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Public Preferences Related to Radioactive Waste Management, Nuclear Energy, and Environment: Methodology and Response Reference Report for the 2014 Energy and Environment Survey

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ABSTRACT

The results described in this report are from nationwide surveys between 2006 and 2014 on preferences of US residents concerning the environment and energy sources. The most recent 2014 survey was undertaken to determine how consent, in the context of nuclear facility siting, is understood and evaluated by a cross-section of the American public. Continuing attention to the events at the Fukushima nuclear facility, coupled with its negative implications for public support for nuclear energy, has changed the balance of risk and benefit perceptions, and thus the context in which nuclear facility siting efforts will occur. In addition, the portion of the public most concerned about climate change have typically been those most concerned about the environment in general, and in turn, are those that have traditionally been hostile to nuclear energy. The overall survey results show that the broader public is not well informed about the nuclear fuel cycle including energy production from nuclear reactors and current policies for the management of used nuclear fuel. In addition, the surveys find that respondents are reluctant to continue to rely on temporary on-site storage of used nuclear fuel, and that there is moderate support for developing one or more interim storage facilities. The survey responses also suggest that the level of trust accorded a new nuclear waste authority by the public will be sensitive to how it is institutionally defined. For a hypothetical community, which had volunteered to host an interim storage facility within 50 miles of their homes, the majority of respondents indicated that veto authority in the siting process should be limited to (a) majorities of local and statewide voters, (b) state and federal environmental regulatory authorities, and (c) governors. The respondents also indicated that the state and local host community should be permitted to withdraw consent up to the point at which a license to build the facility is submitted, but not after the license is received and facility construction initiated. The 2013 and 2014 surveys posed a set of questions concerning respondents' expectations about engaging in the process for siting an interim storage facility. Roughly half of the respondents said they would likely attend informational meetings, and nearly half said they would likely communicate with elected officials or would likely express their views on the topic via social media. Relatively few – about one in five – said they would be likely to actively participate in support for or opposition of an ISF. Finally, the 2014 results suggest that while respondents are more likely to support a citizen-led deliberative panel process than one led by experts, this preference does not seem to influence their opinion about the expected outcome of the siting process.

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1. INTRODUCTION

Background

The results described in this report was undertaken to determine how consent, in the context of nuclear facility siting, is understood and evaluated by a cross-section of the American public. The results are from of nationwide surveys on preferences of US residents concerning the environment and energy sources [1] The survey was initiated in 2006 and is conducted annually by the Center for Energy, Security & Society, a joint research collaboration of the University of Oklahoma and Sandia National Laboratories. The 2014 iteration of the Energy and Environment survey was implemented using a web-based questionnaire, and was completed by 1,610 respondents using an Internet sample that matches the characteristics of the adult US population, [2] as estimated in the US Census. The survey waste conducted June 27–28, 2014. This reference report supplements the primary analytical report (September 2014) of findings from the Energy and Environment Survey 2014).

This report addresses four methodological aspects of the research. In this section we discuss trends in survey methods and rationale for Internet collections. Section 2 describes sampling, demographic representativeness of respondents, and collection methods. In Section 3 we describe data weighting methods. Section 4 reproduces the wording of questions and factual information provided to participants, and it compares central tendencies of responses to questions in the 2014 survey with weighted responses and central tendencies for the same questions in previous surveys collected in the EE series (2006–2014).

Opinion Survey Research via the Internet

Technological developments and telecommunication trends, such as the declining number of wired phones, the increasing use of cellular phones, and the continuing expansion of high speed Internet services, have made probabilistic (often referred to as "random") sampling of the U.S. national population for the administration of lengthy surveys on complex issues infeasible for several reasons.

- The total universe of households without phone service of any kind is unknown
- Wired phone lines are no longer maintained in a sufficient fraction of U.S. households to represent the national population, and members of households that do have wired service differ systematically from households without wired phones
- The number of households with wired phones that are exclusively used for purposes *other than* routine phone calls, such as home alarms or medical alert services, is unknown
- The numbers of individuals and households having both a wired phone and a cell phone or those having more than one cell phone are unknown
- The numbers of households and individuals having access to Internet service suitable for taking Internet surveys is unknown

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[1] The EE survey series differs from popular opinion polling. Polls tend to be snapshots of public opinions on subjects that more often can be categorized with yes—no, for—against responses, typically based on information that the person can recall from memory. By comparison, the EE series is designed to investigate more complex issues that (a) require much more attention and thought from respondents (as noted by the time respondents took to complete the survey), (b) involve more complex question wording, (c) may provide balanced background information, and (d) allow more subtle response variations (as shown in the sections that follow). The EE surveys yield data that can help explain which complex policy options are preferred, why these policy preferences are formed and how they evolve over time related to the six topic areas analyzed in the report.

[2] Alaska, Hawaii, and the District of Columbia were excluded because of a series of questions requiring respondents to assume that interim storage facilities for spent nuclear fuel were to be built in near proximity to their residence.

- The numbers of individuals who have access to Internet services from their place of employment is unknown, and of those, the number of individuals who are allowed to take surveys while at work is unknown
- Cellular telephony is unsuitable for lengthy surveys that may distract respondents who are otherwise occupied, and surveys conducted using cell phones may incur costs to prospective respondents that discourage survey participation
- Face-to-face interviews or printed postal surveys of the U.S. general public require long collection periods and are prohibitively expensive for many research projects

Increasingly, academic quality opinion survey research of the U.S. public on complex subjects, such as energy and the environment, are being conducted via the Internet. These factors present special challenges for probabilistic sampling because incomplete information exists about rapidly evolving telecommunication patterns, Internet accessibility, and the demographic composition of those who have suitable Internet access.

With increasing Internet access, the demographics of the online population are becoming more representative of the U.S. population as a whole, but samples recruited to participate in Internet surveys cannot be truly random samples of the U.S. public. All surveys, regardless of collection methods, include an element of self-selection because even if a perfectly random sample could be constructed, the final decision to participate must be made voluntarily by each respondent, and thus some degree of self-selection is unavoidable. This means that, even when derived from a theoretically perfect random sample, the demographic characteristics of survey respondents may not perfectly reflect U.S. population parameters. Non-probabilistic samples, such as those used to administer surveys of the general public via the Internet, involve greater degrees of self-selection because participants first voluntarily agree to enter a pool or stream of citizens willing to take surveys on-line, and then each member of that group must decide whether or not to participate in a given survey opportunity. This requires the administration of Internet surveys that are as demographically representative as possible, and it warrants caution in presenting findings as statistically representative of views of the entire adult U.S. population.

2. SAMPLING, DEMOGRAPHICS, AND DATA COLLECTION

Sampling for the EE14 survey was accomplished by Survey Sampling International (SSI) using a proprietary methodology known as Dynamix, which provides direct access to millions of potential survey respondents, including members of 34 standing panels plus a variety of online communities, social media, and affiliate partnerships to build a constantly evolving stream of potential survey participants. Prospective survey respondents access SSI's website directly or through trusted partnerships or via social media or numerous other Internet portals where invitations are posted to maximize diversity. Each individual is screened and dynamically profiled before being offered a survey. Rather than being sampled for specific individual surveys or being allowed to choose among alternative surveys, respondents are offered one of various available projects for which they qualify at the time they indicate their willingness to participate in a survey. This increases the probability of survey engagement, reduces dropout rates, and allows prospects to take a survey at a time of their convenience.

If certain demographic categories are underrepresented during the dynamic sampling process, email invitations to members of standing panels are employed to bring the sample into closer balance with key population parameters. Assuming a sample size of 1,000, the sample frame and selection process would achieve comparable results within $\pm$3 percent 19 times out of 20. Security checks and quality verifications are used on all sources before respondents can begin any survey. All external sources undergo a partner verification process that scores individuals based on a series of quality control checkpoints, including digital fingerprinting to prevent duplication, spot checking via third party verification to prove identity, benchmarking against known external data points, and an algorithm that dynamically monitors the sample on a number of personality and psychographic measures.

A variety of incentives from SSI or from affiliate organizations are employed based on the nature and length of surveys and progress of the dynamic sampling process. This sampling process broadens access beyond standing panel memberships by including individuals who are not interested in joining a research panel and who may only rarely choose to participate in online survey research. It does not limit the sampling process to one or a few sample sources, one or a few modes of contact, or a single selection method.

But regardless of its advantages, neither Dynamix nor any other Internet sampling methodology provides a probabilistic sample that can be represented as truly random. While the possibilities of systematic bias can be reduced to minimum levels that allow replication of survey findings, they cannot be eliminated entirely. One source of systematic bias that can be minimized is demographic representativeness.

Table 1 compares key national and regional population parameters to the demographic characteristics of respondents to this survey. Notice that men and households with higher incomes are underrepresented, while educational attainment is higher among our respondents than for the national population as a whole. But overall, the demographic attributes of respondents to this survey have a high level of comparability to national population demographics.

For the protection of participants, the survey questions and the survey protocol were approved by the Institutional Review Board of the University of Oklahoma. The instrument was programmed to allow the survey to be self-administered at the preferred time and pace of each respondent within clearly defined time constraints. To afford continuity of attention and to make best use of factual information provided to each respondent during the course of the survey, a maximum of 45 minutes was allowed for completion of any single Web page in the survey (typically containing one to three survey questions), and a maximum total elapsed time of two hours from start to finish was allowed to complete the survey. Average completion time was 33.3 minutes. Participation was restricted to individuals 18 years of age or older. Each respondent who completed the survey received points credited by SSI or incentives from affiliates equal to a five dollar stipend. Decisions to participate were entirely voluntary. Of those participants who met age qualifications and time constraints, 72.7 percent completed the survey.

Table 1: Demographic Representativeness of Respondents in 2014

Demographic	% U.S. Population 18 Yrs. of Age and Above	% EE14 Respondents
Gender		
Female	51.3	54.6
Male	48.7	45.4
Age		
18–29	21.8	11.7
30–49	34.2	29.5
50+	44.0	58.9
Education		
High School Graduate or higher	87.4	97.5
Bachelor's Degree or higher	28.9	42.9
Ethnicity		
Hispanic	15.0	15.8
non-Hispanic	85.0	84.2
Race		
White	79.3	81.4
Black or African American	12.6	12.0
American Indian or Alaska Native	1.1	1.1
Asian	5.2	2.1
Native Hawaiian or Pacific Islander	0.2	0.4
Two or more races	1.6	3.0
Household Income		
$0–49,999	48.9	58.6
$50–99,999	29.2	31.3
$100–149,999	12.4	7.5
$150–199,999	5.0	1.5
$200,000 or more	4.5	1.1
Census Region		
Northeast	18.3	18.2
Midwest	21.5	21.2
South	37.4	37.7
West	22.8	22.9

3. DATA WEIGHTING

To preserve and leverage the value of legacy collections, to enhance the comparability of mixed-mode collections[3], and to ensure demographic representativeness of the growing use of non-probabilistic sampling and Internet collections, we developed data weighting methods that are described in this section and applied them to all data collections in the EE survey series from 2006 through 2014. Weighting survey data to selected demographic characteristics of the general population (also known as sample balancing) provides three key analytical benefits.

- Representativeness, statistical validity, and reliability of findings are strengthened to the degree that responses from survey participants are adjusted to mirror the demographic characteristics of the U.S. general population at the time the survey is administered.
- The comparability of mixed-mode survey collections is strengthened because data weighting minimizes the demographic differences between phone and Internet respondents and improves the basis for their comparability and integration into combined datasets.
- The analysis of trends in opinion evolution on issues tracked over time is strengthened because survey data are adjusted to represent continually evolving demographics of the U.S. population, such as the growth of ethnic and minority racial groups. This is especially valuable for understanding evolving public views on issues that may be importantly differentiated by demographic shifts.

We employed a single-stage integrated method of post-stratification (as opposed to weighting in sequential stages) that requires the development of computer algorithms. The U.S. Census Bureau publishes annual population estimates that tabulate combined integrated estimates of (a) gender, (b) age, (c) race, (d) Hispanic ethnicity, and (e) state of residence. By appropriately grouping data for states, census region of residence becomes the fifth demographic available for the weighting method employed.

The weighting process involves three related steps. The first step is to calculate for each survey respondent the proportion of the U.S. population for the survey year that shares the same demographic characteristics of gender, age, race, ethnicity, and region as the respondent. The second step is to calculate the proportion of fellow survey participants who share the same demographic characteristics as the respondent being weighted. Finally, the proportion of the national population sharing those demographic attributes is divided by the proportion of survey respondents sharing those same characteristics. The result is a weight factor that can be applied to responses from each individual survey participant to adjust them to national population characteristics. A weight value of one means that responses from a specified participant are used without adjustment. A weight value greater than one means that a participant with a given set of demographic attributes is underrepresented in the survey sample (relative to the national population), and responses from that participant receive greater statistical emphasis than responses from survey participants who are represented in direct proportion to the general population. Conversely, a weight value smaller than one means that a respondent having a given set of demographic attributes is overrepresented in the survey sample (relative to the general population), and responses from that participant receive less emphasis than fellow respondents who are represented in direct proportion to the general population. We calculated weight factors to six decimals places. We show survey questions used in 2014 and compare weighted responses to those questions across previous surveys in Section 4.

[3] Surveys in this series conducted in 2006, 2008, 2010, and 2011 included both land-line phone and Internet collections for comparative purposes and for validating Internet collection methods.

4. WEIGHTED RESPONSE FREQUENCIES AND CENTRAL TENDENCIES: 2006–2014

e1_age How old are you? [unweighted]

	Mean	Median
2014 web	50.9	54
2013 web	44.3	43
2012 web	45.9	46
2011 combined web + phone	48.8	50
2010 combined web + phone	49.0	50
2009 web	45.3	45
2008 combined web + phone	46.0	45
2007 web	48.4	49
2006 combined web+ phone	47.3	47

e2_edu What is the highest level of education you have completed? [unweighted]

%	2014 web	2013 web	2012 web	2011 comb*	2010 comb	2009 web	2008 comb	2007 web	2006 comb
1. < High school graduate	2	2	1	3	2	2	1	1	2
2. High school graduate	21	20	19	20	20	18	20	17	19
3. Some college/vocational school	33	34	34	33	36	37	34	35	35
4. College graduate	27	28	29	27	28	27	27	27	26
5. Some graduate work	5	5	5	5	4	6	5	7	5
6. Master's degree	10	9	9	9	8	7	11	10	10
7. Doctorate (of any type)	2	1	3	3	2	2	2	3	3

*The abbreviation "comb" refers to combined Internet and telephone surveys.

e3_gend Are you male or female? [unweighted]

%	Female 0	Male 1
2014 web	54.6	45.4
2013 web	51.3	48.7
2012 web	51.0	49.0
2011 combined	51.4	48.6
2010 combined	50.8	49.2
2009 web	51.5	48.5
2008 combined	51.6	48.4
2007 web	50.9	49.1
2006 combined	52.2	47.8

e4_hisp Do you consider yourself to be Hispanic, Latino, or Spanish or to have Hispanic, Latino, or Spanish origins? [unweighted]

	No	Yes
%	0	1
2014 web	84	16
2013 web	86	14

e5_race Which of the following best describes your race? [unweighted]

	White	Black	AI/AN	Asian	NH/PI	Two or More Races	Other Race
%	1	2	3	4	5	6	7
2014 web	81	12	1	2	0	3	0
2013 web	78	13	1	4	0	3	0

e6_state Using the dropdown list, please select the state where your primary residence is located. [unweighted]

%	Northeast	Midwest	South	West
2014 web	18	21	38	23
2013 web	17	25	34	24
2012 web	19	23	34	24
2011 combined	18	23	36	23
2010 combined	19	26	35	20
2009 web	23	23	33	21
2008 combined	21	25	35	19
2007 web	18	28	33	21
2006 combined	19	27	32	22

e7_zip What is the five digit zip code at your residence? (This information will only be used to compare grouped differences, not to identify you.) [verbatim]

e8_now Please indicate which of the following statements applies to you. [unweighted]

0 – I am completing this survey from my primary residence.

1 – I am completing this survey from a location that is not my primary residence.

