



**IOWA DEPARTMENT
OF NATURAL RESOURCES**

**SOLID WASTE
MANAGEMENT
SURVEY REPORT**

2020

**PREPARED BY
STRATEGIC
MARKETING SERVICES
AT THE UNIVERSITY
OF NORTHERN IOWA**

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Methodology

Project Objective

Strategic Marketing Services' objective was to assist the Iowa Department of Natural Resources (Iowa DNR) in assessing statewide residential public awareness, perceptions and behaviors regarding household solid waste management and recycling, with the goal of transitioning to a sustainable materials management system.

Project Design

Working collaboratively with the Iowa DNR, SMS refined the content of an online survey designed to collect the data required to address project objectives. The sample was collected by SMS via a partner vendor, Qualtrics. This sample was designed to collect responses from a representative sample of Iowa residents. Specifically, all respondents were Iowa residents and a mix of geographic and urban/rural representation was sought. The sample was proportionally matched to the population demographics by age for Iowa residents aged 18 and older based on the 2019 Census population projections for the state of Iowa by Suburban Stats Inc. This quota sample targeted a 50/50 Male-Female respondent mix, as well as the following age range group percentages:

- 18-44: 45% of the respondents
- 45-64: 35% of the respondents
- 65+: 20% of the respondents

A total of 410 completed surveys were collected from this effort and included in analysis and reporting. These 410 survey completions created a statistically valid sample achieving a 95 ± 2.11 percent confidence level.

During data analysis, SMS segmented the data by age, gender, income, education, geography (within city limits or in rural areas), and county type (mostly urban, mostly rural, or completely rural) in order to uncover any meaningful differences between the respective groups. If any meaningful differences were found, they are noted in the body of the report. If no meaningful differences are reported, you can safely assume the aggregate data is representative of all respondents.

Executive Summary

Demographics

The sample was designed to reflect Iowa population demographics by age and gender. As a result, roughly 46% of the respondents are aged 18 to 44, 34% are aged 45 to 64, and 20% are aged 65 or more. A 50/50 mix of gender was targeted, but a 51% female and 49% male ratio was achieved.

Geographically, 72% of the respondents reside in mostly urban counties, while 21% are in mostly rural and 7% in completely rural counties. Respondents in 85 counties participated in the survey and as expected, counties with the most respondents (20 or more) include Black Hawk, Linn, and Polk counties.

Nearly 63% of the respondents own their homes and most have an annual income of \$50,000 to \$99,999 (30%) or \$25,000 to \$49,999 (29%). Additionally, 29% have a bachelor's degree while another 25% have some college but no degree, 23% have a high school degree and 12% have an associate degree.

Sources of Information

Aggregately, respondents most often utilize web/internet searches (42%) to find information about solid waste, recycling, and/or compost programs and issues. Other top resources include family, friends, or neighbors (34%) and city/regional publications (34%). However, differences among the sample based on age, gender, income, education, and geography exist. More specifically, respondents aged 18 to 44 are significantly more likely to utilize internet searches and social media; while respondents aged 65+ are significantly more likely to utilize city/regional publications and newspapers. Gender differences such as males being significantly more likely to utilize TV advertisements and internet searches than females were also detected. In addition, respondents who live in rural areas, earn less than \$49,999, or have an associate degree or less are significantly more likely to find information from family, friends, and/or neighbors.

When asked which sources are utilized to find information about global warming/climate change, respondents indicated social media (42%), TV advertisements (31%), newspapers (24%), and family, friends, or neighbors (22%) as being most utilized. Age and education significant differences can be noted. More specifically, respondents aged 18 to 44 are significantly more likely to utilize internet searches and social media compared to respondents age 65+. Respondents who have a Bachelor or higher college degree are significantly more likely to find information about global warming and climate change from an internet search.

Aggregately, respondents are most positively impacted by a product having the ability to be reused (mean of 4.06 out of 5.00) and repaired (mean of 4.00 out of 5.00), and least impacted by a product being compostable (mean of 3.50 out of 5.00). Among the education groups, respondents with some college or an associate/bachelor or higher degree are significantly more likely to be positively impacted by a product made with recycled materials, having the ability to be recycled, and being made with reusable products.

Management of Solid Waste and Recyclables

Over half of respondents (51%) place items in the acceptable recycling containers every time, while over one-third (35%) usually do. Respondents 45 and older are significantly more likely to place items in the acceptable containers every time compared to respondents aged 18 to 44. Additionally, the majority of respondents (69%) have their garbage picked up by the City, while slightly over 20 percent contract directly with a private company. Respondents who live in urban counties or earn \$100,000 or more are significantly more likely to contact with a private company, while respondents in rural counties are significantly more likely to haul garbage to another location or burn their garbage.

As for recycling, over two-thirds (68%) of respondents manage recyclables with curbside pick-up, and nearly 30% drop off recyclables at local collection centers. Female respondents and those earning less than \$25,000 more significantly reported that they do not recycle. Among the geographic groups, respondents who live within city limits are significantly more likely to have curbside recycling pick-up, while those living in rural areas are significantly more likely to drop-off recycling at a local collection center. Nearly 60 percent of respondent households pay less than \$25 monthly for all curbside solid waste and recycling services, while just 12% pay \$25 to \$34.

The top two reasons respondents recycle include saving landfill space (70%) and saving natural resources (67%). Among gender groups, female respondents are significantly more likely to recycle due to saving landfill space, protecting wildlife, and making new products from recycled material as compared to male respondents. Those with some college education and above are significantly more likely to recycle because recycling saves energy. In contrast, the top three reasons respondents don't currently recycle include the recycling location being inconvenient, not wanting to store recyclables at home, and not wanting to move recyclables in their vehicle.

Respondents tend to be only slightly knowledgeable about how their recyclables and solid waste are managed. On a scale of 1 to 5 with 1 being not at all knowledgeable and 5 being extremely knowledgeable, respondents rated their knowledge of the management of recyclables at a mean value of 2.46 compared to a mean value of 2.42 for solid waste management. However, respondents with a Bachelor's degree or higher reported a significantly higher level of knowledge in regards to where and how recyclables are managed.

Producers/manufacturers (mean of 3.86) and local government (mean of 3.84) are seen to be the most responsible for end of life management of solid waste and recyclables, on a scale of 1 to 5 with 1 being not at all responsible and 5 being completely responsible. This is closely followed by the state government (3.77) and federal government (3.63). Respondents age 65+ are significantly more likely to report a higher level of consumer, state, and local government responsibility compared to those age 45 to 64. Among income groups, respondents earning \$25,999 to \$49,999 reported a significantly higher level of federal government responsibility compared to respondents earning \$50,000 to \$99,999.

Aggregately, respondents place the highest importance (mean of 4.21 out of 5.00) on environmental impacts of a product, followed by manufacturing (mean of 3.89 out of 5.00) during landfill, reuse, recycling, and composting. Respondents place the least importance on environmental impacts of a product during extraction of raw materials (3.78) and materials and goods distribution (3.80).

When asked for their level of agreement with several statements, respondents agree most with the statement “State government should provide assistance for expanding Iowa infrastructure to reuse, recycle, and compost” (mean of 4.05), followed by “State government should offer financial incentives to increase recycled content in manufacturing new products” (mean of 3.96). Respondents earning \$100,000 or more reported a significantly higher level of agreement that state government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost.

The top two areas respondents would like the state of Iowa to support include prioritizing waste management options based on environmental impacts (65%) and including recycled content in manufacturing of products (54%). Additionally, about half of respondents would like the state of Iowa to support infrastructure expansion to better manage food waste/other organics (50%), updating/revising landfill diversion goals to environmental impact goals (48%), and infrastructure expansion/upgrades to better manage unwanted products/packaging (47%). Less than one-third of respondents would like the state of Iowa to support requiring the use of finished compost in construction projects (30%) and a statewide landfill ban on recyclables (30%). Among age groups, respondents 65+ are significantly more likely to report that the state of Iowa should support infrastructure expansion/upgrade to better manage unwanted products and packaging compared to younger respondents.

Climate Change

The majority of respondents think the private sector has a responsibility to protect environmental quality (82%), and 72% think climate change is happening. Among age groups, those age 18-44 are significantly more likely to believe climate change is happening compared to respondents age 65+. Climate change is considered to be extremely or moderately important by 57% of respondents, while only 23% consider it to be slightly or not at all important. Respondents earning \$100,000 or more reported a significantly higher level of importance of climate change compared to respondents earning \$25,000 to \$49,999.

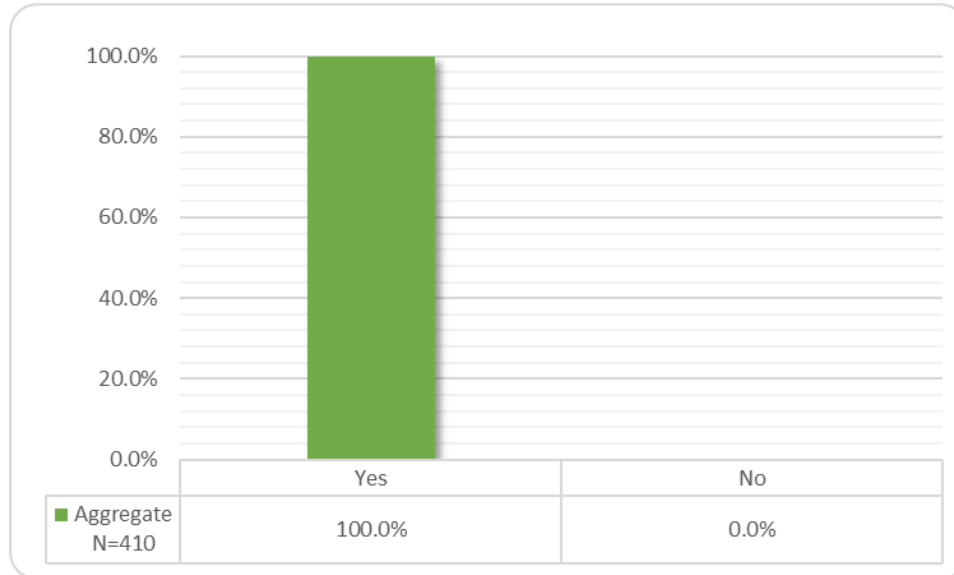
When asked how strongly they feel about various levels of government taking additional action to reduce climate change, aggregately respondents feel most strongly about the federal government (mean of 3.92 out of 5.00) and the state government (mean of 3.89 out of 5.00) taking additional action. Respondents are less concerned with county governments (3.76) and city governments (3.67) taking additional action. Respondents aged 18 to 44 are significantly more likely to report a stronger level of action needed by all levels of government compared to older respondents.

Lastly, respondents were asked how important it is to reduce the amount of waste disposed of in the landfill. A total of 74% of respondents consider reducing the amount of waste disposed of in the landfill to be extremely or moderately important, while only 7% consider reducing the amount of waste to be slightly or not at all important. On a scale of 1 to 5 with 1 being not at all important and 5 being extremely important, the mean level of importance is 4.10.

Survey Results

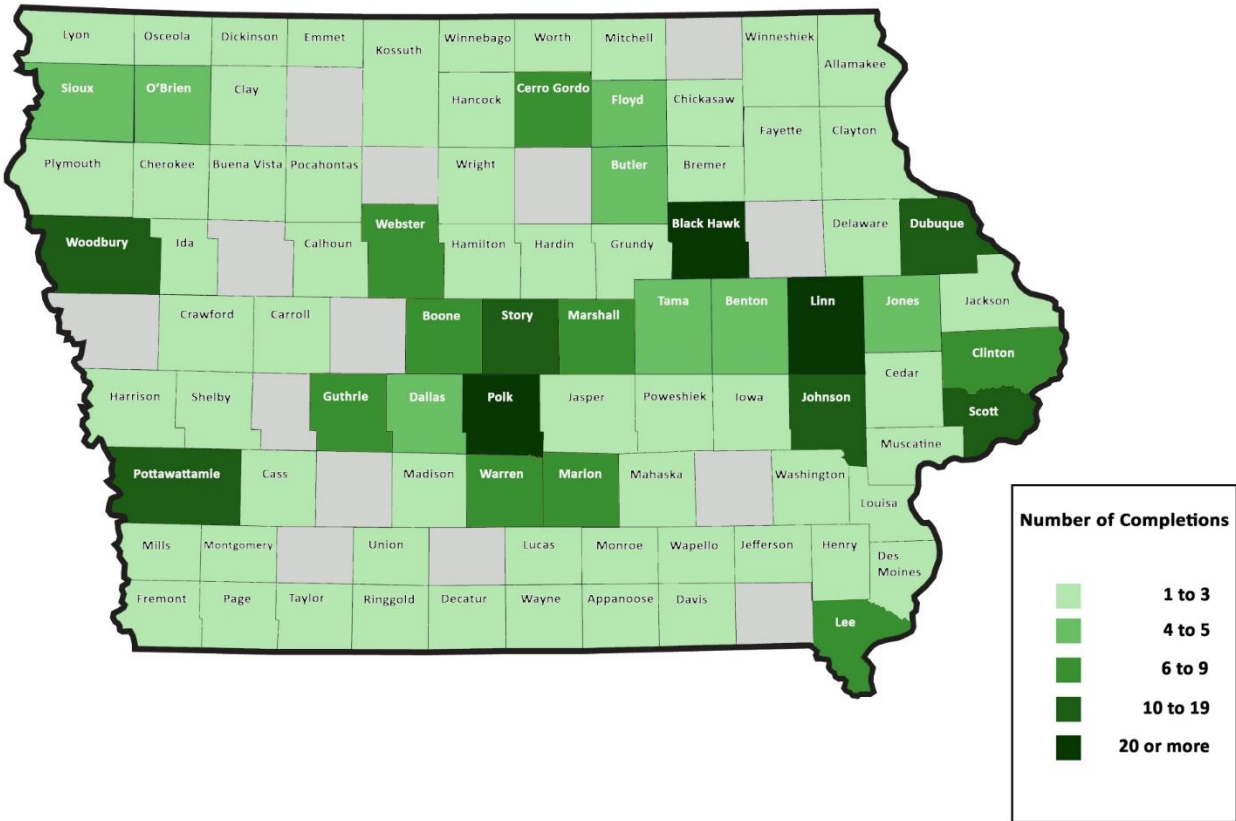
Demographics

Do you live in the state of Iowa?



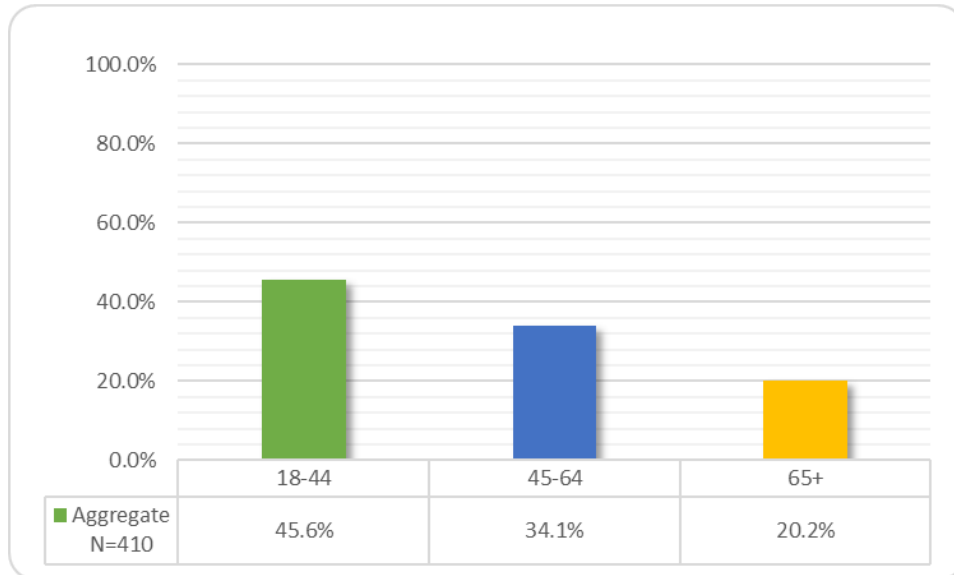
- As required, all 410 survey participants currently live in the state of Iowa.

What is your home zip code?



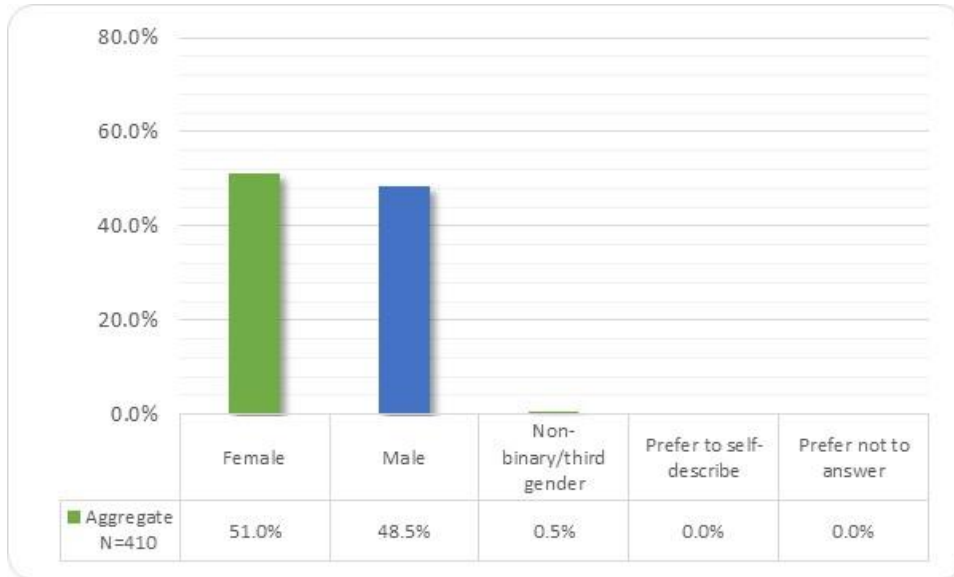
- Respondent zip codes were grouped into counties to provide a visual map displaying the number of completions by county in the map above. Respondents in 85 counties participated in the survey. Counties with the most respondents (20 or more) include Black Hawk, Linn, and Polk counties. A second tier of 10 to 19 respondents includes Dubuque, Johnson, Pottawattamie, Scott, Story, and Woodbury counties.

What is your age?



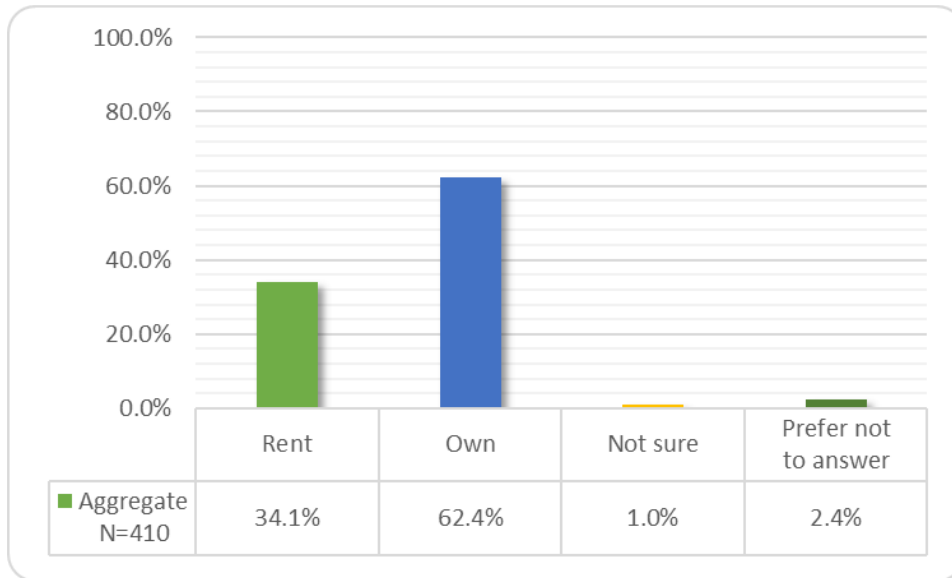
- Aggregately, 45.6% of the respondents were 18 to 44, 34.1% were 45 to 64 and 20.2% were 65+. However, it should be noted the sample was specifically designed to be representative of the Iowa population and therefore is proportional to current age population statistics: 44.2% (45%) aged 18 to 44; 35.6% (35%) aged 45 to 64; and 14.4% (15%) aged 65+.

With what gender do you identify?



