

# Public Perceptions of Climate Change

A Maryland Statewide Survey | Fall 2015





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### **Executive Summary**

In 2009, Maryland adopted the Greenhouse Gas Reduction Act, mandating decreases in the pollution that causes climate change by 25% by 2020.<sup>1</sup> This legislation sunsets in 2016. In order to inform the General Assembly's decision about how to move forward in combatting the causes and impacts of climate change, both the Maryland Commission on Climate Change and Maryland Department of the Environment (MDE) are delivering reports in fall 2015 assessing the state's progress and making recommendations for future emissions reductions targets.

According to early reports,<sup>2</sup> MDE is projecting that the state will meet or exceed the 25% reduction by 2020 and that the current plan to address climate change will result in more economic benefits than initially expected – ranging from \$2.5 to \$3.5 billion instead of \$1.6 billion. Between 26,000 and 33,000 jobs are also anticipated from these policies. As our survey and others have shown, creating jobs is one of the highest priorities for Marylanders.

For the past three years, we have been asking Maryland residents questions about their understanding of the effects of climate change and their preferences for the state policies that fall under the umbrella of the GGRA. This year George Mason University partnered with the

### Fast facts on climate change

- Maryland expects to meet or surpass its goal of reducing greenhouse gas emissions by 25% from 2006 levels by 2020.
- The Greenhouse Gas Reduction Act (GGRA)
  requires the state to consider economic
  impacts and jobs in lowering emissions. The
  benefits of the Act to the state's economy
  and jobs are currently greater than initial
  projections.
- Co-benefits of the GGRA include reductions in other types of air pollution known to harm human health, such as ozone and particulate matter.
- The state's carbon dioxide emissions have dropped in part due to the growing use of natural gas instead of coal. Natural gas emits half as much carbon dioxide as coal when burned for power generation. The economic slowdown also lowered emissions.
- More than 50 state programs are included in the GGRA Plan. These include a regional carbon trading program (the Regional Greenhouse Gas Initiative), EmPOWER Maryland, the Maryland Renewable Energy Portfolio Standard (RPS), public transportation, new transportation technology, and zero waste.
- Climate change will likely produce more extreme weather events.
- Climate change is accelerating sea-level rise, posing a threat to Maryland's coastal communities through flooding, storm surge, erosion, and salt water intrusion into groundwater.
- Increasing temperatures, heavy rains, and droughts, likely to occur as a result of climate change, will put agriculture and farmers at risk.

Johns Hopkins Bloomberg School of Public Health in fielding the survey. This report is one of three released from the 2015 data; other reports highlight attitudes, behaviors and policy

<sup>&</sup>lt;sup>1</sup> Aburn, T. (2015, Sept. 8). *The 2015 update to the Greenhouse Gas Emissions Reduction Act (GGRA) Plan*. Baltimore, MD: Maryland Dept. of the Environment. Available at http://www.mde.maryland.gov/programs/Marylander/Documents/MCCCMDEPresentation09082015.pdf. <sup>2</sup> Ibid.

preferences on energy, and public health and climate change.

Key findings from this report include:

### 1. Jobs, education, roads, and pollution are top priorities for the state.

- Marylanders' top priorities for the General Assembly and Governor are reducing water pollution (high/very high, 76%), fixing and building roads (77%), improving state K-12 and higher education (79%), and creating jobs (87%).
- Almost half of Marylanders say climate change should be a high or very high issue priority (46%), a higher percentage than those who advocate shrinking government (40%).

### 2. Majorities of residents consistently support climate and energy policies.

- In 2015, as in the two previous years of the survey, residents are most likely to say they support expanding energy efficiency rebates and supporting the production and consumption of local agricultural products (somewhat/strongly support, 84%).
- Three-quarters (75%) of Marylanders say they support a mandate for energy suppliers to meet the current state target for renewable energy, almost the same figure as the percentage of Marylanders who support expanding incentives for renewable generation (77%).
- The only polled climate and energy policy that consistently receives less than 50% support is incentives for wood fuel heating systems (somewhat/strongly support, 35%).

### 3. Residents support renewal of the Greenhouse Gas Reduction Act (GGRA).

- A majority say the state should renew the GGRA, either keeping the current pollution reduction goals (22%), or renewing it and strengthening those goals (42%).
- Majorities back renewing the GGRA in each of the state's four regions (Western, 58%; Central, 64%; Southern, 64%; Eastern, 61%).

### 4. State and local governments should protect communities from climate change.

 More than two-thirds of residents say state and local governments should take action to protect communities from climate change (71%), a percentage which has not varied much since 2014 (73%).

### 5. Marylanders say climate change is happening and that humans are – at least in part – at cause.

• Most state residents say climate change is occurring (72%). A sizeable percentage are extremely or very sure (48%).

 Almost half of Marylanders (45%) say climate change is either caused entirely or mostly by human activities, a number that has increased from 37% in the past year. Another third of residents (33%) say climate change is caused equally by natural and human causes.

### 6. Residents are more likely to underestimate the social consensus than the scientific consensus on climate.

- This year, 46% of Marylanders said that scientific consensus on climate change is 80% or greater, an increase of 21 percentage points over 2014.
- As of 2015, only 29% of residents underestimate the scientific consensus in Maryland, but between 43% and 47% underestimate the social consensus for their region, state, and the nation.

### 7. Hotter weather and more storms are seen as likely due to climate change.

• More than two-thirds of Marylanders (70%) call out hotter weather as one of the effects of climate change they expect to see in the next 10-20 years in their communities. They also point to more severe storms (59%) and colder weather (52%). Very few say there are no likely effects from climate change (13%).

### 8. Marylanders say harm to the Bay and its aquatic life are among the most likely effects from climate change.

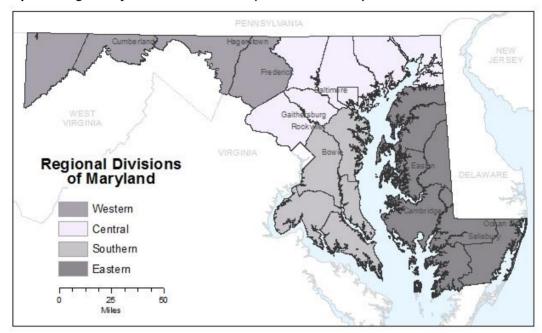
• At the top of the list of community resources that Marylanders expect to suffer from climate change in the next several years are aspects of the state's coastal heritage: aquatic life, such as crabs and fish (62%); the Chesapeake Bay (58%); coastlines (54%); and the fishing/seafood industry (53%). Wildlife (57%), people's health (57%), agriculture (53%), and public water supplies (53%) round out the list.

### Study methodology

The survey was mailed to 6,401 households in the state of Maryland, randomly selected from within each of four regions of the state (Figure 1). We sampled at the regional level to ensure the final data were generalizable to these distinctly different geographic and cultural areas, as well as to the state as a whole. Data were weighted at both the state and regional levels in accordance with U.S. Census population distributions. Households that responded to the survey in 2013 and 2014 were not re-contacted in 2015. The survey was fielded from April 11 to June 24 with a response rate of 27%. The unweighted sample margin of error is +/- 2.5 percentage points at the 95% confidence interval for the state and less than +/- 5.7 percentage points for each region (Study methodology, p. 22).

This report includes survey data from 2013 and 2014 as a basis for comparison. Survey reports from these years can be found at climatemaryland.org and include a description of the sample and methodology. Both were consistent across years.

**Figure 1** | Four regions of the state were sampled in the survey



### 1. Jobs, education, roads, and pollution are top priorities

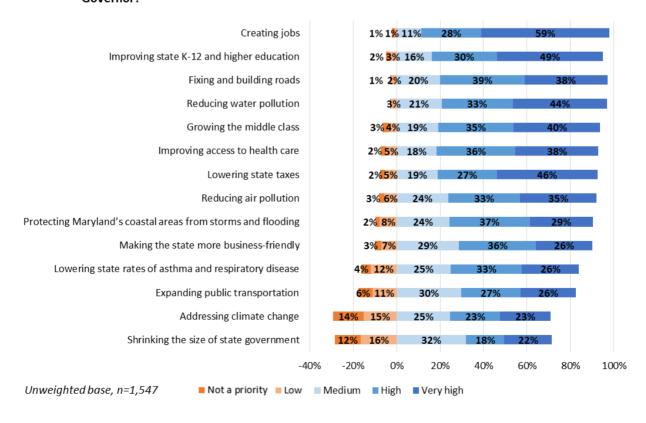
In asking Marylanders to prioritize issues for the General Assembly and Governor, a majority rank all 14 that are listed on the survey as medium, high, or very high priorities. The top public priorities are reducing water pollution (high/very high, 76%), fixing and building roads (77%), improving state K-12 and higher education (79%), and creating jobs (87%) (Figure 2). We asked about water pollution and jobs in both 2014 and 2015. They have remained at the top of the priority list across both years with little movement (Figure 3). In 2014, 81% said water pollution was a high or very high priority, and 89% said the same for jobs. Three of the four regions say that jobs are the highest priority (Western, 88%; Central, 87%; Eastern, 91%) (Appendix, Table 1). Residents of the state's southern region – stretching from Anne Arundel County south to St. Mary's – place reducing water pollution (88%), growing the middle class (87%), and improving education (85%) at about the same or higher priority than jobs (84%).

About half of Marylanders say climate change should be a "high or very high" priority Climate change and shrinking the size of state government fall lower in Marylanders' priorities for the General Assembly and Governor, but few say they should not be a priority

Figure 2 | Marylanders place jobs, education, roads and pollution at the top of state priorities

How much of a priority should these topics be for Maryland's General Assembly and the

Governor?



"High" or "very high" issue priority, 2014-2015 100% 89% 90% 81% 74% 73% 80% 66% 87% 70% 76% 74% 60% 51% 68% 50% 55% 40% 46% 30% 20% 10% 0% Addressing Protecting Reducing air Improving Growing the Reducing Creating jobs climate Maryland's pollution access to middle class water health care pollution change coastal areas from sealevel rise (2014)/Unweighted base, n=2,126 (2013); storms and n=2,035 (2014); n=1,547 (2015) flooding (2015)**2014 2015** 

Figure 3 | Public perceptions of the most important issues in the state have remained stable

(climate change, 14%; shrinking government, 12%) (Figure 2). Indeed, almost half of Marylanders say climate change should be a high or very high issue priority (46%), a higher percentage than those who advocate shrinking government (40%). Between 44% and 52% of each of the regions say climate change is a high or very high priority (Western, 45%; Central, 44%; Southern, 47%; Eastern, 52%) (Appendix, Table 1).

### Air and water pollution, and coastal threats, are linked to climate change

While climate change has consistently remained a lower priority issue (Figure 3), many of the higher priorities listed by citizens over the past two years – like air and water pollution, and coastal protection – are targets of the Greenhouse Gas Reduction Act (GGRA) through its pollution reduction goals and related policies to protect the state from the effects of climate change, such as the 2014 CoastSmart and Bay Acidification Bills. Air pollution that is produced by the combustion of fossil fuels for transportation or power results in respiratory health problems and is a large source of pollution to the Chesapeake Bay.<sup>3</sup>

As an aside, in 2015 we changed the wording in the coastal protection response from "protecting coastal areas from sea-level rise" to "from storms and flooding." There was an 11 percentage point increase between 2014 and 2015 in residents who said that it was a high or very high priority issue – the biggest difference between those items polled both years.

