

Meet Maryland's 2016 **Climate & Energy** Audiences | Millennials & Groups of Racial Diversity

| October 5, 2016 | Online Webinar |

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GEORGE MASON UNIVERSITY
CENTER for CLIMATE CHANGE
COMMUNICATION



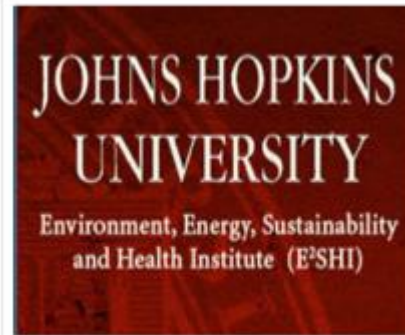
CLIMATE COMMUNICATION
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Baltimore Commission on Sustainability



CLIMATE COMMUNICATION
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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*



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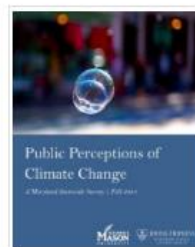


We assist Maryland's state agencies, local governments, non-profits, and universities by providing audience, messaging, and evaluation research



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

CLIMATE



Public Perceptions of Climate Change

A Maryland Statewide Survey | Fall 2016



HEALTH
& CLIMATE



Public Health, Energy & Climate Change

A Maryland Statewide Survey | Fall 2016



ENERGY
& TRANSPORT



Public Knowledge, Behaviors & Preferences about Energy

A Maryland Statewide Survey | Fall 2016



COMMUNITY
RESILIENCE
(NEXT WEEK!)



Perceptions of Community Resilience

A Maryland Community Pilot Study | 2016



Maryland's climate & energy audiences | 2016

- 1) **Maryland's Millennials** – They are more worried about climate change than older generations, and willing to pay more for renewables
- 2) **Diverse racial groups** – They say climate is a priority issue for them and can be disproportionately at risk, but low income groups worry about costs

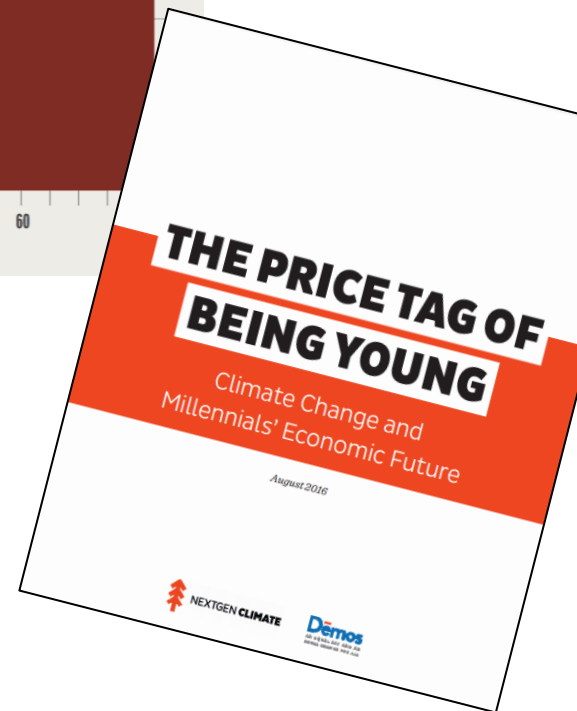
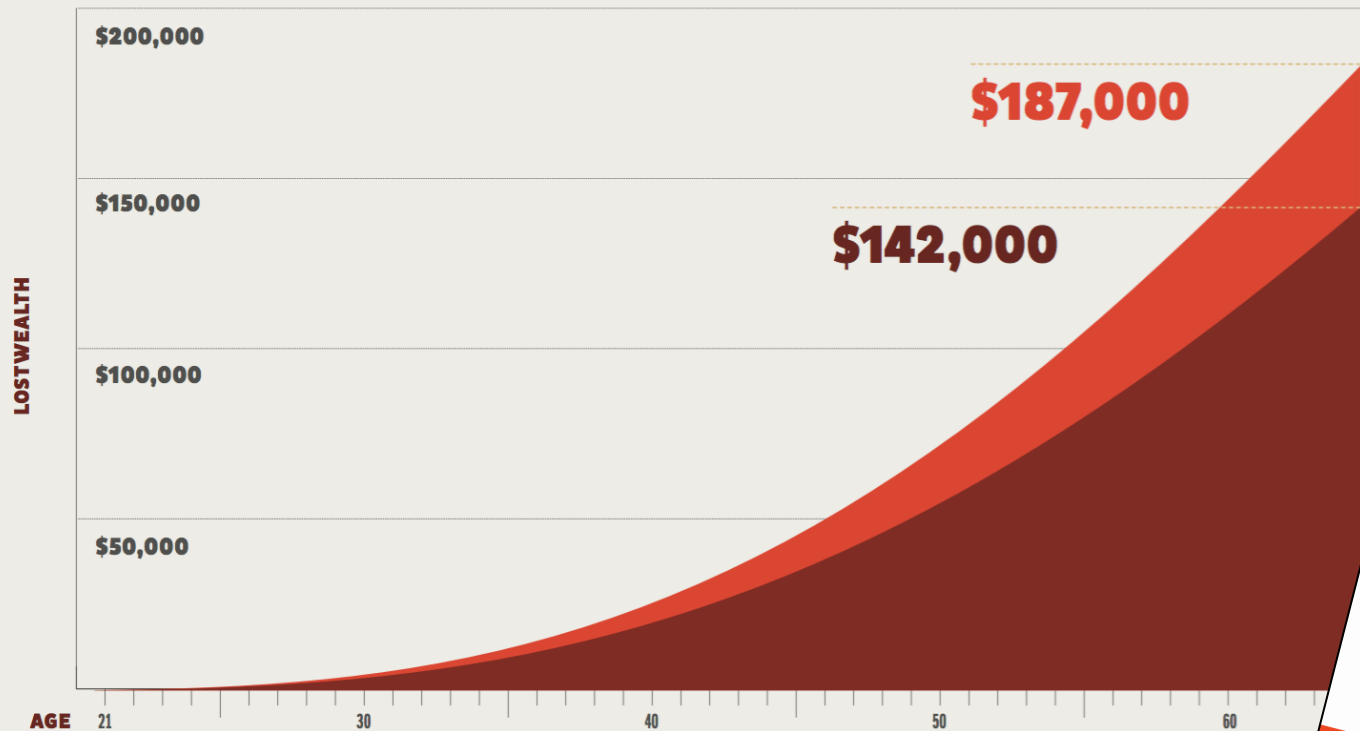


MILLENNIALS



LIFETIME LOST WEALTH FROM CLIMATE CHANGE, WORKERS WHO ARE 21 YEARS OLD AS OF 2015

■ MEDIAN EARNER
■ MEDIAN COLLEGE DEGREE EARNER



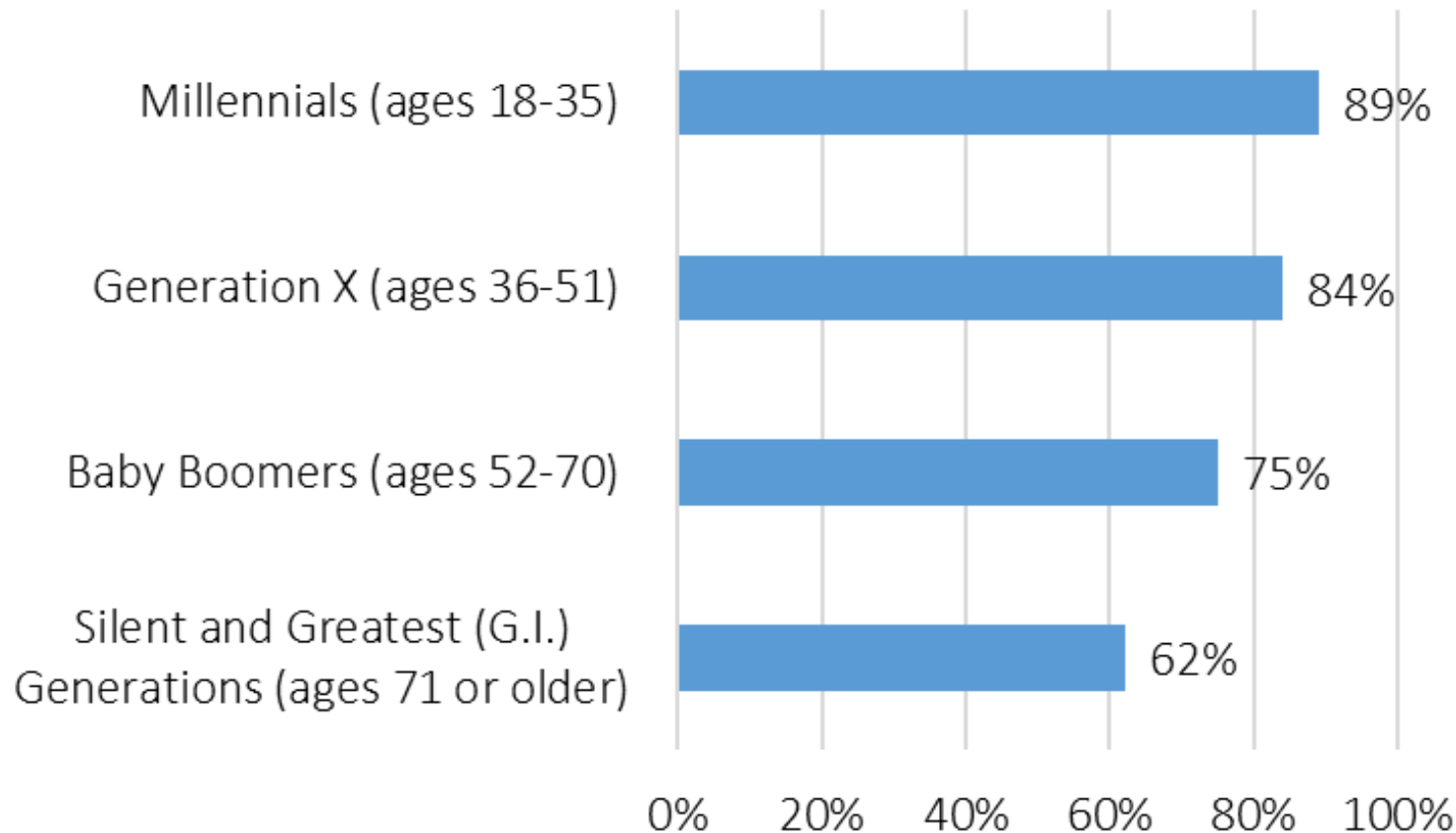
In 2016, Millennials look strong on climate and energy



