Using a Mixed-Mode Approach for Election Surveys

The Case of AP VoteCast in the United States

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Agenda

The Why, When, and How of Mixed-mode Surveys

Using a mixed-mode approach to surveys is a cost effective way to improve the representativeness of the sample.

Researchers are increasingly using a mixed-mode survey design to obtain a representative sample.

Allowing people to complete surveys on either the phone or the web can increase coverage and enhance representativeness.

- A large portion of the public does not have access to the internet or prefers not to take surveys on the web (Sterrett et al. 2017)

- Many households are wireless only and are difficult to reach via phone (Blumberg & Luke 2017)

Research shows significant attitudinal/behavior differences between those with and without internet access in United States (Dutwin & Buskirk 2017)

Mixed-mode surveys are more cost effective than in-person or phone-only surveys.

The complexities involved in using a mixed-mode approach can be a challenge.

A mixed-mode approach requires technology and operational infrastructure to support data collection in multiple modes.

- Case management system that allows for case tracking in real time across modes

- Ability to collect data in multiple modes and integrate on the back end

- Allows respondents multiple points of entry into the survey based on their preferences

- Allows multiple points of outreach to respondents

It also probably requires a larger dedicated team outside of the research staff to support the data collection effort.

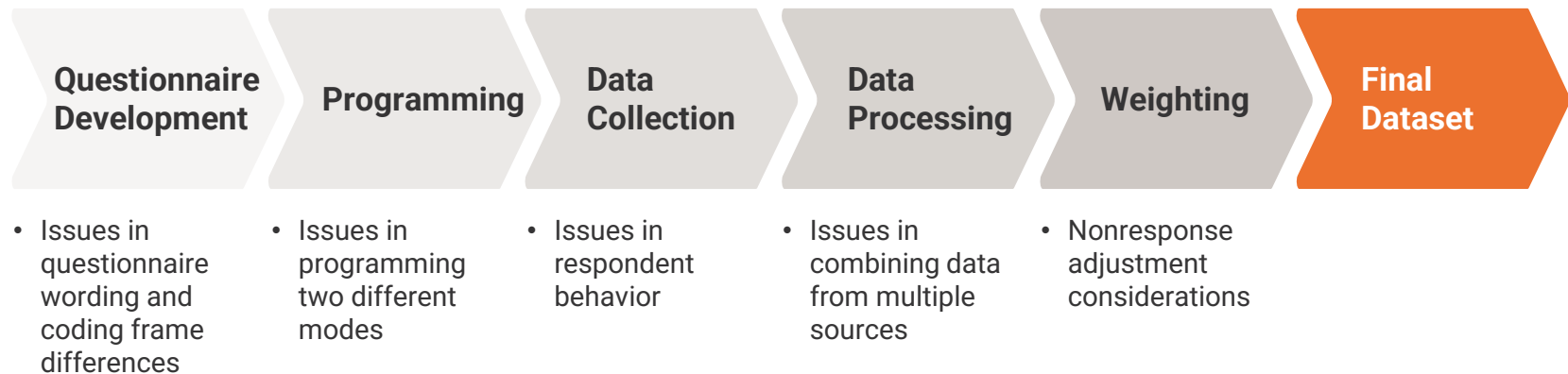# There are other downsides to using a mixed-mode approach to surveys.

A mixed-mode approach can potentially lead to survey mode effects.

There could be differences between those who complete the survey on the web and those who complete the survey on the phone based on the interview mode.

- Phone mode features interviewers while web mode is self-administered.

- Phone mode presents questions verbally while web mode presents questions visually.

Respondents often select their mode so it is difficult to disentangle differences due to composition and mode.

Mixed-Mode design must be accounted for at every step of the survey lifecycle, not just in post-production.

