

Clearly Communicating about Climate Change

Severe Weather Symposium

March 6, 2015

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My main points:

- Most Americans are convinced the climate is changing, and they want solutions enacted, but most feel little sense of urgency.
- Americans think the changing climate is worsening extreme weather events
- Meteorologists can be key providers of climate information

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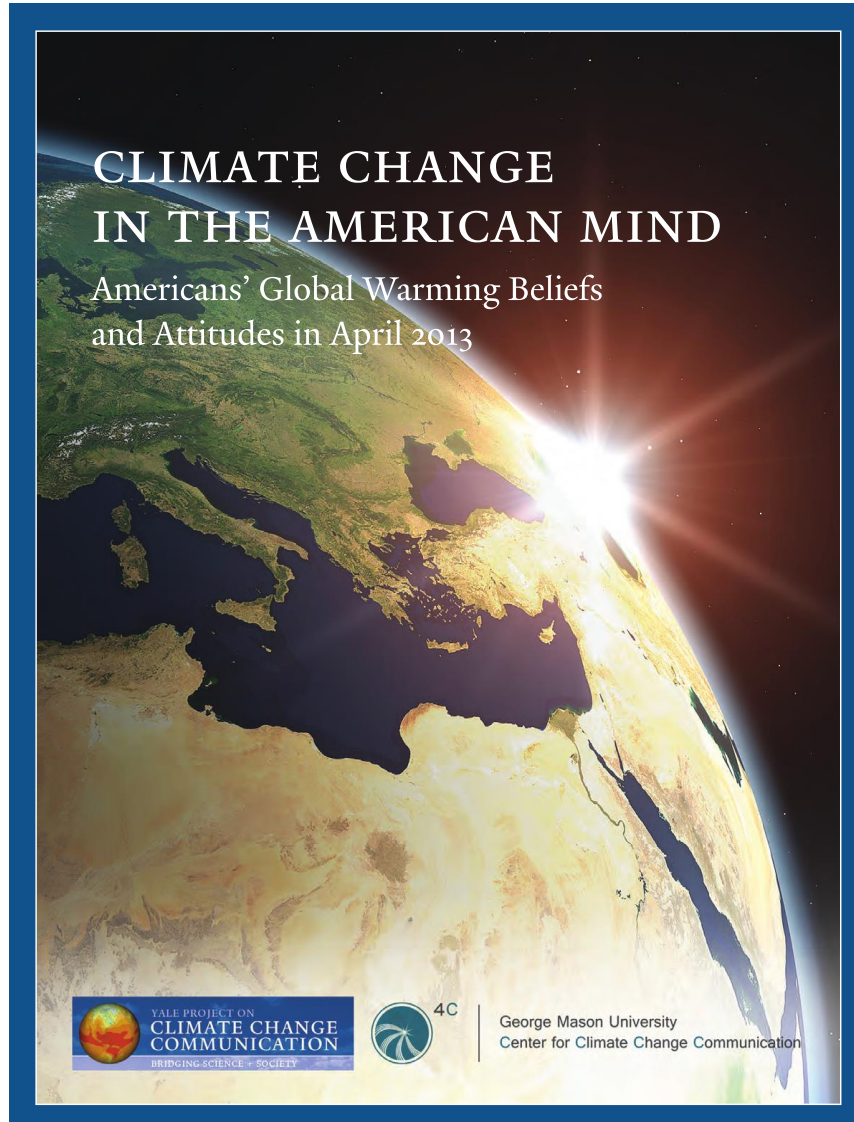
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FIVE KEY CLIMATE CHANGE BELIEFS

Five Key Climate Change Beliefs

1. It's Real
2. It's Us
3. It Hurts People
4. Scientists Agree
5. We Can Do Something About It

What do Americans Think?



Climate Change in the American Mind:

- Nationally representative surveys of adults
- Conducted twice annually
- Started in 2008
- N = 1,000 per survey
- Used to track key indicators of public opinion
 - beliefs
 - behaviors
 - policy support

What do Ohioans Think?

CLIMATE CHANGE IN THE OHIOAN MIND



VALE PROJECT ON
CLIMATE CHANGE
COMMUNICATION
WEIGHING SCIENCE - SOCIETY

CLIMATE CHANGE IN THE COLUMBUS, OHIOAN MIND

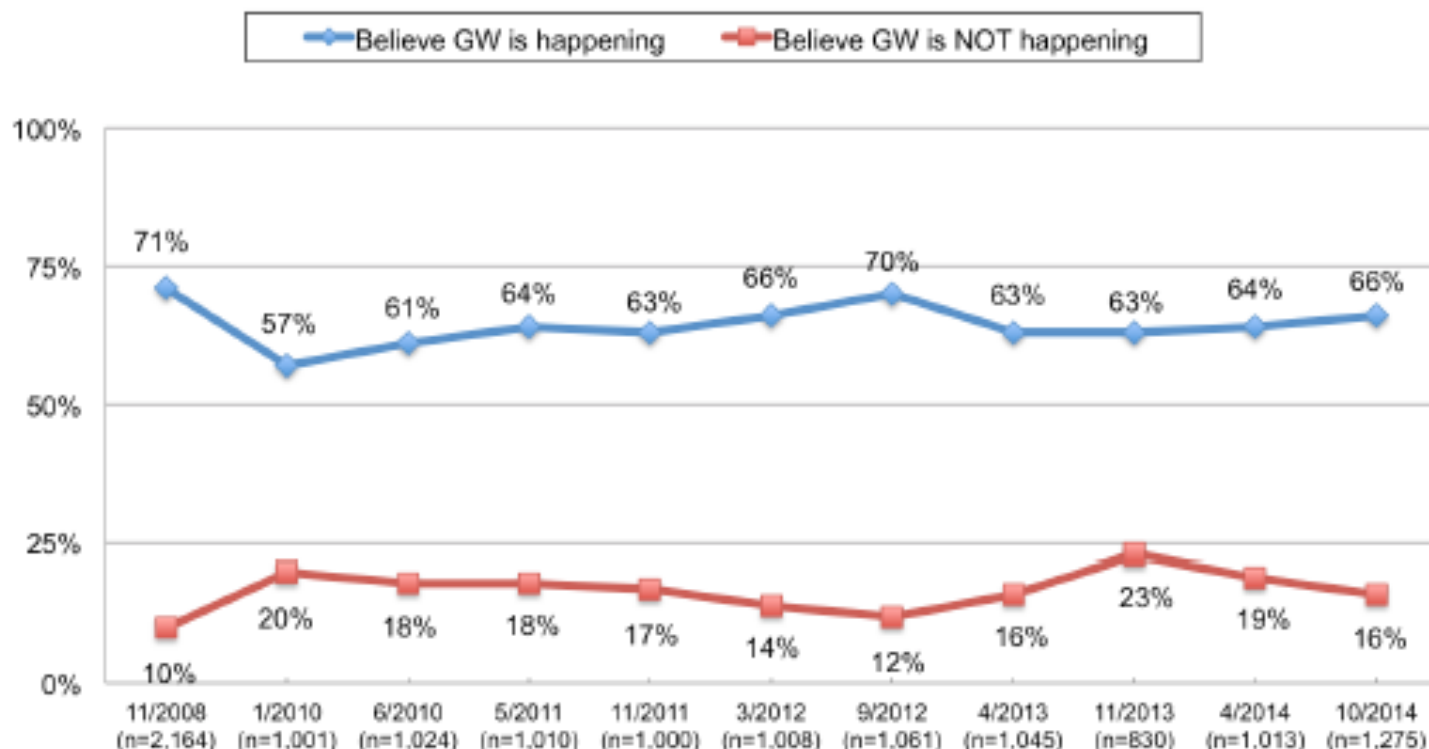


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It's Real

Majority of Americans Think Global Warming Is Happening

- Continuing decline in the number of Americans who think it is not happening -



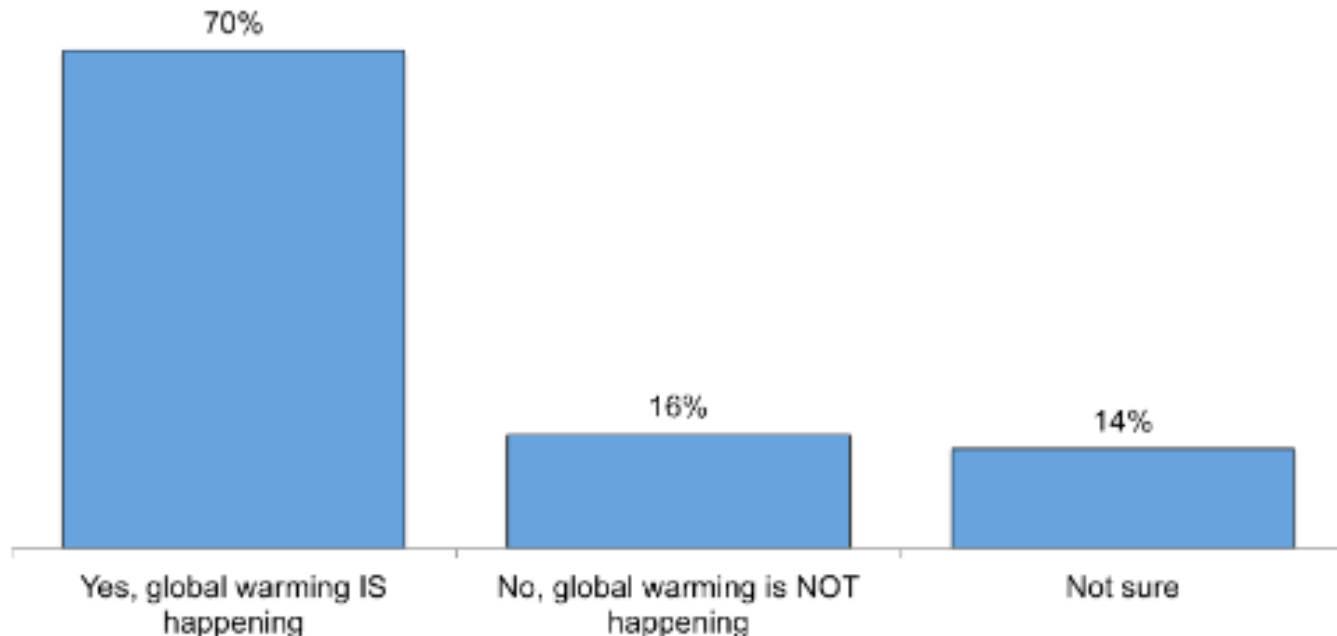
Do you think global warming is happening?

