

PUBLIC OPINION SURROUNDING PLASTIC
CONSUMPTION AND WASTE MANAGEMENT
OF CONSUMER PACKAGING

A REPORT TO WORLD WILDLIFE FUND



**PUBLIC OPINION SURROUNDING
PLASTIC CONSUMPTION AND
WASTE MANAGEMENT OF
CONSUMER PACKAGING**

2020

WWF

WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

Corona Insights

Corona Insights, a Denver-based research, evaluation, and consulting firm, designed the survey instrument, managed the execution of the survey, performed all analyses, and provided this report. Corona Insights would like to thank WWF for entrusting their research to us.

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I am aware that we need to do something.... but I don't know what to do.

- Survey Respondent

EXECUTIVE SUMMARY

BACKGROUND

World Wildlife Fund (WWF) has made it a priority to combat plastic waste. To inform this work, WWF retained Corona Insights in 2020 to develop and implement research to understand the public's awareness of the issue, current behaviors around usage and recycling, and attitudes toward plastics in the United States. Of particular interest were public views on plastic as a material, especially for consumer-packaged goods. Also explored were support for possible solutions as well as understanding the perceived responsibilities of different entities.

Though the results of this research can be used to inform messaging and campaigns directed toward the general public, this report was created to primarily inform WWF's efforts to craft legislation around producer responsibility for plastic waste management by providing a rigorous assessment of the current state of public awareness, opinion, and actions.

METHODOLOGY

Careful consideration was given to the design and sampling plan for this research to ensure the results would be representative of the overall adult population.

Survey design was informed by a literature review (provided in a separate document). The survey sample was a probability-based sample from NORC's AmeriSpeak® panel. All surveys were conducted online between December 3-11, 2020. In total, 1,098 completed surveys were included in this analysis.

Additional detail can be found in the [Appendix](#).

The overall key findings are presented on the following page with additional analysis provided under the Detailed Findings section of this report.

KEY FINDINGS

01

Concern for the impacts of plastics competes with other environmental concerns.

Among environmental concerns, pollution from plastic waste was ranked in the middle, behind water pollution, air pollution, and climate change, and ahead of loss of forests, loss of habitat, and population growth.

More broadly, among a broader list of issues, 16% rated pollution from plastic waste as a “top 5” priority for the next Congress, behind such issues as healthcare, economy, and racial injustice, but ahead of reducing drug addiction, global trade issues, and sexism.

02

There is a strong belief that plastics have negative impacts, especially on the oceans and marine life.

Americans are split on whether plastics do more harm or good overall, but they do have significant concern over the negative impacts of plastics on marine life and water quality. With water pollution seen as the top environmental challenge for the United States, there is potential to more strongly link plastic waste to water pollution in Americans’ minds.

03

People want to do more, but there is only so much they feel they can do.

There is strong agreement on the need to reduce plastic waste and improve recycling. Furthermore, there is a strong desire to recycle more and a strong preference to buy things with less plastic packaging. However, most Americans do not feel they can avoid plastic packaging, nor that their individual actions will make an impact.

Relatedly, 11% of Americans recycle none of their plastic household waste and 33% recycle a little or some, with availability and uncertainty of what is accepted as the top reasons for not recycling more. Lack of access to recycling was greatest in non-metro areas where more than one-quarter reported no access.

04

Everyone has responsibility to do something, but not all responsibility is equal.

Two-thirds of Americans believe that individuals, businesses that produce/sell plastic, and government share responsibility for reducing plastic waste.

When asked to rank these groups’ responsibility, however, businesses were ranked as most responsible. Similarly, two-thirds of Americans believe that businesses that produce or use plastics in their products should pay for collecting, sorting, and recycling plastics, suggesting they believe in a cradle to grave mentality. This is 50% more than any other entity (e.g., consumers, retailers, etc.).

05

There is support for more action.

A large majority of Americans support a variety of regulations, from receiving a credit for using reusable bags, to a nationwide container refund program, to laws phasing out single-use plastics that are not recyclable.

Americans were more split on support for new fees or taxes for plastic consumption, though approximately one-half still supported these. Further, prior research has shown that desire to avoid a disliked fee or tax can be a strong motivator.

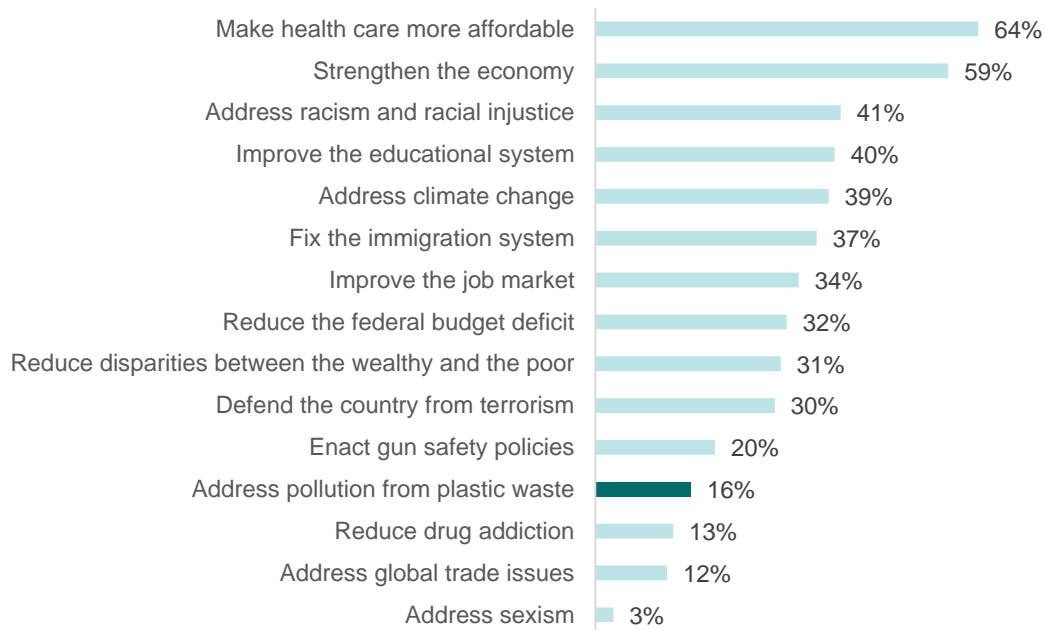
DETAILED FINDINGS

PLASTIC WASTE IN CONTEXT

To understand how plastic waste pollution is viewed in the context of other national issues, respondents selected up to five issues from a provided list of 15 issues that they believe the United States Congress should prioritize in the next two years. One in six respondents selected addressing plastic waste

pollution among their top five. More than twice as many prioritized addressing climate change and addressing racial injustice, which suggests that one way to increase the urgency of plastic pollution is to emphasize its connection to related issues that are viewed as priority items by more people.

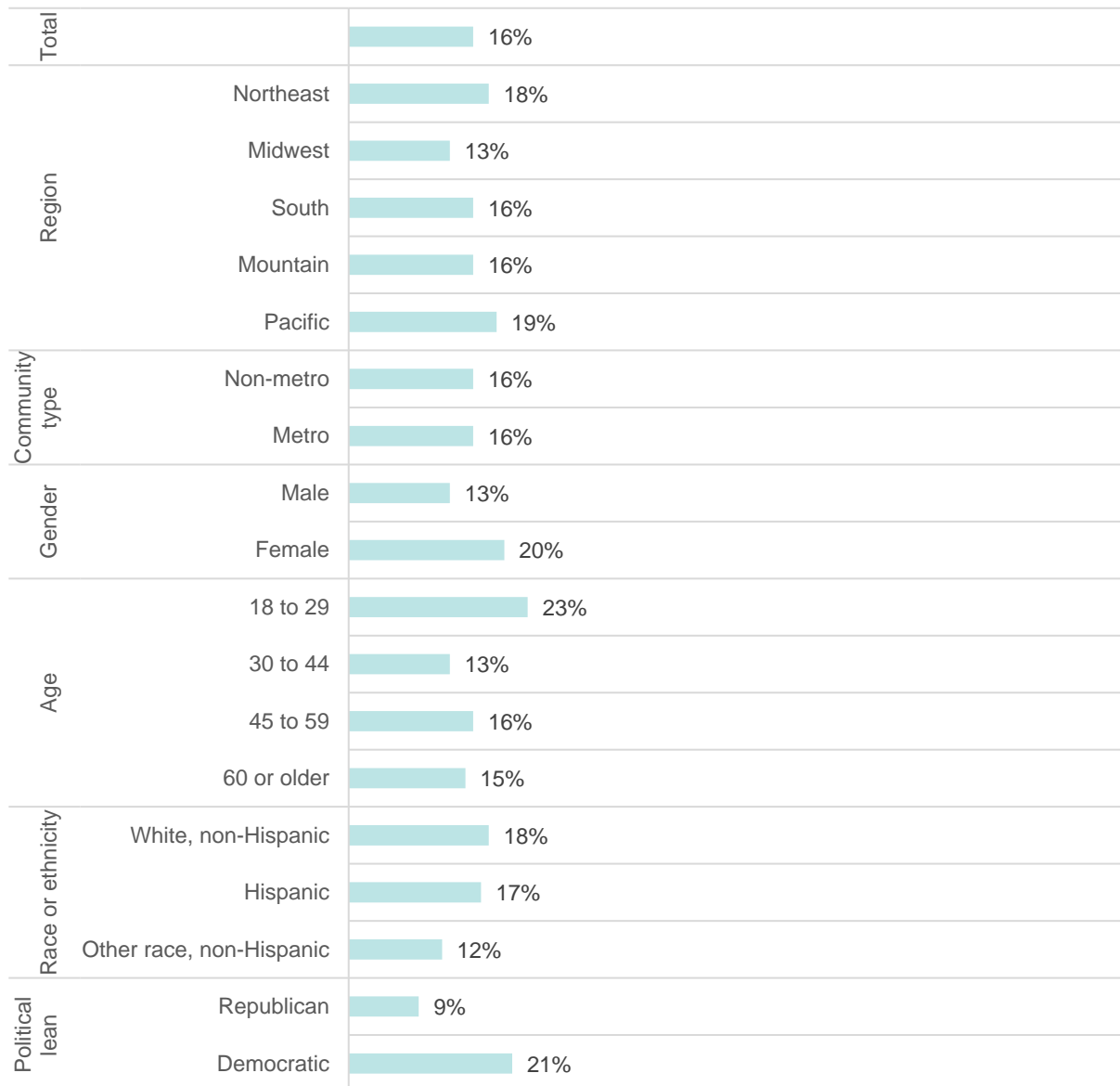
Percentage of Respondents Identifying Each Issue as a "Top 5" Priority for Congress in the Next Two Years



While the overall order of priorities was highly similar across demographic groups, some of the larger gaps in selection of plastic pollution as a top priority were between men and women (13% vs. 20% selecting as a top 5 priority), younger and older adults (23% of those 18 to 29 vs. roughly 15% of those older than

29), and Republicans and Democrats (9% vs. 21%). We also saw regional differences, with coastal residents more often selecting plastic pollution as a priority than those in the interior regions. Interestingly, there was no overall variation between metro and non-metro residents.

