance with federal law. Libraries serve as a familiar resource hub for underrepresented and underserved communities. Delaware libraries provide reading materials in accessible formats for individuals who are unable to read or use standard printed materials, host job and career assistance, enable access to social workers, and offer private telehealth kiosks. Individuals who were not able to join the meetings in person were able to attend virtually and engage in the Q&A segment of the presentation. This work with the public libraries is another example of the strong partnerships that DTI and the State have fostered as part of the engagement process specifically and in striving for universal service more broadly.

Going forward, DTI will continue to find opportunities to present to membership of community organizations (meeting constituents where they are). DTI will also host regular (quarterly) virtual town halls to give updates on the program and provide additional opportunities for the public to submit comments on DTI's work.

4.2 Collaboration to implement this Plan

Comprehensive, continued engagement with partners has informed the development of this Plan and will be key to its implementation. The State's plan, discussed in Section 5, anticipates leveraging partnerships. As described in Section 2.2, this Plan is also aligned with the efforts and priorities of State agencies.

As described above—especially in Section 3.1.1, which lists digital inclusion assets—DTI has identified potential and actual digital equity partners that serve all of the covered populations identified in the Digital Equity NOFO and IIJA statute.

Also noted above, DTI's ongoing outreach efforts have and will reach new potential partners and contributors as DTI conducts work according to this Plan and under the BEAD program.

5 Implementation plan, key activities, and timeline

This section of the Plan describes, at a high level, the implementation strategy and potential future initiatives that relate to each of the key strategies of the Plan, as well as potential timelines.

Digital equity in Delaware will likely involve multiple initiatives and efforts associated with each strategy and objective. DTI looks forward in particular to the opportunity to use its Digital Equity Capacity Grant to support and develop further digital equity capacity in Delaware, in partnership with the many local entities that have participated in DTI's community engagement work.

At the same time, DTI notes that the ability to develop and sustain these initiatives is dependent on the availability of resources and the many other priorities policymakers have for those resources. For that reason, these potential initiatives are offered as examples of what may be possible if resources are available.

Consistent with its longtime efforts to expand broadband, DTI has designed these initiatives in the most pragmatic way possible—to be actionable, measurable, and sustainable—rather than risk designing more ambitious initiatives that are not financially or practically actionable.

To address the potential that resources may not be available to support the full range of proposed initiatives, the State plans to leverage existing resources, partnerships, and creative approaches. For instance, DTI plans to collaborate with libraries, community centers, and schools to provide free or low-cost digital skills training workshops, utilizing volunteers from tech-savvy community members or local businesses and nonprofits. DTI also plans to work with internet service providers to negotiate affordable broadband plans for low-income households and promote public Wi-Fi initiatives in underserved areas. Additionally, DTI plans on partnering with corporations, foundations, and nonprofits to refurbish and distribute donated or recycled computers and devices to those in need could help address the access gap. By utilizing grassroots efforts, public-private collaborations, and maximizing available resources, Delaware plans to improve digital equity in a prudent way that recognizes that resources are not unlimited.

The following are potential strategies, initiatives, and timelines tied to the digital equity barriers described in the sections above:

5.1 Barrier: Lack of broadband availability

Strategy 1: Increase access to residential broadband infrastructure

Activity	Description	Timeline
Execute BEAD Program	Extend last-mile broadband infrastructure throughout Delaware	2023 to 2030 (consistent with IIJA BEAD requirements)

5.2 Barrier: Low-income households struggle to afford broadband services, devices, and technical support

Strategy 1: Increase Affordable Connectivity Program and ISP low-cost program enrollment among eligible households

Activity	Description	Timeline
Develop educational materials	Provide content and support for educational campaigns in multiple languages among organizations that focus on ACP and ISPs' low-cost programs, as well as for localities, CAIs, and nonprofits that have not previously worked to extend ACP and ISPs' low-cost program enrollment	2023 and thereafter
Encourage ISP partnerships for ACP enrollment drives	Encourage ISPs to partner with localities, CAIs, and nonprofits to develop ACP enrollment drives and initiatives	2023 and thereafter
Fund ACP enrollment drives at libraries, community centers, and health centers	Provide funding for libraries and community centers to offer multilingual ACP enrollment drives for eligible households	2024 to 2029, based on availability of Digital Equity Capacity Grant

Strategy 2: Increase low-cost service offerings

Activity	Description	Timeline
Require grantee low-cost offerings	Build requirements and enhanced scoring for affordable service offerings into BEAD grant program	2023 to 2025, with monitoring and enforcement thereafter
Encourage ISP low-cost offerings	Work with ISPs throughout the State to encourage adoption and expansion of low-cost offerings for lower-income households	2023 and thereafter

Strategy 3: Expand access to computing devices and tech support, particularly those provided locally

Activity	Description	Timeline
Provide information	Provide guidance regarding best practices, expertise, and partnership opportunities to localities and nonprofits to develop and expand existing programs that provide free devices to lower-income households	2024 and thereafter
Support ACP and ISP low-cost program enrollment	Work with partners to support eligible households to purchase computing devices under the Affordable Connectivity Program	Ongoing
Fund library-based tech support	Provide funding for libraries to offer tech support for library users	2024 to 2029, based on availability of Digital Equity Capacity Grant

Activity	Description	Timeline
Increase nonprofit capacity	Expand capacity of nonprofits to address device access, tech support, and device repair	2024 to 2029, based on availability of Digital Equity Capacity Grant

Strategy 4: Develop data and informational resources to enable application of a digital equity lens to infrastructure and program decisions

Activity	Description	Timeline
Provide map information	Add digital equity data to the Delaware Broadband Map	2023 and thereafter
Provide asset information	Update DTI's Digital Equity Asset Inventory periodically so that communities have access to resources for identifying partners and best practices	2023 and thereafter
Develop education and informational resources	Work with collaborators to design and share data and informational resources promoting internet safety, ACP awareness, and device donation and refurbishment, and develop online resources on digital equity best practices for reference by stakeholders statewide	2023 and thereafter

5.3 Barrier: Lack of digital and tech-related job opportunities and skill development for marginalized, covered, and low-income populations

Strategy 1: Increase capacity for job training programs with pipeline access to good-paying jobs in the tech section

Activity	Description	Timeline
Enable partnerships	Use DTI's convening capabilities to connect localities and nonprofits with expert partners that have established training courses, to enable stakeholders to benefit from each other's expertise and lessons learned	2023 and thereafter
Provide informational resources and expert data and guidance	Develop and distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying cost-effective strategies and best practices	2023 and thereafter

Strategy 2: Increase outreach and recruitment by job training organizations, including governmental and nonprofit, in historically under-represented populations

Activity	Description	Timeline
Enable partnerships	Use DTI's convening capabilities to connect localities and nonprofits with expert partners that have established training courses, to enable stakeholders to benefit from each other's expertise and lessons learned	2023 and thereafter
Provide informational resources and expert data and guidance	Develop and distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying cost-effective strategies and best practices	2023 and thereafter

5.4 Barrier: Low-income and senior households lack digital skills

Strategy 1: Enable digital skills development through training courses

Activity	Description	Timeline
Enable partnerships	Connect localities with expert partners that have established training courses, working with a full range of stakeholders that are engaged in digital equity efforts to enable partners to benefit from each other's expertise and lessons learned	2023 and thereafter
Fund library-based training	Provide funding for libraries to offer digital skills training, based on standardized and tested curricula that reflect cultural appropriateness	2024 to 2029, based on availability of Digital Equity Capacity Grant
Provide informational resources and guidance	Distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying partners and best practices	2023 and thereafter
Provide broadband to disconnected students	Collaborate with the Delaware Department of Education to provide free service to low-income and disconnected students through the Connect Delaware program	Currently underway and funded through 2024

Strategy 2: Expand opportunity to learn online safety and privacy

Activity	Description	Timeline
Enable partnerships	Use DTI's convening capabilities to connect localities with expert partners that have established training courses, to enable stakeholders to benefit from each other's expertise and lessons learned	2023 and thereafter
Provide informational resources and expert data and guidance	Develop and distribute relevant materials to share expertise and guidance so that communities have access to resources for identifying cost-effective strategies and best practices	2023 and thereafter
Fund library-based training	Provide funding for libraries to offer training at the local level regarding online safety and privacy, based on standardized and tested curricula that reflect cultural appropriateness	2024 to 2029, based on availability of Digital Equity Capacity Grant
Fund training at senior centers and youth centers	Provide funding for senior and youth centers to offer training at the local level regarding online safety and privacy, based on standardized and tested curricula that reflect cultural appropriateness	2024 to 2029, based on availability of Digital Equity Capacity Grant

Strategy 3: Expand accessibility of information

Activity	Description	Timeline
Develop and distribute accessibility guidance	Provide guidance materials to State and local agencies regarding best practices for website design and maintenance that align with accessibility standards and that enable cost-effective use of critical support tools	2023 and thereafter

5.5 Barrier: Communities lack resources and expertise for digital equity efforts

Strategy 1: Build collaboration among State, local, and nonprofit entities

Activity	Description	Timeline
Convene stakeholders	Build structures to enable stakeholders to work together across the State and across different demographics, to enable shared lessons and resources to support those who face the greatest barriers to digital equity, as well as to help organizations to leverage others' capabilities and help stakeholders serving particular regions or specific covered populations to share best practices and digital equity expertise	2024 and thereafter

Activity	Description	Timeline
Enable funders to connect with program experts	Convene a range of stakeholders to enable organizations that run digital equity programs to request resources from various stakeholders, including private sector partners, ISPs, and philanthropy	2024 and thereafter

Strategy 2: Build capacity for digital skill building in governmental and nonprofit entities

Activity	Description	Timeline
Fund standardized train-the-trainer programs	Fund training programs that build practical digital skill sets within government and nonprofit entities that helps to build additional effectiveness and efficiencies in outcomes	2024 thru 2029 (pending funding availability)

6 Conclusion

Broadband access possesses a transformative power that reshapes economies, societies, and individuals' lives. As the backbone of the digital age, broadband empowers individuals with access to information, education, job opportunities, health care services, and civic engagement on a global scale. It serves as a gateway to innovation and entrepreneurship, enabling businesses to reach broader markets, fostering the growth of startups, and promoting economic diversification.

Broadband also enhances communication, connecting people across distances and cultures, while its potential to deliver digital services revolutionizes how governments interact with residents. In essence, broadband's transformative influence permeates every aspect of modern life, transcending geographical limitations.

The State of Delaware understands its crucial role in facilitating digital equity and expanding broadband access. By recognizing that access to high-speed internet is fundamental to social and economic inclusion, Delaware has developed strategies to remove barriers to connectivity.

Leveraging partnerships with ISPs, DTI plans to incentivize affordable plans and extend coverage to unserved and underserved communities, narrowing the digital divide. Furthermore, DTI plans to encourage digital training programs that equip residents with the skills needed to navigate the digital landscape, ensuring that no one is left behind due to lack of know-how. Through strategic collaborations, DTI plans to create an environment where broadband access is not just a luxury but a broadly available tool that empowers residents, fosters economic growth, and advances community interests.

The State will achieve its vision of digital equity through the coordinated efforts of key constituencies and stakeholders across Delaware, and through ongoing engagement and collaboration with partners working together toward shared goals.

Appendix A: Organizations that DTI identified as potential partners

The following table includes the complete list of entities invited to participate in stakeholder engagements. DTI contacted multiple representatives from some organizations.

Table 32: Stakeholder engagement outreach list

Entity name
302 Strategies
American Enterprise Institute
Appoquinimink School District
Beebe Healthcare
Bethany-Fenwick Chamber
BGR Government Affairs
Bloosurf
Boys & Girls Club – Kent County
Boys & Girls Club – New Castle County
Boys & Girls Club – Sussex County
Boys and Girls Clubs of Delaware, Inc.
Breezeline
Bridgeville Senior Center
BrightSpring Health Services
Byrd Gomes
Caesar Rodney School District
Cape Henlopen Senior Center
Cape Henlopen Support Staff Association
Capital School District
Catholic Charities Immigration Services
Central Baptist Community Development Center
Central Delaware Chamber of Commerce
Child, Inc.
Choptank Electric Cooperative
Christiana Care
City of Dover
City of Georgetown
City of Milford
City of Newark
City of Seaford
City of Wilmington
Code Purple – Kent County
Colonial School District
Comcast
Communication Service for the Deaf

Entity name
Communications Workers of America
Community Connectors Centers for Disability Studies – University of Delaware
Compass Group
Concerned Black Educators of Schenectady
Criminal Justice Council
CTC
Delaware Advisory Council on Career and Technical Education
Delaware Art Museum
Delaware Association of Counties
Delaware Association of Realtors
Delaware Auditor
Delaware Black Chamber of Commerce (DEBCC)
Delaware Center for Justice (DCJ)
Delaware Criminal Justice Council
Delaware Department of Corrections
Delaware Department of Health and Social Services
Delaware Division of Substance Abuse and Mental Health
Delaware Department of Labor
Delaware Division for the Visually Impaired
Delaware Division of Vocational Rehabilitation
Delaware Electric Cooperative
Delaware Family Center
Delaware Farm Bureau Kent County
Delaware Health Care Facilities Association
Delaware League of Local Governments
Delaware Libraries
Delaware Manufacturing Extension Partnership (DEMEP)
Delaware Office of Veterans Services
Delaware Prosperity Partnership
Delaware Public Defender
Delaware Schools
Delaware State Chamber of Commerce
Delaware State House of Representatives
Delaware State Housing Authority
Delaware State Senate
Delaware State University
Delaware Technical Community College
Delaware Treasurer
Delaware Union Soccer

Entity name
Delaware Workforce Development Board
Delmarva Christian Schools
Democratic Party
Denhardt Consulting
Department of Education
Department of Labor
Department of Natural Resources and Environment
Department of Safety and Homeland Security
Department of Services for Children, Youth and Families
Department of State
Department of Technology and Information
Department of Transportation
Division of Developmental Disability Services
Division of Family Services
Division of Libraries
Dover Interfaith Mission for Housing
DTI
Early College School at Delaware State University
Easterseals
EducationSuperHighway
Ezion-Mount Carmel United Methodist Church
Family Promise of Northern New Castle County
First State Community Action Agency
First State Strategies
Fitzgerald Consulting, Inc.
Frederica Senior Center
Georgetown Chamber of Commerce
Georgetown Public Library
Governor's Advisory Council for Exceptional Citizens
Graybar Broadband Utility Sales
Habitat for Humanity
Harrington Senior Center
Harvest Christian Church
Harvest Years Senior Center
Health and Social Services
Hilltop Lutheran Neighborhood Center
Hispanic American Association of Delaware
Hispanic Commission
I Am My Sister's Keeper, Inc.
Independent Resources Inc.

Entity name
Indian River School District
Indian River Senior Center
International Brotherhood of Electrical Workers
International Brotherhood of Electrical Workers, Local 13
Internet & Television Association
J. Arthur OP&C, LLC
Jefferson Street Center
Jobs for the Future
Johnson C. Smith University
Kent County
Kent County Alliance
Kent Economic Partnership
Kitts Hummock Improvement Association
Klein Law Group
La Esperanza
La Plaza
Latin American Community Center
Laurel Commons Senior Community
Lead Reduction/Healthy Homes, New Castle County
Leading Age
Lewes Senior Center
Lighthouse Christian School
Lillian Smith Senior Center
Lt. Governor
Lt. Governor's Office
Mediacom
Metropolitan Wilmington Urban League
Milford School District
Milford Senior Center
Milton Chamber of Commerce
Miracle Revival Center
Modern Maturity Center
Multicultural Media, Telecom and Internet Council
National Collaborative for Digital Equity
National Federation of the Blind
Neighborhood House, Inc.
NERDiT Cares
New Castle County
New Castle County Chamber of Commerce
New Castle County Vocational Technical School District

Entity name
New Castle Senior Center
Newark Senior Center
NTIA
Office of Management and Budget
Office of Rep. Lisa Blunt-Rochester
Office of Sen. Chris Coons
Office of Sen. Tom Carper
Office of the Governor
Office of the Secretary
Office of Veterans Services
Police Athletic League of Wilmington
Polytech School District
Reach Riverside Development Corporation
Rehoboth-Dewey Chamber of Commerce
Rhodium Group
Seaford Community of Hope
Seaford District Library
Sen. Tom Carper
Social Contract
Southern Delaware Alliance for Racial Justice
State Chamber of Commerce
State Housing Authority
State of Delaware
State Senate
Student Freedom Initiative
Sussex County
Sussex County Health Coalition
Sussex Economic Development Action Committee
Sussex Montessori School
Sussex Technical School District
Talkie Fiber
Tech Council of Delaware
Telecommunications Industry Association
The Arc of Delaware
The Shepherd Place
The Willis Group
Town of Bowers, DE
Town of Georgetown
U.S. Department of Veterans Affairs – New Castle County
U.S. Small Business Administration Delaware District Office

Entity name
United Way of Delaware
University of Delaware
University of Delaware – Kent County
Urban Tech Hero
USTelecom
Verdantas
Verizon
Veteran Awareness Center
Veterans Multi-Service Center
Virginia, Maryland, and Delaware Association of Electric Cooperatives
Volunteers of America
West End Neighborhood House
Western Sussex Chamber of Commerce
Wilmington Community Advisory Council
Wilmington University

Appendix B: Residential broadband and digital equity needs assessment survey

The results presented in this section are based on analysis of information provided by 796 residents of Delaware, from an estimated 395,656 households. Results are representative of the set of households with a confidence interval of ±3.5 percent at the aggregate level.

The survey responses were entered into SPSS[175] software and the entries were coded and labeled. SPSS databases were formatted, cleaned, and verified prior to the data analysis. The survey data was evaluated using techniques in SPSS including frequency tables, cross-tabulations, and means functions. Statistically significant differences between subgroups of response categories are highlighted and discussed where relevant.

The survey responses were weighted based on household income and ethnicity. Since respondents in lower income households and racial or ethnic minorities were less likely to respond, the weighting corrects for the potential bias based on the household income and ethnicity of the respondent. In this manner, the results more closely reflect the opinions of the State's adult population.

Unless otherwise indicated, the percentages reported are based on the "valid" responses from those who provided a definite answer and do not reflect individuals who said "don't know" or otherwise did not supply an answer because the question did not apply to them. Key statistically significant results ($p \leq 0.05$) are noted where appropriate.

[175] Statistical Package for the Social Sciences (http://www-01.ibm.com/software/analytics/spss/).

Does your household receive home internet service – not mobile data?

Figure 9. Percent of households that receive home internet service

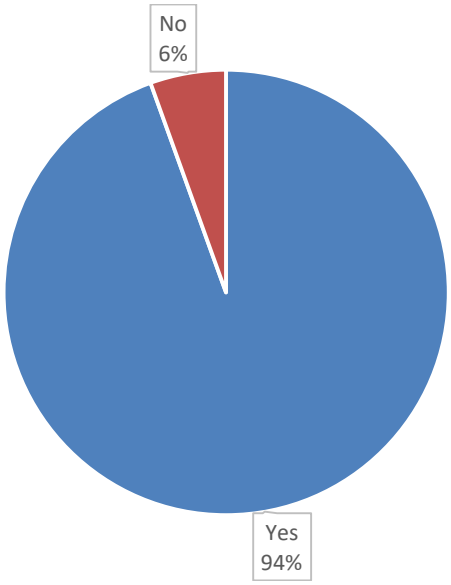
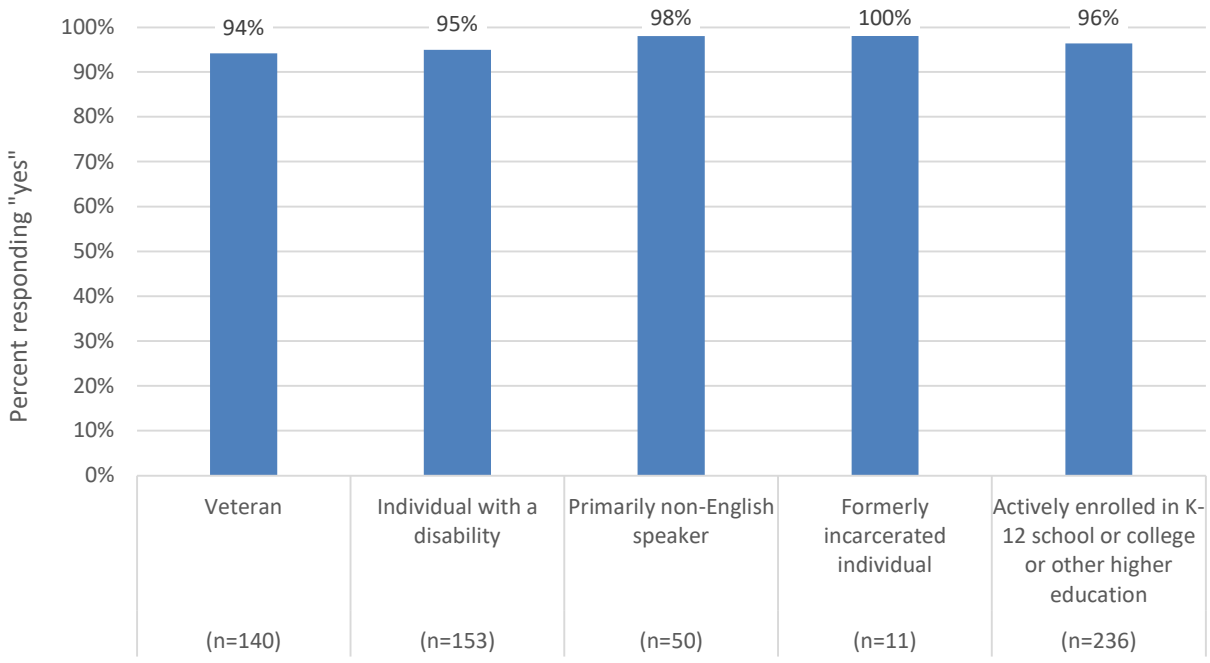


Figure 10. Percent of at-risk households that receive home internet service



(Note: Home internet usage does not vary significantly by demographics)

Does your household purchase home internet service from an internet service provider?

