

Students of Color Caught in the Homework Gap

This spring, the COVID-19 pandemic caused a near-total shutdown of the U.S. school system, forcing more than 55 million students to transition to home-based remote learning practically overnight. In most cases, that meant logging in to online classes and accessing lessons and assignments through a home internet connection.

Sadly, that was not an option for children in **one out of three Black, Latino, and American Indian/Alaska Native households**.

Nationwide, across all racial and ethnic groups, **16.9 million children** remain logged out from instruction because their families lack the home internet access necessary to support online learning, a phenomenon known as the "homework gap."

The following analysis conducted by John B. Horrigan, a national expert on technology adoption, for the Alliance for Excellent Education (All4Ed), National Indian Education Association (NIEA), National Urban League (NUL), and UnidosUS of data from the 2018 American Community Survey¹ (ACS) shows that millions of households with children under the age of 18 years lack two essential elements for online learning: (1) high-speed home internet service and (2) a computer. Furthermore, these disparities disproportionately impact students of color, students from low-income families, and those in rural communities. As states and districts develop plans to extend online learning into the 2020-2021 school year, school and district leaders must ensure that all students have equitable access to the devices and connectivity necessary for academic success. That means understanding the extent of the homework gap—and what it will take to close it.

8.4 Million Households with Children Do Not Have High-Speed Home Internet Service

This includes 16.9 million children. For this analysis, "high-speed home internet" refers to a wireline broadband internet





subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). While many households have wireless broadband internet access through smartphones, these services generally are insufficient for educational purposes since they do not have the same capacity, reliability, or speeds available through wireline services. A study from Michigan State University finds that students who do not have home internet access, or who rely solely on a mobile plan for their internet access, spend more time on their homework, have lower grade point averages, and have weaker digital skills, even after controlling for socioeconomic factors that potentially influence academic performance. In fact, It he gap in digital

Key Findings

- 1. 16.9 million children lack the high-speed home internet access necessary to support online learning.
- 2. 7.3 million children do not have a desktop, laptop, or tablet computer.
- One in three Black, Latino, and American Indian/Alaska Native families do not have high-speed home internet.
- 4. One in three families who earn less than \$50,000 annually do not have high-speed home internet.
- 5. Two in five families in rural areas do not have high-speed home internet.





skills between students with no home access or cell phone only and those with fast or slow home Internet access is equivalent to the gap in digital skills between 8th and 11th grade students," according to the study.⁴

3.6 Million Households Do Not Have a Computer, which Puts Nearly 7.3 Million Children at an Academic Disadvantage

In this analysis, a computer refers to a laptop, desktop, or tablet. The number of children without a computer is an undercount of the need related to online learning because ACS asks whether the household has a computer, not whether each child in the household has a computer. This is an important distinction because each school-aged child needs a computer to participate in online learning. Students who rely exclusively on smartphones for completing homework must contend with smaller screens on slower devices that have fewer features. Smartphone applications lack the full functionality of software that is available on computers. Therefore it may be difficult, if not impossible, for students to complete assignments that require detailed writing, editing, calculations, and graphics. Additionally, these students may need to monitor data caps or recharge prepaid phone plans to maintain their internet access.5 Consequently, these students are less likely to complete and

submit assignments online outside of school or engage in other online activities such as conducting research, video chatting with peers about school work, or looking up classroom information.⁶

Students of Color Are Less Likely to Have Access to High-Speed Home Internet Service and Computers

Nationally, only about 23 percent of all households with children do not have high-speed home internet service and about 10 percent do not have a computer. However, rates vary widely by race. Thirty-four percent of American Indian/Alaska Native families and about 31 percent each of Black and Latino families lack access to high-speed home internet compared to only about 21 percent of White families. All told, 4.7 million Black, Latino, Asian, and American Indian/Alaska Native families combined lack the high-speed home internet service necessary to support online learning and to engage productively in learning outside of the classroom.

Furthermore, lack of high-speed home internet access disproportionately affects children of color. For example, Latino households make up 20.9 percent of all households with children, but represent 28.7 percent of households without high-speed home internet access. This totals 2.4

TABLE 1: Lack of Internet and Device Access by Race and Ethnicity

	White	Asian	Black	Latino	American Indian/Alaska Native
Percentage of Households Without High-Speed Home Internet	20.9%	12.3%	30.6%	31.2%	34.2%
Percentage of Households Without a Computer	7.9%	3.5%	17.2%	17.0%	15.8%

Note: "Household" refers to households with one or more children age 17 years or younger.

TABLE 2: Lack of Internet and Device Access by Household Income

	All Households	Annual Income Below \$25,000	Annual Income Between \$25,000 and \$50,000	Annual Income Between \$50,000 and \$75,000	Annual Income Between \$75,000 and \$150,000	Annual Income Above \$150,000
Percentage of Households Without High- Speed Home Internet	22.7%	44.5%	32.2%	23.6%	15.1%	8.4%
Percentage of Households Without a Computer	9.8%	28.7%	15.9%	8.6%	3.5%	1.7%

Note: "Household" refers to households with one or more children age 17 years or younger.

million Latino families and 5.1 million Latino children. Similarly, Black households make up 14.4 percent of all households with children but represent 19.5 percent of households without high-speed home internet access. This totals 1.6 million Black families and 3.3 million Black children.

Likewise, home access to computers and other devices is limited for students of color. About 17 percent each of Black and Latino families and nearly 16 percent of American Indian/ Alaska Native families do not have a computer at home, compared to only 8 percent of White families.

The Homework Gap Is Widest for Children from Low-Income Families

Four in ten families that earn less than \$25,000 annually do not have high-speed home internet access and three in ten do not have a computer. Similarly, among households that earn between \$25,000 and \$50,000 annually, one-third lack high-speed home internet service and nearly one-fifth do not have a computer. All told, 4.6 million families who earn less than \$50,000 per year do not have access to the high-speed home internet service necessary for online learning.

Families in Rural Areas Are Less Likely to Have Access to High-Speed Home Internet Service and Computers

Roughly 13 percent of the nation's households with children live in nonmetropolitan⁷ (or rural) areas. Among them, 1.7 million households do not have high-speed home internet service. That is nearly two out of every five families living in rural locations. The greatest disparities exist in rural southern and southwestern states, with Mississippi having the highest percentage of families who lack high-speed home internet service—nearly 42 percent.

Closing the Homework Gap

Most of the burden for equipping students with devices and internet access for ongoing online learning will fall to schools, districts, and states. However, they cannot resolve the existing disparities alone. Bringing high-speed home internet access to all 8.4 million households that currently are offline requires Congress to approve additional funding to support students' learning needs. All4Ed, NIEA, NUL, and UnidosUS urge Congress to include the Emergency Educational Connections Act and appropriate \$6.8 billion through the federal E-rate program to cover immediate costs related to high-speed home internet access and devices in any upcoming funding packages passed

TABLE 3: Lack of Internet and Device Access by Location

	Nonmetropolitan "Rural" Locations	Metropolitan Locations
Percentage of Households Without High-Speed Home Internet	36.2%	20.9%
Percentage of Households Without a Computer	14.2%	9.3%

Note: "Household" refers to households with one or more children age 17 years or younger. Following the U.S. Census Bureau's practice, this table defines metropolitan areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan or "rural."

TABLE 4: Cost of Closing the Homework Gap

Technology	Households/Children Without Access	Cost per Household/ Child to Provide Access	Total Cost
High-Speed Home Internet	8,365,183 households	\$600 annually	\$5,019,109,800
Computer	7,273,556 children	\$250 one-time cost	\$1,818,389,000
Total			\$6,837,498,800

Note: This chart calculates the costs of high-speed home internet service based on the number of households without access since a single internet subscription serves multiple family members. By contrast, this chart calculates computer costs based on the number of children without a device since each child needs an individual computer to participate in online learning.

in response to the COVID-19 pandemic. Ultimately, additional substantial resources will be necessary to build out the infrastructure in rural areas where connectivity is not currently available. This is critical to do in the long term to ensure students in isolated regions have full access to a high-quality education. However, these costs fall outside the scope of the immediate response to COVID-19 necessary for students to participate in online learning during the 2020–2021 school year.

