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# Iowa's Silent Generation: Resilient, More Experienced, but Disconnected

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They survived the Dust Bowl, the Great Depression, and went on to harness the scientific and technological advances that led to the global connectivity that lowans experience today. Despite making these technological advances possible, though, many seniors in Iowa are not connected today because they do not subscribe to home broadband service.

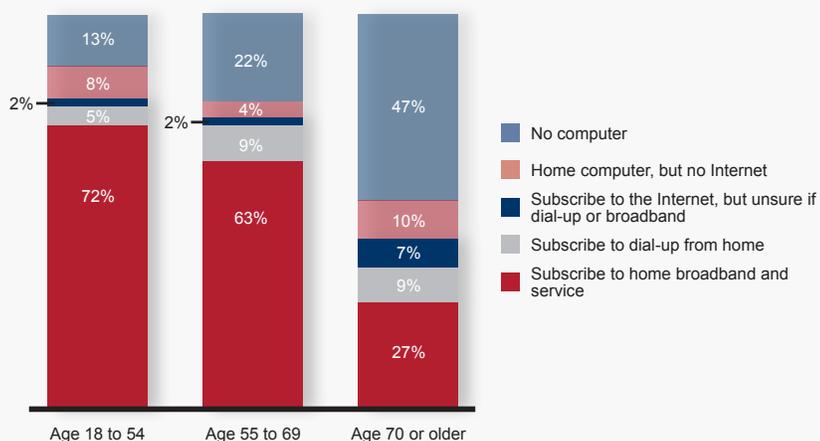
As part of its mission to increase broadband availability, adoption, and use, Connect Iowa conducted random digit dial telephone surveys in 2010 and 2011 to measure technology adoption and barriers to adoption among all lowans. Our research shows that there exists a “gray gap” as seniors in Iowa remain hesitant to adopt home broadband service. This is particularly alarming as a growing number of services and opportunities migrate online; many seniors in Iowa may be left behind without universal broadband access.

### Technology Adoption among Iowa's Senior Population

Iowa has the sixth largest share of residents over the age of 70 in the nation, with more than one in ten lowans belonging to this generation.<sup>1</sup> Furthermore, Iowa's senior population is expected to increase by more than 50% by 2030, so increasing broadband usage among these lowans now can help many lowans live longer, healthier, more independent lives.<sup>2</sup>

According to Connect Iowa Research, nearly two out of three Iowa residents (63%) subscribe to home broadband service, but broadband adoption drops dramatically among older lowans. While nearly three out of four lowans (72%) age 18-54 subscribe to home broadband service, only 63% of lowans age 55-69 subscribe to broadband. Even more alarming, a mere 27% of lowans age 70 and older subscribe to broadband (Figure 1).

**Figure 1.**  
Iowa Technology Adoption by Age



1 2010 U.S. Census Bureau

2 <http://www.aging.iowa.gov/Documents/Statistics/Olderlowans2011.pdf>

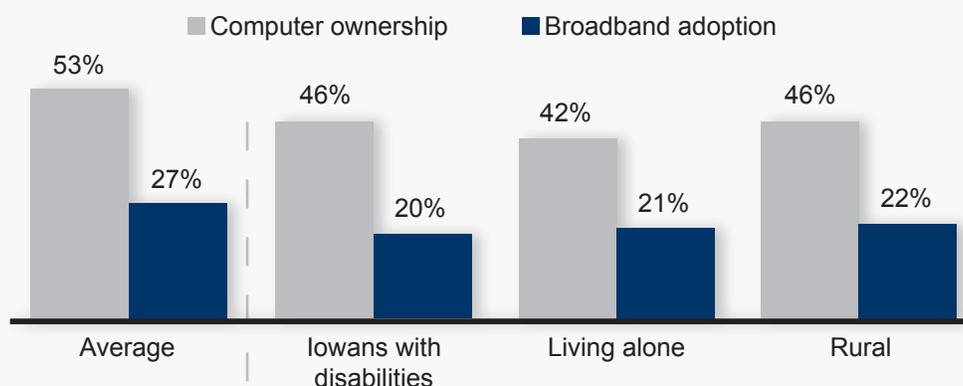
### Among the findings from this survey:

