



May 1, 2015

Secretary Julian Castro  
c/o Regulations Division  
Office of General Counsel  
Department of Housing and Urban Development  
451 7<sup>th</sup> St, SW Room 10276  
Washington, D.C. 20410-0500

**Docket No. FR-5859-N-01– Advance Notice of Digital Opportunity Demonstration**

Dear Secretary Castro,

The National Housing Conference (NHC) and the undersigned members of NHC’s Connectivity Working Group welcome the Department of Housing and Urban Development’s (HUD’s) forthcoming Digital Opportunity Demonstration. Far too many people in this country lack reliable broadband Internet access at home, as our attached research brief “The Connectivity Gap” describes. That lack of access deprives people of opportunities, businesses of new customers and communities of new social and economic contributions. Making sure all households have an affordable connection plus the computing device and the digital literacy to best use it will create new economic opportunities: for households moving toward self-sufficiency, for kids achieving in school, for businesses reaching new markets, and for communities building a higher-skilled workforce. This demonstration represents the first of many steps HUD can and should take to help close the digital divide.

We applaud HUD’s initial foray into this policy area and offer several comments below, summarized briefly here:

1. Broaden the eligibility criteria for communities to build on existing initiatives
2. Include households of all types in rural, suburban and urban communities
3. Focus on property-level shared broadband network solutions for multifamily rental housing
4. Implement other policy actions in parallel to the demonstration

**About the National Housing Conference and the Connectivity Working Group**

The National Housing Conference represents a diverse membership of housing stakeholders including tenant advocates, mortgage bankers, non-profit and for-profit home builders, property managers, policy practitioners, realtors, equity investors, and more, all of whom share a commitment to safe, decent and affordable housing for all in America. We are the nation’s oldest housing advocacy organization, dedicated to the affordable housing mission since our founding in 1931. As a nonpartisan, 501(c)3 nonprofit, we are a research and education resource working to advance housing policy at all levels of government in order to improve housing outcomes for all in this country.

To help achieve affordable broadband connectivity for all, NHC convened a Connectivity Working Group to recommend policy changes. The group draws from affordable housing developers, public agencies, policy experts, capital providers, national intermediaries, and more, all committed to the shared mission of closing the digital divide for low-income people.

## Comments on the Digital Opportunity Demonstration

### 1. Broaden the eligibility criteria for communities to build on existing initiatives

The demonstration encourages communities to build on existing community development efforts by engaging with people in many roles: elected officials, public housing officials, housing practitioners, education leaders, and other community organizations. This is a laudable approach given the scarcity of resources and the interconnections between housing, education, health, economic development and other areas.

**The eligibility criteria should similarly embrace a wide range of existing community efforts** beyond the handful of federal initiatives identified. Based on our preliminary analysis, limiting the applicant pool to communities that participate in two or more of the listed federal initiatives would leave only 25 communities eligible to apply. The attached chart shows our tabulation of data we could locate on the listed programs.

Therefore, **we recommend that HUD allow other indicators of community support and community development infrastructure to count toward the eligibility criteria.** Building on state, local, and other initiatives that can include broadband access as part of comprehensive community development will maximize the impact of the demonstration. For example, many Sustainable Communities' grantees have developed strong cross-sector partnerships, like in Denver, where the city, county, housing authority, and Regional Transportation District are working together on the revitalization of the Mariposa District. Another example is New Mexico, which has created a Behavioral Health Collaborative, where several state agencies are tasked to work in partnership on behavioral health prevention, treatment and recovery. HUD should consider alternate means for applicants to demonstrate a strong commitment beyond just a restrictive "two of the following programs" criterion.

The demonstration should aim to have many applicants, even if initial resources are limited. We recognize this demonstration is in an early stage of planning without specific resources committed yet. **The more HUD can commit funds and specify other benefits of participation, the more energy and commitment it will likely elicit from applicants.** If the demonstration and stakeholder efforts are successful in generating attention and eventually new resources to close the digital divide, applicants who begin work now should have more opportunities in the future.

### 2. Include households of all types in rural, suburban and urban communities

Broadband access has a direct connection to how children participate in school, so the focus in the demonstration on families with children is understandable. But lack of broadband access limits opportunity for all people, not just families with children. **Broadband can be a means to reduce social**

**isolation, deliver health services efficiently, build job skills, and empower small business start-ups, among other opportunities.** The demonstration should make sure that housing for seniors and households without children can also participate.