Figure 11. Percent of households that purchase home internet service

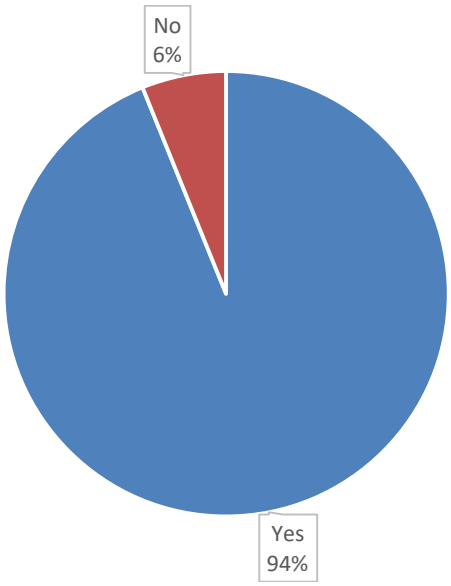
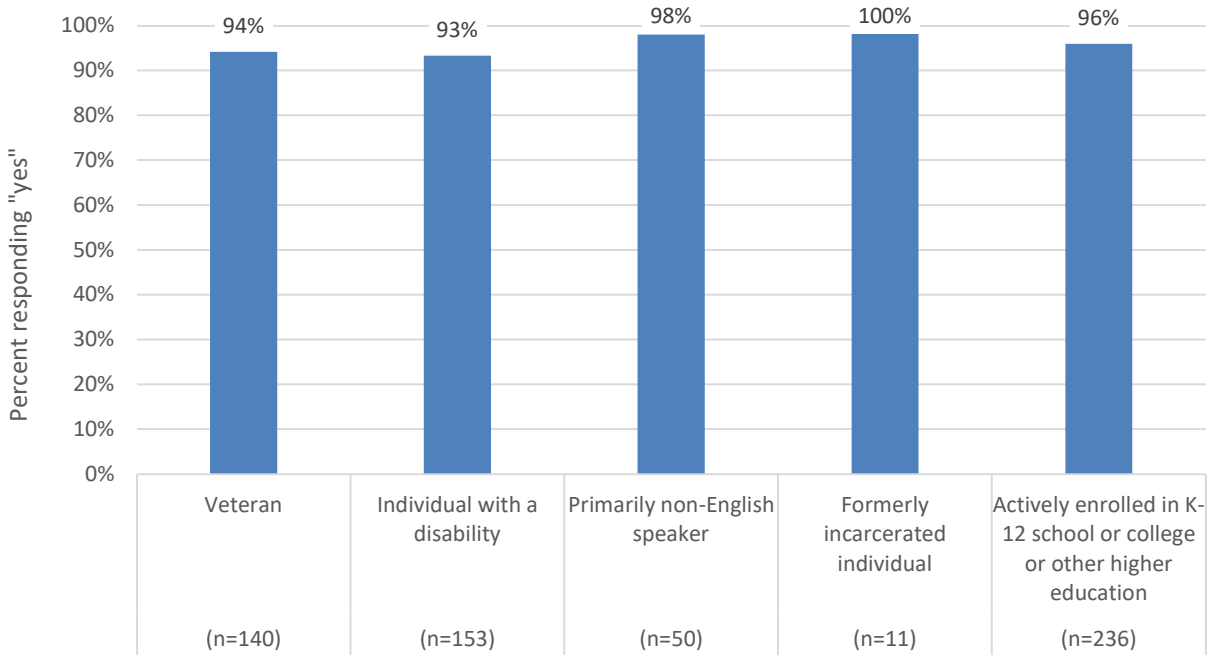


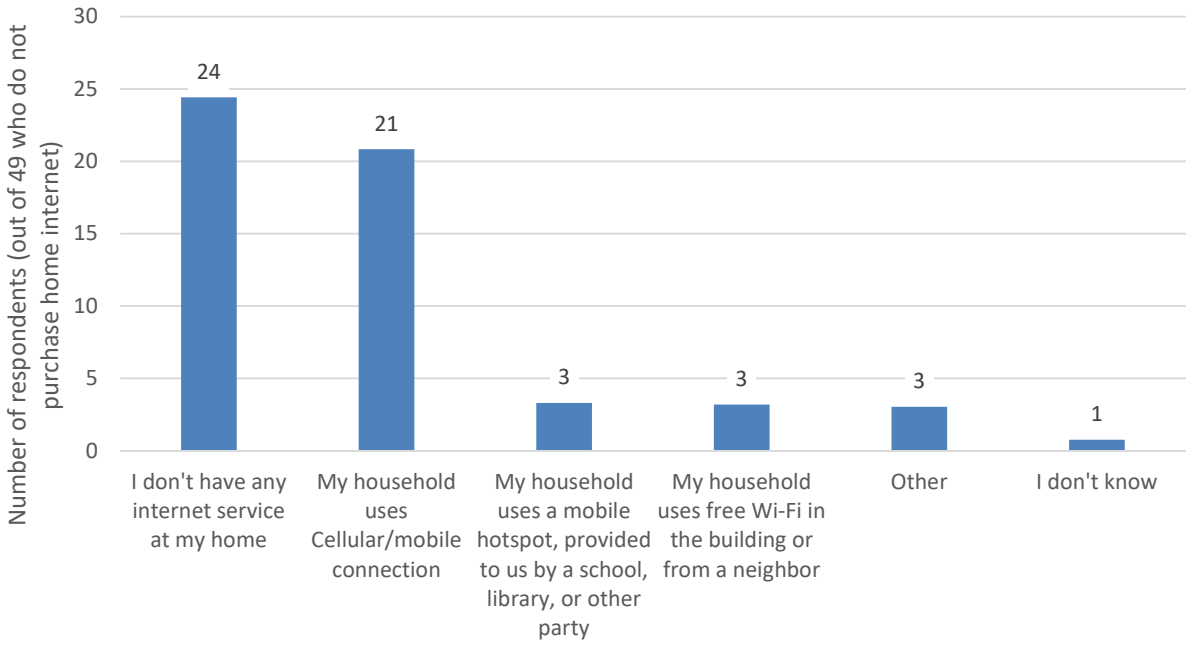
Figure 12. Percent of at-risk households that purchase home internet service



(Note: Home internet usage does not vary significantly by demographics)

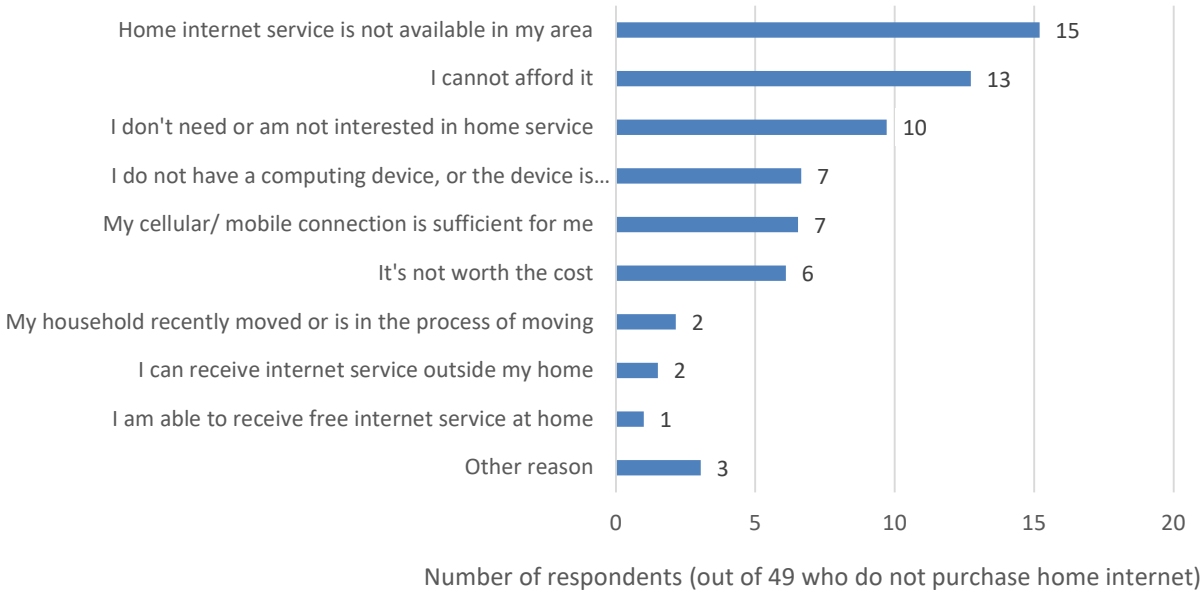
We understand that you don't purchase a home internet service. If you access the internet at home in other ways, which of the following about your service at home is correct:

Figure 13. Number of households without home internet service who access the internet in other ways



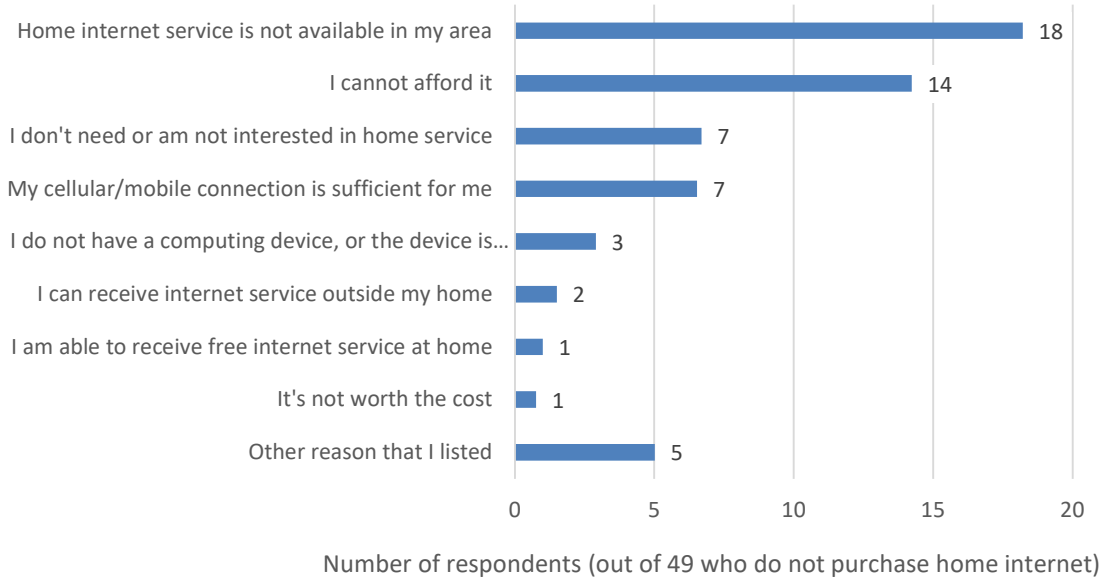
What are the reasons why your household does not purchase home internet service?

Figure 14. Reasons households do not purchase home internet service



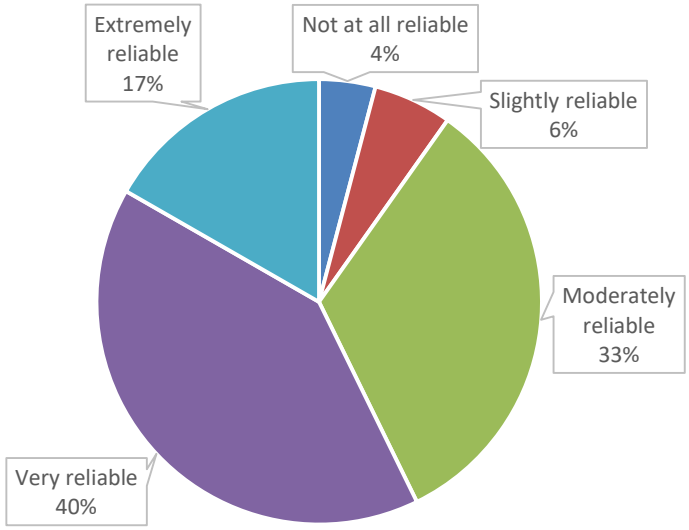
Of the reasons you picked for not purchasing a home internet service, which do you and the members of your household consider to be the most important?

Figure 15. Most important reason households do not purchase home internet service



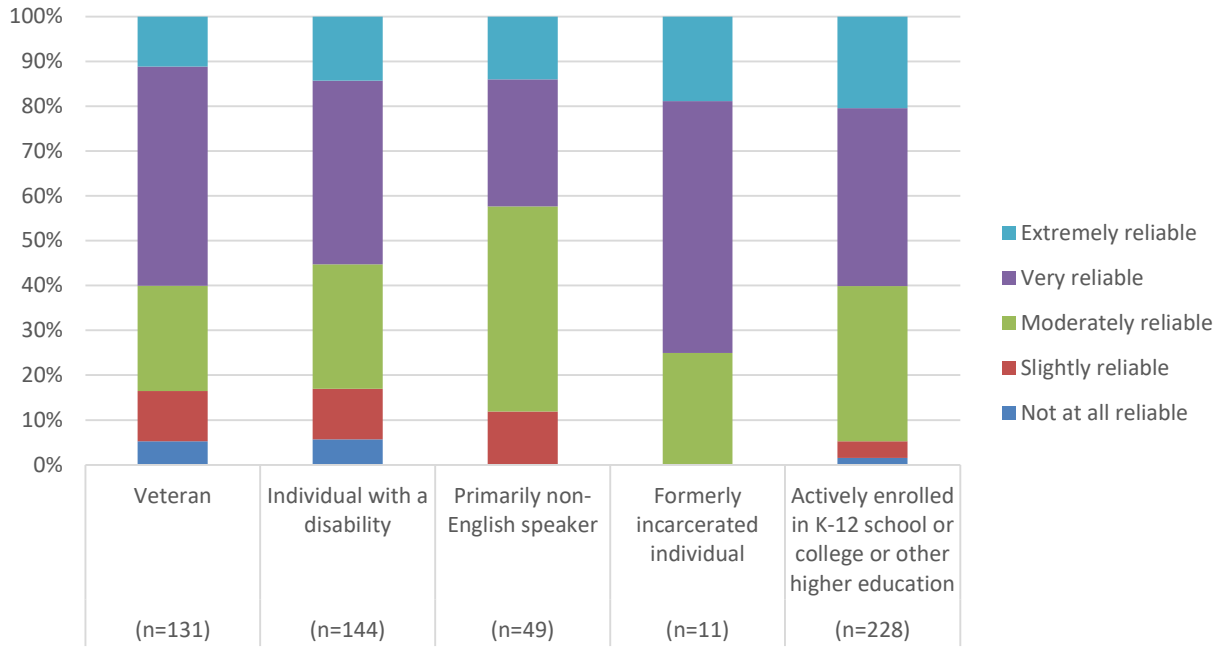
How reliable is your home internet service? For example, unreliable service could mean that the service is not available, or experiences sudden drops in speed.

Figure 16. Reliability of home internet service



Percent of households with home internet service

Figure 17. Reliability of home internet service by at-risk groups



Are you currently enrolled in the Affordable Connectivity Program, Lifeline, or a subsidy program offered by your Internet Service Provider?

Figure 18. Percent of households with home internet service that are enrolled in subsidy programs

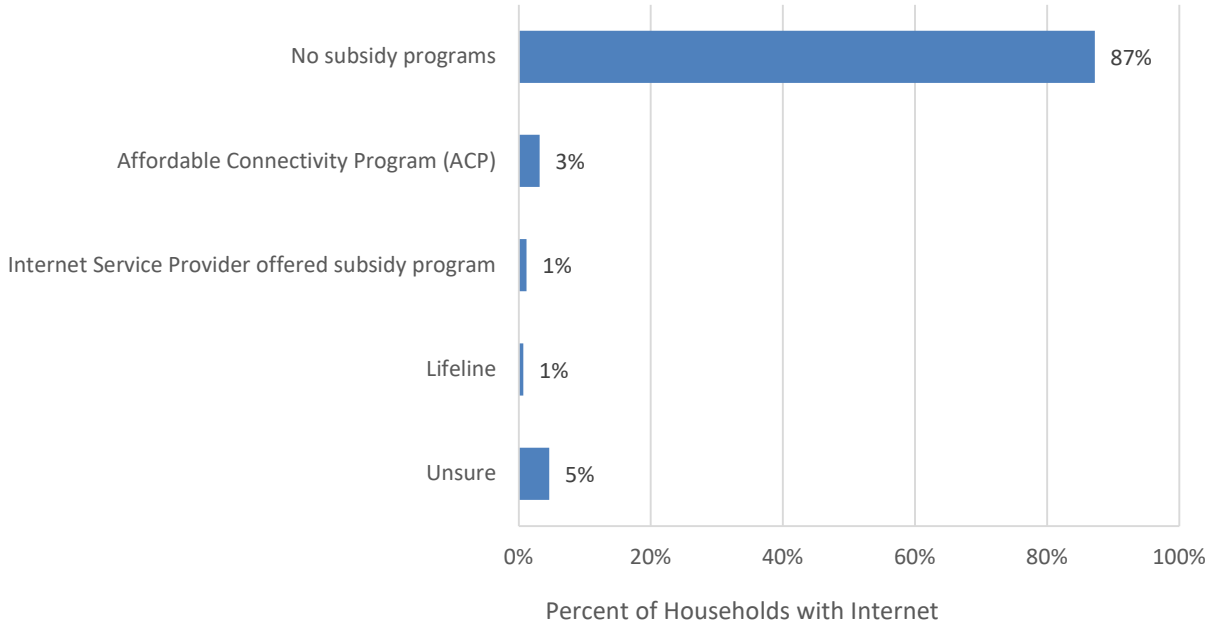


Figure 19. Percent of households with home internet service that are enrolled in subsidy programs by household income

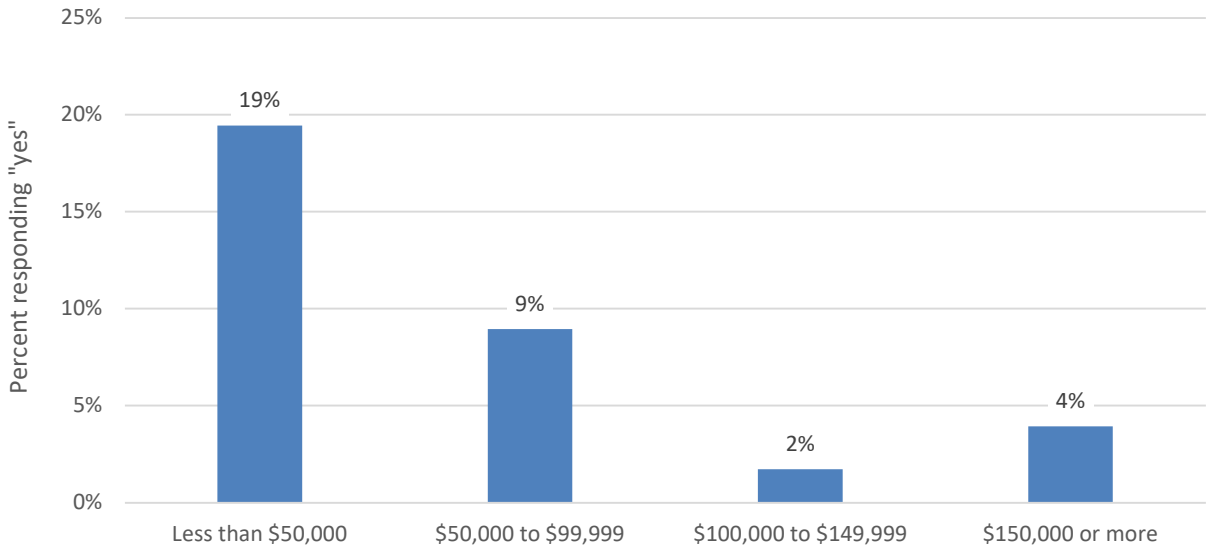
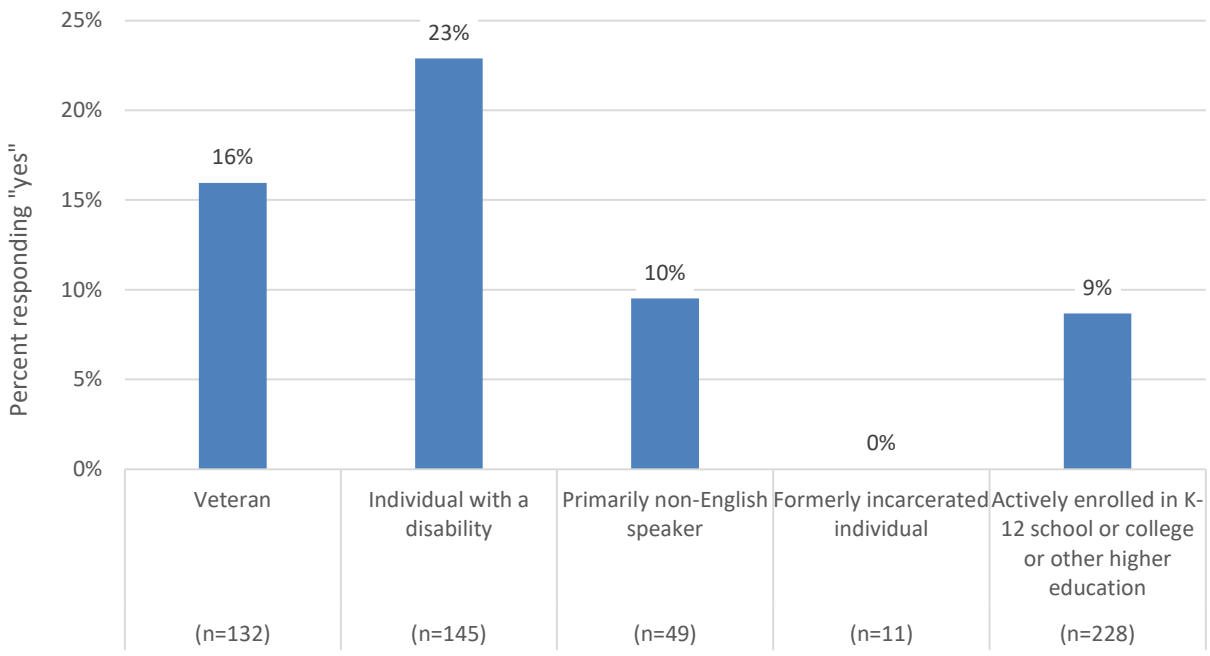


Figure 20. Percent of at-risk households with home internet service that are enrolled in subsidy programs



Please estimate how much you pay per month for your home internet service.

Figure 21. Monthly cost of home internet service

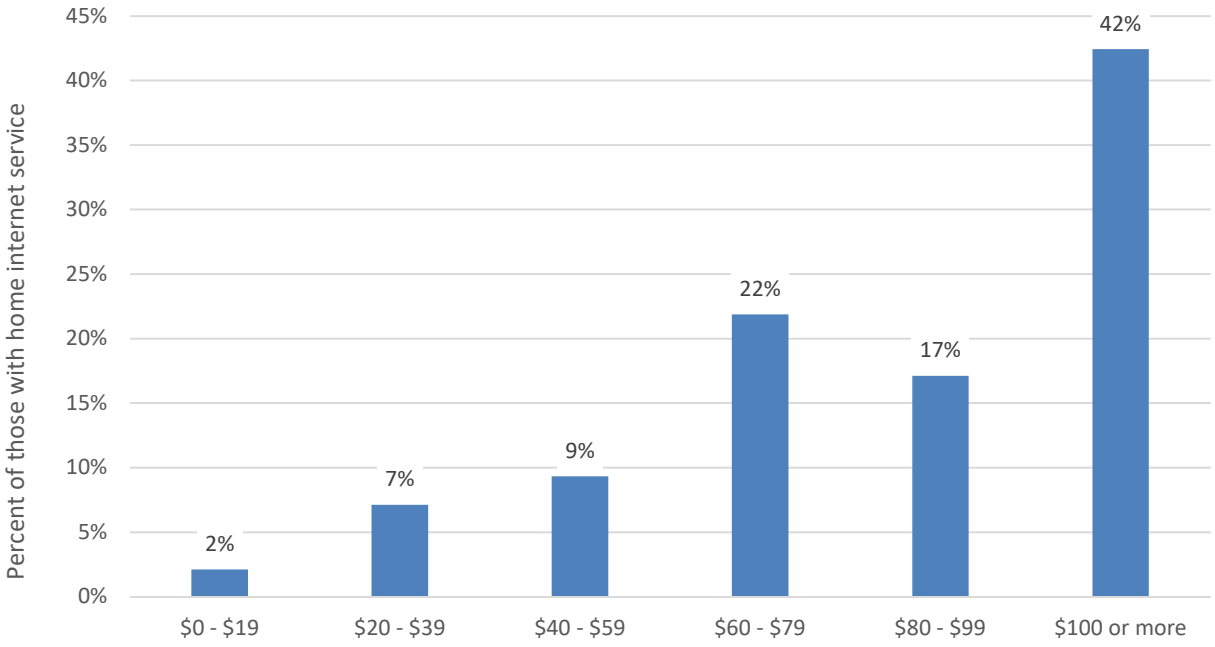
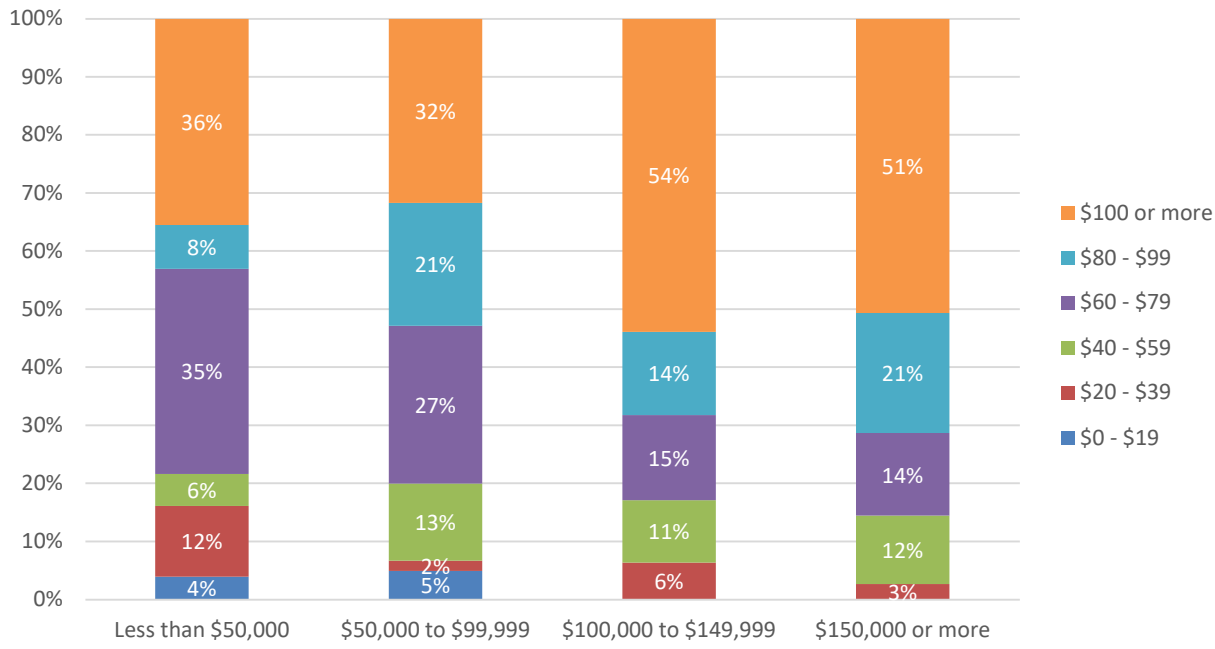


Figure 22. Monthly cost of home internet service by household income



Please estimate how much you are willing to pay per month for high-speed, reliable home internet service.