- Only 27% of Iowa residents age 70 or older subscribe to home broadband service, compared to a statewide average of 63%. This means that approximately 260,000 Iowa residents who are 70+ years old do not benefit from the opportunities provided by home broadband service.
- Furthermore, lowans age 70 or older with disabilities, who live alone, or live in a rural area, are significantly less likely to own a computer or subscribe to home broadband service.
- Once older lowans do connect to the Internet, its value quickly becomes apparent, as over one-half of lowans age 70 or older who subscribe to home Internet service (56%) say they go online on a daily basis.
- Only two in three lowans age 70 or older (66%) own a cell phone, compared to the statewide average of 82% among Iowa adults.
- Only one in twenty Iowa residents age 70 or older (5%) access mobile broadband, significantly lower than the state average of 32%. This translates into only 19,000 lowans in this age bracket who go online via mobile broadband service.
- Whereas cost is the top barrier to broadband adoption among younger lowans, the largest share of lowans age 70 or older (39%, representing approximately 100,000 lowans) say they do not subscribe because they do not see the relevance of broadband to their lives. This suggests that efforts to increase awareness of the benefits of subscribing to broadband could be effective among Iowa seniors.

This broadband adoption rate is slightly below the average broadband adoption rate of 31% for older residents across all of the states that Connected Nation surveyed. It is also essentially unchanged from 2010, when 24% of Iowans age 70 or older subscribed to home broadband service. This means that approximately 260,000 elderly Iowans are not benefiting from the connectivity and opportunities that a home broadband subscription provides. For many of these residents, a broadband connection is not even possible, as 47% of Iowans in this age group (approximately 169,000 Iowans age 70+) do not own a computer. Once connected, though, many seniors in Iowa are making the most of the Internet, as over one-half of Iowans age 70 or older who subscribe to home Internet service (56%) say they go online on a daily basis.

Disparities also exist between different sub-sectors of Iowa's elderly population; certain population segments stand out as less likely to own a computer or subscribe to home broadband service, including residents over the age of 70 who have disabilities, live alone, or live in rural areas (Figure 2).

**Figure 2.**  
Technology Adoption among Residents Age 70+ by Demographic



- **Iowans with disabilities:** For many Iowans, decreased mobility and physical limitations can make it challenging to leave their homes. These issues can be partially overcome through services such as remote health monitoring and consultations, access to information and motivational tools, and the ability to interact socially and participate in online communities via broadband.<sup>3</sup> Yet only 20% of Iowans age 70 or older who have disabilities subscribe to broadband, meaning that approximately 108,000 of these Iowans do not benefit from the range of services made possible by home broadband service.
- **Living alone:** For elderly Iowans who live by themselves, broadband can be an essential lifeline that empowers them to stay in touch with friends and family, decreasing feelings of isolation. Furthermore, remote care and assistance via broadband can enable more seniors to live independently. Yet these residents report some of the lowest overall technology adoption levels: among Iowans age 70+ who live alone, only 42% own a computer and just 21% subscribe to broadband (which translates into approximately 137,000 older Iowans without a home broadband connection).
- **Rural:** For many rural Iowans, a trip into town means driving miles on empty roads to get to their destination, followed by another long drive back home. For elderly rural Iowans, these trips can mean either taking the risk of driving themselves (which can be even more dangerous in bad weather) or trying to find a friend or family member who can transport them back and forth. Many of these trips can be eliminated through broadband, with online medical consultations, online shopping, and paying bills online. Yet fewer than one in four rural Iowans age 70 or older (22%) subscribe to home broadband service, despite nearly 96% of rural Iowan households having broadband service available to them.<sup>4</sup>

<sup>3</sup> [http://www.uschamber.com/sites/default/files/about/Seniors\\_Paper\\_Summary\\_042309.pdf](http://www.uschamber.com/sites/default/files/about/Seniors_Paper_Summary_042309.pdf)

<sup>4</sup> Per Connect Iowa's 2011 NTIA submission, 95.79% of Iowa's rural households have access to broadband

## Mobile Broadband among Iowa's Elderly

Mobile broadband has revolutionized the Internet market - almost everywhere today, people can be seen using the Internet on their smart phones or mobile devices. While the response from the younger crowd and the business professionals have been tremendous, many older Iowans have not fully embraced this technology.

