

Survey questions

In 2022 the City conducted a survey among Airdrie residents to gather feedback about our current curbside services (blue cart, green cart and garbage). When asked about top priorities or suggestions, many respondents expressed a desire to switch to an automated black cart system for garbage collection from our current manual garbage service, similar to how our current green and blue cart service works.

The City is exploring ways to improve our garbage service and wants your input on introducing an automated black cart service.

The information on the survey is collected under the authority of Section 33(c) of the Freedom of Information and Protection of Privacy Act ("the Act") and will be used solely for waste and recycling information gathering purposes. It will be treated in accordance with the privacy protection provisions of Part 2 of the Act.

Questions concerning collection of this information can be directed to the Program Coordinator at Waste and Recycling at waste.recycling@airdrie.ca or at 403.948.0246.

Please consider the following changes that could occur if an automated black cart service were introduced

- An automated garbage program could increase your utility bill by approximately \$12 - \$16 per year. Cost estimates for an automated program were calculated based on weekly collection, a 30% increase to garbage volumes and the cost to purchase carts.
- Collection frequency could change from weekly to every other week
- Your collection schedule could change, which could mean adding a third collection day.
- An increase to the amount of space on your property to store carts.
- An increase to the amount of space on the street or alley to set out your carts if two carts are collected on the same day.
- The potential for reduced diversion and the environmental impact. Data from other municipalities that use black carts show they tend to send more garbage to landfill.

Question 1: If the City were to introduce an automated collection service using black carts, is that something you would be interested in? (select one)

- Very interested
- Somewhat interested
- Somewhat disinterested
- Very disinterested

Question 2: What challenges are a concern to you if the City were to introduce black carts? Please select all that apply.

- Cost: automated collection is more expensive than manual collection
- Cart storage: not enough room to store three carts on my property
- Cart set out: not enough room on my street or in the alley for more than one cart
- Physical concerns: challenges moving large/heavy carts
- Collection days: the potential of having to set out a cart on an additional day of the week
- Collection frequency: the collection schedule might change from once a week to every other week
- Technical issues: concern that problems with an automated system could lead to delays or service disruptions
- Noise: concern that automated collection may be noisier than manual collection
- Reduced diversion: concern that people will send more to landfill instead of composting and recycling correctly
- Other, please specify

Question 3: What opportunities do you see if the City were to introduce black carts? Please select all that apply.

- Choose your cart size: the option to select a cart size that fits your household's needs
- Cost savings for a smaller cart: a lower monthly rate for a smaller cart
- Frequency of pick-up: reducing collection to every other week independent of cart size
- Litter: potential decrease in litter in the neighbourhood from ripped bags
- Reliable service: think there will be fewer disruptions for collection
- Curb appeal: it will look the same at the curb as the blue and green carts
- Service: easier on workers to collect garbage
- Other, please specify

There are different ways the City could offer a black cart program. For example:

- One cart size for all households
- Option to select a cart size that fits the needs of your household
- Different cart sizes at different rates, that is pay a lower rate for a smaller cart, or a higher rate for a larger cart

If multiple cart sizes were offered, there are black carts on the market that are 240 litres and 120 litres. As a comparison our current blue and green carts hold 240 litres. Our

current garbage collection service is equivalent to 120 litres. The following question asks about your thoughts on differing cart sizes and potential cost impacts.

Question 4: If the City were to introduce black carts with different size options and/or different rates for different size options, please select the statements that best reflect your perspective. Please select all that apply.

- A smaller cart with a lower cost option would help me/my family financially.
- A smaller cart with a lower cost option would motivate me/my family to reduce garbage and use the green and blue carts more
- I/my family would be interested to try a smaller cart
- I/my family would want a larger cart even if it meant a higher rate
- Currently, I/my family need to use excess bag tags and would prefer a larger cart
- I/my family feel like we're doing all we can to reduce waste and would still need a larger cart
- I have a large household and don't feel I could make a smaller cart work even if it meant a lower rate
- I have renters/a secondary suite and can't reduce how much garbage they throw out
- I/someone in my family has a medical condition and throws out more garbage than is currently allowed
- I'm not sure
- Other, please specify

Question 5: Is there anything else you think we should know as we explore changes to our garbage collection service? (open-ended question)

Survey summary

A five-question survey was developed to determine the level of interest in an automated program for garbage. A postcard with a unique PIN was mailed to all households ($n = 21,420$) that receive curbside collection services informing them of the survey; the survey was open for five weeks from May 23 to June 30.

