



Commonwealth of Virginia

Digital Opportunity Report - Appendices

Virginia Department of Housing and Community Development

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2 Digital Opportunity Survey

2.1 Project Background and Objectives

DHCD and Guidehouse partnered with SIR to help facilitate community-engaged research across the Commonwealth for Virginia's digital opportunity plan. As such, SIR's research objectives included:

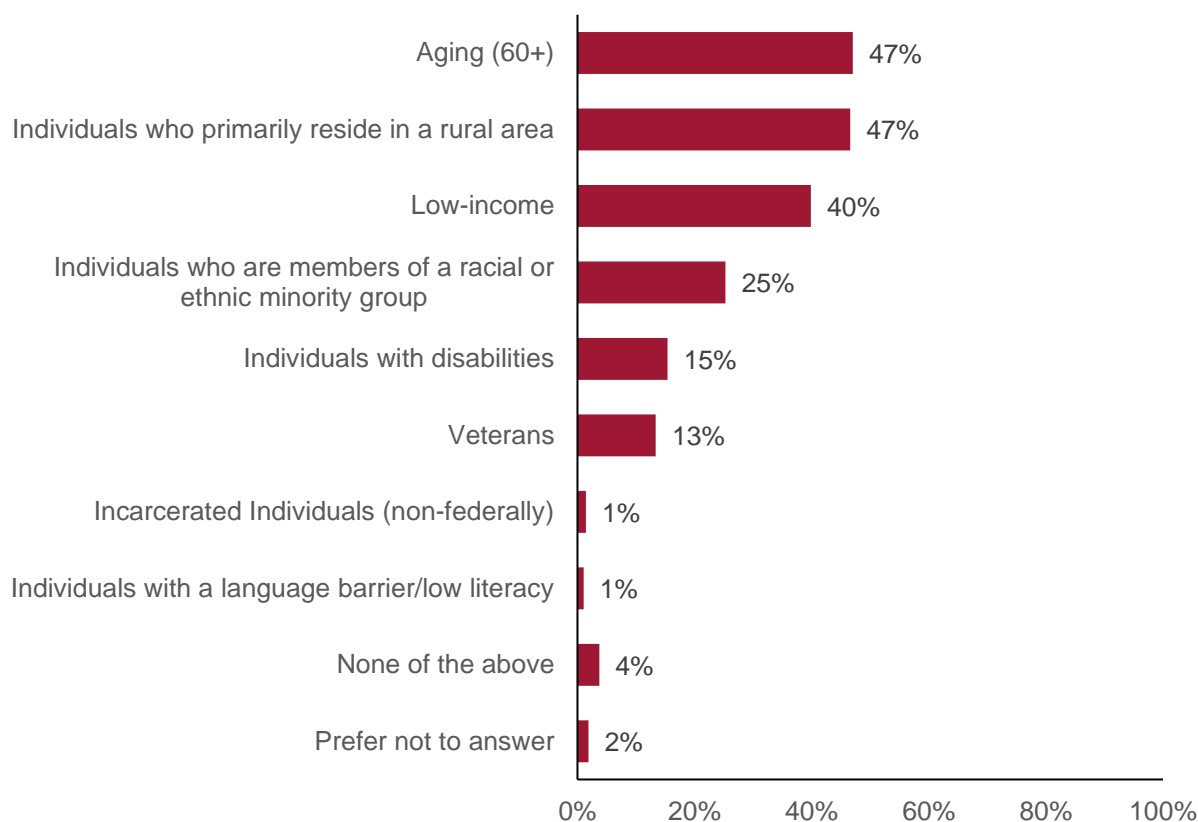
- Conduct authentic, community-driven research, intentionally including input from the community from start to finish.
- Ensure the communities are included throughout the research process.
- Engage the communities in meaningful conversation surrounding their current needs and challenges.
- Identify the challenges, develop hypotheses, conduct research, and listen to potential solutions from community stakeholders.
- Develop an accurate representation of needs that has support and buy-in from the community.
- Recognize the unique perspectives of the audiences surveyed.

2.2 Methodology

To help achieve these goals, SIR conducted an online quantitative survey across the Commonwealth. The survey was programmed into multiple languages including English, Spanish, Russian, Ukrainian, and Arabic. The survey was fielded from May 22, 2023-July 31, 2023. SIR relied on support from DHCD and Community Action Agencies across the Commonwealth to widely distribute the survey links as well as paper versions. QR codes were utilized in public spaces to encourage widespread participation. In addition, libraries, senior centers, and other public spaces provided computers on site for people to complete the survey. Paper surveys were distributed at community meetings and events. A total of 5,911 respondents were collected throughout Virginia. Respondents were grouped into eight "covered populations" based on their self-reported survey responses as well as demographic data. Respondents could belong to one covered population, more than one covered population, or no covered populations. For this report, results are segmented by covered population vs. non-covered population such that respondents who belong to at least one covered population are assigned to the covered population group. As each question was voluntary, sample sizes may vary.

2.3 Respondent Infographics

Key Insight: Almost half of respondents in the covered population are considered aging (47%) and/or primarily reside in a rural area (47%). The covered population segment has some representation of low-income (40%), racial and ethnic minority groups (25%), individuals with disabilities (15%), and veterans (13%). Incarcerated individuals (1%) and individuals with a language barrier (1%) represent the lowest proportion of the covered population sample.



Q28: Which of the following do you most identify with? (n=5,911)

2.4 Key Findings

Access

- Non-covered populations (92%) are more likely than covered populations (71%) to have both a home internet subscription and a wireless cellular plan. Covered and non-covered populations are equally likely to access the internet using a cellular data plan, but non-covered populations are more likely to use a cable modem (40% vs. 33% covered) or fiber optic (39% vs. 20% covered). Covered populations are more likely to use satellite (10% vs. 2% non-covered), DSL (9% vs. 4% non-covered), or fixed wireless (5% vs. 2% non-covered) to access the internet.

Affordability

- Covered and non-covered populations do not *significantly* differ in their reasoning for not having internet access in their home, although non-covered populations tend to say that it is not available in their area while covered populations say that it is too expensive. Covered populations (11%) are more likely than non-covered populations (5%) to spend less than \$36 on internet service while non-covered populations (32%) are more likely to spend \$76 to \$100 (25% covered populations). Covered populations (25%) are more willing than non-covered populations (17%) to spend more for better internet service.

Reliability

- Covered populations (30%) are more likely than non-covered populations (18%) to frequently experience disruptions in internet service. Covered populations are also more likely to experience a subscribed speed not being achievable (22% vs. 16% non-covered), a provider not offering the technology in their location (21% vs. 11% non-covered), a provider denying a request for service (5% vs. 2% non-covered), and/or credit challenges obtaining an internet plan (4% vs. 1% non-covered).

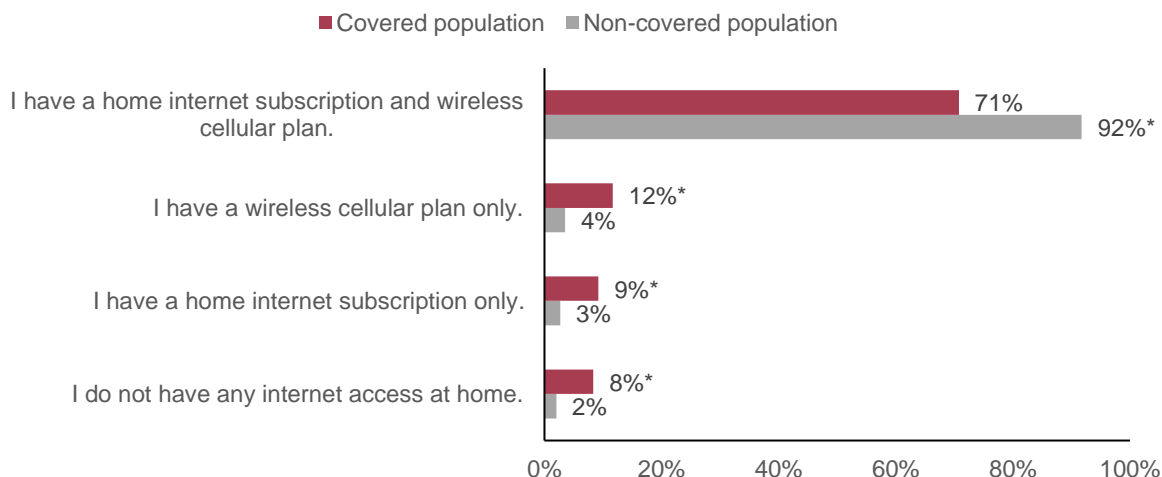
Digital Literacy

- More than 99% of all respondents own at least one digital device, although non-covered respondents are more likely to own specific devices (e.g., smart phone) than covered populations. Non-covered populations are generally more comfortable completing tasks online than covered populations. This is especially true for virtual doctors' appointments as only 74% of covered population respondents feel comfortable completing this task compared to 88% of non-covered population respondents.

Awareness of Programs

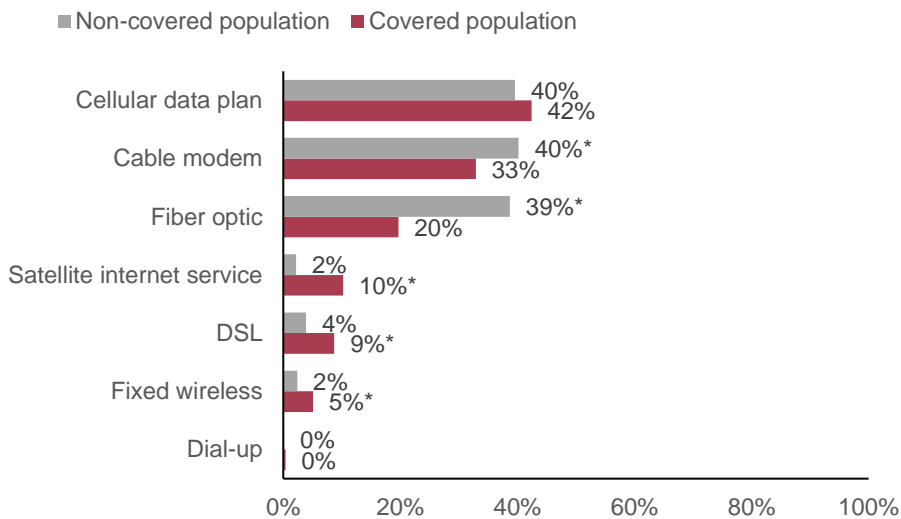
- The covered population is more likely to have applied to the FCC Affordable Connectivity Program (10%) and/or the FCC Lifeline Program (4%) than the non-covered population (3% and 1%, respectively). Covered and non-covered populations do not differ in their likelihood of being aware of these programs.

Key insight: Most respondents have both a home internet subscription and a wireless cellular plan. This is more common among the non-covered population (92%) than the covered population (71%).



Q4: Do you have internet access (WiFi) at home? Covered population n=5,318; Non-covered population n=593; *p<.05

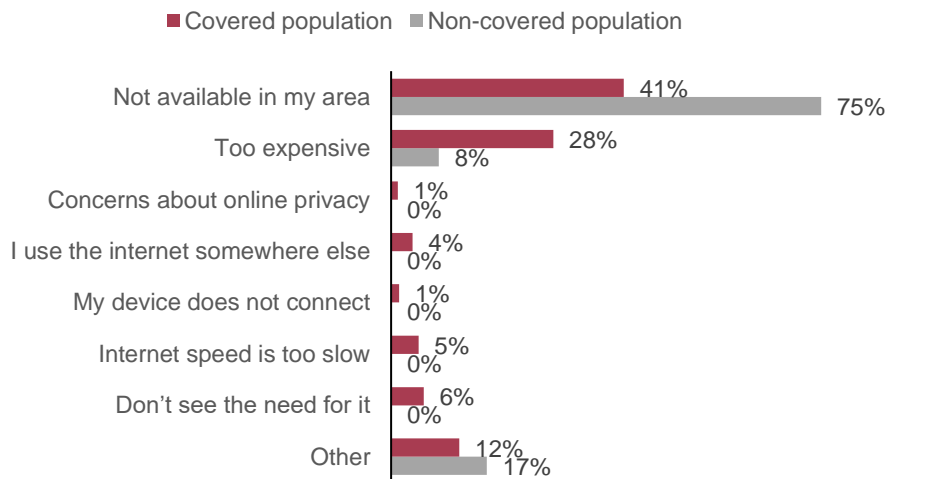
Key insight: More than one-third of respondents access the internet using their cellular data plan. The non-covered population is more likely to use a cable modem (40%) or fiber optic (39%) than the covered population (33% and 20%, respectively).



