

# Statewide Survey on Broadband Adoption 2021

Internet Adoption and the “Digital Divide” in California

*Results from a survey conducted for the  
California Emerging Technology Fund  
(CETF)*

University of Southern California  
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# About the Statewide Survey on Adoption

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- **Population:** California Adults (age 18 and older)
- **Sample Size:** 1,650 Households
- **Method of Collection:** Telephone Survey
- **Sampling Method:** Random-Digit Dialing (RDD) of Cellphones (94%) and Landlines (6%) in California
- **Languages:** English, Spanish, Mandarin, Vietnamese
- **Margin of Error:** ~2% for 95% Confidence Level
- **Weights:** Results Were Adjusted for Age, Gender, Race/Ethnicity, Education and Region based on ACS 2019
- **Fieldwork Dates:** February 10 – March 22, 2021

# CALIFORNIA BROADBAND ADOPTION REGIONS

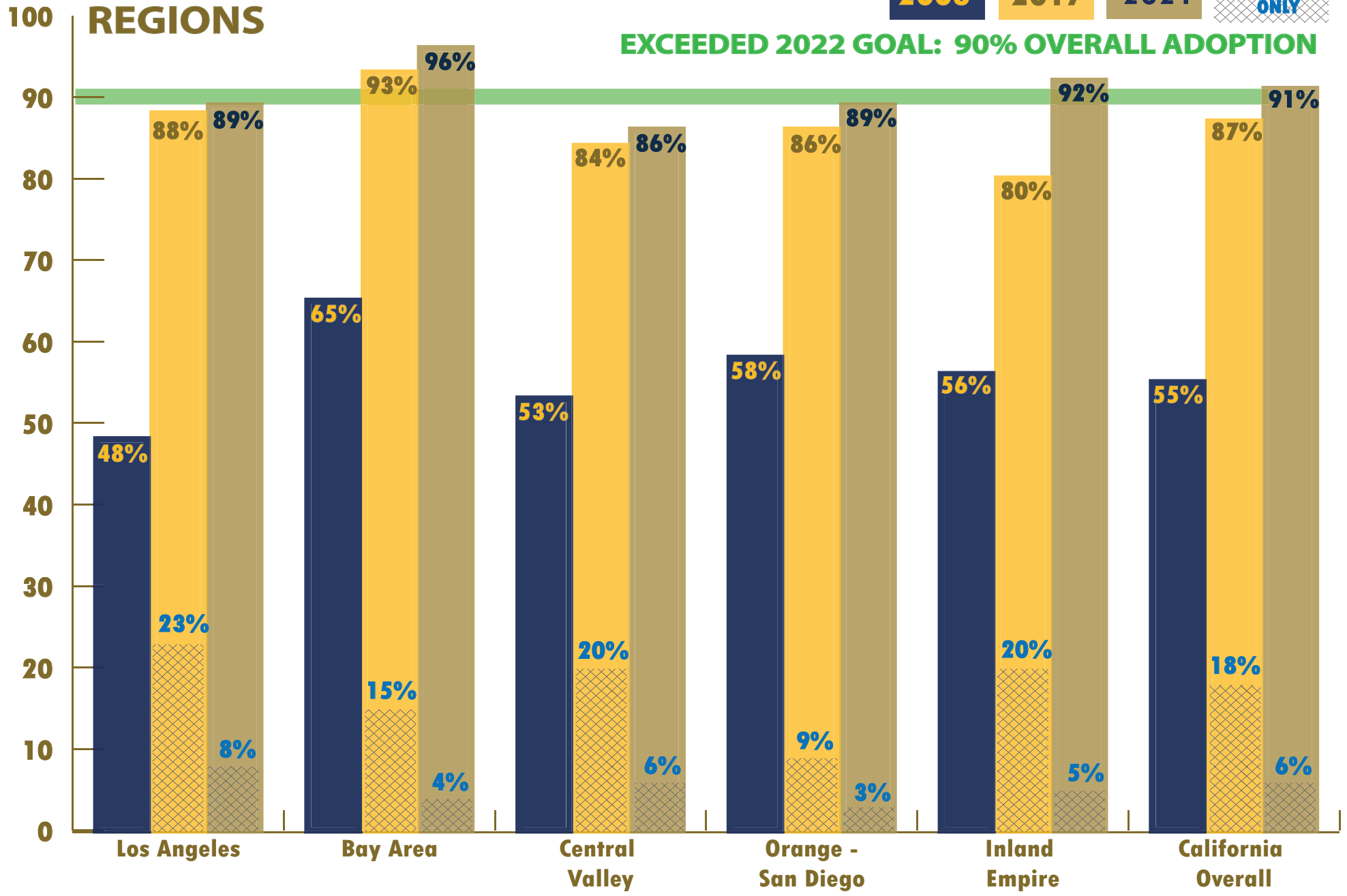
2008

2017

2021

SMARTPHONE ONLY