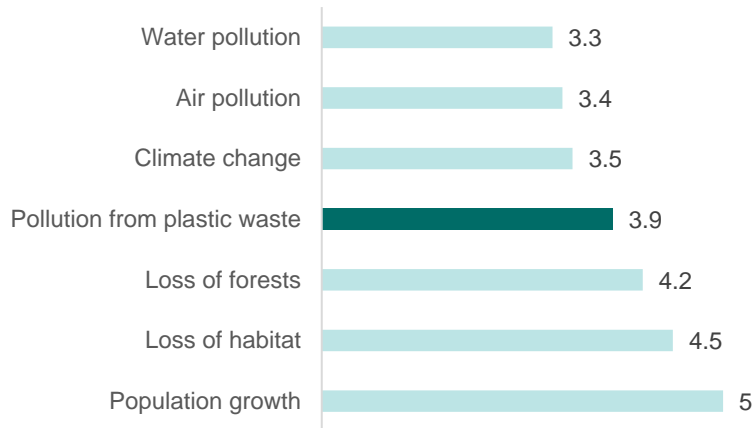
Addressing Pollution from Plastic Waste is a "Top 5" Priority for Congress in the Next Two Years



When asked to rank pollution from plastic waste among other environmental challenges, it fell in the middle of the pack, with water pollution, air pollution, and climate change being typically ranked as bigger

problems, and loss of forests, loss of habitat, and population growth typically being ranked as smaller problems, in comparison.

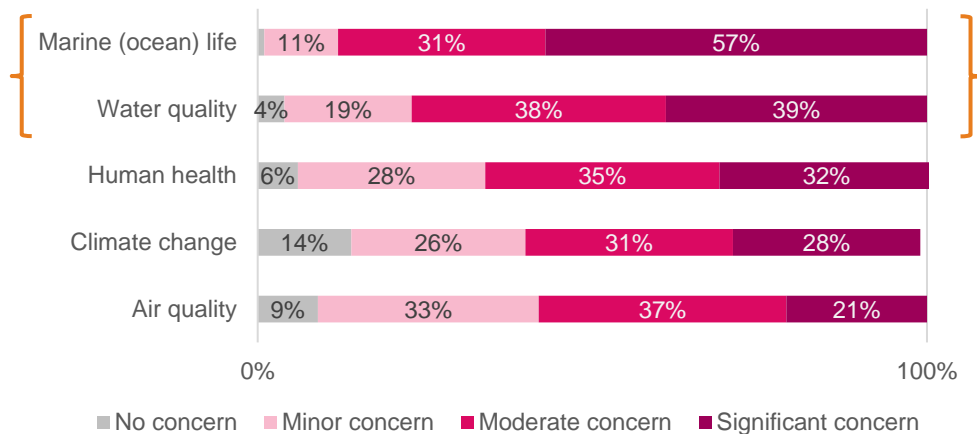
Average Ranking of Environmental Challenges (1=biggest problem to 7=smallest problem)



Relatedly, when asked whether they are concerned with any negative impacts that plastics can have on marine life, water quality, human health, climate change, and air quality, people expressed the greatest concern with the negative impact of plastics

on marine life, followed by water quality. This finding corroborates results from other research discussed in the literature review: plastic pollution is often associated with concerns for marine life.

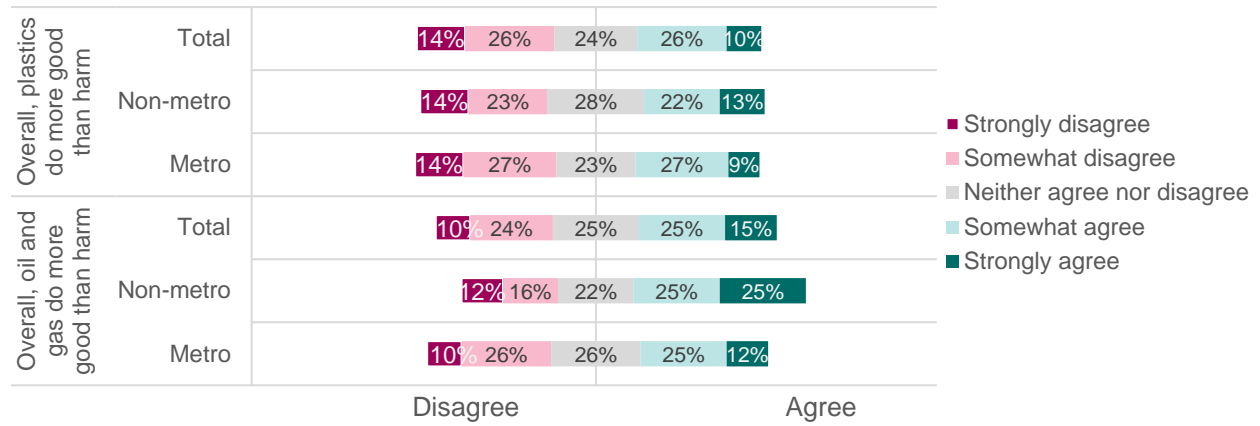
Concern for Negative Impact of Plastics



Americans are evenly divided on whether plastics do more good than harm, with just over a third each agreeing and disagreeing. This was true for both metro and non-metro residents. Metro residents were

similarly divided on whether oil and gas do more good than harm, whereas non-metro residents were more likely to agree that oil and gas do more good than harm.

Beliefs About Plastics vs. Oil and Gas Metro vs. Non-Metro Residents

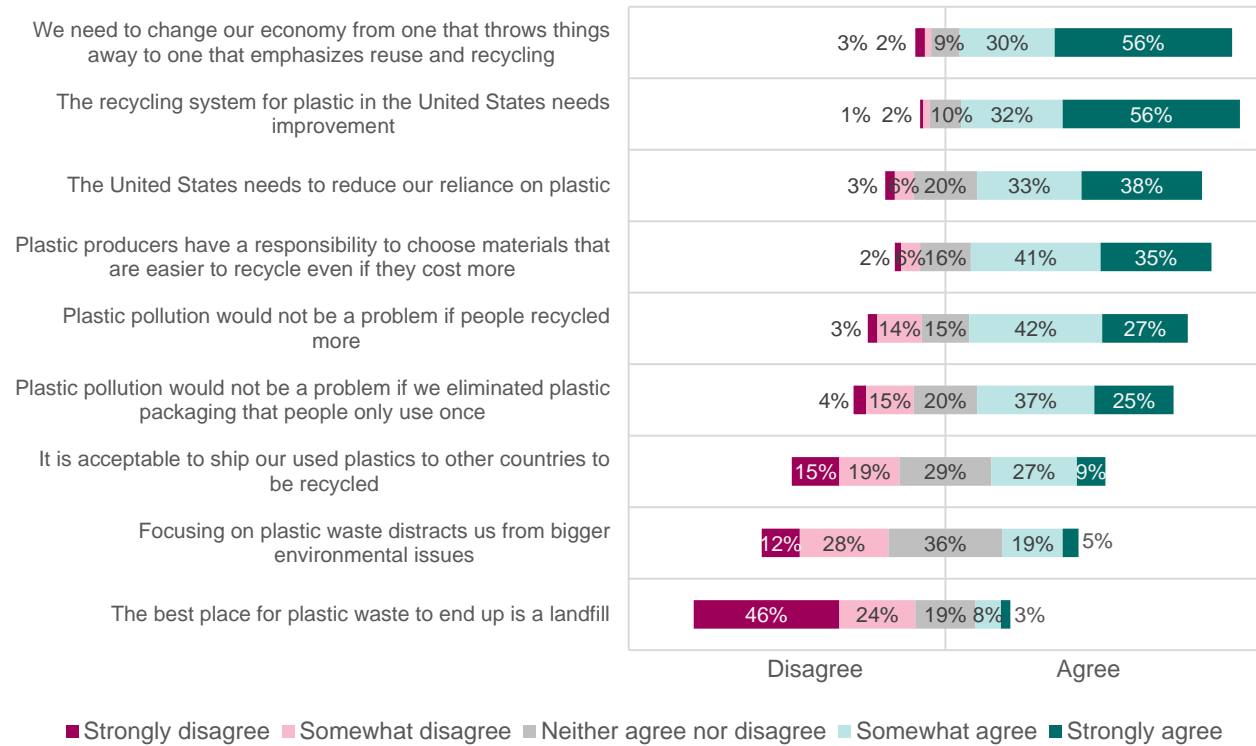


ATTITUDES TOWARD PLASTICS & PLASTIC WASTE

A clear majority of Americans hold similar positive opinions about changing the recycling system. For example, there was very strong agreement that *The recycling system for plastic in the United States needs improvement*, and that *We need to change our economy from one that throws things away to one that emphasizes recycling*. Similarly, a clear majority

of Americans disagreed that *The best place for plastic waste to end up is a landfill*. However, there was notable polarization over two statements: *It is acceptable to ship our used plastics to other countries to be recycled* and *Focusing on plastic waste distracts us from bigger environmental issues*.

