

Preview of 2016 survey results

Marylanders' Attitudes and Policy Preferences on Climate Change

| August 24 2016 | Brown Bag |

| Maryland Department of the Environment | Baltimore, Maryland |

Karen Akerlof, PhD, Research Assistant Professor



GEORGE MASON UNIVERSITY
CENTER *for* CLIMATE CHANGE
COMMUNICATION



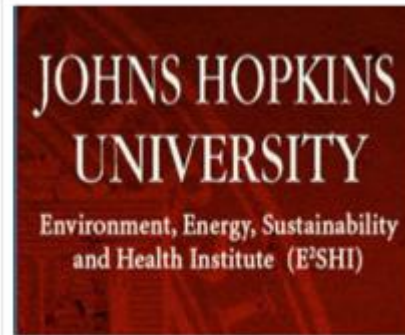
CLIMATE COMMUNICATION
CONSORTIUM *of* MARYLAND



Baltimore Commission on Sustainability



CLIMATE COMMUNICATION
CONSORTIUM *OF MARYLAND*



Johns Hopkins Bloomberg School of Public Health



Maryland League of Conservation Voters



Eastern Shore Land Conservancy



Maryland Environmental Health Network



Maryland Department of the Environment



Maryland Department of Natural Resources

Research for the Consortium, 2012-2016

- 1) **Statewide mail surveys (2013-2016)**
 - *Reports: Public health, energy, climate, sea level rise and adaptation*
- 2) **Community surveys (door-to-door) in vulnerable communities (2016)**
- 3) **Message testing (2013-2016)**
 - *Maryland scientists on climate consensus; MDE climate videos; promoting renewable energy in faith communities; GGRA language*

All resources freely available at climatechange.gmu.edu

** peer-reviewed articles, reports, presentations*



GEORGE MASON UNIVERSITY
CENTER for CLIMATE CHANGE
COMMUNICATION

HOME

ABOUT

PROGRAMS

RESOURCES

INVEST IN 4C

Survey Reports

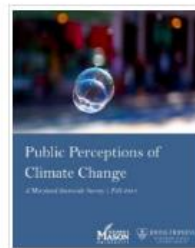


We assist Maryland's state agencies, local governments, non-profits, and universities by providing audience, messaging, and evaluation research



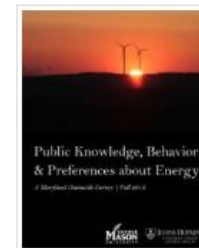
U.S. Media Reporting of Sea Level Rise and Climate Change: Coverage in National and Local Newspapers, 2001-2015

We turned our attention to the news media to see how much reporting on sea...



Public Perceptions of Climate Change: A Maryland Statewide Survey, Fall 2015

For the past three years, we have been asking Maryland residents questions about their understanding...

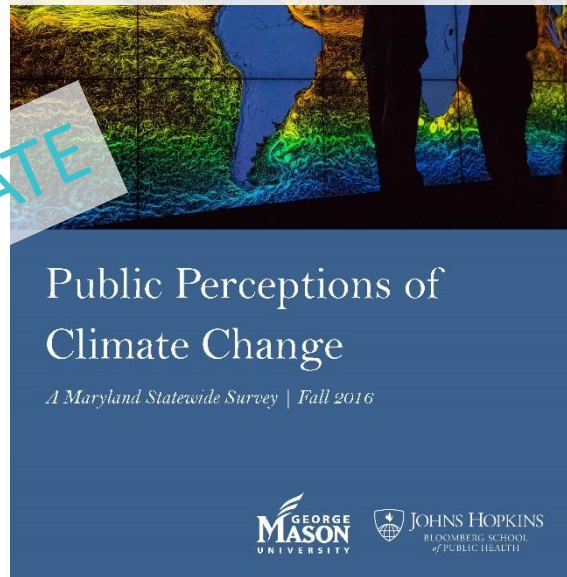


Public Knowledge, Behaviors and Preferences About Energy: A Maryland Statewide Survey, Fall 2015

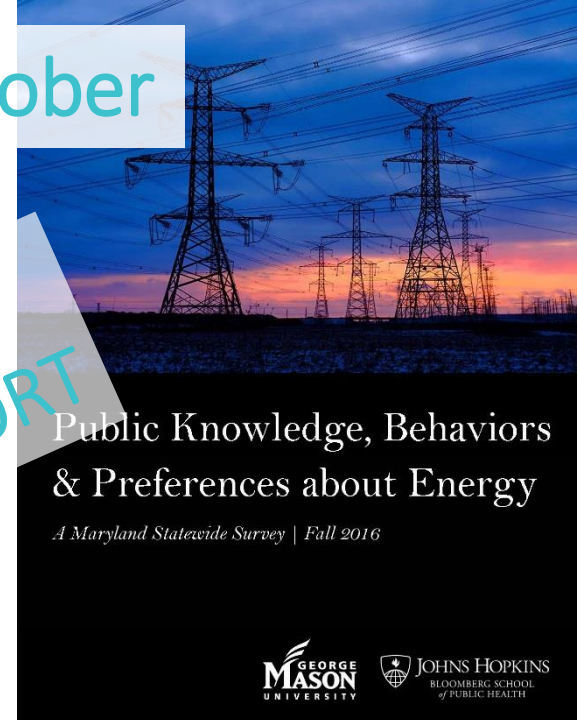
For the past three years, we have been asking Marylanders questions about their preferences

2016 reports | Release dates, early October

CLIMATE



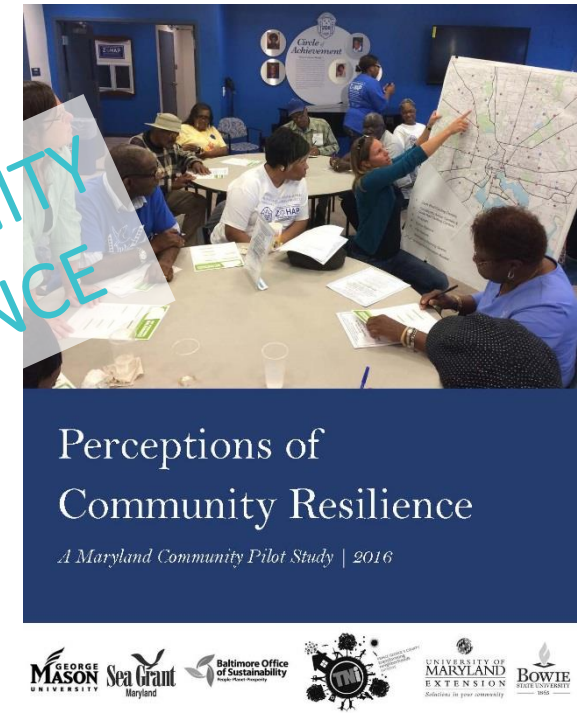
ENERGY
& TRANSPORT



HEALTH
& CLIMATE



COMMUNITY
RESILIENCE



Maryland public opinion | What we have learned

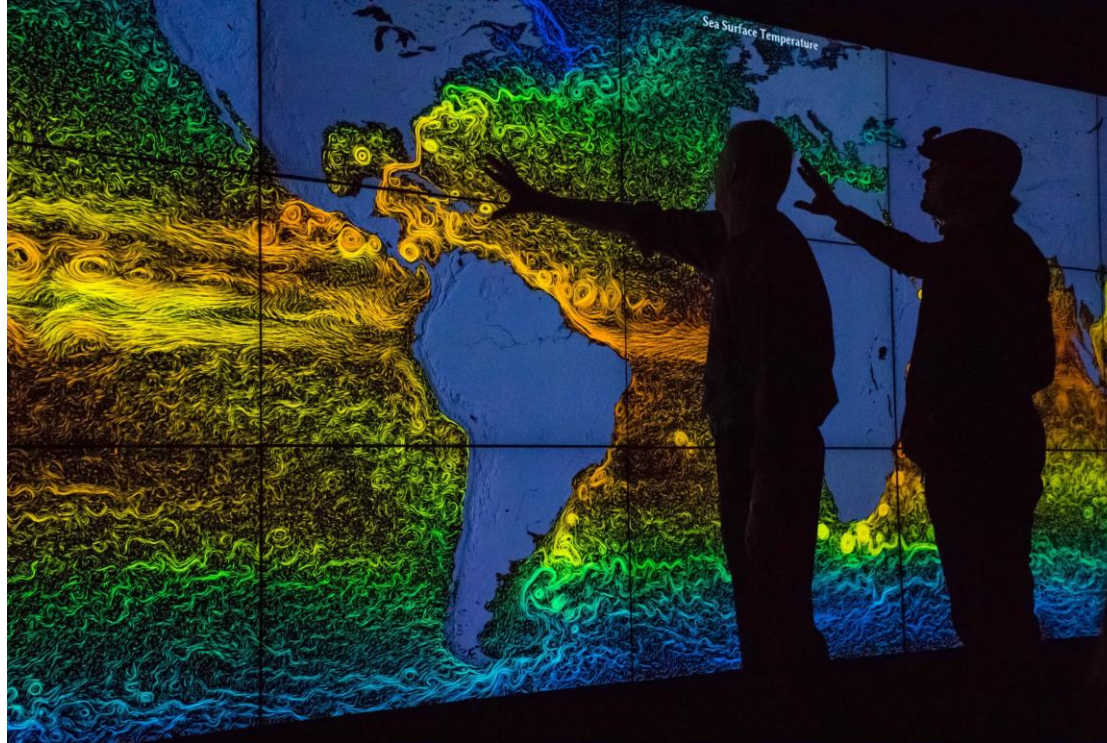
- 1) Climate change is perceived as a real issue—
more so here than to the nation as a whole
- 2) Climate and energy policies are high priorities
– but not as high as jobs and air/water
pollution generally
- 3) Support for renewable energy is high
- 4) Marylanders favor government
action to protect communities



Today's discussion | [Preview of 2016 data](#)

