

Athens &
Hocking
Counties

Residential Recycling Survey Results



Prepared by:

The Voinovich School of
Leadership and Public Affairs
at Ohio University

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The Project

The *Appalachia Ohio Zero Waste Initiative (AOZWI)* collaborates with communities to build local wealth and environmental health by increasing waste diversion and supporting the development of a zero waste economy. The AOZWI is coordinated by Rural Action in partnership with the Voinovich School of Leadership and Public Affairs and funded by the Sugar Bush Foundation, a supporting organization of the Ohio University Foundation.

Zero Waste is an approach to resource management that conserves, repurposes, and recycles what otherwise would be buried or burnt, into valuable assets that contribute to environmental, economic, and social well-being.

Methods

As part of the effort to gauge communities' actions, wants, and needs in terms of waste reduction and recycling, the AOZWI distributed a residential recycling survey to households in Athens and Hocking Counties in February 2012. Once developed, the survey was submitted for review to the Ohio University Institutional Review Board for Human Subjects and determined to be exempt from additional review. Households to receive the survey were chosen randomly from a mailing list of Athens and Hocking County households. In order to ensure proportional representation at the county and township level, the mailing list was geocoded after which names were randomly selected in proportion to the household population in each county and township. As an incentive for recipients to participate in the survey, respondents were entered into a drawing for one of five \$25 gift certificates. Drawing winners received their gift certificates in the summer of 2012.

Of the 2,961 surveys distributed, 709 were returned, representing a cooperation rate of 25.3%.¹ The following report summarizes data from the 709 respondents. Of all respondents who completed the survey, 532 indicated that they reside in Athens County, 175 respondents indicated that they reside in Hocking County, and 2 respondents did not report their county of residence. The total number of responses for each survey question varies as not all respondents completed all questions.

Survey	Athens Co.		Hocking Co.		Unknown*		Total
	Number	% of Total	Number	% of Total	Number	Percent	
Distribution	1,989	67.2%	972	32.8%	N/A	N/A	2,961
Return	532	75.0%	175	24.7%	2	0.2%	709

**It was not possible to identify the county of residence for two returned surveys*

Information from this survey will be used to better inform the AOZWI and to assist in the creation of a Zero Waste Action Plan for communities that comprise the Athens-Hocking Solid Waste District.

¹ Cooperation rate: The ratio of the number of surveys returned to the number of households contacted.

Survey Results

Recycling Patterns

Do you recycle?

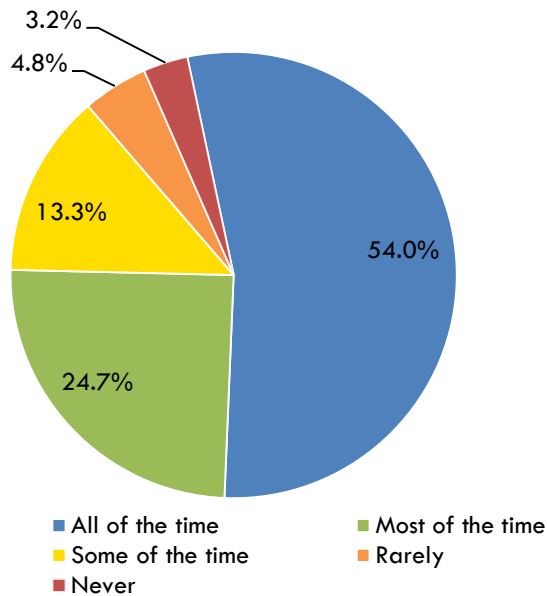
Response	Number of Responses	Percent
All of the time	345	49.1%
Most of the time	183	26.1%
Some of the time	95	13.5%
Rarely	40	5.7%
Never	39	5.6%

When asked “Do you recycle?” nearly half (49.1%) of all respondents answered “All of the time” and over a fourth (26.1%) marked “Most of the time.” Thus, three quarters (75.2%) of respondents reported recycling at least most of the time.