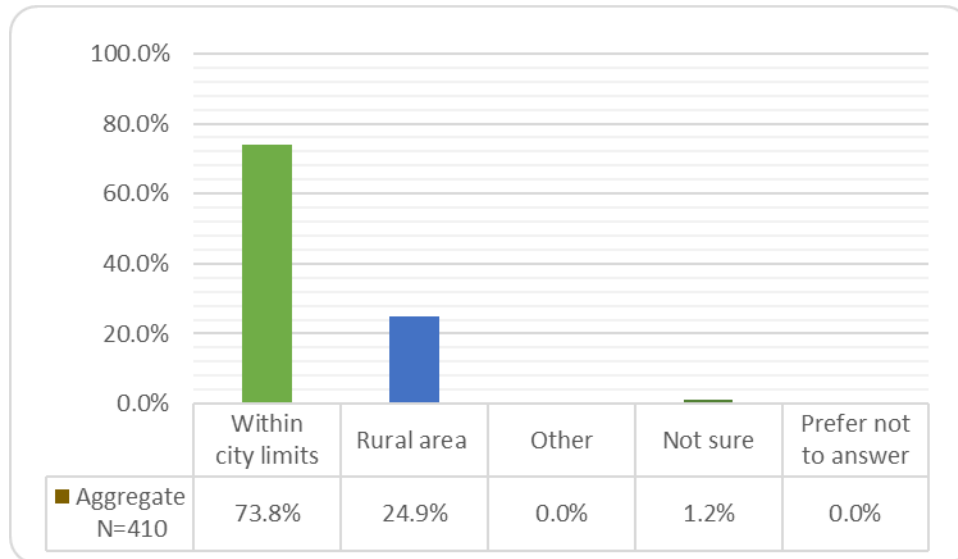
- Aggregately, 51.0% of the respondents were female and 48.5% were male. Less than one percent specified being non-binary/third gender. Again, the sample was specifically designed to be representative of the Iowa population and therefore is proportional to current gender population statistics. An even ratio of 50% female and 50% male was sought and nearly achieved.

Do you rent or own your home?



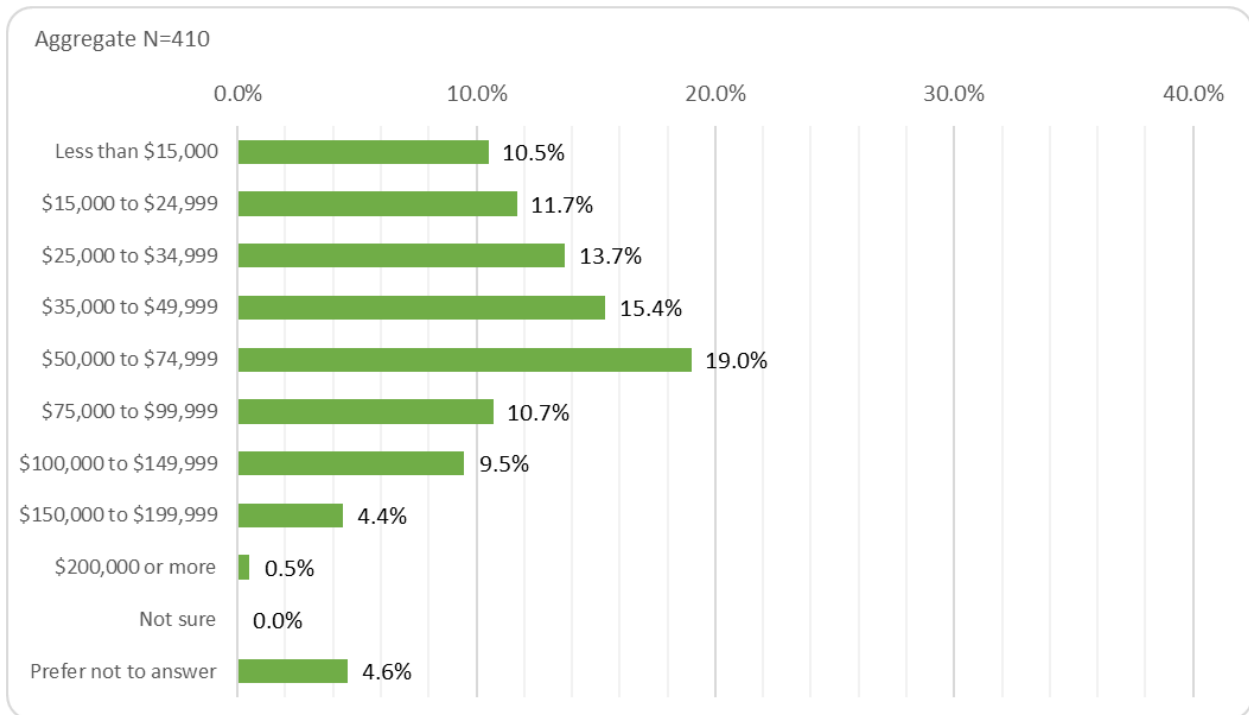
- Aggregately, just less than two-thirds of respondents own their home (62.4%) compared to just over one-third renting (34.1%). Almost three percent preferred not to answer and 0.4% were not sure.
- The following statistically significant difference was detected between age groups:
 - Respondents 45-64 or 65+ are significantly more likely to own their home (72.9% / 80.7%) compared to respondents 18-44 (46.5%).

How would you describe the area in which you live?

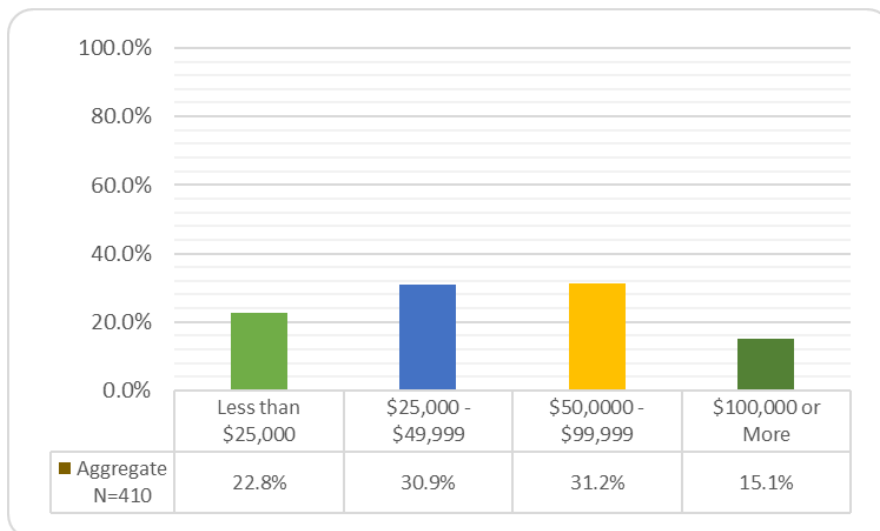


- Aggregately, nearly three-fourths of the respondents reported living within city limits while nearly one-fourth live in a rural area. Only 1.2% reported being not sure and no other self-described areas were offered.

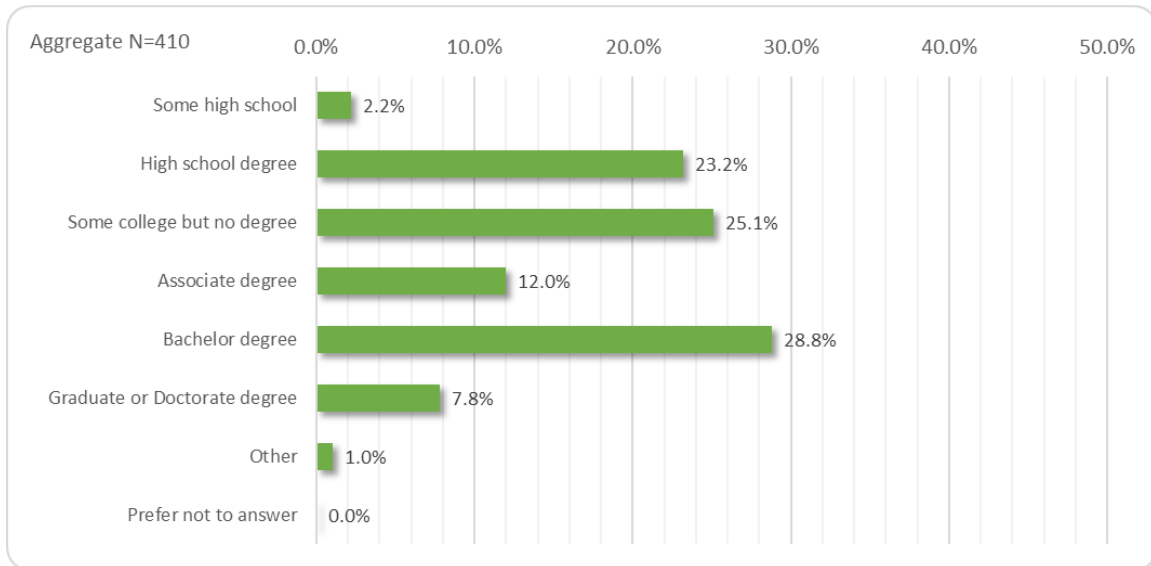
Which of the following ranges best describes your total household income from all sources for 2019?



- Aggregately, middle income ranges were most frequently indicated with \$50,000 to \$74,999 (19.0%) reported most frequently, followed by \$35,000 to \$49,999 (15.4%), and \$25,000 to \$34,999 (13.7%). Just less than 20% of the total respondents indicated an annual household income of \$100,000 or more.
- Consolidating the large number of income ranges into four groups (shown in the graph above) allow for better comparison analysis.

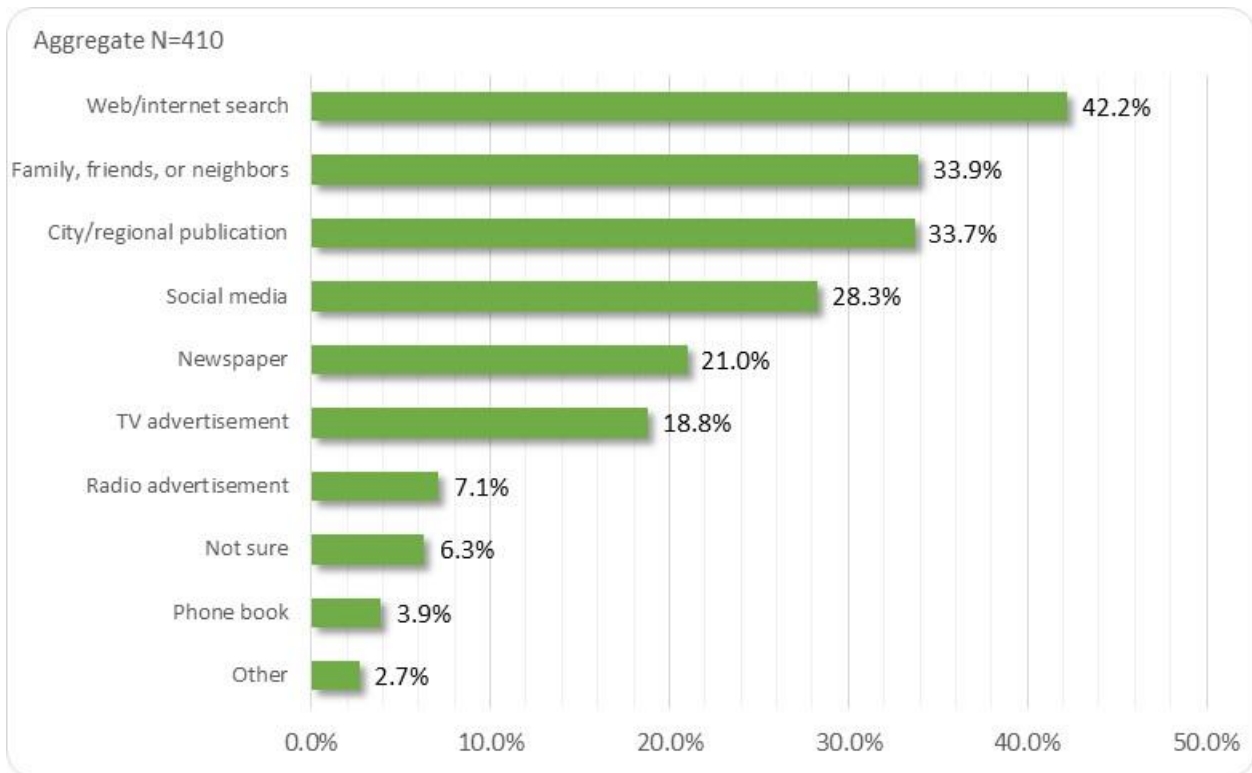


What is the highest level of education you have completed?



- Aggregately, just under 29% of respondents reported having a bachelor degree, 25.1% have some college but no degree, and 23.2% have a high school degree. Twelve percent indicated having an associate degree, nearly 8% a graduate or doctorate degree, and only 2.2% have some high school.
- The following statistically significant difference was detected between age groups:
 - Respondents 65+ are significantly more likely to have an Associate’s degree (21.7%) compared to respondents 18-44 or 45-64 (10.2% / 8.6%).

What is the primary way(s) you find information about solid waste, recycling, and/or compost programs and issues?



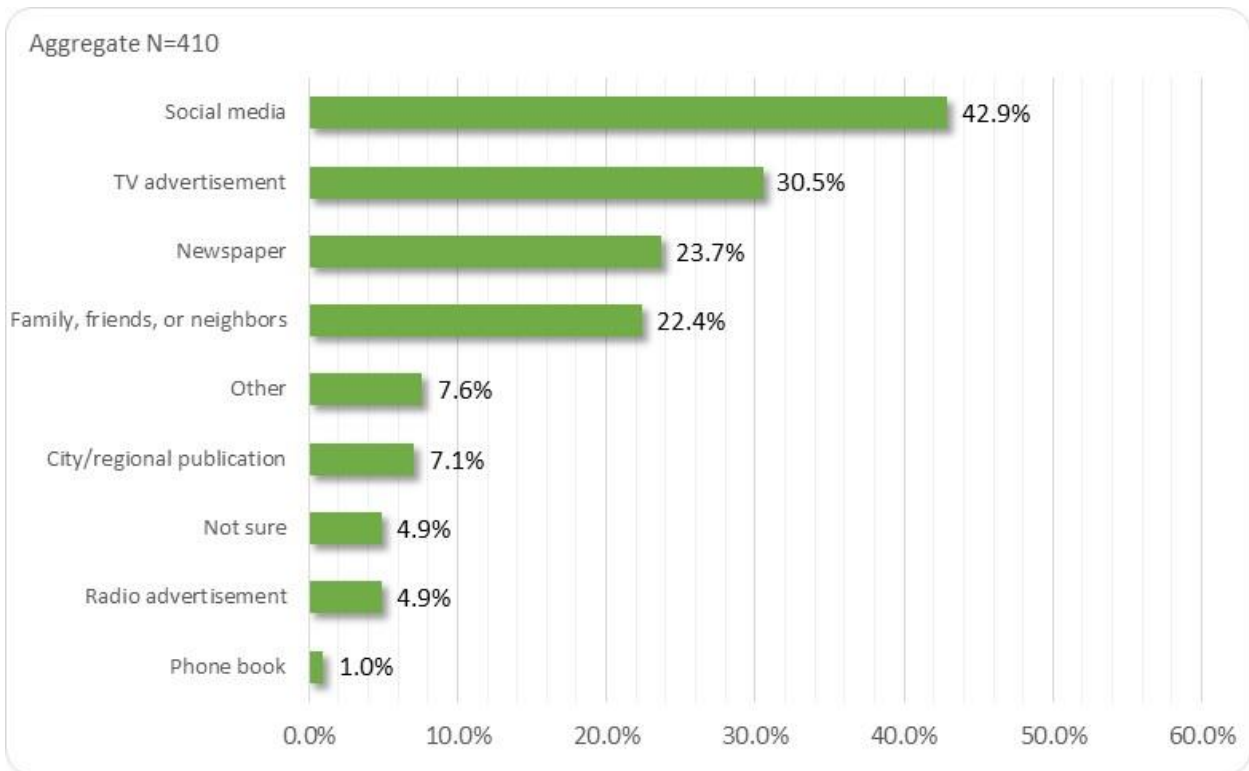
- Aggregately, the top three ways respondents find information about solid waste, recycling, and/or compost programs and issues include a web/Internet search (42.2%), family, friends, or neighbors (33.9%), and city/regional publications (33.7%), followed closely by social media (28.3%). Respondents are least likely to find information through radio advertisements (7.1%) and the phone book (3.9%).
- Other responses indicated by respondents are listed below:
 - City
 - City hall
 - Daughter works at Iowa City Landfill
 - Disposal company
 - Education
 - Local TV news
 - My MBA is in environmental management
 - PBS programming
 - Through utility bill
 - Waste management
 - Work

- The following statistically significant differences were detected between age, gender, rural vs. city, income, education, and county type groups:
 - Respondents 18-44 or 45-64 are significantly more likely to find information about solid waste (SW), Recycling, and Composting Info from an internet search (66.3% / 60.7%) compared to respondents 65+ (33.7%).
 - Respondents 18-44 are significantly more likely to find information about SW, Recycling, and Composting Info from social media (39.6%) compared to respondents 65+ (12.0%).
 - Respondents 65+ are significantly more likely to find information about SW, Recycling, and Composting info from the newspaper (33.7%) compared to respondents 45-64 (15.0%).
 - Respondents 65+ are significantly more likely to find information about SW, Recycling, and Composting info from City or regional publications delivered to their home (53.0%) compared to respondents 18-44 or 45-64 (23.0% / 36.4%).
 - Male respondents are significantly more likely to find information about SW, Recycling, and Composting info from an internet search (63.3%) compared to female respondents (52.6%).
 - Male respondents are significantly more likely to find information about SW, Recycling, and Composting info from TV advertisements (24.6%) compared to female respondents (12.9%).
 - Respondents who live within city limits are significantly more likely to find information about SW, Recycling, Composting Info from city or regional publication delivered to their home (36.8%) compared to respondents who live in rural areas (25.0%).
 - Respondents who live within city limits are significantly more likely to find information about SW, Recycling, and Composting info from TV advertisements (21.3%) compared to respondents who live in rural areas (13.0%).
 - Respondents who live in rural areas are significantly more likely to find information about SW, Recycling, and Composting info from family, friends, and/or neighbors (42.0%) compared to respondents who live within city limits (32.1%).
 - Respondents who earn less than \$25,000 or earn \$25,000 to \$49,999 are significantly more likely to find information about SW, Recycling, and Composting info from the newspaper (24.7% /24.8%) compared to respondents who earn \$50,000 to \$99,999 (11.5%).
 - Respondents who earn \$100,000 or more are significantly more likely to find information about SW, Recycling, and Composting info from city or regional publications delivered to their home (47.5%) compared to respondents who earn less than \$25,000 or earn \$25,000 to \$49,999 (27.0% / 28.9%).
 - Respondents who earn less than \$25,000 or earn \$25,000 to \$49,999 are significantly more likely to find information about SW, Recycling, and Composting info from family, friends, and/or neighbors (41.6% /41.3%) compared to respondents who earn \$100,000 or more (22.0%).
 - Respondents who have a Bachelor or higher college degree are significantly more likely to find information about SW, Recycling, and Composting info from an internet search (67.5%) compared to respondents who have some college or an associate's degree (50.6%).



- Respondents who have a high school diploma or less, some college, or an associate degree are significantly more likely to find information about SW, Recycling, and Composting info from family, friends, and/or their neighbors (38.1% / 38.3%) compared to respondents who have a bachelor or higher college degree (26.5%).
- Respondents who live in mostly urban counties are significantly more likely to find information about SW, Recycling, and Composting Info from TV advertisements (22.0%) compared to respondents who live in mostly rural counties (11.5%).

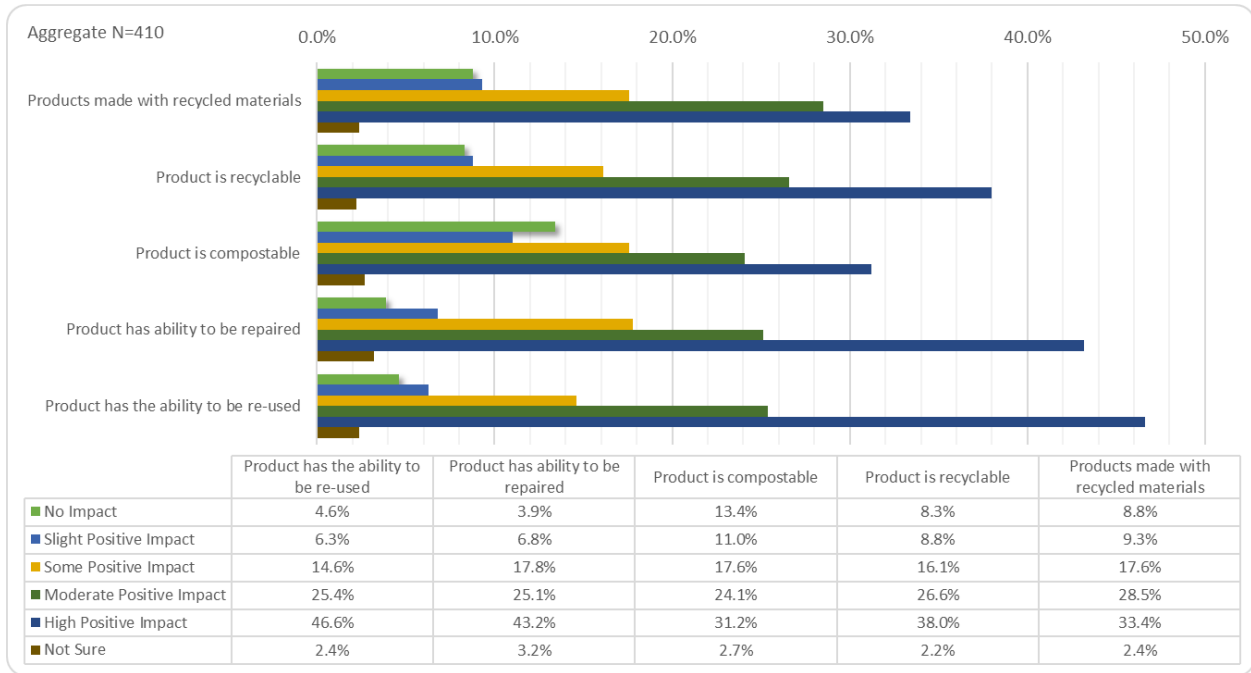
What is the primary way(s) you find information about global warming/climate change? Please check all that apply.