Questionnaire Development	Programming	Data Collection	Data Processing	Weighting	Final Dataset

- Issues in questionnaire wording and coding frame differences
- Issues in programming two different modes
- Issues in respondent behavior
- Issues in combining data from multiple sources
- Nonresponse adjustment considerations

Mixed-mode in Practice:
A Case Study of AP VoteCast

AP VoteCast is a modern, innovative survey of the American electorate conducted in all 50 states.

Fills the need for high-quality data about elections in the United States.

- Since the 1960s, media organizations and researchers have used exit polls to understand who voted for certain candidates and why

- Growing challenges to surveying voters in-person motivated the development of AP VoteCast

AP VoteCast is designed to meet voters where they are in the new era of advance voting.

- Large and growing numbers of Americans voting early or absentee

- 5 states now vote entirely or nearly entirely by mail: Colorado, Hawaii, Oregon, Utah and Washington

Its methodology fit the electoral context in 2020 during the height of the COVID-19 pandemic in the United States.

VoteCast uses a multi-mode approach to reach registered voters.

Three methods to reach registered voters where they are:

• Via mail with postcards inviting them to participate in the survey online or on the phone

• By phone with calls to their landline and cell phones

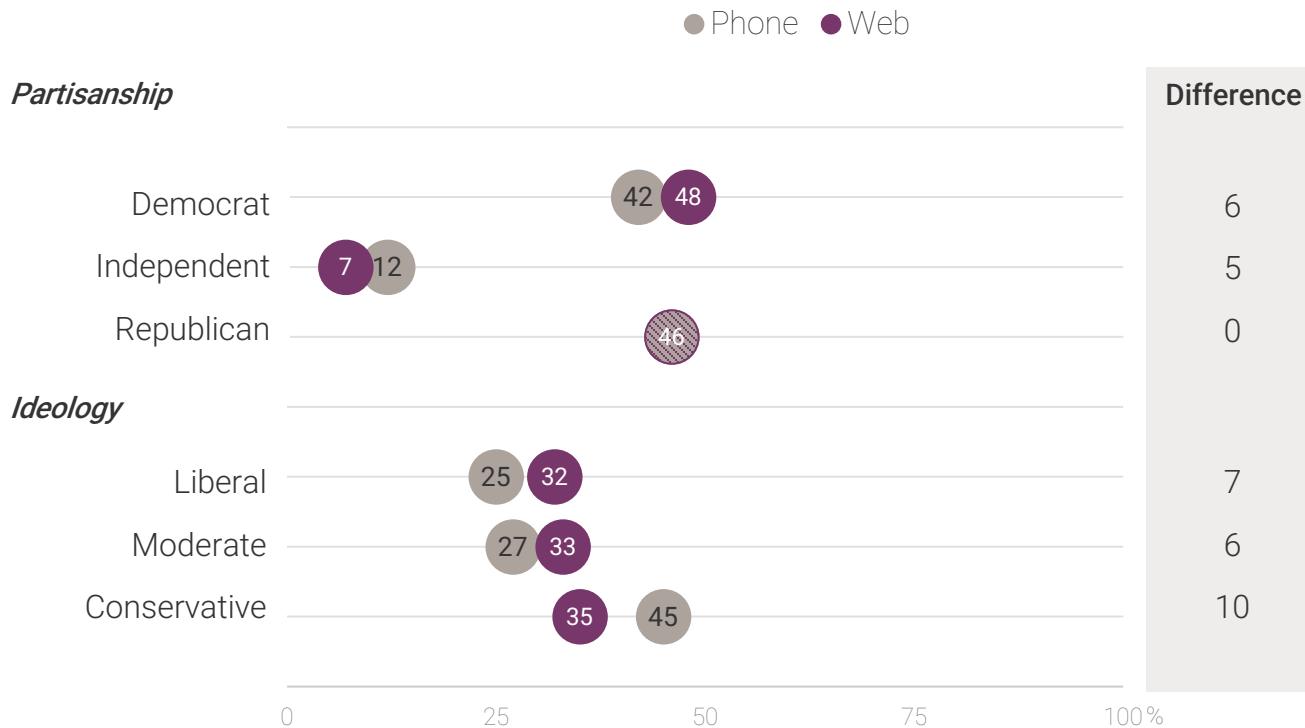• Online via large opt-in and probability-based panels

In 2020, VoteCast conducted interviews with 133,000 registered voters in all 50 states.

