



PUBLIC PERCEPTIONS OF FEDERAL
AGENCIES THAT CONDUCT CLIMATE
CHANGE RESEARCH



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This report contains results from a nationally representative survey of American adults conducted in April and May 2012. The survey examined public beliefs about federal agencies that are engaged in climate change research, and assessed which agencies the public looks to for answers to their questions on the issue. Furthermore, participants visited NASA’s climate change website: climate.nasa.gov. See the methods section for a complete description of the study design.

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SELECTED KEY FINDINGS

Survey participants were asked a range of questions including their perceptions of federal agencies that conduct research on climate change and their beliefs about climate change. They also reviewed NASA's climate change website, and responded to questions about the site. In this section we report selected key findings that will likely be of interest to all of the federal agencies included in the survey. A full list of questions and respondents' answers are presented in the Top-line Findings section of this report below.

A LARGE PORTION OF THE PUBLIC IS UNSURE IF FEDERAL AGENCIES CONDUCT CLIMATE SCIENCE RESEARCH. THIS IS ALSO TRUE REGARDING PUBLIC AWARENESS OF SCIENTIFIC RESEARCH IN GENERAL AT FEDERAL AGENCIES, ALTHOUGH TO A LESSER DEGREE

Respondents were asked to assess NASA and three additional randomly assigned federal agencies (from the list of ten below) in terms of how much scientific research and climate science research they conduct. (Note: Half of the respondents were first asked about scientific research and then asked about climate science research, and the other half were asked these questions in the reverse order. The results below include only those respondents who answered that particular set of questions *first*, e.g., the results for climate science research are only for participants who were asked about climate science first. We have not combined responses from the split sample because the question order primed respondents' answers to the second set of questions, significantly changing their responses; thus, only the un-primed responses are shown).

1. National Oceanic & Atmospheric Administration (NOAA, which includes the National Weather Service)
2. National Park Service (NPS)
3. Centers for Disease Control & Prevention (CDC)
4. National Institutes of Health (NIH)
5. National Science Foundation (NSF)
6. Department of Defense (DOD)
7. Department of Agriculture (USDA)
8. Environmental Protection Agency (EPA)
9. Department of Energy (DOE)
10. Smithsonian Institution

Of the 11 agencies assessed, NASA was perceived as conducting the most scientific research, followed closely by CDC, NOAA and NIH; each of their average ratings was mid-way between "a moderate amount" and "a lot" on the four-point scale. Approximately one quarter to one half of survey participants said they “don’t know” how much scientific research each federal agency conducts, with NSF topping the list as the agency for which the public is least likely to have an impression.

The public is even less aware of agencies’ research on climate change. For example, 41% of respondents said they “don’t know” how much scientific research NASA conducts on climate change (compared to 25% who “don’t know” how much general scientific research NASA conducts). CDC has the largest awareness discrepancy: 23% are unaware of CDC’s scientific research, while 54 percent are unaware of its climate change research – a difference of 31 percentage points.

Of the 11 agencies, NOAA is perceived as engaging in the most climate change research, followed by EPA, NASA and NSF. DOD, CDC and the Smithsonian are perceived as engaging in the least climate change research.

How much scientific research does the [Agency] conduct?*[ordered from least to most “don’t knows”]*

How much scientific research on climate change does the [Agency] conduct?*

Agency	Mean	Don't Know	N	Agency	Mean	Don't Know	N
NASA	3.70	25%	591	NASA	3.27	41%	420
CDC	3.66	23%	180	EPA	3.49	31%	153
EPA	3.41	26%	199	USDA	3.09	38%	138
USDA	3.48	27%	167	NOAA	3.68	40%	130
NOAA	3.64	32%	182	DOD	2.38	46%	117
DOD	3.35	34%	136	NPS	2.90	47%	119
NPS	2.89	41%	133	DOE	3.10	49%	105
DOE	3.32	43%	139	NIH	2.70	51%	106
NIH	3.63	43%	115	Smithsonian	2.61	53%	91
Smithsonian	3.25	50%	121	CDC	2.51	54%	92
NSF	3.50	53%	104	NSF	3.15	56%	93

*A four-point response scale was used: 1 = "none"; 2 = "a little"; 3 = "a moderate amount"; 4 = "a lot." "Don't know" responses were excluded from mean calculations; reported N's are also excluding “Don’t Know” responses.

SCIENTIFIC RESEARCH CONDUCTED BY FEDERAL AGENCIES IS PERCEIVED AS MODERATELY CREDIBLE, ALTHOUGH THIS VARIES BY TOPIC OF RESEARCH (CLIMATE SCIENCE VS. SCIENCE RESEARCH IN GENERAL) AND BY AGENCY.

Respondents were asked to assess NASA and the three (randomly assigned) other federal agencies on three additional dimensions: competence of the agency’s research scientists; trust in the agency’s research; and belief that the agency will use its research findings in ways that benefit the United States. We averaged the ratings on these three dimensions to derive a research credibility score.

NASA was perceived as the most credible agency for scientific research in general, while NOAA had the highest credibility rating for climate change research. The DOE and EPA were rated as the least credible for scientific research in general, although their mean credibility ratings were still well above the (neutral) mid-point of the scale (2.5). The DOE and DOD were rated as the least credible for climate change research, although, again, these means are above the middle of the scale. Thus, while credibility of the individual agencies does vary, all are seen as more credible than not; this is true for both scientific research in general and climate change research in particular.