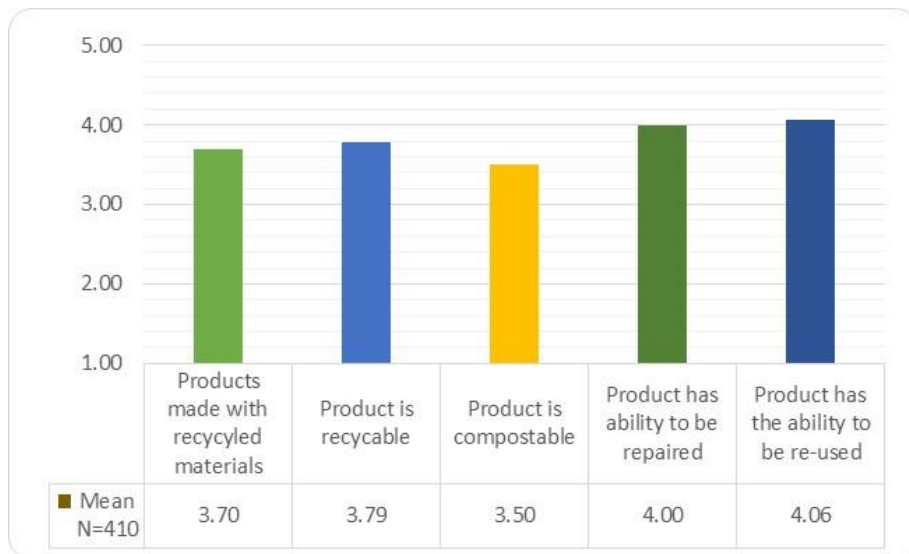
- Aggregately, the primary way respondents find information about global warming/climate change is with social media (42.9%), followed closely by TV advertisements (30.5%), newspapers (23.7%), and family, friends, or neighbors (22.4%). Respondents are least likely to find information through radio advertisements (4.9%) and phone books (1.0%).
- Other responses indicated by respondents are listed below:
 - TV news programs (20)
 - Don't care
 - Fake news media
 - Global warming is natural and not as manmade as we are led to believe
 - I majored in environmental management
 - I'm not really all that concerned, therefore I don't search
 - No such thing exists
 - Nothing to find out about
 - School students
 - Science papers
 - The Weather Channel

- The following statistically significant differences were detected between age and education groups:
 - Respondents 18-44 and 45-64 are significantly more likely to find information about global warming and climate change through an internet search (65.2% / 59.3%) compared to respondents 65+ (42.2%).
 - Respondents 18-44 are significantly more likely to find information about global warming and climate change through social media (58.8%) compared to respondents 45-64 or 65+ (33.6% / 22.9%).
 - Respondents who have a Bachelor or higher college degree are significantly more likely to find information about global warming and climate change from an internet search (69.5%) compared to respondents who have a high school diploma or less (46.7%).

Please tell us how the following product claims would positively impact your purchase decision in general.

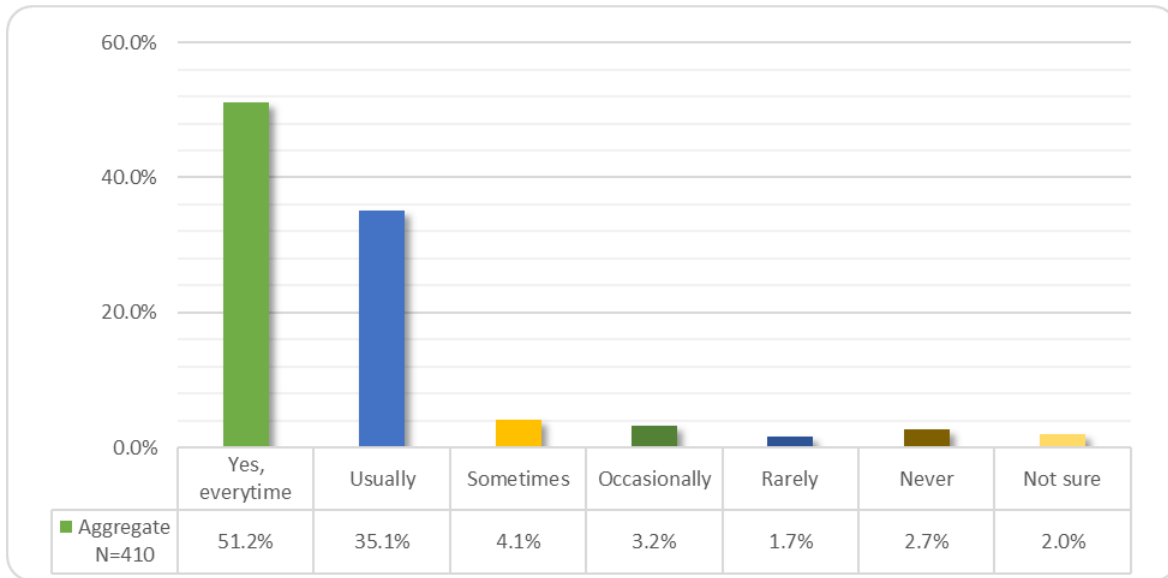


- Aggregately, respondents are most positively impacted by a product having the ability to be reused (mean of 4.06 out of 5.00) and a product having the ability to be repaired (mean of 4.00 out of 5.00). Respondents are least impacted by a product being compostable (mean of 3.50 out of 5.00).



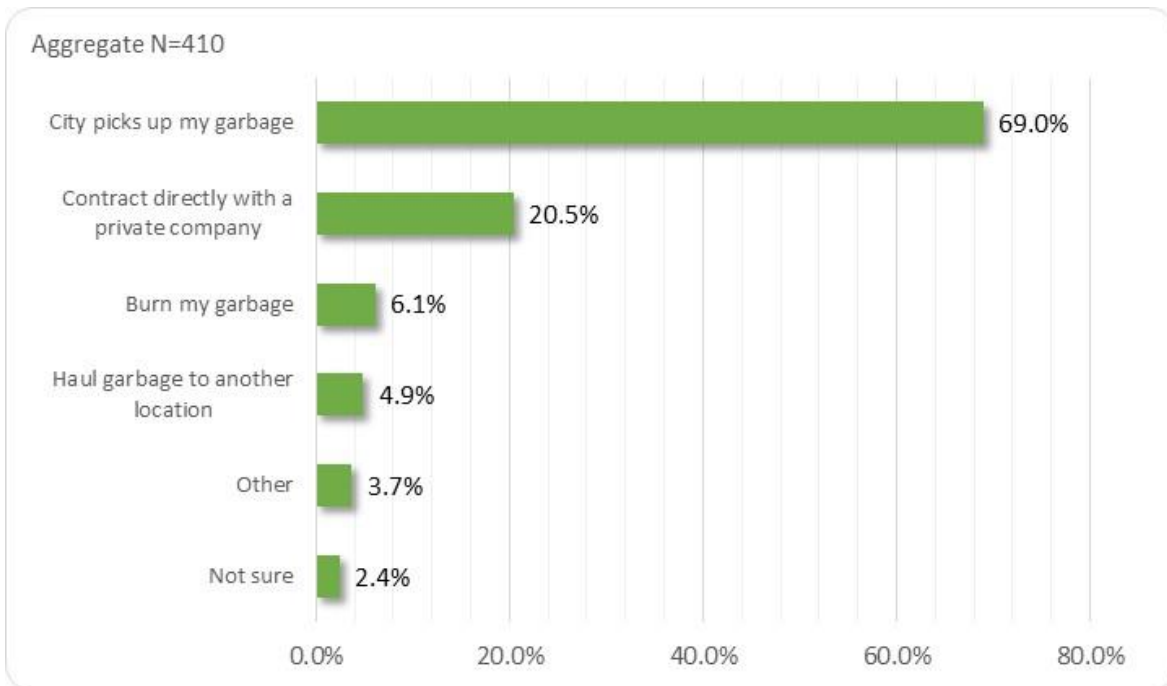
- The following statistically significant differences were detected between education groups:
 - Respondents who have some college or an associate's degree or Bachelor or higher degree are significantly more likely to report products made with recycled materials have a higher impact on their purchase decision (3.83 / 3.82) compared to respondents who have a High School diploma or less (3.33).
 - Respondents who have some college or an associate's degree or Bachelor or higher degree are significantly more likely to report products that are recyclable have a higher impact on their purchase decision (3.97 / 3.88) compared to respondents who have a High School diploma or less (3.38).
 - Respondents who have some college or an associate's degree or Bachelor or higher degree are significantly more likely to report products that are reusable have a higher impact on their purchase decision (4.14 / 4.16) compared to respondents who have a High School diploma or less (3.76).

When you recycle items locally, do you only place items in the recycling containers you know are acceptable?



- Just over half of aggregate respondents (51.2%) reported placing items in the acceptable recycling containers every time, while over one-third (35.1%) usually place items in the acceptable containers. A total of less than 12 percent of respondents reported sometimes, occasionally, rarely, or never.
- The following statistically significant difference was detected between age groups:
 - Respondents 45-64 or 65+ are significantly more likely to place only acceptable items in recycling containers every time (57.1% / 57.8%) compared to respondents 18-44 (43.9%).

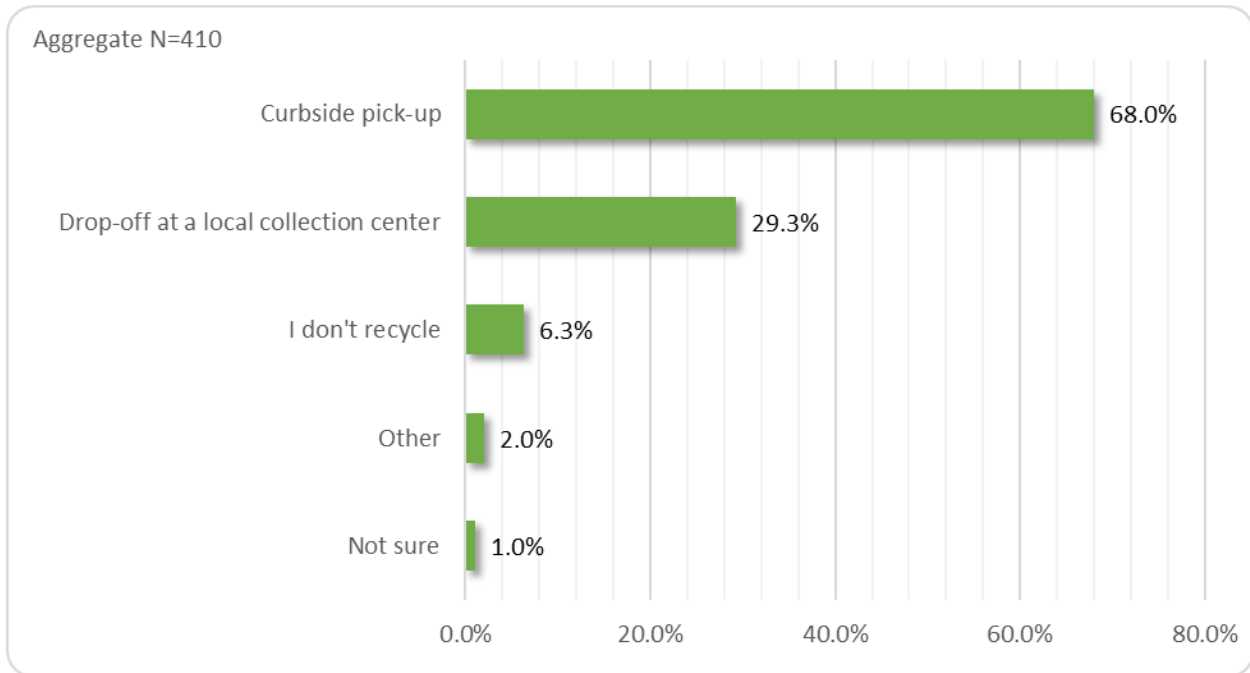
Currently, how is your solid waste (garbage) being managed? Please check all that apply.



- Over two-thirds of respondents have their garbage picked up by the City (69.0%), while slightly over 20 percent of respondents contract directly with a private company. Only 6.1% burn their garbage and less than five percent haul garbage to another location.
- Other responses indicated by respondents are listed below:
 - My apartment building contracts with a private company that picks up garbage (3)
 - Burn some, recycle what I can
 - Feed leftovers, if there is any, to outdoor animals, example: outdoor cats, and wild animals that stray onto the farm (deer, raccoons, possums, rabbits, birds, etc.)
 - I don't recycle
 - I take it to a city recycling center
 - Mobile home park contracts it out - dumpster
 - The landlord has a garbage truck come every two weeks and pick up the dumpster where we put out garbage but usually it isn't separated except for like the cans and bottles I separate and then recycle them
 - Through HOA
 - Townhome Association
 - We also have a recycling dumpster

- The following statistically significant difference was detected between rural vs. city, income and county type groups:
 - Respondents who live within city limits are significantly more likely to contract directly with a private company to pick up their garbage (85.8%) compared to respondents who live in rural areas (64.0%).
 - Respondents who live within city limits are significantly more likely to report their city contracts with a private company that picks up their garbage (79.4%) compared to respondents who live in rural areas (41.0%).
 - Respondents who live in rural areas are significantly more likely to haul garbage to another location (10.0%) compared to respondents who live within city limits (3.0%).
 - Respondents who live in rural areas are significantly more likely to burn their garbage (18.0%) compared to respondents who live within city limits (2.4%).
 - Respondents who earn \$100,000 or more are significantly more likely to contract directly with a private company to pick up their garbage (35.6%) compared to respondents who earn less than \$25,000 (13.5%).
 - Respondents who live in mostly urban counties are significantly more likely to contract directly with a private company to pick up their garbage (17.6%) compared to respondents who live in completely rural counties (3.7%).
 - Respondents who live in mostly urban counties are significantly more likely to report their city contracts with a private company to pick up their garbage (75.6%) compared to respondents who live in mostly rural counties (46.0%).
 - Respondents who live in completely rural counties are significantly more likely to haul garbage to another location (18.5%) compared to respondents who live in mostly urban counties (2.7%).
 - Respondents who live in completely rural counties are significantly more likely to burn their garbage (18.5%) compared to respondents who live in mostly urban counties (3.1%).

Currently, how are your recyclables managed? Please check all that apply.

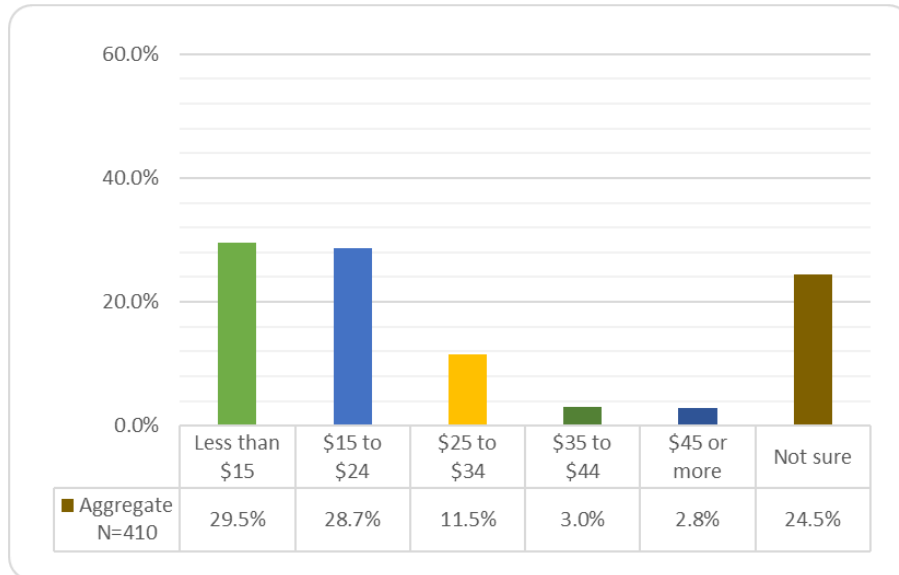


- The majority of respondents (68.0%) manage recyclables with curbside pick-up. Additionally, just under 30 percent of respondents drop-off recyclables at a local collection center. Only 6.3% of respondents don't recycle.
- Other responses indicated by respondents are listed below:
 - Picked up from my apartment building (3)
 - Dumpsters
 - I take my cans and bottles to the local grocery store and cash them in for the deposit
 - My city doesn't recycle
 - No recycling available where I live
 - Pop cans go to my brother
- The following statistically significant differences were detected between gender, rural vs. city, income and county type groups:
 - Female respondents are significantly more likely to report that they do not recycle (8.6%) compared to male respondents (4.0%).
 - Respondents who live within city limits are significantly more likely to have curbside recycling pick-up (77.0%) compared to respondents who live in rural areas (45.0%).
 - Respondents who live in rural areas are significantly more likely to drop-off recycling at a local collection center or drop-off at a special container location (49.0%) compared to respondents who live within city limits (21.3%).
 - Respondents who earn less than \$25,000 are significantly more likely to not recycle (11.2%) compared to respondents who earn \$50,000 to \$99,999 (0.8%).



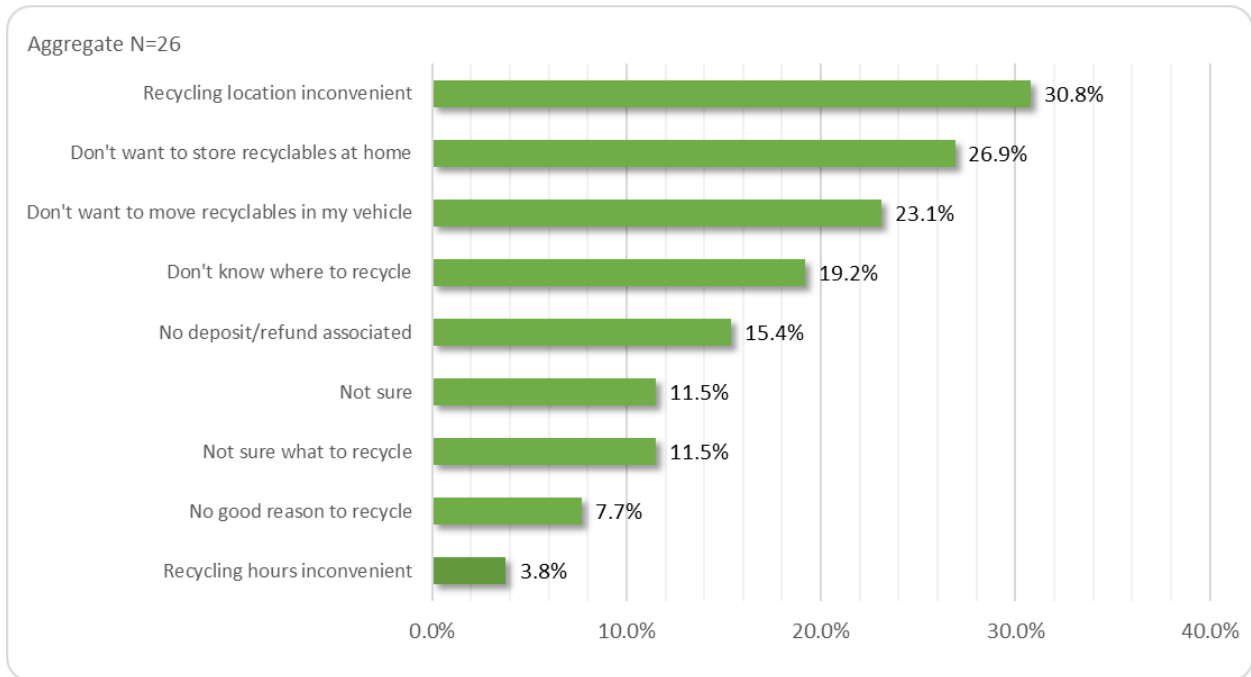
- Respondents who live in mostly urban counties are significantly more likely to have curbside pick-up (73.2%) compared to respondents who live in mostly rural counties (54.0%).
- Respondents who live in mostly rural counties are significantly more likely to drop-off at a local collection center or drop-off at a special container location (42.5%) compared to respondents who live in mostly urban counties (25.1%).