	Primary Residence	Not Primary Residence
%	0	1
2014 web	89	11
2013 web	87	13
2012 web	86	14

The next several questions are about important issues facing policy makers in the U.S. today.

For each of the following issues, please rate your level of concern about the issue using a scale from zero to ten, where zero means you are *not at all concerned* and ten means you are *extremely concerned*. How concerned are you about: [e9–e13 Randomized]

e9_worry1 Threats to national security, including terrorism?

	Not at All Concerned										Extremely Concerned	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	1	2	2	2	7	9	12	18	14	32	7.83
2013 web	2	1	2	2	4	7	10	13	15	14	31	7.65
2012 web	2	1	2	4	5	9	10	13	16	13	26	7.31
2011 comb	1	1	2	3	4	11	9	14	16	12	28	7.48
2010 comb	1	1	1	4	2	9	8	13	17	12	31	7.67
2009 web	1	1	2	1	3	8	8	11	15	16	34	7.85
2008 comb	1	1	2	2	3	10	8	13	17	13	31	7.72
2007 web	0	1	1	2	3	7	9	14	18	16	29	7.87
2006 comb	1	0	1	2	3	9	7	12	18	14	33	7.84

(2014 vs. 2013: p = .0684)

e10_worry2 The delivery and cost of healthcare in the U.S.?

	Not at All Concerned										Extremely Concerned	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	0	0	1	1	5	6	10	17	18	40	8.44
2013 web	0	0	1	1	2	3	4	11	18	17	43	8.55
2012 web	1	0	1	1	2	4	6	10	15	18	43	8.46
2011 comb	1	0	1	1	1	5	5	10	18	17	40	8.39
2010 comb	1	1	1	2	2	7	5	11	16	15	40	8.20
2009 web	1	0	1	1	2	5	5	10	13	20	42	8.38
2008 comb	0	0	1	2	1	5	5	9	17	14	46	8.49
2007 web	0	0	1	1	1	6	5	13	15	17	40	8.35
2006 comb	0	0	1	1	2	6	5	9	17	15	43	8.42

(2014 vs. 2013: p = .1349)

e11_worry3 The availability and cost of energy in the U.S.?

	Not at All Concerned										Extremely Concerned	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	0	0	1	1	1	8	7	12	21	15	34	8.13
2013 web	1	0	1	1	2	5	8	15	18	16	31	8.01
2012 web	1	0	1	1	2	5	7	14	19	18	32	8.13
2011 comb	1	0	1	1	2	6	7	13	23	17	30	8.09
2010 comb	1	1	1	2	2	8	8	17	18	14	29	7.82
2009 web	1	0	1	1	2	5	7	12	19	17	36	8.25
2008 comb	0	0	1	1	1	5	4	10	15	16	47	8.60
2007 web	0	0	1	1	1	6	6	12	20	18	34	8.26
2006 comb	1	0	1	1	1	7	6	13	20	16	35	8.20

(2014 vs. 2013: p = .1663)

e12_worry4 The effects of human activities on the environment? (NOTE: wording change in 09)

	Not at All Concerned										Extremely Concerned	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	2	2	2	2	3	10	9	14	16	13	26	7.38
2013 web	3	1	2	3	3	8	9	14	17	13	26	7.38
2012 web	3	1	2	2	4	9	10	15	16	14	24	7.33
2011 comb	2	1	4	3	5	10	10	13	19	12	21	7.10
2010 comb	3	2	2	3	4	11	7	13	16	13	25	7.20
2009 web	3	1	2	3	3	10	9	11	16	14	27	7.33
2008 comb	1	1	1	2	3	9	7	12	18	13	33	7.81
2007 web	1	0	1	3	2	10	8	14	18	17	25	7.62
2006 comb	1	1	2	2	3	11	9	15	18	13	26	7.53

(2014 vs. 2013: p = .9868)

e13_worry5 The state of the economy, including jobs and inflation?

	Not at All Concerned										Extremely Concerned	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	0	0	0	1	1	4	5	10	18	18	42	8.60
2013 web	1	0	0	1	1	3	6	10	19	18	41	8.53
2012 web	1	0	0	1	1	3	4	9	14	20	48	8.78
2011 comb	0	0	0	0	1	4	4	10	16	17	47	8.74
2010 comb	1	1	0	1	2	4	4	9	17	17	45	8.59
2009 web	0	0	0	1	1	3	4	8	13	21	49	8.81
2008 comb	0	0	1	1	2	4	5	10	16	16	46	8.58
2007 web	1	0	1	2	2	8	9	13	21	16	27	7.83
2006 comb	1	0	2	2	2	8	8	15	19	14	29	7.77

(2014 vs. 2013: p = .3144)

The next several questions ask about your views on energy and environmental issues. These questions concern your perceptions and beliefs, so don't worry about being right or wrong when providing your answers.

e14_nature On a scale from zero to ten, where zero means that nature is *robust and not easily damaged* and ten means nature is *fragile and easily damaged*, how do you view nature?

	Robust and *Not* Easily Damaged										Fragile and *Is* Easily Damaged	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	1	3	5	6	14	12	17	19	7	14	6.55
2013 web	2	1	3	7	6	14	12	17	15	7	15	6.45
2012 web	2	1	3	5	6	17	12	17	15	8	13	6.44
2011 web	2	1	5	6	7	16	10	16	17	7	13	6.38
2010 web	3	2	5	6	7	15	10	15	14	7	17	6.39
2009 web	3	2	3	5	6	14	12	16	15	7	17	6.48
2008 comb	2	1	3	6	6	16	10	15	16	7	18	6.58
2007 web	1	1	3	4	6	15	12	18	17	9	14	6.68
2006 comb	2	1	2	4	5	14	10	15	16	10	21	6.99

(2014 vs. 2013: p = .3256)

As you may know, the issue of global climate change has been the subject of public discussion over the last few years.

e15_gcc In your view, are greenhouse gases, such as those resulting from the combustion of coal, oil, natural gas, and other materials causing average global temperatures to rise?

	Are Not	Are
%	0	1
2014 web	24	76
2013 web	27	73
2012 web	28	72
2011 combined	30	70
2010 combined	33	67
2009 web	26	74
2008 combined	26	74
2007 web	23	77
2006 combined	24	76

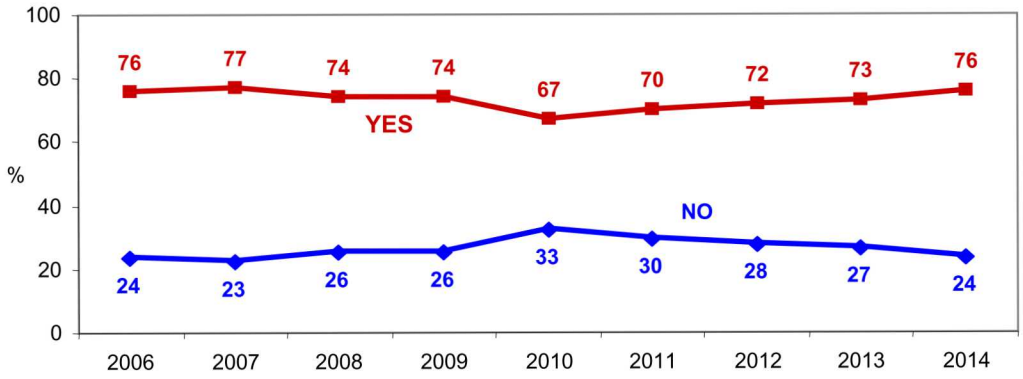

Figure 1: Public Opinion About the Occurrence of Anthropogenic Climate Change

e16_gcccert On a scale from zero to ten, where zero means *not at all certain* and ten means *completely certain*, how certain are you that greenhouse gases <are/are not> (from e15) causing average global temperatures to rise?

	Not at All Certain										Completely Certain	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	1	2	3	5	17	11	18	15	10	16	6.80
2013 web	2	1	1	4	5	14	12	19	18	9	15	6.87
2012 web	3	1	1	4	3	15	14	20	18	8	13	6.76
2011 comb	4	2	3	4	5	18	14	17	16	7	11	6.32
2010 comb	3	1	3	4	5	17	12	14	17	8	15	6.60
2009 web	3	1	2	4	5	18	11	17	17	8	14	6.58
2008 comb	3	1	2	5	5	16	14	17	16	8	12	6.45
2007 web	3	1	2	4	5	18	14	16	17	9	11	6.50
2006 comb	3	1	2	4	3	14	11	16	20	10	17	6.96

(2014 vs. 2013: p = .4430

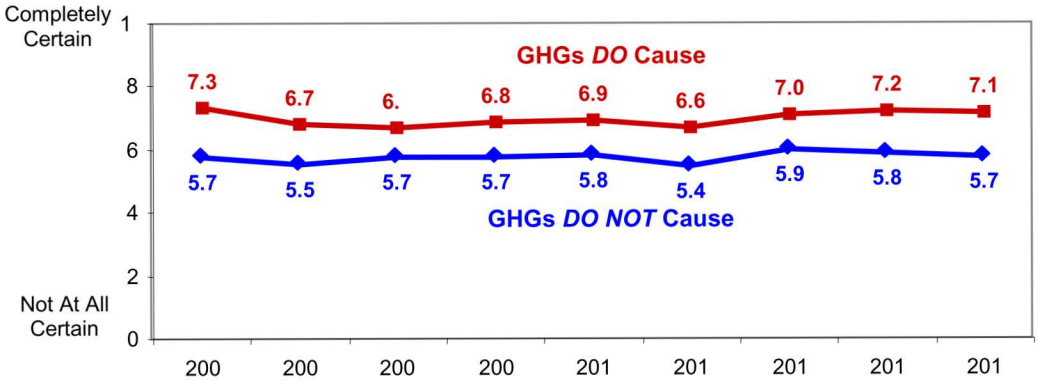

Figure 2: Public Certainty about the Occurrence of Anthropogenic Climate Change

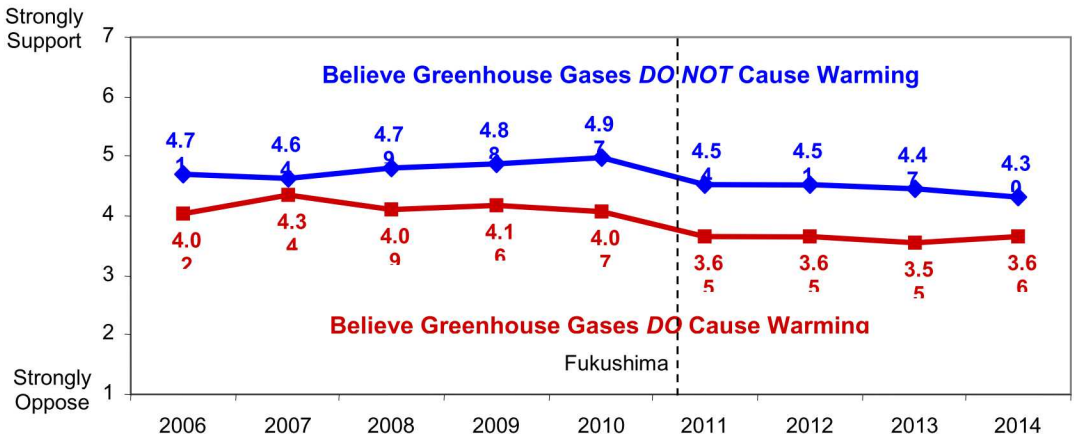

Figure 3: Climate Change Beliefs and Support for New Nuclear Reactors

e17_gccrsk On the scale from zero to ten, where zero means *no risk* and ten means *extreme risk*, how much risk do you think global warming poses for people and the environment?

	No Risk										Extreme Risk	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	2	2	3	4	12	9	14	18	11	22	7.08
2013 web	4	2	2	4	4	12	11	15	16	10	20	6.80
2012 web	3	2	3	4	5	12	12	15	16	10	18	6.75
2011 comb	5	2	3	6	4	12	10	15	17	10	17	6.57
2010 comb	5	2	5	4	4	12	10	13	18	9	18	6.53
2009 web	3	2	4	4	5	11	12	15	16	9	19	6.74
2008 comb	3	2	3	4	4	13	10	15	16	8	21	6.84
2007 web	2	1	3	3	2	11	13	13	18	11	23	7.17
2006 comb	3	1	3	4	4	10	10	14	18	11	22	7.07

(2014 vs. 2013: $p = .0108$)

START SPLIT DESIGN A/B

GROUP-A (50%): Total Energy

Now think about the overall mix of all sources of energy for the U.S. We currently get about 83 percent of our energy from *fossil fuels*, 8 percent from *nuclear energy*, and 9 percent from *renewable sources* (hydroelectric dams, wood, biofuels, wind, waste products, geothermal, and solar). We want to know approximately what percentage of the total U.S. energy supply over the next 20 years you would like to see come from each of these three primary sources. [Randomized]

e18A_foss What percent of our energy should come from fossil fuels, which currently provide about 83% of total U.S. energy? [verbatim]

%	Fossil Fuels (Mean)
2014 web-A	36.6
2013 web-A	34.7
2012 web	N/A
2011 web	36.0
2010 web	33.6
2009 web	25.0
2008 comb	27.0
2007 web	25.3
2006 comb	29.0

e19A_nuc What percent of our energy should come from nuclear energy, which currently provides about 8% of total U.S. energy? [verbatim]

%	Nuclear (Mean)
2014 web-A	15.3
2013 web-A	16.1
2012 web	N/A
2011 web	17.2
2010 web	19.6
2009 web	22.8
2008 comb	22.0
2007 web	22.6
2006 comb	21.7

e20A_renew What percent of our energy should come from renewable sources (hydroelectric dams, wood, biofuels, wind, waste products, geothermal, and solar), which currently provide about 9% of total U.S. energy? [verbatim]

%	Renewables (Mean)
2014 web-A	48.1
2013 web-A	49.2
2012 web	N/A
2011 web	46.8
2010 web	46.8
2009 web	52.2
2008 comb	51.0
2007 web	52.1
2006 comb	49.3

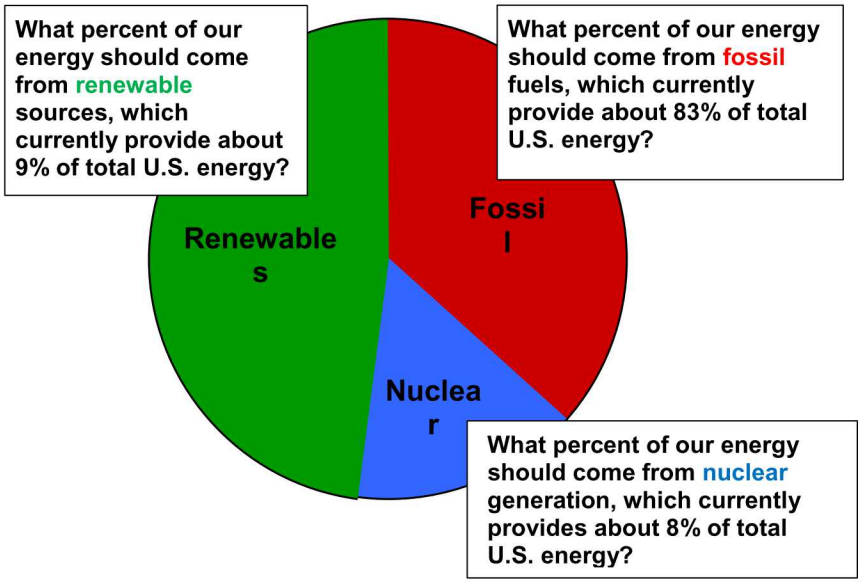

Figure 4: Preferred Sources of U.S. Energy Over the Next 20 Years

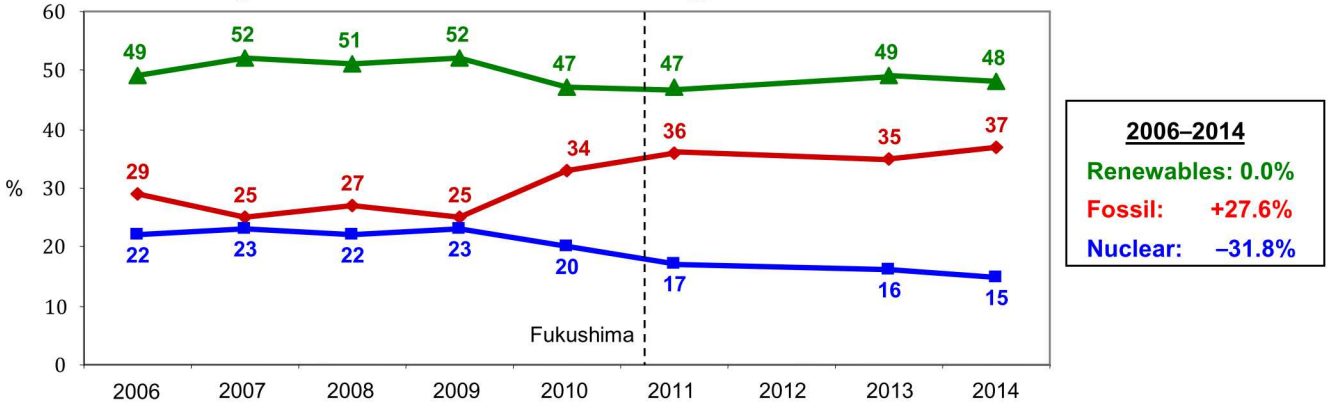

Figure 5: Preferences for Sources of Future Energy Supply (% Preferred from Each Source)