Waste and Recycling Services (WRS) worked with Corporate Communications to educate and engage residents on the survey. Staff utilized the Home and Lifestyle show in April to inform residents of the upcoming survey. The survey was promoted on all City social media platforms, City newspapers, the radio, roadside signs, in bus shelters and on buses. Staff attended the Airdrie Farmers Market, set up tables at Genesis Place, the Airdrie Public Library, and grocery stores to encourage residents to complete the survey.

A total of 6058 households or 28% of eligible households completed the survey. The survey has a confidence level of 99% with a margin of error of $\pm 1\%$. A unique PIN was utilized to ensure each household completed the survey only once. The data associated with each PIN allowed staff to analyze responses and confirm they are representative of the City based on assessed home value, collection point, community and housing classification.

Question 1

The first question asked, *“If the City were to introduce an automated collection service using black carts, is that something you would be interested in?”*. Figure 1 shows that 71% of respondents are very interested and somewhat interested in an automated black cart program and 29% are very disinterested and somewhat disinterested.

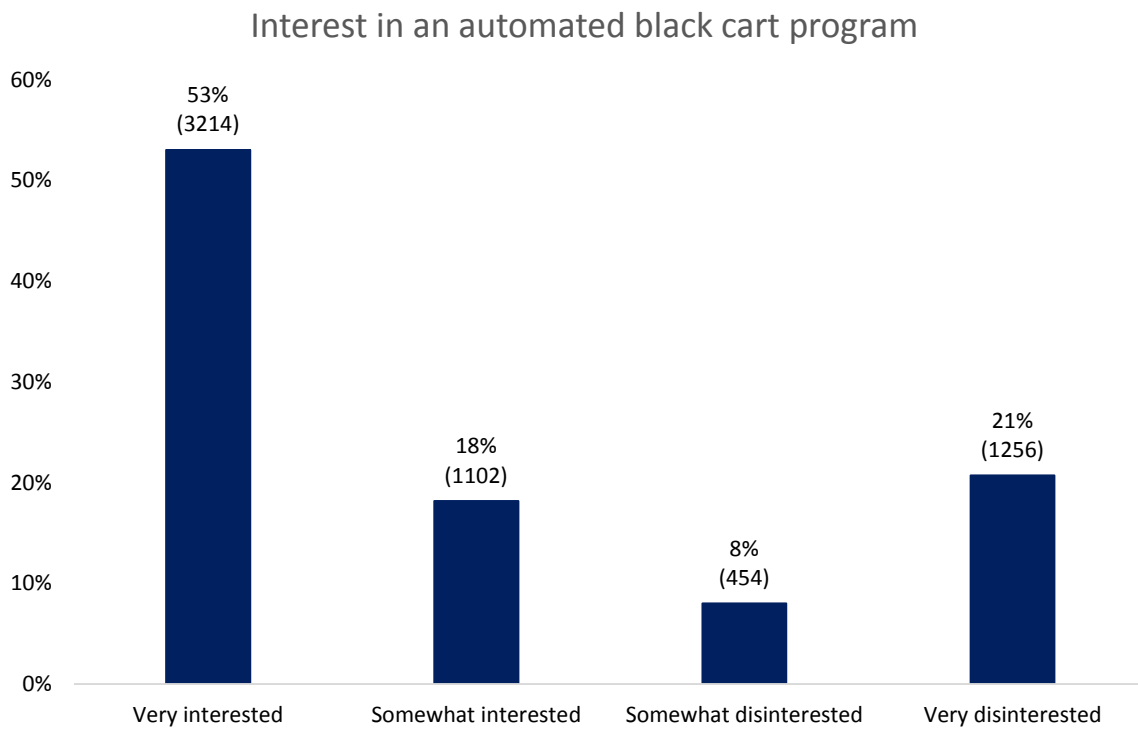


Figure 1 71% of households are very interested and somewhat interested in a black cart program and 29% of households are very disinterested and somewhat disinterested.

Question 2

The second question asked, “*What challenges are a concern to you if the City were to introduce black carts?*”, Figure 2.