EXCEEDED 2022 GOAL: 90% OVERALL ADOPTION



# CALIFORNIA BROADBAND ADOPTION GROUPS

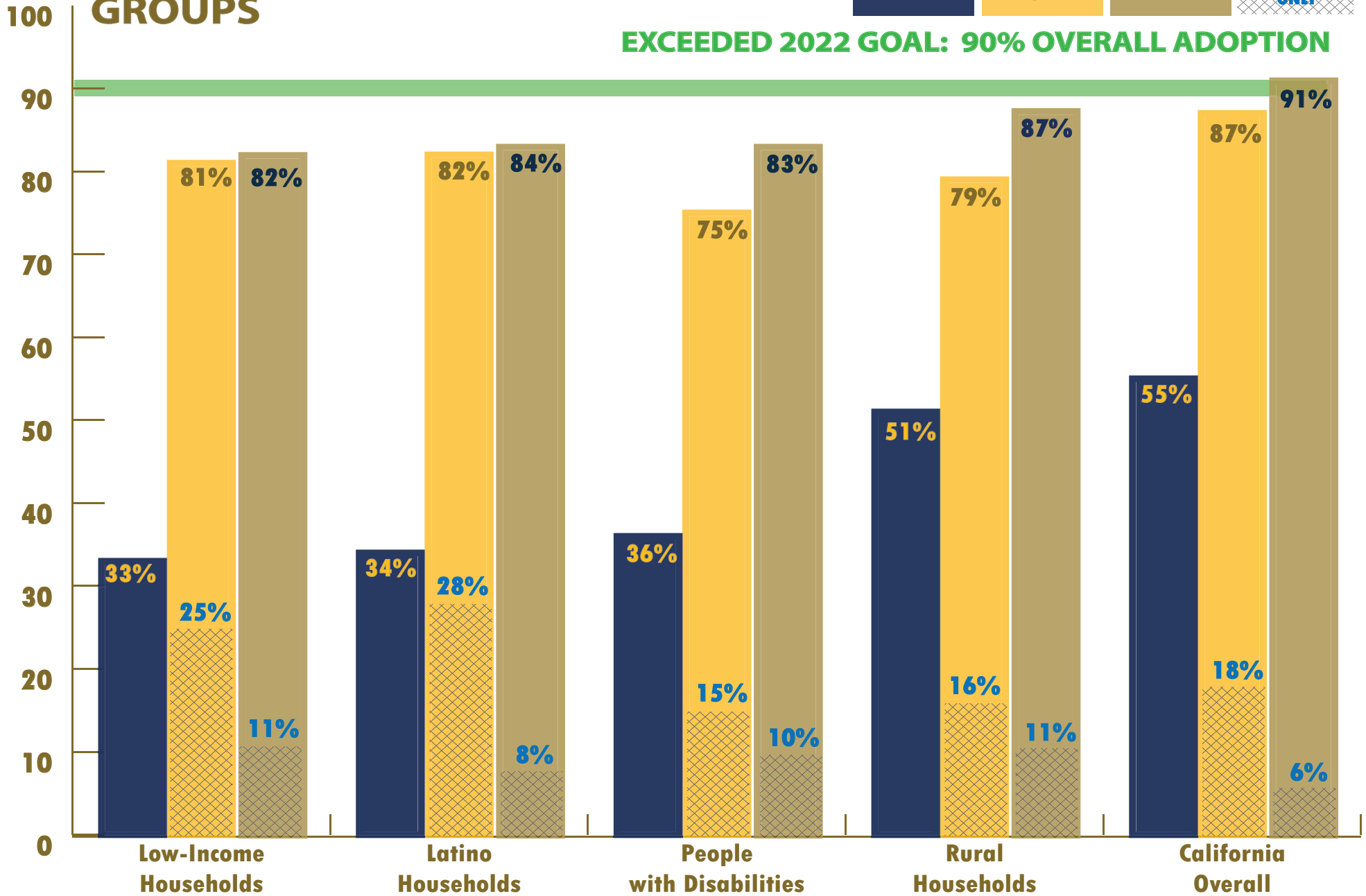
2008

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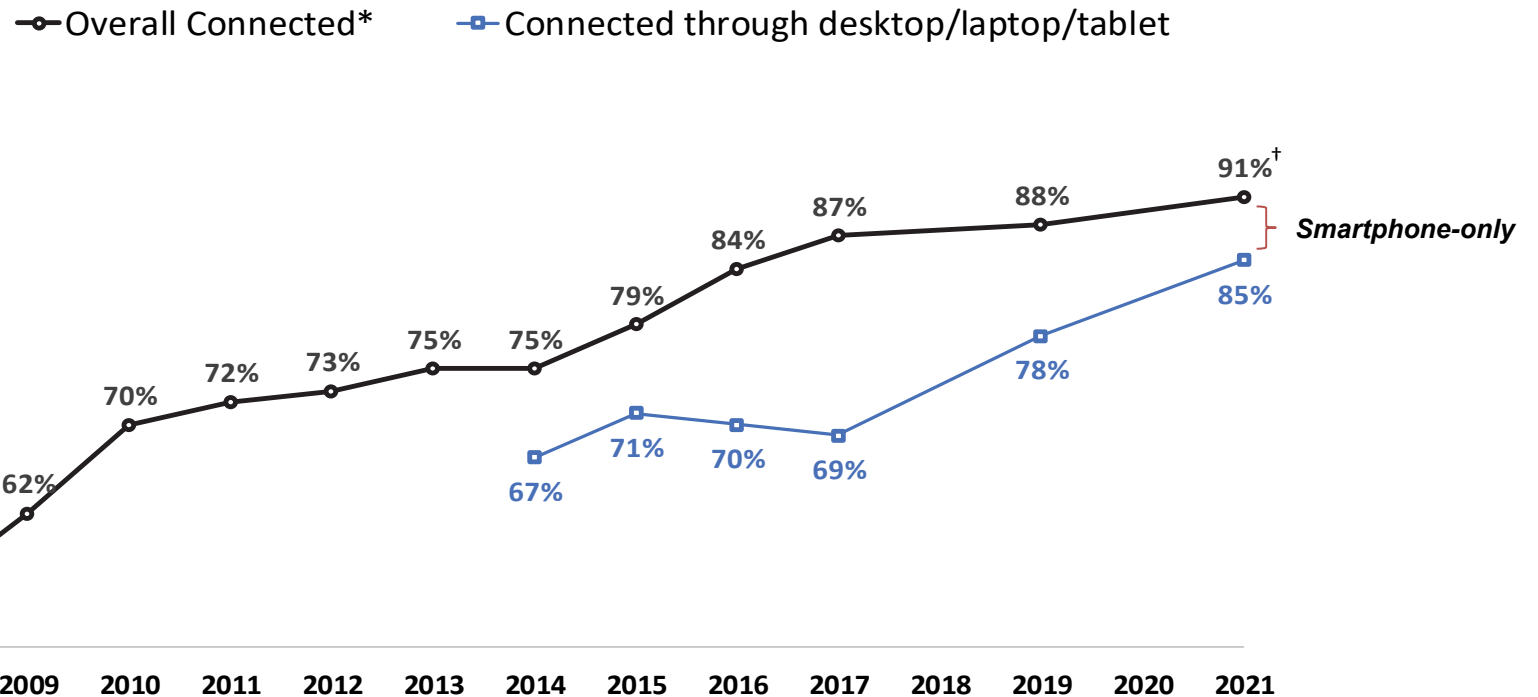
SMARTPHONE ONLY

EXCEEDED 2022 GOAL: 90% OVERALL ADOPTION



# Broadband adoption in California continues to rise while the share of smartphone-only users drops.

## Broadband Adoption in California (2008-2021)



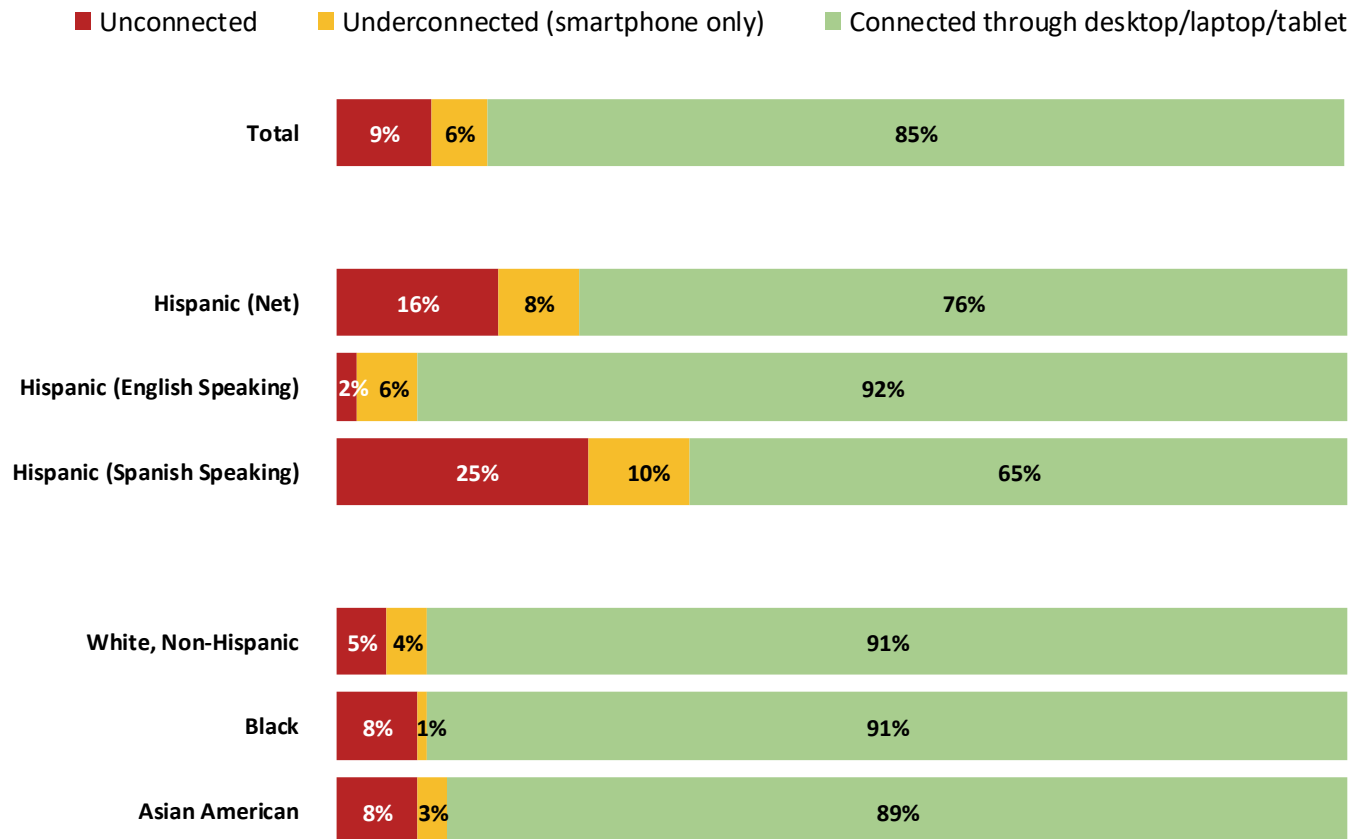
Source: 2021 from USC; 2017/2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll; 2008 to 2013 from PPIC.

\*Includes those who can connect to the Internet either through a desktop, laptop, tablet computer, or smartphone.

<sup>†</sup> 90.5% of households are connected, rounding to 91%. 84.8% are connected with a laptop, desktop or tablet, and 5.7% are smartphone only.

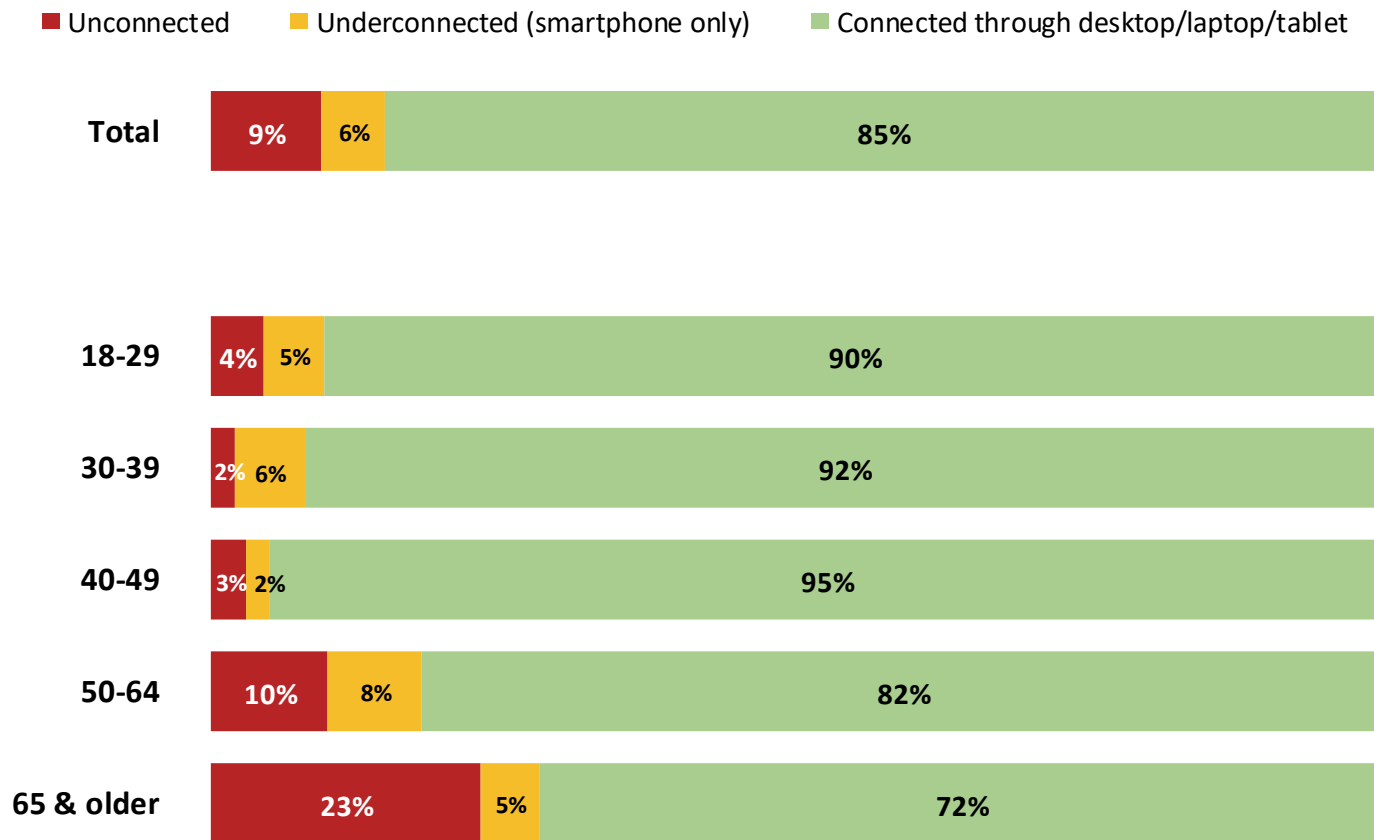
**Nearly 1 in 4 Hispanics are unconnected or underconnected, significantly behind other racial/ethnic groups.**

