



BROKEN ARROW

August 16, 2016

Findings: Telephone Survey of Public Opinion Regarding Curbside Collection Service



SOLID WASTE
MANAGEMENT
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1. Executive Summary

During the week of May 9th through the 13th, 2016, a randomized, statistically significant telephone survey was administered to the residents of Broken Arrow about their attitudes, behaviors, and engagement regarding their curbside garbage service, recycling, and the City-operated garbage bag voucher system. The current collection service notably lacks curbside recycling and includes twice-weekly collection of garbage, both of which features have steadily given way in other U.S. communities to once-weekly garbage and single-stream recyclables at the curb. Of the roughly 460 communities whose curbside programs are currently tracked by solid waste consultants Gershman, Brickner & Bratton, Inc., (GBB), only 50 municipal programs offer twice-weekly garbage. As part of a proactive, integrated approach to solid waste management, City leaders sought to gather information that could be used in decision-making about future revisions to the solid waste collection system in Broken Arrow.

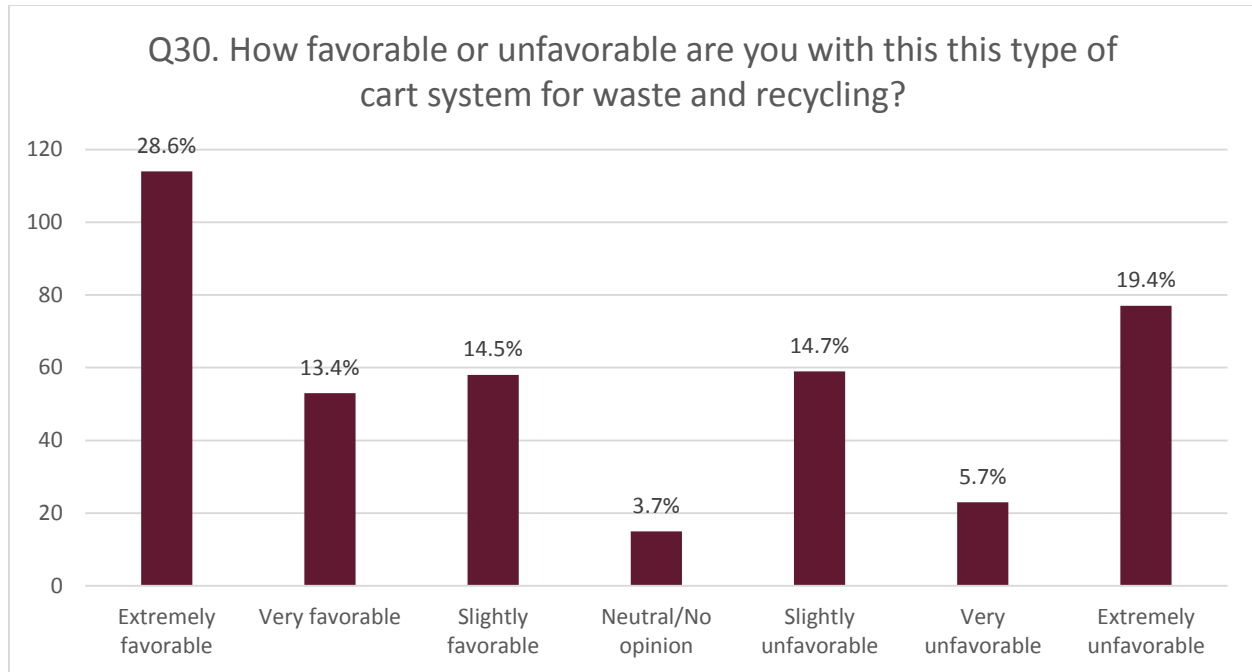
Overall, the survey revealed that residents of Broken Arrow are positive about the current bag-based collection system. The bags are centrally integrated into home-life, with about half of residents using the City-provided bag in the main home trash can in the kitchen. Less than half of residents are currently consolidating their waste in a large can that they keep outside or in the garage. Both of these responses indicate that reduction or removal of the bag voucher system in order to implement cart-based collection would be a twofold culture change for many households.

Residents of Broken Arrow are not opposed, however, to some change. Residents agree that their limited access to recycling is “behind the times.” And while 48 percent of people said they don’t recycle at all, 82.4 percent said they would likely make an effort to recycle more and generate less trash for landfilling if they had curbside service. They also acknowledged that adding more direct service—i.e., curbside recycling—would likely have a cost associated with it, and about 40 percent said they were willing to pay additional dollars on their utility bills to add recycling.

The system of setting out nearly all waste in opaque black bags, and the lack of any recent waste sorting data, means that Broken Arrow has little information on what people are setting out at the curb for collection. The survey asked questions about typical set-out habits, though, which give some insight. When asked how many bags per week they set out, the most common response can be generalized as 3 to 5 bags on the first collection day and 2 to 4 bags on the second day. More than 70 percent of people said that includes 2 or fewer bags per week for setting out yard waste. As a result, a combined 5 to 9 bags per week, with each bag capable of holding up to 32 gallons of material, is 160 to 288 gallons of service per week. In a typical U.S. curbside program, residents of single family homes have one 64-gallon or 96-gallon garbage cart collected weekly and one 64-gallon recycling cart collected weekly or every-other-week, plus separate collection of yard waste in carts or bags. In these communities, the level of service is 160 to 300 gallons per week. This reveals how these systems provide the same level of service as currently received by residents of Broken Arrow, but in a different format, with the added benefit of enabling residents to divert waste and have a positive impact on their environment.