Base: Americans 18+. October, 2014.

Note: Respondents who either said they "don't know" or who did not answer the question are not included in the chart. As a result, percentages sum to less than 100%.

It's Real

Most Ohioans Believe Global Warming Is Happening



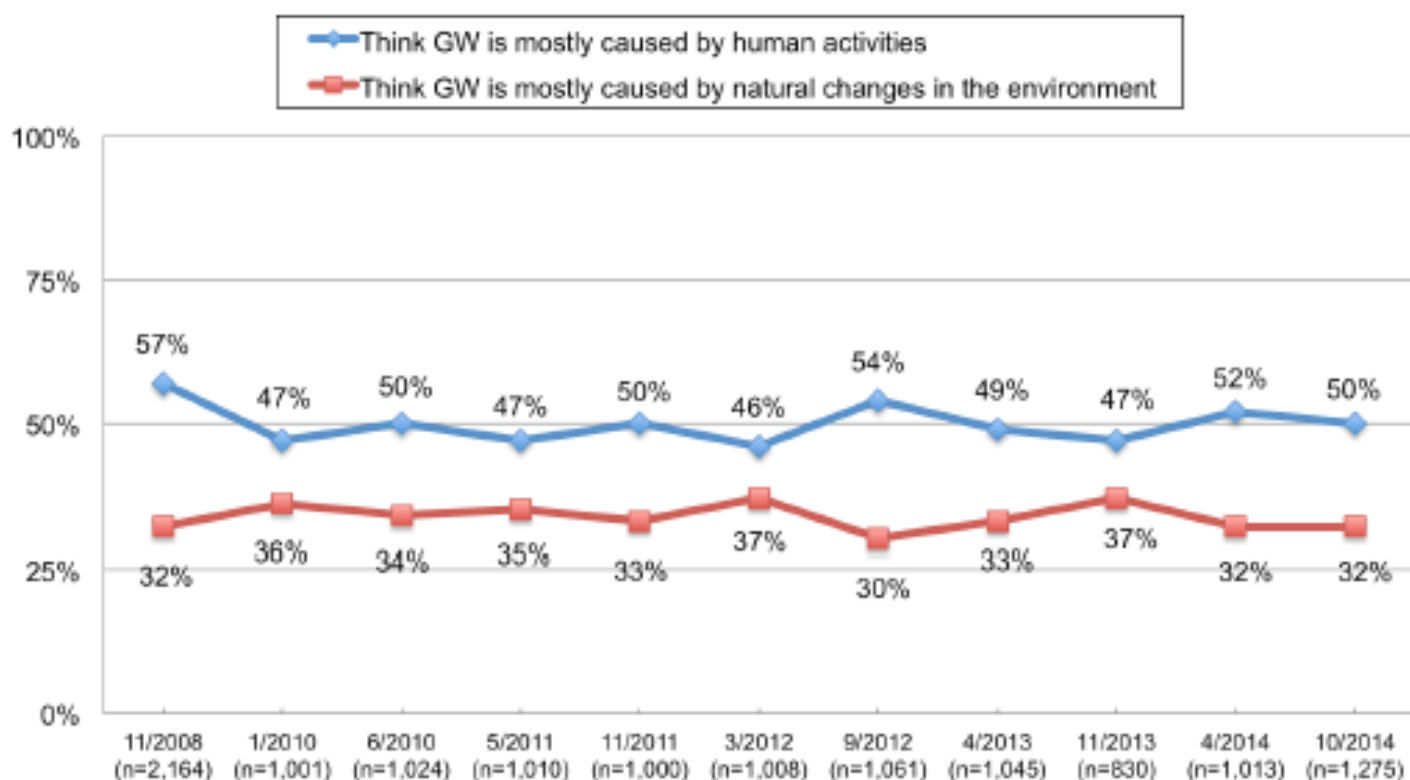
Recently, you may have noticed that *global warming* has been getting some attention in the news. Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate may change as a result.

What do you think: Do you think that global warming is happening, or not? If you're not sure, just let me know.

Base: Ohioans 18+ (n=800).

It's Us

Half of Americans Think That If Global Warming Is Happening, It Is Mostly Human Caused



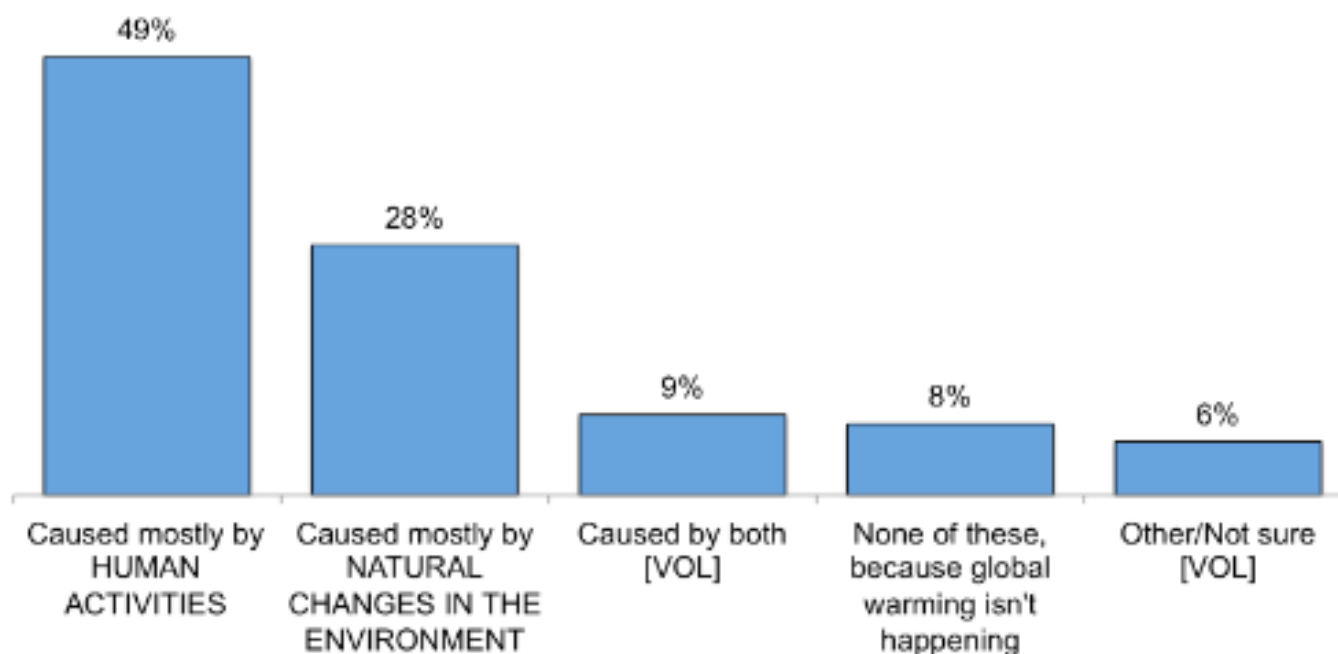
Assuming global warming is happening, do you think it is...

Base: Americans 18+. October, 2014.

