

Calgary



Waste and Recycling Services Variable Set Out Pilot Survey

Final Report

August 27, 2020

Prepared for The City of Calgary by:



Contact:

Erin Roulston
Vice President
Ipsos
403-919-5609
erin.roulston@ipsos.com



Table of Contents

04

Background, Objectives and Methodology

05

Methodology

06

Summary of Findings

12

Cart Set Out Behaviours

29

Motivators and Barriers to Cart Set Out

41

Perceptions of Variable Set Out

59

Key Driver Analyses

66

Demographics



Background, Objectives and Methodology



BACKGROUND

- Waste & Recycling Services (WRS) is one of four (4) business units within the Utilities & Environmental Protection department at The City of Calgary. WRS offers a wide range of programs and services to Calgary residents.
 - These include, but are not limited to, waste collection, recycling, food and yard waste diversion, community recycling depots, landfill Throw 'n' Go bins, household hazardous waste drop-off locations, textile recycling, electronics recycling, Christmas tree composting, and community clean-ups.
- WRS is considering a pilot where customers are charged for garbage based on how often they set their carts out for collection.
- Before beginning the pilot, WRS requires an understanding of current behaviours, attitudes, and knowledge regarding cart set out. WRS will use research results, as well as inputs from other customer engagement initiatives to develop a detailed plan for the pilot.

OBJECTIVES

- The key objectives of the research involve assessments of:
 - Cart set out behaviours, including location of set out, frequency of set out, and amount set out for each of single family households' black, blue and green carts;
 - The reasons for which single family households set out their carts;
 - The likelihood of setting out black carts less often than every two weeks;
 - Motivators and barriers to setting out carts less often, including how realistic single family households feel it would be to set out carts less often;
 - Initial support and opposition to the implementation of a Pay-as-You Throw Program;
 - The impact potential discounts may have on setting out black carts less often;
 - Attitudes towards a Pay-as-You-Throw Program;
 - Final support and opposition to the implementation of the program; and,
 - Key drivers influencing support of the program.



Methodology

-  Ipsos conducted a telephone survey with 500 residents of Calgary aged 18 years or older currently living in single family households.
 - Both landline (60%) and cell phone (40%) sample were used.
 - Interviews were conducted between July 6 and July 19, 2020.
 - The average interview length was 20 minutes.

-  The final data were weighted to ensure the overall sample's quadrant and age/gender composition reflects that of the actual Calgary population aged 18 or older living in single family dwellings.
 - Single family dwellings were defined as a single detached house, a duplex, triplex or fourplex, or a basement suite or suite in a house.

-  With a sample of 500, results are considered accurate to within ± 4.4 percentage points, 19 times out of 20, of what they would have been had the entire population of adult single family residents in Calgary been surveyed.
 - The margin of error is larger within subgroups of the survey population.



Summary of Findings



Summary: Cart Set Out Behaviours

Cart Set Out Location

Setting out carts in the back alley (56%) is more common than setting out carts at the front of single family households (44%).

Among those who always leave their carts in the back alley (41% of single family households), convenience is a factor with 83% agreeing that “it’s easier to just leave them out”.

As well, 33% of those who always leave their carts in the back alley report that they “don’t have space to pull their carts closer to their garage, house or fence”.

Reasons for setting out carts most commonly include habitual activity (83% agree “we’re supposed to on collection day”), the blue (79%) or black (68%) cart being full, or that “the green cart smells” (71%).

Frequency of Cart Set Out

Overall, 73% of single family households set out their **black** cart every two weeks and an additional 10% set out their black cart every four weeks. Further, 16% say their cart is always out and they don’t move it.

In comparison, 61% set out their **blue** cart once a week, 17% report setting out their blue cart every two weeks, 3% every three weeks, 3% once a month, 2% less often than once a month, and 14% say their blue cart is always out and they do not move it.

During *summer* months, 62% of single family households set out their **green** cart once a week, 15% every two weeks, 2% every three weeks, 5% once a month, 2% less often than once a month, and 14% say their green cart is always out and they do not move it.

Amount in Carts

Just more than six-in-ten (62%) single family households state that their **black** cart is full (32%) or more than half full (30%) when set out for collection. Further, 27% say their black cart is half full when set out for pick-up and 11% report that it is less than half full.

Three-quarters (74%) of single family households report their **blue** cart is full (46%) or more than half full (27%) when set out for pick-up. In addition, 19% say it is half full and 7% state that it is less than half full or empty.

Six-in-ten (59%) single family households state their **green** cart is either full (27%) or more than half full (32%) when set out for collection during summer months. An additional 21% say it is half full and 19% report it is less than half full or empty.

Summary:

Motivators and Barriers to Cart Set Out

Likelihood of Setting Out Black Carts Less Often

If The City asked single family households to set out their carts less often, slightly less than two-thirds would be willing to do so for black (64%), blue (63%) and green (63%) carts.

After testing three different key messages that could be used to motivate less frequent set-outs, 69% would be likely to set out black carts less often if municipal operational costs were reduced. As well, 62% would be likely to set out black carts less often knowing that greenhouse gas emissions would be reduced, and 61% would be likely to set out black carts less often knowing that fuel costs for The City would be reduced.

Is It Realistic to Set Out Carts Less Often?

The majority of customers believe it would be realistic to set out their blue (63%) or green (53%) carts less often, while only 35% think it's realistic to set out their black carts less often.



Barriers to Cart Set Out

The main barrier to setting out black carts less often lies with the volume of black cart waste (63%) single family households have at each collection period, including:

- “The black cart is full every two weeks” (41%);
- “They have a big household” (13%);
- “The volume of waste (unspecified)” (8%); and,
- “We couldn’t go four weeks without setting it out” (7%).

Additional barriers mentioned are:

- “The black cart smells” (11%);
- “They are not using the blue and green carts properly” (5%);
- “They are paying for the service/want to get what they pay for” (4%); and,
- “The black cart pick-up schedule is already infrequent every two weeks” (4%).



Summary:

Perceptions of a Pay-as-You-Throw Program

Initial Support of a Program

All respondents were provided with a brief explanation of the potential Pay-as-You Throw Program for black carts.

At first glance, six-in-ten (59%) single family households would support the implementation of a Pay-as-You-Throw Program.

Personally saving money (38%) is the main reason for supporting the Pay-as-You-Throw program, followed by the realization that black carts are not always full (23%), and that it would make waste reduction more efficient (15%).

Initial opposition to the program stems from single family households feeling that they are paying for black cart pick-up and expect it (35%), they produce large amounts of waste would have to pay more (21%), and 19% are concerned that others would place waste in their cart.

Likelihood of Participation with a Discount

20 cents: At a discount of 20 cents per month, 52% of single family households would be 'very' (22%) or 'somewhat' (30%) likely to set out their black cart less often than every two weeks.

50 cents: Six-in-ten (60%) single family households would be 'very' (30%) or 'somewhat' (29%) likely to set out their black cart less often at a 50 cent discount.

\$1: With a monthly discount of \$1, two-thirds (67%) of single family households would be 'very' (40%) or 'somewhat' (27%) likely to set out their black cart less often.

\$2: The majority (72%) of single family households would be 'very' (51%) or 'somewhat' (21%) likely to set out their black cart less often if they received a monthly discount of \$2.

Attitudes Towards the Program

The majority of single family households acknowledge the environmental benefits of a variable set out program (85%); however, concerns with the possibility of black cart waste being placed in others' carts are prevalent (80%).

A moderate majority of single family households agrees with various measures related to the "fairness" of charging waste collection fees according to usage.

Respondents are more cautious in agreeing that "the program would provide significant savings for citizens" (64%) or that "this program would save me money" (60%).



Summary:

Perceptions of a Pay-as-You-Throw Program

Final Support of a Program

At the conclusion of the survey, respondents were once again asked for their level of support or opposition to the implementation of a Pay-as-You-Throw Program for black carts to assess whether exposure to benefits, drawbacks and potential discounts would have an impact on their support of the program.

Final support of the program is found among 63% of single family households, whereas initial support was found among 59% of single family households.

The proportion of those who 'strongly' support the implementation of the program at the conclusion of the survey (27%) is similar to those who initially expressed 'strong' support (26%).

Key Drivers Influencing Support for the Program

The Ipsos Bayes Net (IBN) Drivers Platform is an advanced key driver platform based on Bayesian statistics which allows us to understand the impact of factors on support for the implementation of a Pay-as-You-Throw Program

The most influential factors upon support for the implementation of a Pay-as-You-Throw Program involve "fairness" and personal financial benefits:

- "Charging households for how often they put their cart out is fairer than having a standard monthly fee";
- "Garbage should be treated like water or electricity - those who use the service more, should pay more"; and,
- "This program would save me money".

Key Drivers Influencing the Likelihood to Participate

A second key driver analysis was conducted to better understand which factors influence the likelihood of setting out black carts less often than every two weeks if requested by The City. The most influential factors upon the likelihood of setting out black carts less often include municipal cost savings and environmental benefits:

- "Even if 10% of households didn't put their cart out for collection, it would likely reduce operational costs for The City";
- "Idling produces more greenhouse gas emissions that impact air quality and contribute to climate change"; and,
- "Stopping and idling also increases fuel consumption in collection trucks which has cost impacts for The City".

Insights | Observations

Likely compliance if asked

Almost two-thirds of single family households would be likely to set out their carts less often simply if The City asked them. The City may be successful in reducing set out rates simply with messaging related to asking citizens to set out carts only when needed.

Changing behaviours

If the ultimate goal is to change waste diversion behaviours, key messages should focus on financial benefits to the municipality, environmental benefits for all Calgarians, and a “fair” approach to fees for usage.

The volume of waste is the key barrier

Some households simply report having too much waste every two weeks to consider setting out their black carts less often. Targeting the profile of single family households with carts that are half full or less when set out could prove successful. Nonetheless, continuing to encourage a reduction in the volume of waste through other means (i.e. proper blue and green cart usage) could influence a reduction in black cart volumes.

Consider including all three carts

While the Variable Set Out Pilot is currently considering black carts as its focus, there is opportunity to include variable set out for blue and green carts as well based on a notable proportion of single family households feeling that it would be “realistic” to set out blue and green carts less often if asked.

Mitigate concerns

Single family households express concern that others may place waste in their black bins if financial benefits were involved. This concern should be mitigated as to how The City would deal with such scenarios.



Cart Set Out Behaviours



Summary | Location of Cart Set Out

Setting out carts in the back alley is more common than setting out carts at the front of single family households.

- **Location:** More than one-half (56%) of single family households surveyed set out their black, blue and green carts at the rear of their property or in the back alley. In comparison, 44% of single family households set out their carts at the front of their property.

Convenience is a notable factor for single family households always leaving their carts in the back alley – it is easier to just leave them there.

- **Reasons for Carts Always Being in the Back Alley:** Many (83%) single family households agree that they always leave their carts in the back alley because ‘it’s easier to just leave their carts in the back lane/alley’, including 68% who ‘strongly’ agree.



Summary I

Responsibility for Cart Set Out and Utility Bill

➤ **Most respondents participate in setting out carts and paying the household's utility bill.**

- **Responsibility for Cart Set Out:** Most respondents (91%) participate in setting out their carts for pick-up, including 50% who say they are primarily responsible for setting out their carts and 41% who report sharing the responsibility for setting out their carts. Just 9% of respondents indicate that they rarely or never set out their black, blue and green carts.
 - Those with **primary responsibility** for setting out their carts tend to be males (61%), are also personally responsible for paying the utility bill (76%), aged 55+ (59%) or 35-54 years (53%), and single family households with just one (100%) or two (57%) people.
 - **Shared responsibility** for setting out carts is more likely to occur among females (49%), those aged 18-34 years (54%), those who share responsibility for paying the utility bill (49%) or who do not have responsibility for paying the utility bill (62%), and those in households with four (51%) or five or more (47%) people.
- ❖ **Responsibility for Utility Bill Payment:** Most (86%) respondents participate in paying their household's utility bills, with 55% saying they share responsibility and 31% saying they are personally responsible. The remaining 14% state that they are not responsible for paying their household's utility bills.
 - Those who are more likely to be **personally responsible** for paying utility bills include those who have resided in Calgary for 41 years or more (44%), residents in the Southeast (39%), those aged 35-54 (38%) and 55+ (44%), those with annual household incomes of less than \$60K (46%), those with seniors in the household (43%), one-person households (91%), those who are primarily responsible for setting out their carts (48%), and those who express initial (39%) and final (41%) opposition to the variable set out program.
 - Those who are more likely to **share responsibility** for paying utility bills include those with annual household incomes of \$120K or more (66%), two-person households (66%), and those who share responsibility for setting out their carts (65%) or who rarely or never do (70%).



Summary | Frequency of Cart Set Out

➤ **Almost three-quarters of single family households set out their black carts on each collection schedule, whereas slightly more than six-in-ten set out blue and green carts on each scheduled day.**

- **Black Carts:** Overall, (73%) of single family households set out their black carts every two weeks and an additional 10% set out their black cart every four weeks. Further, 16% say their cart is always out and they don't move it, while just one percent (1%) report that they set out their black cart less than once a month or never.
 - Characteristics of those who set out their black carts **every two weeks** include: those who set out carts at the front of the property (89%); those with annual household incomes of \$120K or more (81%), two-person households (79%) and households with five or more people (80%), those whose black carts are typically full when set out (84%); single family households who report it is not realistic to set out their black cart less often (79%); and those who express initial (80%) and final (83%) opposition to the variable set out program.
- **Blue Carts:** In comparison, 61% of single family households set out their blue cart once a week and an additional 17% report setting out their blue carts every two weeks.
 - As well, 3% set out their blue cart once every three weeks, 3% set it out once a month, and 2% set it out less often than once a month or never. A total of 14% say their blue cart is always out and they do not move it.
- **Green Carts:** During *summer* months, 62% of single family households set out their green cart once a week and 15% say they set it out every two weeks.
 - In addition, 2% set out their green cart once every three weeks during summer months, 5% set it out once a month, and 2% set it out less often than once a month or never during summer months. A total of 14% say their green cart is always out and they do not move it.
 - During *winter* months, 58% of single family households set out their green cart every two weeks, 18% report setting it out every four weeks, 6% set it out less often than once a month, 4% say they never set it out, and 14% report that their green cart is always out during winter months.

