

# QR Codes in the Census Household Panel

Casey Eggleston & Jennifer Hunter Childs (US Census Bureau)

Presented at CIPHER on February 28, 2025

*Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau.*

# Background

- Quick Response (aka QR) Codes began to appear in marketing and public spaces like libraries shortly after smartphone adoption reached a tipping point
- Early researchers were interested in awareness and accessibility of the technology (e.g., Mendelson and Bergstrom 2013)
- After some initial enthusiasm by survey methodologists, research generally concluded that respondents rarely used QR codes when offered and that QR codes did not notably impact response rates (e.g., Marlar 2018; Lugtig & Lutien 2021)



# Background

- Recently, updates to smartphones that have made QR code use easier and more intuitive as well as societal changes in the use of QR codes in response to the COVID-19 pandemic may have changed the landscape
- Updated research is needed to assess whether QR codes now offer more utility as a method of accessing survey questionnaires



# Research Questions

- What proportion of respondents will use a QR code to access an online survey instrument if provided in a mail invitation (as opposed to typing the URL or calling the call center)?
- What demographic characteristics are associated with QR code use among respondents?

# Data Source

# Census Household Panel

- Innovation: First nationally-representative panel built by a U.S. federal statistical agency primarily for federal statistical agency use; providing infrastructure for timely evidence-based decision making
- Method: Nationally-representative, address-based, probability-based internet panel (includes non-internet households)
- Sample: Stratified systematic sample of 75,000 addresses from all eligible units on MAF, including all 50 states + DC
- Data Collection:
  - Online using Qualtrics platform
  - Inbound and outbound calling operations
  - Mail invitation with push to web instrument
  - Initial baseline survey followed by monthly topical questionnaires

# Invitation Letter

You are invited to join the Census Household Panel, a large, national survey panel that will collect information from panel members on topics such as food and nutrition, transportation, employment, and education. Your household was randomly selected to receive this letter and represent thousands of other households. You will be eligible to earn \$20 upon completion of the 20-minute enrollment survey.

To enroll in the panel, please visit the following link and enter your PIN or scan the QR code by

**LINK:** [https://research.rm.census.gov/jfe/form/SV\\_3DGoKQGsfVp76dg](https://research.rm.census.gov/jfe/form/SV_3DGoKQGsfVp76dg)



**PIN:**

Alternatively, you may complete the survey over the phone by calling 1-888-595-1334.

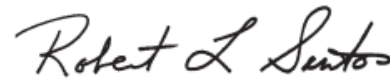
**As a token of our appreciation for completing the survey, we have enclosed \$5 cash.**

Persons who join the Census Household Panel will be eligible to receive additional incentive payments for participating in future Panel surveys.

If you have any questions about the panel, you can reach the Census Household Panel team directly at 1-800-361-6891 from 9:00 a.m. – 5:00 p.m. (EST) Monday through Friday or via email at [adp.household.panel@census.gov](mailto:adp.household.panel@census.gov).

Thank you for your cooperation.

Sincerely,



Robert L. Santos  
Director  
U.S. Census Bureau

*Si usted prefiere la versión en español, vea al dorso de la carta*

# Access Methods

To enroll in the panel, please visit the following link and enter your PIN or scan the QR code by

**URL**

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**PIN:**



**QR**

Alternatively, you may complete the survey over the phone by calling 1-888-595-1334.