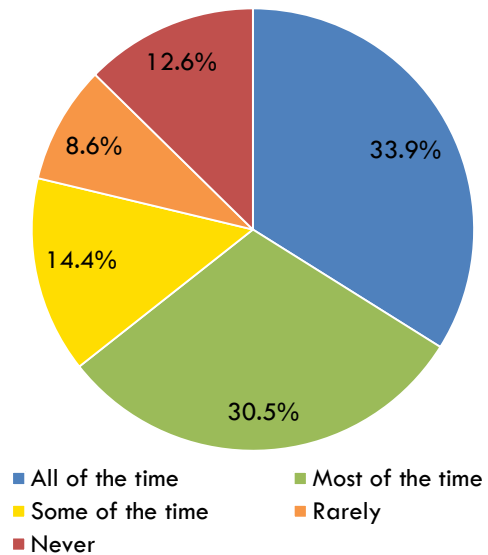
County Perspective

When looking at the two counties separately, Athens County residents reported recycling more than Hocking County residents:

Athens County: Do You Recycle



Hocking County: Do You Recycle



Of the 526 respondents from Athens County who answered this question, 54.0% reported recycling “All of the time,” while only 33.9% of the 174 Hocking County respondents reported recycling “All of the time.” Correspondingly, Athens County has a smaller percentage of residents (3.2%) who report never recycling compared to Hocking County (12.6%).

Recycled Items

Survey respondents were asked to identify what types of items they recycle. The “Percent of Respondents Who Marked Item” column provides the percent of all respondents to this question who reported recycling each item. A small percentage of respondents, 7.2% reported they do not recycle anything.

What items do you recycle? Mark all that apply:

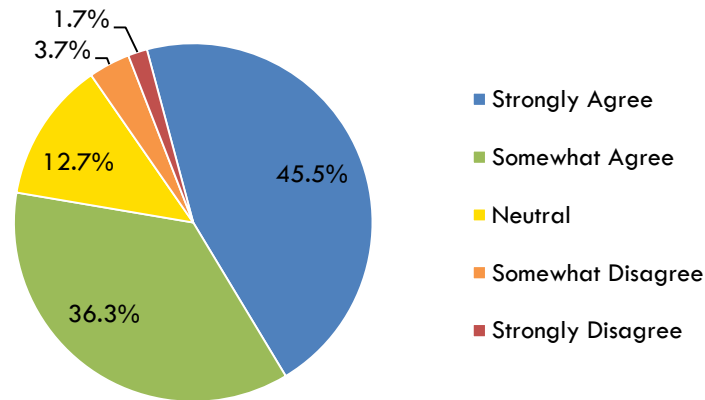
Items	Number of respondents who marked item	Percent of respondents who marked item
Aluminum cans	567	80.2%
Plastic containers	440	62.2%
Newspaper	423	59.8%
Cardboard	421	59.5%
Glass bottles and jars	415	58.7%
Plastic bags/paper bags	391	55.3%
Magazines/catalogs	388	54.9%
Steel/tin cans	378	53.5%
Clothing and/or furniture	344	48.7%
Mixed paper/junk mail	287	40.6%
Scrap metal	273	38.6%
Car batteries	266	37.6%
Telephone books	260	36.8%
Waste oil	218	30.8%
Automotive tires	180	25.5%
Appliances	180	25.5%
Electronics	140	19.8%
Building/construction materials	93	13.2%
Nothing	51	7.2%
Other	30	4.2%

Among survey respondents, the item recycled most was aluminum cans (80.2%). Additionally, more than half indicated they recycled plastic containers (62.2%), newspaper (59.8%), cardboard (59.5%), glass bottles and jars (58.7%), plastic/paper bags (55.3%), magazines/catalogs (54.9%), and steel/tin cans (53.5%). “Other” recycled items frequently mentioned were ink cartridges, batteries of all kinds, and compostable materials.

Recycling Challenges

Across both counties, most respondents agree they make “an effort to reduce the amount of waste I need to throw away.”

I Make an Effort to Reduce Waste



When looking at the two counties separately, a higher percentage of Athens County residents (49.4%) agreed they make an effort to reduce waste than Hocking County residents (33.1%).

When asked to identify “What makes recycling difficult?” respondents selected all issues that applied.

What makes recycling difficult? Mark all that apply:

Issues	Number of respondents who marked item	Percent of respondents who marked item
Pickup not available in my area	312	49.5%
Lack of information about where and how to recycle	200	31.7%
Too much separation required	153	24.3%
Inconvenient	134	21.3%
Problems with drop-off site	103	16.3%
Costs too much	75	11.9%
Takes too much time	73	11.6%
Too messy/unsanitary	70	11.1%
Limits on types of materials accepted	53	8.4%
Physical limitations	51	8.1%
Believe materials end up in landfill instead of recycled	37	5.9%
Lack of transportation	27	4.3%
Disinterested, resistant, or lack of support from household members	23	3.7%
Other	21	3.3%
Not difficult to recycle	19	3.0%

Among the 21 respondents who selected “Other,” lacking space to sort and store recycling was the most commonly mentioned barrier in both counties. Nineteen respondents commented that it is not difficult to recycle.

