

# QR Codes in the Census Household Panel

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*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?
- What demographic characteristics are associated with QR code use among respondents?

# Census Household Panel

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- First nationally-representative panel to be built by a federal statistical agency in the United States primarily for federal statistical agency use, and represents a step forward in providing infrastructure for timely evidence-based decision making
- Nationally-representative, address-based, probability-based internet panel (includes non-internet households)
- Our frames and access to administrative data allow a wealth of data available nowhere else

# CHP Sampling

- Stratified systematic sample of 75,000 addresses from all eligible units on MAF, including all 50 states + DC
- Auxiliary data from Demo Frame and PDB to form 11 strata in each Census Region:
  - Demo Frame used to stratify households into Hispanic/Race strata based on 3 race strata (Black Alone, White Alone and Other) and 2 Hispanic strata (Hispanic/Non-Hispanic)
  - Households not matched to the Demo Frame used PDB strata (Hispanic, Non-Hispanic Black Alone, Non-Hispanic White Alone and Non-Hispanic Other)
  - A final strata include households missing information on both the Demo Frame or PDB

# 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.

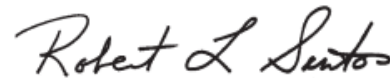
**As a token of our appreciation for completing the survey, we have enclosed \$5 cash.**

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*



# CHP Data Collection

- Online using Qualtrics as the data collection platform
  - Self-response online
  - Inbound CATI
  - Outbound CATI nonresponse follow-up
- Recruitment consists of mail contacts and focused telephone follow-up
- Participants enrolled via a baseline questionnaire
- Panelists invited to complete monthly topical surveys

# Data Collection Details

## Screener/Baseline

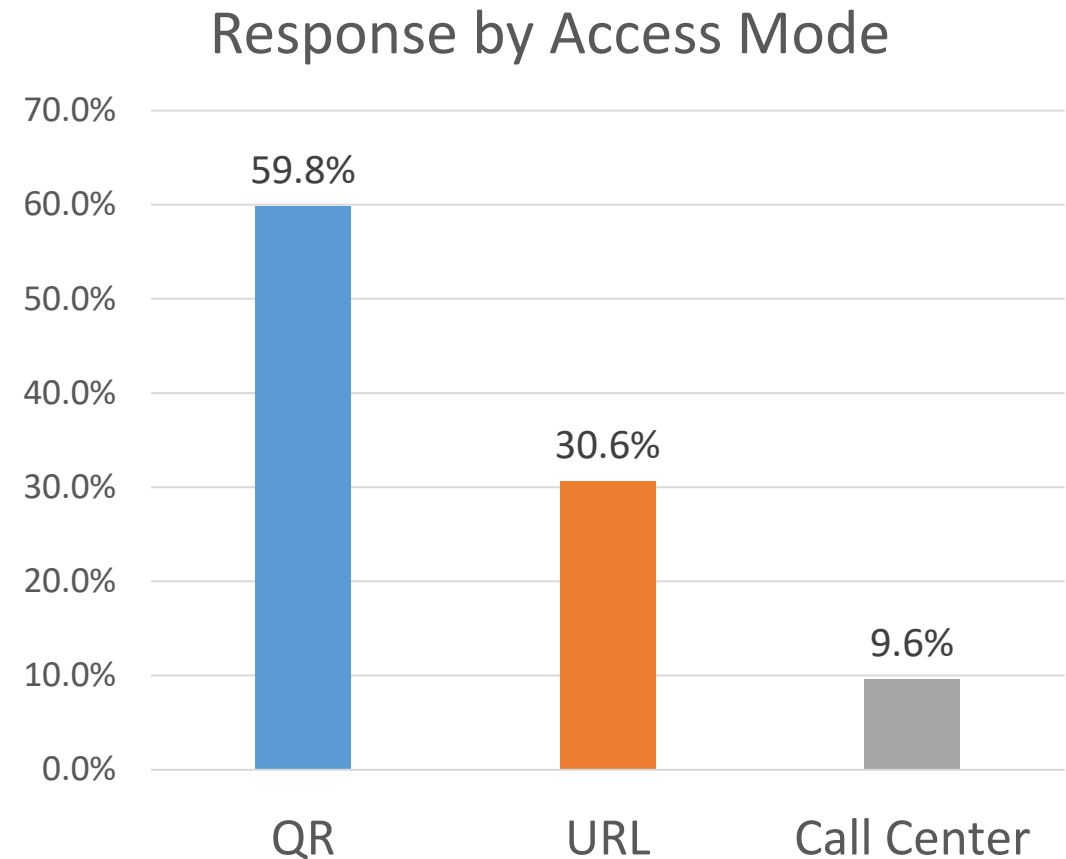
- \$5 visible prepaid incentive
- \$20 contingent incentive
- Questions from ACS and other national surveys
  - To facilitate non-response bias analysis
  - Frame and baseline data to allow for targeted sampling for topical surveys