### Broadband Adoption by Race/Ethnicity

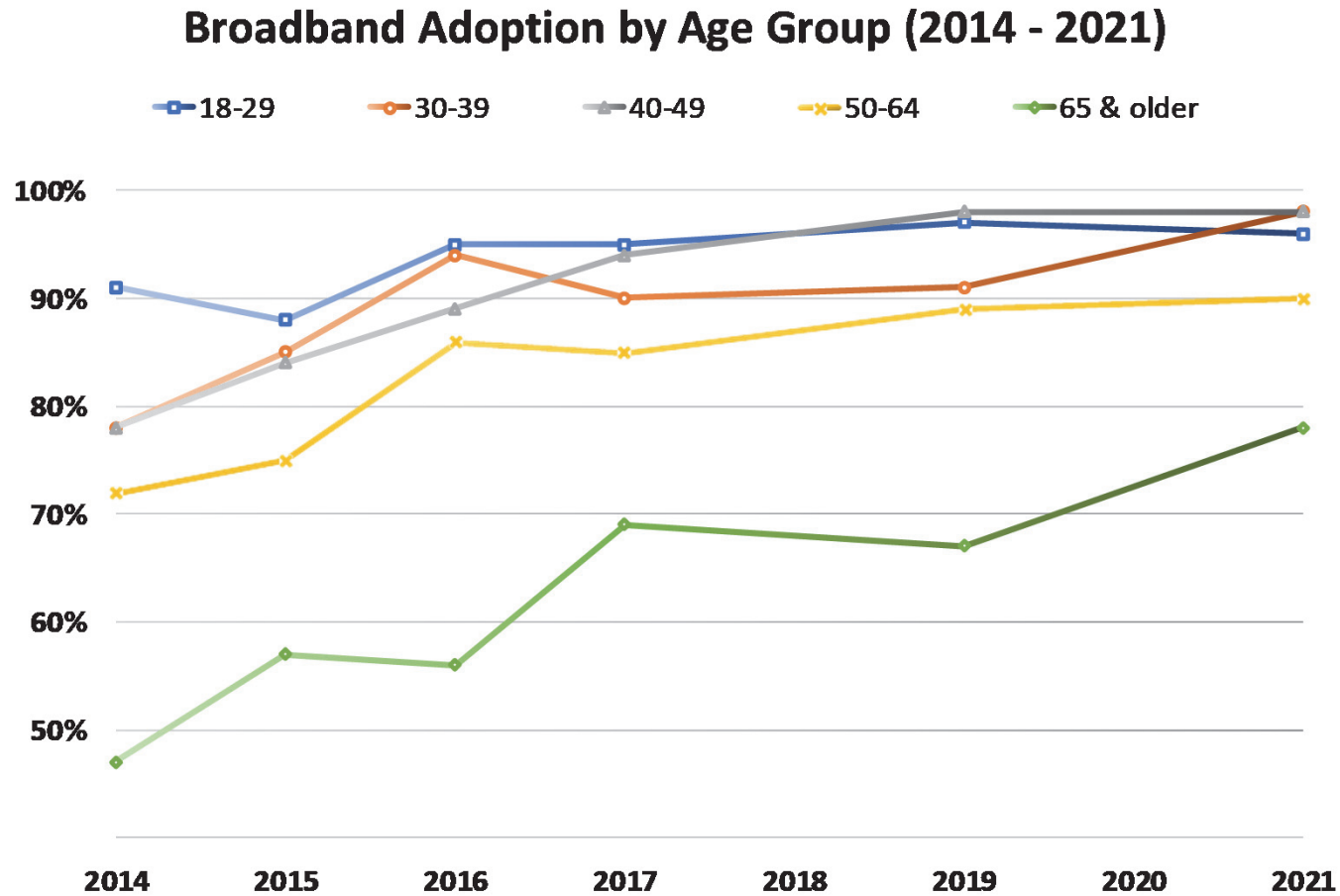


**Adoption for older adults lags, more than 1 in 4 residents age 65 and older are unconnected or underconnected.**

### Broadband Adoption by Age Group



**However, there have been significant gains in adoption among older adults since 2019.**



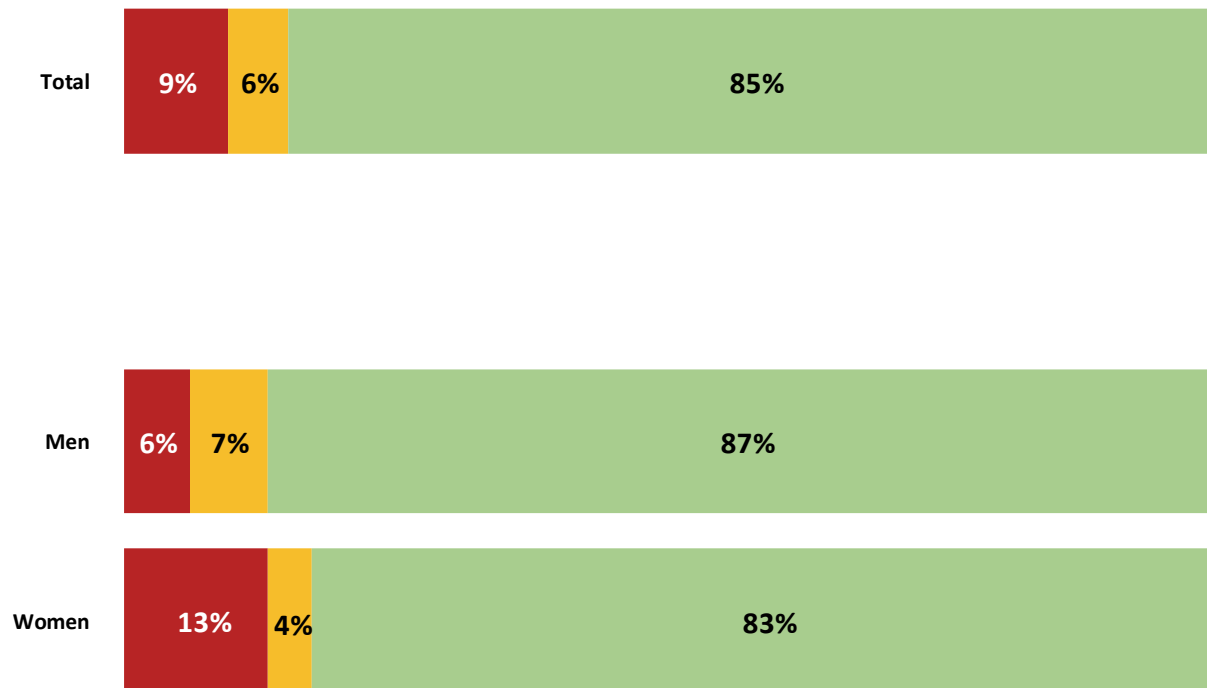
Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.



**A small but significant gender gap in adoption exists. While women are more than twice as likely to be unconnected, men make up a larger share of smartphone-only users.**