Figure 23. Amount willing to pay for high-speed, reliable home internet service

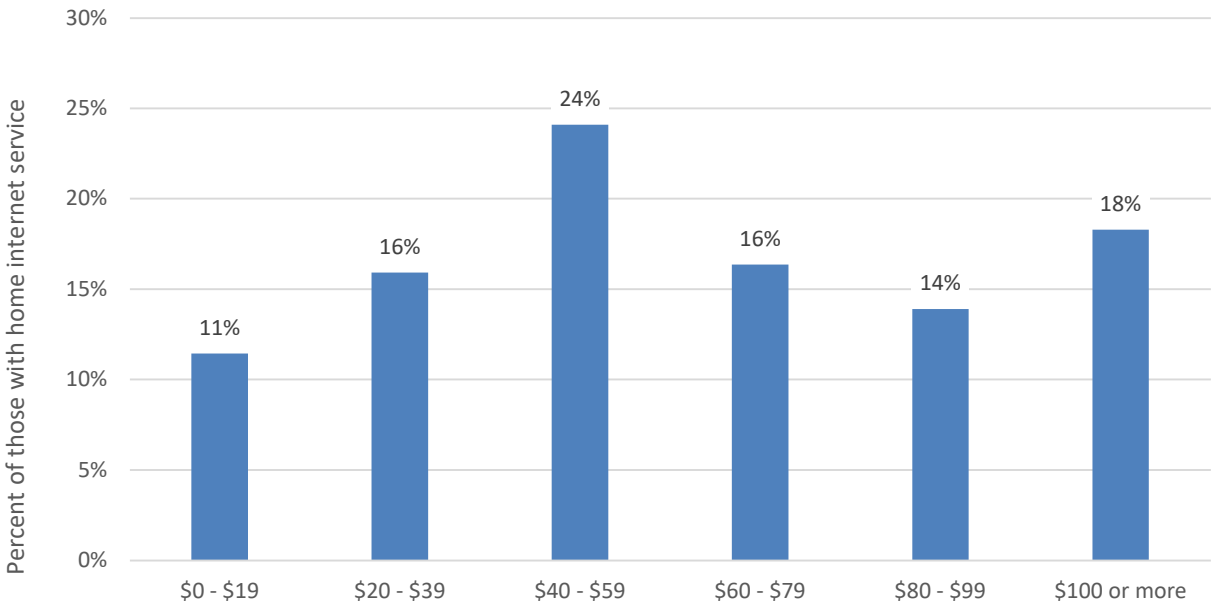
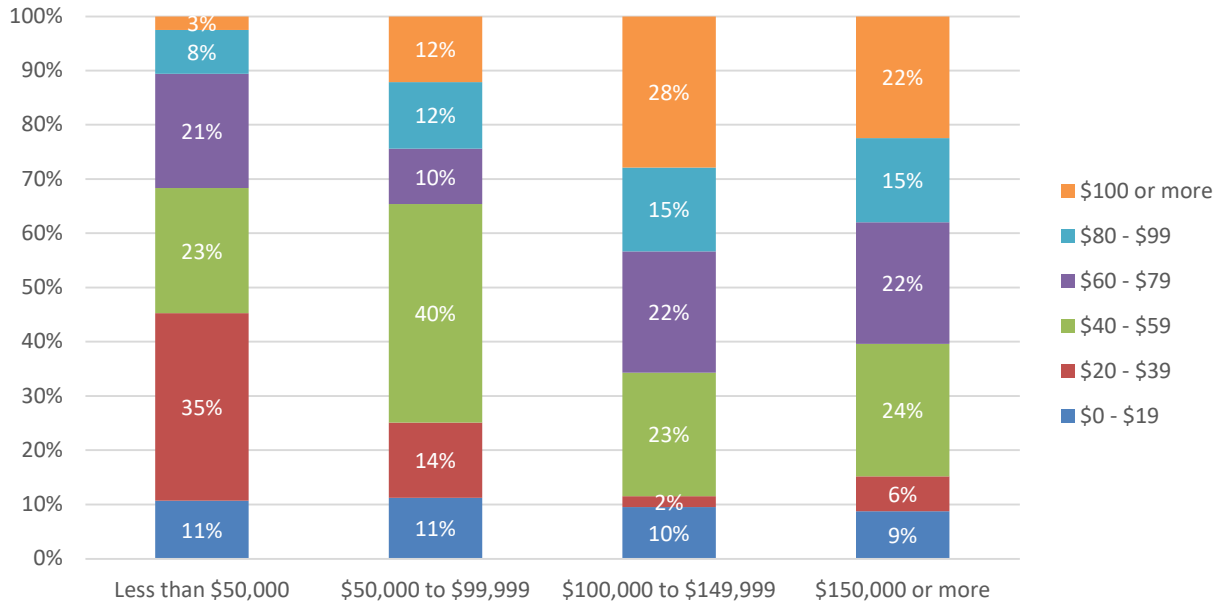


Figure 24. Amount willing to pay for high-speed, reliable home internet service by household income



For each of the following devices, how many does your household use that are in good working condition?

Figure 25. Number of computing devices in the household

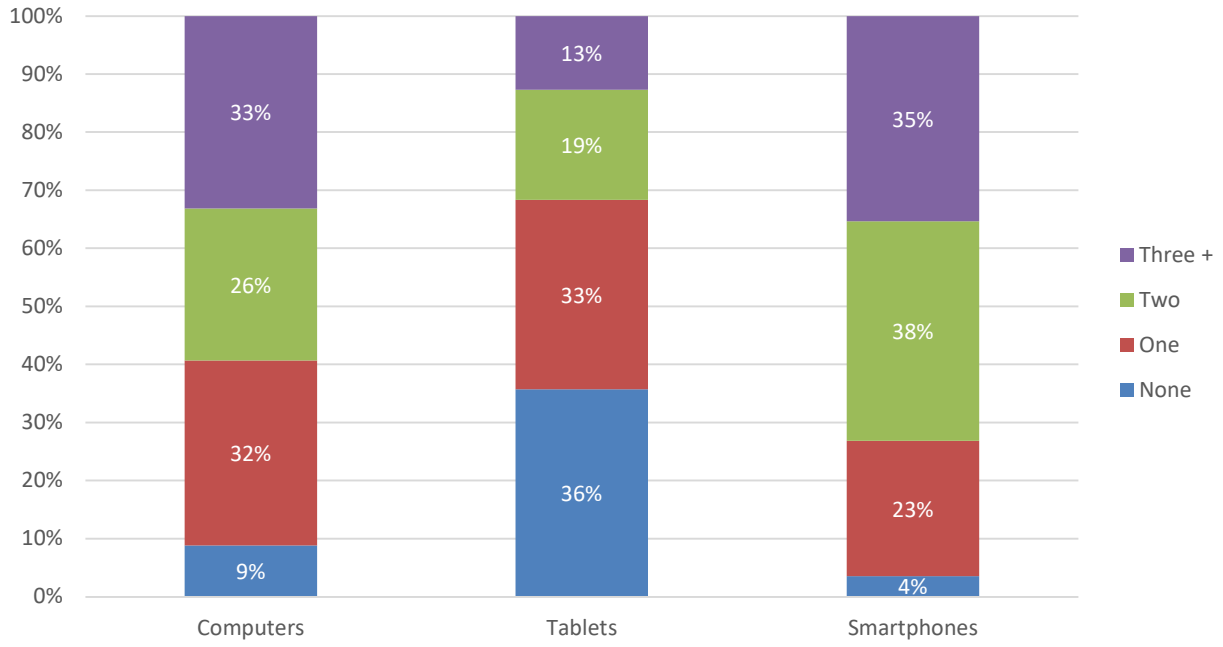


Figure 26. Average number of computing devices in the household (among households with at least one device)

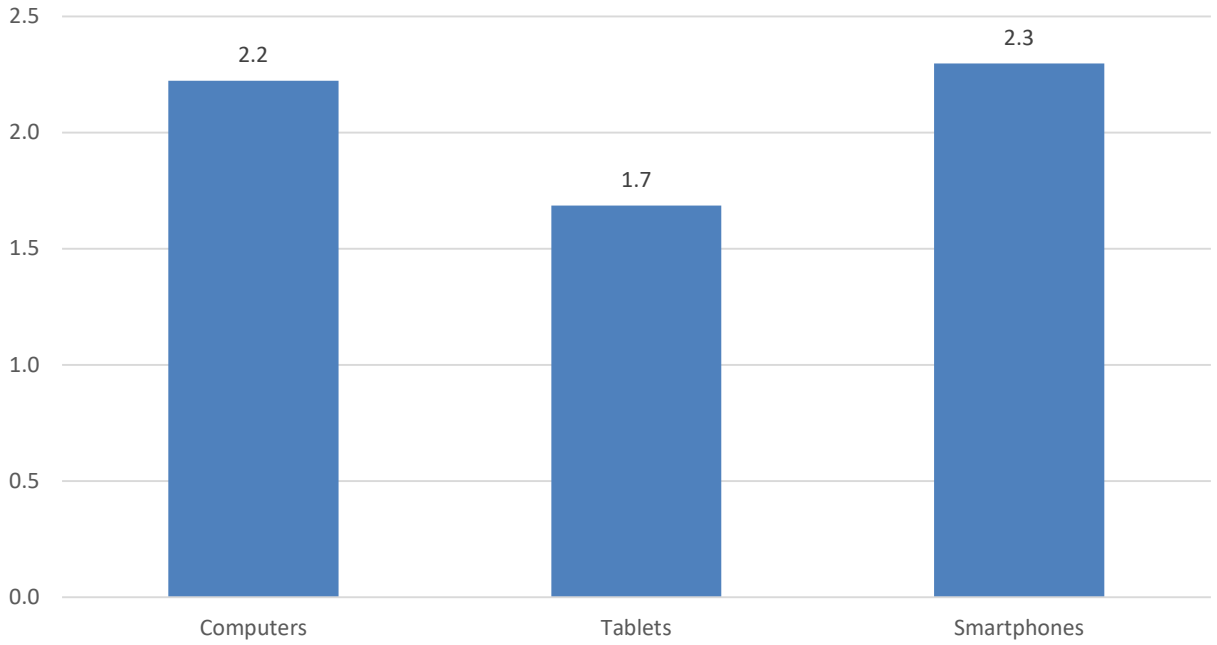


Table 33. Number of computing devices by household income

		Less than $50,000	$50,000 to $99,999	$100,000 to $149,999	$150,000 or more
Computers	None	19%	4%	2%	2%
	One	53%	35%	14%	8%
	Two	15%	35%	38%	27%
	Three or more	14%	26%	46%	63%
	Total Weighted Count	*192*	*177*	*93*	*111*
Tablets	None	50%	34%	26%	22%
	One	34%	38%	35%	29%
	Two	9%	19%	28%	24%
	Three or more	7%	8%	11%	25%
	Total Weighted Count	*192*	*177*	*93*	*111*
Smartphones	None	9%	2%	0%	1%
	One	45%	20%	9%	4%
	Two	29%	40%	46%	39%
	Three or more	17%	38%	45%	56%
	Total Weighted Count	*192*	*177*	*93*	*111*

Figure 27. Number of computers by household income

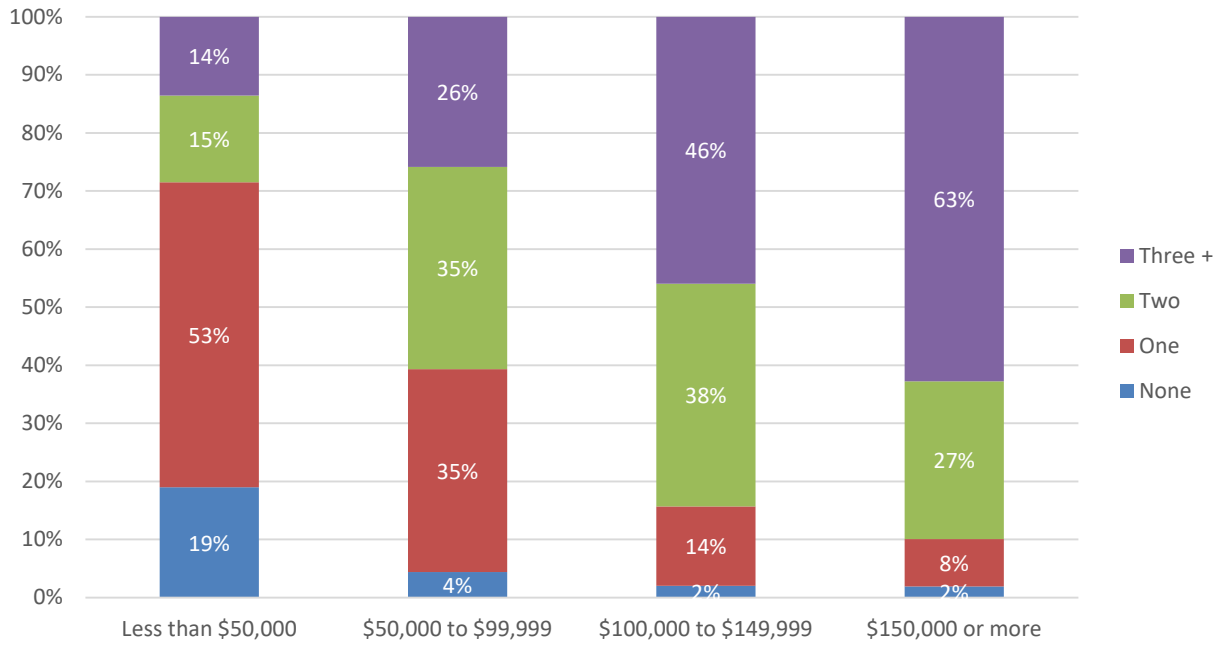


Figure 28. Number of tablets by household income

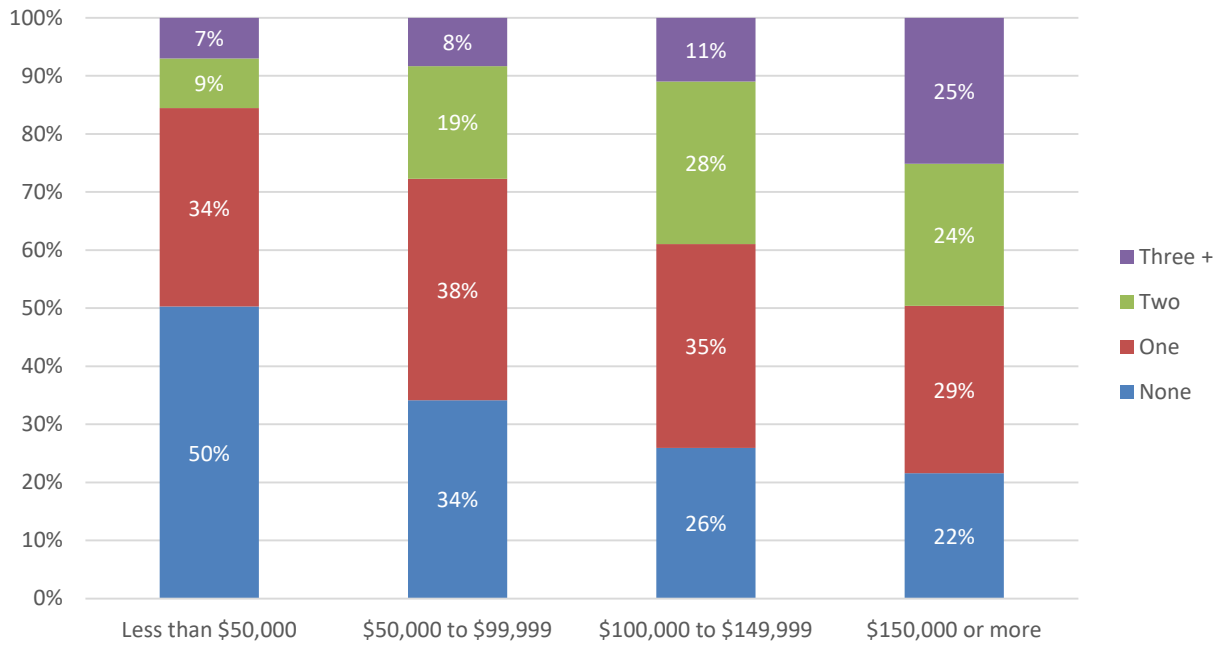


Figure 29. Number of smartphones by household income

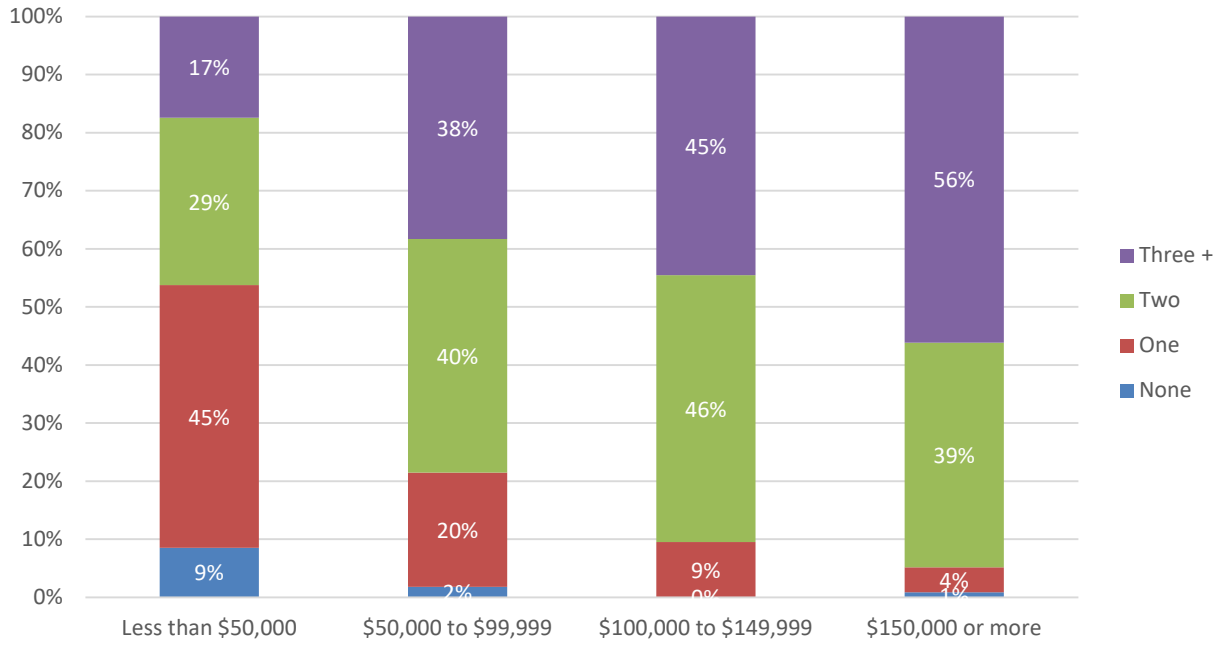


Table 34. Number of computing devices in at-risk households

Households with a member who is actively enrolled in K-12 school or college or other higher education are more likely than those without an actively enrolled student (not shown) to have three or more computers, tablets, and smartphones.

		Veteran	Individual with a disability	Primarily non-English speaker	Formerly incarcerated individual	Actively enrolled in K-12 school or college or other higher education
Computers	None	6%	10%	0%	6%	5%
	One	27%	42%	9%	20%	20%
	Two	22%	16%	30%	41%	28%
	Three or more	45%	32%	60%	34%	47%
	Total Weighted Count	140	153	50	11	236
Tablets	None	30%	33%	27%	29%	27%
	One	35%	31%	42%	6%	27%
	Two	20%	22%	13%	37%	21%
	Three or more	15%	14%	18%	28%	25%
	Total Weighted Count	140	153	50	11	236
Smartphones	None	4%	5%	0%	0%	1%
	One	15%	26%	2%	23%	9%
	Two	48%	32%	59%	6%	26%
	Three or more	34%	37%	39%	72%	65%
	Total Weighted Count	140	153	50	11	236

Figure 30. Number of computers by student in household

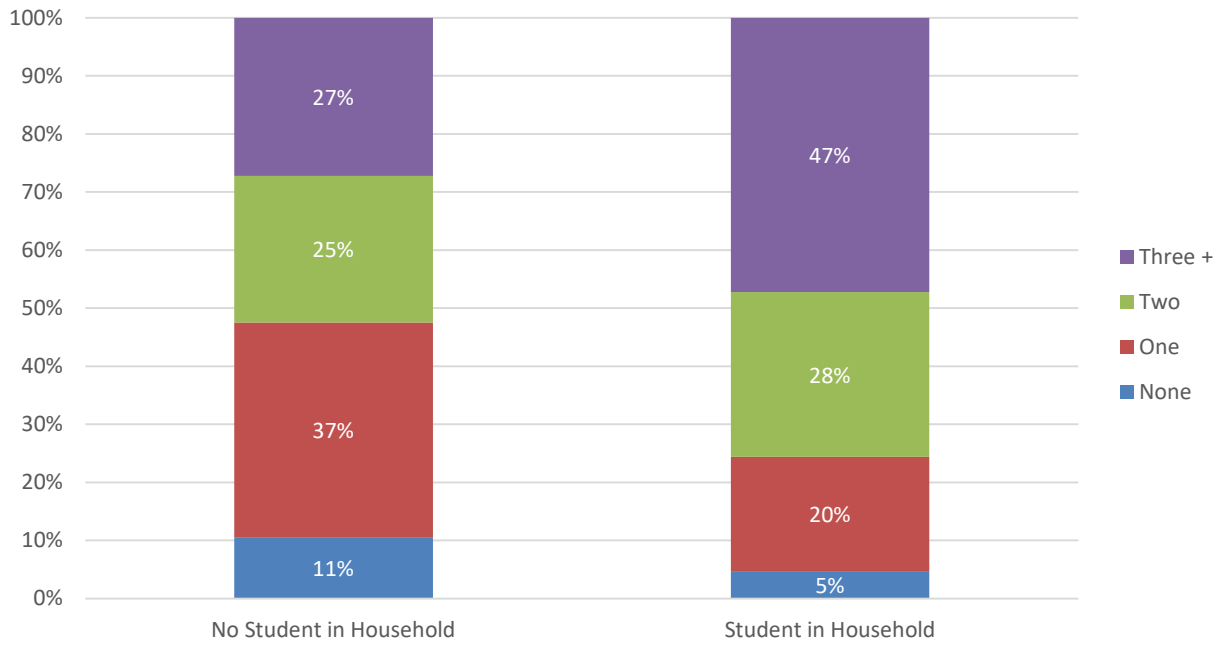


Figure 31. Number of tablets by student in household

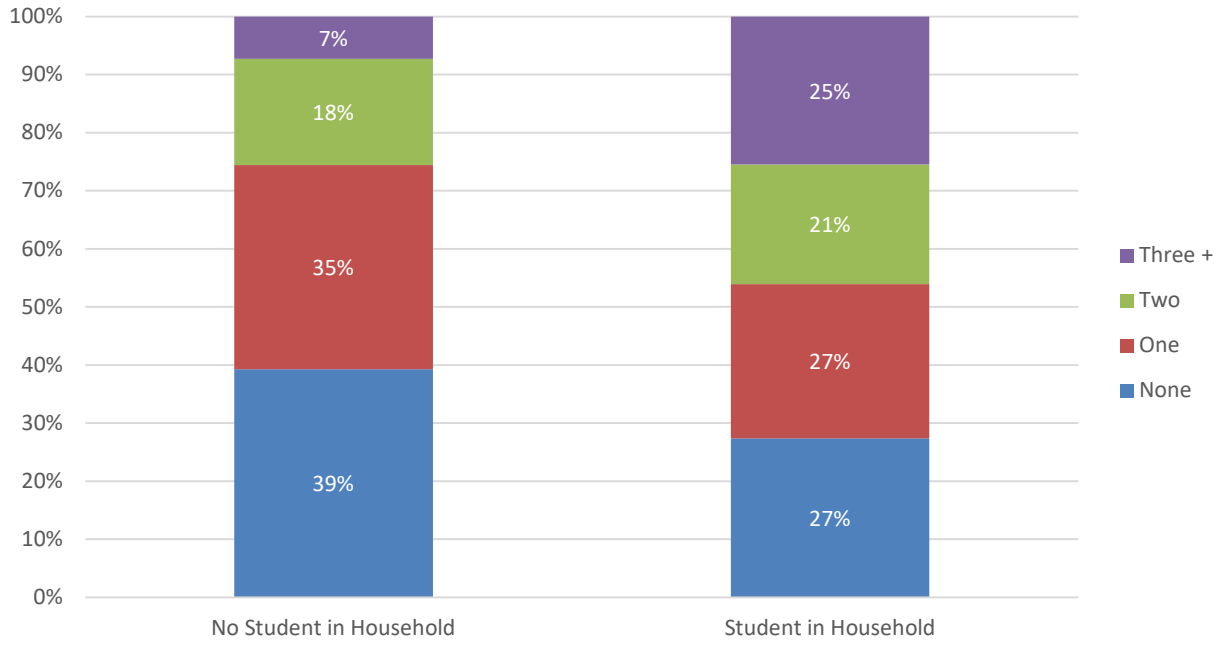


Figure 32. Number of smartphones by student in household

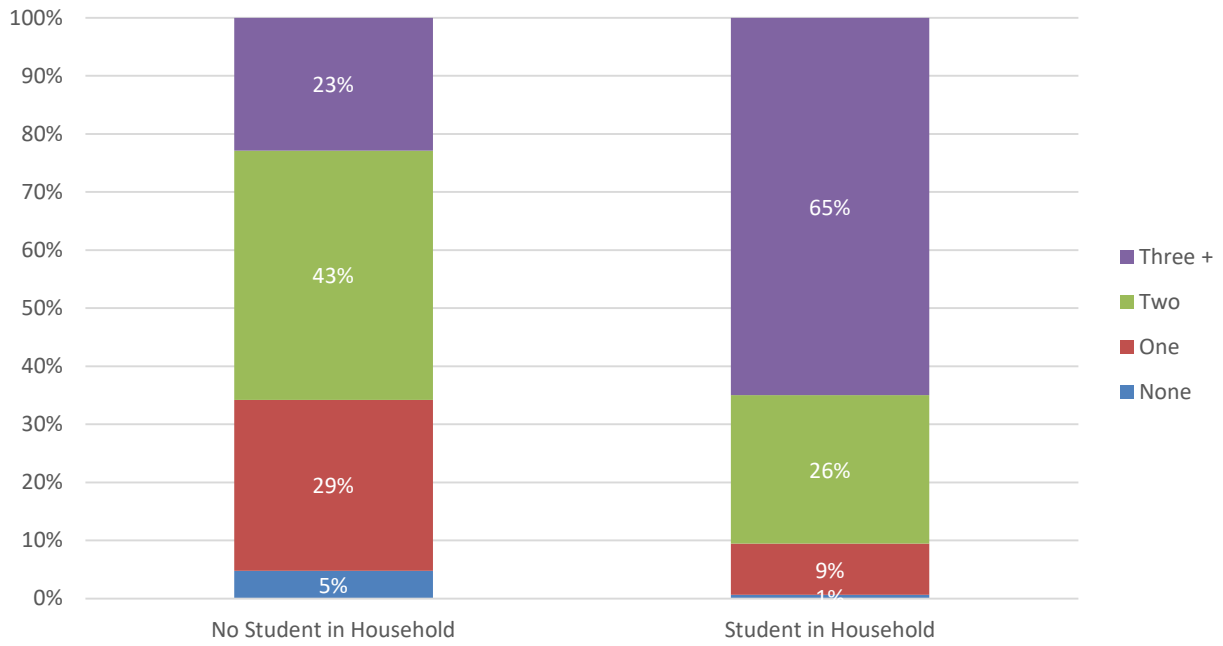


Table 35. Number of computing devices by household size

		One household member	Two household members	Three household members	Four+ household members
Computers	None	17%	7%	5%	4%
	One	63%	30%	23%	10%
	Two	12%	32%	33%	28%
	Three or more	7%	31%	39%	58%
	Total Weighted Count	*176*	*281*	*134*	*182*
Tablets	None	60%	38%	27%	14%
	One	35%	36%	33%	25%
	Two	4%	20%	26%	27%
	Three or more	1%	7%	14%	33%
	Total Weighted Count	*176*	*281*	*134*	*182*
Smartphones	None	8%	3%	0%	1%
	One	77%	13%	5%	2%
	Two	12%	74%	33%	11%
	Three or more	3%	10%	63%	86%
	Total Weighted Count	*176*	*281*	*134*	*182*