In the survey, responsiveness to the idea of waste carts varied among groups. As shown in the figure below, over half of residents were favorable regarding the idea, with more than a quarter saying they were “extremely favorable.” These are the aggregate numbers. Long-term residents, older people, and those who described themselves as retired or disabled tended to be more unfavorable. GBB finds that this is typical, particularly for older people who generate less trash per household and who may find the carts difficult to manage, physically. In the survey, newer residents (fewer than 10 years in town), households of 4 or 5 people (presumably many of which are families), and self-described homemakers tended to be more favorable towards the carts.

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Favorability Responses to a Cart-based Collection System

The survey did not reveal widespread opposition or unwillingness to recycle. A little more than half of people reported that they had recycled during the last year. And while 40 percent of respondents indicated that they have never been to the drop off center operated by the Metropolitan Environmental Trust (“the M.e.t.”), many of those people indicated as their reason that it was simply too inconvenient or difficult, or that they didn’t even know about it.

There is great potential for diverting waste from disposal in the City. In the broadest sense, Broken Arrow has a typical suburban set-out pattern, and the behavior that residents of Broken Arrow already practice can lend itself to curbside recycling. When asked what they set out most often as bulky items, 46 percent said boxes, and 35 percent said limbs or landscaping material. These are highly recyclable materials that many residents are already, in a way, source separating. Additionally, if the volume of material residents currently set out on the second day were properly source-separated recyclables, the City could realize a recycling rate on par with the national average, especially combined with diversion of yard waste.

It is reasonable to expect that, with proper program implementation and community involvement, the solid waste services provided in Broken Arrow could be adjusted to a more comprehensive program that diverts waste from disposal and provides residents with the opportunity to recycle as much as they can and care to. Any changes would likely reduce the need for the number of bags in the voucher program, since the best practices for collection of recyclables and for yard waste do not involve use of opaque bags. Due to the deep cultural integration of the current bag program, the transition plan would need to address both the introduction of the carts and any changes to the bag program. One or more pilot projects would be well-advised as a first step to taking action on the findings of this project. This would give the City the opportunity to try out different approaches to transitioning the current system and behaviors to a more comprehensive set of services at the curb to see which works best for its residents.

2. Introduction to the Project

Originally founded just after the turn of the 20th century as an agricultural community, the City of Broken Arrow (“City”) has grown, expanded, and developed into a center of manufacturing and a suburb of neighboring Tulsa. The City is now home to almost 107,000 residents, mostly families, the vast majority of whom live in a single-family home or very small multi-family home. Homeownership is high, and the median household income is above that of both Oklahoma and the United States.

The City provides solid waste collection services for approximately 33,410 customers, which is nearly all households in Broken Arrow. The City provides a notably high level of service: twice weekly curbside collection of municipal solid waste (MSW), or “trash,” and yard waste. The City participates in the Waste Zero waste metering service, wherein customers may set out as much material as they like, but it must be in the designated bags. For the monthly rate of \$15.50, customers receive up to 200 bags per year; they can purchase additional bags beyond that number. Fee-based services include bulk item pick-up and special pick-ups. Included services are two free “dump days” and doorside collection for persons with disabilities.

The monthly rate of \$15.50 covers the City’s operational costs, bags, capital costs, assigned overhead charges, and costs associated with the two “dump days” and the Metropolitan Environmental Trust (“M.e.t.”). The M.e.t. operates a recycling drop-off center on Elm Place that is staffed seven days a week by Show Inc., a nonprofit organization. The recycling center is open to the public to recycle 24 hours a day. The drop-off center is also a jobs program through the Gatesway Foundation, employing between six and twelve workers with disabilities each day. A wide variety of items are accepted, including typical household recyclables (paper, cardboard, bottles, cans, and jars), common potentially-polluting materials (batteries, cooking oil, automatic fluids, and electronics) and a few other recyclable or reusable items (plastic bags, eyeglasses).

At present, City service does not include curbside collection of recyclables. There is a private curbside recycling service, Gentle Earth Recycling, which collects twice monthly for \$9.50 per month. This service has 130 residential subscribers and many commercial customers in the City, including the Chamber of Commerce, some banks and insurance company offices.

In January 2016, the City contracted with Gershman, Brickner & Bratton, Inc., (GBB) and GBB’s partner, ShapardResearch, to conduct a randomized, statistically significant telephone survey of the residents of Broken Arrow about their attitudes, behaviors, and engagement regarding their curbside garbage service, recycling, and the bag voucher system. The intent of the project was to gather information that could be used in decision-making about future revisions to the solid waste collection system in Broken Arrow.

3. Project Tasks and Schedule

The project began with a kickoff meeting in Broken Arrow. GBB and Shapard Research met with General Services staff, the City Manager, and local community and business leaders. In this meeting, the stakeholders briefed the GBB team about the details of the collection in Broken Arrow. Some of the individuals are also residents and shared how they use the bags provided by the City. The GBB team described to the stakeholders and the City staff how the randomized telephone survey would work. The strengths, possibilities, and limitations were discussed. Additionally, the particulars of how the methodology works were shared. The GBB team also shared its insight on how solid waste systems in other cities and counties typically work—what materials are collected, in which kind cans and carts, and how often different materials are collected.

