



# **Key Findings From Connect Puerto Rico's 2014 Residential Technology Assessment**

**November 14, 2014**



# Survey Overview and Summary of Results

## Survey Overview

- Connect Puerto Rico conducted a phone survey of 1,200 adult heads of households in Puerto Rico between September 19, 2014 and October 19, 2014, on behalf of the Puerto Rico Institute of Statistics. Connect Puerto Rico contacted 600 respondents via cellular phones and 600 via landline telephones. This sample provides a margin of error of  $\pm 3.45\%$  at the 95% confidence level for the total sample group.
- This survey was designed to measure technology adoption, barriers to technology adoption, and the awareness of available broadband service among adults in Puerto Rico.
- Unless specified otherwise, the data in this report comes from Connect Puerto Rico's 2014 Residential Technology Assessment.

## 2014 Key Technology Benchmarks

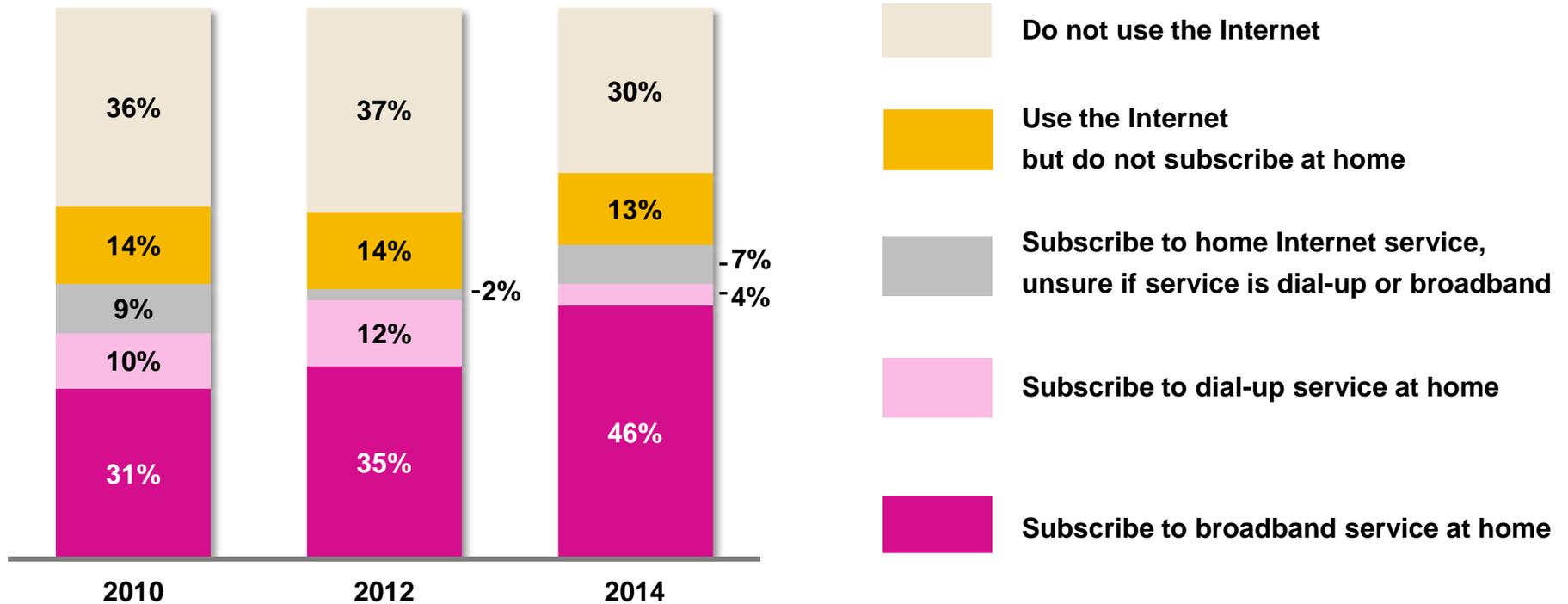
Home broadband adoption:	46% (up from 31% in 2010)
Mobile Internet usage:	55% (up from 18% in 2010)
Average reported monthly price paid for broadband:	\$39.47 (down from \$42.37 in 2010)
Average reported broadband download speed:	11.7 Mbps (up from 3.3 Mbps in 2010)

# Internet Adoption and Usage



# Broadband Adoption and Usage in Puerto Rico

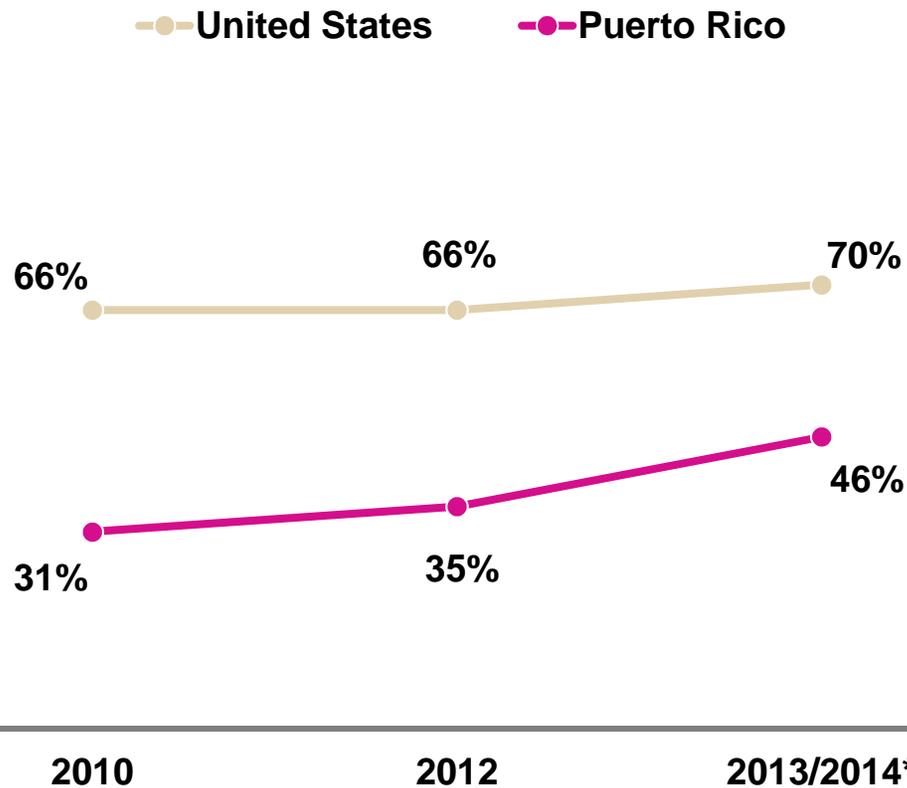
Across Puerto Rico, 46% of adults subscribe to home broadband service, up from 31% in 2010.