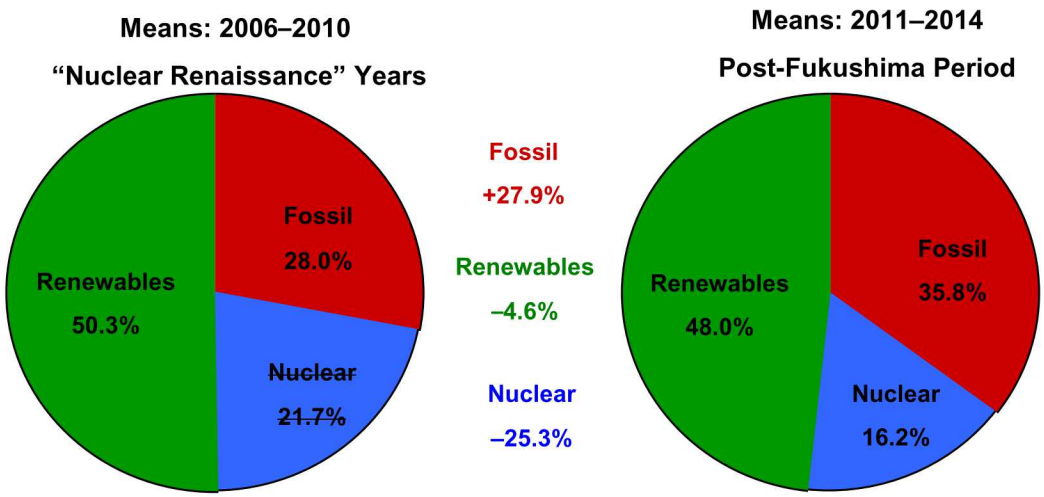

Figure 6: Mean Preferred Future Energy Mix: Before and After Fukushima

GROUP-B (50%): Total Electricity

Now think about the overall mix of all sources of electricity for the U.S. We currently get about 68 percent of our electricity from *fossil fuels*, 19 percent from *nuclear energy*, and 13 percent from *renewable sources* (hydroelectric dams, wood, wind, waste products, geothermal, solar, and other). We want to know approximately what percentage of the total U.S. electricity supply over the next 20 years you would like to see come from each of these three primary sources.

e18B_foss What percent of our electricity should come from fossil fuels, which currently provide about 68% of total U.S. electricity? [verbatim]

%	Fossil Fuels (Mean)
2014 web-B	28.3
2013 web-B	27.1

e19B_nuc What percent of our electricity should come from nuclear energy, which currently provides about 19% of total U.S. electricity? [verbatim]

%	Nuclear (Mean)
2014 web-B	20.4
2013 web-B	21.0

e20B_renew What percent of our electricity should come from renewable sources (hydroelectric dams, wood, biofuels, wind, waste products, geothermal, and solar), which currently provide about 13% of total U.S. electricity? [verbatim]

%	Other Renewables (Mean)
2014 web-B	51.3
2013 web-B	51.9

END SPLIT A/B

The next set of questions focuses specifically on the possible risks and benefits of nuclear energy.

First we want to know about your beliefs concerning some of the possible risks associated with nuclear energy use in the U.S. Please consider both the likelihood of a nuclear event occurring and its potential consequences when evaluating the risk posed by each of the following on a scale from zero to ten where zero means *no risk* and ten means *extreme risk.* [e21–e24 Randomized]

e21_nrsk1 An event at a U.S. nuclear power plant within the next 20 years that results in the release of large amounts of radioactivity.

	No Risk										Extreme Risk	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	4	6	5	5	11	8	14	13	10	23	6.81
2013 web	1	4	5	6	6	11	8	14	13	10	21	6.68
2012 web	1	5	7	7	6	11	10	12	12	10	19	6.43
2011 web	1	5	6	6	6	11	9	12	13	9	21	6.55
2010 web	2	5	7	7	6	13	10	10	11	11	19	6.27
2009 web	2	7	6	7	4	13	9	10	12	9	21	6.32
2008 comb	3	6	7	7	6	13	7	13	11	7	20	6.14

2007 web	1	5	7	6	7	14	11	11	12	8	18	6.24
2006 comb	2	5	7	7	6	15	8	9	11	7	22	6.19

(2014 vs. 2013: $p = .2778$)

e22_nrsk2 An event during the transportation or storage of used nuclear fuel from nuclear power plants in the U.S. within the next 20 years that results in the release of large amounts of radioactivity.

	No Risk										Extreme Risk	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	3	6	5	5	12	10	13	13	11	20	6.67
2013 web	1	4	6	6	6	12	10	13	13	9	20	6.49
2012 web	1	5	7	7	6	14	10	13	13	8	16	6.19
2011 web	1	5	7	7	7	10	10	13	11	8	20	6.31
2010 web	2	4	6	6	6	15	9	11	11	11	18	6.33
2009 web	2	5	8	5	5	12	10	12	12	9	20	6.42
2008 comb	2	5	7	7	5	13	8	13	12	7	21	6.28
2007 web	1	4	7	6	8	13	10	12	12	10	17	6.29
2006 comb	2	5	6	7	7	14	9	10	13	7	21	6.36

(2014 vs. 2013: $p = .1300$)

e23_nrsk3 A terrorist attack at a U.S. nuclear power plant within the next 20 years that results in the release of large amounts of radioactivity.

	No Risk										Extreme Risk	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	3	4	5	5	11	8	12	13	11	27	7.06
2013 web	1	3	5	5	5	10	9	13	15	10	24	6.93
2012 web	2	4	5	6	5	14	10	13	11	9	21	6.57
2011 web	1	3	5	6	6	10	9	12	13	10	24	6.84
2010 web	2	3	4	5	5	14	8	12	13	10	24	6.79
2009 web	1	4	6	6	5	13	7	10	14	9	25	6.69
2008 comb	2	4	6	6	6	12	10	11	12	8	23	6.52
2007 web	1	2	4	5	5	12	10	13	13	12	23	6.92
2006 comb	2	3	4	5	6	12	9	11	12	9	27	6.90

(2014 vs. 2013: $p = .2710$)

e24_nrsk4 The diversion of nuclear fuel from a nuclear power plant in the U.S. within the next 20 years for the purpose of building a nuclear weapon.

	No Risk										Extreme Risk	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	5	4	6	6	5	14	10	10	11	10	18	6.14
2013 web	3	7	7	7	5	13	9	13	11	8	16	5.95
2012 web	4	7	8	7	6	14	9	12	11	6	15	5.68
2011 web	3	7	8	7	7	13	9	12	9	7	17	5.79
2010 web	4	7	7	7	8	14	9	10	10	8	15	5.75
2009 web	6	7	7	6	7	15	10	10	8	8	17	5.73
2008 comb	5	7	7	8	6	14	9	13	10	5	17	5.72
2007 web	4	5	9	7	8	14	11	9	12	7	13	5.71
2006 comb	5	6	8	8	6	15	8	9	9	6	19	5.81

(2014 vs. 2013: $p = .1522$)

Next we want to know about your beliefs concerning some of the possible *benefits* associated with nuclear energy use in the U.S. Please evaluate the benefits associated with each of the following on a scale from zero to ten, where zero means *not at all beneficial* and ten means *extremely beneficial.* [e25–e28 Randomized]

e25_nben1 Reducing environmental threats because the generation of nuclear energy produces much less of the greenhouse gases that are believed to cause climate change

	Not At All Beneficial										Extremely Beneficial	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	1	4	3	4	13	12	15	16	10	19	6.82
2013 web	2	2	2	3	5	16	12	15	16	12	15	6.80
2012 web	2	1	2	3	6	16	11	16	16	12	15	6.81
2011 web	2	2	2	4	5	17	11	15	16	11	16	6.74
2010 web	2	1	2	3	5	14	10	13	16	13	20	7.04
2009 web	3	1	2	3	4	14	10	13	16	12	23	7.14
2008 comb	2	1	2	2	6	17	10	13	17	9	22	7.00
2007 web	1	0	0	2	4	15	13	17	16	13	19	7.24
2006 comb	3	1	2	2	4	15	10	13	19	10	21	7.03
2013 web	2	2	2	3	7	17	11	15	16	10	15	6.72

(2014 vs. 2013: $p = .8392$)

e26_nben2 Reliable power because nuclear energy generates large amounts of electricity and is not affected by weather conditions, such as low rainfall or no wind.

	Not At All Beneficial										Extremely Beneficial	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	2	1	3	3	4	13	11	13	17	12	21	7.07
2013 web	2	1	2	3	4	14	11	15	19	13	16	6.95
2012 web	2	1	2	4	5	15	11	16	16	12	16	6.93
2011 web	2	1	2	3	6	15	11	15	17	11	17	6.91
2010 web	2	1	1	2	5	14	9	13	17	13	22	7.20
2009 web	1	2	1	2	4	14	10	15	16	13	23	7.27
2008 comb	2	1	1	2	5	13	11	13	17	10	24	7.20
2007 web	1	0	1	1	3	14	12	19	17	14	18	7.31
2006 comb	2	1	2	3	3	12	10	16	18	11	22	7.22

(2014 vs. 2013: p = .2747)

e27_nben3 Greater U.S. energy independence because nuclear energy production does not require oil or gas from foreign sources.

	Not At All Beneficial										Extremely Beneficial	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	1	2	3	3	13	10	12	15	13	25	7.22
2013 web	2	1	2	2	4	12	11	14	17	13	21	7.22
2012 web	2	1	2	3	5	13	10	16	15	13	20	7.10
2011 web	2	1	2	3	5	12	10	15	16	12	21	7.09
2010 web	2	1	1	2	5	13	9	13	17	12	25	7.37
2009 web	1	1	2	2	4	13	9	12	16	14	26	7.43
2008 comb	2	1	1	1	4	13	9	15	16	10	27	7.33
2007 web	1	0	1	1	2	16	9	16	18	14	22	7.47
2006 comb	2	1	2	2	2	14	9	13	20	11	24	7.31

(2014 vs. 2013: p = .9741)

e28_nben4 Reduced environmental damage because of less need for mining coal or extracting oil and gas.

	Not At All Beneficial										Extremely Beneficial	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	2	2	4	4	4	12	11	13	15	13	21	6.95
2013 web	2	1	2	3	5	13	11	15	17	13	17	7.02
2012 web	2	1	3	4	5	15	10	17	15	12	15	6.81
2011 web	2	1	2	3	5	14	11	18	16	11	17	6.85
2010 web	2	1	2	3	6	12	11	14	16	11	22	7.06
2009 web	2	1	2	2	5	14	10	13	15	13	24	7.21
2008 comb	2	1	2	2	5	14	10	15	17	10	22	7.10
2007 web	1	0	1	2	3	15	10	17	19	13	19	7.33
2006 comb	2	1	2	3	4	15	11	14	17	9	22	7.03

(2014 vs. 2013: p = .5285)

Now please consider the overall balance of these possible risks and benefits of nuclear energy in the U.S.

e29_riskben Using a scale from one to seven, where one means the risks of nuclear energy far outweigh its benefits, four means the risks and benefits are equally balanced, and seven means the benefits of nuclear energy far outweigh its risks, how do you rate the overall balance of the risks and benefits of nuclear energy in the U.S.? Remember, you can choose any number from one to seven.

	Risks > Benefits			Risks/Benefits Balanced			Benefits > Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	8	10	15	27	19	13	8	4.09
2013 web	7	8	18	30	19	12	6	4.06
2012 web	5	8	15	35	19	10	7	4.11
2011 comb	7	6	14	30	19	13	11	4.29
2010 comb	6	6	11	29	19	13	16	4.53
2009 web	7	5	13	32	18	13	12	4.39
2008 comb	6	5	12	32	18	13	14	4.48
2007 web	4	4	11	35	21	15	10	4.52
2006 comb	7	6	10	29	21	13	13	4.41

(2014 vs. 2013: p = .6666)

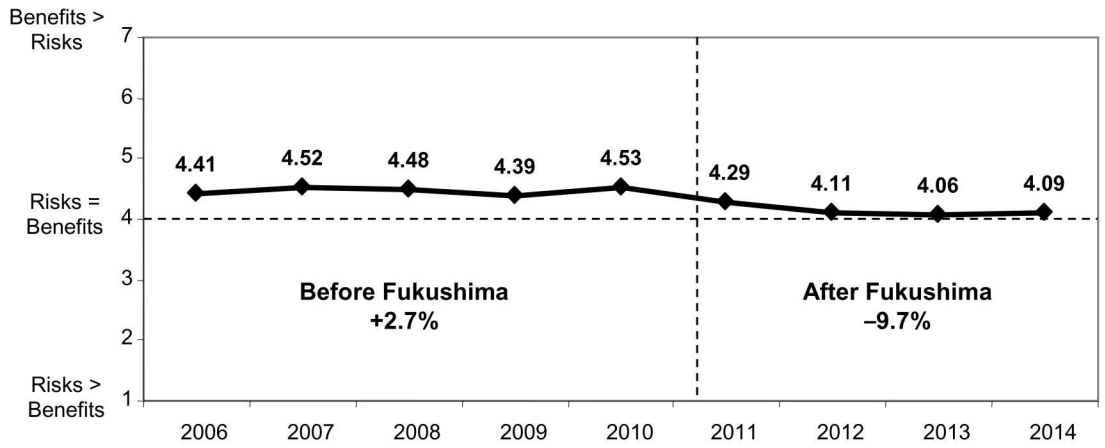

Figure 7: Trends in Balance of Nuclear Energy Risks and Benefits

e30_new1 Using a scale from one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about constructing additional nuclear reactors at the sites of existing nuclear power plants in the U.S.?

%	Strongly Oppose 1	2	3	4	5	6	Strongly Support 7	Mean
2014 web	14	9	16	22	20	10	9	3.90
2013 web	13	10	15	24	20	7	10	3.90
2012 web	11	9	15	27	19	10	8	3.96
2011 comb	15	8	15	22	19	10	12	3.99
2010 comb	11	7	9	21	19	14	19	4.47
2009 web	11	7	9	24	18	13	18	4.41
2008 comb	11	7	12	23	19	11	17	4.33
2007 web	7	7	12	25	21	16	12	4.45
2006 comb	14	7	10	18	19	14	18	4.31

(2014 vs. 2013: p = .9350)

e31_new2 Using the same scale from one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about constructing additional nuclear power plants at new locations in the U.S.?