Q5: How do you access the internet access at home?

Covered population n=4,880; Non-covered population n=584; *p<.05

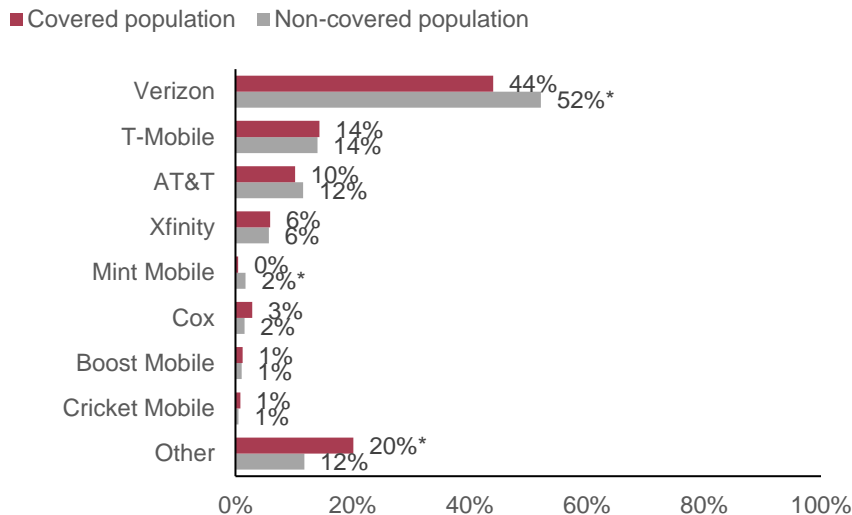
Key insight: The most common reason respondents do not have internet access is because it is not available in their area; This is especially true among the non-covered population (75%). Almost one-third of the covered population (28%) do not have internet access because it is too expensive.



Q6: What is the main reason why you do not have internet access at home?

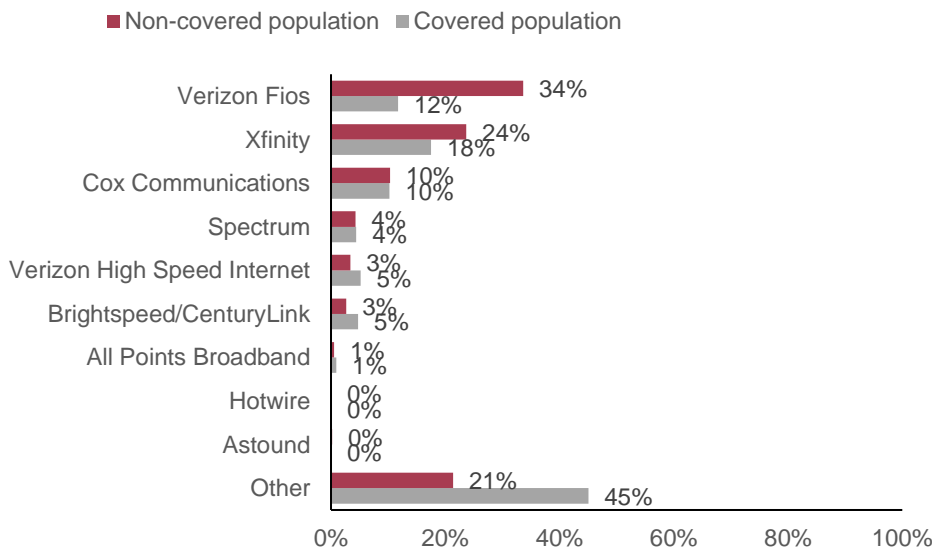
Covered population n=427; Non-covered population n=12; Sample size too small for significance testing.

Key insight: Respondents are most likely to have Verizon as their wireless provider, especially those in the non-covered population (52%). The covered population is more likely to use another cellular plan provider (20%), such as US Cellular (3%) or Straight Talk (3%).



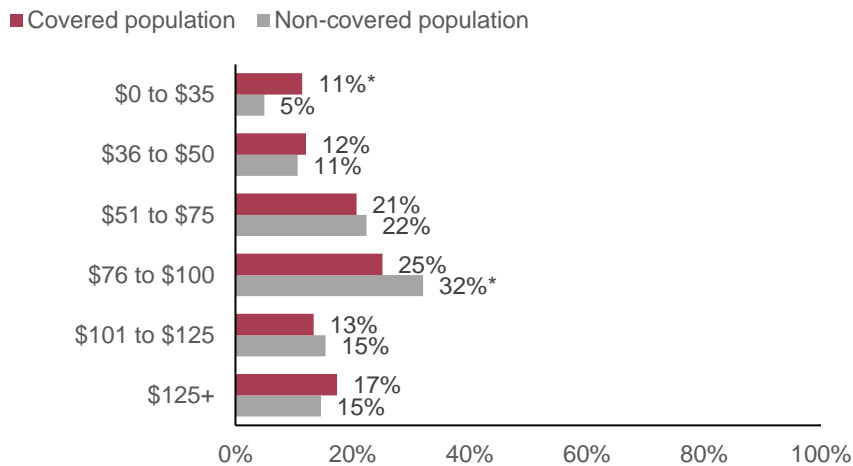
Q7: What is the name of your wireless cellular plan provider/plan?
 Covered population n=4,782; Non-covered population n=579; *p<.05

Key insight: Respondents use a wide variety of providers for home internet. One-third of the non-covered population (34%) uses Verizon Fios while the covered population is more likely to use another provider (45%) such as Firefly (4%) or Shentel (3%).



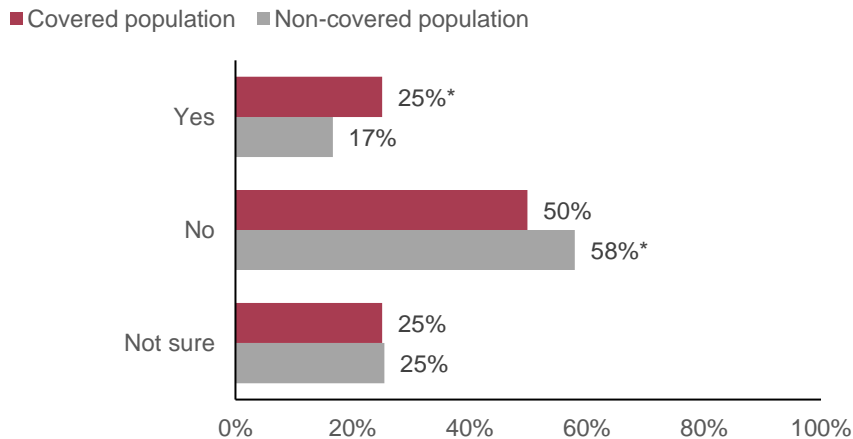
Q8: What is the name of your home's internet provider/plan?
 Covered population n=4,498; Non-covered population n=562; *p<.05

Key insight: Nearly half of respondents spend between \$50 and \$100 each month on their internet service (not as a part of a cellular plan). The covered population (11%) is more likely than the non-covered population (5%) to spend \$35 or less per month.



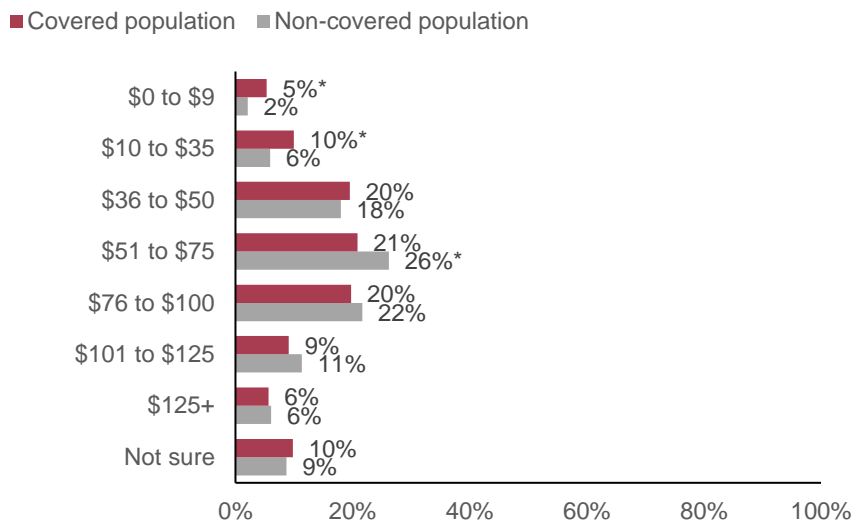
Q9: How much do you pay each month for internet service (NOT as part of a cellular plan)?
 Covered population n=4,365; Non-covered population n=527; * p<.05

Key insight: Although more than half of respondents are not willing to pay more for better internet service, the covered population (25%) is more willing than the non-covered population (17%).



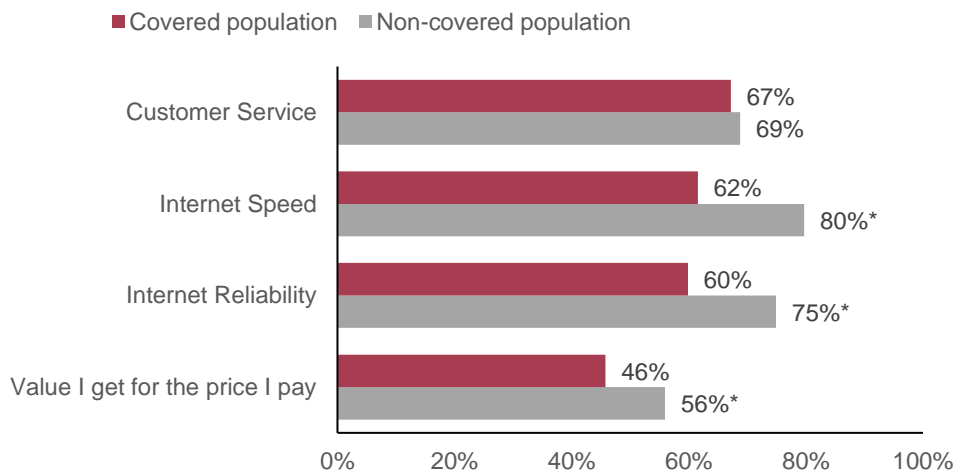
Q10: Would you be willing to pay more for better internet service?
 Covered population n=4,791; Non-covered population n=578; * p<.05

Key insight: Half of respondents are willing to pay between \$50 and \$100 per month for better internet service. The covered population (15%) would prefer to pay \$35 or less per month for better service.