• 41,777 probability interviews from voter files in 40 states

• 87,186 non-probability interviews in 50 states

• 4,141 interviews from AmeriSpeak panel

We see some differences in mode by partisanship and ideology.

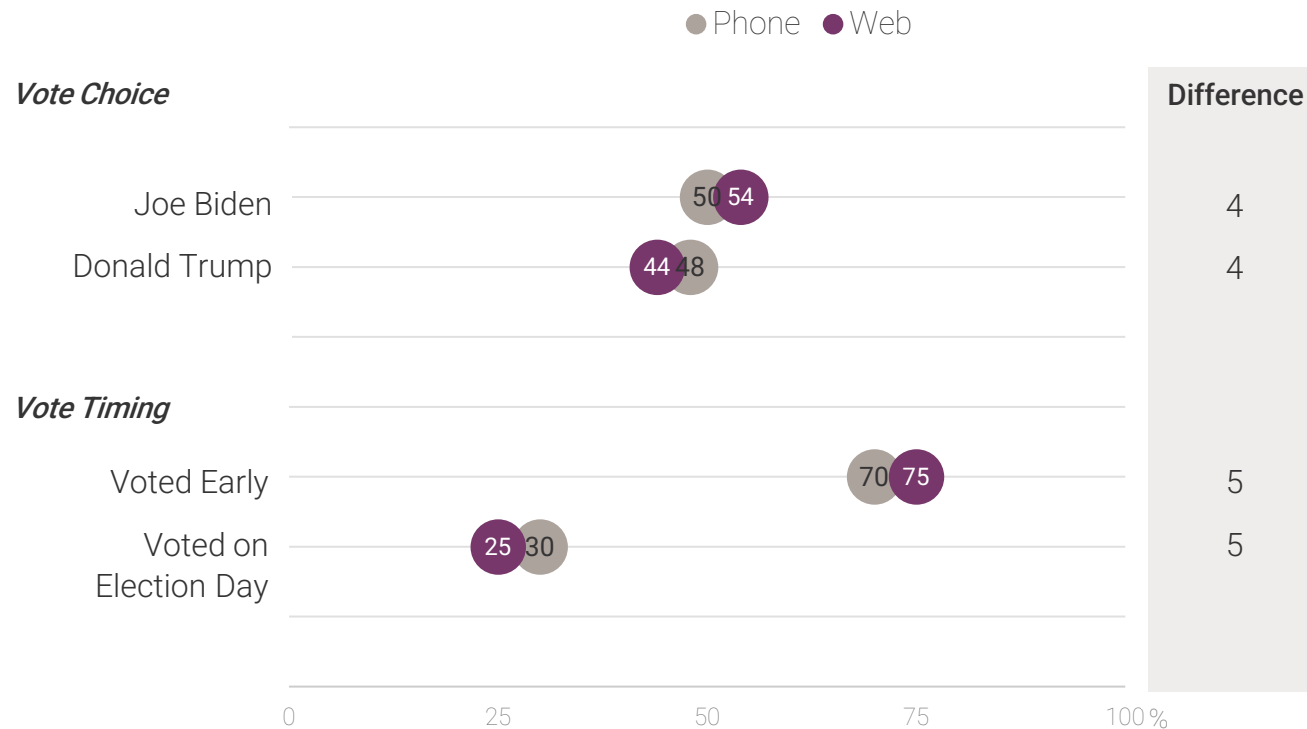**Differences in Responses on the Phone and Web**