%	Strongly Oppose 1	2	3	4	5	6	Strongly Support 7	Mean
2014 web	18	12	16	17	19	9	9	3.70
2013 web	17	12	15	22	17	7	10	3.72
2012 web	15	11	15	22	18	10	9	3.82
2011 comb	19	10	14	18	17	10	12	3.79
2010 comb	15	9	10	20	16	12	18	4.22
2009 web	14	8	10	21	16	13	18	4.30
2008 comb	13	9	12	21	18	11	17	4.20
2007 web	8	9	13	22	20	14	14	4.32
2006 comb	20	9	11	18	14	11	17	3.99

(2014 vs. 2013: p = .7987)

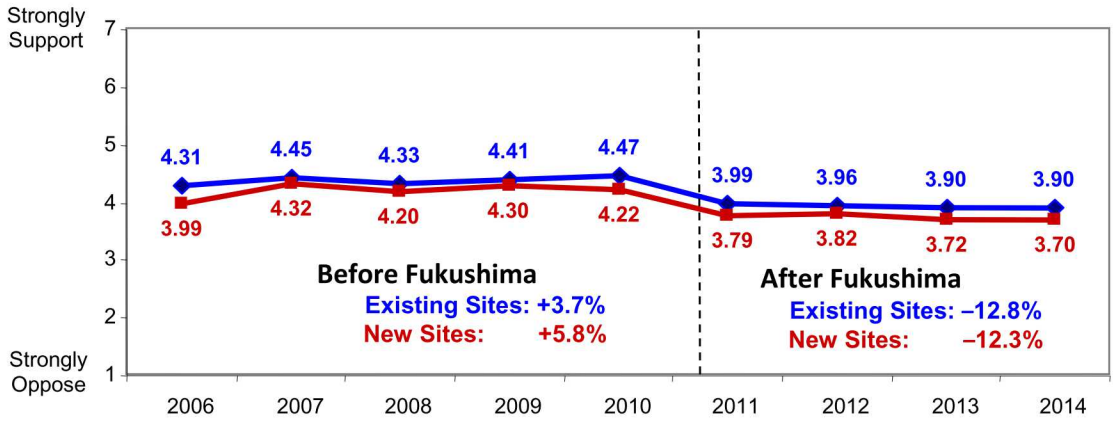

Figure 8: Trends in Support for New Reactors at Existing and New Sites

e32_near To the best of your knowledge, is your primary residence located within approximately 100 miles of an operating nuclear power plant?

%	No 0	Yes 1	Don't Know 2	Correct	Incorrect/DK
2014 web	42	29	29	45	55
2013 web	42	31	27	47	53
2012 web	42	23	35	45	55
2011 web	46	34	20	N/A	N/A
2010 web	44	32	24	N/A	N/A

e33_disp As nuclear fuel is used to generate electricity, it becomes contaminated with radioactive byproducts. When it can no longer efficiently produce electricity, it is called "used" or "spent" nuclear fuel. To the best of your knowledge, what is currently being done with most of the used nuclear fuel produced in the U.S.? [Randomized]

%	2014 web	2013 web	2012 web	2011 comb	2010 comb	2009 web	2008 comb	2007 web	2006 comb
1. Stored in cooling pools or special containers at nuclear power plants throughout the U.S.	35	39	39	41	32	25	23	24	22
2. Shipped to Nevada and stored in a facility deep underground	24	23	22	25	29	32	34	30	36
3. Chemically reprocessed and reused	17	15	15	12	15	17	16	14	13
4. Shipped to regional storage sites	24	23	24	23	24	26	27	32	29

Now we need to provide essential information for you to consider before answering additional questions. We ask that you read the following three paragraphs carefully so that everyone taking the survey has the same minimum level of factual information.

Used nuclear fuel is highly radioactive and must be safeguarded for thousands of years or chemically reprocessed, which is not economically feasible in the U.S. today. In 2010 the government halted construction of a deep underground facility inside Yucca Mountain in Nevada that had been intended for permanent storage and disposal of used nuclear fuel.

Currently, used nuclear fuel in the U.S. is stored at more than 100 temporary storage sites in 39 states. This used fuel is stored in cooling pools "on-site" at nuclear power plants and decommissioned facilities. As part of the nation's used nuclear fuel storage policy, the government is trying to decide whether this used fuel should continue to be stored on-site, or whether it should be transported to interim storage facilities until a permanent repository can be constructed.

e34_UNFprox: To the best of your knowledge, is your primary residence located within approximately 100 miles of a site where used nuclear fuel is being stored?

	No	Yes	Don't Know		
%	0	1	2	Correct	Incorrect/DK
2014 web	37	13	50	25	75

Table 2: Public Awareness and Knowledge of the U.S. Nuclear Fuel Cycle

Knowledge Measure	% Correct Responses
Is your primary residence located within approximately 100 miles of an operating nuclear power plant?	45
What currently is being done with most of the used nuclear fuel produced in the U.S.? (Correct answer: temporary on-site storage)	35
Is your primary residence located within approximately 100 miles of a site where used nuclear fuel is being stored?	25
Have you heard or read about the Waste Isolation Pilot Plant (WIPP), located in southeastern New Mexico?	8

[Random order for grouped sets of bulleted arguments] NOTE: wording was modified in 2014

Key arguments that are made FOR current "on-site" storage practices include the following:

- Keeping the used nuclear fuel at current facilities until a permanent repository is constructed would ensure that the radioactive materials have to be moved only once instead of twice.
- Packaging and transportation of used nuclear fuel from nuclear facilities to interim storage facilities is risky.
- Storing fuel "on-site" at nuclear facilities are less expensive than building interim storage facilities and buys time for finding permanent future solutions.
- Current storage at nuclear power plants has not caused any accidents that have exposed the U.S. public to radiation, and with significant investment, current storage sites can be made safer from terrorists and other threats such as flooding.

Key arguments that are made AGAINST current "on-site" storage practices include the following:

- Storing used nuclear fuel at nuclear facilities does not provide adequate protection from terrorists, and increasing security would require substantial effort, time, and money.
- Some nuclear power plants where used nuclear fuel is stored are near rivers and oceans where flooding is possible, and many are near large population centers, making huge numbers of U.S. residents vulnerable to risks from flooding and other accidents. On rare occasions, used nuclear fuel has leaked radiation into the cooling pools.
- Large volumes of these materials are accumulating that require expensive security; yet current practices do not provide a permanent solution.
- Some of these sites have been dismantled or shutdown, resulting in "stranded" used nuclear fuel. Expensive security measures must be maintained to protect these stored nuclear materials. Interim storage facilities could help consolidate this used fuel.

e35_opt1 Using a scale from one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about the current practice of storing used nuclear fuel at or near nuclear power plants?

%	Strongly Oppose 1	2	3	4	5	6	Strongly Support 7	Mean
2014 web	14	11	18	31	16	6	4	3.57
2013 web	13	13	23	29	15	4	3	3.44
2012 web	12	12	21	31	16	5	3	3.53
2011 web	14	12	22	29	16	5	2	3.42
2010 web	12	11	17	33	18	5	4	3.68
2009 web	13	10	23	30	15	4	5	3.56
2008 comb	14	12	19	29	15	5	6	3.58
2007 web	10	10	20	37	16	4	3	3.62
2006 comb	16	9	19	26	17	6	7	3.66

(2014 vs. 2013: p = .0500)

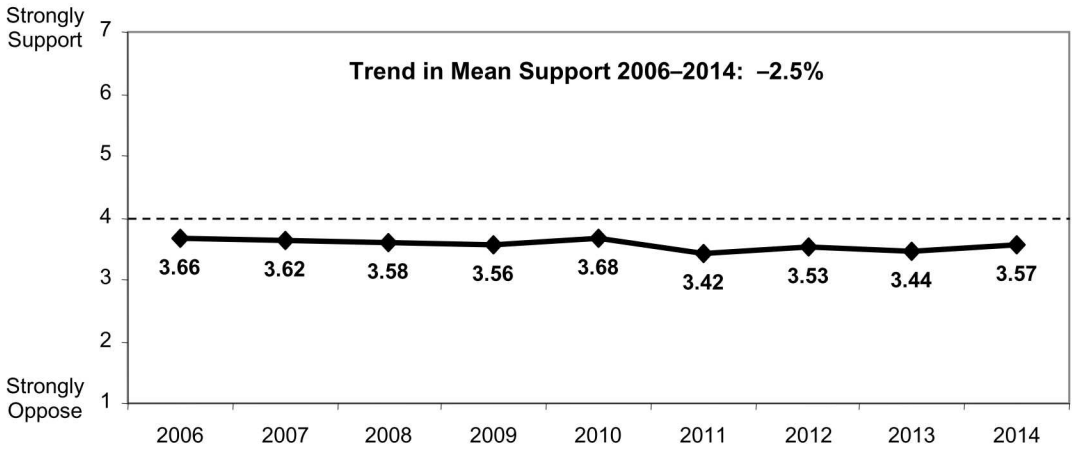

Figure 9: Support for Continued On-Site Storage of UNF

Based on the location information you provided, we estimate that your primary residence is approximately [insert estimate] miles (straight line) from the nearest nuclear energy facility where used nuclear fuel currently is in temporary storage. Our estimate could be imprecise, but you can see the big picture by looking at this map showing where used nuclear fuel currently is being stored in the U.S.

[map of U.S. storage sites shown here]

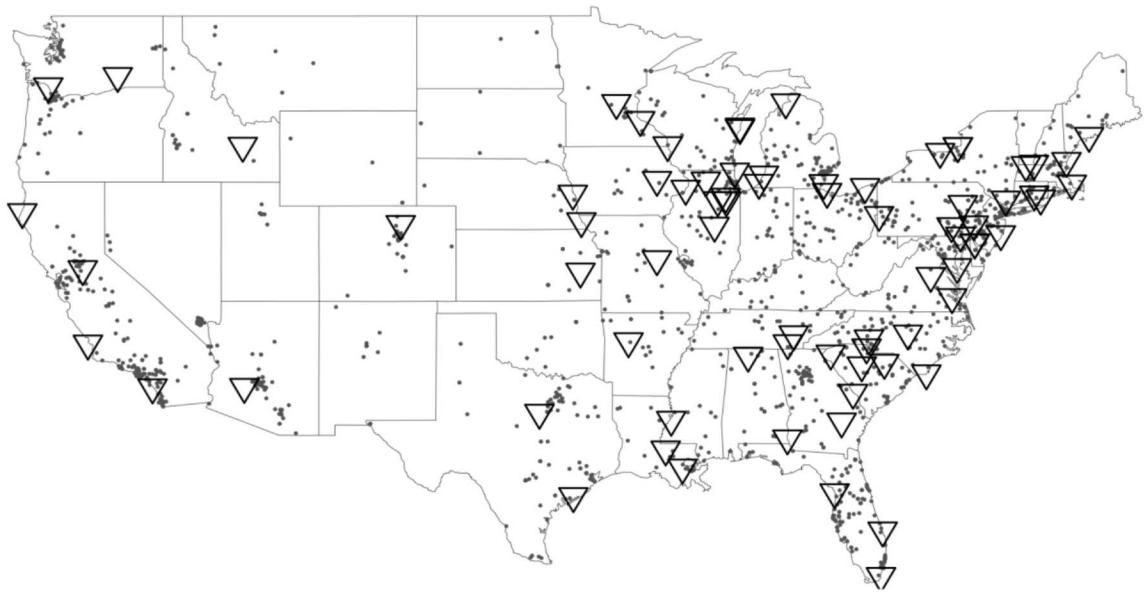

Figure 10: Location of EE14 Respondents and Temporary UNF Storage. About 76% of population and 2014 respondents reside within 100 miles of a UNF storage site, while 44% of the population and 42% of 2014 respondents reside within 50 miles.

Though nuclear power plants will continue to store some used nuclear fuel in their cooling pools, much of the radioactive materials currently at more than 100 temporary storage sites in 39 states could be consolidated at a smaller number of facilities. The President's Blue Ribbon Commission on America's Nuclear Future recognized that constructing underground repositories for permanent storage and disposal of used nuclear fuel will take decades, and the Commission recommended building interim storage sites in the next 10-15 years where used nuclear fuel could be consolidated, stored, and better secured while one or more permanent nuclear repositories are being developed. These interim storage sites would meet all technical and safety requirements set by the U.S. Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, and state regulatory agencies.

[Random order for grouped sets of bulleted arguments]

Key arguments that are made FOR interim storage sites include the following:

- Interim sites can be constructed sooner (within 10-15 years) to safely store used nuclear fuel for up to a hundred years, which is longer than feasible for temporary storage at nuclear power plants, and allow more time to develop permanent repositories.
- Interim sites would consolidate used nuclear fuel while providing better protection from terrorists and allowing the radioactive materials to cool and be packaged for eventual shipment to a permanent repository.
- Interim sites would reduce the growing amount of radioactive materials currently being stored at nuclear power plants, many of which are near large population centers, rivers, and oceans where flooding is possible.
- Interim sites would allow removal of "stranded" used nuclear fuel from ten sites and eventually other sites where nuclear reactors have been dismantled or shutdown, but expensive security measures must be continued to protect the stored nuclear materials. Those savings could partially pay for constructing interim storage sites.

Key arguments that are made AGAINST interim storage sites include the following:

- Building interim sites might lead to delaying the more politically difficult solution of building permanent repositories, which may take 30 or 40 years to construct.
- Transporting used nuclear fuel by barge, train, or truck to interim sites is more risky than continuing temporary storage at the sites of operating or dismantled nuclear power plants.
- Expanding current "on-site" storage practices at or near *existing* operational nuclear power plants is cheaper and politically more acceptable than building consolidated interim storage facilities.
- No members of the public have yet been harmed by current practices for temporarily storing used nuclear fuel, and even though many of today's sites are near large population centers, security can be improved to reduce the risks of terrorist attacks and flooding.

e36_intspt: Using a scale from one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about constructing one or more interim storage facilities for consolidating used nuclear fuel in the U.S.?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014 web	10	8	15	27	23	11	7	4.04
2013 web	7	8	15	28	25	10	7	4.15

(2014 vs. 2013: p = .0993)

Now assume that this interim storage facility is to be located (random: 50, 100, 150, 200, 250, 300) miles from your primary residence.

e37_baseprox: Using the same scale, how do you feel about constructing this interim storage facility?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014: All	16	9	16	27	18	9	5	3.68
2014: 50	23	11	17	23	15	8	3	3.34
2014: 100	15	8	18	29	18	7	4	3.64
2014: 150	20	10	14	28	17	7	4	3.50
2014: 200	16	7	13	31	20	8	5	3.73
2014: 250	10	8	18	28	17	12	8	3.98
2014: 300	12	10	18	24	20	10	6	3.85
2013: All	12	9	14	24	24	9	9	3.99
2013: 50	19	12	16	23	17	3	10	3.55
2013: 100	10	12	17	22	30	5	4	3.82
2013: 150	11	10	18	20	19	8	14	4.02
2013: 200	15	8	12	23	24	7	11	3.98
2013: 250	7	5	9	33	21	17	8	4.38
2013: 300	11	8	12	20	31	11	7	4.11

(2014 (All) vs. 2013 (All): p = .0013)

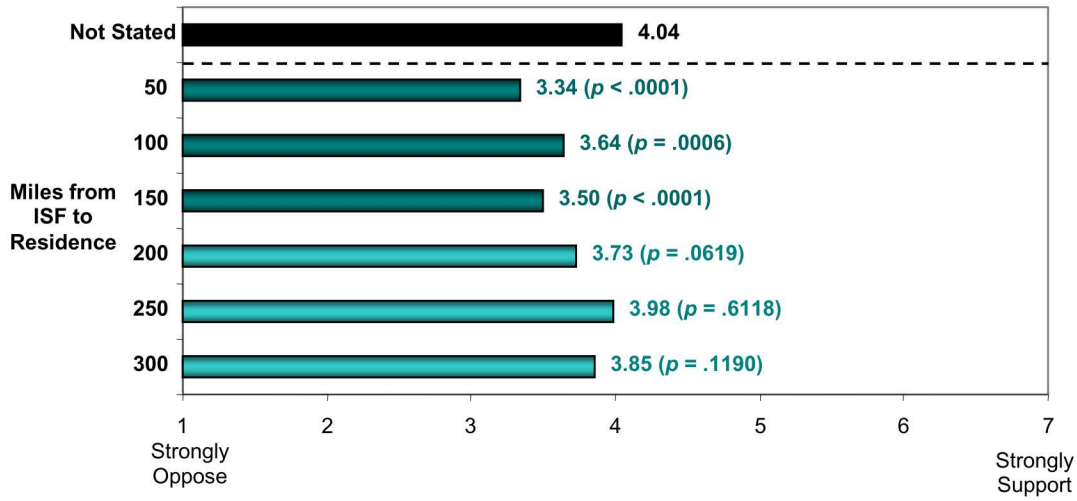

Figure 11: Support for Basic ISF Concept Before and After Being Told Hypothetical Proximity

Table 3: Estimated Effects of Current Proximity to UNF and Distance from Prospective ISF

	Distance to Prospective ISF			
Mean Estimated Support (1=Strongly oppose, 7=Strongly support)	**50 Miles**	**100 Miles**	**200 Miles**	**300 Miles**
Proximity to Existing UNF Storage				
Reside 25 miles from existing UNF	3.51	3.62	3.84	4.06
Reside 50 miles from existing UNF	3.46	3.57	3.79	4.00
Reside 75 miles from existing UNF	3.41	3.51	3.73	3.95
Reside 100 miles from existing UNF	3.35	3.46	3.68	3.90

Government officials are deciding how to proceed on storing used nuclear fuel in the U.S.

