

# **Exiled: Across the Digital Divide**

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## Exiled: Across the Digital Divide

Looking across the digital divide can be as close as the nearest public school located in a rural or inner city setting. As you enter the computer applications and business computer lab at Oliver High School in Pittsburgh PA you notice the Tandy□ 1000 computers. These digital tools were new in the previous decade and have outlived many of the students that sit down at them to work. No printers are working and the floppy disks are of the era when they truly were “floppy”. The students here are making “the best of a bad situation”, words taken directly from the teacher’s mouth. While this may not represent all inner city schools, this scene is more frequent than many politicians or parents care to imagine. (Bushweller, 2001)

Despite several statements by the Bush administration that the digital divide is no longer an issue, this chasm is not narrowing but rather reflects a divide that significantly separates people in this country. This paper looks closely at recent research findings and posits that the digital divide is still present and very well may be growing wider.

The findings stand in contrast to recent pronouncements from the Bush Administration that the digital divide is narrowing or at least is of less concern today. In attempts to downplay the facts, the following statement from the proponents who favor lower funding for technology initiatives in education, seems particularly revealing.

“Because the Internet is still in a relatively early stage of commercial deployment, these socioeconomic and geographic differences in Internet usage are not surprising and may not be long lasting” (GAO, 2001, p.7)

As Clark and Gorski (2002) point out, this summary statement of the latest research from the United States General Accounting Office, form a flawed interpretation of the data on three levels. Their conclusions:

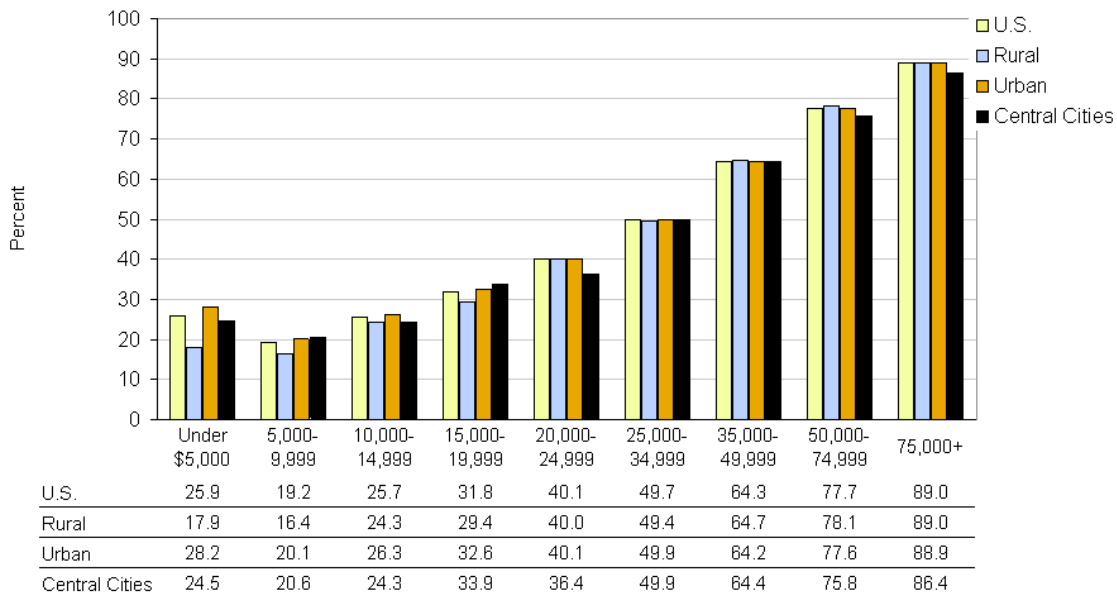
- Assume that the privileged should have quicker access to new technologies than others who are socioeconomically disadvantaged.
- Do not consider it problematic that people in rural areas cannot access new technologies due to inadequate technological infrastructure.
- Assume that these gaps will close naturally in due course – as if this will somehow magically disappear and so there is no need to be concerned with the facts as they exist now.

Recent reports by both the United States Department of Commerce and the United States General Accounting Office show clear evidence that the digital divide is unfortunately as large as ever and favor the privileged over the disadvantaged in our society. The digitally exiled are still being kept from the electronic tools that are crucial in this age of digital information.