**The demonstration should also avoid an unintended bias toward urban communities.** Lack of broadband access looms largest in rural communities, and it is most common in the lowest income households who live in urban, rural and suburban areas. The eligibility criteria, by focusing on a handful of federal initiatives, over-represent urban communities. We recommend that HUD coordinate closely with the Department of Agriculture to address rural areas and, in designing the selection criteria, ensure that urban, suburban, and rural areas are all represented.

### **3. Focus on property-level shared broadband network solutions for multifamily rental housing**

Early efforts to provide broadband connectivity in multifamily affordable housing have demonstrated cost-effective models using a shared network at a property level. Forthcoming research from NHC's Center for Housing Policy will highlight examples of how **property owners can provide broadband to all residents along with equipment and digital literacy training.** Solutions will vary for different communities, properties, and household configurations, but HUD should ensure that the demonstration is compatible with best practices. We also think HUD should have a sense of cost, as the demonstration moves forward. Costs to install shared broadband networks in larger properties can average as low as \$259 per unit with low monthly operating costs.<sup>1</sup>

We recommend modifying the selection criteria to encompass these best practices. To ensure competitive pricing, **HUD should expand its criterion requiring more than one internet service provider for the community to allow properties that periodically use a competitive bidding process to select a service provider for a shared network to participate.** In areas where there is robust competition among ISPs, properties not choosing a shared network approach should pledge not to sign exclusive marketing agreements with internet service providers, so that residents can have full competitive choice.

### **4. Implement other policy actions in parallel to the demonstration**

We include the full recommendations of NHC's Connectivity Working Group as an attachment to this comment letter. There are steps that HUD, other agencies, Congress, and private business can take now to expand broadband access and with it, opportunity. These include, in brief:

- a. Set a national goal for connectivity in HUD and USDA properties as part of a national connectivity goal
- b. Implement digital literacy and equipment support into broadband provision
- c. Treat broadband as an eligible expenditure in affordable rental housing

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<sup>1</sup> California Public Utilities Commission Rulemaking 12-10-012 Order Instituting Rulemaking to Consider Modifications to the California Advanced Services Fund, citing data submitted by Innovative IT, p. A12-A13.

- d. Support broadband in affordable housing through FCC actions
- e. Provide federal funds to support broadband connectivity in affordable housing
- f. Use public resources to leverage private resources

### **Move forward to expand connectivity**

In closing, we thank HUD for its vigorous efforts to ensure that all people have access to the internet in ways relevant to their economic lives. The Digital Opportunity Demonstration and the other policy actions we propose will help ensure that the affordable housing community is doing its part to close the digital divide.

Sincerely,

California Emerging Technology Fund  
Council of Large Public Housing Agencies  
Enterprise Community Partners  
Mercy Loan Fund  
National Association of Housing and Redevelopment Officials  
National Housing Conference  
Stewards of Affordable Housing for the Future