- Their decision on how these materials should be stored could cost you money. For example:
  - Continuing to store used nuclear fuel at nuclear power plants would require heightened security measures and expanding current practices, which is expensive and could mean higher taxes.
  - Construction of interim storage facilities and transportation of used nuclear fuel to the facilities is expensive and could mean higher taxes.

START SPLIT C/D (testing willingness to pay for storage options)

Government officials will consider many factors when deciding how to store used nuclear fuel. One factor is whether various options are personally worthwhile to people like you. In the next question, we will describe the effects of two specific options being considered for storage of used nuclear fuel. We would like you to tell us which of these two options you would prefer.

People might consider several factors when deciding which option they prefer, including the cost of each option and the expected effects of each option.

Group C (50%): Current practices vs. base ISF

Option 1	Option 2
Used nuclear fuel would continue to be stored "on-site" at nuclear power plants. As a reminder:	**Used nuclear fuel would be transported to and stored at an interim storage facility**. As a reminder:
"On-site" storage is less expensive in the near-term than building an interim storage facility.	Building an interim storage facility is more expensive in the near-term than continuing "on-site" storage.
"On-site" storage is more expensive in the long-term than building an interim storage facility because safety measures must be updated to keep the used nuclear fuel secure at over 100 sites scattered across the country.	Building an interim storage facility is less expensive in the long-term than continuing "on-site" storage because the used nuclear fuel would be stored in a centralized location with state-of-the-art security measures.
"On-site" storage is more vulnerable to risks such as flooding and terrorist attacks than an interim storage facility would be.	An interim storage facility would be less vulnerable to risks such as flooding and terrorist attacks than "on-site" storage.
"On-site" storage is less vulnerable to risks associated with transporting used nuclear fuel by barge, train, or truck than an "off-site" interim storage facility would be.	An "off-site" interim storage facility is more vulnerable to risks associated with transporting used nuclear fuel by barge, train, or truck than "on-site" storage.
Option 1	Option 2

e38C_vote: Think about a situation in which you had an opportunity to vote for Option 1 or Option 2. Keeping in mind all of the potential effects described for each option above, and if adoption of either option would not cost you anything, would you vote for Option 1 or Option 2?

	On-Site	Interim Storage	Neither
2014 web-C	32	45	23

Group D (50%): Current practices vs. repackaging and lab ISF

Option 1	Option 2
Used nuclear fuel would continue to be stored "on-site" at nuclear power plants. As a reminder:	**Used nuclear fuel would be transported to and stored at an interim storage facility**. As a reminder:
"On-site" storage is less expensive in the near-term than building an interim storage facility.	Building an interim storage facility is more expensive in the near-term than continuing "on-site" storage.
"On-site" storage is more expensive in the long-term than building an interim storage facility because safety measures must be updated to keep the used nuclear fuel secure at over 100 sites scattered across the country.	Building an interim storage facility is less expensive in the long-term than continuing "on-site" storage because the used nuclear fuel would be stored in a centralized location with state-of-the-art security measures.
"On-site" storage is more vulnerable to risks such as flooding and terrorist attacks than an interim storage facility would be.	An Interim storage facility would be less vulnerable to risks such as flooding and terrorist attacks than "on-site" storage.
"On-site" storage is less vulnerable to risks associated with transporting used nuclear fuel by barge, train, or truck than an "off-site" interim storage facility would be.	An "off-site" interim storage facility is more vulnerable to risks associated with transporting used nuclear fuel by barge, train, or truck than "on-site" storage.
"On-site" storage facilities are not designed to repackage used nuclear fuel for long-term storage and disposal in a permanent repository.	An interim storage facility could be designed to repackage used nuclear fuel for long-term storage and disposal in a permanent repository.
"On-site" storage facilities do not include capabilities to study the characteristics of spent nuclear fuel over time, options for storage and permanent disposition, and alternative methods for managing high-level, long-lived radioactive materials.	An interim storage facility could include a research laboratory to study the characteristics of spent nuclear fuel over time, options for storage and permanent disposition, and alternative methods for managing high-level, long-lived radioactive materials.
Option 1	Option 2

e38D_vote: Think about a situation in which you had an opportunity to vote for Option 1 or Option 2. Keeping in mind all of the potential effects described for each option above, and if adoption of either option would not cost you anything, would you vote for Option 1 or Option 2?

	On-Site	Interim Storage	Neither
2014 web-D	23	52	25

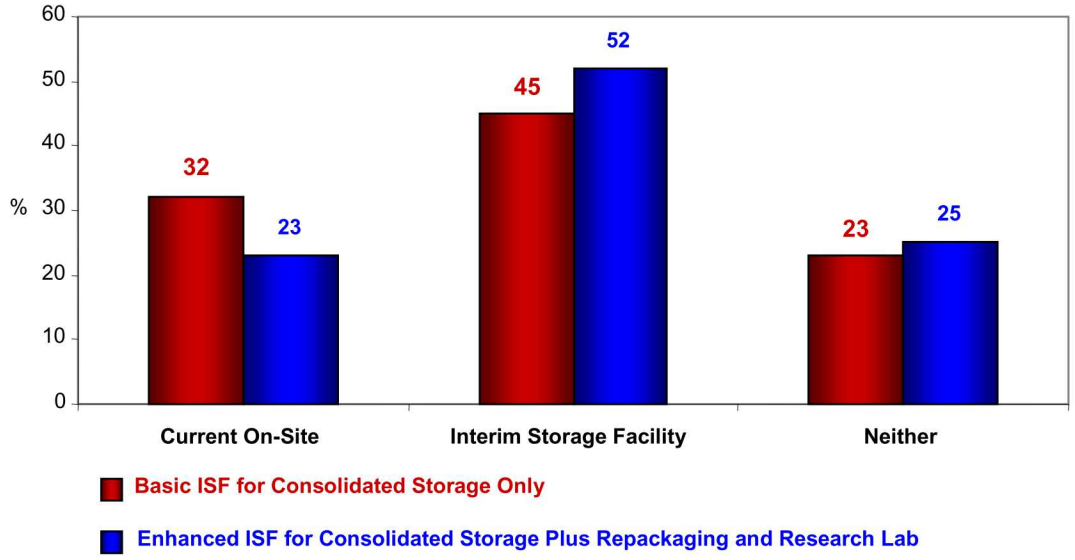

Figure 12: Preferred Options for Interim Storage Facility vs. On-Site Storage

END SPLIT C/D

The option you chose will be more expensive to operate in the long-term/in the near-term ("on-site" storage option gets long-term, interim storage option gets near-term), and will increase the cost to taxpayers. The tax would be added to your electricity bill. As a taxpayer, would you vote for this option? *As you think about your answer, please remember that if this proposal passes, you would have less money for household expenses, charities, groceries, or car payments.*

e39_cv: Would you vote for this option if adoption of this option would cost your household $__ in increased taxes every year for the foreseeable future?

	Definitely No	Probably No	Not Sure	Probably Yes	Definitely Yes	
	1	2	3	4	5	Mean
2014: ALL	19	16	29	28	8	2.90
2014: $12	11	10	27	36	16	3.36
2014: $24	20	9	24	33	14	3.12
2014: $72	12	15	41	27	5	2.97
2014: $120	19	15	29	28	8	2.90
2014: $360	24	18	26	29	3	2.71
2014: $780	20	21	29	25	5	2.75
2014: $1200	30	21	30	16	3	2.41

e39_cv (split design C only: basic ISF)

	Definitely No	Probably No	Not Sure	Probably Yes	Definitely Yes	Mean
	1	2	3	4	5	
2014: ALL-C	20	16	26	29	8	2.89
2014: $12	7	14	27	35	17	3.41
2014: $24	20	9	20	35	16	3.17
2014: $72	10	17	38	31	5	3.05
2014: $120	26	17	22	26	8	2.73
2014: $360	24	16	22	33	5	2.80
2014: $780	17	24	30	26	4	2.75
2014: $1200	38	20	26	15	2	2.22

e39_cv (split design D only: enhanced ISF)

	Definitely No	Probably No	Not Sure	Probably Yes	Definitely Yes	Mean
	1	2	3	4	5	
2014: ALL-D	18	15	33	27	7	2.91
2014: $12	15	7	26	37	15	3.31
2014: $24	19	10	28	31	12	3.06
2014: $72	15	13	45	22	5	2.88
2014: $120	11	14	38	30	8	3.11
2014: $360	23	20	30	25	2	2.62
2014: $780	22	18	28	25	7	2.77
2014: $1200	20	23	36	17	4	2.62

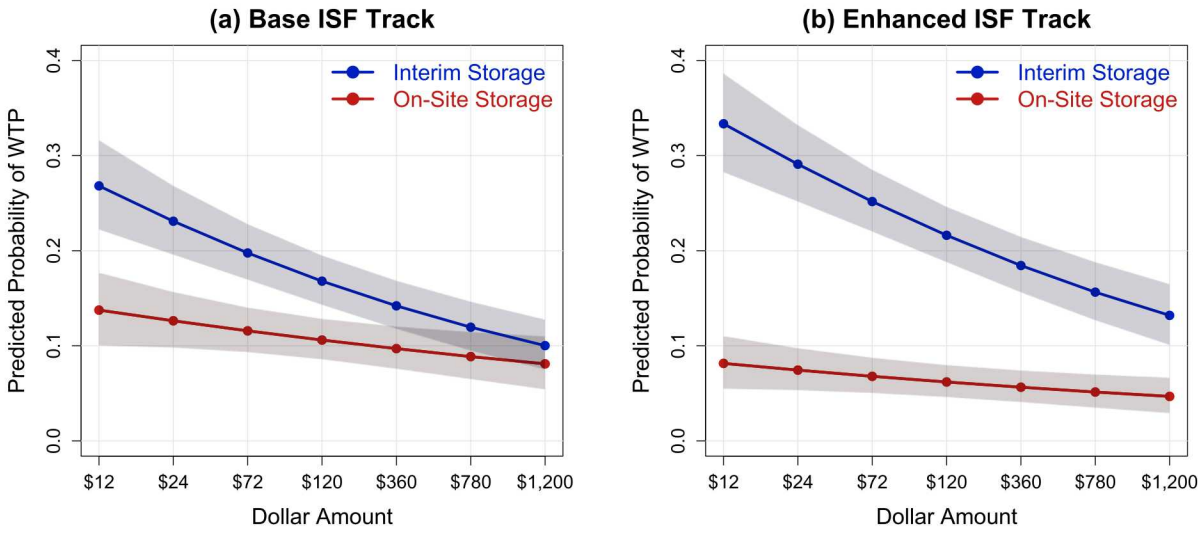

Figure 13: Predicted Willingness to Pay for On-Site Storage vs. ISF

e40_WIPP: Now we want to focus on a different topic. Have you heard or read about the Waste Isolation Pilot Plant (WIPP), located in southeastern New Mexico?

	No	Yes	Unsure
	0	1	2
2014 web	81	8	11

The Waste Isolation Pilot Plant (WIPP) in New Mexico is the only deep geological repository in the U.S. for permanent disposal of certain classes of nuclear waste termed "transuranic materials." These radioactive materials were created during the production of U.S. nuclear weapons and are being buried in salt deposits at depths of about 2,000 feet under the New Mexico desert. The materials stored at WIPP DO NOT include spent nuclear fuel from nuclear power plants. The site has been operational since 1999.

On the evening of February 14, 2014, trace amounts of airborne radioactive materials were discovered above ground near the facility. It was determined that 21 workers were exposed to trace levels of radiation. No deaths or serious injuries have been reported, and no one is known to have been exposed to harmful levels of radiation. Pictures from the underground facility show the lid of a drum of waste burst open in a room that is partially filled with containers of radioactive waste. An open drum could release radioactive material into the air flowing through the repository. The cause of the burst lid in an unsealed room is still under investigation at this time.

e41_WIPP_leak: On a scale from minus ten to plus ten, where minus ten means the recent experience at the Waste Isolation Pilot Plant (WIPP) in New Mexico strongly reduces your support, zero means the WIPP experience has no effect on your support, and ten means the WIPP experience strongly increases your support, how does the recent release of radiation at WIPP affect your support for building regional interim storage facilities to consolidate used nuclear fuel from more than 100 widely distributed sites in 39 states across the U.S.?

	Strongly Reduced										No Effect									Strongly Increased		
	–10	–9	–8	–7	–6	–5	–4	–3	–2	–1	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	11	2	5	5	4	4	5	4	6	4	31	1	2	2	2	3	2	1	1	0	4	–1.87

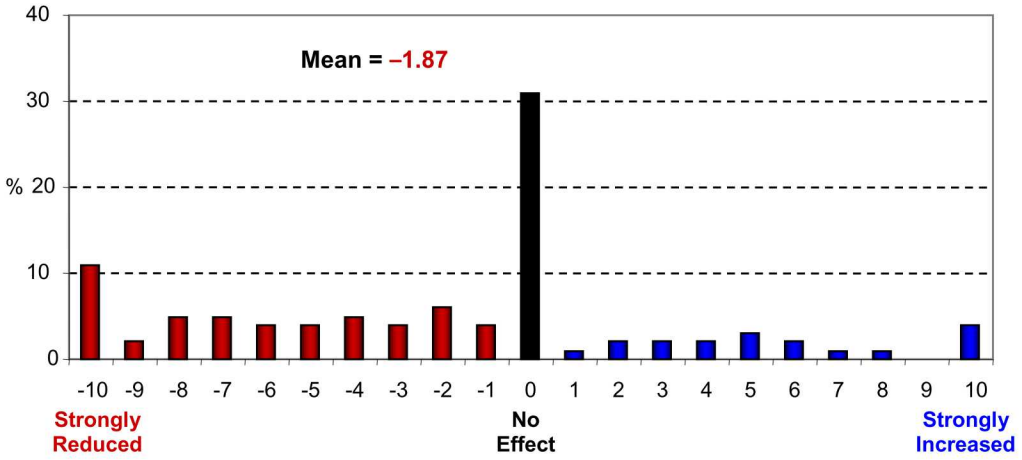

Figure 14: Implications of WIPP Incident for Support of Interim Storage Facility

Managing used nuclear fuel can be technically complex, and getting information you can trust is important. Please indicate your level of trust in information provided by science and engineering experts from each of the following organizations using a scale from zero to ten, where zero means *not trust* and ten means *complete trust.*

[Random Order: e42_NRC_trust—e51E/F_fedcorp_trust]

e42_NRC_trust The U.S. Nuclear Regulatory Commission

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	8	3	6	4	8	19	13	12	12	9	6	5.57
2012 web	5	3	4	6	8	17	13	14	14	10	7	5.87
2011 web	6	3	5	6	9	20	11	15	13	7	5	5.49
2010 web	6	3	5	6	9	21	11	13	13	7	6	5.56