Conclusion

There are reasons why socioeconomic divides exist within low-income communities and communities of color in the United States. America's racial inequities stem from 400 years of systemic racism and federally sanctioned discriminatory policies born from this nation's original sins—the enslavement of Black people and the disenfranchisement and forced relocation of American Indian/Alaska Native communities. The fact that Black Americans were not allowed to read, immigrant children were denied equal access to a free public education, and that Black, Latino, and American Indian/Alaska Native communities were excluded from economic opportunities have had lingering effects on current generations: subpar education, low-wage jobs, and the lack of available or affordable broadband options to allow children to engage in distance learning. These injustices must be confronted head on if the nation hopes to live up to its promise of justice and equality for all. Public policy must not be subtle nor incremental in addressing the issues that American school-age children face. We need bold and highly focused solutions that dismantle the systems that keep our children from succeeding.

Simply put, COVID-19 did not create the homework gap. However, because of COVID-19, the nation must accelerate efforts to close it.

There are many unanswered questions about the 2020–2021 school year, yet one thing is certain: many students will receive their education online. Therefore, students without high-speed home internet will be severely disadvantaged. The gap between students who are "logged in" and "logged out" could set back a generation of American students. Thankfully, this is a solvable problem. By appropriating \$6.8 billion in the next COVID-19 legislative package, Congress can provide the nation's students with the tools they need and deserve to receive an excellent education.

Additional Resources

To learn more about this analysis and access an interactive map with state data about the homework gap, visit all4ed.org/homeworkgap.

To compare internet and device access across states and demographic categories, view the tables in the appendices of this report.

Appendix A: Access to High-Speed Home Internet and Devices by Race, State Comparisons

Appendix B: Access to High-Speed Home Internet and Devices by Income, State Comparisons

Appendix C: Access to High-Speed Home Internet and Devices by Location, State Comparisons

Endnotes

- 1 John B. Horrigan, senior fellow at the Technology Policy Institute, conducted the data analysis referenced in this document. To read the full methodology for this analysis, visit all4ed.org/homeworkgap.
- 2 Columbia Telecommunications Corporation, Mobile Broadband Service Is Not an Adequate Substitute for Wireline (Kensington, MD: Author, 2017).
- 3 K. Hampton et al., Broadband and Student Performance Gaps (East Lansing, MI: James H. and Mary B. Quello Center, Michigan State University, 2020).
- 4 Ibid.
- 5 Ibid.
- 6 Ibid.
- 7 Following the U.S. Census Bureau's practice, this analysis defines metropolitan areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan. The American Community Survey does not use the term "rural" in characterizing geographies.



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The Alliance for Excellent Education (All4Ed) is a Washington, DC-based national policy, practice, and advocacy organization dedicated to ensuring that all students, particularly those underperforming and those historically underserved, graduate from high school ready for success in college, work, and citizenship. all4ed.org

The **National Indian Education Association** (NIEA) advances comprehensive educational opportunities for all Native students. Serving as the critical link between Native communities and the diverse array of institutions that serve our students, NIEA holds all accountable for improving achievement. Through advocacy, capacity-building, and education, NIEA supports Native students and their communities to succeed. **NIEA.org**

The **National Urban League** is a historic civil rights organization dedicated to economic empowerment in order to elevate the standard of living in historically underserved urban communities. The National Urban League spearheads the efforts of its 90 local affiliates through the development of programs, public policy research and advocacy, providing direct services that impact and improve the lives of more than 2 million people annually nationwide. Visit nul.org and follow us on Twitter and Instagram: @NatUrbanLeague.

UnidosUS, previously known as NCLR (National Council of La Raza), is the nation's largest Hispanic civil rights and advocacy organization. Through its unique combination of expert research, advocacy, programs, and an Affiliate Network of nearly 300 community-based organizations across the United States and Puerto Rico, UnidosUS simultaneously challenges the social, economic, and political barriers that affect Latinos at the national and local levels. For more than 50 years, UnidosUS has united communities and different groups seeking common ground through collaboration, and that share a desire to make our country stronger. For more information on UnidosUS, visit unidosus.org or follow us on Facebook, Instagram, and Twitter.

Appendix A: Access to High-Speed Home Internet and Devices by Race, State Comparisons

TABLE A1: Percentage of Households Without High-Speed Home

TABLE A1: Percentage of Households Without High-Speed Home Internet Access by Race, State Comparisons								
State	All	White	Asian	Black	Latino	American Indian/Alaska Native		
Alabama	31.8%	28.8%	18.4%	37.1%	49.6%	54.5%		
Alaska	29.5%	23.7%	35.6%	z21.1%	23.6%	54.1%		
Arizona	24.6%	22.1%	10.2%	30.5%	33.0%	34.2%		
Arkansas	39.0%	37.4%	13.8%	46.2%	45.5%	37.5%		
California	19.9%	19.0%	11.2%	22.9%	28.3%	27.1%		
Colorado	17.2%	16.4%	13.4%	23.0%	28.7%	29.7%		
Connecticut	14.2%	11.0%	13.3%	23.3%	25.2%	25.3%		
Delaware	18.4%	17.9%	7.5%	23.4%	18.7%	53.8%		
District of Columbia	18.5%	4.8%	29.8%	27.0%	25.3%	0.0%		
Florida	22.1%	19.6%	11.3%	31.1%	26.4%	21.0%		
Georgia	24.9%	22.7%	10.9%	28.8%	38.9%	37.4%		
Hawaii	16.9%	12.6%	13.5%	13.8%	16.5%	26.6%		
Idaho	24.4%	23.6%	16.7%	18.1%	40.4%	33.3%		
Illinois	21.8%	19.5%	13.8%	32.3%	30.5%	22.7%		
Indiana	27.0%	26.1%	24.0%	34.4%	33.2%	35.0%		
lowa	24.3%	23.3%	12.6%	40.9%	42.5%	25.2%		
Kansas	22.9%	22.5%	12.1%	27.2%	35.5%	14.7%		
Kentucky	27.7%	26.1%	13.1%	41.1%	40.9%	36.4%		
Louisiana	30.6%	27.7%	18.0%	36.5%	36.5%	21.5%		
Maine	16.5%	16.5%	20.6%	16.2%	21.5%	38.3%		
Maryland	16.4%	13.4%	9.2%	20.5%	25.5%	17.1%		
Massachusetts	13.2%	11.9%	10.2%	20.9%	24.6%	28.9%		
Michigan	23.7%	21.8%	14.8%	34.5%	29.5%	28.8%		
Minnesota	19.0%	17.3%	14.4%	27.2%	34.6%	36.9%		
Mississippi	41.9%	38.4%	31.3%	46.6%	47.7%	49.0%		