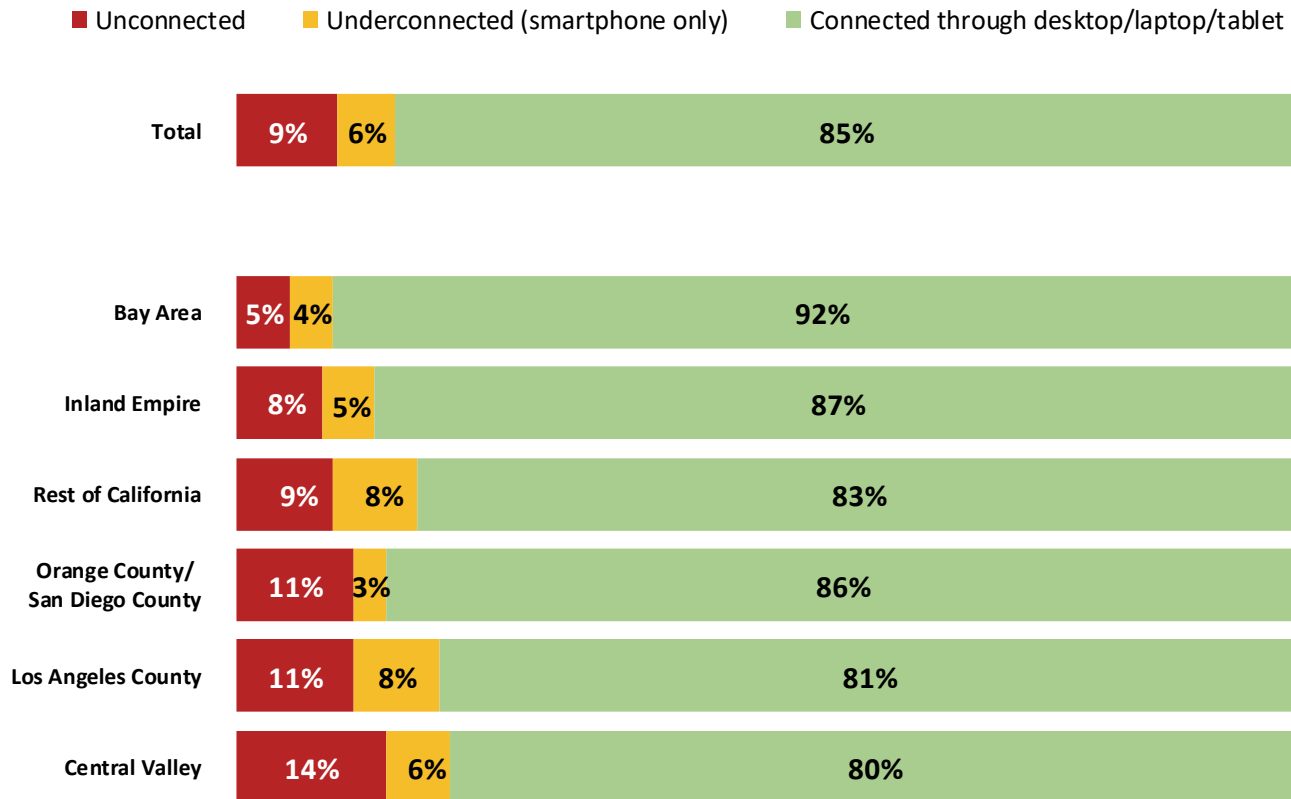
### Broadband Adoption by Gender

■ Unconnected    ■ Underconnected (smartphone only)    ■ Connected through desktop/laptop/tablet



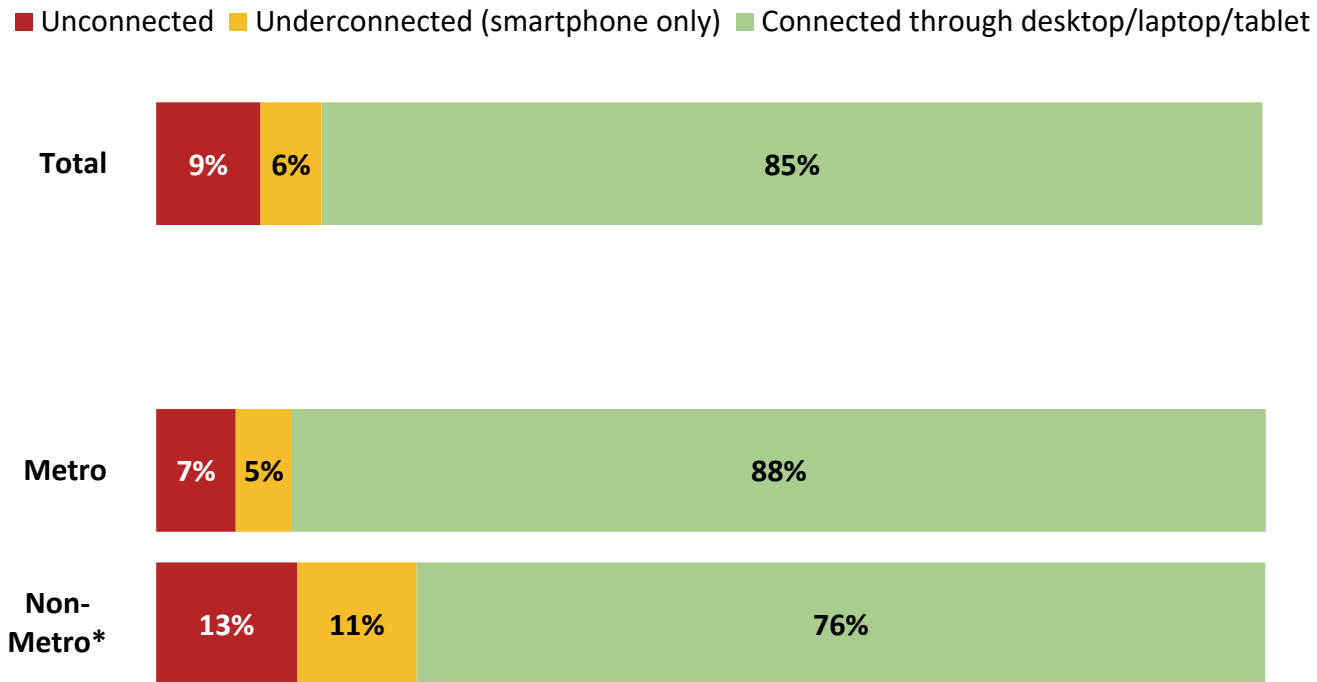
**There are significant disparities in broadband adoption across California, with Los Angeles County and the Central Valley lagging behind other regions.**

### Broadband Adoption by Region



# There are also disparities in broadband adoption between metro and non-metro areas.

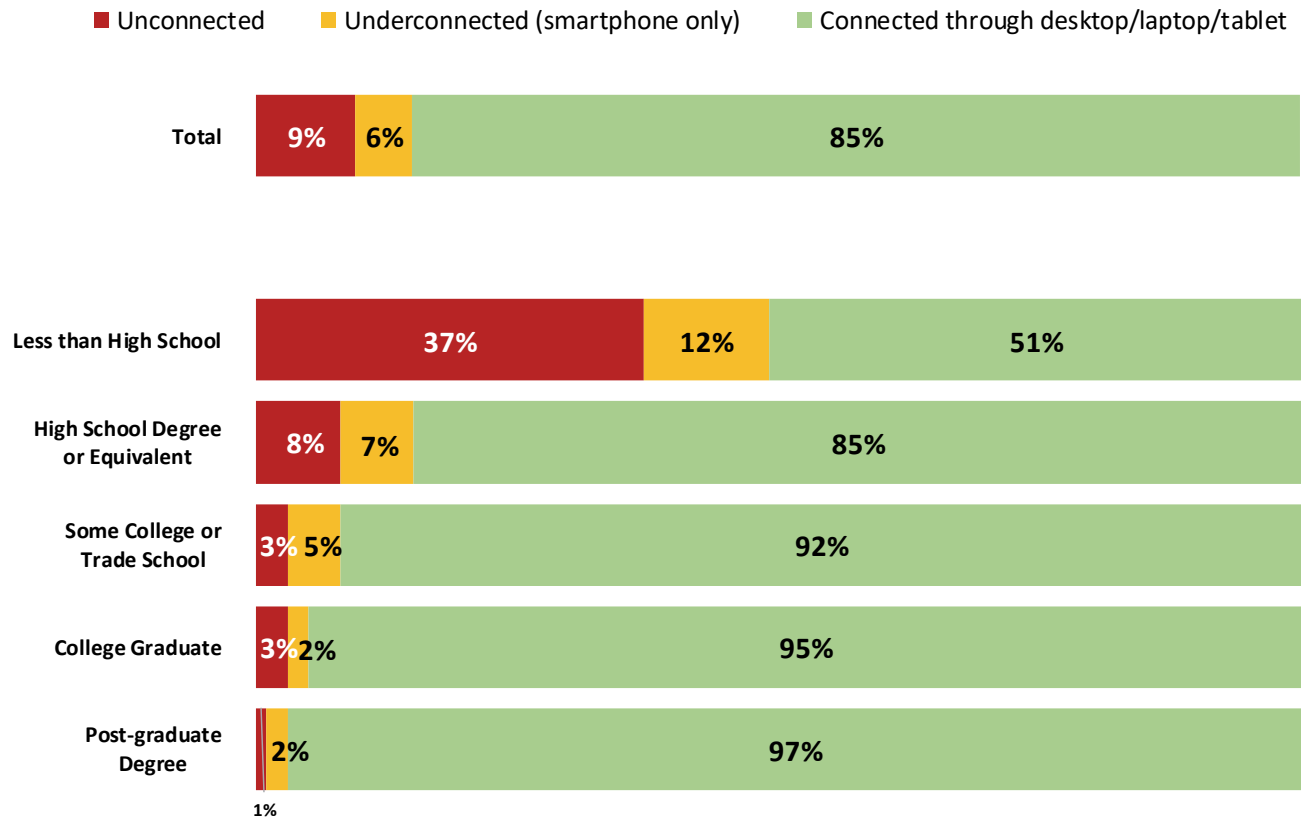
## Broadband Adoption by Metro vs. Non-Metro Area



\* Non-metro areas are defined using the USDA Rural-Urban Commuting Area codes 4-10.