(2014 vs. 2012: p = .0002)

e43_EPA_trust: The U.S. Environmental Protection Agency

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	8	3	5	5	6	14	13	13	14	11	8	5.77
2012 web	7	3	4	4	7	15	13	14	14	10	9	5.95
2011 web	7	3	6	6	8	18	12	14	13	7	6	5.54
2010 web	8	4	6	5	8	18	12	12	14	7	7	5.55

(2014 vs. 2012: p = .0772)

e44_labs_trust: U.S. national laboratories for energy and security

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	5	3	4	5	7	19	14	14	15	8	6	5.81
2012 web	4	2	4	4	8	18	14	15	16	10	6	6.04
2011 web	5	3	4	6	10	21	13	15	13	7	4	5.63
2010 web*	9	5	6	7	11	20	11	12	10	5	5	5.00

*U.S. government-owned energy and national security laboratories. (2014 vs. 2012: p = .0035)

e45_NAS_trust: The National Academy of Sciences

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	4	2	3	3	6	17	12	15	18	12	9	6.40
2012 web	3	2	2	3	8	17	12	15	16	12	9	6.38
2011 web	3	2	3	5	8	20	12	14	16	9	7	6.08
2010 web	4	2	4	5	9	20	12	14	15	9	7	5.98

(2014 vs. 2012: p = .5093)

e46_state_trust: State regulatory agencies

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	8	4	6	8	8	21	14	11	11	6	4	5.18
2012 web	6	4	5	8	11	21	13	13	10	6	4	5.22
2011 web	7	5	7	9	11	23	12	11	9	4	3	4.89
2010 web	8	4	7	9	11	21	13	11	8	4	3	4.81

(2014 vs. 2012: p = .4974)

e47_NGO_trust: Environmental advocacy groups, such as the National Resources Defense Council or the Sierra Club

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	7	4	6	5	7	19	13	14	12	7	6	5.50
2012 web	8	4	5	6	9	17	12	11	13	8	7	5.51
2011 web	10	4	5	7	10	20	12	12	11	6	4	5.10
2010 web	10	5	6	6	9	19	10	12	11	6	6	5.16

(2014 vs. 2012: p = .1992)

e48_NEI_trust: The Nuclear Energy Institute, which represents the nuclear power industry

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	9	5	7	7	10	19	11	11	10	6	5	5.02
2012 web	8	5	6	8	11	17	10	12	10	7	5	5.13
2011 web	8	5	7	8	10	21	11	12	10	5	3	4.93
2010 web	8	4	5	7	11	21	12	12	11	5	5	5.14

(2014 vs. 2012: p =.1219)

e49_util_trust: Utility companies that own nuclear power plants

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	13	7	10	9	10	17	10	9	8	4	3	4.32
2012 web	12	7	9	10	11	16	12	9	7	4	3	4.39
2011 web	12	8	10	9	12	19	10	8	6	3	2	4.17

(2014 vs. 2012: p = .3873)

e50_DOE_trust: The U.S. Department of Energy

	No Trust										Complete Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	7	4	6	5	7	18	14	13	12	8	6	5.45
2012 web	6	3	4	5	8	19	13	14	13	8	6	5.72
2011 web	7	3	4	8	10	20	12	14	12	6	4	5.40

(2014 vs. 2012: p = .0021)

START SPLIT E/F: Testing Fedcorp concepts (paired with Split G/H, so that a respondent gets Split E & G or Split F & H)

GROUP E (50%): Fedcorp as a private entity subject to government safety regulations

e51E_fedcorp_priv_trust: A *private* corporation that is partially funded by fees from nuclear energy, and that would be responsible for managing used nuclear fuel from U.S. nuclear power plants. It would be governed by a Board of Directors made up of experts from the nuclear industry, and it would be subject to federal safety regulations.

	No trust										Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web-E	11	5	10	8	10	18	10	8	9	7	4	4.69

GROUP F (50%): Fedcorp as a government entity

e51F_fedcorp_gov_trust: A *federal* corporation chartered by Congress and partially funded by fees from nuclear energy that would be responsible for managing used nuclear fuel from U.S. nuclear power plants. It would be governed by a Board of Directors made up of experts from government, industry, and universities, and it would be subject to federal safety regulations and Congressional oversight.

	No trust										Trust	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web-F	11	5	7	7	11	20	11	9	8	6	4	4.78

(Fedcorp-E vs. Fedcorp-F: p = .5737)

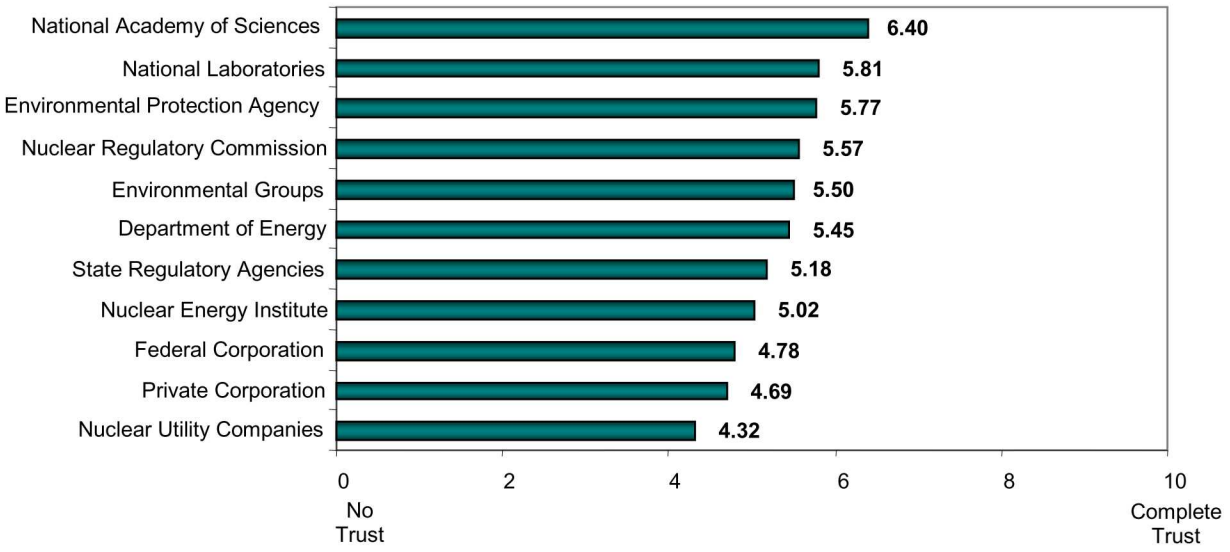

Figure 15: Mean Institutional Trust in Information about Used nuclear fuel

END SPLIT E/F

Now we want to know more about impressions you may have about how these organizations are likely to assess risks associated with managing used nuclear fuel. Using a scale from one to seven, where one means the organization is likely to downplay risks, four means the organization is likely to accurately assess risks, and seven means the organization is likely to exaggerate risks, please rate your impressions of how each organization is likely to assess risks.

[Random Order: e52_NRC_rsk—e61G/H_fedcorp_rsk]

e52_NRC_rsk The U.S. Nuclear Regulatory Commission

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	9	11	22	41	10	4	3	3.54
2013 web	9	8	20	44	12	4	3	3.68
2012 web	6	8	21	45	12	5	3	3.75
2011 web	8	8	23	42	12	5	2	3.61
2010 web	10	8	20	44	10	5	3	3.65

(2014 vs. 2013: $p = .0149$)

e53_EPA_rsk The U.S. Environmental Protection Agency

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	7	6	13	39	20	9	6	4.11
2013 web	4	5	12	37	20	13	9	4.38
2012 web	5	5	13	38	20	10	9	4.29
2011 web	6	5	14	39	19	11	6	4.17
2010 web	7	6	14	39	17	10	7	4.11

(2014 vs. 2013: $p < .0001$)

e54_labs_rsk U.S. national laboratories for energy and security

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	7	8	20	46	12	4	3	3.70
2013 web	5	6	18	51	13	5	3	3.85
2012 web	5	7	18	52	12	4	2	3.81
2011 web	6	6	20	50	12	4	2	3.77
2010 web*	12	11	23	34	10	6	4	3.52

* U.S. government-owned energy and national security laboratories (2014 vs. 2013: $p = .0043$)

e55_NAS_rsk The National Academy of Sciences

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	4	4	12	58	13	6	4	4.04
2013 web	3	4	9	60	16	5	4	4.14
2012 web	3	3	10	58	17	6	3	4.11
2011 web	4	4	12	57	15	5	2	4.02
2010 web	4	3	10	59	15	6	3	4.07

(2014 vs. 2013: $p = .0357$)

e56_state_rsk State regulatory agencies

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	9	9	26	36	13	4	3	3.60
2013 web	6	8	19	41	16	7	3	3.87
2012 web	6	10	25	36	14	6	3	3.74
2011 web	8	10	25	34	16	5	3	3.65
2010 web	11	9	22	33	15	6	4	3.66

(2014 vs. 2013: $p < .0001$)

e57_NGO_rsk Environmental advocacy groups, such as the National Resources Defense Council or the Sierra Club

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	5	4	9	27	22	18	16	4.75
2013 web	3	3	7	27	22	20	19	4.97
2012 web	3	4	8	29	23	17	15	4.81
2011 web	3	3	9	28	22	18	17	4.81
2010 web	4	3	7	29	21	17	19	4.84

(2014 vs. 2013: $p = .0005$)

e58_NEI_rsk The Nuclear Energy Institute, which represents the nuclear power industry

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	18	19	23	26	8	4	2	3.05
2013 web	19	18	20	28	8	3	3	3.11
2012 web	16	16	22	31	9	5	2	3.20
2011 web	17	16	23	31	9	3	2	3.13
2010 web	18	15	21	32	7	4	3	3.18

(2014 vs. 2013: $p = .2757$)

e59_util_rsk Utility companies that own nuclear power plants

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	25	21	23	19	6	3	3	2.80
2013 web	24	23	19	21	6	4	3	2.86
2012 web	22	21	23	22	7	4	2	2.88
2011 web	25	21	21	22	7	3	2	2.79

(2014 vs. 2013: p = .3954)

e60_DOE_rsk The U.S. Department of Energy

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web	9	10	25	37	10	5	4	3.59
2013 web	8	11	21	40	11	5	4	3.65
2012 web	7	8	21	42	13	6	3	3.76
2011 web	8	11	24	38	12	5	3	3.63

(2014 vs. 2013: p = .2635)

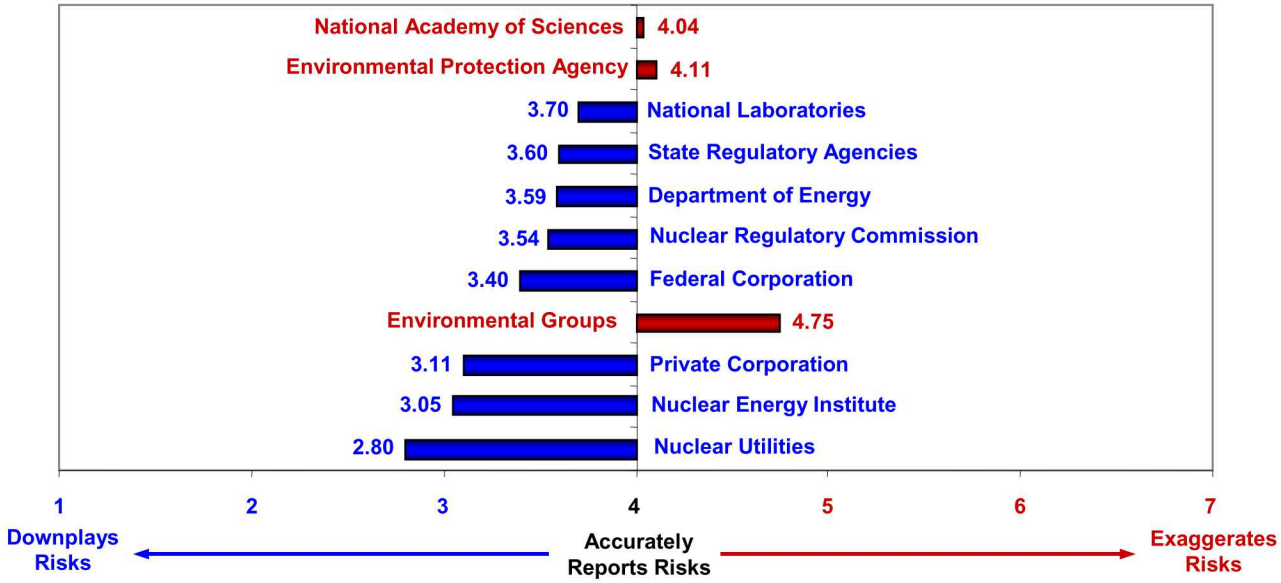

Figure 16: Mean Levels of Perceived Bias in Institutional Risk Assessments

START SPLIT G/H: Testing Fedcorp concepts (paired with Split E/F, so that a respondent gets Split E & G or Split F & H

GROUP G (50%): Fedcorp as a private entity subject to government safety regulations

e61G_fedcorp_priv_rsk: A *private* corporation that is partially funded by fees from nuclear energy, and that would be responsible for managing used nuclear fuel from U.S. nuclear power plants. It would be governed by a Board of Directors made up of experts from the nuclear industry, and it would be subject to federal safety regulations.

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web-G	22	15	21	25	8	5	4	3.11

GROUP H (50%): Fedcorp as a government entity

e61H_fedcorp_gov_rsk: A *federal* corporation chartered by Congress and partially funded by fees from nuclear energy that would be responsible for managing used nuclear fuel from U.S. nuclear power plants. It would be governed by a Board of Directors made up of experts from the government, industry and universities, and it would be subject to federal safety regulations and Congressional oversight.

	Downplay Risks			Accurately Report Risks			Exaggerate Risks	
%	1	2	3	4	5	6	7	Mean
2014 web-H	14	14	19	33	14	3	3	3.40

(Fedcorp-G vs. Fedcorp-H: p = .0092)

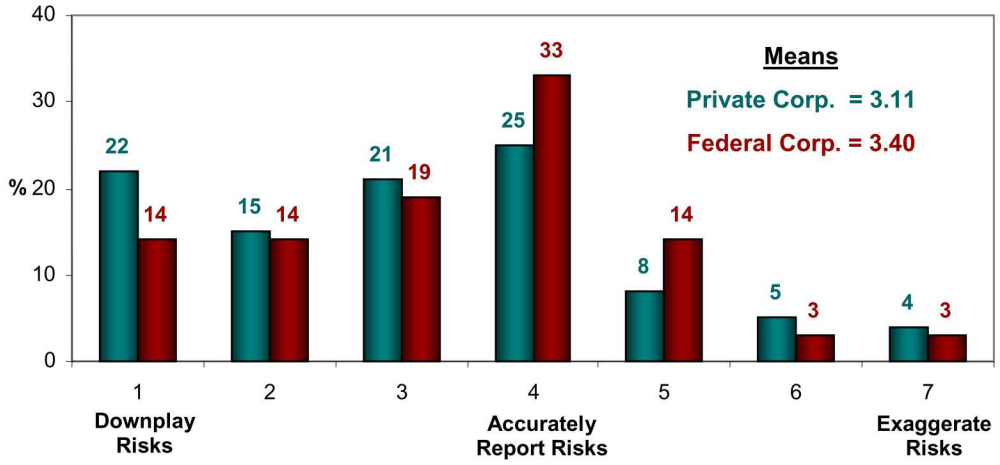

Figure 17: Distribution of Federal vs. Private "Fedcorp" Perceived Risk Bias

END SPLIT G/H

As you may recall, a severe earthquake occurred on March 11, 2011 in the Pacific Ocean near Japan, creating large tidal waves that destroyed some Japanese coastal cities. Also damaged was the Fukushima nuclear power plant, which released radioactivity into the atmosphere and nearby portions of the sea. The earthquake and tidal wave killed thousands of people; the release of radiation at Fukushima is not known to have produced any deaths, but could contribute to future illnesses. We would like to know how the Japanese experience has influenced your confidence in U.S. nuclear power.

e62_Jpn: On a scale from minus ten to plus ten, where minus ten means the Japanese experience has *strongly reduced* your support for U.S. nuclear power production, zero means the Japanese experience has had *no effect* on your support, and plus ten means the Japanese experience has *strongly increased* your support, how have recent events in Japan influenced your support for nuclear power production in the United States?

