PROOF OF CONCEPT STUDY: AN ONLINE EXIT POLL WITH GEOLOCATION TECHNOLOGY

EXECUTIVE SUMMARY

As part of an effort to explore innovative alternatives to traditional exit polling, The Associated Press and NORC at the University of Chicago conducted a proof of concept study to assess the operational opportunities and challenges of using an online exit poll with geolocation technology. The study leveraged NORC’s nationally representative AmeriSpeak Panel and used geolocation technology to send panelists living in Florida an online exit poll after they left their voting places for the 2016 election.

The results of the proof of concept study illustrate that conducting an online exit poll with geolocation technology is possible and highlight the opportunities and challenges of the approach. The study featured four main stages that are discussed in detail in this report: 1) recruiting participants and gaining consent, 2) encouraging participants to download a survey app with geolocation technology, 3) determining the geolocations of participants’ early and Election Day polling places, and 4) having participants complete the online exit poll after they have voted.

Key Findings

- Many adults are willing to participate in an online exit poll. Sixty percent of panelists who responded to the initial survey and had smartphones consented to participate. Younger adults are more likely to agree to consent, and participation rates could rise as future generations become more accustomed to using apps and mobile surveys.
Forty percent of those who consented to the study downloaded and registered for the app needed to complete the online exit poll. Technological difficulties, lack of motivation or effort, and potential concerns about privacy can lead people to not download or activate a geolocation app, based on reports from a short follow-up survey of participants.

Many participants who successfully activate a survey app will complete an online exit poll. More specifically, nearly 15 percent of the people who downloaded the app completed the online exit poll, and the majority of those who did not complete the exit poll either did not activate the app, did not vote, or voted by mail.

**Recommendations**

- A high-quality sample will increase cooperation rates, as AmeriSpeak panelists were four times more likely than the opt-in panelists to download the app.
- Advance letters, postcards, and email or phone call reminders are likely to help build trust with participants and boost participation.
- Advanced geolocation software and a skilled professional are needed to help determine the best geolocation for each polling place because of the wide variation in size, location, and types of polling places.
- A user-friendly survey app is essential. The standard multipurpose survey app used in this study provided a quick and affordable option to assess the technology, but a custom app designed more specifically for exit polling could increase the number of app activations and exit poll completes.
- The next step should be to apply the operational lessons from this proof of concept study to a larger formal experiment that can refine the procedures and compare the findings from online exit poll respondents to those obtained through traditional exit polling methodologies.

**GAINING CONSENT**

**Methodological approach**

We sent a short online survey (see Appendix I) on September 26th to 970 panelists of AmeriSpeak®, NORC at the University of Chicago’s probability-based panel designed to be representative of the U.S. household population. In addition, Toluna, a nonprobability online panel, invited many of its members to complete the survey. The survey asked about whether respondents had smartphones, their usage of mobile apps, and a series of questions about their likelihood of voting in the 2016 presidential election. The survey provided a description of the study, and if respondents agreed to participate, we collected their email address and mailing address. We then provided them with instructions about how to download the app. From the end of September until Election Day, we sent emails every Tuesday, Thursday, and Saturday reminding them to complete the consent survey.

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1 Toluna did not provide details on how many panelists it emailed the survey link, but it continued to send the link to panelists until 131 consented to participate in the study.
Results

There were 652 people who started the consent survey, and 11 percent were determined to be ineligible for the study because they reported not having a smartphone. Among those with a smartphone, there were 576 people who reached the question asking for their consent to participate in the study, and 60 percent agreed. After collecting participants’ addresses, 300 people who consented were eligible to participate in the study.

Logistic regression analysis shows that younger people and those with more education were more likely to consent to participate when also controlling for gender, race, and income. Sixty-eight percent of those age 18-34 consented compared with 62 percent of those 35-59 years old and 43 percent of those age 60 and older. Likewise, 59 percent of those with a college degree consented compared with 47 percent of those with a high school education or less. There were no significant differences in participation related to income, race, or gender. Participants from the Toluna opt-in sample were more likely than AmeriSpeak® panelists to consent (72 percent vs. 55 percent).

