

CLIMATE CHANGE IN THE COLUMBUS, OHIOAN MIND

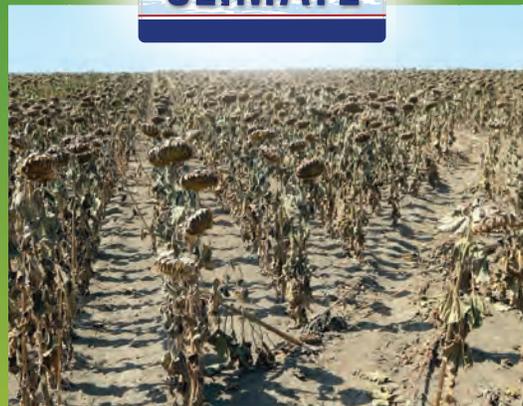


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Introduction

This report is based on findings from a representative, citywide survey of people in Columbus, Ohio, conducted by the Yale Project on Climate Change Communication (<http://environment.yale.edu/climate-communication>).

A total of 700 adults (18+) were interviewed by telephone July 31-August 7, 2013. To help ensure representativeness of the final sample, the survey was administered to respondents reached on traditional landline telephones (490) as well as to those reached on cellphones (210). The average margin of error for the total sample +/- 4 percentage points at the 95% confidence level.

For comparison purposes, data from a statewide survey of Ohio are referenced in this report. In this survey, a total of 800 adults (18+) were interviewed by telephone from July 3 – 10, 2013. The survey was administered to respondents reached on traditional landline telephones (560) as well as to those reached on cellphones (240). The averages margin of error for the total sample +/- 3 percentage points at the 95% confidence level.

Both surveys were conducted for YPCCC by Abt SRBI using random digit dial sample supplied by Survey Sampling International.

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Executive Summary

- Most people in Columbus (70%) believe global warming is happening. One in five (18%) believe it is not.
- About half (49%) believe that if global warming is happening, it is caused mostly by human activities.
- People in Columbus think global warming is important and are worried about it. Seven in ten (69%) say the issue of global warming is at least somewhat important to them personally. And more than half (56%) are at least somewhat worried about it.
- Though virtually all climate scientists agree human-caused global warming is happening, many people in Columbus, like most Americans, are unaware of this fact. Fully half (49%) believe that “there is a lot of disagreement among scientists” about whether or not global warming is happening. Somewhat fewer (42%) believe most scientists agree that global warming is happening.
- Among those who believe global warming is happening, two in three believe it is currently having a large or moderate influence on the severity of heat waves (66%) in Columbus, and half believe it is influencing droughts (51%) and flooding of rivers or lakes (50%).
- More people in Columbus say that they have *not* personally experienced the effects of global warming (51%) than say they have (45%).
- Among people in Columbus who believe global warming is happening, large majorities expect to see a myriad of negative effects from it over the next 50 years. About nine in ten anticipate more heat waves (91%), worse storms (88%), or increased allergies, asthma, infectious diseases, or other health problems (88%). At least eight in ten believe the area will experience declining numbers of fish and native wildlife (84%), increased droughts and water shortages (84%), or more power outages (81%).
- More than half of people in Columbus say that more should be done about global warming at all levels of government—from Congress (61%) and President Obama (57%), to Ohio state legislators (57%) and Governor Kasich (56%), to local government officials (57%). However, even larger numbers of people in Columbus believe that corporations and industry (68%) or citizens themselves (66%) should be doing more to address climate change.
- Two in three people in Columbus (65%) say the United States should reduce greenhouse gas emissions regardless of whether other countries do the same.
- Many people in Columbus believe that individual action, and especially collective action, can be effective in addressing global warming. Among those who believe global warming is happening, most (90%) say their own actions would reduce their personal contribution to global warming at least a little. Virtually all people in Columbus who believe global warming is happening say that if

the same actions were taken by most people in the U.S. (94%) or around the world (95%), it would reduce global warming a little, some, or a lot.

- Nearly half the people in Columbus (47%) say that switching from fossil fuels to clean energy sources would increase economic growth and the number of jobs.
- Many people in Columbus are unsure that people will rally to do what's necessary to reduce global warming. Four in ten (42%) believe humans could reduce global warming, but that it's unclear at this point whether we will do what is needed. Relatively few are convinced that people can reduce global warming and will do so successfully (5%).
- About half of the people in Columbus (50%) say that, in the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once, and 43% would like to do it more frequently in the next 12 months. Moreover, 32% have *punished* companies that are opposing steps to reduce global warming at least once by not buying their products during the past 12 months, and 33% would like to do this more frequently in the coming year.

Key Findings

Beliefs and Attitudes

Most people in Columbus believe global warming is happening and half of them believe it is human caused.

- Most people in Columbus (70%) believe that global warming is happening. One in five (18%) believe it is not.
- About six in ten (59%) of those who believe global warming is happening are either extremely or very sure it is. Those who do *not* believe it is happening are also firm in their beliefs—64% are either extremely or very sure global warming is *not* happening.
- About half of the people in Columbus (49%) believe that, if global warming is happening, it is caused mostly by human activities. However, 28% believe it is caused mostly by natural changes in the environment, while 9% believe it results from a combination of human activities and natural changes.
- Half (49%) believe that there is a lot of disagreement among scientists about whether or not global warming is happening. By contrast, 42% understand that most scientists agree global warming is happening. Just 2% believe that most scientists think global warming is not happening.

Most people in Columbus are concerned about global warming, but fewer than half believe they have experienced its effects.

- More than half the people in Columbus (56%) say they are very or somewhat worried about global warming, and 69% say the issue of global warming is at least somewhat important to them personally. By contrast, about one in three (32%) says it is not important.
- More people in Columbus say that they have *not* personally experienced the effects of global warming (51%) than say they have (45%).

Most believe human intervention is needed to reduce global warming.

- Many in Columbus believe that individual actions can help, and indeed are necessary, to reduce global warming. For example, about six in ten (58%) *disagree* that the actions of a single individual won't make any difference in global warming. Similarly, 60% disagree that new technologies can solve global warming without individuals having to make big changes in their lives.
- Many are also uncertain that humanity will do what is necessary to reduce global warming. Four in ten (42%) believe humans could reduce global warming, but it's unclear at this point whether we will do what's needed. Aside from those who are uncertain, the pessimists outnumber the optimists. One in four (26%) believes that, although we could reduce global warming, people

aren't willing to change their behavior to do so, while another 15% believes humans simply can't reduce global warming. Only one in twenty (5%) believes that humans can reduce global warming and will do so successfully.