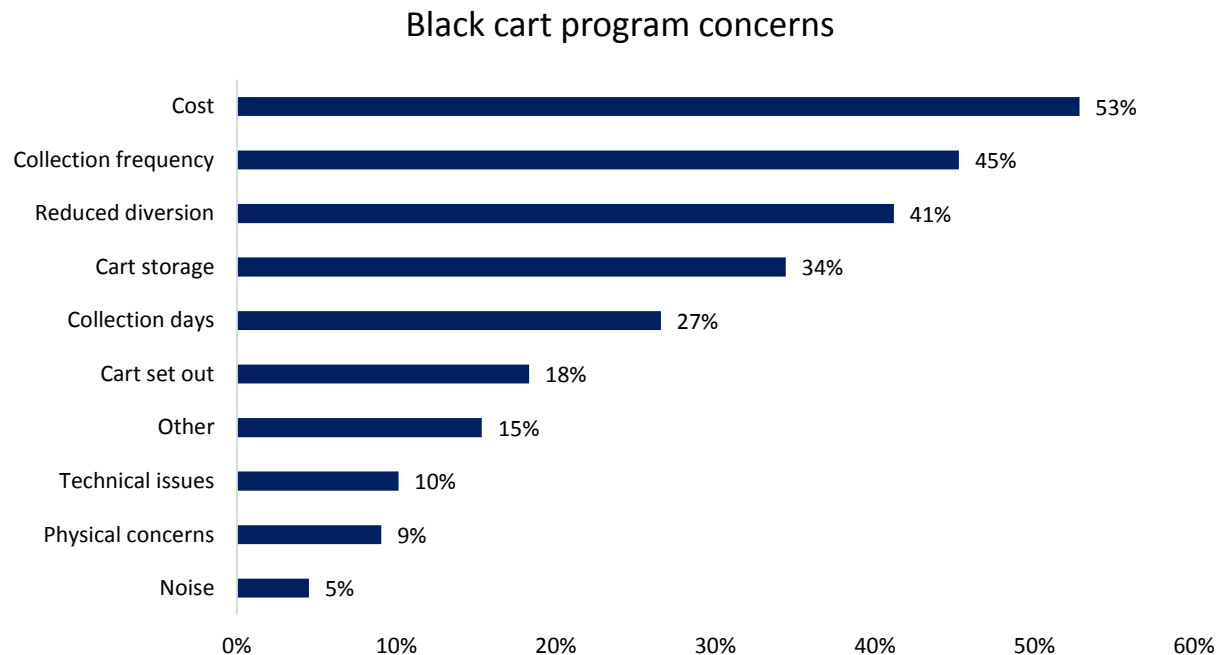


Figure 2 Respondents were able to select multiple statements to question two, 13,492 selections were made.

Respondents had an opportunity to enter other concerns they foresee with a black cart program. The most common concerns were:

- not all households produce the same amount of garbage and feel a one size fits all program would not be equitable;
- having to manage a third cart;
- cart sturdiness.

The concerns of those who are overall interested (very interested and somewhat interested responses) were compared to those who are overall disinterested (very disinterested and somewhat disinterested responses) in a black cart program. Figure 3.