**Call Center (CC)**

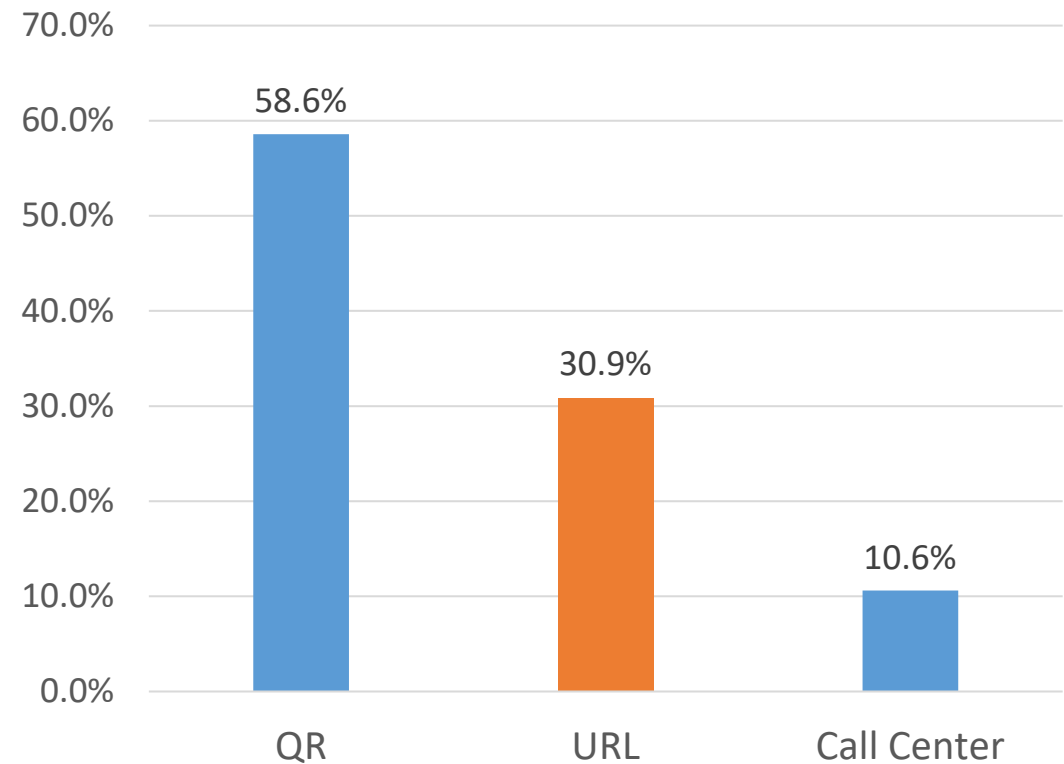


# Results

# QR Code Uptake

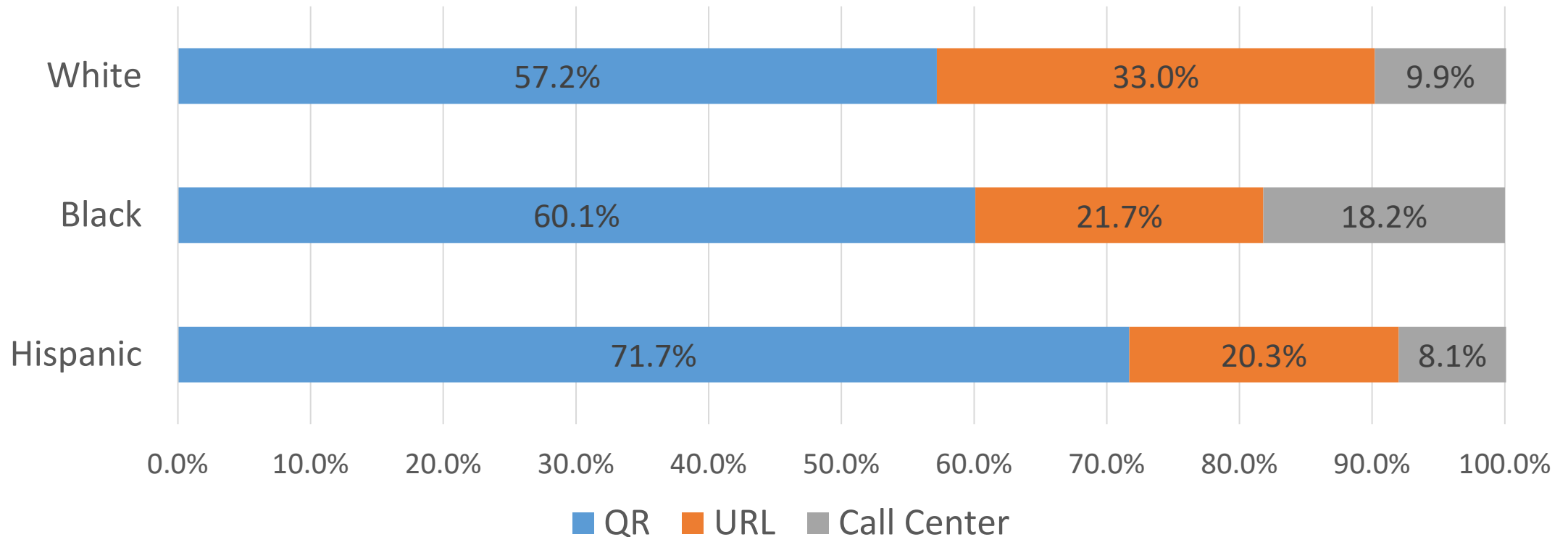
- **Unless specified, results use unweighted data**
- Out of about 18,500 total complete and partial responses collected, 58.6% of respondents accessed the instrument by scanning the QR code (30.9% typed the URL, 10.6% responded via phone)
- The weighted proportions are 64.4% QR, 26.8% URL, and 8.8% CC