<sup>&</sup>lt;sup>3</sup> Chesapeake Bay Program. (ND). Air pollution. Annapolis, MD. Available at http://www.chesapeakebay.net/

### 2. Majorities consistently support climate and energy policies

For the past three years we have asked Marylanders whether they are aware of a number of the state's policies that fall under the Greenhouse Gas Reduction Act Plan and how much they support them. In 2015, as in the two previous years, residents are most likely to say they support expanding energy efficiency rebates and the production and consumption of local agricultural products (somewhat/strongly support, 84%) (Figure 4). A majority of all four regions of the state favorably rate both energy efficiency rebates (Western, 83%; Central, 82%; Southern, 88%; Eastern, 88%) and supporting local agriculture (Western, 90%; Central, 81%; Southern, 81%; Eastern, 85%) (Appendix, Table 2). Over the past three years, there has been relatively little variability in climate and energy policy awareness and support in the state; the only polled climate and energy policy that consistently receives less than 50% support is incentives for wood fuel heating systems (Figure 5). The biggest difference between 2014 and 2015 was a drop in support for more public transportation by 12 percentage points.

### Support for the current Renewable Portfolio Standard remains strong

One of the centerpieces of the GGRA is the state's mandate for renewable energy production, the Renewable Portfolio Standard (RPS). This year, 75% of Marylanders say they support the RPS (Figure 4), almost the same as the percentage of Marylanders who support expanding incentives for renewable generation (77%). Support for the current RPS mandate has remained consistent across the past three years (2013, 75%; 2014, 73%) (Figure 5). However, less

Maryland has begun implementing policies to promote new sources of energy and use energy more efficiently. For each of the following policies, please answer two questions: Have you heard of this policy? How much do you support or oppose this policy? 100% 15% 10% 18% 16% 80% 16% 20% 36% 60% Neither support 44% nor oppose 42% 40% 26% Strongly support 16% 28% 19% 26% 26% 26% 23% 22% Somewhat support -20% Somewhat oppose -40% [Energy efficiency [Local agriculture] [Renewable energy [20% RPS] Requiring [Vehicle emissions] [Development] [Public transit] [RGGI] Participating [Wood fuel heating] that Maryland's Requiring new cars rebates] Expanding Supporting the incentives1 Encouraging the Doubling use of in a regional carbon Tax incentives for Strongly oppose Expanding financial electricity suppliers and other vehicles rebates to help production and emissions trading installation of transportation in people purchase consumption of incentives for the provide 20% of in Maryland to be more homes program to reduce residential wood energy-efficient local agricultural generation of their total less polluting (houses, condos overall production fuel heating Maryland by 2020 renewable energy electricity from and apartments) in of greenhouse lighting and products systems ••••• Policy awareness gases appliances (such as solar and renewable energy our cities with geothermal) sources by 2022 better access to public transportation

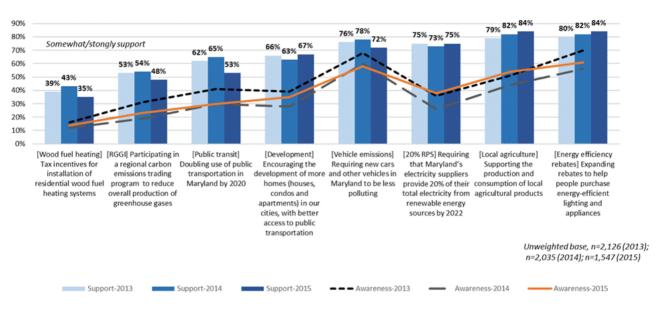
Figure 4 | Support is stronger than awareness of nine current energy and climate policies

Unweighted base, n=1,547

Figure 5 | Support for local agriculture and energy efficiency rebates are consistent favorites

Policy awareness and support, 2013-2015

Maryland has begun implementing policies to promote new sources of energy and use energy more efficiently. For each of the following policies, please answer two questions: Have you heard of this policy? How much do you support or oppose this policy?



than half of residents say they have heard of the policy; just over a third (38%) were aware of it in 2015 (2013, 36%; 2014, 26%). Support for the RPS differs little between the regions of the state (Western, 76%; Central, 77%; Southern, 68%; Eastern, 75%) (Appendix, Table 2).

### Ambivalence about lesser-known policies

Marylanders are more ambivalent in supporting those policies which they are less likely to have heard of, such as incentives for wood fuel heating (14% aware), the regional carbon emissions trading program (23% aware), and doubling use of public transportation (30% aware). One-third or more of our respondents say they "neither support nor oppose" those three policies. Low awareness of these policies is consistent across all four regions (Appendix, Table 3). Some of the biggest regional differences in policy awareness include: 1) people in the Eastern and Western regions of the state are more likely to have heard of tax incentives for residential wood heating systems (respectively, 28%/25%) than those in the Central or Southern regions (12%/11%); and 2) those in the Southern region are less aware of expanding energy efficiency rebates (54%), with larger majorities saying they have heard about them in the Eastern (74%), Western (68%), and Central (62%) regions.

#### Differences in policy support between the Eastern Shore and other regions

Some of the largest differences in policy support are between the Eastern region and other parts of the state. Two policy areas that most strongly demonstrate this regional variation are

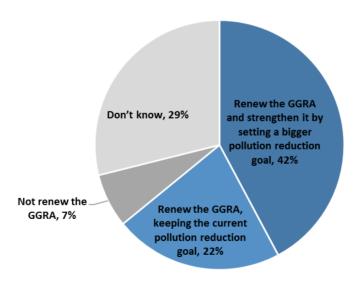
1) encouraging the development of more homes in our cities with better access to public transportation, and 2) expanding financial incentives for the generation of renewable energy. Only 49% of the rural Eastern Shore supports changes in development practices to better support public transportation, compared to 73% of the urbanized central corridor of the state, a difference of 24 percentage points. At the same time, 81% of Shore residents support more incentives for renewable energy generation, compared to only 67% of those residents on the opposite side of the Bay in the Southern region, a 14 percentage point difference.

### 3. Marylanders support renewal of the Greenhouse Gas **Reduction Act**

The Greenhouse Gas Reduction Act (GGRA) authorized the development of a statewide plan to reduce emissions by 25% by 2020 compared to a 2006 baseline. In 2016, the General Assembly will review, and possibly renew, the legislation. In the survey we briefly described the GGRA and asked Marylanders what action they preferred the state to take: renew the act, renew and strengthen it, or not renew it. Sizeable percentages said that they didn't know (29%), but the majority said that the state should renew it, either keeping the current pollution reduction goals (22%) or strengthening those goals (42%) (Figure 6). There is little difference regionally in residents' support for the GGRA's renewal. Majorities favor renewal of the legislation in each of the four regions (Western, 58%; Central, 64%; Southern, 64%; Eastern, 61%) (Appendix, Table 4).

**Figure 6** | A majority of Marylanders support continuing a mandate for lower emissions

The goal of Maryland's current Greenhouse Gas Reduction Act of 2009 is to reduce the pollution that causes climate change 25% by 2020. In 2016, the State's General Assembly will consider whether to renew or makes changes to the GGRA. What should Maryland's General Assembly do?



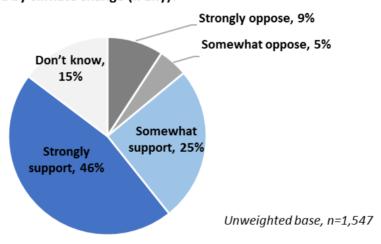
Unweighted base, n=1,547

### 4. State and local governments should protect communities

As the effects of climate change are increasingly felt in Maryland, one question the state and local governments have been trying to answer is what they can do to help communities prepare for these changes and adapt to them. For the last three years we have asked Marylanders whether they support or oppose state and local governments taking action to protect communities from climate change. More than two-thirds of residents statewide say this is an appropriate job for their government (71%) (Figure 7), a percentage which has not varied much since 2014 (73%). Support also remains strong among all four regions (Western, 74%; Central, 72%; Southern, 68%; Eastern, 67%) (Appendix, Table 5).

Figure 7 | Support for protecting communities from climate change remains strong in 2015

How much do you support or oppose state and local governments taking action to protect your community against harm caused by climate change (if any)?



# 5. Marylanders say climate change is happening and that humans are – at least in part – at cause

The question of whether human-caused climate change is happening has become increasingly well answered by the scientific literature over the past few decades.<sup>4</sup> Few climate scientists doubt that climate change is occurring; a larger divide remains among the public. Just under two-thirds (63%) of Americans nationally say that global warming is happening, with about a third saying they are "extremely" or "very sure" (37%).<sup>5</sup> By way of comparison, Marylanders are much more likely to say that climate change is occurring – 72% – and that they are "extremely" or "very sure" (Figure 8). Almost half (48%) say so. Moreover, residents' understanding that climate change is happening remains high across all four regions (Western, 75%; Central, 73%; Southern, 65%; Eastern, 66%) (Figure 9) (Appendix, Table 6).

### The percentage of people who doubt climate change has stayed steady (and small); the percentage of people who are unsure remains considerably larger

Between 2013 and 2015, a consistent 10-13% of Marylanders have said they do not think that climate change is happening (Figure 10). The percentage of people who are unsure about climate change is about four times larger. In 2015, 40% of Marylanders either said they didn't know whether climate change was happening, or were "not at all sure" or "somewhat sure." The percentage who are certain that climate change is happening — "extremely" or "very sure" — has remained fairly stable between 45-50%. Where there have been larger shifts between years is among those people who are either somewhat sure or say they don't know.

#### A majority say that humans are playing a part in causing climatic changes

Almost half of Marylanders (45%) say climate change is either caused entirely or mostly by human activities (Figure 11), a number that has increased from 37% in the past year (Figure 12). Another third of Marylanders – 33% – say climate change is caused equally by natural and human causes. Residents on the Eastern Shore of Maryland are least likely to say that climate change is caused entirely or mostly by humans, only 34% (Appendix, Table 7). By comparison, 42% of Marylanders in the Western counties, 45% in the Central region, and 47% in the Southern portion of the state say the same.

<sup>&</sup>lt;sup>4</sup> Anderegg, W. R. L., Prall, J. W., Harold, J., & Schneider, S. H. (2010). Expert credibility in climate change. *Proceedings of the National Academy of Sciences, 107*(27), 12107–12109.; Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., ... Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters, 8*(2), 024024.; Doran, P. T., & Zimmerman, M. K. (2009). Examining the scientific consensus on climate change. *Eos, Transactions American Geophysical Union, 90*(3), 22.

<sup>&</sup>lt;sup>5</sup> Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Rosenthal, S. (2015). *Climate change in the American mind: March, 2015*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication.