## Households with Computers, By Income

It is clear from the chart below that households earning under \$25,000 per year are at a distinct disadvantage. Comparing these households with the households earning \$50,000 and up, this group is on the other side of the digital chasm. Comparing the extremes in the chart, one observes that 18% of the poorest of rural households indicate they have a computer at home while 89% the households in a rural setting earning \$75,000+ indicate they have computers. We see here the stark nature of this divide. It is of note that the rural poor are more distant from bridging that gap than what might have been expected compared with Central Cities populations in the lowest income brackets. The gap among this group is of great concern as well since the haves (86%) and the have nots (25%) among central city dwellers also outline the vast differences among these two populations. Exiled from the advantages of the digital age, the disadvantaged in our society continue to experience an alarming lack of access to a crucial tool in this information age.

**Percent of U.S. Households with a Computer By Income, By U.S., Rural, Urban, and Central Cities, 2001**

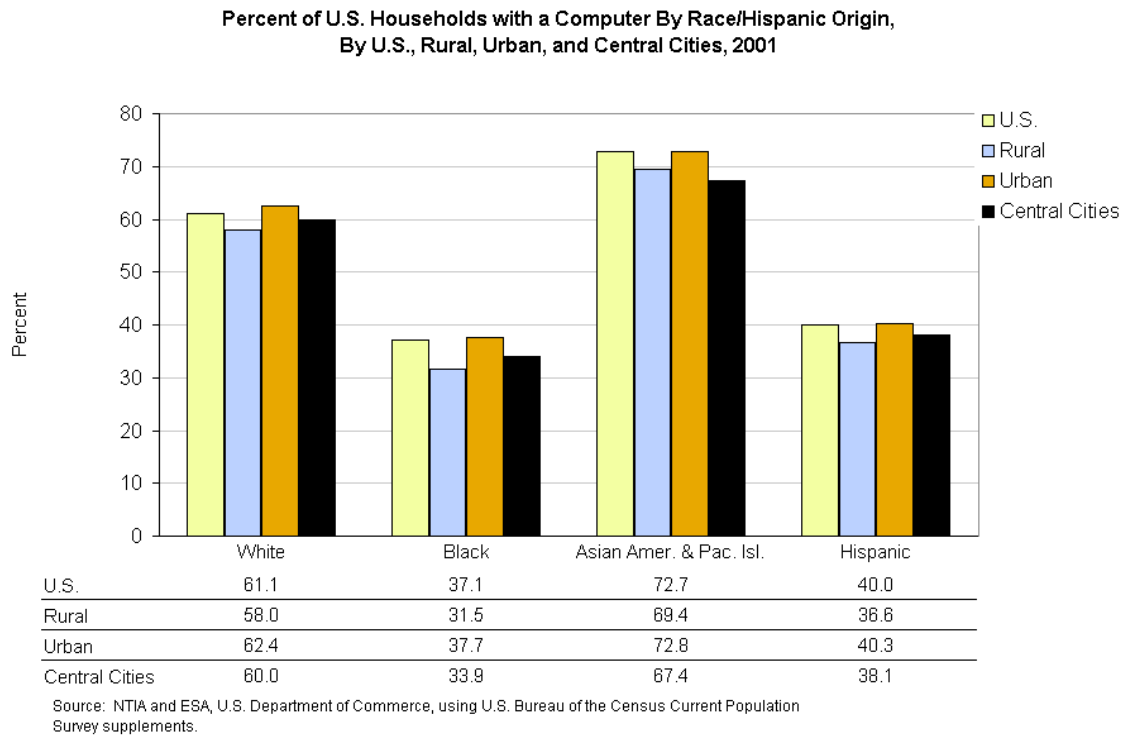


Source: NTIA and ESA, U.S. Department of Commerce, using U.S. Bureau of the Census Current Population Survey supplements.

**Figure 1**

## Households with Computers – By Race

Looking at US households separated into racial categories, the below chart presents the stark reality of disparity across racial groups as it relates to access of computers. Access to this digital tool in the home is most definitively divided along racial lines. The US culture seems to systematically exile persons racially from the tools that are generally agreed upon to be indispensable in the information age or digital age we live in. The rural Black households show the smallest number of computers in homes (31.5%) when compared to any other racial and demographic category.