Name of City	Choice Neighborhoods	Promise Neighborhoods	Promise Zones	Byrne Criminal Justice	Strong Cities, Strong Communities	STEM, Energy & Econ Development	BNCP	Number of programs
Alameda, CA				X (2014)				1
Athens, GA		X (2010)						1
Atlanta, GA		X (2010)						1
Austin, TX				X (2012)				1
Baltimore, MD				X (2012)				1
Baton Rouge, LA	X (2013)			X (2013)				2
Berea, KY		X (2011, 2010)	X (2014)					2
Boston, MA	X (2010)	X (2012, 2010)						2
Brooklyn, NY		X (2010)						1
Brownsville, TX					X (2014)			1
Buffalo, NY		X (2011, 2010)		X (2012)				2
Camden, NJ			X (2015)					1
Chester, PA					X (2013)			1
Chicago, IL	X (2010)							1
Choctaw Nation			X (2014)					1
Chula Vista, CA		X (2012)						1
Cincinnati, OH	X (2012, 2011)							1
Cleveland, OH	X (2011)			X (2013)	X (2013)			3
Columbus, OH	X (2011)							1
Corning, NY				X (2013)				1
Denver, CO	X (2013)			X (2014)				2
Detroit, MI		X (2010)		X (2012)	X (2013)			3
East Lubbock, TX		X (2012)						1
Flint, MI	X (2014)			X (2014)	X (2014)		X (2012)	4
Fresno, CA					X (2013)		X (2012)	2
Gary, IN	X (2014)				X (2014)			2
Harlem, NY		X (2010)						1
Hartford, CT			X (2015)					1
Hayward, CA		X (2011, 2010)						1
Houston, TX		X (2010)						1
Indianapolis, IN			X (2015)					1
Indianola, IA		X (2012, 2010)						1
Kansas City, MO				X (2013)				1
Lawrence, MA		X (2010)						1
Little Rock, AR	X (2011)	X (2010)						2
Los Angeles, CA	X (2013)	X (2012, 2010)	X (2014)	X (2013)				4
Louisville, KY	X (2014)							1
Lowell, MA				X (2012)				1
Macon, GA					X (2014)			1
Memphis, TN					X (2013)		X (2012)	2
Meriden, CT	X (2013)							1
Meridian, MS	X (2011)							1
Miami-Dade County				X (2014)				1
Milwaukee, WI							X (2012)	1
Minneapolis, MN		X (2011)	X (2015)					2
Mobile, AL	X (2014)							1
Nashville, TN				X (2013)				1
New Bern, NC	X (2013)							1
New Haven, CT				X (2014)				1
New Orleans, LA	X (2010)				X (2013)			2
New York City, NY				X (2013)				1
North Las Vegas, NV	X (2014)							1
Opa-Locka, FL	X (2011)							1
Philadelphia, PA	X (2013)	X (2010)	X (2014)					3
Pine Ridge Indian Reservation, Oglala			X (2015)					1
Rockford, IL	X (2011)				X (2014)			2
Rocky Mount, NC					X (2014)			1
Sacramento, CA	X (2013, 2011)		X (2015)					2
San Antonio, TX	X (2012)	X (2011, 2010)	X (2014)					3
San Bernardino, CA				X (2012)				1
San Francisco, CA	X (2010)			X (2013)				2
Savannah, GA	X (2011)							1
Seattle, WA	X (2012, 2010)			X (2012)				2
South Carolina Low Country			X (2015)					1
Springfield, MA	X (2011)			X (2013)				2
St. Louis, MO	X (2014)		X (2015)		X (2014)			3
St. Paul, MN		X (2010)						1
Suffolk, VA	X (2011)							1
Tampa, FL	X (2012)							1
Washington, DC	X (2011)	X (2012, 2010)						2
Wellston, MO	X (2013)							1
West Central Albany, GA				X (2013)				1
Wilson, NC	X (2011)							1
Winston-Salem, NC	X (2013)							1
Worcester, MA		X (2010)		X (2014)				2
Youngstown, OH					X (2013)			1
Data compiled by CLPHA and NHC from public sources								
								<b>Total with two or more</b>
								<b>25</b>

\*unclear which 2010 Promise Neighborhood Awards are implementation or planning grants

\*\* unclear which 2012 & 2013 Byrne Criminal Justice Awards are implementation or planning grants

\*\*\*unable to find data on STEM communities

# Broadband Connectivity in Affordable Housing

## Policy Recommendations

Most of us use the Internet in all facets of our lives: for work, education, medical care, entertainment, shopping, and innumerable daily tasks. Having a reliable broadband connection at home makes all sorts of tasks easier, faster, and cheaper. Yet far too many low-income households do not have even a basic broadband connection at home, as

we describe in the accompanying research brief, “The Connectivity Gap: The Internet is Still Out of Reach for Many Low-Income Renters.” Making sure all households have an affordable connection plus the computing device and the digital literacy to best use it will create new economic opportunities: for households moving toward self sufficiency, for kids achieving in school, for businesses reaching new markets, and for communities building a higher-skilled workforce.



To help achieve affordable broadband connectivity for all, the National Housing Conference (NHC) convened a Connectivity Working Group to recommend policy changes. The group draws from affordable housing developers, public agencies, policy experts, capital providers, national intermediaries, and more, all committed to the shared mission of closing the digital divide for low-income people. The recommendations presented here draw on the expertise of the Connectivity Working Group, the policy briefs from NHC’s Center for Housing Policy, and advice from other stakeholders. We recognize that achieving broadband connectivity for all will require action by many, including Congress, the President, the Federal Communications Commission (FCC), the Department of Housing and Urban Development (HUD), the Department of Agriculture, Internet service providers, state and local governments, and more. To ensure that the affordable housing community does its part, we recommend:

- 1. Set a national goal for connectivity in HUD and USDA properties as part of a national connectivity goal.** With a strong federal commitment of new resources and partnerships with the private sector, we believe all HUD-assisted and USDA-assisted rental housing properties could have affordable, cost-effective, basic broadband connectivity for all residents by 2020. There are innovative solutions in public housing and privately-owned assisted housing that we could encourage others to adopt. If states commit to this goal as well, we could also reach all Low Income Housing Tax Credit properties. Aligning broadband connectivity with existing initiatives such as Choice Neighborhoods and Promise Zones may help pave the way, but achieving the national goal will ultimately require a concerted effort nationwide.