Mean of competency, trust, and perception that the [Agency] would use its scientific research in ways that would benefit the United States*

Mean of competency, trust, and perception that the [Agency] would use its climate change research in ways that would benefit the United States

Agency	Mean	N
NASA	3.46	642
NOAA	3.40	203
Smithsonian	3.38	152
CDC	3.36	200
NSF	3.25	112
NIH	3.24	137
USDA	3.17	180
NPS	3.15	150
DOD	3.13	160
EPA	3.07	220
DOE	3.01	172
<i>Average</i>	3.28	

Agency	Mean	N
NASA	3.15	500
NOAA	3.27	150
EPA	3.05	174
NPS	3.02	145
Smithsonian	3.00	108
NSF	3.00	111
NIH	2.91	124
CDC	2.90	106
USDA	2.85	152
DOD	2.77	134
DOE	2.68	140
<i>Average</i>	2.99	

*Responses ranged from 1 to 4; 1 = low competency, trust & benefits; 4 = high competency, trust and benefits

WHAT THE PUBLIC MOST WANTS TO KNOW ABOUT CLIMATE CHANGE

This chart reports answers to the questions: *If you had the opportunity, which of the following questions would you like to ask an expert on climate change? (Check up to three questions); and If you could ask the expert on climate change ONLY ONE QUESTION, which question would you ask?* The results displayed are only for the respondents who were asked the questions prior to visiting the NASA website [half of the sample].¹

Overall, respondents most wanted to know how scientists can determine that human activities are causing climate change, what kind of research the agencies are conducting on climate change, whether there is still time to reduce climate change, and whether climate change is really happening; few would ask about the cost of reducing climate change or what benefit climate change will cause.

TOP QUESTIONS THAT PEOPLE WANT TO ASK AN EXPERT ABOUT CLIMATE CHANGE

	Top Three	Top Question
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	18%
What kind of research are you conducting on climate change?	28%	11%
Is there still time to reduce climate change, or is it too late?	20%	10%
Is climate change really happening?	19%	9%
What can the nations of the world do to reduce climate change?	16%	8%
On the whole, will climate change be more harmful or beneficial?	17%	7%
How do you know that climate change is happening?	20%	6%
When will climate change begin to harm people?	12%	5%
What can the United States do to reduce climate change?	14%	5%
What can I do to reduce climate change?	11%	4%
What harm will climate change cause?	15%	3%
Will climate change harm people?	9%	3%
What causes climate change?	14%	3%
How much would it cost the United States to reduce climate change?	7%	1%
What benefit will climate change cause?	7%	1%

¹ All respondents to this survey were asked to view the NASA website on climate change; half were asked their top questions about climate change *before* they visited the site, and half were asked *after* they visited the site. The results displayed are from the respondents who had not yet visited the website (N = 760).

TOP LINE FINDINGS

In this section we report questions - and respondents' answers - asked on the survey.

Participant Instructions: We would like to get your impression of the scientific research conducted at four federal government agencies. For each agency, we will ask you the following questions:

- How much scientific research does the agency conduct?
- On average, how competent are the research scientists at the agency?
- How much do you trust the scientific research conducted at the agency?
- To what degree do you believe the agency will use the findings from its scientific research in ways that benefit the United States?

Each individual was shown the questions for NASA and for three other randomly selected agencies. The order of these agencies was also randomized.

1. *National Oceanic & Atmospheric Administration (NOAA, which includes the National Weather Service)*
2. *National Park Service (NPS)*
3. *Centers for Disease Control & Prevention (CDC)*
4. *National Institutes of Health (NIH)*
5. *National Science Foundation (NSF)*
6. *Department of Defense (DOD)*
7. *Department of Agriculture (USDA)*
8. *Environmental Protection Agency (EPA)*
9. *Department of Energy (DOE)*
10. *Smithsonian Institution*

Q1. How much scientific research does the [Agency] conduct? [Results displayed are those of the respondents who were asked about general scientific research first.]

None	A Little	A Moderate Amount	A Lot	I Don't Know
<input type="checkbox"/>				

	None	A Little	A Moderate Amount	A Lot	I Don't Know
NASA	1%	2%	16%	57%	25%
CDC	1%	6%	11%	59%	23%
NOAA	1%	0%	21%	46%	32%
USDA	0%	7%	24%	43%	27%
EPA	0%	8%	27%	39%	26%
NIH	0%	3%	15%	39%	43%
DOD	1%	7%	25%	32%	34%
DOE	2%	5%	24%	27%	43%
NSF	0%	0%	23%	24%	53%
Smithsonian	1%	6%	23%	20%	50%
NPS	2%	16%	28%	13%	41%

Note: N for NASA is 720; other Ns range from 192 to 230

Q2. On average, how competent are the research scientists at the [Agency]? [Results displayed are those of the respondents who were asked about general scientific research first.]

Very Incompetent	Somewhat Incompetent	Somewhat Competent	Very Competent	I Have No Opinion About This
<input type="checkbox"/>				

	Very Incompetent	Somewhat Incompetent	Somewhat Competent	Very Competent	No Opinion
NASA	1%	1%	18%	60%	20%
CDC	2%	2%	25%	55%	17%
NOAA	1%	4%	20%	49%	27%
Smithsonian	2%	1%	16%	43%	38%
USDA	1%	5%	33%	39%	22%
NIH	1%	1%	25%	34%	40%
EPA	3%	8%	34%	32%	23%
DOD	1%	4%	39%	30%	25%
NSF	0%	1%	23%	27%	50%
DOE	3%	3%	31%	27%	36%
NPS	2%	4%	32%	23%	40%

Note: N for NASA is 720; other Ns range from 197 to 228

Q3. How much do you trust the scientific research conducted at the *[Agency]*? [Results displayed are those of the respondents who were asked about general scientific research first.]