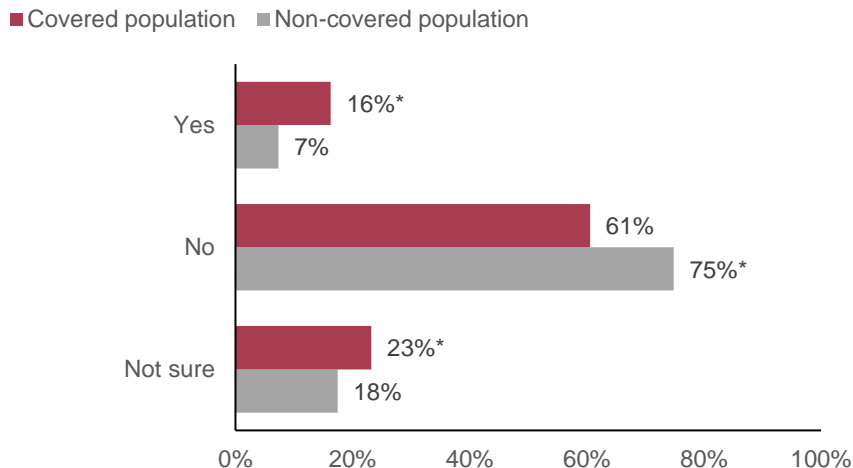
Q11: How much would you be willing to pay for better internet service per month (NOT as part of a cellular plan)?
 Covered population n=4,716; Non-covered population n=573; *p<.05

Key insight: Respondents are generally satisfied with customer service, internet speed, and reliability, but less satisfied with value. The non-covered population is more likely to be satisfied on most of these traits than the covered population.



Q12: Please rate your internet service provider(s) on the following:
 Covered population n=4,499; Non-covered population n=556; *p<.05

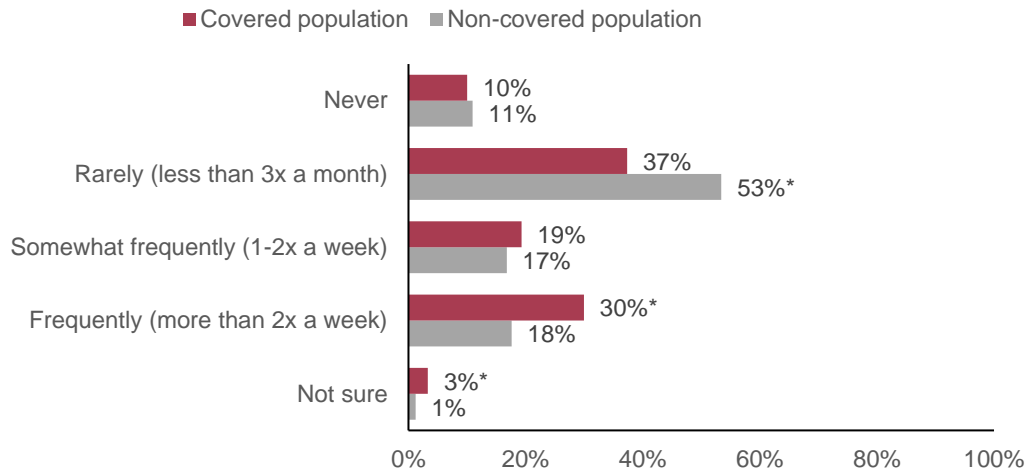
Key Insight: Most respondents do not have a cap on their monthly internet usage, although this is more common in the non-covered population (75%) than the covered population (61%).



Q13: Do you have a cap on monthly internet usage?

Covered population n=4,880; Non-covered population n=584; *p<.05

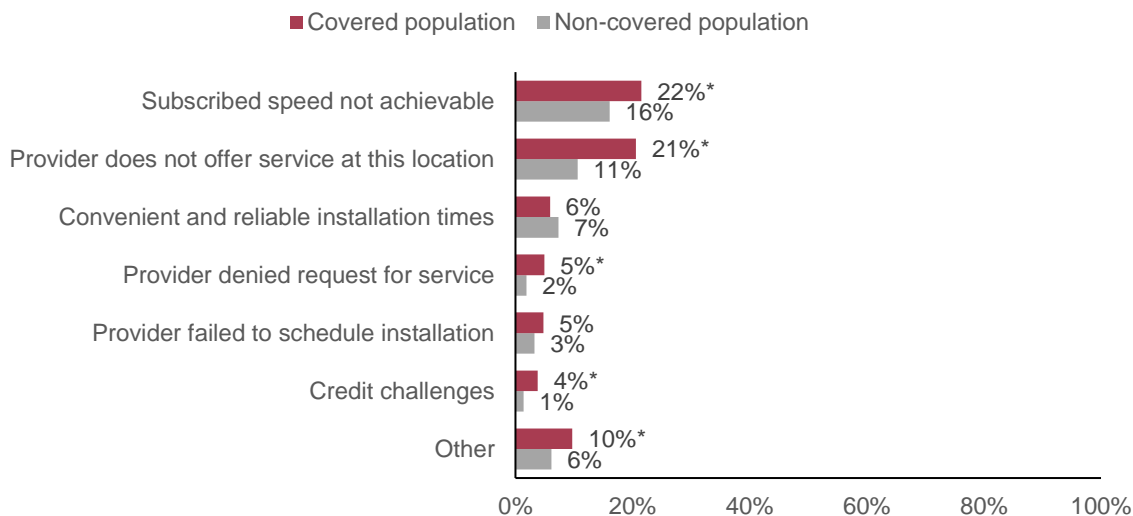
Key Insight: Respondents vary in how often they experience disruptions in download or upload speeds. The covered population (30%) is more likely than the non-covered population (18%) to frequently experience disruptions.



Q14: How often do you experience disruptions or download/upload speeds that are slower than expected?

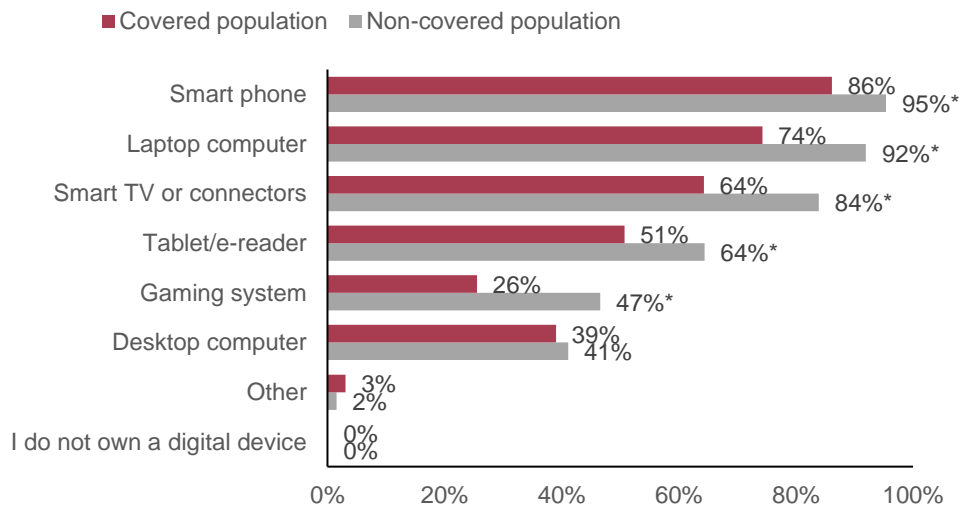
Covered population n=4,880; Non-covered population n=584; *p<.05

Key Insight: The most common problems among respondents are their subscribed speeds not being achievable and that the provider does not offer service at their location. This is especially true among the covered population.



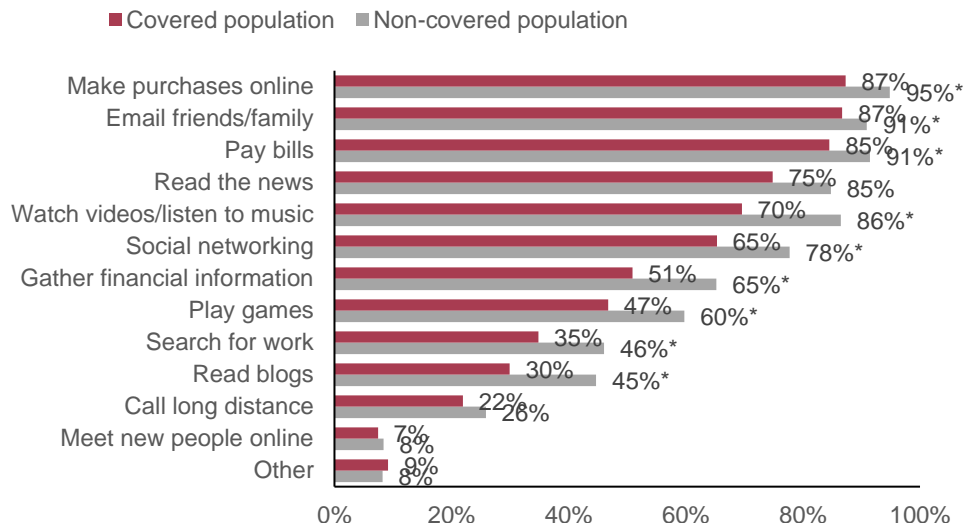
Q15: Have you experienced any of these problems trying to get internet?
 Covered population n=4,880; Non-covered population n=584; *p<.05

Key Insight: Most devices are more commonly used by the non-covered population than the covered population. The most used devices among all respondents are smart phones, laptop computers, and smart TVs.



Q16: Which of these do you use to access the internet? Covered population n=4,880; Non-covered population n=584; *p<.05

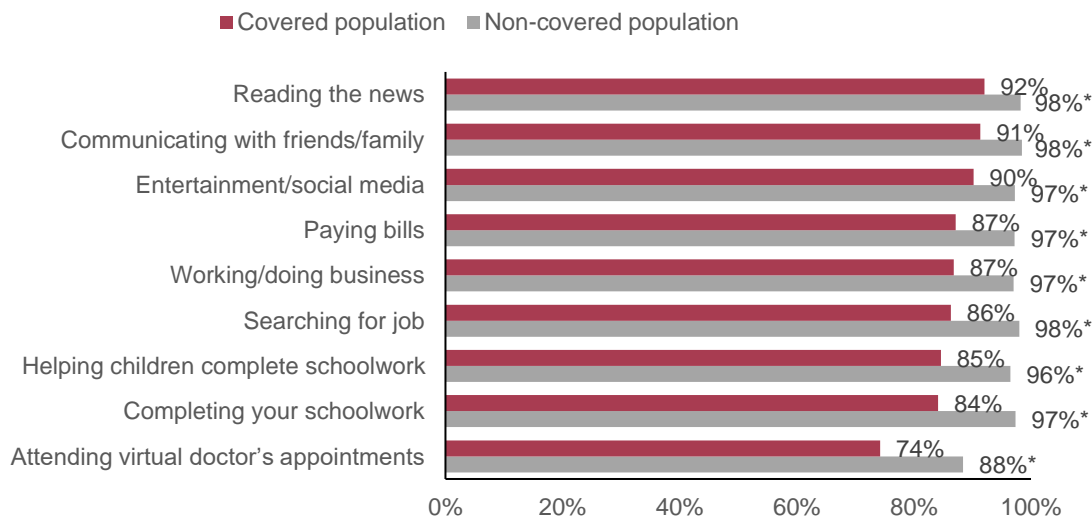
Key Insight: Respondents are most likely to use the internet to make purchases, e-mail family/friends, and/or pay bills. The non-covered population is more likely to do most activities online than the covered population.



Q17: When you use the Internet, what kind of activities do you do online?