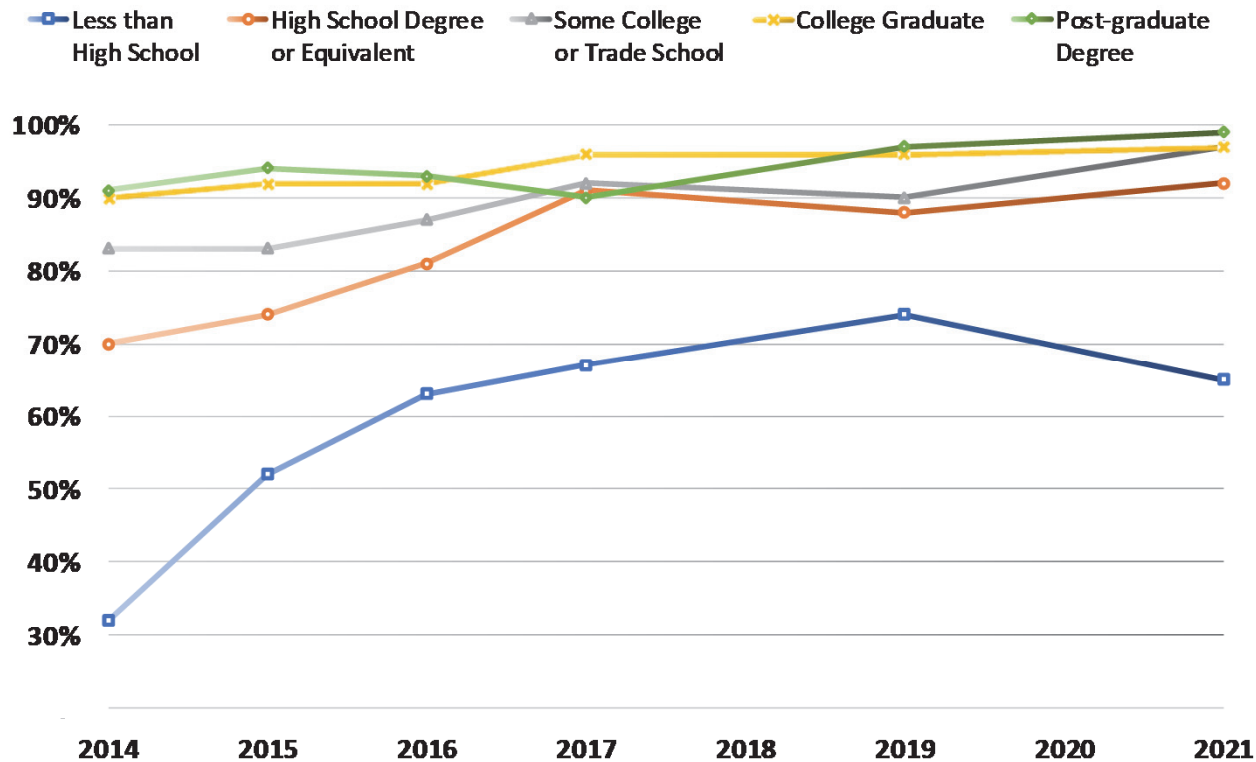
**Nearly half of those without a high school degree are unconnected or underconnected, in stark contrast to those with higher educational attainment.**

### Broadband Adoption by Educational Attainment



**Adoption for those without a high school degree is lower than it was in 2019, likely reflecting the impact of the COVID-19 pandemic on the low-wage workforce.**

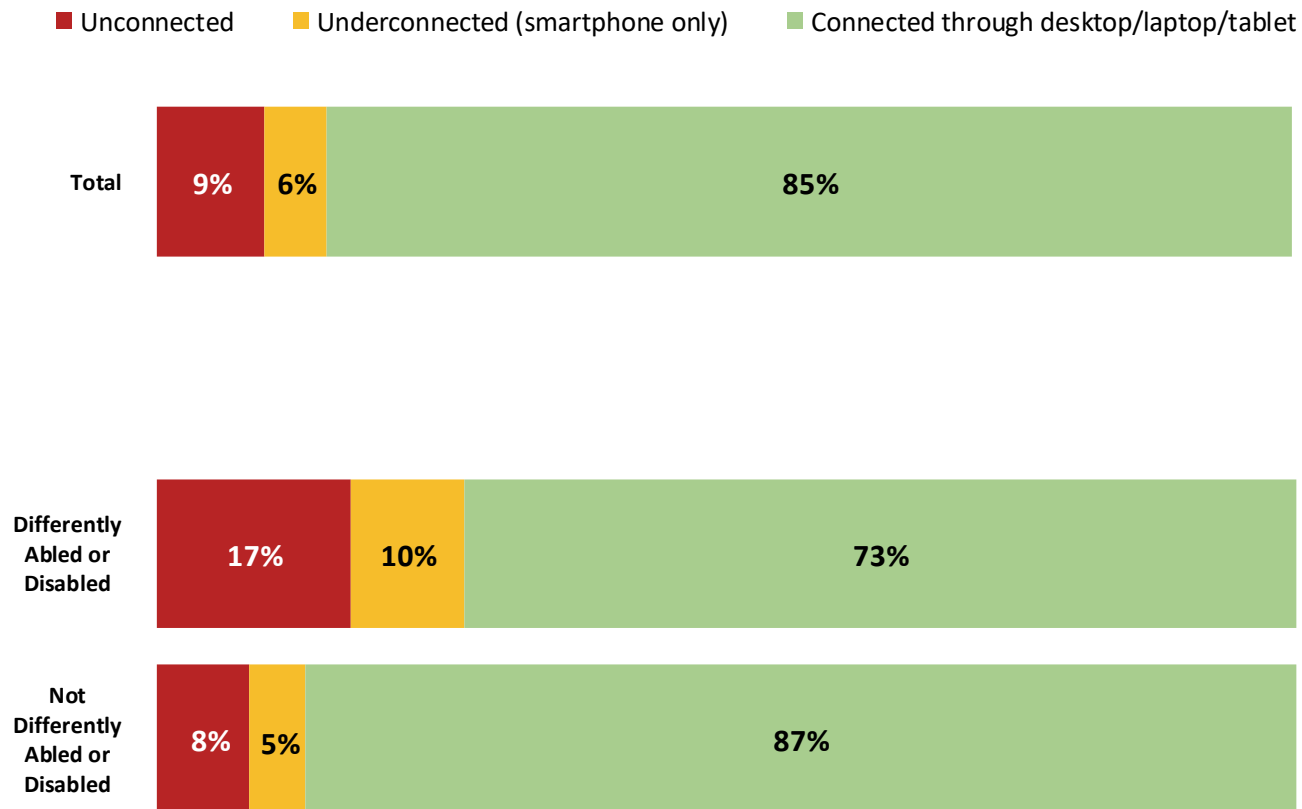
**Broadband Adoption by Educational Attainment (2014 - 2021)**



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

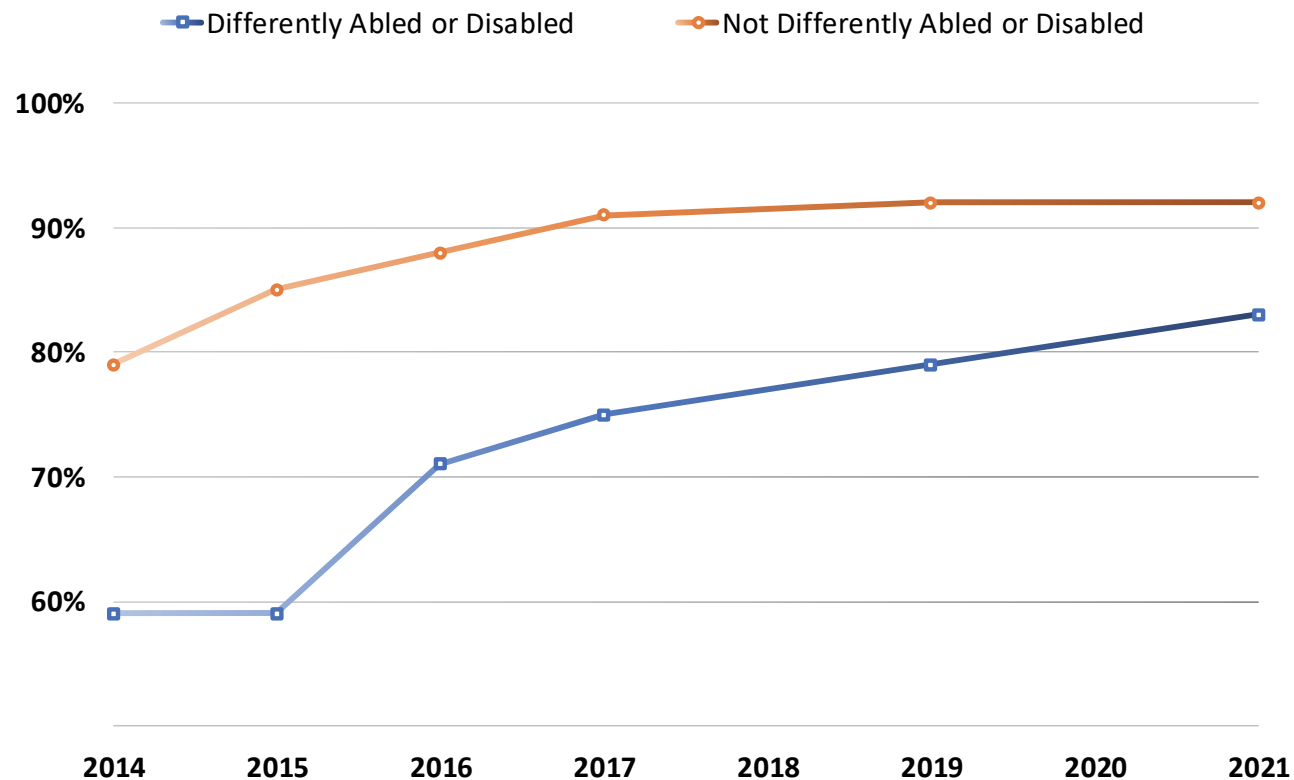
# People with disabilities are more than twice as likely to be unconnected or underconnected.