County Perspective

The same five issues were identified as being the most difficult obstacles for recycling in both counties:

Athens County		Hocking County	
Issue	Percent of respondents	Issue	Percent of respondents
Pickup not available in my area	44.8%	Pickup not available in my area	63.3%
Lack of information about where and how to recycle	31.8%	Lack of information about where and how to recycle	31.3%
Too much separation required	23.8%	Inconvenient	28.3%
Inconvenient	18.8%	Too much separation required	25.9%
Problems with drop-off site	14.9%	Problems with drop-off site	19.9%

Consistently, the lack of recycling pick up and information about where/how to recycle were identified as the biggest obstacles to recycling.

Respondents Who Recycle Regularly

Survey respondents were grouped into three geographies: residents of the two largest townships in Athens and Hocking County (Athens and Falls, respectively), and those residents outside of these townships who were combined into “Other.” From these groups, respondents who indicated that they recycle “All of the time” were selected. The following table shows the percentage of these respondents that report having curbside recycling pickup.

Does your household have curbside recycling pickup?

	Athens	Falls	Other
Yes	88.0%	33.3%	15.9%
No	12.0%	66.7%	84.1%

Of the 328 respondents who indicated that they recycle “All of the time,” 176 reported having curbside recycling pickup, while the rest reported that they did not have this service. A higher percentage of respondents in Athens Township who reported recycling “All of the time” have curbside recycling. However, two-thirds of respondents from Falls Township (66.7%) who reported recycling “All the time” do not have curbside recycling. Overall, over half of respondents who reported that they recycle “All of the time” (53.7%) have curbside recycling pickup—most of these respondents are from Athens Township.

Drop-off Site Use

Nearly half (47.7%) of all respondents reported using a drop-off site. Among those who use a drop-off site, most (58.6%) report using the Athens-Hocking Recycling Center, at either the Logan or Athens location. Temporary sites were the next most frequently used drop-off sites (13.6%). The most

commonly used temporary sites were located in Glouster, Lee, Lodi Waterloo and Guysville. A smaller percentage of respondents (11.9%) reported using private haulers that have permanent drop-off locations. Some respondents (5.4%) also reported going to out-of-district drop-off sites; these may include the drop-off site of the private hauler, Rumpke, in Columbus.

Respondents who used drop-off sites indicated that they chose a particular site because it was the only one near them (36.6%) or because it was most convenient (31.1%). Some respondents chose sites that accepted the most materials (16.5%) while others selected the location based on it being neat and clean (10.1%).

Below are the ranked suggestions for improvement of drop-off sites, grouped by which site people reported using:

Do you have any suggestions for improving drop-off sites? Mark all that apply:

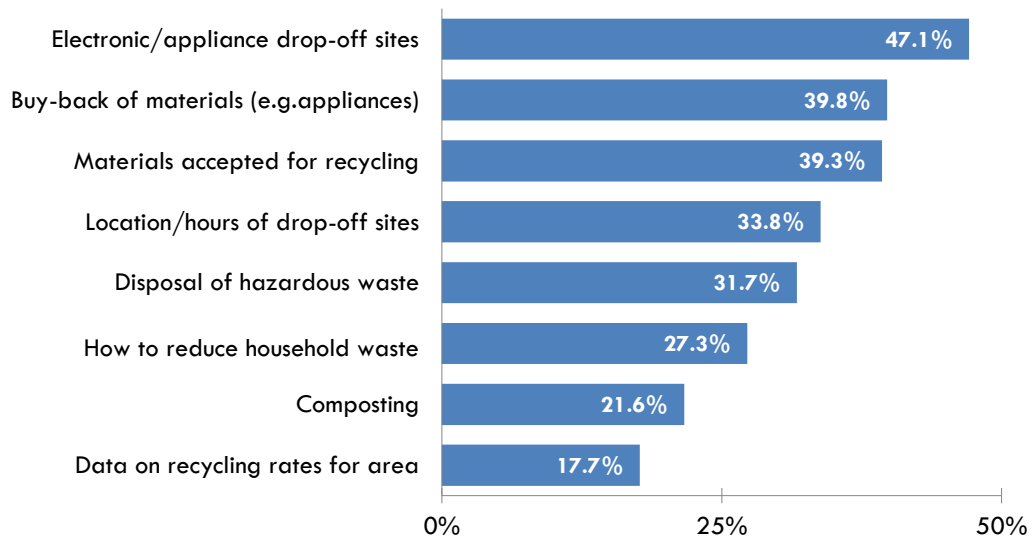
	Athens-Hocking Recycling Center	Temporary Township Site	Private Hauler Permanent Site
Accept more types of materials	1 st	1 st	3 rd
Be available longer hours	2 nd	2 nd	4 th
More sites	3 rd	3 rd	1 st
Publish when/where sites will be	4 th	4 th	2 nd

Note: Private haulers, for this specific question, were limited to those companies that have drop-off sites (Rumpke, Trace’s A-1, and Farmer’s).