TABLE A1: Percentage of Households Without High-Speed Home Internet Access by Race, State Comparisons (continued)								
State	All	White	Asian	Black	Latino	American Indian/Alaska Native		
Missouri	27.8%	26.8%	16.9%	35.4%	34.2%	30.7%		
Montana	25.7%	24.7%	0.0%	0.0%	27.3%	39.8%		
Nebraska	21.0%	19.7%	14.3%	41.4%	34.5%	49.9%		
Nevada	21.7%	19.5%	13.8%	28.5%	30.1%	26.9%		
New Hampshire	13.7%	13.6%	13.1%	33.5%	31.0%	0.0%		
New Jersey	14.4%	11.8%	7.2%	21.2%	23.5%	15.7%		
New Mexico	34.0%	29.9%	13.7%	45.7%	37.7%	55.6%		
New York	20.1%	17.4%	16.7%	25.4%	26.3%	25.6%		
North Carolina	22.7%	19.1%	12.8%	30.6%	36.6%	24.2%		
North Dakota	20.9%	17.5%	37.4%	57.7%	36.4%	33.7%		
Ohio	21.4%	19.9%	12.4%	29.9%	28.5%	24.4%		
Oklahoma	34.6%	32.2%	19.3%	42.2%	41.4%	56.6%		
Oregon	21.1%	20.1%	12.9%	32.4%	36.9%	24.9%		
Pennsylvania	17.6%	16.0%	13.1%	26.0%	28.3%	28.4%		
Rhode Island	15.1%	12.5%	9.3%	22.2%	26.4%	0.0%		
South Carolina	26.5%	20.5%	0.0%	40.8%	39.8%	32.3%		
South Dakota	22.6%	17.1%	43.1%	24.7%	35.4%	55.3%		
Tennessee	27.8%	24.7%	16.8%	39.6%	36.6%	34.4%		
Texas	28.6%	28.4%	11.8%	30.8%	37.8%	24.8%		
Utah	19.0%	17.5%	21.9%	24.8%	31.7%	38.6%		
Vermont	21.5%	22.0%	8.7%	13.0%	0.0%	22.4%		
Virginia	20.8%	18.9%	7.1%	29.8%	23.0%	22.0%		
Washington	15.8%	14.3%	8.7%	26.3%	31.7%	27.2%		
West Virginia	25.8%	25.5%	25.5%	38.5%	30.5%	49.4%		
Wisconsin	21.6%	19.0%	19.0%	39.0%	30.3%	30.7%		
Wyoming	23.8%	23.3%	50.0%	0.0%	21.3%	39.0%		
United States	22.7%	20.9%	12.3%	30.6%	31.2%	34.2%		

TABLE A1: Percentage of Households Without High-Speed Home

Notes: "High-speed home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). "Households" refers to households with one or more children age 17 years or younger. A value of "0" indicates one of the following: (1) the number of households within a given racial category was too small for the state to report data or (2) all households within a given racial category have adequate interent access. The American Community Survey does not provide further clarification about these values.

TABLE A2: Number of Children Without High-Speed Home Internet Access by Race, State Comparisons

State	All	White	Asian	Black	Latino	American Indian/Alaska Native
Alabama	332,223	200,520	3,221	110,258	33,881	7,938
Alaska	52,552	26,010	5,261	1,397	2,463	24,303
Arizona	415,234	291,860	7,619	33,000	219,779	37,632
Arkansas	296,639	212,844	1,838	56,879	39,318	6,914
California	1,763,038	998,147	144,307	126,525	1,163,710	48,941
Colorado	228,987	186,293	7,713	17,276	100,861	9,423
Connecticut	110,176	61,585	6,309	26,238	41,836	2,518
Delaware	34,353	22,166	986	11,286	5,280	724
District of Columbia	20,278	1,908	984	15,639	2,863	0
Florida	859,018	547,060	16,224	244,123	317,667	6,077
Georgia	625,197	320,147	13,638	241,590	125,720	9,733
Hawaii	51,032	15,763	21,373	1,350	6,283	1,548
Idaho	110,504	100,104	1,348	929	28,517	8,642
Illinois	635,855	410,138	26,132	137,750	196,496	4,546
Indiana	438,365	357,972	9,705	61,250	53,047	13,175
Iowa	184,572	158,930	3,293	17,481	27,396	1,478
Kansas	171,750	144,201	3,561	14,191	38,219	2,367
Kentucky	286,447	234,880	2,697	42,029	17,436	831
Louisiana	318,352	179,860	3,660	127,763	23,538	2,888
Maine	42,603	40,179	1,227	1,503	1,069	1,214
Maryland	220,714	97,718	10,182	86,921	45,775	2,152
Massachusetts	185,053	126,078	12,382	31,978	56,888	2,980
Michigan	536,377	383,606	14,513	125,190	37,525	9,677
Minnesota	264,334	184,337	12,461	44,036	30,226	9,655
Mississippi	290,739	145,878	1,761	134,190	11,847	4,459
Missouri	394,745	315,311	5,735	68,332	23,957	6,660

TABLE A2: Number of Children Without High-Speed Home Internet Access by Race, State Comparisons (continued)

State	All	White	Asian	Black	Latino	American Indian/Alaska Native
Montana	57,569	49,208	0	0	4,472	10,055
Nebraska	107,141	89,512	1,948	9,982	27,404	6,357
Nevada	147,923	85,019	7,597	19,475	77,631	6,002
New Hampshire	36,507	33,014	1,625	2,216	4,292	0
New Jersey	284,879	151,786	16,155	62,338	119,251	2,187
New Mexico	151,279	51,959	589	2,146	43,927	14,556
New York	833,365	449,101	61,698	181,618	237,160	11,370
North Carolina	525,858	294,019	13,604	163,266	117,862	10,685
North Dakota	37,255	26,373	1,664	4,311	2,441	6,011
Ohio	579,779	433,238	10,028	129,283	37,648	5,609
Oklahoma	345,997	242,770	5,761	41,921	59,519	75,140
Oregon	192,235	154,371	6,857	8,032	62,168	23,296
Pennsylvania	475,762	342,380	15,713	92,323	74,802	5,019
Rhode Island	32,396	20,590	932	3,994	13,609	0
South Carolina	283,081	143,626	0	128,202	33,799	3,393
South Dakota	48,879	30,431	712	2,245	4,312	17,050
Tennessee	434,739	290,366	5,812	123,229	44,253	4,550
Texas	2,104,514	1,519,150	46,963	292,164	1,256,206	21,146
Utah	181,255	149,241	7,584	3,461	42,080	5,700
Vermont	23,184	23,044	134	433	0	221
Virginia	393,850	246,429	11,376	118,215	52,019	5,000
Washington	280,297	191,495	16,771	25,179	98,368	13,721
West Virginia	96,684	90,585	529	4,780	2,077	411
Wisconsin	297,324	215,192	9,832	52,946	38,457	6,394
Wyoming	29,683	26,784	232	0	2,917	2,805
United States	16,850,575	11,113,180	582,243	3,250,866	5,108,271	483,151

Notes: "High-speed home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). A value of "0" indicates one of the following: (1) the number of children within a given racial category was too small for the state to report data or (2) all children within a given racial category have adequate interent access. The American Community Survey does not provide further clarification about these values.

TABLE A3: Per	centage of H	ouseholds Wit	hout a Compu	uter by Race, S	tate Comparis	ons
State	All	White	Asian	Black	Latino	American Indian/Alaska Native
Alabama	14.2%	10.0%	6.9%	22.5%	30.6%	33.7%
Alaska	8.0%	3.5%	6.6%	4.2%	13.0%	22.2%
Arizona	11.3%	9.6%	3.0%	17.1%	17.6%	27.8%
Arkansas	17.0%	13.5%	2.1%	32.7%	25.2%	13.9%
California	8.2%	7.3%	2.3%	11.5%	13.6%	10.9%
Colorado	7.5%	6.7%	5.6%	11.5%	18.2%	12.4%
Connecticut	6.4%	3.9%	3.9%	12.8%	15.1%	8.6%
Delaware	8.1%	5.0%	0.9%	16.5%	12.9%	0.0%
District of Columbia	7.8%	0.6%	12.2%	11.3%	12.0%	28.6%
Florida	9.5%	7.5%	3.3%	17.6%	11.5%	9.0%
Georgia	11.0%	8.5%	3.6%	14.8%	21.8%	15.5%
Hawaii	8.3%	4.6%	5.7%	4.7%	9.5%	7.8%
Idaho	6.9%	6.4%	9.5%	4.4%	15.9%	14.2%
Illinois	9.1%	6.3%	3.8%	20.0%	14.0%	13.8%
Indiana	11.3%	9.4%	9.3%	23.2%	20.6%	8.6%
Iowa	8.6%	7.6%	4.5%	24.1%	21.1%	10.3%
Kansas	9.6%	8.3%	1.2%	21.7%	26.2%	12.0%
Kentucky	12.1%	10.8%	8.8%	20.5%	25.6%	27.8%
Louisiana	15.5%	10.0%	4.9%	26.1%	22.2%	17.9%
Maine	6.6%	5.7%	6.2%	52.9%	0.7%	25.0%
Maryland	6.2%	4.2%	1.9%	8.2%	15.9%	2.1%
Massachusetts	5.7%	4.6%	2.6%	11.2%	15.5%	1.7%
Michigan	9.5%	7.5%	2.6%	21.2%	15.5%	14.1%
Minnesota	5.7%	3.7%	4.5%	15.6%	14.7%	23.4%
Mississippi	17.1%	12.3%	4.1%	23.6%	25.3%	20.0%
Missouri	10.9%	8.9%	0.7%	22.2%	21.9%	9.8%