Figure 8 | A large majority of Marylanders say that climate change is happening

Do you think that climate change is happening? If you answered either yes or no, how sure are you? Extremely sure climate change is not happening, 3%

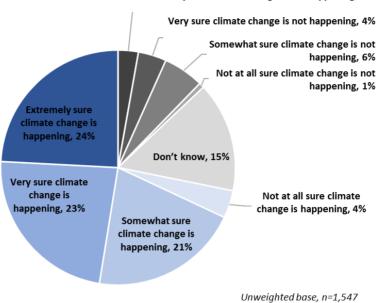


Figure 9 | Certainty that climate change is happening varies across the state

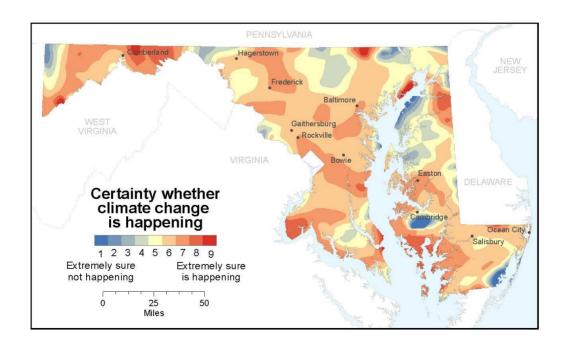


Figure 10 | The biggest shifts have occurred within the audiences that are uncertain

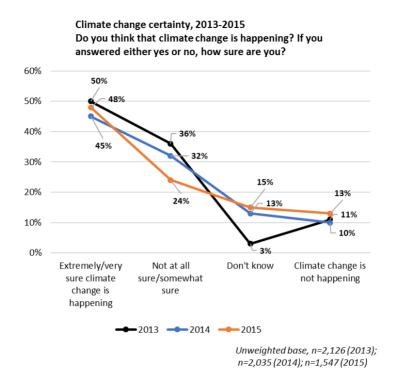
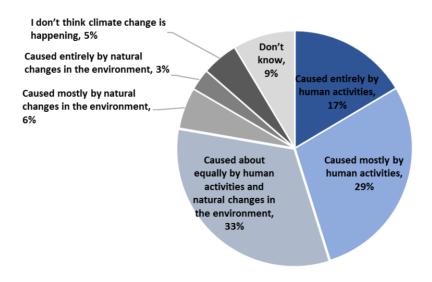


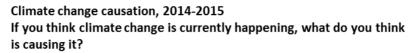
Figure 11 | Most say humans are contributing to climate change

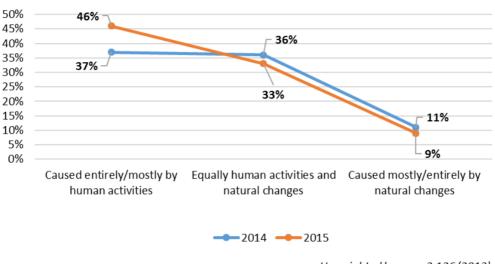
If you think climate change is currently happening, what do you think is causing it?



Unweighted base, n=1,547

**Figure 12** | *Understanding of human-caused climate change increases* 





*Unweighted base, n=2,126 (2013);* n=2,035 (2014); n=1,547 (2015)

# 6. Residents are more likely to underestimate the social consensus than the scientific consensus on climate

Considerable research has shown over the past few years that public understanding of the scientific consensus can act as a "gateway" to other climate change beliefs. Studies have also revealed that perceptions of social consensus are underestimated and people who believe that their opinions are not in alignment with the majority are more likely to change their minds over time. This year, 46% of Marylanders said that scientific consensus on climate change is 80% or greater, an increase of 21 percentage points over the past year (Figures 13-14). Between 2013 and 2014, there was virtually no change in this statistic; the substantial change in just one year is one of the larger surprises of the survey. Communication of the scientific consensus has been a focus of numerous organizations, including the American Association for the Advancement of Science.

Those who do not think that climate change is happening are most likely to say that the public discussion is the result of politics or politicians (25%), money (18%), special interest groups (6%), the media (5%), or Al Gore (5%) (Appendix, Table 8).

### Almost half incorrectly ascertain the level of regional and state social consensus

As of 2015, only 29% of residents underestimate the scientific consensus in Maryland, but between 43% and 47% underestimate the social consensus for their region, state, and the nation (Figure 13). This presents an opportunity for communication. There are few differences in the percent of those who correctly estimate the consensus by region.

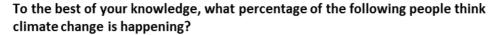
Many people simply admit they do not know either the level of scientific or social consensus People find it uncomfortable to admit that they "do not know" on surveys, so it is important to note that on all questions about the levels of social and scientific consensus, large percentages say they do not know enough to say, between 24% and 29%. In the Southern and Eastern regions of the state, roughly a third or more say they do not know what the social consensus is in their area or the state (Appendix, Table 9).

<sup>&</sup>lt;sup>6</sup> Van der Linden, S., Leiserowitz, A. A., Feinberg, G. D., & Maibach, E. W. (2015). The scientific consensus on climate change as a gateway belief: Experimental evidence. *PloS one*, *10*(2), e0118489.

<sup>&</sup>lt;sup>7</sup> Leviston, Z., Walker, I., & Morwinski, S. (2013). Your opinion on climate change might not be as common as you think. *Nature Climate Change*, *3*(4), 334-337.

<sup>&</sup>lt;sup>8</sup> See the "What We Know" initiative at http://whatweknow.aaas.org/

Figure 13 | Almost half understand the scientific consensus on climate change



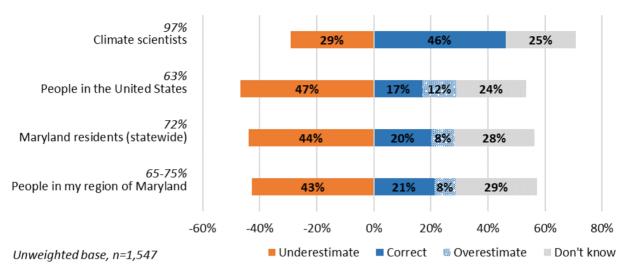
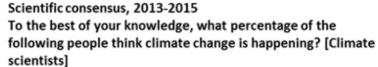
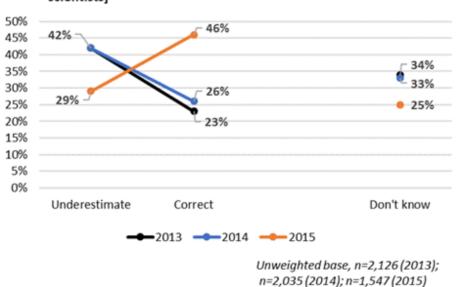


Figure 14 | Perceptions of the scientific consensus changed dramatically





### 7. Hotter weather and more storms are seen as likely

The name "global warming" says it all; things are expected to heat up as the climate changes, including in Maryland.<sup>9</sup> Perhaps unsurprisingly, more than two-thirds of Marylanders (70%) are most likely to call out hotter weather as one of the effects of climate change that they expect to see in the next 10-20 years in their communities (Figure 15). At the same time, they also point to more severe storms (59%) and colder weather (52%). Very few say there are no likely effects from climate change (13%).

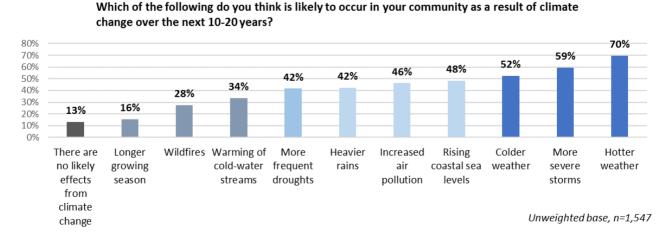
### Hot weather and more storms have remained top concerns over past two years

In 2014 and 2015, hotter weather and more severe storms remained the most commonly cited likely local impacts from climate change. Fewer percentages of people cited storms as a likely impact in 2015 than 2014, a drop of 10 percentage points (Figure 16). Fewer people also named colder weather (12 percentage points down), and heavier rains (15 percentage points down).

### Southern residents are more likely to point to higher temperatures and more storms

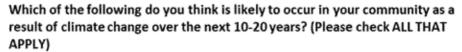
While people in all regions are most likely to say that temperatures will grow warmer in coming decades, those in the Southern counties from Anne Arundel down to St. Mary's are more likely to say so than other areas. Eighty percent of residents in the Southern region point to higher heat compared to only 53% on the Eastern Shore. Similarly, more extreme storms are cited by 68% of Southern residents compared to 51% of their fellow citizens on the Eastern side of the Bay (Appendix, Table 10).

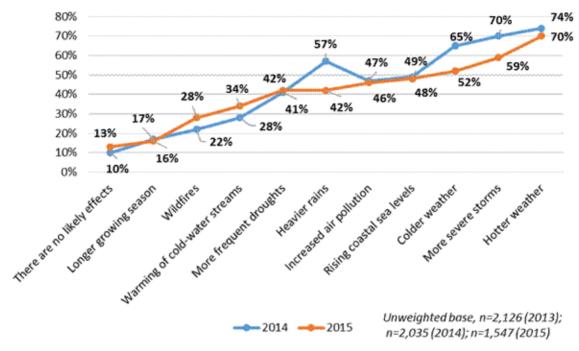
**Figure 15** | Hotter weather and more severe storms are anticipated in coming decades



<sup>9</sup> Boesch, D. F. (ed.). (2008). *Global warming and the free state: Comprehensive assessment of climate change impacts in Maryland*. Report of the Scientific and Technical Working Group of the Maryland Commission on Climate Change. Cambridge, MD: University of Maryland Center for Environmental Science.

Figure 16 | Fewer Marylanders cite storms, colder weather and heavier rains in 2015



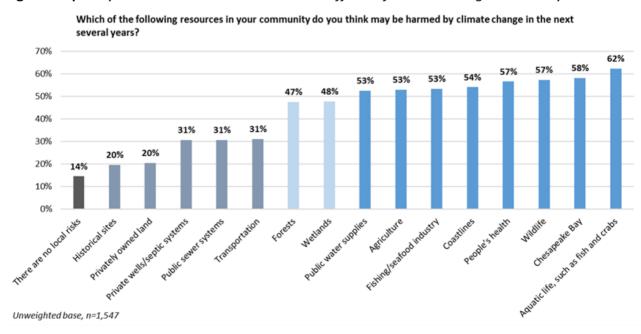


# 8. Marylanders say harm to the Bay and its aquatic life are among the most likely effects from climate change

At the top of the list of community resources that Marylanders expect to suffer from climate change in the next several years are aspects of the state's coastal heritage: aquatic life, such as crabs and fish (62%); the Chesapeake Bay (58%); coastlines (54%); and the fishing/seafood industry (53%) (Figure 17). Wildlife (57%), people's health (57%), agriculture (53%), and public water supplies (53%) round out the list. Aquatic resources and the Bay were added to this question on the 2015 survey; they were not polled in previous years. The largest difference in responses polled both in 2014 and 2015 was to transportation – a drop of 10 percentage points from 41% to 31% (Figure 18).

### Southern region residents are most likely to point to effects on aquatic life and the Bay

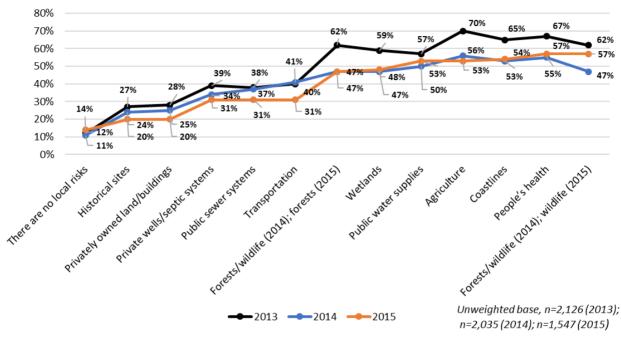
Three-quarters of people (75%) from the Southern region, stretching between Anne Arundel and St. Mary's counties, say aquatic life in their communities will be harmed by climate change; 72% say the Bay itself will suffer (Appendix, Table 11). In contrast, the Western, Central and Eastern regions demonstrate lower concern about these impacts, ranging from 51% to 60% for aquatic life and 54% to 56% for the Chesapeake Bay. People in the Southern region are also more likely to say they expect climate change to affect their public sewers (47%), private wells and septic tanks (46%), and coastlines (69%) compared to people in other regions. People on the Eastern Shore, an area at risk for salinization of the groundwater, are less likely than Southern residents to be concerned about loss of private wells and septic systems (31%).