- 1) Climate
- 2) Health & climate
- 3) Energy
- 4) Community resilience





Public Perceptions of Climate Change

A Maryland Statewide Survey | Fall 2016



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH



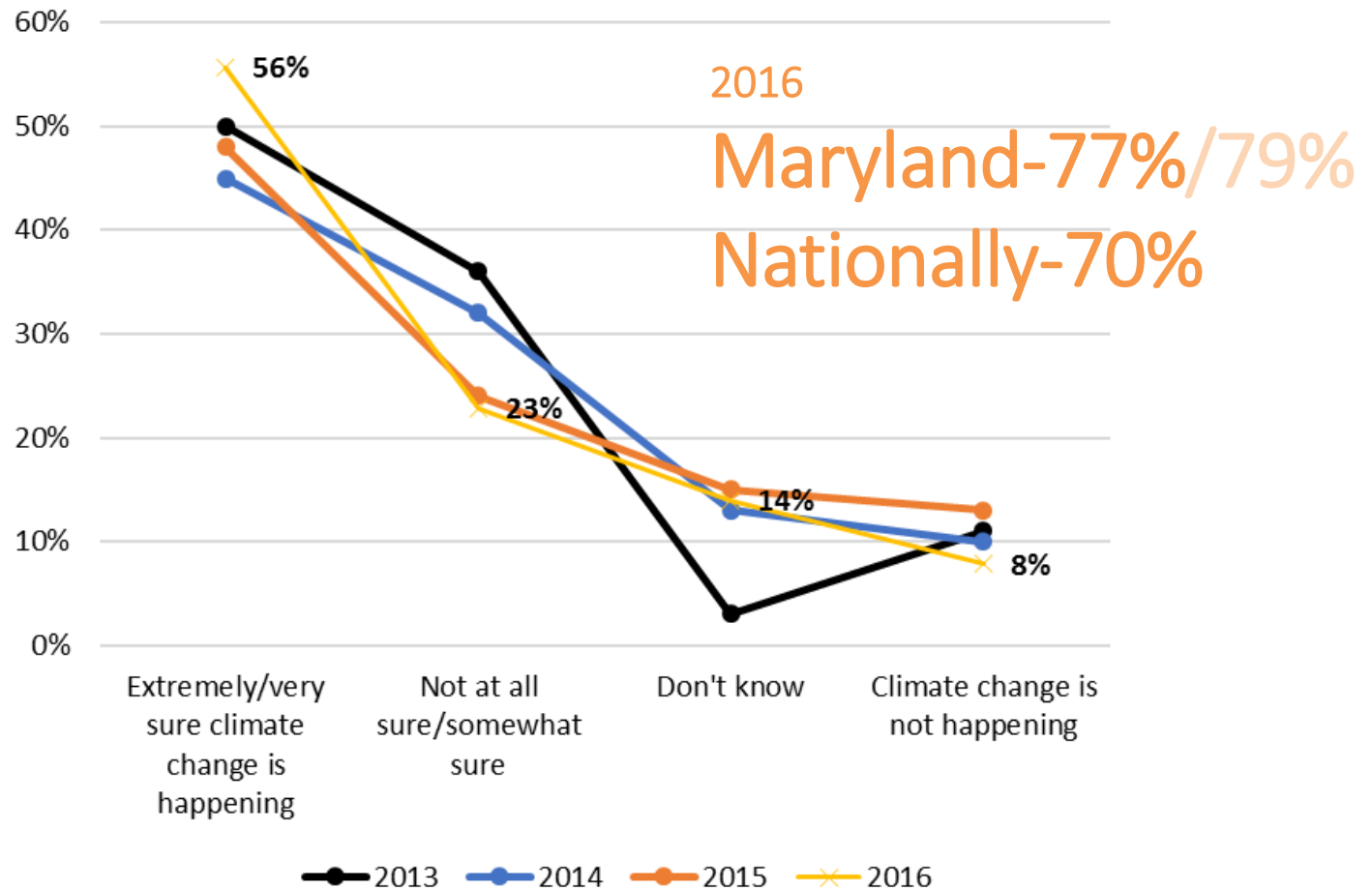
What do you think?

What percentage of
Marylanders say that climate
change is happening?

Most agree climate change is happening

Climate change certainty, 2013-2016

Do you think that climate change is happening? If you answered either yes or no, how sure are you?

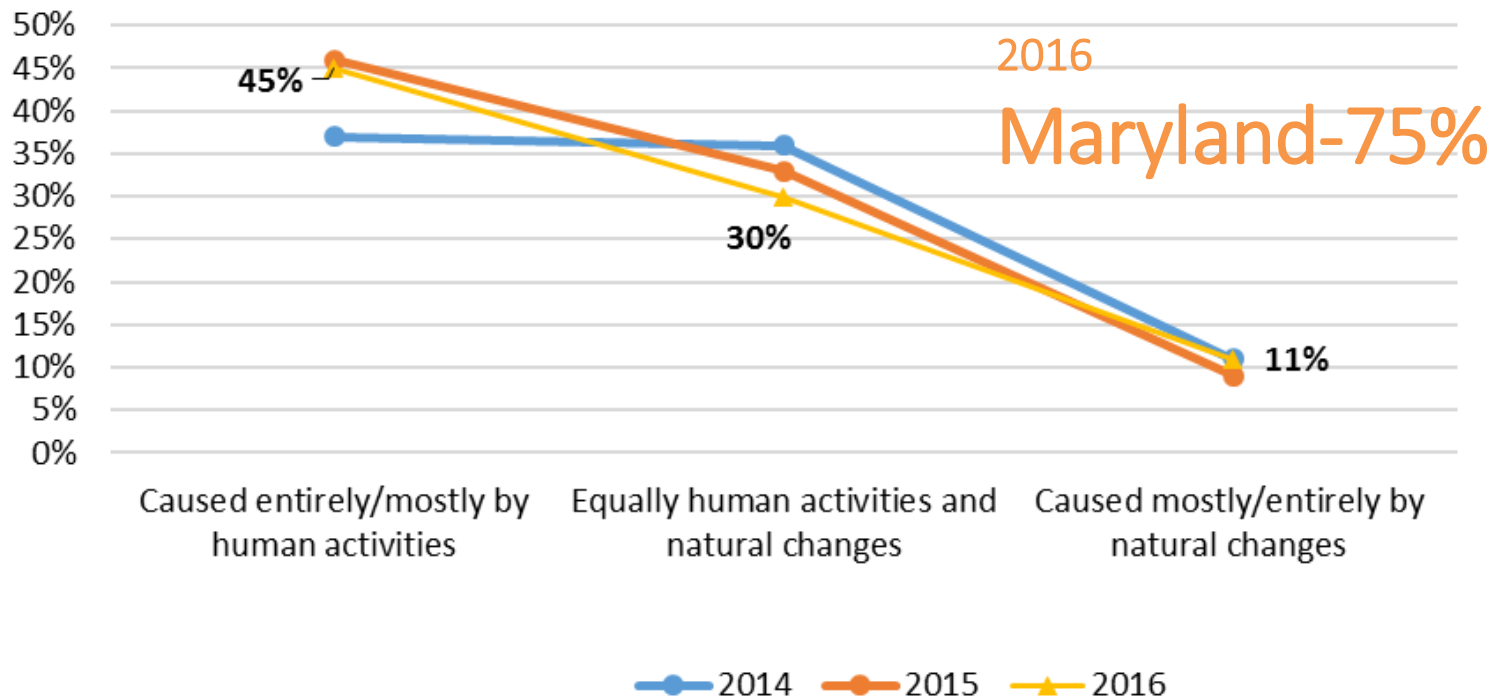


Unweighted base, n=2,126 (2013);
n=2,035 (2014); n=1,547 (2015);
n=907 (2016)

... and that humans are playing a role

Climate change causation, 2014-2016

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



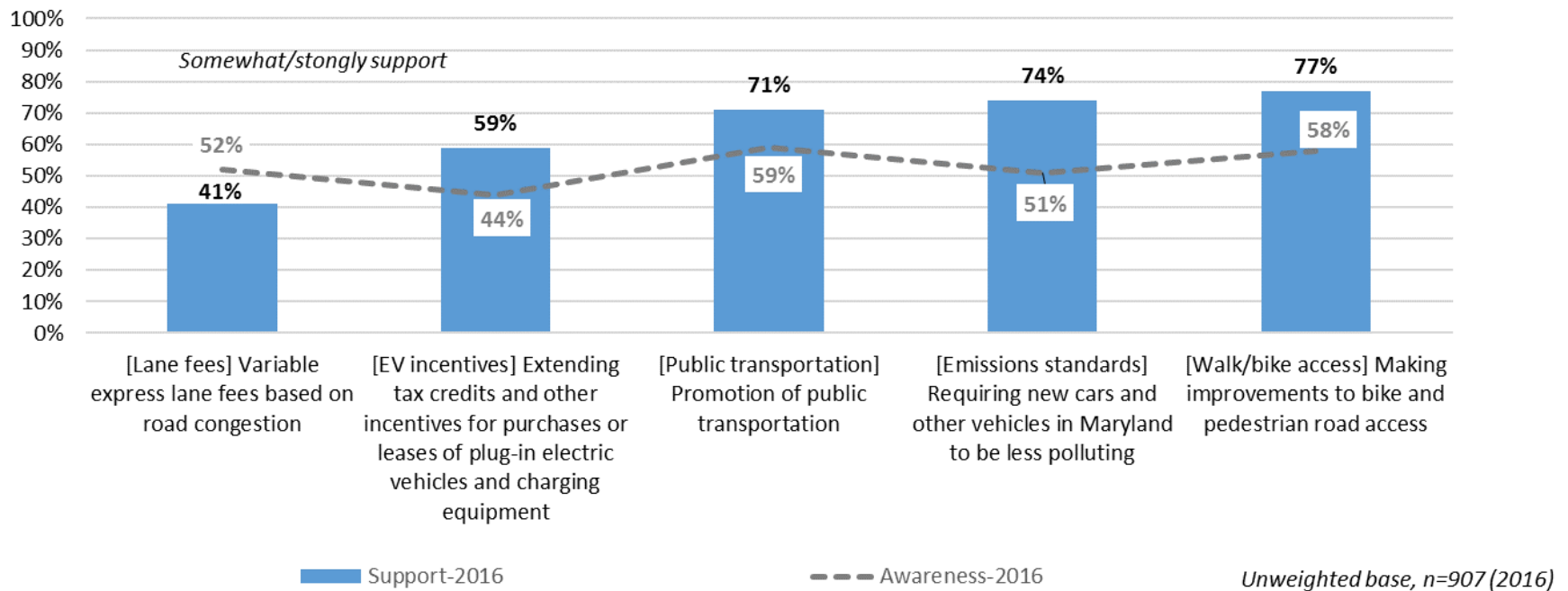
*Unweighted base, n=2,126 (2013);
n=2,035 (2014); n=1,547 (2015)*

Marylanders demonstrate high support for state transportation policies

Transportation policy awareness and support, 2016

Maryland has begun implementing policies to alleviate road congestion on highways and improve air quality.

