



4C George Mason University
Center for Climate Change Communication

**A Virginia Public Opinion Survey on Climate Change,
Public Health and the Environment**

Karen Akerlof, PhD
kakerlof@gmu.edu
703 993 6667

Edward Maibach, MPH, PhD
emaibach@gmu.edu
703 993 1587

A Virginia Public Opinion Survey on Climate Change, Public Health and the Environment

In the past year, Virginia has moved rapidly to reinstate the state's climate commission, initially created in 2007, and sign on to a new Chesapeake Bay Watershed Agreement that addresses climate change. At the same time, regionally, Hampton Roads has launched a collaborative intergovernmental planning pilot project to address coastal flooding and inundation. These events represent a window of opportunity that is opening to broadly engage citizens on climate change in the Commonwealth of Virginia. Assessing public opinion – policy priorities and perceptions of climate change risks – and conveying that information to policymakers, private industry, non-profits, and the residents of the Commonwealth is needed to expand this discourse and inform decisions about implementing greenhouse gas emission reductions and increasing Virginia's resilience to the effects of climate change.

Public opinion research is also needed to provide baseline data on which to evaluate subsequent campaigns in the state, and inform their development. In December, the Commonwealth's Climate Change and Resiliency Update Commission established an outreach and education workgroup and will be promoting public communication on climate change and evaluating these efforts to ensure that they are effective. The Hampton Roads intergovernmental pilot project also has initiated citizen engagement, and outreach and education, workgroups to create targeted messaging and encourage grassroots participation in decision-making in conjunction with the development of new regional solutions for the impacts of sea-level rise. These state and regional efforts represent collaborative efforts between grassroots environmental organizations, municipalities, the Commonwealth, and the federal government. Supporting their collective efforts in communicating to the public will have dividends not just for these partnerships, but for the individual organizations as well.

To provide a public opinion platform for these organizations, we propose to survey more than 2,000 citizens of Virginia. The findings will be generalizable to the Commonwealth's populace as a whole, and to four specific regions, one of which will include Hampton Roads. We have begun discussions to conduct the survey in conjunction with the Commonwealth, and have been told that this is a possibility. The mail survey, sent to 6,400 households, itself promotes public engagement by asking citizens to think deeply about problems to which they may have given little prior thought. Furthermore, it conveys the message that not only does the Commonwealth find these problems worthy of consideration, it is seeking citizen input in their solutions.

Importance of conveying social consensus

Conveying areas of public agreement is one of the most critical functions of public opinion surveys, especially for topics on which there is pervasive misunderstanding of the level of social consensus, such as climate change. In Maryland, we will be conducting a statewide mail survey

in spring 2015, in its third year (climatemaryland.org), with funding from the Town Creek Foundation. The Center for Climate Change Communication has established a survey model for Maryland that can easily be implemented on the other side of the Potomac River. We are seeking funding to expand this work to Virginia.

In Maryland, our survey data representing public support for current and expanded state policies have been used by state agencies, universities and environmental organizations in outreach to media, the public and policymakers. Just in the last few months, the survey data have been cited in *Baltimore Sun* articles, an op-ed, and in a local public radio program. A 2008 University of Virginia Miller Center of Public Affairs survey found high levels of certainty that climate change was occurring, suggesting that the Commonwealth may not be as unlike Maryland in its climate change public opinion as many continue to think. Since the 2008 survey, a number of short political polls have been conducted with representative populations in the Commonwealth, but there has not been a recent comprehensive study of climate and energy public opinion in the Commonwealth. Additionally, none of the studies that have been conducted, including in 2008, have been large enough to be able to describe differences among residents who live in the geographically and culturally distinct regions of the Commonwealth, and will experience climate change in different ways. The effects of climate change may be the most significant upon Hampton Roads in the near term, but other regions will also experience harms ranging from increasing respiratory problems from air pollution to declines in biodiversity and more frequent extreme weather events.

Stakeholder participation

In Maryland, we work with stakeholder organizations through the Climate Communication Consortium in developing the surveys. For Virginia, we will also develop a panel that will participate in the development of Commonwealth-specific measures and dissemination of the final reports. We will work with stakeholder groups on climate and energy, and the Chesapeake Bay, including environmental non-profits, universities, government agencies and regionally representative bodies. Organizations that have said they would sit on the panel include the Northern Virginia Regional Commission, Old Dominion University, the Virginia Coastal Policy Clinic at the College of William & Mary Law School, and Sierra Club. We are also in ongoing conversations regarding the Commonwealth's participation.