C	A 11	140.5	.	Dis. I	L. Maria	American
State	All	White	Asian	Black	Latino	Indian/Alaska Native
Montana	8.0%	6.4%	0.0%	0.0%	9.7%	20.0%
Nebraska	8.7%	8.0%	6.1%	12.9%	24.0%	27.7%
Nevada	8.8%	6.8%	3.9%	13.1%	15.3%	13.6%
New Hampshire	4.5%	4.3%	7.2%	8.1%	7.9%	0.0%
New Jersey	6.1%	4.4%	1.2%	9.7%	14.1%	5.1%
New Mexico	15.9%	12.7%	6.3%	18.7%	17.6%	33.8%
New York	9.1%	6.9%	5.3%	12.5%	15.1%	15.7%
North Carolina	10.4%	7.7%	5.4%	16.0%	21.7%	17.6%
North Dakota	7.4%	3.6%	3.3%	41.9%	11.5%	28.6%
Ohio	9.9%	8.0%	4.4%	20.3%	17.5%	7.5%
Oklahoma	14.3%	12.2%	9.0%	24.2%	24.4%	16.7%
Oregon	7.5%	7.2%	1.3%	9.3%	21.9%	8.2%
Pennsylvania	8.1%	6.7%	6.3%	14.2%	21.3%	18.2%
Rhode Island	6.2%	4.5%	1.6%	13.6%	12.0%	0.0%
South Carolina	13.1%	8.1%	0.5%	24.1%	25.2%	19.1%
South Dakota	10.6%	7.3%	28.7%	2.3%	26.2%	32.3%
Tennessee	13.0%	9.7%	6.9%	25.9%	23.1%	8.0%
Texas	14.2%	13.3%	4.5%	17.8%	22.1%	9.1%
Utah	4.1%	2.8%	6.1%	14.4%	10.6%	15.9%
Vermont	3.0%	3.1%	0.0%	0.0%	0.0%	0.0%
Virginia	7.5%	6.1%	0.7%	13.0%	15.4%	9.8%
Washington	6.6%	5.2%	3.0%	13.3%	18.7%	7.2%
West Virginia	11.6%	11.3%	0.0%	23.0%	26.2%	57.4%
Wisconsin	8.6%	5.8%	10.1%	25.8%	15.8%	23.3%
Wyoming	8.3%	8.0%	0.0%	0.0%	7.4%	18.6%
United States	9.8%	7.9%	3.5%	17.2%	17.0%	15.8%

Notes: "Computer" refers to a laptop, desktop, or tablet computer. "Households" refers to households within a given racial category was too small for the state to report data or (2) all households within a given racial category have adequate computer access. The American Community Survey does not provide further clarification about these values.

TABLE A4: Numb	er of Childrer	Without a Co	omputer by Ra	ace, State Con	nparisons	
State	All	White	Asian	Black	Latino	American Indian/Alaska Native
Alabama	150,238	69,535	1,209	66,850	20,907	4,905
Alaska	14,410	3,846	974	278	1,354	9,973
Arizona	192,520	126,687	2,251	18,522	117,134	30,590
Arkansas	128,337	76,829	280	55,771	30,590	3,706
California	688,636	383,337	29,641	63,619	559,163	19,685
Colorado	99,834	76,214	3,234	8,649	63,967	3,934
Connecticut	50,738	21,800	1,851	14,406	25,118	856
Delaware	19,702	6,203	119	7,944	3,635	0
District of Columbia	8,685	240	403	6,545	1,358	216
Florida	373,710	208,817	4,740	137,933	138,567	2,605
Georgia	261,997	111,646	4,185	115,671	65,743	3,764
Hawaii	25,423	5,734	9,034	461	3,607	454
Idaho	31,370	27,154	767	225	11,212	3,685
Illinois	265,228	132,269	7,170	85,341	90,312	2,763
Indiana	182,766	128,699	3,753	41,354	32,866	3,237
lowa	65,437	51,891	1,173	10,308	13,593	604
Kansas	71,953	53,234	353	11,332	28,210	1,932
Kentucky	126,867	97,034	1,805	20,952	10,923	635
Louisiana	162,654	64,963	995	91,251	14,308	2,405
Maine	17,122	13,888	369	4,904	35	792
Maryland	84,757	30,538	2,110	34,844	28,487	264
Massachusetts	79,003	48,640	3,167	17,097	35,793	175
Michigan	218,853	131,754	2,548	76,932	19,721	4,738
Minnesota	81,346	39,532	3,905	25,283	12,837	6,123
Mississippi	119,902	46,774	231	67,897	6,284	1,820
Missouri	155,915	104,712	237	42,840	15,354	2,126

TABLE A4: Number of Children Without a Computer by Race, State Comparisons (continued)							
State	All	White	Asian	Black	Latino	American Indian/Alaska Native	
Montana	17,868	12,767	0	0	1,589	5,053	
Nebraska	44,534	36,323	830	3,112	19,053	3,529	
Nevada	88,967	29,637	2,153	8,955	39,501	3,034	
New Hampshire	12,114	10,434	895	536	1,095	0	
New Jersey	122,304	56,483	2,694	28,583	71,481	710	
New Mexico	70,692	44,533	514	1,601	41,490	19,250	
New York	380,747	178,443	19,639	89,305	136,364	6,973	
North Carolina	242,850	118,565	5,728	85,344	69,804	7,771	
North Dakota	13,149	5,438	147	3,128	772	5,101	
Ohio	251,719	162,153	3,322	81,787	21,545	1,609	
Oklahoma	143,720	91,856	2,686	24,034	35,116	22,170	
Oregon	69,346	55,399	692	2,304	36,936	7,672	
Pennsylvania	221,037	143,768	7,553	50,369	56,235	3,216	
Rhode Island	13,479	7,434	160	2,451	6,177	0	
South Carolina	140,126	56,722	103	75,722	21,381	2,006	
South Dakota	23,386	12,997	474	209	3,191	9,959	
Tennessee	201,912	114,111	2,394	80,565	27,906	1,058	
Texas	1,061,541	710,791	17,914	168,921	734,118	7,759	
Utah	39,032	23,946	2,117	2,010	14,055	2,348	
Vermont	3,038	3,250	0	0	0	0	
Virginia	143,653	79,491	1,123	51,526	34,872	2,227	
Washington	117,179	69,800	5,775	12,718	57,949	3,632	
West Virginia	44,144	40,180	0	2,855	1,785	477	
Wisconsin	119,244	65,740	5,215	35,055	20,060	6,394	
Wyoming	10,376	9,203	0	0	1,012	1,338	
United States	7,273,556	4,201,432	168,629	1,838,297	2,804,565	235,273	

Notes: "Computer" refers to a laptop, desktop, or tablet computer. A value of "0" indicates one of the following: (1) the number of children within a given racial category was too small for the state to report data or (2) all children within a given racial category have adequate computer access. The American Community Survey does not provide further clarification about these values.