Agreement with Statements about Plastics & Plastic Waste

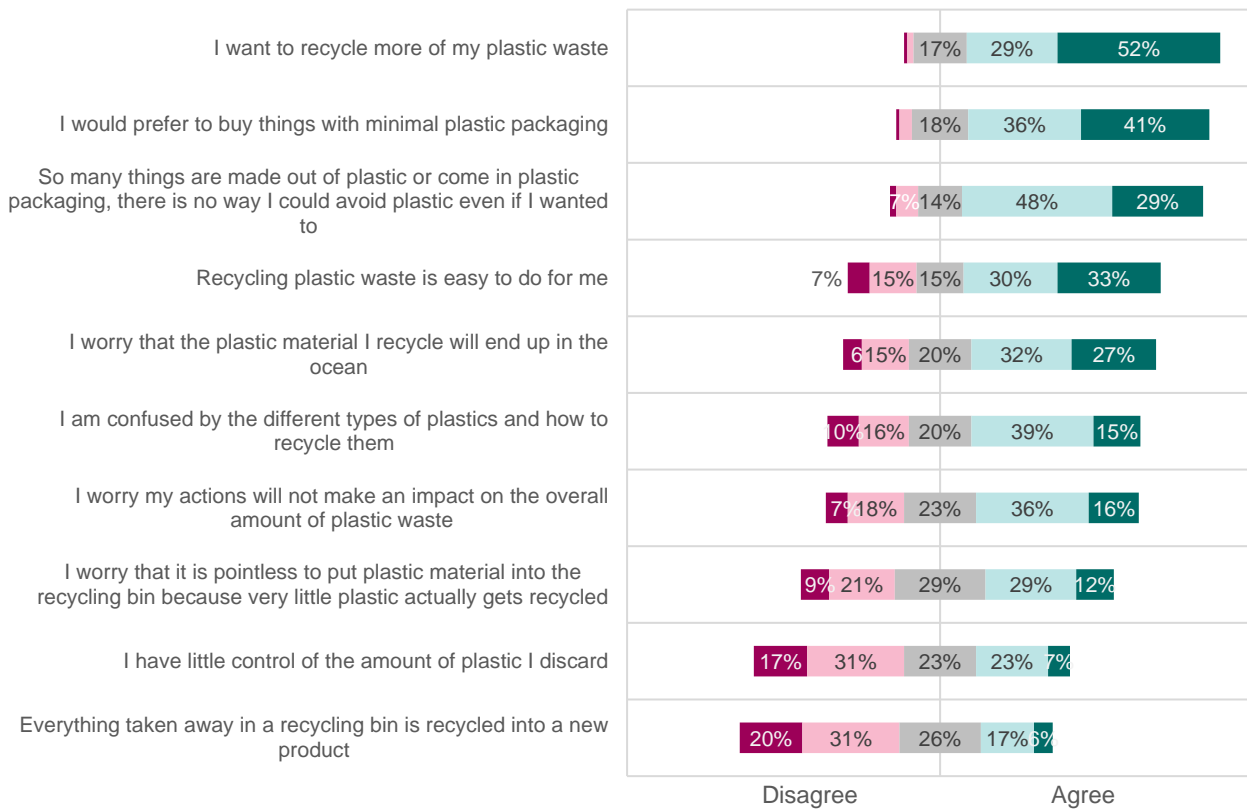


ATTITUDES ABOUT PERSONAL USE AND DISPOSAL OF PLASTICS

A majority agreed that they *want to recycle more of their plastic waste, would prefer to buy things with minimal plastic packaging, and feel that as so many things are made out of plastic or come in plastic packaging, there is no way they could avoid plastic even if they wanted to.* More than half of Americans worry that the plastic material they recycle will end up in the ocean, worry that their actions won't make an impact on the overall amount of plastic waste, and are confused by the different types of plastics and how to recycle them. Interestingly, a majority also agree that *recycling plastic is easy for them to do* and disagree that they *have little control over the amount of plastic they discard.* People are about evenly split on whether *it is pointless to put plastic material into the recycling bin because very little of it gets recycled.*

On the whole, while people would like to buy less plastic and see buying it as somewhat unavoidable, people believe they have a fair amount of control over whether they recycle or discard plastic waste (perhaps responding only based on whether they have easy access to a recycling bin). Nearly one in four agree that *everything taken away in a recycling bin is recycled*, which suggests that flaws in the existing recycling system may not be widely known. One-third of non-metro residents agreed that everything taken away in a recycling bin is recycled, as did 32% of Hispanics, and 34% of non-Hispanic, people of color (vs. 17% of non-Hispanic Whites), and 28% of those with less than a bachelor's degree (vs. 14% of those with a bachelor's degree or higher).

Agreement with Statements about Personal Use & Disposal of Plastics

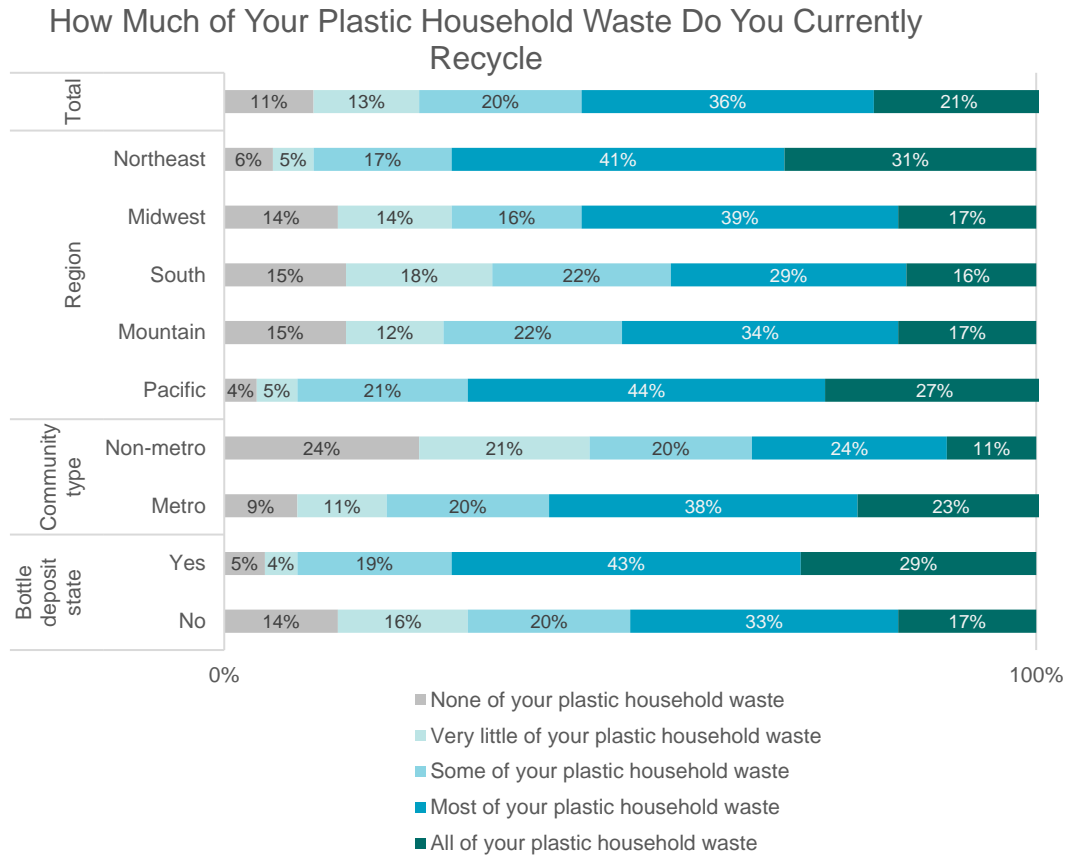


■ Strongly disagree ■ Somewhat disagree ■ Neither agree nor disagree ■ Somewhat agree ■ Strongly agree

PLASTIC USE & RECYCLING BEHAVIOR

One in five respondents reported recycling all their plastic household waste. Even greater proportions of residents in the Northeast and Pacific regions, as well as metro communities, and those in bottle deposit states, report recycling all their plastic household waste. This may suggest that people interpreted this

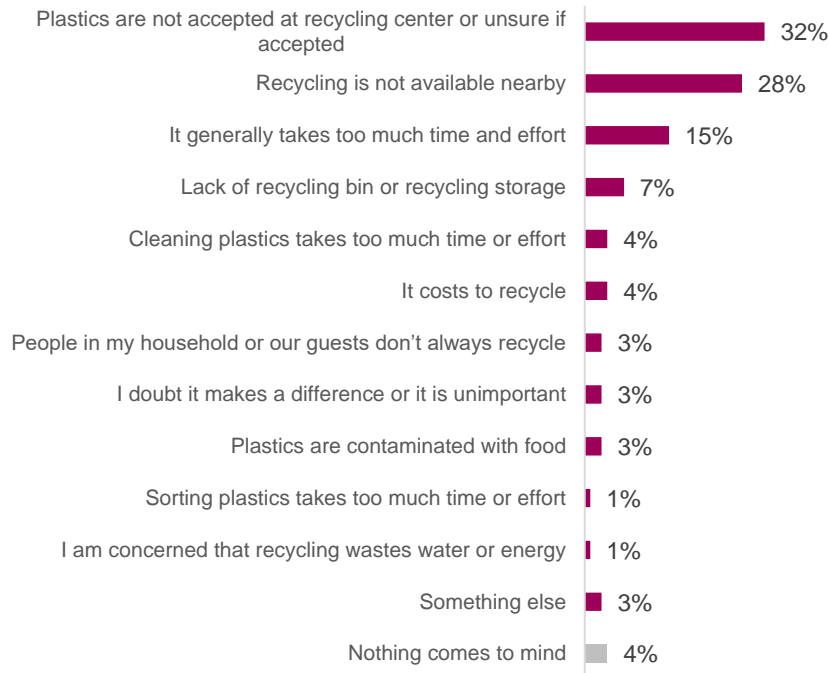
question as asking about “recyclable” plastic waste, or that people are not separating recyclable from non-recyclable plastics, or that they are perhaps not seeing certain plastic waste as plastic. One-quarter of non-metro residents said they do not recycle plastics at all.