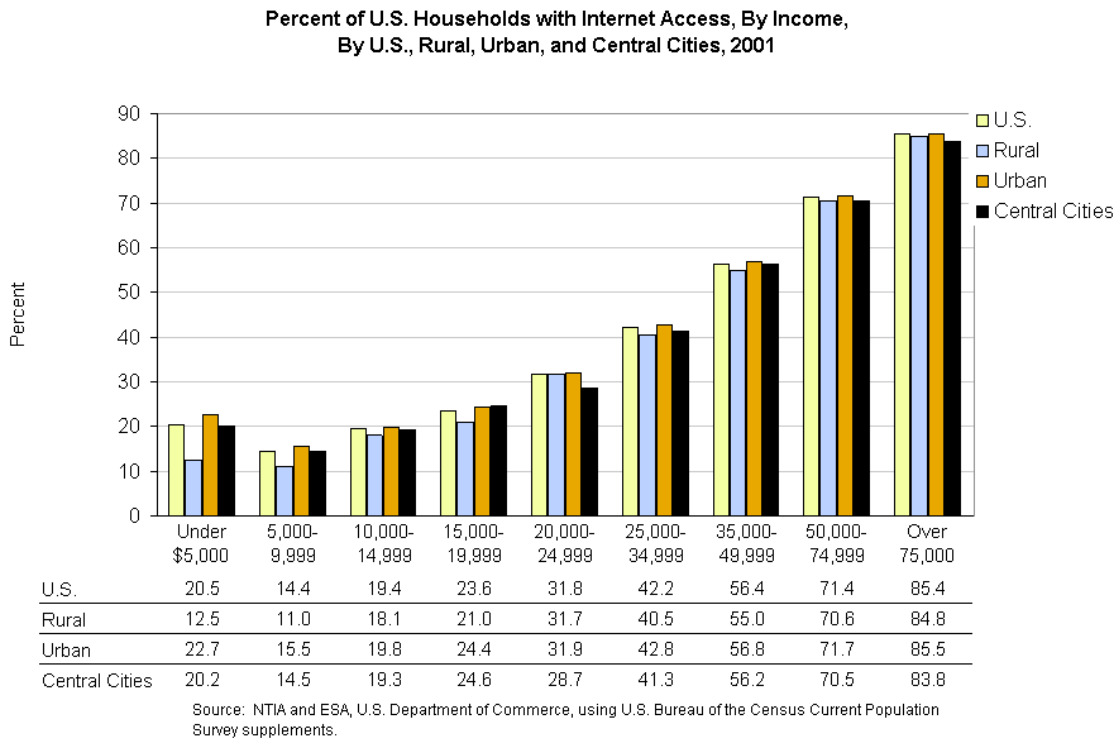


**Figure 2**

## Internet Access by Income

Our society is more and more conducting personal business within the context of the home. Access to the growing resources on the Internet build on this already prevalent phenomena in our culture. Older technologies such as telephones and televisions have helped create the phenomena where searching for information, looking for a job, communicating with employers and friends, finding entertainment options are more and more completed within the privacy of residency. Access to the Internet in your home provides increasing capability to engage in these activities for connection and advancement in our culture. Understandably if the underprivileged do not have computers, then access to the Internet is even more skewed toward the privileged in our culture.