% who identify as each by survey mode

● Phone ● Web

Partisanship

		Difference
Democrat	42 · 48	6
Independent	7 · 12	5
Republican	46	0

Ideology

		Difference
Liberal	25 · 32	7
Moderate	27 · 33	6
Conservative	35 · 45	10

0   25   50   75   100%

There are also some differences by vote choice and when the respondent voted.
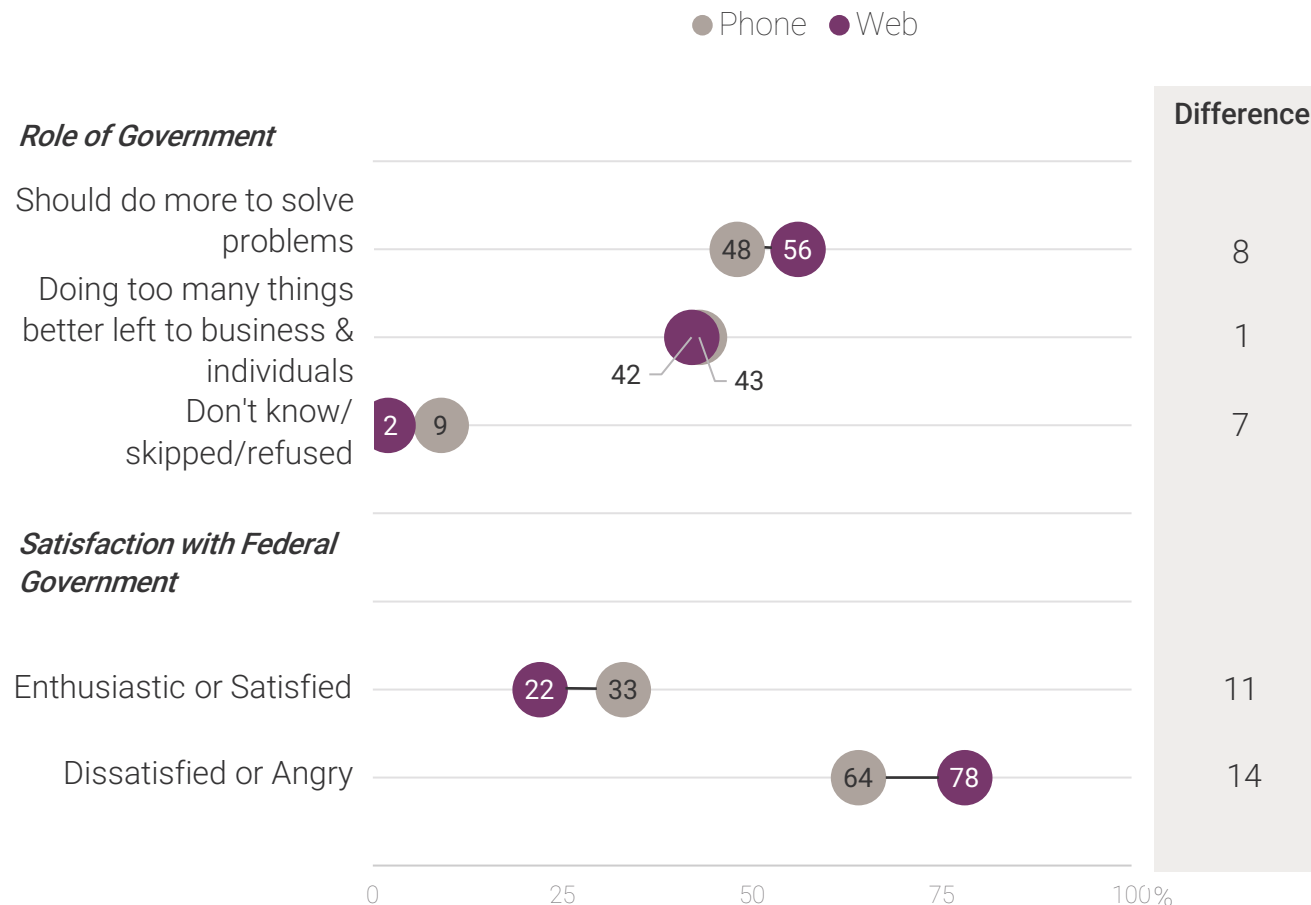
Differences in Responses on the Phone and Web