Lessons

Many people are willing to participate in a voting survey that involves downloading a smartphone app, but consent is not universal and there are demographic differences in willingness to participate.

About 60 percent of the people who took the initial survey and had smartphones agreed to participate, and the high number of consents is encouraging moving forward. Smartphones continue to grow in popularity and younger people are more likely to consent, which indicates that participation rates could rise over time as each generation gets more accustomed to using smartphone apps. However, there is likely to remain a segment of the population unwilling to participate in such a study due to privacy concerns related to allowing researchers to track their location.

The demographic differences in consent rates raise questions about the representativeness of this approach, but traditional exit polls also face nonresponse challenges. People with higher education were more likely to consent to participate in the app study, and highly educated people are also more likely to participate in traditional exit polls. In contrast, younger people are more likely to consent to the app study than older people, who are often more likely to participate in exit polls. The demographic differences between younger and older respondents suggest the possible benefits of a mixed-mode approach to exit polling.

DOWNLOADING THE SURVEYSWIPE APP

Methodological approach

After smartphone users consented to participate in the study, they received emails reminding them to download the free SurveySwipe app, which was available in the Apple and Android app stores. The SurveySwipe app was developed in October 2010 by QuestionPro, a California-based company, and it has geolocation capabilities that allow it to send participants surveys when they are at certain locations. The app has been used by a wide range of companies to conduct surveys and market research.
The voting study participants were provided with a direct link to it in the app store and the study password (“vote”). After downloading the app, respondents needed to provide an email address and the study access password, and also consent to the terms of service in order to activate the app (see Appendix 2 for screenshots). Participants were then asked if they would allow the app to follow their location. Each Monday and Thursday during the study, we sent reminders to download the app to everyone who had consented to participate (see Appendix 3). In addition, a reminder was sent on the day before the election and the morning of Election Day. Following the election, we sent a follow-up survey to everyone who had consented to participate in the study in order to understand their experience with the research.

**Results**

About 40 percent of participants who consented to the study downloaded the SurveySwipe app and completed all of the registration information. AmeriSpeak panelists who consented were much more likely to download the app than the opt-in sample participants (56 percent vs. 13 percent).

In total, 119 people downloaded the app by the time voting closed on Election Day. Five participants downloaded the app on Election Day, but nearly half of the total downloads (55) came within a week after the initial survey was sent in late September. The number of downloads then continued at a steady rate of about 1-4 a day throughout the month of October and into early November.

Age was a significant predictor of likelihood to download the app after consenting. Nearly half of adults age 35-59 who consented to participate successfully downloaded the app (48 percent) compared with 35 percent of those age 60 and older and 33 percent of those 18-34 years old. Income, education, gender, and race were not significant predictors of downloading the app.

Of the 181 participants who consented but did not successfully download the app, 100 responded to a follow-up survey asking why they did not download it (see Appendix 4). About one-third said they did not download the app because they forgot (33 percent), and 27 percent said they did not download it because they decided they did not want it. About 1 in 5 said it was too difficult, and another 1 in 5 said they did not successfully download it for another reason such as they voted by mail or forgot the access code. Thirty percent of those who did not download the app said on the follow-up survey that they were extremely or very worried about privacy with such apps, 32 percent said they were moderately worried, and 38 percent said they were a little or not at all worried.

**Lessons**

The results illustrate that many people are willing and able to download a geolocation app, but there are a number of challenges to getting participants to successfully do it.

The findings show that many participants downloaded the app shortly after giving consent, which highlights the need to have clear instructions about how to download the app at the end of the consent survey. At the same time, the consistent reminders appear to have been effective in increasing participation as there was a steady flow of downloads throughout the study period.