Climate Impacts and Extreme Weather

People in Columbus have observed increasing heat waves and flooding.

- Half of those in Columbus (51%) say that, over the past several years, heat waves have become more severe in their area. Of those who believe global warming is happening, two in three (66%) believe global warming has had at least a moderate influence on the severity of the heat waves. Few (12%) believe global warming has had *no* influence on heat waves.
- Nearly half (47%) believe flooding of rivers or lakes in the area has become more severe over the past several years. Of those who believe global warming is happening, half (50%) say that it has had at least a moderate influence on the severity of flooding, compared to 18% who say global warming has had no influence.
- By contrast, only one in four people in Columbus (25%) believes drought has become more severe over the past several years. However, of those who believe global warming is happening, half (51%) say that it has had at least a moderate influence on the severity of drought.

People in Columbus expect a myriad of negative global warming effects over the next 50 years.

- Most people in Columbus who believe that global warming is happening say that negative climate impacts are at least somewhat likely to occur over the next 50 years as a result. For example, about nine in ten anticipate more heat waves (91%), worse storms (88%), or increased allergies, asthma, infectious diseases, or other health problems (88%).
- At least eight in ten who believe global warming is happening say the area will experience declining numbers of fish and native wildlife (84%), increased droughts and water shortages (84%), or more power outages (81%).

People in Columbus tend to see global warming less as a threat to themselves than to others.

- Seven in ten people in Columbus believe that global warming will cause at least a moderate amount of harm to future generations of people (70%) and to plant and animal species (70%).
- Majorities also believe that global warming will harm people in modern industrialized countries (59%), in developing countries (58%), or in the United States (56%).
- Fewer people in Columbus, however, believe that global warming will harm people in their own communities (41%) or families (39%).

- Still fewer think they personally will be harmed by global warming, with only 31% saying global warming will cause them at least a moderate amount of harm. One in three (34%) says he or she will not be harmed at all.

Support for Climate and Energy Policies

People in Columbus say industry, citizens, and government should do more to address global warming.

- More than half of people in Columbus say that more should be done about global warming at all levels of government—from Congress (61%) and President Obama (57%), to Ohio state legislators (57%) and Governor Kasich (56%), to local government officials (57%).
- However, more say that corporations and industry (68%), or citizens themselves (66%), should be doing more to address climate change.

People in Columbus say the U.S. should act alone on global warming if necessary.

- Two in three people in Columbus (65%) say the United States should reduce greenhouse gas emissions regardless of what other countries do. Very few (4%) say the U.S. should act only if other industrialized countries also reduce their emissions, and only 6% say the U.S. should wait for both other industrialized and developing countries to act. Some (11%) say the U.S. should *not* reduce its emissions.
- Further, six in ten (60%) say the U.S. should make a medium- or large-scale effort to reduce global warming, even if there are, respectively, medium or large economic costs. By contrast, only 12% say the U.S. should make *no* effort to reduce global warming.

People in Columbus support switching to clean energy sources.

- Most in Columbus (77%) would support tax rebates for people who purchase energy-efficient vehicles or solar panels. By contrast, only 20% would oppose this policy.
- Similarly, 62% would support requiring electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources—even if it costs the average household an extra \$100 a year. Comparatively few (35%) would oppose this policy.
- About half the people in Columbus (47%) believe that if the state switched from fossil fuels (e.g., coal and oil) to clean energy sources (e.g., solar and wind), it would increase economic growth and the number of jobs in the area. One in five (19%) says it would have no effect on the economy, and 21% says a switch to clean energy would *decrease* economic growth and the number of jobs.
- People in Columbus are evenly split in their opinion of “fracking”—27% support it while 25% oppose it. However, a plurality (42%) is currently undecided about fracking.

Actions to limit global warming

Many people in Columbus are engaged in actions to limit global warming—and are interested in doing them more frequently.

- Most people in Columbus (89%) have at least a few compact fluorescent lights (CFLs) in their home. Only 5% have none.
- Among people in Columbus who do not yet have all or most bulbs replaced with CFLs, four in ten (41%) say that over the next 12 months they would like to replace their incandescent bulbs and probably will. Others say they would like to replace them, but probably won't (14%). About one in four (24%) does not want to replace them, and 21% are not sure.
- About half the people in Columbus (53%) say they set their thermostats—always, often, or sometimes—to 68 degrees or cooler in the winter. By contrast, 42% do it rarely or never.
- Four in ten people in Columbus at least sometimes walk or bike instead of drive (39%), and one in five (19%) uses public transportation or car pools at least sometimes. Majorities, however, take these actions rarely or never (walk or bike = 60%; use public transportation or car pool = 81%).

People in Columbus agree individuals can make a difference, but together we can make a bigger difference.

- Of those who believe that global warming is happening, nine in ten (90%) think that the actions they are already taking and those they would like to take over the next 12 months would reduce their personal contribution to global warming at least a little. Only 8% say individual actions will not help reduce global warming at all.
- A larger number believes that the same actions would be even more effective if done collectively. Virtually all who believe that global warming is happening say that if most people in the United States (94%) or in the modern industrialized countries around the world (95%) did the same things, it would reduce global warming at least a little. Fully 60% of people in Columbus believe that global warming would be reduced “a lot” if people in most industrialized countries took these actions.

Many people in Columbus reward or punish companies based on their efforts to reduce global warming.

- Half of the people in Columbus (50%) say that, over the past 12 months, they have rewarded companies that are taking steps to reduce global warming by buying their products at least once.
- Moreover, one in three (32%) says that, over the past 12 months, they have *punished* companies that are opposing steps to reduce global warming by *not* buying their products.
- One in four people in Columbus (25%) says that, over the past 12 months, he or she has volunteered with or donated money to an organization working to reduce global warming.

About the same number (26%) would like to volunteer or donate more often over the next 12 months.

Global warming communication

Global warming is a topic of conversation for many in Columbus.

- Four in ten people in Columbus (42%) say they discuss global warming with their family and friends often or occasionally.
- Six in ten (58%) say that all, most, or some of their friends share their views on global warming. Only 13% say that *none* of their friends do.

Some people in Columbus have communicated with government officials about global warming.

- About one in ten people in Columbus (13%) has written letters, emailed, or phoned government officials about global warming at least once in the past 12 months. Among them, the majority (74%) says they urged officials to take action to reduce global warming. Only 5% urged them *not* to take action.
- One in five (19%) says he or she would like to contact government officials more often over the next 12 months. Of those, 68% would urge officials to take action to reduce global warming, compared to 10% who would urge them *not* to take action.