% who say each by survey mode

● Phone ● Web

	Difference
Vote Choice	
Joe Biden — Phone 50, Web 54	4
Donald Trump — Web 44, Phone 48	4
Vote Timing	
Voted Early — Phone 70, Web 75	5
Voted on Election Day — Web 25, Phone 30	5

0   25   50   75   100 %

Views of government differ by mode.

Differences in Responses on the Phone and Web

% who say each by survey mode

● Phone ● Web

	Difference
Role of Government	
Should do more to solve problems	8
	(Phone 48, Web 56)
Doing too many things better left to business & individuals	1
	(Web 42, Phone 43)
Don't know/ skipped/refused	7
	(Web 2, Phone 9)
Satisfaction with Federal Government	
Enthusiastic or Satisfied	11
	(Web 22, Phone 33)
Dissatisfied or Angry	14
	(Phone 64, Web 78)

0   25   50   75   100%

Collecting Data in multiple modes can create challenges for backend processing.

Problem: variables or coding frames in the CATI and CAWI systems don't align

- VoteCast web and phone data are saved in two separate databases.

- Each database includes more than 400 survey questions, in addition to paradata

Solutions:

- A single programmer should be used to program in both CATI and CAWI to reduce issues

- If more programming resources are needed, divide by questionnaire section rather than mode

- Build in time for a careful review of the variables and coding frame

An example of programming differences by mode.

CAWI:

For each of the following, please say if you have a favorable or unfavorable opinion. If you don't know enough to have an opinion, you can say that too.

	Very favorable	Somewhat favorable	Somewhat unfavorable	Very unfavorable	Don't know enough to say
Pete Ricketts	○	○	○	○	○
Chris Janicek	○	○	○	○	○
Ben Sasse	○	○	○	○	○

CATI:

READ STEM IF NECESSARY: For each of the following, please say if you have a favorable or unfavorable opinion. If you don't know enough to have an opinion, you can say that too.

Chris Janicek Cris JAN-i-SEK

IF R SAYS FAVORABLE: Is that very or somewhat favorable?
IF R SAYS UNFAVORABLE: Is that very or somewhat unfavorable?

01	○ VERY FAVORABLE
02	○ SOMEWHAT FAVORABLE
03	○ SOMEWHAT UNFAVORABLE
04	○ VERY UNFAVORABLE
77	○ DON'T KNOW ENOUGH TO SAY
99	○ REFUSED

Data collection in multiple modes can create opportunities for chaotic respondent behavior.

Problem: multi-mode approach allows respondents to open the survey in two modes

- Respondent can begin the survey on the web and then call in, or vice versa

- This behavior can indicate issues in the survey skip logic even if there are none

Solutions:

- Conduct daily reviews of the data

- Turn off mode-switching capabilities altogether

Collecting data in multiple modes may have implications for weighting.

VoteCast uses a four-step weighting process to produce accurate estimates.

1. Separate weights for probability and non-probability cases

2. Calibration weights

3. All cases receive a combined weight after small domain modeling

4. After the vote count, the survey is weighted to the election results

Nonresponse adjustments are needed for those who complete the survey by outbound dialing

– Respondents who complete the survey after receiving an outbound call are weighted to represent those cases who received an outbound call but who did not complete the survey

Conclusions:

- Multi-mode surveys have the ability to enhance sample representativeness at low(er) cost.

- Potential issues in multi-mode data processing should be considered well before data collection begins.

- Data review should be an ongoing process, not a one-time event.

Thank you.

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