The analysis illustrates that the effects of age on consenting to participate in the study are different than the effects of age on downloading the app. While the youngest adults are most likely to consent to participate, middle age adults (those 35-59 years old) are the most likely to actually download the app after consenting. The effects of age on the likelihood of downloading the app could indicate that doing
so depends both on familiarity with apps as well as a sense of political or civic engagement. It is possible that middle age adults are most likely to download the app because they are more comfortable with apps than the oldest adults and more politically or civically engaged than younger adults.

The follow-up survey highlighted that a lack of interest or effort, technology problems, and concerns about privacy could limit the number of successful downloads. Downloading the app requires more effort than a standard survey, and a third of respondents on the follow-up survey reported they forgot to do it. Several other respondents said they did not do it because they could not remember the access code, which was provided in every email reminder notice. This suggests that additional effort may be required to ensure respondents have a motivating call to action and the needed logistical information in a variety of formats, including postcard reminders, prompting voice calls, or text messages.

Technological problems could have also prevented people from downloading the app, as 20 percent said on the follow-up survey that it was too difficult. Several people reported on the follow-up survey that they deleted the app because of the need for space, and a few reported that the app crashed on them multiple times. Offering respondents multiple paths to obtain technical support could help willing respondents overcome technical barriers.

Another potential reason people may have decided not to download the app is privacy concerns about the app, which asked to track their location. About 3 in 10 on the follow-up survey said they decided they did not want to download the app after they consented. The request for the app to track their location could have turned people off, and many of those who decided not to download the app expressed strong concerns about the privacy of such apps. As illustrated in the download rate, which is significantly higher for AmeriSpeak panelists, working with respondents for which there is already a trusted data relationship can help improve cooperation.

**IDENTIFYING POLLING PLACES**

**Methodological approach**

After collecting participants’ home addresses, we had USgeocoder, a California-based company specializing in geolocation, use respondents’ addresses to determine the location of their early voting and Election Day polling places. USgeocoder collected shapefiles with voting precinct boundaries from each country in Florida and created a GIS program to match home addresses with voting precincts. With the geolocation program, the vendor was able to determine the participants’ voting precinct. Then USgeocoder matched participants’ precincts to county lists of polling places to determine their Election Day and early voting locations.

Each county had to finalize its polling places with the Florida Secretary of State 30 days before Election Day. However, a lawsuit led a judge to grant the counties a one-week extension. After the office of the Secretary of State received all of the polling places, they published early voting locations on their website on October 19th, only 19 days before Election Day. Moreover, Election Day polling places were not publicized by the Florida Secretary of State and had to be obtained separately from each of the 67 counties.
The choice to create a geolocation program to match participants’ addresses to precincts occurred because, while many counties have online lookup tools that allow researchers to enter an address and see the proper polling place, some counties require a date of birth for online lookups. Other potential options were nongovernmental online lookup tools such as the League of Women Voters’ voter information site (http://www.vote411.org/) or the Democratic National Committee’s polling place locator [https://pollingplaces démocrats.org/] but these could be viewed as partisan sources.

Results

USgeocoder provided us with a file with each participants’ precinct and the address of their early voting and Election Day voting location.

Lessons

Each county determines the polling places for its precincts, and the variation in how counties publicize the locations can create challenges in systematically matching peoples’ home addresses to their polling place.

In order to match home addresses to polling places on a national level, a geolocation lookup tool would need to be designed and structured months before the election so that data could be quickly added once available. Organizations such as the Democratic National Committee have created such lookup tools, but the exact cost/time for such a tool would need more exploration.

DETERMINING GEOLOCATIONS FOR POLLING PLACES

Methodological approach

After identifying respondents’ polling places, we had to determine the geolocation coordinates for each of these polling places. Identifying the best geolocation coordinates is necessary to make sure the app sends respondents a survey after they vote. The geolocation coordinates serve as the center of a circular geofence, which is a virtual perimeter for a particular geographic area. When respondents cross the geofence, it triggers the app to send the survey. It is important that the geofence encompasses where people vote while not being so large that it includes a lot of areas outside of the polling place. Many polling places are on large pieces of property, and determining the ideal geolocation coordinates is critical.