## Response by Access Mode



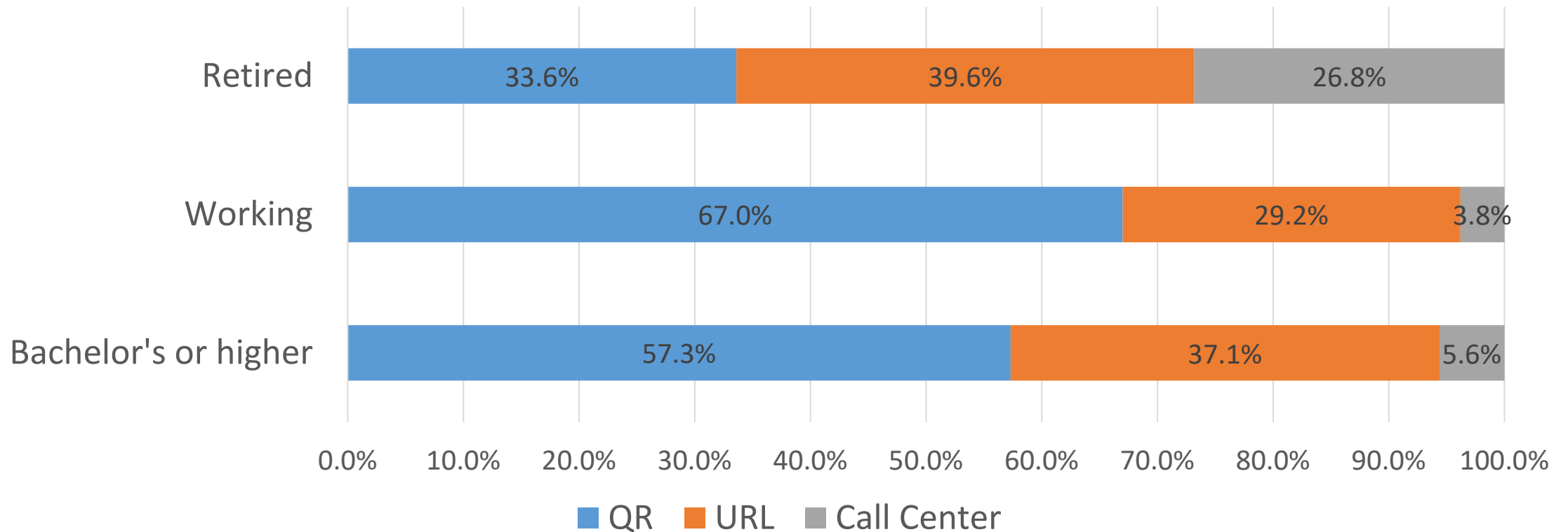
# Respondent Characteristics

## Access Mode by Race & Ethnicity

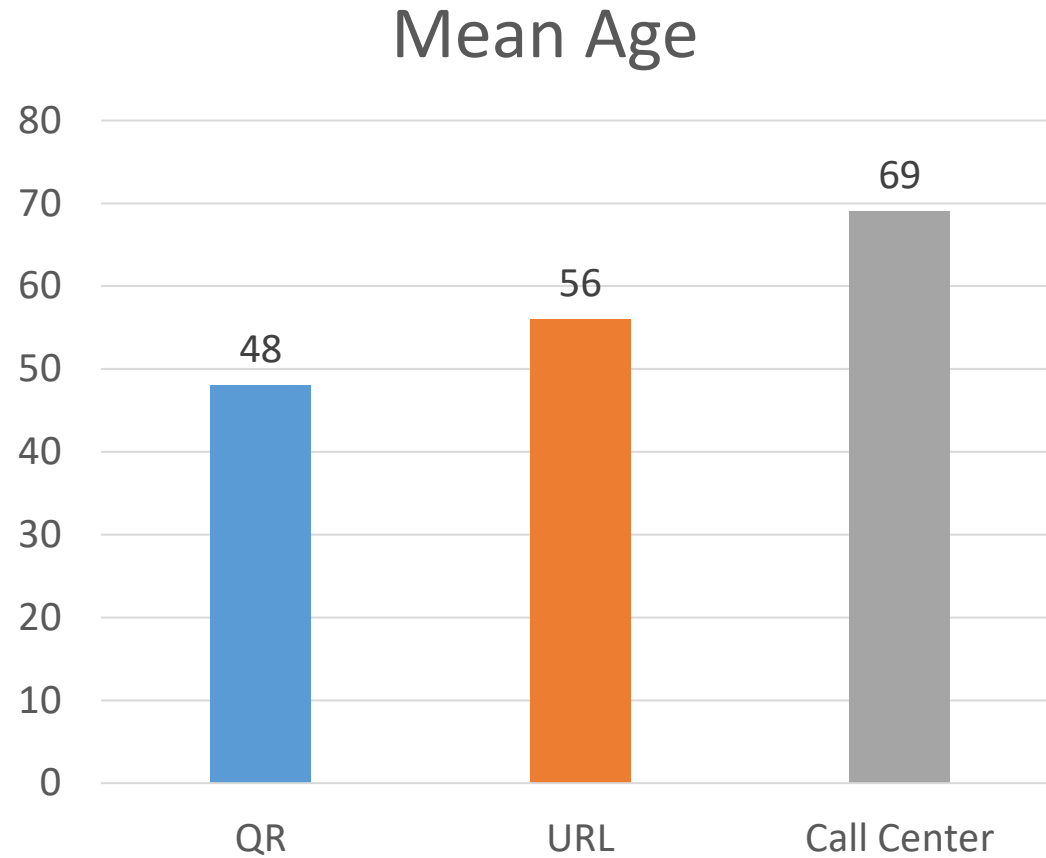


# Respondent Characteristics

## Access Mode by Education and Employment

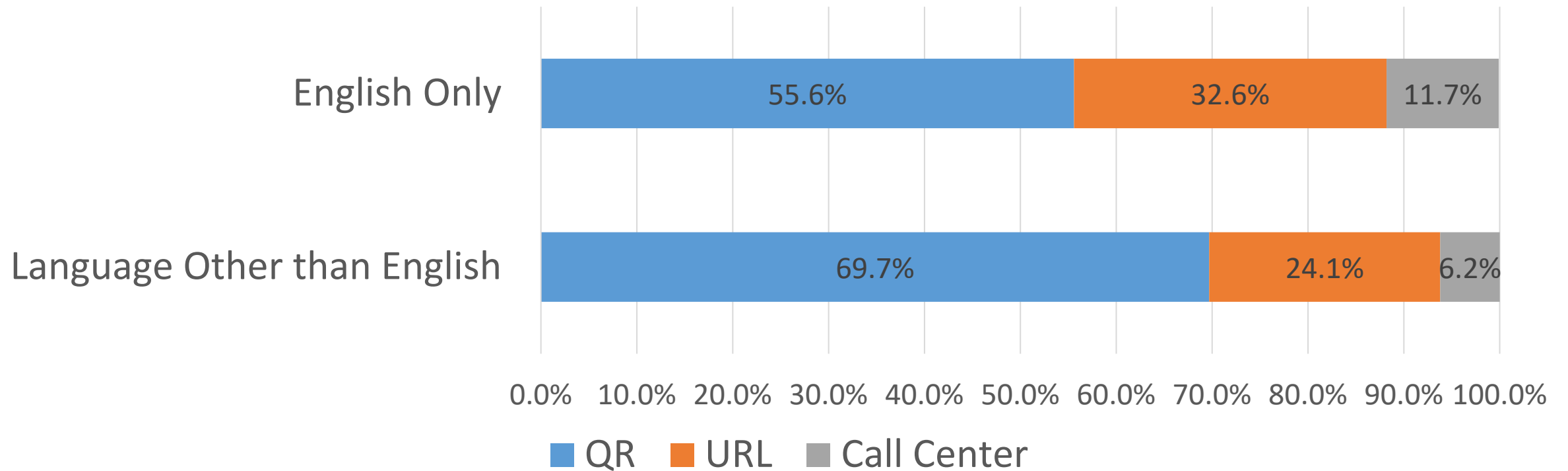


# Respondent Characteristics



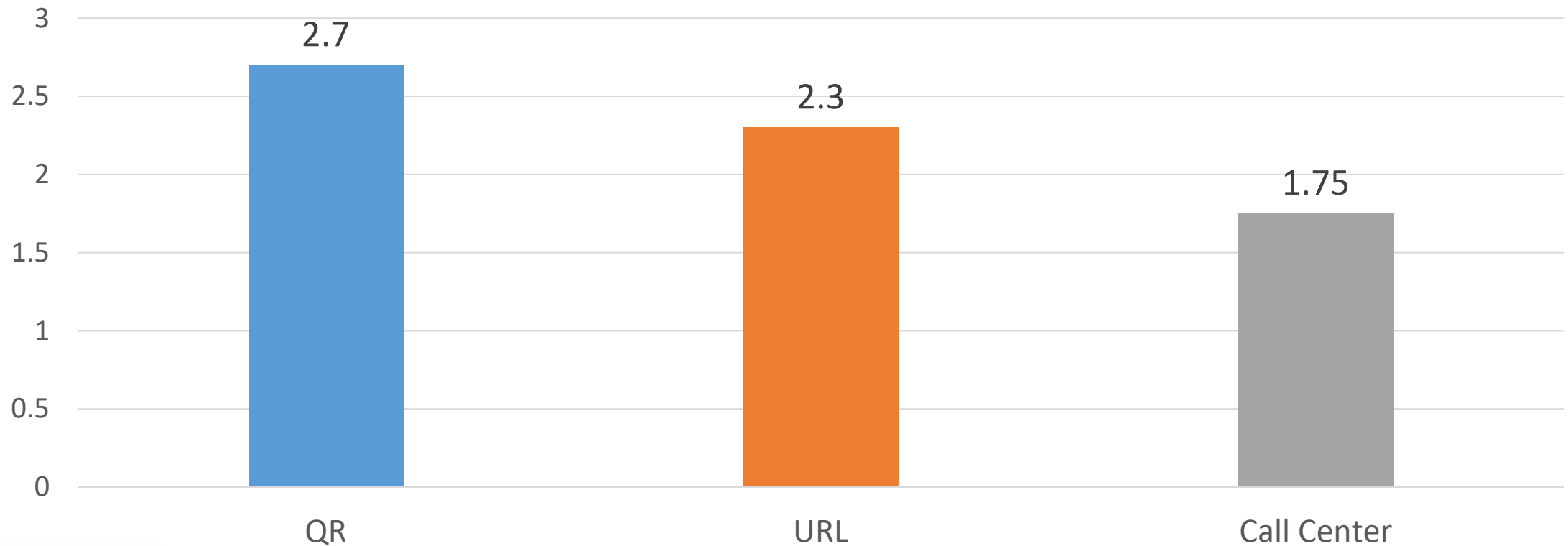