The most common reasons for not recycling all plastic waste were that certain plastics are not accepted at their recycling center or that recycling is not available nearby. General time and effort of recycling was also

a common reason for not recycling more, and needing to clean plastics tends to be a more common barrier than needing to sort them. Few respondents indicated that recycling wasn't worth doing.

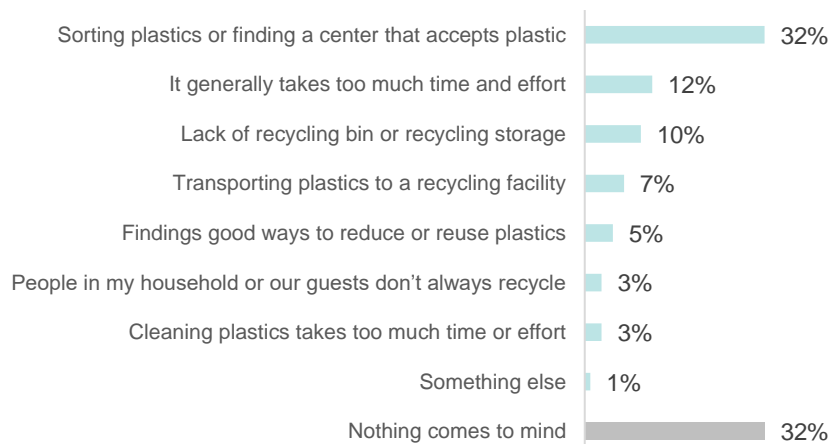
Barriers to Recycling More Household Plastic Waste (coded from open-ended responses)



Among those claiming to recycle all their plastic household waste, most said the largest challenge they had overcome in order to recycle all of their

plastic household waste was sorting plastics or finding a center that accepts plastic. Similarly, making the time and effort was also commonly cited.

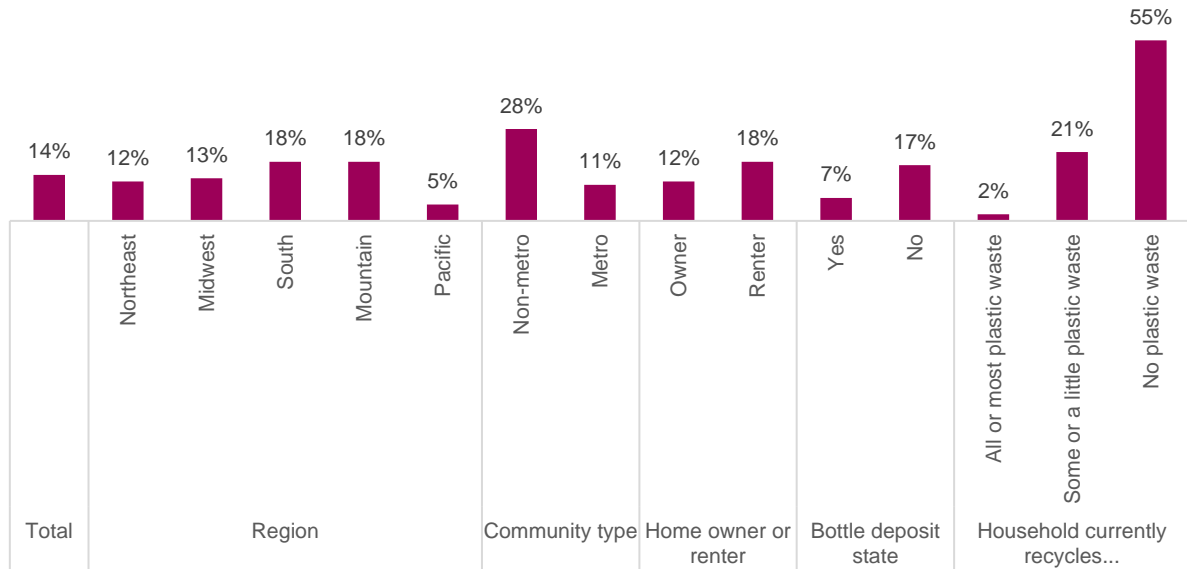
Barriers Overcome in order to Recycle All Household Plastic Waste (coded from open-ended responses)



About one in seven Americans said they have no access to recycling in their community. Those in the South and Mountain regions were most likely to not have access to recycling, as were those in non-metro communities, renters, and those in states without

bottle deposits. Consistent with previous survey questions, more than half of those who said they do not currently recycle any plastic waste also said they have no access to recycling.

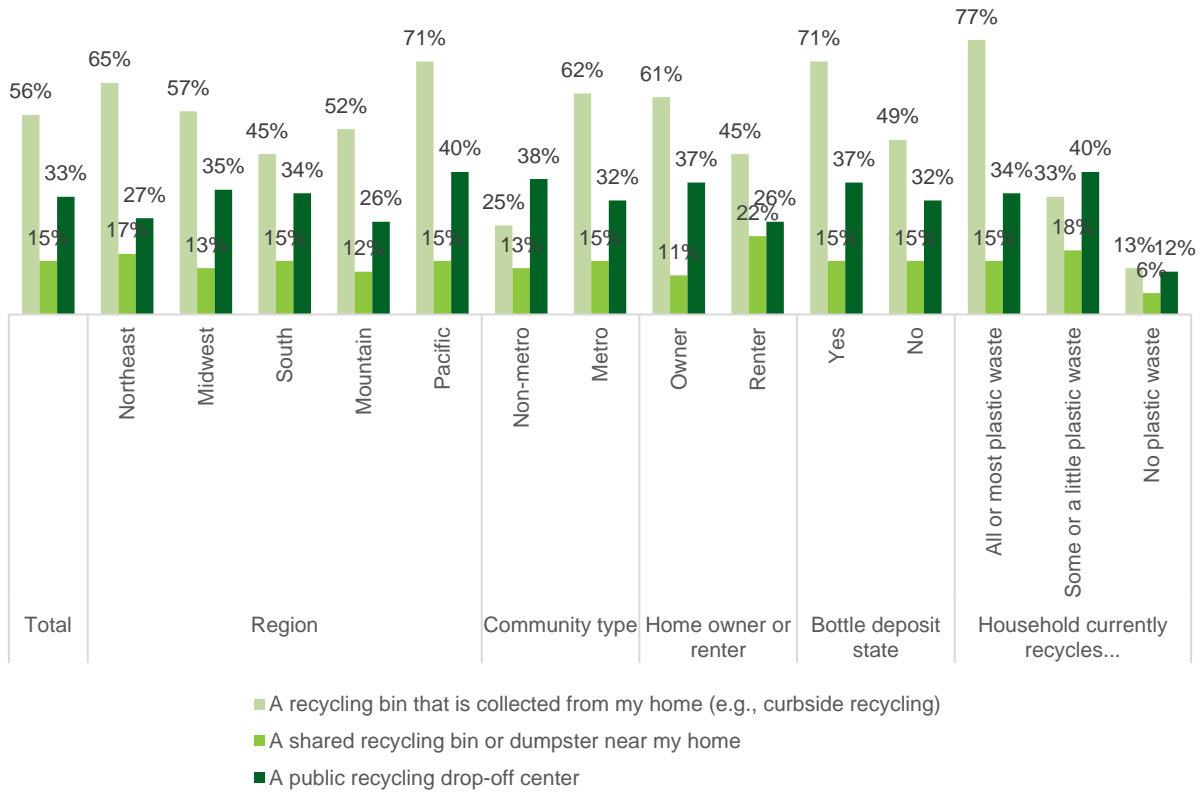
No Access to Recycling



More than half of those surveyed said they had access to a recycling bin that is collected from their home (e.g., curbside recycling). This was more

common among Northeast and Pacific residents, metro residents, and homeowners.