Summary | Typical Amount of Waste in Carts

Single family households report that three-quarters of their blue cart are full or more than half full when set out, followed by approximately six-in-ten saying their black cart and green cart are full or more than half full.

- **Black Cart:** Just more than six-in-ten (62%) single family households state that their black cart is full (32%) or more than half full (30%) when set out for collection. Further, 27% say their black cart is half full when set out for pick-up and 11% report that it is less than half full.
 - Those who are more likely to say their black cart is typically **full or more than half full** tend to be households with children (69%), aged 18-34 years (70%), those without seniors in the household (66%), households with five or more (82%) people, households who set out their black carts every two weeks (67%), those who are not likely to set out their black cart less often if asked (74%), those who feel it is not realistic to set out their black cart less often (74%), and those who initially oppose (70%) and are in final opposition (74%) to the variable set out program.
 - Citizens in single family households who report their black cart is typically **half full, less than half full or empty** when set out for collection tend to be longer-term residents of Calgary of 41+ years (54%), households without children (43%), those aged 55+ (49%), those with seniors in the household (49%), households of one (63%) or two (52%) people, those who set out their black carts every four weeks or less than once per month (62%), those who would be likely to set out their black cart less often if asked (43%), those who would find it realistic to set out their black cart less often (59%), and those who express initial support (44%) and final support (45%) for the variable set out program.
- **Blue Cart:** Three-quarters (74%) of single family households report their blue cart is full (46%) or more than half full (27%) when set out for pick-up. In addition, 19% say it is half full and 7% state that it is less than half full or empty.
- **Green Cart in Summer Months:** Six-in-ten (59%) single family households state their green cart is either full (27%) or more than half full (32%) when set out for collection during summer months. An additional 21% say it is half full and 19% report it is less than half full or empty.

Summary | Reasons for Cart Set Out

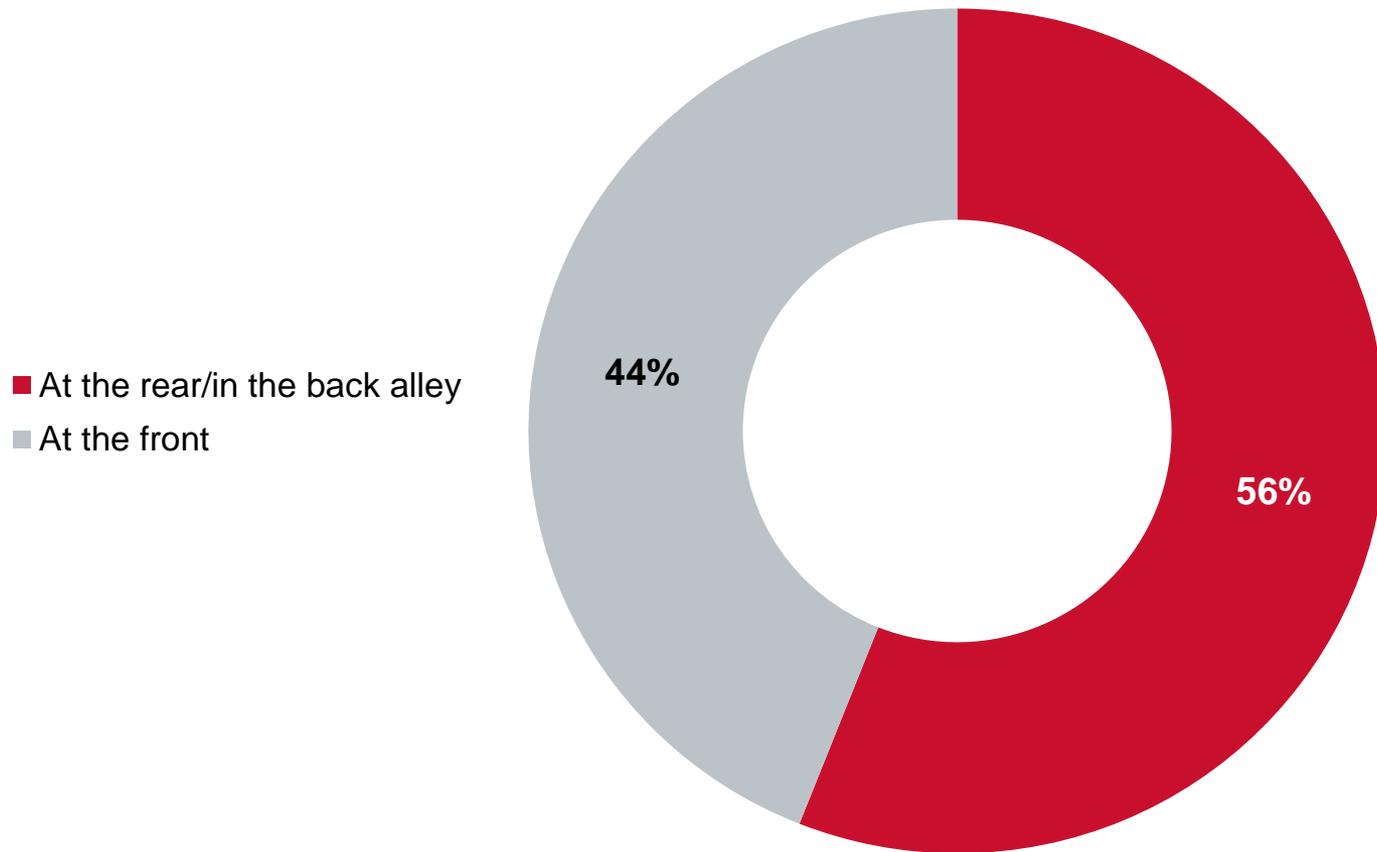


The habitual activity of setting out carts on scheduled days, volume within black carts being at capacity, carts always being in the back lane, and green cart odour are the main reasons for setting out carts for collection.

- The main reason for setting out carts pertains to habitual activity: “We are supposed to set out our carts on collection day” (83%). Next, “the blue cart is full” (79%), “our carts are always in the back lane/alley” (74%), and “the green cart smells” (71%) are also key reasons for cart set out in single family households.
- Roughly two-thirds say that their cart set out is motivated by “the black cart is full” (68%), “if we don’t set it out on collection day, it will be overflowing before the next collection period” (65%), and “I have a reminder to set it out to be collected” (65%).
- A slim majority also set out their carts because “the green cart is full” (60%), “the black cart smells” (58%), and “it is a service I pay for so I put them out whether they are full or not” (54%).
- A minority of single family households report that they set out their carts because ‘my household sets out our black cart as little as possible’ (34%), ‘my household sets out our green cart as little as possible’ (32%), and ‘my household sets out our blue cart as little as possible’ (30%).
- Fewer than two-in-ten report setting out their carts because ‘sometimes my household does not set out our carts if there is a lot of snow or it is cold or rainy’ (18%), ‘we have issues with pests or rodents’ (17%), and ‘the blue cart smells’ (15%).



Cart Set Out Location



- At the rear/in the back alley
- At the front

Q1. To begin, where does The City of Calgary pick up your black, blue and green carts?
Base: All respondents (n=500)



Reasons for Always Leaving Carts in the Back Lane/ Alley

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know

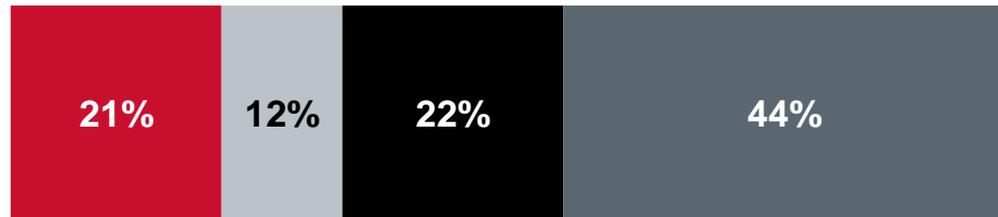
% Agree

It's easier to just leave your carts in the back lane/alley



83%*

You don't have space to pull your carts closer to your garage, house or fence



33%

Data labels 3% or less are not shown

*Rounding

Q11. You mentioned that your carts are always in the back lane/alley. To what extent do you agree or disagree with the following statements?
 Base: Those who strongly/somewhat agree that their carts are always in the back alley in Q10 (n=206)



Responsibility for Cart Set Out

I am primarily responsible for setting out our carts



50%

I share the responsibility for setting out our carts



41%

I rarely or never set out our carts

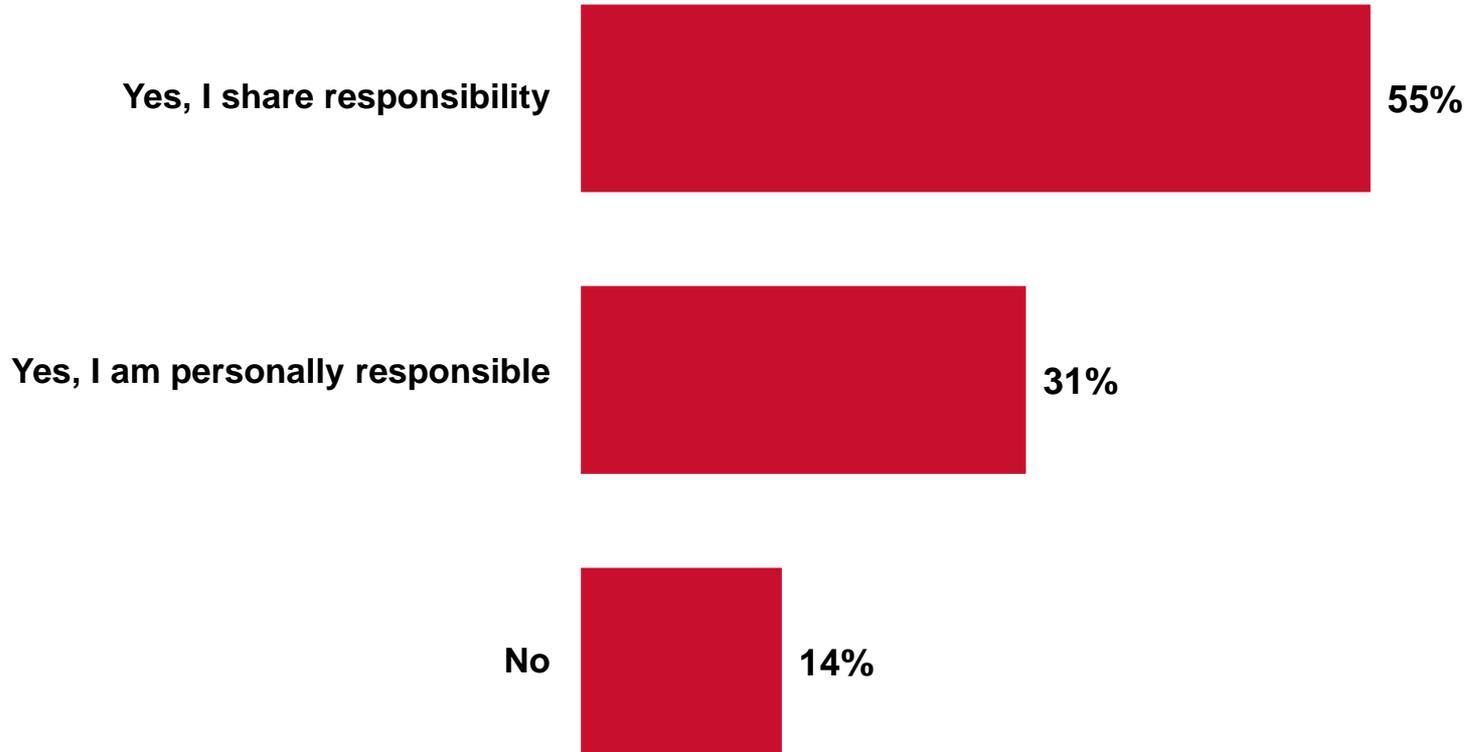


9%

Q2. Which one of the following statements best describes your responsibility for setting out your carts for pick-up?
Base: All respondents (n=500)



Responsibility for Utility Bill



Yes, I share responsibility

55%

Yes, I am personally responsible

31%

No

14%

Q35. Are you personally responsible or share responsibility for paying your household's utility bills?
Base: All respondents (n=500)