Half or more people in Columbus say President Obama, Senator Sherrod Brown, and Governor John Kasich are believable when talking about energy- and climate-related issues.

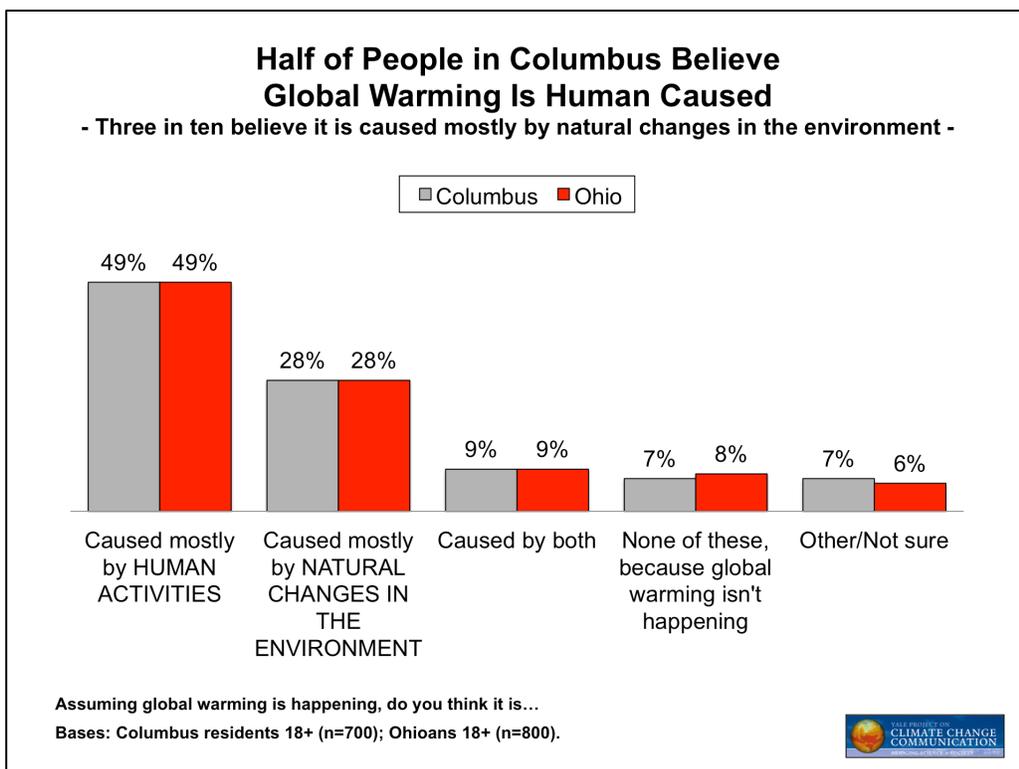
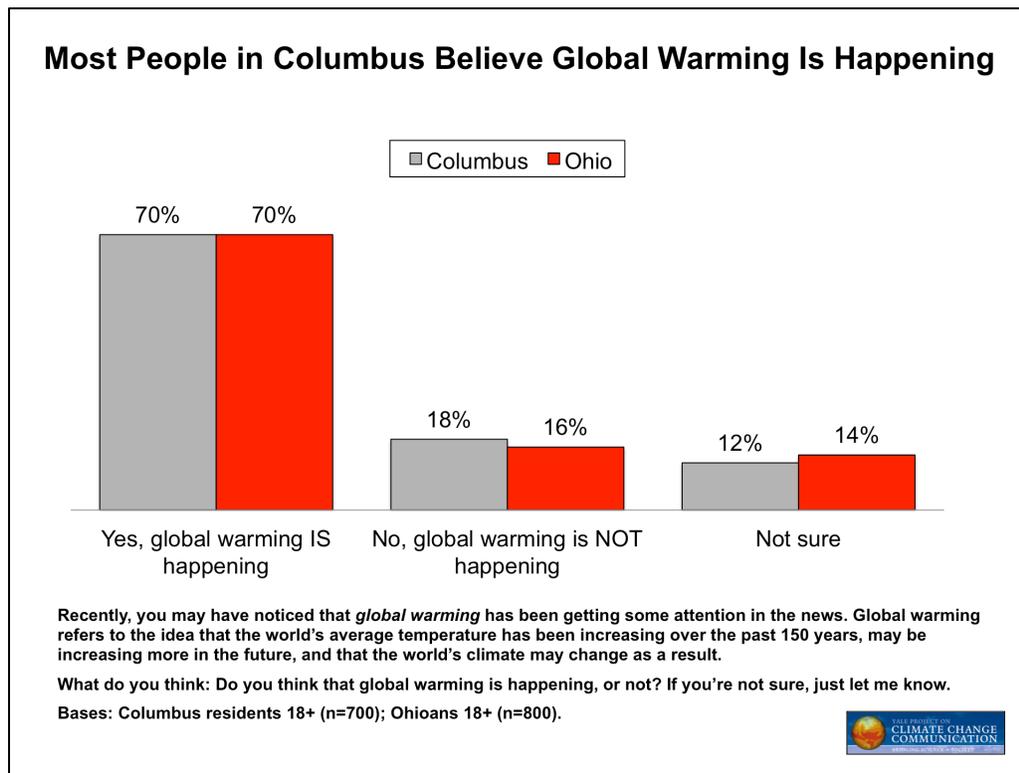
- Six in ten people in Columbus (62%) say that President Obama is very or somewhat believable when speaking about energy- and climate-related issues. More than one in three (36%), however, says he is either not very or not at all believable.
- About half say Senator Sherrod Brown (53%) or Governor John Kasich (51%) are very or somewhat believable regarding energy and climate issues. By contrast, 42% say Senator Rob Portman is believable regarding those issues.