**Figure 17** | Marylanders are concerned about the effects of climate change on the Bay

Figure 18 | Fewer people in 2015 say transportation will be harmed by climate change





### 9. Study methodology

This study was conducted by George Mason University's Center for Climate Change Communication in partnership with the Johns Hopkins Bloomberg School of Public Health to explore Marylanders' views on public health, energy and the environment. The survey instrument was developed at George Mason University, partially based on questions used in the Climate Change in the American Mind national surveys run by the Yale Project on Climate Change Communication (http://environment.vale.edu/ climate-communication/) and George Mason's Center for Climate Change Communication (http://climatechange communication.org/). The mail survey consisted of 48 questions, and took approximately 20 minutes to complete.

For reporting purposes, the data have been broken into three separate documents on Marylanders' attitudes, behaviors and policy preferences regarding public health and climate change, energy, and climate change generally.

The unweighted sample margin of error is +/- 2.5 percentage points at the 95% confidence interval for the state and less than +/- 5.7 percentage points for each region (Table 1).

### Sampling design; fielding

The survey was mailed to 6,401 households in the state of Maryland, randomly selected from within each of four regions of the state from Survey Sampling International household address databases, based primarily on U.S. Postal Service delivery route information. We sampled at the regional level to ensure the final data were generalizable to these distinctly different geographic and cultural areas of the state, as well as the state as a whole. The sample size for the Central region of the state was higher relative to the other three regions because it accounts for more than half of the state's population. Households that responded to the survey in 2013 and 2014 were not re-contacted in 2015.

The survey was fielded from April 11 to June 24, 2015. Each household was sent up to four mailings: an announcement letter introducing the survey (April 11), a copy of the survey with a \$2 bill as a thank you (April 20), a reminder postcard (May 4), and a follow-up survey (May 18). (As a point of comparison, the previous surveys were fielded from March 28 to June 4, 2013, and March 17 to June 10, 2014, 2014. Methodology for the 2013 and 2014 surveys is available within those reports at climatemaryland.org.) In order to achieve randomization of respondents within each household, we requested that the person with the most recent birthday complete the survey. Households that completed and returned the survey were taken off of subsequent mailing lists.

### Weighting

The data tables report percentages for the state and each region. State data were weighted for regional representation, gender, age, and education level based on 3-year American Community Survey data from the U.S. Census Bureau. Each region's data were also weighted for the same demographic variables. Base unweighted sample sizes for each question are reported in addition to the weighted percentages. Respondents who did not provide regional, gender, age or education level data were dropped from the data set. This lowered the number of respondents by 64 cases. (The overall response rate for the study before those cases were dropped was 28%.) Please see the demographics section of the appendix for more information on the characteristics of the survey sample pre- and post-weighting.

#### **Institutional Review Board**

The study was reviewed by Institutional Review Boards for both George Mason University (Protocol #8508) and Johns Hopkins Bloomberg School of Public Health (Protocol #00006315).

**Table 1** | Regional samples, response rates and margin of error

Region	Counties	Mailing #	Refusals	Undeliverable	Respondents	Response rate	Margin of error
Western	Allegany, Frederick, Garrett, Washington	1,467	14	115	424	31%	4.76
Central	Baltimore, Carroll, Cecil, Harford, Howard, Montgomery, Baltimore City	2,000	15	135	484	26%	4.45
Southern	Anne Arundel, Calvert, Charles, Prince George's, St. Mary's	1,467	4	99	297	22%	5.69
Eastern	Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, Worcester	1,467	6	232	342	28%	5.3
State		6,401	<b>39</b>	581	1,547	27%	2.49

## **Appendices**– Data tables

- Sample demographics

The following tables provide data at the state and regional level for each of the questions included in this survey report. "Unweighted n" refers to the number of people who responded to each question. The samples were weighted to better approximate U.S. Census data on state population distributions. More information can be found in the study methodology section. The counties included in each region are listed below.

Region	Counties
Western	Allegany, Frederick, Garrett and Washington counties
Central	Baltimore, Carroll, Cecil, Harford, Howard, Montgomery counties and Baltimore City
Southern	Anne Arundel, Calvert, Charles, Prince George's and St. Mary's counties
Eastern	Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester counties
State	All counties

### Data tables | Marylanders' priorities for the Assembly and Governor Table 1 | *Top priority areas for the state*

How much of a priority should th		STATE	WESTERN	CENTRAL	SOUTHERN	EASTER
a. Improving access to health	Not a priority	2.2%	1.4%	2.2%	2.1%	2.0%
care	Low	5.0%	5.0%	5.0%	3.7%	5.1%
	Medium	18.4%	19.2%	18.3%	21.9%	15.4%
	High	36.3%	28.4%	37.2%	39.5%	26.0%
	Very high	38.1%	46.1%	37.2%	32.9%	51.6%
	Unweighted n	1529	421	481	291	336
b. Lowering state rates of asthma	Not a priority	4.1%	8.1%	5.0%	1.4%	4.9%
and respiratory disease	Low	12.0%	13.6%	11.8%	13.7%	8.6%
	Medium	24.9%	27.5%	22.6%	33.8%	29.0%
	High	32.7%	22.7%	33.9%	29.6%	21.4%
	Very high	26.3%	28.2%	26.7%	21.4%	36.2%
	Unweighted n	1510	415	472	289	334
c. Lowering state taxes	Not a priority	2.3%	3.0%	3.0%	.8%	1.5%
· ·	Low	5.3%	9.0%	6.0%	2.6%	5.5%
	Medium	18.9%	19.9%	18.1%	28.7%	17.3%
	High	27.2%	24.0%	27.3%	25.0%	30.8%
	Very high	46.3%	44.1%	45.7%	42.9%	45.0%
	Unweighted n	1532	419	481	293	339
d. Addressing climate change	Not a priority	13.9%	13.1%	14.6%	10.2%	12.8%
	Low	15.2%	18.0%	16.5%	15.2%	15.9%
	Medium	24.7%	23.9%	24.6%	27.3%	19.7%
	High	22.9%	21.8%	21.1%	26.4%	23.8%
	Very high	23.3%	23.1%	23.2%	20.9%	27.8%
	Unweighted n	1516	413	481	290	332
e. Making the state more	Not a priority	2.8%	1.0%	2.5%	10.6%	2.2%
business-friendly	Low	7.1%	5.9%	6.7%	9.1%	10.2%
	Medium	28.6%	21.6%	29.9%	22.8%	22.5%
	High	35.5%	35.6%	37.9%	32.8%	25.8%
	Very high	26.0%	35.9%	23.0%	24.6%	39.3%
	Unweighted n	1518	415	475	292	336
f. Shrinking the size of state	Not a priority	12.0%	7.3%	12.4%	9.4%	6.8%
government	Low	16.4%	16.1%	15.9%	22.6%	13.8%
	Medium	32.0%	23.0%	31.5%	38.3%	30.8%
	High	17.6%	23.2%	18.9%	12.3%	20.0%
	Very high	21.9%	30.4%	21.3%	17.4%	28.5%
	Unweighted n	1529	420	478	295	336
g. Creating jobs	Not a priority	1.3%	.5%	1.4%	.5%	.5%
3,	Low	.9%	1.5%	.9%	.6%	1.2%
	Medium	11.3%	9.5%	10.6%	15.4%	7.2%
	High	27.7%	27.1%	29.0%	22.2%	24.2%
	Very high	58.9%	61.3%	58.1%	61.3%	66.8%
	Unweighted n	1525	419	477	292	337
h. Growing the middle class	Not a priority	3.0%	2.0%	4.2%	.9%	2.1%
	Low	3.5%	2.4%	4.6%	1.8%	3.8%
	Medium	19.1%	13.8%	21.2%	9.9%	20.6%
	High	34.8%	35.1%	30.6%	55.3%	28.4%
	Very high	39.6%	46.7%	39.4%	32.0%	45.1%
	Unweighted n	1521	414	477	294	336
i. Protecting Maryland's coastal	Not a priority	2.0%	3.6%	2.3%	1.0%	.7%
areas from storms and flooding	Low	7.8%	9.6%	9.7%	2.4%	7.1%
5	Medium	24.3%	27.4%	24.9%	19.1%	19.2%
	High	37.0%	30.4%	37.9%	40.8%	29.9%
	Very high	29.0%	29.0%	25.2%	36.6%	43.1%
			/ M 11%	1:1 / 1/0	מ"מ נזכ.	

Continued How much of a priority should these topics be for Maryland's General Assembly and the Governor?

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
j. Reducing water pollution	Not a priority	.4%	1.8%	.2%	.2%	.4%
	Low	2.7%	4.4%	3.4%	.8%	2.8%
	Medium	20.7%	27.9%	21.7%	11.4%	22.0%
	High	32.7%	29.9%	33.3%	39.9%	29.3%
	Very high	43.5%	35.9%	41.4%	47.7%	45.5%
	Unweighted n	1537	422	482	295	338
k. Fixing and building roads	Not a priority	.5%	.4%	.6%	.2%	.4%
	Low	2.4%	2.7%	1.5%	3.1%	5.2%
	Medium	19.9%	16.0%	19.6%	23.2%	20.0%
	High	39.0%	37.2%	43.5%	28.0%	33.7%
	Very high	38.1%	43.6%	34.8%	45.5%	40.8%
	Unweighted n	1533	421	479	294	339
I. Expanding public transportation	Not a priority	6.3%	5.0%	6.6%	4.9%	5.9%
	Low	11.2%	13.5%	12.3%	9.2%	13.2%
	Medium	29.6%	29.5%	27.7%	38.5%	25.0%
	High	27.4%	26.4%	28.4%	24.9%	33.4%
	Very high	25.5%	25.6%	25.0%	22.6%	22.5%
	Unweighted n	1530	419	479	295	337
m. Reducing air pollution	Not a priority	2.5%	6.6%	2.4%	1.3%	.8%
	Low	5.6%	9.4%	7.0%	1.3%	7.5%
	Medium	23.8%	25.3%	24.7%	17.4%	26.4%
	High	33.0%	25.8%	31.4%	44.8%	28.2%
	Very high	35.1%	32.9%	34.5%	35.2%	37.2%
	Unweighted n	1517	417	475	289	336
n. Improving state K-12 and	Not a priority	1.6%	1.2%	1.7%	1.9%	2.1%
higher education	Low	3.3%	5.2%	3.9%	2.1%	4.9%
	Medium	16.1%	18.3%	18.3%	11.4%	11.1%
	High	30.0%	28.6%	28.7%	34.8%	29.4%
	Very high	48.9%	46.7%	47.4%	49.8%	52.6%
	Unweighted n	1535	421	481	294	339