It's Us

Half of Ohioans Believe Global Warming Is Human Caused

- But 28% believe it is caused mostly by natural changes in the environment -



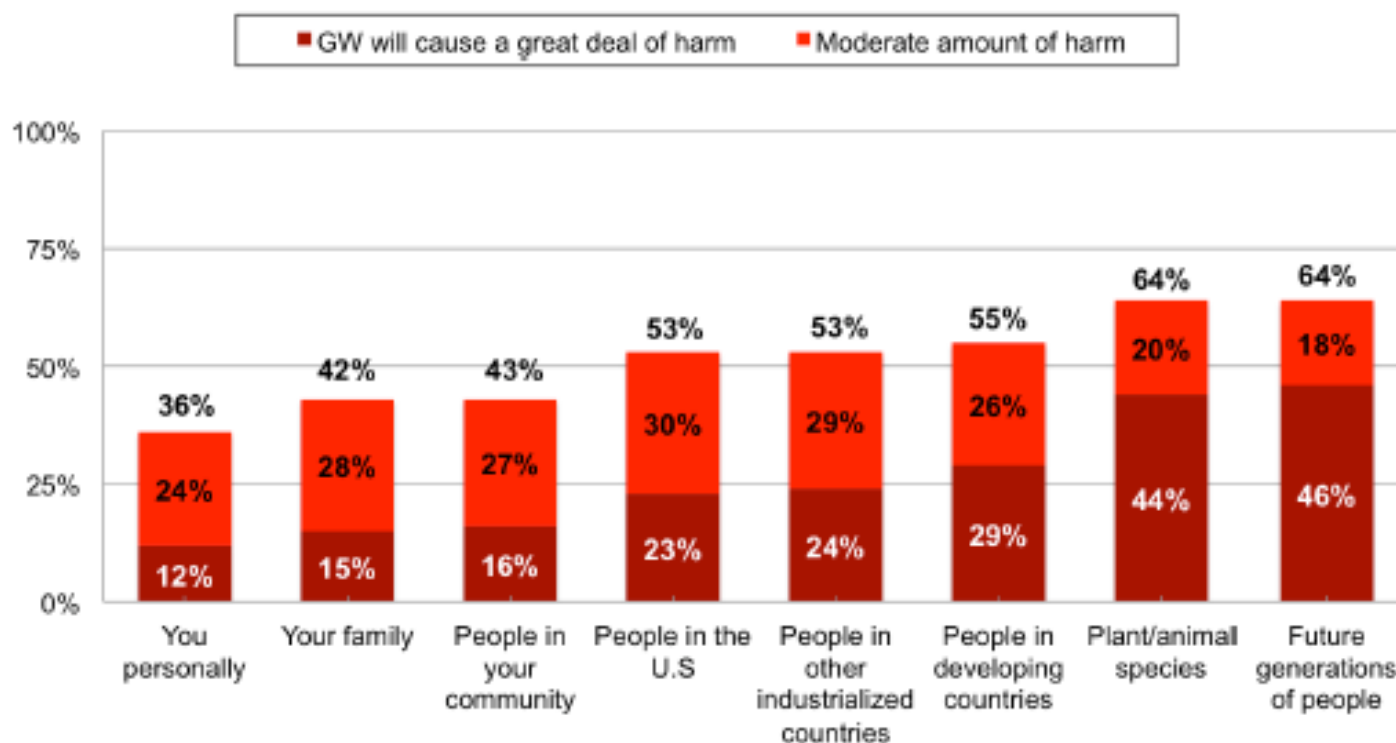
Assuming global warming is happening, do you think it is...

Base: Ohioans 18+ (n=800).



It Hurts People

Most Americans Think Global Warming Is a Relatively Distant Threat

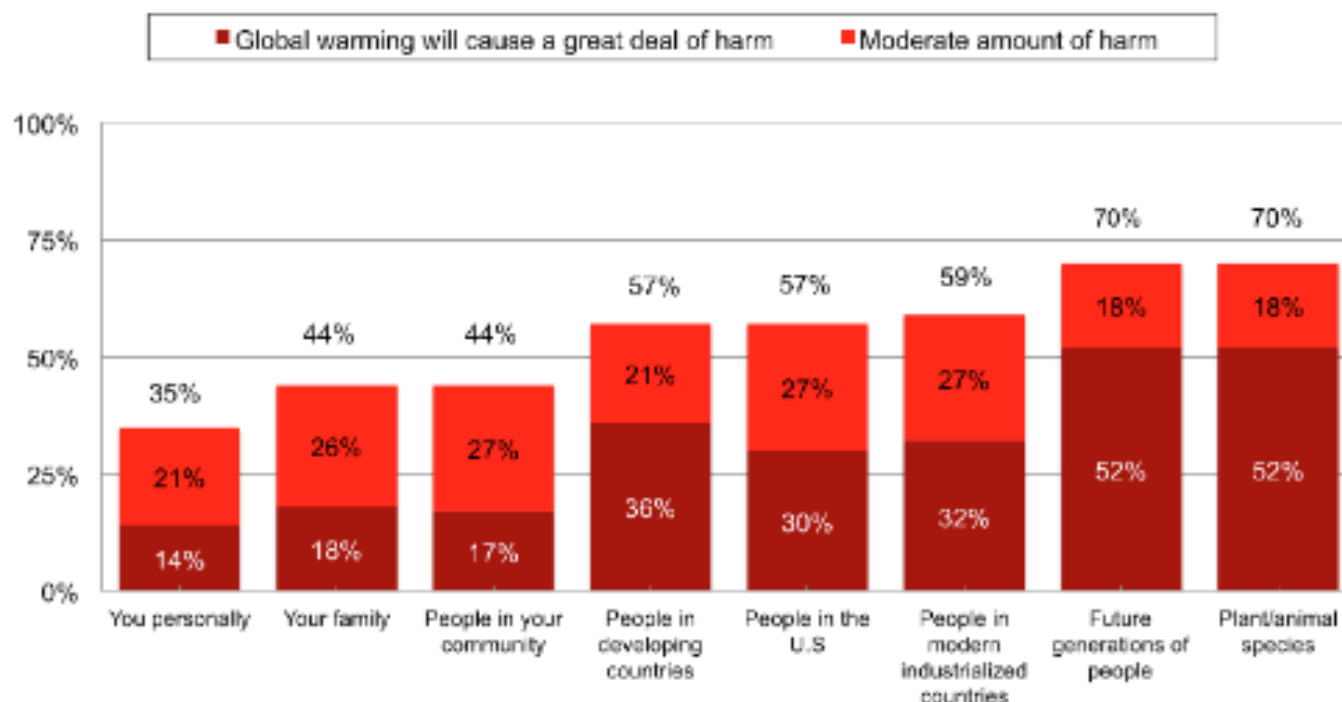


How much do you think global warming will harm...?

Base: Americans 18+ (n=1,275). October, 2014.

It Hurts People

Many Ohioans Perceive Global Warming as a Relatively Distant Threat



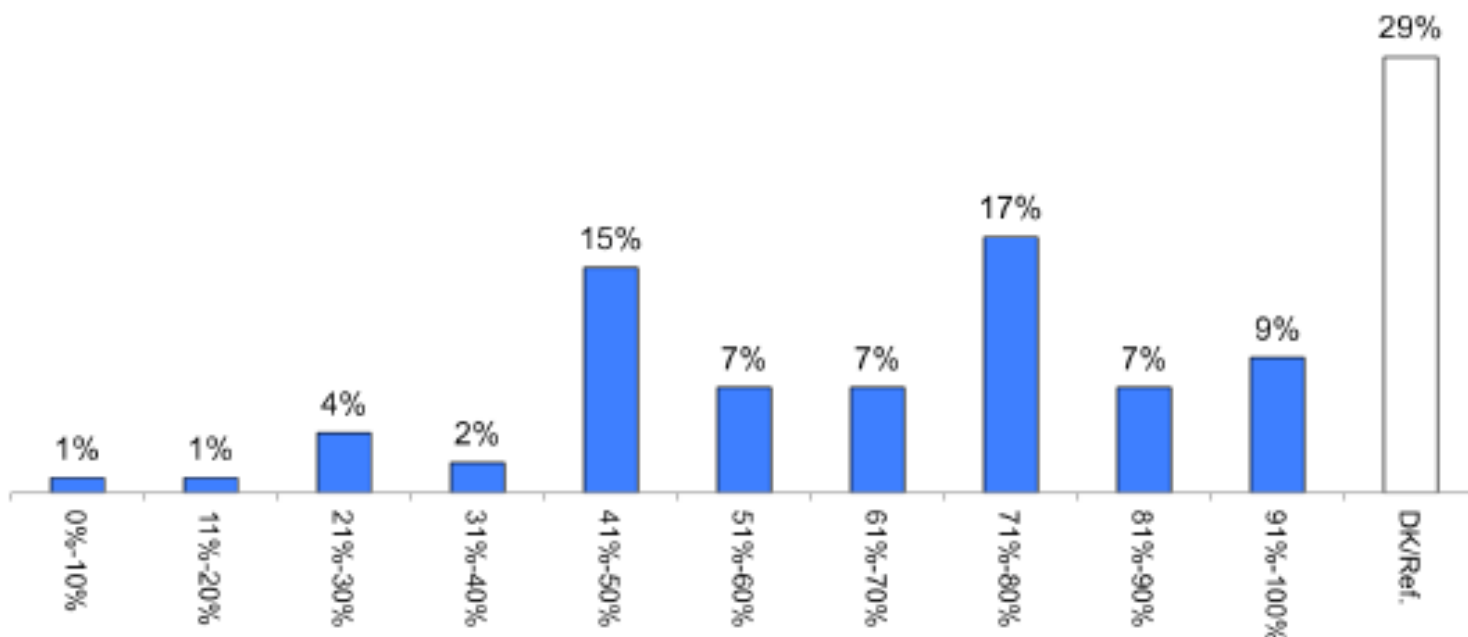
Please tell me whether you think global warming will harm each of the following – not at all, only a little, a moderate amount, or a great deal? If you're not sure about an item, just let me know. First...

Base: Ohioans 18+ (n=800).