- Millennials represent about a quarter of Marylanders
- While media representations paint Millennials as widely on board the climate and clean energy movement, **there has not been much evidence of this to date among the group as a whole, including in recent U.S. surveys from Yale/Mason**
- We have also not seen consistently large age effects in the Maryland data in previous years
- And this generation is stressed out—a finding of our survey and others. A majority of Maryland's Millennials reported more than one prolonged period of stress in the last year.

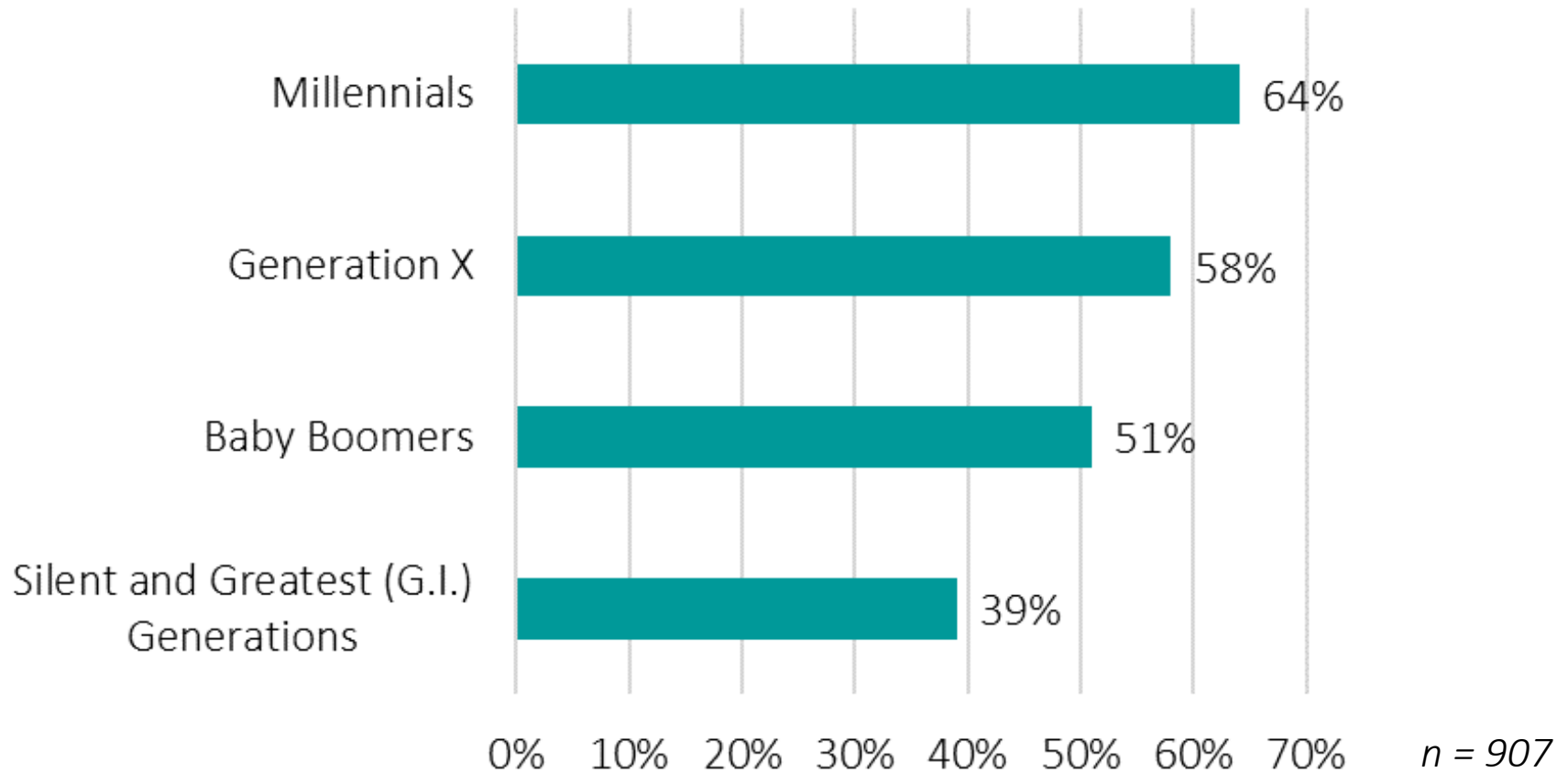
Do you think that climate change is currently happening?

Overall, **77%** of Marylanders say “yes,” but ...



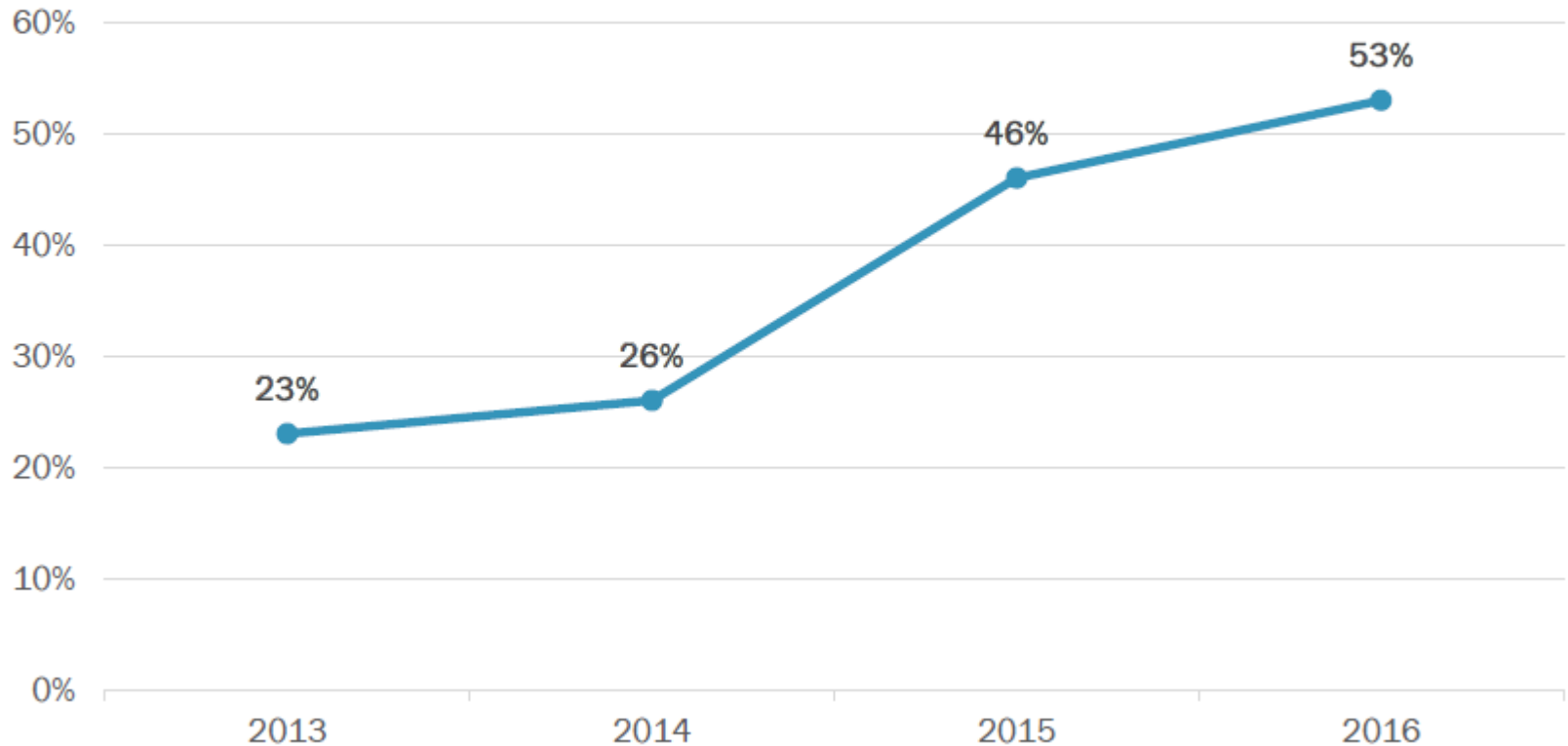
To the best of your knowledge, what percentage of [climate scientists] think climate change is happening?