Requested Learning Topics

Respondents were asked to select areas of recycling they would be interested in learning more about.

Areas of Interest

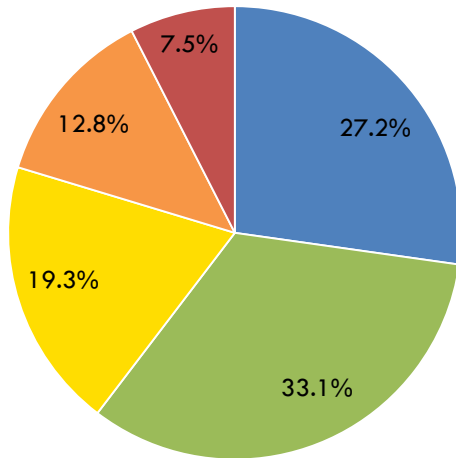


An overwhelming majority of respondents (82.6%) expressed interest in learning more about some area of recycling. Respondents were most interested in learning about electronic or appliance drop-off sites (47.1%), buy-back of materials (39.8%), types of materials accepted for recycling (39.3%), and the location/hours of drop-off sites (33.8%).

Recycling Fees

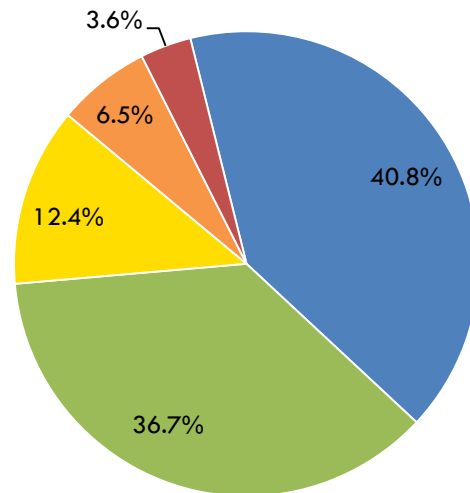
Respondents were asked “What would be the most in monthly fees you would be willing to pay for once-a-week curbside recycling for standard household recyclables (paper, plastic containers, aluminum, glass, tin, cardboard)?” The rates respondents reported being willing to pay are described below for each county. Note that some respondents already pay a weekly recycling fee.

Athens County: Willing to Pay for Weekly Recycling



- Nothing
- \$1 - \$4.99 per month
- \$5 - \$6.99 per month
- \$7 - \$9.99 dollars per month
- \$10 or more per month

Hocking County: Willing to Pay for Weekly Recycling



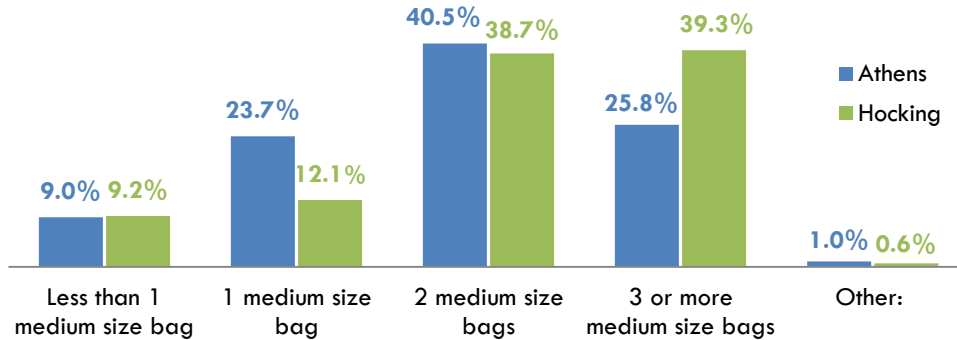
- Nothing
- \$1 - \$4.99 per month
- \$5 - \$6.99 per month
- \$7 - \$9.99 dollars per month
- \$10 or more per month

A relatively large proportion of both Athens County (27.2%) and Hocking County (40.8%) respondents indicated that they would be unwilling to pay for recycling services. Yet, a similar proportion of respondents in each county indicated that a fee of less than \$5.00 per month was acceptable and only 11.9% of respondents considered cost to be a barrier in the earlier question “What makes recycling difficult.”