## Monthly Topical Surveys

- \$10 contingent incentive
- SMS/Web invitation
- Web completion/limited phone
- Not to exceed 20 min

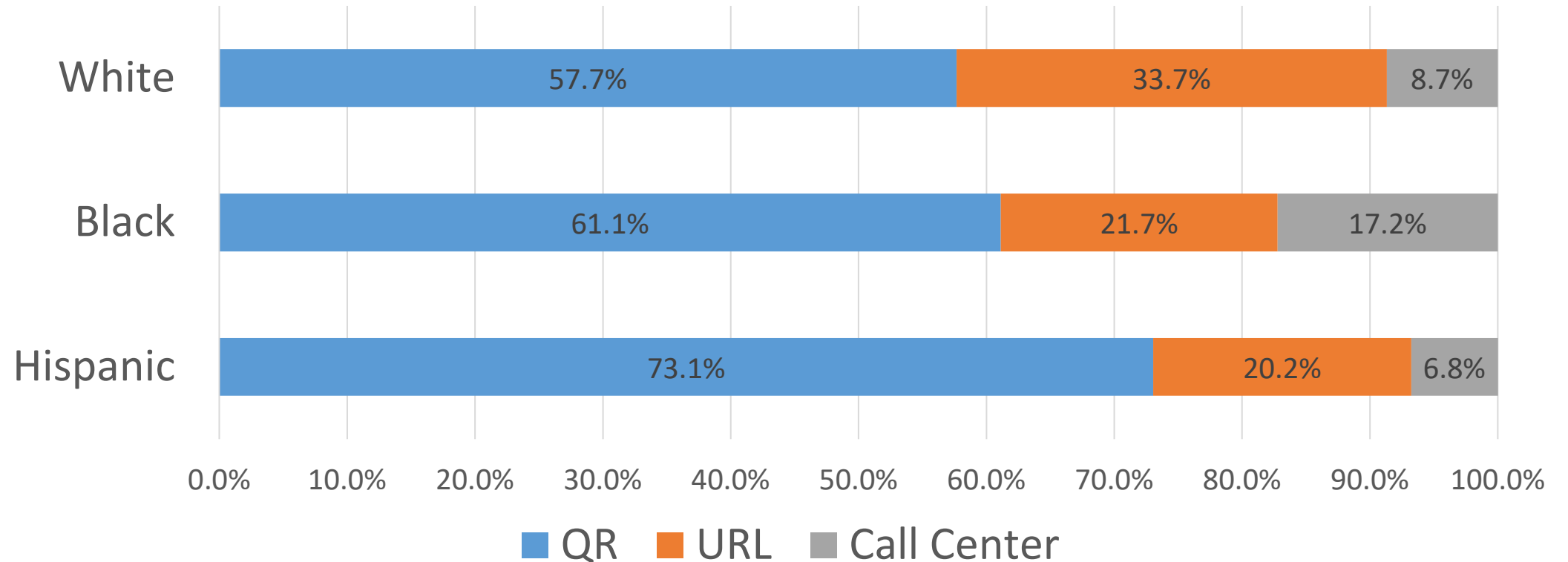
# Preliminary Results – QR Code Uptake

- **All results use unweighted data**
- Out of nearly 14,000 total responses collected, 59.8% of respondents accessed the instrument by scanning the QR code (30.6% typed the URL, 9.6% responded via phone)