Appendix B: Access to High-Speed Home Internet and Devices by Income, State Comparisons

TABLE B1: Percentage of Households Without High-Speed Home Internet Access by Household Income, State Comparisons

State	All Households	Households with Annual Income Below \$25,000	Households with Annual Income Between \$25,000 and \$50,000	Households with Annual Income Between \$50,000 and \$75,000	Households with Annual Income Between \$75,000 and \$150,000	Households with Annual Income Above \$150,000
Alabama	31.8%	54.4%	40.3%	27.2%	19.3%	14.9%
Alaska	29.5%	54.3%	46.0%	38.4%	23.0%	8.7%
Arizona	24.6%	47.2%	32.1%	25.8%	15.1%	9.4%
Arkansas	39.0%	59.8%	44.5%	41.2%	28.4%	1.1%
California	19.9%	40.1%	30.1%	23.4%	14.1%	7.7%
Colorado	17.2%	37.9%	27.6%	21.1%	12.1%	6.4%
Connecticut	14.2%	31.8%	26.2%	17.1%	9.6%	4.2%
Delaware	18.4%	31.0%	27.7%	19.8%	14.5%	5.5%
District of Columbia	18.5%	44.7%	34.3%	16.7%	11.1%	4.7%
Florida	22.1%	40.8%	30.6%	20.2%	13.5%	8.2%
Georgia	24.9%	46.7%	33.5%	26.3%	15.2%	8.0%
Hawaii	16.9%	46.2%	23.6%	19.0%	13.0%	6.3%
Idaho	24.4%	44.1%	27.2%	25.7%	17.8%	10.2%
Illinois	21.8%	45.9%	31.9%	22.8%	14.8%	7.3%
Indiana	27.0%	45.1%	33.5%	27.0%	19.2%	14.8%
Iowa	24.3%	50.6%	36.5%	26.4%	14.9%	9.8%
Kansas	22.9%	41.4%	32.4%	20.7%	16.9%	10.8%
Kentucky	27.7%	46.7%	35.1%	28.6%	16.5%	11.1%
Louisiana	30.6%	51.8%	36.8%	23.6%	19.8%	13.4%
Maine	16.5%	34.6%	23.4%	15.5%	12.0%	5.6%
Maryland	16.4%	41.9%	29.3%	21.8%	10.8%	7.0%
Massachusetts	13.2%	33.1%	23.5%	15.8%	9.6%	5.1%
Michigan	23.7%	45.3%	30.5%	22.0%	17.1%	8.7%
Minnesota	19.0%	40.4%	29.2%	23.6%	14.6%	8.9%
Mississippi	41.9%	60.6%	50.9%	35.0%	29.2%	19.3%
Missouri	27.8%	51.0%	37.5%	25.0%	19.4%	12.2%
Notes: "High-sp	eed home interr	net access" refers to	o a wireline broadbar	nd internet subscription	on—high-speed intern	et service provid

TABLE B1: Percentage of Households Without High-Speed Home Internet Access by Household Income, State Comparisons (continued)

State	All Households	Households with Annual Income Below \$25,000	Households with Annual Income Between \$25,000 and \$50,000	Households with Annual Income Between \$50,000 and \$75,000	Households with Annual Income Between \$75,000 and \$150,000	Households with Annual Income Above \$150,000
Montana	25.7%	49.1%	31.2%	18.8%	16.5%	27.6%
Nebraska	21.0%	39.5%	30.7%	21.1%	14.5%	8.7%
Nevada	21.7%	46.4%	26.8%	16.5%	15.0%	11.3%
New Hampshire	13.7%	34.0%	23.2%	14.5%	9.8%	7.0%
New Jersey	14.4%	30.1%	25.1%	19.0%	10.8%	6.3%
New Mexico	34.0%	56.2%	38.2%	31.6%	17.2%	16.1%
New York	20.1%	37.8%	29.7%	22.1%	14.2%	8.2%
North Carolina	22.7%	43.3%	31.0%	22.2%	12.7%	5.7%
North Dakota	20.9%	54.9%	22.4%	19.9%	17.2%	15.2%
Ohio	21.4%	42.2%	28.0%	20.1%	14.0%	7.7%
Oklahoma	34.6%	58.0%	39.4%	34.9%	24.1%	15.5%
Oregon	21.1%	39.6%	31.4%	21.8%	16.0%	9.2%
Pennsylvania	17.6%	36.5%	25.2%	19.4%	11.4%	7.0%
Rhode Island	15.1%	38.6%	26.4%	15.2%	6.6%	4.1%
South Carolina	26.5%	46.8%	35.1%	25.0%	15.6%	8.7%
South Dakota	22.6%	41.9%	31.8%	25.2%	12.1%	12.0%
Tennessee	27.8%	47.4%	35.8%	27.1%	16.0%	11.7%
Texas	28.6%	53.3%	38.7%	28.5%	18.7%	10.2%
Utah	19.0%	34.7%	30.7%	18.4%	14.1%	12.1%
Vermont	21.5%	34.9%	23.8%	27.9%	16.9%	16.6%
Virginia	20.8%	47.2%	33.5%	22.9%	15.1%	7.1%
Washington	15.8%	33.5%	26.9%	19.1%	11.1%	5.9%
West Virginia	25.8%	40.3%	27.4%	25.0%	19.7%	9.9%
Wisconsin	21.6%	39.2%	29.0%	22.2%	16.2%	13.7%
Wyoming	23.8%	35.3%	32.1%	19.8%	18.7%	22.9%
United States	22.7%	44.5%	32.2% ds" refers to househol	23.6%	15.1%	8.4%

Notes: "High-speed home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). "Households" refers to households with one or more children age 17 years or younger

TABLE B2: Number of Children Without High-Speed Home Internet Access by Household Income, State Comparisons

State	All Income Levels	Household Income Below \$25,000	Household Income Between \$25,000 and \$50,000	Household Income Between \$50,000 and \$75,000	Household Income Between \$75,000 and \$150,000	Household Income Above \$150,000
Alabama	332,223	123,381	84,727	46,966	60,797	16,353
Alaska	52,552	9,542	12,916	12,144	15,109	2,841
Arizona	415,234	118,511	119,369	78,434	77,003	21,918
Arkansas	296,639	90,311	80,288	57,163	58,232	10,644
California	1,763,038	447,519	493,192	305,831	364,829	151,668
Colorado	228,987	48,936	60,192	43,156	57,844	18,858
Connecticut	110,176	30,287	32,722	16,225	21,290	9,652
Delaware	34,353	11,326	8,917	6,992	6,492	626
District of Columbia	20,278	8,975	5,465	1,906	2,139	1,793
Florida	859,018	256,332	266,750	142,713	151,289	41,934
Georgia	625,197	204,258	175,023	109,913	106,215	29,788
Hawaii	51,032	13,904	10,859	8,003	13,688	4,577
Idaho	110,504	26,180	28,437	25,778	24,770	5,339
Illinois	635,855	187,693	163,698	104,988	136,022	43,454
Indiana	438,365	107,478	111,893	84,811	105,551	28,633
lowa	184,572	43,483	51,837	36,002	42,804	10,446
Kansas	171,750	37,331	51,372	28,166	43,758	11,123
Kentucky	286,447	90,681	80,329	51,919	51,119	12,400
Louisiana	318,352	125,350	81,541	39,518	55,794	16,149
Maine	42,603	9,827	12,699	6,529	11,245	2,302
Maryland	220,714	51,013	55,973	37,786	48,339	27,604
Massachusetts	185,053	49,801	42,934	26,520	42,354	23,444
Michigan	536,377	165,192	132,987	86,188	123,219	28,792
Minnesota	264,334	50,660	66,298	44,869	74,704	27,803
Mississippi	290,739	105,824	77,686	46,497	49,776	10,957
Missouri	394,745	110,347	113,514	58,798	88,335	23,750

TABLE B2: Number of Children Without High-Speed Home Internet Access by Household Income, State Comparisons (continued)