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Using the insights gained from the kickoff meeting, the GGB team prepared four general descriptions of possible solid waste collection systems that Broken Arrow could plausibly adopt. City staff provided feedback on the scenarios regarding the likelihood of the City considering or adopting each scenario. The acceptable concepts for solid waste collection were used to craft the program descriptions that would be given to survey respondents for reaction.

The GBB team prepared a draft survey instrument that was shared with the stakeholder group and vetted by City staff. The survey instrument was approved by a resolution of the City Council and the survey was administered during the week of May 9-13, 2016.

4. Survey Methodology

ShapardResearch conducted a dual frame of RDD (Random Digit Dialed) landlines and cell phones of adults (age 18 and older) living in the City, to account for the increasing percentage of the population that is transitioning to cell phone only households.

RDD selection starts with identifying all telephone exchanges that serve a desired “universe.” After identifying the prefixes to be targeted, ShapardResearch eliminates non-working and business numbers. After, valid numbers are weighted proportionally by the number of listed phone lines, they systematically select numbers to yield a probability sample of base numbers. Finally, random digits are added to the base number to create a random ten-digit telephone number. This same process is used for cell phones. The two samples are then blended to reflect the population at large. The data is purchased from SSI, the world leader in RDD sampling of this nature.

The data collection was conducted by telephone within a calling center located at the offices of ShapardResearch at 820 NE 63rd Street in Oklahoma City using Computer-aided Telephone Interviewing (CATI) technology. ShapardResearch’s data collection team included a field director who is in charge of monitoring the sample, verifying interviews and providing feedback to interviewers. Each of the interviewers received extensive training and practice interviewing sessions before working on any projects. Before they make that first call, every member of our data collection team is familiarized with the overall study objectives, interviewing techniques and the survey instrument. Both English and Spanish speaking interviewers were utilized for this project.

After the data collection process was completed and a respondent audit was verified, the results were stratified with multiple variants, using the U.S. Census and others deemed appropriate to this particular project. With the final data results, ShapardResearch provided appropriate analysis techniques. In addition to standard statistical measurements, ShapardResearch conducted more advanced analysis, in working with City of Broken Arrow staff, in order to gain complete understanding of the data.

All surveys come with a theoretical calculation of sampling error. Many people are accustomed to hearing “plus or minus four percent” when hearing a newscaster citing the most recent poll results. Sampling error, however, isn’t the most serious error in polling. Errors may result from a myriad of other factors, and unfortunately, most of these are impossible to quantify. Factors that can cause errors include declined interviews, interviewer bias, question wording, and question order. To correct for these errors, ShapardResearch, uses proprietary technology, its own resources and its own employees to maximize the accuracy of every data collection project.

5. Survey Findings

5.1. Overview of Reporting Data

The complete results of the random telephone survey responses are available in Appendix A of this report, as follows:

- **Key takeaways:** These are summary-level observations as prepared by ShapardResearch.
- **Toplines and Graphs:** This view shows the questions from the survey and how many individuals selected each response, along with what proportion of total respondents to that question selected each response. For example, in Question 1, 191 people (or, 47.9 percent of the people who answered that question) chose “Extremely Satisfied” as their response. This view does not provide cross-referencing of two or more responses—i.e., it cannot tell you how many seniors chose “Extremely Satisfied” as their response. Also included is a graph showing this information for each question.
- **Crosstabs:** This information “crosses” survey responses with certain other demographic data. For example, among people who have lived in Broken Arrow more than 20 years, 52.7 percent responded “Extremely Satisfied” to Question 1.
 - Note: it is important in reading these data tables not to reverse the statement—i.e., it is not true that 52.7 percent of people who responded “Extremely Satisfied” have lived in Broken Arrow for more than 20 years.
- **Verbatims:** Two of the survey questions asked respondents to provide an open-ended answer. One question asked for what types of bulky items that don’t fit in a bag do respondents put at the curb; the other was a follow-up question of “why?” for respondents who said they have never taken recyclables to the drop-off at the M.e.t..

5.2. Findings and Results

In addition to these statistical reports, the following findings present a summary of the opinions expressed in the survey in the context of their meaning for solid waste program planning. They are not a complete picture of all responses, nor do they include every possible combination of opinions. Their purpose is to explore what the opinions from the survey might mean for future solid waste program changes in Broken Arrow.

➤ Attitudes toward the current system of City-provided bags and vouchers are positive.

- Residents of Broken Arrow are very satisfied with the bags in the voucher program, as shown in Figure 1.
- Most respondents say they get “just the right amount” or not enough bags.
- There may be an economic justice issue to address since underemployed people and people who are often earning lower incomes (rental tenants, younger people, older people) are the most attached to the bags.
- About half of residents are using the City-provided bag in the main home trash can in the kitchen, putting it front and center in their daily lives.

About half of residents are using the City-provided bags in the main trash can in the kitchen.

