



Public Awareness of Scientific Consensus on Climate Change Is Rising

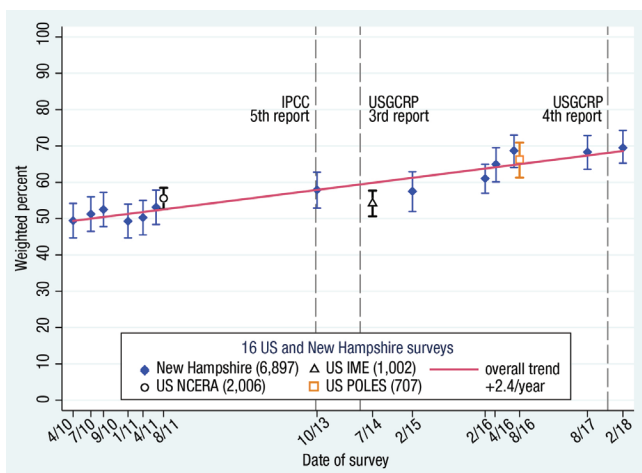
Lawrence C. Hamilton

Among scientists who study the Earth's climate, there is overwhelming agreement that humans are causing rapid change.¹ Surveys find that the U.S. public underestimates the extent to which scientists agree on this point,² but public awareness is gradually rising (Figure 1). A repeating question placed by Carsey School researchers on surveys since 2010 asks:

Which of the following two statements do you think is more accurate?

1. *Most scientists agree that climate change is happening now, caused mainly by human activities.*
2. *There is little agreement among scientists whether climate change is happening now, caused mainly by human activities.*

FIGURE 1. PERCENTAGE AWARE THAT MOST SCIENTISTS AGREE—CLIMATE CHANGE HAPPENING NOW, CAUSED BY HUMANS



Analysis: Lawrence Hamilton, Carsey School, University of New Hampshire
Source: Granite State Poll, National Communities and Environment in Rural America (NCERA), iMediaEthics (IME), and Polar, Environment, and Science (POLES) surveys

KEY FINDINGS



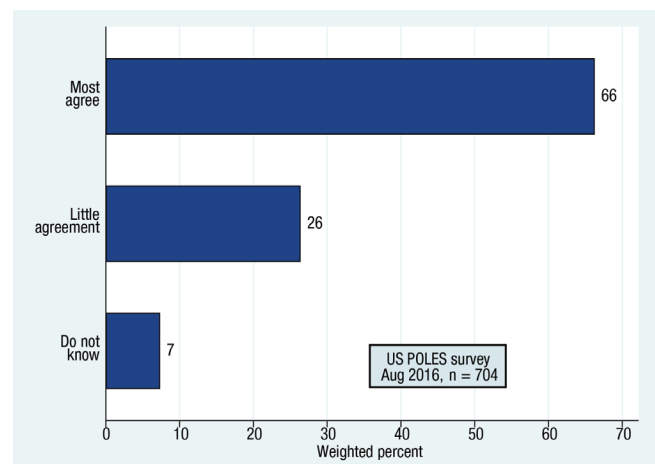
About 2/3 of respondents in recent polls recognize that most scientists agree about the effect of human activities on climate change.



Public awareness of this scientific consensus is gradually rising.

Figure 1 tracks what percentage answered accurately that most scientists agree, and shows an upward trend averaging about 2.4 points per year.³ On the nationwide Polar, Environment, and Science (POLES) survey conducted in August 2016, for example, 66 percent said they thought that most scientists agree. Only 26 percent thought there is little agreement, and 7 percent said they do not know (Figure 2). New Hampshire responses generally are within a few points of the nationwide surveys,⁴ as is often the case with climate-change topics.⁵

FIGURE 2. DO MOST SCIENTISTS AGREE, OR IS THERE LITTLE AGREEMENT AMONG SCIENTISTS?



Source: Polar, Environment, and Science (POLES) survey

Publication of major scientific reports that synthesized work by thousands of scientists, such as those from the Intergovernmental Panel on Climate Change in 2013,⁶ or U.S. Global Change Research Program in 2017,⁷ are not followed by sudden moves in the graph. Such reports, along with countless individual studies by scientists across many disciplines, contributed in a more gradual way to growing public awareness of the scientific consensus.

Endnotes

1. J. Cook, N. Oreskes, P.T. Doran, W.R.L. Anderegg, B. Verheggen, E.W. Maibach, J.S. Carlton, S. Lewandowsky, A.G. Skuce, S.A. Green, D. Nuccitelli, P. Jacobs, M. Richardson, B. Winkler, R. Painting, and K. Rice, "Consensus on consensus: A synthesis of consensus estimates on human-caused global warming," *Environmental Research Letters* 11(4) (2016), doi:10.1088/1748-9326/11/4/048002.
2. A. Leiserowitz, E. Maibach, C. Roser-Renouf, S. Rosenthal, and M. Cutler, *Climate change in the American mind: May 2017*, Yale University and George Mason University, New Haven, CT: Yale Program on Climate Change Communication (2017), <http://climatecommunication.yale.edu/publications/climate-change-american-mind-may-2017/>.
3. The upward trend of about 2.4 points per year is statistically significant ($p < 0.001$), tested using robust statistical methods suitable for these mixed data.
4. L.C. Hamilton, "Public awareness of the scientific consensus on climate," *Sage Open* (2016), doi: 10.1177/2158244016676296.
5. L.C. Hamilton, J. Hartter, M. Lemcke-Stampone, D.W. Moore, and T.G. Safford, "Tracking public beliefs about anthropogenic climate change," *PLOS ONE* 10(9):e0138208 (2015), doi: 10.1371/journal.pone.0138208.
6. Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report*, <http://www.ipcc.ch/report/ar5/syr/>.
7. U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment (NCA4)*, Volume I (2017), <https://science2017.globalchange.gov/>.

Acknowledgments

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