	Strongly Trust <input type="checkbox"/>	Somewhat Trust <input type="checkbox"/>	Somewhat Distrust <input type="checkbox"/>	Strongly Distrust <input type="checkbox"/>	I Have No Opinion About This <input type="checkbox"/>
	Strongly Trust	Somewhat Trust	Somewhat Distrust	Strongly Distrust	No Opinion
NASA	32%	38%	6%	3%	20%
NOAA	25%	42%	6%	2%	25%
CDC	23%	52%	10%	2%	14%
Smithsonian	21%	34%	3%	4%	38%
EPA	16%	42%	17%	6%	20%
USDA	15%	43%	13%	7%	22%
NPS	14%	37%	13%	1%	35%
DOD	13%	44%	11%	5%	26%
NIH	11%	46%	7%	2%	34%
DOE	11%	38%	9%	9%	33%
NSF	9%	34%	7%	1%	49%

Note: N for NASA is 720; other Ns range from 196 to 228

Q4. To what degree do you believe the *[Agency]* will use the findings from its scientific research in ways that benefit the United States? [Results displayed are those of the respondents who were asked about general scientific research first.]

	Definitely Will Not <input type="checkbox"/>	Probably Will Not <input type="checkbox"/>	Probably Will <input type="checkbox"/>	Definitely Will <input type="checkbox"/>	I Have No Opinion About This <input type="checkbox"/>
	Definitely Will Not	Probably Will Not	Probably Will	Definitely Will	No Opinion
NASA	1%	3%	39%	38%	20%
CDC	0%	4%	37%	41%	17%
NOAA	0%	3%	36%	37%	24%
USDA	2%	4%	43%	31%	21%
EPA	3%	9%	42%	26%	20%
Smithsonian	1%	2%	36%	25%	36%
DOD	1%	7%	47%	23%	22%
NIH	1%	4%	37%	23%	35%
NPS	1%	5%	40%	21%	32%
DOE	4%	8%	38%	20%	30%
NSF	0%	3%	31%	14%	52%

Note: N for NASA is 720; other Ns range from 197 to 228

Now we would like to get your impression of the scientific research on climate change conducted at four federal government agencies. For each agency, we will ask you the following questions:

- How much scientific research on climate change does the agency conduct?
- On average, how competent are the climate change research scientists at the agency?
- How much do you trust the climate change scientific research conducted at the agency?
- To what degree do you believe the agency will use the findings of its climate change scientific research in ways that benefit the United States?

Q5. How much scientific research on climate change does the *[Agency]* conduct? [Results displayed are those of the respondents who were asked about climate science research first.]

None A Little A Moderate Amount A Lot I Don't Know

	None	A Little	A Moderate Amount	A Lot	I Don't Know
NASA	1%	9%	21%	27%	41%
NOAA	0%	3%	14%	44%	40%
EPA	1%	4%	24%	40%	31%
USDA	0%	12%	31%	19%	38%
NSF	1%	9%	17%	17%	56%
DOE	1%	11%	22%	18%	49%
NPS	0%	17%	24%	12%	47%
NIH	5%	16%	18%	10%	51%
CDC	8%	15%	12%	10%	54%
Smithsonian	9%	9%	19%	9%	53%
DOD	9%	20%	19%	5%	46%

Note: N for NASA is 718; other Ns range from 195 to 226

Q6. On average, how competent are the climate change research scientists at the *[Agency]*? [Results displayed are those of the respondents who were asked about climate science research first.]

Very Incompetent Somewhat Incompetent Somewhat Competent Very Competent I Have No Opinion About This

	Very Incompetent	Somewhat Incompetent	Somewhat Competent	Very Competent	No Opinion
NASA	3%	4%	24%	34%	36%
NOAA	1%	4%	21%	38%	35%
EPA	4%	5%	34%	31%	26%
NPS	2%	6%	31%	23%	38%
NIH	4%	5%	19%	21%	50%
DOE	9%	6%	28%	19%	38%
NSF	3%	5%	23%	18%	51%
CDC	7%	3%	25%	18%	47%
Smithsonian	4%	3%	27%	17%	49%
USDA	2%	7%	41%	16%	34%
DOD	3%	7%	35%	9%	46%

Note: N for NASA is 718; other Ns range from 195 to 224

Q7. How much do you trust the climate change scientific research conducted at the [Agency]? [Results displayed are those of the respondents who were asked about climate science research first.]

	Strongly Trust <input type="checkbox"/>	Somewhat Trust <input type="checkbox"/>	Somewhat Distrust <input type="checkbox"/>	Strongly Distrust <input type="checkbox"/>	I Have No Opinion About This <input type="checkbox"/>
	Strongly Trust	Somewhat Trust	Somewhat Distrust	Strongly Distrust	No Opinion
NASA	19%	35%	10%	5%	31%
NOAA	20%	40%	7%	4%	30%
EPA	13%	44%	13%	7%	23%
Smithsonian	11%	35%	6%	3%	44%
CDC	10%	24%	12%	7%	48%
NPS	9%	37%	10%	7%	37%
NIH	8%	33%	10%	6%	43%
USDA	6%	37%	16%	9%	33%
DOE	5%	36%	16%	12%	31%
NSF	4%	32%	7%	5%	52%
DOD	3%	37%	13%	9%	38%

Note: N for NASA is 718; other Ns range from 196 to 225

Q8. To what degree do you believe the [Agency] will use the findings of its climate change scientific research in ways that benefit the United States? [Results displayed are those of the respondents who were asked about climate science research first.]