We compared three different approaches to determining the best latitude and longitude coordinates for the center of the geofence at each polling place.

1. USgeocoder used a geolocation program, based on Emergency Medical System standards, that locates the geolocation coordinates for an address on the street parallel to the entrance of the building.

2. NORC researchers used the MapMaker Pro geolocation software that combines data from the United States Postal System and satellite data. This program usually locates the geolocation coordinates for an address at the point of mail delivery (e.g., a mailbox).

3. NORC researchers used Google Maps, which locates geolocation coordinates for an address in the center of the property.
After calculating the geolocations for each polling place with all three approaches, NORC researchers manually reviewed cases in which the three geolocation approaches led to coordinates that were more than 500 feet apart. During this manual review, the researchers used the MapMaker Pro program to manually review maps/overhead images of the polling place location and determine the best coordinates for the center of the geofence.

In order to capture polling locations, we set the radius of the geofence at 500 feet. QuestionPro advised that the radius for geofences is usually set between 300-500 feet, and we decided on 500 feet to avoid potentially missing voters.

**Results**

We determined geolocations for all 354 early voting locations in Florida and the Election Day polling places for all 119 participants who downloaded the app. We decided to include every early voting location in Florida because voting laws in the state allow people to vote at any early voting location in their county. Of the 354 early voting locations, we needed to manually review about 20 locations because of discrepancies between the three geolocation approaches. Of the roughly 100 Election Day polling places, we needed to manually review five locations due to differences between the three approaches.

**Lessons**

Researchers can rely on geolocation software to determine the latitude and longitude coordinates for most polling places, but some manual review is needed due to software limitations and variations in the types of polling places. Researchers also need to consider the optimal size of the geofences and consider tailoring that based on the polling place.

Geolocation programs such as MapMaker Pro can quickly determine the geolocation coordinates of hundreds or thousands of polling place addresses nationwide. However, there is great variation in the size and shape of polling place locations, and there is likely always going to be a need to manually review a certain portion of properties. Geolocation programs tend to have lower levels of accuracy in rural areas compared with urban or suburban locations; however, mapping of rural areas is improving.

Polling places located on large properties also present more challenges because there is a greater chance the polling place might fall outside a geofence. For example, we needed to manually code a polling place in Florida located in a far corner of a large shopping mall.

Researchers also must consider the ideal size for the geofences at polling places and may need to use different size geofences for different locations. A geofence that is too small may not encompass the polling place and may not trigger a survey when someone goes to vote. A geofence that is too large and includes a nearby road could trigger a survey when someone is driving past a polling place. False positives from geofences that extend beyond polling places are most likely during early voting when a geofence is active for several weeks and polling places tend to be at areas people frequently visit such as community centers.
EARLY AND ELECTION DAY VOTING SURVEY

Methodological approach

The voting survey was conducted through the SurveySwipe app, and featured six questions from the traditional exit poll, including vote choice, ideology, and partisanship (see Appendix 5 for questionnaire and Appendix 6 for screenshots). During early voting and on Election Day, the app sent the survey to participants 15 minutes after they entered a voting location. The 15-minute delay was designed so the survey would appear shortly after respondents had voted. After voting, respondents received a push notification of the survey from the app, and the survey was available in their app for the duration of the study period and could be completed at any time.

Results

Nearly 15 percent of people who downloaded the app completed the survey, and the majority of those who did not complete the exit poll survey either did not activate the app, did not vote, or voted by mail. The app sent a survey to 22 people and 17 of them completed either the early voting or Election Day survey. Six people completed the early voting survey, three before Election Day and three on Election Day. Eleven people completed the Election Day survey, nine on Election Day and two during the week after Election Day.