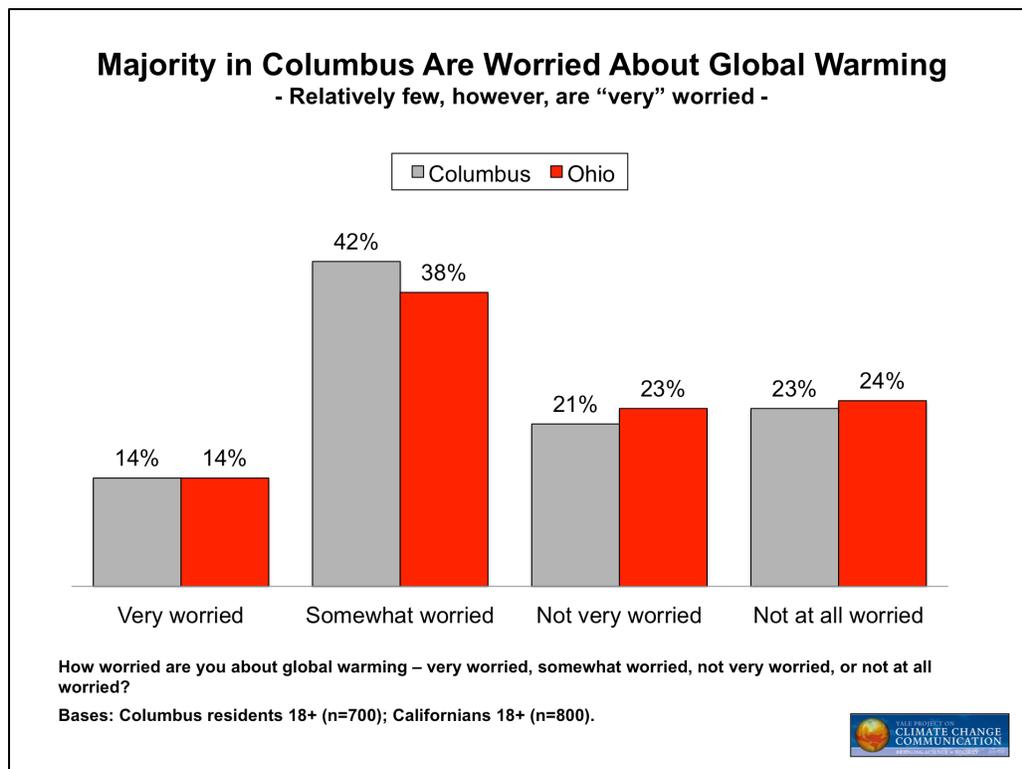
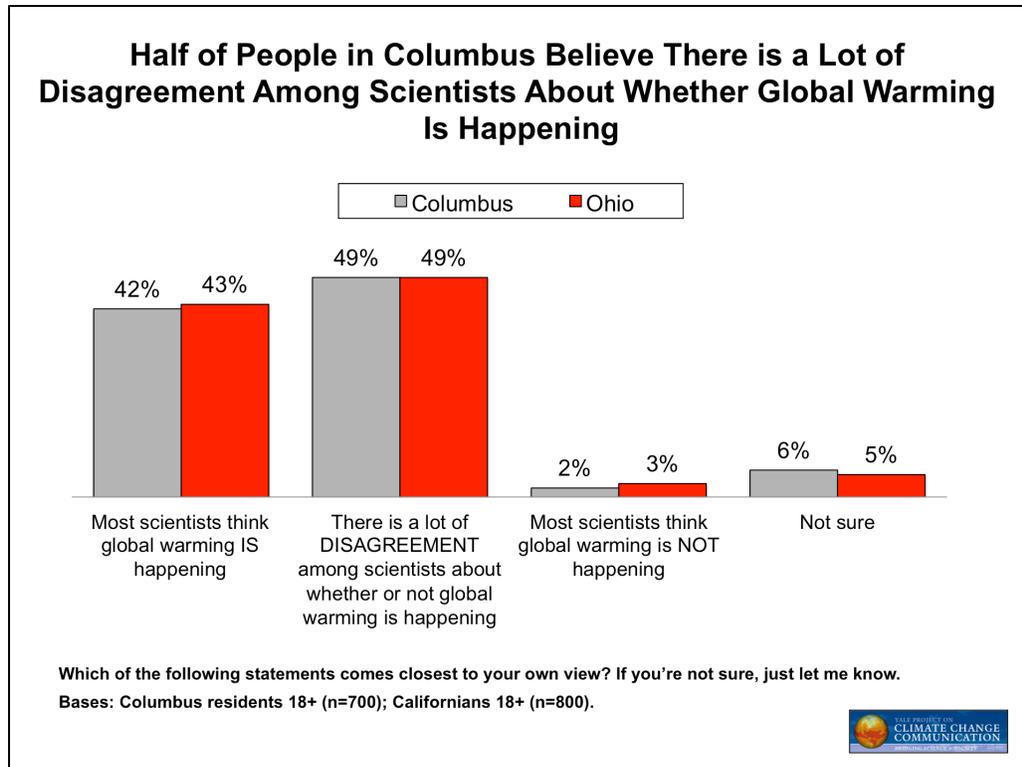
Selected comparisons between people in the city of Columbus and the state of Ohio

In most ways, the opinions of people in Columbus about global warming are similar to those in the state of Ohio as a whole.

- People in Columbus and in Ohio are equally likely to say global warming is happening (70% each).
- Half of the people in Columbus, and in Ohio as a whole, understand that global warming is caused mostly by human activities (49% each).
- Half of the people in Columbus and in Ohio think there is a lot of disagreement among scientists about whether global warming is happening (49% each).
- About half of people in Columbus and in Ohio are “very” or “somewhat worried” about global warming (56% and 52% respectively).
- People in Columbus and in Ohio are equally likely to say that global warming should be a “very high,” “high,” or “medium” priority for the president and Congress (70% and 71%, respectively).
- However, Ohioans in general—more of whom live in areas where they are able to witness the impacts of global warming first hand—are more likely than people in Columbus to believe climate change is having a large or moderate effect on the severity of heat waves (72% versus 66% respectively), drought (58% versus 51%), flooding of rivers or lakes (62% versus 50%), or wildfires (45% versus 31%).

Appendix I: Selected Charts





Many in Columbus Perceive Global Warming as a Relatively Distant Threat

	Columbus			Ohio			Pt. Diff. (Col.-OH)
	Amount of harm			Amount of harm			
	Great deal/moderate amount	Great deal	Moderate amount	Great deal/moderate amount	Great deal	Moderate amount	Great deal/moderate amount
	%	%	%	%	%	%	%
Plant/animal species	70	49	21	70	52	18	--
Future generations of people	70	52	18	70	52	18	--
People in modern industrialized countries	59	31	28	59	32	27	--
People in developing countries	58	38	20	57	36	21	1
People in the U.S	56	24	32	57	30	27	-1
Your family	39	15	24	44	18	26	-5
People in your community	41	14	27	44	17	27	-3
You personally	31	10	21	35	14	21	-4

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...

Bases: Columbus residents 18+ (n=700); Ohioans 18+ (n=800).