# Home Broadband Adoption Trends

Percent of adults who subscribe to home broadband service



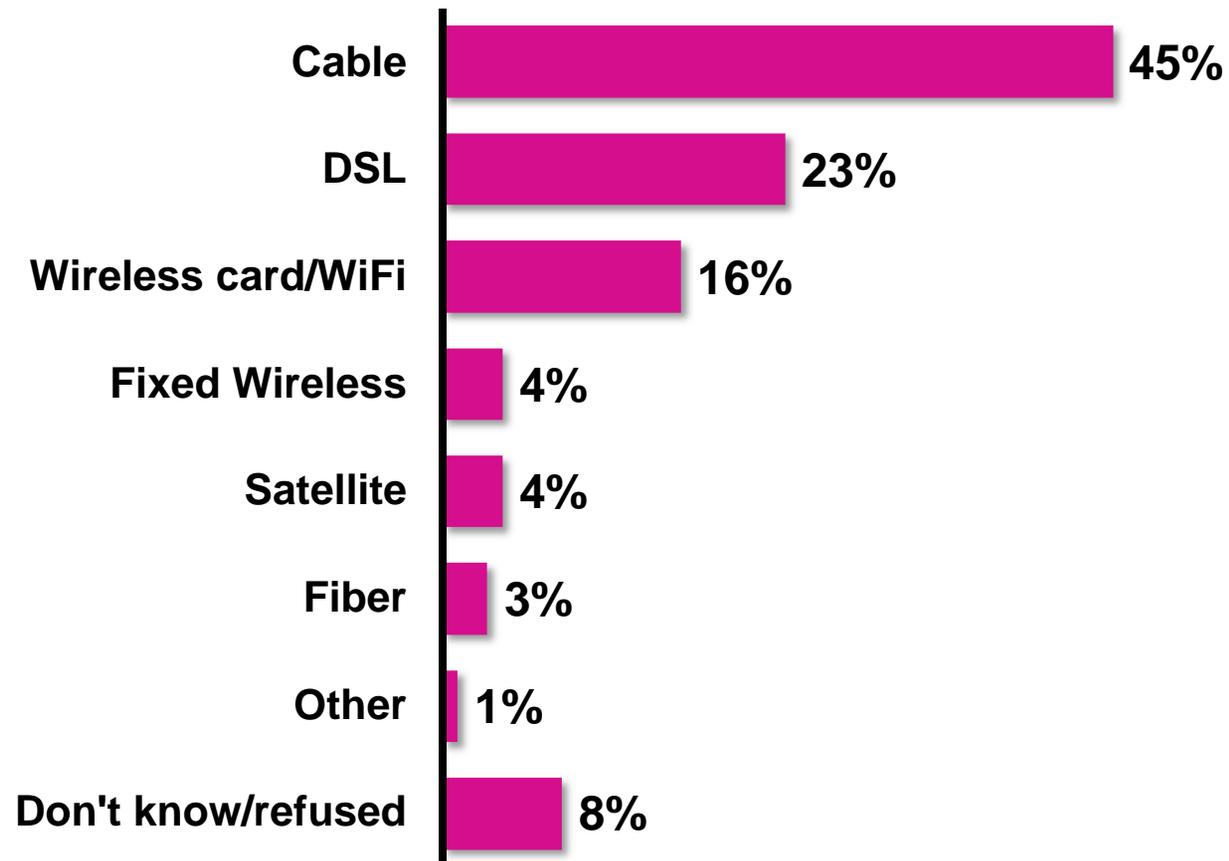
**Between 2010 and 2014, home broadband adoption in Puerto Rico grew by 15 percentage points.**

**By comparison, broadband adoption grew by 4 percentage points on the United States mainland between 2010 and 2013.**

\*US data only available from 2013. Data for Puerto Rico reflects 2014 survey findings.

# Types of Broadband Service

Among Puerto Rico broadband subscribers\*

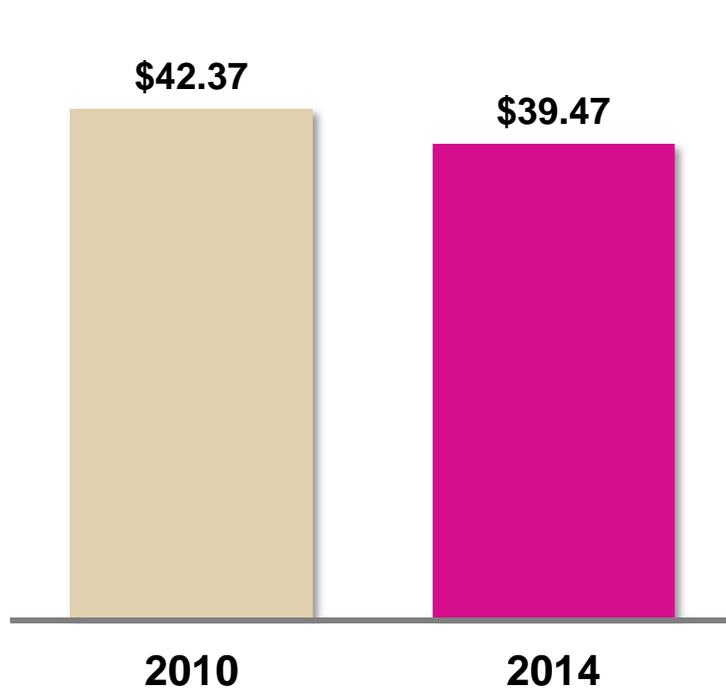


\*Percentages do not add up to 100% because individuals could give multiple responses.