For each of the following policies, please answer two questions: Have you heard of this policy? How



2016 data

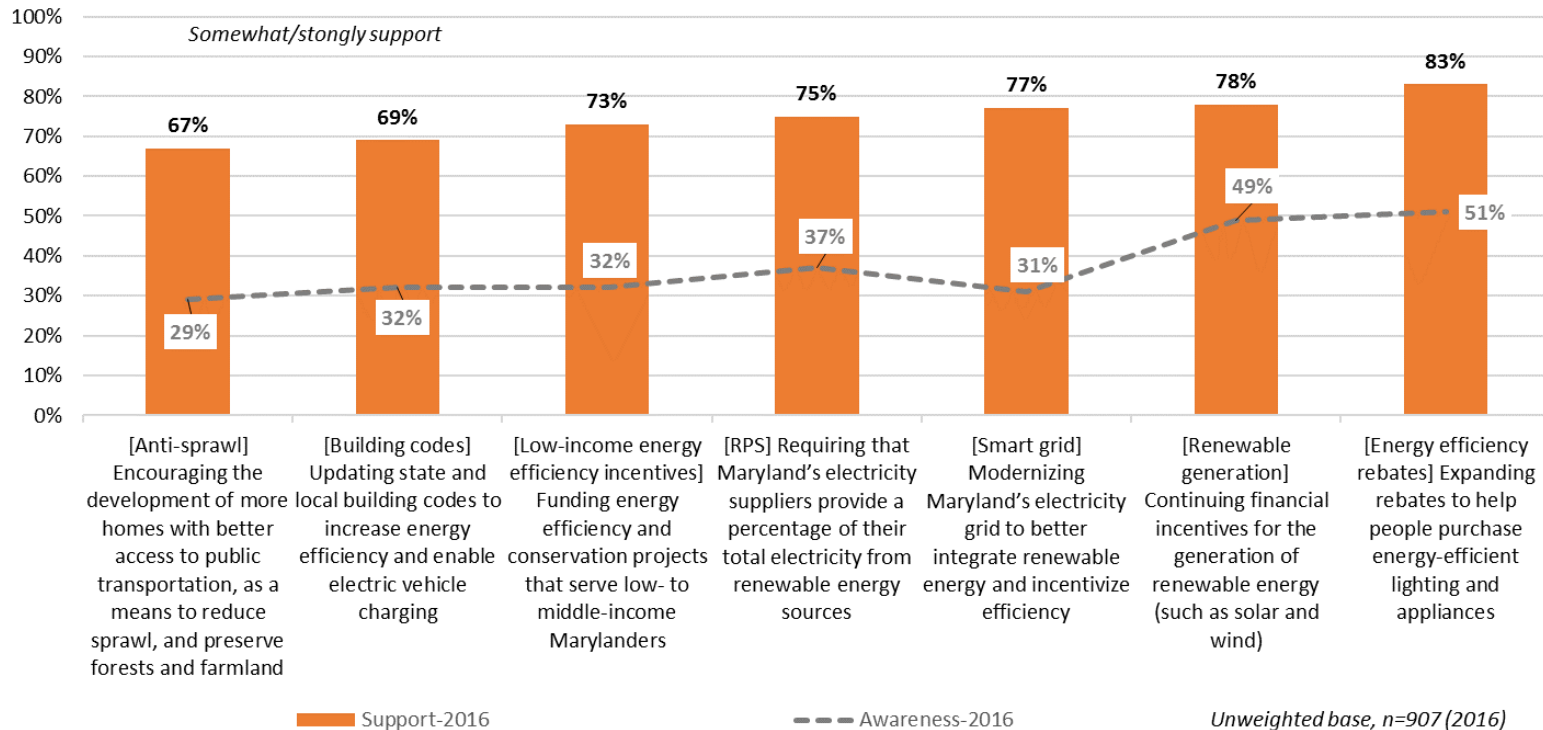
Walking/biking access-77%
Less polluting vehicles-74%
Public transportation-71%

... and energy policies

Energy policy awareness and support, 2016

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?



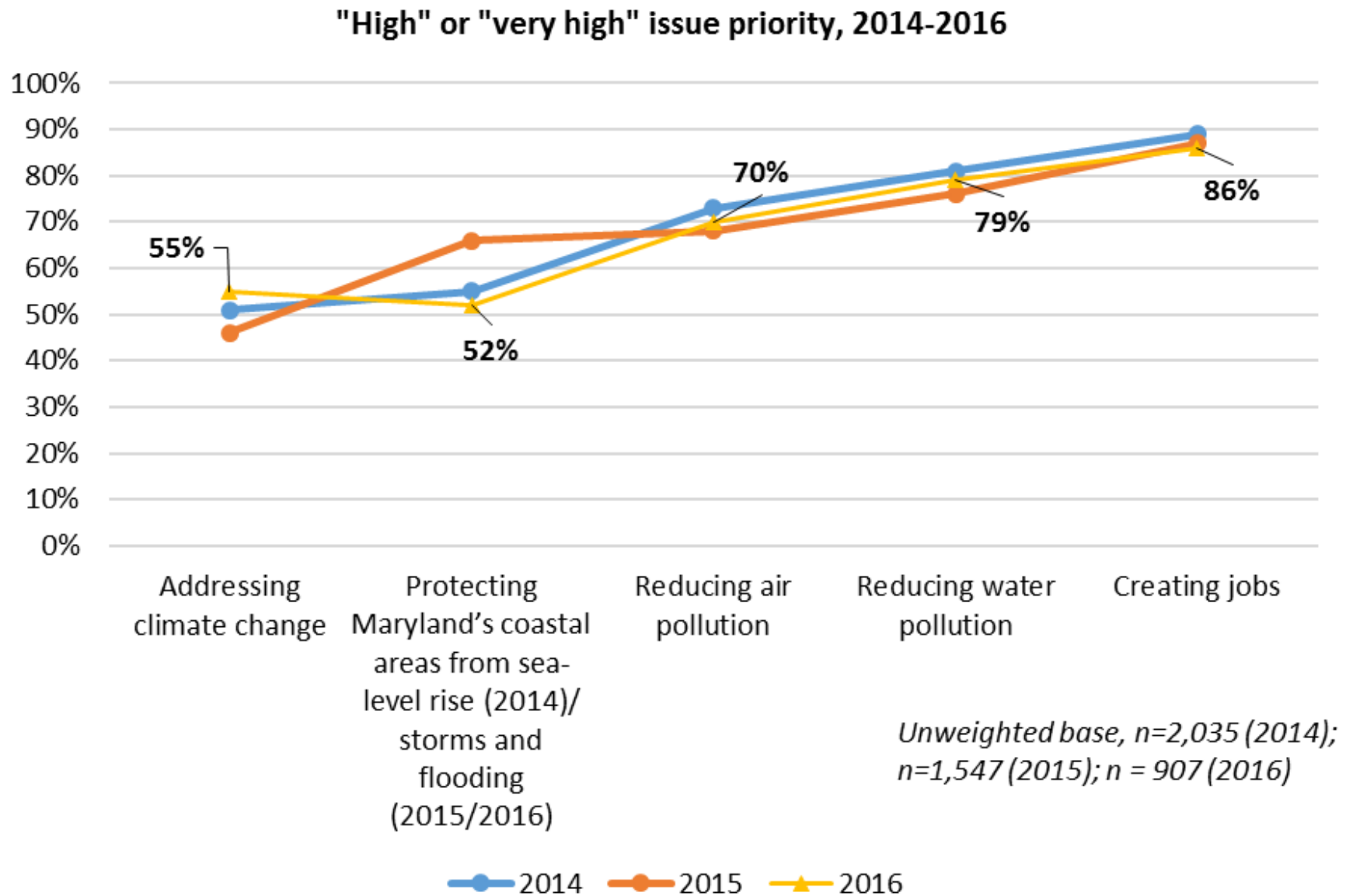
Energy efficiency rebates-83%

Renewable energy incentives-78%

Smart grid-77%; RPS-75%

2016 data

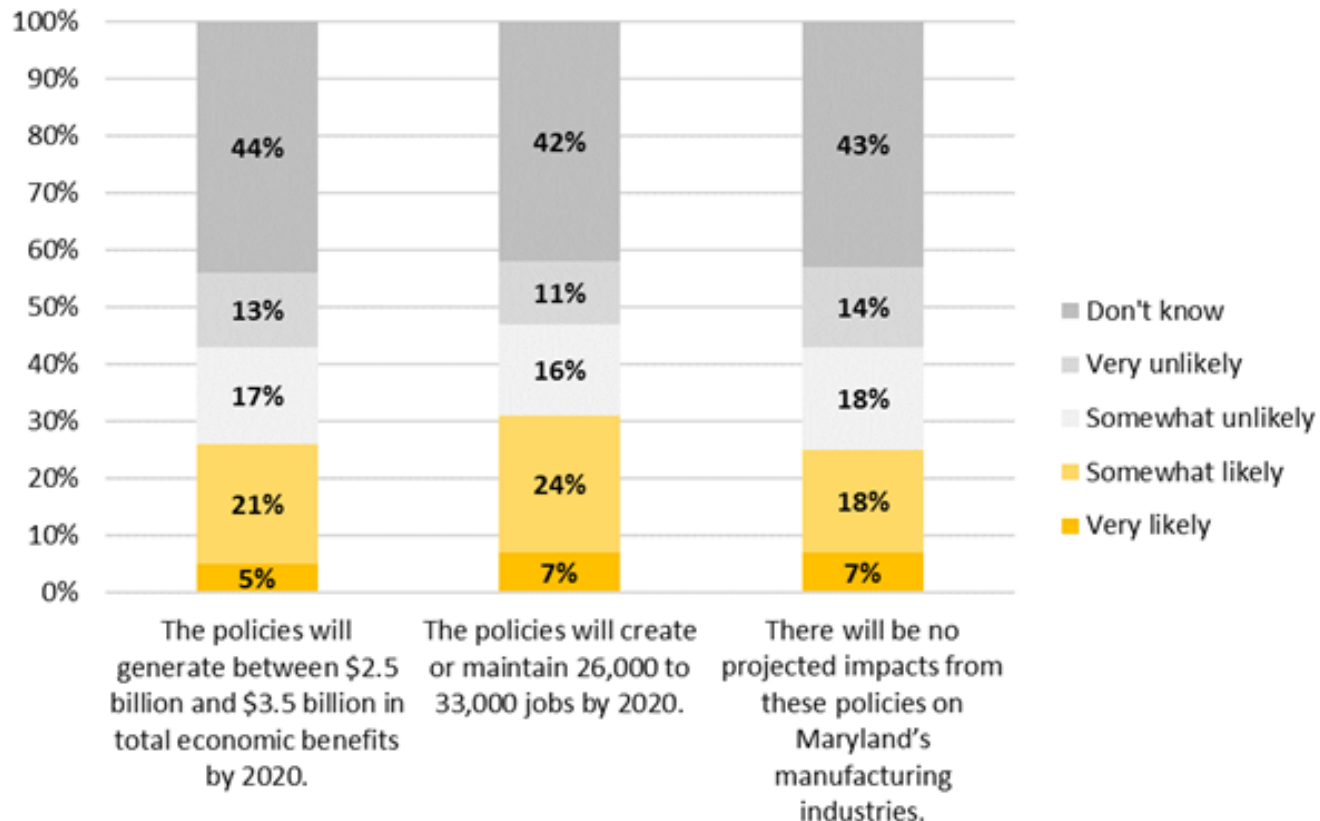
... but climate remains a relatively lower priority