Access to Recycling

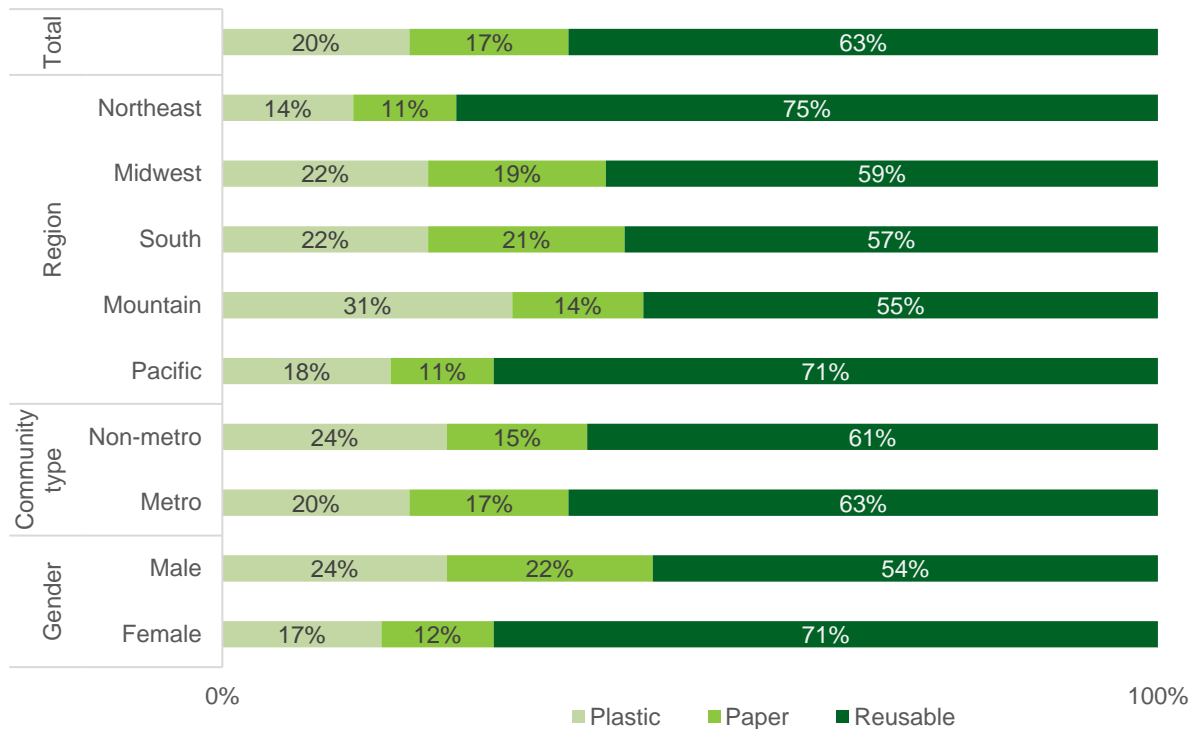


RESPONSIBLE PARTIES & SUPPORT FOR REGULATIONS

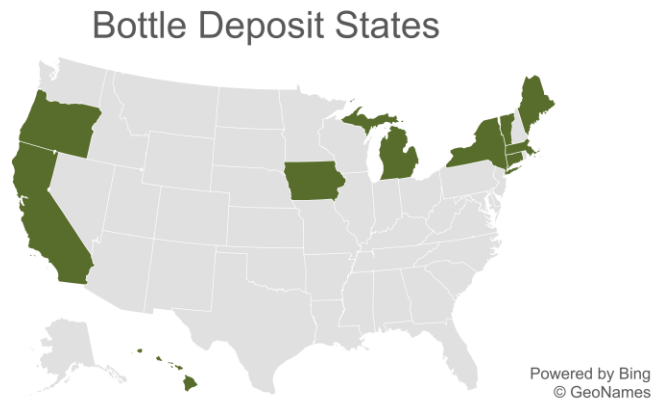
A majority of people said they prefer to use a reusable shopping bag for regular shopping trips, such as for groceries. Plastic is the next most preferred, followed by paper. Reusable bags are most strongly preferred by those in Northeast and Pacific regions and by women. Prior research, described in the accompanying literature review, found a similar

gender difference in bag preference. The wide gender split may suggest that reusable bags are seen as more of a feminine product. Men preferred paper bags about twice as often as women (note that women are more likely than men to do household shopping). Mountain region residents preferred plastic more than those in other regions.

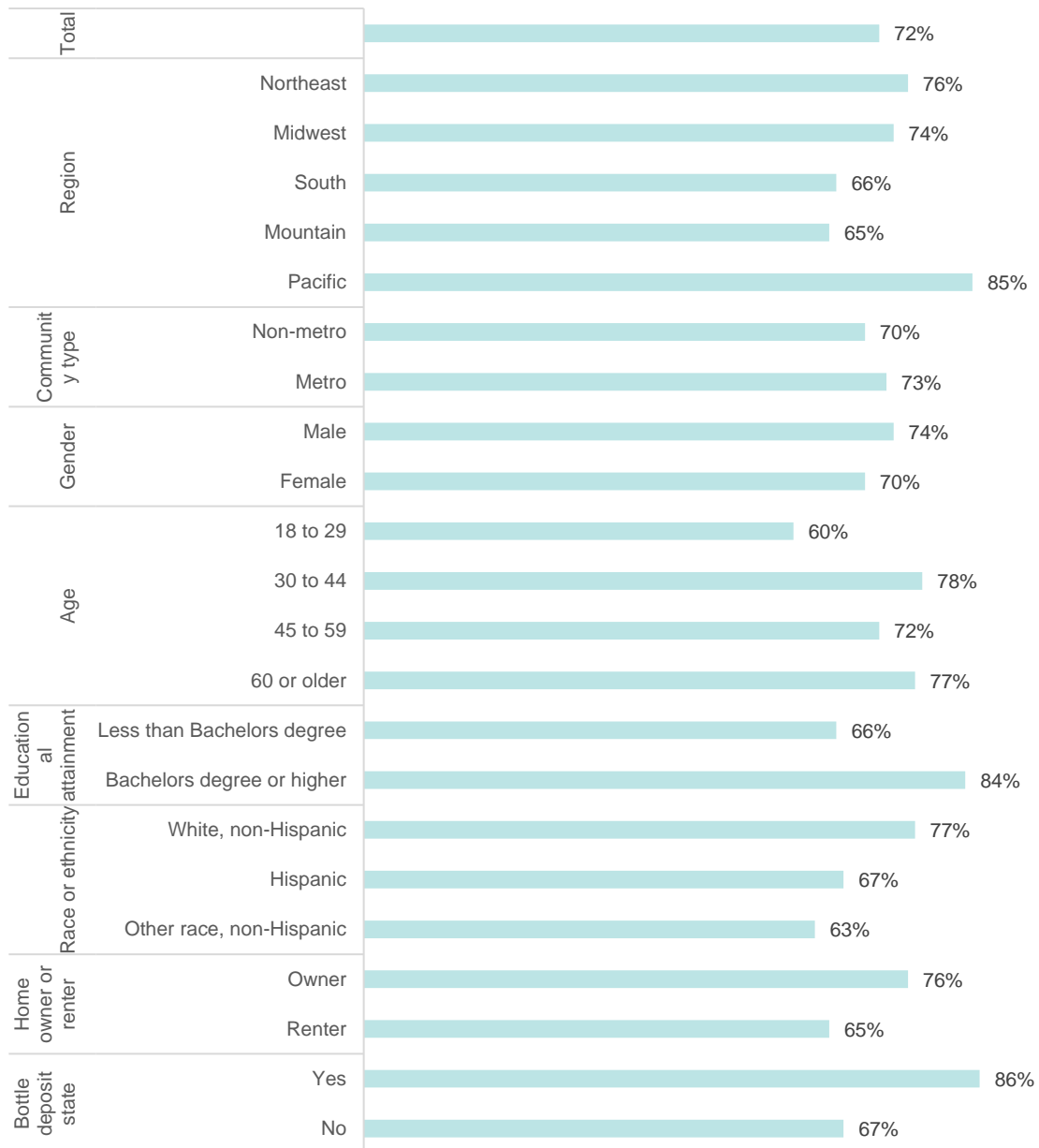
Preferred Shopping Bag for Groceries



States with bottle deposit laws include California, Oregon, and Hawaii in the Pacific region; Connecticut, Maine, Massachusetts, New York, and Vermont in the Northeast region; and Iowa and Michigan in the Midwest. Those in bottle deposit states were more often aware of bottle deposit laws, as were people aged 30 or older and those with higher educational attainment. White, non-Hispanic residents were more often aware of bottle deposit laws than were people of color. There was little difference between genders or metro/non-metro residents.



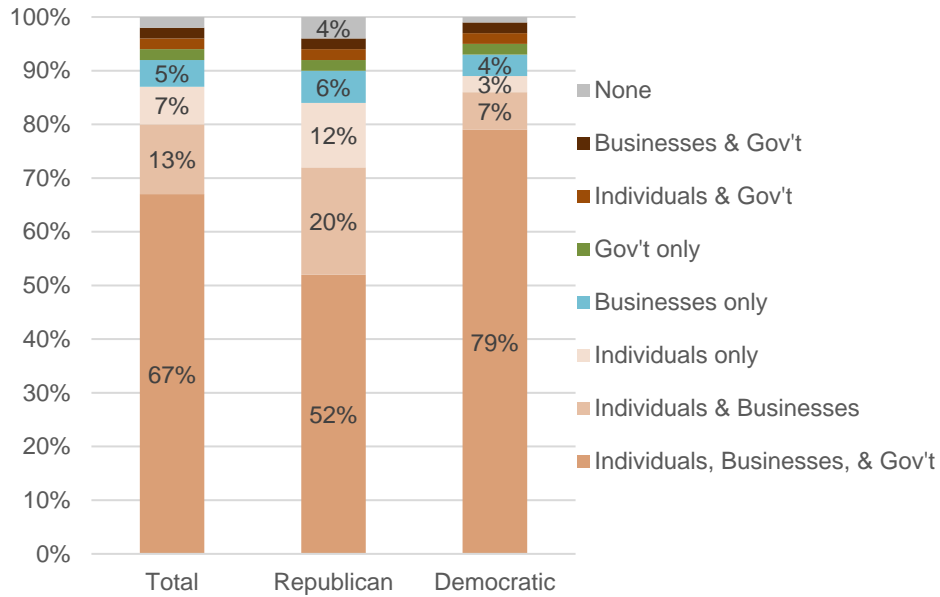
Awareness of Bottle Deposit Laws



When asked to select all the groups responsible for reducing plastic waste, a majority of people selected all three groups offered: individuals, businesses, and government (67% chose all three). Among Democrats, nearly 80% chose all three, compared

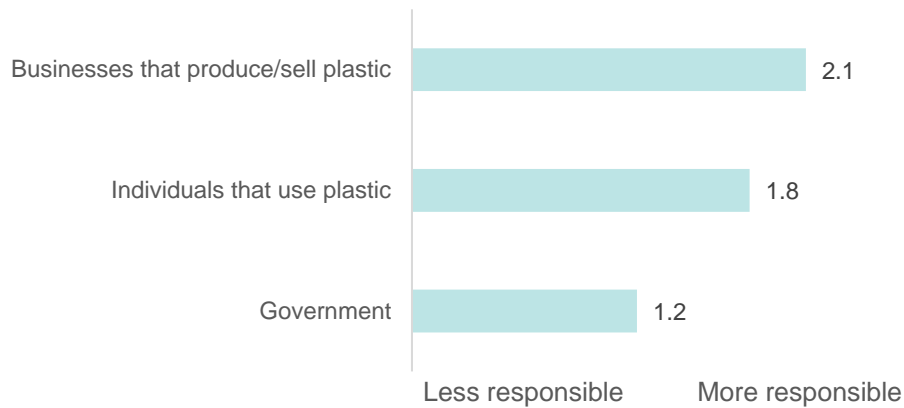
with 52% of Republicans. Republicans were least likely to say government is responsible; 20% said people and businesses were responsible, and 12% said only people were responsible.

Groups Believed to be Responsible for Reducing Plastic Waste



When asked to rank the groups they selected from greatest to least responsibility, businesses were most often said to have the greatest responsibility, followed by individuals, then government.

