

# Optimizing Cost and Response Rates through Mailing 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.**

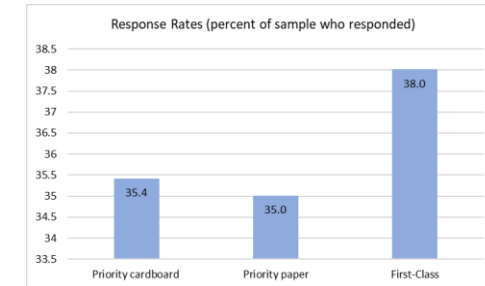
USPS Priority — paper

USPS Priority — cardboard

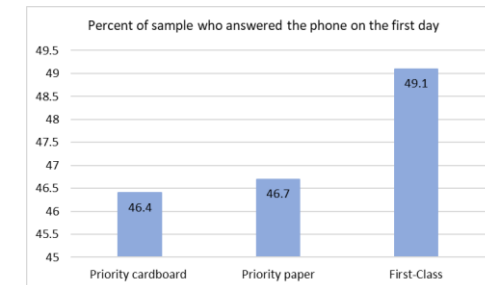
First-Class — paper

## 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

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