Scientists Agree

About One in Ten Americans Knows That More Than 90% of Climate Scientists Have Concluded Human-Caused Global Warming Is Happening

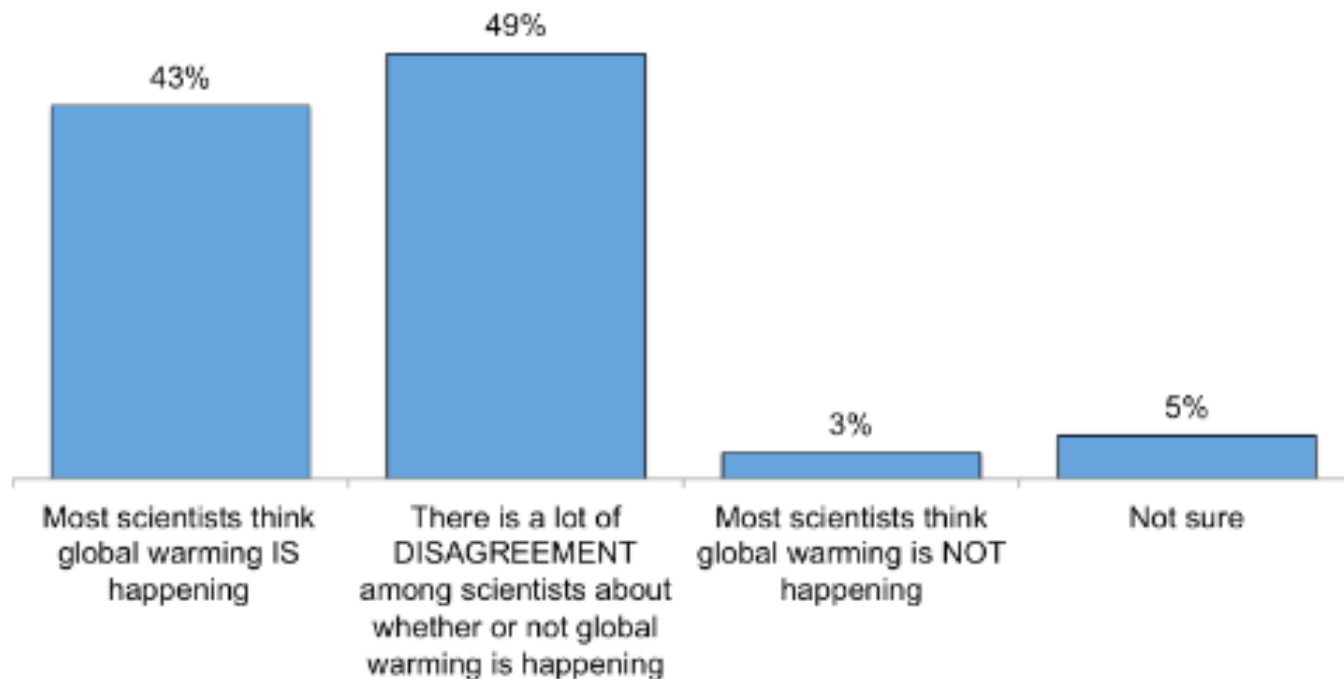


To the best of your knowledge, what percentage of climate scientists think that human-caused global warming is happening? Please click on the slider bar below to indicate your answer. You can slide the indicator to the position that best describes your opinion. If the slider does not work, you can enter a number in the number box.

Base: Americans 18+ (n=1,275). October, 2014.

Scientists Agree

Half of Ohioans Believe There Is a Lot of Disagreement Among Scientists About Whether Global Warming Is Happening



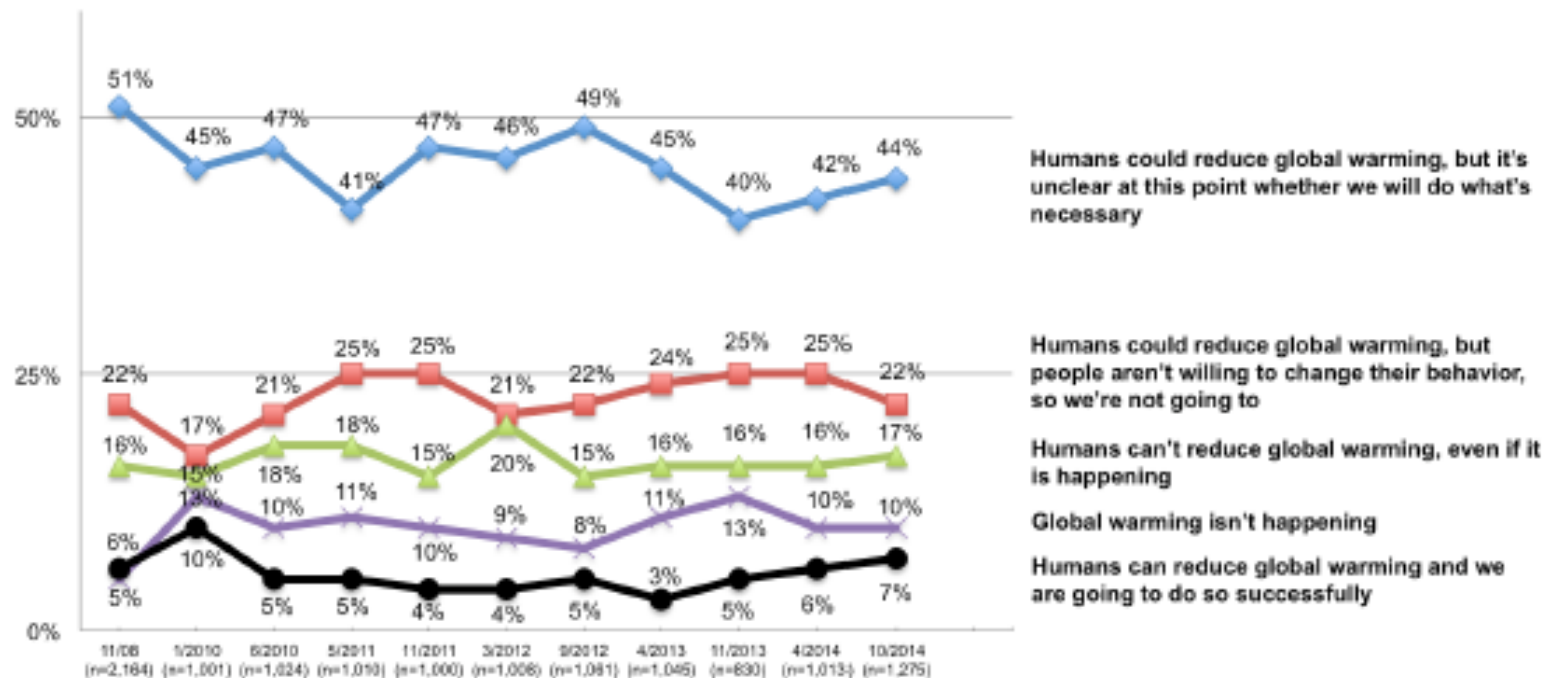
Which of the following statements comes closest to your own view? If you're not sure, just let me know.

Base: Ohioans 18+ (n=800).

We Can Do Something About It

Few Americans Are Optimistic Humans Will Reduce Global Warming

Which of the following statements comes closest to your view?

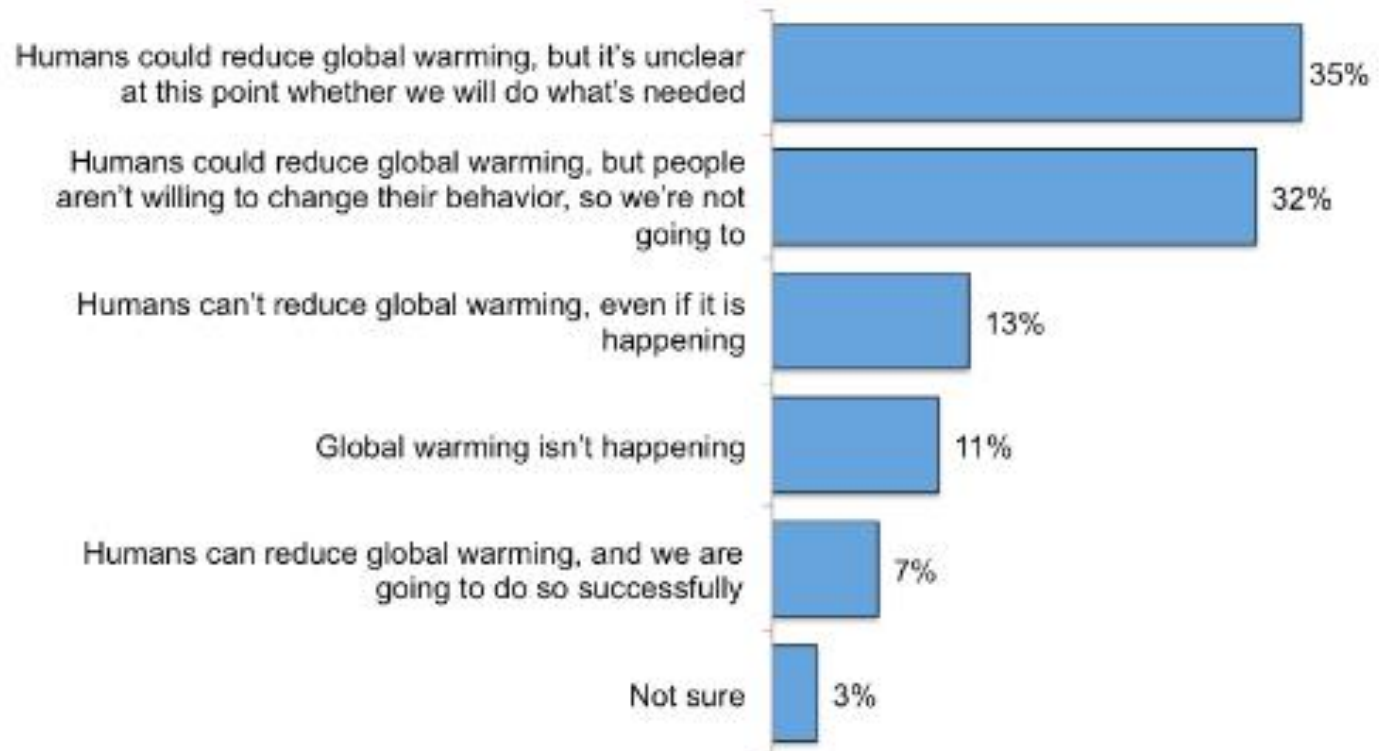


Which of the following statements comes closest to your view?

Base: Americans 18+ (n=1,275). October, 2014.

We Can Do Something About It

Ohioans Are Unsure Whether Humans Will be Able to Reduce Global Warming



Which one of the following statements comes closest to your view?

Base: Ohioans 18+ (n=800).



Despite the modest levels of public engagement...