Figure 33. Number of computers by household size

Figure 34. Number of tablets by household size

Figure 35. Number of smartphones by household size

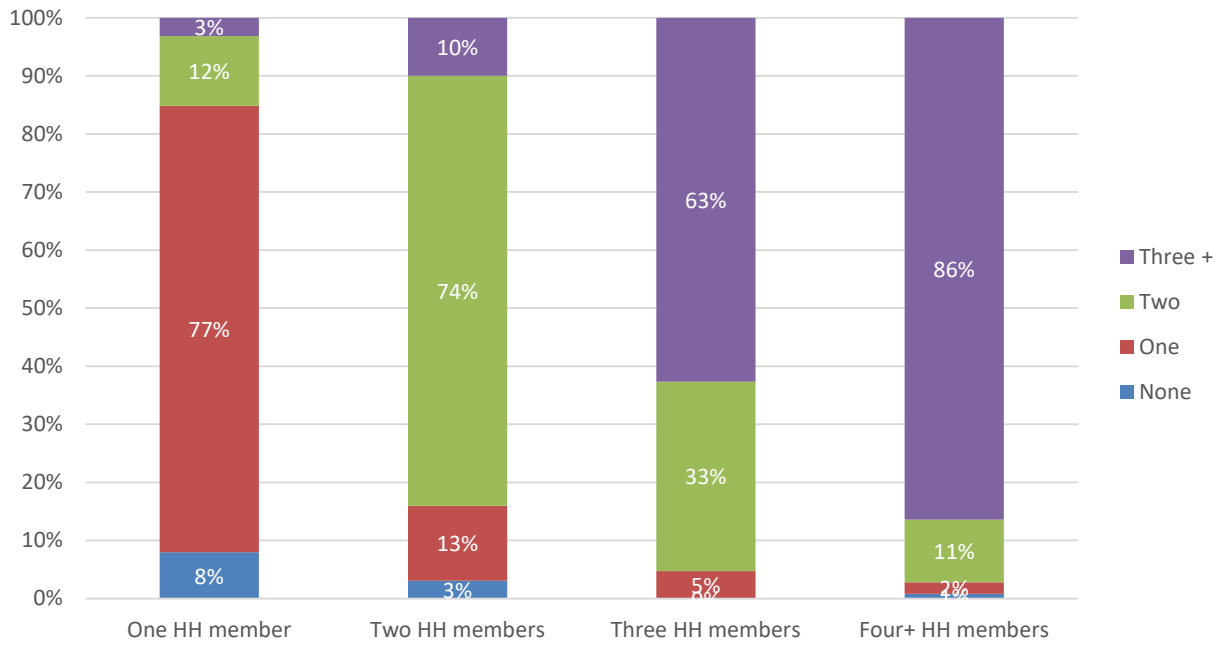


Table 36. Number of computing devices by ages of householders (percent of households with at least one householder in each age group)

		Under 18	18-29	30-39	40-49	50-64	65+
Computers	None	5%	5%	8%	8%	5%	9%
	One	15%	16%	25%	23%	28%	44%
	Two	32%	29%	38%	24%	25%	21%
	Three or more	48%	50%	29%	45%	41%	26%
	Total Weighted Count	*236*	*161*	*210*	*186*	*256*	*233*
Tablets	None	23%	20%	41%	30%	28%	36%
	One	28%	40%	24%	26%	38%	31%
	Two	20%	22%	17%	23%	25%	23%
	Three or more	28%	18%	18%	22%	10%	11%
	Total Weighted Count	*236*	*161*	*210*	*186*	*256*	*233*
Smartphones	None	1%	1%	0%	1%	2%	8%
	One	5%	6%	20%	14%	14%	33%
	Two	26%	22%	31%	27%	43%	35%
	Three or more	68%	71%	48%	58%	41%	24%
	Total Weighted Count	*236*	*161*	*210*	*186*	*256*	*233*

Figure 36. Number of computers by children in household (at least one household member under age 18)

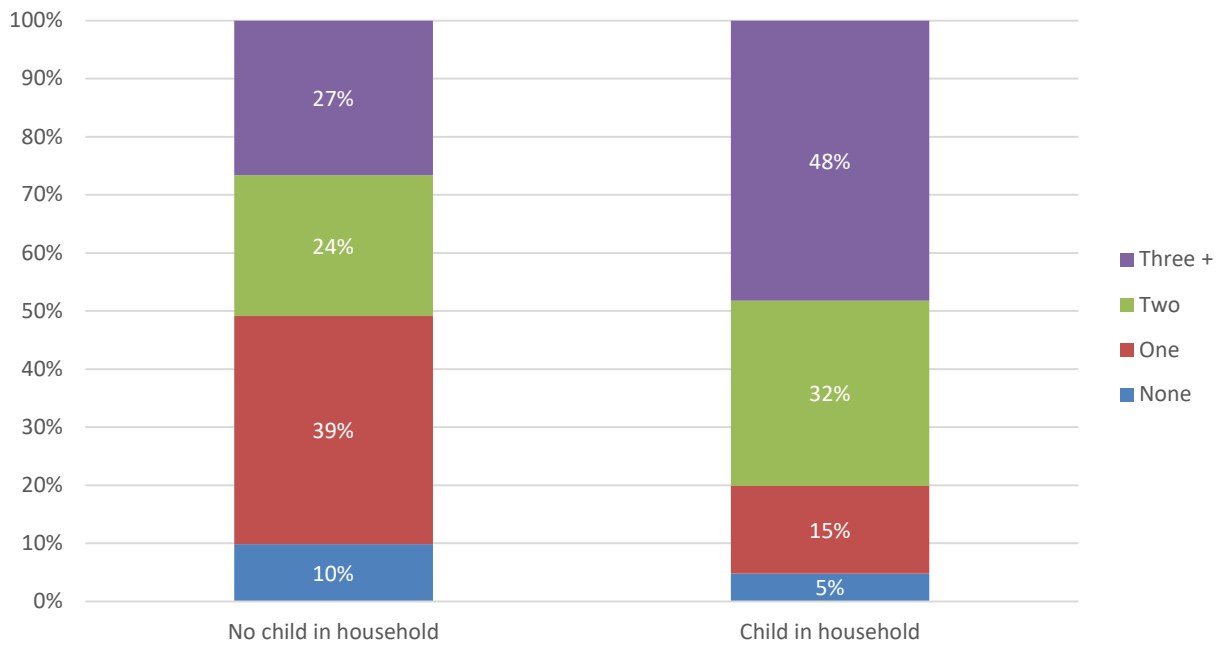


Figure 37. Number of tablets by children in household (at least one household member under age 18)

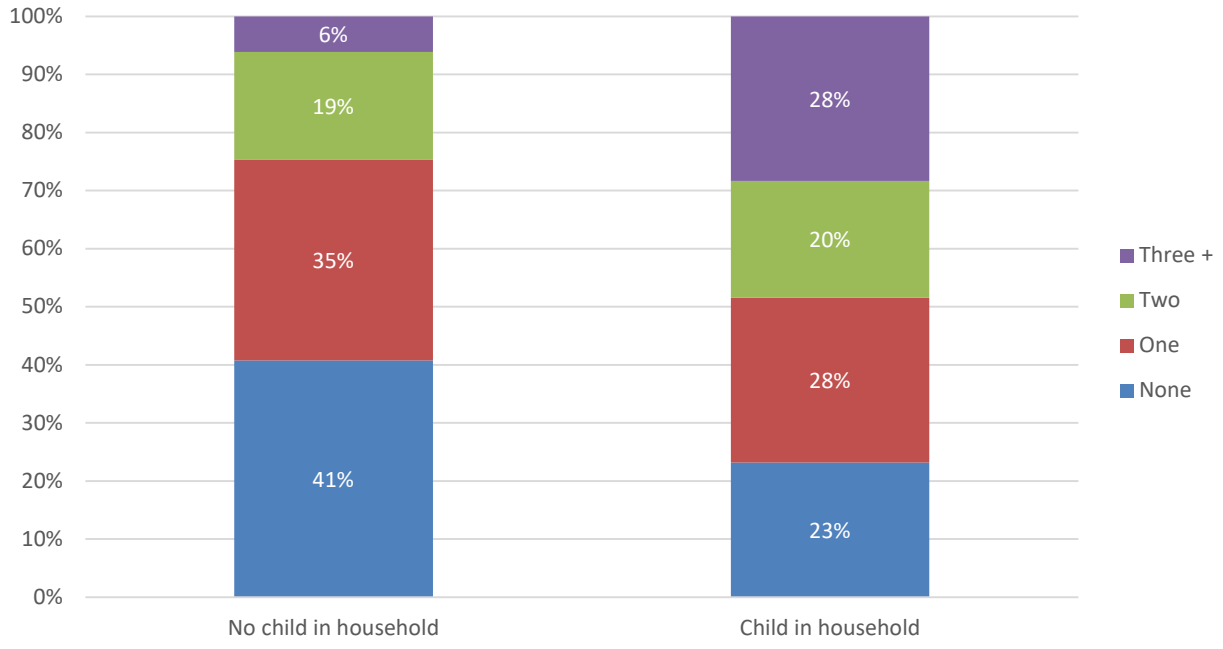


Figure 38. Number of smartphones by children in household (at least one household member under age 18)

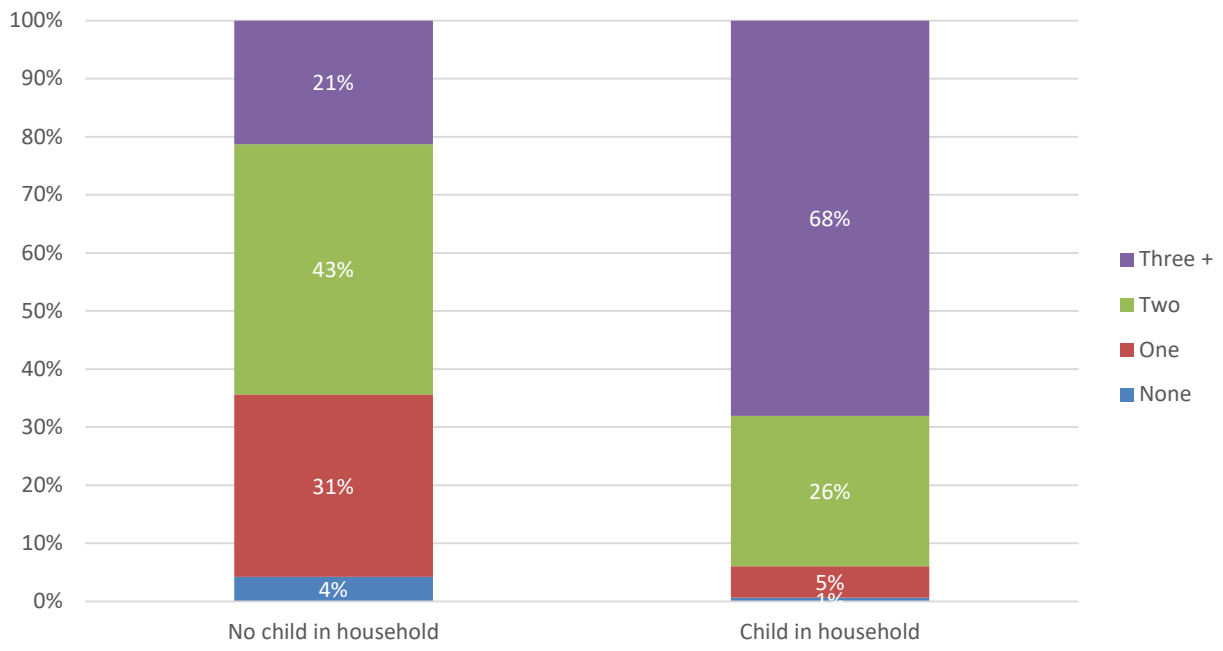


Figure 39. Number of computers by seniors in household (at least one household member age 65 or older)

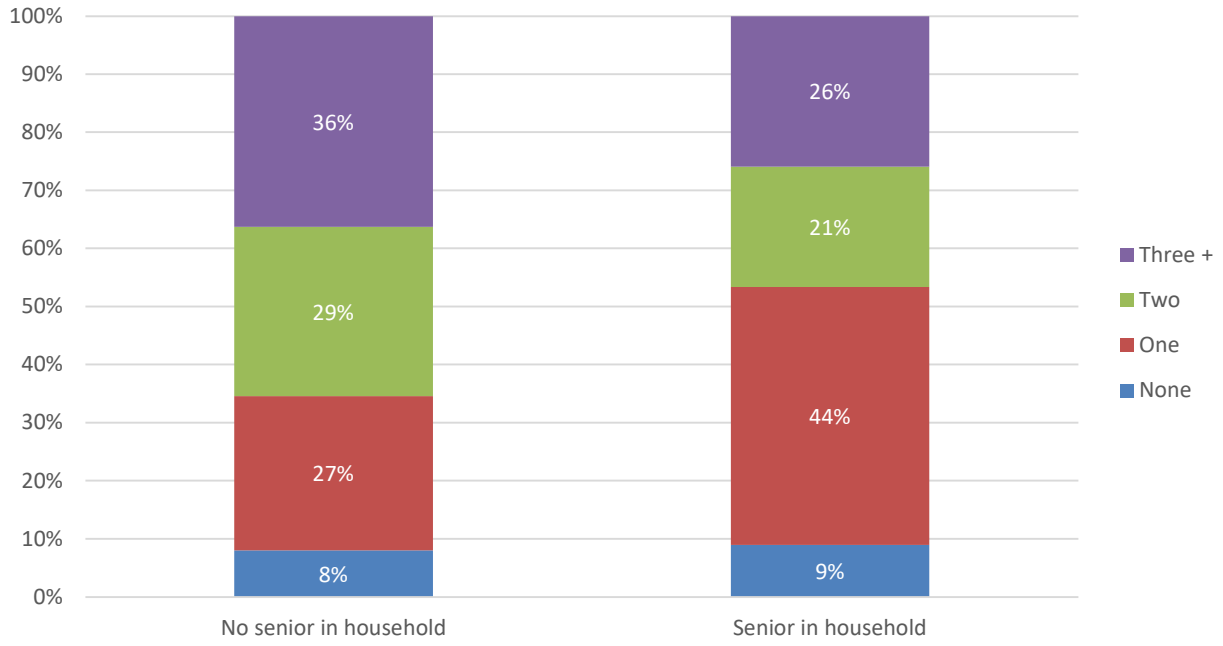


Figure 40. Number of tablets by seniors in household (at least one household member age 65 or older)

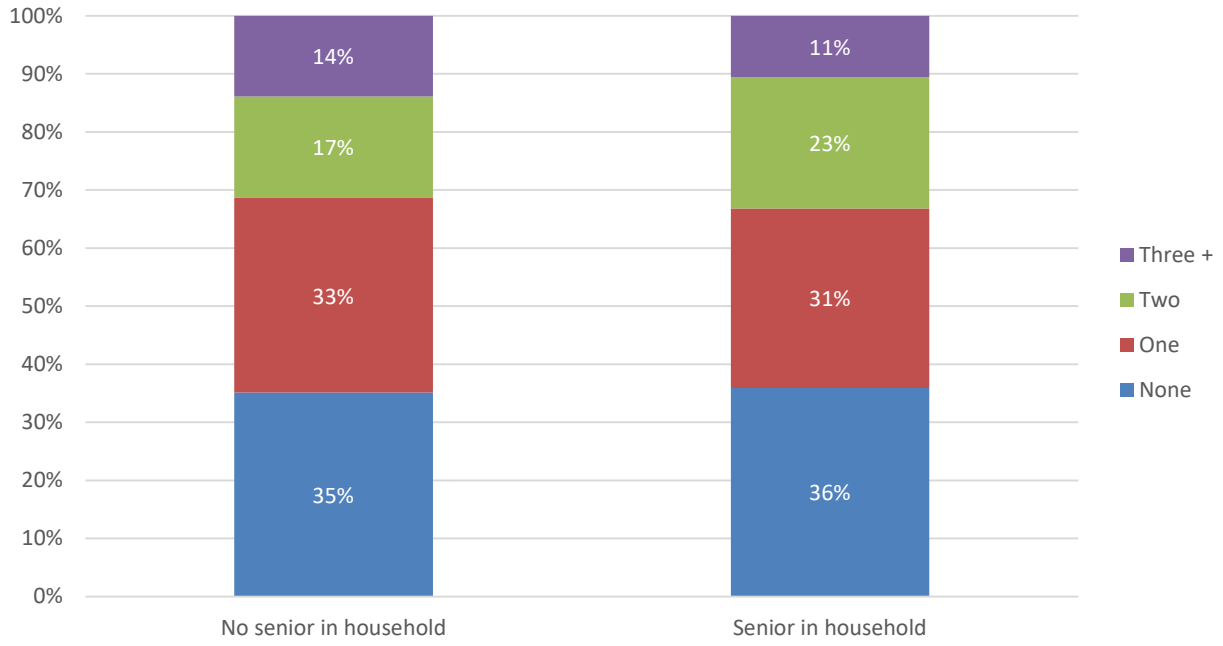
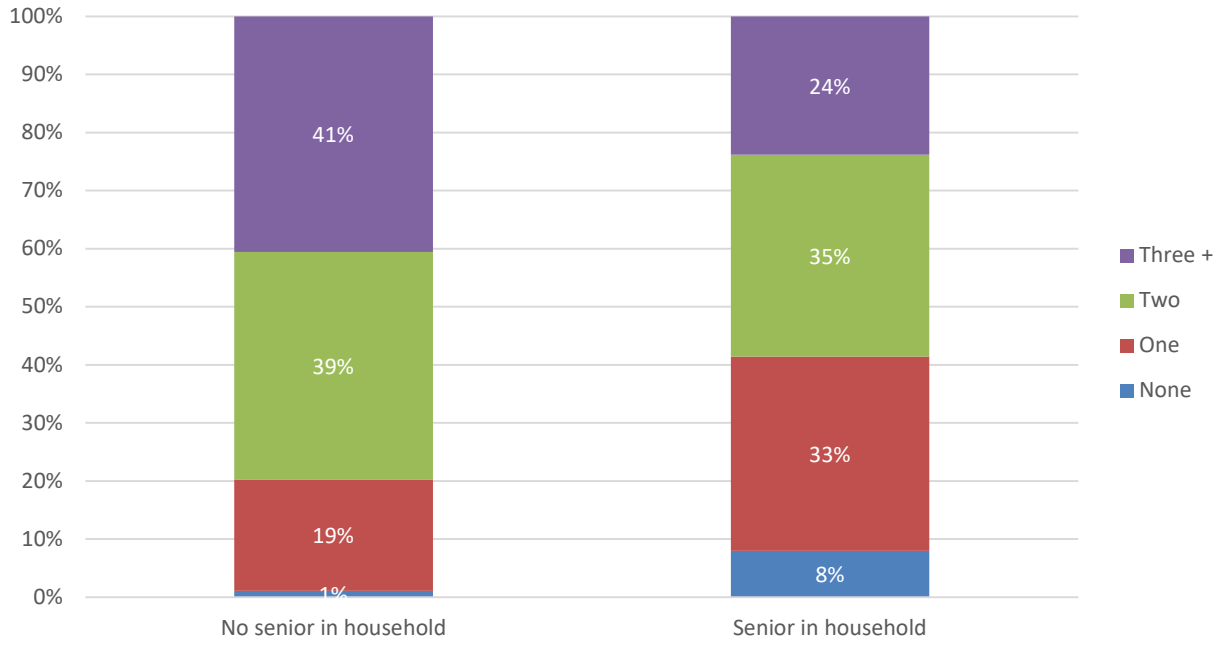


Figure 41. Number of smartphones by seniors in household (at least one household member age 65 or older)



Thinking about the computing device you primarily use, if it were lost or damaged beyond repair, how long do you think it would take you to replace it?

Figure 42. How long it would take to replace a lost or damaged computing device

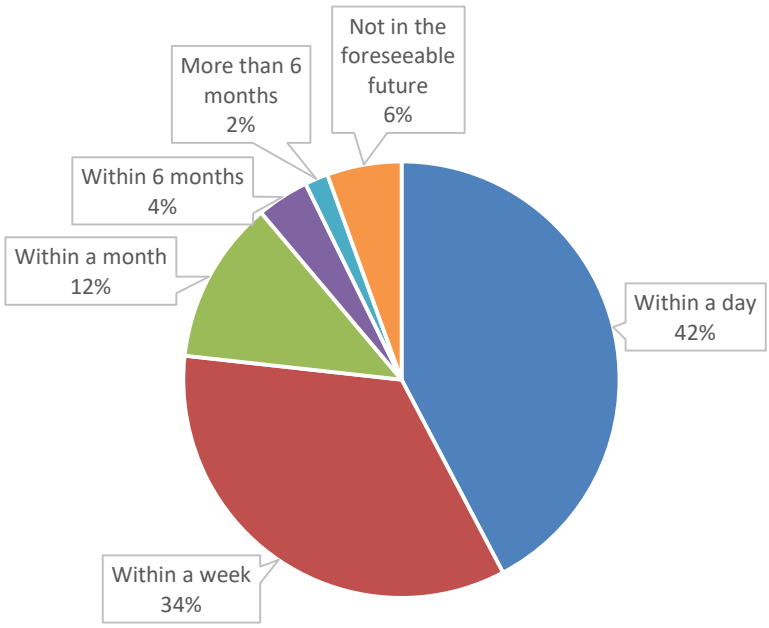
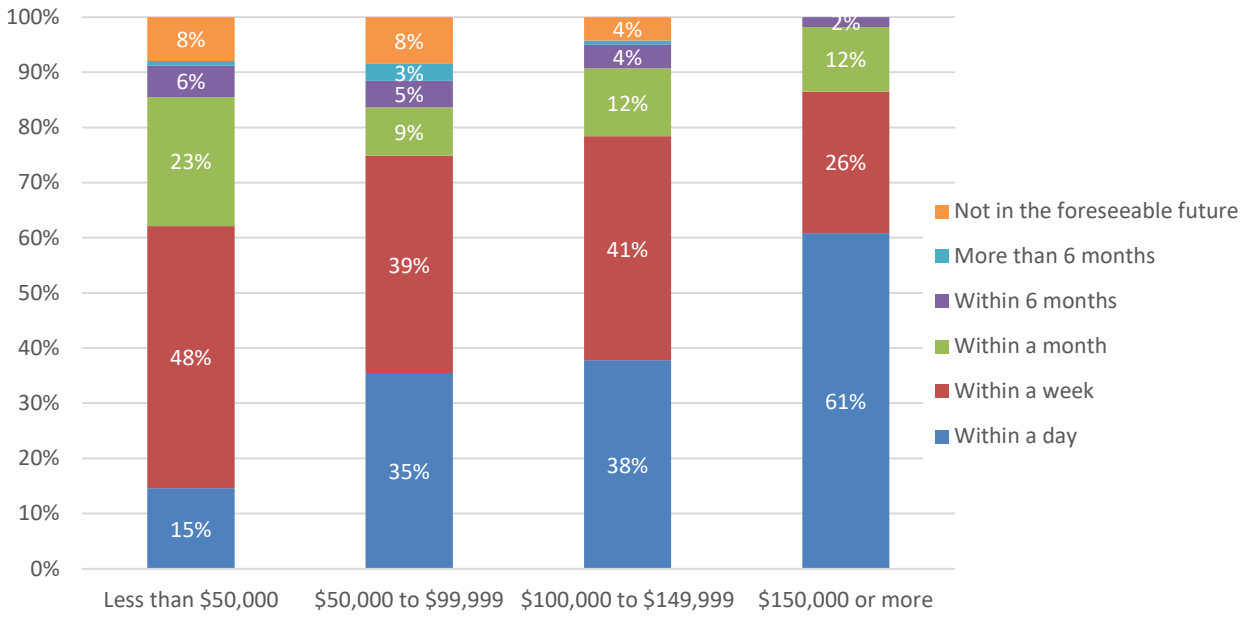


Figure 43. How long it would take to replace a lost or damaged computing device by household income



Please rate how confident you or the primary user are in doing the following activities on the internet?