Marylanders are unsure that the GGRA will produce economic gains

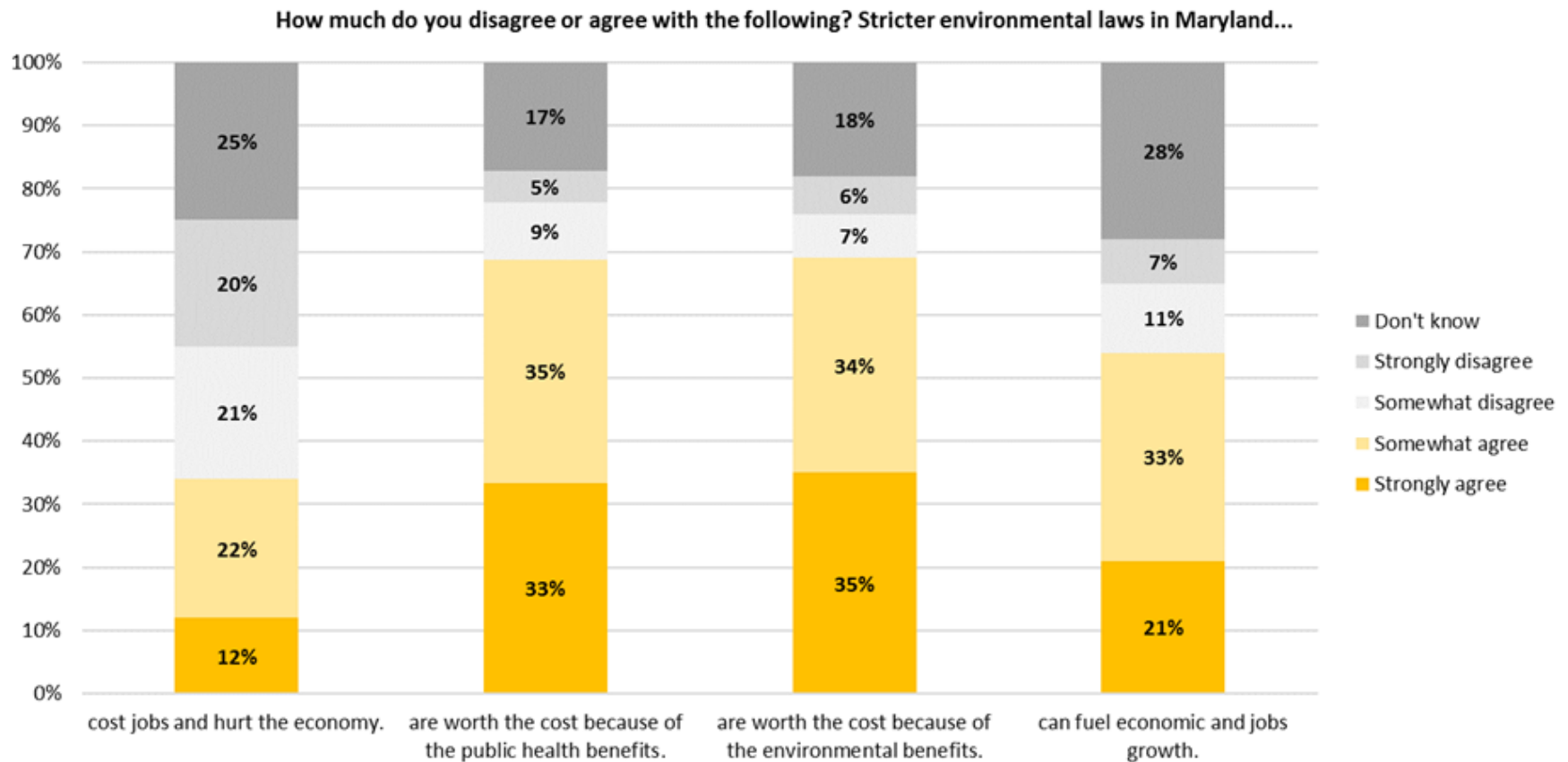
Maryland is required to evaluate the economic impacts, including to jobs and industry, of its energy and greenhouse gas reduction policies that are collectively called the “Greenhouse Gas Reduction Plan.”

How likely do you think it is that these policies will accomplish the following?



2016 data

Marylanders believe stricter environmental laws have costs—and benefits



2016 data



Public Knowledge, Behaviors & Preferences about Energy

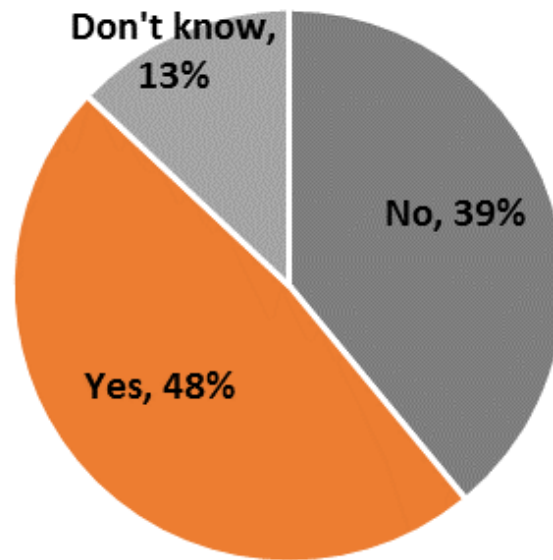
A Maryland Statewide Survey | Fall 2016



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

About half are unfamiliar with “Smart Grids”

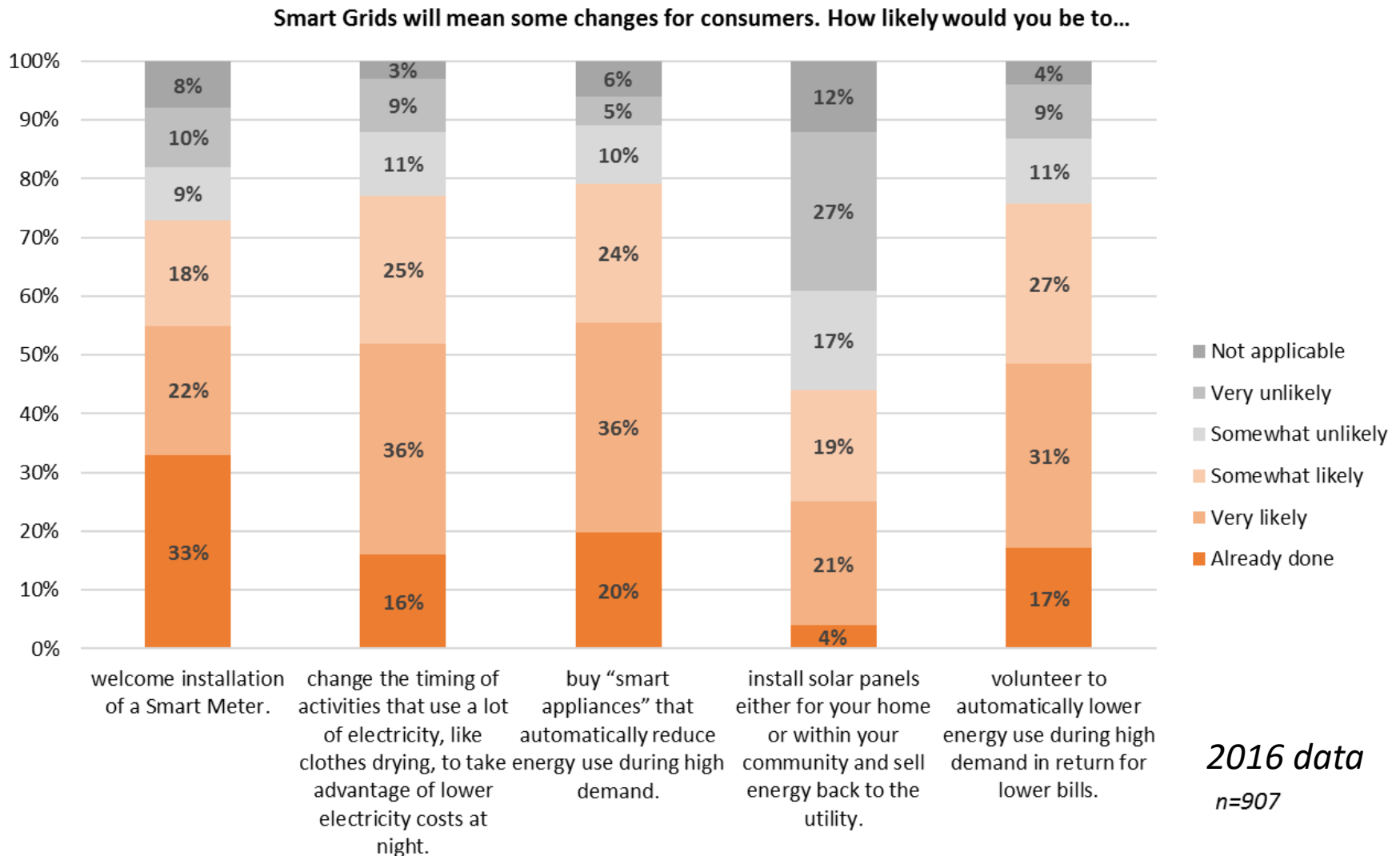
Have you ever heard the term, “Smart Grid,” in referring to new ways to generate and manage electricity?



n=907 (2016)

2016 data

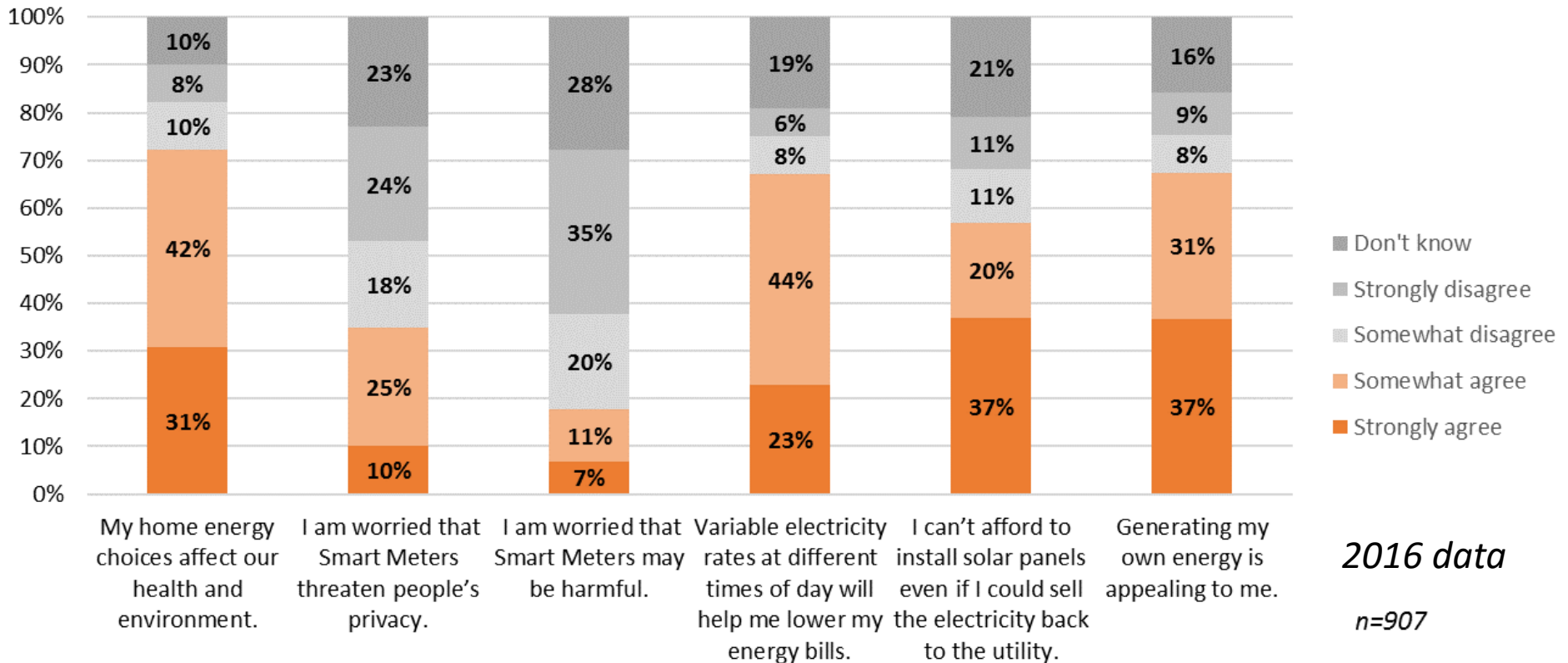
Most Marylanders welcome Smart Grid changes



More than 70% say they already do, or are likely, to take actions

Few are worried about Smart Meter privacy or harm

How strongly do you disagree or agree with the following statements?