Covered population n=4,880; Non-covered population n=584; *p<.05

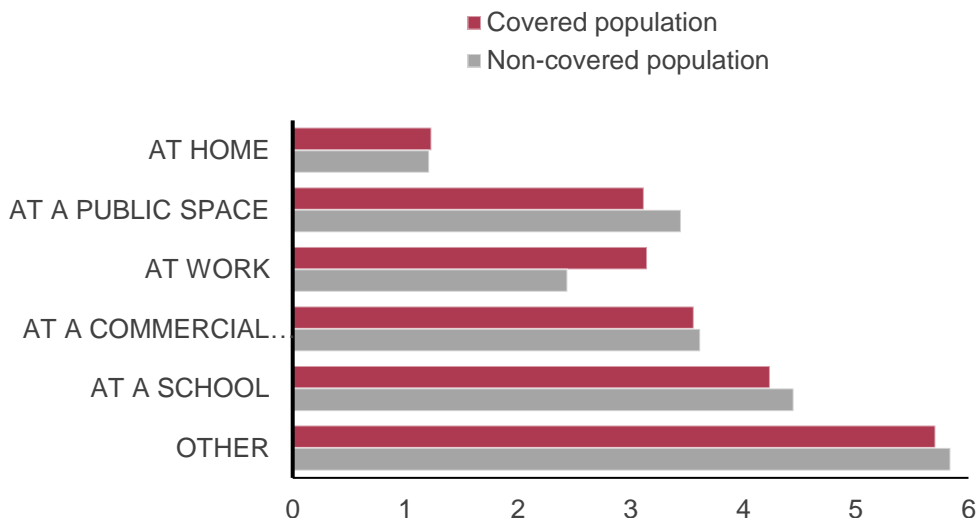
Key Insight: Respondents are comfortable using their devices to do most tasks, but less so virtual doctor’s appointments. The non-covered population is more likely to feel comfortable using digital devices to complete tasks than the covered population.



Q18: How comfortable are you using digital devices to do these tasks?

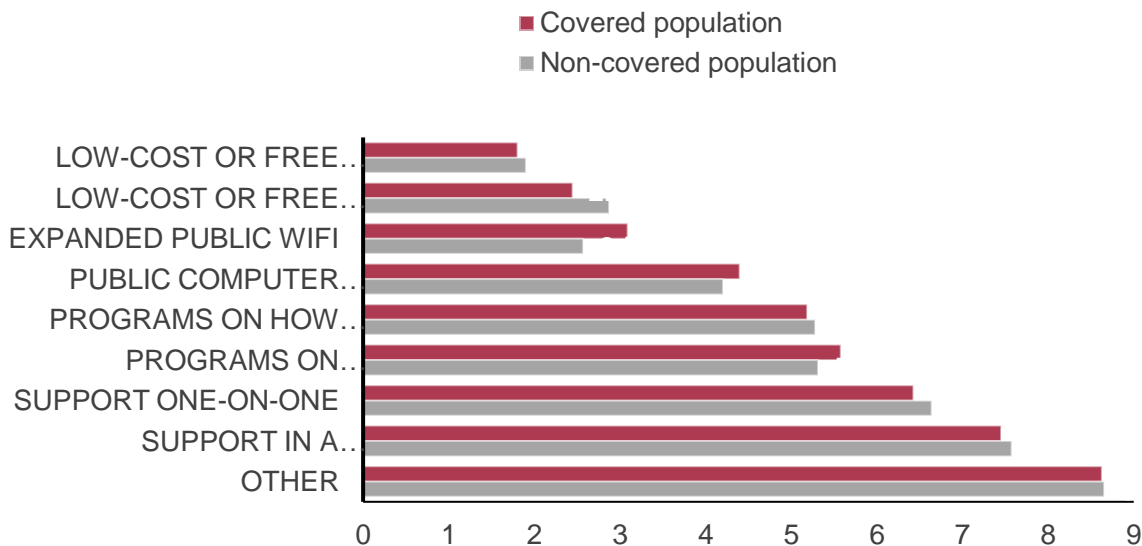
Covered population n=3,883; Non-covered population n=509; *p<.05

Key Insight: Covered population respondents are more likely to access the internet at work while non-covered respondents are more likely to access the internet in a public space and/or at school.



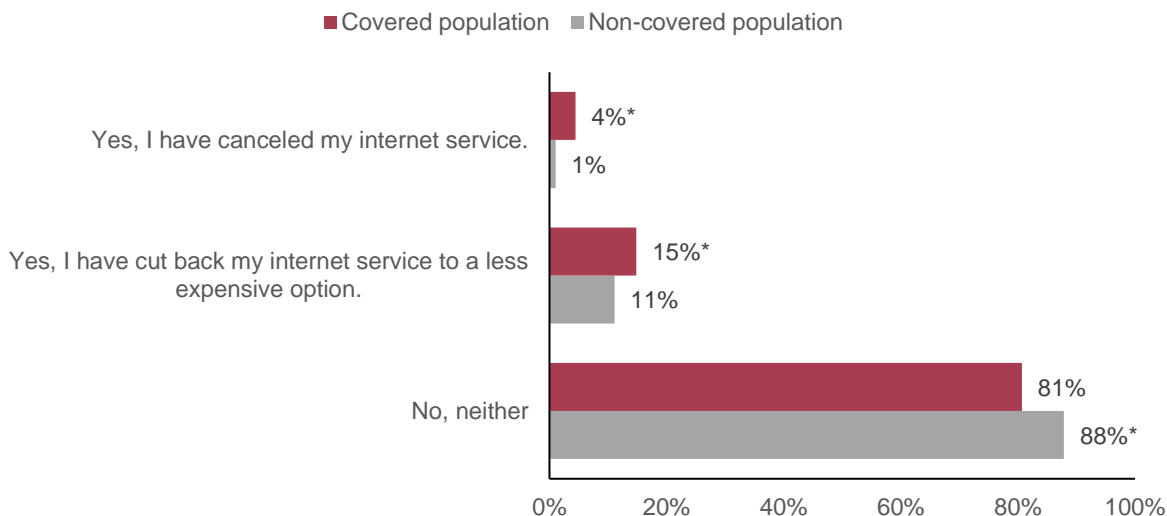
Q19: Where do you frequently access the internet?
 Covered population n=4,113; Non-covered population n=538; *p<.05

Key Insight: Respondents are most likely to want low-cost or free internet service and digital devices. The covered population is more likely than the non-covered population to want expanded public WiFi, public computer spaces, and/or programs on digital skills for jobs.



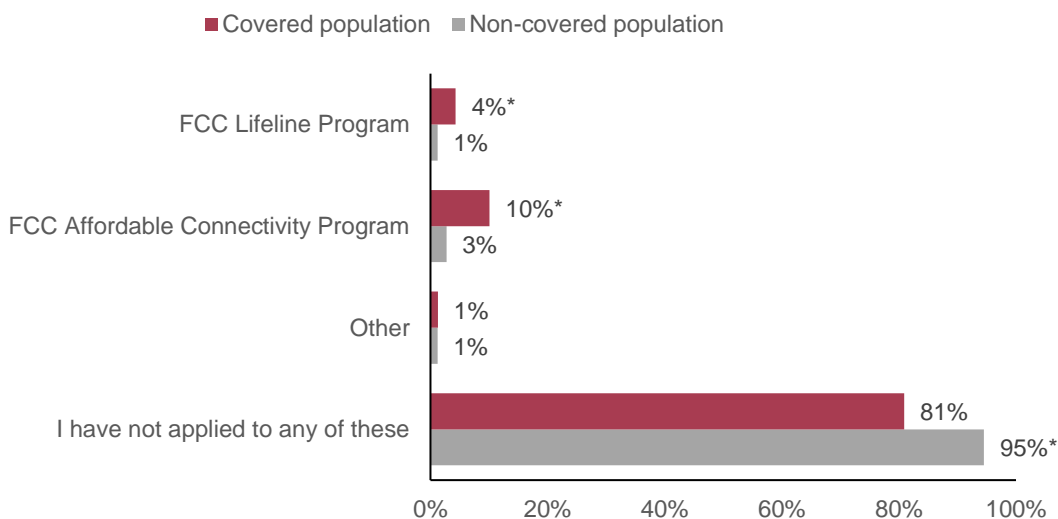
Q20: What options would you like to have available?
 Covered population n=4,328; Non-covered population n=518; *p<.05

Key Insight: Most respondents have not cancelled or cut back on their internet service. The covered population (19%) is more likely to have cancelled or cut back their internet service to a less expensive option than the non-covered population (12%).



Q22: Have you canceled your internet service or cut back your internet to a less expensive service plan, within the past 12 months?
 Covered population n=4,753; Non-covered population n=576; *p<.05

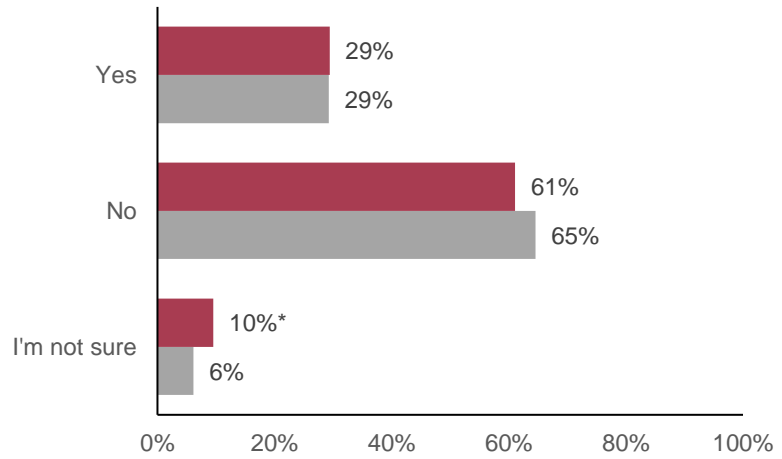
Key Insight: The covered population (14%) is more likely than the non-covered population (4%) to have applied to the FCC Lifeline Program and/or the FCC Affordable Connectivity Program, although most respondents have not applied to either.



Q23: Have you ever applied for any of the following programs?
 Covered population n=4,880; Non-covered population n=584; *p<.05

Key Insight: Only one-third of respondents are aware of these programs. Awareness does not differ by covered vs. non-covered population.

■ Covered population ■ Non-covered population



Q24: Are you aware of these programs?
Covered population n=4,880; Non-covered population n=584; * $p < .05$

2.5 Survey Analysis by Covered Population

2.5.1 Low-Income Covered Population

Access

- Similar to other non-covered populations, higher-income respondents (81%) are more likely to have both a home internet subscription and wireless cellular plan than low-income respondents (59%). Higher- and low-income respondents generally access the internet in their homes using the same methods (e.g., a cellular data plan, cable modem), although higher-income respondents (25%) are more likely than low-income respondents (15%) to access the internet using fiber optic.

Affordability

- Low-income respondents (39%) tend to not have internet access at home because it is too expensive, while higher-income respondents (66%) say that it is not available in their area. Low-income respondents (33%) generally spend less than \$50 a month for internet while higher-income respondents (62%) may spend upwards of \$76 to \$125. Higher-income respondents (27%) are also willing to pay more for better internet service while low-income respondents (54%) would not.

Reliability

- Unlike other covered populations, low-income respondents do not experience disruptions in internet services more frequently than higher-income respondents. In fact, higher-income respondents are more likely to experience their subscribed speed not being achievable (22%) or their provider not offering service in their location (21%) than low-income respondents (18% and 17%, respectively). Low-income respondents (8%) are, however, more likely than higher-income respondents (1%) to experience credit challenges with obtaining an internet plan.

Digital Literacy

- While low-income respondents are more likely *not* to own any digital devices than higher-income respondents, more than 99% of all respondents own at least one digital device. Like other covered populations, low-income respondents are less likely than higher-income respondents to feel comfortable completing most tasks online. This is especially true for virtual doctors' appointments as only 66% of low-income respondents feel comfortable completing this task compared to 81% of higher-income respondents.

Awareness of Programs

- Similar to other covered populations, low-income respondents are more likely to have applied to the FCC Affordable Connectivity Program (22%) and/or the FCC Lifeline Program (10%) than higher-income respondents (3% and 1%, respectively). Low-income respondents (37%) are also more likely to be aware of these programs than higher-income respondents (26%).