	Definitely Will Not <input type="checkbox"/>	Probably Will Not <input type="checkbox"/>	Probably Will <input type="checkbox"/>	Definitely Will <input type="checkbox"/>	I Have No Opinion About This <input type="checkbox"/>
	Definitely Will Not	Probably Will Not	Probably Will	Definitely Will	No Opinion
NASA	3%	8%	38%	20%	30%
EPA	4%	9%	36%	26%	25%
NOAA	1%	6%	42%	23%	28%
NPS	2%	9%	32%	21%	36%
USDA	4%	9%	39%	14%	33%
NSF	1%	9%	34%	14%	42%
CDC	3%	13%	24%	13%	47%
NIH	5%	12%	30%	13%	41%
DOE	10%	15%	36%	12%	28%
Smithsonian	2%	10%	33%	12%	44%
DOD	2%	17%	33%	12%	37%

Note: N for NASA is 718; other Ns range from 196 to 226

Q9. If you had the opportunity, which of the following questions would you like to ask an expert on climate change? (Check up to three questions)

Q10. If you could ask the expert on climate change ONLY ONE QUESTION, which question would you ask?

Results for questions nine and ten are displayed on p. 6 of this report.

Q11/12. You indicated that the one question that you would most like to ask an expert is “[TOP QUESTION]”. From which of the following federal government agencies would you want to learn their answer to this question? (*Participants selected “yes” or “no” for each agency, repeated for their top three questions*). [Results displayed are those of the respondents who were asked their top question prior to visiting the NASA website.]

1) *Is climate change really happening?*

	Yes	No
NASA	61%	39%
NOAA	77%	23%
NSF	64%	36%
EPA	60%	40%
USDA	39%	61%
DOE	35%	65%
Smithsonian	25%	75%
NPS	24%	76%
CDC	21%	79%
NIH	21%	79%
DOD	12%	88%

2) *How do you know that climate change is happening?*

	Yes	No
NASA	63%	37%
NOAA	87%	13%
EPA	58%	42%
NSF	54%	46%
USDA	42%	58%
DOE	32%	68%
Smithsonian	30%	70%
NPS	27%	73%
CDC	20%	80%
NIH	18%	82%
DOD	14%	86%

3) *What causes climate change?*

	Yes	No
NASA	65%	35%
NOAA	85%	15%
EPA	77%	23%
NSF	67%	33%
USDA	60%	40%
NIH	49%	51%
DOE	44%	56%
NPS	41%	58%
Smithsonian	41%	59%
CDC	38%	63%
DOD	22%	78%

4) *How do you know that climate change is caused mostly by human activities, not natural changes in the environment?*

	Yes	No
NASA	62%	38%
NOAA	88%	12%
EPA	70%	30%
NSF	69%	31%
DOE	44%	56%
2USDA	40%	60%
NPS	33%	67%
NIH	32%	68%
CDC	31%	69%
Smithsonian	30%	70%
DOD	17%	83%

5) *What harm will climate change cause?*

	Yes	No
NASA	62%	38%
NOAA	86%	14%
EPA	80%	20%
NIH	67%	33%
USDA	66%	34%
NSF	62%	38%
CDC	56%	44%
DOE	49%	51%
NPS	44%	56%
DOD	25%	75%
Smithsonian	22%	78%

6) *What benefit will climate change cause?*

	Yes	No
NASA	73%	27%
NSF	82%	18%
NOAA	80%	20%
EPA	76%	24%
NIH	67%	33%
USDA	64%	36%
DOE	58%	42%
CDC	49%	51%
Smithsonian	49%	51%
NPS	48%	52%
DOD	32%	68%

7) *On the whole, will climate change be more harmful or beneficial?*

	Yes	No
NASA	62%	38%
NOAA	86%	14%
NSF	80%	20%
EPA	76%	24%
NIH	63%	37%
USDA	57%	43%
CDC	49%	51%
DOE	46%	54%
NPS	35%	65%
Smithsonian	27%	73%
DOD	19%	81%

8) *Will climate change harm people?*

	Yes	No
NASA	46%	54%
EPA	66%	34%
NOAA	63%	37%
NIH	58%	42%
CDC	47%	53%
NSF	44%	56%
USDA	37%	63%
DOE	32%	68%
DOD	31%	88%
NPS	26%	74%
Smithsonian	21%	79%

9) *When will climate change begin to harm people?*

	Yes	No
NASA	47%	53%
NOAA	73%	27%
EPA	68%	32%
NSF	61%	39%
NIH	57%	44%
DOE	53%	47%
CDC	50%	50%
USDA	41%	59%
NPS	27%	73%
DOD	24%	76%
Smithsonian	24%	76%

10) *What can I do to reduce climate change?*

	Yes	No
NASA	57%	43%
NOAA	84%	16%
EPA	79%	21%
NSF	74%	26%
DOE	63%	37%
NIH	61%	39%
USDA	51%	49%
CDC	50%	50%
NPS	46%	54%
Smithsonian	39%	61%
DOD	23%	77%