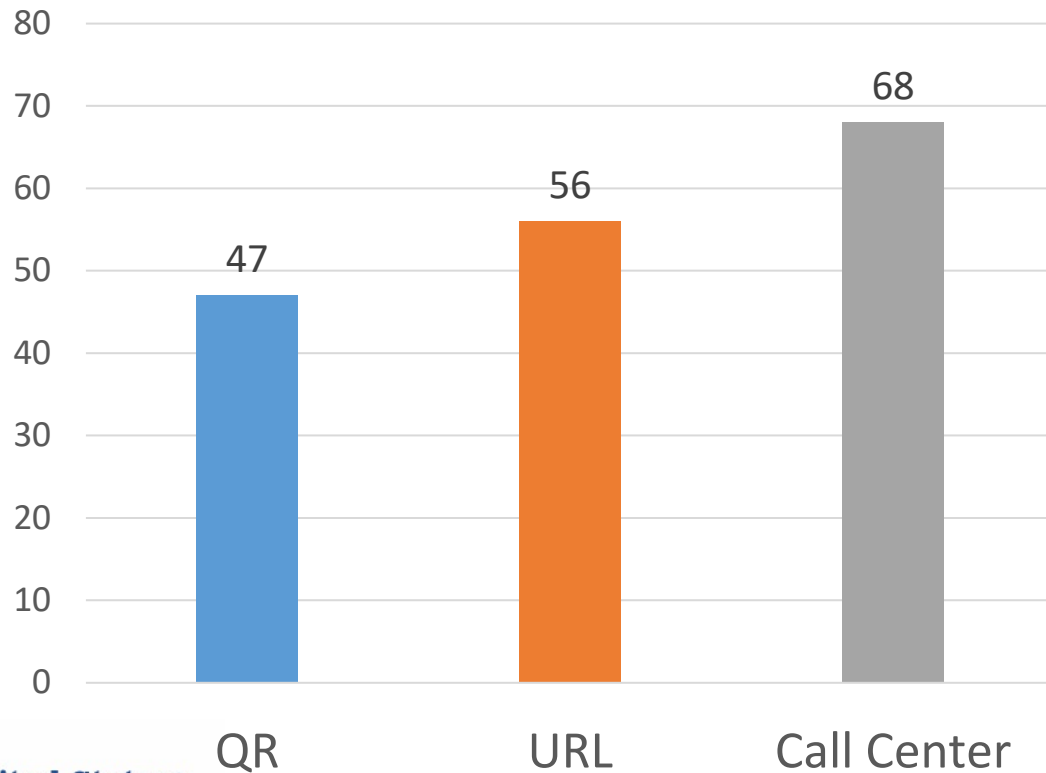
# Preliminary Results – Respondent Characteristics