Research Caveat | COVID-19 Pandemic

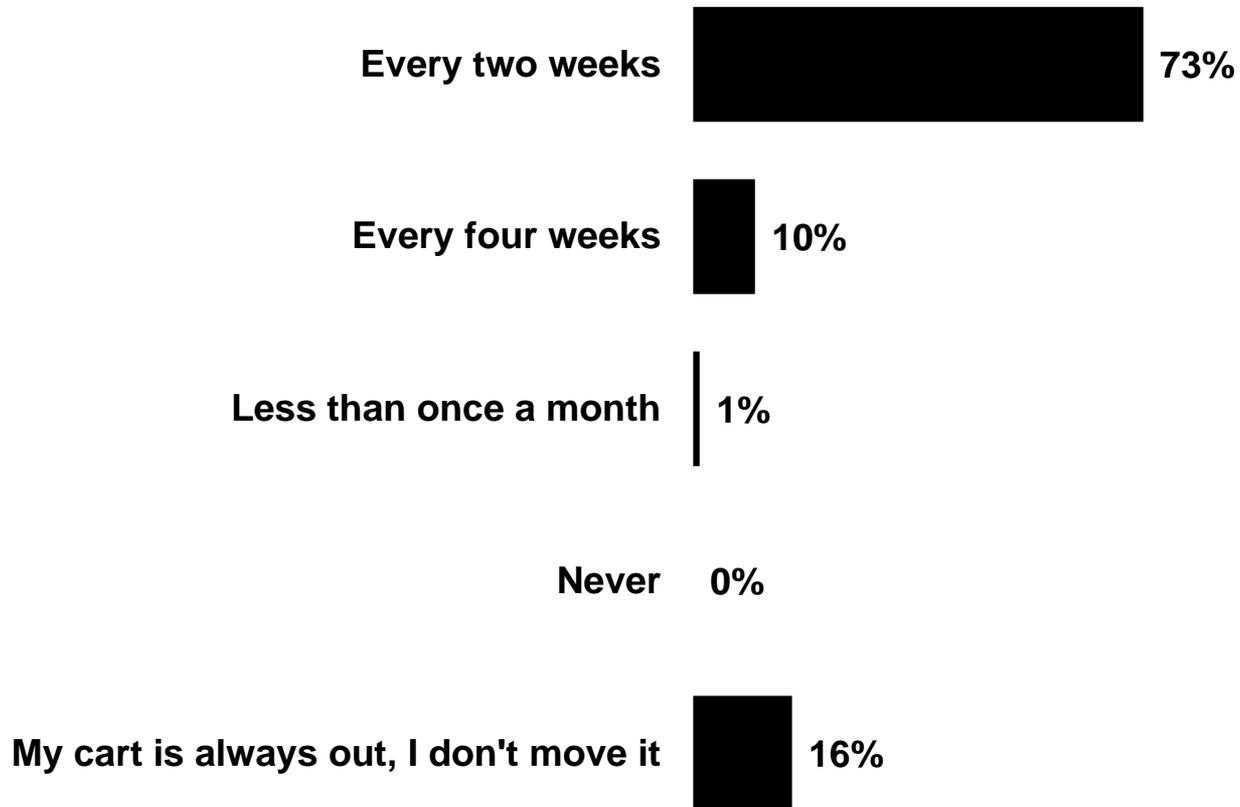


The following statement was read to all respondents prior to asking questions about the frequency of cart set out and the typical amount in carts when put out for collection:

While the amount of waste, recyclables and compostable material your household generates, as well as your cart set-out frequency may have changed over the past few months due to the COVID-19 pandemic, please think about your typical habits over the past year when answering the following questions.



Frequency of Black Cart Set Out

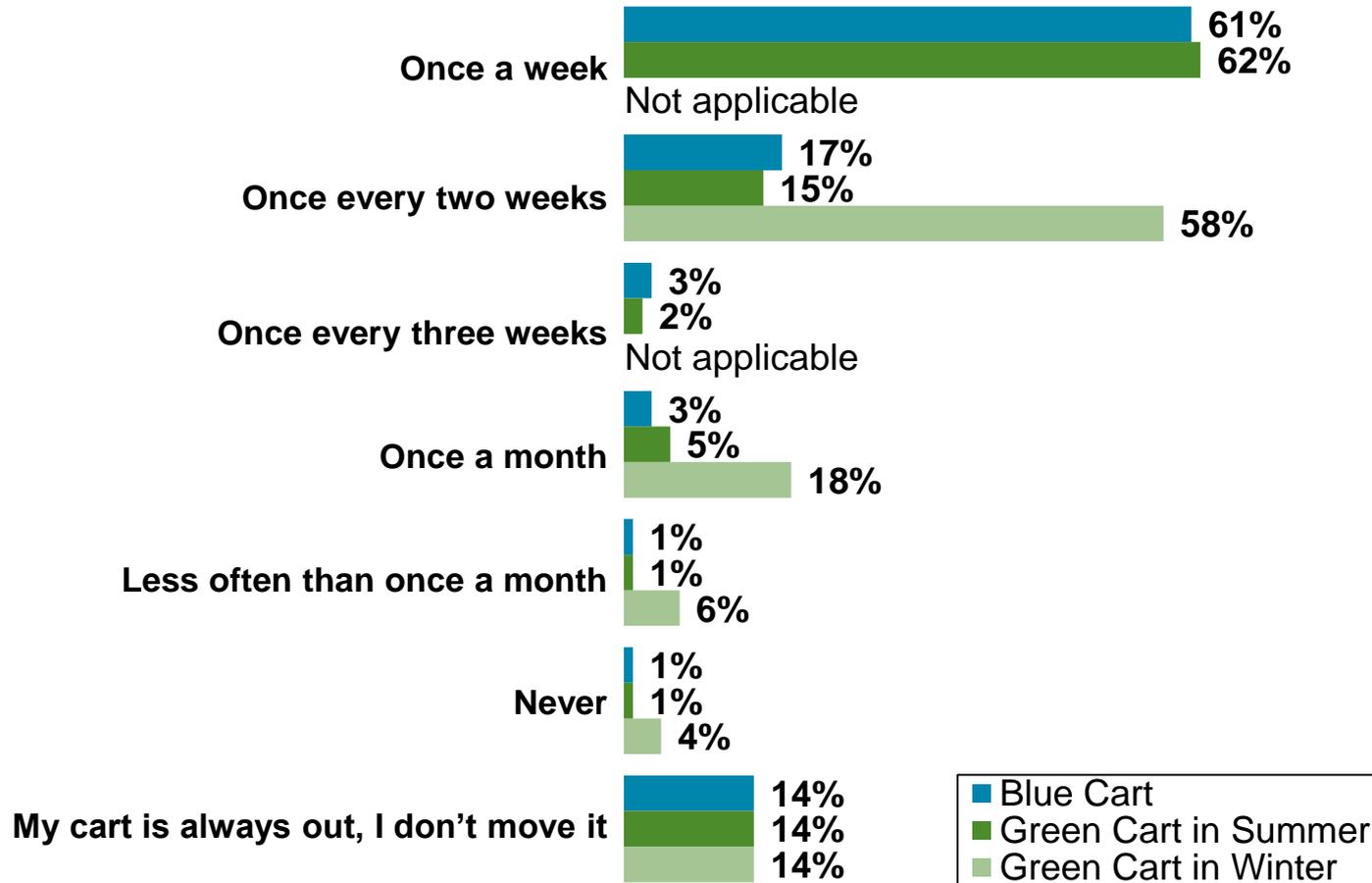


Q3. As you may know, black carts are collected every two weeks. Thinking about the past year, how often do you usually set out your black cart for collection?

Base: All respondents (n=500)



Frequency of Blue and Green Cart Set Out



Q5. As you may know, blue carts are collected every week. Thinking about the past year, how often do you usually set out your blue cart for collection?

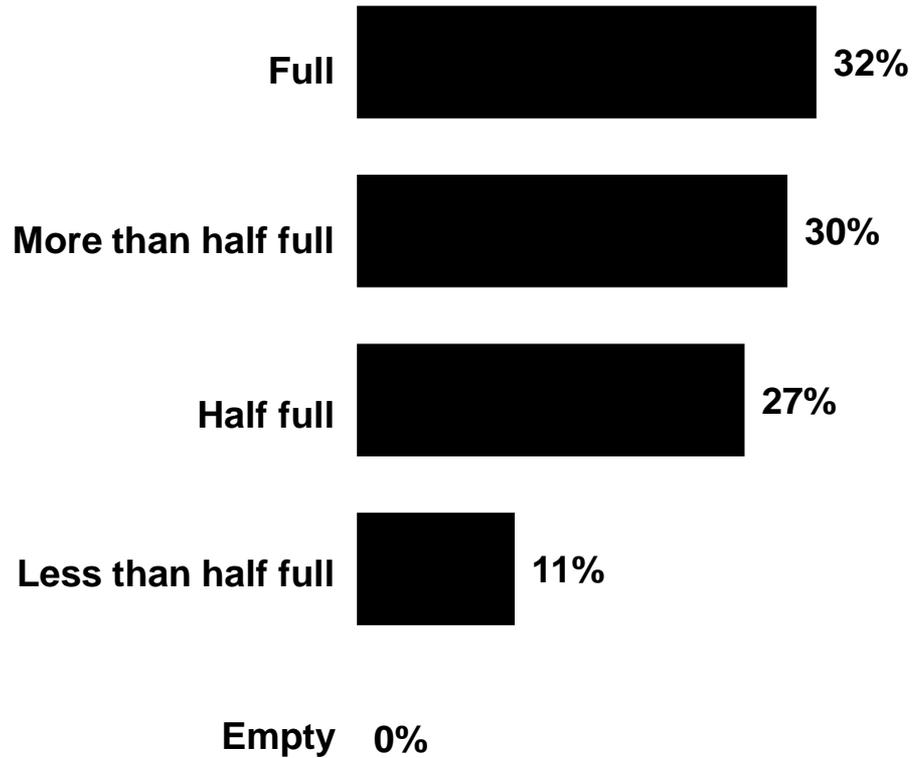
Q8. As you may know, green carts are collected weekly during the summer months. Thinking about the past year, how often do you usually set out your green cart for collection during the summer months?

q7. As you may know, green carts are collected every two weeks during the winter months. Thinking about the past year, how often do you usually set out your green cart for collection during the winter months?

Base: All respondents (n=500)



Amount in Black Cart When Set Out

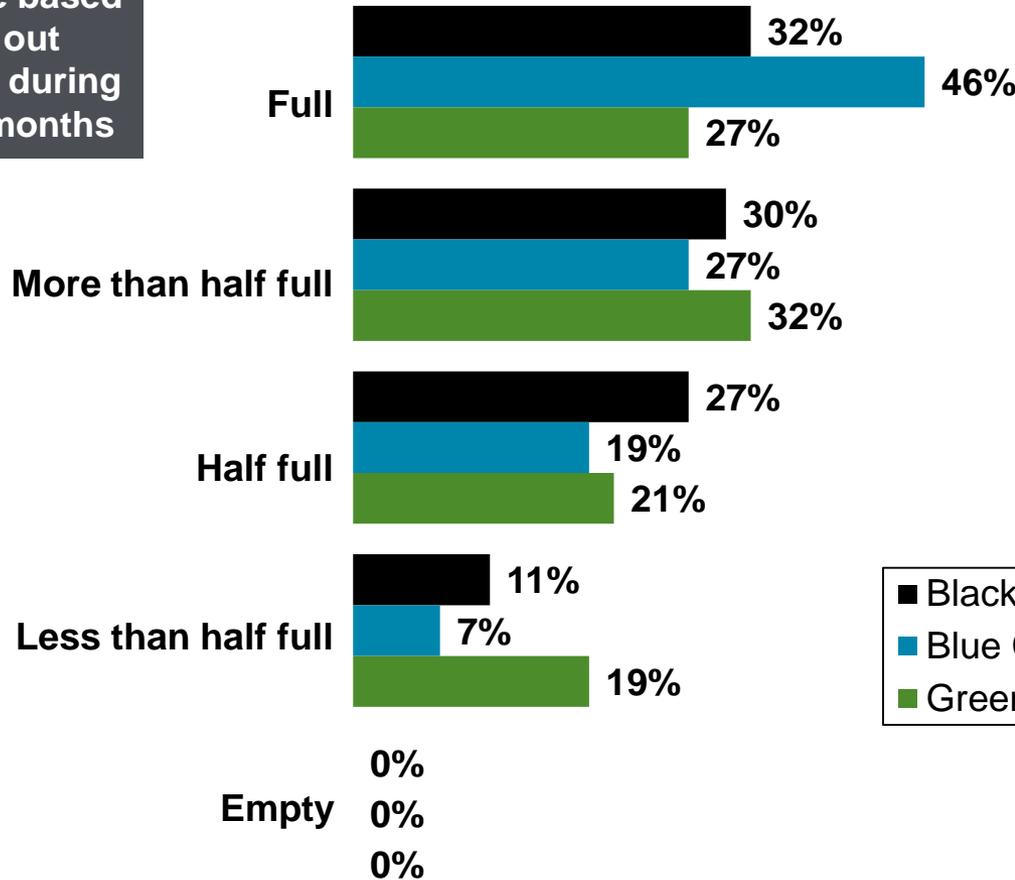


Q4. Typically, is your black cart completely full, more than half full, about half full, less than half full or empty, when you put it out for collection?
Base: All respondents (n=500)



Amount in Carts When Set Out

Green Cart results are based on set out frequency during summer months



CART	FULL/ >HALF FULL	HALF FULL OR LESS
Black	62%	38%
Blue	74%*	26%
Green	59%	40%



**Rounding*

Q4. Typically, is your black cart completely full, more than half full, about half full, less than half full or empty, when you put it out for collection?
 Q6. Typically, is your blue cart completely full, more than half full, about half full, less than half full, or empty when you put it out for collection?
 Q9. Typically in the summer months, is your green cart completely full, more than half full, half full, less than half full or empty when you put it out for collection?