Half or More People in Columbus Say Global Warming Is Having a Large or Moderate Influence on Heat Waves, Drought, and Flooding of Rivers/Lakes

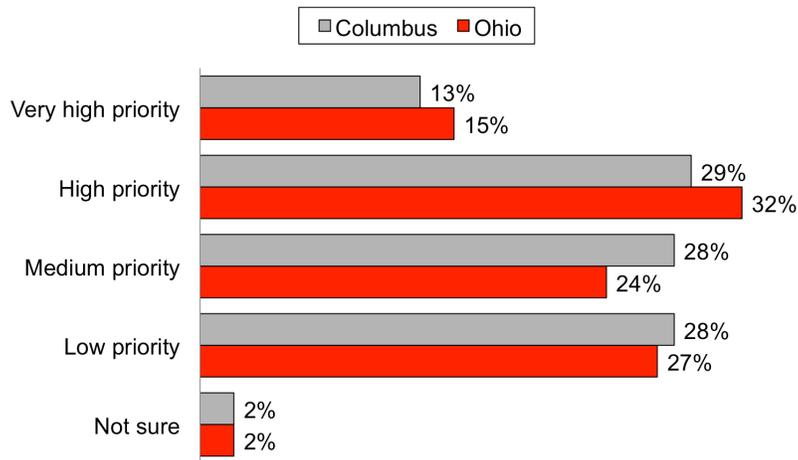
	Columbus			Ohio			Pt. Diff. (Col.-OH)
	Amount of global warming influence on severity			Amount of global warming influence on severity			
	Large/moderate amount	Large	Moderate	Large/moderate amount	Large	Moderate	Large/moderate amount
	%	%	%	%	%	%	%
Heat waves	66	31	35	72	35	37	-6
Drought	51	19	32	58	23	35	-7
Flooding of rivers or lakes	50	18	32	62	26	36	-12
Wildfires	31	11	20	45	20	25	-14

In your opinion, is global warming having no influence, a small influence, a moderate influence, or a large influence on the severity of...

Base: Columbus residents 18+ and Ohioans 18+ who believe that global warming is happening.



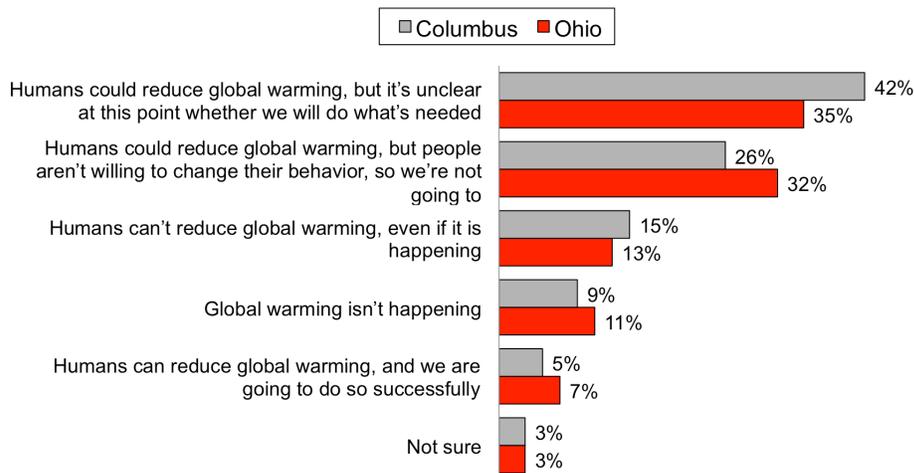
Most in Columbus Say Global Warming Should Be at Least a Medium Priority For the President and Congress



Do you think that global warming should be a low, medium, high, or very high priority for the president and Congress?
 Bases: Columbus residents 18+ (n=700); Ohioans 18+ (n=800).



People in Columbus Are Unsure Whether Humans Will be Able to Reduce Global Warming



Which one of the following statements comes closest to your view?
 Bases: Columbus residents 18+ (n=700); Ohioans 18+ (n=800).



People in Columbus Believe Corporations and Industry, Citizens Themselves, and Politicians Should be Doing More to Address Global Warming

	Columbus			Ohio			Pt. Diff. (Col.-OH)
	How much should be doing to address global warming			How much should be doing to address global warming			
	More/ much more	Much more	More	More/ much more	Much more	More	
	%	%	%	%	%	%	Large/ moderate amount
Corporations & industry	68	37	31	69	42	27	-1
Citizens themselves	66	28	38	65	29	36	1
The U.S. Congress	61	28	33	59	31	28	2
Your state legislators	57	25	32	56	27	29	1
President Obama	57	22	35	54	25	29	3
Local government officials	57	20	37	53	25	28	4
Governor Kasich	56	25	31	54	25	29	2

Do you think each of the following should be doing much more, more, less, or much less to address global warming, or do you think they are currently doing the right amount to address it?

Bases: Columbus residents 18+ (n=700); Ohioans 18+ (n=800).



Appendix II: Posted Questionnaire

[ASK ALL; n=700]

1. **How often do you do each the following – never, rarely, sometimes, often, or always? If something I say doesn't apply to you, just let me know. First... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

	Never	Rarely	Some- times	Often	Always	Not app.	NS [VOL]	REF [VOL]
In the winter, set the thermostat to 68 degrees or cooler	32%	10%	17%	17%	19%	3%	2%	--%
Use public transportation or car pool	68	13	10	4	5	1	*	--
Walk or bike instead of drive	44	16	27	10	2	2	*	--

[ASK ALL; n=700]

2. **Over the next 12 months, would you like to do each of the following more frequently than you do now, less frequently than you do now, or about as frequently as you do now? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

	Less frequently	About the same	More frequently	NS [VOL]	REF [VOL]
In the winter, set the thermostat to 68 degrees or cooler	15%	63%	19%	2%	*%
Use public transportation or car pool	23	59	14	3	*
Walk or bike instead of drive	16	49	33	2	*

[ASK ALL; n=700]

3. How many light bulbs in your home are energy-efficient compact fluorescent lights – All, most, some, a few, none of them, or are you not sure?

All	28%
Most	32
Some	18
A few	11
None	5
Not sure	6
Refused [VOL]	--

[ASK RESPONDENTS WHO ANSWER Q3=3,4, OR 5; n=287]

4. Over the next 12 months, how likely will you be to change most of the light bulbs in your home to energy-efficient compact fluorescent lights? Would you say you'd like to and probably will, or that you'd like to but probably won't, or that you don't want to and therefore won't, or are you not sure?