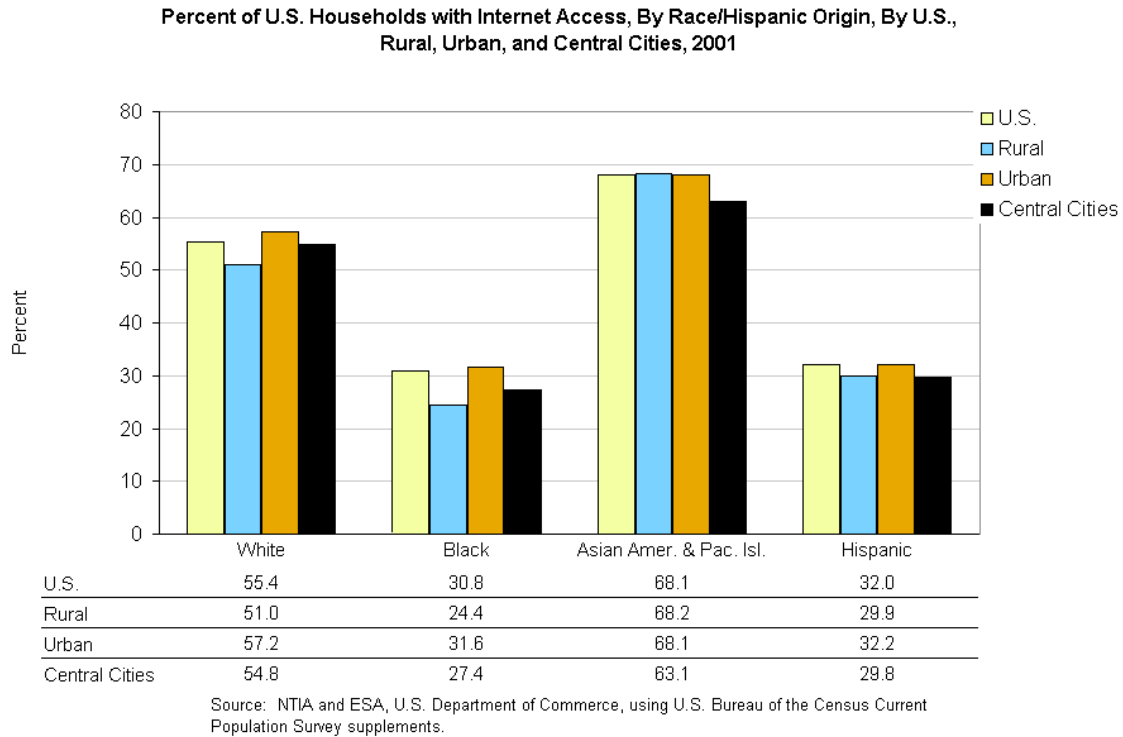
Figure 3 highlights that the rural underprivileged (12.5%, 11%) are the most looking over the precipice that separates the digital “haves” from the “have nots” as it relates to connectivity in the household.



**Figure 3**

## Internet Access by Race

We again see the outcomes of racial grouping of persons who don't have computers to begin with do not have access to the Internet in their households. Again the two racial groups (Black and Hispanic) are exiled from the tools needed to compete and survive in this new electronic economy.