Figure 44. Confidence in using the internet for various activities

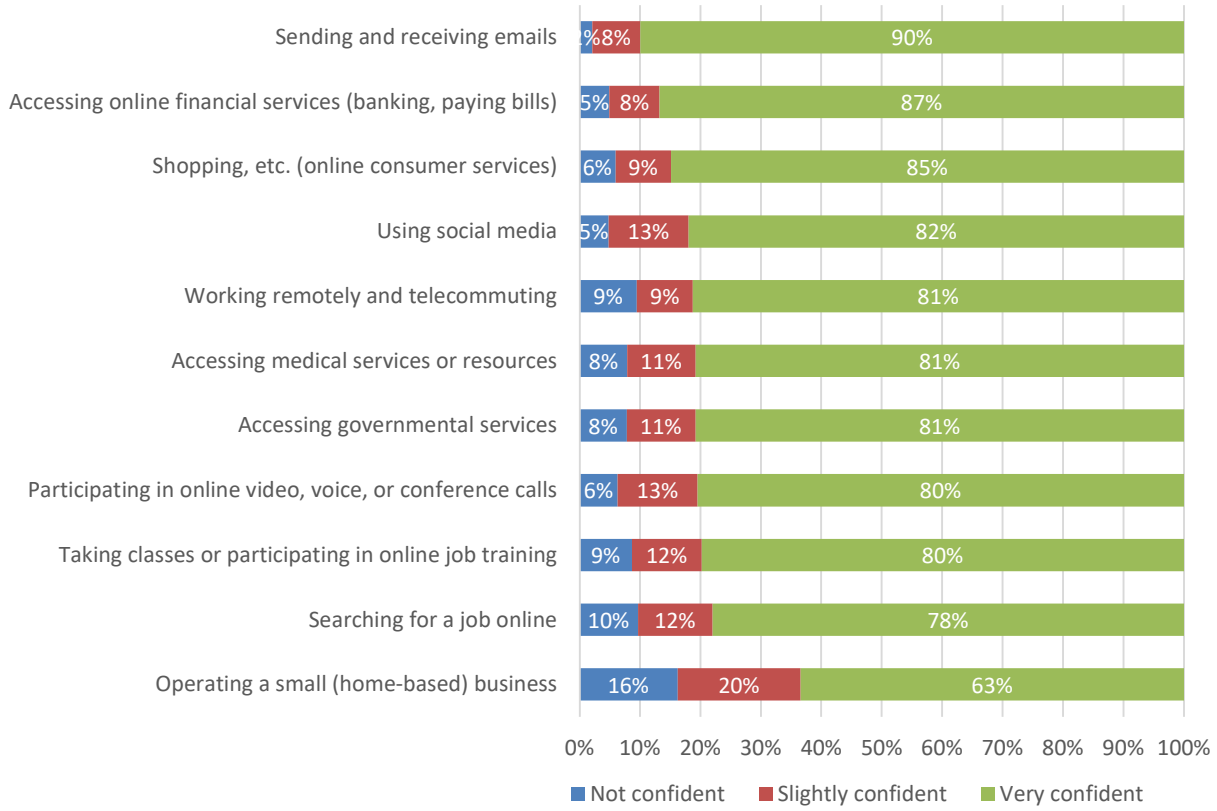


Table 37. Confidence in using the internet for various activities by household income

		Less than $50,000	$50,000 to $99,999	$100,000 to $149,999	$150,000 or more
Sending and receiving emails?	Not confident	6%	0%	0%	0%
	Slightly confident	11%	11%	2%	3%
	Very confident	84%	89%	98%	97%
	Total	181	175	93	111
Using social media?	Not confident	7%	5%	2%	3%
	Slightly confident	15%	16%	5%	6%
	Very confident	78%	79%	93%	91%
	Total	172	168	86	105
Participating in online video, voice, or conference calls (such as Zoom, Skype, or FaceTime)?	Not confident	12%	8%	0%	1%
	Slightly confident	17%	14%	8%	10%
	Very confident	72%	77%	92%	89%
	Total	157	170	90	110
Operating a small (home-based) business?	Not confident	34%	16%	5%	8%
	Slightly confident	30%	21%	17%	12%
	Very confident	36%	63%	78%	80%
	Total	99	110	48	55
Working remotely and telecommuting?	Not confident	19%	9%	1%	3%
	Slightly confident	9%	8%	10%	3%
	Very confident	73%	82%	89%	94%
	Total	104	116	66	94
Searching for a job online?	Not confident	13%	13%	3%	8%
	Slightly confident	13%	12%	12%	11%
	Very confident	74%	75%	84%	81%
	Total	131	128	61	79
Taking classes or participating in online job training?	Not confident	14%	9%	3%	5%
	Slightly confident	14%	13%	7%	11%
	Very confident	72%	79%	90%	84%
	Total	119	135	64	82
Accessing medical services or resources?	Not confident	9%	15%	8%	2%
	Slightly confident	14%	9%	6%	11%
	Very confident	78%	76%	86%	87%
	Total	172	163	87	104
Accessing governmental services (such as DMV, benefits enrollment, etc.)?	Not confident	6%	13%	4%	4%
	Slightly confident	15%	12%	9%	10%
	Very confident	80%	75%	88%	86%
	Total	164	162	86	108
Shopping, making travel reservations, or using other online consumer services?	Not confident	11%	9%	0%	0%
	Slightly confident	10%	11%	7%	7%
	Very confident	80%	81%	93%	93%
	Total	178	171	92	110
Accessing online financial services such as banking and paying bills?	Not confident	9%	5%	1%	0%
	Slightly confident	8%	10%	4%	7%
	Very confident	82%	85%	95%	92%
	Total	174	170	90	110

Figure 45. Very confident in using the internet for various activities by household income

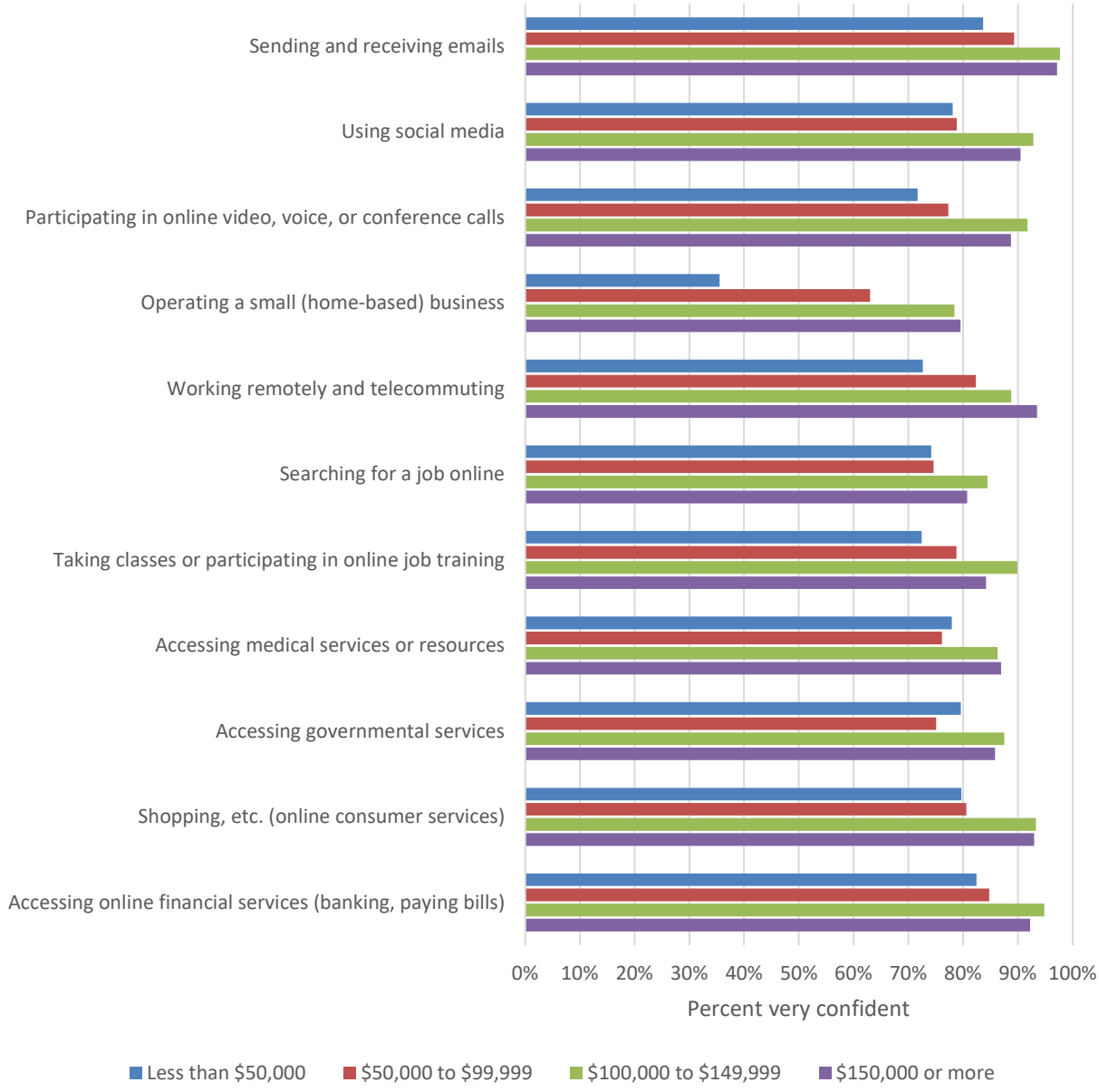


Table 38. Confidence in using the internet for various activities by ages of householders

		No child in household	Child in household	No senior in household	Senior in household
Sending and receiving emails?	Not confident	2%	1%	1%	4%
	Slightly confident	11%	2%	7%	10%
	Very confident	87%	97%	92%	86%
	Total	*527*	*232*	*535*	*224*
Using social media?	Not confident	6%	2%	3%	8%
	Slightly confident	16%	7%	12%	17%
	Very confident	78%	90%	85%	75%
	Total	*495*	*223*	*518*	*201*
Participating in online video, voice, or conference calls (such as Zoom, Skype, or FaceTime)?	Not confident	7%	4%	4%	12%
	Slightly confident	17%	7%	11%	21%
	Very confident	76%	89%	85%	67%
	Total	*478*	*229*	*510*	*196*
Operating a small (home-based) business?	Not confident	20%	11%	13%	28%
	Slightly confident	17%	27%	24%	9%
	Very confident	63%	62%	63%	63%
	Total	*272*	*153*	*330*	*94*
Working remotely and telecommuting?	Not confident	13%	2%	5%	22%
	Slightly confident	10%	7%	9%	8%
	Very confident	77%	91%	85%	69%
	Total	*321*	*191*	*401*	*111*
Searching for a job online?	Not confident	14%	2%	5%	30%
	Slightly confident	16%	7%	13%	12%
	Very confident	71%	91%	82%	58%
	Total	*346*	*186*	*428*	*104*
Taking classes or participating in online job training?	Not confident	12%	2%	4%	26%
	Slightly confident	14%	8%	12%	11%
	Very confident	74%	89%	84%	63%
	Total	*347*	*187*	*424*	*110*
Accessing medical services or resources?	Not confident	10%	3%	7%	11%
	Slightly confident	12%	9%	11%	12%
	Very confident	78%	88%	82%	77%
	Total	*489*	*214*	*500*	*203*
Accessing governmental services (such as DMV, benefits enrollment, etc.)?	Not confident	10%	3%	6%	12%
	Slightly confident	13%	8%	11%	13%
	Very confident	77%	89%	83%	75%
	Total	*478*	*217*	*502*	*193*
Shopping, making travel reservations, or using other online consumer services?	Not confident	8%	1%	4%	10%
	Slightly confident	11%	5%	9%	9%
	Very confident	81%	94%	87%	81%
	Total	*516*	*229*	*527*	*218*
Accessing online financial services such as banking and paying bills?	Not confident	6%	2%	2%	12%
	Slightly confident	9%	6%	8%	8%
	Very confident	84%	92%	89%	80%
	Total	*487*	*230*	*520*	*197*

Figure 46. Very confident in using the internet for various activities by children in household (at least one household member under age 18)

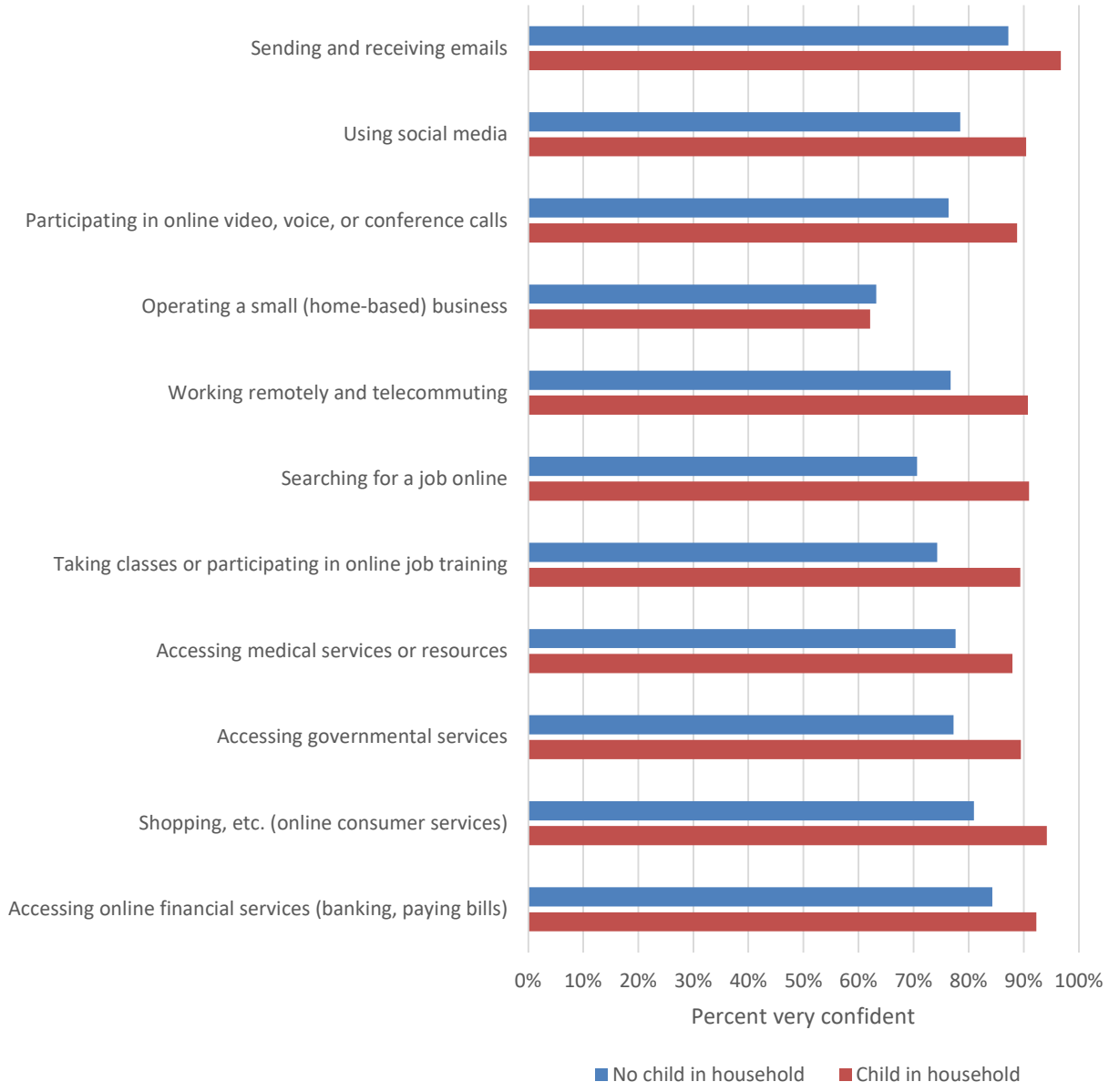
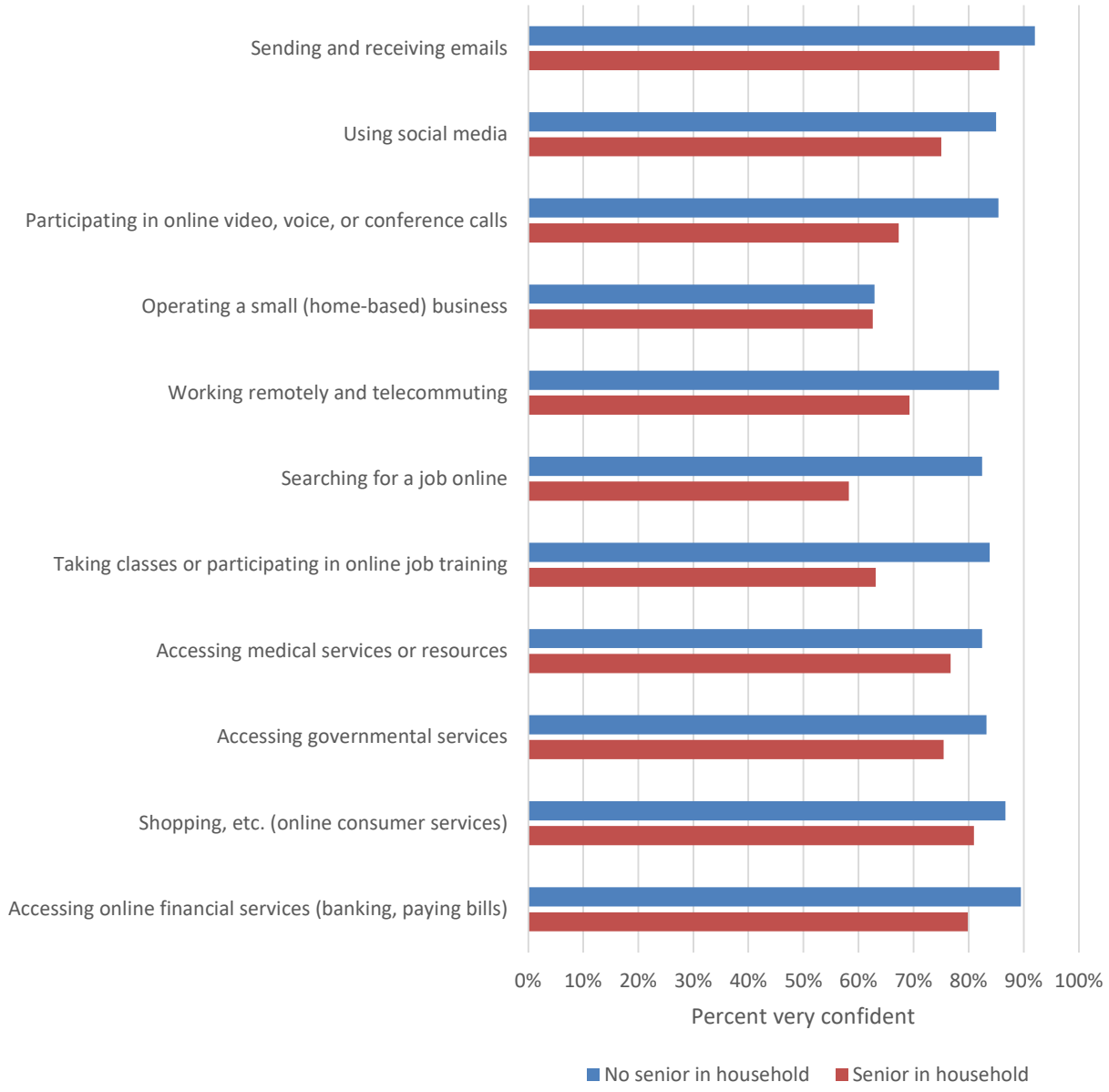


Figure 47. Very confident in using the internet for various activities by seniors in household (at least one household member age 65 or older)



To what extent do you agree or disagree with the following statements about your internet and computer skills?

Figure 48. Agreement with statements about internet skills

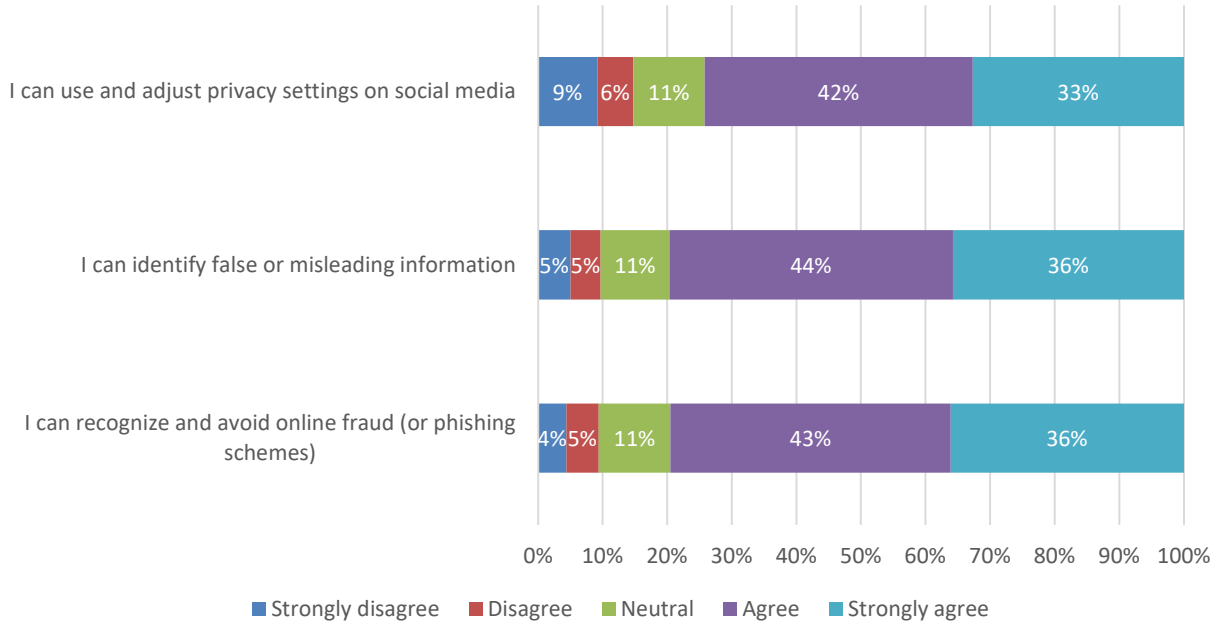


Figure 49. I can use and adjust privacy settings on social media by household income

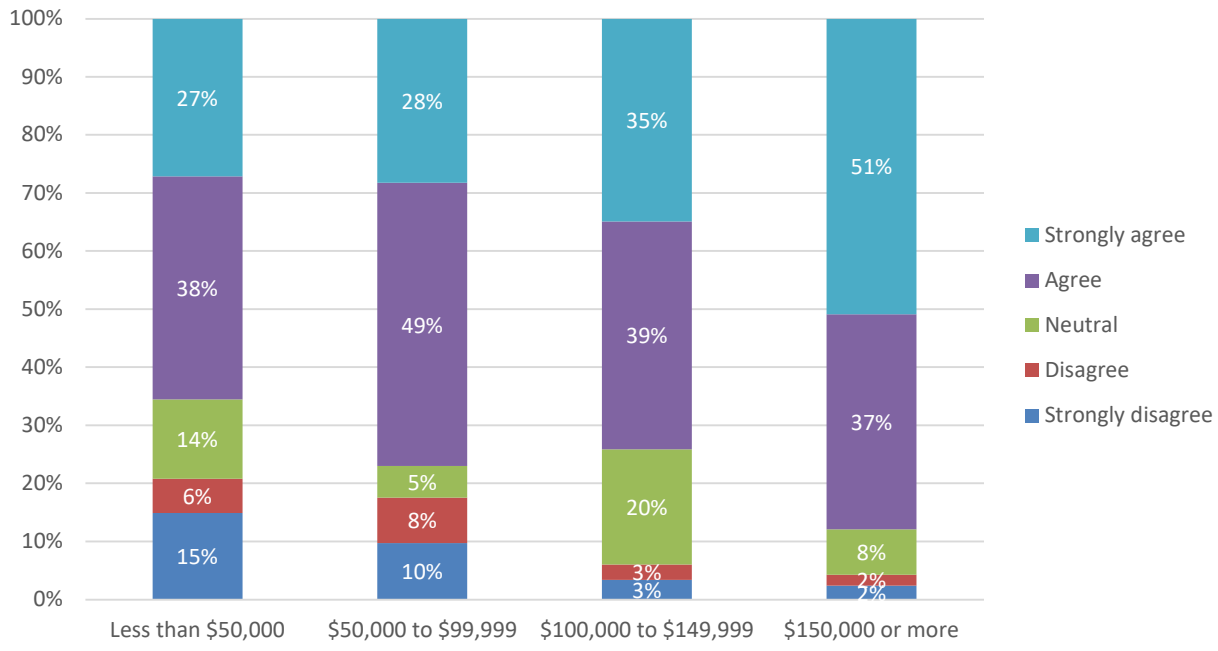


Figure 50. I can identify false or misleading information by household income

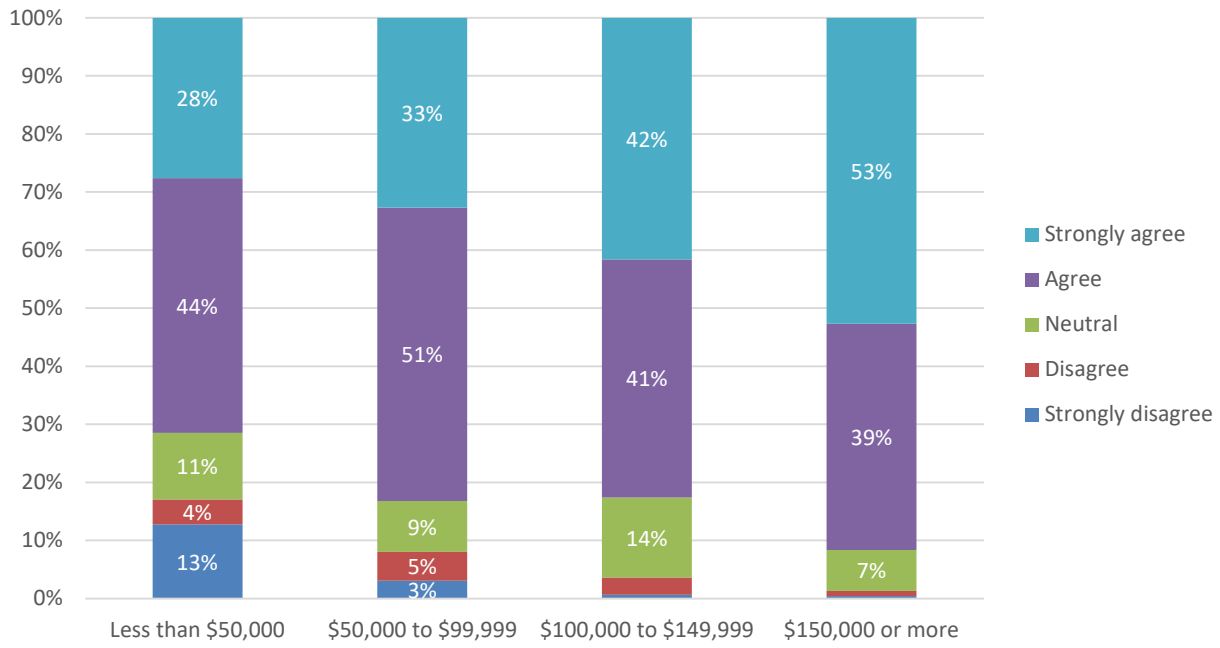


Figure 51. I can recognize and avoid online fraud by household income

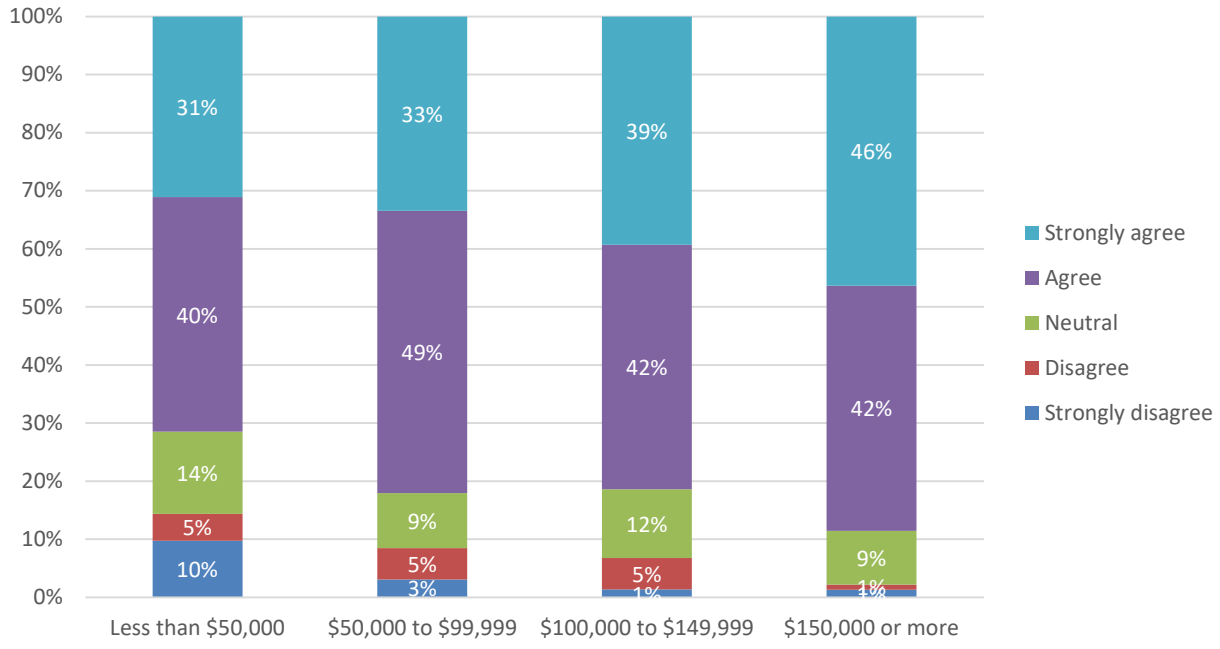


Figure 52. I can use and adjust privacy settings on social media by children in household

