Appendix I: Methodology

SSRS METHODOLOGY

SSRS conducted a survey of Muslims and Jews for the Institute for Social Policy and Understanding from January 18 through January 27, 2016. The study investigated the opinions of Muslims and Jews regarding the 2016 presidential election, the most important issues facing the country, the acceptability of both military and non-military attacks on civilians, and the importance of national and religious identity.

For the survey, SSRS interviewed 515 Muslim respondents and 312 Jews. We interviewed a total of 827 respondents. This report details the methodological components of the study: sample design, questionnaire design, programming, field operations, data processing, and weighting. The majority of all interviews (and all Jewish interviews) were completed by phone. One hundred six interviews with Muslim respondents were completed via web panel.

Sample Design

The sampling procedures were designed to efficiently reach the two low-incidence target populations of interest. These are listed below:

1) SSRS pulled sample prescreened as Muslim households from the last four years of its weekly national omnibus survey of 1,000 randomly selected respondents to recontact for this study.
2) SSRS pulled sample prescreened as Jewish households from the last two years of its weekly national omnibus survey to recontact for this study.
3) SSRS purchased listed sample in both landline and cell phone frames from Experian, a sample provider with specific characteristics flagged for each piece of sample. Experian provided sample with flags for Muslim households.
4) Finally, in an effort to supplement the number of Muslim interviews that we were able to complete in the given time frame and with the amount of available prescreened sample, SSRS employed a web panel and completed the final 106 Muslim interviews via an online survey with sample from a non-probability panel.

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In total, 329 interviews were completed via cell phones, 392 via landline, and 106 via web survey. Table 1 summarizes the total number of interviews by sample type, religious affiliation, and frame.

Table One

	Muslims	Jews	Total
LL Prescreened Muslim	73	1	74
Cell Prescreened Muslim	183	2	185
LL Prescreened Jewish	0	151	151
Cell Prescreened Jewish	2	138	140
Experian LL	148	19	167
Experian Cell	3	1	4
Web Panel	106	0	106
TOTAL	**515**	**312**	**827**

Questionnaire Design

The questionnaire was developed by the Institute for Social Policy and Understanding in consultation with the SSRS project team. Prior to the field period, SSRS programmed the study into CfMC 8.6 Computer Assisted Telephone Interviewing (CATI) software. Extensive checking of the program was conducted to ensure that skip patterns and sample splits followed the design of the questionnaire. SSRS project directors checked randomly generated data as an additional confirmation of program accuracy.

Field Procedures

Pretesting

Although no pretest was specifically scheduled for this project, SSRS conducted five pilot interviews on January 15, 2016. Overall, the questionnaire flowed smoothly, and respondents provided thoughtful and reasonable responses to the questions. As a result of the pilot test, SSRS recommended two changes to the instrument that were approved and implemented prior to launch on January 18. They were the following:

1) To read the names of presidential candidates at Q.8 instead of asking respondents to name their preferred candidate without prompting.
2) To reword Q.9 to ask what would be the most important issue for the next president to address.

Survey Administration

The field period for this study was January 18 through January 28, 2016. Seven hundred and twenty one interviews were completed using the CATI system. The remainder were completed

via web survey. Both CATI and Web programs ensured that questions followed logical skip patterns and that complete dispositions of all call attempts were recorded.

CATI interviewers received written materials about the survey instrument and received formal training for this particular project. The written materials were provided prior to the beginning of the field period and included an annotated questionnaire that contained information about the goals of the study as well as detailed explanations as to why questions were being asked, the meaning and pronunciation of key terms, potential obstacles to be overcome in getting good answers to questions, and respondent problems that could be anticipated ahead of time, as well as strategies for addressing the potential problems. Due to the sensitive nature of some of the questions, interviewers were given specific instructions on how to cope with respondents who seemed agitated or distressed by the questions.

Interviewer training was conducted immediately before the survey was fielded. Call center supervisors and interviewers were walked through each question from the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection.