11) *What can the United States do to reduce climate change?*

	Yes	No
NASA	68%	32%
NOAA	93%	7%
EPA	88%	12%
NSF	74%	26%
DOE	70%	30%
USDA	69%	31%
NIH	59%	41%
NPS	53%	47%
CDC	46%	54%
Smithsonian	45%	55%
DOD	29%	71%

12) *How much would it cost the United States to reduce climate change?*

	Yes	No
NASA	57%	43%
NOAA	76%	24%
NSF	70%	30%
EPA	70%	30%
DOE	61%	39%
USDA	54%	46%
NIH	45%	55%
DOD	38%	62%
Smithsonian	38%	62%
NPS	37%	63%
CDC	35%	65%

13) *What can the nations of the world do to reduce climate change?*

	Yes	No
NASA	69%	31%
NOAA	90%	10%
EPA	81%	19%
NSF	77%	23%
USDA	69%	31%
DOE	67%	33%
NIH	64%	36%
CDC	55%	45%
NPS	48%	52%
Smithsonian	46%	54%
DOD	41%	59%

14) *Is there still time to reduce climate change, or is it too late?*

	Yes	No
NASA	63%	37%
NOAA	95%	5%
EPA	85%	15%
NSF	83%	17%
DOE	60%	40%
USDA	51%	49%
NIH	49%	51%
NPS	40%	60%
CDC	37%	63%
Smithsonian	34%	66%
DOD	24%	76%

15) *What kind of research are you conducting on climate change?*

	Yes	No
NASA	70%	30%
NOAA	91%	9%
NSF	77%	23%
EPA	71%	29%
USDA	56%	44%
DOE	54%	46%
NIH	50%	50%
CDC	46%	54%
NPS	44%	56%
Smithsonian	40%	60%
DOD	36%	64%

Q13. In which of the following formats would you prefer to receive an answer to your question: “[INSERT TOP QUESTION]” [All respondents]

- 50% Written Text (i.e., a News Article)
- 27% Video
- 17% Interactive Graphic
- 5% Other

Next we’d like to show you to a website designed by NASA to provide members of the public with information about climate change. Please spend up to ten minutes browsing this website.

Half of participants received the following prompt (while half only received the link):

Specifically, we’d like you to attempt to find information that answers your question: “[INSERT TOP QUESTION]”.

<http://climate.nasa.gov/{userid}>

If you see a message like “The page you are on is trying to open a site in a new window,” please click “Accept”.

Please come back to the survey after you have browsed the website. You can leave this survey window open while you look around the website-we’ll alert you after ten minutes have passed.

When you are done browsing the website and are ready to answer a few questions, please come back to this window and click the “Next” button that will appear shortly.

Q14. After viewing the NASA website, how much scientific research on climate change would you say the agency conducts? [All respondents]

- | | | | | |
|--------------------------|--------------------------|-------------------------------|--------------------------|--------------------------|
| None
(1%) | A Little (2%) | A Moderate
Amount
(17%) | A Lot
(67%) | I Don’t Know
(13%) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Q15. How likely are you to seek additional information about climate change from any other source in the next few days or weeks? [All respondents]

- | | | | |
|---------------------------------|-------------------------------|---------------------------|----------------------------|
| Definitely
Will Not
(18%) | Probably
Will Not
(43%) | Probably
Will
(31%) | Definitely
Will
(8%) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Q16. What specific sources of information might you consult for the purpose of finding additional information about climate change in the next few days or weeks? (check all that apply) [All respondents]

	Yes	No
An Internet Search	56%	44%
Scientific Organizations	32%	68%
Environmental Organizations	30%	70%
Mainstream News Media	23%	77%
Family and Friends	16%	84%
Others	8%	92%
Corporations (e.g., energy companies)	5%	95%
Religious Leaders	2%	98%
My Political Representatives	1%	99%

METHODS

In April and May 2012, we surveyed a nationally representative cohort sample of adult Americans who had participated in one of several prior surveys assessing their attitudes and beliefs about global warming. These previous surveys had been conducted 10/20/2011 – 11/16/2011; 04/22/2011 – 05/11/2011; 6/24/2010-7/22/2010; or 5/14/2010 – 6/1/2010.

Details on the prior surveys are described here:

Leiserowitz, A., Maibach, E., Roser-Renouf, C., Smith, N. & Hmielowski, J. D. (2011) *Climate change in the American Mind: Americans' global warming beliefs and attitudes in November 2011*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.

<http://environment.yale.edu/climate/files/ClimateBeliefsNovember2011.pdf>

Leiserowitz, A., Maibach, E., Roser-Renouf, C., & Smith, N. (2011) *Climate change in the American Mind: Americans' global warming beliefs and attitudes in May 2011*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.

<http://environment.yale.edu/climate/files/ClimateBeliefsMay2011.pdf>

Leiserowitz, A., Maibach, E., Roser-Renouf, C., & Smith, N. (2010) *Climate change in the American Mind: Americans' global warming beliefs and attitudes in June 2010*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.

<http://environment.yale.edu/climate/files/ClimateBeliefsJune2010.pdf>

Leiserowitz, A., Smith, N. & Marlon, J.R. (2010) *Americans' Knowledge of Climate Change*. Yale University. New Haven, CT: Yale Project on Climate Change Communication.

<http://environment.yale.edu/climate/files/ClimateChangeKnowledge2010.pdf>

The re-contact survey that supplied the data reported here was fielded from April 24th to May 25th; 1,510 adults, aged 18 and older, responded, for a completion rate of 68.4 percent, and a margin of sampling error of 2.5% with 95% confidence. The sample was weighted to correspond with US Census Bureau parameters for the United States.