Across Iowa, nearly seven out of ten Iowans age 70 or older (69%) own a device that would allow them to access mobile broadband, including two out of three (66%) who own cell phones and nearly one in five (19%) who own a laptop or tablet computer (Table 1). Yet only one in twenty Iowa residents age 70 or older (5%) access mobile broadband, significantly lower than the state average of 32%. This translates into only 19,000 Iowans in this age bracket who go online via mobile broadband service.

**Table 1: Mobile Adoption in Iowa by Age**

|                  | Own a cell phone | Own a laptop or tablet computer | Access mobile broadband |
|------------------|------------------|---------------------------------|-------------------------|
| <b>Statewide</b> | <b>82%</b>       | <b>48%</b>                      | <b>32%</b>              |
| Age 18 to 54     | 86%              | 58%                             | 43%                     |
| Age 55 to 69     | 80%              | 37%                             | 16%                     |
| Age 70 or older  | 66%              | 19%                             | 5%                      |

## Barriers to Broadband Adoption

A range of barriers hinder more robust broadband adoption among Iowa's older residents. Whereas cost is the top barrier to broadband adoption among younger Iowans, the largest share of Iowans age 70 or older (39%, representing approximately 100,000 Iowans) say they do not subscribe because they do not see the relevance of broadband to their lives (Table 2).

**Table 2: Main Barriers to Home Broadband Adoption by Age**

|                       | Age 18 to 54 | Age 55 to 69 | Age 70 or older |
|-----------------------|--------------|--------------|-----------------|
| Cost                  | 43%          | 31%          | 18%             |
| Relevance             | 18%          | 23%          | 39%             |
| Digital literacy      | 12%          | 22%          | 24%             |
| Availability          | 7%           | 7%           | 2%              |
| Other                 | 11%          | 8%           | 5%              |
| Don't know or refused | 9%           | 9%           | 12%             |

This can be for a variety of reasons, such as having interests that do not involve going online and not being aware of anything they would want to do online. In addition, Iowa residents age 70 or older are twice as likely to cite digital literacy as a main barrier to home broadband adoption as younger Iowa adults. Nearly one out of four Iowans age 70 or older (24%, representing 61,000 Iowans) report that a lack of digital literacy is their main barrier to broadband adoption. This includes Iowans who fear that either the Internet or computers are too complicated for them, or fear the potential threats of fraud or identity theft.

Compared to younger non-adopters in Iowa, a smaller share of residents age 70 or older say that cost is their main barrier to broadband adoption. This barrier cannot be overlooked, though, as it still represents approximately 46,000 Iowans who say that cost is the main issue keeping them from going online.

## Conclusion

Broadband provides Iowa's senior citizens with an interactive link to family and friends, as well as increased access to healthcare information and services, empowering them to live more independently while enabling them to engage more fully with society. However, a definite adoption gap exists across Iowa, in which older residents are without access to the life-enhancing and lifesaving applications and services made possible by a home broadband subscription.

As Iowa looks toward the future, a multifaceted focus is necessary to ensure that adoption increases among every age group. Supply-side policies must ensure that every resident has equal access to affordable high-speed Internet. Additionally, demand-side policies that raise awareness and stimulate demand for broadband among residents of every age category are essential to closing the gap between adopters and non-adopters. Especially among seniors, more aggressive education and outreach efforts regarding the benefits of broadband could help further spur demand, adoption, and use. In addition to the cost-savings enabled by broadband, educating seniors on the many ways that broadband can be used for personal, social, and healthcare gains is essential to stimulating demand and use.



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## Methodology and Definitions

Between June 27 and August 19, 2011, Connect Iowa conducted a random digit dial telephone survey of 1,200 adults across the state. Connect Iowa also oversampled an additional 2,400 Iowa adults who were specifically selected because they did not subscribe to home broadband service. This oversample of non-adopters was conducted separately to further explore barriers to broadband adoption and willingness to subscribe to home broadband service in the future.