In order to maximize survey response, SSRS enacted the following procedures during the field period:

- An average of four follow-up attempts were made to contact non-responsive numbers (e.g. no answer, busy, answering machine)
- Each non-responsive number was contacted multiple times, varying the times of day, and the days of the week that call-backs were placed using a programmed differential call rule
- Interviewers explained the purpose of the study and, when asked, stated as accurately as possible the expected length of the interview (approximately 10 minutes)
- Respondents were offered the option of scheduling a call-back at their convenience
- Specially trained interviewers contacted respondents who had initially refused to participate in the survey, and attempted to convert them into completed interviews.

Screening Procedures
The target population of the survey was specified as people who identify their religion as either Muslim or Jewish. For landline respondents, if the person who answered the phone was neither Muslim nor Jewish, we asked if anyone in the household considered him or herself to be a different religion than the respondent and, if so, what religion that would be. If another

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household member was Jewish or Muslim, we then asked to speak with that person. If no person in the household fit the religion criteria, we terminated the interview. Any cell phone respondent who was not a Muslim or Jew was immediately screened out of the survey since cell phone respondents are considered individual households for the purposes of the selection process.

Response Rate

Response rate for the ISPU survey was calculated using AAPOR's Response Rate 3 formula. This percentage divides the number of completed interviews in each sampling frame by the estimated number of eligible phone numbers in the frame. The response rate for the prescreened landline sample is 32.4%. The response rate for the prescreened cell phone sample is 25.5%. The response rate on the SSRS Omnibus poll, where sample was prescreened, is typically 8%-10%. Finally, the combined response rate for all of the listed sample is 7.7%. The web panel response rate is 3.2%.

Data Processing and Deliverables

At the end of the field period SSRS delivered a standard banner of crosstabulations, including combination tables for multiple related questions, and a fully labeled STATA dataset. The final deliverables also included a methods report.

Weighting Procedures

The data from this project is weighted to provide reflections of nationally representative estimates of the adult Jewish and/or Muslim population 18 years of age and older. The weighting process for those from the phone takes into account the disproportionate probabilities of household and respondent selection due to the number of separate telephone landlines and cellphones answered by respondents and their households, as well as the probability associated with the random selection of an individual household member. Specific steps for those collected via phone are provided below:

Probability of Selection (phone number): A phone number's probability of selection depends on the number of phone-numbers selected out of the total sample frame. So for each landline number this is calculated as total landline numbers dialed divided by total numbers in the landline frame and conversely for the cell phone numbers this is calculated as total cell phone numbers divided by total numbers in the cell phone frame.

Probability of Contact: The probability that the sampling unit (households on landlines or respondents on cell phone) will be reached is a product of the number of phones (by type) a respondent or their household answer.

Probability of Respondent selection: In households reached by landline, a single respondent is selected. Thus, the probability of selection within a household is inversely related to the number of adults in the household.

Total Probability of Selection: This is calculated as the phone number's probability of selection (by frame), multiplied by the number of devices of each type the respondent answers, and for landlines, divided by the number of adults in the household. [1] The sample weights derived at this stage are calculated as the inverse of the probability of selection.

The final base-weight is fully calculated for those from the phone portion of this study. Since we are unable to calculate probability of selection for those from the web, those respondents were given a base-weight of 1.

Following application of the above base-weight, the full sample is post-stratified and balanced by key demographics such as age, race, sex, region, education, marital status, number of adults in the household, voter registration, and political party identification within the Jewish and Muslim portions of this study separately. The sample also reflects the distribution of phone usage of the Jewish and/or Muslim population, meaning the proportion of those who are cell phone only, landline only, and mixed users.

Post Stratification Iterative Proportional Fitting ('raking'): With the base-weight applied, the sample will undergo the process of iterative proportional fitting (IPF), in which the sample will be balanced to match estimates of the Jewish and/or Muslim populations determined from 3 years of data collected through our SSRS Omnibus as well as the PEW estimates. This process of weighting will repeat until the root mean square error for the differences between the sample and the population parameters is 0 or near-zero.

The population parameters used for post-stratification are: age (18-29; 30-49; 50-64; 65+), gender, Census region (Northeast, North-Central, South, West), Education (less than high school, high school graduate, some college, four-year college or more); race/ethnicity (white non-Hispanic or Other non-Hispanic; Black non-Hispanic; Hispanic); marital status (single; married; other), registered voter (Yes/No), political affiliation (Republican; Democrat; Independent/Other), Number of Adults (1/2/3 or more), and phone-usage (cell phone only, landline only, both).