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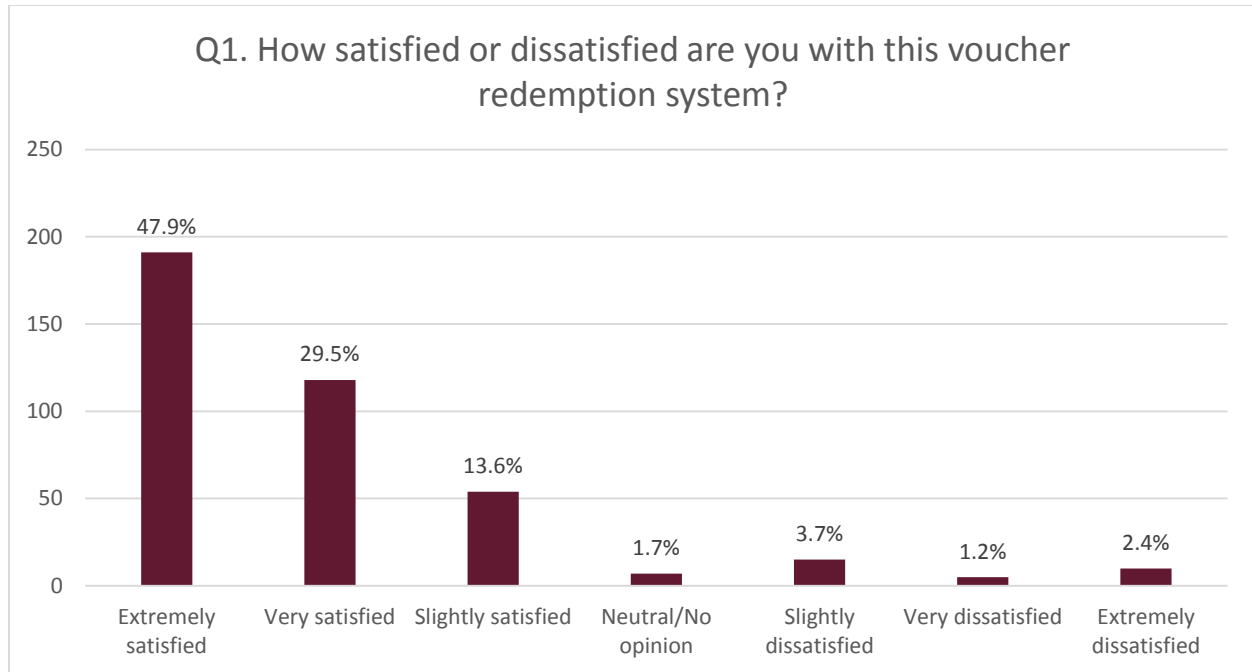


Figure 1 – Satisfaction with Bag Voucher System in Broken Arrow, OK

➤ **On the second garbage collection day of the week, residents set out about 20 to 33 percent fewer bags than on the first collection day of the week.**

- The most common response can be generalized as 3 to 5 bags on the first day and 2 to 4 bags on the second day, or 20 to 33 percent fewer bags on the second day.

➤ **When asked about yard waste set-outs using the City-provided bags, 71.4 percent of residents responded that they use 2 or fewer bags per week.**

- The most common answer, at 43.1 percent, was 1-2 bags per week.
- The next-most common answer, at 28.3 percent, was “zero” bags per week.
 - These residents may be using their own cans or bags to set out yard waste, or they simply may not produce a notable amount of yard waste.

71.4 percent of residents responded that they use 2 or fewer bags per week for setting out yard waste.

➤ **Most people have bulky set-outs 4 times per year or fewer; younger people and rental tenants set out more frequently. Much of the bulky items could be recycled.**

- 37.8 percent of survey respondents said they set out bulky items at least once monthly, and 62.3 percent said they set out these bulky items four times a year or less.
- When asked what they set out the most, 46 percent of people said boxes and 35 percent of people said they set out limbs or landscaping material, as shown in Figure 2.
- A few people mentioned appliances, which are generally recyclable.

Much of the bulky items set out by residents could be recycled.

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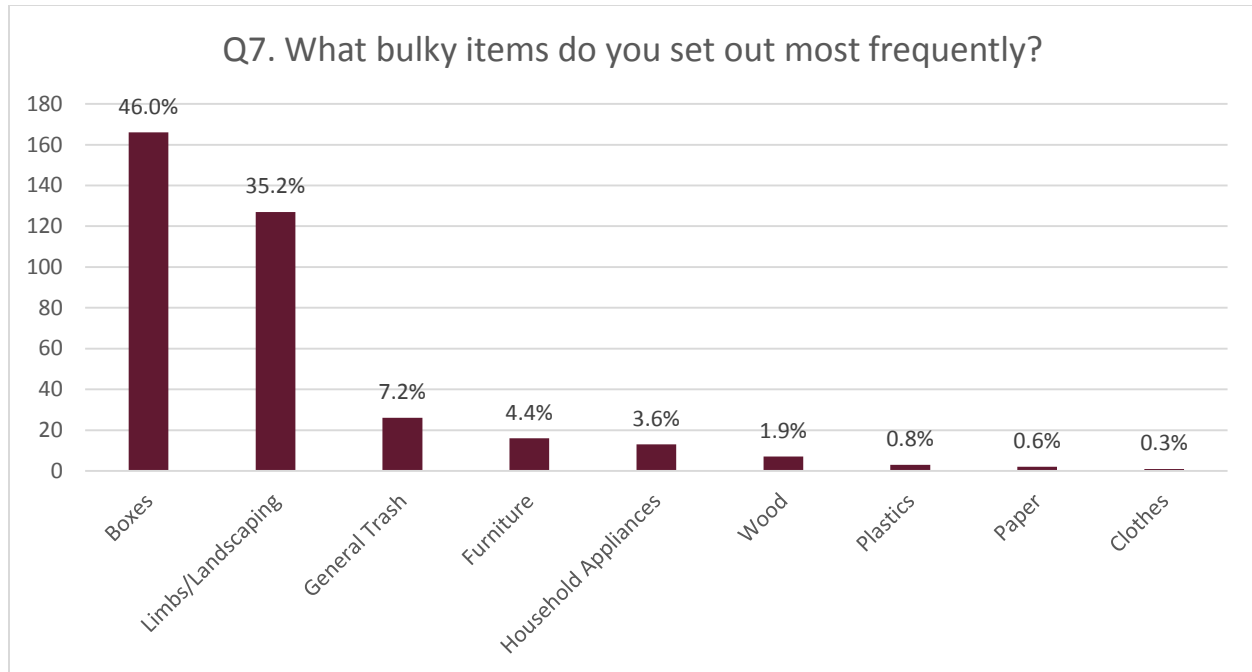