Most would like to generate their own energy (68%),
but say they can't afford solar panels (57%)



Public Health, Energy & Climate Change

A Maryland Statewide Survey | Fall 2016

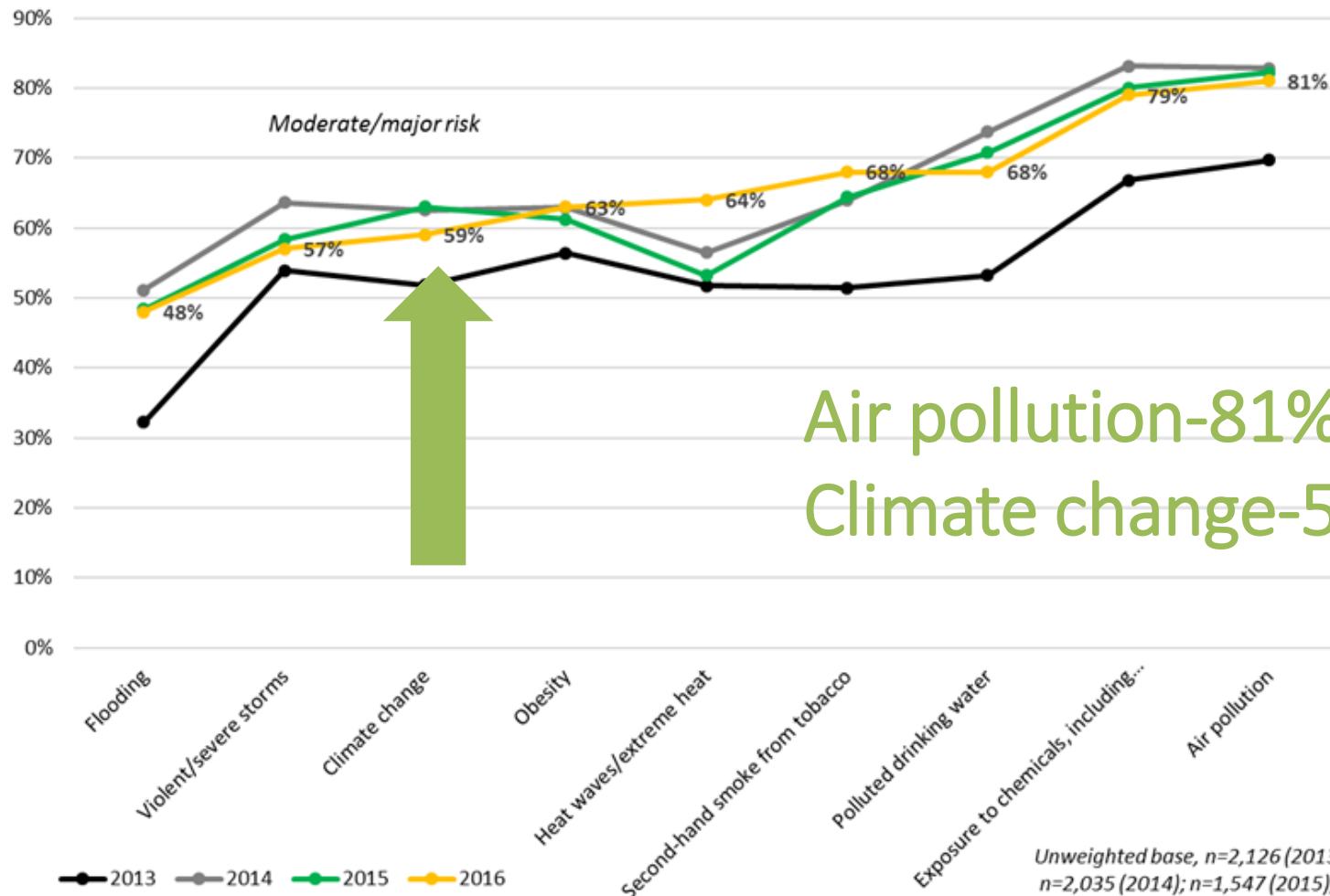


JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Marylanders see climate change as a personal health risk, but more so air and water pollution

Perceptions of personal health risks, 2013-2016

Below is a list of potential risks to people's health and well-being. How much of a risk do you feel each of the following poses to your health and well-being?



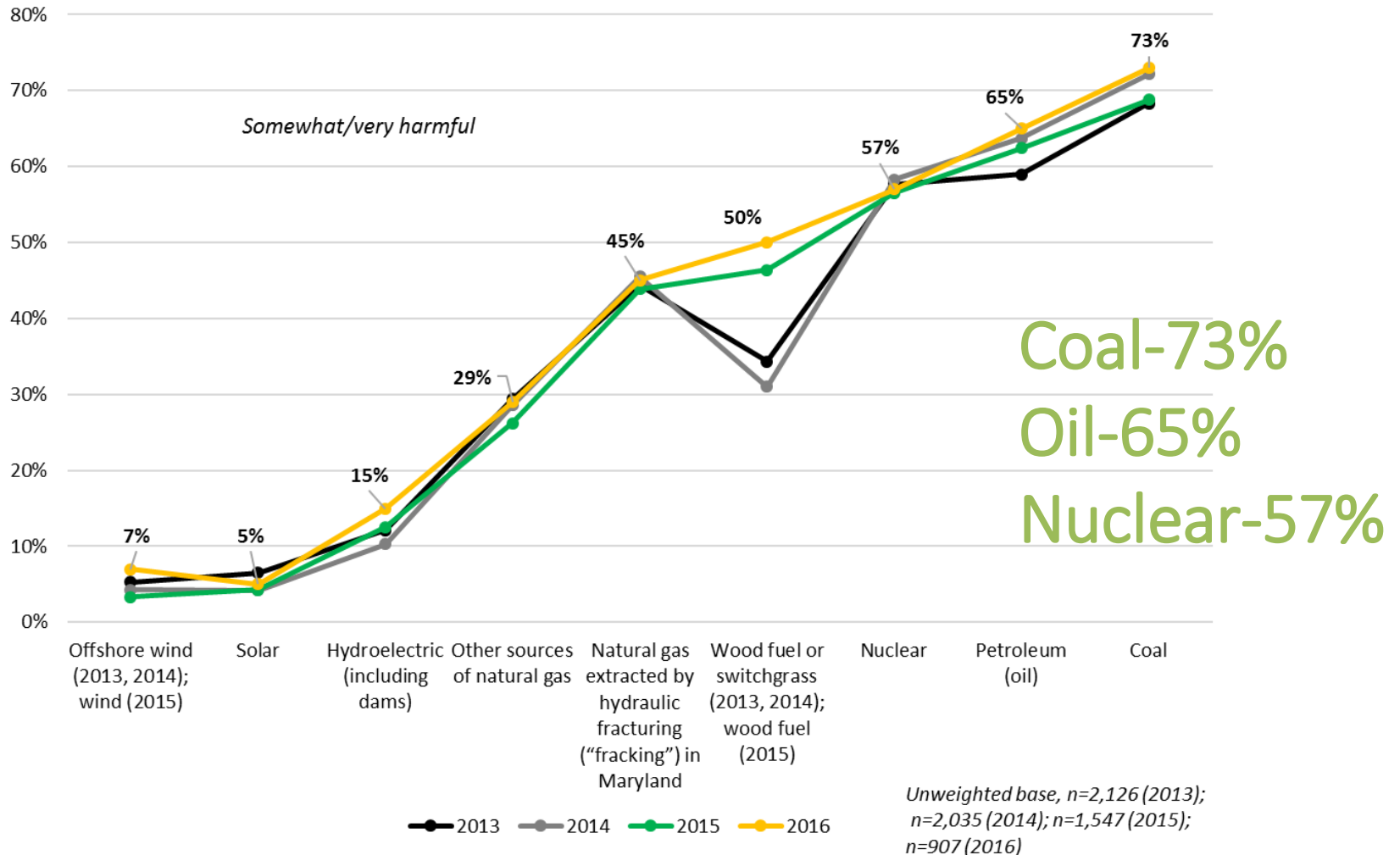
Air pollution-81%
Climate change-59%

Unweighted base, n=2,126 (2013);
n=2,035 (2014); n=1,547 (2015);
n = 907 (2016)

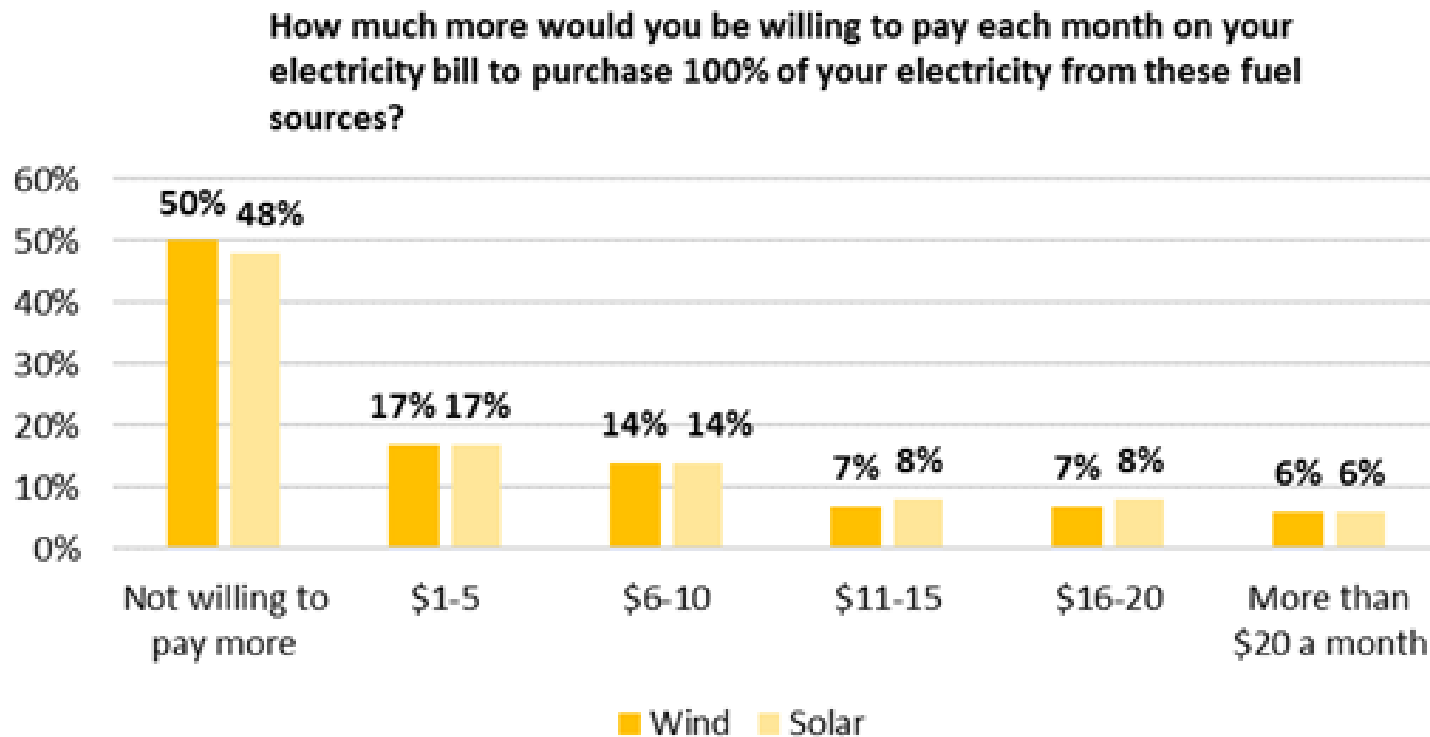
Marylanders perceive fossil fuels and nuclear energy as harmful to their health

Perceptions of energy source health harms, 2013-2016

Please rate each of the following sources of electrical energy in terms of how harmful they are to people's health.