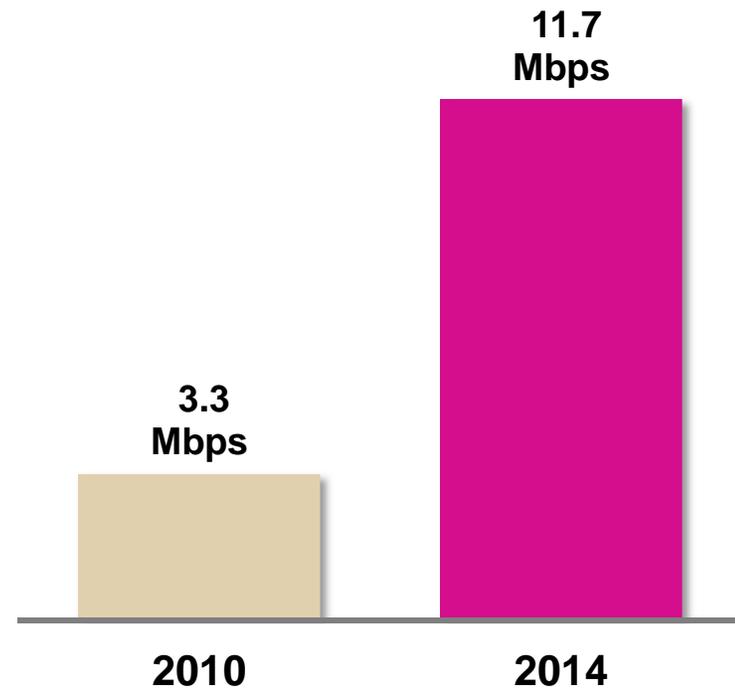


# Broadband Speeds and Prices in Puerto Rico

Average price paid for home broadband service



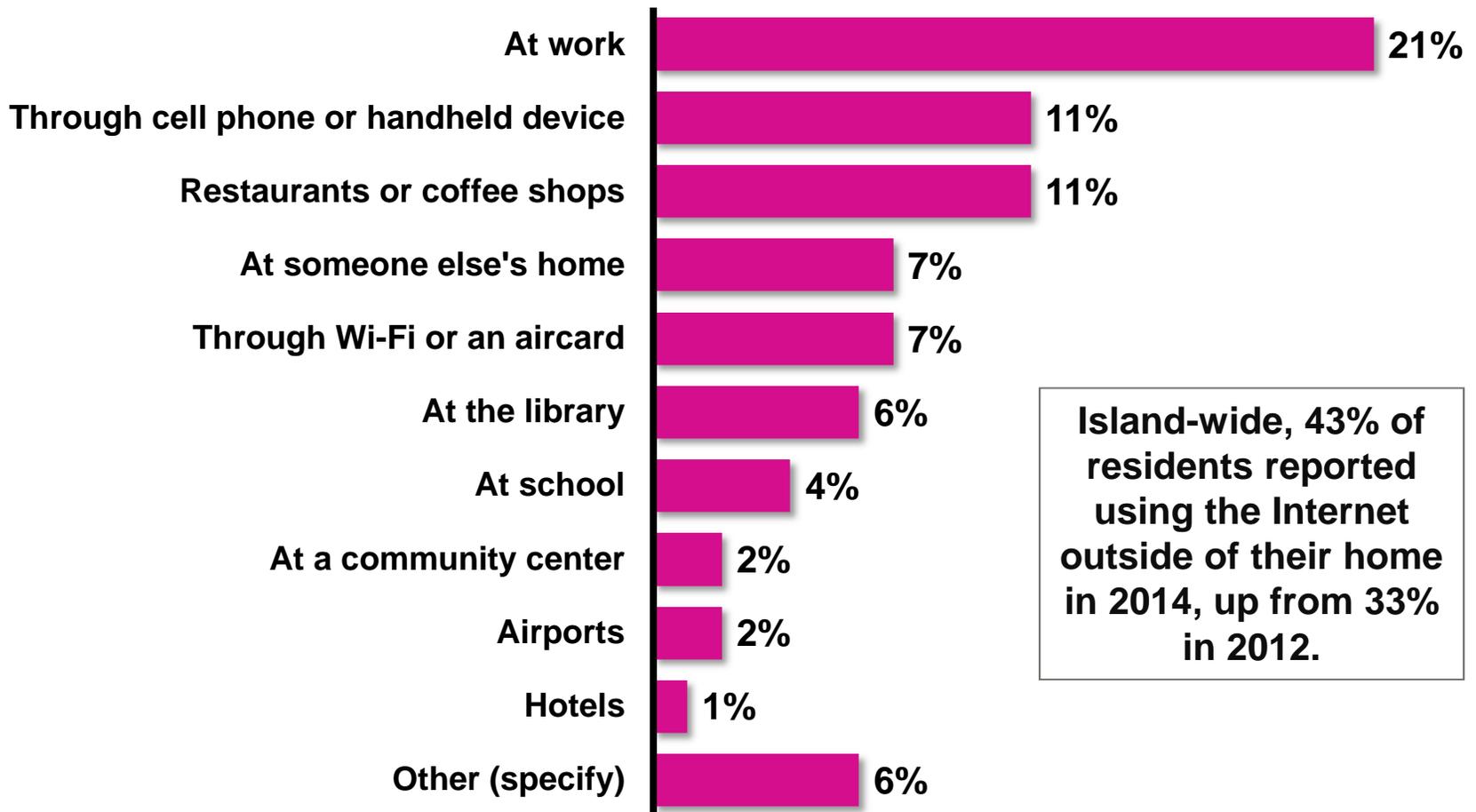
Average advertised download speed reported by home broadband adopters



**Puerto Rico broadband subscribers report paying less on average, but they report that their advertised download speeds have more than tripled since 2010.**