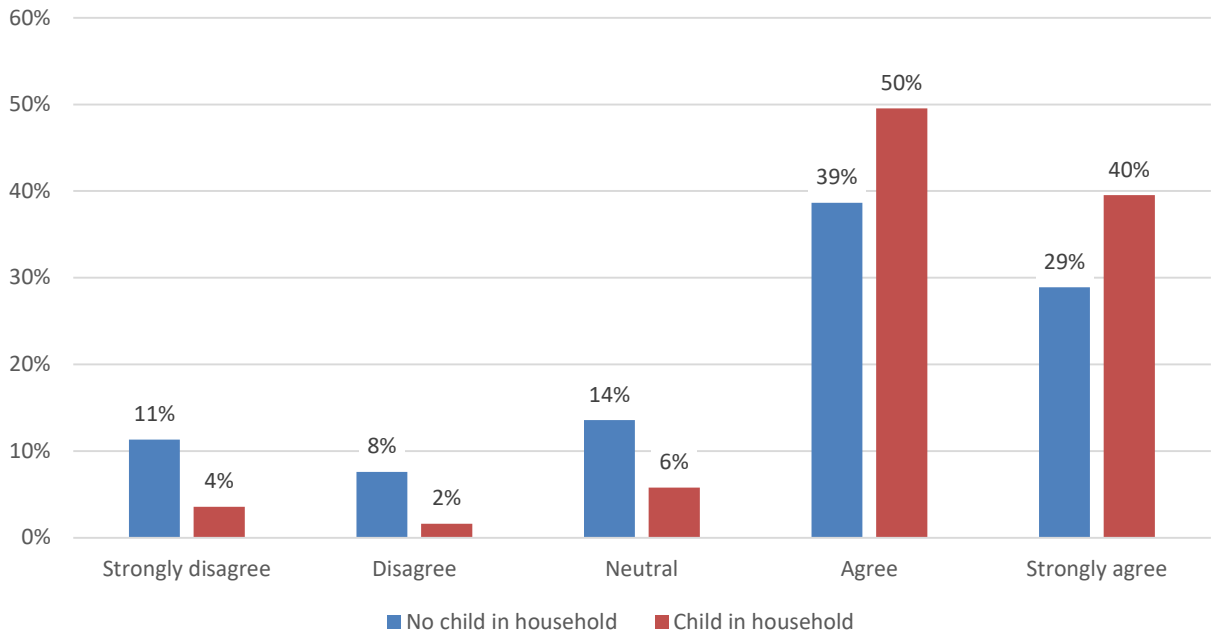


Figure 53. I can identify false or misleading information by children in household

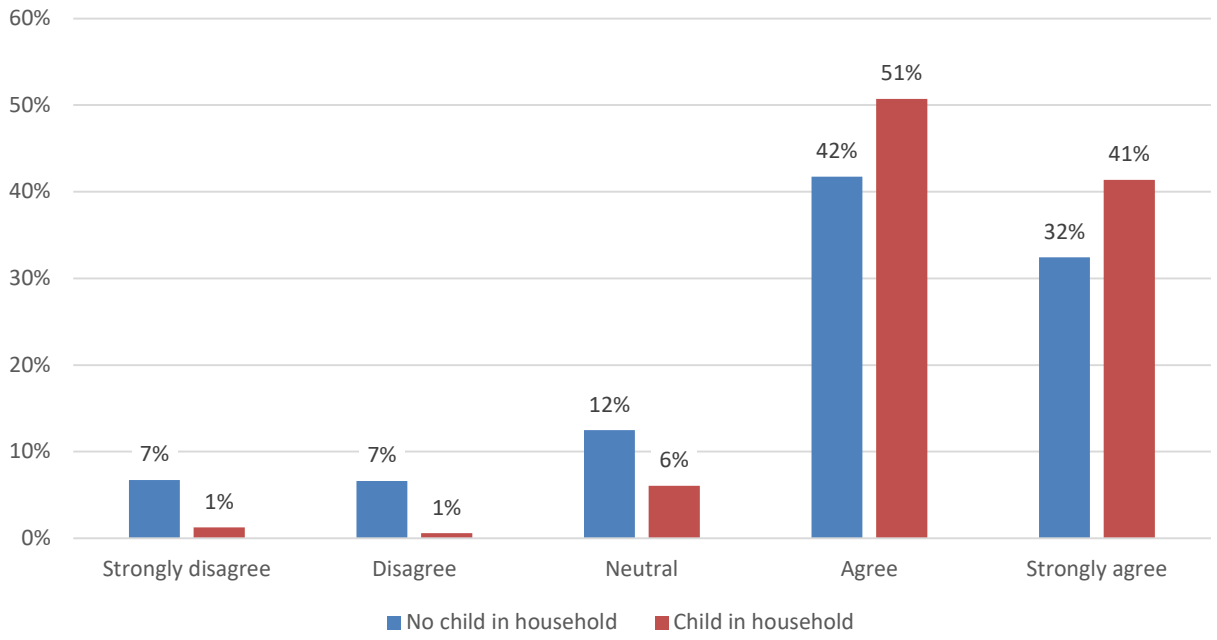


Figure 54. I can recognize and avoid online fraud by children in household

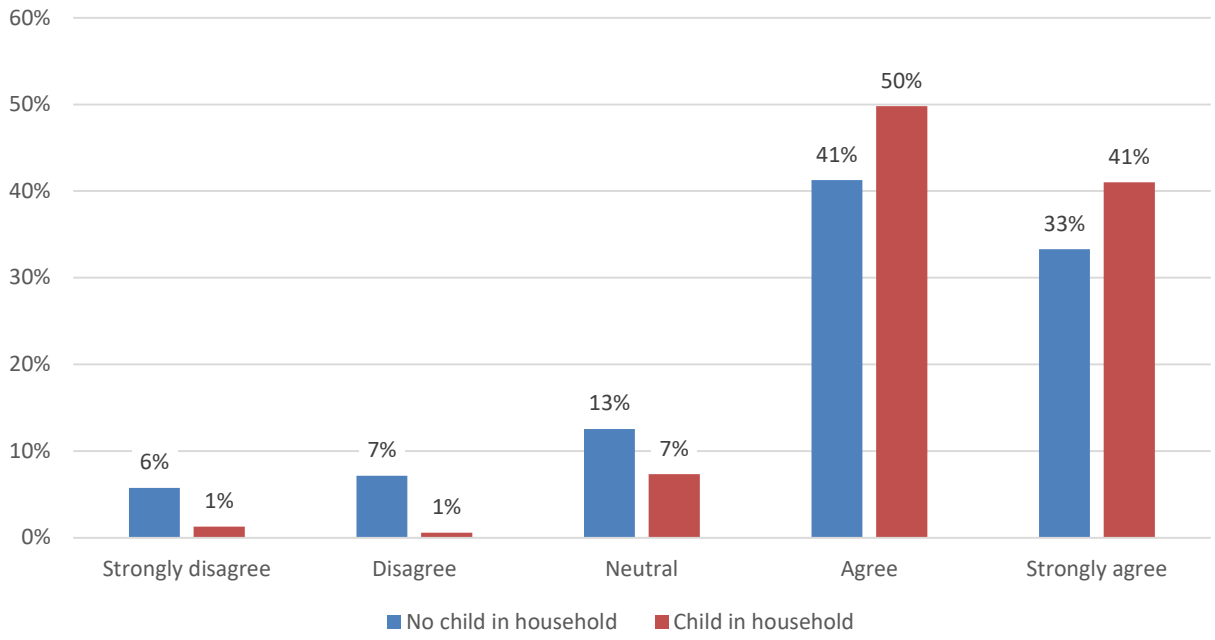


Figure 55. I can use and adjust privacy settings on social media by seniors in household

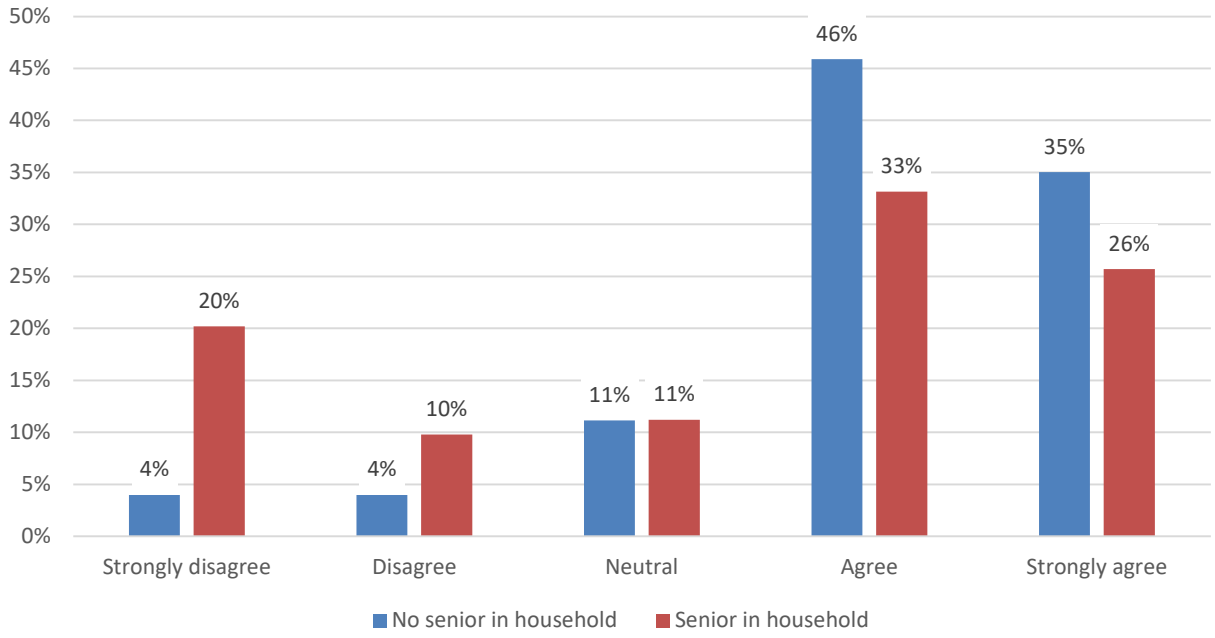


Figure 56. I can identify false or misleading information by seniors in household

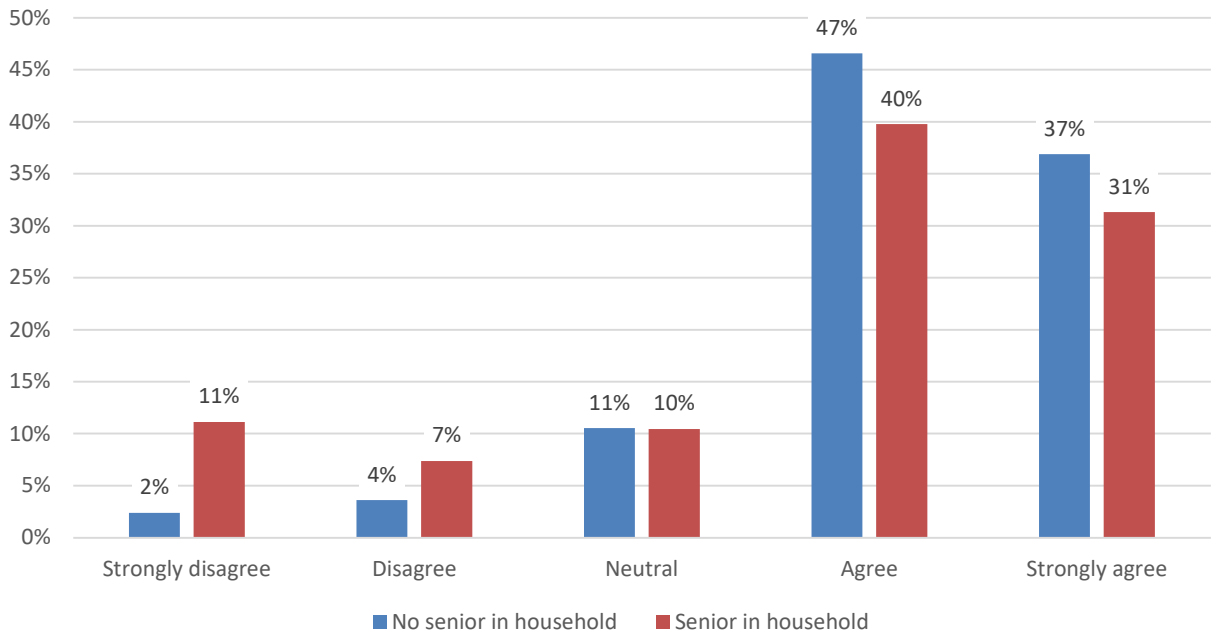
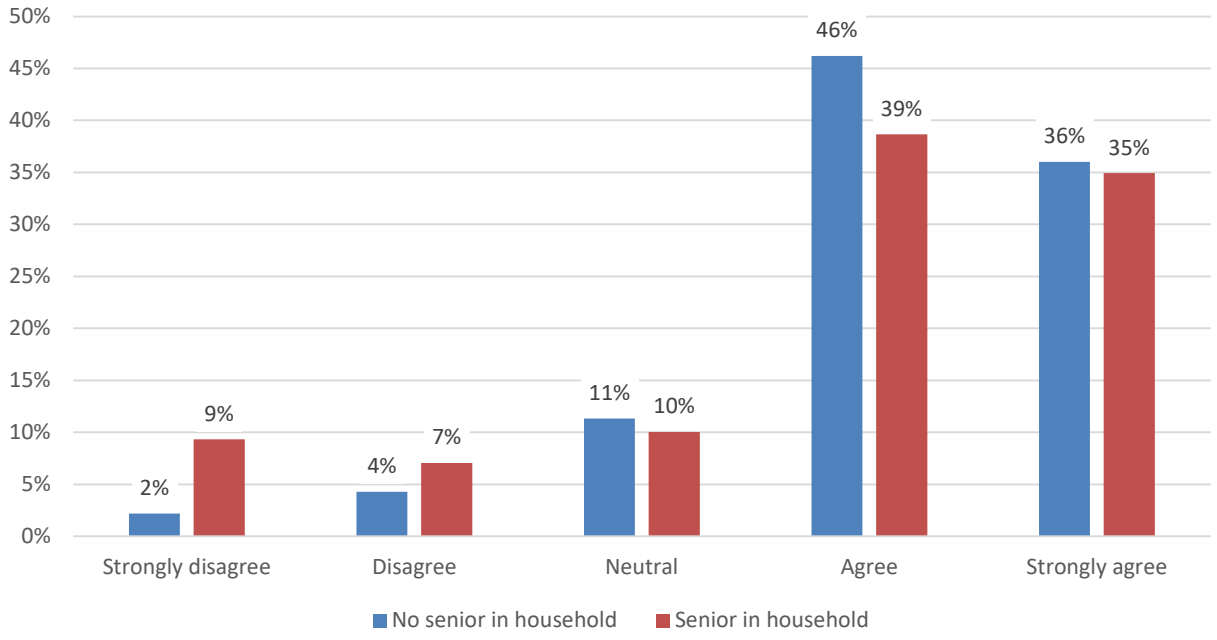


Figure 57. I can recognize and avoid online fraud by seniors in household



How many people live in your household, and what are their approximate ages?

Figure 58. Percent of households with at least one member in each age category

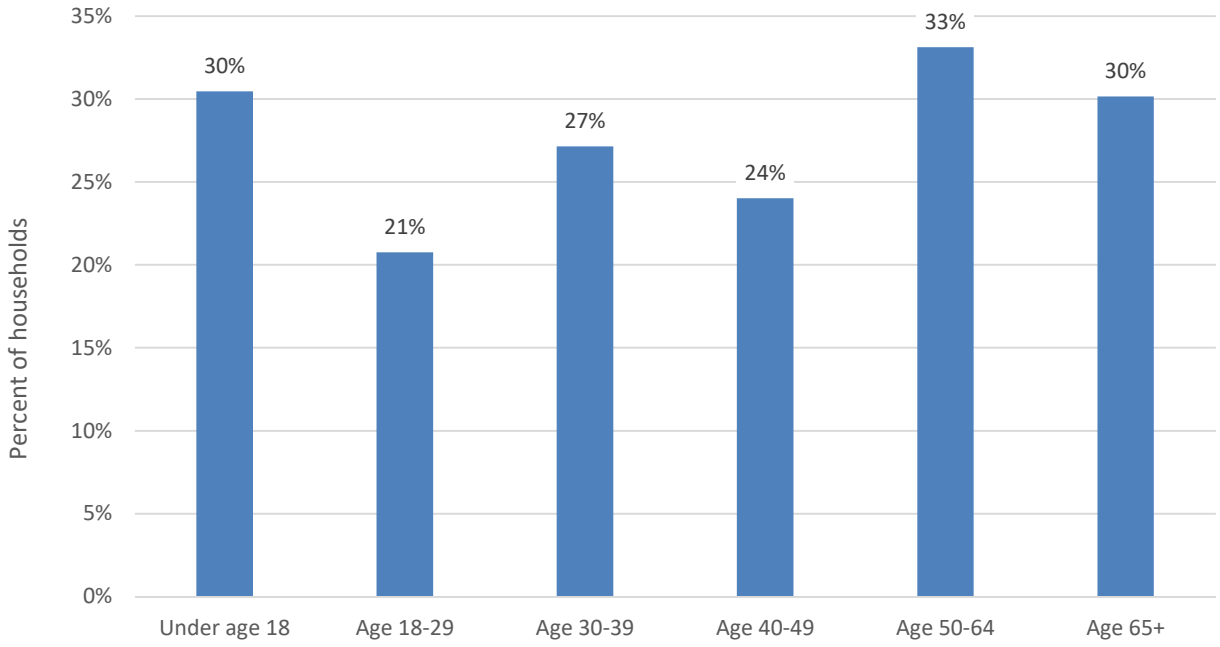


Figure 59. Average number of household members per age category (among households with at least one household member in that age group)

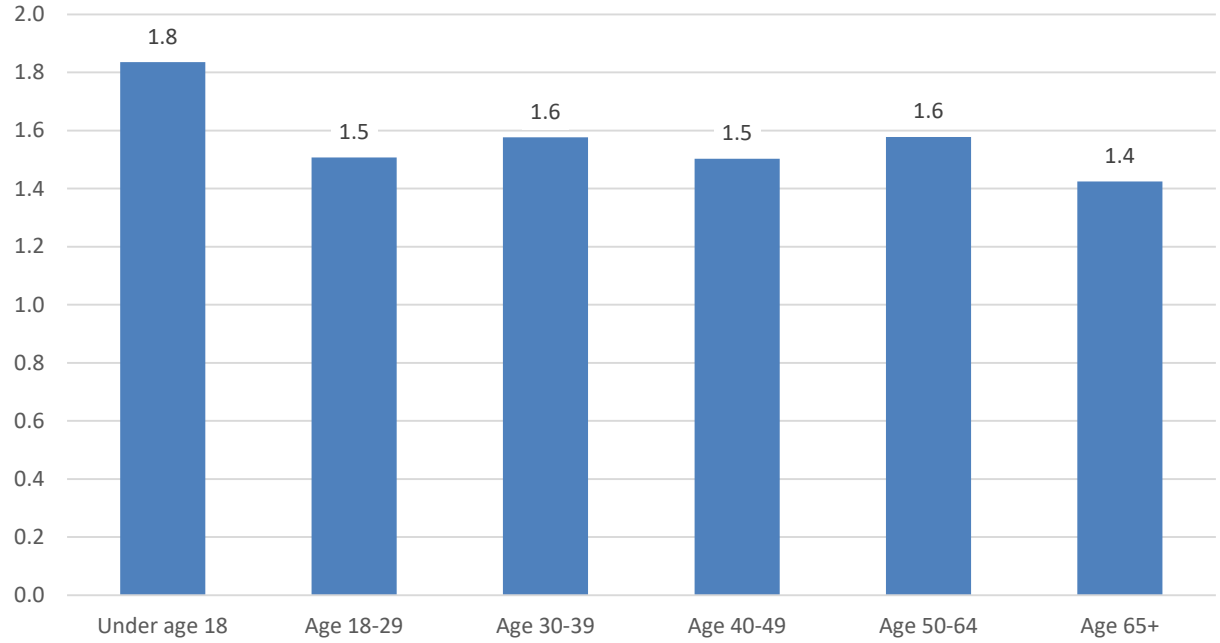
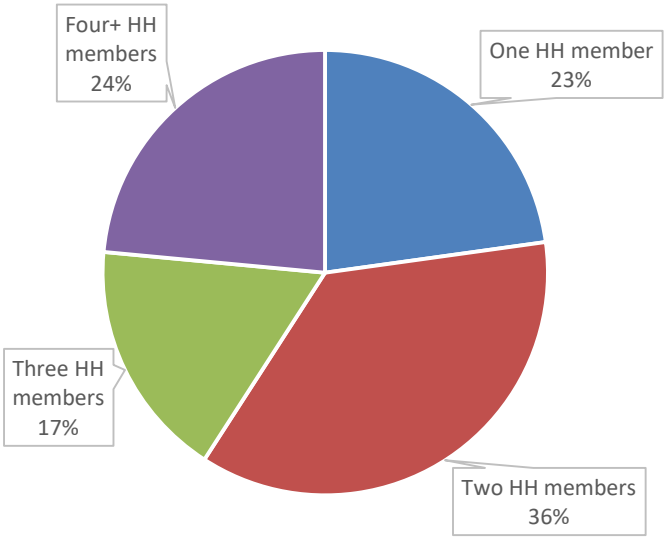
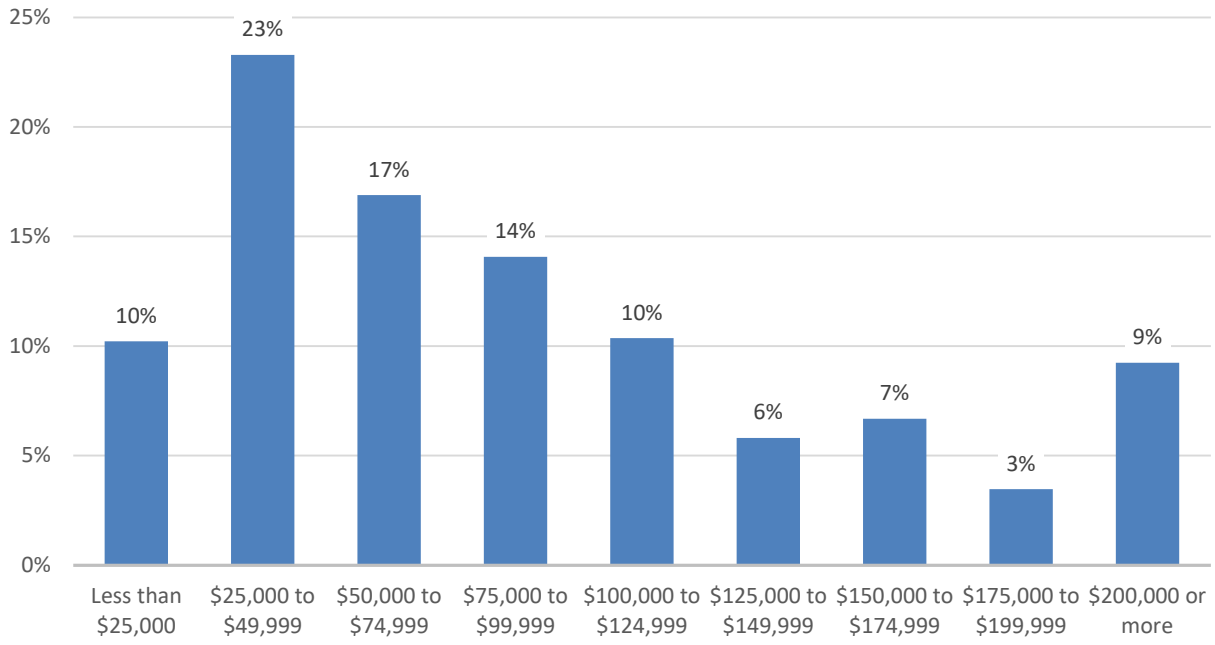