Overall, **53%** of Marylanders correctly say between 81-100%, but ...



Understanding of the scientific consensus seems to be rising ...

More Marylanders now say 81-100% of climate scientists think climate change is happening



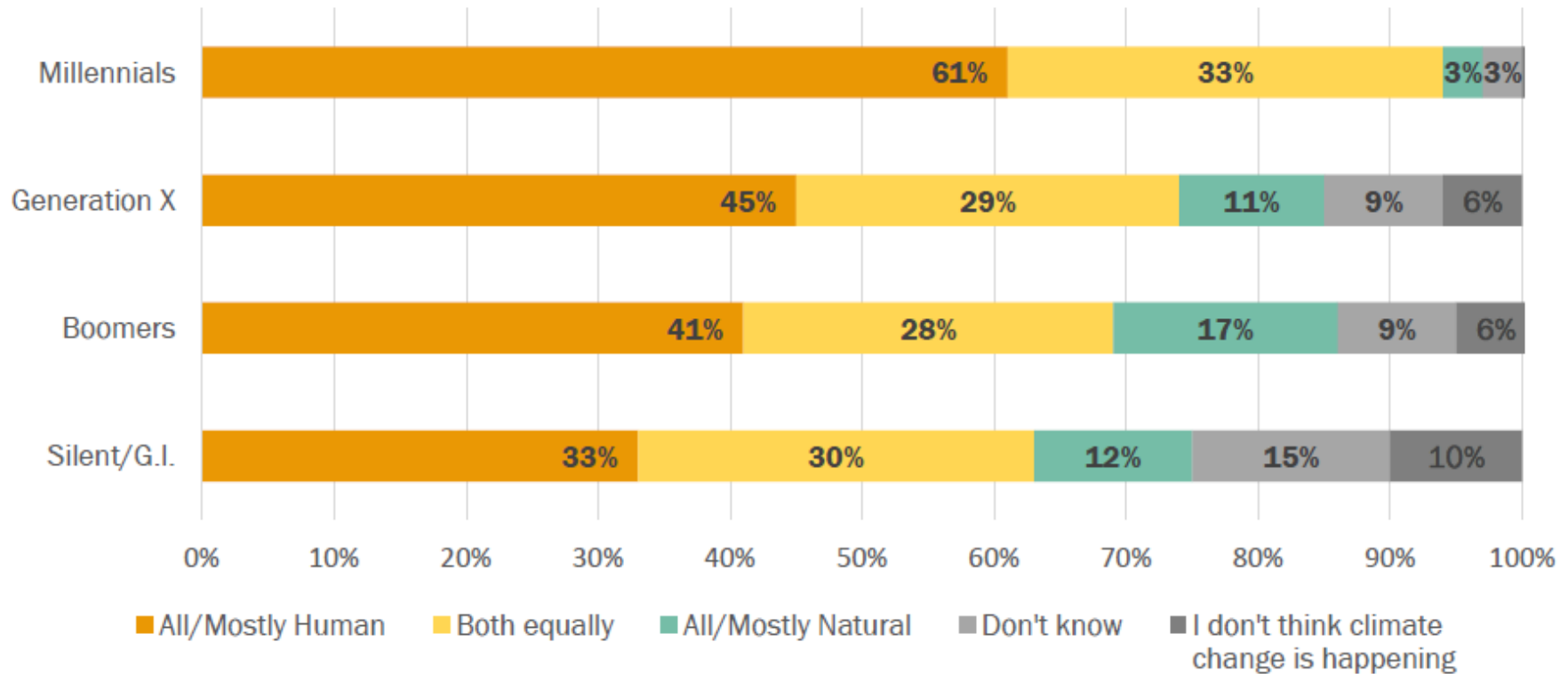
... but not of the social consensus (including among Millennials)

Table 8: To the best of your knowledge, what percentage of the following people think climate change is happening?⁶

	Under-estimate	Correct	Over-estimate	Don't know
People in my region in Maryland (Correct: 61-80%)	43%	18%	10%	30%
Statewide Marylanders (Correct: 77%)	39%	20%	8%	32%
People in the United States (Correct: 70%)	47%	18%	9%	26%
Climate scientists (Correct: 97%)	25%	53%	--%	22%

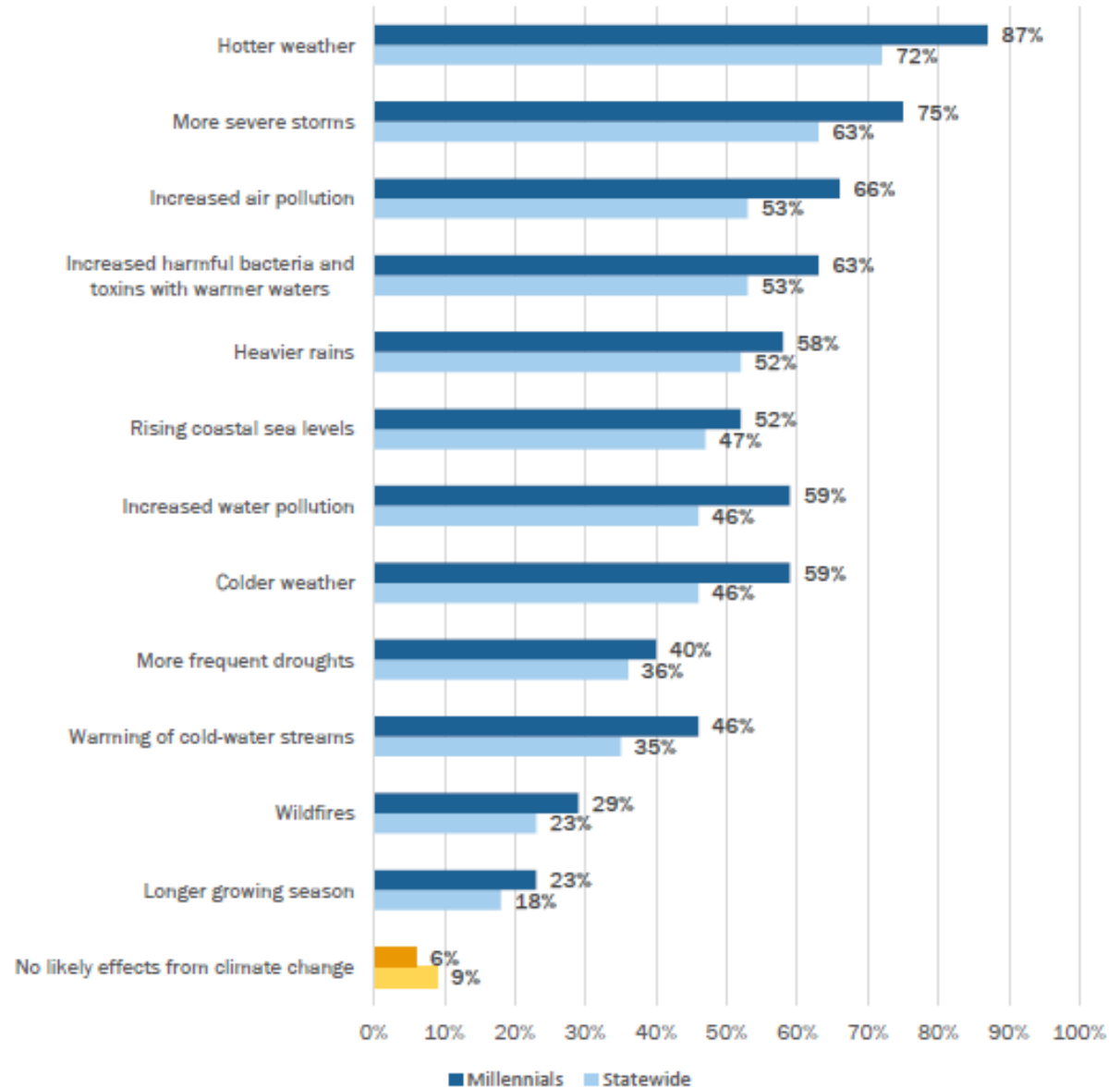
A majority of Millennials understand the human role in climate change, older generations are less likely