2.5.2 Racial or Ethnic Minority Group Covered Population

Access

- Similar to other non-covered populations, non-minority respondents (74%) are more likely to have both a home internet subscription and wireless cellular plan than minority respondents (71%). However, minority respondents are more likely to access the internet at home using a cellular data plan (46% compared to 41% non-minority) or a cable modem (44% compared to 31% non-minority), while non-minority respondents are more likely to access the internet using fiber optic (24% compared to 15% minority), satellite (10% compared to 7% minority), DSL (9% compared to 5% minority), or fixed wireless (5% compared to 4% minority).

Affordability

- Minority respondents (36%) tend to not have internet access at home because it is too expensive, while non-minority respondents (49%) say that it is not available in their area. Minority and non-minority respondents do not differ in the amount they spend on the internet each month or their willingness to pay more for internet service.

Reliability

- Unlike other covered populations, minority respondents (13%) are more likely to never experience disruptions in service than non-minority populations (9%). However, minority respondents are more likely to say that providers do not offer convenient and reliable installation times (9% compared to 5% non-minority) and/or experience credit challenges with obtaining an internet plan (6% compared to 3% non-minority). Non-minority respondents (20%) are more likely to say that providers do not offer the technology or service type at their location than minority respondents (17%).

Digital Literacy

- While minority respondents are more likely *not* to own any digital devices than non-minority respondents, more than 99% of all respondents own at least one digital device. Minority respondents are less comfortable than non-minority respondents completing some tasks online such as paying bills (14% uncomfortable minority vs. 11% uncomfortable non-minority), communicating with friends/family (10% uncomfortable minority vs. 7% uncomfortable non-minority), and reading the news (9% uncomfortable minority vs. 7% uncomfortable non-minority) but just as comfortable doing some tasks as non-minority respondents such helping children complete schoolwork, working or doing business, or attending virtual doctor's appointments.

Awareness of Programs

- Similar to other covered populations, low-income respondents are more likely to have applied to the FCC Affordable Connectivity Program (14%) and/or the FCC Lifeline Program (6%) than higher-income respondents (8% and 3%, respectively). Minority respondents are not more likely than non-minority respondents to be aware of these programs.

2.5.3 Aging (60+) Covered Population

Access

- Unlike other non-covered populations, older respondents are not more likely than younger respondents to have both a home internet subscription and a wireless cellular plan. Older respondents are more likely to have just a home internet subscription (10% vs. 7% younger) while younger respondents are more likely to have just a cellular plan (12% vs. 9% older). Older respondents are more likely to access the internet using fiber optic (25% vs. 20% younger), DSL (9% vs. 8% younger), or dial-up (1% vs. 0% younger), while younger respondents are more likely to access the internet at home using a cellular data plan (46% vs. 36% older).

Affordability

- Older respondents (12%) tend to not have internet access at home because they don't see a need for it, while younger respondents (46%) say that it is not available in their area. Respondents widely vary on how much they pay for internet with older respondents paying either \$36 to \$50 (14%) or more than \$125 (21%) and younger respondents paying either \$0 to \$35 (13%) or \$76 to \$100 (27%). Younger respondents (26%) are also willing to pay more for better internet service while older respondents (53%) would not.

Reliability

- Unlike other covered populations, older respondents do not experience disruptions in internet services more frequently than younger respondents. Younger respondents, however, are more likely to experience provider not offering technology in their location (23% vs. 15% older), subscribed speed not being achievable (22% vs. 19% older), lack of convenient installation times (8% vs. 4% older), provider denying a request for service (6% vs. 3% older), provider failing to schedule an installation (6% vs. 4% older), and credit challenges obtaining a plan (5% vs. 2% older).

Digital Literacy

- While younger respondents are more comfortable using most devices than older respondents, older respondents (46%) are more likely to be comfortable using a desktop computer than younger respondents (34%). Like other covered populations, older respondents are less likely than younger respondents to feel comfortable completing most tasks online. This is especially true for virtual doctors' appointments as only 71% of older respondents feel comfortable completing this task compared to 79% of younger respondents.

Awareness of Programs

- Unlike other covered populations, younger respondents are more likely to have applied to the FCC Affordable Connectivity Program (12%) and/or the FCC Lifeline Program (5%) than older respondents (6% and 2%, respectively). Younger respondents (33%) are also more likely to be aware of these programs than older respondents (25%).

2.5.4 Incarcerated Covered Population

Access

- Similar to other non-covered populations, non-incarcerated respondents (73%) are more likely to have both a home internet subscription and wireless cellular plan than incarcerated respondents (41%). Incarcerated and non-incarcerated respondents generally access the internet in their homes using the same methods, although incarcerated respondents (63%) are more likely than non-incarcerated respondents (42%) to access the internet at home using a cellular data plan.

Affordability

- Incarcerated respondents tend to not have internet access at home because they use the internet somewhere else (18%) or their device does not connect (9%), while non-incarcerated respondents (44%) say that it is not available in their area. Incarcerated respondents (36%) generally spend less than \$36 a month for internet while non-incarcerated respondents (31%) may spend upwards of \$101 to \$125+. Incarcerated and non-incarcerated respondents do not differ in their willingness to pay more for better internet service.

Reliability

- Unlike other covered populations, incarcerated respondents (20%) are more likely to never experience disruptions in service than non-incarcerated populations (10%). Incarcerated individuals (11%) are, however, more likely than non-incarcerated individuals (4%) to have credit challenges obtaining an internet plan.

Digital Literacy

- While incarcerated respondents are more likely *not* to own any digital devices than non-incarcerated respondents, at least 98% of all respondents own at least one digital device. Like other covered populations, incarcerated respondents are less likely than non-incarcerated respondents to feel comfortable completing most tasks online. This is especially true for virtual doctors' appointments as only 59% of incarcerated respondents feel comfortable completing this task compared to 76% of non-incarcerated respondents.

Awareness of Programs

- Similar to other covered populations, incarcerated respondents are more likely to have applied to the FCC Lifeline Program (24%) and/or the FCC Affordable Connectivity Program (19%) than non-incarcerated respondents (4% and 9%, respectively). Incarcerated respondents are equally as likely as non-incarcerated respondents to be aware of these programs.

2.5.5 Veterans Covered Population

Access

- Unlike other non-covered populations, veterans (77%) are more likely to have both a home internet subscription and wireless cellular plan than non-veterans (72%). Veterans and non-veterans generally access the internet in their homes using the same methods (e.g., a cellular data plan, cable modem), although veterans (13%) are more likely than non-veterans (9%) to access the internet using satellite.

Affordability

- Veterans tend to not have internet access at home because it is not available in their area (57%) or they have concerns about online privacy and security (4%), while non-veterans (30%) say that it is too expensive. Non-veterans (45%) generally spend less than \$75 a month for internet while veterans (40%) may spend upwards of \$101 to \$125+. Veterans (29%) are also willing to pay more for better internet service while non-veterans (52%) would not.

Reliability

- Unlike other covered populations, veteran respondents do not experience disruptions in internet services more frequently than non-veteran respondents. Veteran respondents (25%) are, however, more likely than non-veteran respondents (20%) to say that their subscribed speed is not achievable.

Digital Literacy

- Veterans are more likely to access the internet using a desktop computer (52% vs. 38% non-veteran) or tablet (58% vs. 51% non-veteran) while non-veterans are more likely to use a smart phone (88% vs. 85% veteran) or a gaming system (29% vs. 23% veteran). Veterans do not differ from non-veterans in their comfortability of completing online tasks.

Awareness of Programs

- Unlike other covered populations, veterans are less likely to have applied to the FCC Affordable Connectivity Program (5%) and/or the FCC Lifeline Program (2%) than non-veterans (10% and 4%, respectively). Two-thirds of veterans (66%) are not aware of these programs compared to 61% of non-veterans.

2.5.6 Individuals with Disabilities Covered Population

Access

- Similar to other non-covered populations, respondents without disabilities (74%) are more likely to have both a home internet subscription and wireless cellular plan than respondents with disabilities (67%). Respondents with and without disabilities do not differ in the devices that they use to access the internet at home.

Affordability

- Respondents with and without disabilities do not differ in why they do not have internet access at home. Respondents with disabilities (16%) do, however, generally spend less than \$36 a month for internet while respondents without disabilities (26%) are more likely to spend between \$76 to \$100. Respondents with and without disabilities also do not differ in their willingness to pay more for better internet.

Reliability

- Like other covered populations, respondents with disabilities (35%) are more likely to experience disruptions in internet service frequently compared to respondents without disabilities (28%). Respondents with disabilities are also more likely to experience their subscribed speed not being achievable (25%), a provider who does not provide convenient installation times (8%), a provider who denied a request for service (6%), or credit challenges obtaining an internet plan (6%) than respondents without disabilities (20%, 6%, 4%, and 3%, respectively).

Digital Literacy

- Respondents without disabilities are more likely to access the internet using a smart phone (88%), laptop (77%), or smart TV (67%) than respondents with disabilities (84%, 68%, and 62%, respectively). Like other covered populations, respondents with disabilities are less likely than respondents without disabilities to feel comfortable completing most tasks online. This is especially true for virtual doctors' appointments as only 72% of respondents with disabilities feel comfortable completing this task compared to 77% of respondents without disabilities.

Awareness of Programs

- Similar to other covered populations, respondents with disabilities are more likely to have applied to the FCC Affordable Connectivity Program (25%) and/or the FCC Lifeline Program (11%) than higher-income respondents (7% and 3%, respectively). Respondents with disabilities (41%) are also more likely to be aware of these programs than respondents without disabilities (28%).

2.5.7 Language Barrier Covered Population

Access

- Unlike other non-covered populations, individuals with and without a language barrier do not differ on if they have internet access at home. They also do not differ on the devices they use to access the internet.

Affordability

- Individuals with and without a language barrier do not differ on their reason for not having internet access at home. They also do not differ in how much they spend on internet access or their willingness to pay more for better internet.

Reliability

- Individuals with a language barrier (33%) are more likely to somewhat frequently experience disruptions in internet service compared to individuals without a language barrier (19%), otherwise there are no differences in this frequency. However, individuals with a language barrier are more likely to experience a provider denying a request for service (11%) or credit challenges obtaining an internet plan (11%) than individuals without a language barrier (5%, and 4%, respectively).

Digital Literacy

- Individuals with and without a language barrier are similar in the devices that they use to access the internet, although individuals without a language barrier are more likely to use a laptop (76%) or desktop (39%) computer than individuals with a language barrier (64% and 26%, respectively). Like other covered populations, respondents with a language barrier are less likely than respondents without a language barrier to feel comfortable completing most tasks online. This is especially true for virtual doctors' appointments as only 60% of respondents with a language barrier feel comfortable completing this task compared to 76% of respondents without a language barrier.

Awareness of Programs

- Respondents without a language barrier (83%) are more likely than respondents with a language barrier (67%) to have never applied for the FCC Affordable Connectivity Program and/or the FCC Lifeline Program. Respondents with and without a language barrier are equally as likely to be aware of these programs.

2.5.8 Rural Covered Population

Access

- Similar to other non-covered populations, non-rural respondents (76%) are more likely to have both a home internet subscription and wireless cellular plan than rural respondents (69%). Rural and non-rural respondents access the internet using different methods. Rural respondents are more likely to use a cellular data plan (46% vs. 39% non-rural), satellite (16% vs. 4% non-rural), DSL (13% vs. 5% non-rural), or fixed wireless (7% vs. 3% non-rural). Non-rural respondents are more likely to use a cable modem (42% vs. 22% rural) or fiber optic (26% vs. 15% rural).

Affordability

- Rural respondents (64%) are more likely than non-rural respondents (25%) to not have home internet access because it is not available in their area. Rural and non-rural respondents do not differ on the amount they spend for internet access, but rural respondents (34%) are more willing to pay more for better internet service than non-rural respondents (17%).