... and about half say they are willing to pay more for renewables



2016 data

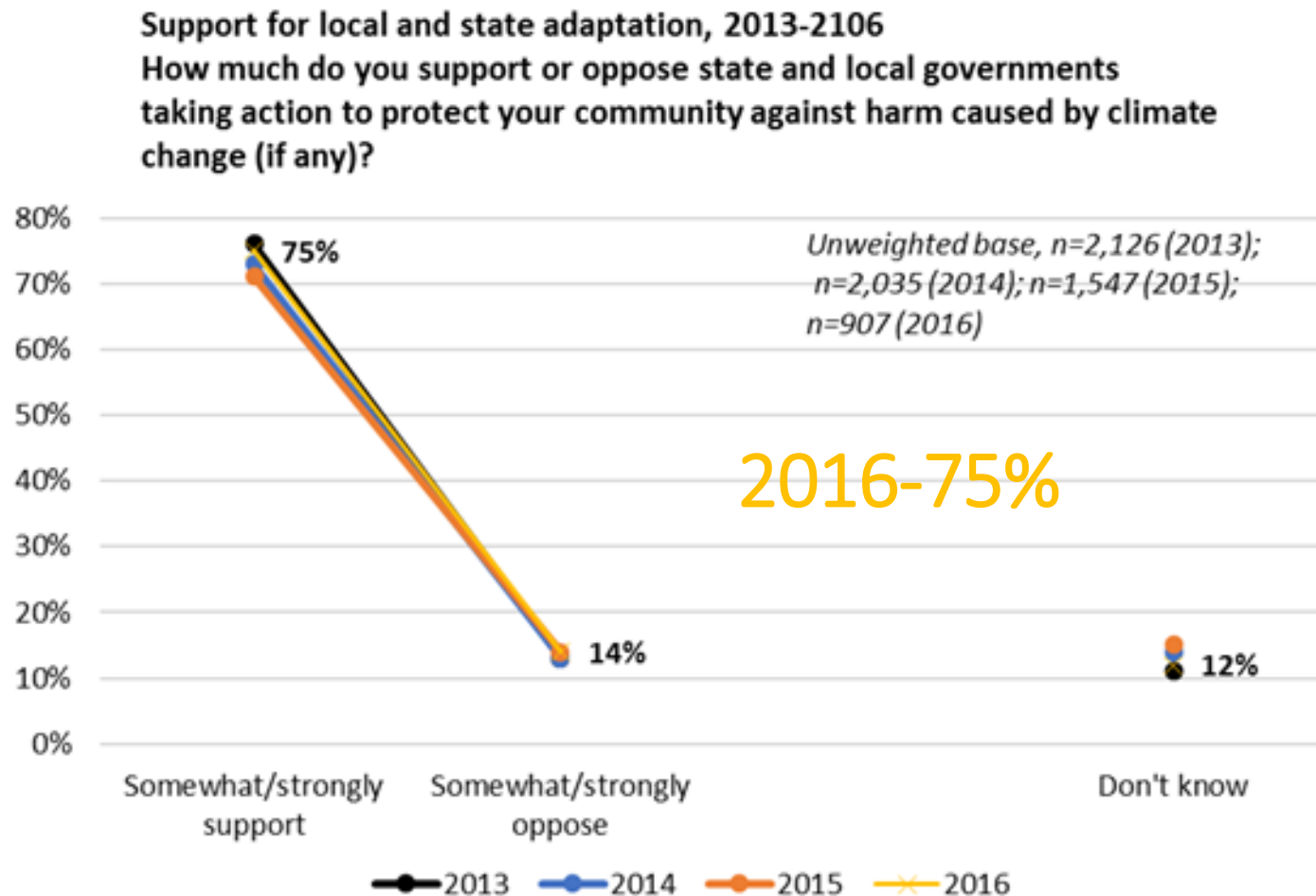


Perceptions of Community Resilience

A Maryland Community Pilot Study | 2016



Marylanders *consistently* support local and state government action to protect their communities



Concerns span across populations



International Journal of
*Environmental Research
and Public Health*



Article

Vulnerable Populations Perceive Their Health as at Risk from Climate Change

Karen L. Akerlof ^{1,*}, Paul L. Delamater ², Caroline R. Boules ¹, Crystal R. Upperman ³ and Clifford S. Mitchell ⁴

Received: 14 September 2015; Accepted: 26 November 2015; Published: 5 December 2015

Academic Editor: Jan C. Semenza

¹ Center for Climate Change Communication, George Mason University, Fairfax, VA 22030, USA; cboules@masonlive.gmu.edu

² Department of Geography and GeoInformation Science, George Mason University, Fairfax, VA 22030, USA; pdelamat@gmu.edu

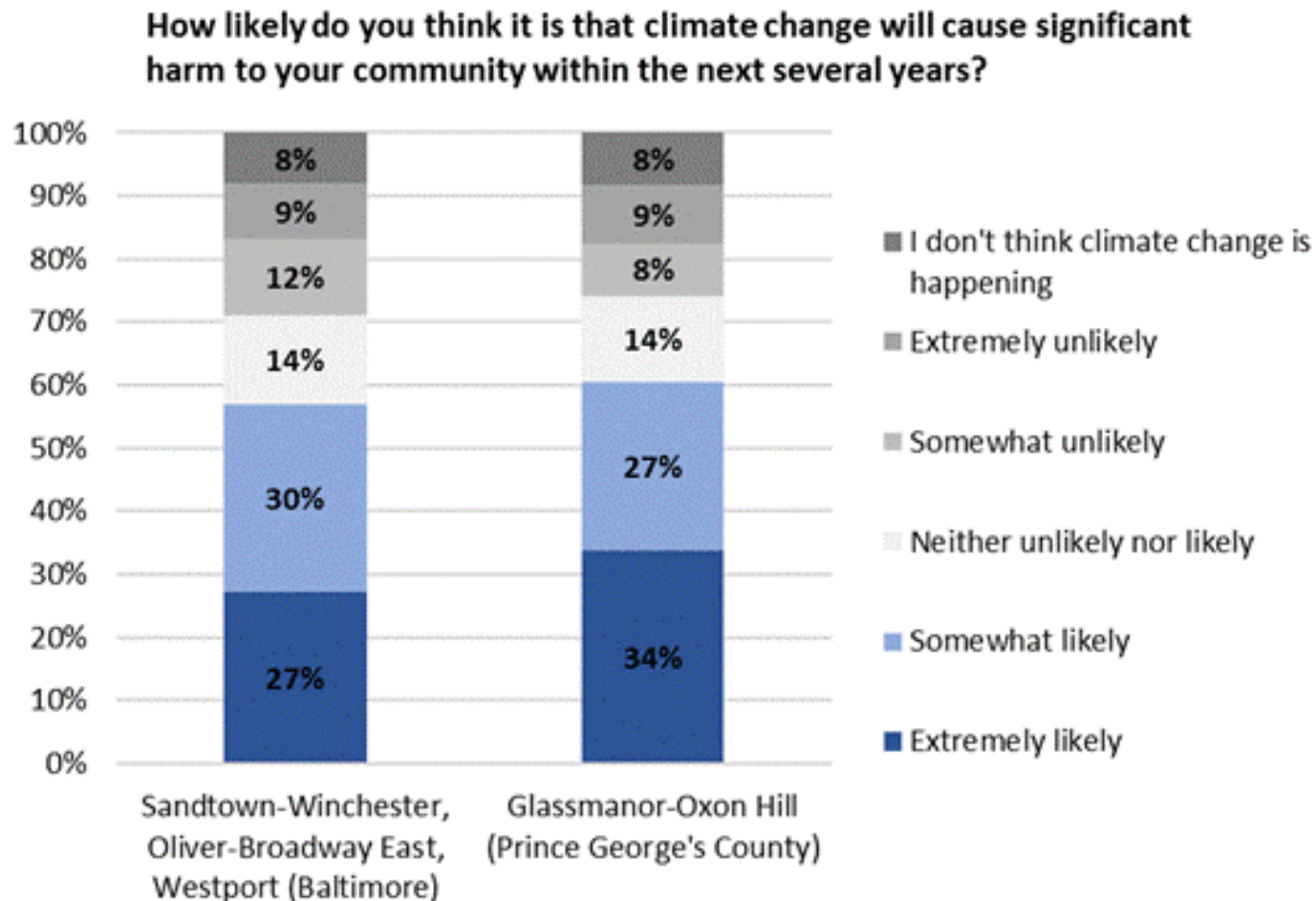
³ University of Maryland School of Public Health, College Park, MD 20742, USA; cromeo@umd.edu

⁴ Maryland Department of Health & Mental Hygiene, Baltimore, MD 21201, USA; cliff.mitchell@maryland.gov

* Correspondence: kakerlof@gmu.edu; Tel.: +1-703-993-6667; Fax: +1-703-993-3205

Abstract: Climate change is already taking a toll on human health, a toll that is likely to increase in coming decades. The relationship between risk perceptions and vulnerability to climate change's health threats has received little attention, even though an understanding of the dynamics of adaptation among particularly susceptible populations is becoming increasingly important. We demonstrate that some people whose health will suffer the greatest harms from climate change—due to social vulnerability, health susceptibility, and exposure to hazards—already feel they are at risk. In a 2013 survey we measured Maryland residents' climate beliefs, health risk