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



Millennials
are more likely
to cite a host of
local climate
effects as
probable

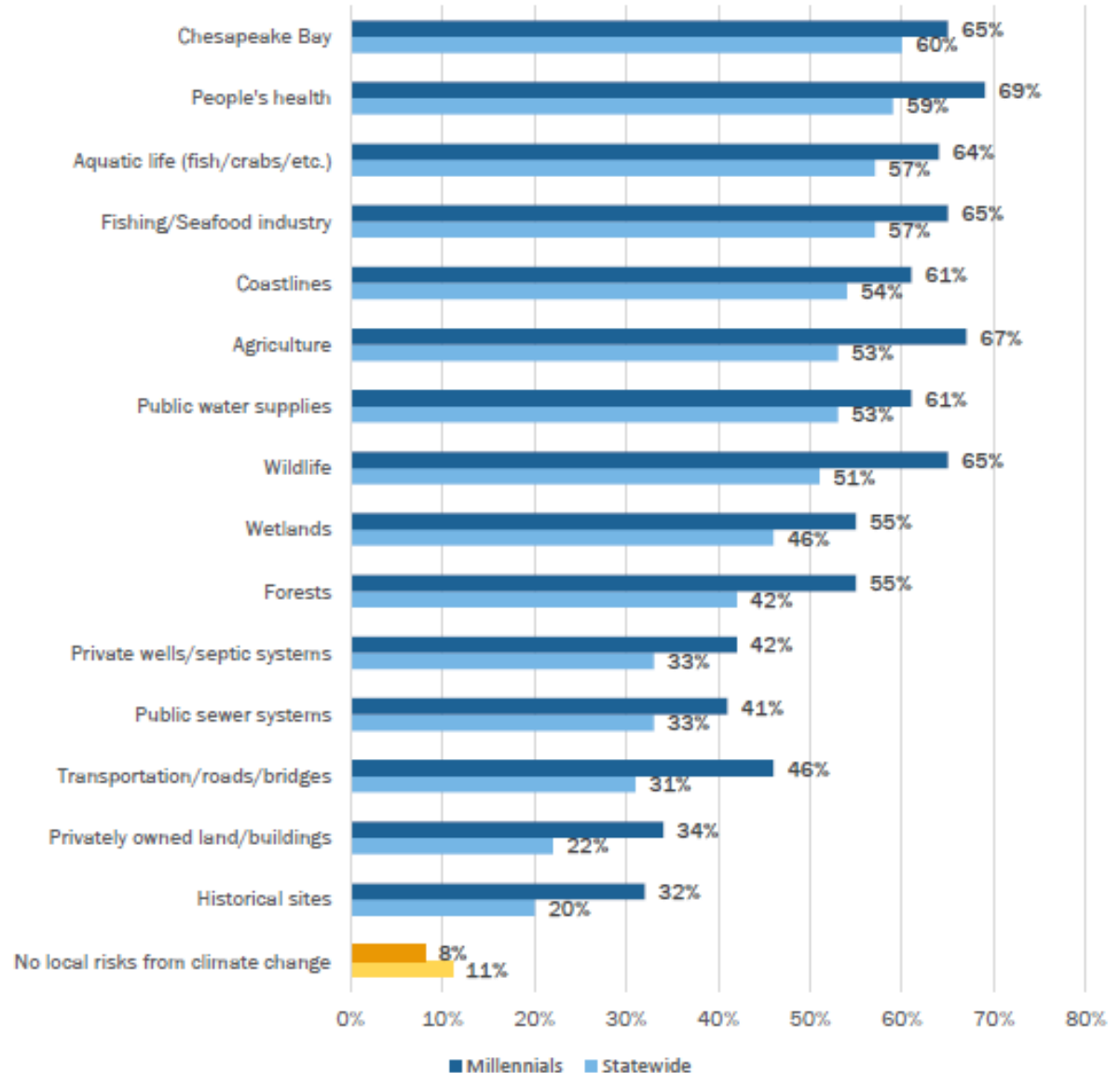
Which of the following do you think is likely to occur in your community as a result of climate change over the next 10-20 years?



n = 907

.. and the same
for harm to
resources
in their
communities
in the next
several years

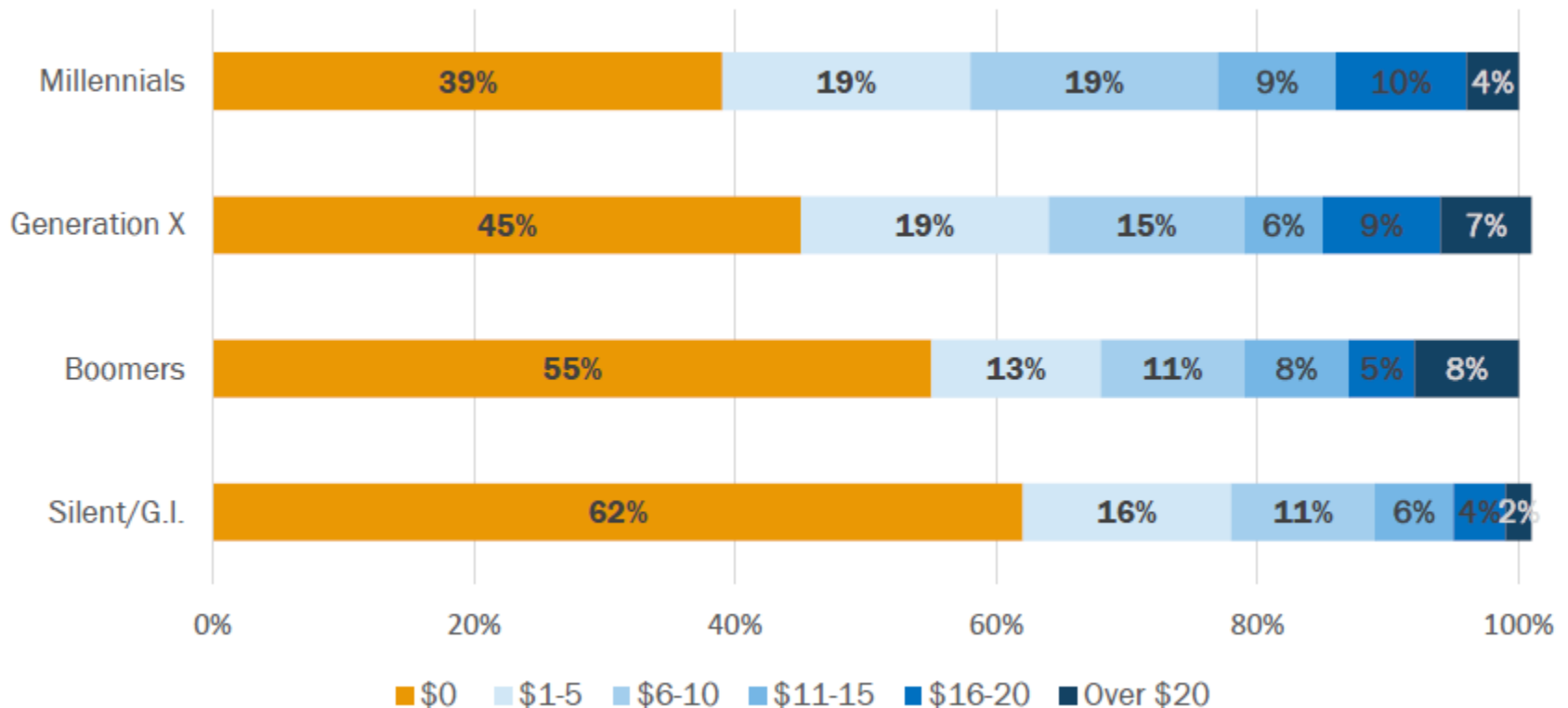
Which of the following resources in your community do you think may be harmed by climate change in the next several years?