On average, what does your household pay monthly for all of your curbside solid waste (garbage) and recycling services?



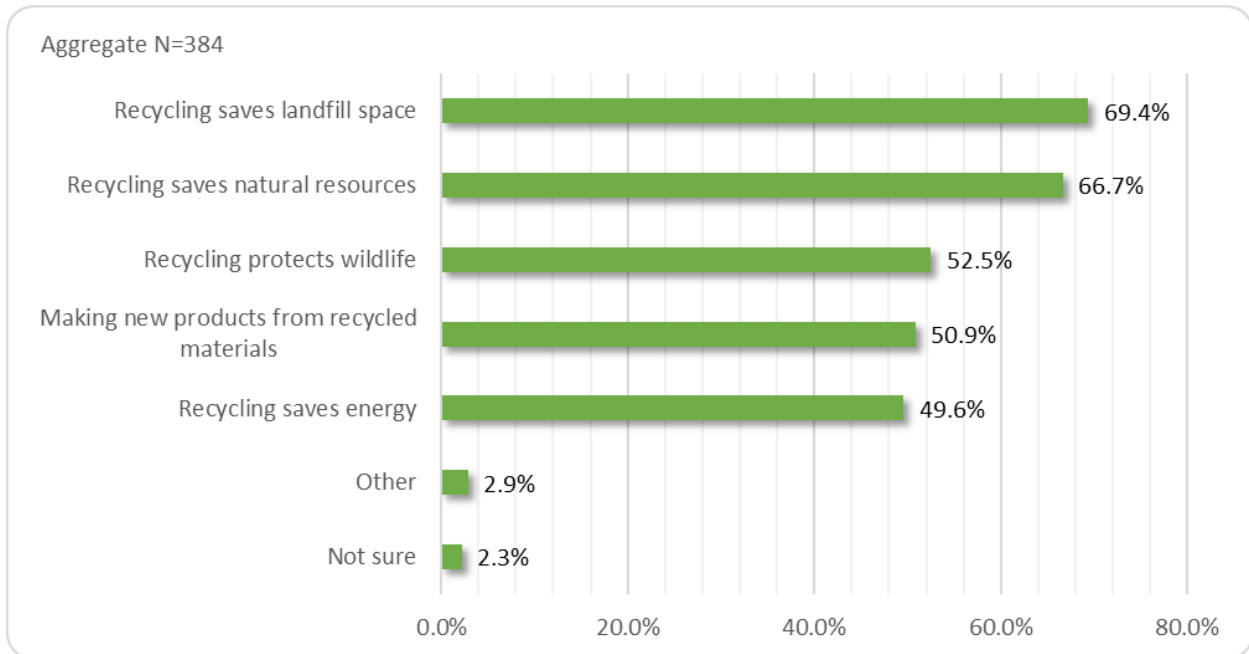
- Nearly 60 percent of respondent households pay less than \$25 monthly for all curbside solid waste and recycling services. Just 11.5% of respondents pay \$25 to \$34 and less than six percent pay over \$35. Approximately one-fourth of respondents were not sure.
- The following statistically significant differences were detected between rural vs. city and income groups:
 - Respondents who live within city limits are significantly more likely to not know how much they pay for curbside solid waste and recycling services (27.2%) compared to respondents who live in rural areas (15.0%).
 - Respondents who earn less than \$25,000 are significantly less likely to pay \$15 to \$24 per month for curbside solid waste and recycling services (20.5%) compared to respondents who earn \$50,000 to \$99,999 (58.3%).

Please tell us why you do not currently recycle. Please check all that apply.



- Of the 6.3% of respondents who don't currently recycle, the top three reasons include the recycling location being inconvenient (30.8%), not wanting to store recyclables at home (26.9%), and not wanting to move recyclables in their vehicle (23.1%). Almost 20 percent of respondents don't know where to recycle and another 15.4% do not recycle because there is not a deposit/refund associated. Only 3.8% of respondents believe recycling hours are inconvenient and just 7.7% have no good reason to recycle.
- The following statistically significant difference was detected between education groups:
 - Respondents who have a Bachelor or higher college degree are significantly more likely to not recycle because they don't want to move recyclables in their vehicle (57.1%) compared to respondents who have a high school diploma or less or some college or associate's degree (12.5% / 9.1%).

What are your primary reasons for recycling? Please check all that apply.

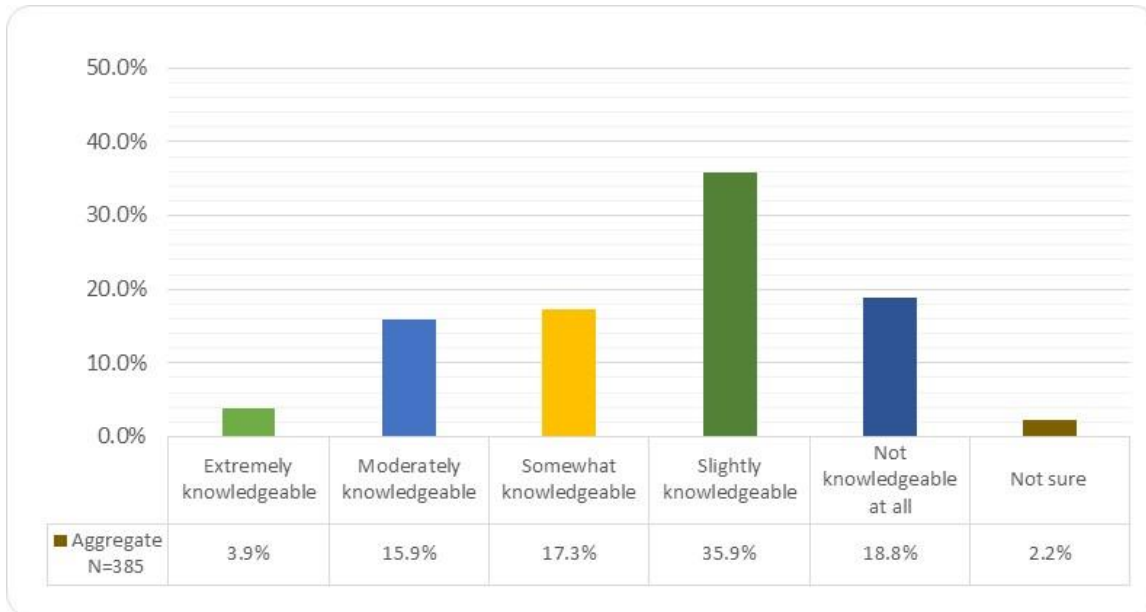


- For the 93.7% of respondents who currently recycle, the top two reasons for recycling include that recycling saves landfill space (69.4%) and recycling saves natural resources (66.7%). In addition, over half of respondents recycle because it protects wildlife (52.5%) and because new products can be made from recycled materials (50.9%). Just under half of respondents believe recycling saves energy (49.6%).
- Other responses indicated by respondents are listed below:
 - Iowa pays for recycling / deposits (3)
 - Donate proceeds to school activities, fundraisers, etc.
 - Good for the planet, less waste
 - It is one of the ways I worship God. I am a good steward.
 - Recycling reduces climate change
 - Save money
 - Semi required
 - The planet
 - Wife
- The following statistically significant differences were detected between age, gender, rural vs. city, education and county type groups:
 - Respondents 65+ are significantly more likely to report that the primary reason they recycle is to make new products from recycled materials (65.3%) compared to respondents 18-44 (44.1%).
 - Female respondents are significantly more likely to report that the primary reason they recycle is because recycling saves landfill space (74.0%) compared to male respondents (64.4%).



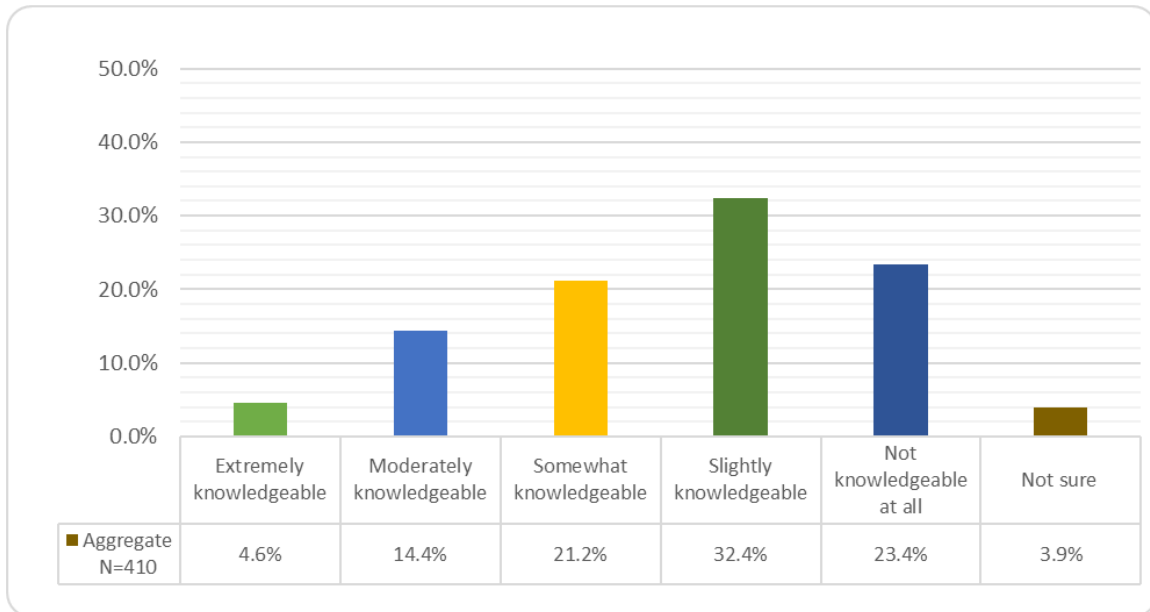
- Female respondents are significantly more likely to report that the primary reason they recycle is because recycling protects wildlife (57.8%) compared to male respondents (46.6%).
- Female respondents are significantly more likely to report that the primary reason they recycle is to make new products from recycled materials (56.8%) compared to male respondents (45.0%).
- Respondents who live in rural areas are significantly more likely to report that the primary reason they recycle is to protect wildlife (63.7%) compared to respondents who live within city limits (50.2%).
- Respondents who have some college or an associate's degree or bachelor degree or higher college degree are significantly more likely to recycle because recycling saves energy (51.7% / 54.5%) compared to respondents who have a high school diploma or less (39.2%).
- Respondents who live in completely rural counties are significantly more likely to recycle because it saves landfill space (83.3%) compared to respondents who live in mostly urban counties (65.6%).

Beyond your regular recycling service, how knowledgeable are you regarding where and how your recyclables are managed?



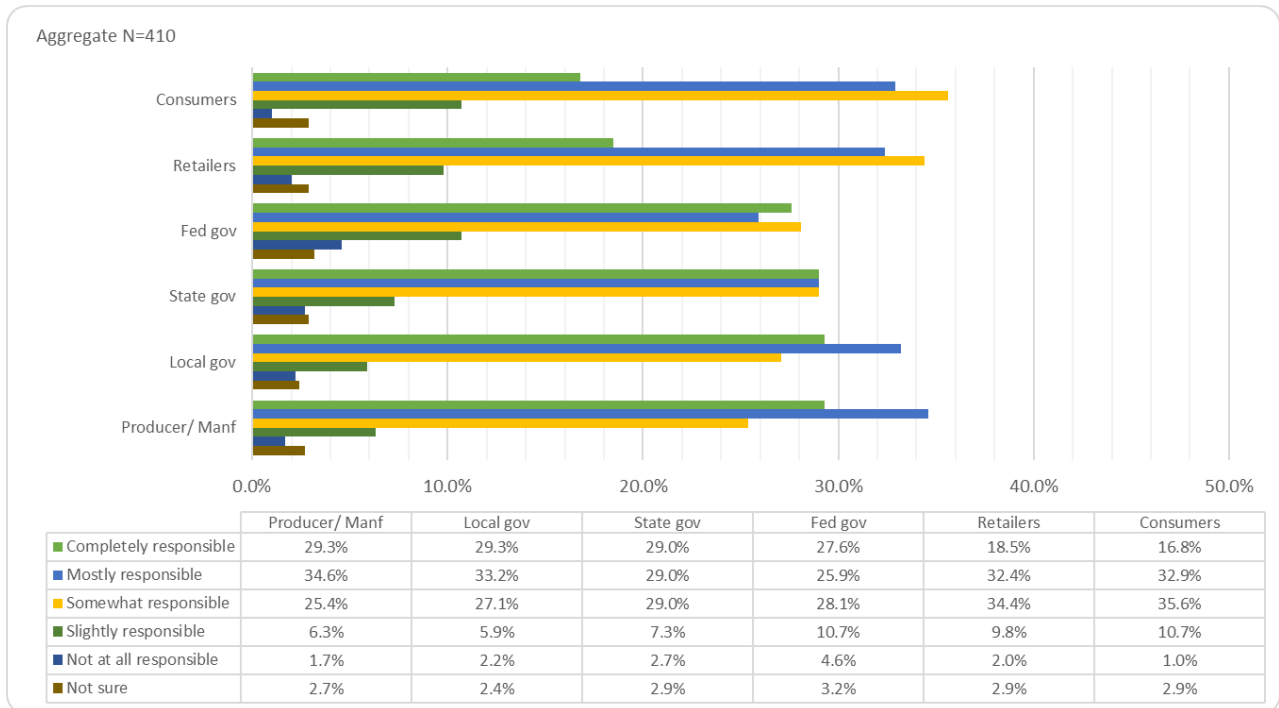
- Over a third of respondents (35.9%) are only slightly knowledgeable regarding where and how their recyclables are managed, while 18.8% are not knowledgeable at all. Just over 17 percent of respondents are somewhat knowledgeable and a total of 19.8% are extremely or moderately knowledgeable. Aggregately, respondents provided a mean value of 2.46 out of 5.00 with 1 being not knowledgeable at all and 5 being extremely knowledgeable.
- The following statistically significant difference was detected between education groups:
 - Respondents who have a Bachelor or higher degree are significantly more likely to report a higher level of knowledge in regards to where and how recyclables are managed (2.54) compared to respondents who have some college or an associate’s degree (2.24).

Beyond your regular garbage service, how knowledgeable are you regarding where and how your solid waste is managed?

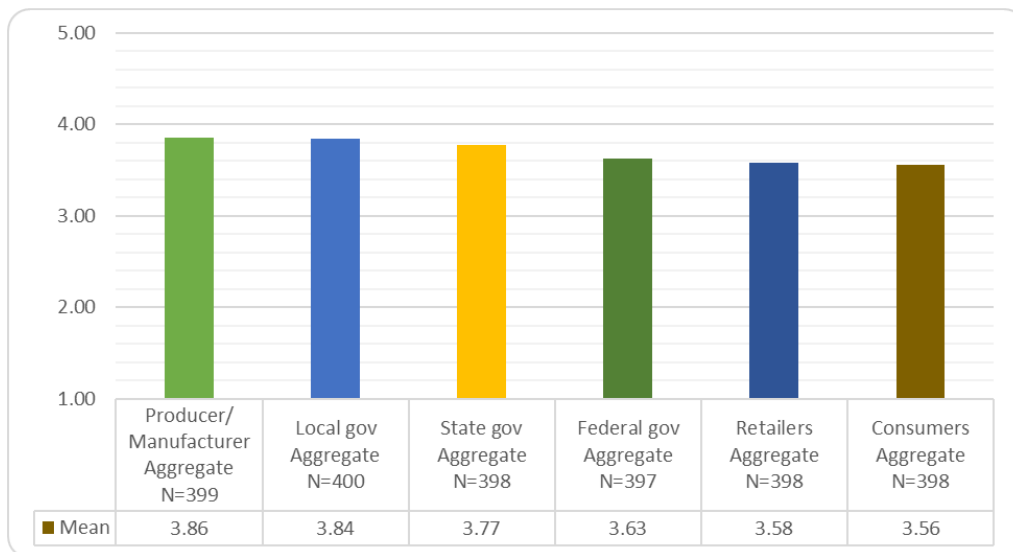


- Nearly a third of respondents (32.4%) are only slightly knowledgeable regarding where and how solid waste is managed, while 23.4% are not knowledgeable at all. Just over 21 percent of respondents are somewhat knowledgeable and a total of 19.0% are extremely or moderately knowledgeable. Aggregately, respondents provided a mean value of 2.42 out of 5.00 with 1 being not knowledgeable at all and 5 being extremely knowledgeable.

In your opinion, how much responsibility should each of the following groups have for end of life management of solid waste and recyclables?

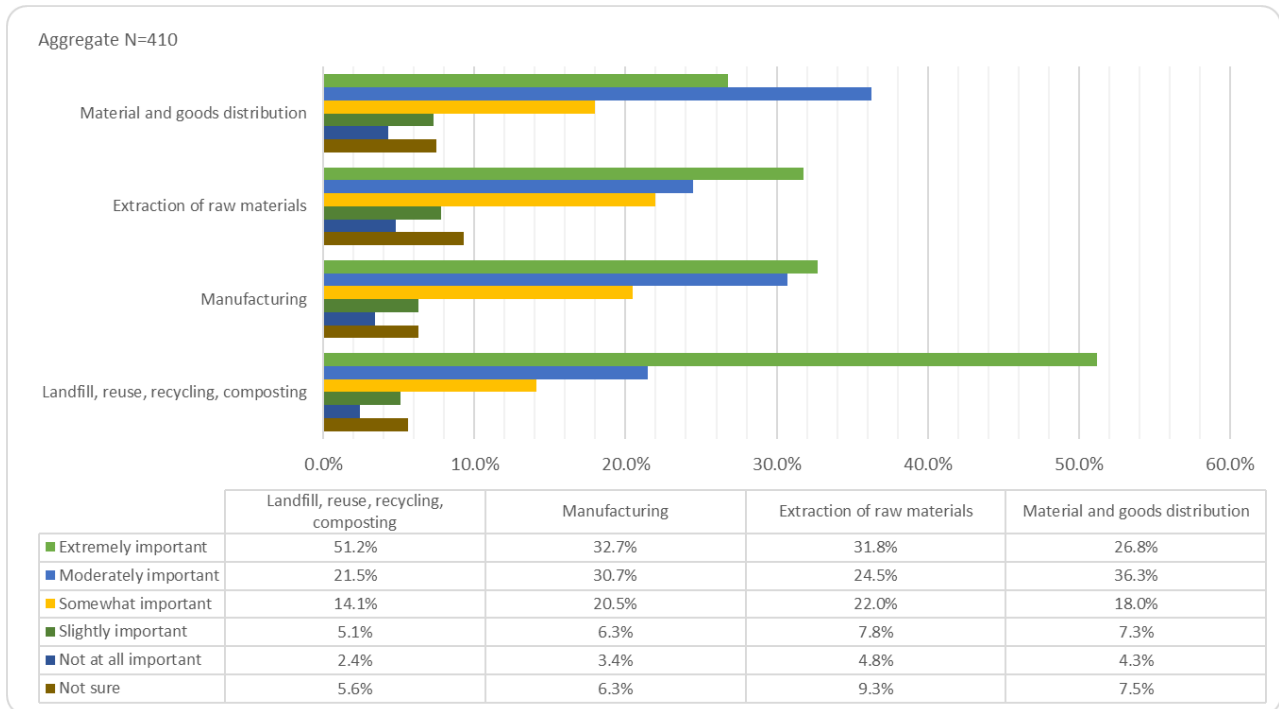


- Aggregately, respondents believe producers/manufacturers (mean of 3.86 out of 5.00) and the local government (mean of 3.84 out of 5.00) are most responsible for end of life management of solid waste and recyclables. This is closely followed by the state government (3.77) and the federal government (3.63). Retailers (3.58) and consumers (3.56) are viewed as the least responsible for end of life management of solid waste and recyclables.