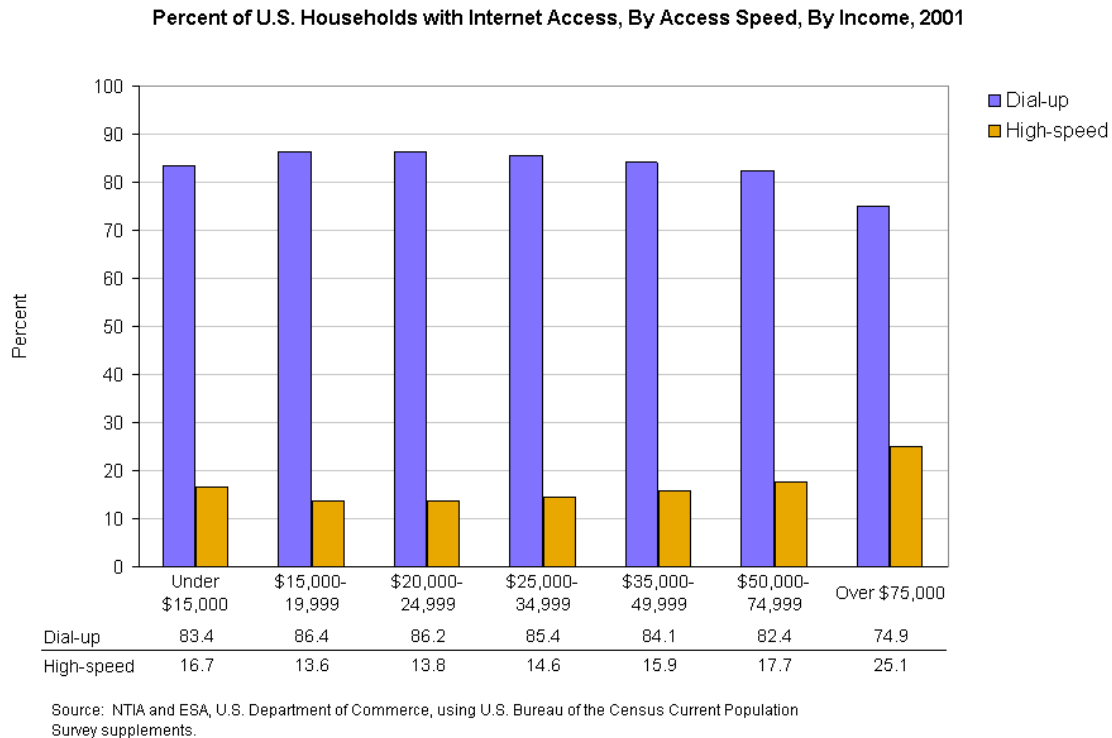


**Figure 4**

Things change so rapidly in the new cyberspace economy and culture that the urgency of the above phenomena may not yet be fully appreciated. If the digitally exiled experience this separation for a decade (generation), the pace of change that occurs in our society will distance the exiled at an exponentially greater rate than ever before. This group may move from a severely disadvantaged group to a permanently separated group with no hope to ever cross the precipice of the digital chasm.

## Broadband Access to the Internet

Content on the Internet increasingly utilizes multimedia elements including audio and video for which high speed access is crucial. The trends here may not seem as pronounced but the pattern is starting to emerge reflecting the chasm that is sure to keep those in exile with no conceivable bridge in sight. This chasm will widen in the future as federal programs aimed at providing support for technologies to lower income individuals are being slated for cuts. It is clear from current administrative dialogue, the war on terrorism will take precedence over funding for the disparities that are growing among the digitally exiled in our society.



**Figure 5**

## Implementation and Utilization

To this point the discussion has focused on physical access to the digital tools in our society. The implementation or utilization of these same tools also reflect a gap that promotes isolation and exclusion among disadvantaged groups in our society.

## **Exiled from Relevant Electronic Resources**

While the physical tools are essential for access to these new technologies, content that is needed and wanted by the disadvantaged goes hand in hand with serving the digitally exiled in our society. Having a computer with no software necessarily renders the tool completely useless. The opposite is also true. Internet access with little relevant information available, renders this resource ineffective if not useless for the digitally disadvantaged in our culture.

A study completed by The Children's Partnership (2000) points out some of the barriers that are faced by the "digitally exiled" in our culture as it relates to Internet access. They highlight four barriers faced by this group of people:

1. A lack of information about their local community
2. A lack of resources for people who do not read and write at an advanced literacy level.
3. A lack of documents in languages other than English.
4. A lack of cultural diversity.

## **Local Community**

There is a lack of information on local communities among current web sites. Persons with lower incomes travel outside their communities less often. These persons would like to see more resources focusing on local community activities. Web content promoting opportunities to improve quality of life within local and surrounding communities is severely lacking for persons who are less mobile.

Local housing information rarely is available online. Low income families stated that information on affordable local housing in their communities would be an extremely helpful online resource. There is also a lack of available listings of local employment opportunities applicable for persons in this underserved population.

## **Content for Limited-Literacy Readers**

Material online for the most part ignores users who may have limited literacy capabilities. The sites that are at a reading level appropriate for those who lack functional literacy skills tend to be sites that have content and social level of young children. Thus these sites do not provide information of need or interest to limited-literacy adults. This appears as a significant limitation and further increases the digital divide these persons experience with online materials.

## **English Language Preference**

The online resources remain primarily English. There are few sites with multilingual content that provide information and content in languages other than English. Spanish speaking users of online material have expressed their discontent and frustration in the lack of accessible information that could help them with employment, access to applicable resources or information to improve their quality of life. Estimates several years ago were that 33 million persons were Spanish speakers living in the United States. No doubt today this number has increased. Local school districts in the Shenandoah

Valley of Virginia indicate that there are more than 30 different native languages represented among current students in the classrooms of today.