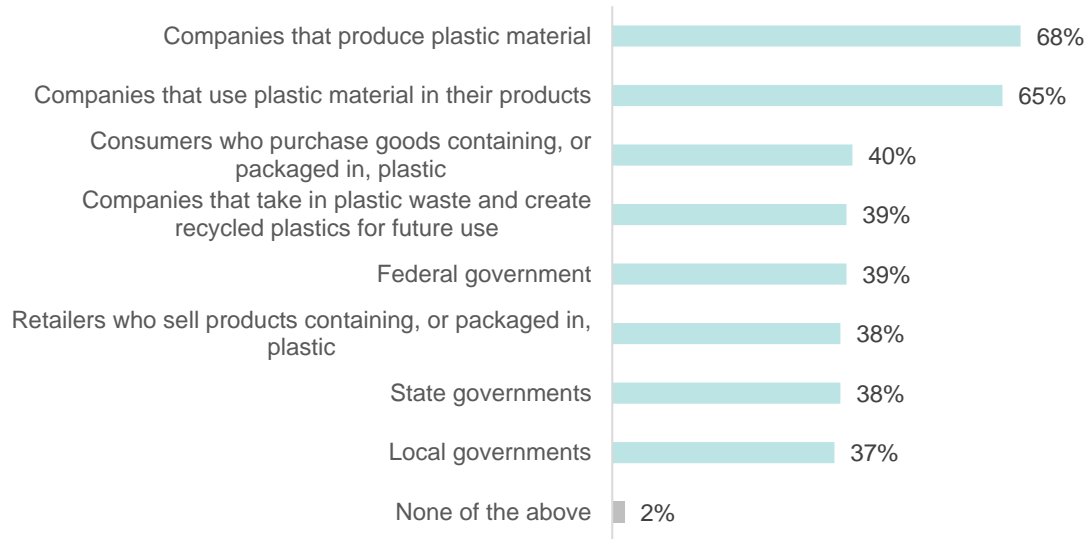
Average Ranking of Responsible Parties (reverse coded so that the highest ranked has the most points)



Similarly, when asked who should pay for collecting, sorting, and recycling plastics, a majority of people said companies that produce plastic material and

companies that use plastic material should pay. This was true among all groups.

Groups Believed Should Pay for Collecting, Sorting, and Recycling Plastics



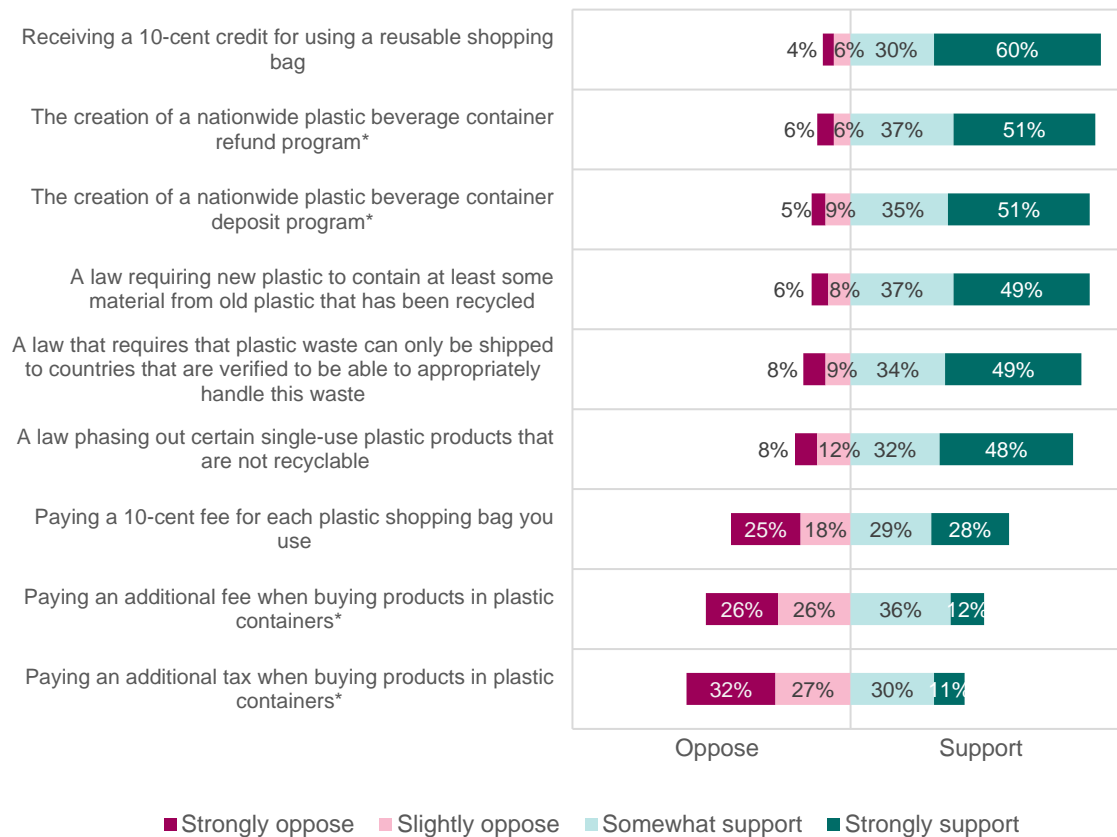
Overall, positively framed regulations, such as “credits” or “refunds,” were most popular, while negatively framed regulations, such as “taxes” and “fees,” were least popular. “Taxes” for buying products in plastic containers were viewed more negatively than were “fees” (each version was shown to half of respondents). Interestingly, there was little difference in reaction to “refund program” vs. “deposit program” wording (each version was shown to half of respondents).

While there was widespread support for receiving a credit for using a reusable shopping bag, people were evenly split on paying a fee for using a plastic bag. Support for a bag fee was lowest in the Midwest, in non-metro communities, and among lower-income residents. However, desire to avoid a disliked bag fee, plastic product fee, or tax could be a strong motivator for those groups. Indeed, prior research, as described

in the accompanying literature review, found that framing policies as a tax (i.e., negative/loss framing) was much more effective at reducing plastic bag use than framing the policy as a bonus, (i.e., positive/gain framing).

Support for a law requiring verification before shipping plastic waste to other countries was widespread and varied little across demographic groups. Political affiliation was the largest gap; with 76% of Republicans supporting the law and 89% of Democrats. This was similar to support for a law requiring new plastic to contain at least some recycled material. Overall, 86% of Americans support this law, including 78% of Republicans and 93% of Democrats. A bigger gap was seen in support for phasing out certain non-recyclable plastics, with 80% support overall, including 69% of Republicans and 90% of Democrats.

Support for Regulations



*Paired items were each shown to one-half of respondents in order to compare different wordings.

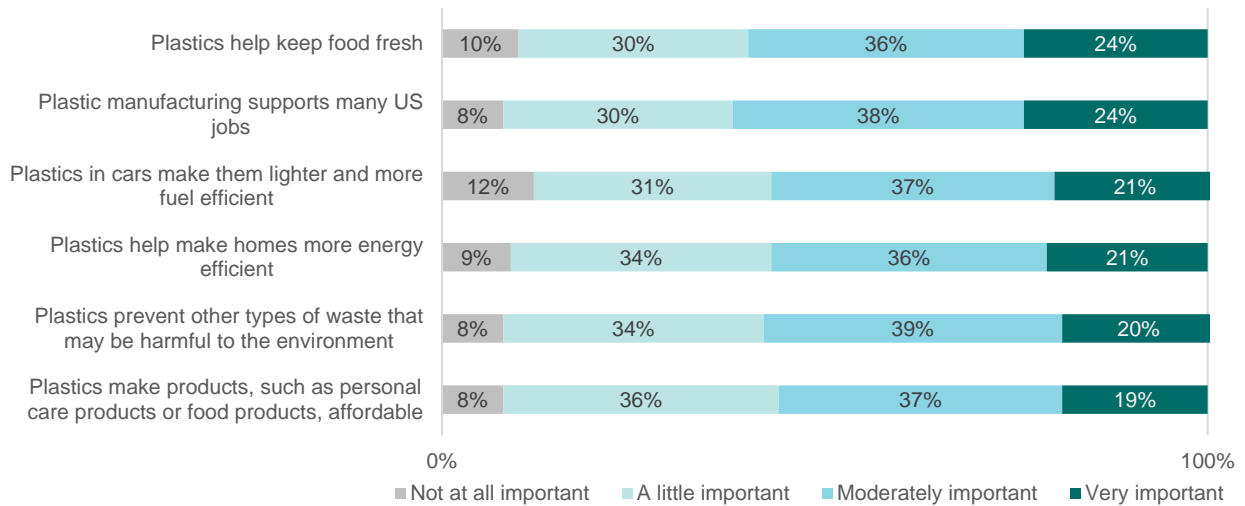
MESSAGING

Overall, there were no large differences in the relative importance of the various benefits of plastics. Plastics keeping food fresh was most often rated as “very important” in the South (34%), and least often in the Northeast (11%); and more often by Republicans (27%) than Democrats (21%). Plastic manufacturing supporting U.S. jobs was more often rated “very important” by those in non-metro communities (28%) than metro communities (23%), by females (27%) than males (20%), by older adults (28% of those 60 or older vs. 13% of those under 30), and by Republicans (31%) than Democrats (19%).

The benefit of plastics making cars lighter and more fuel efficient did not show much variation among different segments. Similarly, plastics making homes more energy efficient, and plastics preventing other types of waste that may be harmful to the environment, were not rated much differently by different segments.

The benefit of plastics making products more affordable was rated “very important” more often by renters (24%) than homeowners (17%), non-metro (23%) than metro residents (19%), and Republicans (24%) than Democrats (16%).