State	All Income Levels	Household Income Below \$25,000	Household Income Between \$25,000 and \$50,000	Household Income Between \$50,000 and \$75,000	Household Income Between \$75,000 and \$150,000	Household Income Above \$150,000
Montana	57,569	11,347	17,758	8,524	11,958	7,982
Nebraska	107,141	21,870	30,269	22,250	26,390	6,362
Nevada	147,923	44,475	40,327	20,185	34,169	8,767
New Hampshire	36,507	8,695	7,825	5,658	9,623	4,706
New Jersey	284,879	66,272	67,626	47,179	64,427	39,374
New Mexico	151,279	59,228	41,804	24,478	19,683	6,086
New York	833,365	249,847	207,883	124,900	172,981	77,753
North Carolina	525,858	179,876	156,963	83,035	87,948	18,036
North Dakota	37,255	7,370	5,097	7,795	12,084	4,910
Ohio	579,779	190,084	148,464	89,247	122,361	29,622
Oklahoma	345,997	102,408	91,492	65,947	70,088	16,062
Oregon	192,235	42,669	51,127	35,242	47,586	15,611
Pennsylvania	475,762	129,710	121,875	85,911	103,046	35,220
Rhode Island	32,396	11,875	9,197	5,140	4,474	1,710
South Carolina	283,081	93,819	80,829	49,606	48,187	10,640
South Dakota	48,879	11,186	16,062	9,344	9,642	2,646
Tennessee	434,739	141,523	124,847	78,846	70,625	18,899
Texas	2,104,514	661,552	604,418	336,194	388,869	113,481
Utah	181,255	24,714	46,868	34,116	56,350	19,207
Vermont	23,184	2,928	4,675	4,882	8,140	2,559
Virginia	393,850	97,907	104,831	62,793	95,109	33,210
Washington	280,297	57,029	77,283	55,135	67,056	23,794
West Virginia	96,684	32,917	22,451	17,242	20,862	3,211
Wisconsin	297,324	60,220	70,516	54,381	85,400	26,806
Wyoming	29,683	5,594	6,366	4,549	9,204	3,971
United States	16,850,575	4,839,258	4,578,473	2,840,392	3,478,979	1,113,473

Notes: "High-speed home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL).

TABLE B3: Percentage of Households Without a Computer by Household Income, State Comparisons Households Households Households Households with Households with Annual with Annual All with Annual Annual Income with Annual State Income Between Income Between Households Income Below Between \$75,000 Income Above \$25,000 and \$50,000 and \$25,000 and \$150,000 \$150,000 \$50,000 \$75,000 14.2% 34.8% Alabama 17.7% 10.9% 4.3% 1.5% Alaska 8.0% 24.7% 14.0% 10.6% 4.1% 0.3% Arizona 11.3% 29.0% 16.2% 10.6% 4.6% 1.6% Arkansas 17.0% 36.4% 22.8% 14.9% 5.4% 0.7% California 8.2% 23.4% 15.0% 8.3% 2.0% 1.1% Colorado 7.5% 26.7% 15.5% 8.9% 2.3% 0.8% 6.4% 21.1% 13.5% 7.7% 2.5% 0.4% Connecticut Delaware 8.1% 34.2% 18.5% 5.1% 3.5% 1.8% District of 7.8% 18.4% 6.8% 4.3% 0.3% 20.1% Columbia 9.5% 25.0% 14.4% 7.0% 3.2% 1.1% Florida Georgia 11.0% 28.9% 17.0% 9.6% 3.3% 0.6% Hawaii 8.3% 33.0% 11.5% 9.5% 5.0% 1.3% Idaho 6.9% 18.6% 13.3% 2.8% 2.3% 0.8% Illinois 9.1% 28.8% 14.7% 8.4% 3.1% 0.8% Indiana 11.3% 29.5% 16.2% 10.2% 3.8% 2.9% lowa 8.6% 26.2% 14.0% 11.1% 2.3% 1.2% 9.6% 31.0% 14.1% 9.9% 2.9% 0.7% Kansas 12.1% 33.2% 15.9% 8.4% 3.1% 1.1% Kentucky 15.5% Louisiana 37.0% 20.5% 8.7% 3.6% 2.5% 6.6% 2.8% 1.2% Maine 15.0% 15.4% 3.3% Maryland 6.2% 24.3% 14.5% 7.8% 2.5% 0.7% 2.6% Massachusetts 5.7% 22.6% 11.8% 5.5% 0.6% Michigan 9.5% 29.0% 15.7% 6.2% 2.5% 0.7% 5.7% 29.5% 9.1% 4.4% 2.4% 1.0% Minnesota 17.7% 11.4% 5.7% Mississippi 17.1% 37.7% 3.9% Missouri 10.9% 31.7% 16.5% 7.7% 3.6% 1.5%

TABLE B3: Percentage of Households Without a Computer by Household Income, State Comparisons (continued)

State	All Households	Households with Annual Income Below \$25,000	Households with Annual Income Between \$25,000 and \$50,000	Households with Annual Income Between \$50,000 and \$75,000	Households with Annual Income Between \$75,000 and \$150,000	Households with Annual Income Above \$150,000
Montana	8.0%	23.9%	14.8%	3.6%	1.9%	3.2%
Nebraska	8.7%	31.2%	11.0%	7.4%	4.5%	0.6%
Nevada	8.8%	24.0%	14.5%	6.7%	13.5%	6.8%
New Hampshire	4.5%	19.6%	10.7%	5.7%	1.3%	0.0%
New Jersey	6.1%	19.8%	15.3%	6.7%	3.0%	0.6%
New Mexico	15.9%	32.4%	19.1%	11.4%	5.5%	1.3%
New York	9.1%	25.1%	15.7%	8.0%	4.0%	1.2%
North Carolina	10.4%	27.9%	16.2%	7.8%	2.2%	0.2%
North Dakota	7.4%	34.3%	9.0%	7.8%	3.2%	3.7%
Ohio	9.9%	29.2%	14.2%	7.4%	3.0%	1.0%
Oklahoma	14.3%	34.1%	18.0%	12.9%	5.6%	1.0%
Oregon	7.5%	25.2%	12.7%	9.8%	1.8%	0.2%
Pennsylvania	8.1%	24.2%	14.1%	7.4%	3.0%	1.4%
Rhode Island	6.2%	21.2%	11.9%	2.3%	3.0%	0.0%
South Carolina	13.1%	34.5%	17.7%	8.9%	3.5%	1.3%
South Dakota	10.6%	34.9%	18.9%	4.9%	3.4%	0.0%
Tennessee	13.0%	31.7%	18.0%	9.0%	4.5%	1.3%
Texas	14.2%	37.5%	21.2%	11.6%	5.5%	1.4%
Utah	4.1%	13.0%	7.9%	5.9%	1.5%	0.5%
Vermont	3.0%	13.3%	3.9%	3.3%	1.2%	0.0%
Virginia	7.5%	29.2%	13.5%	8.3%	2.6%	0.4%
Washington	6.6%	21.1%	12.5%	7.5%	3.6%	0.8%
West Virginia	11.6%	28.8%	12.4%	9.9%	3.3%	0.4%
Wisconsin	8.6%	25.6%	15.3%	9.4%	3.3%	1.2%
Wyoming	8.3%	26.6%	11.7%	9.0%	3.6%	0.0%
United States	9.8%	28.7%	15.9%	8.6%	3.5%	1.7%

Notes: "Computer" refers to a laptop, desktop, or tablet computer. "Households" refers to households with one or more children age 17 years or younger.

TABLE B4: Number of Children Without a Computer by Household Income, State Comparisons Household Household Household Household Household All Income Income Between Income Between Income Between State Income Above Income Below Levels \$25,000 and \$50,000 and \$75,000 and \$150,000 \$25,000 \$50,000 \$75,000 \$150,000 150,238 Alabama 78,983 37,211 18,821 13,573 1,649 Alaska 14.410 4.338 3.929 3.351 2.693 Arizona 192,520 72,873 60,318 32,198 23,414 3,717 Arkansas 128,337 55,015 41,107 20,679 11,074 463 688,636 260,971 245,925 108,460 51,595 21,686 California Colorado 99,834 34,498 33,762 18,246 10,983 2,345 Connecticut 50,738 20,096 16,892 7,307 5,525 918 19,702 Delaware 9,515 5,600 1,894 2,144 549 District of 8.685 4.037 2.928 775 831 114 Columbia Florida 373,710 157,156 125,690 49,379 35,839 5,647 261,997 117,913 Georgia 82,973 37,477 21,544 2,090 Hawaii 25,423 9,926 5,293 3,995 5,268 941 31,370 11,052 13,891 2,808 3,198 419 Idaho Illinois 265,228 117,684 75,479 38,760 28,515 4,790 182,766 70,226 54,082 31,995 20,844 Indiana 5,618 65,437 22,517 19,899 15,128 6,612 1,282 lowa Kansas 71,953 27,928 22,331 13,453 7,518 722 126,867 64,436 36,350 9,576 1,233 Kentucky 15,273 Louisiana 162.654 89.590 45.371 14.542 10.142 3.010 Maine 17,122 4,266 8,352 1,391 2,623 490 Maryland 84,757 29,588 27,724 13,506 11,173 2,766 79,003 33,995 21,524 9,205 11,514 2,765 Massachusetts Michigan 218,853 105,703 68,553 24,301 17,977 2,319 Minnesota 81,346 36,976 20,627 8,349 12,268 3,126 Mississippi 119,902 65,823 27,003 15,135 9,722 2,219 Missouri 155,915 68,546 49,909 18,117 16,431 2,911