# Household Characteristics

## Access Mode by Language Spoken at Home



# Household Characteristics

## Mean Household Size



# Conclusion



# Summary & Discussion

- Majority of respondents used the QR code to access the instrument
- Most differences presented were statistically significantly different given the size of the dataset
- It is notable that the QR code respondents reflect many characteristics that are often underrepresented in surveys (as seen by increased proportion of QR code respondents after weighting):
  - Younger
  - Larger household size
  - Identify as Hispanic
  - Working

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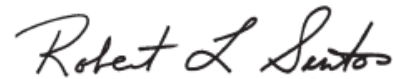
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# Future Directions

- Does time alone explain the increased uptake rate of QR codes in the Census Household Panel recruitment, or are other factors at play?
  - For example, does the difficulty of typing the URL relate to QR code uptake?
- Does QR code availability actually increase response rates, either overall or among particular populations of interest (e.g., young people, Hispanic/Latino individuals)?
  - Recently conducted this experiment in Small-Scale Mailout Testing program for decennial, results not yet published

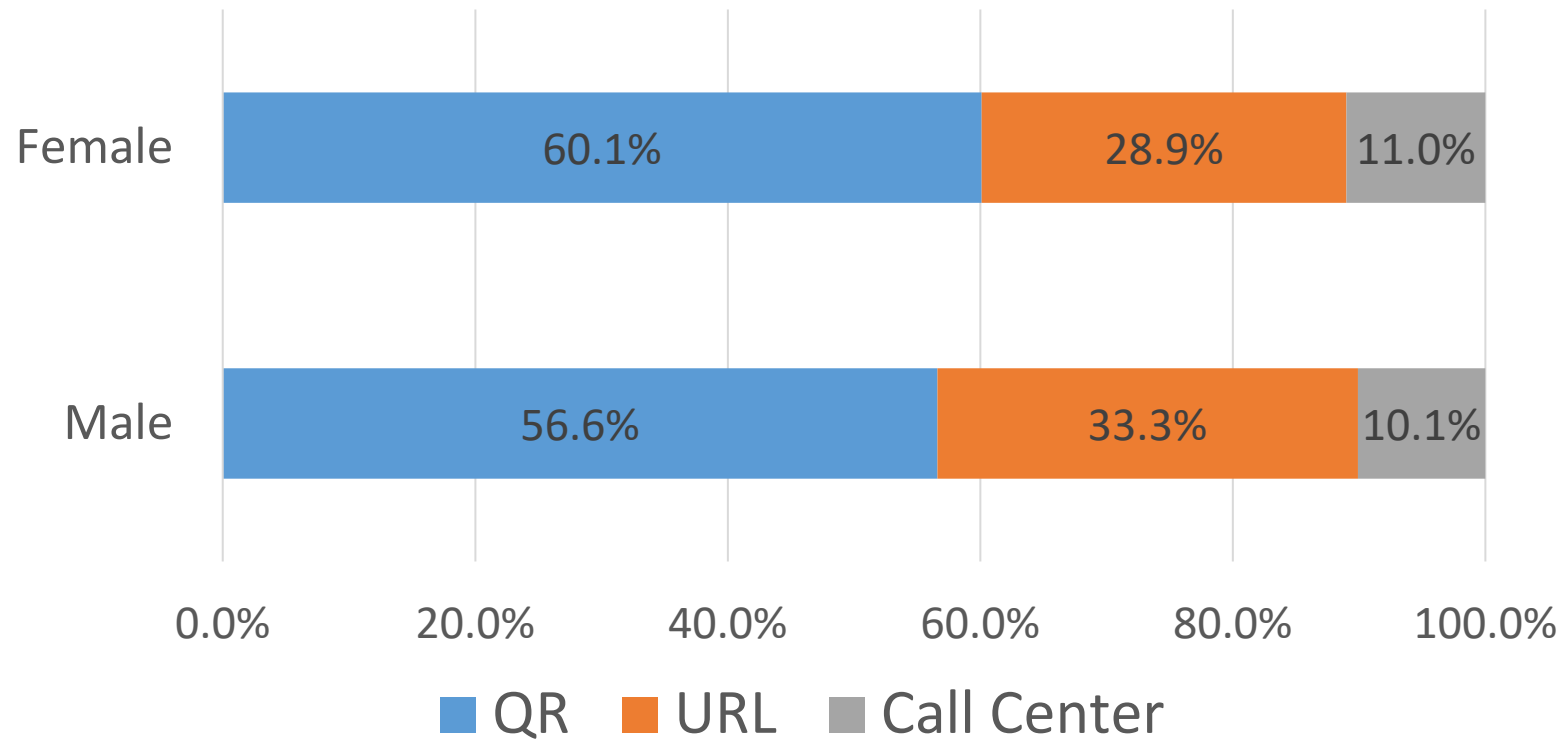
# Questions?