Yes, I'd like to and probably will	41%
Yes, I'd like to but probably won't	14
No, I don't want to	24
Not sure	21
Refused [VOL]	--

[ASK ALL; n=700]

5. In your view, do you think each of the following has become much less severe, somewhat less severe, stayed about the same, become somewhat more severe, or much more severe in Columbus over the past several years? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Much less severe	Some-what less severe	Same	Some-what more severe	Much more severe	NS [VOL]	REF [VOL]
Wildfires	21%	11%	46%	3%	5%	14%	1%
Flooding of rivers or lakes	7	8	35	34	13	3	*
Drought	9	19	44	18	7	3	*
Heat waves	3	10	35	34	17	1	*

[ASK ALL; n=700]

- 6a. Do you think global warming is a bad thing or a good thing? If you've never heard of global warming, just let me know.

Bad thing	73%
Good thing	7
Never heard of global warming	3
Not sure [VOL]	14
Refused [VOL]	4

[ASK RESPONDENTS WHO ANSWER Q6a=1; n=499]

6b. And do you think global warming is a very bad thing, moderately bad thing, or slightly bad thing?

Very bad	51%
Moderately bad	33
Slightly bad	15
Not sure [VOL]	1
Refused [VOL]	*

[ASK RESPONDENTS WHO ANSWER Q6a=2; n=56]

6c. And do you think global warming is a very good thing, moderately good thing, or slightly good thing?

Very good	16%
Moderately good	30
Slightly good	53
Not sure [VOL]	1
Refused [VOL]	*

[ASK ALL; n=700]

7. 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.

Yes	70%
No	18
Not sure	12
Refused [VOL]	*

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

8. How sure are you that global warming is happening – not at all sure, somewhat sure, very sure, or extremely sure?

Not at all sure	4%
Somewhat sure	37
Very sure	28
Extremely sure	31
Not sure [VOL]	--
Refused [VOL]	--

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS NOT HAPPENING (Q7=2); n=121]

9. How sure are you that global warming is not happening – not at all sure, somewhat sure, very sure, or extremely sure?

Not at all sure	2%
Somewhat sure	34
Very sure	26
Extremely sure	38
Not sure [VOL]	1
Refused [VOL]	--

[ASK ALL; n=700]

10. Assuming global warming is happening, do you think it is... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Caused mostly by human activities, or	49%
Caused mostly by natural changes in the environment, or	28
Something else (Please specify), or	[11]
Both human activities and natural changes in the environment [VOL]	9
Other [VOL]	2
None of these, because global warming isn't happening	7
Not sure [VOL]	5

[ASK ALL; n=700]

11. Which of the following statements comes closest to your own view? If you're not sure, just let me know. [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Most scientists think global warming is happening, or	42%
Most scientists think global warming is not happening, or	2
There is a lot of disagreement among scientists about whether or not global warming is happening	49
Not sure [VOL]	6
Refused [VOL]	*

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

12. Thinking about the energy-saving actions you're already taking and those you'd like to take over the next 12 months, if you did most of these things, how much do you think it would reduce your personal contribution to global warming – not at all, a little, some, or a lot?

Not at all	8%
A little	45
Some	34
A lot	11
Not sure [VOL]	1
Refused [VOL]	--

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

13. If most people in the United States did these same actions, how much do you think it would reduce global warming – not at all, a little, some, or a lot?

Not at all	6%
A little	19
Some	37
A lot	38
Not sure	1
Refused [VOL]	--

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

14. If most people in the modern industrialized countries around the world did these same actions, how much do you think it would reduce global warming – not at all, a little, some, or a lot?

Not at all	4%
A little	11
Some	24
A lot	60
Not sure [VOL]	2
Refused [VOL]	--

[ASK ALL; n=700]

15. How worried are you about global warming – very worried, somewhat worried, not very worried, or not at all worried?

Very worried	14%
Somewhat worried	42
Not very worried	21
Not at all worried	23
Not sure [VOL]	1
Refused [VOL]	--

[ASK ALL; n=700]

16. 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... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Not at all	Only a little	A moderate amount	A great deal	Not sure	REF [VOL]
You personally	34%	30%	21%	10%	5%	*%
Your family	28	26	24	15	7	*
People in your community	24	27	27	14	9	*
People in the United States	18	20	32	24	6	--
People in modern industrialized countries	15	18	28	31	8	*
People in developing countries	19	18	20	38	6	--
Future generations of people	13	12	18	52	5	*
Plant and animal species	14	11	21	49	6	*

[ASK ALL; n=700]

17. **When do you think global warming will start to harm people in the United States? Would you say... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

They are being harmed right now, or	36%
In 10 years, or	11
In 25 years, or	8
In 50 years, or	11
In 100 years, or	13
Never	17
Not sure [VOL]	4
Refused [VOL]	*

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

18. **Do you think it is very likely, somewhat likely, somewhat unlikely, or very unlikely that each of the following will occur in Columbus over the next 50 years due to global warming?**

[RANDOMIZE]	Very unlikely	Some-what unlikely	Some-what likely	Very likely	NS [VOL]	REF [VOL]
Increased allergies, asthma, infectious diseases or other health problems	4%	6%	33%	55%	3%	--%
Power outages	6	12	32	49	1	--
More heat waves	4	5	35	56	*	--
Droughts and water shortages	5	10	39	45	1	--
Worse storms, hurricanes, or tornadoes	4	7	33	55	1	*
Flooding of major cities	9	22	30	38	2	--
Declining numbers of fish and native wildlife	5	9	33	51	2	--

[ASK RESPONDENTS WHO THINK GLOBAL WARMING IS HAPPENING (Q7=1); n=489]

19. In your opinion, is global warming having no influence, a small influence, a moderate influence, or a large influence on the severity of [ITEM] in Columbus? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	No influence	Small influence	Moderate influence	Large influence	NS [VOL]	REF [VOL]
Wildfires	38%	24%	20%	11%	7%	*%
Flooding of rivers or lakes	18	31	32	18	1	--
Drought	17	31	32	19	1	*
Heat waves	12	21	35	31	1	--

[ASK ALL; n=700]

20. How much had you thought about global warming before today – not at all, a little, some, or a lot?

Not at all	9%
A little	28
Some	37
A lot	26
Not sure [VOL]	*
Refused [VOL]	--

[ASK ALL; n=700]

21. How important is the issue of global warming to you personally – would say it is not at all important, not too important, somewhat important, very important, or extremely important?