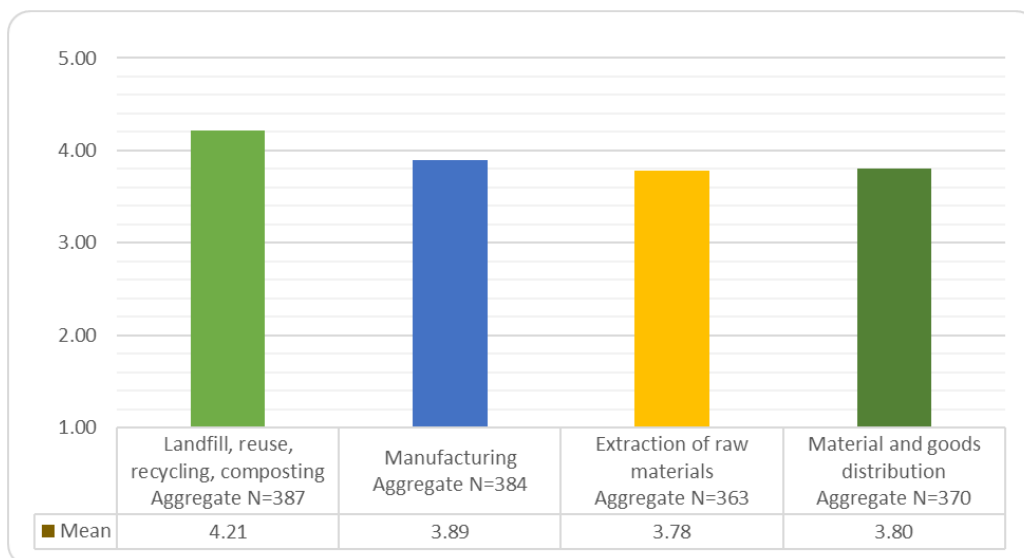


- The following statistically significant differences were detected between age, rural vs. city and income groups:
 - Respondents 65+ are significantly more likely to report a higher level of consumer responsibility in regards to end of life management of solid waste and recyclables (3.80) compared to respondents 18-44 (3.48).
 - Respondents 18-44 are significantly more likely to report a higher level of federal government responsibility in regards to end of life management of solid waste and recyclables (3.74) compared to respondents 45-64 (3.41).
 - Respondents 65+ are significantly more likely to report a higher level of state government responsibility in regards to end of life management of solid waste and recyclables (3.95) compared to respondents 45-64 (3.61).
 - Respondents 65+ are significantly more likely to report a higher level of local government responsibility in regards to end of life management of solid waste and recyclables (4.09) compared to respondents 45-64 (3.75).
 - Respondents who live in rural areas are significantly more likely to report a higher level of consumer responsibility in regards to end of life management of solid waste and recyclables (3.73) compared to respondents who live within city limits (3.50).
 - Respondents who earn \$25,000 to \$49,999 are significantly more likely to report a higher level of federal government responsibility in regards to end of like management of solid waste and recyclables (3.93) compared to respondents who earn \$50,000 to \$99,999 (3.56).
 - Respondents who earn \$100,000 or more are significantly more likely to report a higher level of agreement that state government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost (4.28) compared to respondents who earn \$50,000 to \$99,999 (3.87).

How important is it to you to consider environmental impacts of a product during the following phase of its life as listed in the table below?

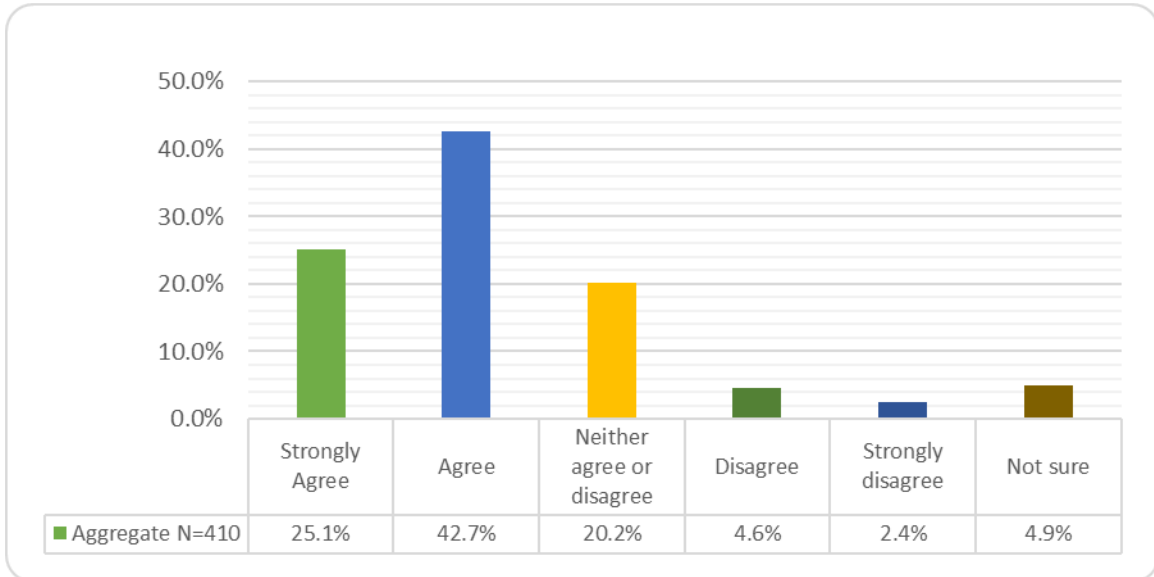


- Aggregately, respondents place the highest importance (mean of 4.21 out of 5.00) on environmental impacts of a product during landfill, reuse, recycling, and composting. This is followed closely by manufacturing (mean of 3.89 out of 5.00). Respondents place the least importance on environmental impacts of a product during extraction of raw materials (3.78) and materials and goods distribution (3.80).



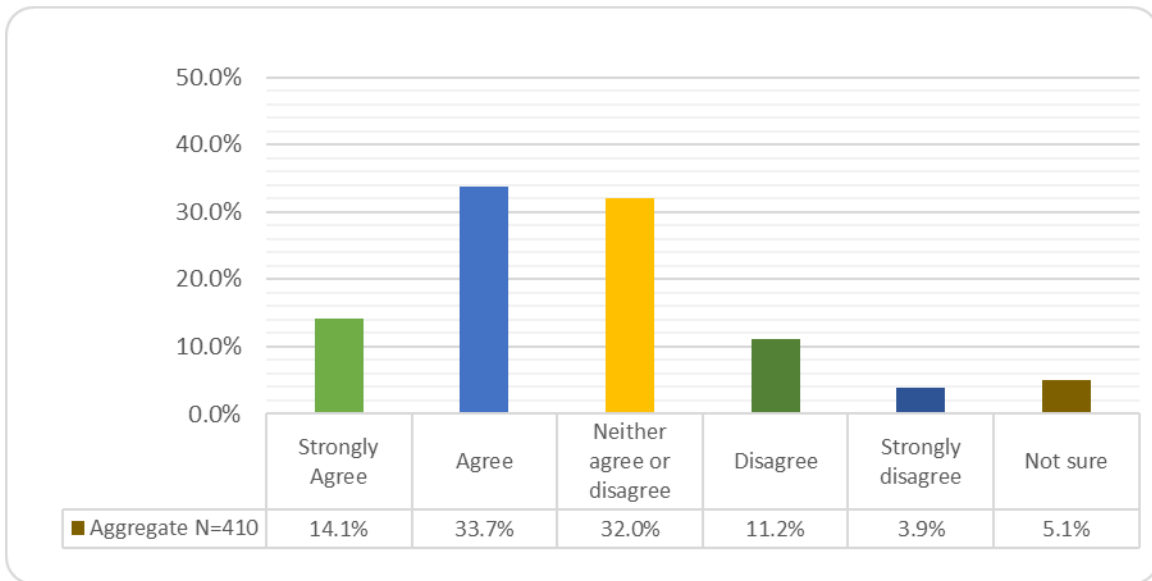
How much do you agree with the following statements?

Manufacturers should pay for take back programs to increase recovery of end of life products and packaging.



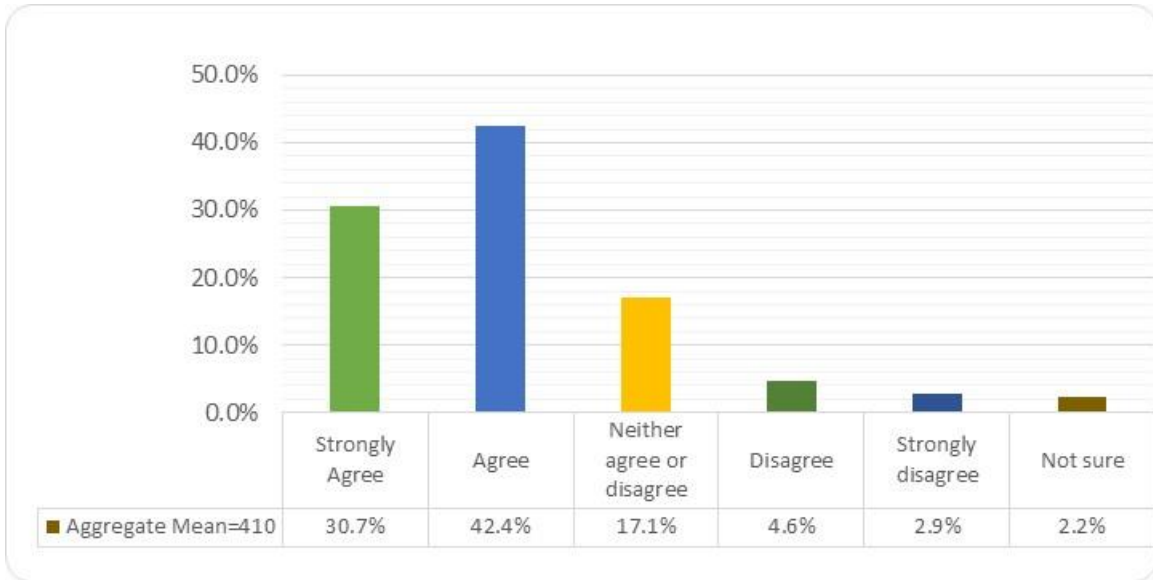
- A total of 67.8% of respondents agree or strongly agree that manufacturers should pay for take back programs to increase recovery of end of life products and packaging. Just 7.0% of respondents disagreed. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strong agree, the mean level of agreement is 3.88.

Manufacturers & Consumers should share the cost for take back programs to increase recovery of end of life products.



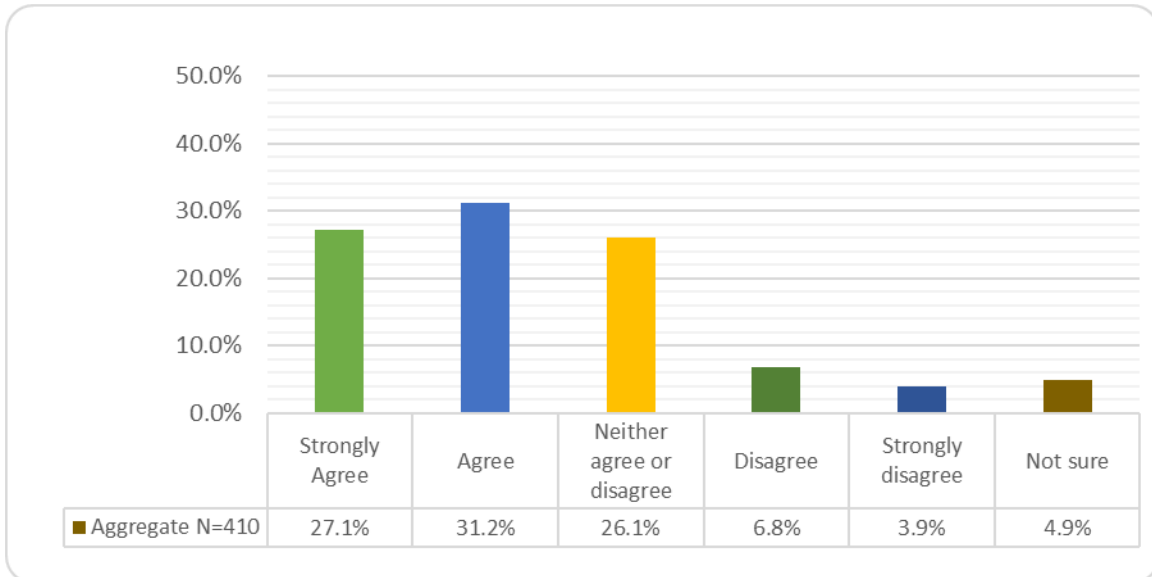
- A total of 47.8% of respondents agree or strongly agree that manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products, while about one-third neither agree or disagree. Just 15.1% of respondents disagreed. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strong agree, the mean level of agreement is 3.45.
- The following statistically significant difference was detected between county type groups:
 - Respondents who live in mostly urban counties are significantly more likely to report a higher level of agreement with the statement Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products (3.51) compared to respondents who live in completely rural areas (2.91).

State government should offer financial incentives to increase recycled content in manufacturing new products.



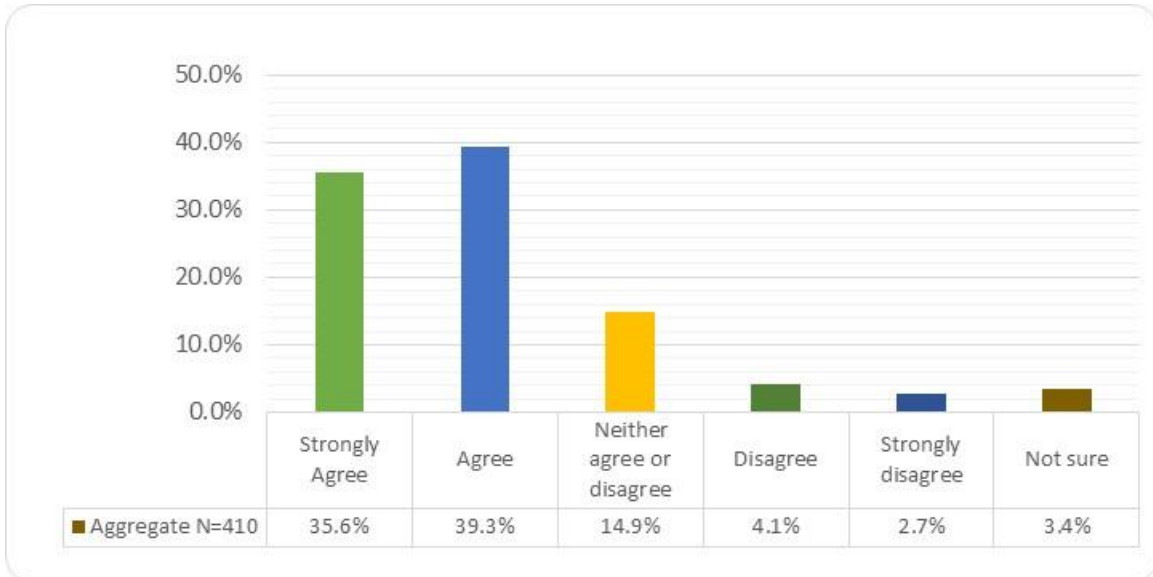
- A total of 73.1% of respondents agree or strongly agree that the state government should offer financial incentives to increase recycled content in manufacturing new products. Just 7.5% of respondents disagreed. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strong agree, the mean level of agreement is 3.96.

State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs.

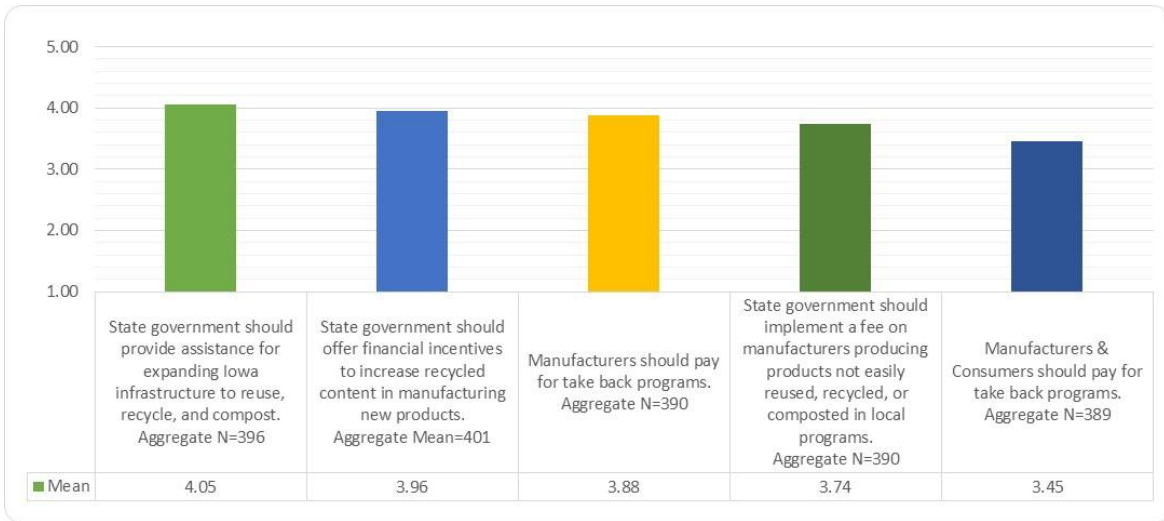


- A total of 58.3% of respondents agree or strongly agree that the state government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs. Just 10.7% of respondents disagreed. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strong agree, the mean level of agreement is 3.74.
- The following statistically significant difference was detected between age groups:
 - Respondents 18-44 are significantly more likely to report a higher level of agreement with the statement State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs (3.86) compared to respondents 45-64 (3.54).

State government should provide assistance for expanding Iowa infrastructure to reuse, recycle, and compost.

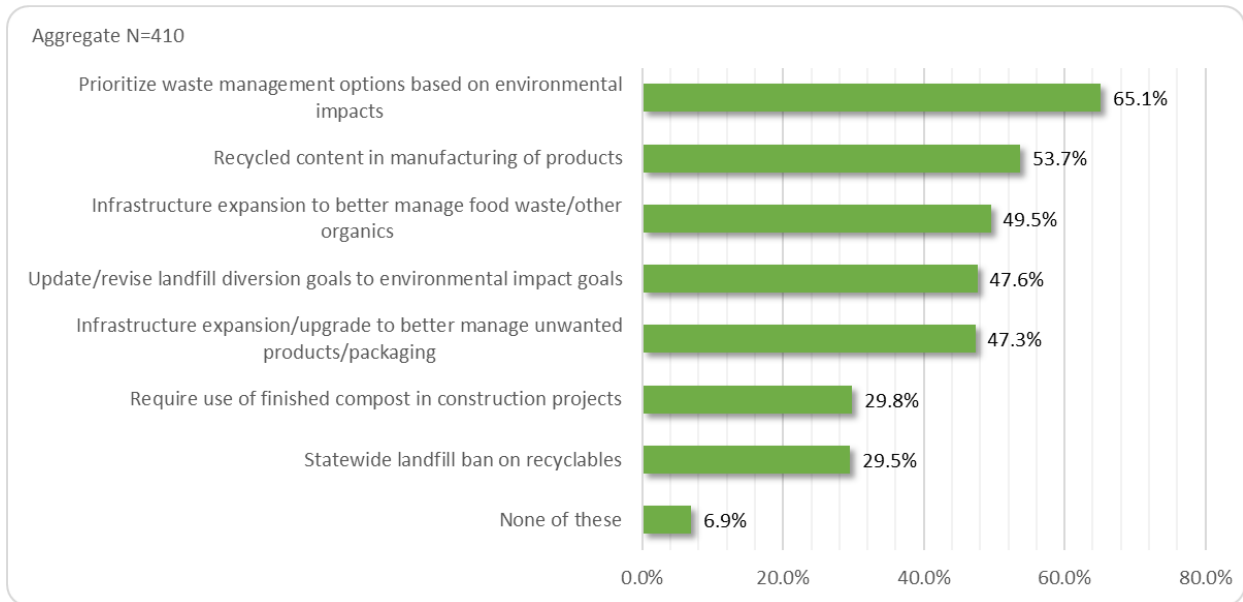


- A total of 74.9% of respondents agree or strongly agree that the state government should provide assistance for expanding Iowa infrastructure to reuse, recycle, and compost. Just 6.8% of respondents disagreed. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strong agree, the mean level of agreement is 4.05.
- The following statistically significant difference was detected between income groups:
 - Respondents who earn \$100,000 or more are significantly more likely to report a higher level of agreement that state government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost (4.28) compared to respondents who earn \$50,000 to \$99,999 (3.87).