Trash Production and Recycling of Other Materials

The graph below shows how much trash respondents report their households throw away on a weekly basis. A medium sized bag of trash was described in the survey as a 15 gallon, kitchen size bag. “Other” responses ranged from as many as 8 bags a week to as little as a shopping bag worth of trash.

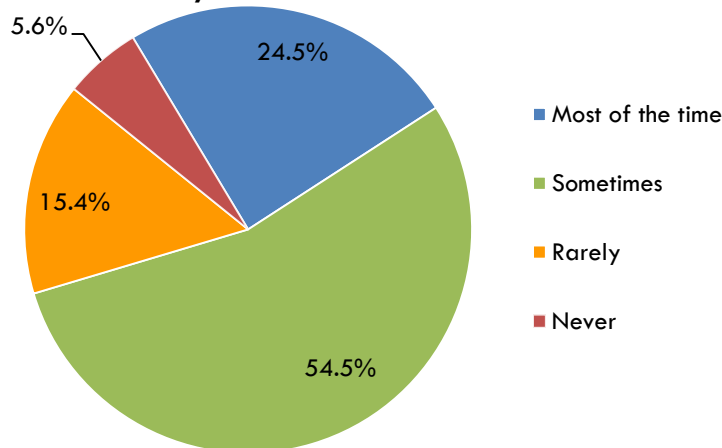
Weekly Trash Production, per Household, by County



Overall, despite both counties’ respondents reporting similar household sizes, with over 80% of both counties’ households having three or less people, Hocking County residents reported higher trash production.

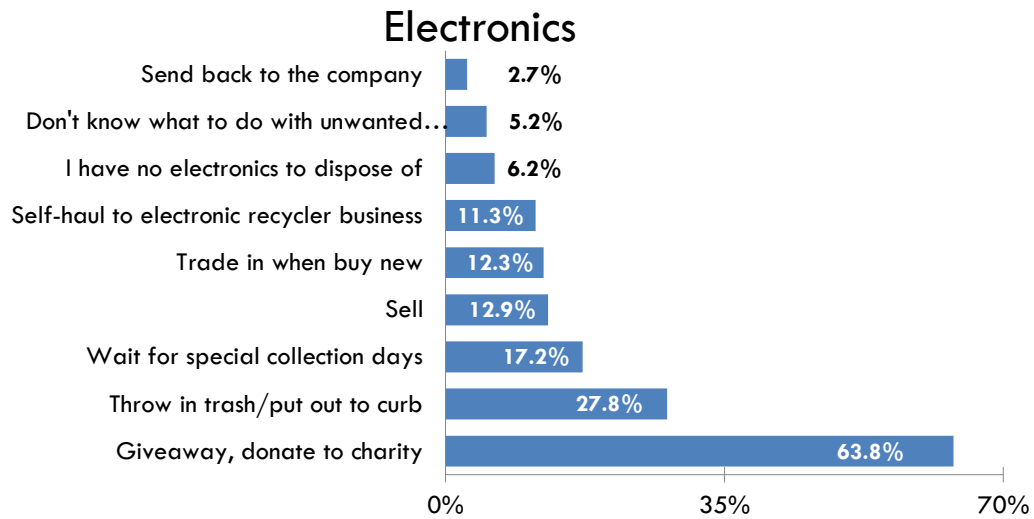
Respondents were asked, “When purchasing products, do you try to choose products made with recycled materials?”