# Internet Access Outside of the Home

## Where Puerto Rican residents access the Internet

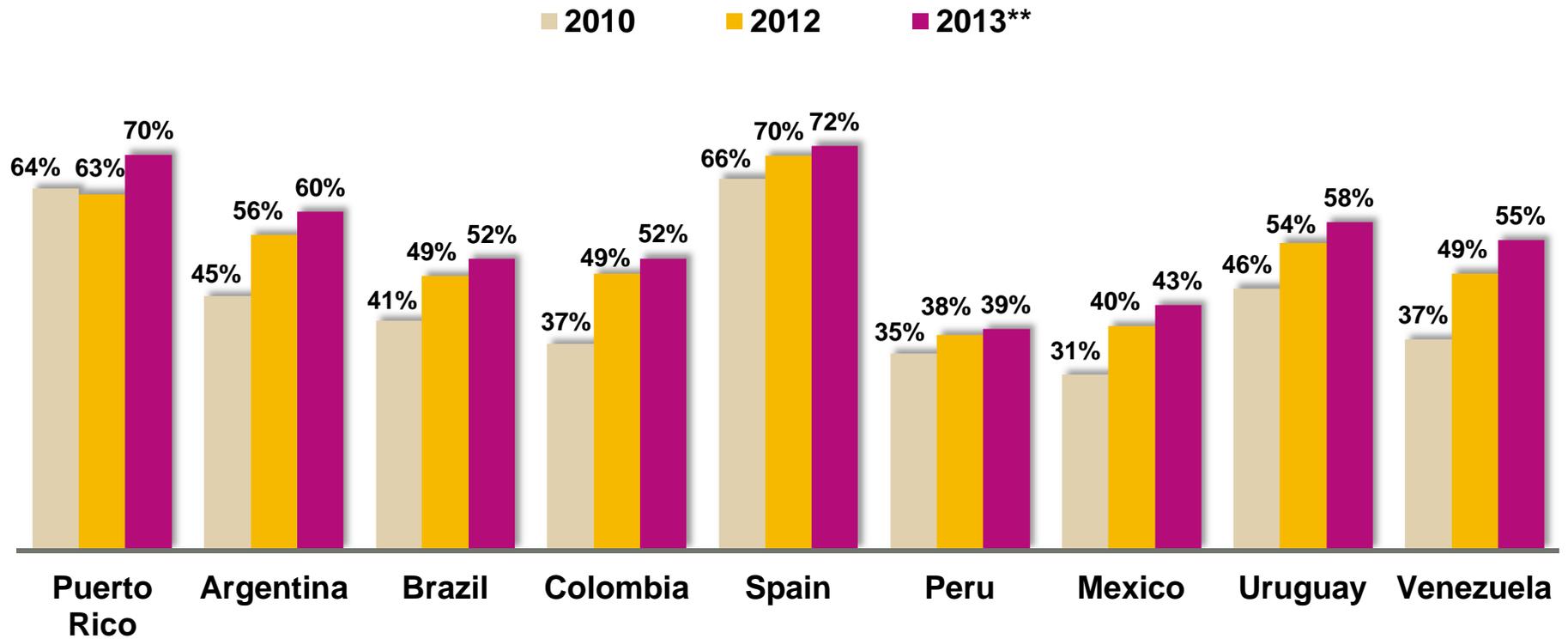


Island-wide, 43% of residents reported using the Internet outside of their home in 2014, up from 33% in 2012.



# International Trends in Internet Use

Percent of individuals who use the Internet\*



\*Different countries use different methods to measure Internet use and may reflect Internet usage among individuals of different age groups.

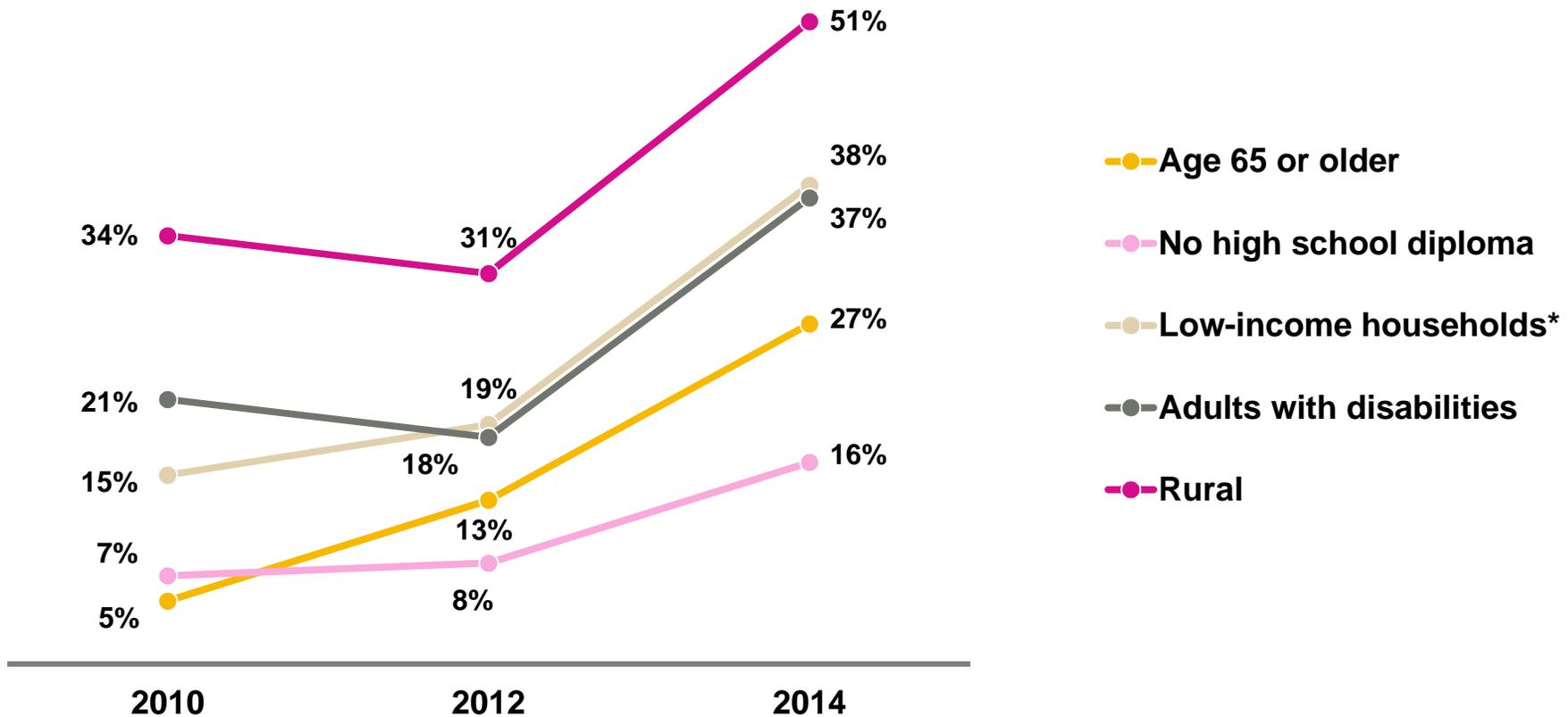
\*\*Puerto Rico data reflect Internet users for 2014.

# Broadband Adoption by Demographic



# Broadband Adoption Trends in Puerto Rico by Demographic

Percent of adults in each demographic group who subscribe to home broadband service