Of the 1,200 respondents randomly contacted statewide, 200 were called on their cellular phones, and 1,000 were contacted via landline telephone. The results of this survey have been compared to similar surveys that Connected Nation conducted across ten states in 2011 (Alaska, Florida, Iowa, Michigan, Minnesota, Nevada, Ohio, South Carolina, Tennessee, and Texas). Altogether, Connected Nation surveyed 27,086 residents across these ten states in 2011 for this study.

“Technology Adoption” is defined as follows:

1. Broadband adopters are defined as respondents who answered “yes” when asked “Do you subscribe to the Internet at home?” and answered “broadband or high speed Internet service” when asked “Which of the following describe the type of Internet service you have at home?”
2. Computer owners are defined as respondents who answered “yes” when asked “Does your household have a computer?”
3. Mobile broadband users are defined as respondents who met any of the following criteria:
  - Responded that they use a cell phone to access the Internet while at home when asked “When you are at your home, which of the following devices do you use to access the Internet?” or
  - When asked “At what locations outside of your own home do you use the Internet?” responded “Through a cell phone or handheld device” or
  - Responded “yes” when asked “On your laptop or tablet computer, do you subscribe to a mobile wireless service that allows you to access the Internet through a cellular network?” or
  - Responded “yes” when asked “On your cell phone, do you subscribe to a plan that allows you to access the Internet?” and reported that they access the Internet via their cell phone when asked “How often, if ever, do you go online using your cell phone?”

Multiple attempts were made to each working telephone number on different days of the week and at different times of the day to increase the likelihood of contacting a potential respondent. To ensure a representative sample, quotas were set by age, gender, and county of residence (rural or non-rural), and the results were weighted to coincide with 2010 United States Census population figures. For the purpose of setting quotas and weighting, “rural” respondents are defined as living in a county that is not a part of a Metropolitan Statistical Area (MSA), as designated by the United States Office of Management and Budget. Weighting and design consultation were provided by Lucidity Research.

Surveys were conducted by Thoroughbred Research Group. On average, the survey took approximately 12 minutes to complete after the respondent agreed to participate. Based on the effective sample size, the margin of error =  $\pm 3.21\%$  at a 95% level of confidence for the statewide survey of 2011, and  $\pm 2.70\%$  at a 95% level of confidence for the oversample non-adopter survey of 2011. As with any survey, question wording and the practical challenges of data collection may introduce an element of error or bias that is not reflected in this margin of error.

These surveys were conducted as part of the State Broadband Initiative (SBI) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009. To learn more about Connect Iowa and its programs please visit [www.connectiowa.org](http://www.connectiowa.org) or e-mail us at [info@connectiowa.org](mailto:info@connectiowa.org).

**APPENDIX A:**  
**Select sample sizes**

**2011 Residential Assessment**

|                | <i>n</i><br>Connected Nation<br>Average | <i>n</i><br>2011 Iowa |
|----------------|---|-----------------------|
| Total          | 12,004                                  | 1,200                 |
| Internet Users | 9,555                                   | 952                   |

**Demographic Categories for the Residential Assessment**

|                                    |       |     |
|------------------------------------|-------|-----|
| Age 18-54                          | 7,251 | 702 |
| Age 55-69                          | 3,204 | 285 |
| Age 70+                            | 1,707 | 213 |
| Age 70 or older, living alone      | 697   | 106 |
| Age 70 or older, with a disability | 588   | 81  |
| Rural residents age 70 or older    | 773   | 91  |

**2011 Non-Adopter Assessment**

|       | <i>n</i><br>Connected Nation<br>Average | <i>n</i><br>2011 Iowa |
|-------|---|-----------------------|
| Total | 15,951                                  | 2,400                 |

**Demographic Categories for the Non-Adopter Assessment**

|           |       |       |
|-----------|-------|-------|
| Age 18-54 | 5,498 | 613   |
| Age 55-69 | 4,787 | 658   |
| Age 70+   | 5,660 | 1,129 |