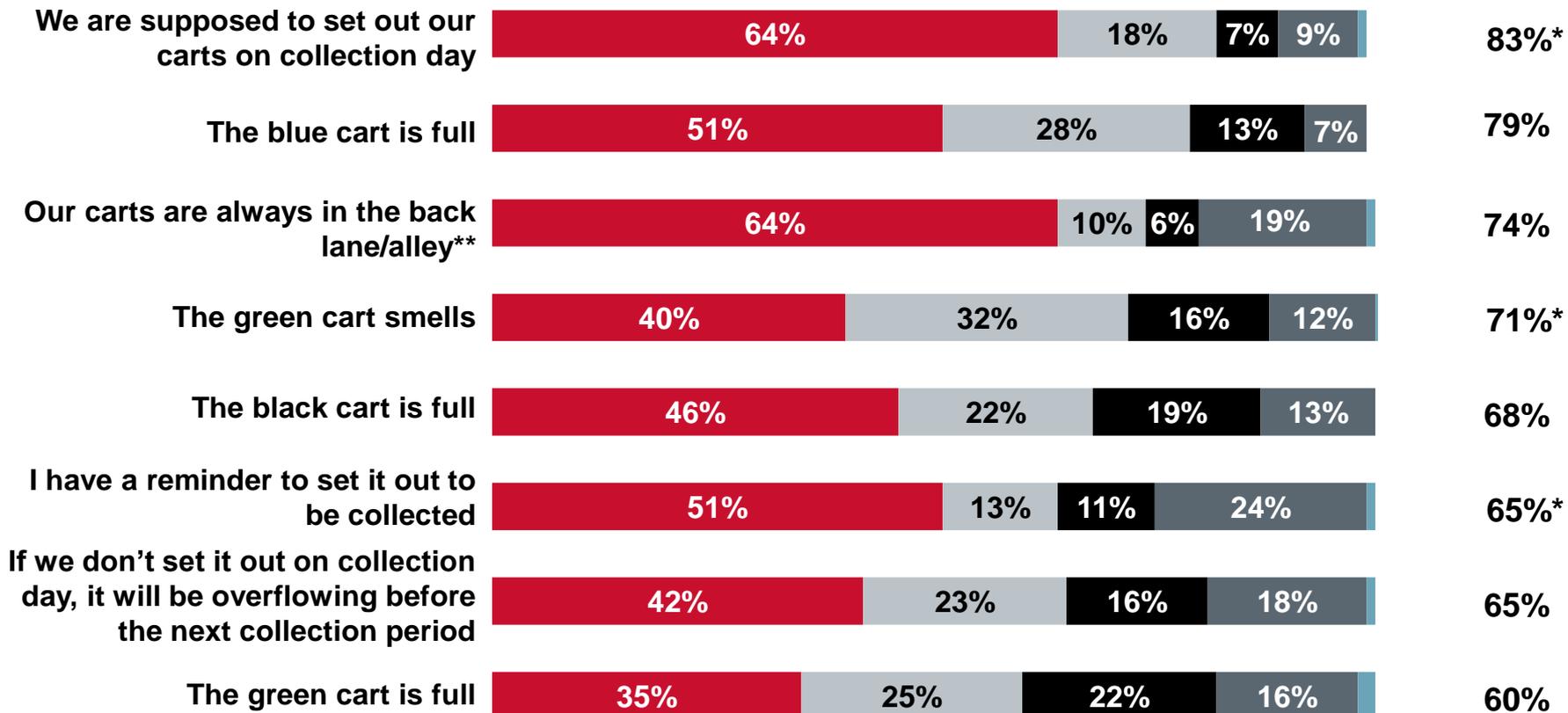
Base: All respondents (n=500)



Reasons for Setting Out Carts (1/2)

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know

% Agree



Data labels 3% or less are not shown

*Rounding

Q10. Households set out their carts for various reasons. Do you agree or disagree that your household sets out your carts for each of the following reasons?

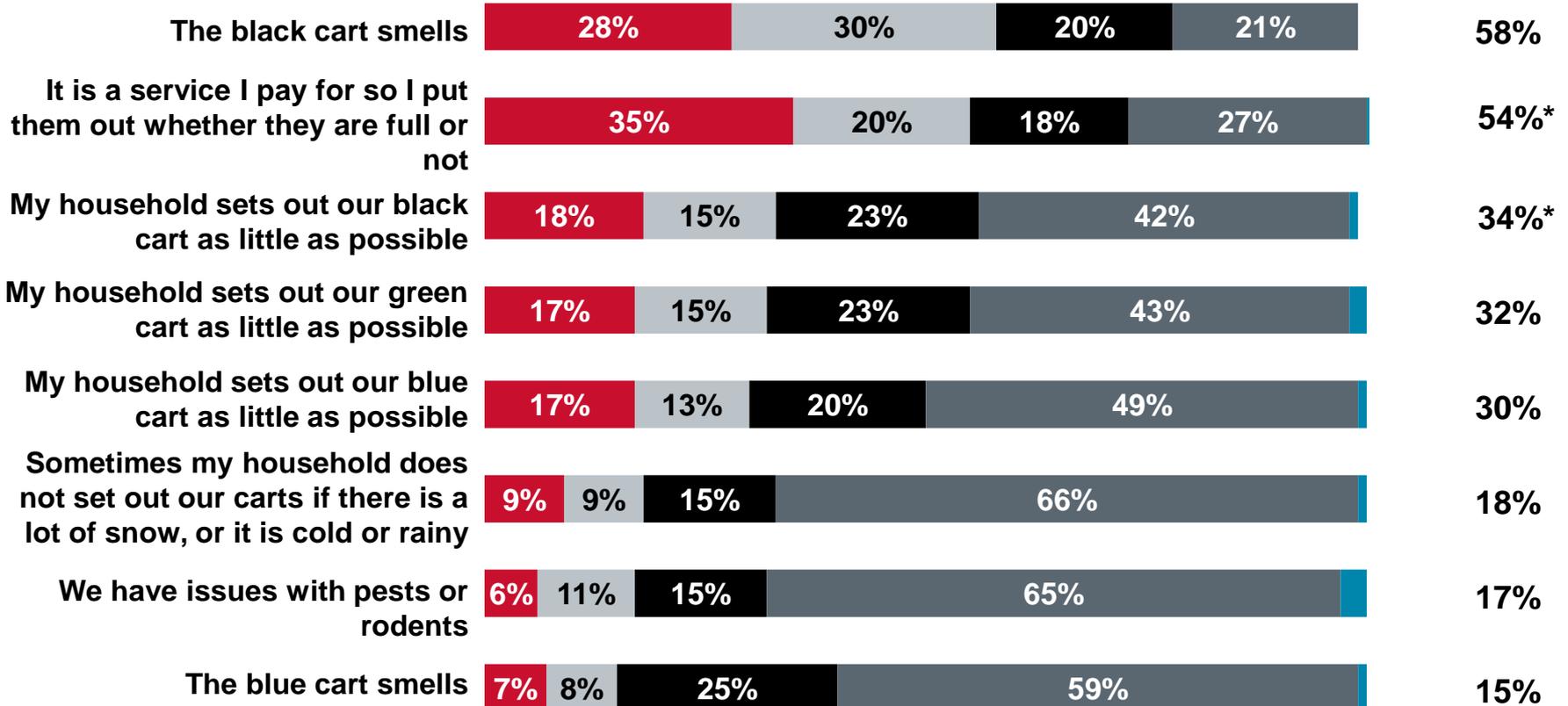
Base: All respondents (n=500) | **Base: Those who set out their carts in the back lane/alley (n=282)



Reasons for Setting Out Carts (2/2)

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know

% Agree



Data labels 3% or less are not shown

**Rounding*

Q10. Households set out their carts for various reasons. Do you agree or disagree that your household sets out your carts for each of the following reasons?

Base: All respondents (n=500)



Motivators and Barriers to Cart Set Out



Research Caveat | COVID-19 Pandemic



The following statement was read to all respondents prior to asking questions about motivators and barriers to cart set out:

Again, we understand the amount of garbage and recyclables your household generates and/or your cart set out frequency may have changed over the past few months due to the COVID-19 pandemic. Please think about your typical habits over the past year when answering the following questions.



Summary I Likelihood of Setting Out Carts Less Often (1/2)



If The City asked single family households to set out their carts less often, slightly less than two-thirds would be willing to do so – equally for black, blue and green carts.

- **Black Cart:** If The City asked them to set out their black carts only when needed rather than every collection day, 64% of single family households would be either 'very' (36%) or 'somewhat' (28%) likely to set it out less often. Conversely, 35% would be 'not very' (17%) or 'not at all' (18%) likely to set it out less often.
- **Subgroups who are notably more willing to set out their black cart only when needed are:**
 - Residents who have been in Calgary for 11 to 20 years (72%);
 - Those aged 18-34 (74%);
 - Those whose primary language spoken at home is not English (82%);
 - Those who set out their black cart every four weeks or less than once per month (91%);
 - Those with annual household incomes of less than \$60K (70%) and \$60K to less than \$120K (71%);
 - Those whose black carts are half full or less than half full when set out (73%);
 - Single family households who set out their carts in the back alley, but disagree that their carts are always out (77%);
 - Those who feel that it is realistic to set out their black carts less often than every two weeks (90%); and,
 - Those who express initial support (73%) and final support (74%) for the variable set out program.

Summary | Likelihood of Setting Out Carts Less Often (2/2)



- **Subgroups who are notably not likely to set out their black cart only when needed are:**
 - Residents who have been in Calgary for 21-40 years (42%) or 41 years or more (41%);
 - Those aged 35-54 (42%);
 - Those with annual household incomes of \$120K or more (49%);
 - Those whose primary language spoken at home is English (37%);
 - Single family households that set out their black carts every two weeks (50%);
 - Those whose black carts are full when set out (50%);
 - Single family households who set out their carts in the back alley and agree that their carts are always out (39%);
 - Those who feel that it is not realistic to set out their black carts less often than every two weeks (49%); and,
 - Those who express initial opposition (49%) and final opposition (53%) to the variable set out program.
- **Blue Cart:** If The City asked them to set out their blue cart only when needed rather than every collection day, 63% of single family households would be either 'very' (36%) or 'somewhat' (28%) likely to set it out less often. On the other hand, 35% would be 'not very' (15%) or 'not at all' (19%) likely to set out their blue cart less often.
- **Green Cart:** If The City asked them to set out their green cart only when needed rather than every collection day, 63% of single family households would be either 'very' (32%) or 'somewhat' (31%) likely to set it out less often. Conversely, 36% of single family households would be 'not very' (18%) or 'not at all' (18%) likely to set out their green carts less often.



Summary | Likelihood of Setting Out Carts Less Often Knowing Specific Impacts



Key messaging related to reducing operational costs for The City would incite somewhat higher participation in a Pay-as-You-Throw Program than would messages related to reducing greenhouse gas emissions or reducing fuel costs for The City.

- **Reducing Municipal Operational Costs:** Respondents were presented with the following information: “The average driver services 1,200 households a day. Even if 10% of households didn't put their cart out for collection, it would likely reduce operational costs for The City.” Knowing this, 69% of single family households would be ‘very’ (33%) or ‘somewhat’ (36%) likely to set out their carts less often. Three-in-ten (30%) would be ‘not very’ (16%) or ‘not at all’ (14%) likely to set them out less often.
- **Reducing Greenhouse Gas Emissions:** Respondents were also presented with the following information: “Every time a collections truck stops to pick up a cart, there are increased environmental impacts. For example, idling produces more green house gas emissions that impact air quality and contribute to climate change.” Knowing this, 62% of single family households would be ‘very’ (28%) or ‘somewhat’ (34%) likely to set out their carts less often, while 37% would be ‘not very’ (19%) or ‘not at all’ (18%) likely to do so.
- **Reducing Fuel Costs for The City:** Respondents were also presented with the following information: “Stopping and idling also increases fuel consumption in collection trucks which has cost impacts for The City.” Knowing this, 61% of single family households would be ‘very’ (27%) or ‘somewhat’ (34%) likely to set out their carts less often, while 39% would be ‘not very’ (22%) or ‘not at all’ (17%) likely to set out their carts less often.



Summary I How Realistic is it to Set Out Carts Less Often? (1/2)

➤ **Setting out black carts less often is least realistic in comparison to blue and green carts – just over one-third say it would be realistic for black carts versus slightly more than one-half for green carts and over six-in-ten for blue carts.**

- **Black Cart:** Just over one-third (35%) of single family households feel that it would be ‘very’ (14%) or ‘somewhat’ (21%) realistic to set out their black carts once a month instead of every two weeks. Two-thirds (65%), however, feel that it would be ‘not very’ (27%) or ‘not at all’ (38%) realistic to set out their black carts less often.
- **Realistic:** Those who are more likely to believe it would be realistic to set out their black carts less often include:
 - Residents in the Southeast (47%);
 - Single family households without children (41%);
 - Those aged 55+ (40%);
 - Those who have resided in Calgary for 41 years or more (40%);
 - Those with annual household incomes of less than \$60K (47%) or \$60K to less than \$120K (39%);
 - Households of one (52%) or two (40%) people;
 - Those whose black carts are half full or less when set out (55%);
 - Those who are likely to set it out less often if asked (49%);
 - Those who set out their carts in the back lane and who disagree that their carts are always out (54%); and,
 - Those who express initial (44%) and final (46%) support for the variable set out program.



Summary I How Realistic is it to Set Out Carts Less Often? (2/2)

- **Not realistic:** Single family households that would not find it realistic to set out their black carts less often tend to be:
 - Residents in the Southwest (74%);
 - Those with children in the household (73%);
 - Those aged 35-54 (70%);
 - Households with five or more people (82%);
 - Those with annual household incomes of \$120K or more (75%);
 - Those who have resided in Calgary for 21-40 years (72%);
 - Those who set out their black carts every two weeks (70%) or whose carts are always set out (80%);
 - Those whose black carts are full when set out (87%);
 - Single family households who would not be likely to set out their black cart less often if asked (91%);
 - Single family households who set out their carts in the back lane and agree that their carts are always out (69%); and,
 - Those who express initial opposition (79%) and final opposition (86%) to the variable set out program.
- **Blue Cart:** In comparison, 63% of single family households feel it would be 'very' (21%) or 'somewhat' (42%) realistic to set out their blue cart less often than every week, while 37% say it would be 'not very' (16%) or 'not at all' (21%) realistic.
- **Green Cart:** During summer months, 53% of single family households feel it would be 'very' (23%) or 'somewhat' (30%) realistic to set out their green cart less often than every week, while 47% say it would be 'not very' (22%) or 'not at all' (25%) realistic.