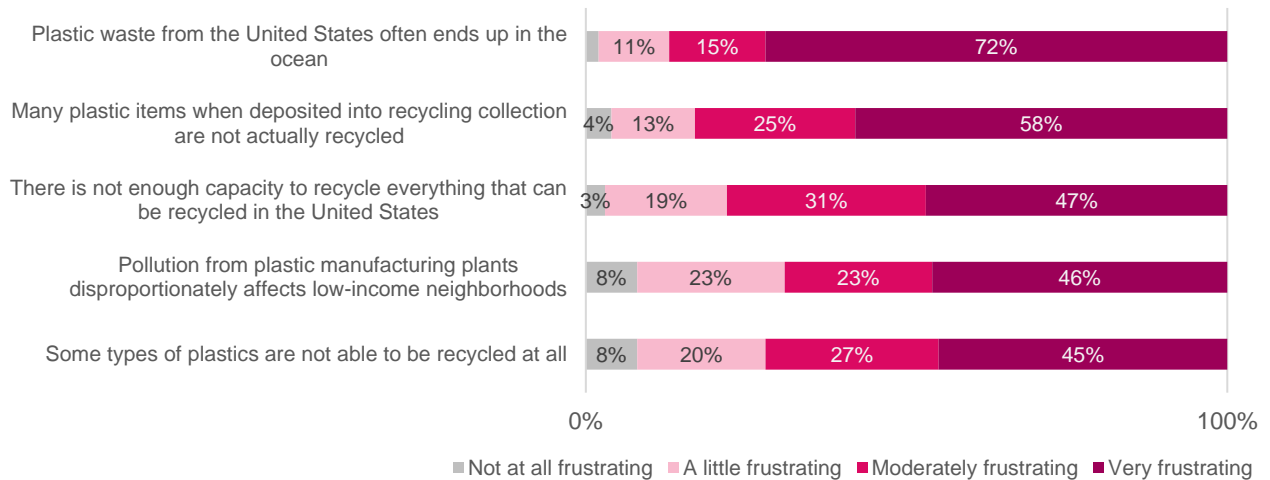
Value of Benefits of Plastics



Americans expressed the most frustration with plastic waste ending up in the ocean, a result that was also found in prior research in Europe and Australia, as described in the literature review. Plastic ending up in the ocean was rated very frustrating by a majority of all segments. The biggest differences were seen between men and women (65% vs. 79% rating it “very frustrating”) and between Republicans and Democrats (64% vs. 78% rating it “very frustrating”). Across all items, women tended to rate items as more frustrating than did men, metro residents rated them more frustrating than did non-metro residents, and Democrats rated them more frustrating than Republicans.

Much frustration was also expressed with recycled items not actually being recycled. There was greater frustration with this among metro residents, women, White people, and Democrats. This pattern was similar for the lack of capacity to recycle everything that can be recycled in the U.S., and that some types of plastics are not able to be recycled at all. Pollution from plastic manufacturing plants disproportionately affecting low-income neighborhoods was more frustrating for those in the Midwest, women, people of color, renters, and Democrats.

Extent of Frustration with Recycling Realities



APPENDIX

DELIVERABLES

The 2020 Public Opinion Surrounding Plastic Consumption and Waste Management Of Consumer Packaging Report is comprised of the following deliverables:

Executive Summary: PDF including key findings of the Report.

Detailed Findings: PDF including additional analyses of the survey results, including exhibits.

Tabulations: Excel file with all tabulations, including by multiple segments, of each survey question. Verbatim comments are also included.

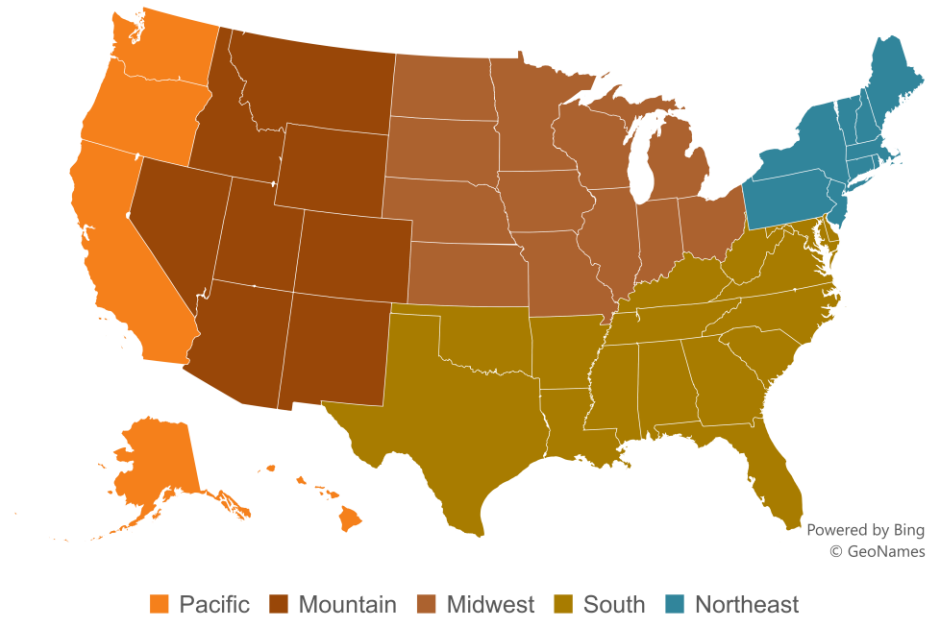
Survey Instrument: A copy of the survey instrument used in this study is also included for reference.

Literature Review Memo: A separate PDF documenting findings from the literature review as well as implications.

DEFINITION OF TERMS

U.S. Region – Respondents' states of residence were coded into regions defined by the U.S. Census Bureau designations. The Western region was divided into Mountain and Pacific divisions.

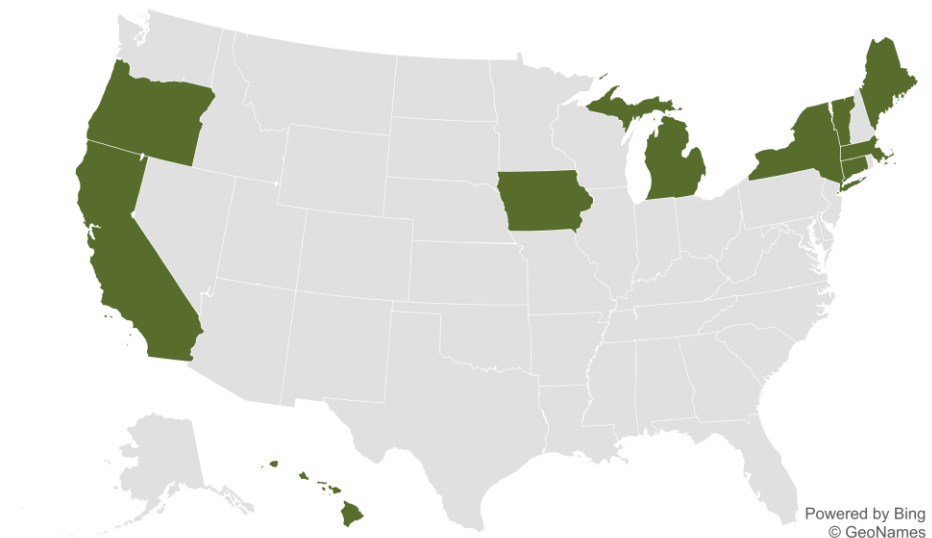
Analysis Regions



Metro/Non-metro Communities – Respondents' place of residence was identified as whether it was in a metropolitan statistical area as defined by the U.S. OMB Core-Based Statistical Area.

Bottle Deposit States – The following states were coded as states with beverage container deposit laws at the time of survey administration, per information obtained from the National Conference of State Legislatures (NCSL) website: California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont.

Bottle Deposit States



METHODS

Survey sponsored & funded by: World Wildlife Fund (sponsor was blinded for survey respondents)

Survey conducted by: Corona Insights, contact Matt Bruce at matt@coronainsights.com

Survey population: Adult (age 18+) residents of U.S.

Fielding period: December 3-11, 2020

Sampling: Probability-based sample from NORC AmeriSpeak® panel (detailed technical overview available [here](#)), stratified into 5 geographical regions

Mode: Online survey hosted by Corona Insights' on the Alchemer survey platform, with email invitations from the AmeriSpeak® panel

Language: English language only

Screening: No additional screening was performed

Data quality procedures: Respondents were disqualified from analysis if their survey completion time was faster than 1/3 of the median survey completion time, or if they answered fewer than half of the median number of questions answered.

Incentives: Incentives were provided by the AmeriSpeak® panel. Panelists were offered the cash equivalent of \$5.

Length: The median survey length was 15 minutes.

Sample size: 1,098 usable responses were collected.

Response rate: 5%

Weighting: Weighting was conducted by NORC and includes adjustments for non-response in panel recruitment, as well as survey non-response. Final weights align the survey population to the external population with regard to age (7 categories), gender (2 categories), education (4 categories), race/ethnicity (4 categories), housing tenure (2 categories), telephone status (3 categories), and Census Division (9 categories). The average design effect is 1.93.

Margin of Error: ±4.11% for the overall results

Survey instrument: A copy of the survey instrument used in this study is also included for reference.

DEMOGRAPHICS

The tables in this section provide the weighted breakdown of survey respondents. Respondents were weighted to match the U.S. population.