Of the 97 participants who downloaded the app but did not receive the survey, 80 participated in a follow-up survey. Of these 80 who completed the follow-up survey, 18 percent reported they did not vote, 14 percent reported they voted by mail/absentee, 44 percent reported they voted early, and 25 percent reported they voted on Election Day. Among those who voted early or on Election Day, most reported they either deleted the app or did not activate the app (i.e., did not allow it to track their location).

Of the 17 participants who completed the voting survey, six completed a follow-up survey. All six said the exit poll survey was easy to complete. However, only two of the six participants said they saw the survey right after voting, and the other four reported not seeing the survey until more than an hour after voting.

Lessons

The early voting and Election Day survey completes illustrate that geolocation technology can be used to conduct an exit poll via mobile phones. At the same time, the limited number of survey completes highlight the challenges of such an approach and illustrate the potential benefits of a custom geolocation survey app.

Participants deciding not to vote and/or voting by mail reduced the number of completes and presents a challenge for a geolocation survey. The nonresponse follow-up survey shows that about a third of those who downloaded the app and did not receive the survey said they either did not vote or voted by mail. Future geolocation study designs should include a way for mail voters to participate.

Nonresponse was an issue despite the fact that participants were willing to take the time to download the app. About a fifth of the people who received a survey on the app did not complete it, and several people waited several days to take the survey. In particular, three people who received the early voting survey waited until Election Day to complete it, and two people who received the Election Day
survey completed it later that week. Delayed responses could reduce response validity and make it
difficult for researchers to use the results on Election Day. On the follow-up survey, four of the six
people who completed the survey said they did not receive a notification about the exit poll survey
and had to open the app to find it. A custom app that made it easier to receive notifications could
increase the response rates.

The follow-up survey also indicates that many people who downloaded the app and voted did not
receive the exit poll survey because they did not allow the app to track their location. If participants
did not allow the app to track their location, the app could not send participants an exit poll survey. In
future studies, participants should need to agree to allow the app to track their location as part of the
registration process.
APPENDIX 1: CONSENT SURVEY

Q1.
Do you have a cellphone, or not?
1. Yes
2. No

[SHOW IF Q1=1]

[SP]

Q2.
Do you have a cellphone that connects to the Internet and can have apps, or does your phone only receive calls and text messages?
1. Cellphone connects to the internet and can have apps
2. Cellphone only receives calls and text messages

[SP]

Q3.
Do you share this cellphone with any family members, or not?
1. Yes
2. No

[SP]

Q4.
Have you ever downloaded an app on your cellphone?
1. Yes
2. No

[SHOW IF Q4=1]

Q5.
In general, how frequently do you download a new app on your cellphone?
1. Daily
2. Couple times a week
3. Weekly
4. Couple times a month
5. Monthly
6. Less than monthly

[SP]
Q6.

Are you registered to vote?
1. Yes, at my current address
2. Yes, but at a different address
3. No
4. Not sure

Q7.

How often would you say you vote?
1. Always
2. Nearly always
3. Part of the time
4. Seldom
5. Never

Q8.

How much interest do you have in following news about the campaign for president?

<table>
<thead>
<tr>
<th>IF RND_01 = 0, RESPONSE OPTIONS FOR Q8:</th>
<th>IF RND_01 = 1, RESPONSE OPTIONS FOR Q8:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 A great deal</td>
<td>1. No interest at all</td>
</tr>
<tr>
<td>2 Quite a bit</td>
<td>2. Very little</td>
</tr>
<tr>
<td>3 Only some</td>
<td>3. Only some</td>
</tr>
<tr>
<td>4 Very little</td>
<td>4. Quite a bit</td>
</tr>
<tr>
<td>5 No interest at all</td>
<td>5. A great deal</td>
</tr>
</tbody>
</table>

Q9.