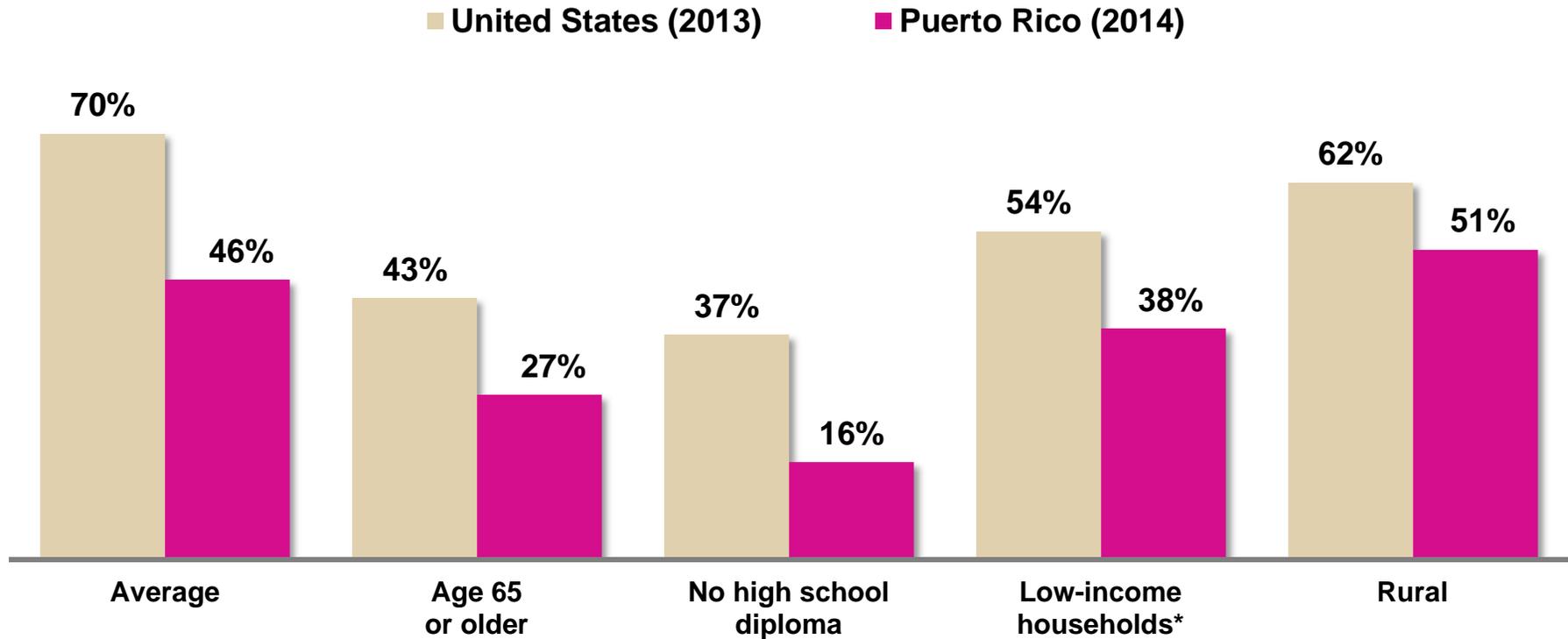


\*Low-income households defined as those that report annual household incomes less than \$15,000.



# Broadband Adoption by Demographic

Percent of adults in each demographic group who subscribe to home broadband service



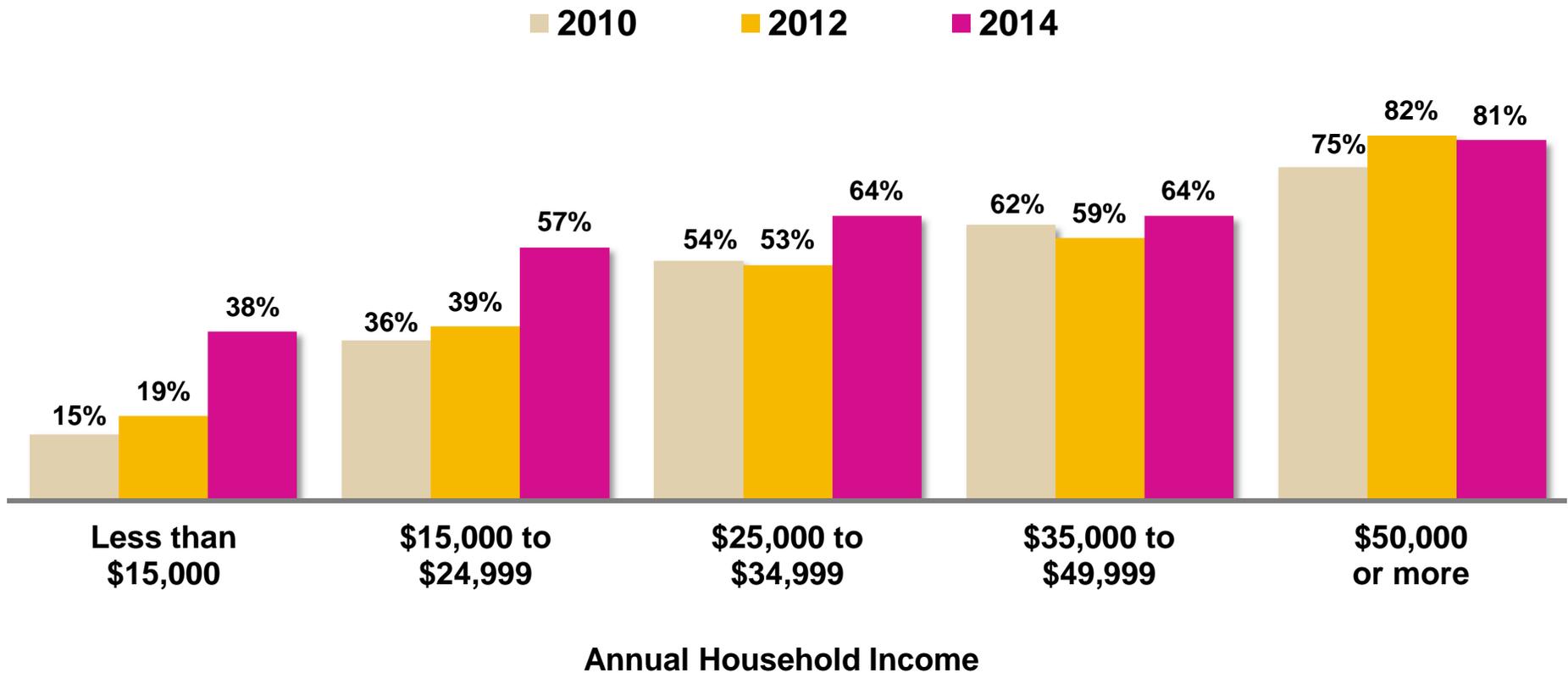
**Adults in Puerto Rico trail behind their peers on the United States mainland.**

\*Low-income households defined in Puerto Rico as those that report annual household incomes less than \$15,000; in the United States, low-income households are defined as having annual household incomes less than \$25,000.