Figure 60. Number of household members (household size)



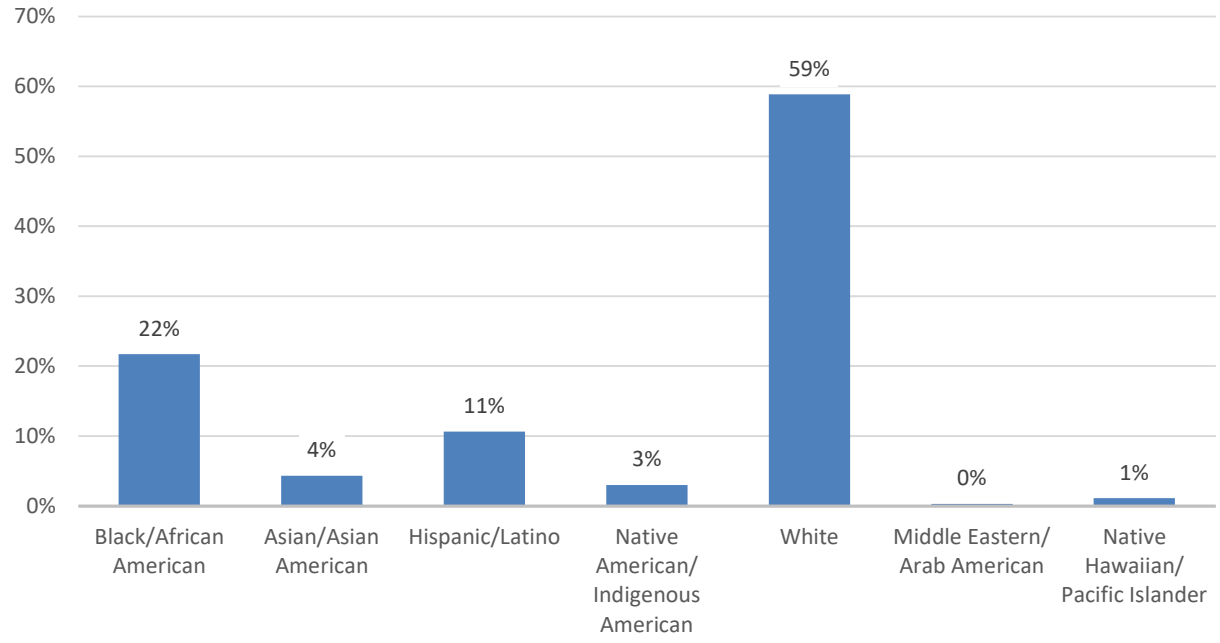
What is your approximate annual household income?

Figure 61. Approximate annual household income



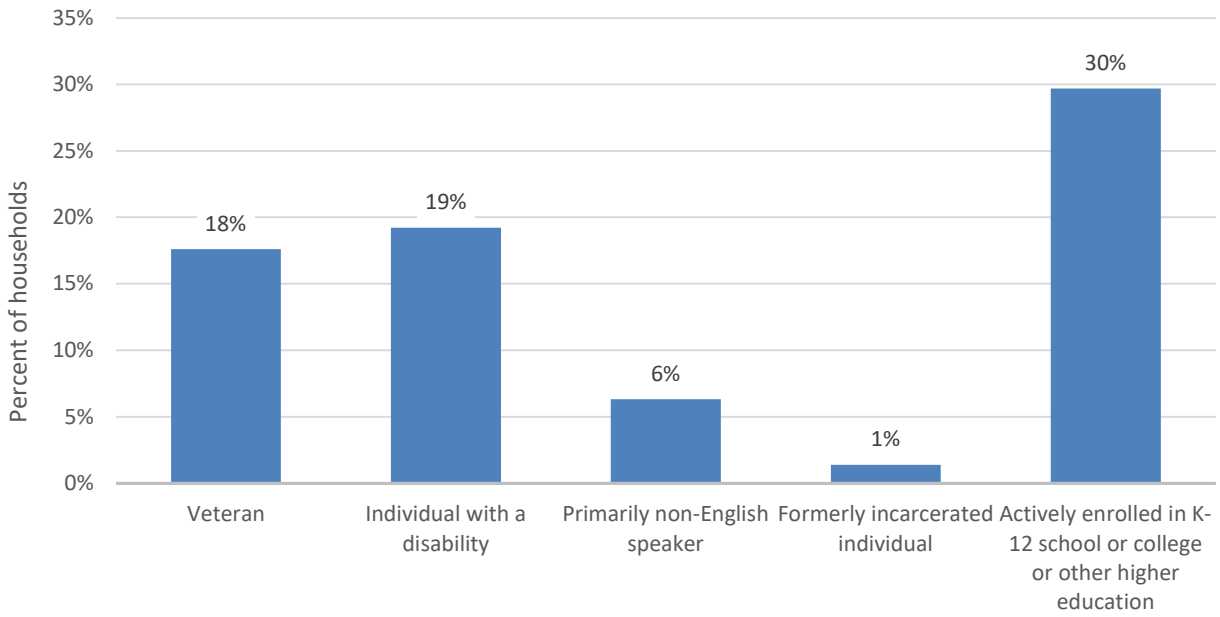
What race/ethnicities are represented in your household?

Figure 62. Race/ethnicity



Are you or anyone else living in your household a(n):

Figure 63. Percent of households with at least one household member in each at-risk group

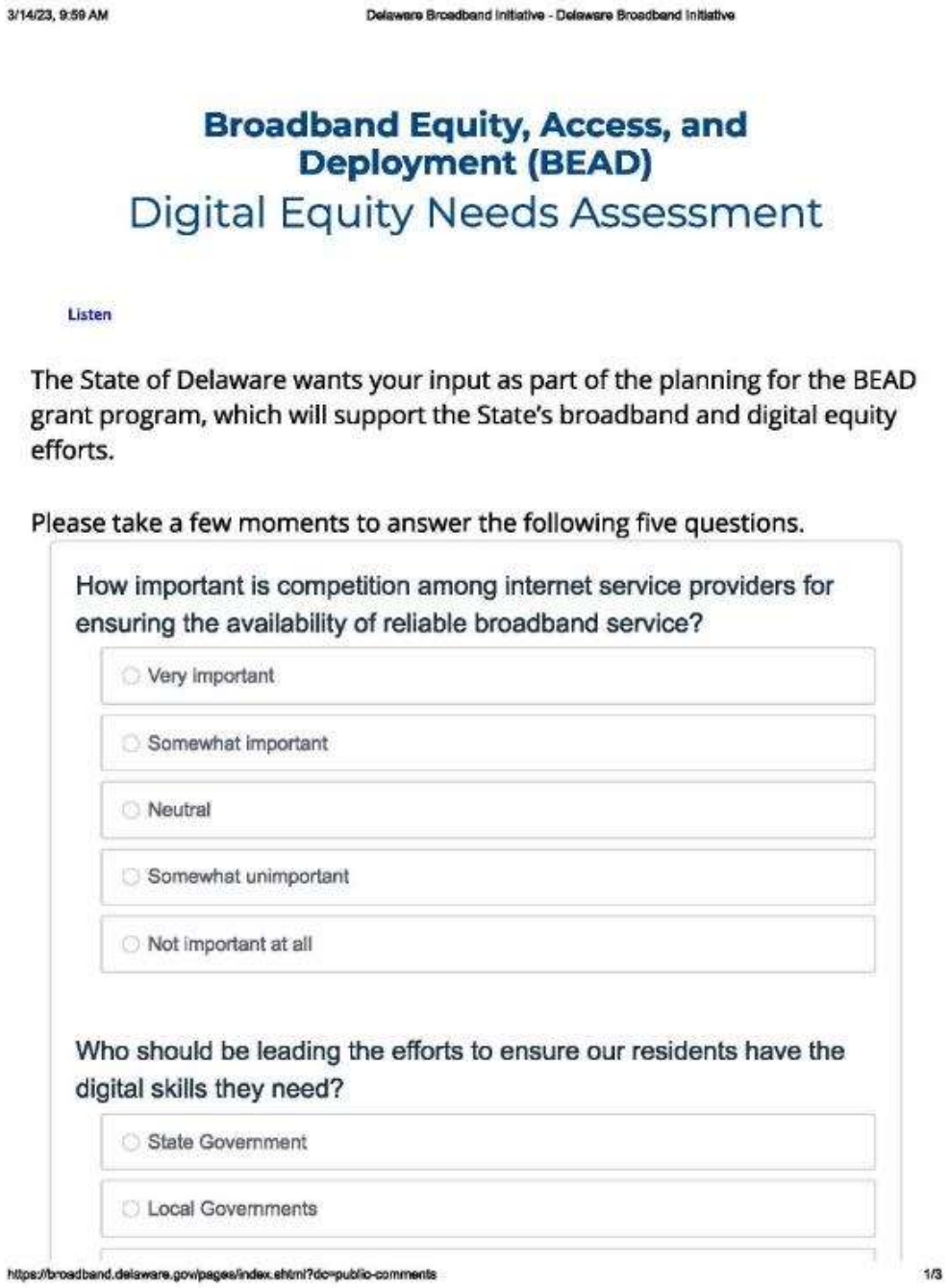


Appendix C: Partner Questionnaires

DTI gathered input from stakeholders through both a high-level Digital Equity Needs Assessment survey and surveys targeted to individual groups of stakeholders. The Needs Assessment was also posted on DTI's website to collect responses from the public.

Survey instrument 1: Broadband Equity, Access, and Deployment Digital Equity needs assessment

The Digital Equity Needs Assessment was provided through a link during stakeholder meetings and was posted publicly on the DTI website to gather additional responses.



3/14/23, 9:59 AM Delaware Broadband Initiative - Delaware Broadband Initiative

Broadband Equity, Access, and Deployment (BEAD)

Digital Equity Needs Assessment

Listen

The State of Delaware wants your input as part of the planning for the BEAD grant program, which will support the State's broadband and digital equity efforts.

Please take a few moments to answer the following five questions.

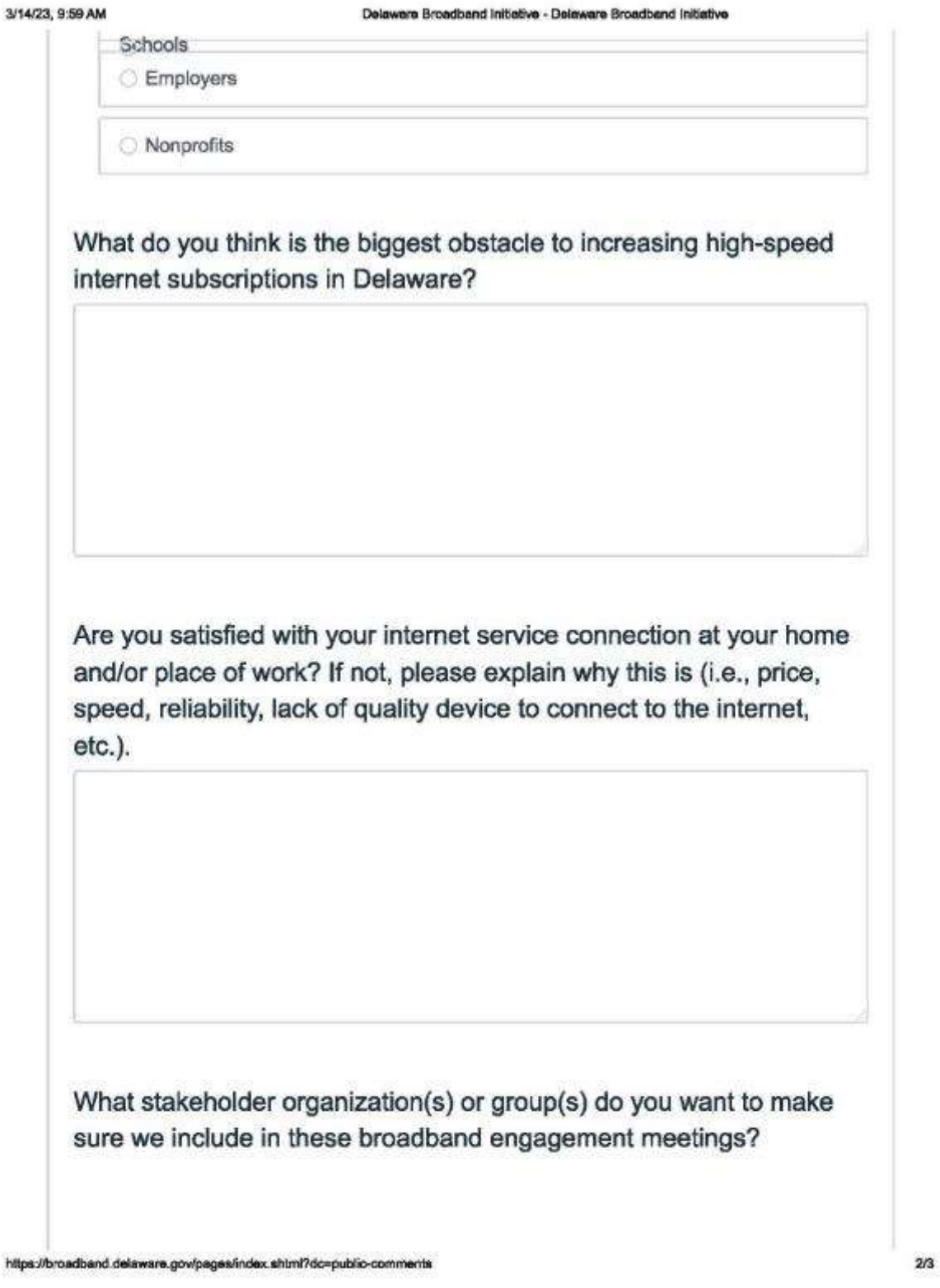
How important is competition among internet service providers for ensuring the availability of reliable broadband service?

- Very important
- Somewhat important
- Neutral
- Somewhat unimportant
- Not important at all

Who should be leading the efforts to ensure our residents have the digital skills they need?

- State Government
- Local Governments

https://broadband.delaware.gov/pages/index.shtml?dc=public-comments 1/3



3/14/23, 9:59 AM Delaware Broadband Initiative - Delaware Broadband Initiative

Schools

Employers

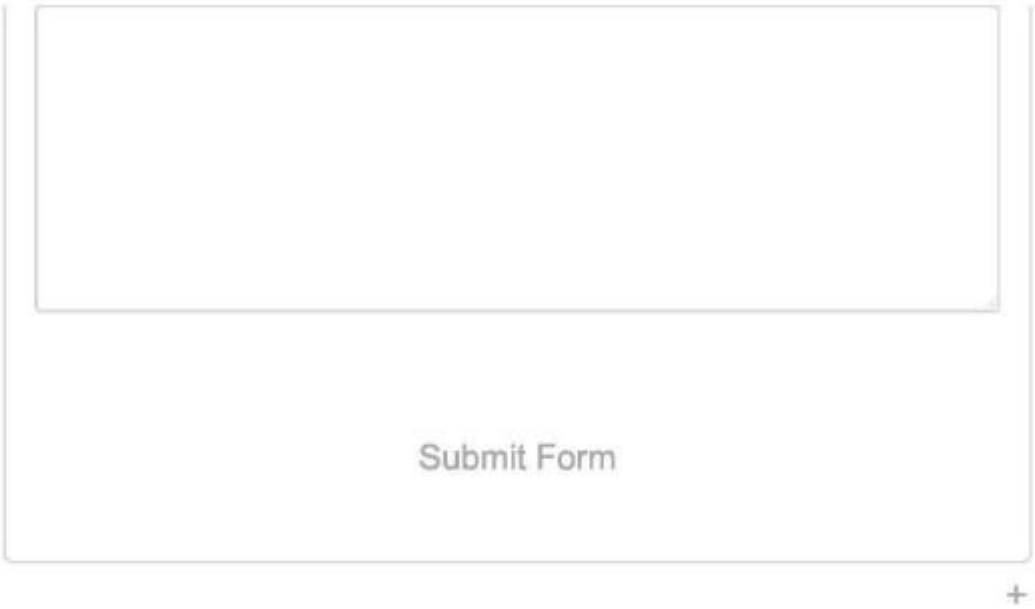
Nonprofits

What do you think is the biggest obstacle to increasing high-speed internet subscriptions in Delaware?

Are you satisfied with your internet service connection at your home and/or place of work? If not, please explain why this is (i.e., price, speed, reliability, lack of quality device to connect to the internet, etc.).

What stakeholder organization(s) or group(s) do you want to make sure we include in these broadband engagement meetings?

https://broadband.delaware.gov/pages/index.shtml?dc=public-comments 2/3


Submit Form

Survey instrument 2: Delaware agency asset inventory survey

The Delaware Agency Asset Inventory Survey was provided via a direct link during the Local and Regional Governments stakeholder sessions and through email to all stakeholders.

5/9/23, 9:02 AM Delaware Agency Asset Inventory Survey

Delaware Agency Asset Inventory Survey

By completing this short questionnaire, you will help Delaware's Department of Technology and Information identify infrastructure-related assets that may potentially help facilitate broadband deployment in Delaware. As the State engages with Internet Service Providers (ISPs) to extend network footprints and services, this information will support Delaware's goal of optimizing federal Broadband Equity, Access, and Deployment (BEAD) funding to achieve statewide universal access to high-speed broadband.

1. Please provide your contact information

Agency name

https://www.surveymonkey.com/r/DTI_AgencyAsset01 1/8

Government level (State, regional, county, local, tribal)

Name of jurisdiction

First and last name

Title

Email

Phone number

Agency website URL (if any)

2. Does your agency own or manage physical assets (i.e. conduit, fiber, structures, real estate, poles, etc.) that are available for lease to Internet Service Providers (ISP) for broadband deployment?

☐ Yes

☐ No

What information about these leasable assets would you like the State to include in its broadband planning and communications with ISPs?

3. Will your agency oversee capital construction projects between now and 2027 that include opportunities for the placement of communications facilities by your agency, other state or local agencies, regional or local consortia, or ISPs?

☐ Yes

☐ No

What information about these projects (i.e. scope, location, schedule) would you like included in State broadband planning and in communications with ISPs?

4. Has your agency analyzed workforce readiness (i.e., the availability of skilled labor) in Delaware as it may impact State broadband policies and deployment goals?

☐ Yes

☐ No

Please provide a URL link where relevant documents, presentations, or analyses are located or send to the following email address: DEbroadband@ctcnet.us

5. Does your agency have a role in workforce development that would support wired or wireless broadband deployment (including training and recruitment for equipment technicians, cable installation and repair, and construction jobs)?

☐ Yes

☐ No

Please describe programs or initiatives that your agency operates or supports or relevant programs operated by other agencies.

6. Are you aware of, or does your agency have reason to track and monitor frequent or widespread broadband or other communications outages that have significant impact on your community (or, if you represent a statewide organization, on the communities in Delaware)?

☐ Yes

☐ No

If yes, please describe your agency's role in monitoring or tracking communications reliability in your community and discuss the impact of significant outages.

7. Are you aware of, or is your agency involved in, planning efforts or development of regulations related to reliable and resilient emergency-level broadband or other communications services, especially services for critical facilities in Delaware (e.g. hospitals, schools, evacuation sites, utilities, data centers, public safety locations)?

☐ Yes

☐ No

Please provide a URL link to any publicly available materials relating to these issues and briefly describe the relevant issues related to critical facilities, including planning for climate and

weather-related hazards. You may also email these materials to DEbroadband@ctcnet.us

8. Has your agency developed any policies, regulations, or guidance regarding emergency communications, network redundancy, climate resilience, disaster preparedness, or disaster recovery planning applicable to the broadband and communications industry in Delaware?

- ☐ Yes
- ☐ No

Please provide a URL link to any publicly available documents and briefly describe policies and other materials that you believe would be helpful to Delaware's broadband planning efforts. You may also email these materials to DEbroadband@ctcnet.us

9. Has your agency developed policies or strategic planning documents that will facilitate broadband access efforts in Delaware (e.g. publicly available information that directly addresses digital equity, infrastructure deployment, economic development, network resilience, partnerships, business planning, or other related efforts)?

☐ Yes

☐ No

Please briefly summarize the material and provide a URL link or email information to DEbroadband@ctcnet.us

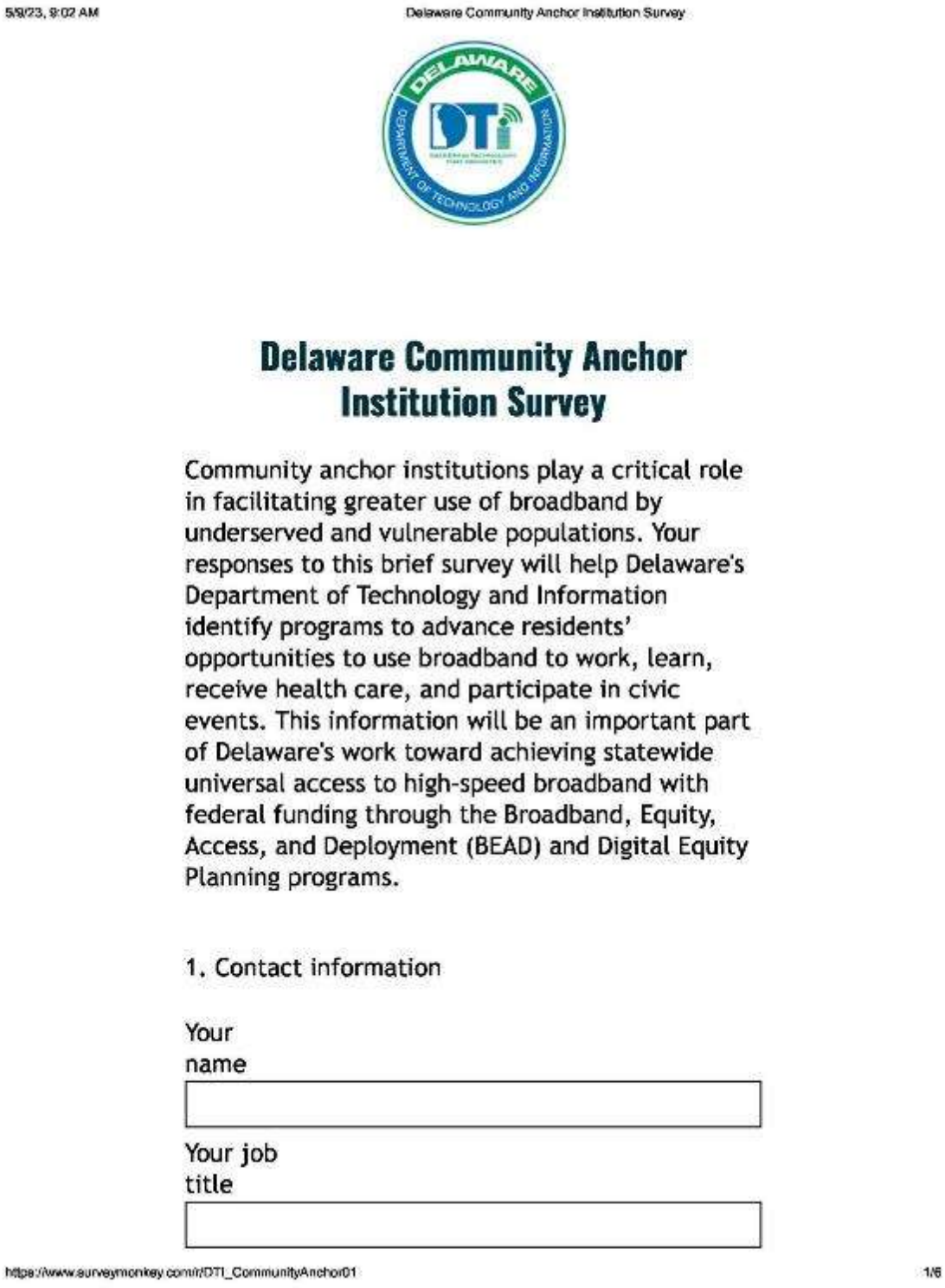
10. If applicable please share information regarding broadband-related planning efforts of other Delaware state and local agencies or contact information for agencies involved in broadband-related planning efforts, that you believe would be helpful to DTI's broadband planning efforts.