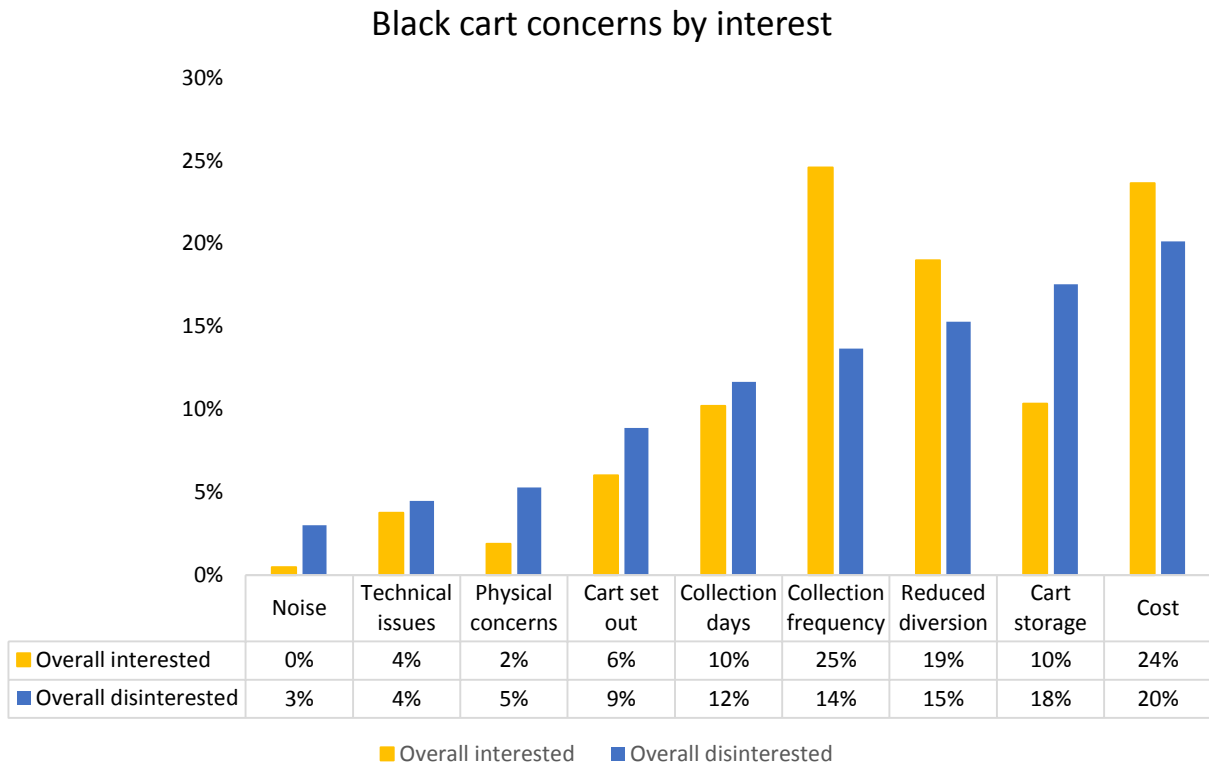


Figure 3 A comparison of black cart program concerns of respondents that are overall intersted vs. overall disinterested

Question 3

Question three asked “*What opportunities do you see if the City were to introduce black carts?*”, Figure 4.

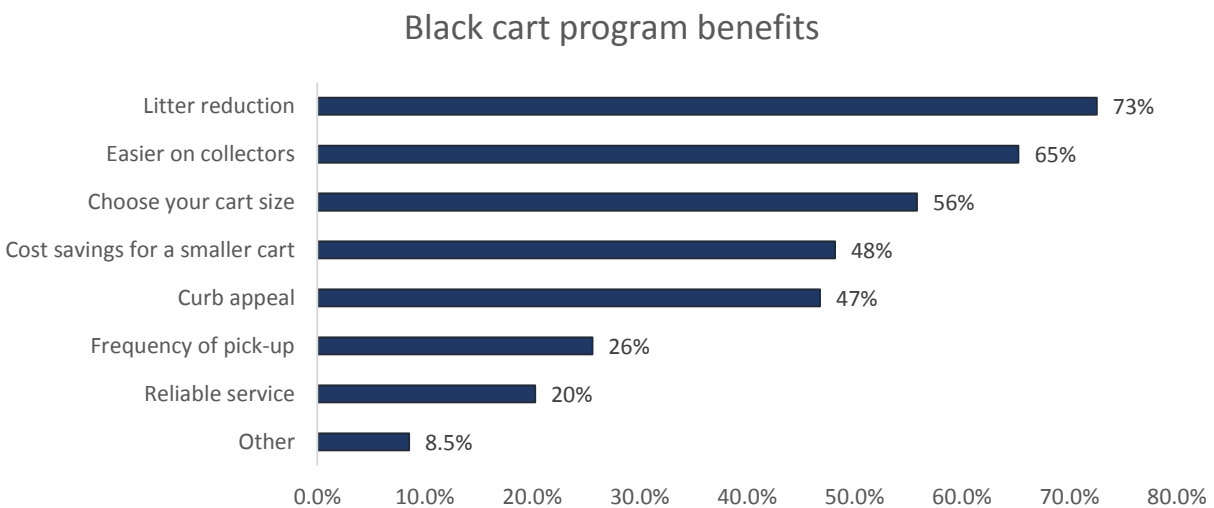


Figure 4 Respondents were able to select multiple statements to question three, 19,566 selections were made.

Other benefits of an automated program identified:

- potential to reduce the amount of plastic sent to landfill by not placing multiple bags into one large bag;
- a black cart would be easier and more convenient to store and set out garbage.