# Broadband Adoption Trends in Puerto Rico by Annual Household Income

Percent of adults in each economic group who subscribe to home broadband service

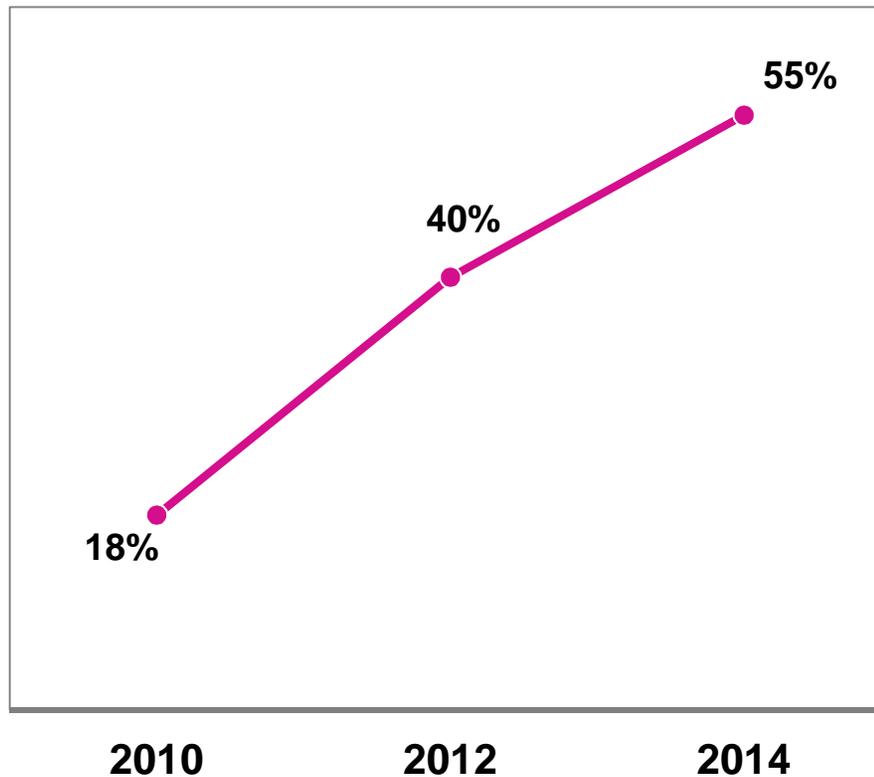


Since 2010, the greatest growth in home broadband adoption has been among lower-income households.