Summary | Barriers to Setting Out Black Carts Less Often



The main barrier to setting out black carts less often lies with the volume of black cart waste single family households have at each collection period.

Respondents were asked in an open-ended manner, “What would be the main barriers to setting out your black cart less often?”

- **Volume of waste** is clearly the largest barrier, with 63% of single family households pointing to barriers related to the amount of waste they accumulate, including:
 - “The black cart is full every two weeks” (41%);
 - “They have a big household” (13%);
 - “The volume of waste (unspecified)” (8%); and,
 - “We couldn’t go four weeks without setting it out” (7%).
- **Additional barriers** mentioned involve:
 - “The black cart smells” (11%);
 - “They are not using the blue and green carts properly” (5%);
 - “They are paying for the service/want to get what they pay for” (4%);
 - “The black cart pick-up schedule is already infrequent every two weeks” (4%);
 - “It depends on the season/time of year” (4%);
 - “Issues with pests/rodents” (3%);
 - “It’s a matter of remembering to only set it out when full” (3%);
 - “The size of the black cart is not large enough” (2%); and,
 - “Weather conditions” (2%).



Likelihood of Less Frequent Cart Set Out

■ Very likely
 ■ Somewhat likely
 ■ Not very likely
 ■ Not at all likely
 ■ Don't know

% Likely



Data labels 3% or less are not shown

**Rounding*

Q14. If The City asked you to set out your ... cart only when needed rather than every collection day, how likely are you to try to set it out for collection less often?

Base: All respondents (n=500)

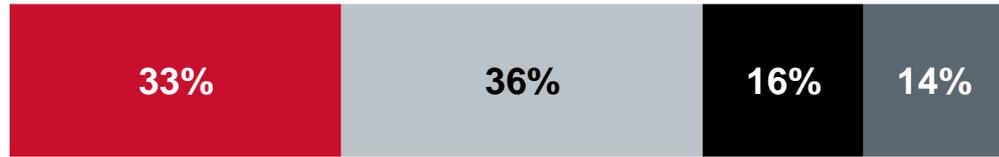


Likelihood of Less Frequent Cart Set Out - Knowing Specific Impacts -

■ Very likely
 ■ Somewhat likely
 ■ Not very likely
 ■ Not at all likely
 ■ Don't know

% Likely

The average driver services 1,200 households a day. Even if 10% of households didn't put their cart out for collection, it would likely reduce operational costs for The City.



69%

Every time a collections truck stops to pick up a cart, there are increased environmental impacts. For example, idling produces more green house gas emissions that impact air quality and contribute to climate change.



62%

Stopping and idling also increases fuel consumption in collection trucks which has cost impacts for The City.



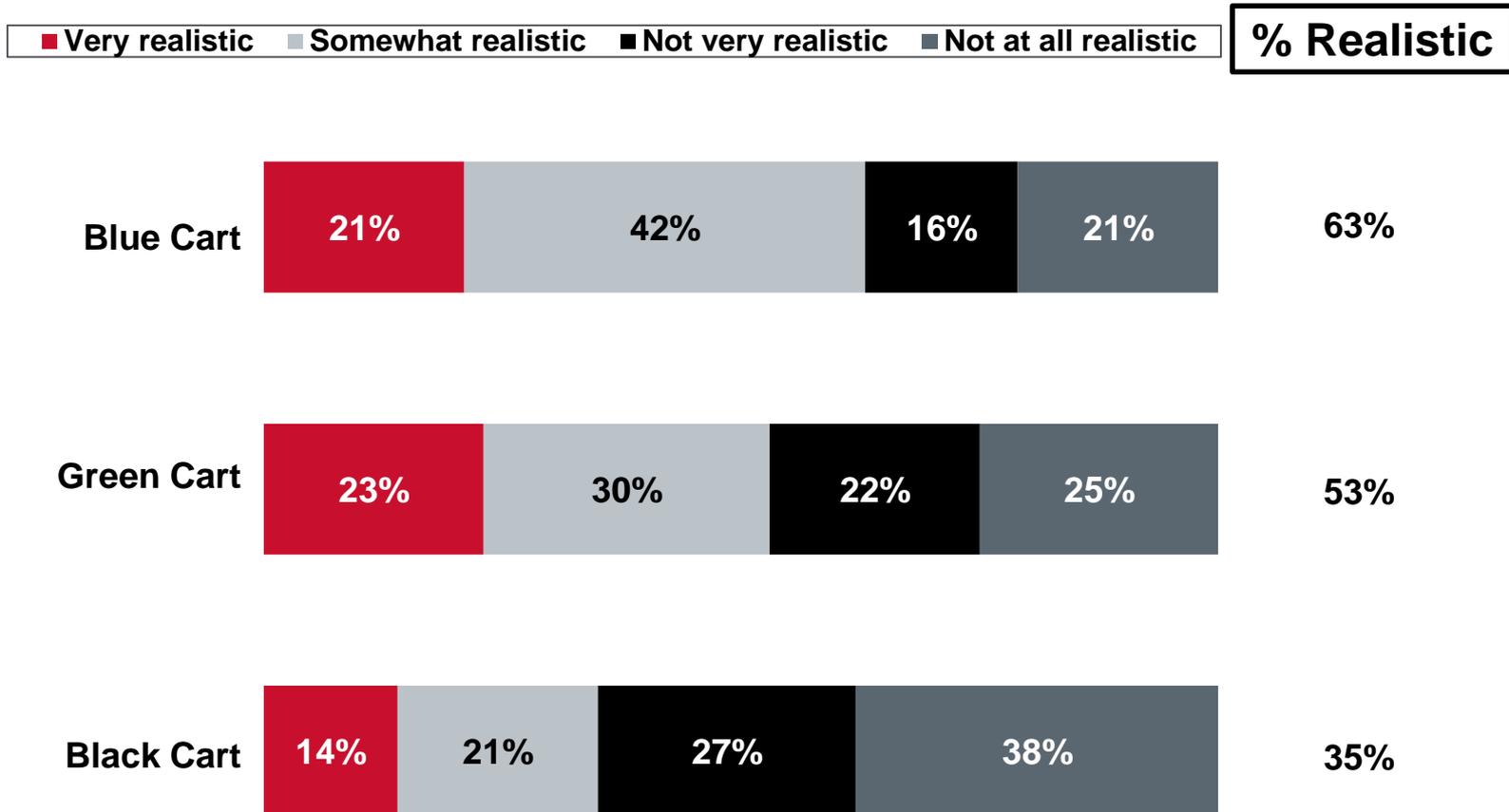
61%

Data labels 3% or less are not shown

Q15/16/17. [Insert item] Considering this, how likely are you to try to set out your carts less often?
 Base: All respondents (n=500)



How Realistic Is It to Set Out Carts Less Often?



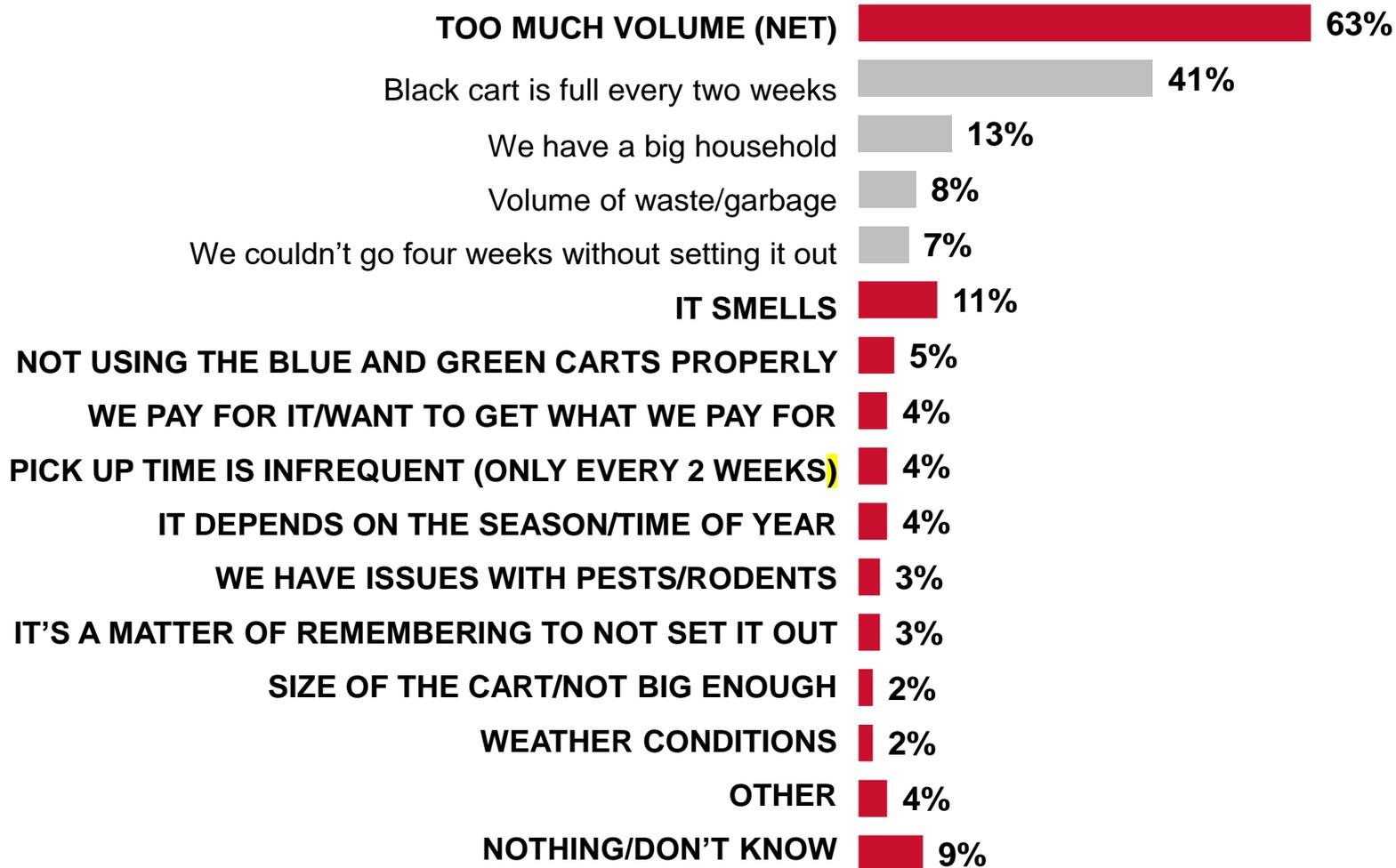
Data labels 3% or less are not shown

Q18. How realistic would it be for your household to set out your black cart once a month instead of every two weeks?
 Q20. How realistic would it be for your household to set out your blue cart less often than every week?
 Q22. How realistic would it be for your household to set out your green cart less often than every week during the summer months?
 Base: All respondents (n=500)



Barriers to Setting Out Black Carts Less Often

Multiple Responses



Responses <2% are not shown

Q19. What would be the main barriers to setting out your black cart less often?
 Base: All respondents (n=500)



Perceptions of Variable Set Out



Pay-As-You-Throw Explanation



The following statement was read to all respondents prior to asking questions about citizens' perceptions of a 'pay-as-you-throw' program:

Right now, City garbage trucks tip all carts that appear to be set out for collection as the drivers cannot tell if the carts are empty until it is tipped, which adds to the cost of service. The City is exploring the idea of billing households for black cart services based on their use. This means that a portion of the black cart fee would be fixed to cover costs such as truck leases, truck operating costs and customer support, with the remaining variable fee portion based on how often the black cart is set out for that household during a billing period. This is called a pay-as-you-throw program.



Summary | Initial Support for a Pay-as-You-Throw Program

 **At first glance, six-in-ten single family households would support the implementation of a Pay-as-You-Throw Program.**

After having been given an explanation of the Pay-as-You-Throw Program, and prior to introducing any benefits, drawbacks or potential customer financial incentives, respondents were asked whether they would support or oppose the implementation of such a program.

- **Initial support** for the program is found among 59% of single family households, including 26% who ‘strongly’ support the program and 32% who ‘somewhat’ support the program.
- Initial support for the program is more likely to occur among those:
 - Who have resided in Calgary for 10 years or less (84%) and 11-20 years (65%);
 - Aged 18-34 (82%);
 - With annual household incomes of \$60K to less than \$120K (64%);
 - Without seniors in the household (68%);
 - Who set out their black carts every four weeks or less than once per month (87%);
 - Whose black carts are half full and less than half full when set out (63%);
 - Who would be likely to set out their black carts less often if asked (68%); and,
 - Who would find it realistic to set out their black cart less often (74%).

Summary | Initial Opposition to a Pay-as-You-Throw Program

 **Four-in-ten single family households express initial opposition to the implementation of a Pay-as-You-Throw Program.**

- **Initial opposition** to the program is found among 40% of single family households, with 12% who 'somewhat' oppose the program and 29% who 'strongly' oppose the program.
- Those who initially oppose the implementation of the program tend to be:
 - Personally responsible for paying their household's utility bills (50%);
 - Those with longer tenures in Calgary (45% 21-40 years and 53% 41 years or more);
 - Those aged 35-54 (47%) and 55 years or more (54%);
 - Those with annual household incomes of less than \$60K (54%);
 - Those with seniors in the household (53%);
 - Single family households who set out their black cart every two weeks (44%) or who always have their carts out (40%);
 - Those whose black carts are full when set out (49%);
 - Those who are not likely to set out their black cart less often if asked (57%); and,
 - Those who say it is not realistic to set out their black cart less often (49%).