## Broadband Adoption by Disability Status



**However, the overall broadband adoption gap for people with disabilities continues to narrow.**

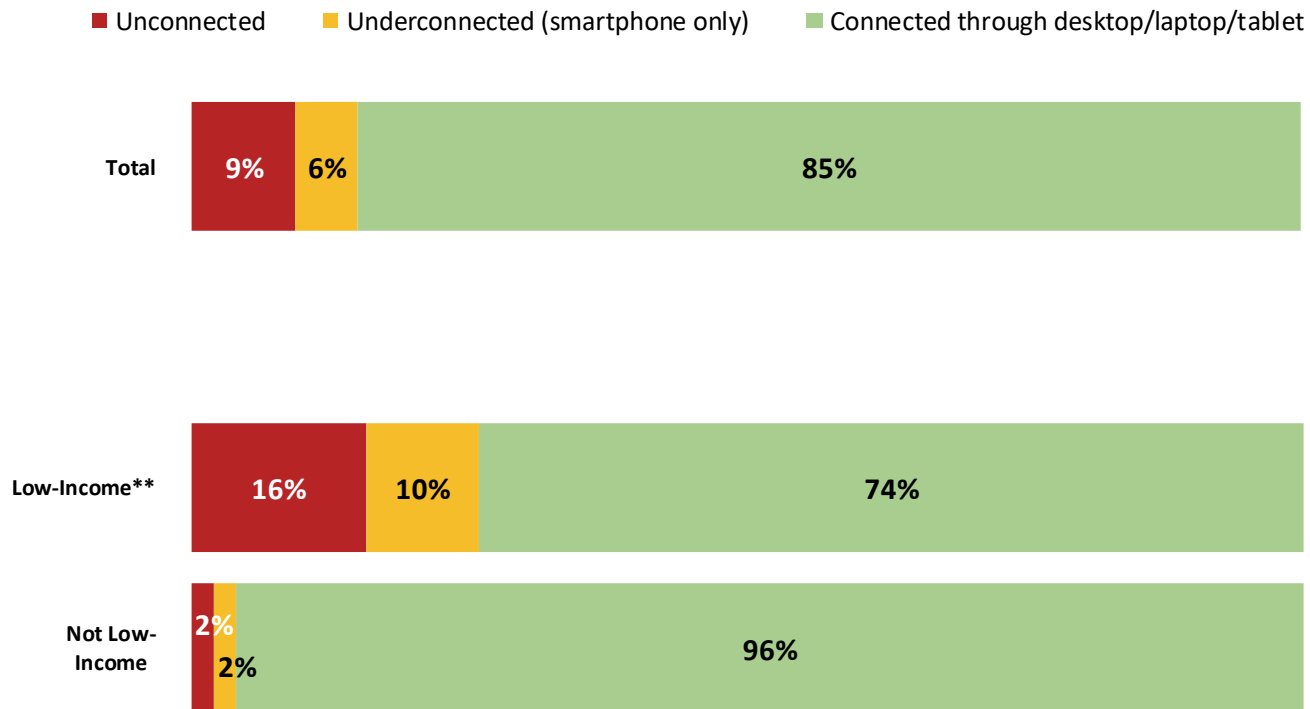
**Broadband Adoption by Disability Status (2014 - 2021)**



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

**More than 1 in 4 low-income households are unconnected or underconnected, in contrast to near universal adoption among higher-income households.**

### Broadband Adoption by Income Status

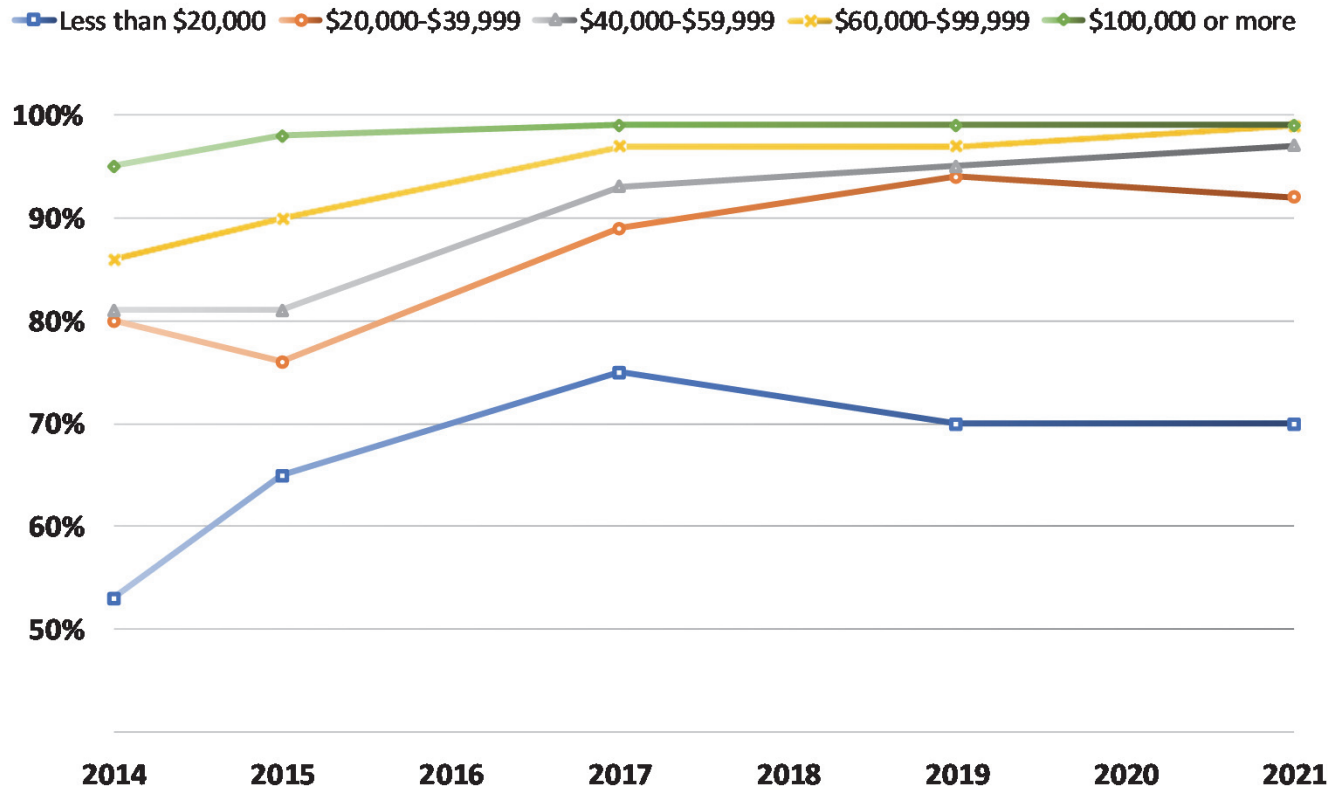


*\*\*Low-income is defined as households with income lower than 200% of the Federal Poverty Line depending on number of household members.*



# Overall, earlier gains in broadband adoption among lower-income households have slowed.

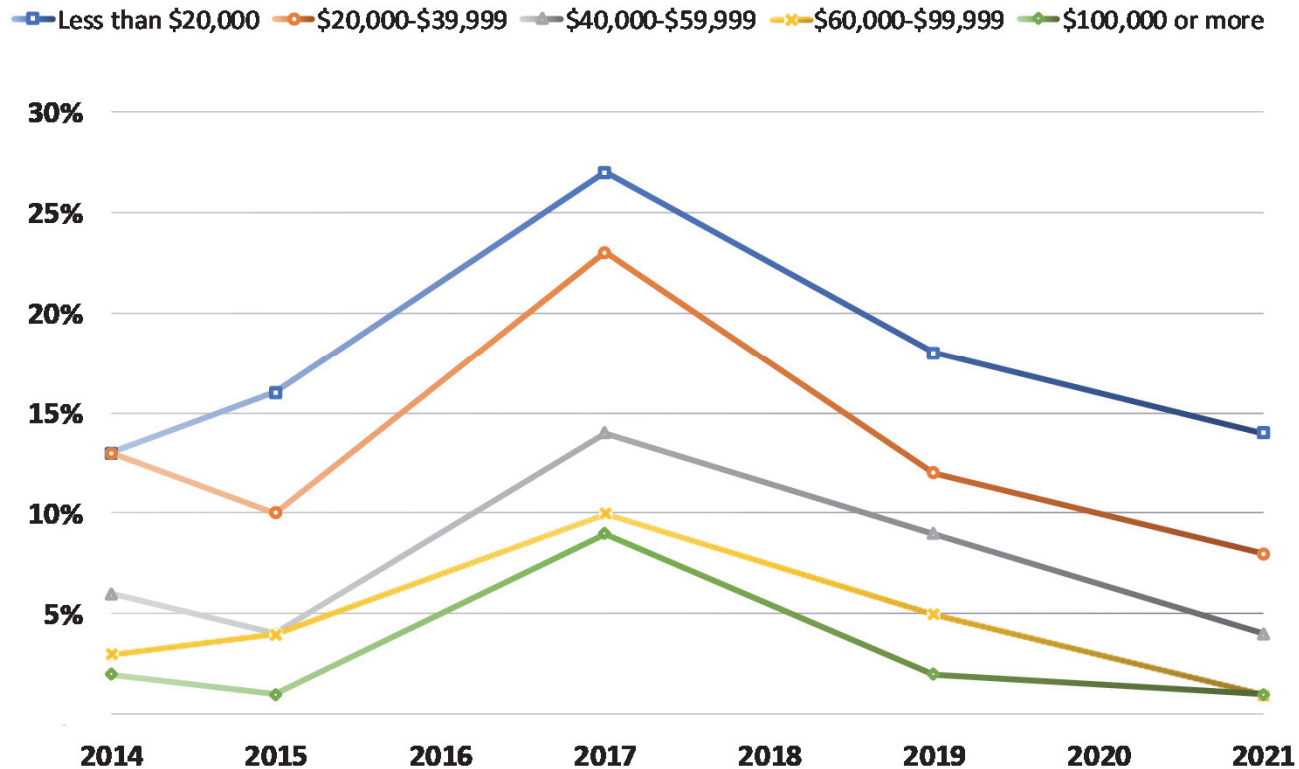
## Broadband Adoption by Household Income (2014 - 2021)



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

# Share of low-income households only connecting with a smartphone continues to fall, but remains high for those earning less than \$20,000.