# Mobile Internet Usage

# Mobile Broadband Trends in Puerto Rico

Percent of adults in Puerto Rico  
who use mobile broadband service

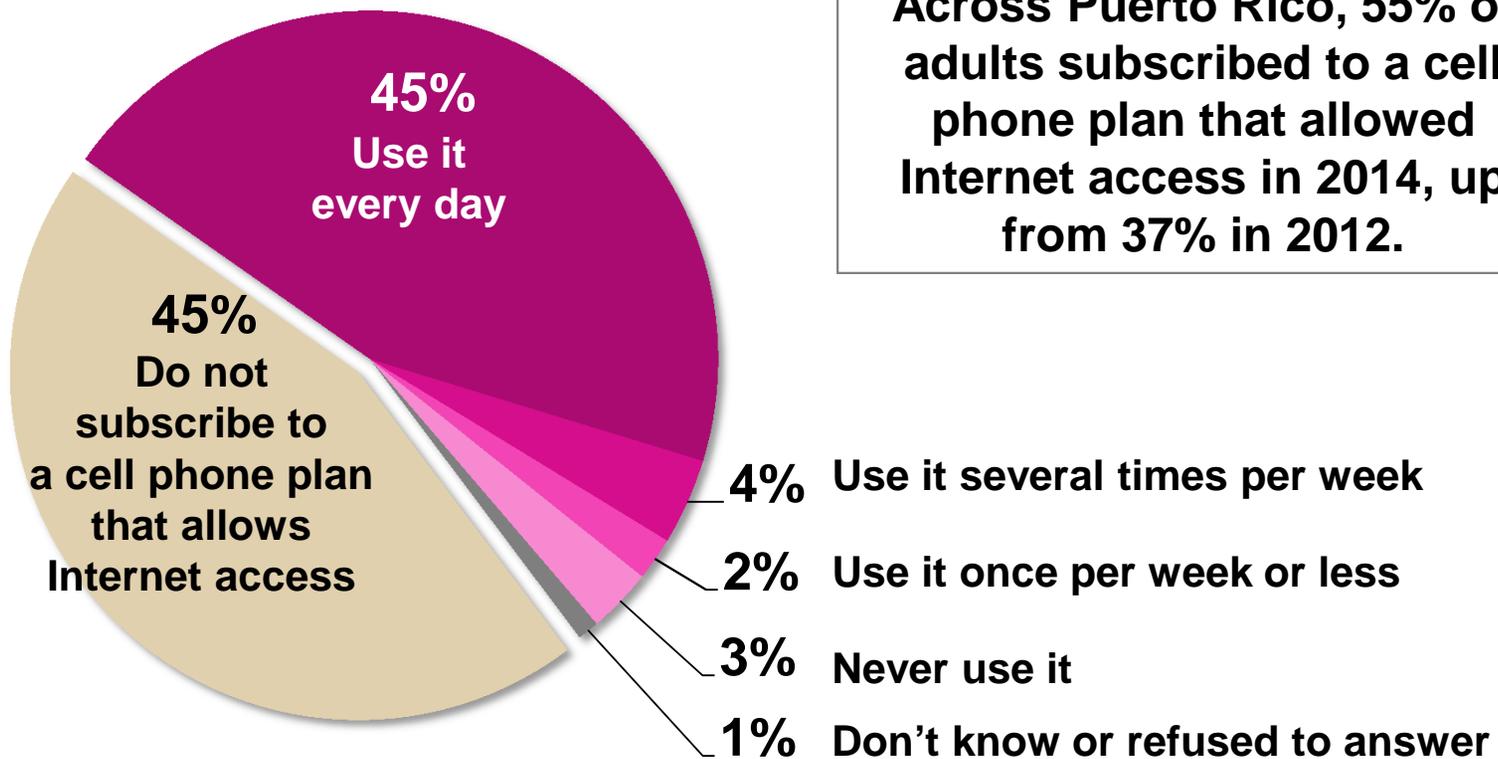


**Between 2010 and 2014, mobile broadband usage in Puerto Rico has grown by more than 300%.**

**This growth parallels a significant increase in laptop and tablet computer ownership on the Island.**

# Mobile Broadband Access Via Cell Phone in Puerto Rico

Among all residents

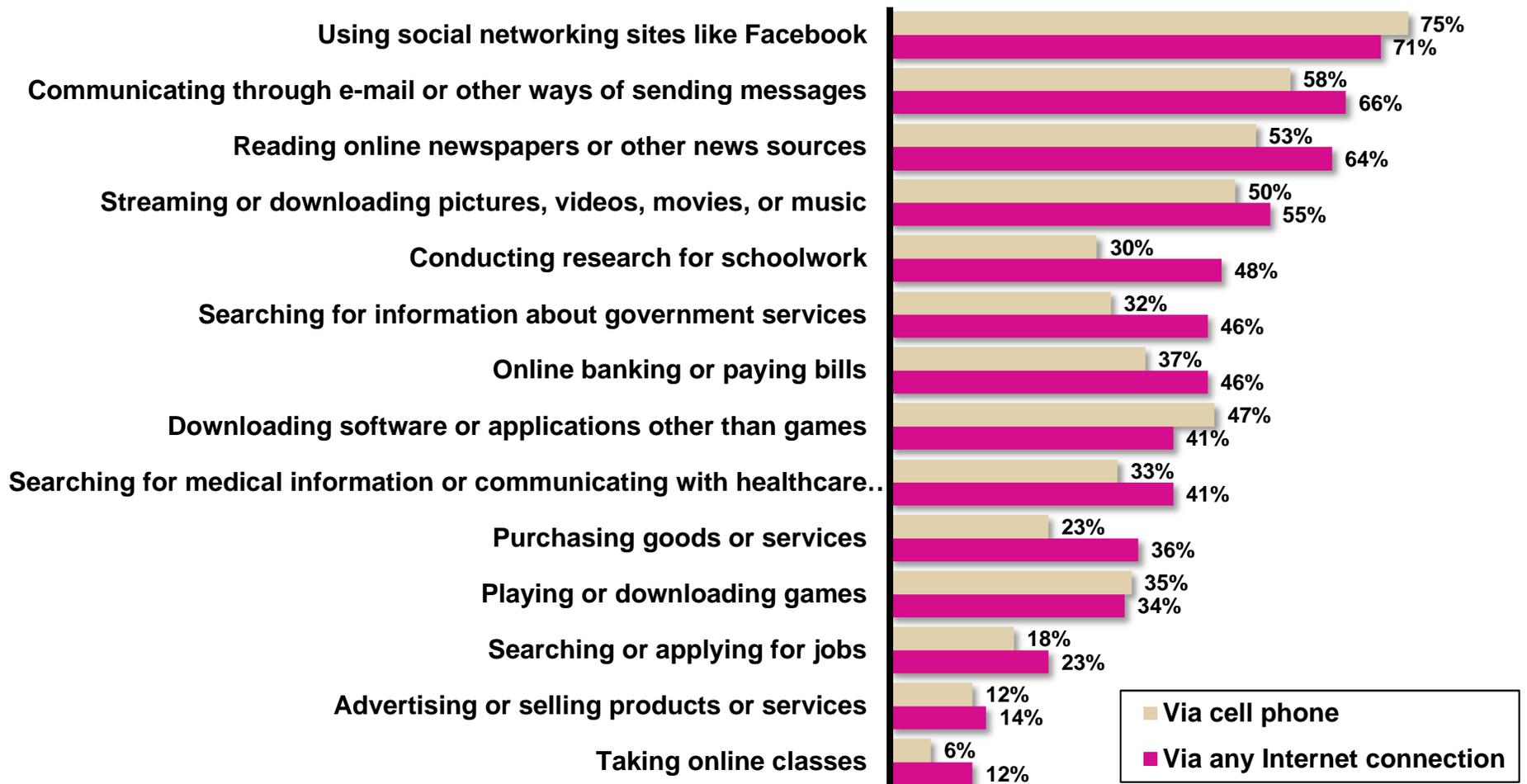


Across Puerto Rico, 55% of adults subscribed to a cell phone plan that allowed Internet access in 2014, up from 37% in 2012.

# Uses for the Internet

# Online Activities

**Percent of Puerto Rico Internet users who conduct the following activities online**

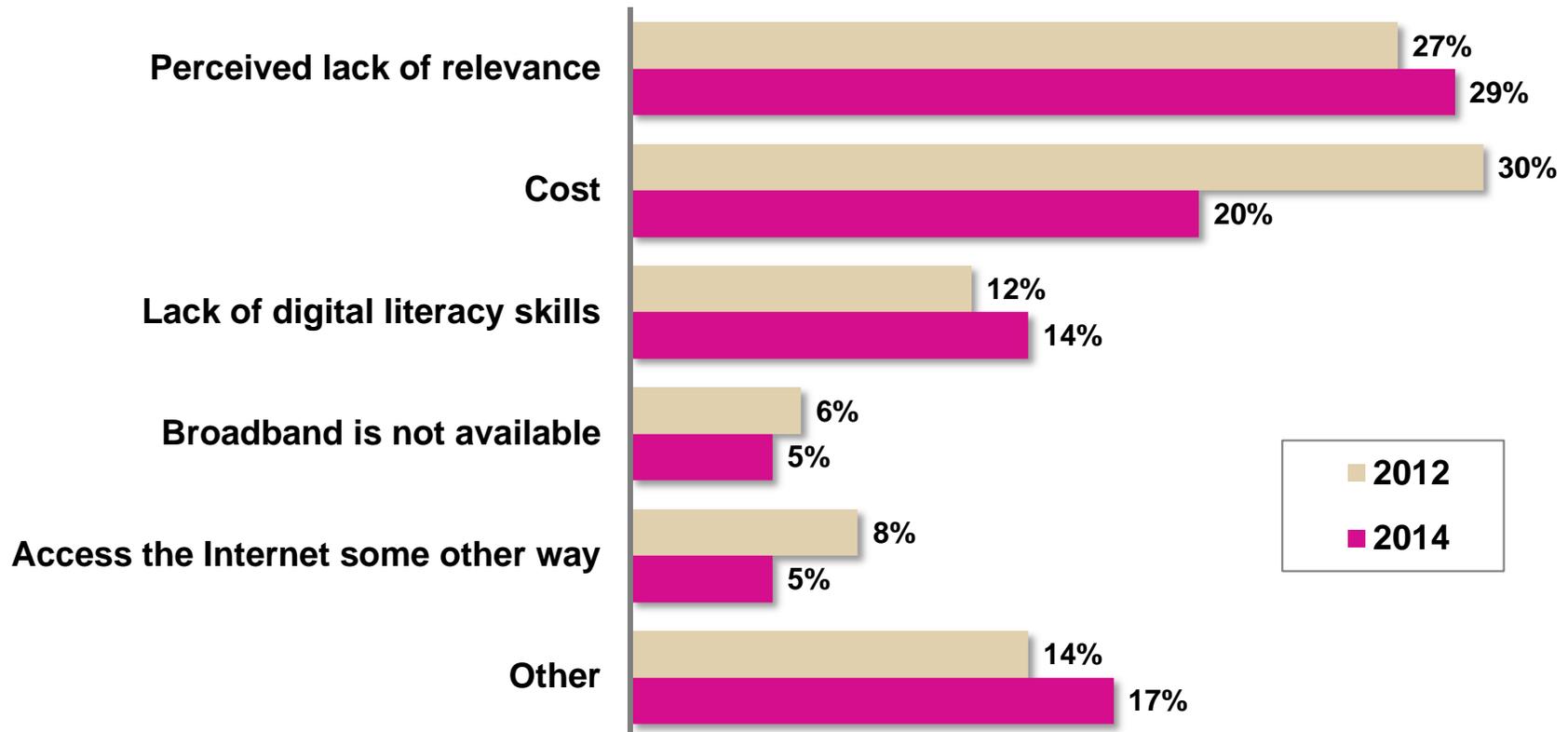


# Barriers to Home Broadband Adoption



# Barriers to Home Broadband Adoption

Main barrier to home broadband adoption among adults who do not subscribe



Across Puerto Rico, more than 1.5 million adults do not subscribe to home broadband service.