Figure 5 compares the perceived benefits of those who are overall interested to overall disinterested in a black cart program.

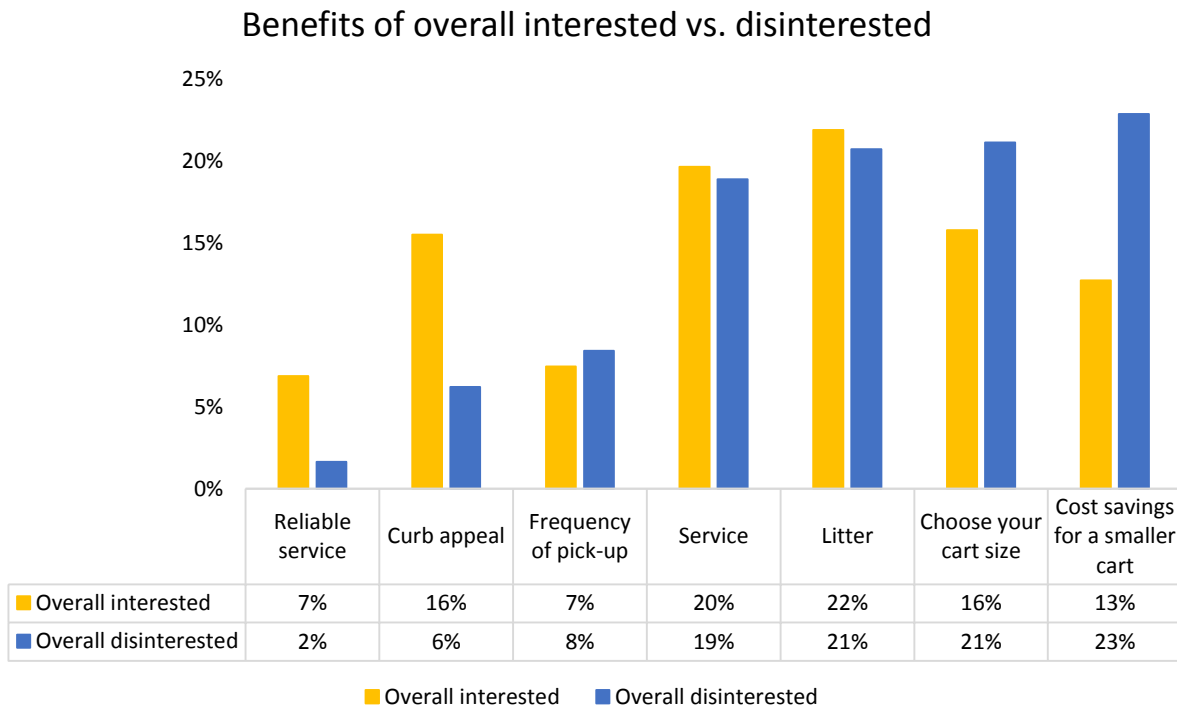


Figure 5 Comparison of black cart program benefits to overall interested vs. overall disinterested

Question 4

The fourth question asked, “*if the City were to introduce black carts with different size options and/or different rates for different size options, select the statements that best reflect your perspective*”, Figure 6.