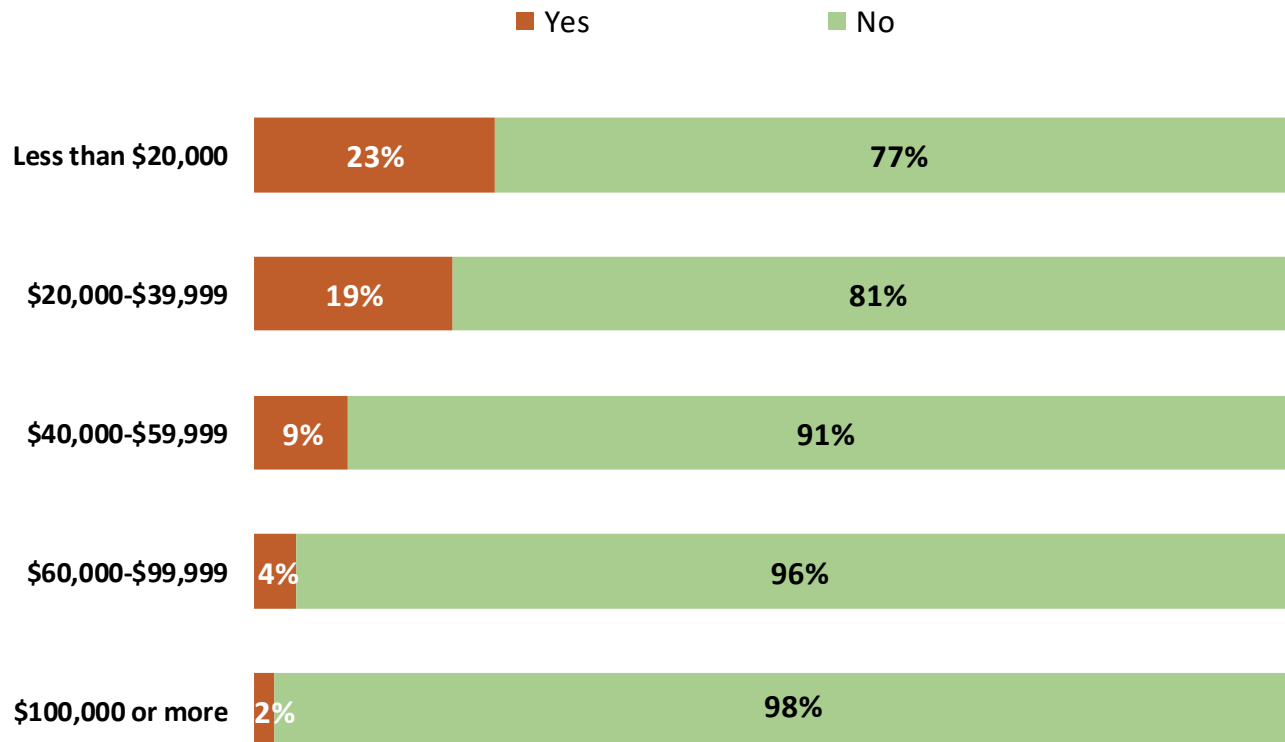
## Smartphone-Only Household by Income (2014 - 2021)



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

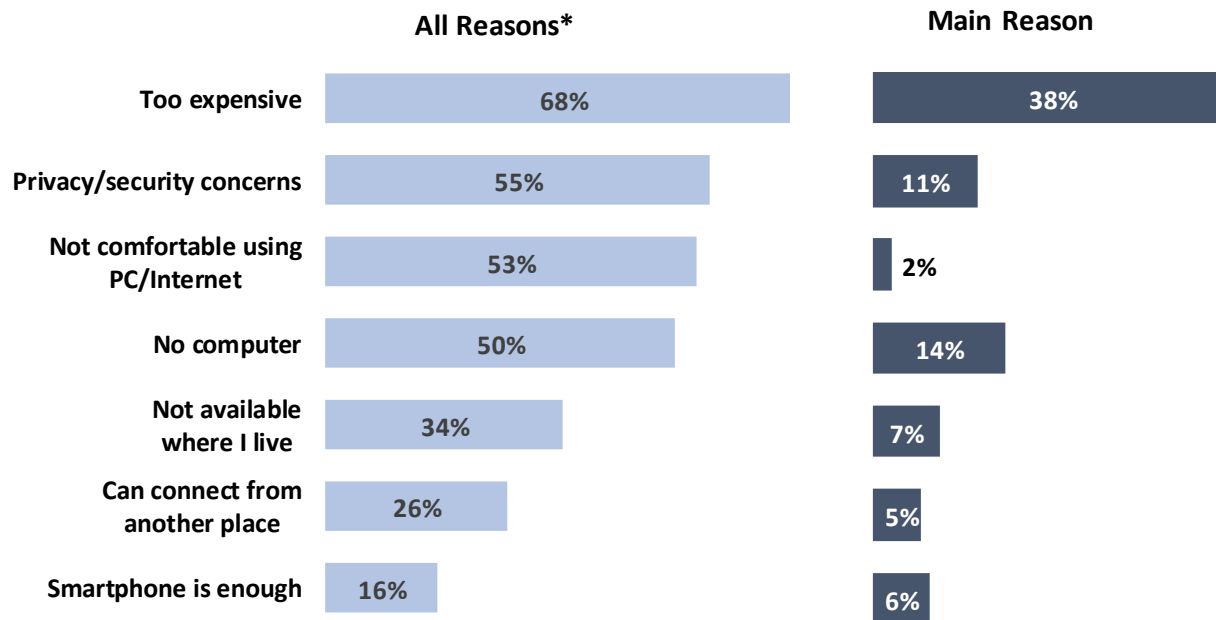
**Further, even when connected, many lower-income households go without Internet access for significant periods of time.**

**"Was there ever a time when your household went without Internet access for one month or longer?"**



**Affordability is the main reason that keeps households from adopting broadband; digital literacy and lack of an appropriate device are also relevant factors.**

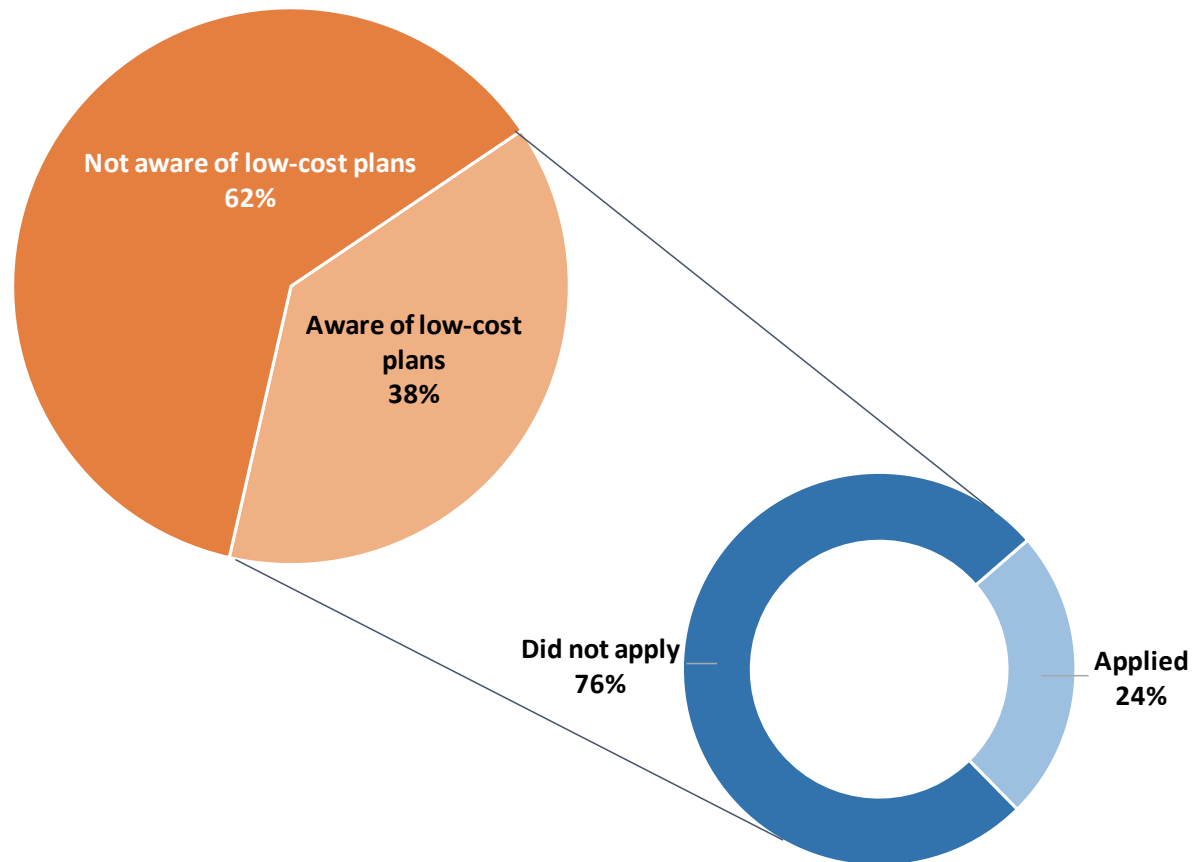
**Self-Reported Reasons for Lack of Internet Connectivity at Home Among Unconnected and Underconnected**