11. Please describe how your agency can collaborate with DTI and participate in its efforts to achieve statewide universal access to high-speed broadband.

Done

Survey instrument 3: Delaware community anchor institution survey

The Delaware Community Anchor Institution Survey was provided via a direct link during the Community Anchor Institutions stakeholder sessions and through email to all stakeholders.



5/9/23, 9:02 AM Delaware Community Anchor Institution Survey

Delaware Community Anchor Institution Survey

Community anchor institutions play a critical role in facilitating greater use of broadband by underserved and vulnerable populations. Your responses to this brief survey will help Delaware's Department of Technology and Information identify programs to advance residents' opportunities to use broadband to work, learn, receive health care, and participate in civic events. This information will be an important part of Delaware's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

1. Contact information

Your name

Your job title

https://www.surveymonkey.com/r/DTI_CommunityAnchor01 1/6

Your e-mail

Your phone number

Organization name

Organization address

Organization website URL

Organization's number of employees

Please indicate if your organization serves statewide, regionally, or locally

2. Choose the option that best describes your organization. Select the one that best applies.

- ○ K-12 school
- ○ Higher education entity
- ○ Library
- ○ Health clinic, health center, hospital, or other medical provider
- ○ Public safety entity
- ○ Public housing organization (including HUD-assisted housing and tribal housing organizations)
- ○ Neighborhood organization and community center
- ○ Faith-based organization

○ Community support organization that facilitates use of broadband service by low-income or other underserved populations

○ Other (please specify)

3. Which of the following programs or services do you offer to facilitate the use of broadband services by your constituents or clients? Select all that apply.

☐ Support for applicants to broadband subsidy programs such as the Affordable Connectivity Program (ACP)

☐ Loans or donations of devices (computers, tablets) to access the internet

☐ Hotspots and free or subsidized internet access

☐ Cybersecurity training

☐ Other digital literacy training

☐ Training, equipment, subsidized services, or other resources to facilitate access to telehealth and telemedicine services

☐ Training teachers of broadband skills and digital literacy

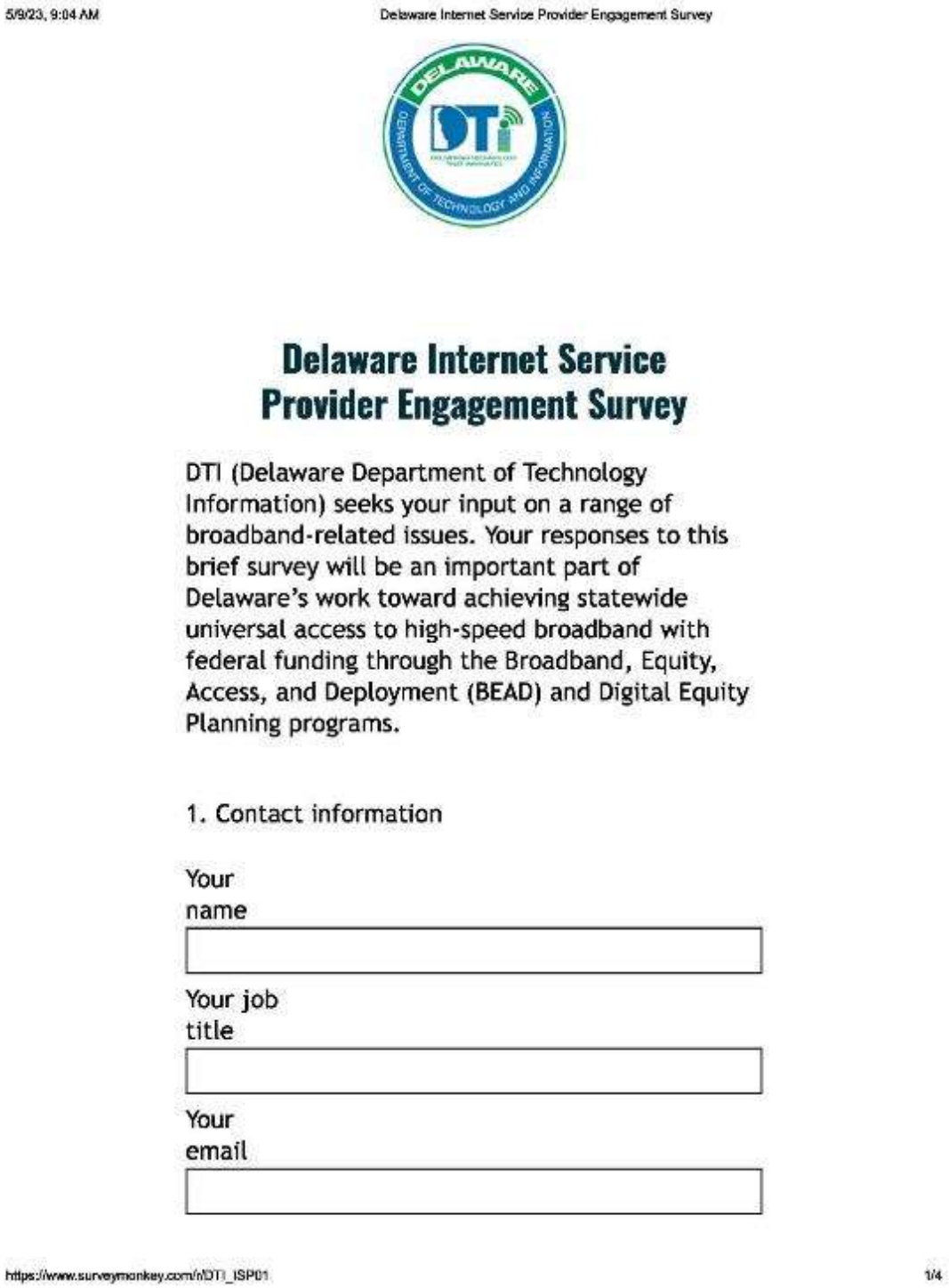
- [ ] Developing and distributing accessible online content or devices designed for us by persons with disabilities
- [ ] Developing and distributing accessible online content directed at populations with specific needs, such as seniors, low-income residents, those with low-literacy, and those whose first language is not English
- [ ] Broadband internet access services at community centers or other gathering spaces used by clients and constituents
- [ ] Funding of programs that provide any of the above programs, including broadband infrastructure, devices, and subsidies to support affordability
- [ ] Program development and planning of broadband-related services
- [ ] Advocacy for digital inclusion, affordability, and the broadband-related needs of vulnerable populations
- [ ] Emergency and disaster relief services such as evacuation centers, charging stations, replacement equipment, and information on grants, loans, and services to those impacted by disasters
- [ ] My organization does **not** offer programs that facilitate the use of broadband services

☐ Other (please specify)

Next

Survey instrument 4: Internet service provider survey

The Delaware Internet Service Provider Engagement Survey was provided via a direct link during the internet service provider stakeholder sessions and through email to all stakeholders.



5/9/23, 9:04 AM Delaware Internet Service Provider Engagement Survey

Delaware Internet Service Provider Engagement Survey

DTI (Delaware Department of Technology Information) seeks your input on a range of broadband-related issues. Your responses to this brief survey will be an important part of Delaware's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

1. Contact information

Your name

Your job title

Your email

https://www.surveymonkey.com/r/DTI_ISP01 1/4

Your phone number

Organization name

Organization address

Organization website URL

Organization's number of employees

2. Choose the option that best describes your organization and the services it offers:

Internet service provider (ISP)

Provider type

3. What recruitment and hiring sources does your organization use to hire technicians, lineworkers, engineers, construction laborers and managers, and similar positions? (Select all that apply)

- ☐ Internet-based employment posting sites
- ☐ Workforce development and community job placement centers
- ☐ Communications industry-specific training classes
- ☐ Third-party hiring and recruitment firms
- ☐ Advertisements in trade association publications and websites
- ☐ Incentivizing employee referrals

4. Does your organization offer, sponsor, or participate in any workforce development or apprenticeship programs?

- ○ Yes
- ○ No

5. If you answered yes to Q.4, please specify the type of programs. (Select all that apply)

- ☐ Mentorship
- ☐ Certification programs

- [ ] Apprenticeship
- [ ] Internship
- [ ] Sponsorships/scholarships for third-party training and classes
- [ ] Other (please specify)

6. How would you propose to work with Delaware on workforce development issues related to broadband deployment, including programs to support diversity among your organization's employees?

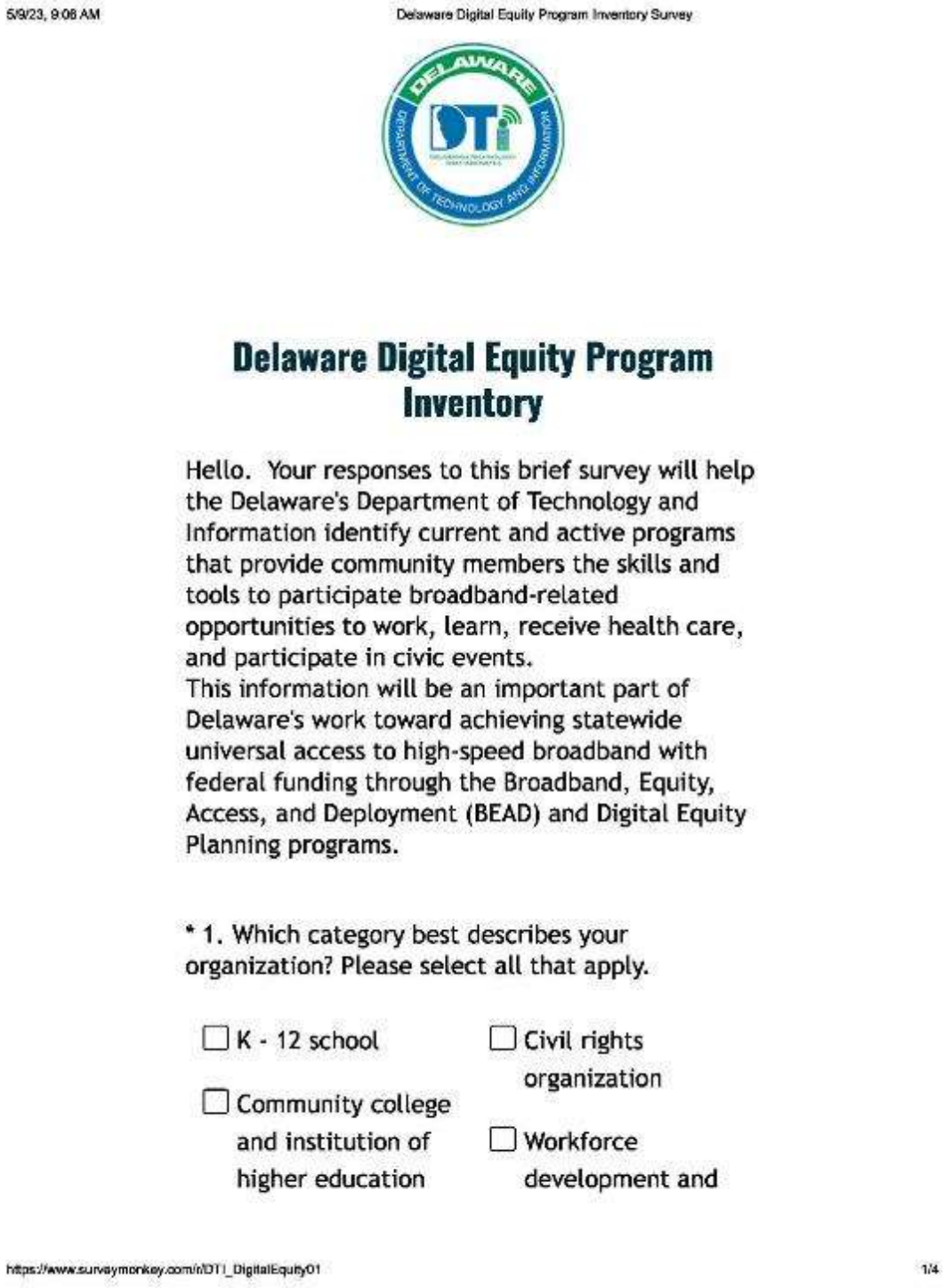
7. Does your organization participate in the Affordable Connectivity Program (ACP)?

- ○ Yes
- ○ No

Next

Survey instrument 5: Delaware Digital Equity Program inventory survey

The Delaware Digital Equity Program Inventory Survey was provided via a direct link during the Digital Equity and Covered Population Serving Organizations stakeholder sessions and through email to all stakeholders.



5/9/23, 9:06 AM Delaware Digital Equity Program Inventory Survey

Delaware Digital Equity Program Inventory

Hello. Your responses to this brief survey will help the Delaware's Department of Technology and Information identify current and active programs that provide community members the skills and tools to participate broadband-related opportunities to work, learn, receive health care, and participate in civic events.
This information will be an important part of Delaware's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

* 1. Which category best describes your organization? Please select all that apply.

- ☐ K - 12 school
- ☐ Community college and institution of higher education
- ☐ Civil rights organization
- ☐ Workforce development and

https://www.surveymonkey.com/r/DTI_DigitalEquity01 1/4

- ☐ Library
- ☐ Medical and health care provider
- ☐ State government
- ☐ County government
- ☐ Municipal government
- ☐ Council of governments (COG) or regional authority
- ☐ Tribal government
- ☐ Public housing authority
- ☐ adult literacy organization
- ☐ Internet Service Provider (ISP)
- ☐ Business
- ☐ Regional or industry association or commission
- ☐ Non-profit organization that represents individuals with disabilities
- ☐ Non-profit organization that represents veterans
- ☐ Non-profit organization that represents aging individuals
- ☐ Non-profit organization that represents incarcerated individuals
- ☐ Non-profit organization that

represents English learners

2. Has your organization created a broadband and/or digital equity plan?

- ○ Yes
- ○ No

3. Is your organization part of a broadband coalition?

- ○ Yes
- ○ No

4. Please provide the information for a point of contact in your organization.

Name	
Organization name	
Address	
Address 2	
City/Town	
State/Province	

ZIP/Postal Code

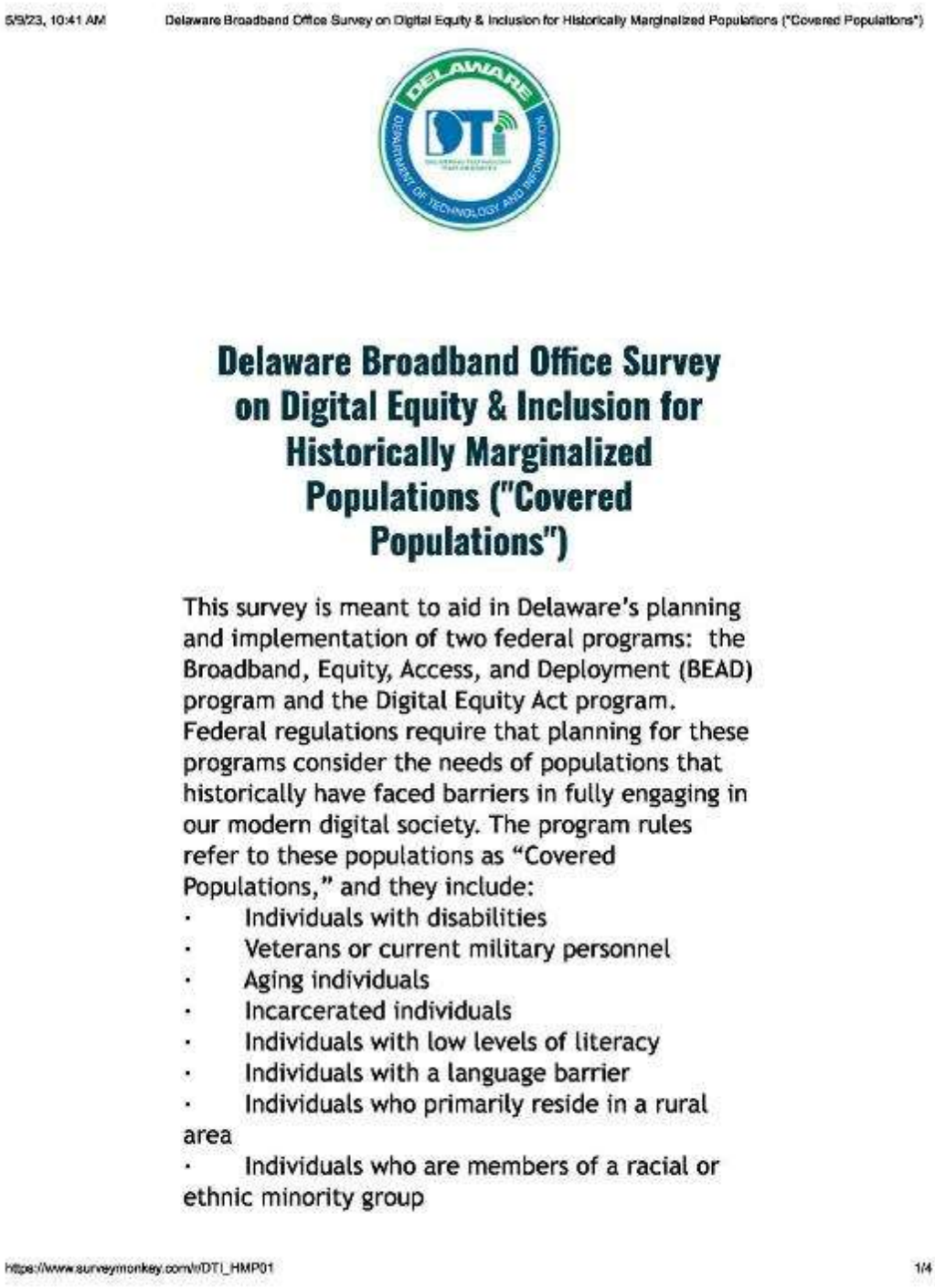
Email Address

Phone Number

Next

Survey instrument 6: Digital equity and inclusion for historically marginalized populations ("Covered Populations")

The Delaware Digital Equity and Inclusion for Historically Marginalized Populations Survey was provided via a direct link during the Digital Equity and Covered Population Serving Organizations stakeholder sessions and through email to all stakeholders.



5/9/23, 10:41 AM Delaware Broadband Office Survey on Digital Equity & Inclusion for Historically Marginalized Populations ("Covered Populations")

Delaware Broadband Office Survey on Digital Equity & Inclusion for Historically Marginalized Populations ("Covered Populations")

This survey is meant to aid in Delaware's planning and implementation of two federal programs: the Broadband, Equity, Access, and Deployment (BEAD) program and the Digital Equity Act program. Federal regulations require that planning for these programs consider the needs of populations that historically have faced barriers in fully engaging in our modern digital society. The program rules refer to these populations as "Covered Populations," and they include:

- Individuals with disabilities
- Veterans or current military personnel
- Aging individuals
- Incarcerated individuals
- Individuals with low levels of literacy
- Individuals with a language barrier
- Individuals who primarily reside in a rural area
- Individuals who are members of a racial or ethnic minority group

https://www.surveymonkey.com/r/DTI_HMP01 1/4

Organizations that serve or represent Covered Populations have a critical role in shedding light on the unique barriers such populations face, and how their needs can best be addressed. Your responses to this brief survey will help the Delaware Broadband Office identify opportunities for programs to advance vulnerable residents' full participation in broadband-related opportunities to work, learn, receive health care, and participate in civic events. This information will be an important part of Delaware's work toward achieving universal access to high-speed Internet.

1. Contact information

Your name

Your job title

Your e-mail

Your phone number

Organization name

Organization address

Organization website URL

Organization's number of employees

2. Does your organization provide programs and services that are primarily targeted to any of the following communities (the "covered populations")? (Select all that apply)

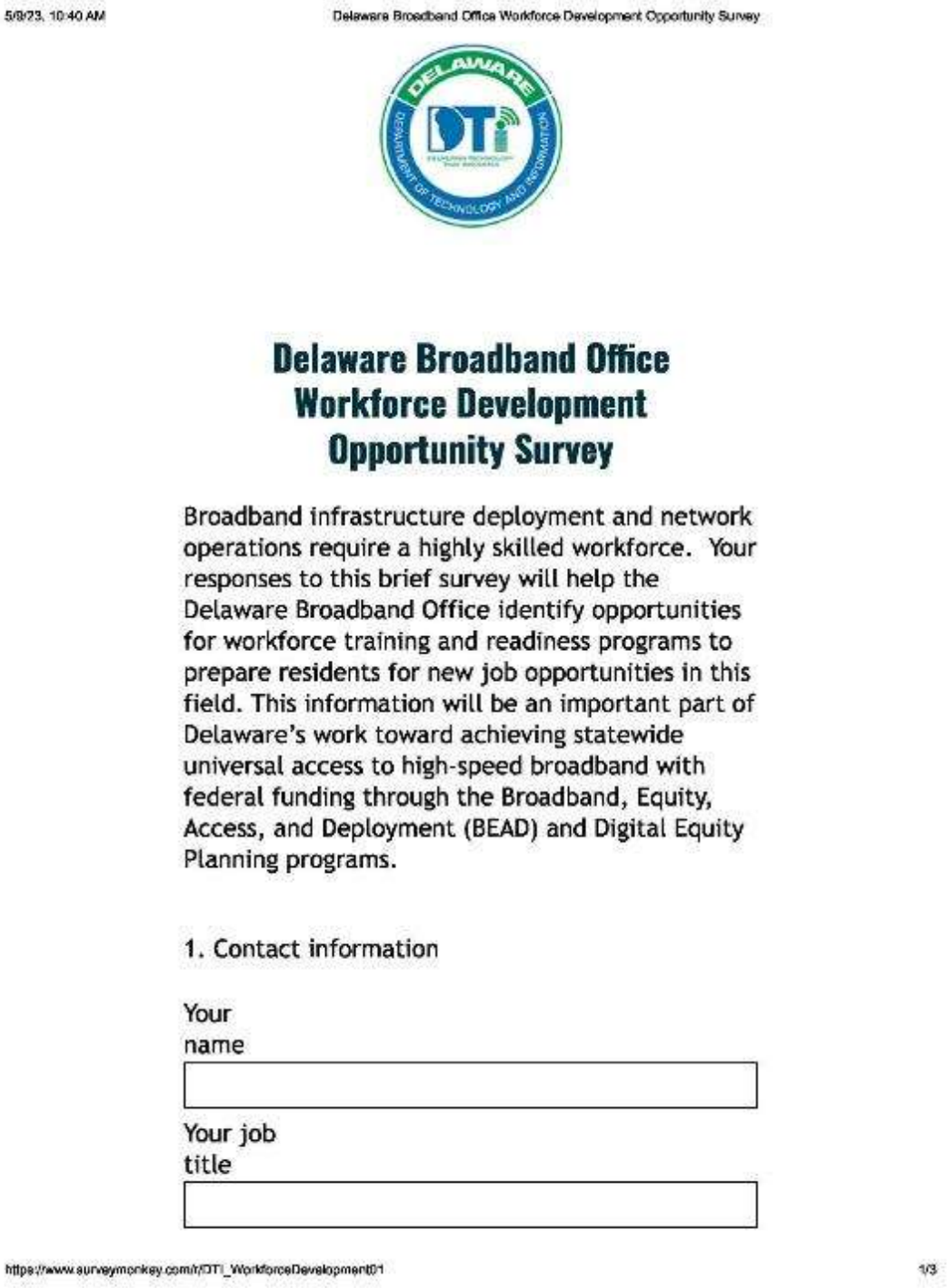
- ☐ Individuals with disabilities
- ☐ Veterans or current military personnel
- ☐ Aging individuals
- ☐ Incarcerated individuals
- ☐ Individuals with low levels of literacy
- ☐ Individuals with a language barrier

- ☐ Individuals who primarily reside in a rural area
- ☐ Individuals who are members of a racial or ethnic minority group
- ☐ No particular focus on a population or community
- ☐ Other (please specify)

Next

Survey instrument 7: Workforce development opportunity survey

The Delaware Workforce Development Opportunity Survey was provided via a direct link during the Workforce Development and Business and Economic Development stakeholder sessions and through email to all stakeholders.



5/8/23, 10:40 AM Delaware Broadband Office Workforce Development Opportunity Survey

Delaware Broadband Office Workforce Development Opportunity Survey

Broadband infrastructure deployment and network operations require a highly skilled workforce. Your responses to this brief survey will help the Delaware Broadband Office identify opportunities for workforce training and readiness programs to prepare residents for new job opportunities in this field. This information will be an important part of Delaware's work toward achieving statewide universal access to high-speed broadband with federal funding through the Broadband, Equity, Access, and Deployment (BEAD) and Digital Equity Planning programs.

1. Contact information

Your name

Your job title

https://www.surveymonkey.com/r/DTI_WorkforceDevelopment01 1/3

Your e-mail

Your phone number

Organization name

Organization address

Organization website URL

2. Type of organization (one selection only)

- ○ Internet service provider (ISP)
- ○ Labor union
- ○ Trade association
- ○ Industry certification or standards body
- ○ Government agency (state, county, local, tribal, or regional consortia)

- ○ Economic development association or agency
- ○ Regional or local workforce development board or agency
- ○ K-12 education (private, charter, public)
- ○ Higher education organization (all levels, public or private)
- ○ Trade, technical or vocational school (public, nonprofit, or for-profit)
- ○ Community based or nonprofit organization
- ○ Other (please specify)

Next