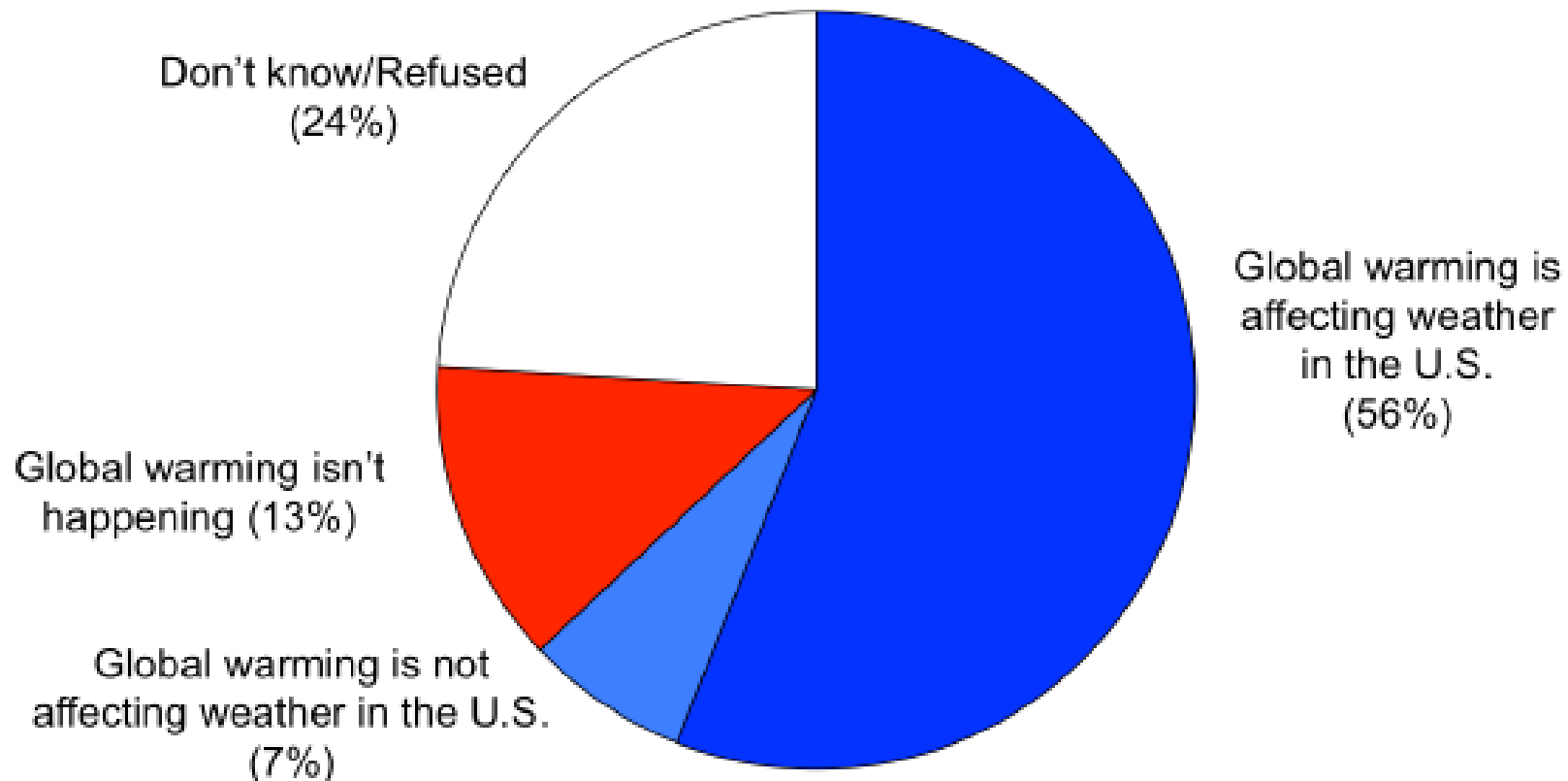
- **There is still considerable public support for policy responses:**
 - Strong (and bi-partisan) support for accelerating the transition to clean energy.
 - Considerable support for action on climate change.

My main points:

- Most Americans are convinced the climate is changing, and they want solutions enacted, but most feel little sense of urgency.
- Americans think the changing climate is worsening extreme weather events
- Meteorologists can be key providers of climate information

PERCEPTIONS OF CLIMATE WARMING & EXTREME WEATHER

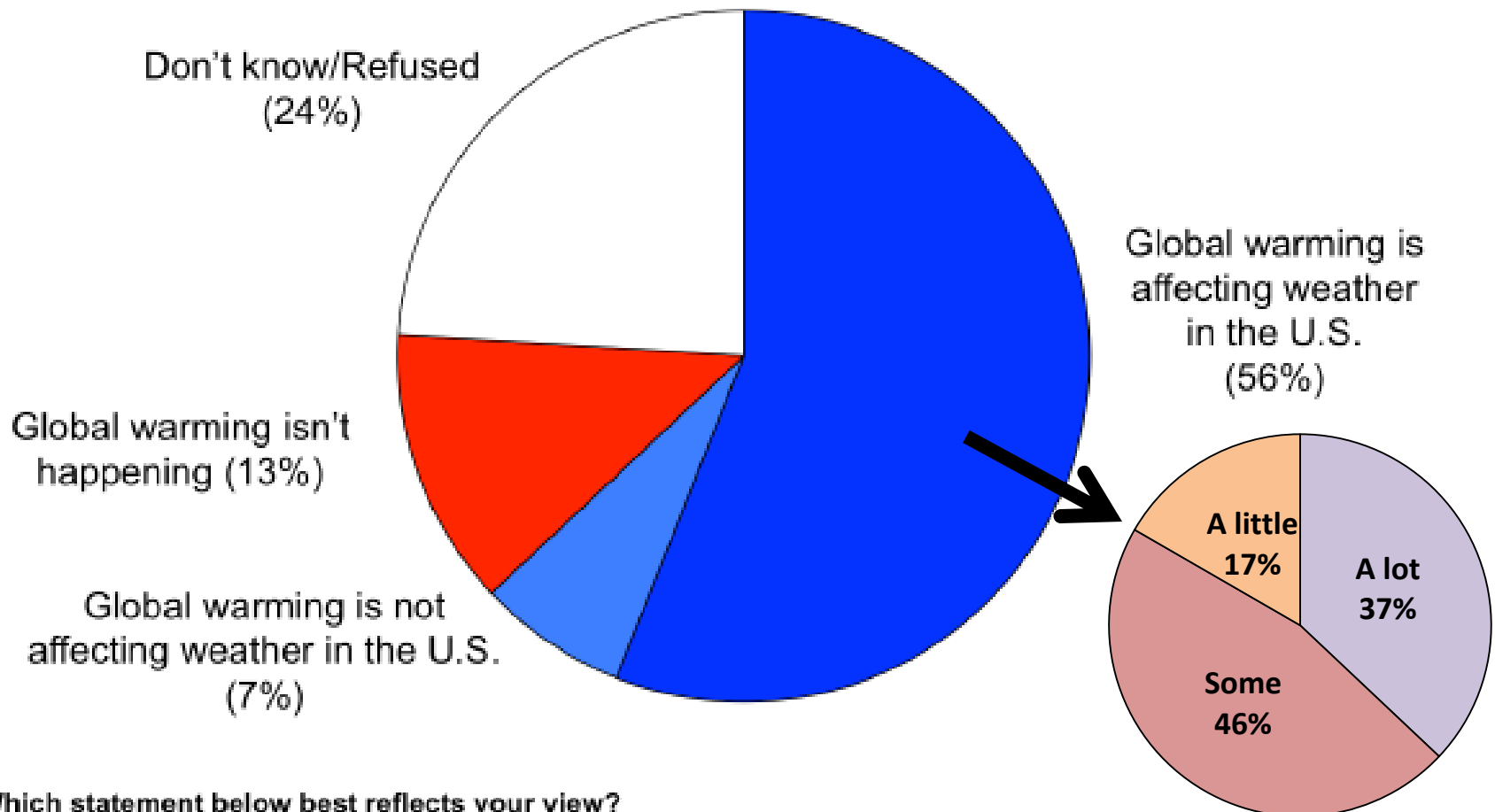
A Majority of Americans Say Global Warming Is Affecting Weather in the United States



Which statement below best reflects your view?

Base: Americans 18+ (n=526, split sample)

A Majority of Americans Say Global Warming Is Affecting Weather in the United States



Which statement below best reflects your view?