n = 907

A majority of Millennials and Gen X are willing to pay more for wind energy

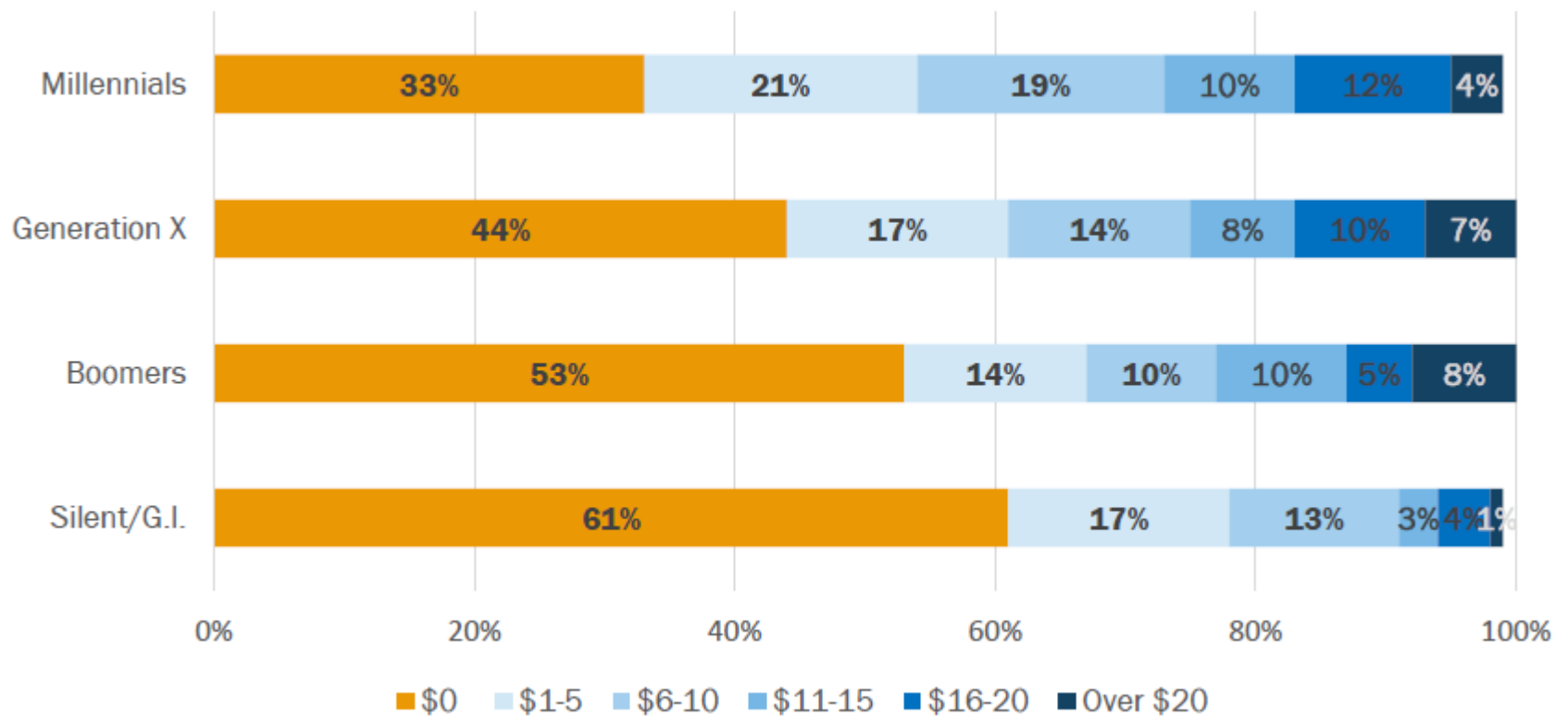
How much more would you be willing to pay each month on your electricity bill to purchase 100% of your electricity from these fuel sources? / WIND



n = 907

... and solar

How much more would you be willing to pay each month on your electricity bill to purchase 100% of your electricity from these fuel sources? / SOLAR



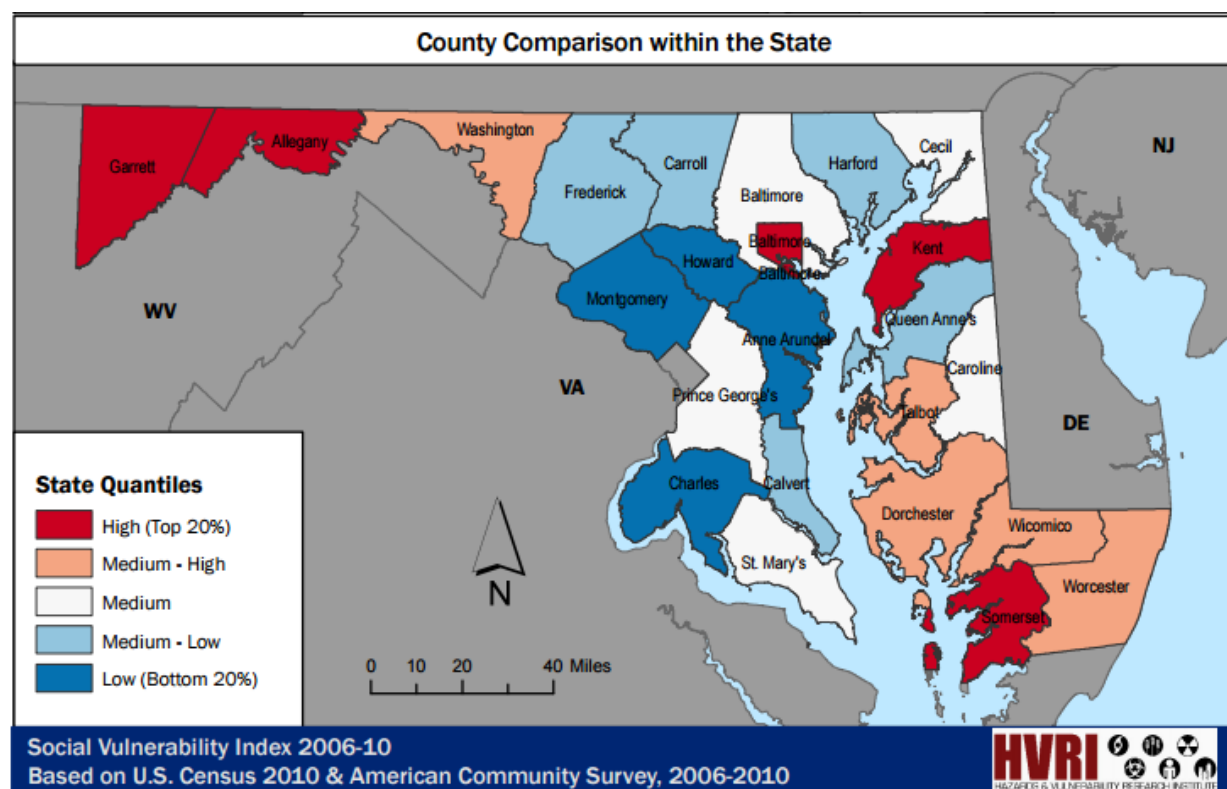
n = 907

RACIAL DIVERSITY



Maryland's **diverse groups** voice climate concerns

- They place a higher priority on climate; some are also experiencing greater environmental hazards
- The state is racially and ethnically diverse – a majority (52%) are non-Hispanic white, but 31% African American, 10% Hispanic or Latino, 7% Asian
- Maryland has the highest median income of any state in the U.S., but also significant disparities



Climate change is an environmental justice issue

- Seven in ten minorities want the General Assembly to prioritize climate change, compared with less than half of white Marylanders (46%).
- **Whites (32%) are three times more likely than minorities as a whole (10%) and almost five times as likely as black or African-American residents (7%) to say that climate change should be low or no priority.**



African Americans rate all issues as higher priority, especially inequality and transportation

**Table 2: Top priorities by race
(Rated “High” or “Very high”)**

	White	Black	Other
Lowering crime	86%	95%	81%
Improving schools	83%	96%	86%
Creating jobs	81%	97%	85%
Reducing water pollution	75%	88%	83%
Reducing home energy costs	63%	86%	79%
Reducing air pollution	64%	79%	76%
Addressing racial inequalities	42%	91%	72%
Expanding tax credits for renewable energy	50%	70%	67%
Lowering rates of asthma and respiratory disease	47%	75%	60%
Addressing climate change	46%	72%	63%
Making public transportation more accessible and affordable	41%	82%	67%
Protecting coastal areas from storms and flooding	46%	68%	57%

Lowering asthma and respiratory disease is a high priority for African Americans and low income groups

- 75% of African Americans say that state government should make it a high or very high priority to lower rates of asthma and other respiratory illnesses, compared with less than half of whites (47%).
- 71% of those with annual household incomes of under \$50,000 consider this a high or very high priority, fully 25 percentage points higher than those with annual incomes of \$50,000 or more (46%).