Timeline and strategy for report dissemination

The Virginia study would be conducted in parallel to the Maryland survey, fielding in spring/summer 2015 with five individual reports released in fall 2015. These reports would include: climate change and public health, energy, climate change policies, Chesapeake Bay, and a regional report. We would work with our stakeholder panel to both develop the survey measures, and determine opportunities for the release of the reports and presentation of the data. Stakeholder calls and meetings would begin in early 2015 and continue throughout the year.

Additionally, we propose to partner with a public relations firm to conduct media outreach, design the reports, and create infographics from the data. We would develop a freestanding website for the reports, and publicize them via the Center for Climate Change Communication's listserv and website, which reach national audiences with interest in public opinion and climate change communication.

Conclusion

Public opinion can have enormous impacts on the direction that local governments and states take on policy. As Virginia moves forward in making decisions about how best to respond to the challenges that we face from climate change, efforts to actively engage the public in these questions, and discern and communicate areas of agreement, will help to maintain the course. George Mason University's Center for Climate Change Communication is optimally positioned to contribute to this effort based on its location at one of the state's premier research institutions, and its reputation as one of the only academic centers in the country with expertise in climate change communication and public opinion research.

The Center for Climate Change Communication (4C), George Mason University

The Center for Climate Change Communication's mission is to conduct unbiased public engagement research – and to help government agencies, non-profit organizations, and companies apply the results of this research – so that collectively, we can stabilize our planet's life sustaining climate. The Center was established in 2007 as the nation's first social science research center devoted exclusively to addressing the communication issues inherent in responding to climate change. The organization directly supports nine staff members, and includes many additional Mason faculty.

The center has had a significant impact on the climate change education and outreach activities of government agencies (including the US Global Change Research Program, NOAA, NASA, NIH, CDC, National Park Service, and US Fish & Wildlife), NGOs (including zoos and aquaria, science museums, professional societies, and the National Academies) and corporations (including Levi-Strauss, Nike, eBay, Timberland, Avon and others). We have developed research tools (e.g., the Global Warming's Six Americas questionnaire), and made them freely available to other organizations, thereby enhancing the climate change communication research capacity of local, state and national organizations across America. The center has also been productive academically, having attracted extramural support from the Robert Wood Johnson Foundation, the National Science Foundation, NASA, and the Grantham Foundation for the Protection of the Environment, and having published dozens of monographs and articles in leading journals including Nature Climate Change, PLoS ONE and the American Journal of Public Health.

Key Project Staff

Karen Akerlof, PhD, is the Primary Investigator for research conducted on behalf of the Climate Communication Consortium of Maryland, and has conducted research on public engagement strategies in consideration of sea-level rise policies. She has participated in the outreach and education workgroup of the Commonwealth's Recurrent Flooding Sub-Panel that concluded its report in Sept. 2014, and the Hampton Roads intergovernmental pilot project.

Edward Maibach, MPH, PhD, is Director of the Center for Climate Change Communication and University Professor of Communication at George Mason University. Trained in public health and communication, Maibach has extensive experience as an academic researcher and as a communication and social marketing practitioner in government, business, and the non-profit sector. Maibach is currently a Principal Investigator on several climate change education grants funded by the National Science Foundation, NASA, Robert Wood Johnson Foundation, and Grantham Foundation for the Protection of the Environment. He served on the National Climate Assessment Development and Advisory Committee and advises a wide range of organizations on how to improve their climate change communication, education and outreach.

Survey Methodology

The survey will be mailed by Princeton Survey Associates International (<http://www.psrai.com/>) to a random sample of 6,400 households in Virginia sampled from four distinctly different regions of the Commonwealth: the eastern coastal, southwestern and western, central, and northern counties. These will be derived from the typical eight-region typology for the Commonwealth. We will sample at the regional level to ensure the final data is generalizable to Virginia's distinctly different geographic and cultural areas, as well as the Commonwealth as a whole.

The survey will be fielded in spring/summer 2015. Each household will be sent up to four mailings: an announcement letter introducing the survey, a copy of the survey with a \$2 bill as a thank you, a reminder postcard, and a follow-up survey. In order to achieve randomization of respondents within each household, we will request that the person with the most recent birthday complete the survey. Households that complete and return the survey are taken off of subsequent mailing lists.

We anticipate a response rate of approximately one-third, which translates to just over 2,000 respondents for the Commonwealth as a whole, and at least 400 respondents per region. The unweighted sample margin of error is +/- 2 percentage points at the 95% confidence interval for the Commonwealth, and less than +/- 5 percentage points for each region. State data will be weighted based on demographic data from the U.S. Census Bureau.