Summary | Reasons for Support and Opposition to the Program

Saving money is the main reason for supporting the Pay-as-You-Throw program, followed by the realization that black carts are not always full.

Respondents who expressed initial support of the Pay-as-You-Throw Program were asked to explain (on an unaided basis) why they would support the potential program for black carts. The main themes that emerge involve:

- To save money/cost should be based on how much you waste (38%);
- Fluctuation in garbage/ carts not always full (23%);
- Waste reduction/ more efficient (15%);
- We don't use it much (11%);
- Encourages use of blue and green bins (10%);
- Good idea/ I like it (8%);
- Good for the environment (7%); and,
- Promotes personal accountability (6%).

Opposition to the program stems from single family households feeling that they are paying for black cart pick-up and expect it, and among those producing larger amounts of waste, that they would have to pay more.

Respondents who expressed initial opposition to the Pay-as-You-Throw Program were asked to explain (on an unaided basis) why they would oppose the potential program for black carts. The main reasons for initially opposing the program are:

- It's part of what I pay for/ already paying for it (35%);
- I produce a lot of garbage/ use it a lot/ will be paying more (21%);
- Someone might put garbage in my cart/ elsewhere (19%);
- Large family household (8%);
- Concerns about implementation (8%);
- Not realistic/ fair (7%);
- Unnecessary/ don't need it (4%); and,
- Odour will build up (3%).



Summary I

Likelihood of Participation with a Discount



The likelihood of participating in the variable set out program when offered a discount is appealing to a sizeable proportion of single family households, although a similar proportion would set out black carts less often simply if asked.

After being reminded that black cart pick-up fees are \$6.85 per month which appears on monthly utility bills, respondents were asked how likely they would be to set out their black cart less often than every two weeks if they received a discount at various price points.

- **20 cents:** At a discount of 20 cents per month, 52% of single family households would be 'very' (22%) or 'somewhat' (30%) likely to set out their black cart less often than every two weeks. On the other hand, 48% would be 'not very' (22%) or 'not at all' (26%) likely to do so.
- **50 cents:** Six-in-ten (60%) single family households would be 'very' (30%) or 'somewhat' (29%) likely to set out their black cart less often if they received a discount of 50 cents per month. Conversely, 40% would be 'not very' (18%) or 'not at all' (22%) likely to set it out less often at this discount price point.
- **\$1:** With a monthly discount of \$1, two-thirds (67%) of single family households would be 'very' (40%) or 'somewhat' (27%) likely to set out their black cart less often than every two weeks, while 33% would be 'not very' (13%) or 'not at all' (19%) likely to set it out less often.
- **\$2:** The majority (72%) of single family households would be 'very' (51%) or 'somewhat' (21%) likely to set out their black cart less often than every two weeks if they received a monthly discount of \$2, whereas 28% would be 'not very' (12%) or 'not at all' (16%) to do so.

In comparison, 64% of single family households would be likely to set out their black carts less often simply if asked, denoting that offering discounts may not significantly impact the reduction of set out rates.



Summary | Attitudes Towards the Variable Set Out Program (1/2)



The majority of single family households acknowledge the environmental benefits of a variable set out program; however, concern with the possibility of black cart waste being placed in others' carts is prevalent.

Respondents were asked the extent to which they agree or disagree with a series of ten statements about the Variable Set Out Program.

- Agreement is strongest (85%) for the notion that “Individual citizens should do more to reduce the frequency of black cart pick-ups to help reduce the environmental impacts”, including 52% who ‘strongly’ agree and 33% who ‘somewhat’ agree.
- Showing a potential drawback to the program, 80% of single family households either ‘strongly’ (41%) or ‘somewhat’ (39%) agree that “A pay-as-you-throw program for black carts would encourage people to dump their garbage in others’ black carts”.
- The majority (72%) of single family households ‘strongly’ (32%) or ‘somewhat’ (40%) agree with the sentiment that “It is not a great use of municipal resources to pick up black carts that are less than half full”.



Summary | Attitudes Towards the Variable Set Out Program (2/2)



The notion of “fairness” in fees for usage receives moderate agreement, and respondents are somewhat more cautious in agreeing with potential financial savings for single family households.

Respondents were asked the extent to which they agree or disagree with a series of ten statements about the Variable Set Out Program.

- The majority (71%) also ‘strongly’ (31%) or ‘somewhat’ (40%) agree that “Paying more for larger households penalizes larger families”.
- Further, 70% either ‘strongly’ (36%) or ‘somewhat’ (34%) agree that “I shouldn’t have to pay the same as other households if I set out my black cart less often”.
- Next, more than two-thirds (68%) of single family households agree with the statement, “Garbage should be treated like water or electricity – those who use the service more should pay more”, including 41% who ‘strongly’ agree and 27% who ‘somewhat’ agree.
- More than two-thirds (68%) also either ‘strongly’ (33%) or ‘somewhat’ (35%) agree that “Charging households for how often they put their cart out is fairer than having a standard monthly fee”.
- As well, 64% of single family households ‘strongly’ (36%) or ‘somewhat’ (28%) agree with the sentiment that “If I had an opportunity to save money, I would recycle and compost more to set out my black cart less frequently”.
- Slightly less than two-thirds (64%) of single family households also ‘strongly’ (18%) or ‘somewhat’ (47%) agree that “This program would provide significant savings for citizens”.
- Agreement is slightly lower (60%) with the statement, “This program would save me money”, including 21% who ‘strongly’ agree and 39% who ‘somewhat’ agree.



Summary | Final Support for a Pay-as-You-Throw Program



Final support for the implementation of a variable set out program is moderate.

At the conclusion of the survey, respondents were once again asked for their level of support or opposition to the implementation of a Pay-as-You-Throw Program for black carts to assess whether exposure to benefits, drawbacks and potential discounts would have an impact on their support of the program.

- **Final support** of the program is found among 63% of single family households, whereas initial support was found among 59% of single family households
 - The proportion of those who ‘strongly’ support the implementation of the program at the conclusion of the survey (27%) is similar to those who initially expressed ‘strong’ support (26%).
 - Final support for the program is **more likely to occur** among those:
 - Who have resided in Calgary for 11-20 years (77%);
 - Aged 18-34 (83%);
 - Who do not have responsibility for paying the household’s utility bill (88%);
 - Who set out their black carts every four weeks or less than once per month (81%);
 - Whose black carts are half full or less than half full when set out (75%);
 - Who would be likely to set out their black carts less often if asked (73%); and,
 - Who would find it realistic to set out their black cart less often (82%).

Summary I Final Opposition to the Pay-as-You-Throw Program

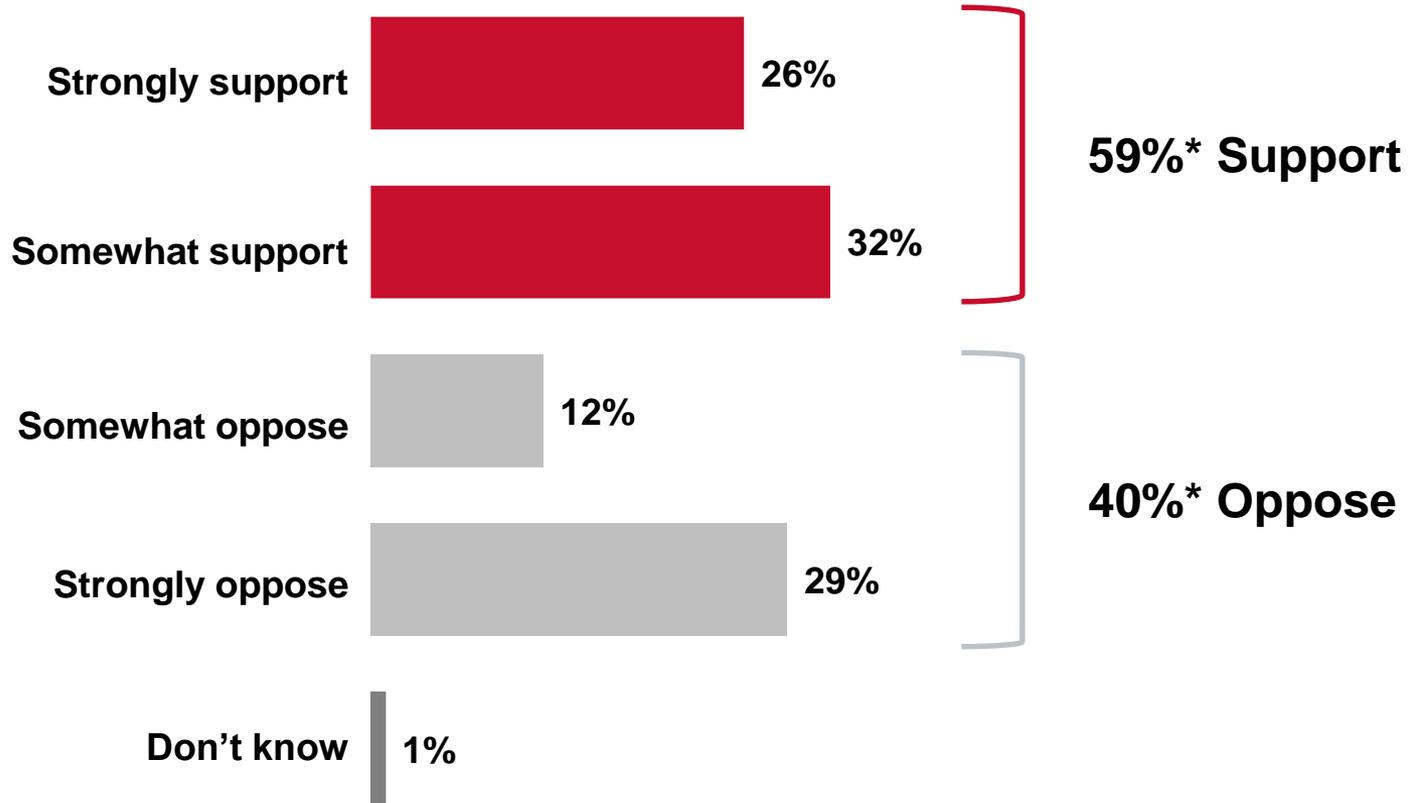
 **Opposition to the implementation of a variable set out program stems mainly from those whose black carts are typically full and would not find it feasible to set them out less often.**

At the conclusion of the survey, respondents were once again asked for their level of support or opposition to the implementation of a Pay-as-You-Throw Program for black carts to assess whether exposure to benefits, drawbacks and potential discounts would have an impact on their support of the program.

- **Final opposition** to the implementation of the program is found among 35% of single family households, slightly lower than 40% who initially opposed the implementation of the program.
 - In addition, 24% ‘strongly’ oppose the implementation of the program at the conclusion of the survey, also somewhat lower than 29% who initially ‘strongly’ opposed the program.
 - Those who express final opposition to the implementation of the program tend to be:
 - Personally responsible for paying their household’s utility bills (46%);
 - Those with longer tenures in Calgary (42% 21-40 years and 47% 41 years or more);
 - Those aged 35-54 (43%) and 55 years or more (48%);
 - Those who set out their black carts every two weeks (40%) and those whose carts are always set out (33%);
 - Those whose black carts are full when set out (47%);
 - Those who are not likely to set out their black cart less often if asked (54%); and,
 - Those who say it is not realistic to set out their black cart less often (47%).



Initial Support for a Pay-as-You-Throw Program



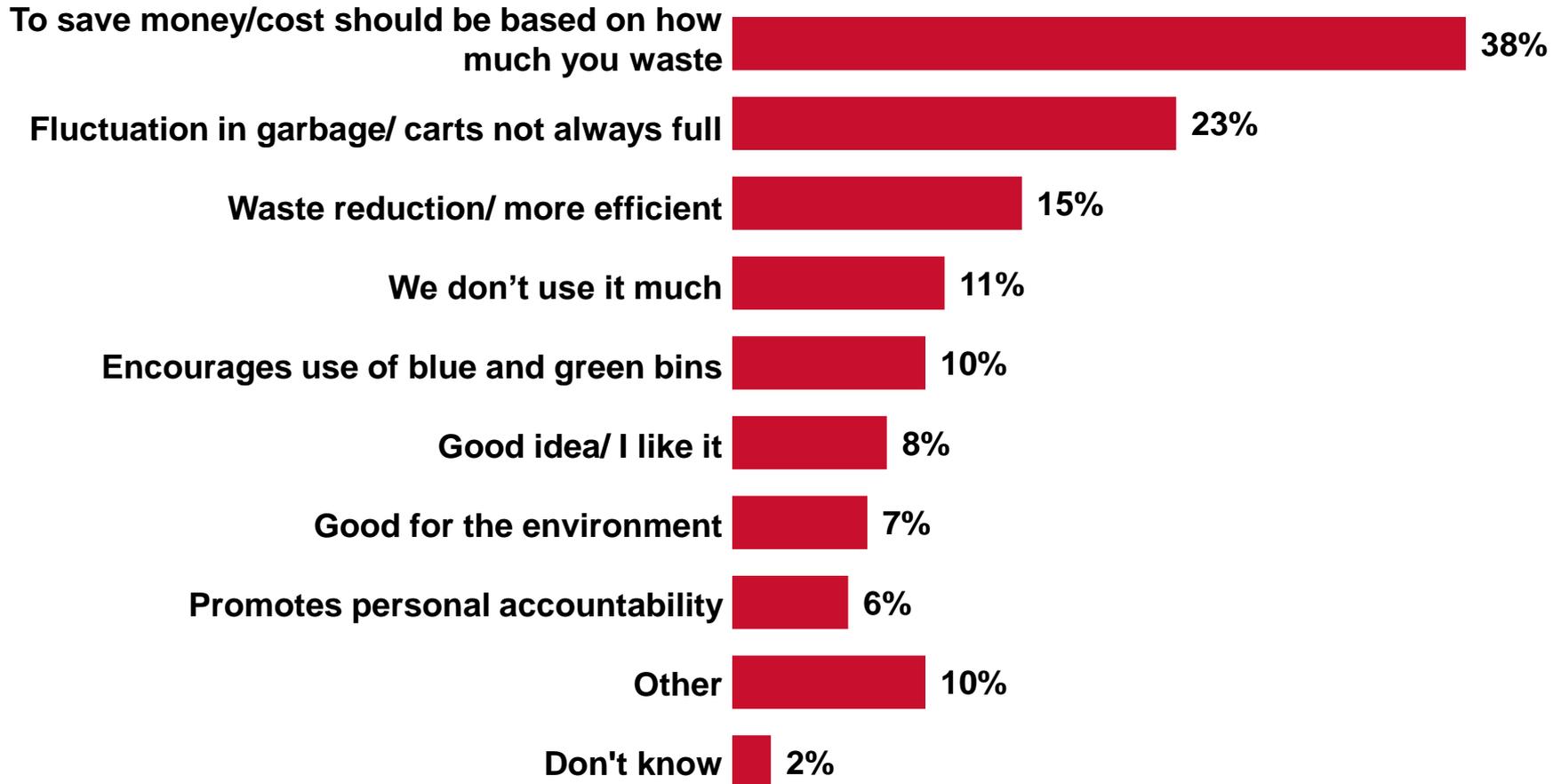
**Rounding*

Q26. Would you support or oppose the implementation of a pay-as-you throw program?
 Base: All respondents (n=500)