Figure 2 – Most-often Set-out Bulky Items in Broken Arrow, OK

- **Less than half of residents are currently consolidating their waste in a large can that they keep outside or in the garage.**
 - This may mean that the rest just pull their household and kitchen bags on one of the two trash days and go straight out to the curb—a function of having two collection days per week.
 - Another possibility is that people who came to Broken Arrow from another city are not accustomed to providing their own can. Residents who have lived in Broken Arrow for 20 years or more are 34 percent more likely to have a large trash container they use to store trash or take trash to the curb.
- **Residents of Broken Arrow agree that their limited access to recycling is “behind the times.”**
 - Younger people and newer residents say Broken Arrow is behind the times on recycling.
 - 70 percent of homemakers also agreed.
 - 40 percent of long-time residents also agreed.
 - Figure 3 shows that while many residents do not view the trash collection as being behind the times, most feel that the absence of curbside collection of recyclables is.

40 percent of long-time residents say the current recycling system is behind the times.

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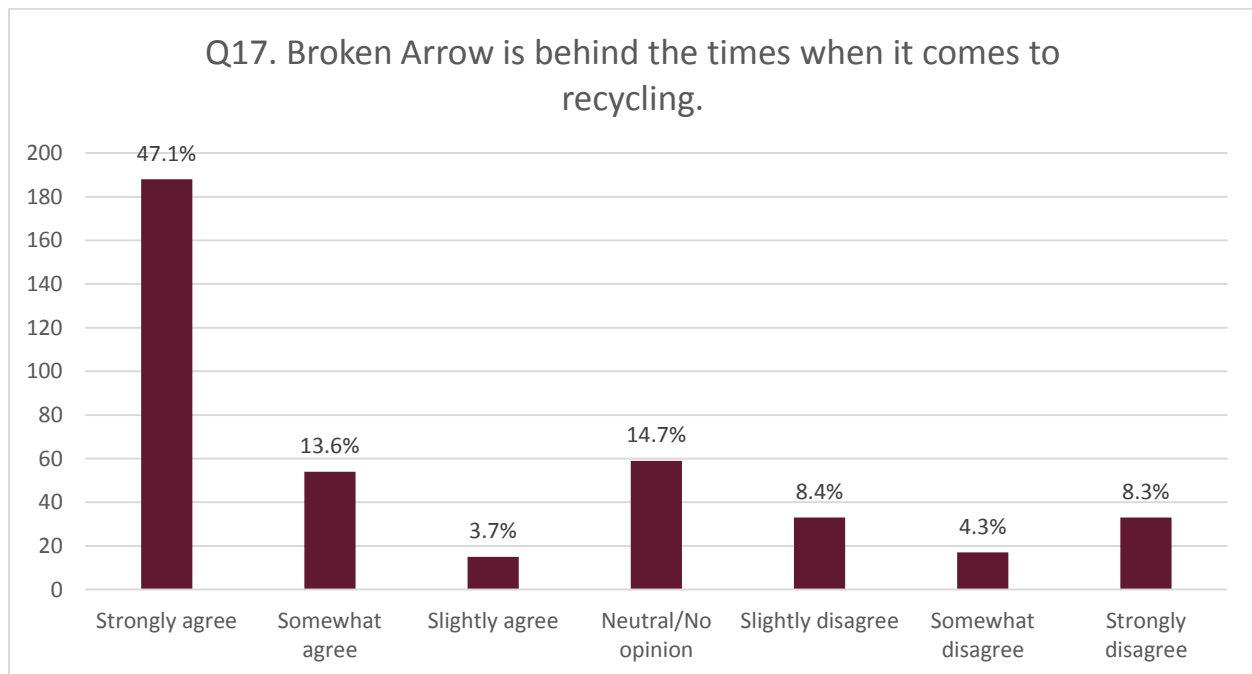
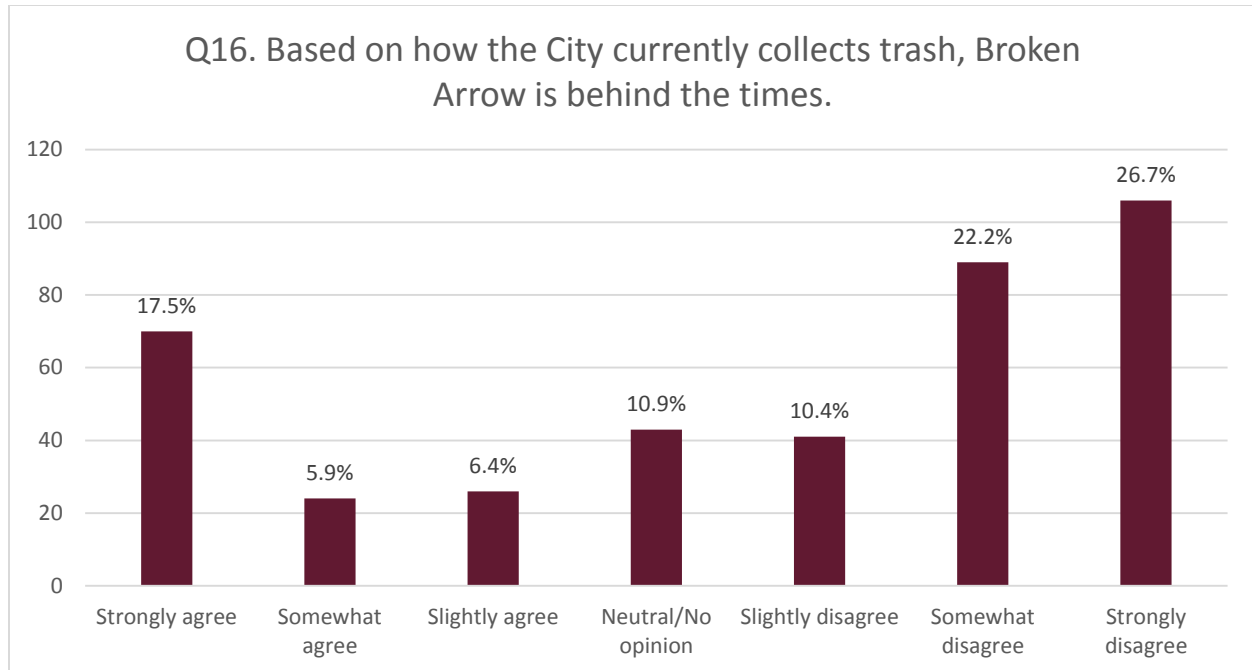