Choose to Purchase Products Made with Recycled Materials



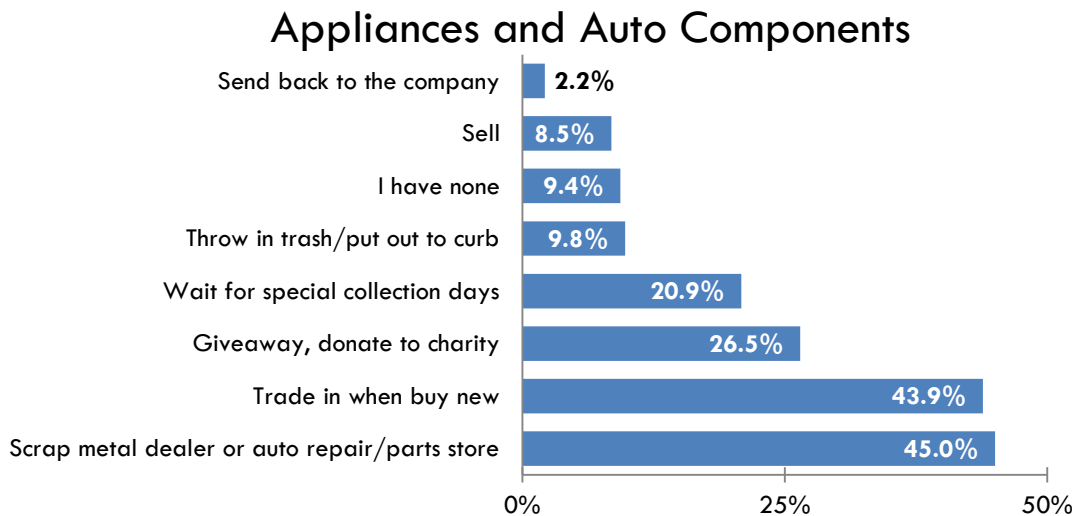
More than half of respondents (54.5%) reported choosing to purchase products made from recycled materials “sometimes.” Only 5.6% of respondents reported that this did not influence which products they purchase.

Respondents were asked “What do you do with unwanted electronics such as televisions, cell phones, and computers?” Respondents selected as many options as applicable.



Nearly two thirds of respondents (63.8%) give away or donate electronics. Over a quarter of respondents (27.8%) throw unwanted electronics in the trash or put them on the curb. A small number of respondents (5.2%) indicated that they did not know what to do with electronics and would like more information.

Respondents were also asked “How do you dispose of appliances, automotive batteries, motor oil, and tires?” Participants were able to select as many options as necessary.



Nearly half of respondents (45.0%) take their household appliances and automobile components to scrap-metal dealers, auto repair shops, and auto parts stores. Almost as many (43.9%) trade them in when they buy new ones. A quarter of respondents (26.5%) donate them to charity. It is unknown, however, if appliances are handled differently than automobile components.

Finally, respondents were asked how they handled lawn and garden debris. The most common ways people reported dealing with grass clippings, leaves, brush and lawn/garden debris includes the following: compost bin/throw on garden (23.8%), leaves and grass are left where they fall (22.2%), they are thrown in the woods (20.8%), or burned (11.2%). When asked if they compost food scraps, most respondents (65.5%) said no.

Conclusions

Generally, respondents indicated an interest in recycling, with 75.2% reporting recycling most or all of the time. There were higher rates of recycling in Athens County than in Hocking County. Hocking County residents reported producing more trash than Athens County residents, though household sizes are approximately the same in both counties.

Making recycling easier and more convenient is likely to increase recycling rates. Barriers to recycling primarily concern issues of convenience and information. Some convenience barriers include a lack of pickup service (49.5%) and the amount of separation required (24.3%). Information barriers, however, are likely to be the easiest to address. A vast majority (82.6%) of respondents indicated they would like to know more about aspects of recycling and nearly a third (31.7%) indicated that recycling was difficult because they lacked the information on where and how to recycle. Top areas of interest in more information included: electronic/appliance drop-off (47.1%), buy-back of materials (39.8%), materials accepted for recycling (39.3%), and location/hours of drop-off sites (33.8%). Some residents (17.7%) expressed curiosity about recycling rates in the area.

Aspects that make recycling inconvenient are also likely to have a greater negative impact on individuals who have to use drop-off sites, as using the sites requires travel and storage of materials. Increasing the number of drop-off locations, the hours they are open and making the locations and hours of these sites better-known would likely increase their use.

Electronics collection too has room for growth. While many donate used electronics or sell them, a sizable portion (27.8%) simply throw electronics away. Yet, when asked what areas of recycling respondents wished to learn more about, almost half indicated an interest in learning about proper disposal for electronics and appliances. This represents an opportunity to capture more recyclable materials locally.

There is also some indication that people do not trust that recycling is useful; for instance, 5.9% of respondents indicated that they “believe materials end up in landfill instead of recycled.” However, the majority of individuals express an interest in recycling particularly if recycling is convenient and they have information on how, where, and when it can be done.

It should be noted that because recycling is considered a positive behavior, it is possible that rates of recycling were overrepresented in the data because people who recycle would be more likely to respond to the survey. This may, in part, explain why there was a larger rate of response from Athens County, which seems to have higher recycling rates, interest in recycling, and lower trash production.

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