		2014	2015	∆ 2015-2014
	Not a priority	3.2%	2.2%	-1.0%
	Low	6.3%	5.0%	-1.3%
	Medium	16.7%	18.4%	1.7%
mproving access to health care	High	29.5%	36.3%	6.8%
	Very high	44.3%	38.1%	-1.0% -1.3% 1.7%
	Unweighted n	1997	1529	
	Not a priority	8.6%	13.9%	5.3%
	Low	12.3%	15.2%	2.9%
ddragaing alimete abongs	Medium	28.4%	24.7%	-3.7%
ddressing climate change	High	29.6%	22.9%	-6.7%
	Very high	8.6%       13.9%       5.3%         12.3%       15.2%       2.9%         28.4%       24.7%       -3.7%         29.6%       22.9%       -6.7%         21.0%       23.3%       2.3%         1994       1516         0.9%       1.3%       0.4%         1.5%       0.9%       -0.6%         8.2%       11.3%       3.1%         26.2%       27.7%       1.5%         63.1%       58.9%       -4.2%         2002       1525         2.5%       3.0%       0.5%         4.9%       3.5%       -1.4%         18.4%       19.1%       0.7%         30.1%       34.8%       4.7%         44.1%       39.6%       -4.5%         1982       1521       -4.5%         4.5%       2.0%       -2.5%         11.0%       7.8%       -3.2%         29.2%       24.3%       -4.9%         31.2%       37.0%       5.8%         24.1%       29.0%       4.9%         1998       1536	2.3%	
	Unweighted n	1994	1516	
	Not a priority	0.9%	1.3%	0.4%
	Low	1.5%	0.9%	-0.6%
Proofing jobs	Medium	8.2%	11.3%	
Creating jobs	High	26.2%	27.7%	
	Very high	63.1%	58.9%	
	Unweighted n	2002	1525	1.5% -4.2% 0.5% -1.4% 0.7%
	Not a priority	2.5%	3.0%	0.5%
	Low	4.9%	3.5%	
rowing the middle close	Medium	18.4%	19.1%	0.7%
rowing the middle class	High	30.1%	34.8%	4.7%
	Very high	44.1%	39.6%	-4.5%
	Unweighted n	1982	1521	
	Not a priority	4.5%	2.0%	-2.5%
	Low	11.0%	7.8%	-3.2%
rotecting Maryland's coastal reas from sea-level rise (2014)/	Medium	29.2%	24.3%	-4.9%
torms and flooding (2015)	High	31.2%	37.0%	5.8%
3(1)	Very high	24.1%	29.0%	4.9%
	Unweighted n	1998	1536	
	Not a priority	1.2%	0.4%	-0.8%
	Low	2.3%	2.7%	0.4%
educing water pollution	Medium	15.4%	20.7%	5.3%
educing water politition	High	36.3%	32.7%	-3.6%
	Very high	44.8%	43.5%	-1.3%
	Unweighted n	1989	1537	
	Not a priority	2.0%	2.5%	0.5%
	Low	5.4%	5.6%	0.2%
toducing oir pollution	Medium	19.2%	23.8%	4.6%
Reducing air pollution	High	33.8%	33.0%	-0.8%
	Very high	39.5%	35.1%	-4.4%
	Unweighted n	1993	1517	

Table 2 | Residents' level of support for state climate and energy policies

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTER
a. Requiring new cars and other	Strongly oppose	3.1%	5.4%	2.8%	2.9%	4.9%
vehicles in Maryland to be less polluting	Somewhat oppose	8.5%	9.4%	9.5%	4.2%	8.9%
, <b>.</b>	Neither support nor oppose	16.1%	19.8%	13.7%	28.1%	16.8%
	Somewhat support	28.1%	32.5%	25.7%	23.2%	35.2%
	Strongly support	44.2%	32.9%	48.3%	41.6%	34.2%
	Unweighted n	1376	377	436	261	302
. Expanding rebates to help	Strongly oppose	1.8%	3.5%	1.0%	2.2%	4.4%
eople purchase energy-efficient ghting and appliances	Somewhat oppose	4.4%	3.8%	5.3%	1.1%	3.6%
griding and applications	Neither support nor oppose	9.9%	9.3%	11.3%	8.6%	3.6%
	Somewhat support	29.4%	26.0%	26.9%	41.1%	33.8%
	Strongly support	54.5%	57.4%	55.5%	47.1%	54.6%
	Unweighted n	1371	375	433	262	301
Doubling use of public	Strongly oppose	4.7%	6.3%	5.2%	2.9%	5.5%
	Somewhat oppose	7.1%	5.8%	7.3%	6.6%	11.1%
0201	Neither support nor oppose	35.6%	32.9%	33.3%	43.3%	29.9%
	Somewhat support	25.8%	19.8%	27.3%	28.2%	27.3%
	Strongly support	26.8%	35.3%	27.0%	19.0%	26.2%
	Unweighted n	1230	333	397	238	262
. Participating in a regional	Strongly oppose	6.6%	16.7%	5.4%	4.6%	6.8%
	Somewhat oppose	8.5%	7.3%	10.0%	5.8%	9.8%
roduction of greenhouse gases	Neither support nor oppose	36.6%	37.4%	34.2%	44.0%	37.8%
	Somewhat support	22.7%	19.9%	23.7%	22.7%	29.3%
	Strongly support	25.6%	18.7%	26.6%	22.9%	16.3%
	Unweighted n	1153	321	360	218	254
. Encouraging the development	Strongly oppose	4.1%	7.9%	3.1%	3.3%	7.9%
	Somewhat oppose	8.8%	5.1%	5.4%	18.1%	10.1%
etter access to public ransportation	Neither support nor oppose	20.0%	24.3%	18.6%	23.8%	32.7%
	Somewhat support	25.6%	34.9%	30.1%	17.1%	14.4%
	Strongly support	41.6%	27.8%	42.7%	37.6%	34.8%
	Unweighted n	1239	340	395	234	270
Supporting the production and	Strongly oppose	.3%	2.5%	.1%	0.0%	.6%
	Somewhat oppose	1.4%	.6%	1.6%	.1%	1.9%
	Neither support nor oppose	14.8%	7.2%	17.1%	18.5%	12.8%
	Somewhat support	21.5%	27.2%	20.6%	24.4%	26.8%
	Strongly support	62.0%	62.6%	60.7%	57.0%	57.9%
	Unweighted n	1339	369	427	247	296
	Strongly oppose	7.4%	10.5%	6.7%	5.4%	8.5%
ystems	Somewhat oppose	13.0%	11.0%	14.7%	9.5%	12.1%
	Neither support nor oppose	44.4%	39.2%	42.2%	56.3%	40.3%
	Somewhat support	18.9%	19.5%	18.4%	21.6%	16.6%
	Strongly support	16.4%	19.8%	18.0%	7.2%	22.4%
	Unweighted n	1156	321	367	220	248
	Strongly oppose	4.1%	4.8%	4.4%	3.5%	3.7%
of their Unweighted n electricity	Somewhat oppose	5.0%	2.4%	4.6%	5.9%	6.7%
rom renewable energy sources by 2022 (such as solar, wind,	Neither support nor oppose	15.8%	17.3%	14.4%	22.9%	15.1%
iomass, landfill gas, and	Somewhat support	25.5%	26.5%	25.6%	20.7%	29.9%
Participating in a regional rbon emissions trading ogram to reduce overall oduction of greenhouse gases  Encouraging the development more homes (houses, condos ad apartments) in our cities, with effect access to public ansportation  Supporting the production and insumption of local agricultural oducts and other products  Tax incentives for installation residential wood fuel heating stems  Requiring that Maryland's ectricity suppliers provide 20% their Unweighted n electricity on renewable energy sources a 2022 (such as solar, wind,	Strongly support	49.5%	49.0%	51.0%	47.0%	44.6%
	Unweighted n	1279	357	397	246	279

### Continued

### How much do you support or oppose this policy?

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
i. Expanding financial incentives	Strongly oppose	2.5%	3.8%	2.4%	2.5%	2.9%
for the generation of renewable energy (such as solar and	Somewhat oppose	2.9%	1.9%	2.6%	3.3%	2.5%
geothermal)	Neither support nor oppose	17.5%	20.8%	16.3%	27.1%	13.5%
	Somewhat support	28.3%	26.4%	28.5%	26.0%	28.2%
	Strongly support	48.8%	47.2%	50.2%	41.1%	52.9%
	Unweighted n	1287	353	405	248	281

		2013	2014	2015	∆ 2014- 2013	∆ 2015- 2014	∆ 2015- 2013
	Strongly oppose	3.9%	4.6%	3.1%	0.7%	-1.5%	-0.8%
	Somewhat oppose	3.5%	5.2%	8.5%	1.7%	3.3%	5.0%
Requiring new cars and other	Neither support nor oppose	17.2%	12.1%	16.1%	-5.1%	4.0%	-1.1%
vehicles in Maryland to be less polluting	Somewhat support	24.2%	29.4%	28.1%	5.2%	-1.3%	3.9%
policing	Strongly support	51.3%	48.8%	44.2%	-2.5%	-4.6%	-7.1%
	Unweighted n	2040	1941	1376			
	Strongly oppose	3.6%	2.8%	1.8%	-0.8%	-1.0%	-1.8%
	Somewhat oppose	4.1%	2.8%	4.4%	-1.3%	1.6%	0.3%
Expanding rebates to help people	Neither support nor oppose	12.4%	12.6%	9.9%	0.2%	-2.7%	-2.5%
purchase energy-efficient lighting and appliances	Somewhat support	23.6%	29.4%	29.4%	5.8%	0.0%	5.8%
and appliances	Strongly support	56.3%	52.4%	54.5%	-3.9%	2.1%	-1.8%
	Unweighted n	2038	1951	1371			
	Strongly oppose	5.5%	2.8%	4.7%	-2.7%	1.9%	-0.8%
	Somewhat oppose	5.1%	7.2%	7.1%	2.1%	-0.1%	2.0%
Doubling use of public	Neither support nor oppose	27.5%	25.5%	35.6%	-2.0%	10.1%	8.1%
transportation in Maryland by	Somewhat support	25.7%	32.6%	25.8%	6.9%		0.1%
2020	Strongly support	36.1%	31.9%	26.8%	-4.2%		-9.3%
	Unweighted n	1968	1914	1230	,•		
	Strongly oppose	6.1%	5.8%	6.6%	-0.3%	0.8%	0.5%
	Somewhat oppose	5.6%	4.5%	8.5%	-1.1%		2.9%
Participating in a regional carbon	Neither support nor oppose	35.2%	35.9%	36.6%	0.7%		1.4%
emissions trading program to reduce overall production of	Somewhat support	21.0%	29.6%	22.7%	8.6%		1.7%
greenhouse gases	Strongly support	32.1%	24.2%	25.6%	-7.9%		-6.5%
	Unweighted n	1937	1855	1153	7.570	-1.5% 3.3% 4.0% -1.3% -4.6%  -1.0% 1.6% -2.7% 0.0% 2.1%  1.9% -0.1%	0.070
	Strongly oppose	5.2%	4.3%	4.1%	-0.9%	-0.2%	-1.1%
Encouraging the development of more homes (houses, condos and	Somewhat oppose	5.7%	6.6%	8.8%	0.9%		3.1%
apartments) in our cities, with	Neither support nor oppose	23.4%	26.6%	20.0%	3.2%		-3.4%
better access to public	Somewhat support	26.1%	29.4%	25.6%	3.3%		-0.5%
transportation, as a means to reduce sprawl, and preserve	Strongly support	39.6%	33.1%	41.6%	-6.5%		2.0%
forests and farmland	Unweighted n	1992	1907	1239	-0.570	0.070	2.070
	Strongly oppose	0.9%	0.7%	0.3%	-0.2%	-0.4%	-0.6%
	Somewhat oppose	1.9%	2.4%	1.4%	0.5%		-0.5%
Supporting the production and		18.7%	15.3%	14.8%	-3.4%		-3.9%
consumption of local agricultural	Neither support nor oppose	23.9%	28.2%	21.5%	4.3%		-2.4%
products and other products	Somewhat support	54.6%	53.4%	62.0%	-1.2%		7.4%
	Strongly support Unweighted n	1998	1920	1339	-1.2/0	2014 -1.5% 3.3% 4.0% -1.3% -4.6% -1.0% 1.6% -2.7% 0.0% 2.1% -1.9% -0.1% -1.1% -6.8% -5.1% -0.8% 4.0% 0.7% -6.9% 1.4% -0.2% -6.6% -3.8% 8.5% -0.4% -1.0% -0.5% -6.7% 8.6% -1.0% -3.6% -1.1% -1.6% -2.6% -2.6% -0.2%	7.4/0
					-3.2%	0.59/	2.70/
	Strongly oppose	10.1%	6.9%	7.4%			-2.7%
Tax incentives for installation of	Somewhat oppose	10.2%	9.3%	13.0%	-0.9%		2.8%
residential wood fuel heating	Neither support nor oppose	41.0%	40.5%	44.4%	-0.5%		3.4%
systems	Somewhat support	20.7%	23.4%	18.9%	2.7%		-1.8%
	Strongly support	17.9%	20.0%	16.4%	2.1%	-3.6%	-1.5%
	Unweighted n	1954	1872	1156	4.407	4.407	0.50/
Requiring that Maryland's	Strongly oppose	6.6%	5.2%	4.1%	-1.4%		-2.5%
electricity suppliers provide 20% of their total electricity from	Somewhat oppose	3.7%	3.4%	5.0%	-0.3%		1.3%
renewable energy sources by	Neither support nor oppose	15.0%	18.4%	15.8%	3.4%		0.8%
2022 (such as solar, wind,	Somewhat support	27.8%	25.7%	25.5%	-2.1%		-2.3%
biomass, landfill gas, and hydroelectric power)	Strongly support	46.8%	47.3%	49.5%	0.5%	2.2%	2.7%
, 051001110 portor)	Unweighted n	1973	1905	1279			

### Data tables | Awareness of and support for Maryland state policies

Table 3 | Residents' awareness of state policies

Maryland has begun implementing policies to promote new sources of energy and use energy more efficiently. For each of the following policies, please answer two questions: Have you heard of this policy?