Not at all important	14%
Not too important	18
Somewhat important	41
Very important	18
Extremely important	10
Not sure [VOL]	*
Refused [VOL]	*

[ASK ALL; n=700]

22. On some issues, people feel that they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind. For global warming, would you say you... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Do not need any more information, or you	38%
Need a little more information, or you	20
Need some more information, or you	20
Need a lot more information	22
Not sure [VOL]	1
Refused [VOL]	*

[ASK ALL; n=700]

- 23. Please tell me whether you strongly disagree, somewhat disagree, somewhat agree, or strongly agree with each of the following statements. First... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

	Strongly disagree	Some-what disagree	Some-what agree	Strongly agree	NS [VOL]	REF [VOL]
I could easily change my mind about global warming	40%	24%	28%	7%	0%	*%
The actions of a single individual won't make any difference in global warming	29	29	20	20	1	*
New technologies can solve global warming without individuals having to make big changes in their lives	32	28	26	11	2	1
I have personally experienced the effects of global warming	31	20	30	15	4	*

[ASK ALL; n=700]

- 24. How often do you discuss global warming with your family and friends – never, rarely, occasionally, or often?**

Never	29%
Rarely	30
Occasionally	33
Often	9
Not sure [VOL]	--
Refused [VOL]	--

[ASK ALL; n=700]

25. How many of your friends share your views on global warming – none, a few, some, most, or all?

None	13%
A few	22
Some	23
Most	30
All	5
Not sure [VOL]	8
Refused [VOL]	*

[ASK ALL; n=700]

26. Which one of the following statements comes closest to your view? [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.] [PROGRAMMER: HALF OF RESPONDENTS SHOULD BE READ ITEMS 1-5; OTHER HALF SHOULD BE READ ITEMS 5-1]

Global warming isn't happening, or	9%
Humans can't reduce global warming, even if it is happening, or	15
Humans could reduce global warming, but people aren't willing to change their behavior, so we're not going to, or	26
Humans could reduce global warming, but it's unclear at this point whether we will do what's needed, or	42
Humans can reduce global warming, and we are going to do so successfully	5
Not sure [VOL]	3
Refused [VOL]	*

[ASK ALL; n=700]

27. Do you think global warming should be a low, medium, high, or very high priority for the president and Congress? [READ EACH ITEM.]

Low priority	28%
Medium priority	28
High priority	29
Very high priority	13
Not sure [VOL]	2
Refused [VOL]	*

[ASK ALL; n=700]

28. Do you think each of the following should be doing much more, more, less, or much less to address global warming, or do you think they are currently doing the right amount to address it? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

[RANDOMIZE]	Much less	Less	Currently doing the right amount	More	Much more	NS [VOL]	REF [VOL]
The U.S. Congress	13%	10%	10%	33%	28%	6%	*%
President Obama	12	9	15	35	22	6	*
Corporations and industry	8	8	13	31	37	3	*
Citizens themselves	9	9	13	38	28	3	1
Your local government officials	9	9	16	37	20	9	1
Your state legislators	9	10	14	32	25	10	*
Your governor	9	10	16	31	25	9	*

[SPLIT SAMPLE A; n=350]

29a. Do you think your state government should be doing much more, more, less, much less, or about the same amount as it is doing now to prepare for the potential impacts of global warming?

Much more	37%
More	28
Same amount	19
Less	5
Much less	5
Not sure [VOL]	7
Prefer not to answer [VOL]	*

[SPLIT SAMPLE B; n=350]

29b. Do you think your local government should be doing much more, more, less, much less, or about the same amount as it is doing now to prepare for the potential impacts of global warming?

Much more	30%
More	33
Same amount	18
Less	5
Much less	9
Not sure [VOL]	5
Prefer not to answer [VOL]	1

[ASK ALL; n=700]

- 30. People disagree about whether the United States should reduce greenhouse gas emissions on its own, or make reductions only if other countries do so. Which of the following statements comes closest to your own point of view? If you're not sure, just let me know.**

The United States should reduce its greenhouse gas emissions... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Regardless of what other countries do, or	65%
Only if other industrialized countries (such as England, Germany, and Japan) reduce their emissions, or	4
Only if other industrialized countries and developing countries (such as China, India, and Brazil) reduce their emissions, or	6
The U.S. should not reduce its emissions	11
Don't know	14
Refused [VOL]	1

[ASK ALL; n=700]

- 31. How big of an effort should the United States make to reduce global warming? Would you say... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

No effort, or	12%
A small-scale effort, even if it has small economic costs, or	24
A medium-scale effort, even if it has moderate economic costs, or	33
A large-scale effort, even if it has large economic costs	27
Not sure [VOL]	3
Refused [VOL]	*

[ASK ALL; n=700]

- 32. Over the past 12 months, how many times have you done each of the following – never, once, two or three times, four or five times, or six or more times? Your best estimate is fine, and if you're not sure, just let me know. [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

	Never	Once	2-3 times	4-5 times	6 or more times	Not sure	REF [VOL]
Rewarded companies that are taking steps to reduce global warming by buying their products	37%	8%	19%	9%	14%	13%	*%
Punished companies that are opposing steps to reduce global warming by NOT buying their products	56	5	13	3	11	12	*

[ASK ALL; n=700]

- 33. Over the next 12 months, would you like to punish companies that are opposing steps to reduce global warming by NOT buying their products... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

More frequently than you do now, or	33%
Less frequently than you do now, or	11
About the same as you do now	50
Not sure [VOL]	5
Refused [VOL]	1

[ASK ALL; n=700]

- 34. Over the next 12 months, do you intend to buy the products of companies that are taking steps to reduce global warming... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

More frequently than you do now, or	43%
Less frequently than you do now, or	6
About the same as you do now	49
Not sure [VOL]	2
Refused [VOL]	*

[ASK ALL; n=700]

35. Over the past 12 months, how many times have you done the following – never, once, two or three times, four or five times, or six or more times? Your best estimate is fine, and if you're not sure, just let me know. **[READ EACH ITEM. REPEAT SCALE AS NECESSARY.]**

	Never	Once	2-3 times	4-5 times	6 or more times	Not sure	REF [VOL]
[A] Volunteered with or donated money to an organization working to reduce global warming	74%	9%	9%	4%	3%	2%	--%
[B] Written letters, emailed, or phoned government officials about global warming	87	4	6	1	2	--	--

[ASK RESPONDENTS WHO HAVE CONTACTED A GOVERNMENT OFFICIAL AT LEAST ONCE (Q35B=2,3,4 OR 5); n=99]

36. When you contacted a government official did you... **[READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]**

Urge them to take action to reduce global warming, or	74%
Urge them <u>NOT</u> to take action to reduce global warming, or	5
Something else? (Please specify)	20
Not sure [VOL]	1
Refused [VOL]	--

[ASK ALL; n=700]

37. Over the next 12 months, would you like to do each of the following less often, more often, or about as often as you do now? [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Less often	About the same	More often	NS [VOL]	REF [VOL]
[A] Volunteer with or donate money to an organization working to reduce global warming	13%	59%	26%	2%	*%
[B] Write letters, email, or phone government officials about global warming	16	63	19	2	*

[ASK RESPONDENTS WHO WOULD LIKE TO CONTACT GOVERNMENT OFFICIALS OVER THE NEXT YEAR WITH AT LEAST THE SAME FREQUENCY AS IN THE PAST (Q37B=2 OR 3); n=573]

38. If you were to contact government officials about global warming, would you... [READ EACH ITEM – DO NOT ACCEPT RESPONSE UNTIL ALL ITEMS HAVE BEEN READ.]