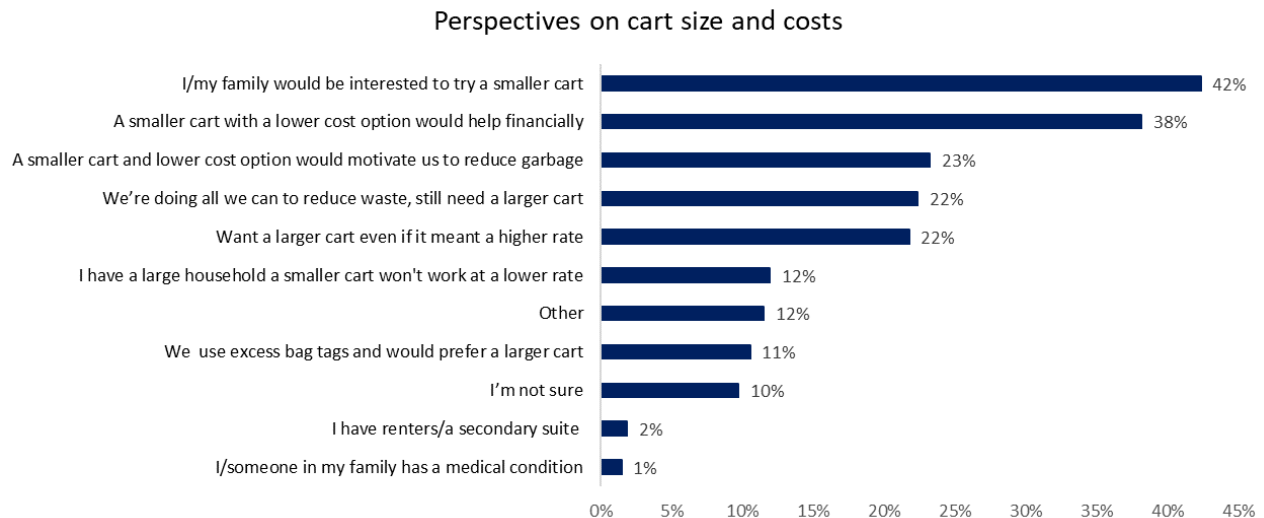


Figure 6 Respondents were able to select multiple statements to question four, 11,339 selections were made.

Respondents had an opportunity to provide additional feedback in the “*other*” portion of the question. The most common response was:

- respondents felt they need to know the collection frequency to determine the cart size;
- want to know if they would still have the option to set out irregular excess waste;
- have concerns about diaper and medical waste.

Figure 7 compares the statements that reflect respondents’ perspectives about cart size and cost of those who are overall interested to overall disinterested in a black cart program.

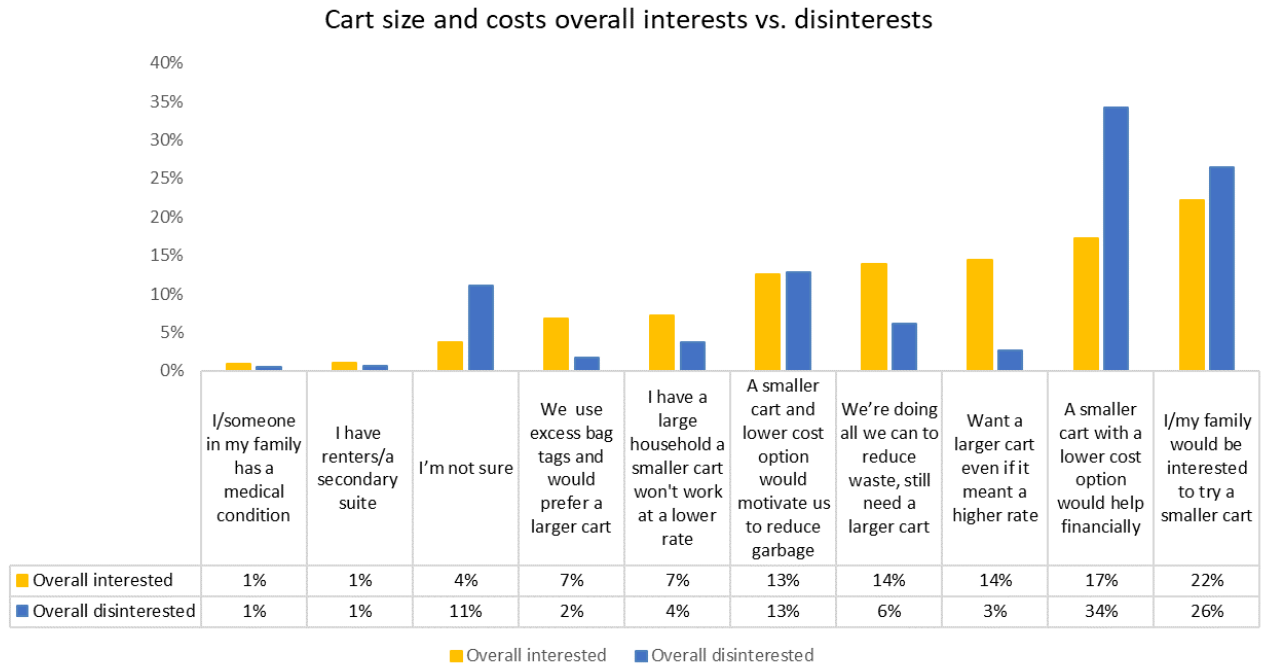


Figure 7 Comparison of overall interested and overall disinterested responses to cart and cost perspectives.