**2. Implement digital literacy and equipment support into broadband provision.** For access to broadband to transform lives, it must be more than just a plug in the wall or a wireless access point. Low-income residents need access to reliable equipment (particularly computers or tablets, not just smartphones, for a full range of education and work-related activities) and training in how to make the most of it. Successful examples of these solutions combine small contributions from residents with grants and owner contributions so that all share a commitment to the success of the effort.

**3. Treat broadband as an eligible expenditure in affordable rental housing.** As pilot programs are demonstrating, basic broadband provided at the property level can serve residents effectively while containing costs. HUD should issue guidance allowing properties to use available funds to implement cost-effective connectivity for residents and should support pilot programs to test different implementation methods. Building on these initial steps, HUD should explore treating cost-effective basic broadband as a standard operating cost for affordable housing properties. This would affect all HUD properties, but would be most meaningful for those using a budget-based rent calculation, such as Section 202, some project-based Section 8, Section 811, and others. For it to meaningfully affect public housing, HUD would need to revise additional guidance possibly through an “add-on” expense under the asset management formula in sec. 990.190. Ultimately, to implement basic broadband widely, Congress would need to provide additional funds, per recommendation 5 below.

**4. Support broadband in affordable housing through FCC actions.** The Federal Communications Commission (FCC) is uniquely positioned to reduce costs of broadband service for low-income households, encourage public-private partnerships to serve low-income communities, and make broadband part of coordinated neighborhood transformation strategies. For example, as the FCC considers the Comcast-Time Warner Cable merger, it should require both companies to:

**a.** Work with HUD, state and local housing agencies, and affordable housing stakeholders to implement broadband access in publicly-subsidized housing developments including public housing, Section 8, Low Income Housing Tax Credit, and others.

**b.** Contribute to independent funds to support broadband adoption at home and implement strategies to improve and expand Comcast’s Internet Essentials program to all low-income families and individuals.

**c.** Upgrade infrastructure in underserved areas and extend into unserved communities to improve broadband deployment, with special attention to low-income neighborhoods and multifamily buildings serving households below median income.

**d.** Ensure that provider-supported connectivity programs reach all people in need, especially seniors and people with disabilities who may not be captured by school-related criteria for eligibility.

The FCC should consider these aspects in future mergers and consolidations that require approval.

**5. Provide federal funds to support broadband connectivity in affordable housing.** Existing resources are not sufficient to accomplish all that is needed, including capital installation, ongoing operation, equipment, digital literacy training, and technical support. As part of annual appropriations, Congress should allocate additional funding for public and assisted housing to pay for broadband costs in property operations, as well as large-scale pilots to refine best practices for implementing broadband at a property level. Tax incentives are an alternative mechanism for defraying the cost of broadband connectivity in affordable housing, if properly structured in a pay-for-performance model and not diverted from existing affordable housing programs.

**6. Use public resources to leverage private resources.** Private businesses can be part of the solution to the digital divide, through both corporate philanthropy and private investment for business purposes at the large and small scale. In-home connectivity can make property management more efficient for multifamily housing, deliver health care services efficiently, and allow telecommuting for workers. It can also bring low-income people into the economic mainstream as workers, consumers, and entrepreneurs. Scarce public resources should therefore leverage private contributions, of which there are many models, including community development financial institutions, tax credit incentives, loan pools, and in-kind contributions. Examples include Google Fiber projects in Austin and Comcast’s Internet Essentials program.

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*The NHC Connectivity Working Group thanks the California Emerging Technologies Fund for its generous support.*



***The following organizations support these recommendations:***

Bernal Heights  
Neighborhood Center

California Coalition  
for Rural Housing

California Housing  
Consortium

California Emerging  
Technology Fund

Chinatown Community  
Development Corporation

Community Housing  
Improvement Systems  
and Planning Association

Community Housing  
Opportunities  
Corporation (CHOC)

Community Housing  
Partnership

Community Housing Sonoma  
County

Community HousingWorks

Council of Large Public  
Housing Authorities

Dignity Housing West, Inc.