	Strongly Reduced –10	–9	–8	–7	–6	–5	–4	–3	–2	–1	No Effect 0	1	2	3	4	5	6	7	8	9	Strongly Increased 10	Mean
2014 web	13	4	4	4	4	5	4	6	5	4	34	1	2	1	1	3	2	1	0	0	1	–2.62
2013 web	11	3	4	3	4	4	4	5	5	4	37	2	2	2	2	2	1	1	1	0	2	–1.97
2012 web	9	2	2	3	3	4	3	6	6	6	40	2	2	2	2	2	1	1	1	1	2	–1.44
2011 web	7	2	3	3	3	5	4	5	5	4	39	2	2	2	3	3	2	2	1	1	2	–1.38

(2014 vs. 2013: $p = .0016$)

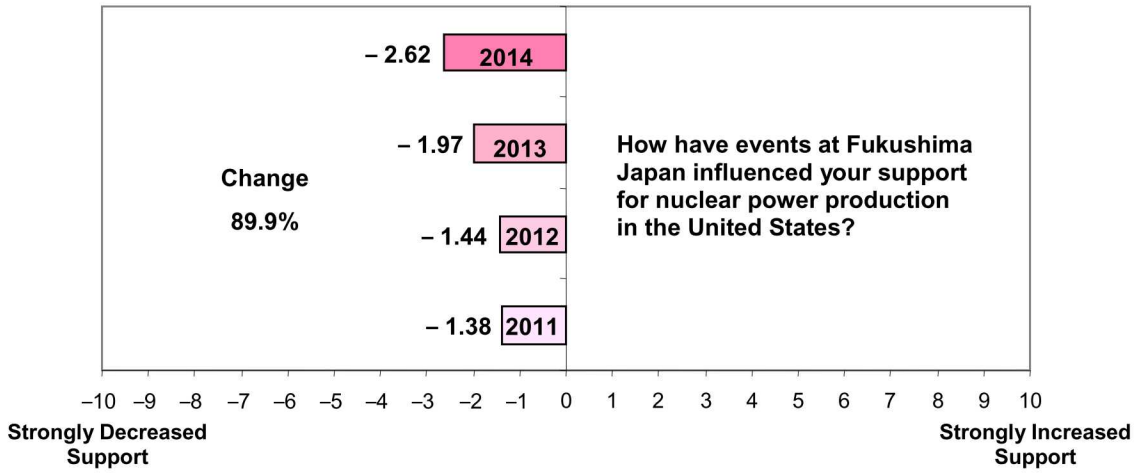

Figure 18: Mean Effects of Fukushima on U.S. Public Support for Nuclear Energy: 2011 through 2014

For purposes of this survey, assume that a small rural community that is about 50 miles from your primary residence in [insert state] has volunteered to be considered for hosting an interim storage facility for used nuclear fuel.

Now we want you to consider the issue of "consent." The primary questions are how consent can be granted and how it can be withdrawn during the site selection process. The siting process involves numerous groups who have a stake in decision making (stakeholders). Among key stakeholders are

a. the host community and those who live near the proposed site;

b. other residents of the host state;

c. residents of bordering or nearby Native American communities;

d. residents of bordering or nearby states;

e. county and state governments, legislatures, tribal authorities, and associated regulatory bodies;

f. federal departments and agencies authorized to oversee the management of radioactive materials;

g. federal environmental protection and regulatory agencies;

h. nongovernmental organizations such as environmental groups;

i. the U.S. Congress which oversees and helps fund nuclear materials management;

j. and the nuclear energy industry whose utility companies generate electricity and produce used nuclear fuel.

e63_need: On a scale where zero means *not at all important* and ten means *extremely important*, how important is it that "consent" must be granted by key stakeholders before siting an interim storage facility for used nuclear fuel?

	Not At All Important										Extremely Important	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	1	0	1	1	3	11	7	12	15	13	37	8.03
2013 web	1	0	0	2	3	12	9	15	17	10	31	7.72
2012 web-K	1	0	1	1	4	13	9	17	16	11	28	7.62

(2014 vs. 2013: p = .0004)

Deciding what constitutes "consent" to build an interim storage facility for used nuclear fuel and deciding which stakeholders should be involved are complex issues. The answers may vary depending on geographical, social, political, and other factors, so a Blue Ribbon Commission appointed by the President recommended that the issue of consent should be negotiated with the volunteer host community and state as part of the siting process.

e64_consent: Again, assume that a small rural community located about 50 miles from your primary residence in [insert state] has volunteered to host an interim storage facility for used nuclear fuel. Which of the following definitions of consent would you most support?

[Random Order]

1 - "Consent" should involve a process where many different stakeholders must agree. Thus consent should require agreement by local elected officials, [insert state]'s governor, both of [insert state]'s U.S. senators, the U.S. congressperson representing the host community, and [insert state]'s environmental protection agencies. In addition, consent should require that, in a state-wide vote, a majority of citizens in [insert state] support siting the interim storage facility.

2 - "Consent" should involve a process where only the elected representatives of those that are most affected must agree. Thus consent should require agreement by local elected officials and [insert state]'s governor.

%	More Inclusive 1	Less Inclusive 2
2014 web	84	16
2013 web	79	21
2012 web-K	56	44

Table 4: Public Responses to What Constitutes Consent

%	**ALL**	Oppose ISF	Support ISF	Liberal	Conserv.	Women	Men
More inclusive process	**84%**	85%	81%	87%	80%	86%	81%
Less inclusive process	**16%**	15%	19%	13%	20%	14%	19%

e65_veto: Please select all those on the following list that you think should be allowed to block or veto the construction of a proposed interim storage facility for used nuclear fuel in [insert state]:

[Random Order]

% Yes	2014 web	2013 web	2012 web-K
1 - The Governor of [insert state]	52	49	54
2 – Either of the two U.S. senators from [insert state]	39	31	33
3 – The U.S. congressperson representing the district in which the host community is located	39	32	35
4 – The leaders of [insert state]'s legislature	39	34	28
5 – Tribal authorities of affected Native American communities	38	N/A	N/A
6 – [insert state]'s environmental protection agency or its equivalent	55	53	48
7 – A majority of the citizens, including those in Native American communities, residing within 50 miles of the proposed facilities	66	68	69
8 – A majority of the voters of [insert state], including affected Native American communities	64	68	56
9 – The U.S. Nuclear Regulatory Commission	43	44	38
10 – The U.S. Environmental Protection Agency	50	50	41
11 – The U.S. Department of Energy	44	44	35
12 – Nongovernmental environmental interest groups in [insert state]	26	21	18

Table 5: Who Should Have Authority to Block/Veto a Siting Decision?

Who should be allowed to block / veto a siting decision for an ISF?	**%**
A majority of citizens, including those in Native American communities, residing within 50 miles of the facility	**66**
A majority of voters in the host state, including affected Native American communities	**64**
Host state environmental protection agency or equivalent	**55**
Governor of the host state	**52**
U.S. Environmental Protection Agency	**50**
U.S. Department of Energy	44
U.S. Nuclear Regulatory Commission	43
Leaders of the host state's legislature	39
U.S. Congressperson representing the host district	39
Either of the two U.S. Senators representing the host state	39
Nongovernmental environmental groups in the host state	26

A related issue involves if and when consent might be withdrawn. The siting process will proceed in stages, and at some point a final decision to build or not to build the facility must be made. Each of these stages requires considerable investment of money and time. Each stage also provides more information for making a good decision. Generally, these stages include:

Step 1: The community or state volunteers to be a candidate to host an interim storage facility for used nuclear fuel, and a technical evaluation of the site is begun. This evaluation may take several years to complete.

e66_step1: Should the host state and local community be allowed to withdraw their consent during this stage?

	No	Yes
%	0	1
2014 web	21	79
2013 web	24	76
2012 web-K	24	76

Step 2: Technical evaluation of the suitability of the site for interim storage of used nuclear fuel is completed.

e67_step2: Should the host state and local community be allowed to withdraw their consent at this stage?

	No	Yes
%	0	1
2014 web	23	77
2013 web	28	72
2012 web-K	27	73

Step 3: If the site is determined to be suitable, a license to construct an interim storage facility for used nuclear fuel is submitted to U.S. regulatory agencies; the regulatory consideration may take several years to complete.

e68_step3: Should the host state and local community be allowed to withdraw their consent during this stage?

	No	Yes
%	0	1
2014 web	28	72
2013 web	34	66
2012 web-K	33	67

Step 4: If the license is provided, construction of an interim storage facility for used nuclear fuel begins. Construction will take several years to complete.

e69_step4: Should the host state and local community be allowed to withdraw their consent during this stage?

	No	Yes
%	0	1
2014 web	51	49
2013 web	57	43
2012 web-K	53	47

Step 5: Construction is completed, and the interim storage facility is prepared to receive used nuclear fuel.

e70_step5: Should the host state and local community be allowed to withdraw their consent at this stage?

	No	Yes
%	0	1
2014 web	67	33
2013 web	68	32
2012 web	66	34

Table 6: Preferences for Allowing Withdrawal of Consent During the ISF Siting Process

When should host community be allowed to withdraw consent?	*% Yes*
Host community/state volunteers; site assessment is initiated	**79**
Scientific evaluation of site suitability is completed	**77**
Application for a license to construct a UNF facility is submitted to agencies	**72**
License is obtained; facility construction is initiated	49
Construction is completed; facility is prepared to receive UNF	34

Next we want to know more about your willingness to participate in political and civic advocacy ***excluding*** charities or charitable causes.

e71_regis: Are you registered to vote?

	No	Yes
%	0	1
2014 web	14	86
2013 web	12	88

e72_potus: Did you vote in the presidential election of 2013?

	No	Yes
%	0	1
2014 web	23	77
2013 web	19	81

e73_local: Do you usually vote in local elections, such as county supervisors, mayor, city council, school board, etc.?

	No	Yes
%	0	1
2014 web	33	67
2013 web	30	70

e74_camp: Have you actively campaigned for any candidate or any political cause in the past ten years (not including charities or charitable causes)?

	No	Yes
%	0	1
2014 web	84	16
2013 web	82	18

e75_active: On a scale from zero to ten, where zero means *not at all active*, and ten means *extremely active*, how do you characterize your typical level of activity in local community organizations and civic causes?

%	Not At All Active 0	1	2	3	4	5	6	7	8	9	Extremely Active 10	Mean
2014 web	20	8	13	11	7	19	9	7	3	1	2	3.52
2013 web	14	7	12	12	8	18	11	10	5	2	2	3.99

(2014 vs. 2013: $p < .0001$)

We want to know how likely it is that you would actively participate in the debate and policy process if construction of an interim storage site for used nuclear fuel was proposed within 50 miles of your residence, in [insert state]. We understand that you cannot be sure about your precise level of involvement, but please be as realistic as possible when responding to the following questions using a scale from one to seven, where one means *not at all likely*, and seven means *extremely likely*.

e76_attend: How likely is it that you would attend one or more informational meetings held by authorities who are developing the proposed interim storage site for used nuclear fuel?

%	Not At All Likely 1	2	3	4	5	6	Extremely Likely 7	Mean
2014 web	12	11	10	18	18	15	17	4.30
2013 web-S	12	7	10	19	20	15	16	4.37

(2014 vs. 2013: $p = .9655$)

e77_speak: How likely is it that you would speak at a public hearing in your area held by authorities who are developing the proposed interim storage site for used nuclear fuel?

%	Not At All Likely 1	2	3	4	5	6	Extremely Likely 7	Mean
2014 web	31	17	10	17	11	7	7	3.08
2013 web-S	31	18	12	18	10	7	4	2.97

(2014 vs. 2013: $p = 5076$)

e78_socmed: How likely is it that you would express your opinion on the proposed interim storage site using social media such as Facebook or Twitter?

%	Not At All Likely 1	2	3	4	5	6	Extremely Likely 7	Mean
2014 web	21	10	9	15	17	13	14	3.91
2013 web-S	22	10	9	17	13	14	16	3.96

(2014 vs. 2013: $p = .3949$)

e79_write: How likely is it that you would write letters or make phone calls to your elected representatives expressing your opinion on the proposed interim storage site?

%	Not At All Likely 1	2	3	4	5	6	Extremely Likely 7	Mean
2014 web	15	13	10	20	16	14	13	4.02
2013 web-S	13	10	10	20	20	13	14	4.20

(2014 vs. 2013: p = .0182)

e80_orgopp: How likely is it that you would help organize public *opposition* to the proposed interim storage site?

	Not At All Likely						Extremely Likely	
%	1	2	3	4	5	6	7	Mean
2014 web	27	17	12	20	12	6	6	3.17
2013 web-S	29	16	13	21	10	5	6	3.05

(2014 vs. 2013: p = .2402)

e81_orgspt: How likely is it that you would help organize public *support* for the proposed interim storage site?

	Not At All Likely						Extremely Likely	
%	1	2	3	4	5	6	7	Mean
2014 web	31	16	11	21	12	7	3	3.01
2013 web-S	29	14	13	22	12	6	4	3.07

(2014 vs. 2013: p = .3539)

Table 7: Public Responses to Likely Engagement in the Siting Process

Likely to … (% with score above scale mid-point)	**2014**	**2013**
Attend informational meetings held by authorities	50%	51%
Write or phone your elected representatives	43%	47%
Express your opinion using social media	44%	43%
Serve on a citizens' advisory committee	37%	37%
Speak at a public hearing in your area	25%	21%
Help organize public ***support***	22%	22%
Help organize public ***opposition***	24%	21%

e82_advise: If invited, how likely is it that you would participate as a member of a citizens' committee asked to help provide advice and oversight to the authorities who are developing the proposed interim storage site if it required about [random 5, 10, 20] hours of your time each month for a year?

	Not At All Likely						Extremely Likely	
%	1	2	3	4	5	6	7	Mean
2014 web-All	19	12	12	18	15	11	12	3.78
2014 web: 5	18	14	13	18	14	11	12	3.81
2014 web: 10	22	10	9	18	15	14	12	3.83
2014 web: 20	18	13	14	20	17	8	10	3.70
2013-S: All	17	11	11	25	14	10	13	3.92
2013-S: 5	17	11	9	25	13	11	14	3.96
2013-S: 10	17	11	11	24	14	10	12	3.84
2013-S: 20	16	10	12	25	14	9	14	3.95

(2014-All vs. 2013-All: p = .1052)

In the past, policy decisions related to scientific and technical issues, like where to build storage facilities for used nuclear fuel have been based on the recommendation of a "technical expert panel." These expert panels are typically made up of scientists and engineers hired by the federal government. Because expert participants have specialized knowledge about the various technical aspects of a proposed site, utilizing expert panels often ensures that the most up-to-date scientific and technical information is considered in making policy decisions.

Recently, there has been interest in getting local citizens more involved in decision-making regarding technically complex policy problems. One way to get citizens involved is to assemble a citizen panel, made up of 10-20 citizens from the potential host community that would be most affected by the policy decision. Citizen participants would be selected through a process similar to jury selection. Once selected to be on citizen panels, participants first would be given scientific information in order to learn about and discuss the topic in depth. The panel would then meet to discuss the issue in the presence of a moderator to ensure fair and respectful discussion among citizens. Because citizens have knowledge about the community that would be affected, utilizing citizen panels would ensure that the most relevant community concerns are considered in making policy decisions. This process is referred to as a "deliberative citizen panel."

[Random order for grouped sets of bulleted arguments]

Key arguments that are made FOR *deliberative citizen panels* include the following: [code as "FOR CITIZEN"]

- Citizen panels help educate citizens and communities by building a strong information base about the policy issue at hand, especially if the issue is highly technical or scientific in nature.
- Citizen panels give members of the local community a chance to hear a wider range of opinions and views on the issue from their fellow citizens, community leaders, and technical or scientific experts.
- Citizen panels give members of the community an opportunity to influence public policy and therefore may result in decisions they are more likely to understand and support.