In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. Which one of the following statements best describes you?
1. I did not vote in the 2012 presidential election.
2. I thought about voting in the 2012 presidential election, but didn't
3. I usually vote, but I didn't in the 2012 presidential election
4. I'm sure I voted in the 2012 presidential election.

[SP]
Q10.

On November 8, 2016, the election for President will be held. Using a 0-to-10 scale, where 10 means you are completely certain you will vote and 0 means you are completely certain you will not vote, how likely are you to vote in the upcoming presidential election? You can use any number between 0 and 10 to indicate how you strongly feel about your likelihood to vote.

1. 0-Certain will not vote
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10-Certain will vote

Q11.

Do you know where people in your neighborhood go to vote, or not?

1. Yes
2. No

Q12.

How likely are you to vote at an early polling location before Election Day?

1. Very likely
2. Somewhat likely
3. Somewhat unlikely
4. Very unlikely
5. Not sure

Q13.

How likely are you to vote by absentee mail ballot?

1. Very likely
2. Somewhat likely
3. Somewhat unlikely
4. Very unlikely
5. Not sure

[SP, PROMPT TWICE]
We would like to give you an opportunity to join a unique research project funded by the Knight Foundation that will explore Americans’ attitudes about the upcoming election. Participation in this research is voluntary. As part of this study, you will download a free app to your smartphone, and if you decide to vote, this app will send you a two-minute survey once you are at your polling place. The app is developed by QuestionPro a company with a focus in mobile research and data collection. Participants who download the app and respond to the survey when prompted, will receive an additional $10 incentive.

Are you willing to participate in this study?

1. Yes
2. No

Great, glad you will help us with this research. We do need to collect your email address so we can send you an invitation to download the app. Your email address will only be used for this study and will not be shared.

Please enter your email address below:

Please confirm your email address:

All Respondents who consented

In order for us to determine your polling place and send you the survey we will need your current home address. Could you please tell us what is your current home address?

<table>
<thead>
<tr>
<th>Address 1</th>
<th>[HOMEADD1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address 2</td>
<td>[HOMEADD2]</td>
</tr>
<tr>
<td>City</td>
<td>[HOMEADDCITY]</td>
</tr>
<tr>
<td>State</td>
<td>[HOMEADDSTATE]</td>
</tr>
<tr>
<td>Zip code</td>
<td>[HOMEADDZIP]</td>
</tr>
</tbody>
</table>
Thank you again for participating in this study. To participate in the voting study, please download the free smartphone application, SurveySwipe. The application is available for smartphones with both iOS and Android operating systems. The application can be downloaded here:


Once you download the application, click on “Create Account” and enter your information. The access code to use for this study is: `<i><u>vote</u></i>`

You will want to allow SurveySwipe to send you notifications so you will receive the exit poll survey.

After you download the application, you will be ready to participate in the voting study. If you decide to vote, you will receive a very short survey through the SurveySwipe application when you leave your polling place. The application will send you the survey if you vote at an early polling location or your Election Day polling place.
APPENDIX 2: SCREENSHOTS OF DOWNLOADING APP
Thank you again for participating in this study exploring Americans’ attitudes about the upcoming election. As part of this study, you will download a free app to your smartphone, and if you decide to vote, this app will send you a two-minute survey once you are at your polling place. Participants who download the app and respond to the survey when prompted will receive an additional $10 incentive.

To participate in the voting study, please download the free smartphone application, SurveySwipe. The application is available for smartphones with both iOS and Android operating systems. The application can be downloaded here:


Once you download the application, click on “Create Account” and enter your information. The access code to use for this study is: `<i><u>vote</u></i>`

You will want to allow SurveySwipe to send you notifications so you will receive the survey.