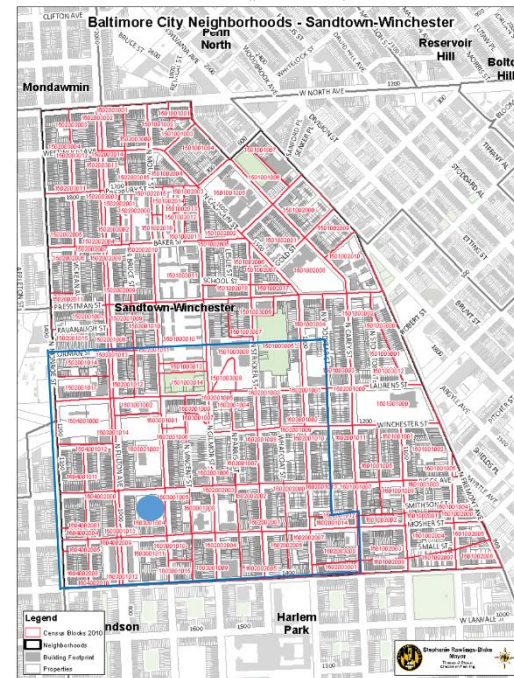
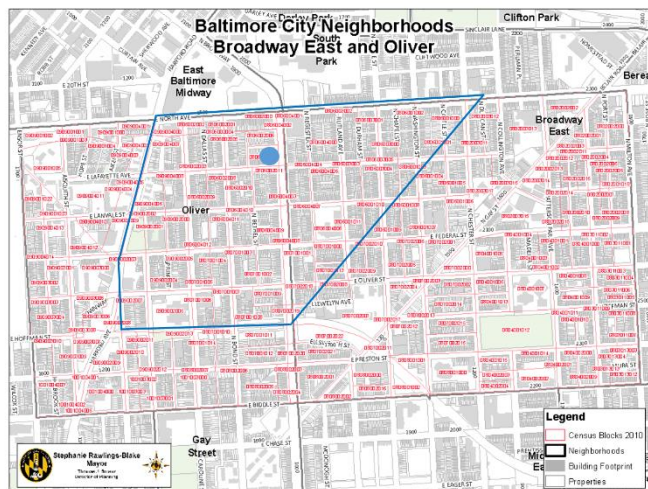
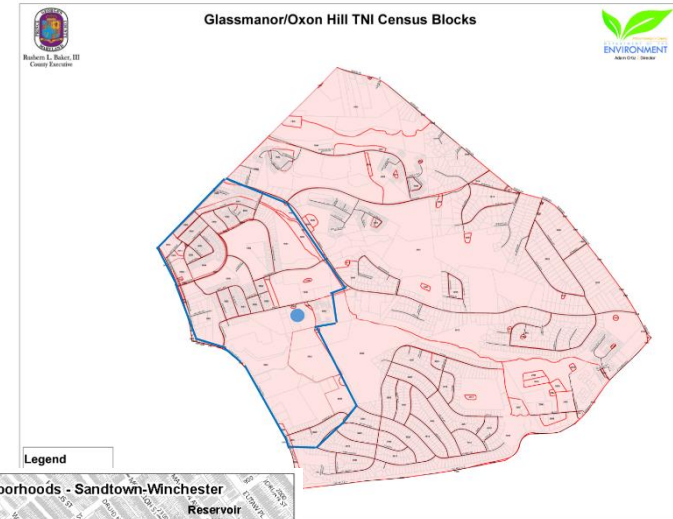
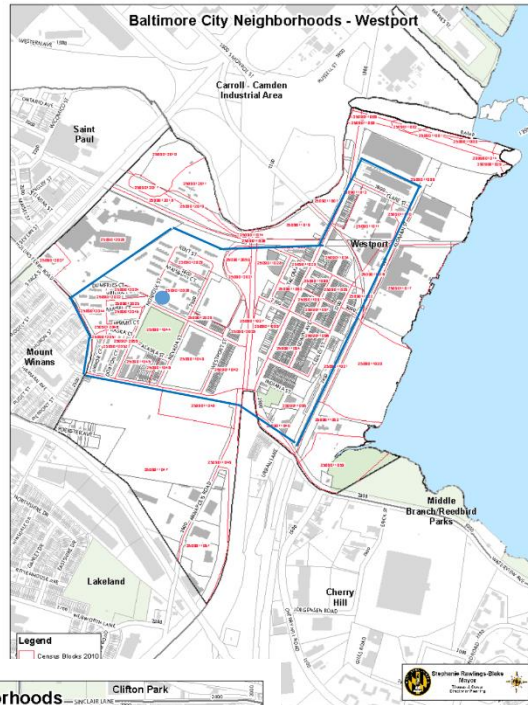
Release date Oct. 12th!



Perceptions of Community Resilience

A Maryland Community Pilot Study | 2016

4 high climate risk/low resource neighborhoods of Baltimore and Prince George's County



Resilience issues don't always look "climate": Trash is at the top of community concerns

Baltimore--Trash, housing, and drugs



Glassmanor-Oxon Hill--Police, trash, crime/gun violence



Chronic medical issues are worse in Baltimore

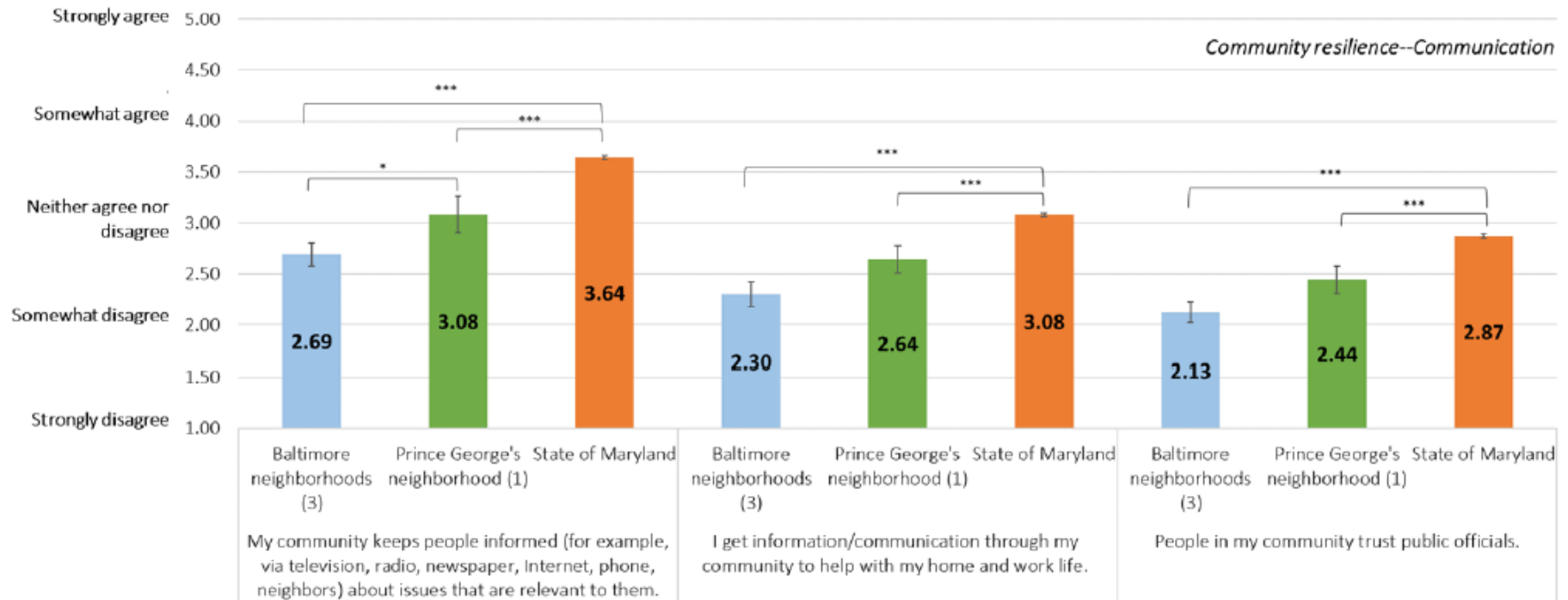
Chronic medical conditions are more pervasive in the three neighborhoods of Baltimore than they are in the state as a whole for **asthma** (23% vs. 12%), **kidney problems** (4% vs. 2%), **stroke** (9% vs. 2%), and **hepatitis** (6% vs. 2%)