## Access Mode by Race & Ethnicity

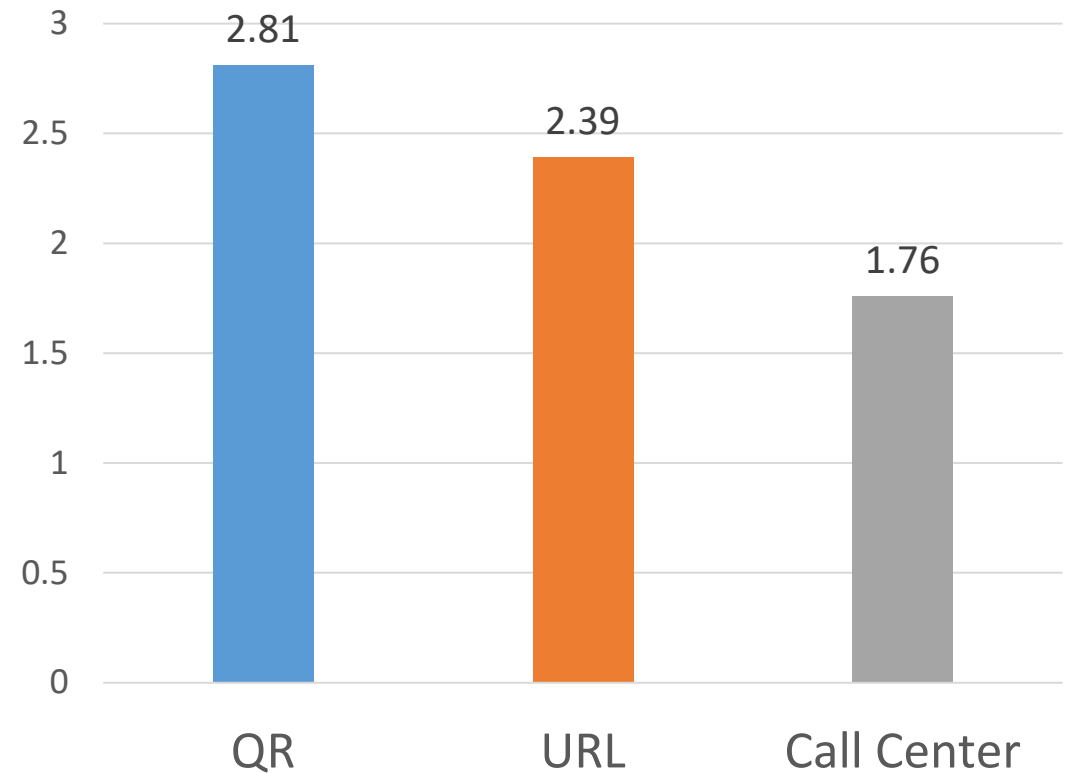


# Preliminary Results – Respondent Characteristics

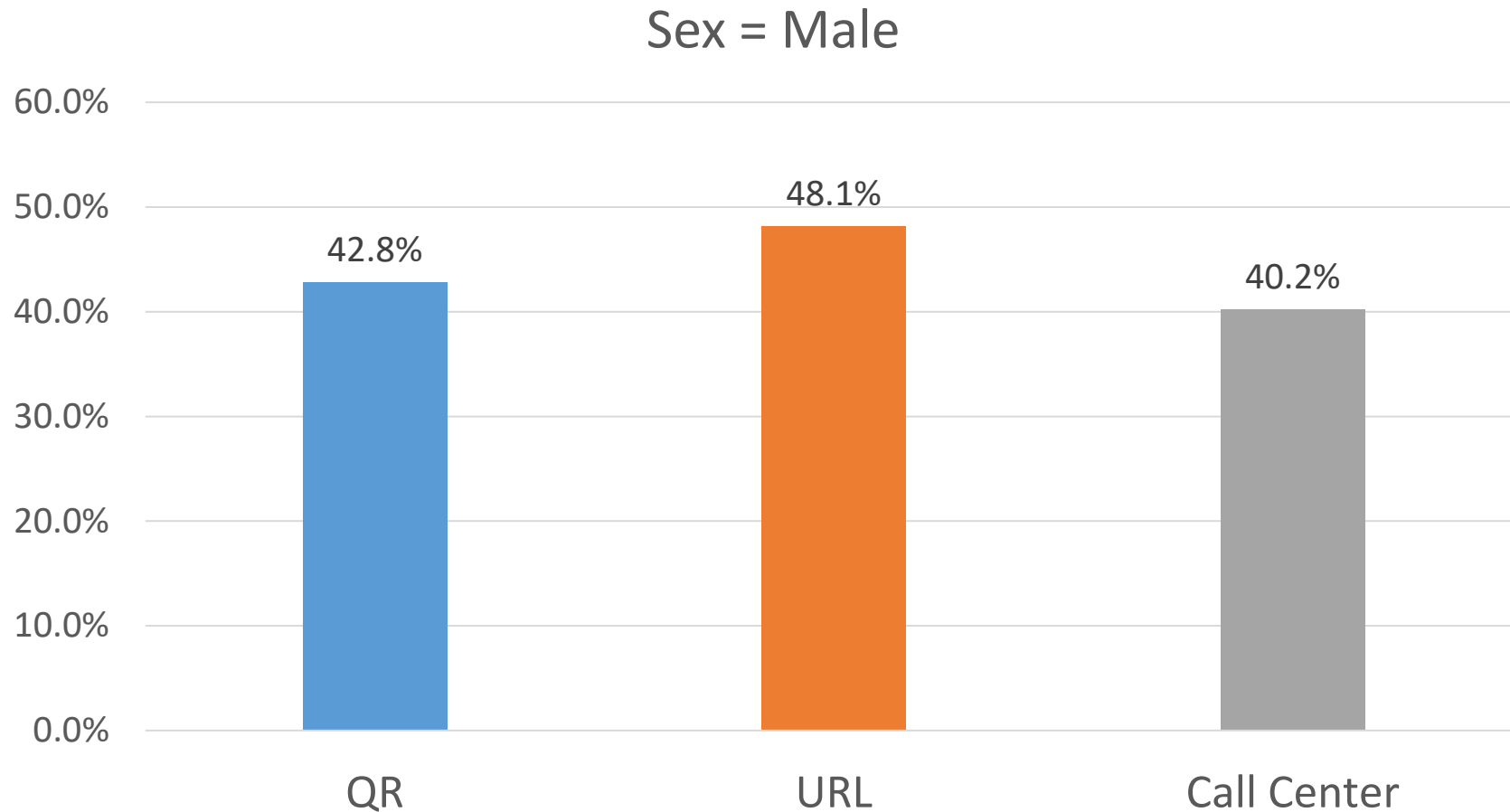
## Mean Age



## Mean Household Size

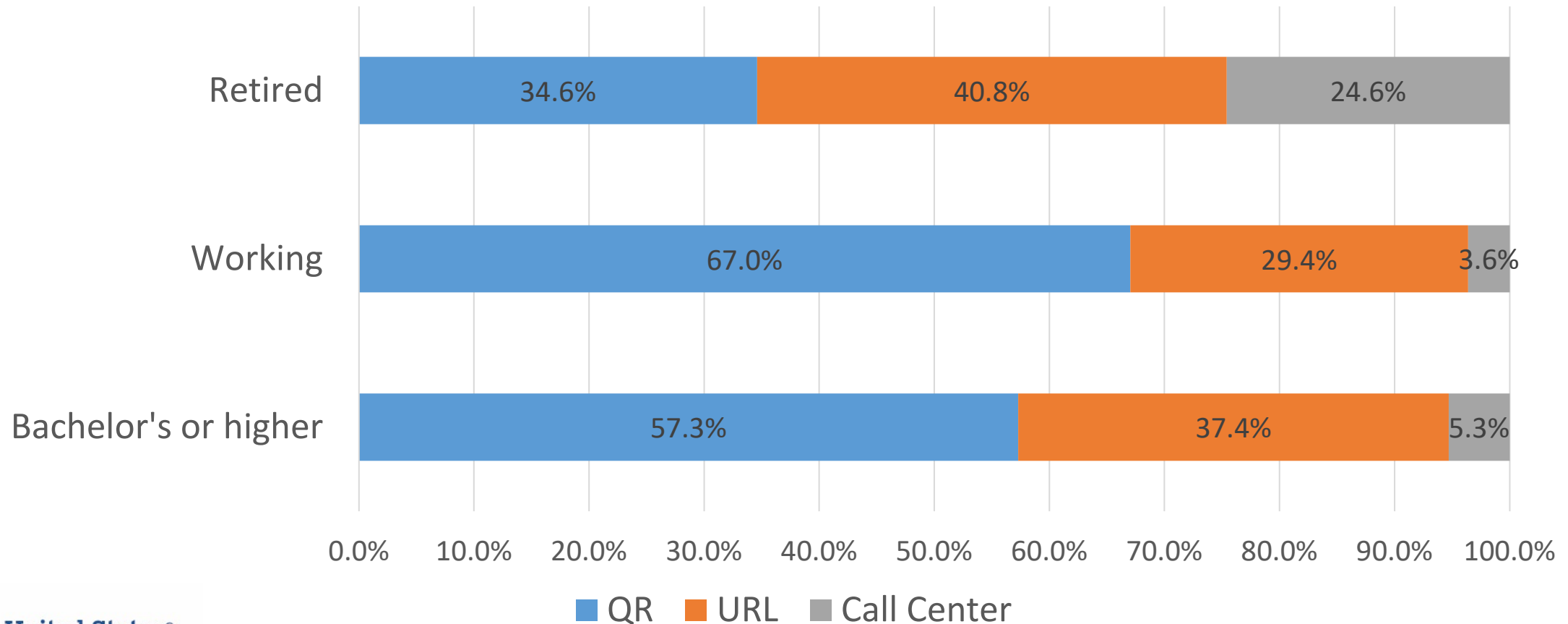


# Preliminary Results – Respondent Characteristics



# Preliminary Results – Respondent Characteristics

## Access Mode by Education and Employment



Data from Census Household Panel Recruitment 2023; DRB Clearance Number: (CBDRB-FY24-CBSM002-045)

# Summary & Discussion

- Majority of respondents used the QR code to access the instrument
- Although statistical tests have NOT yet been performed on the demographic characteristics across response modes, it is notable that the QR code respondents reflect many characteristics that are often underrepresented in surveys:
  - Younger
  - Larger household size
  - Identify as Hispanic
  - Working



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# Future Directions

- Further analyze results with weights and significance tests
- 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)?

# Questions?

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