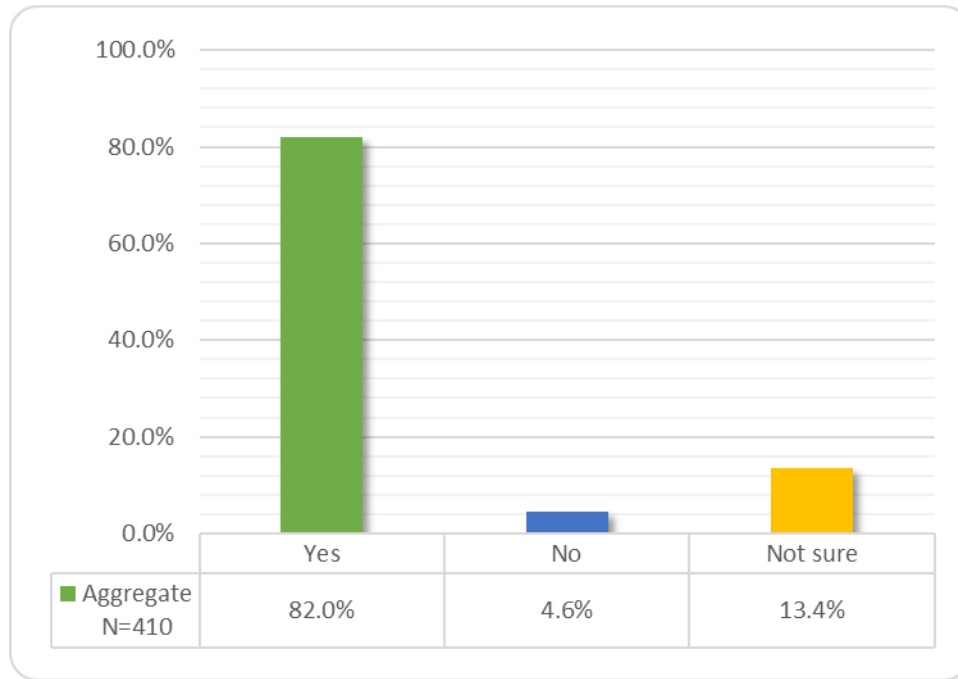
- Aggregately, respondents agree most with the statement “State government should provide assistance for expanding Iowa infrastructure to reuse, recycle, and compost” (mean of 4.05), followed by “State government should offer financial incentives to increase recycled content in manufacturing new products” (mean of 3.96). On average, the majority of respondents agree with every statement listed above.

Which of the following solid waste and/or recycling should the state of Iowa support?



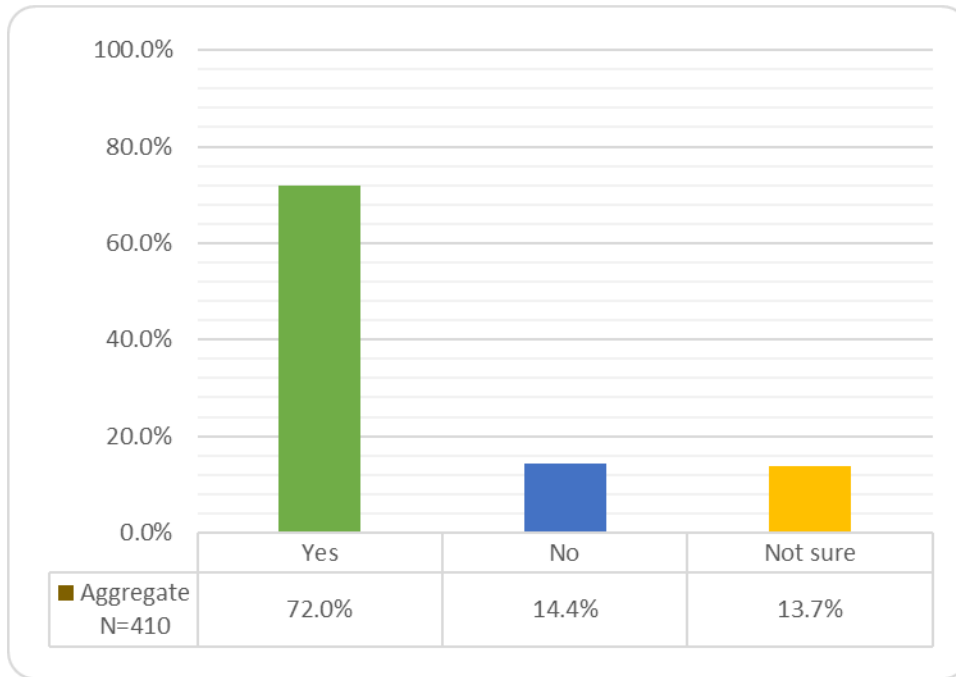
- Aggregately, the top two areas respondents would like the state of Iowa to support include prioritizing waste management options based on environmental impacts (65.1%) and including recycled content in manufacturing of products (53.7%). Additionally, just under half of respondents would like the state of Iowa to support infrastructure expansion to better manage food waste/other organics (49.5%), updating/revising landfill diversion goals to environmental impact goals (47.6%), and infrastructure expansion/upgrades to better manage unwanted products/packaging (47.3%).
- Less than one-third of respondents would like the state of Iowa to support requiring the use of finished compost in construction projects (29.8%) and a statewide landfill ban on recyclables (29.5%).
- The following statistically significant difference was detected between age groups:
 - Respondents 65+ are significantly more likely to report that the state of Iowa should support Infrastructure expansion/upgrade to better manage unwanted products and packaging (60.2%) compared to respondents 18-44 (41.7%).

Do you think the private sector has a responsibility to protect environmental quality?



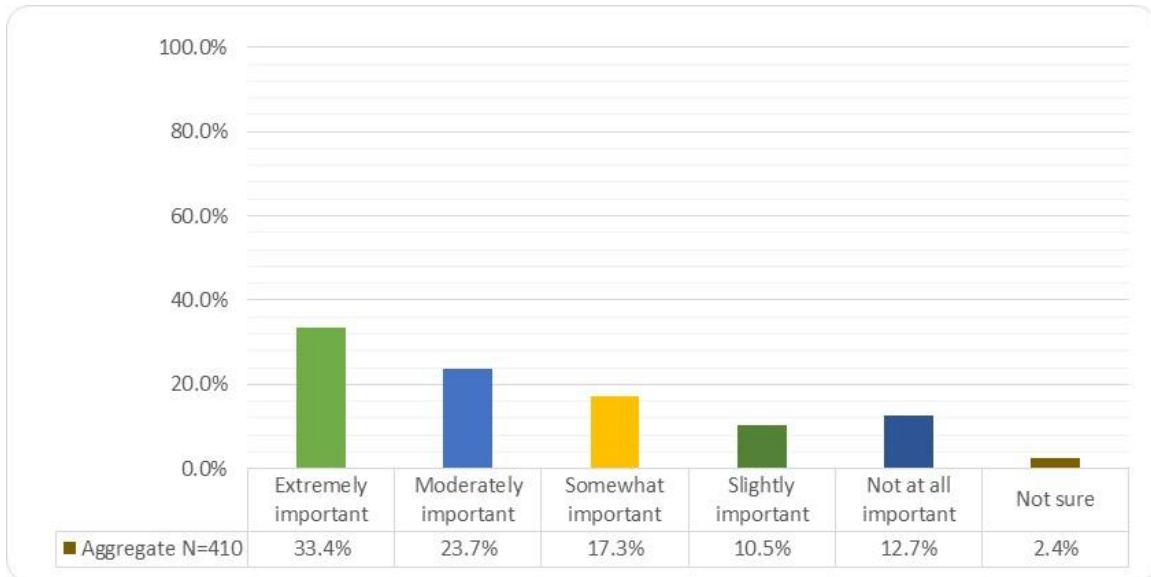
- Aggregately, the majority of respondents think the private sector has a responsibility to protect environmental quality (82.0%), while 13.4% were not sure.
- The following statistically significant difference was detected between education groups:
 - Respondents who have a Bachelor or higher degree are significantly more likely to report the private sector has a responsibility to protect environmental quality (90.1%) compared to respondents with a High School diploma or less (73.3%).

Do you think climate change is happening?



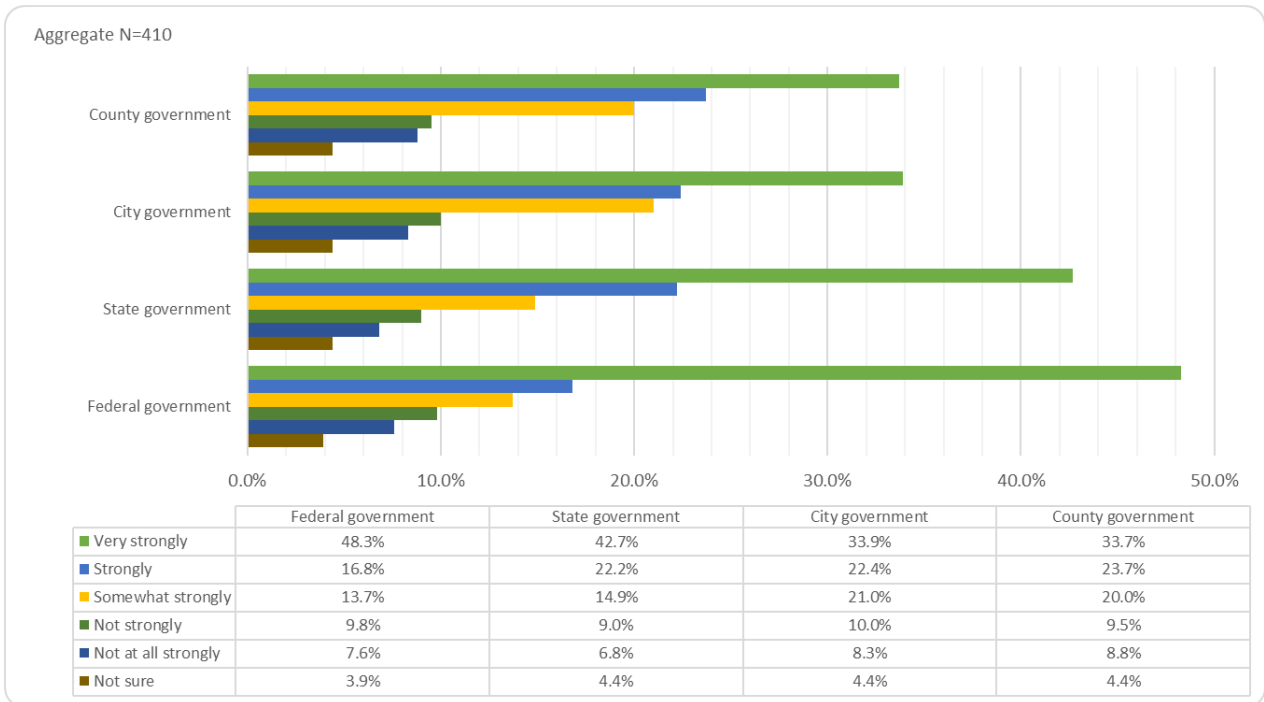
- Nearly three-fourths of respondents think climate change is happening.
- The following statistically significant difference was detected between age groups:
 - Respondents 18-44 are significantly more likely to believe climate change is happening (79.1%) compared to respondents 65+ (61.4%).

How important is the issue of climate change to you personally?

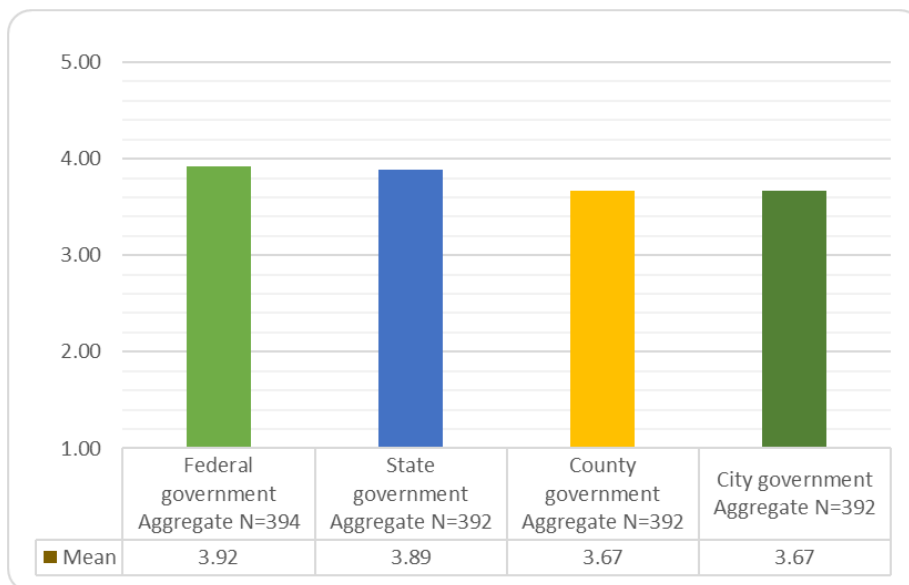


- A total of 57.1% of respondents consider climate change to be extremely or moderately important, while only 23.2% consider climate change to be slightly or not at all important. On a scale of 1 to 5 with 1 being not at all important and 5 being extremely important, the mean level of importance is 3.56.
- The following statistically significant difference was detected between income groups:
 - Respondents who earn \$100,000 or more are significantly more likely to report a higher level of importance of climate change (4.02) compared to respondents who earn \$25,000 to \$49,999 (3.41).

How strongly do you feel each of the following levels of government should take additional action to reduce climate change?

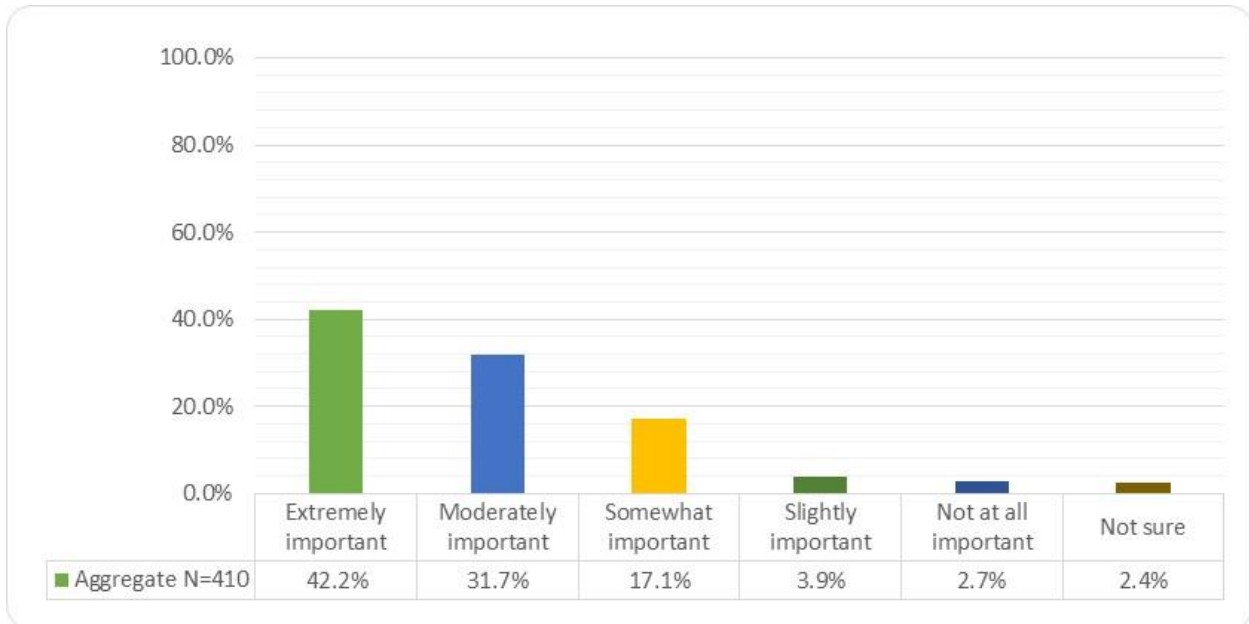


- Aggregately, respondents feel most strongly about the federal government (mean of 3.92 out of 5.00) and the state government (mean of 3.89 out of 5.00) taking additional action to reduce climate change. Respondents are least concerned with county governments (3.76) and city governments (3.67) taking additional action.



- The following statistically significant differences were detected between age and county type groups:
 - Respondents 18-44 are significantly more likely to report a stronger level of federal government action is needed in regards to reducing climate change (4.11) compared to respondents 65+ (3.63).
 - Respondents 18-44 are significantly more likely to report a stronger level of state government action is needed in regards to reducing climate change (4.08) compared to respondents 65+ (3.65).
 - Respondents 18-44 are significantly more likely to report a stronger level of county government action is needed in regards to reducing climate change (3.89) compared to respondents 45-64 or 65+ (3.49 / 3.49).
 - Respondents 18-44 are significantly more likely to report a stronger level of city government action is needed in regards to reducing climate change (3.91) compared to respondents 45-64 or 65+ (3.48 / 3.45).
 - Respondents who live in mostly urban counties are significantly more likely to report a higher level of additional action is needed by the federal government to reduce climate change (4.04) compared to respondents who live in mostly rural areas (3.58).
 - Respondents who live in mostly urban counties are significantly more likely to report a higher level of additional action is needed by the city government to reduce climate change (3.78) compared to respondents who live in mostly rural areas (3.33).

How important is it to you to reduce the amount of waste disposed of in the landfill?



- A total of 73.9% of respondents consider reducing the amount of waste disposed of in the landfill to be extremely or moderately important, while only 6.6% consider reducing the amount of waste to be slightly or not at all important. On a scale of 1 to 5 with 1 being not at all important and 5 being extremely important, the mean level of importance is 4.10.

Appendix: Data Tables Segmented by Demographic Variables

Gender Segments

Gender by Age Groups

	<i>Male</i>	<i>Female</i>
18 – 44	22.1	23.3
45 – 64	17.4	16.9
65+	9.3	11.0

Gender by Rent vs. Own

	<i>Male</i>	<i>Female</i>
<i>Rent</i>	17.9	15.9
<i>Own</i>	29.4	33.3
<i>Not Sure</i>	0.5	0.5

Gender by Where you Live

	<i>Male</i>	<i>Female</i>
<i>Within city limits</i>	38.1	35.6
<i>Rural area</i>	11.0	14.0
<i>Not sure</i>	0.3	1.0

Gender by Income Groups

	<i>Male</i>	<i>Female</i>
<i>Less than \$25,000</i>	11.1	11.8
<i>\$25,000 - \$49,999</i>	15.2	15.7
<i>\$50,000 - \$99,999</i>	15.4	15.37
<i>\$100,000 or more</i>	8.0	7.2

Gender by Education Level

	<i>Male</i>	<i>Female</i>
<i>Some high school</i>	1.0	1.2
<i>High school degree or equivalent</i>	13.5	9.8
<i>Some college but no degree</i>	10.5	14.5
<i>Associates degree</i>	5.4	6.4
<i>Bachelor degree</i>	13.5	15.4
<i>Graduate or Doctorate degree</i>	4.7	3.2
<i>Other</i>	0.2	0.7

Gender by Primary way respondent finds information about solid waste, recycling, and/or compost programs and issues

	<i>Male</i>	<i>Female</i>
<i>Web/internet search</i>	63.3	52.6
<i>Social media</i>	28.1	28.2
<i>Phone book</i>	3.0	4.8
<i>Newspaper</i>	20.6	21.5
<i>City or regional publication</i>	33.7	33.5
<i>TV advertisement</i>	24.6	12.9
<i>Radio advertisement</i>	9.0	4.8
<i>Family, friends or neighbors</i>	32.7	34.4
<i>Other</i>	2.5	2.9
<i>Not sure</i>	4.0	8.6

Gender by Primary way respondent finds information about global warming/climate change

	<i>Male</i>	<i>Female</i>
<i>Web/internet search</i>	62.3	55.5
<i>Social media</i>	41.7	44.0
<i>Phone book</i>	2.0	0.0
<i>Newspaper</i>	24.1	23.4
<i>City or regional publication</i>	7.0	6.7
<i>TV advertisement</i>	32.2	28.7
<i>Radio advertisement</i>	5.5	4.3
<i>Family, friends or neighbors</i>	19.6	25.4
<i>Other</i>	10.1	5.3
<i>Not sure</i>	3.0	6.7

Gender by Product claims that would positively impact purchase decision (Mean comparisons)

	<i>Male</i>	<i>Female</i>
<i>Products made with recycled materials</i>	3.48	3.92
<i>Product is recyclable</i>	3.60	3.99
<i>Product is compostable</i>	3.35	3.65
<i>Product has ability to be repaired</i>	3.95	4.05
<i>Product has the ability to be re-used</i>	3.90	4.20



Gender by Placing items you know are acceptable in recycling containers

	<i>Male</i>	<i>Female</i>
<i>Yes, every time</i>	49.2	53.1
<i>Usually</i>	37.7	32.5
<i>Sometimes</i>	5.0	3.3
<i>Occasionally</i>	4.0	2.4
<i>Rarely</i>	1.5	1.9
<i>Never</i>	2.0	3.3
<i>Not sure</i>	0.5	3.3

Gender by How solid waste is currently being managed

	<i>Male</i>	<i>Female</i>
<i>Contract directly with private company</i>	22.6	18.7
<i>My city picks up my garbage</i>	70.9	67.0
<i>Haul my garbage to another location</i>	3.5	5.7
<i>Burn my garbage</i>	2.5	9.1
<i>Other</i>	4.0	3.3
<i>Not sure</i>	1.0	3.8

Gender by How recyclables are currently being managed

	<i>Male</i>	<i>Female</i>
<i>Curbside pick-up</i>	72.9	63.2
<i>Drop-off at local collection center</i>	28.1	29.7
<i>Other</i>	1.0	2.9
<i>I don't recycle</i>	4.0	8.6
<i>Not sure</i>	0.5	1.4