Domus Development

East Bay Asian Local  
Development Corporation

Economic Development  
Collaborative for Ventura  
County

Eden Housing

Enterprise Community  
Partners

Episcopal Community  
Services of San Francisco

Housing Authority  
of the City of Los Angeles

Housing California

Housing Colorado

Housing Partnership  
Network

Koreatown Youth and  
Community Center

Local Initiatives Support  
Corporation

Mercy Housing California

Mercy Loan Fund

Mission Economic  
Development Agency

Mutual Housing California

National Association  
of Housing and  
Redevelopment Officials

National Housing &  
Rehabilitation Association

National Housing  
Conference

National Housing Trust

New York Housing  
Conference

Non-Profit Housing  
Association  
of Northern California

Rural Communities Housing  
Development Corporation

Sacramento Housing  
Alliance

San Francisco Housing  
Development Corporation

Skid Row Housing Trust

Stewards of Affordable  
Housing for the Future

Tenderloin Neighborhood  
Development Corporation

The Unity Council

The Working in  
Neighborhoods (WIN)  
Project

Yolo Mutual Housing  
Association

## The Connectivity Gap: The Internet Is Still Out of Reach for Many Low-Income Renters

Having a home computer and Internet access is increasingly important for individual and family well-being and self-sufficiency. The availability of Internet access is associated with greater student achievement,<sup>1</sup> improved health outcomes,<sup>2</sup> and less social isolation,<sup>3</sup> as well as with more robust economic growth.<sup>4</sup> Connecting to the Internet is increasingly the way people learn, get health care information, share news, pay bills, and interact with government. Most Americans say that being online is essential for “job-related or other reasons.”<sup>5</sup> However, low-income individuals and families—and particularly very low-income renters—are far less likely than others to have Internet access or a computer at home. The persistent digital divide in the U.S. exacerbates economic inequality and risks leaving low-income individuals and families further behind.<sup>6</sup>

### Low-Income Renters are Much Less Likely than Other Households to Have Home Computer or Internet Access

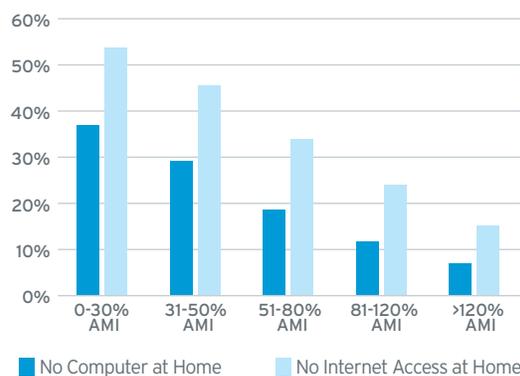
In 2013, 84 percent of U.S. households had a computer at home and 74 percent had home access to the Internet.<sup>7,8</sup> But there are significant variations across income groups, and low-income renters—including many served by federal housing programs—are among the least likely to have access to technology in their homes.

Thirty-seven percent of extremely low-income renters (with incomes below 30 percent of area median income) do not have a computer at home and 54 percent do not have home Internet access (Figure 1). Among renters with incomes between 31 and 50 percent of area median income (AMI), 29 percent have no home computer and 46 percent have no home Internet access. The likelihood of having access increases as households move up the income scale.

### Very Low-Income Renters are Somewhat More Likely to Rely on a Smartphone Rather than a Laptop or Desktop Computer

While smartphones are useful for some Internet applications, a home laptop or desktop computer can be necessary for some important tasks, including accessing health information or doing schoolwork.

Eleven percent of very low-income renter households (with incomes below 50 percent of AMI) rely solely on a smartphone or other handheld device for their at-home computer access, compared to nine percent of all renters (Figure 2). Higher-income renters are much more likely to have a desktop or laptop at home—70 percent of all renters compared to 55 percent of very low-income renters.



Source: 2013 American Community Survey 1-year PUMS file

**FIGURE 1**  
Share of Renters with No Computer and No Internet Access at Home by Income, 2013

## Only Half of Very Low-Income Renters Have Home Internet Access

Among very low-income renters with home Internet access, the most common type of access is via a cable modem. Mobile broadband access is the second most common mode of home Internet access. However, the availability and speed of different Internet connections vary substantially around the country.<sup>9</sup>

Not only is having access to home Internet important, but having sufficient speed to use online education and training programs like streaming course lectures or to maintain a video connection with a health care provider is equally as important.