Reasons for Supporting the Program

Multiple Responses

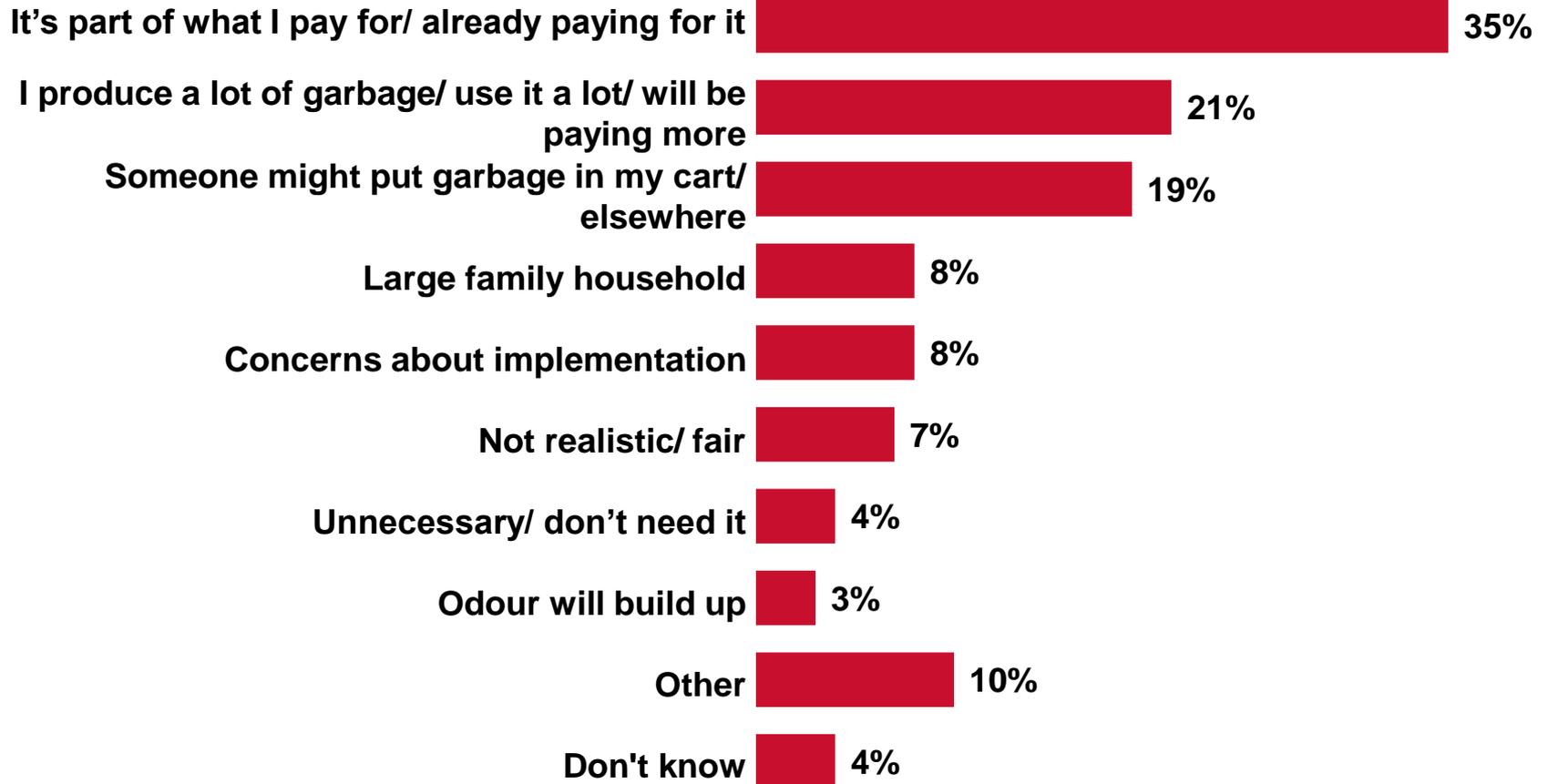


Q27. Why would you support a pay-as-you-throw program for black carts?
 Base: Respondents who support a pay-as-you-throw program in Q26,(n=253)



Reasons for Opposing the Program

Multiple Responses



Responses of ≤ 2% are not shown

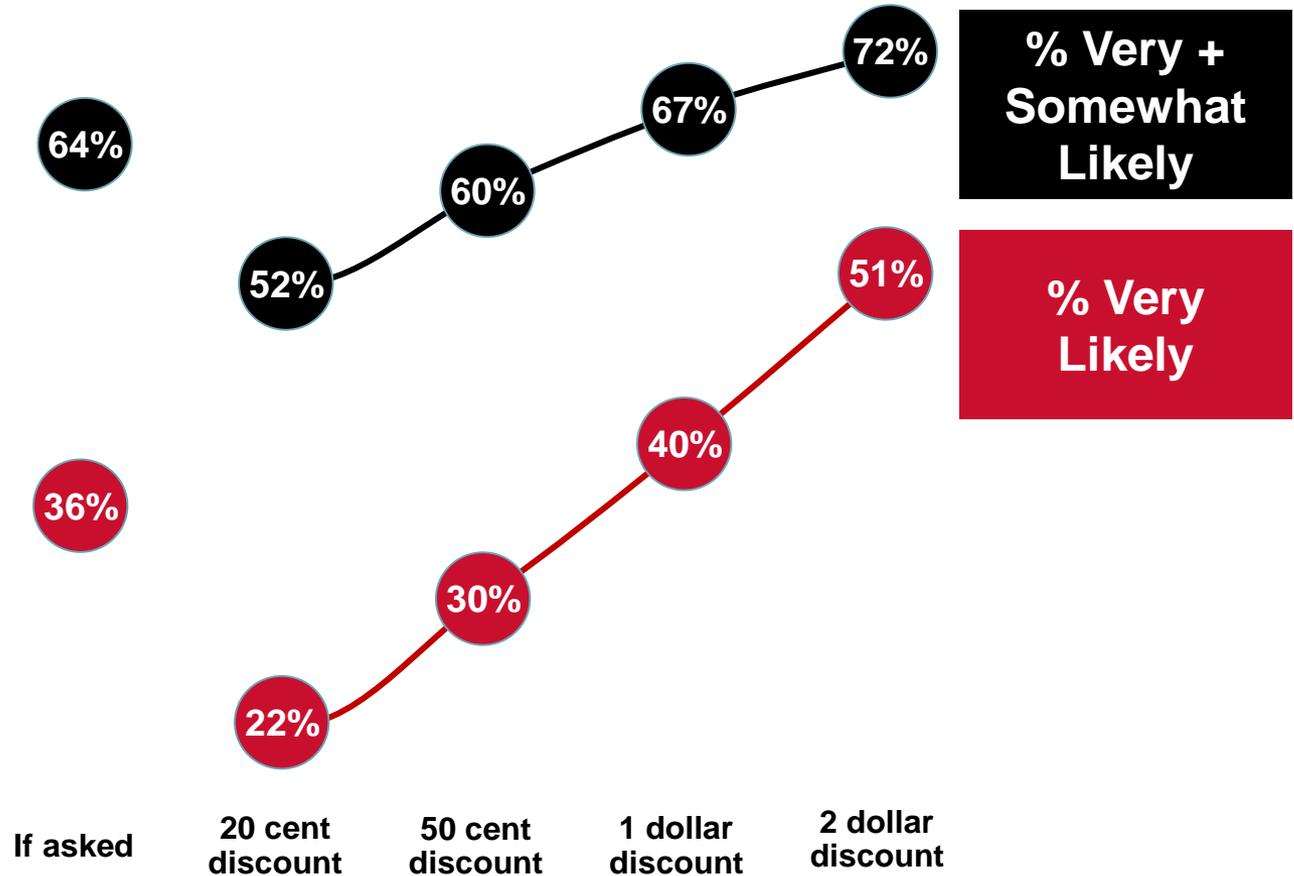
Q29. Why would you oppose a pay-as-you-throw program for black carts? Do you have any other concerns?
 Base: Respondents who oppose a pay-as-you-throw program in Q26,(n=241)



Likelihood of Participation with a Discount

Respondents were read the following statement:

As you may know, households in Calgary are charged a black cart fee of \$6.85 a month. This fee appears on monthly utility bills. In addition to collection costs, this fee also includes costs for disposing the material, providing carts to Calgarians, cart maintenance, education, and program support.



% Very + Somewhat Likely

% Very Likely

Q14. If The City asked you to set out your black cart only when needed rather than every collection day, how likely are you to try to set it out for collection less often?

Q30. If The City offered a 20 cent discount every time you did not set out your black cart for collection, how likely are you to set your black cart less often than every two weeks? [IF NOT VERY LIKELY, ASK] What if the discount was 50 cents? [IF NOT VERY LIKELY, ASK] What if the discount was \$1? [IF NOT VERY LIKELY, ASK] What if the discount was \$2?

Base: All respondents (n=500)



Attitudes Towards the Program (1/2)

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know

% Agree

Individual citizens should do more to reduce the frequency of black cart pick-ups to help reduce the environmental impacts



85%

A pay-as-you-throw program for black carts would encourage people to dump their garbage in others' black carts



80%

It is not a great use of municipal resources to pick up black carts that are less than half full



72%

Paying more for larger households penalizes larger families



71%

I shouldn't have to pay the same as other households if I set out my black cart less often



70%

Data labels 3% or less are not shown

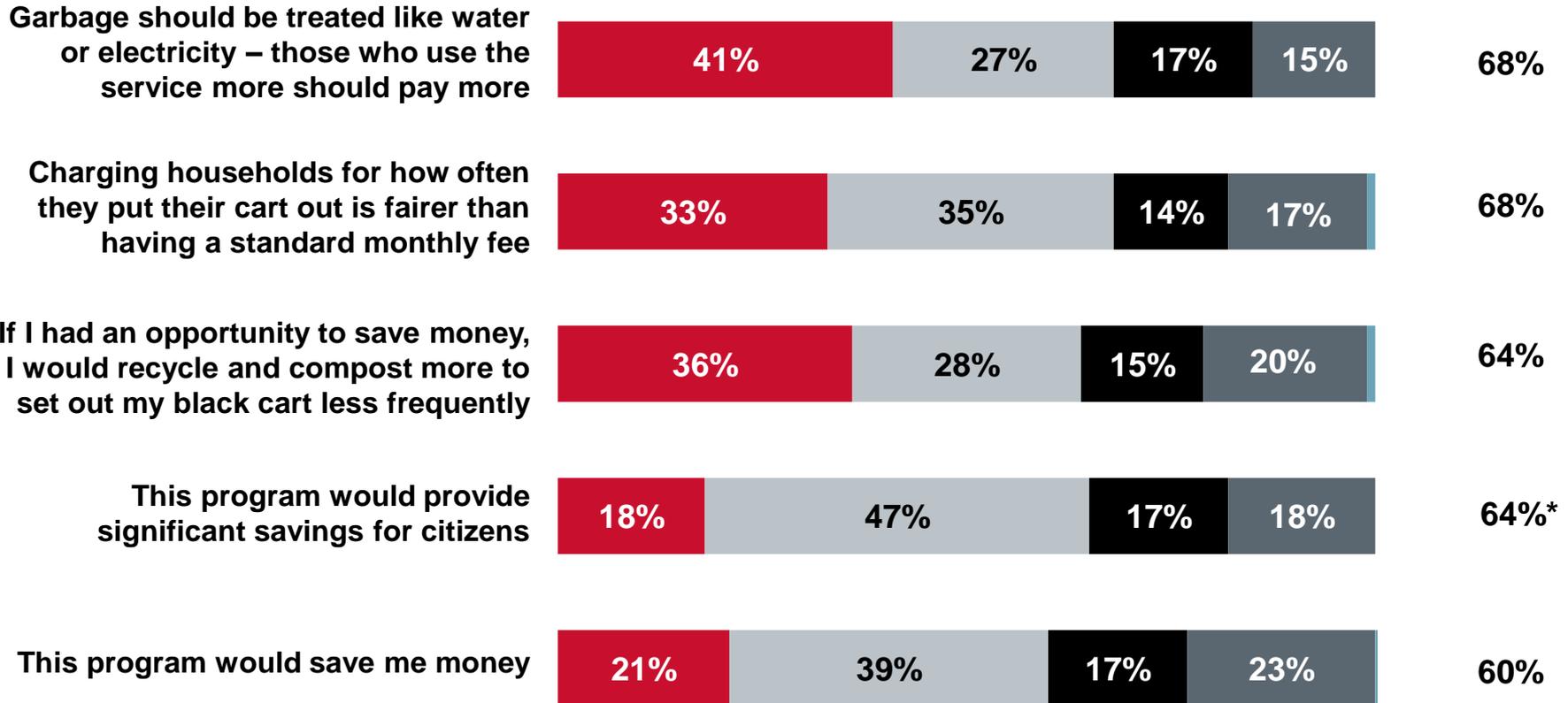
Q32. And please tell me the extent to which you agree or disagree with each of the following statements. Would that be strongly or somewhat?
 Base: All respondents (n=500)