Gender by Household monthly expenditure for all curbside solid waste and recycling services

	<i>Male</i>	<i>Female</i>
<i>Less than \$15</i>	28.6	30.7
<i>\$15 to \$24</i>	30.6	26.2
<i>\$25 to \$34</i>	12.8	10.4
<i>\$35 to \$44</i>	3.1	3.0
<i>\$45 or more</i>	4.6	1.0
<i>Not sure</i>	49.2	50.8

Gender by Primary reason respondent does not currently recycle

	<i>Male</i>	<i>Female</i>
<i>Not sure what to recycle</i>	12.5	11.1
<i>Recycling location inconvenient</i>	37.5	27.8
<i>Recycling hours inconvenient</i>	12.5	0.0
<i>Don't know where to recycle</i>	25.0	16.7
<i>No deposit or refund associated</i>	0.0	22.2
<i>Don't want to store recyclables at home</i>	37.5	22.2
<i>Don't want recyclables in my vehicle</i>	0.0	33.3
<i>No good reason to recycle</i>	12.5	5.6
<i>Not sure</i>	0.0	16.7

Gender by Primary reason respondent does recycle

	<i>Male</i>	<i>Female</i>
<i>Recycling saves energy</i>	46.6	52.6
<i>Recycling saves natural resources</i>	64.9	70.8
<i>Recycling reduces landfill space</i>	64.4	74.0
<i>Recycling protects wildlife</i>	46.6	57.8
<i>Making new products from recycled materials</i>	45.0	56.8
<i>Other</i>	3.7	2.1
<i>Not sure</i>	2.6	2.1

Gender by Respondent knowledge regarding solid waste and recycling (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>How solid waste is managed</i>	2.54	2.29
<i>How recyclables is managed</i>	2.50	2.39

Gender by Responsibility for end of life management of solid waste and recycling (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>Consumers</i>	3.48	3.62
<i>Retailers</i>	3.39	3.75
<i>Producer/manufacturer</i>	3.74	3.97
<i>Federal government</i>	3.47	3.78
<i>State government</i>	3.66	3.86
<i>Local government</i>	3.81	3.86

Gender by Importance for environmental impacts of a product (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>Extraction of raw materials</i>	3.71	3.85
<i>Manufacturing</i>	3.87	3.89
<i>Material and goods distribution</i>	3.74	3.86
<i>Landfill/reuse/recycling/composting</i>	4.13	4.28

Gender by Agreement with the following statements (Mean comparison)

	Male	Female
<i>Manufacturers should pay for take back programs to increase recovery of end of life products and packaging</i>	3.80	3.95
<i>Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products</i>	3.50	3.40
<i>State government should offer financial incentives to increase recycled content in manufacturing new products</i>	3.86	4.05
<i>State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs</i>	3.59	3.89
<i>State government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost</i>	3.95	4.13

Gender by Support of state of Iowa solid waste and/or recycling policies

	Male	Female
<i>Recycled content in manufacturing of products</i>	54.8	52.6
<i>Infrastructure expansion/upgrade to better manage unwanted products and packaging</i>	46.7	47.8
<i>Infrastructure expansion (e.g. collection, composting/anaerobic digestion) to better manage food waste and other organics</i>	49.2	50.2
<i>Require use of finished compost in construction projects</i>	29.1	30.1
<i>Prioritize waste management options (e.g., reuse, recycling, composting) based on environmental impacts</i>	68.3	62.2
<i>Statewide landfill ban on recyclables</i>	30.2	28.7
<i>Update or revise landfill diversion goals to environmental impact goals</i>	44.7	49.8
<i>None of these</i>	7.5	6.3

Gender by Responsibility of private sector to protect environmental quality

	<i>Male</i>	<i>Female</i>
<i>Yes</i>	81.9	82.3
<i>No</i>	7.0	1.9
<i>Not sure</i>	11.1	15.8

Gender by Respondent to climate change

	<i>Male</i>	<i>Female</i>
<i>Yes</i>	68.3	75.6
<i>No</i>	17.1	11.5
<i>Not sure</i>	14.6	12.9

Gender by Importance of climate change (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>Mean</i>	3.47	3.65

Gender by Responsibility of government to take action to reduce climate change (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>Federal government</i>	3.88	3.95
<i>State government</i>	3.81	3.95
<i>County government</i>	3.56	3.76
<i>City government</i>	3.56	3.76

Gender by Importance of reducing waste in landfill (Mean comparison)

	<i>Male</i>	<i>Female</i>
<i>Mean</i>	4.03	4.17

Age Group Segments

Age Groups by Gender

	18 – 44	45 – 64	65+
Male	22.1	17.4	9.3
Female	23.3	16.9	11.0

Age Groups by Rent vs. Own

	18 – 44	45 – 64	65+
Rent	47.1	25.7	19.3
Own	46.5	72.9	80.7
Not Sure	2.1	0.0	0.0

Age Groups by Where you live

	18 – 44	45 – 64	65+
Within city limits	74.5	73.3	73.2
Rural area	23.9	25.9	25.6
Not sure	1.6	0.7	1.2

Age Groups by Income Groups

	18 – 44	45 – 64	65+
Less than \$25,000	25.6	21.3	18.7
\$25,000 - \$49,999	31.1	27.2	37.3
\$50,000 - \$99,999	28.3	32.4	36.0
\$100,000 or more	15.0	19.1	8.0

Age Groups by Education Level

	<i>18 – 44</i>	<i>45 – 64</i>	<i>65+</i>
<i>Some high school</i>	2.7	2.9	0.0
<i>High school degree or equivalent</i>	21.9	25.7	21.7
<i>Some college but no degree</i>	28.3	17.1	31.3
<i>Associate degree</i>	10.2	8.6	21.7
<i>Bachelor degree</i>	28.3	37.1	15.7
<i>Graduate or Doctorate degree</i>	8.0	8.6	6.0
<i>Other</i>	0.5	0.0	3.6

Age Groups by Primary way respondent finds information about solid waste, recycling, and/or compost programs and issues

	<i>18 – 44</i>	<i>45 – 64</i>	<i>65+</i>
<i>Web/internet search</i>	66.3	60.7	33.7
<i>Social media</i>	39.6	22.9	12.0
<i>Phone book</i>	3.2	3.6	6.0
<i>Newspaper</i>	19.8	15.0	33.7
<i>City or regional publication</i>	23.0	36.4	63.0
<i>TV advertisement</i>	19.8	15.0	22.9
<i>Radio advertisement</i>	8.0	5.7	7.2
<i>Family, friends or neighbors</i>	35.3	30.7	36.1
<i>Other</i>	1.1	3.6	4.8
<i>Not sure</i>	8.0	4.3	6.0

Age Groups by Primary way respondent finds information about global warming/climate change

	18 – 44	45 – 64	65+
<i>Web/internet search</i>	65.2	59.3	42.2
<i>Social media</i>	58.8	33.6	22.9
<i>Phone book</i>	1.1	0.7	1.2
<i>Newspaper</i>	20.9	25.0	27.7
<i>City or regional publication</i>	6.4	7.1	8.4
<i>TV advertisement</i>	28.3	30.0	36.1
<i>Radio advertisement</i>	8.0	2.1	2.4
<i>Family, friends or neighbors</i>	26.2	20.0	18.1
<i>Other</i>	2.1	12.9	10.8
<i>Not sure</i>	4.3	4.3	7.2

Age Groups by Product claims that would positively impact purchase decision (Mean comparisons)

	18 – 44	45 – 64	65+
<i>Products made with recycled materials</i>	3.68	3.65	3.84
<i>Product is recyclable</i>	3.70	3.79	4.00
<i>Product is compostable</i>	3.51	3.40	3.65
<i>Product has ability to be repaired</i>	3.94	3.99	4.16
<i>Product has the ability to be re-used</i>	4.04	3.99	4.18



Age Groups by Placing items you know are acceptable in recycling containers

	18 – 44	45 – 64	65+
<i>Yes, every time</i>	43.9	57.1	57.8
<i>Usually</i>	36.9	35.0	31.3
<i>Sometimes</i>	7.5	2.1	0.0
<i>Occasionally</i>	3.7	3.6	1.2
<i>Rarely</i>	3.2	0.7	0.0
<i>Never</i>	3.2	0.7	4.8
<i>Not sure</i>	1.6	0.7	4.8

Age Groups by How solid waste is currently being managed

	18 – 44	45 – 64	65+
<i>Contract directly with private company</i>	19.3	24.3	16.9
<i>My city picks up my garbage</i>	73.3	63.6	68.7
<i>Haul my garbage to another location</i>	5.9	3.6	4.8
<i>Burn my garbage</i>	5.3	6.4	7.2
<i>Other</i>	1.1	4.3	8.4
<i>Not sure</i>	3.2	1.4	2.4

Age Groups by How recyclables are currently being managed

	18 – 44	45 – 64	65+
<i>Curbside pick-up</i>	67.4	68.6	68.7
<i>Drop-off at local collection center</i>	30.5	30.0	25.3
<i>Other</i>	0.5	2.9	3.6
<i>I don't recycle</i>	5.3	5.7	9.6
<i>Not sure</i>	2.1	0.0	0.0

Age Groups by Household monthly expenditure for all curbside solid waste and recycling services

	18 – 44	45 – 64	65+
<i>Less than \$15</i>	32.6	27.8	25.3
<i>\$15 to \$24</i>	22.3	34.6	33.7
<i>\$25 to \$34</i>	14.7	9.8	7.2
<i>\$35 to \$44</i>	1.6	4.5	3.6
<i>\$45 or more</i>	2.2	1.5	6.0
<i>Not sure</i>	26.6	21.8	24.1

Age Groups by Primary reason respondent does not currently recycle

	18 – 44	45 – 64	65+
<i>Not sure what to recycle</i>	10.0	25.0	0.0
<i>Recycling location inconvenient</i>	30.0	37.5	25.0
<i>Recycling hours inconvenient</i>	0.0	12.5	0.0
<i>Don't know where to recycle</i>	10.0	37.5	12.5
<i>No deposit or refund associated</i>	0.0	25.0	25.0
<i>Don't want to store recyclables at home</i>	20.0	25.0	37.5
<i>Don't want recyclables in my vehicle</i>	10.0	50.0	12.5
<i>No good reason to recycle</i>	20.0	0.0	0.0
<i>Not sure</i>	10.0	0.0	25.0

Age Groups by Primary reason respondent does recycle

	18 – 44	45 – 64	65+
<i>Recycling saves energy</i>	50.8	46.6	52.0
<i>Recycling saves natural resources</i>	63.2	71.4	72.0
<i>Recycling reduces landfill space</i>	66.1	68.4	78.7
<i>Recycling protects wildlife</i>	54.8	49.6	52.0
<i>Making new products from recycled materials</i>	44.1	51.9	65.3
<i>Other</i>	2.8	3.8	1.3
<i>Not sure</i>	2.8	0.8	4.0

Age Groups by Respondent knowledge regarding solid waste and recycling (Mean comparison)

	18 – 44	45 – 64	65+
<i>How solid waste is managed</i>	2.42	2.45	2.38
<i>How recyclables is managed</i>	2.45	2.50	2.41

Age Groups by Responsibility for end of life management of solid waste and recycling (Mean comparison)

	18 – 44	45 – 64	65+
<i>Consumers</i>	3.48	3.51	3.80
<i>Retailers</i>	3.60	3.44	3.74
<i>Producer/manufacturer</i>	3.84	3.81	3.97
<i>Federal government</i>	3.74	3.41	3.77
<i>State government</i>	3.81	3.61	3.95
<i>Local government</i>	3.79	3.75	4.09

Age Groups by Importance for environmental impacts of a product (Mean comparison)

	18 – 44	45 – 64	65+
<i>Extraction of raw materials</i>	3.80	3.67	3.91
<i>Manufacturing</i>	3.84	3.85	4.05
<i>Material and goods distribution</i>	3.83	3.67	3.95
<i>Landfill/reuse/recycling/composting</i>	4.23	4.06	4.39

Age Groups by Agreement with the following statements (Mean comparison)

	18 – 44	45 – 64	65+
<i>Manufacturers should pay for take back programs to increase recovery of end of life products and packaging</i>	3.94	3.79	3.87
<i>Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products</i>	3.58	3.38	3.28
<i>State government should offer financial incentives to increase recycled content in manufacturing new products</i>	4.03	3.88	3.91
<i>State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs</i>	3.86	3.54	3.83
<i>State government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost</i>	4.05	3.99	4.13

Age Groups by Support of state of Iowa solid waste and/or recycling policies

	18 – 44	45 – 64	65+
<i>Recycled content in manufacturing of products</i>	55.6	52.9	50.6
<i>Infrastructure expansion/upgrade to better manage unwanted products and packaging</i>	41.7	47.1	60.2
<i>Infrastructure expansion (e.g. collection, composting/anaerobic digestion) to better manage food waste and other organics</i>	47.1	50.0	54.2
<i>Require use of finished compost in construction projects</i>	30.5	25.7	34.9
<i>Prioritize waste management options (e.g., reuse, recycling, composting) based on environmental impacts</i>	68.4	62.1	62.7
<i>Statewide landfill ban on recyclables</i>	29.4	27.9	32.5
<i>Update or revise landfill diversion goals to environmental impact goals</i>	50.3	45.7	44.6
<i>None of these</i>	7.0	7.9	4.8

Age Groups by Responsibility of private sector to protect environmental quality

	18 – 44	45 – 64	65+
Yes	75.9	85.7	89.2
No	5.9	5.7	0.0
Not sure	18.2	8.6	10.8

Age Groups by Respondent to climate change

	18 – 44	45 – 64	65+
Yes	79.1	68.6	61.4
No	9.6	17.1	20.5
Not sure	11.2	14.3	18.1

Age Groups by Importance of climate change (Mean comparison)

	18 – 44	45 – 64	65+
Mean	3.66	3.54	3.38

Age Groups by Responsibility of government to take action to reduce climate change (Mean comparison)

	18 – 44	45 – 64	65+
Federal government	4.11	3.85	3.63
State government	4.08	3.78	3.65
County government	3.89	3.49	3.49
City government	3.89	3.48	3.45

Age Groups by Importance of reducing waste in landfill (Mean comparison)

	18 – 44	45 – 64	65+
Mean	4.02	4.12	4.23

Income Group Segments

Income Groups by Gender

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Male</i>	11.1	15.2	15.4	8.0
<i>Female</i>	11.8	15.7	15.7	7.2

Income Groups by Age Groups

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>18 – 44</i>	11.8	14.3	13.0	6.9
<i>45 – 64</i>	7.4	9.5	11.3	6.6
<i>65+</i>	3.6	7.2	6.9	1.5

Income Groups by Rent vs. Own

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Rent</i>	14.5	12.1	7.7	1.6
<i>Own</i>	7.1	19.3	24.0	13.7

Income Groups by Where you live

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Within city limits</i>	17.2	23.2	22.7	12.1
<i>Rural area</i>	5.0	8.4	9.0	2.4

Income Groups by Education Level

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Some high school</i>	6.7	0.8	0.0	3.4
<i>High school degree or equivalent</i>	36.0	30.6	13.1	8.5
<i>Some college but no degree</i>	36.0	26.4	21.3	16.9
<i>Associate degree</i>	6.7	16.5	16.4	1.7
<i>Bachelor degree</i>	12.4	20.7	39.3	44.1
<i>Graduate or Doctorate degree</i>	1.1	4.1	9.0	25.4
<i>Other</i>	1.1	0.8	0.8	0.0

**Income Groups by Primary way respondent finds information about solid waste, recycling, and/or
compost programs and issues**

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Web/internet search</i>	55.1	53.7	59.8	67.8
<i>Social media</i>	30.3	28.1	24.6	33.9
<i>Phone book</i>	3.4	7.4	2.5	0.0
<i>Newspaper</i>	24.7	24.8	11.5	22.0
<i>City or regional publication</i>	27.0	28.9	38.5	47.5
<i>TV advertisement</i>	15.7	22.3	15.6	22.0
<i>Radio advertisement</i>	6.7	7.4	8.2	6.8
<i>Family, friends or neighbors</i>	41.6	41.3	32.0	22.0
<i>Other</i>	2.2	2.5	4.1	1.7
<i>Not sure</i>	9.0	6.6	4.9	1.7

Income Groups by Primary way respondent finds information about global warming/climate change

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Web/internet search</i>	58.4	52.1	59.8	72.9
<i>Social media</i>	47.2	45.5	36.1	47.5
<i>Phone book</i>	0.0	1.7	0.0	3.4
<i>Newspaper</i>	25.8	21.5	19.7	33.9
<i>City or regional publication</i>	4.5	5.8	7.4	15.3
<i>TV advertisement</i>	30.3	36.4	28.7	27.1
<i>Radio advertisement</i>	5.6	3.3	6.6	5.1
<i>Family, friends or neighbors</i>	24.7	24.8	23.0	18.6
<i>Other</i>	5.6	4.1	11.5	10.2
<i>Not sure</i>	4.5	3.3	5.7	1.7

Income Groups by Product claims that would positively impact purchase decision (Mean comparisons)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Products made with recycled materials</i>	3.56	3.62	3.82	3.95
<i>Product is recyclable</i>	3.65	3.68	3.89	4.09
<i>Product is compostable</i>	3.40	3.44	3.50	3.78
<i>Product has ability to be repaired</i>	3.86	4.07	4.05	4.02
<i>Product has the ability to be re-used</i>	3.92	4.00	4.19	4.17



Income Groups by Placing items you know are acceptable in recycling containers

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Yes, every time</i>	48.3	47.1	54.9	54.2
<i>Usually</i>	31.5	36.4	36.9	35.6
<i>Sometimes</i>	5.6	2.5	4.1	5.1
<i>Occasionally</i>	4.5	3.3	2.5	1.7
<i>Rarely</i>	3.4	5.0	0.8	1.7
<i>Never</i>	3.4	5.0	0.8	1.7
<i>Not sure</i>	3.4	3.3	0.0	1.7

Income Groups by How solid waste is currently being managed

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Contract directly with private company</i>	13.5	21.5	18.0	35.6
<i>My city picks up my garbage</i>	69.7	68.6	73.0	61.0
<i>Haul my garbage to another location</i>	4.5	5.0	4.9	3.4
<i>Burn my garbage</i>	4.5	9.1	6.6	3.4
<i>Other</i>	6.7	3.3	1.6	3.4
<i>Not sure</i>	7.9	0.8	0.8	0.0

Income Groups by How recyclables are currently being managed

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Curbside pick-up</i>	59.6	62.0	75.4	81.4
<i>Drop-off at local collection center</i>	28.1	28.1	28.7	32.2
<i>Other</i>	3.4	4.1	0.0	0.0
<i>I don't recycle</i>	11.2	9.9	0.8	3.4
<i>Not sure</i>	3.4	0.0	0.0	0.0

Income Groups by Household monthly expenditure for all curbside solid waste and recycling services

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Less than \$15</i>	40.9	24.0	28.3	29.6
<i>\$15 to \$24</i>	20.5	23.1	38.3	31.5
<i>\$25 to \$34</i>	6.8	16.5	8.3	18.5
<i>\$35 to \$44</i>	3.4	2.5	4.2	1.9
<i>\$45 or more</i>	1.1	2.5	2.5	7.4
<i>Not sure</i>	27.3	31.4	18.3	11.1

Income Groups by Primary reason respondent does not currently recycle

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Not sure what to recycle</i>	10.0	16.7	0.0	0.0
<i>Recycling location inconvenient</i>	20.0	41.7	0.0	50.0
<i>Recycling hours inconvenient</i>	10.0	0.0	0.0	0.0
<i>Don't know where to recycle</i>	30.0	16.7	0.0	0.0
<i>No deposit or refund associated</i>	0.0	33.3	0.0	0.0
<i>Don't want to store recyclables at home</i>	30.0	25.0	0.0	50.0
<i>Don't want recyclables in my vehicle</i>	0.0	33.3	0.0	100.0
<i>No good reason to recycle</i>	10.0	0.0	0.0	0.0
<i>Not sure</i>	20.0	0.0	100.0	0.0

Income Groups by Primary reason respondent does recycle

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Recycling saves energy</i>	49.4	43.1	51.2	56.9
<i>Recycling saves natural resources</i>	64.1	68.8	67.2	71.7
<i>Recycling reduces landfill space</i>	65.8	68.8	71.1	72.4
<i>Recycling protects wildlife</i>	60.8	49.5	55.4	50.0
<i>Making new products from recycled materials</i>	50.6	48.6	54.5	44.8
<i>Other</i>	5.1	1.8	3.3	1.7
<i>Not sure</i>	2.5	1.8	2.5	1.7

Income Groups by Respondent knowledge regarding solid waste and recycling (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>How solid waste is managed</i>	2.36	2.32	2.39	2.77
<i>How recyclables is managed</i>	2.26	2.39	2.49	2.75