All respondents were asked to assess NASA, as NASA was the sponsor of this research. For comparison purposes, ten other agencies that are part of the U.S. Global Change Research Program were also assessed. Each respondent was asked to assess four agencies – NASA and three other randomly assigned agencies. As all respondents were asked to assess NASA, while only subsets were asked about the other agencies, the number of respondents assessing NASA is substantially larger than for all other agencies.

Two order experiments were embedded within the survey. Half of respondents were asked about their views on scientific research first and about climate change research next. Conversely, the other half were asked about their views on climate change research first and about their views on scientific research next. We present here the results for the “first” set of questions, respectively. That is, results reported for the scientific research set of questions are for those half or respondents who saw that set first and, correspondingly, results for the climate science research set of questions are for those who saw the climate science set first.

Additionally, we asked half of respondents their top question about climate change *prior to* visiting the NASA climate science website (climate.nasa.gov) and prompted them to look for the answer to their question there. The other half of respondents was asked their top question about climate change only *after* visiting the NASA climate science website. As viewing the site likely influenced the top question, we report only the responses of those who were asked their top question first. Results from these order experiments will be presented in academic papers and are available upon request.

APPENDIX: TOP CLIMATE CHANGE QUESTIONS FOR EACH AGENCY

After identifying the top three questions they would most like to ask of an expert on climate change, participants were shown a list of the 11 federal agencies that conduct climate change research and asked: *From which of the following federal government agencies would you want to learn their answer to this question?* The charts on pages 22-32 report the top questions that the public has for each of those agencies, and the total percentage of the public that wishes to know that agency's answer to their top question. For each agency, the three questions that had the highest percentage of respondents who indicated they wished a given agency to answer that question are bolded.

WOULD LIKE AN ANSWER FROM: NATIONAL AERONAUTICS AND SPACE
ADMINISTRATION

Question	Top Three Questions	<i>Percentage of people asking this as one of their top questions who would go to NASA</i>	<i>Percentage of the total population who would ask NASA this as one of their top questions^a</i>
What benefit will climate change cause?	7%	73%	5%
What kind of research are you conducting on climate change?	28%	70%	20%
What can the nations of the world do to reduce climate change?	16%	69%	11%
What can the United States do to reduce climate change?	14%	68%	10%
What causes climate change?	14%	65%	9%
How do you know that climate change is happening?	20%	63%	13%
Is there still time to reduce climate change, or is it too late?	20%	63%	13%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	62%	24%
On the whole, will climate change be more harmful or beneficial?	17%	62%	11%
What harm will climate change cause?	15%	62%	9%
Is climate change really happening?	19%	61%	12%
What can I do to reduce climate change?	11%	57%	6%
How much would it cost the United States to reduce climate change?	7%	57%	4%
When will climate change begin to harm people?	12%	47%	6%
Will climate change harm people?	9%	46%	4%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to NASA for the answer. E.g., 17% (percentage of the population with this question) x 62% (percentage of those with this question who would go to NASA for the answer) = 11% of the population who would go to NASA to have this question answered.

^bBolded entries are the three highest values for NASA on the “*Percentage of the total population who would ask NASA this as one of their top questions*” measure

WOULD LIKE AN ANSWER FROM: CENTERS FOR DISEASE CONTROL AND PREVENTION

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to CDC	Percentage of the total population who would ask CDC this as one of their top questions ^a
What harm will climate change cause?	15%	56%	8%
What can the nations of the world do to reduce climate change?	16%	55%	9%
When will climate change begin to harm people?	12%	50%	6%
What can I do to reduce climate change?	11%	50%	6%
On the whole, will climate change be more harmful or beneficial?	17%	49%	8%
What benefit will climate change cause?	7%	49%	3%
Will climate change harm people?	9%	47%	4%
What kind of research are you conducting on climate change?	28%	46%	13%
What can the United States do to reduce climate change?	14%	46%	6%
What causes climate change?	14%	38%	5%
Is there still time to reduce climate change, or is it too late?	20%	37%	7%
How much would it cost the United States to reduce climate change?	7%	35%	2%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	31%	12%
Is climate change really happening?	19%	21%	4%
How do you know that climate change is happening?	20%	20%	4%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to CDC for the answer. E.g., 39% (percentage of the population with this question) x 31% (percentage of those with this question who would go to CDC for the answer) = 12% of the population who would go to CDC to have this question answered.

^bBolded entries are the three highest values for CDC on the “Percentage of the total population who would ask CDC this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: DEPARTMENT OF DEFENSE

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to DOD	Percentage of the total population who would ask DOD this as one of their top questions ^a
What can the nations of the world do to reduce climate change?	16%	41%	7%
How much would it cost the United States to reduce climate change?	7%	38%	3%
What kind of research are you conducting on climate change?	28%	36%	10%
What benefit will climate change cause?	7%	32%	2%
Will climate change harm people?	9%	31%	3%
What can the United States do to reduce climate change?	14%	29%	4%
What harm will climate change cause?	15%	25%	4%
Is there still time to reduce climate change, or is it too late?	20%	24%	5%
When will climate change begin to harm people?	12%	24%	3%
What can I do to reduce climate change?	11%	23%	3%
What causes climate change?	14%	22%	3%
On the whole, will climate change be more harmful or beneficial?	17%	19%	3%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	17%	7%
How do you know that climate change is happening?	20%	14%	3%
Is climate change really happening?	19%	12%	2%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to DOD for the answer. E.g., 28% (percentage of the population with this question) x 36% (percentage of those with this question who would go to DOD for the answer) = 10% of the population who would go to DOD to have this question answered.