Vehicles in Maryland to be less polluting   No			STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Deciding   Deciding   Deciding   Deciding   Deciding   Deciding   Deciding   Professional State   Professional S		Yes	58.1%	56.7%	60.9%	56.4%	56.1%
Unweighted n		No	41.9%	43.3%	39.1%	43.6%	43.9%
Deople purchase energy-efficient lighting and appliances   No	ponuming	Unweighted n	1488	411	464	56.4% 43.6% 288 53.6% 46.4% 285 30.4% 69.6% 286 18.3% 81.7% 279 29.6% 70.4% 284 49.2% 50.8% 284 10.6% 89.4% 282 38.6% 61.4% 280 37.3% 62.7%	325
Internation		Yes	61.3%	68.2%	62.2%	53.6%	74.0%
C. Doubling use of public transportation in Maryland by 2020  1. Participating in a regional carbon emissions trading program to reduce overall production of greenhouse gases  2. Encouraging the development of more homes (houses, condos and apartments) in our cities, with better access to public transportation as a means to reduce sprawl, and preserve forests and farmland  1. Supporting the production and consumption of local agricultural products and other products  9. Tax incentives for installation of residential wood fuel heating systems  Unweighted n  1480  406  406  406  70.7%  69.6%  60.0%  70.7%  70.5%  81.7%  70.9%  77.7%  76.5%  81.7%  70.9%		No	38.7%	31.8%	37.8%	46.4%	26.0%
No   70.1%   66.6%   70.7%   69.6%   60.0%	iightiing and appliances	Unweighted n	1480	406	466	285	323
Descripting in a regional carbon emissions trading program to reduce overall production of greenhouse gases e. Encouraging the development of more homes (houses, condos and apartments) in our cities, with better access to public transportation as a means to reduce sprawl, and preserve forests and farmland f. Supporting the production and consumption of local agricultural products and other products and other products and other products and other products of residential wood fuel heating systems    No		Yes	29.9%	33.4%	29.3%	30.4%	40.0%
Unweighted n   1463   402   461   286   314		No	70.1%	66.6%	70.7%	69.6%	60.0%
No	2020	Unweighted n	1463	402	461	56.4% 43.6% 288 53.6% 46.4% 285 30.4% 69.6% 286 18.3% 81.7% 279 29.6% 70.4% 284 49.2% 50.8% 284 10.6% 89.4% 282 38.6% 61.4% 280 37.3% 62.7%	314
Description of greenhouse gases   Unweighted n   1451   399   457   279   316		Yes	23.0%	22.3%	23.5%	18.3%	29.1%
Droduction of greenhouse gases   Unweighted n   1451   399   457   279   316		No	77.0%	77.7%	76.5%	81.7%	70.9%
of more homes (houses, condos and apartments) in our cities, with better access to public transportation as a means to reduce sprawl, and preserve forests and farmland for Supporting the production and consumption of local agricultural products and other products  g. Tax incentives for installation of residential wood fuel heating systems  No  No  65.3%  67.9%  63.4%  70.4%  56.3%  1473  407  460  284  322  1473  49.2%  68.8%  No  14.9%  50.8%  31.2%  No  14.1%  24.7%  12.2%  10.6%  27.6%  No  14.1%  24.7%  12.2%  10.6%  27.6%  No  14.1%  24.7%  12.2%  10.6%  27.6%  No  14.60  282  318  No  14.65  405  460  282  318  No  14.65  No  61.8%  55.2%  61.6%  61.4%  56.5%  No  1462  44.8%  38.4%  38.6%  43.5%  14.69%  44.8%  37.3%  55.0%  No  55.0%  45.0%		Unweighted n	1451	399	457	56.4% 43.6% 288 53.6% 46.4% 285 30.4% 69.6% 286 18.3% 81.7% 279 29.6% 70.4% 284 49.2% 50.8% 284 10.6% 89.4% 282 38.6% 61.4% 280 37.3% 62.7%	316
and apartments) in our cities, with better access to public transportation as a means to reduce sprawl, and preserve forests and farmland  f. Supporting the production and consumption of local agricultural products and other products  g. Tax incentives for installation of residential wood fuel heating systems  Hou Sci.3/% 67.9% 63.4% 70.4% 36.3% 12% 1473 407 460 284 322 184 322 185 187 187 187 187 187 187 187 187 187 187		Yes	34.7%	32.1%	36.6%	29.6%	43.7%
better access to public transportation as a means to reduce sprawl, and preserve forests and farmland  f. Supporting the production and consumption of local agricultural products and other products  g. Tax incentives for installation of residential wood fuel heating systems  Yes 54.0% 60.4% 55.1% 49.2% 68.8% 12.2% 10.6% 39.6% 44.9% 50.8% 31.2% 12.2% 10.6% 27.6% 10.6% 10		No	65.3%	67.9%	63.4%	70.4%	56.3%
No	better access to public transportation as a means to reduce sprawl, and preserve	Unweighted n	1473	407	460	56.4% 5 43.6% 4 288 53.6% 7 46.4% 2 285 30.4% 4 69.6% 6 286 18.3% 2 81.7% 7 279 29.6% 4 70.4% 5 284 49.2% 6 50.8% 3 284 10.6% 2 89.4% 7 282 38.6% 4 61.4% 5 280	322
No   46.0%   39.6%   44.9%   50.6%   31.2%		Yes	54.0%	60.4%	55.1%	49.2%	68.8%
Unweighted n   1474   406   462   284   322     g. Tax incentives for installation of residential wood fuel heating systems   Ves   14.1%   24.7%   12.2%   10.6%   27.6%     No		No	46.0%	39.6%	44.9%	50.8%	31.2%
No	products and other products	Unweighted n	1474	406	462	284	322
No   Si.5%   73.3%   Si.5%		Yes	14.1%	24.7%	12.2%	10.6%	27.6%
Unweighted n   1465   405   460   282   318     h. Requiring that Maryland's electricity suppliers provide 20% of their electricity from renewable energy sources by 2022 (such as solar, wind, biomass, landfill gas, and hydroelectric power)   i. Expanding financial incentives for the generation of renewable energy (such as solar and energy) (such as solar and energy)		No	85.9%	75.3%	87.8%	89.4%	72.4%
electricity suppliers provide 20% of their electricity from renewable energy sources by 2022 (such as solar, wind, biomass, landfill gas, and hydroelectric power)  i. Expanding financial incentives for the generation of renewable energy (such as solar and	Systems	Unweighted n	1465	405	460	56.4% 43.6% 288 53.6% 46.4% 285 30.4% 69.6% 286 18.3% 81.7% 279 29.6% 70.4% 284 49.2% 50.8% 284 10.6% 89.4% 282 38.6% 61.4% 280 37.3% 62.7%	318
of their electricity from renewable energy sources by 2022 (such as solar, wind, biomass, landfill gas, and hydroelectric power)  i. Expanding financial incentives for the generation of renewable energy (such as solar and		Yes	38.2%	44.8%	38.4%	38.6%	43.5%
energy sources by 2022 (such as solar, wind, biomass, landfill gas, and hydroelectric power)  i. Expanding financial incentives for the generation of renewable energy (such as solar and	of their electricity from renewable energy sources by 2022 (such as solar, wind, biomass, landfill gas,	No	61.8%	55.2%	61.6%	61.4%	56.5%
for the generation of renewable energy (such as solar and		Unweighted n	1462	408	457	280	317
energy (such as solar and		Yes	43.4%	46.9%	44.8%	37.3%	55.0%
		No	56.6%	53.1%	55.2%	62.7%	45.0%
		Unweighted n	1466	406	458	283	319

		2013	2014	2015	Δ 2014-2013	$\Delta$ 2015- 2014	∆ 2015- 2013
Requiring new cars and other	Yes	68.0%	59.8%	58.1%	-8.2%	-1.7%	-9.9%
vehicles in Maryland to be less	No	32.0%	40.2%	41.9%	8.2%	1.7%	9.9%
polluting	Unweighted n	2043	1978	1488			
Expanding rebates to help people	Yes	69.5%	56.1%	61.3%	-13.4%	5.2%	-8.2%
purchase energy-efficient lighting	No	30.5%	43.9%	38.7%	13.4%	-5.2%	8.2%
and appliances	Unweighted n	2022	1971	1480			
5 11 ( 11	Yes	41.2%	29.9%	29.9%	-11.3%	0.0%	-11.3%
Doubling use of public ransportation in Maryland by 2020	No	58.8%	70.1%	70.1%	11.3%	0.0%	11.3%
	Unweighted n	2006	1966	1463			
Participating in a regional carbon	Yes	31.0%	19.3%	23.0%	-11.7%	3.7%	-8.0%
emissions trading program to	No	69.0%	80.7%	77.0%	11.7%	-3.7%	8.0%
reduce overall production of greenhouse gases	Unweighted n	2008	1937	1451		13 2015- 2014 20 -1.7% -9.9 1.7% 9.9 5.2% -8.2 -5.2% 8.2 0.0% -11. 0.0% 11.: 3.7% -8.0 -3.7% 8.0 7.0% -4.5 -7.0% 4.5 9.9% 3.0 -9.9% -3.0 2.6% -1.7 -2.6% 1.7	
Encouraging the development of	Yes	39.2%	27.7%	34.7%	-11.5%	7.0%	-4.5%
more homes (houses, condos and	No	60.8%	72.3%	65.3%	11.5%	-7.0%	4.5%
apartments) in our cities, with better access to public transportation, as a means to reduce sprawl, and preserve forests and farmland	Unweighted n	2007	1958	1473			
Supporting the production and	Yes	51.0%	44.1%	54.0%	-6.9%	9.9%	3.0%
consumption of local agricultural	No	49.0%	55.9%	46.0%	6.9%	-9.9%	-3.0%
products and other products	Unweighted n	2017	1945	1474		-5.2% 8.2° 0.0% -11.3 0.0% 11.3 0.0% 11.3 0.3.7% -8.0 -3.7% 8.0° 0.7.0% -4.5 -7.0% 4.5° 0.7.0% -3.0 0.9.9% -3.0 0.9.9% -3.0 0.9.9% -3.0 0.9.9% -3.0 0.9.9% -3.0 0.9.9% -3.0	
Tax incentives for installation of	Yes	15.8%	11.5%	14.1%	-4.3%	2.6%	-1.7%
residential wood fuel heating	No	84.2%	88.5%	85.9%	4.3%	-2.6%	1.7%
systems	Unweighted n	1996	1931	1465			
Requiring that Maryland's electricity	Yes	36.2%	25.5%	38.2%	-10.7%	12.7%	2.0%
suppliers provide 20% of their total	No	63.8%	74.5%	61.8%	10.7%	-12.7%	-2.0%
electricity from renewable energy sources by 2022 (such as solar, wind, biomass, landfill gas, and nydroelectric power)	Unweighted n	2006	1930	1462			