Reliability

- Like other covered populations, rural respondents (43%) frequently experience disruptions in internet services more than non-rural respondents (18%). Rural respondents are also more likely to experience a provider not offering the technology in their location (32% vs. 11% non-rural), a subscribed speed not being achievable (29% vs. 15% non-rural), a provider denying a request for service (7% vs. 3% non-rural), and/or a provider failing to schedule a service installation within 10 days (6% vs. 4% non-rural).

Digital Literacy

- Although non-rural respondents are more likely *not* to own any digital devices than rural respondents, more than 99% of all respondents own at least one digital device. Rural respondents are more likely to access the internet using a smart phone (89%) or a laptop computer (78%) compared to non-rural respondents (86% and 75%, respectively). Unlike other covered populations, rural respondents are more comfortable reading the news (94% vs. 92% non-rural), communicating with family/friends (93% vs. 91% non-rural) searching for a job (89% vs. 87% non-rural), and/or completing schoolwork (87% vs. 85% non-rural). Rural and non-rural respondents are equally comfortable attending virtual doctor's appointments.

Awareness of Programs

- Unlike other covered populations, non-rural respondents are more likely to have applied to the FCC Lifeline Program (5%) than rural respondents (3%), but not the FCC Affordable Connectivity Program. Rural and non-rural respondents do not differ in their awareness of these programs.

2.6 Demographics – Covered Population

Gender	
Female	65%
Male	31%
Other/Non-binary	1%
Prefer not to answer	3%
Hispanic	
No	91%
Yes, Mexican, Mexican American, Chicano	1%
Yes, Puerto Rican	1%
Yes, Cuban	0%
Yes, another Hispanic, Latino, or Spanish origin	2%
Prefer not to answer	5%
Race	
White	74%
Black or African American	17%
American Indian or Alaska Native	2%
Asian	2%
Native Hawaiian or Pacific Islander	0%
Other	3%
Prefer not to answer	6%
Age	
18 to 24	3%
25 to 34	10%
35 to 44	14%

45 to 54	15%
55 to 64	22%
65 or over	34%
Prefer not to answer	2%
Employment	
Employed, working 40 or more hours per week	45%
Employed, working 1-39 hours per week	11%
Not employed, looking for work	4%
Not employed, not looking for work	2%
Student	1%
Retired	28%
Disabled, not able to work	7%
Prefer not to answer	2%
Individuals in Household (Average)	
Under Age 18	1
Age 18 to 65	2
Over Age 65	1
Income	
Less than \$25,000	15%
\$25,000 to \$49,999	18%
\$50,000 to \$99,999	25%
\$100,000 to \$149,999	14%
\$150,000 or more	12%
Prefer not to answer	17%
Education	

Less than high school	3%
High school diploma (or GED)	15%
Some college	20%
Associate's degree	10%
Bachelor's degree	25%
Master's degree	18%
Professional degree beyond a master's degree	6%
Prefer not to answer	3%

2.7 Demographics – Non-covered Population

Gender	
Female	61%
Male	34%
Other/Non-binary	1%
Prefer not to answer	4%
Hispanic	
No	95%
Yes, Mexican, Mexican American, Chicano	0%
Yes, Puerto Rican	0%
Yes, Cuban	0%
Yes, another Hispanic, Latino, or Spanish origin	0%
Prefer not to answer	5%
Race	
White	93%

Black or African American	0%
American Indian or Alaska Native	0%
Asian	0%
Native Hawaiian or Pacific Islander	0%
Other	1%
Prefer not to answer	6%
Age	
18 to 24	2%
25 to 34	13%
35 to 44	30%
45 to 54	37%
55 to 64	16%
65 or over	0%
Prefer not to answer	3%
Employment	
Employed, working 40 or more hours per week	84%
Employed, working 1-39 hours per week	7%
Not employed, looking for work	1%
Not employed, not looking for work	3%
Student	1%
Retired	2%
Disabled, not able to work	0%
Prefer not to answer	2%
Individuals in Household (Average)	
Under Age 18	1

Age 18 to 65	2
Over Age 65	0
Income	
Less than \$25,000	0%
\$25,000 to \$49,999	0%
\$50,000 to \$99,999	24%
\$100,000 to \$149,999	26%
\$150,000 or more	35%
Prefer not to answer	14%
Education	
Less than high school	0%
High school diploma (or GED)	6%
Some college	11%
Associate's degree	6%
Bachelor's degree	34%
Master's degree	31%
Professional degree beyond a master's degree	10%
Prefer not to answer	2%

3 Regional Reports

NOTE | Regional Reports included in separately appendices folder

The Digital Opportunity Regional Reports provide a snapshot of the digital landscape across the nine officially designated regions in the Commonwealth. These reports were developed by the participating community action agencies, leveraging their local expertise and unmatched proximity to Virginia residents and covered populations. In many ways, they operate as a short-form version of the Commonwealth-wide Digital Opportunity report and document the digital assets and needs of Virginia's unique regions. Each Regional Report developed by the partner CAAs can be found attached separately as a zipped file.

4 Asset Inventory

NOTE | Asset Inventory included separately as an Excel File

The Asset Inventory is the Commonwealth's comprehensive repository for all digital assets available to residents. It offers This appendix item is attached separately as an Excel file.

5 Stakeholder Engagement

5.1 Digital Equity Act Program Requirements

State Digital Equity Plans submitted under the State Digital Equity Planning Grant (SDEPG) Program must include a description of the coordination and outreach strategy, including opportunities for public comment by, collaboration with, and ongoing engagement with representatives of each category of covered populations within the Commonwealth.¹ Although covered populations are essential stakeholders to engage when developing a DEA Plan Submission, the NTIA DEA NOFO emphasizes the importance of engaging groups in addition to those that represent covered populations. Specifically, additional groups that may not directly serve covered populations are digital inclusion organizations, organizations offering digital inclusion programs, and broader community organizations.

5.2 Stakeholder Outreach and Public Engagement Strategy

Virginia's stakeholder engagement involved a three-pronged approach to outreach and the deployment of a statewide survey to reach the public. These efforts are detailed below:

Focus Groups

Four focus groups were conducted with a wide swath of organizations to create a forum for dialogue and shared ideas, as well as maximize efficiency of scheduling amidst a large number of agencies. These sessions captured organizational perspectives on Digital Opportunity through the lenses of broadband access, affordability, and digital literacy and will ask participants to speak to the impact of digital opportunity on the populations they serve.

¹ Covered populations are defined by the NTIA as

1. Community Action Agencies Not Developing Regional Digital Opportunity Plans

- Community Action Agencies (CAAs) are local subdivisions of the Commonwealth that provide various services to residents. This Focus Group engaged with CAAs for two key reasons: 1) as integral members of communities throughout Virginia, they provide additional breadth to perspectives and needs for their communities; 2) as they fall within CAA regions that are developing plans, the digital needs of these communities will help inform these plans as well.

2. Virginia Health and Human Services Agencies

- Virginia Health and Human Services (HHS) encompasses multiple agencies tasked with directly and indirectly serving NTIA-defined Covered Populations. This Focus Group convened a focused range of stakeholders in government that spoke to the existing digital programs in place to support these populations as well as the unique needs of their respective covered populations from a statewide-perspective.

3. Community Anchor Institutions

- Community Anchor Institutions (CAIs) are defined by DHCD as: schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations.

4. Broadband Advisory Council

- The Broadband Advisory Council advises the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. This entity has been integral to Virginia's past and ongoing efforts to bring both broadband and digital opportunity to all. This Focus Group explored the perspective of this group both as an advisory body and as individuals that can speak to their communities' needs.

1:1 Interviews

The Commonwealth of Virginia conducted 18 1:1 interviews to capture stakeholder perspectives. The 1:1 conversations cast a wide net across many leading agencies and organizations throughout the Commonwealth that intimately know and serve the covered populations. Many of these interviews engaged organizations that represent covered populations that were able to provide direct insight into the lived experiences of these groups. In particular, these conversations focused on both the everyday digital needs and opportunities for these populations, as well as the broader implications of what improved digital inclusion could mean for the organizations and those that they serve. Please reference **5.3.1** for a detailed list of which organizations were engaged in 1:1 interviews.

Community Input Sessions

6 community input sessions supported the research efforts of CAAs and DHCD to hear directly from stakeholders and Virginians. Whereas the 1:1 conversations offered an opportunity to hear insights individually, these community sessions enabled more collective discussion about the unique digital inclusion needs and opportunities within each region. The CAA Community Input Sessions were developed to align with existing programming led by the CAA to leverage attendance and maximize community participation. Some CAAs led their own sessions while others were thoughtfully facilitated by the DHCD team and CAA staff. Insights gathered at these sessions informed the CAAs in the development of their Regional Plans.

Public Survey

The Commonwealth gathered the input of over 5,900 Virginians through the completion of the Digital Opportunity Survey. The survey was designed to be user-friendly, brief, and accessible to all Virginians. It aimed to capture residents’ perspectives on broadband access, affordability, and digital literacy in order to help DHCD paint the most accurate portrait of the broadband landscape across the Commonwealth. Most respondents accessed the survey through a digital link or QR code. These links were distributed through the contact networks of DHCD, stakeholder partners, and the CAAs to as many residents of the Commonwealth as possible. The digital survey was made available in English, Spanish, Russian, Ukrainian, and Arabic. The survey will be available in a printed, paper format for communities that have limited internet or cellular access. Physical surveys were distributed through CAAs and partners such as local libraries. The printed surveys were available for respondents in all languages made available digitally. Word of mouth, physical marketing fliers, and publicization of the paper survey at DHCD and CAA-sponsored events were the primary mechanism for promoting the physical survey.

Overview of Engagement Efforts

1:1 Interviews
<ul style="list-style-type: none"> • Department of Social Services, State Office • Department of Social Services, Local Offices • Library of Virginia • Virginia Department of Corrections • Virginia Department of Education • Virginia Association of Counties • Virginia Community Action Reentry System • Virginia Association of Area Agencies on Aging • Virginia Poverty Law Center • The Virginia, Maryland, and Delaware Association of Electric Cooperatives • The Hispanic Federation • Literacy for Life • Virginia Broadband Industry Association • Albemarle County • Virginia Municipal League • Virginia Community Action Partnership • Broadband Association of Virginia

Focus Groups
<ul style="list-style-type: none"> • CAAs not developing regional plans • Community Anchor Institutions • VA Broadband Advisory Council • Health and Human Services Departments <ul style="list-style-type: none"> ○ Department of Social Services ○ Department for Aging and Rehabilitative Services ○ Board of for People with Disabilities ○ No Wrong Door ○ Department for the Deaf and Hard of Hearing ○ Department for the Blind and Vision Impaired ○ Board of for People with Disabilities

Community Input Sessions
<ul style="list-style-type: none"> • Bay Aging / Eastern Shore • HRCAP • CAPUP • Improvement Association • Williamsburg James City County

5.3 Stakeholder Engagement Discussion Summaries

The below tables outline high-level summaries from each discussion with stakeholders.

5.3.1 1:1 Interviews

Department of Social Services, State Office	
Summary	On June 16 th , 2023 a 1:1 virtual session was held with representatives from the Virginia DSS to discuss digital opportunity needs for the broader Virginia community and the clients of DSS agencies.
Affected Populations	The four primary populations served by DSS, as recalled during the meeting, were aging individuals, individuals with disabilities, individuals with language barriers, and rural populations.
Digital Needs	Lack of knowledge for funding community and clients surrounding merits of broadband were identified as challenges. VDSS indicated that there were caried capacities of local VDSS offices to support programming. Identified

	need for usability improvements of CommonHealth platform to improve users' ability to navigate.
Digital Assets	<ul style="list-style-type: none"> • Virginia DSS issued a call to all local DSS' to encourage applicants to enroll in the ACP when they qualify for other benefits

Department of Social Services, Local Offices	
Summary	On July 6 th , 2023, a virtual 1:1 interview was held with community the local office director to discuss on-the-ground digital programming opportunities and needs for local DSS offices.
Affected Populations	Local DSS offices identified aging populations as especially impacted by unreliable broadband connections.
Digital Needs	Local DSS offices highlighted that stable internet access is the biggest challenge for their clients. For the DSS offices and partners to deliver existing or consider expanding programs, financial and staffing capacity have been identified as the primary barriers.
Digital Assets	<ul style="list-style-type: none"> • United Way of SW Virginia deployed hotspots to support clients in connecting with local DSS offices. • Every local DSS office is equipped with administrative services staff who can help patients complete materials electronically.