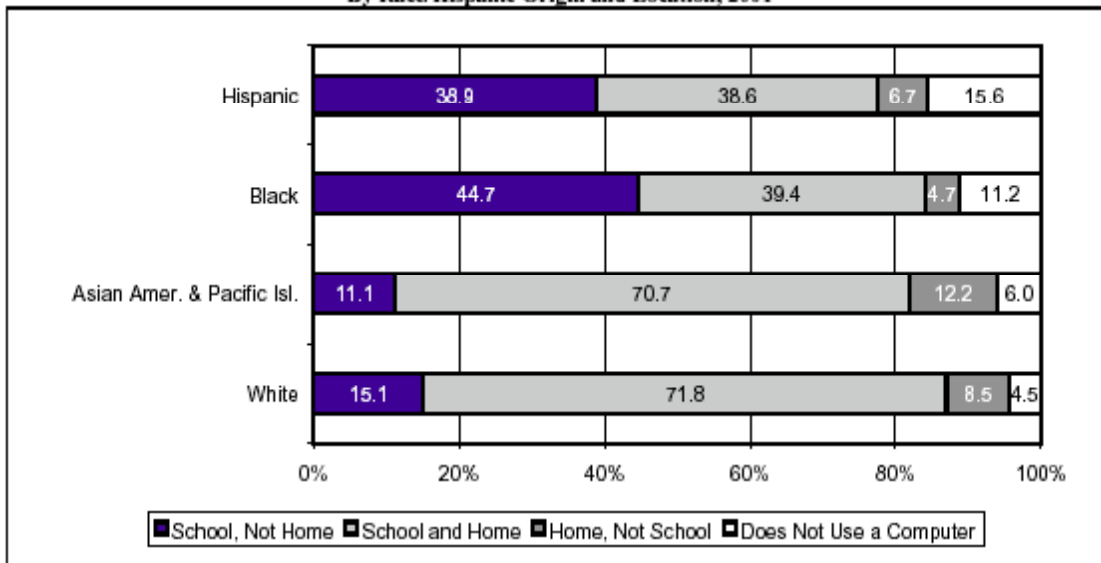
**Lack of Cultural Diversity**

While there seem to be a growing body of online materials where content providers are targeting ethnic and cultural markets, there is a tendency to homogenize large groups together and thus ignore distinctive essences that provide vitality and energy to a culture. This lack of distinctive flavor relates to the first barrier regarding lack of local community content. Large portals might provide content to a particular market but tend to group persons together (all Latinos) with no awareness of distinctive differences among Latinos.

**Computer Access in Schools**

There are some positive efforts being made toward closing the digital divide and worth noting. Data gathered point toward more computer access in public schools and more computers available in classrooms with increasing access to internet resources. Figure 6 indicates that both Hispanic and Blacks have increased use of computers when you look at both school and home locations. There are also scattered examples of school districts placing laptop computers in every student’s hands. Henrico School district in Richmond Virginia is a more local example of this initiative.

**Figure 5-7: Computer Use Among 10 to 17 Year-Olds  
By Race/Hispanic Origin and Location, 2001**



*Source: NTIA and ESA, U.S. Department of Commerce, using U.S. Census Bureau Current Population Survey Supplements*

**Figure 6**

**A story close to home**

I have a 9<sup>th</sup> grade child in my family this year. I am one of the privileged. Internet connection in our home is provided by a cable modem allowing continual connection at a relatively fast speed. Instant messaging and email constitute the bulk of online activity for

this female high school student while at home. What is happening in her friends lives is almost instantly available for discussion. She is able to remain connected to friends and relatives from Vermont to Ohio. She has more people she converses with in a day than I would find comfortable. It is not uncommon to see her on the phone and instant messaging at the same time. She is unable to name many persons within her close circle of friends who do not have access to this form of communication. The social connections she maintains are dependent on these tools of communication. Those who don't have access seem exiled from these social interaction. A modified language form has emerged from these new tools of communication of which I am excluded from for the most part. Those persons who are in this social mix but do not have access to these tools are automatically exiled from this new language form.

Some examples are listed below:

LOL	laughing out loud	TMOT	Trust me on this
TTYL	Talk to you later	UFIM	Unavailable for instant message
B/C	Because	IMHO	In my humble opinion
B4	before	99	Nighty night
LYLAS(B)	Love you like a sister (bro)	GTG	Got to go
NM	Not much	OIC	Oh I see
SUP	What's up?	<s>	smile
FWIW	For what its worth	<g>	grin
BTW	By the way	<vbg>	Very big grin

### Summary

Evidence still points to the fact that the digital divide is unfortunately still very wide between person of differing income and race. The digitally exiled in our country remain the poor and non-white segments of our society. The emerging technologies of broadband internet connections are looking to even widen the "digital divide" that was coined several years ago.

If we are to encourage all persons to thrive in our culture and achieve to their fullest potential, these digital gaps need to continue to be addressed at local, regional and national levels. This chasm will not close naturally as some recent rhetoric suggests. Rather, without increasing resources to infuse technological advances among the underprivileged, the digital divide will continue to isolate and exile persons from needed resources and skills to grow and mature in our society.

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