Table 4 | Support for the renewal of the Greenhouse Gas Reduction Act

The goal of Maryland's current Greenhouse Gas Reduction Act of 2009 is to reduce the pollution that causes climate change 25% by 2020. In 2016, the State's General Assembly will consider whether to renew or makes changes to the GGRA. What should Maryland's General Assembly do?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Renew the GGRA and strengthen it by setting a bigger pollution reduction goal	42.2%	35.7%	42.8%	42.0%	38.2%
Renew the GGRA, keeping the current pollution reduction goal	21.9%	22.5%	21.6%	22.2%	22.5%
Not renew the GGRA	7.0%	9.1%	6.8%	6.2%	8.4%
Don't know	28.9%	32.7%	28.9%	29.7%	30.8%
Unweighted n	1520	420	472	297	331

### Data tables | Support for local and state adaptation policies

Table 5 | Support for government action to protect communities

How much do you support or oppose state and local governments taking action to protect your community against harm caused by climate change (if any)?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Strongly oppose	9.2%	9.3%	9.5%	6.9%	9.9%
Somewhat oppose	4.8%	5.1%	4.7%	3.5%	6.9%
Somewhat support	25.3%	40.9%	21.3%	33.8%	26.7%
Strongly support	46.0%	33.0%	50.7%	33.7%	40.6%
Don't know	14.7%	11.7%	13.8%	22.1%	16.0%
Unweighted n	1511	417	477	291	326

How much do you supp climate change (if any)		d local governi	ments taking act	ion to protect	your community	against harm ca	used by
		2013	2014	2015	Δ 2014-2013	Δ 2015-2014	∆ 2015-2013
	Strongly oppose	6.5%	7.5%	9.2%	1.0%	1.7%	2.7%
	Somewhat oppose	6.0%	5.2%	4.8%	-0.8%	-0.4%	-1.2%
	Somewhat support	36.0%	34.4%	25.3%	-1.6%	-9.1%	-10.7%
	Strongly support	40.3%	38.7%	46.0%	-1.6%	7.3%	5.7%
	Don't know	11.3%	14.2%	14.7%	2.9%	0.5%	3.4%
	Unweighted n	2092	2012	1511			

### Data tables | Public climate change understanding

Table 6 | Certainty that climate change is happening

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Extremely sure climate change is not happening	2.8%	4.3%	3.1%	1.3%	1.8%
Very sure climate change is not happening	3.9%	4.7%	2.7%	8.7%	6.8%
Somewhat sure climate change is not happening	5.6%	4.3%	5.6%	3.1%	16.2%
Not at all sure climate change is not happening	0.7%	1.0%	.6%	.6%	.2%
Don't know	15.2%	10.6%	15.6%	21.1%	9.1%
Not at all sure climate change is happening	3.8%	3.9%	3.4%	3.5%	2.6%
Somewhat sure climate change is happening	20.6%	28.7%	20.3%	16.0%	24.3%
Very sure climate change is happening	23.3%	21.8%	21.6%	29.6%	18.9%
Extremely sure climate change is happening	24.2%	20.8%	27.2%	16.2%	20.0%
Unweighted n	1522	417	476	294	335

	2013	2014	2015	∆ 2014-2013	∆ 2015-2014	∆ 2015-2013
Extremely sure climate change is not happening	1.2%	1.2%	2.8%	0.0%	1.6%	1.6%
Very sure climate change is not happening	2.2%	2.5%	3.9%	0.3%	1.4%	1.7%
Somewhat sure climate change is not happening	3.0%	5.1%	5.6%	2.1%	0.5%	2.6%
Not at all sure climate change is not happening	4.6%	1.4%	0.7%	-3.2%	-0.7%	-3.9%
Don't know	3.3%	13.3%	15.2%	10.0%	1.9%	11.9%
Not at all sure climate change is happening	3.6%	2.7%	3.8%	-0.9%	1.1%	0.2%
Somewhat sure climate change is happening	32.7%	29.1%	20.6%	-3.6%	-8.5%	-12.1%
Very sure climate change is happening	30.6%	26.4%	23.3%	-4.2%	-3.1%	-7.3%
Extremely sure climate change is happening	18.9%	18.3%	24.2%	-0.6%	5.9%	5.3%
Unweighted n	1923	1995	1522			

Table 7 | Understanding of the causes of climate change

If v	ou think	climate ch	ango ie curre	ntly hannoning	what do	you think is causing	a it?
11 )	you mink	ciimate cn	ange is curre	entry nappeming	, what do v	you mink is causing	gitr

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Caused entirely by human activities	16.5%	12.6%	18.6%	8.7%	9.1%
Caused mostly by human activities	28.7%	29.4%	26.3%	38.4%	24.4%
Caused about equally by human activities and natural changes in the environment	32.6%	34.6%	30.0%	41.5%	37.6%
Caused mostly by natural changes in the environment	5.7%	9.7%	6.8%	3.0%	4.5%
Caused entirely by natural changes in the environment	3.0%	2.0%	3.5%	1.4%	2.6%
I don't think climate change is happening	5.0%	4.6%	5.4%	2.4%	7.3%
Don't know	8.6%	7.2%	9.5%	4.6%	14.4%
Unweighted n	1392	387	430	272	303

	2014	2015	△ 2015-2014
Caused entirely by human activities	9.5%	16.5%	7.0%
Caused mostly by human activities	27.1%	28.7%	1.6%
Caused about equally by human activities and natural changes in the environment	36.0%	32.6%	-3.4%
Caused mostly by natural changes in the environment	8.3%	5.7%	-2.6%
Caused entirely by natural changes in the environment	2.8%	3.0%	0.2%
I don't think climate change is happening	6.0%	5.0%	-1.0%
Don't know	10.4%	8.6%	-1.8%
Unweighted n	1892	1392	

Table 8 | Beliefs about what is causing the public discourse by people who don't think it is happening

If you don't think climate change is happening (n=217), what do you think is causing the public discussion?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
Politics/politicians	25.0%	23.0%	24.3%	18.0%	6.7%
Money	17.7%	15.2%	15.9%	33.7%	11.8%
Special interest groups	5.7%	2.1%	4.5%	10.2%	0.0%
Media	5.4%	9.2%	7.6%	.7%	6.3%
Al Gore	5.1%	2.4%	6.5%	.3%	3.7%
Unweighted n	217	54	64	34	65

Table 9 | Understanding of the social and scientific consensus on climate change

To the best of your knowledge, v	viiat percentage of the f	ollowing people thin	k climate change	is nappening?		
		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. People in my region of Maryland (Western, Central,	0 to 20%	7.3%	12.8%	5.5%	7.7%	6.1%
Southern, Eastern counties)	21 to 40%	14.4%	20.2%	12.2%	20.1%	16.9%
	41 to 60%	21.1%	16.4%	24.0%	14.6%	21.0%
	61 to 80%	21.2%	17.9%	23.2%	16.0%	16.5%
	81 to 100%	7.5%	11.0%	8.3%	5.3%	4.7%
	Don't know	28.5%	21.7%	26.8%	36.2%	34.8%
	Unweighted n	1509	417	469	294	329
b. Maryland residents (statewide)	0 to 20%	5.1%	5.3%	4.4%	5.0%	4.6%
	21 to 40%	15.8%	16.3%	15.6%	20.4%	10.5%
	41 to 60%	22.9%	20.6%	26.2%	13.1%	30.3%
	61 to 80%	20.2%	21.6%	19.4%	20.2%	15.5%
	81 to 100%	8.1%	12.3%	8.0%	6.0%	8.6%
	Don't know	27.9%	23.9%	26.4%	35.2%	30.6%
	Unweighted n	1510	415	474	293	328
c. People in the United States	0 to 20%	3.2%	7.8%	3.2%	2.8%	2.4%
	21 to 40%	12.5%	10.7%	12.7%	11.5%	13.7%
	41 to 60%	30.9%	26.5%	32.9%	30.4%	29.9%
	61 to 80%	17.1%	19.9%	15.2%	19.6%	16.6%
	81 to 100%	11.8%	13.5%	11.1%	7.8%	11.8%
	Don't know	24.4%	21.6%	24.9%	27.9%	25.5%
	Unweighted n	1502	413	471	292	326
d. Climate scientists	0 to 20%	4.2%	4.4%	4.5%	6.3%	.7%
	21 to 40%	3.6%	2.3%	4.4%	2.7%	2.9%
	41 to 60%	7.0%	7.4%	7.7%	4.8%	6.3%
	61 to 80%	14.4%	15.1%	12.2%	18.2%	21.3%
	81 to 100%	46.3%	47.2%	47.6%	41.1%	45.1%
	Don't know	24.5%	23.6%	23.5%	26.8%	23.7%
	Unweighted n	1499	414	470	291	324

To the best of your knowle	dge, what percentag	ge of the follow	ing people thin	k climate chan	ge is happening?		
		2013	2014	2015	∆ 2014-2013	∆ <b>2015-2014</b>	∆ <b>2015-2013</b>
Climate scientists	0 to 20%	2.7%	4.4%	4.2%	1.7%	-0.2%	1.5%
	21 to 40%	6.0%	8.1%	3.6%	2.1%	-4.5%	-2.4%
	41 to 60%	13.5%	12.5%	7.0%	-1.0%	-5.5%	-6.5%
	61 to 80%	20.1%	16.6%	14.4%	-3.5%	-2.2%	-5.7%
	81 to 100%	23.4%	25.6%	46.3%	2.2%	20.7%	22.9%
	Don't know	34.4%	32.8%	24.5%	-1.6%	-8.3%	-9.9%
	Unweighted n	2088	2017	1499			

### Data tables | Perceptions of climate change impacts

Table 10 | Perceived types of local climate changes likely to occur

Which of the following do you think is likely to occur in your community as a result of climate change over the next 10-20 years?

(Please check ALL THAT APPLY)

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Hotter weather	69.5%	68.0%	67.4%	79.9%	52.8%
b. Colder weather	52.4%	57.0%	52.8%	57.3%	46.9%
c. Heavier rains	42.2%	48.5%	40.3%	52.8%	30.1%
d. More frequent droughts	41.6%	43.9%	40.1%	51.2%	31.0%
e. Wildfires	27.6%	34.6%	25.5%	26.2%	19.7%
f. Increased air pollution	46.3%	44.6%	45.2%	50.6%	32.6%
g. Warming of cold-water streams	33.7%	32.8%	33.0%	32.3%	26.6%
h. Longer growing season	15.5%	12.8%	15.5%	13.4%	11.4%
i. More severe storms	59.4%	57.1%	58.7%	68.4%	51.4%
j. Rising coastal sea levels	48.4%	37.4%	50.6%	46.1%	51.8%
k. There are no likely effects from climate change	13.1%	14.8%	13.1%	9.3%	18.6%
Unweighted n	1547	424	484	297	342

	2014	2015	∆ 2015-2014
a. Hotter weather	74.2%	69.5%	-4.7%
b. Colder weather	64.7%	52.4%	-12.3%
c. Heavier rains	57.1%	42.2%	-14.9%
d. More frequent droughts	41.3%	41.6%	0.3%
e. Wildfires	21.9%	27.6%	5.7%
. Increased air pollution	46.8%	46.3%	-0.5%
g. Warming of cold-water streams	28.3%	33.7%	5.4%
n. Longer growing season	16.5%	15.5%	-1.0%
i. More severe storms	69.8%	59.4%	-10.4%
j. Rising coastal sea levels	48.5%	48.4%	-0.1%
k. There are no likely effects from climate change	10.4%	13.1%	2.7%
Unweighted n	2035	1547	

Table 11 | Perceptions of climate impacts to one's own community

Which of the following resources in your community do you think may be harmed by climate change in the next several years?