Base: Americans 18+ (n=526, split sample)

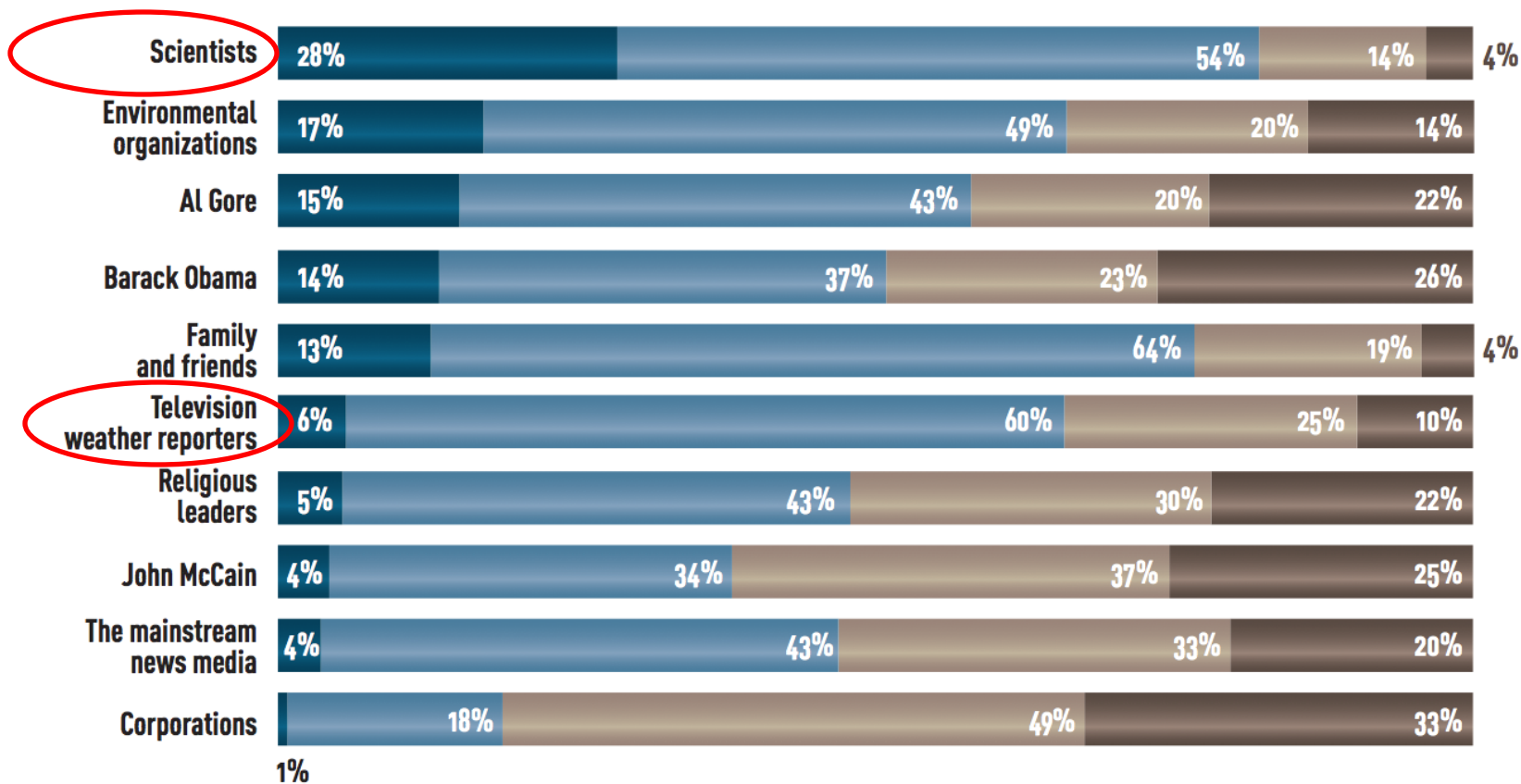
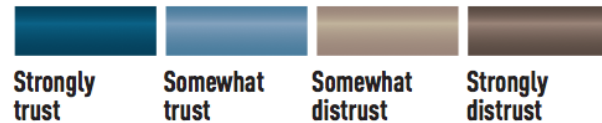
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POTENTIAL ROLE OF METEOROLOGISTS IN THE CLIMATE DISCUSSION

Figure 39: Trust

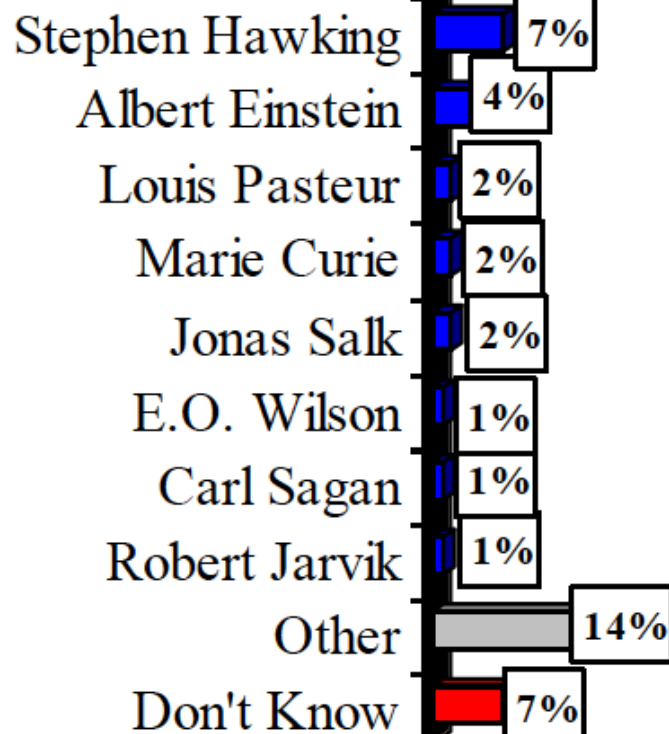
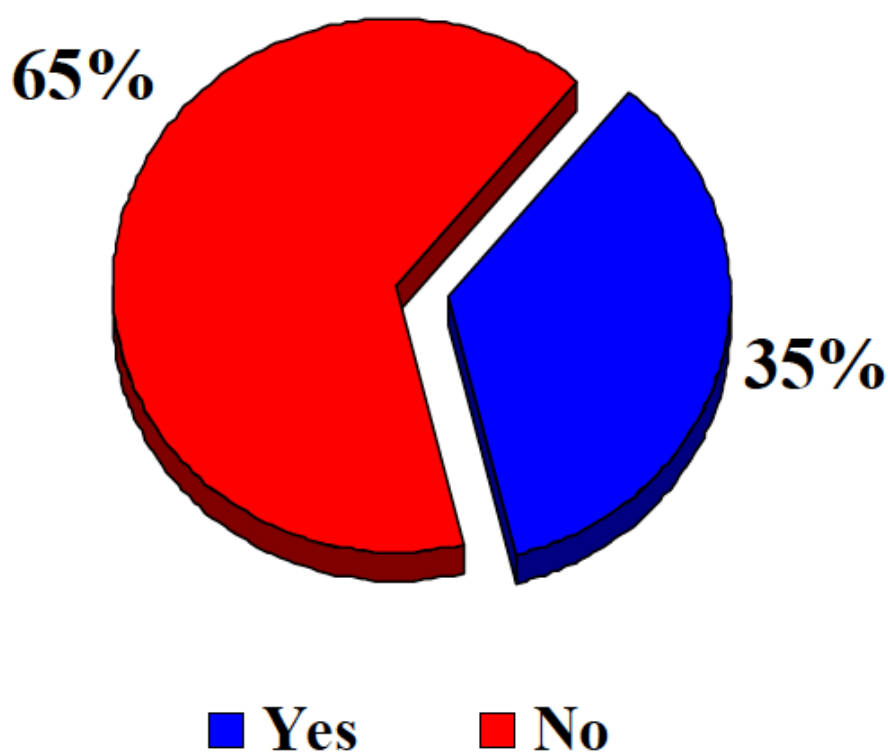
How much do you trust or distrust the following as a source of information about global warming?
(randomized)



N=2,164

Most Americans Can't Name A Living Scientist

Can you name a living scientist? (total mentions $n=278$)



Weathercasters have high trust and unparalleled access as climate educators



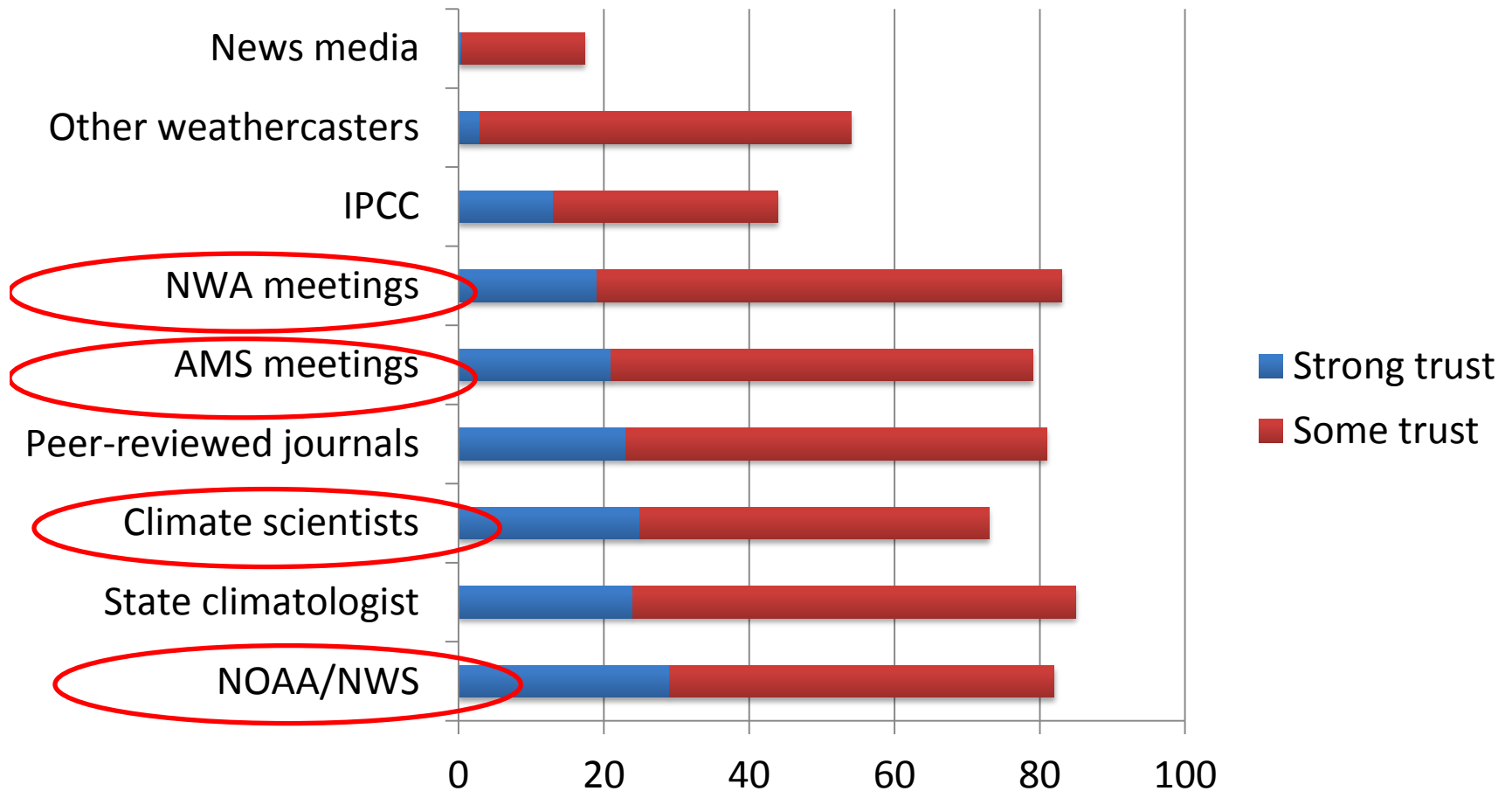
And they have great communication skills!