Figure 3 – Attitudes Regarding Broken Arrow Solid Waste Collection

- **The connection between the recycling system and economic development, however, does not resonate strongly.**
- Younger people and newer residents reported seeing the connection between no curbside recycling and the local economy.
 - Renters also said that not having recycling hurts business. It's possible these individuals have a different view or perspective regarding the community. There is some statistical overlap

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between the “younger people” and “newer residents” categories and people who rent their homes. Just over 50 percent of renters are aged 25-34, and among people who have lived in Broken Arrow 10 years or less, 80.5 percent are renters.

➤ **The idea that adding recycling will cost something seemed to be more amenable to people than a pay-as-you-throw (PAYT) system of pricing.¹**

- Opposition to PAYT was strongest among renters and those whose income level is at the lower end of the scale.
- To “add recycling,” without qualification: Average expect-to-pay amount was \$2.33; most frequent answer was \$0 and second-most frequent answer was \$5; 40.4 percent gave an answer of \$1, \$2, \$3, \$4, or \$5.
- To implement a cart system for garbage and recycling: Average expect-to-pay amount was \$2.60; most frequent answer was \$0 and second most frequent answer was \$5; 27.5 percent gave an answer of \$1, \$2, \$3, \$4, or \$5.
- To keep twice-weekly garbage service while adding once weekly recycling service: Average expect-to-pay amount was \$2.00; most frequent answer was \$0 and second most frequent answer was \$5; 31.1 percent gave an answer of \$1, \$2, \$3, \$4, or \$5.

About 40 percent of respondents were willing to pay additional dollars on their utility bills to add recycling service.

➤ **People in Broken Arrow currently have a relatively low level of recycling engagement; however, they express strong interest in curbside service as a way to change that.**

- 38 percent say they do take recyclables somewhere; however, 48 percent say they don’t recycle at all. 40 percent say they’ve never been to the drop off center at the M.e.t.. 17 percent say they didn’t even know about it.
- 74.5 percent said that it is important for the City of Broken Arrow to have a comprehensive recycling plan.
- 82.4 percent said that if curbside recycling were available, they were likely to make the effort to recycle more than they currently do.

48 percent of people said they don’t recycle at all. 40 percent have never been to the MET. 82.4 percent said they would likely make an effort to recycle more with curbside service.

➤ **Responsiveness to the idea of waste carts varies among groups.**

- The most common answer regarding carts was “extremely favorable,” at 28.6 percent, and overall 56.5 percent were favorable. The second-most common answer was “extremely unfavorable,” at 19.4 percent, and overall, 39.8 percent were unfavorable towards the idea of adopting a cart system.

¹ A note about surveying: With every successive question about paying, the \$0 responses increased. It is not unusual as the survey progresses for respondents to become increasingly agitated by the idea of paying more than what they do currently. This can lead to more people responding “zero dollars” regardless of their opposition or support of the initiative in question. For this reason, while the City should consider that many of the respondents indicated unwillingness to pay more than their currently monthly amount, that result should not be read as unequivocal opposition to the program. Furthermore, the City should consider the responses of amounts residents would expect to see as increases, since they are both indicators of support and guidelines for what the market might bear.

