

Committee: Education, Health, and Environmental Affairs
Chairman: Senator Paul Pinksey
Vice-Chair: Senator Cheryl Kagan

Dr. Kevin Kornegay
Director of Cybersecurity Assurance & Policy Center at Morgan State University

Testimony in Support of

SB 66 -- Department of Housing and Community Development -- Office of Digital Inclusion
Sponsor: Senator Elfreth, et al.

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Thank you, Mr. Chairman, Vice Chairman, and members of the Committee, for the opportunity to testify today. I support SB 66 for the establishment of the Office of Digital Inclusion. In the Department of Housing and Community Development. I hope that my testimony will be useful to you in your deliberations.

By way of introduction, my name is Dr. Kevin Kornegay. I am the Director of the Cybersecurity Assurance & Policy (CAP) Center and IoT Security Professor in the Electrical and Computer Engineering Department at Morgan State University.

Defining the "Digital Divide"

Interaction between humans and computers has dramatically increased as we embark on the twenty-first century. The ability to access computers and the Internet has become increasingly important to completely immerse oneself in the economic, political, and social aspects of not just America, but of the world. However, not everyone has access to this technology. The idea of the "digital divide" refers to the growing gap between the underprivileged members of society, especially the poor, rural, elderly, and handicapped portion of the population who do not have access to computers or the Internet; and the wealthy, middle-class, and young Americans living in urban and suburban areas who have access.

Factors Attributing to the Digital Divide

Although the number of Americans with access to computers and the Internet continues to soar every year, the digital divide also grows at an alarming rate. On the one hand, sections of society already connected - such as higher income, educated White and Asian Pacific Islander households - are adopting newer technologies faster and are connecting even more. On the other, groups with traditionally lower Internet and computer usage rates continue to lag far behind. Unfortunately, according to a study conducted by the National Telecommunications and Information Administration (NTIA), entitled Falling Through the Net: Defining the Digital Divide, the gap widens along already strained economic and racial lines.

Education

Widening education levels seem to magnify the digital divide; households with higher levels of education are increasingly more likely to use computers and the Internet. Data indicates that those with college degrees or higher are ten times more likely to have internet access at work than those with only a high school education. A study conducted by the NTIA from 1997 to 1998 determined that the gap in computer usage and Internet access widened by 7.8% and 25%, respectively, between those with the most and the least education.

Income

Not surprisingly, and in direct correlation to education, household income levels also play a significant role in the widening gap. Again, the study by the NTIA stated, "In the last year, the divide between the highest and lowest income groups grew 29%" (NTIA Falling through the Net 99). Also, households earning incomes over \$75,000 are 20 times more likely to have home internet access than those at the lowest income levels and ten times more likely to have a computer if living in the city or suburban area than in the rural area. Due to lower-incomes, poor neighborhoods lack the infrastructure available in affluent areas. Telecommunication facilities are more readily available for wealthier communities and are more attractive for developing companies to establish themselves. As a result, poverty in less fortunate neighborhoods makes it less appealing for outside companies' investments, further aggravating the divide.

Race

At the same time, the digital divide continues to widen along racial lines. The difference in computer usage grew by 39.2% between White and Black households and 42.6% between White and Hispanic families between 1994 and 1998. Hispanic households are roughly half as likely to own computers as White households. Interestingly, race affects the number of computers in the school. Schools with a higher percentage of minorities have fewer computers, whereas those with a lower rate of minorities have a more significant number of computers. As expected, the gaps between racial groups narrow at higher incomes but widen among households at lower economic levels.

Concerning Internet access, Black and Hispanic households are falling even further behind: access by White families grew by 37.6% between 1997 and 1998. Hispanic households are nearly 2.5 times less likely to use the Internet than White households. The NTIA study also demonstrated the racial disparities in Internet access exist irrespective of income. In a cultural study to determine the reasons for the divide other than income, the Hispanic, African-American, and Asian-American communities were studied. In the Hispanic community, computers are a luxury, not a need; computer activities isolated individuals and took away valuable time from family activities. Many in the African-American community have experienced negative encounters with technological innovations. On the other hand, Asian-Americans generally emphasize education, resulting in a larger number embracing rising technological advances.