Income Groups by Responsibility for end of life management of solid waste and recycling (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Consumers</i>	3.49	3.61	3.48	3.66
<i>Retailers</i>	3.58	3.69	3.46	3.56
<i>Producer/manufacturer</i>	3.84	3.88	3.77	3.92
<i>Federal government</i>	3.74	3.74	3.47	3.56
<i>State government</i>	3.80	3.93	3.56	3.80
<i>Local government</i>	3.98	3.88	3.74	3.80

Income Groups by Importance for environmental impacts of a product (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Extraction of raw materials</i>	3.72	3.85	3.65	4.02
<i>Manufacturing</i>	3.79	3.90	3.92	4.07
<i>Material and goods distribution</i>	3.60	3.87	3.83	3.94
<i>Landfill/reuse/recycling/composting</i>	4.13	4.25	4.14	4.41

Income Groups by Agreement with the following statements (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Manufacturers should pay for take back programs to increase recovery of end of life products and packaging</i>	3.76	4.00	3.80	4.02
<i>Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products</i>	3.49	3.38	3.44	3.71
<i>State government should offer financial incentives to increase recycled content in manufacturing new products</i>	4.01	4.05	3.77	4.12
<i>State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs</i>	3.68	3.83	3.63	3.88
<i>State government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost</i>	4.10	4.09	3.87	4.28

Income Groups by Support of state of Iowa solid waste and/or recycling policies

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Recycled content in manufacturing of products</i>	46.1	55.4	53.3	62.7
<i>Infrastructure expansion/upgrade to better manage unwanted products and packaging</i>	42.7	51.2	41.8	55.9
<i>Infrastructure expansion (e.g. collection, composting/anaerobic digestion) to better manage food waste and other organics</i>	46.1	45.5	50.0	62.7
<i>Require use of finished compost in construction projects</i>	30.3	30.6	26.2	30.5
<i>Prioritize waste management options (e.g., reuse, recycling, composting) based on environmental impacts</i>	58.4	66.1	65.6	76.3
<i>Statewide landfill ban on recyclables</i>	24.7	35.5	27.0	33.9
<i>Update or revise landfill diversion goals to environmental impact goals</i>	47.2	45.5	50.0	52.5
<i>None of these</i>	5.7	7.4	6.6	6.9

Income Groups by Responsibility of private sector to protect environmental quality

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Yes</i>	77.5	80.2	83.6	93.2
<i>No</i>	3.4	5.8	6.6	1.7
<i>Not sure</i>	19.1	14.0	9.8	5.1

Income Groups by Respondent to climate change

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Yes</i>	78.3	68.6	68.9	84.7
<i>No</i>	7.9	16.5	17.2	11.9
<i>Not sure</i>	16.9	14.9	13.9	3.4

Income Groups by Importance of climate change (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Mean</i>	3.60	3.41	3.48	4.02

Income Groups by Responsibility of government to take action to reduce climate change (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Federal government</i>	3.98	3.88	3.81	4.32
<i>State government</i>	4.12	3.83	3.75	4.16
<i>County government</i>	3.92	3.72	3.48	3.75
<i>City government</i>	3.93	3.72	3.46	3.80

Income by Importance of reducing waste in landfill (Mean comparison)

	<i>Less than \$25,000</i>	<i>\$25,000 - \$49,999</i>	<i>\$50,000 - \$99,999</i>	<i>\$100,000 or more</i>
<i>Mean</i>	4.01	4.11	4.14	4.19

Education Group Segments

Education Groups by Gender

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Male</i>	14.5	15.9	18.4
<i>Female</i>	11.3	21.3	18.6

Education Groups by Age Group

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>18 – 44</i>	11.5	17.6	16.6
<i>45 – 64</i>	9.8	8.8	15.6
<i>65+</i>	4.4	11.2	4.6

Education Groups by Rent vs. Own

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Rent</i>	10.6	14.4	10.4
<i>Own</i>	14.4	22.7	27.5

Education Groups by Where you live

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Within city limits</i>	18.7	28.3	27.8
<i>Rural area</i>	7.1	9.6	8.6

Education Groups by Income Groups

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Less than \$25,000</i>	10.0	9.7	3.1
<i>\$25,000 - \$49,999</i>	9.7	13.6	7.7
<i>\$50,000 - \$99,999</i>	4.1	11.8	15.3
<i>\$100,000 or more</i>	1.8	2.8	10.5

Education Groups by Primary way respondent finds information about solid waste, recycling, and/or compost programs and issues

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Web/internet search</i>	13.9	19.0	24.9
<i>Social media</i>	7.6	11.7	9.0
<i>Phone book</i>	1.5	1.2	1.2
<i>Newspaper</i>	3.9	9.0	8.0
<i>City or regional publication</i>	6.3	13.4	13.9
<i>TV advertisement</i>	6.1	6.6	6.1
<i>Radio advertisement</i>	1.5	2.9	2.7
<i>Family, friends or neighbors</i>	9.8	14.4	9.8
<i>Other</i>	0.2	1.0	1.5
<i>Not sure</i>	2.9	1.5	2.0

Education Groups by Primary way respondent finds information about global warming/climate change

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Web/internet search</i>	12.0	21.0	25.6
<i>Social media</i>	10.0	17.6	15.4
<i>Phone book</i>	0.2	0.5	0.2
<i>Newspaper</i>	5.4	8.8	9.5
<i>City or regional publication</i>	1.0	2.4	3.7
<i>TV advertisement</i>	8.3	13.4	8.8
<i>Radio advertisement</i>	1.0	2.0	2.0
<i>Family, friends or neighbors</i>	6.6	9.5	6.3
<i>Other</i>	1.7	1.5	4.4
<i>Not sure</i>	1.5	1.0	2.4

Education Groups by Product claims that would positively impact purchase decision (Mean comparisons)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Products made with recycled materials</i>	3.33	3.83	3.82
<i>Product is recyclable</i>	3.38	3.88	3.97
<i>Product is compostable</i>	3.28	3.59	3.55
<i>Product has ability to be repaired</i>	3.87	4.11	3.98
<i>Product has the ability to be re-used</i>	3.76	4.16	4.14



Education Groups by Placing items you know are acceptable in recycling containers

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Yes, every time</i>	12.4	20.2	18.5
<i>Usually</i>	9.0	11.5	14.6
<i>Sometimes</i>	0.7	2.0	1.5
<i>Occasionally</i>	0.7	1.2	1.2
<i>Rarely</i>	0.7	0.2	0.7
<i>Never</i>	1.5	1.2	0.0
<i>Not sure</i>	0.5	1.2	0.2

Education Groups by How solid waste is currently being managed

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Contract directly with private company</i>	6.1	7.1	7.3
<i>My city picks up my garbage</i>	16.3	27.6	25.1
<i>Haul my garbage to another location</i>	1.0	2.4	1.5
<i>Burn my garbage</i>	1.2	2.7	2.2
<i>Other</i>	0.7	1.7	1.2
<i>Not sure</i>	1.2	0.2	1.0

Education Groups by How recyclables are currently being managed

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Curbside pick-up</i>	17.1	24.1	26.8
<i>Drop-off at local collection center</i>	6.3	12.7	10.2
<i>Other</i>	0.5	0.7	0.7
<i>I don't recycle</i>	2.0	2.7	1.7
<i>Not sure</i>	0.5	0.2	0.2

Education Groups by Household monthly expenditure for all curbside solid waste and recycling services

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Less than \$15</i>	8.0	13.0	8.5
<i>\$15 to \$24</i>	7.0	9.5	12.3
<i>\$25 to \$34</i>	3.3	4.0	4.3
<i>\$35 to \$44</i>	0.8	0.8	1.5
<i>\$45 or more</i>	0.3	1.5	1.0
<i>Not sure</i>	7.0	9.5	8.0

Education Groups by Primary reason respondent does not currently recycle

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Not sure what to recycle</i>	0.0	3.8	7.7
<i>Recycling location inconvenient</i>	3.8	19.2	7.7
<i>Recycling hours inconvenient</i>	0.0	3.8	0.0
<i>Don't know where to recycle</i>	0.0	7.7	11.5
<i>No deposit or refund associated</i>	3.8	7.7	3.8
<i>Don't want to store recyclables at home</i>	7.7	7.7	11.5
<i>Don't want recyclables in my vehicle</i>	3.8	3.8	15.4
<i>No good reason to recycle</i>	3.8	3.8	0.0
<i>Not sure</i>	7.7	3.8	0.0

Education Groups by Primary reason respondent does recycle

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Recycling saves energy</i>	15.3	17.9	17.1
<i>Recycling saves natural resources</i>	17.3	25.3	25.1
<i>Recycling reduces landfill space</i>	16.1	24.7	28.6
<i>Recycling protects wildlife</i>	13.2	20.8	18.4
<i>Making new products from recycled materials</i>	11.9	19.2	19.7
<i>Other</i>	0.5	1.3	1.0
<i>Not sure</i>	1.0	0.8	0.5

Education Groups by Respondent knowledge regarding solid waste and recycling (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>How solid waste is managed</i>	2.51	2.24	2.54
<i>How recyclables is managed</i>	2.33	2.34	2.65

Education Groups by Responsibility for end of life management of solid waste and recycling (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Consumers</i>	3.50	3.50	3.65
<i>Retailers</i>	3.57	3.63	3.52
<i>Producer/manufacturer</i>	3.74	3.91	3.88
<i>Federal government</i>	3.62	3.68	3.59
<i>State government</i>	3.75	3.81	3.73
<i>Local government</i>	3.78	3.86	3.85

Education Groups by Importance for environmental impacts of a product (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Extraction of raw materials</i>	3.62	3.85	3.82
<i>Manufacturing</i>	3.76	3.89	3.97
<i>Material and goods distribution</i>	3.65	3.79	3.89
<i>Landfill/reuse/recycling/composting</i>	4.10	4.22	4.27

Education Groups by Agreement with the following statements (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Manufacturers should pay for take back programs to increase recovery of end of life products and packaging</i>	3.84	3.85	3.93
<i>Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products</i>	3.49	3.36	3.52
<i>State government should offer financial incentives to increase recycled content in manufacturing new products</i>	3.94	3.94	3.98
<i>State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs</i>	3.79	3.70	3.75
<i>State government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost</i>	4.08	4.01	4.06

Education Groups by Support of state of Iowa solid waste and/or recycling policies

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Recycled content in manufacturing of products</i>	11.5	20.7	21.5
<i>Infrastructure expansion/upgrade to better manage unwanted products and packaging</i>	11.0	17.6	18.8
<i>Infrastructure expansion (e.g. collection, composting/anaerobic digestion) to better manage food waste and other organics</i>	10.5	18.8	20.2
<i>Require use of finished compost in construction projects</i>	9.3	10.7	9.8
<i>Prioritize waste management options (e.g., reuse, recycling, composting) based on environmental impacts</i>	14.6	24.4	26.1
<i>Statewide landfill ban on recyclables</i>	6.8	12.4	10.2
<i>Update or revise landfill diversion goals to environmental impact goals</i>	11.2	19.8	16.6
<i>None of these</i>	2.7	2.2	2.0

Education Groups by Responsibility of private sector to protect environmental quality

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Yes</i>	18.8	30.0	33.2
<i>No</i>	1.5	2.2	1.0
<i>Not sure</i>	5.4	5.4	2.7

Education Groups by Response to climate change

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Yes</i>	18.3	25.6	28.0
<i>No</i>	3.7	5.6	5.1
<i>Not sure</i>	3.7	6.3	3.7

Education Groups by Importance of climate change (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Mean</i>	3.43	3.51	3.70

Education Groups by Responsibility of government to take action to reduce climate change (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Federal government</i>	3.82	3.88	4.03
<i>State government</i>	3.89	3.80	3.98
<i>County government</i>	3.59	3.65	3.74
<i>City government</i>	3.68	3.62	3.71

Education Groups by Importance of reducing waste in landfill (Mean comparison)

	<i>HS diploma or less</i>	<i>Some college or Assoc. degree</i>	<i>Bachelor+ college degree</i>
<i>Mean</i>	3.95	4.13	4.15

Geographic Segments

Geographic Groups by Age Groups

	<i>Within city limits</i>	<i>Rural area</i>
<i>18 – 44</i>	34.6	11.1
<i>45 – 64</i>	25.0	8.8
<i>65+</i>	15.2	5.3

Geographic Groups by Rent vs. Own

	<i>Within city limits</i>	<i>Rural area</i>
<i>Rent</i>	29.6	5.5
<i>Own</i>	44.7	20.3

Geographic Groups by Income Groups

	<i>Within city limits</i>	<i>Rural area</i>
<i>Less than \$25,000</i>	22.8	20.0
<i>\$25,000 - \$49,999</i>	30.9	34.0
<i>\$50,000 - \$99,999</i>	30.2	36.2
<i>\$100,000 or more</i>	16.1	9.6

Geographic Groups by Education Level

	<i>Within city limits</i>	<i>Rural area</i>
<i>Some high school</i>	1.7	3.0
<i>High school degree or equivalent</i>	23.0	25.0
<i>Some college but no degree</i>	26.0	23.0
<i>Associate degree</i>	11.8	13.0
<i>Bachelor degree</i>	29.1	25.0
<i>Graduate or Doctorate degree</i>	7.8	9.0
<i>Other</i>	0.7	2.0

Geographic Groups by Primary way respondent finds information about solid waste, recycling, and/or compost programs and issues

	<i>Within city limits</i>	<i>Rural area</i>
<i>Web/internet search</i>	58.4	55.0
<i>Social media</i>	28.7	27.0
<i>Phone book</i>	3.0	6.0
<i>Newspaper</i>	19.6	24.0
<i>City or regional publication</i>	36.8	25.0
<i>TV advertisement</i>	21.3	13.0
<i>Radio advertisement</i>	6.1	11.0
<i>Family, friends or neighbors</i>	32.1	42.0
<i>Other</i>	2.4	4.0
<i>Not sure</i>	4.4	12.0

Geographic Groups by Primary way respondent finds information about global warming/climate change

	<i>Within city limits</i>	<i>Rural area</i>
<i>Web/internet search</i>	59.1	57.0
<i>Social media</i>	44.9	38.0
<i>Phone book</i>	1.0	1.0
<i>Newspaper</i>	25.0	18.0
<i>City or regional publication</i>	7.4	4.0
<i>TV advertisement</i>	31.4	31.0
<i>Radio advertisement</i>	4.7	5.0
<i>Family, friends or neighbors</i>	22.6	24.0
<i>Other</i>	7.4	8.0
<i>Not sure</i>	4.4	6.0

Geographic Groups by Product claims that would positively impact purchase decision (Mean comparisons)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Products made with recycled materials</i>	3.67	3.78
<i>Product is recyclable</i>	3.75	3.89
<i>Product is compostable</i>	3.48	3.60
<i>Product has ability to be repaired</i>	3.97	4.04
<i>Product has the ability to be re-used</i>	4.03	4.14

Geographic Groups by Placing items you know are acceptable in recycling containers

	<i>Within city limits</i>	<i>Rural area</i>
<i>Yes, every time</i>	51.7	50.0
<i>Usually</i>	34.5	40.0
<i>Sometimes</i>	4.4	1.0
<i>Occasionally</i>	3.4	2.0
<i>Rarely</i>	1.7	2.0
<i>Never</i>	2.4	3.0
<i>Not sure</i>	2.0	2.0

Geographic Groups by How solid waste is currently being managed

	<i>Within city limits</i>	<i>Rural area</i>
<i>Contract directly with private company</i>	14.2	36.0
<i>My city picks up my garbage</i>	79.4	41.0
<i>Haul my garbage to another location</i>	3.0	10.0
<i>Burn my garbage</i>	2.4	18.0
<i>Other</i>	3.4	4.0
<i>Not sure</i>	2.0	3.0

Geographic Groups by How recyclables are currently being managed

	<i>Within city limits</i>	<i>Rural area</i>
<i>Curbside pick-up</i>	77.0	45.0
<i>Drop-off at local collection center</i>	21.3	49.0
<i>Other</i>	1.7	3.0
<i>I don't recycle</i>	5.1	9.0
<i>Not sure</i>	0.7	2.0

Geographic Groups by Household monthly expenditure for all curbside solid waste and recycling services

	<i>Within city limits</i>	<i>Rural area</i>
<i>Less than \$15</i>	27.9	34.0
<i>\$15 to \$24</i>	29.3	29.0
<i>\$25 to \$34</i>	10.9	14.0
<i>\$35 to \$44</i>	1.7	7.0
<i>\$45 or more</i>	3.1	1.0
<i>Not sure</i>	27.2	15.0

Geographic Groups by Primary reason respondent does not currently recycle

	<i>Within city limits</i>	<i>Rural area</i>
<i>Not sure what to recycle</i>	13.3	11.1
<i>Recycling location inconvenient</i>	26.7	33.3
<i>Recycling hours inconvenient</i>	6.7	0.0
<i>Don't know where to recycle</i>	20.0	22.2
<i>No deposit or refund associated</i>	6.7	33.3
<i>Don't want to store recyclables at home</i>	33.3	11.1
<i>Don't want recyclables in my vehicle</i>	13.3	33.3
<i>No good reason to recycle</i>	13.3	0.0
<i>Not sure</i>	6.7	11.1

Geographic Groups by Primary reason respondent does recycle

	<i>Within city limits</i>	<i>Rural area</i>
<i>Recycling saves energy</i>	48.8	51.6
<i>Recycling saves natural resources</i>	68.8	65.9
<i>Recycling reduces landfill space</i>	67.6	75.8
<i>Recycling protects wildlife</i>	50.2	63.7
<i>Making new products from recycled materials</i>	49.1	56.0
<i>Other</i>	3.6	1.1
<i>Not sure</i>	1.8	2.2

Geographic Groups by Respondent knowledge regarding solid waste and recycling (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>How solid waste is managed</i>	2.36	2.56
<i>How recyclables is managed</i>	2.40	2.55

Geographic Groups by Responsibility for end of life management of solid waste and recycling (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Consumers</i>	3.50	3.73
<i>Retailers</i>	3.55	3.70
<i>Producer/manufacturer</i>	3.85	3.94
<i>Federal government</i>	3.65	3.69
<i>State government</i>	3.82	3.74
<i>Local government</i>	3.89	3.76

Geographic Groups by Importance for environmental impacts of a product (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Extraction of raw materials</i>	3.80	3.73
<i>Manufacturing</i>	3.92	3.79
<i>Material and goods distribution</i>	3.83	3.71
<i>Landfill/reuse/recycling/composting</i>	4.22	4.22

Geographic Groups by Agreement with the following statements (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Manufacturers should pay for take back programs to increase recovery of end of life products and packaging</i>	3.87	3.90
<i>Manufacturers and consumers should share the cost for take back programs to increase recovery of end of life products</i>	3.47	3.38
<i>State government should offer financial incentives to increase recycled content in manufacturing new products</i>	3.97	3.95
<i>State government should implement a fee on manufacturers producing products not easily reused, recycled, or composted in local programs</i>	3.76	3.74
<i>State government should provide financial assistance for expanding Iowa infrastructure to reuse, recycle, and compost</i>	4.07	4.01

Geographic Groups by Support of state of Iowa solid waste and/or recycling policies

	<i>Within city limits</i>	<i>Rural area</i>
<i>Recycled content in manufacturing of products</i>	52.0	56.0
<i>Infrastructure expansion/upgrade to better manage unwanted products and packaging</i>	46.3	49.0
<i>Infrastructure expansion (e.g. collection, composting/anaerobic digestion) to better manage food waste and other organics</i>	49.3	48.0
<i>Require use of finished compost in construction projects</i>	30.4	25.0
<i>Prioritize waste management options (e.g., reuse, recycling, composting) based on environmental impacts</i>	66.2	64.0
<i>Statewide landfill ban on recyclables</i>	30.7	29.0
<i>Update or revise landfill diversion goals to environmental impact goals</i>	47.6	48.0
<i>None of these</i>	6.8	7.0

Geographic Groups by Responsibility of private sector to protect environmental quality

	<i>Within city limits</i>	<i>Rural area</i>
<i>Yes</i>	82.1	83.0
<i>No</i>	6.1	1.0
<i>Not sure</i>	11.8	16.0

Geographic Groups by Respondent to climate change

	<i>Within city limits</i>	<i>Rural area</i>
<i>Yes</i>	74.7	65.0
<i>No</i>	13.9	16.0
<i>Not sure</i>	11.5	19.0

Geographic Groups by Importance of climate change (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Mean</i>	3.61	3.43

Geographic Groups by Responsibility of government to take action to reduce climate change (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Federal government</i>	3.97	3.82
<i>State government</i>	3.94	3.78
<i>County government</i>	3.72	3.57
<i>City government</i>	3.71	3.56

Geographic Groups by Importance of reducing waste in landfill (Mean comparison)

	<i>Within city limits</i>	<i>Rural area</i>
<i>Mean</i>	4.13	4.01