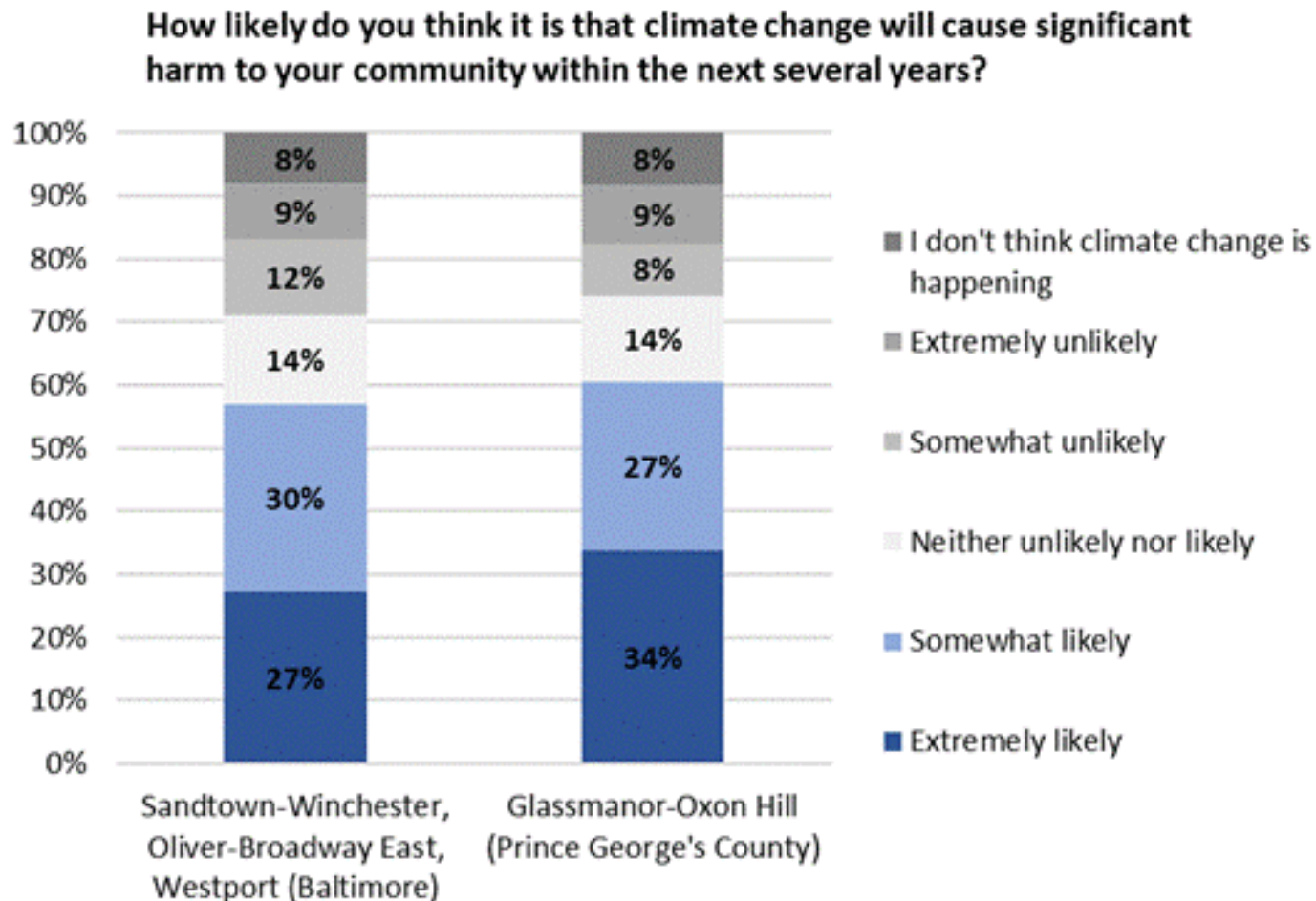
Neighborhoods have experienced greater risks in past year with fewer resources to adapt

- **water damage** caused by heavy rains or flooding (38% Baltimore vs. 15% state),
- **sewage overflows** after rains or storms (22%/19% vs. 6% state),
- **insufficient financial resources** to cover bills if unable to work for 1-2 weeks (37% Baltimore/33% Glassmanor-Oxon Hill vs. 21% state)
- lack of access to **high quality/nutritious food** (25%/14% vs. 8% state),
- lack of access to **transportation** (22%/17% vs. 10% state),
- lack of access to **medical care** (19%/14% vs. 7% state),
- no household **air conditioning** (16%/17% vs. 11% state).

Communication and trust—a part of community resilience--are lower in these neighborhoods



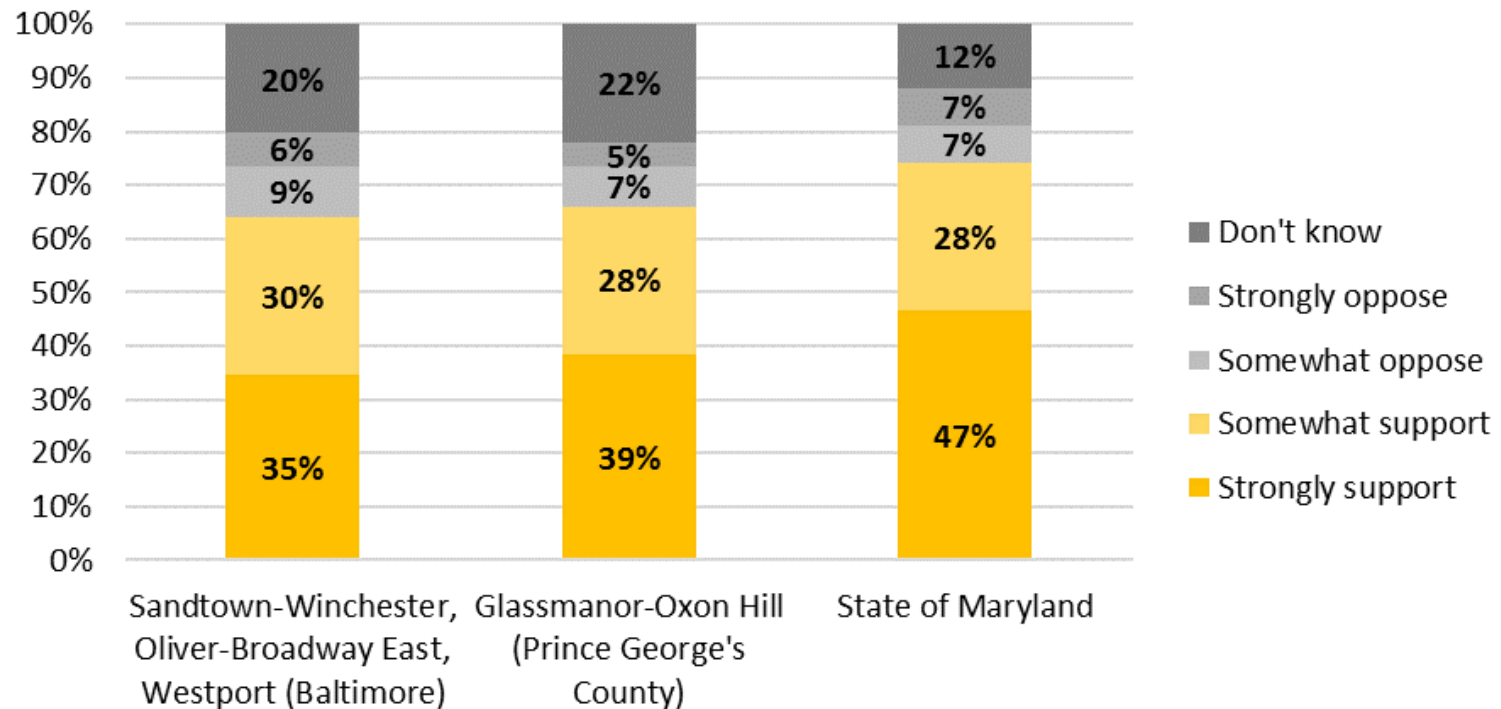
Majorities say climate change will cause their communities significant harm



Spring 2016 data

Residents say state and local governments should take protective actions against harms

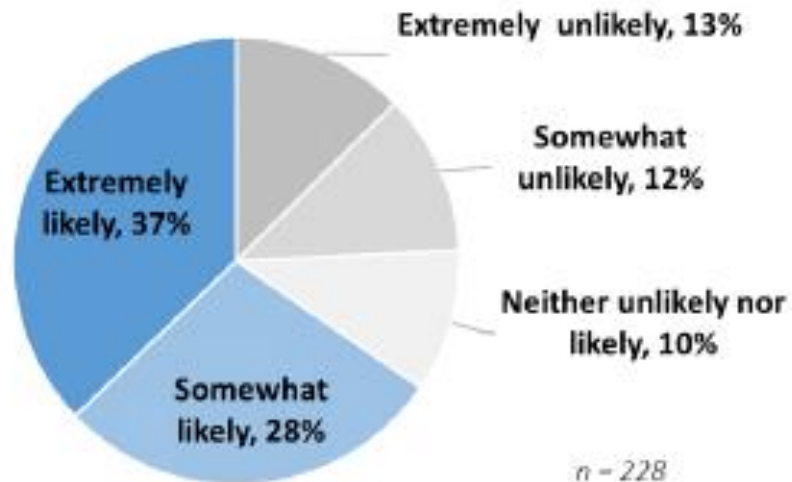
How much do you support or oppose state and local governments taking action to protect your community against harm caused by climate change (if any)?