Library of Virginia	
Summary	On June 20 th , 2023, a virtual 1:1 interview was held with Library of Virginia leaders to discuss digital needs and programming opportunities within the Commonwealth's library system.
Affected Populations	The Virginia's public library network serves all covered populations, however particular populations of recent interest include incarcerated individuals, aging individuals, & low-income individuals.
Digital Needs	Public libraries are functioning at low capacity and require funding for additional staff to deliver digital tools and programs or hire a Digital Navigator. Library of Virginia raised the concern that many current funding sources are emergency-driven and may not be renewed.
Digital Assets	<ul style="list-style-type: none"> • Library of Virginia disbursed CARES and ARPA funding to the public library network to distribute public internet access, tablets, laptops, and hotspots to the public. • Some libraries offer 1:1 digital literacy skills building sessions <ul style="list-style-type: none"> ○ In Williamsburg, these sessions were in partnership with a low-income apartment complex ○ Other programming is targeted directly at certain populations (i.e., understanding MyChart for aging adults)

Virginia Department of Corrections	
Summary	On August 1 st , 2023, a virtual 1:1 interview was held with Department of Correction leaders to discuss digital needs and programming opportunities within Virginia's carceral system.
Affected Populations	The DOC serves incarcerated individuals.
Digital Needs	Today, the majority of correctional facilities only have access to speeds of 1.5 Mbps, far below rates considered "broadband" speeds even by current FCC definitions of 25/3. This creates significant limitations on what correctional facilities can offer even in the way of basic digital services for inmates. Telehealth, digital learning, and other areas of digital opportunity are unable to be supported with the existing infrastructure. Cost of retrofitting buildings and deploying the necessary digital infrastructure is prohibitive, particularly as most correctional facilities are located in remote / rural regions of the Commonwealth away from population centers.
Digital Assets	<ul style="list-style-type: none"> • With the exception of some trainings VADOC offers around digital skills and literacy, as well as some partnerships with local nonprofits / libraries for those transitioning back into society, there are no major digital assets presently available to incarcerated individuals

Virginia Department of Education	
Summary	On June 30 th , 2023, a virtual 1:1 interview was held with Department of Education leaders to discuss digital needs and programming opportunities within the Commonwealth's schooling system.
Affected Populations	The DOE supports learners across the Commonwealth that identify as members of multiple covered populations.
Digital Needs	The DOE recognizes Virginia's varied topography as a major challenge to universal broadband connection and opportunity. For some urban communities struggling with poverty, parents have expressed safety and security concerns with having their children carry Chromebooks home from school. The DOE also highlighted the need for increased data processing capacity for those with existing broadband connections to support AI-functions and advanced computing. They highlighted that device provision is not a need for the DOE at this time.
Digital Assets	<ul style="list-style-type: none"> • VirtualVirginia is a state program that offers online courses across the Commonwealth to address the discrepancies between course offerings in school districts. • The DOE has provided each Virginia student with a Chromebook

Virginia Association of Counties	
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Summary	On June 20 th , 2023, a virtual 1:1 interview was held with VACO leaders to discuss digital needs and programming opportunities at the county level.
Affected Populations	VACO supports residents who are members of all covered populations.
Digital Needs	Deployment and access were a large focus of VACO's efforts to-date. Now VACO is encountering an adoption and use challenge, mainly around education of what is available and why it is valuable.
Digital Assets	<ul style="list-style-type: none"> • Previous initiative through a school for funding for digital resources aimed at helping families that spoke English as a second language, however adoption of these resources was at 10% of the target goal • VACO Achievement Awards (recognizing Digital Literacy and Skill Building in York County and Henrico County)

Virginia Community Action Reentry System

Summary	On July 18 th , 2023, a virtual 1:1 interview was held with VA CARES leaders to discuss digital needs and programming opportunities for the previously incarcerated community.
Affected Populations	This interview focused on the needs and assets surrounding the incarcerated population and their connection to broadband.
Digital Needs	VA CARES highlighted that housing and employment are the two most pressing needs of recently incarcerated individuals and many resources to secure these things are available online. It also was noted that digital literacy is critical, since incarcerated individuals have limited access to updated technology while serving their sentence. The cost of digital devices and topography were also raised as barriers to broadband connection.
Digital Assets	<ul style="list-style-type: none"> • VA CARES does not currently offer any dedicated digital programs or initiatives, but is open to distributing funds to its subcontracting organizations or hosting a digital program at the state level.

Virginia Association of Area Agencies on Aging

Summary	On July 20 th , 2023, a virtual 1:1 interview was held with Virginia Association of Area Agencies on Aging leaders to discuss digital needs and programming opportunities for the Commonwealth's aging population.
Affected Populations	The V4A primarily serves aging residents, however, some aging individuals identify as members of multiple covered populations.
Digital Needs	The V4A emphasized that digital literacy and skill development is a critical need for their communities. Telehealth access and adoption was also highlighted as a need for aging populations. Particularly for the rural aging populations, lack of broadband infrastructure was discussed. In both urban

	and rural contexts, it was noted that some aging individuals struggled with the affordability of broadband and digital devices.
Digital Assets	<ul style="list-style-type: none"> Each AAA has its own programming and capacity to invest in digital opportunity. Bay Aging was spotlighted as one of the most innovative AAAs in the Commonwealth.

Virginia Poverty Law Center	
Summary	On July 5 th , 2023, a virtual 1:1 interview was held with Poverty Law Center leaders to discuss digital needs and programming opportunities for low-income individuals.
Affected Populations	The Virginia Poverty Law Center supports low-income clients and recognizes the intersecting nature of many of the covered populations.
Digital Needs	To address capacity challenges, the Virginia Poverty Law Center is transitioning many of its offerings to online, do-it-yourself models that can be scaled across the country. Their clientele require devices and consistent broadband access to take advantage of these programs.
Digital Assets	<ul style="list-style-type: none"> The VPLC manages an extensive project called ENROLL Virginia that supports qualified populations in their enrollment in healthcare plans. This program is administered primarily online. The VPLC also manages a website called VALegalAid.org that distributes knowledge and resources to the broader VA legal aid programs. This could serve as a distribution network for digital opportunity resources.

The Virginia, Maryland, and Delaware Association of Electric Cooperatives	
Summary	On July 13 th , 2023, a virtual 1:1 interview was held with community organization leaders to discuss digital needs and programming opportunities .
Affected Populations	The VMDAEC primarily serves rural residents.
Digital Needs	The Virginia, Maryland, and Delaware Association of Electric Cooperatives (VMDAEC) highlighted the cost of last-mile construction and low rates of digital literacy as the key barriers for rural populations. VMDAEC highlighted the concern of funding instability once the ACP window expires and noted that many of their customers are currently enrolled in a federal affordability program.
Digital Assets	<ul style="list-style-type: none"> The Prince George Electric Cooperative has instituted a Community Living Room initiative that encourages adoption by creating demo spaces in community centers that demonstrate the advantages and uses of broadband in rural communities. The Community Living Room is equipped with staff to educate residents about broadband, technological devices, and assist in ACP enrollment.

	<ul style="list-style-type: none"> • VMDAEC also emphasized the importance of broadband for leisure in rural communities by engaging gaming companies in their upcoming Rural Fiber Expo.
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The Hispanic Federation	
Summary	On July 20 th , 2023, a virtual 1:1 interview was held with Latino community organization leaders to discuss digital needs and programming opportunities for the Commonwealth's Hispanic population.
Affected Populations	The Hispanic Federation primarily serves members of racial and/or ethnic minorities and limited language proficiency individuals., however their services are offered to the general public.
Digital Needs	The Hispanic Federation highlighted that the Latino population is the least likely to adopt the internet and technological devices.
Digital Assets	<ul style="list-style-type: none"> • One of the Hispanic Federation's Virginia-based partners, Edu-Futuro is a regional expert in digital skills programming for the Latino community. • Much of Edu-Futuro's digital offerings are part of their Workforce Development Services program. The six-week courses teach students about resume and cover letter writing, enhance English skills for the workplace, and cover basic computing skills. • Some of Edu-Futuro's digital programming has a bigenerational approach. Parents and children are encouraged to participate, with the adults learning "Tech for Parents" and the children having access to devices to complete their homework.

Albemarle County	
Summary	On June 16 th , 2023, a virtual 1:1 interview was held with broadband leaders in Albemarle County to discuss digital needs and programming opportunities across the county and throughout the Commonwealth.
Affected Populations	Albemarle County partners with the nonprofit Network to Work to distribute sophisticated digital hardware to formerly incarcerated individuals as they reenter the workforce.
Digital Needs	After extensive deployments, Albemarle is encountering hesitation or skepticism among some residents, limiting adoption. Limited access to sophisticated technological hardware is also a key challenge (e.g., a refurbished Chromebook may not meet the needs of a modern student user. Concerns around the sustainability of Federal ACP funding have impacted partners' willingness to launch new initiatives.
Digital Assets	<ul style="list-style-type: none"> • Albemarle county is developing a broadband affordability and adoption plan and has developed a coalition. • Albemarle County stood up the ACP Bridge program which is a locally-funded benefit that supplements \$20 to the ACP grant.

	<ul style="list-style-type: none"> • School districts in Albemarle Co. have implemented a digital citizenship unit and digital skills programming.
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Literacy for Life	
Summary	On July 24 th , 2023, a virtual 1:1 interview was held with language educators to discuss digital needs and programming opportunities for the language learning and low-literacy community.
Affected Populations	Literacy for Life supports low-literacy individuals and the English-learning community.
Digital Needs	Literacy for Life highlighted the need for sustainable funding sources to support language learners and their digital literacy instruction. They called for the need to publish all materials with simple vocabulary in multiple language options for English-learners. They highlighted the expense of technological devices and perceived self-efficacy with technology as challenges for their communities served.
Digital Assets	<ul style="list-style-type: none"> • Literacy for Life partnered with the Commonwealth Catholic Charities to support digital skill building for Ukrainian refugees. • Since the organization is housed at William and Mary University and supported by the IT Department, Literacy for Life offers its learners a number of refurbished devices to take home and own. • Literacy for Life was also the recipient of a DHCD digital learning grant that enabled them to hold a 6-week digital skills course

Virginia Broadband Industry Association	
Summary	On July 20 th , 2023, a virtual 1:1 interview was held with association leaders and internet service providers to discuss digital needs and programming opportunities surrounding broadband affordability and deployment.
Affected Populations	VBIA supports all customers of their 12 member ISPs.
Digital Needs	The primary need that was highlighted by the VBIA is that there isn't sufficient incentive for internet services providers to advertise their existing affordability/access initiatives to customers. VBIA also highlighted that the Commonwealth would benefit from additional forums for collaboration between broadband stakeholders.
Digital Assets	<ul style="list-style-type: none"> • Each member ISP offers its own combinations of programs and initiatives for their customers.