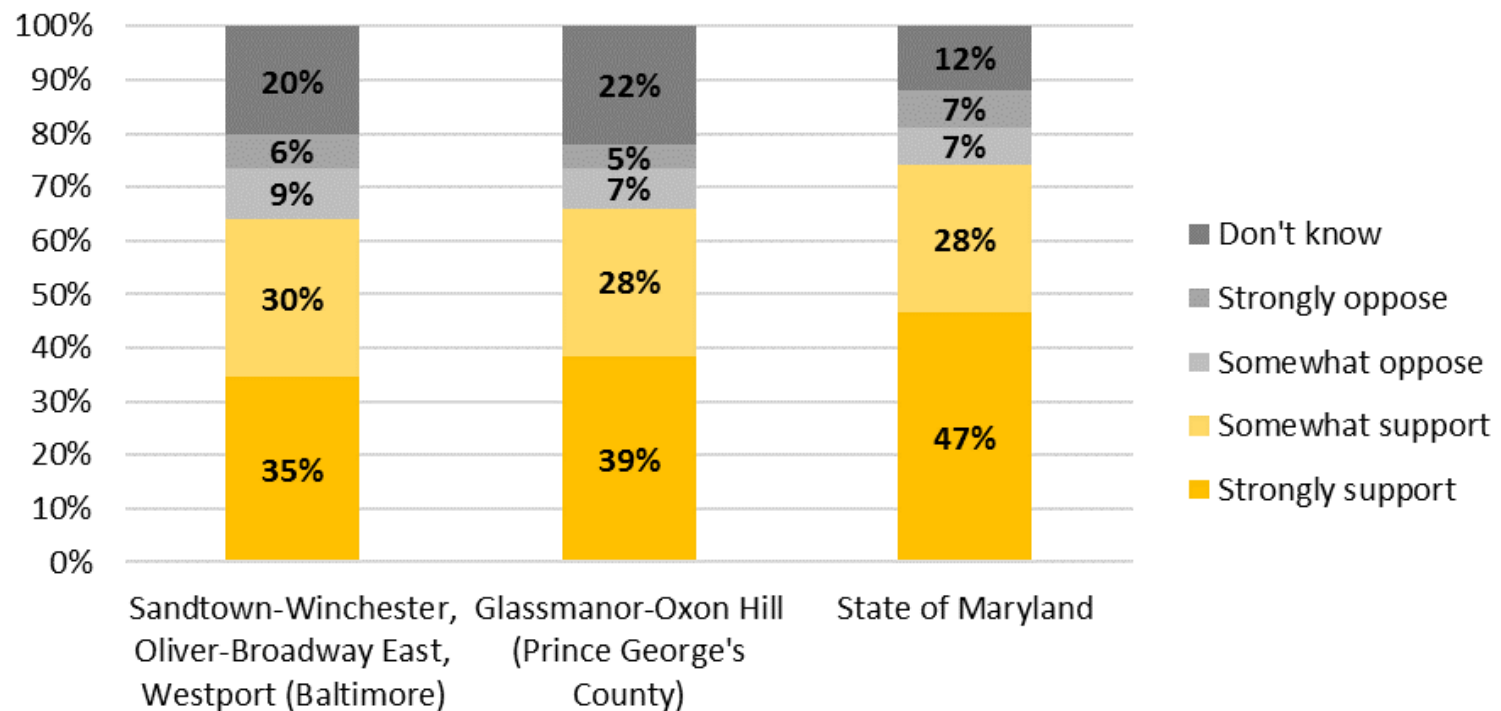
Baltimore and Prince George's communities are concerned about climate



2016 data

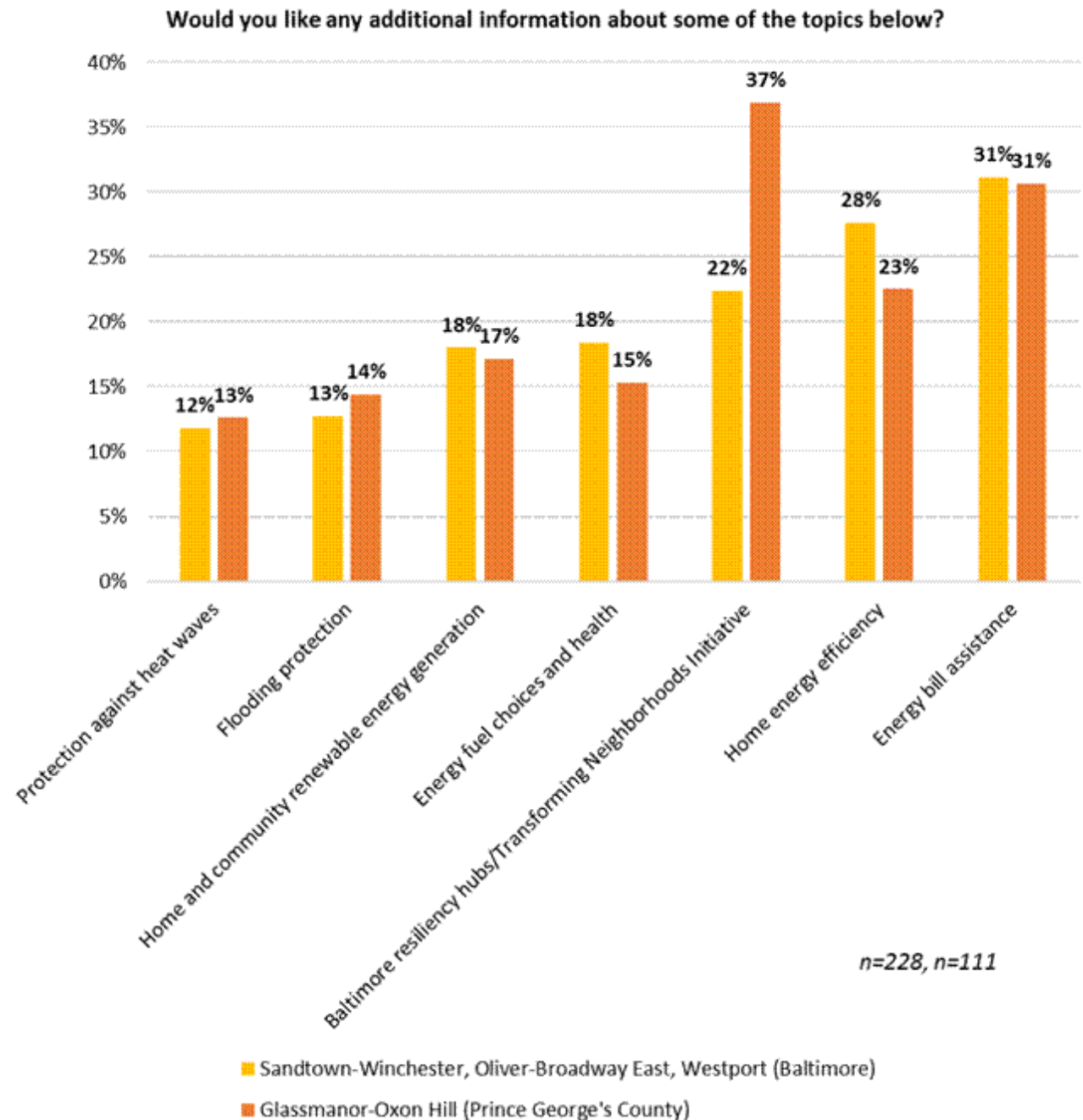
Baltimore and Prince George's communities support protective government actions

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)?



2016 data

Energy assistance, efficiency, and local resilience efforts are topics of interest



2016 data

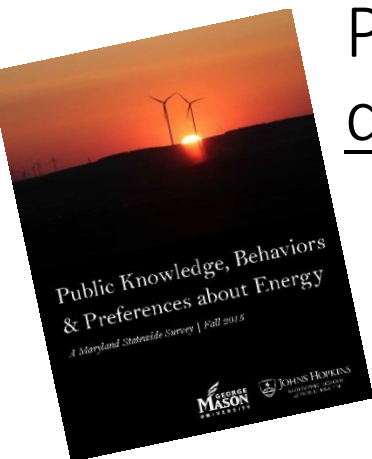
Maryland public opinion | What we have learned

- 1) Climate change is perceived as a real issue—
more so here than to the nation as a whole
- 2) Climate and energy policies are high priorities
– but not as high as jobs and air/water
pollution generally
- 3) Support for renewable energy is high
- 4) Marylanders favor government
action to protect communities
- 5) Public opinion is generally
supportive but
there are softer areas in which
communication/education is still needed



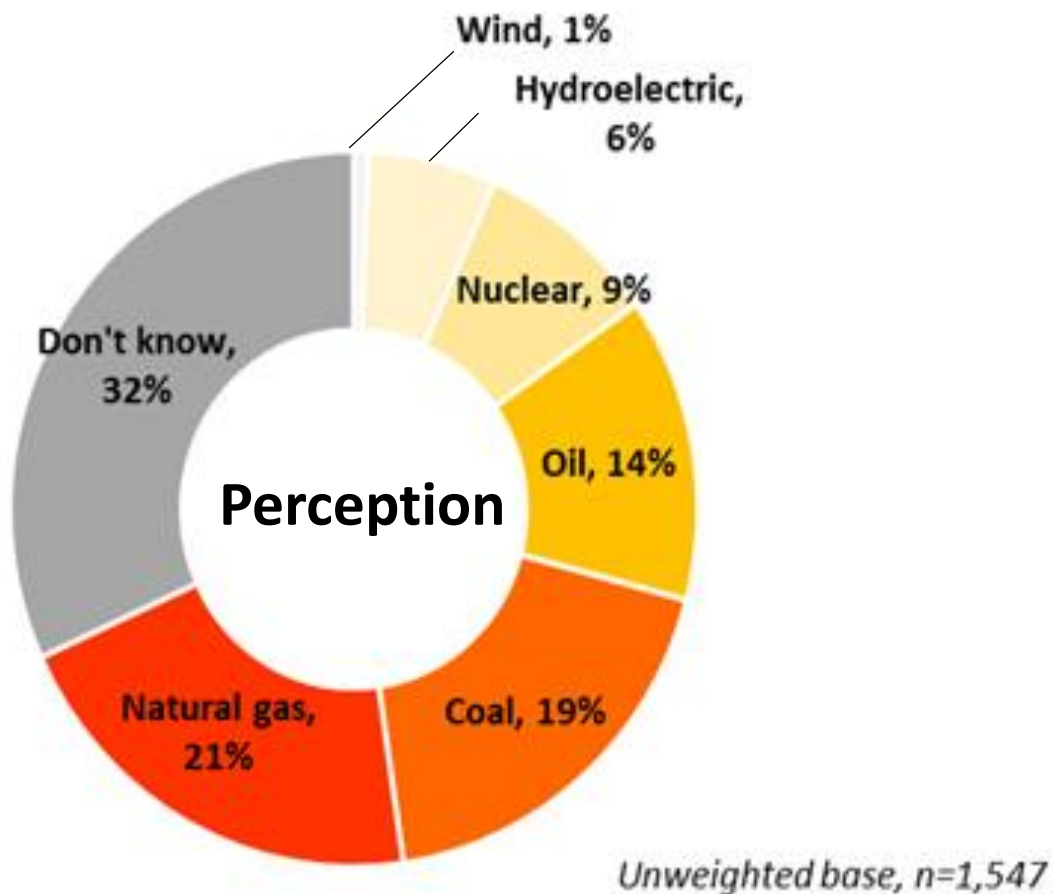
#1. Energy education

People perceive fossil fuels as harmful, but many don't know where their electricity comes from