	Total	Region				
		Northeast	Midwest	South	Mountain	Pacific
Number of respondents	1098	215	214	233	218	212
Weighted	1098	190	222	417	82	180
Region						
Northeast	17%	100%	-	-	-	-
Midwest	20%	-	100%	-	-	-
South	38%	-	-	100%	-	-
Mountain	8%	-	-	-	100%	-
Pacific	17%	-	-	-	-	100%
Community Type						
Non-metro	18%	15%	30%	18%	16%	5%
Metro	82%	85%	70%	82%	84%	95%
Gender						
Male	48%	48%	49%	48%	50%	49%
Female	52%	52%	51%	52%	50%	51%
Age Category						
18 to 29	21%	20%	21%	21%	22%	21%
30 to 44	26%	23%	26%	25%	25%	29%
45 to 59	24%	25%	21%	24%	24%	22%
60 or older	30%	32%	32%	30%	29%	28%
Race or ethnicity						
White, non-Hispanic	63%	67%	77%	58%	66%	48%
Hispanic	17%	13%	7%	17%	23%	29%
Black, non-Hispanic	12%	11%	10%	18%	4%	5%
Asian or Pacific Islander, non-Hispanic	6%	6%	5%	4%	3%	14%
2 or more races, non-Hispanic	1%	3%	0%	1%	3%	2%
Other, non-Hispanic	1%	0%	-	2%	1%	2%
Educational attainment						
High school graduate or equivalent	28%	28%	28%	29%	26%	24%
Vocational or technical school, some college, Associate degree	28%	23%	29%	27%	32%	28%
Bachelor's degree	20%	27%	18%	18%	21%	20%
Post graduate study or professional degree	15%	14%	15%	15%	12%	16%
Less than high school diploma	10%	8%	8%	11%	9%	12%
Political Party Lean						
Republican	42%	40%	43%	44%	47%	37%
Democratic	58%	60%	57%	56%	53%	63%
Voted in 2020 presidential election						
Yes	85%	84%	84%	86%	82%	87%
No	15%	16%	16%	14%	18%	13%
Home Type						
One-family house or townhome	77%	70%	80%	81%	71%	73%
Apartment, mobile home, or similar	23%	30%	20%	19%	29%	27%
Household Income						
Less than \$50,000	42%	34%	41%	47%	45%	38%
\$50,000 to \$99,999	36%	42%	39%	31%	36%	37%
\$100,000 or more	22%	24%	20%	22%	19%	25%

	Total	Region				
		Northeast	Midwest	South	Mountain	Pacific
Housing Tenure						
Owner	66%	66%	76%	64%	67%	60%
Renter	34%	34%	24%	36%	33%	40%
Marital status						
Married	50%	44%	53%	53%	51%	45%
Never married	27%	28%	24%	26%	24%	32%
Divorced	9%	11%	11%	8%	10%	8%
Living with partner	7%	5%	8%	8%	7%	7%
Separated	4%	8%	3%	3%	5%	5%
Widowed	3%	3%	2%	3%	3%	4%
Child(ren) in the home						
Yes	30%	30%	27%	33%	28%	30%
No	70%	70%	73%	67%	72%	70%
Lives in a Bottle Deposit State						
Yes	29%	57%	23%	-	-	86%
No	71%	43%	77%	100%	100%	14%

Public Opinion Surrounding Plastic Consumption
and Waste Management of Consumer Packaging

2020

SURVEY INSTRUMENT

Thank you for participating in this survey. Please be sure to scroll down on each page to ensure you have answered all questions. Please press "next" (>) to begin.

[Headers not programmed- for internal organization purposes only]

[Respondents age and state will be known so screener questions are not needed here.]

PLASTIC WASTE RELATIVE TO OTHER ISSUES [WARM UP QUESTIONS]

The first few questions will ask you about various challenges we face in the United States.

1. Please choose up to five of the following issues that you think the United States Congress should prioritize in the next two years. [Randomize] [Items besides "Plastic waste" are from a Pew 2017 study].
 - a. Address pollution from plastic waste
 - b. Address climate change
 - c. Defend the country from terrorism
 - d. Enact gun safety policies
 - e. Strengthen the economy
 - f. Improve the job market
 - g. Improve the educational system
 - h. Address global trade issues
 - i. Make health care more affordable
 - j. Reduce drug addiction
 - k. Fix the immigration system
 - l. Reduce the federal budget deficit
 - m. Reduce disparities between the wealthy and the poor
 - n. Address racism and racial injustice
 - o. Address sexism

2. Please rank each of the following environmental challenges in terms of how big or small of a problem it is in the country today. Rank from biggest problem (#1) to smallest problem (#7). Please rank all seven items. [Randomize]
 - a. Pollution from plastic waste
 - b. Air pollution
 - c. Water pollution
 - d. Climate change
 - e. Loss of forests

- f. Loss of habitat
- g. Population growth

3. To what extent do you agree or disagree with the following statements? [\[Randomize\]](#)

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Overall, plastics do more good than harm [Adapted from the American Chemistry Council and Plastics Industry Association.]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, oil and gas do more good than harm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. To what extent are you concerned with any negative impact plastics can have on the following? [\[Randomize\]](#)

	No concern	Minor concern	Moderate concern	Significant concern
Human health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine (ocean) life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ATTITUDES AROUND PLASTIC WASTE

5. The next questions will ask about your opinions towards plastic waste more specifically. To what extent do you agree or disagree with the following statements? [\[These are key questions to understand beliefs and attitudes about plastic and pollution caused from plastic.\]](#) [\[Randomize\]](#)

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
The United States needs to reduce our reliance on plastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Focusing on plastic waste distracts us from bigger environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The recycling system for plastic in the United States needs improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We need to change our economy from one that throws things away to one that emphasizes reuse and recycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic pollution would not be a problem if we eliminated plastic packaging that people only use once	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic pollution would not be a problem if people recycled more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic producers have a responsibility to choose materials that are easier to recycle even if they cost more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The best place for plastic waste to end up is a landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is acceptable to ship our used plastics to other countries to be recycled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. To what extent do you agree or disagree with the following statements? [Many of these statements assess whether they feel they have any control over outcomes] [Randomize]

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I want to recycle more of my plastic waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little control of the amount of plastic I discard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recycling plastic waste is easy to do for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confused by the different types of plastics and how to recycle them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So many things are made out of plastic or come in plastic packaging, there is no way I could avoid plastic even if I wanted to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that the plastic material I recycle will end up in the ocean	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that it is pointless to put plastic material into the recycling bin because very little plastic actually gets recycled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everything taken away in a recycling bin is recycled into a new product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry my actions will not make an impact on the overall amount of plastic waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would prefer to buy things with minimal plastic packaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CURRENT BEHAVIORS

7. Would you say you currently recycle...?
- All of your plastic household waste
 - Most of your plastic household waste
 - Some of your plastic household waste
 - Very little of your plastic household waste
 - None of your plastic household waste
8. [If not "all"] What prevents you from recycling more of your household plastic waste? [If "all"] What were the largest challenge(s) you had to overcome in order to recycle all of your plastic household waste? [Open-ended]
9. Which of the following are available to you? *You may select more than one.*
- A recycling bin that is collected from my home (e.g., curbside recycling)
 - A shared recycling bin or dumpster near my home
 - A public recycling drop-off center
 - Something else _____
 - None of the above [Exclusive]
 - Don't know [Exclusive]
10. For regular shopping trips, such as for groceries, which type of shopping bag would you most prefer to use? *Select one.*

- a. Plastic shopping bag



- b. Paper shopping bag



- c. Reusable shopping bag





11. Beverage container deposit laws (also called bottle bills) require a minimum refundable deposit on beverage containers (e.g., beer bottles, water bottles, soda cans, etc.) in order to increase recycling and reduce litter. You may see this information on the side of containers, such as in the picture above.

Prior to this survey, were you aware of container deposit laws?

- a. Yes
- b. No

RESPONSIBILITIES

12. Please check all of the following groups that you believe have a responsibility to reduce plastic waste.
- a. Individuals that use plastic
 - b. Businesses that produce/sell plastic
 - c. Government
 - d. None of the above

12a: Please rank the groups listed below from greatest responsibility on top (#1) to least responsibility on bottom.

[Show options checked in Q12. Skip if "none of the above" or no options checked in Q12.]

13. Who should pay for collecting, sorting, and recycling plastics? *You may check all that you believe should pay at least something.* [Do not randomize]
- a. Companies that produce plastic material
 - b. Companies that use plastic material in their products
 - c. Retailers who sell products containing, or packaged in, plastic
 - d. Consumers who purchase goods containing, or packaged in, plastic
 - e. Companies that take in plastic waste and create recycled plastics for future use
 - f. Local governments
 - g. State governments
 - h. Federal government
 - i. None of the above [Exclusive]
14. To what extent do you support or oppose each of the following potential type of law or regulation?
[Randomize]

	Strongly support	Slightly support	Slightly oppose	Strongly oppose
The creation of a nationwide plastic beverage container [refund/deposit – randomize language] program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paying an additional [tax/fee – randomize language] when buying products in plastic containers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paying a 10-cent fee for each plastic shopping bag you use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receiving a 10-cent credit for using a reusable shopping bag	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A law phasing out certain single-use plastic products that are not recyclable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A law requiring new plastic to contain at least some material from old plastic that has been recycled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A law that requires that plastic waste can only be shipped to countries that are verified to be able to appropriately handle this waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MESSAGING

15. How important are each of the following benefits of plastic to you? [Adapted from the American Chemistry Council and Plastics Industry Association.] [Randomize]

	Not at all important	A little important	Moderately important	Very important
Plastics in cars make them lighter and more fuel efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastics help make homes more energy efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastics help keep food fresh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastics make products, such as personal care products or food products, affordable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastics prevent other types of waste that may be harmful to the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic manufacturing supports many US jobs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. The following statements are all true. Please indicate how frustrating the situation described in each statement is to you. [Randomize]

	Not at all frustrating	A little frustrating	Moderately frustrating	Very frustrating
Many plastic items when deposited into recycling collection are not actually recycled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some types of plastics are not able to be recycled at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste from the United States often ends up in the ocean	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is not enough capacity to recycle everything that can be recycled in the United States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pollution from plastic manufacturing plants disproportionately affects low-income neighborhoods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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17. Please indicate how much you trust the accuracy of information about plastics from each of the following organizations. *If you are unfamiliar with an organization you may respond based on your perceptions of the name.* [Randomize]

	Do not trust at all	Somewhat trust	Completely trust
The World Wildlife Fund	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oceana	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ocean Conservancy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greenpeace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
American Beverage Association	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastics Industry Association	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The American Chemical Council	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local trash/recycle collection companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your elected officials at the local level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your elected officials at the state level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your elected officials at the federal level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DEMOGRAPHICS

[Appended by the panel company: Age, gender, state, urban/rural based on MSA, race/ethnicity, housing type, rent/own, household size, employment status, educational attainment]

18. Many Americans did not vote in the previous election. Did you vote in this year's presidential election?
- Voted
 - Did not vote
19. In politics today, do you consider yourself a Republican, a Democrat, an Independent, or something else?

- a. Republican
 - b. Democrat
 - c. Independent
 - d. Something else
20. [If Independent/Something else/no answer] As of today do you lean more to the Republican Party or the Democratic Party?
- a. Republican Party
 - b. Democratic Party

FINAL COMMENTS

21. If you have any additional comments on the topics covered in this survey, please provide them below.
[Open-ended]