What do Meteorologists Think?

Preliminary Findings from a survey conducted last month

- 90% of current broadcast meteorologists are convinced that climate change is occurring
- Majorities are interested in presenting local impacts of climate change on-air (50%), online blogs (57%), or at community speaking events (64%)

Who do TV weathercasters trust as sources of information about climate change?



Source: Maibach, E., Wilson, K & Witte, J. (2010) *A National Survey of Television Meteorologists about Climate Change: Preliminary Findings*. George Mason University. Fairfax, VA: Center for Climate Change Communication.

The Climate Matters pilot project: WLTX (Columbia, SC)

[Click to view](#)

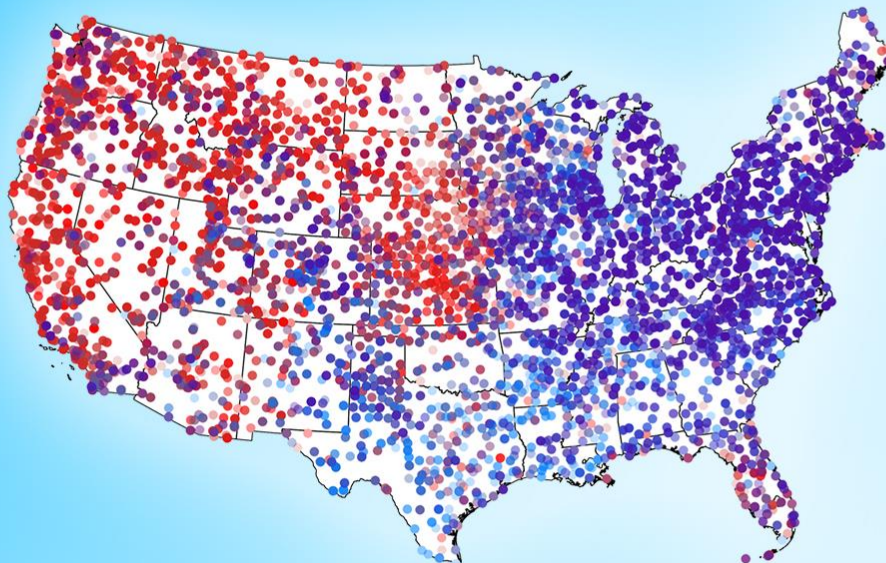
A Wintry Mix Record Temperatures

Highs

15,665

10,177

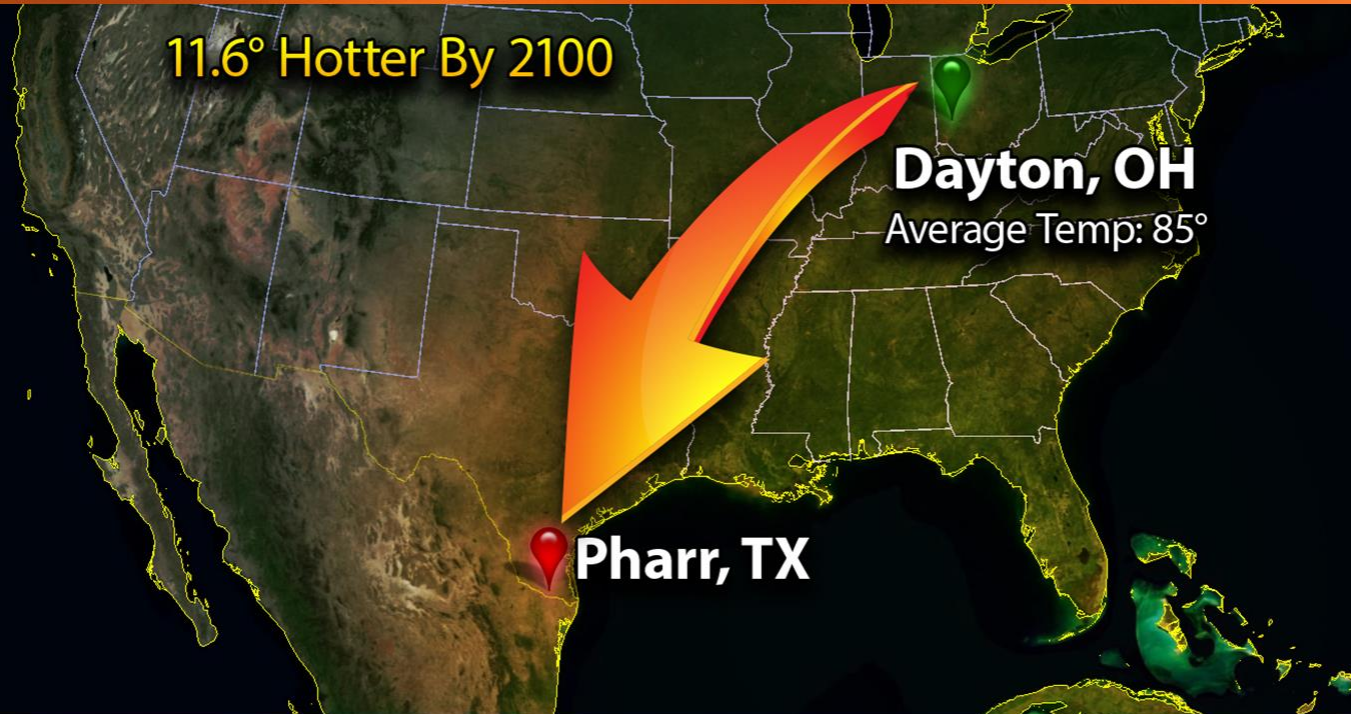
Lows



Source: NOAA/NCDC Climate Data Online - Daily Weather Records

CLIMATE  CENTRAL

Where Your Summer is Headed



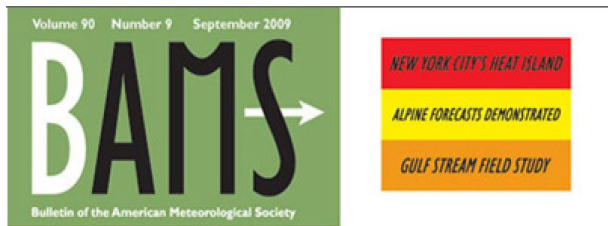
Future summer temperatures based on continuing with current emissions trends.
Current temperatures: PRISM Climate Group, Oregon State University, <http://prism.oregonstate.edu>, accessed July 1, 2014.
Projected temps: CMIP5 multi-model ensemble dataset.

CLIMATE  CENTRAL

An Effective Education Tool

Climate Change Education through TV Weathercasts: Results of a Field Experiment

Zhao, Maibach, Gandy, Witte, Cullen, Klinger, et al. (2013) BAMS. DOI: 10.1175/BAMS-D-12-00144.1



“The results of this field experiment suggest that when TV weathercasters educate their viewers about climate change, viewers gain a more science-based understanding of the issue.”

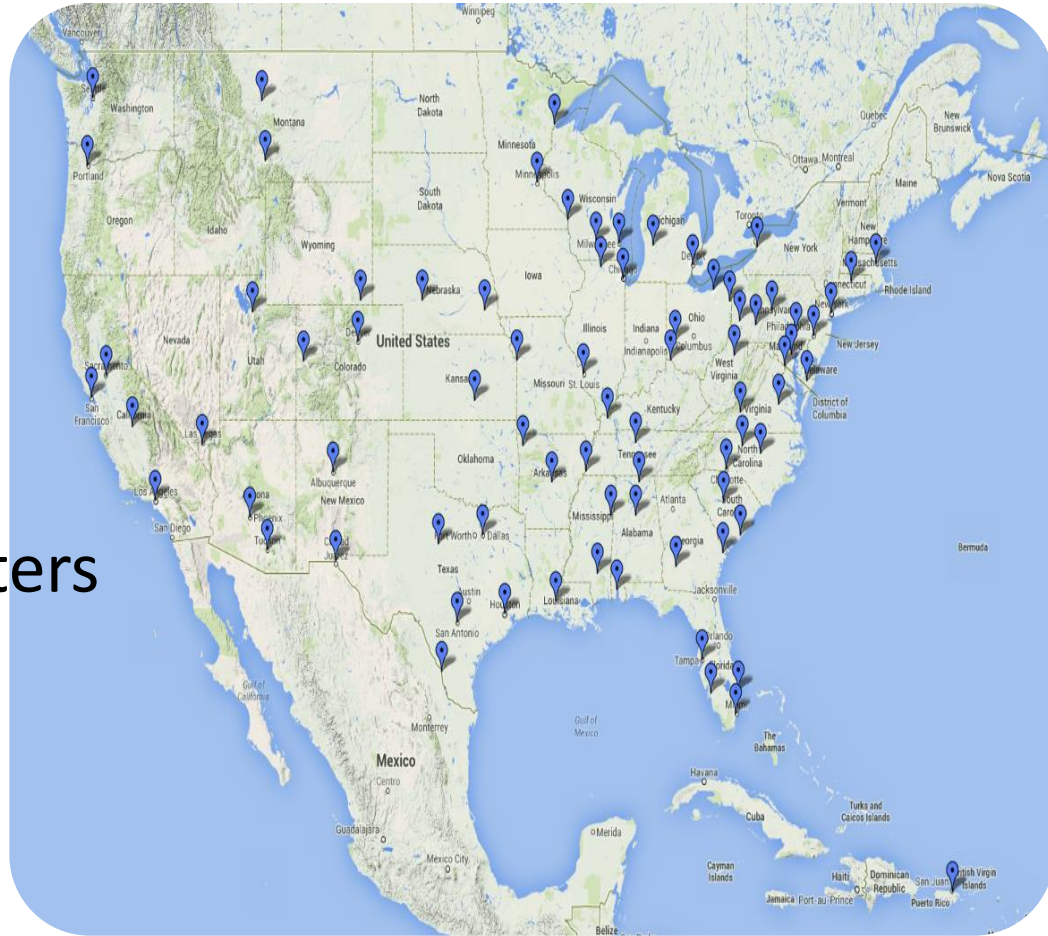
Note: Article was published as an “early release” – this is not the real journal cover.