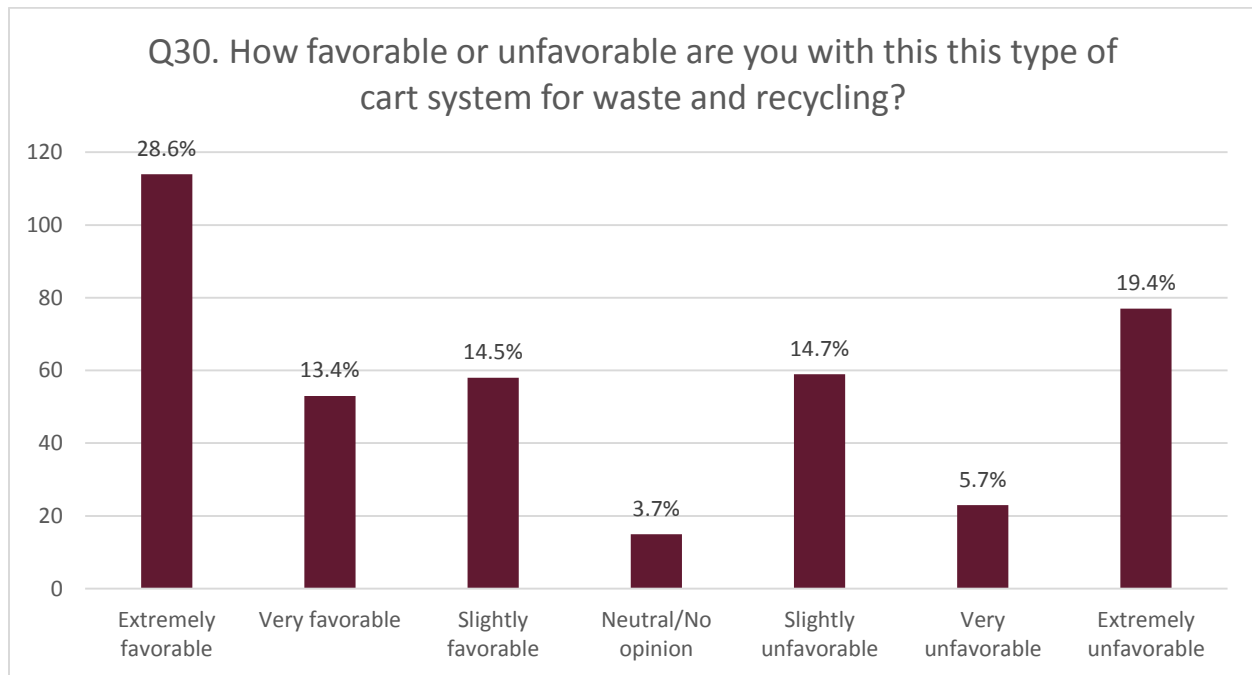


Figure 4 – Attitudes Toward use of Carts in Broken Arrow, OK

- 21.2 percent of retired or disabled residents responded “somewhat unfavorable” or “very unfavorable” toward the idea of carts, and 31.3 percent responded “extremely unfavorable.”
- Renters are broadly open to the idea of the cart, with 97 percent expressing favorability. Since there was no follow-up question to ask for reasons, additional research regarding their positive responses might provide insight into the overall populations’ negative response.

5.3. Implications for Solid Waste Management in Broken Arrow

➤ Public engagement and stakeholder involvement are critical for culture change.

- For any program change, the City will need to create an outreach and engagement plan both before the program is created and during the roll-out of any changes.
- Any changes to the garbage bag voucher program will require careful planning and community participation. Focus groups or workshops and stakeholder engagement activities will be key.
- The City will need to take great care that there is no real or perceived loss of service for residents and to make any transition straightforward and easy to adopt.
- A lot of people reported using grocery bags as trash can liners. This demonstrates a value of reuse and thrift that the City should incorporate as a touchstone in future communications regarding waste management.
- Most Broken Arrow residents do not currently have a large garbage can they use to accumulate material between collection days. Using a system of carts will be a culture change for their personal routines. The 40 percent negative response when asked specifically about carts likely reflects some of that effect. This is similar to initial polling

For any program change, the City will need to create an outreach and engagement plan both before the program is created and during the roll-out of any changes

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in Tulsa in November 2011, when that city was implementing carts and reducing garbage collection to once weekly.² One year later, in November 2012, opinions were evolving as people adapted to the changes.³

- Seniors and people with disabilities expressed being strongly unfavorable to the idea of carts. GBB has found that this is not uncommon, since these individuals are often concerned about maneuvering the cart to and from the curb, uprighting it if it blows or falls over, and maintaining and cleaning it. This is most often addressed by offering a way for residents to apply and qualify for a special service or a special exception. Examples include service that will retrieve waste from closer to the house—currently available in Broken Arrow as “doorside”—or allowing residents to decline the cart and set out material in just a bag during a certain window of time.

➤ Broken Arrow has some positive factors in place to add curbside diversion programs.

- Residents currently set out 20 to 33 percent fewer bags on their second collection day of the week. If the material set out on the second collection day were source-separated recyclables, a 20 to 33 percent rate of source separation would be achieved, which is a typical rate for a successful curbside program.
 - Before converting the second collection day to a recycling day, operational parameters, set-out, participation rates, and route balancing would need to be determined.
- The most common answer regarding setting out yard waste in the City-provided bags was 1 to 2 bags. Two bags is about 64 gallons of capacity. This is a common service level for once-weekly yard waste collection in cities and counties where carts are provided for this material. This indicates that most households are setting out an amount of yard waste typical of other municipal programs.
 - Some communities allow residents to set out more generous or unlimited amounts of yard waste if they use their own container or a compostable bag. This is due to the preferable nature of that material versus material set out in plastic bags. In such a system, the municipality does not generally provide containers or bags for residents to set out yard waste.
- The materials most often set out as bulky waste—cardboard boxes and tree limbs—are highly recyclable. So residents are, in effect, already source separating these materials.
- Local attitudes towards curbside recycling service are positive, viewing it as a modern amenity that a city like Broken Arrow ought to have. Outreach efforts will have the advantage that audiences are already familiar with the concepts for recycling.

