

# Impact of Pre- and Post-incentives on Response Rates to a Web and Mail Survey using an Address-based Sample Frame

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# Project Background

- **A national household survey on vehicle occupant protection was conducted in 2016 via web and mail using address based sampling**
- **There were two versions of the questionnaire, which included items related to: the use of seatbelts and car seats, air bags, emergency medical services, and crash injury experience**
- **Methodology change**
  - Past iterations: Telephone mode, random digit dial sampling methodology
  - 2016 iteration: Web and Mail modes, Address Based Sampling (ABS) methodology
- **Before full-scale data collection began, pilot tests were conducted to assess the study design**
- **During one pilot study, an experiment was conducted to test six pre- and post-incentive conditions**

# Goals of the Incentive Experiment

- **What impact do the experimental conditions have on response rate and cost?**
- **Does paying an incentive encourage respondents to speed through the Web survey or encourage respondents to return the mail survey more quickly?**



# Data Collection

- Data collection modes: Web and mail
- Two mailing protocol:

Event Description	Day	Audience
Mailed letter offering response by web	1	All sampled addresses
Mailed package offering web and mail response	8	All sampled addresses
Web/Mail fielding period ends	50	



# Sample Sizes

## Sample Sizes by Experimental Condition

	Post-incentive		
	\$0	\$5	
Pre-incentive	\$0	400	400
	\$1	400	400
	\$2	400	400
Total	2,400		

# Response Rate and Cost Per Interview

## Response Rate and Cost per Interview by Experimental Condition

Incentive Condition		Response Rate (AAPOR 3)	N	Per-Complete Cost as a Percentage of the \$0/\$0 condition
Pre	Post			
\$0	\$0	7.8%	31	100%
\$1	\$0	12.5%	50	89%
\$2	\$0	16.0%	64	91%
\$0	\$5	15.0%	60	<b>67%</b>
\$1	\$5	<b>18.3%</b>	73	<b>77%</b>
\$2	\$5	<b>18.8%</b>	75	<b>75%</b>

# Web Survey Duration

## Median Duration of the Web Survey by Experimental Condition

Incentive Condition		Version A Median Duration in Minutes	Version B Median Duration in Minutes
Pre	Post		
\$0	\$0	19:53	14:47
\$1	\$0	18:08	18:17
\$2	\$0	18:35	18:01
\$0	\$5	17:05	13:41
\$1	\$5	18:26	18:52
\$2	\$5	16:00	14:05

# Mail Survey Return Time

## Median Days to Return Mail Survey by Experimental Condition

Incentive Condition		Version A Median Days to Return	Version B Median Days to Return
Pre	Post		
\$0	\$0	15.00	16.50
\$1	\$0	18.00	14.50
\$2	\$0	8.00	8.00
\$0	\$5	15.00	8.00
\$1	\$5	8.00	8.00
\$2	\$5	8.00	15.00



# Results

- **When you consider both the response rate and cost, the conditions with both a pre- and post-incentive (\$1/\$5 and \$2/\$5) had the best outcome for response rate as well as a low comparative cost per complete.**
- **Paying an incentive did not seem to encourage respondents to speed through the Web survey.**
- **It generally appears that the incentives either helped or didn't hurt response time for the mail survey.**



# Implications

- **For multi-year contracts, conduct an experiment during the first year to boost efficiency and reduce respondent burden**
- **Incentives can potentially pay for themselves**



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