What the Data Reveals About the Digital Divide

A Pew Research Center study shows that among U.S. adults with household incomes below \$30,000, 29% don't own a smartphone, 44% don't have home broadband services, 46% don't own a traditional computer, and 26% own a smartphone but don't have broadband internet at home.

Since 1994, NTIA has regularly commissioned the U.S. Census Bureau to conduct surveys on technology use. These surveys consistently show that Americans living in rural communities, and distressed urban communities, are less likely to use the Internet than those living in urban, more prosperous areas. Their most recent survey, conducted in 2017, shows that in households with incomes under \$25,000, only 6 in 10 reported using the Internet at home. Many Americans living in rural areas have limited options for broadband services, in contrast to those living in large cities. A recent Federal Communications Commission survey found that a quarter of rural Americans – nearly 17 million people – live in places that lack sufficient broadband availability.

Overcoming the Digital Divide: Establishment of the Office of Digital Inclusion (ODI)

As a whole, the digital divide remains an enormous and complicated issue - heavily interwoven with issues of race, education, and poverty. However, the obstacle is by no means impossible if broken down into specific tasks that must be accomplished. Aside from the obvious financial barriers, the following would help narrow the gap:

Universal Access

As the use of computers and the Internet increases, so does the necessity for access. In the public sector, policymakers and community members must recognize the importance of such resources and ensure access for all. While increased competition among PC manufacturers and Internet Service Providers has substantially reduced the costs associated with owning a computer and maintaining a home connection, for many households the costs remain prohibitive. Like basic phone service, the ODI should help to ensure Internet access for low-income households. At the same time, the private sector must commit to providing equal service and networks to rural and underserved communities so that all individuals can participate.

More Community Access Centers, Continued Support of Those Already Existing

Community access centers (CACs) are a critical resource for those without access to computers and the Internet at school or work; such programs should continue to receive funding to expand and strengthen. According to data collected in 1998, minorities, individuals earning lower incomes, individuals with lower education, and the unemployed - the exact groups affected most by the digital divide - are the primary users of CACs. Those using the CACs "are also using the internet more often than other groups to find jobs or for educational purposes" (NTIA Falling through the Net 99). Community access centers, therefore, are worthwhile investments. ODI will coordinate with CAC's to help close the gap.

Additional, Well-Trained Technical Staff

Computers and other technologies alone are not enough. Communities and schools must train more qualified staff and alongside new technologies to promote the best resources. In addition

to understanding the latest technologies, the staff must be able to teach others. ODI will provide oversight to ensure proper training statewide.

Change of Public Attitude Regarding Technology

At the same time, much of society needs to change its attitude concerning technology. Rather than perceiving computers and the Internet as a superfluous luxury, the public should view them as crucial necessities. The public must come to realize the incredible power of new technologies and embrace them as tools for their future and the future of their children.

My testimony here today justifies establishing the Office of Diversity and Inclusion, and I hope it has helped the Committee. Based on my knowledge and experience, I support SB0066 to establish the Office of Diversity Inclusion.

To the members of this Committee, thank you once again for the opportunity to provide testimony today.

I encourage favorable support of SB0066. Thank you for your consideration.

References

- [1] <https://www.ntia.doc.gov/category/broadband>
- [2] <https://www.ntia.doc.gov/category/minority-broadband-initiative>
- [3] <mailto:aveigle@ntia.gov>
- [4] <https://sites.ed.gov/whhbcu/>
- [5] <https://www.ntia.doc.gov/report/2019/ntia-minority-broadband-initiative-framework>
- [6] <https://www.ntia.doc.gov/print/speechtestimony/2019/remarks-acting-assistant-secretary-rinaldo-2019-carolinas-alliance-success>