TABLE B4: Number of Children Without a Computer by Household Income, State Comparisons
(continued)

State	All Income Levels	Household Income Below \$25,000	Household Income Between \$25,000 and \$50,000	Household Income Between \$50,000 and \$75,000	Household Income Between \$75,000 and \$150,000	Household Income Above \$150,000
Montana	17,868	5,521	8,411	1,634	1,377	924
Nebraska	44,534	17,285	10,841	7,805	8,167	436
Nevada	88,967	22,990	21,825	8,175	30,694	5,284
New Hampshire	12,114	5,007	3,613	2,217	1,277	0
New Jersey	122,304	43,464	40,968	16,510	17,587	3,775
New Mexico	70,692	34,157	20,923	8,834	6,287	491
New York	380,747	165,716	109,994	45,145	48,581	11,310
North Carolina	242,850	115,857	81,964	29,202	15,196	632
North Dakota	13,149	4,604	2,044	3,057	2,248	1,196
Ohio	251,719	122,723	70,197	30,686	24,518	3,595
Oklahoma	143,720	60,243	41,776	24,357	16,306	1,037
Oregon	69,346	27,155	20,658	15,829	5,363	341
Pennsylvania	221,037	86,018	68,071	32,781	27,132	7,035
Rhode Island	13,479	6,521	4,143	777	2,038	0
South Carolina	140,126	69,209	40,815	17,681	10,828	1,593
South Dakota	23,386	9,328	9,539	1,815	2,705	0
Tennessee	201,912	92,856	61,769	25,736	19,503	2,048
Texas	1,061,541	464,864	330,860	136,569	113,811	15,437
Utah	39,032	9,255	12,075	10,910	5,999	793
Vermont	3,038	1,116	766	577	579	0
Virginia	143,653	60,508	42,197	22,732	16,352	1,863
Washington	117,179	35,943	35,759	21,054	21,222	3,201
West Virginia	44,144	23,534	10,152	6,832	3,497	129
Wisconsin	119,244	39,285	37,174	23,066	17,368	2,351
Wyoming	10,376	4,217	2,318	2,067	1,774	0
United States	7,273,556	3,101,507	2,242,040	1,020,864	773,328	137,453

Notes: "Computer" refers to a laptop, desktop, or tablet computer. "Households" refers to households with one or more children age 17 years or younger.

Appendix C: Access to High-Speed Home Internet and Devices by Location, State Comparisons

TABLE C1: Percentage of Households Without High-Speed Home Internet Access by Location, State Comparisons

State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations
Alabama	31.8%	46.3%	29.6%
Alaska	29.5%	57.9%	24.4%
Arizona	24.6%	51.6%	23.5%
Arkansas	39.0%	45.9%	35.2%
California	19.9%	31.3%	19.7%
Colorado	17.2%	35.7%	14.9%
Connecticut	14.2%	14.1%	14.2%
Delaware	18.4%	0.0%	18.4%
District of Columbia	18.5%	0.0%	18.5%
Florida	22.1%	38.5%	21.6%
Georgia	24.9%	43.6%	21.2%
Hawaii	16.9%	38.6%	13.4%
Idaho	24.4%	33.3%	20.0%
Illinois	21.8%	30.6%	20.6%
Indiana	27.0%	38.5%	23.7%
lowa	24.3%	31.4%	20.4%
Kansas	22.9%	28.2%	20.5%
Kentucky	27.7%	31.8%	25.0%
Louisiana	30.6%	60.7%	26.7%
Maine	16.5%	22.7%	12.4%
Maryland	16.4%	35.1%	15.8%
Massachusetts	13.2%	21.8%	13.1%
Michigan	23.7%	37.6%	20.8%
Minnesota	19.0%	29.0%	16.7%
Mississippi	41.9%	49.1%	33.4%
Missouri	27.8%	38.0%	24.9%

TABLE C1: Percentage of Households Without High-Speed Home Internet Access by Location, State Comparisons (continued)

State	All Locations	Nonmetropolitan "Rural"	Metropolitan Locations
		Locations	
Montana	25.7%	26.4%	24.9%
Nebraska	21.0%	29.6%	16.6%
Nevada	21.7%	24.9%	21.3%
New Hampshire	13.7%	15.5%	12.8%
New Jersey	14.4%	0.0%	14.4%
New Mexico	34.0%	41.1%	30.1%
New York	20.1%	28.3%	19.5%
North Carolina	22.7%	30.5%	20.9%
North Dakota	20.9%	19.8%	21.7%
Ohio	21.4%	32.3%	18.5%
Oklahoma	34.6%	46.7%	27.4%
Oregon	21.1%	25.7%	20.1%
Pennsylvania	17.6%	25.9%	16.5%
Rhode Island	15.1%	0.0%	15.1%
South Carolina	26.5%	44.8%	24.4%
South Dakota	22.6%	26.1%	19.7%
Tennessee	27.8%	36.3%	25.9%
Texas	28.6%	46.3%	26.8%
Utah	19.0%	25.8%	18.3%
Vermont	21.5%	24.3%	16.0%
Virginia	20.8%	37.3%	18.8%
Washington	15.8%	26.3%	15.0%
West Virginia	25.8%	30.3%	23.7%
Wisconsin	21.6%	27.1%	19.4%
Wyoming	23.8%	28.6%	17.0%
United States	22.7%	36.2%	20.9%

Notes: "Home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). "Households" refers to households with one or more children age 17 years or younger. Following the U.S. Census Bureau's practice, this analysis defines "metropolitan" areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan. The American Community Survey (ACS) does not use the term "rural" in characterizing geographies. Values for Delaware, the District of Columbia, New Jersey, and Rhode Island appear as "0" because these jurisdictions do not have a geographic area that meets the ACS definition of nonmetropolitan area.

TABLE C2: Number of Children Without High-Speed Home Internet Access by Location, State Comparisons

State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations
Alabama	332,223	63,411	266,561
Alaska	52,552	17,626	35,047
Arizona	415,234	37,380	376,285
Arkansas	296,639	125,809	163,860
California	1,763,038	47,243	1,681,551
Colorado	228,987	55,003	173,968
Connecticut	110,176	4,917	104,136
Delaware	34,353	0	34,353
District of Columbia	20,278	0	20,278
Florida	859,018	44,001	806,742
Georgia	625,197	181,003	431,737
Hawaii	51,032	17,890	33,556
Idaho	110,504	52,457	59,685
Illinois	635,855	105,813	525,586
Indiana	438,365	141,212	299,279
Iowa	184,572	86,891	98,432
Kansas	171,750	66,021	105,423
Kentucky	286,447	130,008	154,135
Louisiana	318,352	73,704	243,318
Maine	42,603	24,004	19,035
Maryland	220,714	14,337	203,757
Massachusetts	185,053	4,003	181,161
Michigan	536,377	147,373	386,256
Minnesota	264,334	79,087	182,209
Mississippi	290,739	180,895	106,718
Missouri	394,745	119,480	271,519

TABLE C2: Number of Children Without High-Speed Home Internet Access by Location, State Comparisons (continued)

