# Optimizing Cost and Response Rates through Mailout Materials in the American Time Use Survey (ATUS)



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#### ATUS — Background

Federally administered, continuous survey on time use
Approximately 26,400 individuals annually, randomly selected from a subset of households that have completed the Current Population Survey (CPS)
Sponsored by the Bureau of Labor Statistics, conducted by the U.S. Census Bureau

## ATUS — Data Collection

All data collected using computer-assisted telephone interviewing (CATI)
Each designated person is assigned a specific day of the week to be interviewed
Approximately one week before a case's start date, an advance mailer is sent to notify cases that they have been sampled

## Methodology — Background

•During its inception, the ATUS conducted field tests and found that USPS Priority Mail envelopes had a significant, positive impact on response rates as opposed to when advance materials were sent by First-Class Mail (Piskurich, Nelson, & Herz, 2001) •Like many surveys, the ATUS has seen declining response rates over the years as well as increasing costs

## Methodology — Experimental Design

- In 2022, the ATUS tested three different envelopes for its advance mailer –
  USPS Priority Mail cardboard envelope (control)
  USPS Priority mail paper envelope (treatment one)
  First-Class Mail paper envelope (treatment two)
  The 10,000 cases sampled starting with the 2021 December sample through the 2022
- April sample were divided into three, nearly equal groups
- •We analyzed measures including response rates and percentages of sample who answered the phone on the first day of data collection to reflect engagement
  •We conducted chi-square tests and a regression analysis to determine whether the different envelope types affected the likelihood of response for the following demographic groups age, race, origin, family income, occupation type, employment status, marital status, language spoken, and the presence of young children
  •All tests of significance were conducted at the alpha 0.10 level

The First-Class Mail envelope consistently outperformed the two Priority Mail envelopes in this experiment. It yielded significantly higher response rates for one fourth the cost of shipping.

Fist-Class – paper

**USPS Priority – cardboard** 

#### Results — Engagement Rates

Do the USPS paper Priority Mail or First-Class Mail envelopes yield higher engagement than the current USPS cardboard Priority Mail envelope?



•The First-Class Mail envelope had a significantly higher response rate than both USPS Priority Mail envelopes



•The First-Class Mail envelope had a significantly higher percent of calls answered on the first day of data collection than both USPS Priority Mail envelopes

## Results — Demographic Distributions

Do the USPS paper Priority Mail or First-Class Mail envelopes yield higher engagement across different demographic groups than the current USPS cardboard Priority Mail envelope?

•Significant differences across envelopes for marital status, language spoken, Hispanic origin, and employment status

•First-Class Mail envelopes elicited higher response rates from sampled cases who are employed, as well as harder to reach populations, such as sampled cases that do not speak English

Please contact me at kayla.m.varela@census.gov with questions

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**USPS Priority – paper** 

References: Bureau of Labor Statistics. (2022). American Time Use Survey User's Guide: Understanding ATUS 2003 to 2021. Retrieved from https://www.bls.gov/tus/atususersguide.pdf. Piskurich, K., Nelson, D., & Herz, D. (2001). Maximizing Respondent Contact in the American Time Use Survey. American Association of Public Opinion Research (AAPOR) Conference. Montreal, Canada. U.S. Census Bureau. (2018). American Time Use Survey Interviewer Manual 2018. Washington, D.C.: Available upon request.