Question 5

The last question asked, “*is there anything else you think we should know as we explore changes to our garbage collection service*”. The comments from this section echoed what was heard in the previous questions; the most frequent comment was about the challenges with the additional cost and the benefits of reduced litter because of an automated garbage program.

Automated program option

The automated program outlined has been designed with a focus on diversion while also taking into consideration public input and industry best practices.

	Current manual program	Automated program
Garbage volume	One bag - 25kg limit - 90cm x 125cm limit	Multiple cart sizes - Small (80 – 100L) - Medium (120 – 180L) - Large (240L)
Cost for service	Equal distribution amongst all single-family households	Variable, based on cart size
Collection frequency	Weekly Two days a week for collection services	Biweekly Maintain two days a week for collection services
Excess waste	Allowed to set out up to three additional bags each week with an excess waste tag	Allowed to set up out up to three transparent bags with an excess waste tag
Medical exemption Program	Households that cannot stay within the bag limit due to a health issue can apply for an exemption	Households with a medical condition will be able apply for an exemption to set out a black bag next to their cart
Diaper exemption program	Households with two or more children under the age of four can apply for an exemption	Managed within cart sizes

Variable cart sizes and rates

A variable cart size and rate program is a collection policy whereby each household pays for services based on the volume of garbage set out for collection. It is one of the most effective policies for maximizing diversion as it creates a transparent link between garbage disposal and the cost of services. Providing variable rates linked to cart sizes creates a financial incentive to change waste disposal behaviour by encouraging residents to properly sort materials.

Providing three cart sizes allows households to find the right size cart for their needs and allows for larger differences in rates between the smallest and largest cart, which supports waste reduction and diversion.

The Waste Management Fee operates on a cost recovery basis. Developing a rate structure is a complex process which requires multiple known variables which are not

readily available. Administration requires the following information before the rate structure can be developed:

- Collection cost per household
- Disposal cost per household
- Distribution of cart sizes

Once a service level has been endorsed

- Administration will initiate a competitive bid process and award contracts,
- Educate and engage residents to determine cart size distribution,
- Develop rate structure for Council consideration,
- New contract for collection services starts

Municipal examples

The current cost of curbside collection in Airdrie is \$22.12 per household per billing cycle. The following table shows how Calgary Metropolitan Region Board (CMRB) and mid-sized cities price their variable cart rate programs.

Table 1 Municipalities with variable black cart sizes and associated rates per billing cycle. Prices include cost for all curbside services.

	80L	120L	180L	240L	360L
CMRB URBAN					
Chestermere		\$23.03		\$23.03	
Okotoks (bimonthly)		\$16.75	\$37.75	\$41.50	
MID-SIZED CITIES					
Lethbridge				\$24.11	\$25.82
Red Deer		\$19.50		\$23.75	\$30.00
St. Albert	\$14.56	\$18.67		\$23.66	
Strathcona County		\$15.25		\$27.25	

Skumatz Economic Research Associates, Inc. (SERA) is a research firm with expertise in program and policy design and works in recycling and solid waste integrated material management sustainability. SERA suggests a rate difference of 50 – 80% to truly incentivize waste diversion.

Biweekly collection

Biweekly collection was identified as a concern by 45% of survey respondents however maintaining the same volume and collection frequency would not incentivize diversion.

Waste characterizations studies conducted between 2018 and 2022 show on average 51% of what is in our waste could be diverted to other streams. Specifically, 35% to organics, 10% to recycling and 6% other recycling that could be diverted to the Recycle Depot.

Waste characterization studies also assessed set out rates. On average, 74% of households set out garbage, 59% of households set out recycling carts and 54% of households set out organics carts each week.

Excess waste tags

When asked about variable cart sizes on the survey, a concern about the option to set out excess waste was raised. Households would still be able to set out excess waste as needed by purchasing an excess waste tag; new to the program is that excess waste will need to be set out in a transparent bag free of organic and recyclable material.

Use of a transparent bag for excess waste will help to ensure residents are using the organics and recycling cart programs and discourage residents from creating excessive amounts of garbage. A transparent bag, free of food waste, will also help to prevent pests from getting into bags and minimize litter.

Medical exemption program

An updated medical exemption program will allow residents who are not able to meet the garbage limit to set out excess waste. Households who cannot stay within the maximum 240 litre cart size would be eligible to apply for the medical exemption program, allowing them to set out excess medical waste in an opaque bag.