^bBolded entries are the three highest values for DOD on the “Percentage of the total population who would ask DOD this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: DEPARTMENT OF ENERGY

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to DOE	Percentage of the total population who would ask DOE this as one of their top questions ^a
What can the United States do to reduce climate change?	14%	70%	10%
What can the nations of the world do to reduce climate change?	16%	67%	11%
What can I do to reduce climate change?	11%	63%	7%
How much would it cost the United States to reduce climate change?	7%	61%	4%
Is there still time to reduce climate change, or is it too late?	20%	60%	12%
What benefit will climate change cause?	7%	58%	4%
What kind of research are you conducting on climate change?	28%	54%	15%
When will climate change begin to harm people?	12%	53%	6%
What harm will climate change cause?	15%	49%	7%
On the whole, will climate change be more harmful or beneficial?	17%	46%	8%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	44%	17%
What causes climate change?	14%	44%	6%
Is climate change really happening?	19%	35%	7%
How do you know that climate change is happening?	20%	32%	6%
Will climate change harm people?	9%	32%	3%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to DOE for the answer. E.g., 39% (percentage of the population with this question) x 44% (percentage of those with this question who would go to DOE for the answer) =17% of the population who would go to DOE to have this question answered.

^bBolded entries are the three highest values for DOE on the “*Percentage of the total population who would ask DOE this as one of their top questions*” measure

WOULD LIKE AN ANSWER FROM: ENVIRONMENTAL PROTECTION AGENCY

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to EPA	Percentage of the total population who would ask EPA this as one of their top questions ^a
What can the United States do to reduce climate change?	14%	88%	12%
Is there still time to reduce climate change, or is it too late?	20%	85%	17%
What can the nations of the world do to reduce climate change?	16%	81%	13%
What harm will climate change cause?	15%	80%	12%
What can I do to reduce climate change?	11%	79%	9%
What causes climate change?	14%	77%	11%
On the whole, will climate change be more harmful or beneficial?	17%	76%	13%
What benefit will climate change cause?	7%	76%	5%
What kind of research are you conducting on climate change?	28%	71%	20%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	70%	27%
How much would it cost the United States to reduce climate change?	7%	70%	5%
When will climate change begin to harm people?	12%	68%	8%
Will climate change harm people?	9%	66%	6%
Is climate change really happening?	19%	60%	11%
How do you know that climate change is happening?	20%	58%	12%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to EPA for the answer. E.g., 39% (percentage of the population with this question) x 70% (percentage of those with this question who would go to EPA for the answer) =27% of the population who would go to EPA to have this question answered.

^bBolded entries are the three highest values for EPA on the “Percentage of the total population who would ask EPA this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: NATIONAL INSTITUTES FOR HEALTH

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to NIH	Percentage of the total population who would ask NIH this as one of their top questions ^a
What harm will climate change cause?	15%	67%	10%
What benefit will climate change cause?	7%	67%	5%
What can the nations of the world do to reduce climate change?	16%	64%	10%
On the whole, will climate change be more harmful or beneficial?	17%	63%	11%
What can I do to reduce climate change?	11%	61%	7%
What can the United States do to reduce climate change?	14%	59%	8%
Will climate change harm people?	9%	58%	5%
When will climate change begin to harm people?	12%	57%	7%
What kind of research are you conducting on climate change?	28%	50%	14%
Is there still time to reduce climate change, or is it too late?	20%	49%	10%
What causes climate change?	14%	49%	7%
How much would it cost the United States to reduce climate change?	7%	45%	3%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	32%	12%
Is climate change really happening?	19%	21%	4%
How do you know that climate change is happening?	20%	18%	4%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to NIH for the answer. E.g., 28% (percentage of the population with this question) x 50% (percentage of those with this question who would go to NIH for the answer) =14 % of the population who would go to NIH to have this question answered.

^bBolded entries are the three highest values for NIH on the “Percentage of the total population who would ask NIH this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION

Question	Top Three Questions	<i>Percentage of people asking this as one of their top questions who would go to NOAA</i>	<i>Percentage of the total population who would ask NOAA this as one of their top questions^a</i>
Is there still time to reduce climate change, or is it too late?	20%	95%	19%
What can the United States do to reduce climate change?	14%	93%	13%
What kind of research are you conducting on climate change?	28%	91%	25%
What can the nations of the world do to reduce climate change?	16%	90%	14%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	88%	34%
How do you know that climate change is happening?	20%	87%	17%
On the whole, will climate change be more harmful or beneficial?	17%	86%	15%
What harm will climate change cause?	15%	86%	13%
What causes climate change?	14%	85%	12%
What can I do to reduce climate change?	11%	84%	9%
What benefit will climate change cause?	7%	80%	6%
Is climate change really happening?	19%	77%	15%
How much would it cost the United States to reduce climate change?	7%	76%	5%
When will climate change begin to harm people?	12%	73%	9%
Will climate change harm people?	9%	63%	6%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to NOAA for the answer. E.g., 39% (percentage of the population with this question) x 88% (percentage of those with this question who would go to NOAA for the answer) = 34% of the population who would go to NOAA to have this question answered.

^bBolded entries are the three highest values for NOAA on the “*Percentage of the total population who would ask NOAA this as one of their top questions*” measure.