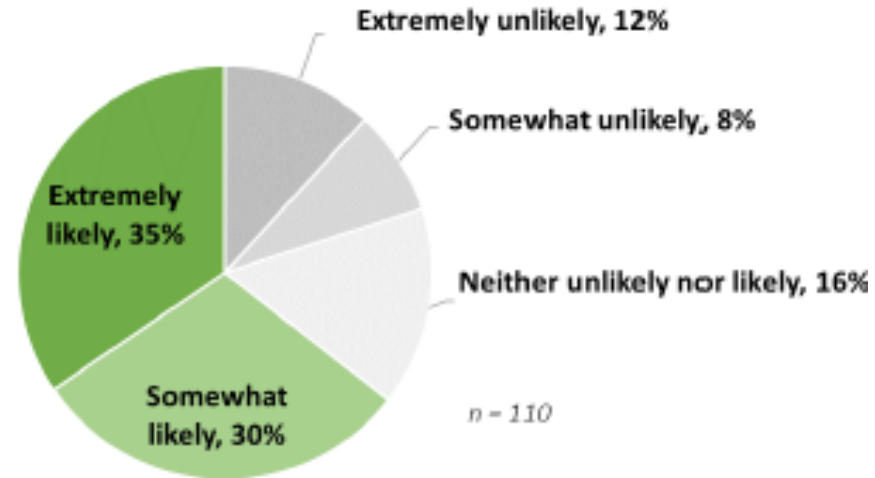
Spring 2016 data

Residents would use community resource/resilience hubs

Baltimore communities

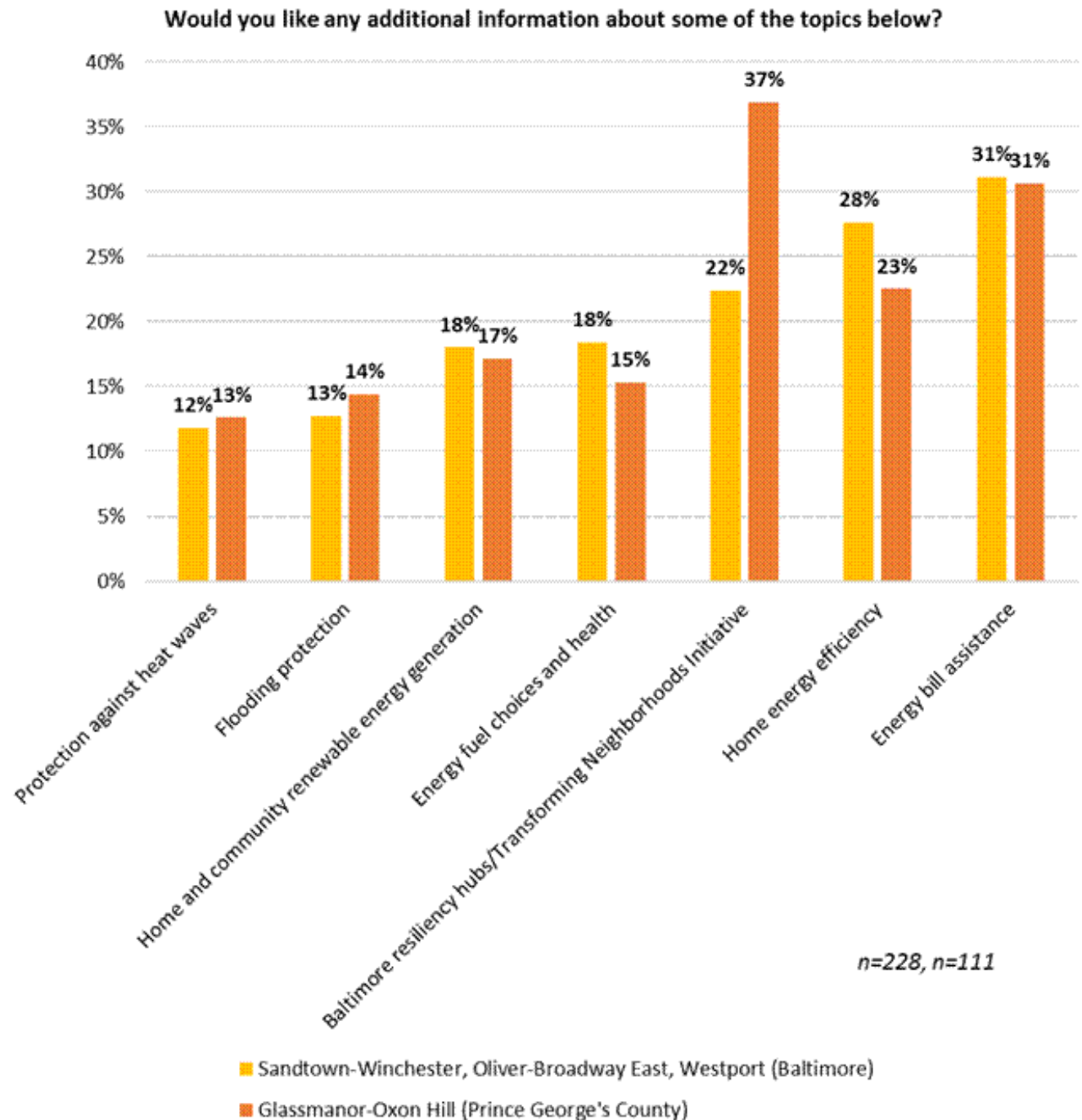


Glassmanor-Oxon Hill



Energy assistance, efficiency, and local resilience efforts are topics of interest—more than for the state as a whole

Spring 2016 data



Energy costs are an issue for all working class Marylanders



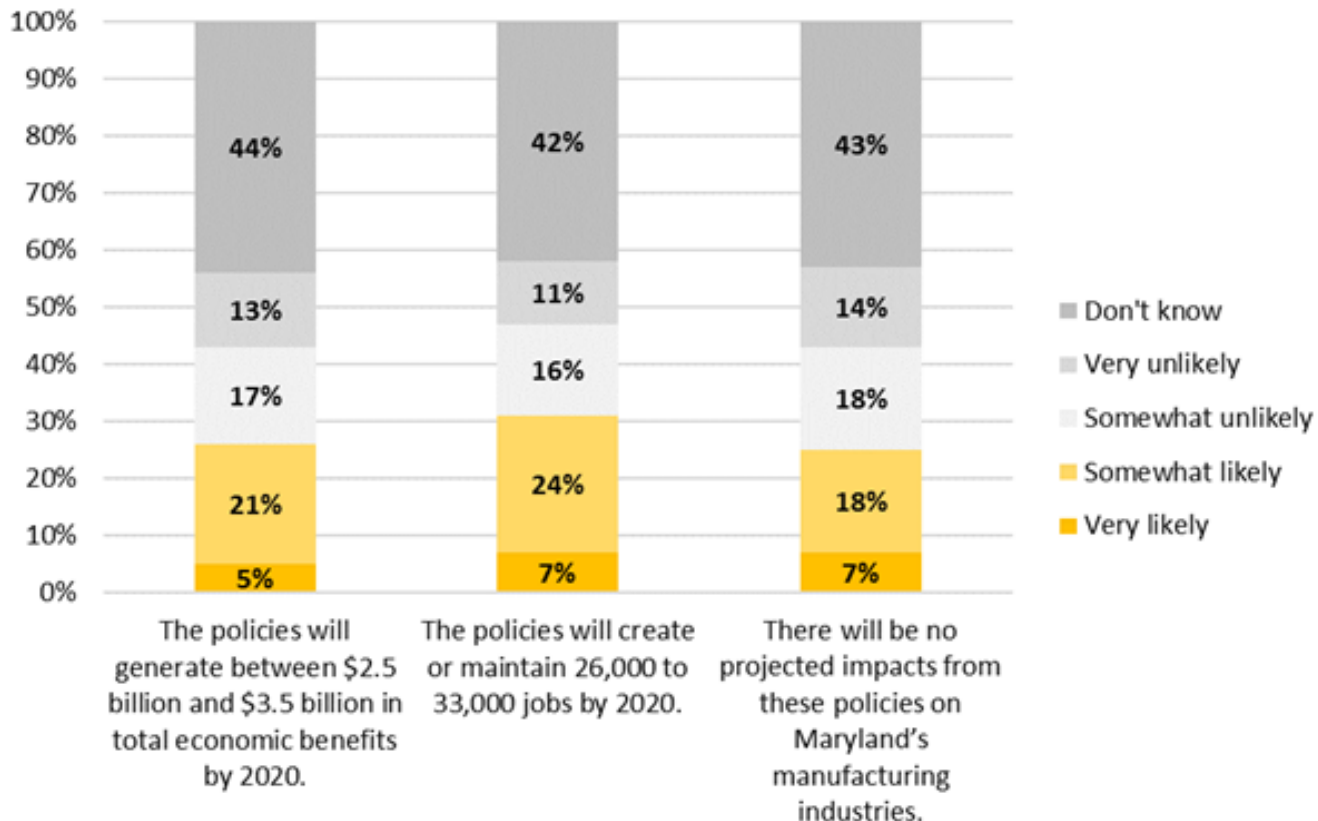
86% of working class Marylanders* want the General Assembly to prioritize reducing their home energy costs, compared with 61 percent of higher-income adults.

**Those with household incomes of under \$50,000.*

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

Maryland's audiences | What we have learned

- We may have seen a shift this summer in increased interest in climate among Millennials
- Maryland's diverse communities—including some of the most underserved—feel at risk and say climate is a top priority for them
- There is widespread uncertainty about the economic impacts of the state's GHG reduction plans and concern about energy affordability within low income groups



Maryland public opinion | Moving forward

#1. Millennials and diverse communities are on board, the challenge is maintaining that momentum and ensuring they remain part of the conversation.

#2. Economic uncertainty over the effects of climate and energy policies, and energy assistance, need to be addressed.

#3. Money is increasingly available for “climate resilience.” Governments should think broadly about what issues may increase resilience writ large, even if not clearly “climate” adaptation.



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, Johns Hopkins Bloomberg School of Public Health on the 2015 and 2016 surveys, and Jennifer Sue of PSRAI for execution and write-up of the 2016 survey results.



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