Diaper exemption program

The current diaper exemption program provides households with two children under the age of four in diapers with excess waste tags to put out an extra garbage bag a week for a six-month period. This program was implemented to help ensure garbage bags would not be too heavy for collection crews to lift.

With an automated cart program, the diaper exemption program would not be required. Residents would choose a cart size based on household needs and have the option to downsize at any time. Municipalities with an automated garbage collection program do not offer households the option to set out extra waste for free as households have shown that they are able to stay within the cart limits.

Secondary Suites

Homes with secondary suites are responsible for coordinating waste set out. It is up to the occupant to purchase excess waste tags or landlord to provide tags to accommodate excess waste. On the survey, respondents with secondary suites noted that they cannot control the amount of waste being thrown out. Once a variable cart program has been established, staff will engage properties with secondary suites to ascertain if there are challenges with staying within the limits to determine if a secondary suite program needs to be developed.

Selecting the right cart size

Prior to ordering and delivering carts, staff will develop a system for residents to identify the ideal cart size for their household. Education campaigns prior to sign up will help residents understand cart sizes, how much can fit in each cart, what the program will look like and associated costs. However, it is understandable there may be challenges with selecting the right cart size and changes may be needed. Households will be allowed to switch their cart size within the first year at no cost.

A common concern raised in the survey was whether a household would be allowed to change their cart size over time to accommodate their family's needs. For example, children moving out would allow a household to downsize their cart or a growing family could upsize their cart. Households will be able to exchange their carts to encourage diversion and ensure they have the right size for their household.

Currently, WRS allows each utility account to exchange their recycling or organics cart once per property. Additional exchanges cost a nominal fee to cover administrative costs, cart cleaning, and to encourage residents to consider their year-round needs and prevent seasonal cart changes. The same approach will be taken for the black cart program after the first year.

Illegal dumping

Illegal dumping and an increase in contamination is a common concern when introducing a variable rate cart program. The suggested excess waste option provides flexibility and can help mitigate issues of illegal dumping. Municipalities have found that a curbside large item program can reduce illegal dumping and contamination and can be considered if warranted. A robust education program will accompany the launch of an automated cart program to help residents understand program changes.

Manual program option

A manual program has been developed to help increase diversion and allows households to control how much they throw out and spend on garbage disposal.

	Current manual	Amended manual program
Garbage volume	One bag - 25KG limit - 90cm x 135cm limit (120L)	Per bag - 20KG limit - 60cm x 90cm limit (75L)
Collection frequency	Weekly Two days a week for collection services	Biweekly Maintain two days a week for collection services
Cost for service	Equal distribution amongst all single-family homes	Tag-a-bag
Excess waste bag	Allowed to set out up to three additional bags each week with an excess waste tag	N/A
Medical exemption program	Households with a medical condition can apply for a medical exemption	Households with a medical condition can apply for a medical exemption
Diaper exemption program	Households with two or more children or infants under the age of four can apply for a diaper exemption	Managed through tag-a-bag program

Tag-a-bag

Garbage collection in Airdrie has progressed over the years with limits reducing from five bags in 1992, to one bag in 2017. The limit has not changed since 2017 when the recycling cart program was implemented. Reducing the allowed size and weight limit of accepted bags will influence diversion.

Residents will be required to purchase waste tags for each bag they set out (tag-a-bag) within the size and weight limit. Requiring a household to purchase a tag will provide the resident direct control over garbage program costs and encourage residents to consider how much waste they create.

Collection Frequency

Switching to a biweekly collection frequency for a manual program would encourage diversion by promoting food waste and recycling disposal to the organics and recycling carts, respectively.

Medical exemption programs

Airdrie has had a medical exemption program since 2017; between 2021 and 2022, the department received 99 medical applications and handed out 2,574 tags (\$7,722). WRS will continue to provide a medical exemption program to help families that have no control over the medical waste they produce.

Diaper exemption program

The diaper exemption program was introduced in 2017. Between 2021 and 2022, the department received 399 diaper exemption applications and handed out 10,374 tags (\$31,122). Only 32% of households reapply for the diaper exemption program, indicating that most growing families can stay within the bag limits.

Collection companies will be better able to manage diaper waste through the tag-a-bag program with decreased size and weight restrictions. A separate diaper exemption program is not required under the enhanced manual garbage program.