(Please check ALL THAT APPLY)

(: ::::::::::::::::::::::::::::::::::::					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Public water supplies	52.5%	52.2%	52.1%	65.7%	36.9%
b. Public sewer systems	30.6%	32.7%	29.9%	46.6%	21.5%
c. People's health	56.5%	50.9%	55.9%	61.3%	45.7%
d. Transportation	31.0%	31.8%	31.2%	40.1%	26.9%
e. Historical sites	19.5%	23.3%	17.5%	31.3%	18.3%
f. Coastlines	54.0%	42.2%	53.8%	68.6%	50.0%
g. Wetlands	47.7%	44.0%	45.0%	54.7%	47.1%
h. Forests	47.4%	50.1%	45.6%	52.5%	38.8%
i. Wildlife	57.2%	57.7%	55.1%	66.9%	42.8%
j. Chesapeake Bay	58.0%	53.7%	55.7%	72.4%	55.1%
k. Aquatic life, such as fish and crabs	62.3%	54.9%	60.1%	74.8%	51.4%
I. Agriculture	52.9%	60.4%	53.7%	46.4%	44.8%
m. Fishing/seafood industry	53.3%	51.8%	51.5%	60.7%	51.8%
n. Private wells/septic systems	30.5%	39.1%	25.8%	46.4%	30.5%
o. Privately owned land	20.4%	23.6%	19.6%	27.0%	20.7%
p. There are no local risks from climate change	14.4%	15.8%	14.9%	9.5%	17.7%
Unweighted n	1547	424	484	297	342

	2013	2014	2015	∆ <b>2014-2013</b>	∆ <b>2015-2014</b>	∆ 2015-2013
a. Public water supplies	57.0%	49.8%	52.5%	-7.2%	2.7%	-4.5%
b. Public sewer systems	38.2%	37.1%	30.6%	-1.1%	-6.5%	-7.6%
c. People's health	66.9%	55.4%	56.5%	-11.5%	1.1%	-10.4%
d. Transportation	40.3%	40.7%	31.0%	0.4%	-9.7%	-9.3%
e. Historical sites	26.8%	24.1%	19.5%	-2.7%	-4.6%	-7.3%
f. Coastlines	64.5%	52.7%	54.0%	-11.8%	1.3%	-10.5%
g. Wetlands	59.0%	47.0%	47.7%	-12.0%	0.7%	-11.3%
h/i. Forests/wildlife (2014); forests (2015)	62.0%	47.1%	47.4%	-14.9%	0.3%	-14.6%
h/i. Forests/wildlife (2014); wildlife (2015)	62.0%	47.1%	57.2%	-14.9%	10.1%	-4.8%
I. Agriculture	69.7%	56.4%	52.9%	-13.3%	-3.5%	-16.8%
n. Private wells/septic systems	38.8%	33.5%	30.5%	-5.3%	-3.0%	-8.3%
o. Privately owned land/buildings	27.9%	24.9%	20.4%	-3.0%	-4.5%	-7.5%
o. There are no local risks from climate change	11.7%	11.1%	14.4%	-0.6%	3.3%	2.7%
Unweighted n	2126	2035	1547			

### Data tables | Sample demographics

egion			
		STATE unweighted sample n	STATE weighted %
	Western Region	424	8.4%
	Central Region	484	55.3%
	Southern Region	297	30.3%
	Eastern Region	342	6.0%
	Total	1547	

Gender							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
Are you:	Male	589	48.0%	50.3%	48.0%	48.7%	48.6%
(Check	Female	958	52.0%	49.7%	52.0%	51.3%	51.4%
ONE)	Unweighted n	1547	1547	424	484	297	342

Age							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	18-24	30	12.5%	12.2%	11.9%	13.4%	14.1%
	25-34	145	17.6%	15.7%	18.0%	18.3%	13.8%
	35-44	201	17.1%	16.9%	17.0%	17.8%	14.1%
	45-54	297	19.7%	19.8%	19.5%	20.2%	18.2%
	55-64	380	16.2%	16.3%	16.4%	15.7%	17.3%
	65-74	295	9.5%	10.4%	9.3%	8.9%	12.7%
	75-84	136	5.1%	6.1%	5.2%	4.0%	6.9%
	85+	63	2.3%	2.6%	2.6%	1.6%	2.9%
	Unweighted n	1547	1547	424	484	297	342

Education							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	Less than high school	45	11.0%	10.5%	10.6%	11.5%	13.1%
	High school or GED	272	25.8%	32.7%	23.2%	27.1%	34.2%
What is the highest	Some college, no degree	290	19.8%	20.6%	18.2%	22.6%	20.1%
degree or level of	Associate's degree	124	6.3%	7.6%	5.9%	6.6%	6.2%
school that you have	Bachelor's degree	406	20.3%	17.0%	21.9%	19.0%	15.7%
completed?	Advanced degree beyond a bachelor's degree	410	16.8%	11.5%	20.3%	13.2%	10.7%
	Unweighted n	1547	1547	424	484	297	342

Number of Ch	ildren in Househ	old					
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	0	986	59.5%	53.9%	62.3%	52.0%	65.6%
	1	208	20.0%	23.5%	15.4%	35.9%	18.2%
How many	2	167	13.4%	15.2%	16.0%	8.4%	7.3%
people under 18 years of	3	53	5.1%	4.1%	5.0%	2.8%	5.3%
age are	4	11	1.2%	2.0%	1.3%	0.1%	0.6%
currently	5	3	0.3%	1.1%	0.0%	0.0%	2.5%
living in your	6	1	0.1%	0.0%	0.0%	0.2%	0.0%
household? (Please write	7	1	0.0%	0.2%	0.0%	0.0%	0.0%
(Flease write #)	8	1	0.1%	0.0%	0.0%	0.0%	0.6%
,	9	1	0.4%	0.0%	0.0%	0.6%	0.0%
	Unweighted n	1432	1432	392	450	280	310

		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	Less than \$10,000	132	13.1%	22.6%	13.1%	16.4%	12.5%
	\$10,000 — \$14,999	62	5.0%	4.1%	4.0%	5.7%	14.9%
Which of the following	\$15,000 — \$24,999	130	10.7%	11.1%	10.0%	8.6%	11.7%
broad categories	\$25,000 — \$34,999	144	9.2%	11.7%	7.3%	10.4%	13.2%
describes your own	\$35,000 — \$49,999	222	14.3%	17.3%	14.3%	13.2%	14.7%
current approximate	\$50,000 — \$74,999	286	19.0%	15.4%	19.7%	19.4%	14.7%
annual income before taxes?	\$75,000 — \$99,999	194	13.0%	7.1%	15.0%	11.7%	8.8%
	\$100,000 — \$149,999	174	10.1%	6.9%	9.7%	10.9%	5.7%
	\$150,000 or more	118	5.6%	4.0%	6.9%	3.9%	3.9%
	Unweighted n	1462	1462	405	453	278	326

Household Ani	nual Household	Income					
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	Less than \$10,000	49	4.5%	5.0%	5.6%	1.0%	10.5%
	\$10,000 — \$14,999	52	4.1%	6.9%	4.3%	0.6%	13.7%
Which of the following	\$15,000 — \$24,999	84	4.8%	6.0%	3.7%	4.3%	12.9%
broad categories	\$25,000 — \$34,999	107	7.8%	10.7%	8.3%	7.2%	5.2%
describes your	\$35,000 — \$49,999	148	11.4%	20.2%	10.1%	18.4%	7.6%
household's total	\$50,000 — \$74,999	238	19.3%	13.4%	17.3%	20.4%	16.3%
approximate annual income before	\$75,000 — \$99,999	225	14.8%	11.4%	16.8%	15.5%	14.9%
taxes?	\$100,000 — \$149,999	277	17.2%	16.5%	16.6%	19.0%	12.6%
	\$150,000 or more	268	16.0%	9.9%	17.2%	13.6%	6.2%
	Unweighted n	1448	1448	402	448	279	319

Urban and	Rural						
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	Very rural	185	7.7%	18.4%	5.0%	7.8%	20.6%
How would you	Somewhat rural	503	22.1%	45.4%	15.3%	23.8%	49.2%
describe	Suburban	593	47.3%	23.3%	48.8%	56.3%	21.7%
the area in which	Somewhat urban	171	16.0%	11.8%	20.0%	10.3%	6.1%
you live?	Very urban	78	6.8%	1.0%	10.8%	1.7%	2.4%
	Unweighted n	1530	1530	418	481	293	338

Ethnicity							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
What ethnicity	Hispanic or Latino	39	4.1%	3.6%	4.3%	2.5%	5.4%
do you consider	Not Hispanic or Latino	1457	95.9%	96.4%	95.7%	97.5%	94.6%
yourself?	Unweighted n	1496	1496	414	467	286	329

Race							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted r
What is	White	1204	65.3%	93.4%	63.2%	59.4%	74.9%
your race? (Please	African American or Black	196	19.1%	3.0%	19.3%	23.5%	17.1%
check	Asian	55	8.8%	1.0%	12.3%	6.1%	.8%
APPLY) /	American Indian or Alaska Native	4	.3%	.4%	0.0%	.4%	2.5%
	Native Hawaiian or other Pacific Islander	1	.1%	0.0%	.1%	0.0%	0.0%
	Other	35	4.2%	1.8%	2.9%	7.5%	2.9%
	Two or more races	25	2.3%	.5%	2.3%	3.1%	1.9%
	Unweighted n	1520	1520	420	479	289	332

Religious Affiliation								
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n	
What is your present religion, if any? Are you	Protestant	490	25.2%	32.4%	23.1%	21.7%	26.4%	
	Roman Catholic	346	22.6%	20.8%	24.9%	23.1%	13.2%	
	Mormon	5	0.2%	0.5%	0.3%	0.0%	0.1%	
	Orthodox, such as Greek or Russian Orthodox	17	0.9%	0.3%	1.2%	0.6%	0.8%	
	Jewish	47	3.1%	0.4%	4.5%	1.2%	0.5%	
	Muslim	13	2.2%	0.5%	2.8%	1.2%	0.7%	
	Buddhist	8	0.3%	0.1%	0.6%	0.1%	0.1%	
	Hindu	5	0.4%	0.3%	0.6%	0.0%	0.0%	
	Atheist	58	3.5%	3.7%	4.3%	1.2%	4.9%	
	Agnostic	92	6.0%	5.2%	6.9%	3.7%	6.5%	
	Other	411	35.5%	35.8%	30.8%	47.2%	46.7%	
	Unweighted n	1492	1492	414	467	280	331	

Political Ideology								
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n	
	Very conservative	172	10.8%	12.8%	9.7%	10.8%	14.6%	
Generally speaking,	Somewhat conservative	318	15.8%	21.7%	15.6%	12.3%	19.6%	
do you think of yourself as	Moderate, middle of the road	613	48.8%	48.7%	44.3%	63.2%	43.8%	
politically	Somewhat liberal	298	18.2%	11.0%	22.4%	9.6%	18.9%	
	Very liberal	120	6.3%	5.9%	8.0%	4.1%	3.1%	
	Unweighted n	1521	1521	417	477	290	337	