Urge them to take action to reduce global warming, or	68%
Urge them NOT to take action to reduce global warming, or	10
Something else? (Please specify)	17
Not sure [VOL]	5
Refused [VOL]	1

[ASK ALL; n=700]

39. Please tell me whether you strongly oppose, somewhat oppose, somewhat support, or strongly support each of the following. First... [READ EACH ITEM. REPEAT SCALE AS NECESSARY.]

	Strongly oppose	Some-what oppose	Some-what support	Strongly support	NS [VOL]	REF [VOL]
Provide tax rebates for people who purchase energy-efficient vehicles or solar panels	11%	9%	33%	44%	4%	--%
Require electric utilities to produce at least 20% of their electricity from wind, solar, or other renewable energy sources, even if it costs the average household an extra \$100 a year	25	10	32	30	2	*

[ASK ALL; n=700]

40. **“Fracking” is a way to extract natural gas from shale rock deep underground. Based on anything you may have heard or read about fracking, do you... [READ EACH ITEM]**

Strongly oppose fracking	18%
Somewhat oppose it	7
I'm undecided	42
Somewhat support it	12
Strongly support it	15
Not sure [VOL]	6
Refused [VOL]	--

[ASK ALL; n=700]

41. **If Columbus were to switch from fossil fuels like coal and oil to clean energy sources like solar and wind, do you think it would... [READ EACH ITEM. DO NOT ACCEPT AN ANSWER UNTIL BOTH ITEMS ARE READ.]**

Increase economic growth and the number of jobs in Columbus	47%
Have no effect on the economic growth and number of jobs in Columbus	19
Decrease economic growth and the number of jobs in Columbus	21
[DO NOT READ] Don't know	13
[DO NOT READ] Prefer not to answer	*

[IF 41=1,2, OR 3, ASK; n=608]

42. **How strongly do you agree with the statement that switching from fossil fuels to clean energy sources would ...[INSERT STATEMENT FROM Q41]? Do you strongly agree, moderately agree, slightly agree, or do you not agree with the statement at all?**

Strongly agree	37%
Moderately agree	41
Slightly agree	15
Agree not at all	8
[DO NOT READ] Don't know	*
[DO NOT READ] Prefer not to answer	*

[ASK ALL; n=700]

43. As you know, sometimes different people speak out on public policy issues. Please tell me how believable you would find each of the following people regarding the energy and climate related issues we have been discussing - Very believable, somewhat believable, not very believable, or not at all believable. If you are not familiar with one of these individuals please just say so and we will move on. [READ EACH ITEM.]

	Not at all believable	Not very believable	Somewhat believable	Very believable	NS [VOL]	REF [VOL]
President Obama	22%	14%	42%	20%	3%	*%
Governor John Kasich	18	16	44	7	15	*
U.S. Senator Rob Portman	13	12	38	4	32	*
U.S. Senator Sherrod Brown	14	14	39	14	19	*

[ASK ALL; n=700]

44. How often do you watch or listen to the following shows or visit their websites – Often, sometimes, hardly ever, or never. [READ EACH ITEM]

[RANDOMIZE]	Never	Hardly ever	Sometimes	Often	NS [VOL]	REF [VOL]
The Daily Show with Jon Stewart	57%	13%	20%	9%	1%	--%
The Colbert Report with Stephen Colbert	55	16	19	9	1	--
National Public Radio, or NPR	50	13	22	15	1	--
Public Broadcasting Service, or PBS	27	16	34	23	*	--
The Fox News Cable Channel	35	11	26	28	1	--
The New York Times	60	18	17	6	*	--
Rush Limbaugh	70	8	16	5	2	--
CNN	27	12	36	25	*	--
The national nightly network news on CBS, ABC, or NBC	23	12	26	38	*	--
MSNBC	33	13	33	20	1	--

Appendix III: Survey Method

The data in this report are based on a representative, citywide survey of persons reached within the Columbus, Ohio, metropolitan statistical area (MSA).

A total of 700 adults (18+) were interviewed by telephone July 31-August 7, 2013. To help ensure representativeness of the final sample, the survey was administered to respondents reached on traditional landline telephones (490) as well as to those reached on cellphones (210). The average margin of error for the total sample +/- 4 percentage points at the 95% confidence level.

For comparison purposes, data from a statewide survey of Ohio are referenced in this report. In this survey, a total of 800 adults (18+) were interviewed by telephone from July 3 – 10, 2013. The survey was administered to respondents reached on traditional landline telephones (560) as well as to those reached on cellphones (240). The averages margin of error for the total sample +/- 3 percentage points at the 95% confidence level.

Respondents within each household were selected using the next/last birthday selection method. If the selected person was not at home during the initial contact, he or she was called back and interviewed at a convenient time.

The survey was conducted for YPCCC by Abt SRBI using random digit dial sample supplied by Survey Sampling International.

Rounding error

For tabulation purposes, percentage points are rounded off to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%.

Appendix IV: Sample Demographics

Total	N 700 (unweighted)	% 100 (weighted)
Sex		
Men	310	48
Women	390	52
Age		
18-24	27	11
25-34	75	19
35-44	96	19
45-54	130	19
55-64	153	16
65 or older	211	15
Refused	8	1
Education		
Less than high school	26	4
High school graduate	202	35
Technical/Trade school	21	3
Some college	130	27
College graduate	166	16
Some graduate school	32	4
Graduate degree	118	10
Not sure/Refused	5	0
Income		
Under \$10,000	40	5
\$10,000 to under \$20,000	58	9
\$20,000 to under \$30,000	71	11
\$30,000 to under \$40,000	60	11
\$40,000 to under \$50,000	56	10
\$50,000 to under \$75,000	95	13
\$75,000 to under \$100,000	94	13
\$100,000 to under \$150,000	82	10
\$150,000 or more	60	6
(VOL) Don't know	24	5
(VOL) Refused	60	7
Other		
Yes	12	3
Race		
White, Caucasian (non-Hispanic)	559	79
Black, African-American (non-Hispanic)	75	13
Other/Mixed/Not sure/Refused	54	5