Email [casey.m.eggleston@census.gov](mailto:casey.m.eggleston@census.gov)

# Extra Slides

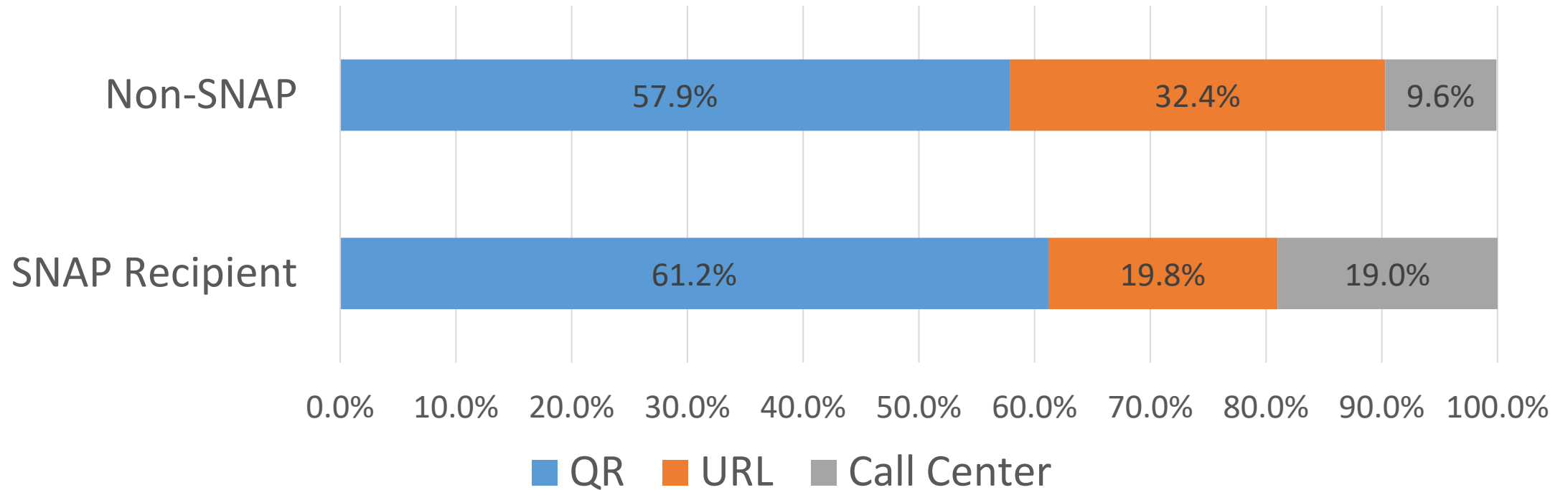
# Respondent Characteristics

## Access Mode by Sex



# Household Characteristics

## Access Mode by SNAP Receipt



# Household Characteristics

## Access Mode by Home Ownership