To handle missing data among some of the demographic variables we employed a technique called hot decking. Hot deck imputation replaces the missing values of a respondent randomly

with another similar respondent without missing data. These are further determined by variables predictive of non-response that are present in the entire file. We used an SPSS macro detailed in 'Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handing Missing Data' (Myers, 2011).

Weight truncation ('trimming'): The weights will undergo truncation (or 'trimming') so that they do not exceed 4.1 or fall below under 0.25.

The overall design effect of the trimmed weights for the Jewish portion of this study is 1.6 and the design effect of the trimmed weights for the Muslim portion is 2.02.

Margin of Sampling Error

Weighting procedures increase the variance in the data. Complex survey designs and post data-collection statistical adjustments increase variance estimates and, as a result, the error terms applied in statistical testing. The Margin of Error for the two groups of interest are found below. This is calculated **only** for the telephone sample and does not take into account the web panel completes.

Table 2: Design Effect and Margin of Sampling Error

	Number of Interviews	Margin of Error with Design Effect	Design Effect
Muslims	409	+/-6.9%	2.02
Jews	312	+/-7.0%	1.60

TRITON POLLING METHODOLOGY

The Institute for Social Policy and Understanding commissioned Triton to conduct a poll of the general American public between January 18 and 30th. From this overall sample, researchers examined the views of self identified Protestants and Catholics.

Triton Polling live interview telephone surveys are conducted by our in-house, state of the art call center located outside of Bend, Oregon. Triton's automated surveys are carried out by our proprietary, automated telephone survey system. All surveys incorporate standard statistical methods to select a representative sample of the target population.

Lists
Lists used to conduct Triton surveys are obtained from various sources, often the client, list vendors, government entities, and other sources. The type of list will vary by the nature of the survey, most often lists are of registered voters, random digit sampling, or consumer lists. Three attempts are made per contact to maximize participation from each contact in the sample.

Cell Phones
Triton utilizes numerous list vendors who are apply to supply high quality cell phone lists. This is increasingly important as more than a third of the nation is cell only and young people are much more likely than older people to be cell only.

Interviewing
Triton live interview surveys are conducted by Triton employees located in our Bend, Oregon call center. Triton's interviewers are among the most experienced in the industry in all aspects of polling and survey research. Typically, calls are placed from 5 pm to 9 pm local time during the week. Saturday calls are made from 11 am to 6 pm local time and Sunday calls from 1 pm to 8 pm local time. Triton's call center utilizes a custom developed Computer Assisted Telephone Interviewing system built upon Microsoft SQL Server.
Triton automated telephone surveys require that questions be digitally recorded and then loaded into a proprietary automated calling program. Respondents use the keypad on the phone to answer questions.

Data Integrity, Weighting and Analysis
Data integrity and proper application of statistical methods are essential to gaining a true understanding of your survey audience. There are specific methods for cleaning, randomizing and matching that must be adhered to in order to ensure statistically significant results. Triton employs enterprise grade software tools, including Microsoft SQL Enterprise Server 2012 and IBM SPSS, along with rigorous data handling procedures.
Upon completion of calling, the raw survey data is weighted using industry standard statistical procedures to ensure the sample reflects the overall population, typically in terms of age, gender, ethnicity, political party affiliation, geography, etc. This processing step is essential because different segments of the population answer the phone in different ways. For example, women answer the phone more than men, older citizens are home more and participate more often than younger people, and rural residents typically answer the phone more frequently than

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urban residents. Without a proper weighting model, in most cases survey samples are heavily skewed one direction or another and are not representative of the target population.

While reporting can vary depending on customer requirements and budget, standard service usually includes full statistical analysis is provided in comprehensive crosstabs and graphical summary report. Turnaround time is generally five days or less. Multiple reports with different weightings or crosstab arrangements are available post survey for little or no additional cost. Triton will continue to work with you to help you understand the results and consider your next course of action.

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