After you download the application, you will be ready to participate in the voting study. If you decide to vote, you will receive a very short survey through the SurveySwipe application when you leave your polling place. The application will send you the survey if you vote at an early polling location or your Election Day polling place.
### APPENDIX 4: FOLLOW-UP SURVEY

<table>
<thead>
<tr>
<th>STATUS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Consented to download the app but never did</td>
<td></td>
</tr>
<tr>
<td>2=Downloaded the app but never got the survey</td>
<td></td>
</tr>
<tr>
<td>3=Downloaded the app, got the survey, did not complete</td>
<td></td>
</tr>
<tr>
<td>4=Completed the survey</td>
<td></td>
</tr>
</tbody>
</table>

[SHOW IF STATUS=1,2,3]

[SP]

#### Q1.

In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. Which one of the following statements best describes you?

**RESPONSE OPTIONS:**

1. I did not vote in the 2016 presidential election
2. I thought about voting in the 2016 presidential election, but didn't
3. I usually vote, but I didn't in the 2016 presidential election
4. I'm sure I voted in the 2016 presidential election

[SHOW IF STATUS=1,2,3 AND Q1=4]

[SP]

#### Q2.

Did you vote by mail/absentee, at an early voting location, or on Election Day?

**RESPONSE OPTIONS:**

1. Mail/absentee
2. Early voting
3. Election Day

**QUESTIONS FOR THOSE WHO CONSENTED TO DOWNLOAD THE APP BUT DID NOT DOWNLOAD**

[SHOW IF STATUS=1]

[SP]

#### Q3.

You may remember answering a brief survey from us about voting in the 2016 election. At that end of that survey you said you might be willing to download the SurveySwipe app to participate in the next part of the study. What is the main reason that you did not download the SurveySwipe app?

**RESPONSE OPTIONS:**

1. Decided you did not want to download it
2. Forgot to download it
3. It was too difficult to download
4. Other, please specify: [TEXTBOX]

[SHOW IF STATUS=1]

[SP]
Q4.

Do you remember receiving any emails about downloading the app or do you not remember any emails about downloading the app?
RESPONSE OPTIONS:
1. Remember receiving emails
2. Don’t remember receiving any emails
[SHOW IF STATUS=1]

Q5.

How worried are you about privacy with apps such as SurveySwipe that use your location?
RESPONSE OPTIONS:
1. Extremely worried
2. Very worried
3. Moderately worried
4. A little worried
5. Not at all worried

QUESTIONS FOR THOSE WHO DOWNLOADED THE APP BUT DID NOT RECEIVE THE PUSH NOTIFICATION TO TAKE THE SURVEY
[SHOW IF STATUS=2 AND Q1=4]
[TEXTBOX]

Q6.

In order to figure out why the app did not send you a survey, we are wondering where you cast your vote. Do you remember the name of the location you voted? For example, Smith Elementary School or Johnson Community Center.

Can you tell us where you voted?
[SP]

Q7.

Did you delete the SurveySwipe app from your phone before you voted?
RESPONSE OPTIONS:
1. Yes
2. No
IF Q7=1,98 GO TO Q15 IF P_PANEL=1; GO TO Q15 IF P_PANEL>1
[SHOW IF STATUS=2 AND Q7=2]
[SP]
Q8.

How confident are you that you did or did not enable push notifications – that is, notifications that pop up on your screen—for the SurveySwipe app?

RESPONSE OPTIONS:
1. Very confident I enabled push notifications
2. Somewhat confident I enabled push notifications
3. Somewhat confident I did <u>not</u> enable push notifications
4. Very confident I did <u>not</u> enable push notifications
77. Not sure

[SHOW IF STATUS=2 AND Q7=2]

Q9.

How confident are you that you did or did not enable the SurveySwipe app to access your location even when you aren’t using the app?

RESPONSE OPTIONS:
1. Very confident I enabled full location access
2. Somewhat confident I enabled full location access
3. Somewhat confident I did <u>not</u> enable full location access
4. Very confident I did <u>not</u> enable full location access
77. Not sure

QUESTIONS FOR THOSE WHO DOWNLOADED THE APP BUT DID NOT RECEIVE THE PUSH NOTIFICATION TO TAKE THE SURVEY

[SHOW IF STATUS=3]

Q10.