If the bags residents set out on the second collection day were recycling, the City could have a recycling rate of 20 to 33 percent.

Recycling the limbs and yard waste residents are setting out separately could boost that rate even higher.

² “Tulsa World Poll: Tulsans split on trash pickup changes,” November 21, 2011, <http://soonerpoll.com/tulsa-worldtulsans-split-on-trash-pickup-changes/>

³ “Poll shows most Tulsans approve of new trash service,” November 12, 2012, <http://soonerpoll.com/poll-shows-most-tulsans-approve-of-new-trash-service/>

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- The concept that there is a cost associated with collecting recyclables is not wholly unknown or opposed by residents of Broken Arrow. The dollar amounts given as expect-to-pay are lower than what the actual cost would likely be; however, they are not too far off. The following are some approximate, proposed, and actual monthly per-household costs for weekly recycling collection which the GBB team has recently observed. Some of the locality information is confidential since the procurements in which they were involved have not yet been disclosed publicly.
 - Fayetteville, NC: \$3.09 (Average, actual costs, 2015)
 - Aiken SC: \$3.45 (Average, approximate costs, FY2015-16)
 - Allentown, PA: \$3.20, \$3.32, \$3.87, \$4.06, and \$4.77 (Collection-only prices from five proposers in a competitive procurement, 2015)
 - Confidential West Coast client: \$4.48 (Collection-only pricing proposed in a competitive procurement, 2015)
 - Confidential Midwest client: \$6.02 for *weekly* service, \$4.20 for *every-other-week* (Cost results of financial modeling which included significant capital costs, 2015)
- The only way to know for certain what adding recycling service will cost is to issue an RFP for the service or create one or more financial models of the programs being evaluated. Costs across the country are increasing due to the changing marketplace for recycled commodities.

Residents view curbside recycling as a positive amenity, and are familiar with its benefits.

➤ Broken Arrow has some challenges in place to add curbside diversion programs.

- Response to variable pricing for curbside service was not positive. The City could still ask its current bag vendor, WasteZero, for a proposal for the more comprehensive version of its waste metering services. This will provide information regarding costs and services when a larger public input process takes place.
- The current recycling option in Broken Arrow is not adequately engaging residents. 51.6 percent affirmed that they recycled in the last year, although established research indicates that many people over-report recycling behavior for a variety of reasons.⁴ In fact, some researchers estimate that this over-reporting could account for 10 to 20 percent of affirmative recycling responses.⁵ From the perspective of solid waste planning, what is clear is that less than half of Broken Arrow residents are engaged in the recycling option the City provides via the M.e.t..

Only half of Broken Arrow residents report recycling during the past year; however, a super majority indicate that access to curbside recycling would make them more likely to give a greater effort.

5.4. Conclusions and Next Steps

There is a lot of room for improvement in Broken Arrow with regards to recycling, but there is also a lot of interest and support for a curbside program. The people who answered the survey responded positively to the idea of adding curbside recycling, noting that the current system is “behind the times.” They also expressed enthusiasm for changing their recycling behavior, given the opportunity, and clearly

⁴ “Public Attitudes Towards Recycling and Waste Management: Quantitative and Qualitative Review,” MORI Social Research Institute, September 2002. https://www.ipsos-mori.com/Assets/Docs/Archive/Polls/waste_recycling.pdf

⁵ Household Waste in London, Brook Lyndhurst/MORI, 2001, as cited in “Public Attitudes Towards Recycling and Waste Management: Quantitative and Qualitative Review.”

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acknowledged that increasing a service can require an increase in costs. Since curbside recycling is a best practice for diverting waste, this is a promising response by people in Broken Arrow. Adding carts will be a major cultural change for many residents, however. Seniors and people with disabilities face real challenges using carts, and the City must be prepared to accommodate these individuals and their concerns. There are programs across the country to benchmark for help in planning such accommodation. Additionally, changes to the bag voucher program (which would be likely to accompany the implementation of carts) would also be met with great opposition. The City must take care that there is no real or perceived reduction in service level. Finally, there will be costs associated with purchasing carts, adding one or more collection routes, and conducting meaningful education on how to recycle properly. Some of these costs can likely be offset by reducing bag purchase, but the program may also require adjustment of the rate structure. The preponderance of “\$0” responses to the questions regarding expect-to-pay indicated that more pointed and finer-grained study is called for in that matter.

6. Suggested Next Steps for Broken Arrow

Go for Curbside Recycling

Pursue creation of curbside recycling collection

- Evaluate possible systems (bags, carts, customer-provided containers)
- Conduct cost modeling of one or two top choices to determine rate needs OR issue an RFP for collection services

Careful Planning

Create a time-delineated plan for implementation

- Public input
- Procurement
- Communications and education
- Transition
- Evaluation

Public Involvement

Engage stakeholders at all points of the project

- Write a plan for public involvement
- Create a committee of advisors
- Conduct additional polling, as appropriate

Procurements

Issue RFBs or RFPs for equipment and services

- Additional equipment
- Recycling processing
- Complete service proposal from a private vendor

Implementation

Start collection, evaluation, and reporting

- Begin operations
- Collect data
- Generate feedback
- Respond appropriately
- Evaluate performance

Appendix A: Report by ShapardResearch and SoonerPoll.com: Key Takeaways, Toplines, Results and Graphs, Crosstabs, and Verbatims

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