Virginia Municipal League	

Summary	On July 22 nd , 2023, a virtual 1:1 interview was held with municipal leaders to discuss digital needs and programming opportunities across the Commonwealth's localities.
Affected Populations	While members of all covered populations reside within the member counties of VML, the primary group that VML has direct digital opportunity exposure to is aging individuals.
Digital Needs	The Virginia Municipal League (VML) has found that some counties lack cybersecurity knowledge and the resources to have a robust online presence.
Digital Assets	<ul style="list-style-type: none"> • VML actively advocates for affordable broadband • VML monitors FirstNet and public safety broadband networks • The insurance arm of the VML educates member counties on cybersecurity and assists in security remediation, when necessary • VML co-hosts the Broadband Together conference which gathers thought leaders, policy makers, and internet service providers to reimagine a more connected Commonwealth

Virginia Community Action Partnership

Summary	On June 22 nd , 2023, a virtual 1:1 interview was held with community action organization leaders to discuss digital needs and programming opportunities across the CAA network.
Affected Populations	The CAA network across the Commonwealth has program offerings and support for all eight types of covered populations – availability and capacity of these programs vary between CAAs and are largely driven by funding / lack of funding.
Digital Needs	The Virginia Community Action Partners network (VACAP) underscored that local agencies require additional funding to support a designated Digital Navigator as part of their staff leadership. CAAs also report that the families they serve are best supported when services are delivered in a whole-family approach with wraparound services.
Digital Assets	<ul style="list-style-type: none"> • The Asset Inventories received from the CAAs will be the most thorough depiction of CAA assets across the Commonwealth • HRCAP has a family-oriented computer lab available to the public

Broadband Association of Virginia

Summary	On June 26 th , 2023, a virtual 1:1 interview was held with internet service providers to discuss digital needs and programming opportunities within their service areas.
Affected Populations	ISPs purport to consider the needs of all covered populations when developing their digital opportunity initiatives.

Digital Needs	The Virginia Cable Telecommunications Association (VCTA) perceived relevance of connectivity and readiness to adopt new technologies are the two primary barriers that were raised in the interview. ISPs highlighted that 46% of those not connected were not interested in being connected or perceived there were other barriers to accessing the internet, as reported by the NTIA
Digital Assets	<ul style="list-style-type: none"> • Comcast: Internet Essentials and Internet Essentials+ are affordability programs that can leverage ACP/supplemental grant funds. ProjectUP creates LiftZones where devices and access to digital education is made available at community centers. • Cox Communications: ConnectToCompete is Charter's affordability offering. They also partner with local housing authorities and school districts to reach potential enrollees. • Charter Communications: SpectrumFree, when paired with ACP grants is free to customers. Device provision with community partners is also offered.

Nottoway Tribal Sovereignty	
Summary	On August 21 st , 2023, a virtual 1:1 interview was held with a representative of the Nottoway Tribal Sovereignty to discuss digital needs and programming opportunities within their tribal community.
Affected Populations	The Nottoway Tribe considers the needs of their tribal community and individuals within racial and ethnic minorities when developing their digital opportunity initiatives.
Digital Needs	The Nottoway Tribe expressed the need for funding to offer reliable high-speed internet access and access to digital devices as primary needs for their community. The school system also lacks access to reliable high-speed internet to support their students learning about their culture and history. The tribe expressed difficulties with applying for grants to boost their economy due to the lack of service and/or the knowledge to fill out the extensive online application process.
Digital Assets	<ul style="list-style-type: none"> • Community House Center: The Community House Center is the central hub for digital resources on their historical reservation land, also housing their cultural museum exhibit. The Community House Center gives the community access to a laptop and two SMART TVs.

5.3.2 Focus Groups

Community Anchor Institution Focus Group

Summary	On August 2 nd , 2023, a virtual Focus Group was held with educators and community organization leaders to discuss digital needs and programming opportunities in community anchor institutions.
Affected Populations	Students were the primary group discussed during this Focus Group.
Digital Needs	Participants discussed how students use the internet extensively for education, including online classes, virtual tutoring, and accessing course materials. However, they note that lack of access to devices and reliable internet can hinder the learning experience, especially for non-traditional and underserved students. The conversation highlighted the challenges faced during the transition to online learning, especially during the COVID-19 pandemic. Issues such as poor engagement, lack of training for staff and families, and the need to develop digital literacy were mentioned. Concerns are raised about digital equity, particularly for English Language Learners (ELLs). Language barriers and the lack of translation resources are identified as challenges for ELL students in accessing and navigating online education. Participants discussed the importance of educating students about online safety, including protecting personal information and guarding against cyberbullying and fraud. Academic integrity becomes more complex in online learning environments, where monitoring for plagiarism and ensuring the authenticity of students' work can be challenging. The conversation emphasized the need for affordable broadband access, especially in rural areas where internet availability is limited or costly. Participants expressed the desire for internet to be treated as a public utility, ensuring access for all regardless of income and location.
Digital Assets	<ul style="list-style-type: none"> • At Reynolds Community College, many students choose to take advantage of virtual classwork and tutoring. • The Reynolds Community College Library offers a helpdesk that provides technological support and a laptop loaner programs for students that do not have digital devices at home.

Virginia Health and Human Services Agencies Focus Group	
Summary	On July 24 th , 2023, a virtual Focus Group was held with health and human services agency leaders to discuss digital needs and programming opportunities in the Commonwealth's agencies.
Affected Populations	A mix of stakeholders participated in the focus groups, representing the Department for the Blind and Vision Impaired, the Department of Social Services, and the Department of Aging and Rehabilitative Services. They support most covered population communities, but with particular emphasis on aging individuals and individuals with disabilities.
Digital Needs	The cost of broadband was identified as a barrier to adoption, particularly for individuals with disabilities. For aging populations and those with disabilities, addressing connectivity needs will decrease feelings of loneliness and isolation. Language barriers are a major challenge to access broadband resources and agency programming. Sustainable funding for individualized care and case management is required to adequately serve covered

	populations. For aging populations in particular, cybersecurity trainings or free software would help address digital vulnerabilities.
Digital Assets	<ul style="list-style-type: none"> • No Wrong Door is investing in DirectConnect, an online platform that answers community questions and shares resources. • DBVI's Rehabilitation Technology Services program maintains a robust technology tutor network as a resource for DBVI case managers for tutorial services clients may utilize to obtain, maintain, or improve their technology skills on a remote basis.

Community Action Agency Working Group Series	
Summary	On June 16 th and July 6 th and 28 th , 2023, three working groups were held with the participating community action agencies leaders to discuss the development of the Regional Digital Opportunity Plans and digital needs and programming opportunities across the regions.
Affected Populations	Residents in the nine CAA regions represent all covered populations.
Digital Needs	Community engagement surrounding broadband was emphasized. The working session group noted that proactive, targeted engagement and translation services were needed to reach all covered populations within their regions.
Digital Assets	<ul style="list-style-type: none"> • Support was provided for CAAs developing their Regional Digital Opportunity Plan Asset Inventories. Organizational materials as well as leading practices guidance were shared with the CAA contacts.

Broadband Advisory Council Meeting	
Summary	On June 9 th 2023, the Broadband Advisory Council was convened and the Commonwealth's broadband leaders discussed the Digital Opportunity Plan and digital needs and programming opportunities across Virginia.
Affected Populations	The Broadband Advisory council represents the interests of all covered populations in the Commonwealth.
Digital Needs	Robust community engagement when developing the Digital Opportunity Plan was identified as a key need for Virginia.
Digital Assets	<ul style="list-style-type: none"> • The Broadband Advisory Council itself serves as an excellent asset in the Commonwealth. The expertise of its members can be leveraged to advance existing broadband initiatives and introduce new programs to Virginians.

5.3.3 Community Input Sessions

Williamsburg James City County Community Action Agency	
Summary	On July 12 th , 2023, an in-person Community Input Session was held with residents and community organization leaders to discuss digital needs and programming opportunities in the Williamsburg / James City County region.
Affected Populations	The general population was the primary group discussed during this Community Input Session.
Digital Needs	The cost and reliability of broadband were raised as major concerns. In some areas of the region, there is little competition between internet service providers. The price of internet boosters and extenders is also a challenge. Many school programs are now only delivered digitally, further exacerbating a digital divide for families that do not have internet and digital tools. Download speeds were raised as a concern in York County.
Digital Assets	<ul style="list-style-type: none"> • K-12 students receive Chromebooks during the school year. • The Williamsburg Library system offers mobile hot spots.

Bay Aging Community Action Agency	
Summary	On July 13 th , 2023, a virtual Community Input Session was held with residents, local education stakeholders, and community organization leaders to discuss digital needs and programming opportunities in the Bay Aging region.
Affected Populations	The aging covered population was the primary group discussed during this Community Input Session.
Digital Needs	Low levels of digital literacy amongst aging populations and the cost of broadband were raised as major concerns in this Community Input Session. Some regions have geographic barriers that make broadband deployment. Some stakeholders raised concerns that the LECAP program doesn't help those who are not economically disadvantaged who might not have enough income to cover the line extension costs and can't afford the quarter mile of line that's needed to reach their house
Digital Assets	<ul style="list-style-type: none"> • Internet service providers offer a number of broadband solutions to the region.

CAPUP Community Action Agency	
Summary	On July 19 th , 2023, two in-person Community Input Sessions were held with residents and community organization leaders to discuss digital needs and programming opportunities in the CAPUP region.

Affected Populations	The aging population was the primary group discussed during this Community Input Session.
Digital Needs	The challenges of digital skill development for aging individuals were raised. Many lack the education to meaningfully interact with the internet and digital devices. In areas such as Dinwiddie and Hopewell, broadband access is still spotty. Affordability of broadband programs also poses a challenge for aging individuals.
Digital Assets	<ul style="list-style-type: none"> • Many aging individuals are equipped with smart phones. • CAPUP partners with Senior Connection and provides transportation to aging individuals to a Senior Tech Café, where they can develop digital skills.

Improvement Association Community Action Agency	
Summary	On July 27 th , 2023, a virtual Community Input Sessions was held with residents and community organization leaders to discuss digital needs and programming opportunities in the Improvement Association region.
Affected Populations	The aging and rural population as well as individuals with disabilities were the primary groups discussed during this Community Input Session.
Digital Needs	Telehealth for many individuals, particularly for those with disabilities and extra care needs, is a high-priority issue. Many individuals within the Improvement Association region live in rural communities that are served with satellite service. This broadband connection is reportedly inconsistent and unreliable when the weather shifts, limiting families' ability to connect and access critical services. The lack of digital education, specifically surrounding cyber security, was also raised as a need for the aging community in the region.
Digital Assets	<ul style="list-style-type: none"> • Washington Park Community Center offers a computer lab to residents, with satellite broadband, which would be strengthened with a more reliable connection.

Improvement Association Community Action Agency – Emporia Rotary Club	
Summary	On August 1 st , 2023, an in-person Community Input Sessions was held with residents and community organization leaders at the Emporia Rotary Club to discuss digital needs and programming opportunities in the Improvement Association region.
Affected Populations	The rural population was the primary group discussed during this Community Input Session.
Digital Needs	Cost was raised as a major concern for many residents. Many called for increased competition and options amongst internet service providers. Service in some of the most remote areas costs as much as \$160 a month.

	Barriers to adoption, including transportation and attitudes towards the internet, were highlighted.
Digital Assets	<ul style="list-style-type: none"> • In general, when internet service is expanded, residents know of this change.

Community Action Agencies Not Developing Regional Digital Opportunity Plans	
Summary	On August 3 rd , 2023, a virtual Focus Group was held with community action agency leaders to discuss digital needs and programming opportunities in the broader community action space.
Affected Populations	The low-income and rural populations were the primary groups discussed during this Focus Group.
Digital Needs	Lack of advertising and awareness of affordability programs was raised as a concern for rural populations. Overall broadband affordability was identified as a key challenge for many constituents. It was noted that some individuals pay over \$150 a month for wired and/or satellite broadband. CAA leaders highlighted that digital navigators could equip community members with the appropriate digital skillsets required to connect.
Digital Assets	<ul style="list-style-type: none"> • Children in the school districts are all provided Chromebooks to take home. • Libraries offer loan programs for hotspots