State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations
Montana	57,569	32,260	26,063
Nebraska	107,141	51,395	56,565
Nevada	147,923	19,723	126,632
New Hampshire	36,507	13,947	22,318
New Jersey	284,879	0	282,764
New Mexico	151,279	68,771	83,533
New York	833,365	79,611	739,187
North Carolina	525,858	133,319	389,912
North Dakota	37,255	14,754	22,544
Ohio	579,779	146,090	412,514
Oklahoma	345,997	177,272	168,705
Oregon	192,235	42,392	147,355
Pennsylvania	475,762	79,822	392,014
Rhode Island	32,396	0	31,539
South Carolina	283,081	51,077	230,724
South Dakota	48,879	25,266	23,510
Tennessee	434,739	97,643	330,476
Texas	2,104,514	330,735	1,734,353
Utah	181,255	25,504	159,230
Vermont	23,184	17,875	5,720
Virginia	393,850	73,595	318,806
Washington	280,297	34,348	242,899
West Virginia	96,684	37,112	58,818
Wisconsin	297,324	45,246	231,680
Wyoming	29,683	21,600	8,464
United States	16,850,575	3,438,922	13,210,323

Notes: "Home internet access" refers to a wireline broadband internet subscription—high-speed internet service provided via cable, fiber, or digital subscriber line (DSL). Following the U.S. Census Bureau's practice, this analysis defines "metropolitan" areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan. The American Community Survey (ACS) does not use the term "rural" in characterizing geographies. Values for Delaware, the District of Columbia, New Jersey, and Rhode Island appear as "0" because these jurisdictions do not have a geographic area that meets the ACS definition of nonmetropolitan area.

TABLE C3: Percentage of Households Without a Computer by Location, State Comparisons Nonmetropolitan "Rural" State **All Locations Metropolitan Locations** Locations 14.2% 18.7% 13.6% Alabama 8.0% 25.4% Alaska 33.5% 11.3% 29.3% 10.6% Arizona Arkansas 17.0% 19.2% 15.8% California 8.2% 10.4% 8.2% Colorado 7.5% 11.9% 6.9% Connecticut 6.4% 5.6% 6.5% Delaware 8.1% 0.0% 8.1% **District of Columbia** 7.8% 0.0% 7.8% Florida 9.5% 23.0% 9.1% Georgia 11.0% 19.0% 9.4% Hawaii 8.3% 20.3% 6.4% 6.9% 8.2% 6.3% Idaho Illinois 9.1% 13.1% 8.5% Indiana 11.3% 14.0% 10.5% 8.6% 10.3% 7.6% Iowa Kansas 9.6% 11.2% 8.8% 12.1% 14.2% 10.8% Kentucky Louisiana 15.5% 28.0% 13.9% Maine 6.6% 6.9% 6.4% Maryland 8.7% 6.1% 6.2% Massachusetts 5.7% 5.0% 5.7% Michigan 9.5% 11.3% 9.2% Minnesota 5.7% 9.4% 4.8% Mississippi 17.1% 20.0% 13.6% Missouri 10.9% 14.1% 9.9%

TABLE C3: Percentage of Households Without a Computer by Location, State Comparisons	
(continued)	

State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations
Montana	8.0%	8.2%	7.8%
Nebraska	8.7%	10.3%	8.0%
Nevada	8.8%	6.6%	9.1%
New Hampshire	4.5%	5.4%	4.0%
New Jersey	6.1%	0.0%	6.1%
New Mexico	15.9%	19.6%	13.8%
New York	9.1%	9.9%	9.1%
North Carolina	10.4%	13.5%	9.7%
North Dakota	7.4%	8.3%	6.7%
Ohio	9.9%	11.2%	9.6%
Oklahoma	14.3%	16.6%	12.8%
Oregon	7.5%	9.1%	7.2%
Pennsylvania	8.1%	12.4%	7.6%
Rhode Island	6.2%	0.0%	6.2%
South Carolina	13.1%	15.6%	12.8%
South Dakota	10.6%	16.9%	5.5%
Tennessee	13.0%	14.6%	12.6%
Texas	14.2%	21.1%	13.5%
Utah	4.1%	6.5%	3.9%
Vermont	3.0%	2.9%	3.1%
Virginia	7.5%	13.9%	6.8%
Washington	6.6%	7.9%	6.5%
West Virginia	11.6%	15.1%	9.9%
Wisconsin	8.6%	9.5%	8.5%
Wyoming	8.3%	8.5%	8.0%
United States	9.8%	14.2%	9.3%

Notes: "Computer" refers to a laptop, desktop, or tablet computer. "Households" refers to households with one or more children age 17 years or younger. Following the U.S. Census Bureau's practice, this analysis defines "metropolitan" areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan. The American Community Survey (ACS) does not use the term "rural" in characterizing geographies. Values for Delaware, the District of Columbia, New Jersey, and Rhode Island appear as "0" because these jurisdictions do not have a geographic area that meets the ACS definition of nonmetropolitan area.

TABLE C4: Number of Children Without a Computer by Location, State Comparisons					
State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations		
Alabama	150,238	25,611	122,474		
Alaska	14,410	6,515	8,043		
Arizona	192,520	21,225	169,729		
Arkansas	128,337	52,626	73,551		
California	688,636	15,697	699,935		
Colorado	99,834	18,334	80,563		
Connecticut	50,738	1,953	47,668		
Delaware	19,702	0	19,702		
District of Columbia	8,685	0	8,685		
Florida	373,710	26,286	339,877		
Georgia	261,997	73,603	178,630		
Hawaii	25,423	9,399	16,027		
ldaho	31,370	12,917	18,801		
Illinois	265,228	45,299	216,868		
Indiana	182,766	51,350	132,592		
lowa	65,437	28,502	36,671		
Kansas	71,953	26,221	45,255		
Kentucky	126,867	58,054	66,586		
Louisiana	162,654	33,998	126,671		
Maine	17,122	7,296	9,825		
Maryland	84,757	3,554	78,666		
Massachusetts	79,003	918	78,826		
Michigan	218,853	44,290	170,844		
Minnesota	81,346	25,635	52,371		
Mississippi	119,902	73,684	43,454		
Missouri	155,915	44,334	107,953		

TABLE C4: Number of Children Without a Computer by Location, State Comparisons (continued)					
State	All Locations	Nonmetropolitan "Rural" Locations	Metropolitan Locations		
Montana	17,868	10,020	8,164		
Nebraska	44,534	17,884	27,260		
Nevada	88,967	5,228	54,101		
New Hampshire	12,114	4,859	6,974		
New Jersey	122,304	0	122,304		
New Mexico	70,692	32,796	38,298		
New York	380,747	27,850	344,954		
North Carolina	242,850	59,010	180,964		
North Dakota	13,149	6,185	6,961		
Ohio	251,719	47,269	199,748		
Oklahoma	143,720	63,013	78,811		
Oregon	69,346	15,010	52,784		
Pennsylvania	221,037	38,216	180,564		
Rhode Island	13,479	0	13,479		
South Carolina	140,126	17,786	121,036		
South Dakota	23,386	16,360	6,564		
Tennessee	201,912	39,272	160,772		
Texas	1,061,541	150,724	873,648		
Utah	39,032	6,425	33,934		
Vermont	3,038	2,133	1,108		
Virginia	143,653	42,816	189,927		
Washington	117,179	10,317	105,256		
West Virginia	44,144	18,495	24,569		
Wisconsin	119,244	15,861	101,509		
Wyoming	10,376	6,420	3,983		
United States	7,273,556	1,361,251	5,887,941		

Notes: "Computer" refers to a laptop, desktop, or tablet computer. Following the U.S. Census Bureau's practice, this analysis defines "metropolitan" areas as urbanized areas of 50,000 or more people and urban clusters of at least 2,500 people but less than 50,000. Remaining areas are nonmetropolitan. The American Community Survey (ACS) does not use the term "rural" in characterizing geographies. Values for Delaware, the District of Columbia, New Jersey, and Rhode Island appear as "0" because these jurisdictions do not have a geographic area that meets the ACS definition of nonmetropolitan area.