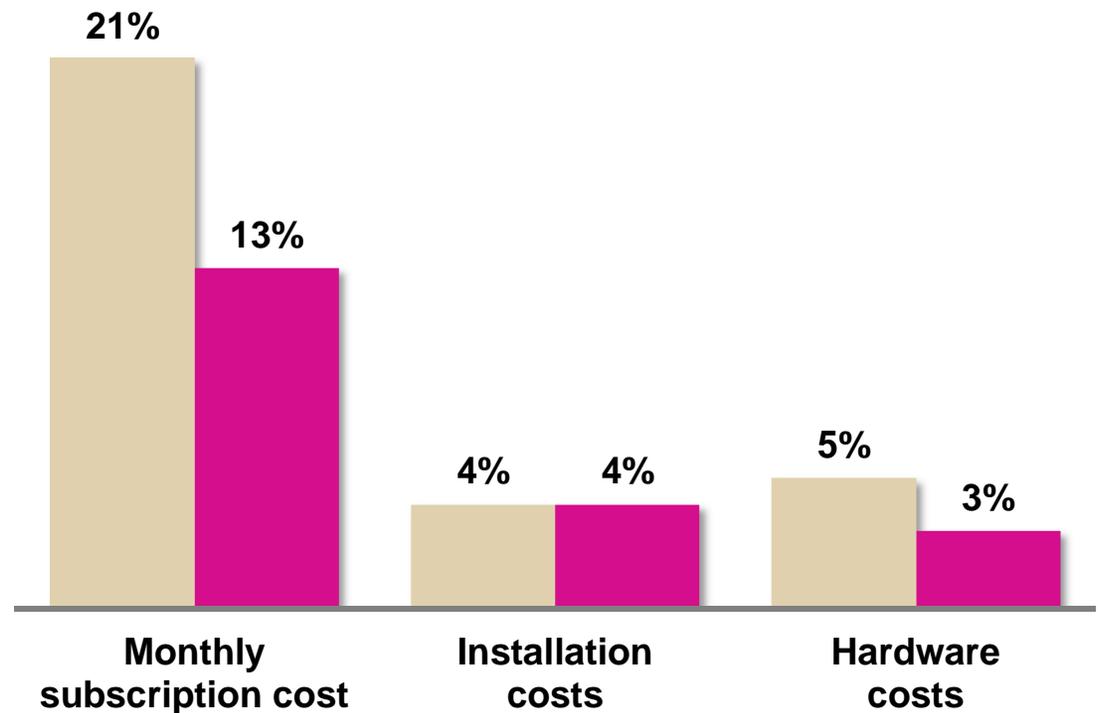


# Cost as a Barrier to Home Broadband Adoption

Non-adopters who cite the following costs as their main barriers to home broadband adoption

■ 2012 ■ 2014

Between 2012 and 2014, the share of non-adopters who said that the monthly cost of broadband service is their main barrier to adoption dropped significantly.



# Research Methodology



# Methodology Overview

- Connect Puerto Rico contacted one thousand two hundred (1,200) adult heads of households in Puerto Rico by telephone between September 19 and October 12, 2014. Of those 1,200 respondents, 600 were contacted via cellular phones. Data were collected by Estudios Tecnicos in San Juan, PR, ([www.estudios tecnicos.com](http://www.estudios tecnicos.com)).
- The error interval or sample tolerance for the survey is  $\pm 3.45\%$  at the 95% confidence level. This sample error accounts for sample weighting, using the effective sample size.
- Sample quotas were established by age, gender, and municipality of residence (rural or non-rural).
- For the purpose of setting quotas and weighting, Connect Puerto Rico defines "rural" respondents as adults living in a municipality that is not a part of a Metropolitan Statistical Area (MSA), as designated by the United States Office of Management and Budget.
- Connect Puerto Rico defines "low-income households" in Puerto Rico as those reporting annual household incomes less than \$15,000.
- Connect Puerto Rico applied raking weighting to correct for minor variations and to ensure that the samples match the most recent U.S. Census estimates of Puerto Rico's adult population by age, gender, and the urban/rural classification of each respondent's municipality of residence. Weighting and research consultation were provided by Lucidity Research, LLC, of Westminster, Maryland ( [www.lucidityresearch.com](http://www.lucidityresearch.com)).



## Methodology Overview *(cont.)*

- Connect Puerto Rico conducted these surveys 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.
- For more information about the methodology used in these surveys, please contact [info@connectpr.org](mailto:info@connectpr.org).



## Select Question Wording *(cont.)*

**Slide 4:** “Do you subscribe to the Internet at home,” “Do you use the Internet from any location outside of your own home,” and “Which of the following describes the type of Internet service to which you subscribe?” (Source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments)

**Slide 5:** “Do you subscribe to the Internet at home,” and “Which of the following describes the type of Internet service to which you subscribe?” (Puerto Rico Source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments. US Source: Pew Internet Research Center (<http://www.pewinternet.org/2013/08/26/home-broadband-2013/>))

**Slide 6:** “Which of the following describes the broadband service you subscribe to at home?”

**Slide 7:** “What do you pay each month for your home Internet service,” and “To the best of your knowledge, what is the advertised download speed provided by your home Internet service provider?” (Source: Connect Puerto Rico 2010 and 2014 Residential Technology Assessments. Speed and price data were self-reported as part of these surveys)

**Slide 8:** “At what locations outside of your own home do you use the Internet?”

**Slide 9:** Puerto Rico data source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments. Source for other data: International Telecommunication Union (<http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>)

**Slide 11:** Source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments.



## Select Question Wording

**Slide 12:** “Do you subscribe to the Internet at home,” and “Which of the following describes the type of Internet service to which you subscribe?” (Puerto Rico source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments. US Source: Pew Internet Research Center (<http://www.pewinternet.org/2013/08/26/home-broadband-2013/>))

**Slide 13:** “Do you subscribe to the Internet at home,” and “Which of the following describes the type of Internet service to which you subscribe?” (Source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments)

**Slide 15:** “On your cell phone, do you subscribe to a plan that allows you to access the Internet,” and “How often, if ever, do you go online using your cell phone?” (Source: Connect Puerto Rico 2010, 2012, and 2014 Residential Technology Assessments)

**Slide 16:** “On your cell phone, do you subscribe to a plan that allows you to access the Internet,” and “How often, if ever, do you go online using your cell phone?”

**Slide 18:** “Which of the following activities do you conduct using the Internet,” and “Which of the following activities do you conduct on your cell phone using your mobile broadband service?”

**Slide 20:** “Why don’t you subscribe to home Internet/broadband service,” and “Which of these is the main reason why you don’t subscribe to home Internet/broadband service?” (Source: Connect Puerto Rico 2012 and 2014 Residential Technology Assessments)

**Slide 21:** “Why don’t you subscribe to home Internet/broadband service,” and “Which of these is the main reason why you don’t subscribe to home Internet/broadband service?” (Source: Connect Puerto Rico 2012 and 2014 Residential Technology Assessments)