## Very Low-Income Senior and Disabled Renters are Unlikely to Have Home Computer or Internet Access

Nearly 70 percent of very low-income senior renters do not have a computer and 74 percent do not have home Internet access. Very low-income disabled renters also lack access; more than half have no computer of any kind and about two-thirds do not have access to the Internet in their homes. A lack of access to technology can limit opportunities for seniors and disabled persons to stay connected to friends and families and precludes them from accessing Internet-based health care options.

Very low-income renters with children are more likely than other low-income renters to have both a home computer and home Internet access.

Part of the reason households with children are more connected is because of the focus on access and the integration of the Internet into education. For very low-income seniors and disabled renters, illustrating the benefit of home Internet access has been more of a challenge. However, as federal benefit programs like Social Security move online, Internet access will become critical for older adults and disabled persons.

## ENDOTES

1. Darling-Hammond, Linda, Molly B. Zieleszinski and Shelley Goldman. 2014. *Using Technology to Support At-Risk Students' Learning*. Stanford Center for Opportunity Policy in Education. Online <https://edpolicy.stanford.edu/publications/pubs/1241>.
2. Fox, Susannah and Maeve Duggan. 2013. *The diagnosis difference*. Pew Research Center. Online <http://www.pewinternet.org/2013/11/26/the-diagnosis-difference/>.
3. Barbarotta, Linda. 2014. "Fighting isolation with technology," *LeadingAge Magazine* July/August. Online [http://www.leadingage.org/Fighting\\_Isolation\\_With\\_Technology\\_V4N4.aspx](http://www.leadingage.org/Fighting_Isolation_With_Technology_V4N4.aspx).
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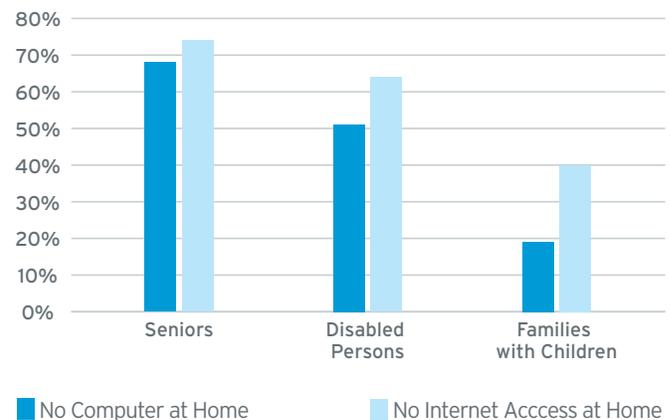
**FIGURE 2**  
Computer and Internet Access Type

	SHARE OF HOUSEHOLDS	
	VERY LOW-INCOME RENTERS	ALL RENTERS
<b>TYPE OF COMPUTER</b>		
Smartphone only, no computer	11%	9%
Computer only, no smartphone	19%	16%
Both computer and smartphone	37%	53%
Neither computer nor smartphone	34%	22%
<b>TYPE OF INTERNET ACCESS<sup>a</sup></b>		
Mobile broadband	20%	29%
DSL	12%	15%
Cable modem	30%	40%
Fiber optic	4%	6%
Other	4%	4%
No Internet access	50%	35%

<sup>a</sup>Numbers sum to more than 100 because households may have more than one source of home Internet access.

Source: 2013 American Community Survey 1-year PUMS file

**FIGURE 3**  
Very Low-Income Renter with No Computer and No Internet Access at Home, 2013



Source: 2013 American Community Survey 1-year PUMS file

5. Fox, Susannah and Lee Rainie. 2014. *The web at 25 in the U.S.* Pew Research Center. Online <http://www.pewinternet.org/2014/02/27/the-web-at-25-in-the-u-s/>.
6. Crow, David. 2014. *Digital divide exacerbates US inequality*. *Financial Times*. October 28. Online <http://www.ft.com/cms/s/2/b75d095a-5d76-11e4-9753-00144feabdc0.html#axzz3Q97suiF0>.
7. All data in this report were tabulated from the 2013 American Community Survey 1-year public use microdata sample (PUMS) file.
8. For this report, "computers" include desktops, laptops, notebooks, and smartphones as well as other handheld computers. Internet access includes wireless broadband, dialup, DSL, fiber optic, cable modem and satellite Internet services.
9. NTIA. 2013. *U.S. Broadband Availability: June 2010-June 2012*. May. Online [http://www.ntia.doc.gov/files/ntia/publications/usbb\\_avail\\_report\\_05102013.pdf](http://www.ntia.doc.gov/files/ntia/publications/usbb_avail_report_05102013.pdf).