Key arguments that are made AGAINST *deliberative citizen panels* include the following: [code as "AGAINST CITIZEN"]

- Citizen panels may result in members of the community influencing public policy about complex technical and scientific issues that they do not fully understand.
- Citizen panels may be uncomfortable or challenging for some citizens who don't typically engage in political discussions.
- Citizen panels demand a lot of time and effort from the members that agree to be on the panel. Some citizens do not have the time or resources to attend these panels and thus cannot be a part of the process.

Key arguments that are made FOR *expert panels* include the following: [code as "FOR EXPERT"]

- Expert panels ensure that the most up-to-date scientific and technical information is considered, leading to the adoption of the best scientific and technical decision.
- Expert panels consist of individuals who have the scientific and technical knowledge to understand the issues at hand and can therefore make recommendations that are of a sound basis.
- Expert panels ensure that different perspectives from various scientific disciplines are brought together to improve current analytical methods and also identify the need for additional information.

Key arguments that are made AGAINST *expert panels* include the following: [code as "AGAINST EXPERT"]

- Expert panels limit the consideration of non-technical aspects of a policy issue, such as ethical and social concerns.
- Expert panels restrict citizen input into decision-making processes, and may result in socially undesirable and contentious decisions.
- Expert panels consist of individuals who may not act objectively or may sometimes disagree about scientific information presented to them.

Thinking about these two types of decision-making processes (the "deliberative citizen panel" and the "technical expert panel"), which of the two, do you think would be best for making public policy decisions in the following areas?

[Random order: e83_paneltype1—e87_paneltype5]

e83_paneltype1: Decisions about mechanisms to stimulate the national economy.

	Deliberative	Mostly Deliberative	Even Mix	Mostly Technical	Technical	
	1	2	3	4	5	Mean
2014 web	6	9	62	17	7	3.10

e84_paneltype2: Decisions about whether or not to enact more restrictions on private gun ownership

	Deliberative	Mostly Deliberative	Even Mix	Mostly Technical	Technical	
	1	2	3	4	5	Mean
2014 web	16	18	54	7	5	2.66

e85_paneltype3: Decisions about requiring vaccination against particular diseases.

	Deliberative	Mostly Deliberative	Even Mix	Mostly Technical	Technical	
	1	2	3	4	5	Mean
2014 web	7	9	46	22	16	3.29

e86_paneltype4: Decisions about acceptable levels of carbon emissions and whether or not we should put caps on carbon emissions.

	Deliberative	Mostly Deliberative	Even Mix	Mostly Technical	Technical	
	1	2	3	4	5	Mean
2014 web	6	7	48	26	13	3.32

e87_paneltype5: Decisions about voter identification rules, such as whether or not we should have more strict requirements for voters to show identification before being allowed to vote.

	Deliberative	Mostly Deliberative	Even Mix	Mostly Technical	Technical	
	1	2	3	4	5	Mean
2014 web	14	16	54	11	5	2.78

START SPLIT J/K (expert panel vs. citizen panel deliberation questions)

GROUP J (50%): decision-making using technical expert panels

Assume that a small rural community located about 50 miles away from your primary residence has volunteered to host an interim storage facility for used nuclear fuel.

The process for determining whether the facility will be built in the community will be led by an expert panel that will focus on the scientific and technical suitability of the site. The panel also will get input from state and federal elected officials before making their final recommendations on the storage facility site. The panel will consist of both scientists and engineers from across the nation chosen by the National Academy of Sciences for their expertise on the technical aspects of the site and the nature of the facility. The panel will meet periodically over several months and be given time to study and discuss the topic in depth. If the site is deemed technically suitable, the expert panel will recommend to the federal government that the storage facility be built at the site.

e88J_expert1: On a scale of one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about relying on an expert panel process to make the decision on whether to build an interim storage facility within 50 miles of your home?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014 web-J	15	7	16	27	18	8	8	3.82

e89J_expert2: Now, assume that an expert panel process has been conducted in your community and the decision has been made to build the storage facility at the proposed site within 50 miles of your home. On a scale of one to seven, where one means *strongly oppose* and seven means *strongly support*, how would you feel about the decision to build the interim storage facility at that location?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014 web-J	21	10	18	27	14	7	4	3.40

GROUP K (50%): decision-making using citizen panels

Assume that a small rural community located about 50 miles away from your primary residence has volunteered to host an interim storage facility for used nuclear fuel.

The process for determining whether the facility will be built in the community will be led by a deliberative citizen panel, made up of 10-20 citizens that reside within 50 miles of the proposed site. Citizen participants will be selected through a process similar to jury selection. Once selected to be on citizen panels, participants will first be given scientific information in order to learn about and discuss the topic in depth. The panel then will meet to discuss the issue in the presence of a moderator to ensure fair and respectful discussion among citizens. The panel will focus on the overall suitability of the site for the nearby communities and residents. The panel will meet periodically over several months, and will have access to independent scientific analysis and be given time to study and discuss the topic in depth. If the site is deemed suitable, the citizen panel will recommend to the federal government that the storage facility be built at the site.

e88K_citizen1: On a scale of one to seven, where one means *strongly oppose* and seven means *strongly support*, how do you feel about relying on a citizen deliberative process to make the decision on whether to build an interim storage facility within 50 miles of your home?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014 web-K	10	6	12	32	22	10	8	4.08

e89K_citizen2: Now, assume that a citizen deliberative process has been conducted in your community and the decision has been made to build the storage facility at the proposed site within 50 miles of your home. On a scale of one to seven, where one means *strongly oppose* and seven means *strongly support*, how would you feel about the decision to build the interim storage facility at that location?

	Strongly Oppose						Strongly Support	
%	1	2	3	4	5	6	7	Mean
2014 web-K	20	11	12	28	16	7	5	3.50

Table 8: Mean Level of Support for Decision-making Process and Outcome to Site an ISF

	Mean Level of Support for… (1=Strongly oppose, 7=Strongly support)	
Scenario	Decision-making Process	Decision-making Outcome
Expert Panel	3.82	3.40
Citizen Panel	4.08	3.50

END SPLIT J/K

The next several questions are about your beliefs concerning a variety of issues.

e90_environ On a scale where zero means the natural environment is *not at all threatened* and ten means the natural environment is on the *brink of disaster*, how do you assess the current state of the natural environment?

	Not At All Threatened										Brink of Disaster	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	2	3	5	7	8	16	19	19	12	4	6	5.74
2013 web	3	2	4	8	9	19	20	19	9	3	4	5.59
2012 web	2	1	4	9	10	22	18	20	8	2	3	5.53
2011 web	2	1	4	7	8	19	22	19	11	3	4	5.74
2010 web	2	3	4	7	7	20	17	20	11	4	5	5.78
2009 web	2	2	3	5	8	17	19	22	12	4	7	6.01
2008 comb	2	2	2	6	8	19	18	20	13	3	7	6.04

(2014 vs. 2013: p = .1335)

e91_doright On a scale from zero to ten, where zero means *none of the time* and ten means *all of the time*, how much of the time do you trust the government in Washington to do what is right for the American people?

	None of the Time										All of the Time	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	17	10	15	16	9	13	8	4	3	2	2	3.30
2013 web	12	8	15	15	12	16	9	6	4	1	2	3.63
2012 web	12	10	13	15	11	19	8	7	3	1	1	3.62
2011 web	10	10	16	17	10	16	9	8	3	1	1	3.59
2010 web	13	9	12	13	11	17	10	8	4	1	2	3.79
2009 web	9	8	13	13	10	19	12	8	5	1	2	4.08
2008 comb	12	8	16	16	12	14	8	7	3	2	2	3.66

(2014 vs. 2013: p = .0019)

Please rate the degree to which each of the following four groups of statements describes your outlook on life, using a scale from zero to ten, where zero means *not at all* and ten means *completely.* You can change your initial selections, but no two of the four descriptions may be given the same numerical rating, and each must be rated before advancing.

[Random Order: e92_H_rate—e95_F_rate]

e92_H_rate: I am more comfortable when I know who is, and who is not, a part of my group, and loyalty to the group is important to me. I prefer to know who is in charge and to have clear rules and procedures; those who are in charge should punish those who break the rules. I like to have my responsibilities clearly defined, and I believe people should be rewarded based on the position they hold and their competence. Most of the time, I trust those with authority and expertise to do what is right for society.

	Not At All										Completely	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	5	4	7	7	10	16	12	11	12	7	9	5.59
2013 web	4	5	7	8	9	13	13	15	12	8	6	5.56

(2014 vs. 2013: $p = .7419$)

e93_I_rate: Groups are not all that important to me. I prefer to make my own way in life without having to follow other peoples' rules. Rewards in life should be based on initiative, skill, and hard work, even if that results in inequality. I respect people based on what they do, not the positions or titles they hold. I like relationships that are based on negotiated "give and take," rather than on status. Everyone benefits when individuals are allowed to compete.

	Not At All										Completely	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	3	3	5	6	6	16	11	12	13	9	16	6.31
2013 web	4	4	5	7	8	10	12	14	14	11	10	5.98

(2014 vs. 2013: $p = .0071$)

e94_E_rate: Much of society today is unfair and corrupt, and my most important contributions are made as a member of a group that promotes justice and equality. Within my group, everyone should play an equal role without differences in rank or authority. It is easy to lose track of what is important, so I have to keep a close eye on the actions of my group. It is not enough to provide equal opportunities; we also have to try to make outcomes more equal.

	Not At All										Completely	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	6	4	8	8	9	13	11	10	12	8	11	5.63
2013 web	5	6	8	8	9	13	11	12	13	7	8	5.42

(2014 vs. 2013: $p = .0646$)

e95_F_rate: Life is unpredictable and I have very little control. I tend not to join groups, and I try not to get involved because I can't make much difference anyway. Most of the time other people determine my options in life. Getting along is largely a matter of doing the best I can with what comes my way, so I just try to take care of myself and the people closest to me. It's best to just go with the flow, because whatever will be will be.

	Not At All										Completely	
%	0	1	2	3	4	5	6	7	8	9	10	Mean
2014 web	11	8	9	10	7	15	9	9	8	6	8	4.75
2013 web	9	9	13	10	10	11	10	9	8	6	5	4.44

(2014 vs. 2013: p = .0159)

e96_tie: (present options that tied for highest score) It looks like you gave these statements the same rating. Please indicate which one of these options comes closes to your outlook on life.

e97_party With which political party do you most identify?

	Democratic	Republican	Independent	Other Party
%	1	2	3	4
2014 web	37	26	36	2
2013 web	42	25	31	2
2012 web	41	27	31	1
2011 combined	37	28	33	2
2010 combined	39	27	32	2
2009 web	41	32	25	2
2008 combined	42	34	22	2
2007 web	38	33	27	2
2006 combined	44	36	17	3

e98_iden Do you completely, somewhat, or slightly identify with that political party?

	Slightly	Somewhat	Completely	
%	1	2	3	Mean
2014 web	8	56	37	2.29
2013 web	10	55	35	2.25
2012 web	9	57	34	2.24
2011 combined	12	56	32	2.20
2010 combined	10	56	34	2.25
2009 web	10	54	36	2.27
2008 combined	10	57	33	2.23
2007 web	13	61	26	2.12
2006 combined	21	57	22	2.01

e99_ideol On a scale of political ideology, individuals can be arranged from strongly liberal to strongly conservative. Which of the following best describes your views? Would you say that you are:

%	Strongly Liberal 1	Liberal 2	Slightly Liberal 3	Middle of the Road 4	Slightly Conserv. 5	Conserv. 6	Strongly Conserv. 7	Mean
2014 web	8	13	11	35	12	16	5	3.99
2013 web	7	15	12	32	15	13	6	3.97
2012 web	7	16	11	33	12	15	6	3.97
2011 comb	4	12	12	35	14	16	7	4.18
2010 comb	5	13	12	32	13	16	8	4.15
2009 web	6	15	11	35	10	15	7	4.03
2008 comb	6	14	11	33	14	15	7	4.10
2007 web	4	13	12	36	14	15	6	4.09
2006 comb	5	13	12	31	14	17	8	4.21

(2014 vs. 2013: p = .7055)

e100_city In what city or town is your primary residence located? [verbatim]

e101_jury: Have you ever served on a jury that deliberated on a civil or criminal case?

	No	Yes
2014 web	76	24

e101a_jury_exp: On a scale of one to seven, where one means *not at all satisfied*, and seven means *extremely satisfied*, how satisfied were you with your overall experience on the jury?

%	Not at all satisfied 1	2	3	Somewhat satisfied 4	5	6	Extremely satisfied 7	Mean
2014 web	5	5	5	22	20	26	18	4.99

e102_inc Please indicate which of the following income categories approximates the total estimated annual income for your *household* for the year 2013.

%	<$10K 1	$10–20K 2	$20–30K 3	$30–40K 4	$40–50K 5	$50–60K 6	$60–70K 7
2014 web	8	13	17	13	8	12	7
2013 web	7	10	13	12	8	11	8
2012 web	8	12	12	12	10	13	8
2011 comb	8	11	13	12	9	10	9
2010 comb	8	13	14	13	10	10	8
2009 web	6	10	13	12	10	12	10
2008 comb	7	9	12	11	9	11	10
2007 web	6	10	12	11	7	12	11
2006 comb	4	8	12	12	11	12	11

%	$70–80K 8	$80–90K 9	$90–100K 10	$100–110K 11	$110–120K 12	$120–130K 13	$130–140K 14
2014 web	7	4	2	1	1	2	2
2013 web	7	5	4	2	2	3	2
2012 web	6	4	3	3	2	1	1
2011 comb	7	4	4	2	2	2	1
2010 comb	6	4	3	3	2	1	1
2009 web	8	4	3	3	2	2	1
2008 comb	8	5	3	4	2	2	2
2007 web	7	5	4	4	3	3	1
2006 comb	8	5	3	3	2	2	1

$140–150K % 15	$150–160K 16	$160–170K 17	$170–180K 18	$180–190K 19	$190–200K 20	>$200K 21
2014 web 1	0	0	0	0	0	1
2013 web 1	1	0	0	0	1	2
2012 web 2	1	0	1	0	0	2
2011 comb 1	1	1	0	0	1	2
2010 comb 1	1	0	0	0	0	2
2009 web 1	1	0	0	0	0	2
2008 comb 1	1	0	0	0	0	3
2007 web 1	0	0	0	0	1	1
2006 comb 1	1	1	0	0	1	2

%	Median
2014 web	$30–40K
2013 web	$40–50K
2012 web	$40–50K
2011 comb	$45–50K
2010 comb	$40–50K
2009 web	$40–50K
2008 comb	$50–60K
2007 web	$50–60K
2006 comb	$50–60K

e103_web About how often do you access the Internet using a computer or some sort of a smartphone, like a Blackberry or iPhone?

	Never	< Once/ Month	Several Times/ Month	Once/ Week	Several Times/ Week	Once or Twice/Day	Several Times/ Day
%	0	1	2	3	4	5	6
2014 web	NA	2	1	2	6	17	72
2013 web	NA	5	1	1	7	15	70
2012 web	NA	5	2	2	7	19	65
2011 comb	5	10	2	3	9	17	54

e104_twit About how often do you use Twitter?

	Never	< Once/ Month	Several Times/ Month	Once/ Week	Several Times/ Week	Once or Twice/Day	Several Times/ Day
%	0	1	2	3	4	5	6
2014 web	59	13	4	6	7	5	6
2013 web	59	11	4	5	7	6	8
2012 web	70	9	3	5	4	4	4
2011 comb	81	6	2	3	3	2	3

Scholars have learned that information often influences the way in which people answer survey questions. With this in mind, we are interested in whether you are taking the time to read the text that precedes each question. So, in order to demonstrate that you have read this text, please ignore the question below and click on the blue dot.

e105_instruct Which of the following devices do you typically use to answer surveys on the Internet?

1 – a computer
2 – A tablet (like an iPad)
3 – A smart phone (like a Blackberry or iPhone)

	Did Not Click Blue Dot	Clicked Blue Dot
%	0	1
2014 web	65	35
2013 web	80	20
2012 web	80	20

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