WOULD LIKE AN ANSWER FROM: NATIONAL PARK SERVICE

Question	Top Three Questions	<i>Percentage of people asking this as one of their top questions</i> who would go to NPS	<i>Percentage of the total population</i> who would ask NPS this as one of their top questions ^a
What can the United States do to reduce climate change?	14%	53%	7%
What can the nations of the world do to reduce climate change?	16%	48%	8%
What benefit will climate change cause?	7%	48%	3%
What can I do to reduce climate change?	11%	46%	5%
What kind of research are you conducting on climate change?	28%	44%	12%
What harm will climate change cause?	15%	44%	7%
What causes climate change?	14%	41%	6%
Is there still time to reduce climate change, or is it too late?	20%	40%	8%
How much would it cost the United States to reduce climate change?	7%	37%	3%
On the whole, will climate change be more harmful or beneficial?	17%	35%	6%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	33%	13%
How do you know that climate change is happening?	20%	27%	5%
When will climate change begin to harm people?	12%	27%	3%
Will climate change harm people?	9%	26%	2%
Is climate change really happening?	19%	24%	5%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to NPS for the answer. E.g., 39% (percentage of the population with this question) x 33% (percentage of those with this question who would go to NPS for the answer) = 13% of the population who would go to NPS to have this question answered.

^bBolded entries are the three highest values for NPS on the “*Percentage of the total population* who would ask NPS this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: NATIONAL SCIENCE FOUNDATION

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to NSF	Percentage of the total population who would ask NSF this as one of their top questions ^a
Is there still time to reduce climate change, or is it too late?	20%	83%	17%
What benefit will climate change cause?	7%	82%	6%
On the whole, will climate change be more harmful or beneficial?	17%	80%	14%
What kind of research are you conducting on climate change?	28%	77%	22%
What can the nations of the world do to reduce climate change?	16%	77%	12%
What can the United States do to reduce climate change?	14%	74%	10%
What can I do to reduce climate change?	11%	74%	8%
How much would it cost the United States to reduce climate change?	7%	70%	5%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	69%	27%
What causes climate change?	14%	67%	9%
Is climate change really happening?	19%	64%	12%
What harm will climate change cause?	15%	62%	9%
When will climate change begin to harm people?	12%	61%	7%
How do you know that climate change is happening?	20%	54%	11%
Will climate change harm people?	9%	44%	4%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to NSF for the answer. E.g., 39% (percentage of the population with this question) x 69% (percentage of those with this question who would go to NSF for the answer) =27% of the population who would go to NSF to have this question answered.

^bBolded entries are the three highest values for NSF on the “Percentage of the total population who would ask NSF this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: SMITHSONIAN

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to Smithsonian	Percentage of the total population who would ask Smithsonian this as one of their top questions ^a
What benefit will climate change cause?	7%	49%	3%
What can the nations of the world do to reduce climate change?	16%	46%	7%
What can the United States do to reduce climate change?	14%	45%	6%
What causes climate change?	14%	41%	6%
What kind of research are you conducting on climate change?	28%	40%	11%
What can I do to reduce climate change?	11%	39%	4%
How much would it cost the United States to reduce climate change?	7%	38%	3%
Is there still time to reduce climate change, or is it too late?	20%	34%	7%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	30%	12%
How do you know that climate change is happening?	20%	30%	6%
On the whole, will climate change be more harmful or beneficial?	17%	27%	5%
Is climate change really happening?	19%	25%	5%
When will climate change begin to harm people?	12%	24%	3%
What harm will climate change cause?	15%	22%	3%
Will climate change harm people?	9%	21%	2%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to Smithsonian for the answer. E.g., 39% (percentage of the population with this question) x 30% (percentage of those with this question who would go to Smithsonian for the answer) = 12% of the population who would go there to have this question answered.

^bBolded entries are the three highest values for Smithsonian on the “Percentage of the total population who would ask Smithsonian this as one of their top questions” measure

WOULD LIKE AN ANSWER FROM: UNITED STATES DEPARTMENT OF AGRICULTURE

Question	Top Three Questions	Percentage of people asking this as one of their top questions who would go to USDA	Percentage of the total population who would ask USDA this as one of their top questions ^a
What can the nations of the world do to reduce climate change?	16%	69%	11%
What can the United States do to reduce climate change?	14%	69%	10%
What harm will climate change cause?	15%	66%	10%
What benefit will climate change cause?	7%	64%	4%
What causes climate change?	14%	60%	8%
On the whole, will climate change be more harmful or beneficial?	17%	57%	10%
What kind of research are you conducting on climate change?	28%	56%	16%
How much would it cost the United States to reduce climate change?	7%	54%	4%
Is there still time to reduce climate change, or is it too late?	20%	51%	10%
What can I do to reduce climate change?	11%	51%	6%
How do you know that climate change is happening?	20%	42%	8%
When will climate change begin to harm people?	12%	41%	5%
How do you know that climate change is caused mostly by human activities, not natural changes in the environment?	39%	40%	16%
Is climate change really happening?	19%	39%	7%
Will climate change harm people?	9%	37%	3%

^aFigures in this column are the product of the percentage who would ask this question and the percentage of those with this question who would go to USDA for the answer. E.g., 28% (percentage of the population with this question) x 56% (percentage of those with this question who would go to DOE for the answer) = 16% of the population who would go to DOE to have this question answered.

^bBolded entries are the three highest values for USDA on the “*Percentage of the total population* who would ask USDA this as one of their top questions” measure