*\*Percentages add to more than 100% due to multiple responses*

*Note: Subsample for unconnected and underconnected n=212 (unweighted)*

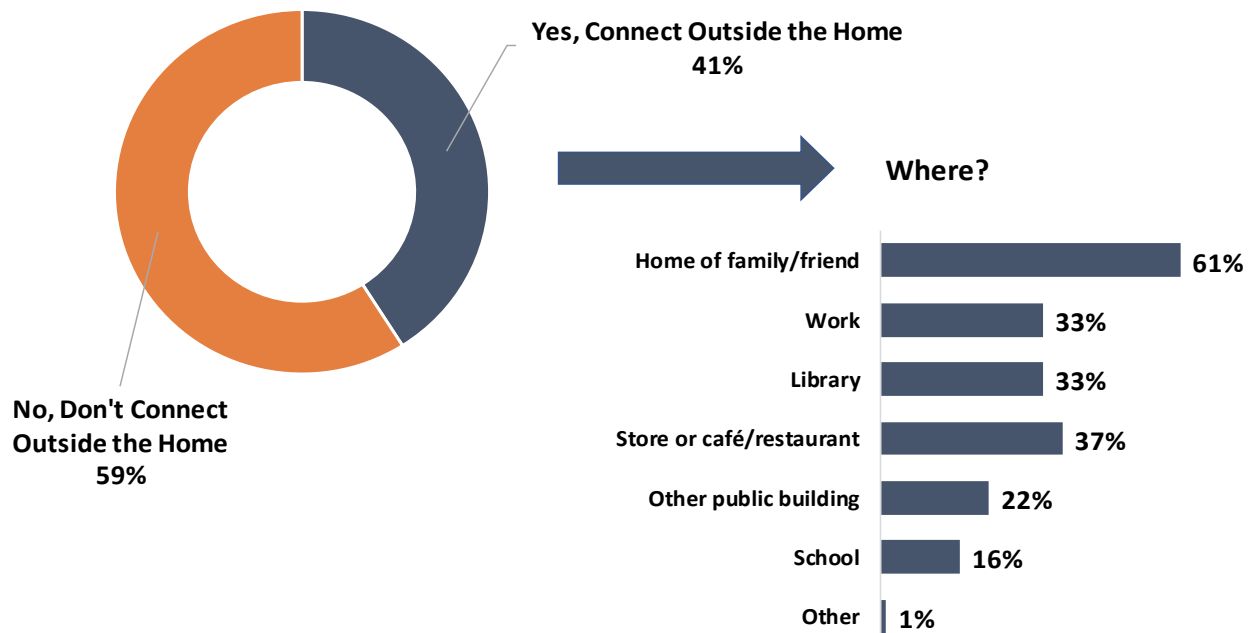
**Nearly 2 in 3 unconnected or smartphone-only households are unaware of discount Internet plans, and fewer than 1 in 4 of those aware report having ever applied.**



*Note: Subsample for unconnected and underconnected n=212 (unweighted)*

# Nearly 40% of unconnected or underconnected households use the Internet outside the home, including in public libraries and other public spaces.

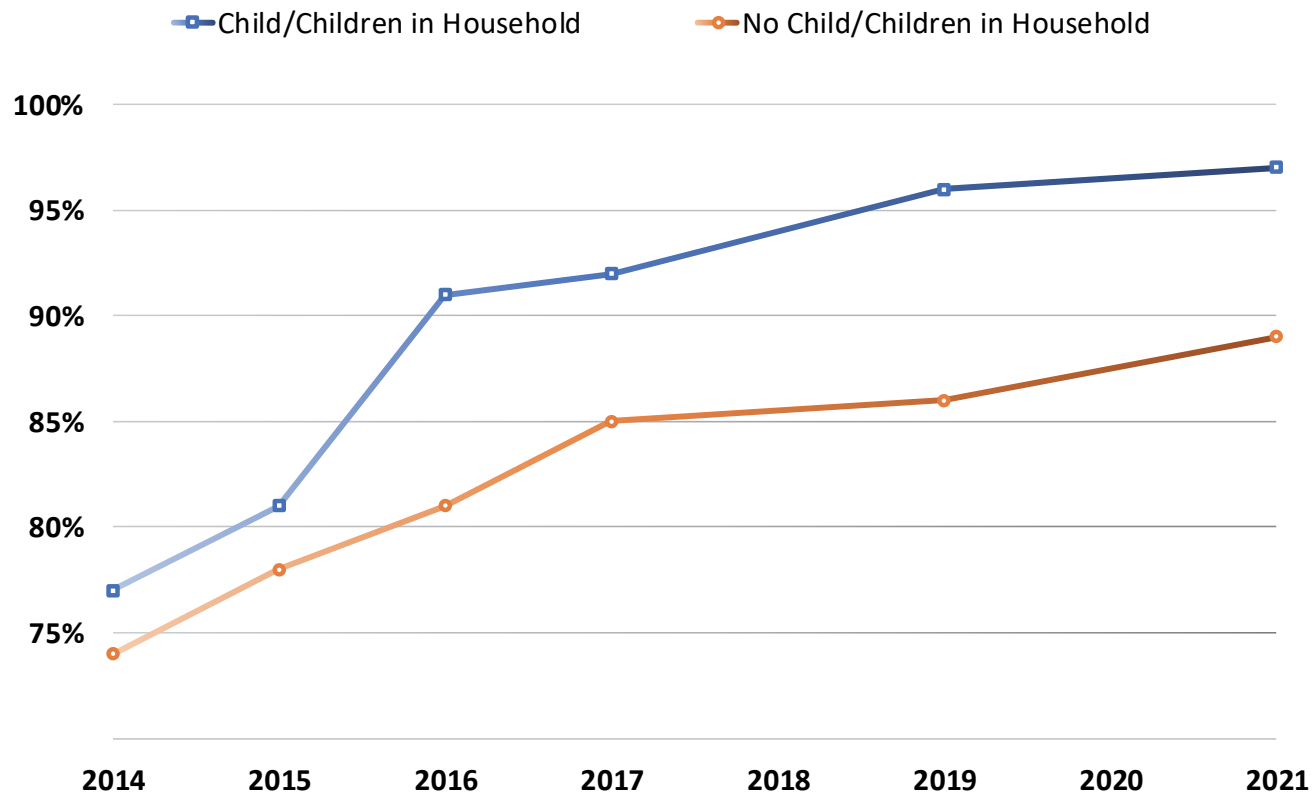
"Do you or do others in your household ever connect to the Internet outside your home?" (Among Unconnected or Underconnected Households)



Note: Subsample for unconnected and underconnected n=212 (unweighted)

# Households with school-age children continue to be more likely to be connected.

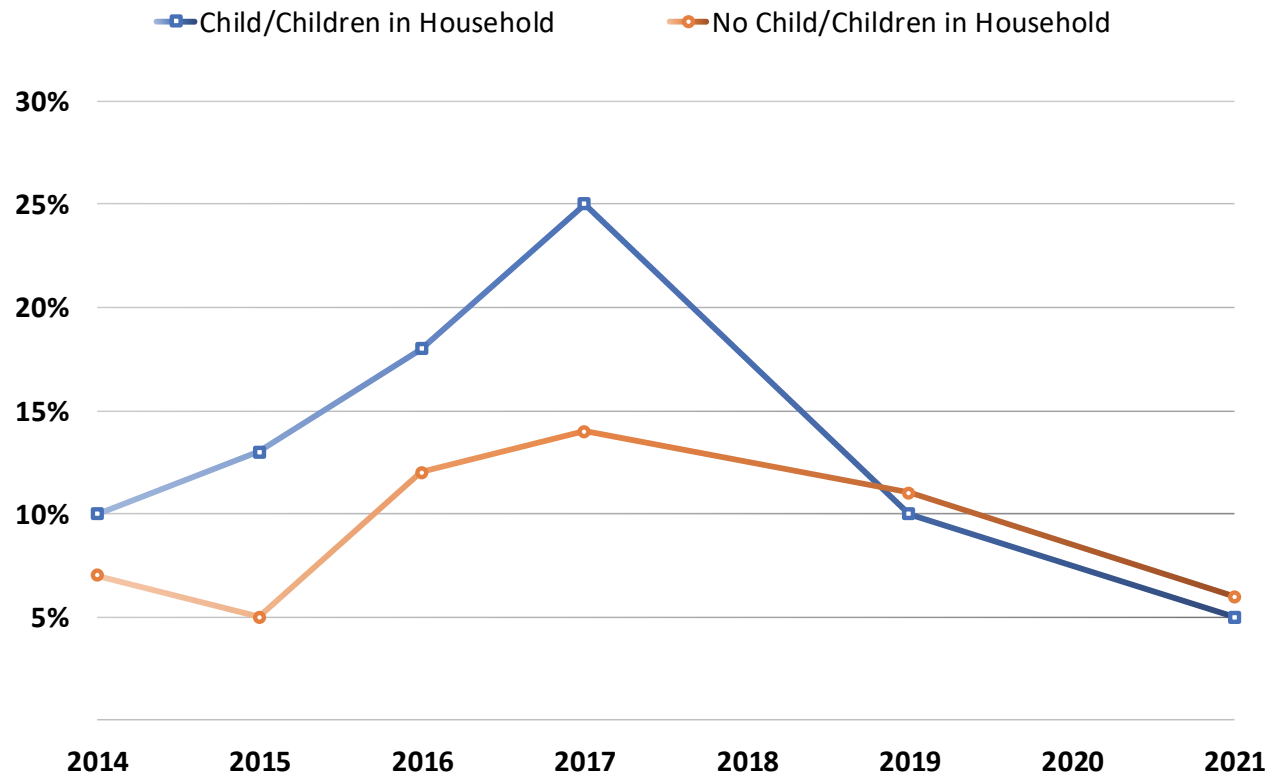
## Broadband Adoption by Presence of School-Age Children (2014 - 2021)



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.

# The share of households with school-age children relying only on a smartphone for access is falling more rapidly, driven by school-issued devices.

Smartphone-Only Households by Presence of School-Age Children (2014-21)



Source: 2021 from USC; 2017-2019 from Berkeley IGS Poll; 2014 to 2016 from The Field Poll.