Reality

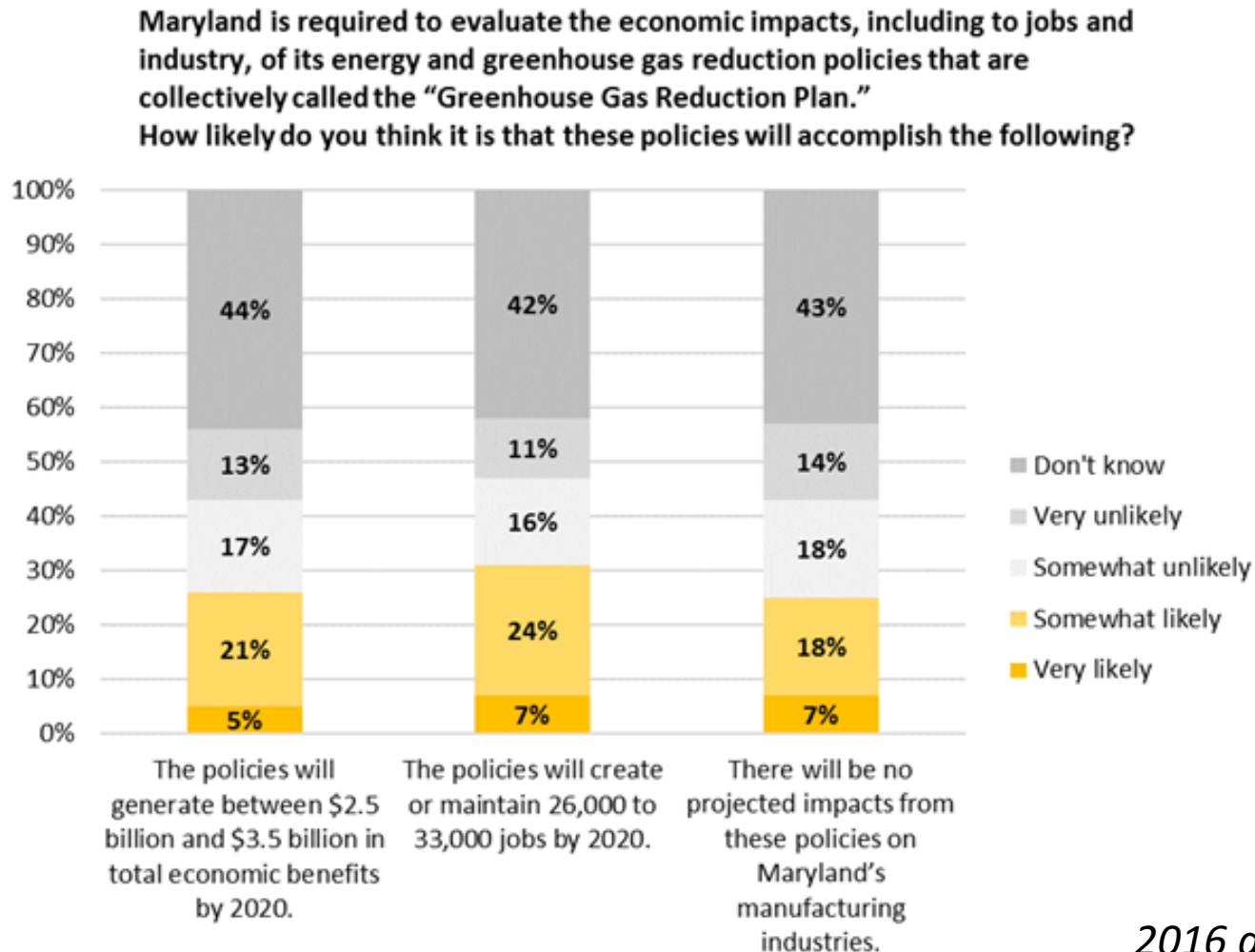
The two largest sources of Maryland's electricity generation are **coal-fired (40%)** and **nuclear (40%)** power plants with **natural gas (15%)** a distant third.



2015 data

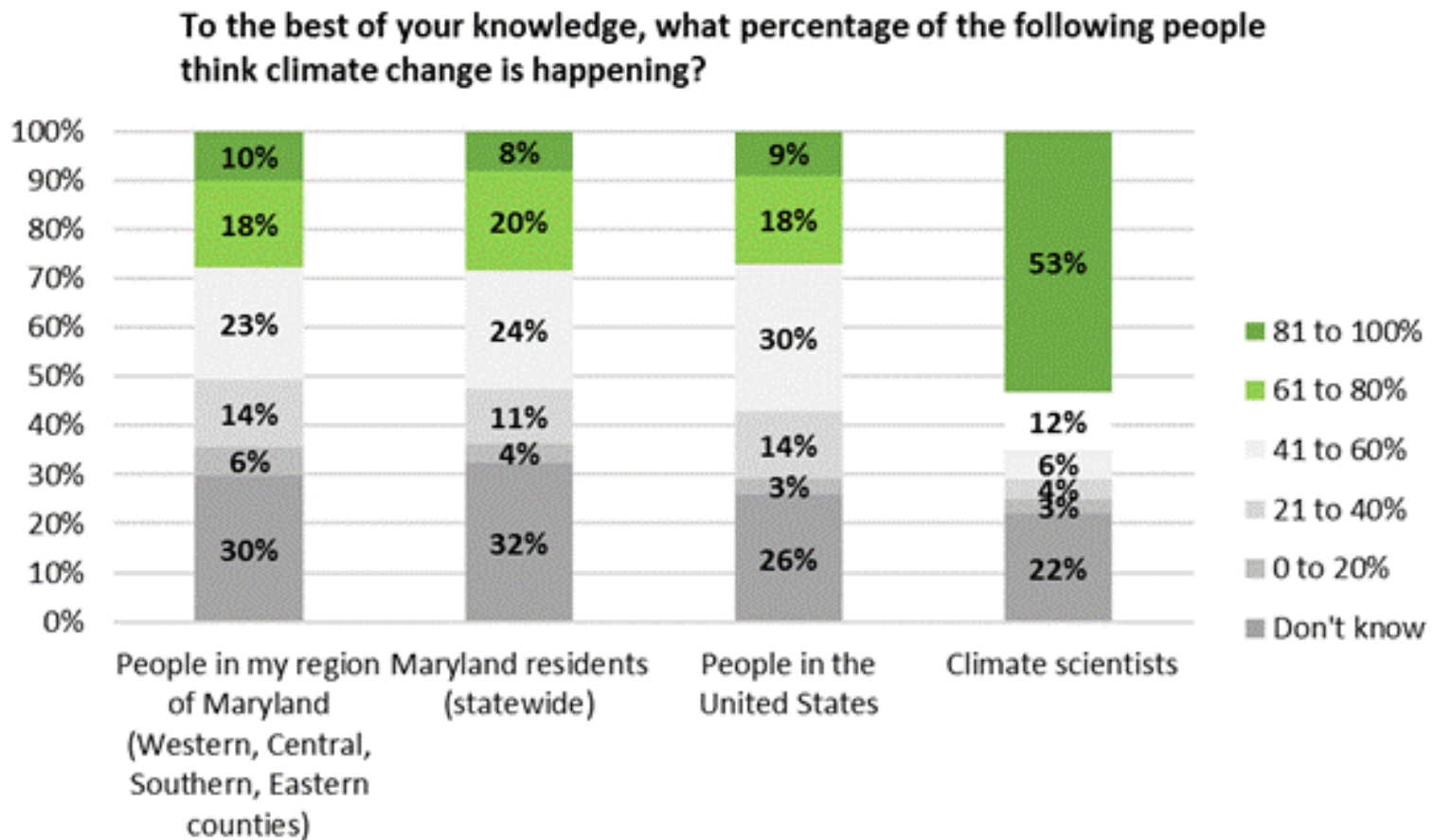
#2. Economic discussion

People are unsure of the economic impacts of energy policies



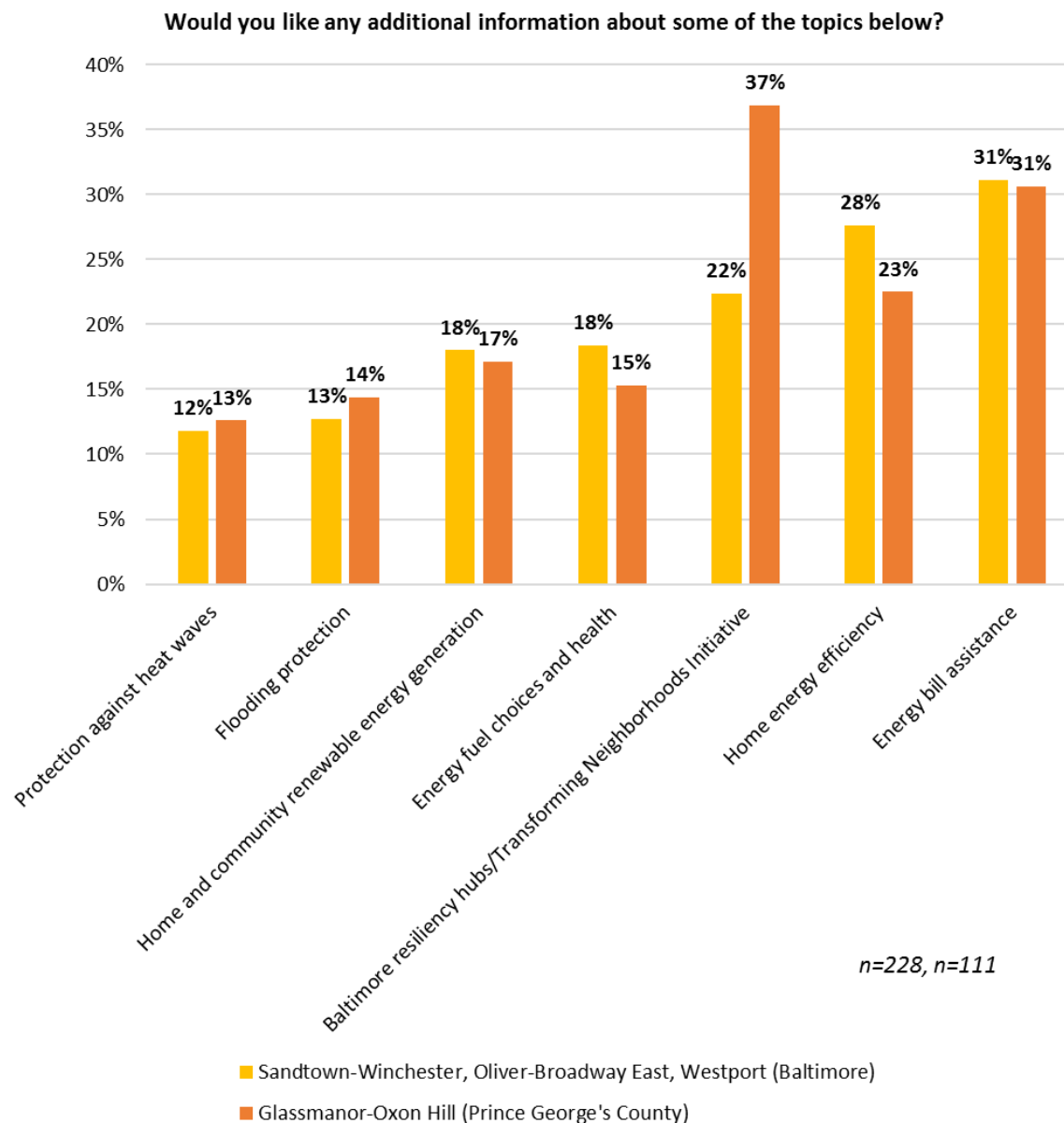
#3. Talk about the scientific and social consensus

Perceptions of public dissension are high



2016 data

#4. Include underserved communities in the discussion



2016 data

Maryland public opinion | Moving forward

#1. Energy education

#2. Economic discussion

#3. Talk about the scientific and social consensus

#4. Include underserved communities in the discussion



Thank you to Town Creek Foundation of Easton, Maryland for its support, Maryland Department of Health and Mental Hygiene for its partnership on the 2013 and 2014 surveys, and Johns Hopkins Bloomberg School of Public Health on the 2015 and 2016 surveys.



kakerlof@gmu.edu