Did you receive a voting survey from the SurveySwipe app?

RESPONSE OPTIONS:
1. Yes
2. No

IF Q10=2,98 GO TO Q15 IF P_PANEL=1; GO TO Q15 IF P_PANEL>1

[SHOW IF STATUS=3 AND Q10=1]

Q11.

What is the main reason you did not complete the survey?

RESPONSE OPTIONS:
1. Decided you did not want to do it
2. Did not have time
3. Forgot about it
4. Could not access the survey
5. Other, please specify: [TEXTBOX]

QUESTIONS FOR THOSE WHO DOWNLOADED THE APP AND COMPLETED THE SURVEY <3

[SHOW IF STATUS=4]
Q12.

We appreciate you completing the voting survey via the SurveySwipe app. Overall, how easy or difficult was it to complete the survey in the app?
RESPONSE OPTIONS:
1. Very easy
2. Somewhat easy
3. Somewhat difficult
4. Very difficult
[SHOW IF STATUS=4]

Q13.

Did you receive a push notification to complete the voting survey or did you go into the app to complete the survey?
RESPONSE OPTIONS:
1. Notification
2. Went into app
[SHOW IF STATUS=4]

Q14.

When did you first see the voting survey?
RESPONSE OPTIONS:
1. While waiting to vote
2. Right after voting
3. Within an hour after voting
4. More than an hour after voting

Q15.

Please let us know if you have any additional feedback on your experience with the study and if you have any suggestions for how to improve the survey process for future elections.

[TEXTBOX]
APPENDIX 5: VOTING SURVEY

[If voting early]

Q1.

Have you already voted in the upcoming Presidential election by going to an early voting location, or not?
1. Yes   SKIP TO Q2
2. No    TERMINATE
77. DON’T KNOW   TERMINATE
99. REFUSED   TERMINATE

[If voting on Election Day]

Q1.

Have you already voted in the 2016 Presidential Election, which is taking place today?
1. Yes
2. No    TERMINATE
77. DON’T KNOW    TERMINATE
99. REFUSED    TERMINATE

Q2.

[early vote] Who did you vote for in the election for president?
[same day] In today's election for president, did you vote for:
1. Hillary Clinton (Dem)
2. Donald Trump (Rep)
55. Other: Who? __________
66. Did not vote

Q3.

Which best describes your vote for president today?
1. I strongly favor my candidate
2. I like my candidate but with reservations
3. I dislike the other candidates

Q4.

Which ONE of these four issues is the most important facing the country? (CHECK ONLY ONE)
[RANDOMIZED]
1. Foreign policy
2. Federal budget deficit
3. The economy
4. Health care
Q5.

On most political matters, do you consider yourself:
1. Liberal
2. Moderate
3. Conservative

Q6.

Do you consider yourself a Democrat, a Republican, an independent or none of these?
1. Democrat
2. Republican
3. Independent
4. None of these

Q6I.

Do you lean more toward the Democrats or Republicans?
1. Lean Democrat
2. Lean Republican
3. Don’t lean

Q6D.

Do you consider yourself a strong Democrat or moderate Democrat?
1. Strong Democrat
2. Moderate Democrat

Q6R.

Do you consider yourself a strong Republican or moderate Republican?
1. Strong Republican
2. Moderate Republican
APPENDIX 6: SCREENSHOTS OF VOTING SURVEY

Have you already voted in the 2016 Presidential Election, which is taking place today?

- Yes
- No
- I'm waiting to vote right now

In today's election for president, did you vote for:

- Hillary Clinton (Democrat)
- Donald Trump (Republican)
- Gary Johnson (Libertarian)
- Jill Stein (Green)
- Other