Release of the 3rd National Climate Assessment

Where We're at Today

The national network has
expanded...currently:
162 weathercasters
115 stations
75 markets
23 Spanish TV weathercasters
(plus some cable, radio,
& newspaper)



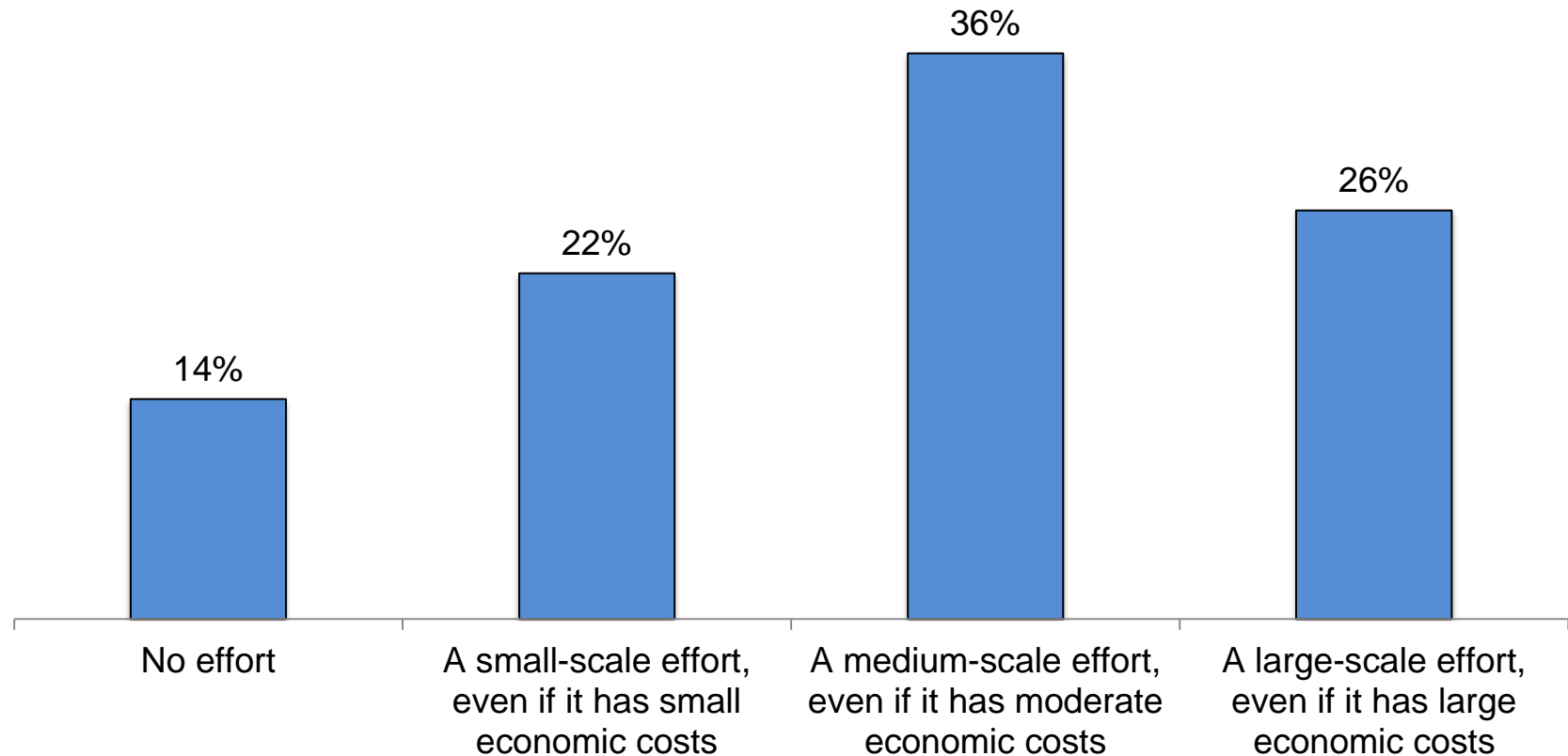
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Questions or
Comments?

A large majority of Americans support a U.S. effort to reduce global warming, even if it has economic costs

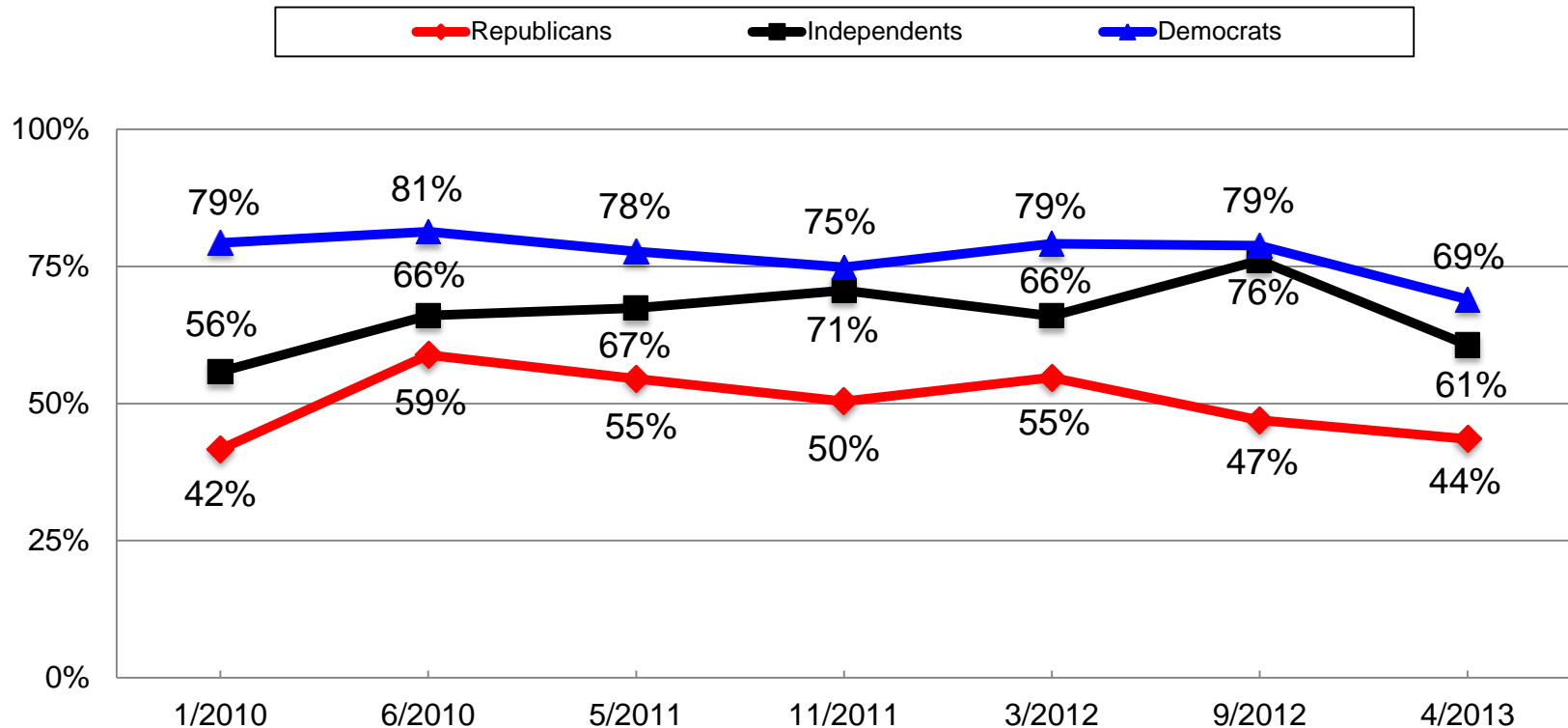


How big of an effort should the United States make to reduce global warming?

Base: Americans 18+ (n=1,045)

Most Democrats and Independents, and nearly half of Republicans, say developing clean energy sources should be a high priority for the President and Congress

- % who say developing clean energy sources should be a “high” or “very high” priority



Do you think that developing sources of clean energy should be a low, medium, high, or very high priority for the president and Congress?

Base: Americans 18+ who are registered to vote.

(Base sizes for party affiliation vary from wave to wave).