Attitudes Towards the Program (2/2)

■ Strongly agree
 ■ Somewhat agree
 ■ Somewhat disagree
 ■ Strongly disagree
 ■ Don't know

% Agree



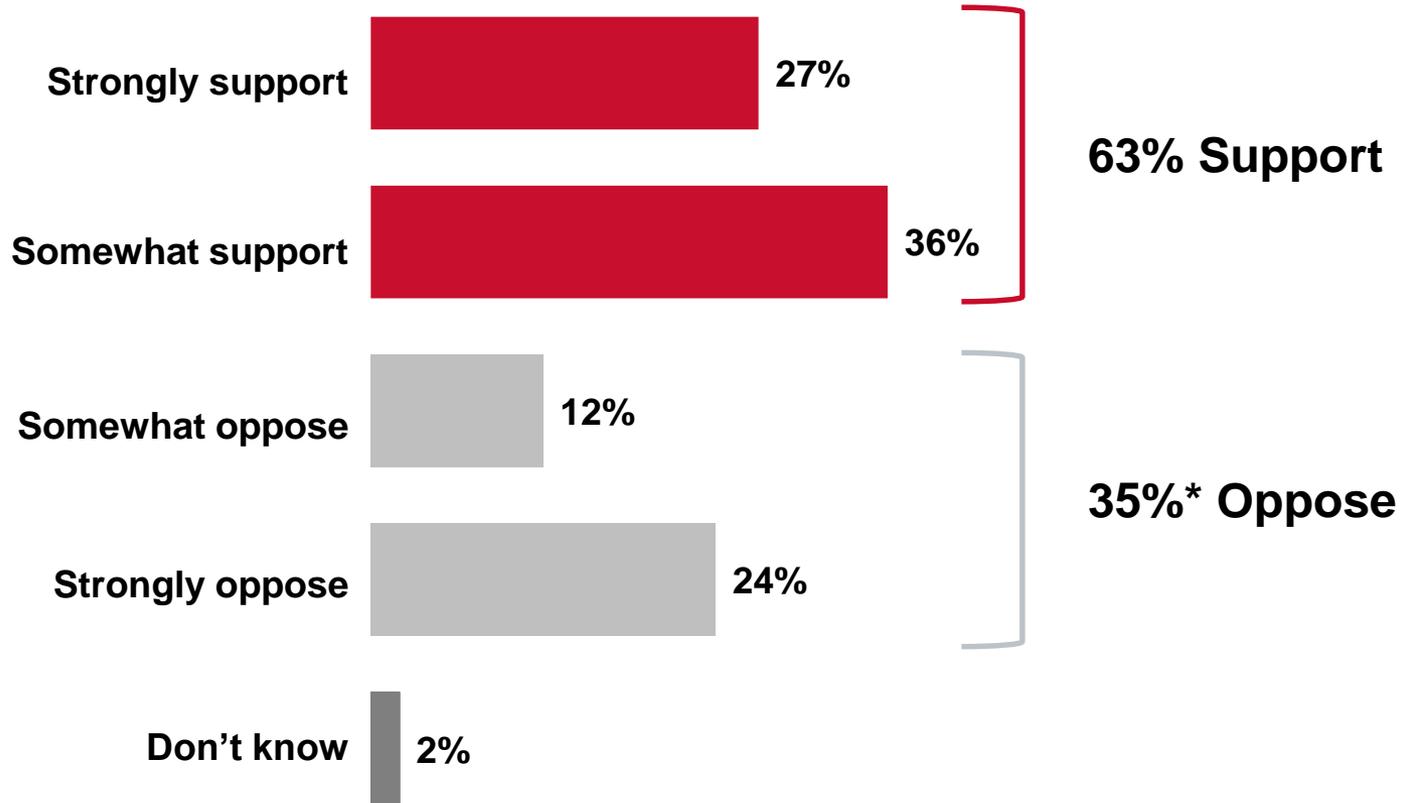
Data labels 3% or less are not shown

**Rounding*

Q32. And please tell me the extent to which you agree or disagree with each of the following statements. Would that be strongly or somewhat?
 Base: All respondents (n=500)



Final Support for the Pay-as-You-Throw Program

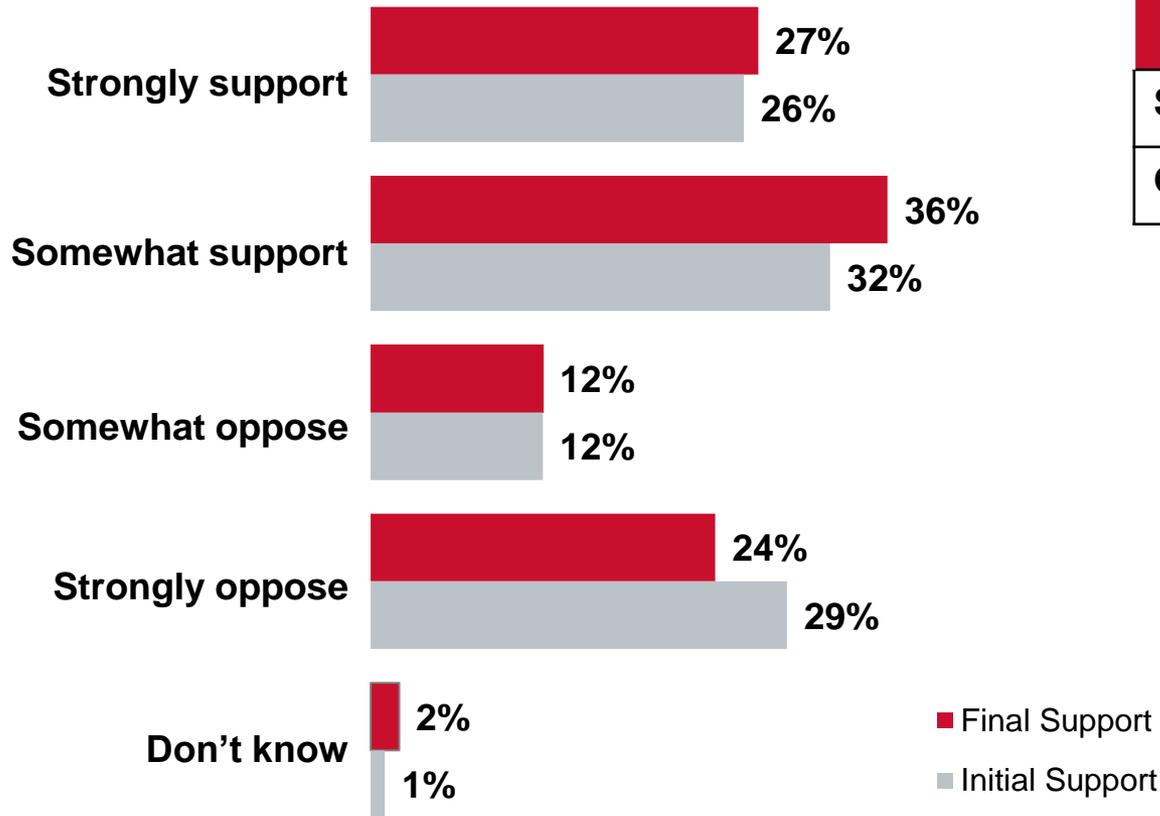


**Rounding*

Q26b. Considering our discussion today, would you support or oppose the implementation of a pay-as-you throw program?
Base: All respondents (n=500)



Initial vs. Final Support for the Program



	Final	Initial
Support	63%	59%*
Oppose	35%*	40%*

**Rounding*

Q26b. Considering our discussion today, would you support or oppose the implementation of a pay-as-you throw program?
 Base: All respondents (n=500)



Key Driver Analyses



Summary | Key Driver Analyses



The Ipsos Bayes Net (IBN) Drivers Platform is an advanced key driver platform based on Bayesian statistics which allows us to understand the impact of factors on support for the implementation of a Pay-as-You-Throw Program (Q26b).

Program Support | The most influential factors upon support for the implementation of a Pay-as-You-Throw Program involve “fairness” and personal financial benefits:

- “Charging households for how often they put their cart out is fairer than having a standard monthly fee”;
- “Garbage should be treated like water or electricity - those who use the service more, should pay more”; and,
- “This program would save me money”.

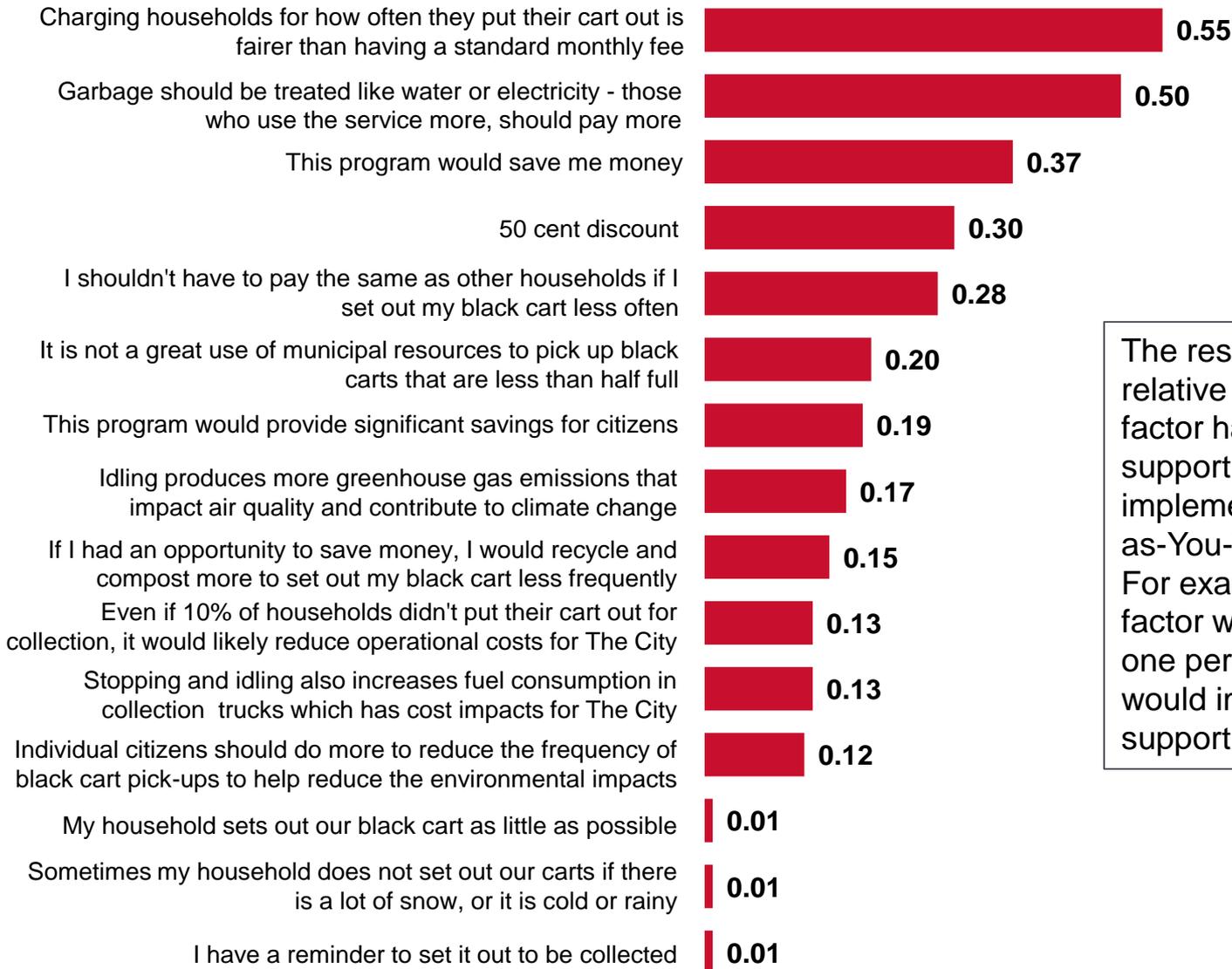


Negative Impacts | The most influential factors detracting support for the implementation of a Pay-as-You-Throw Program include:

- “A pay-as-you-throw program for black carts would encourage people to dump their garbage in others' black carts”;
- “If we don't set it out on collection day, it will be overflowing before the next collection period”; and,
- “Paying more for larger households penalizes larger families”.



Key Drivers Influencing Support for the Implementation of a Pay-as-You-Throw Program

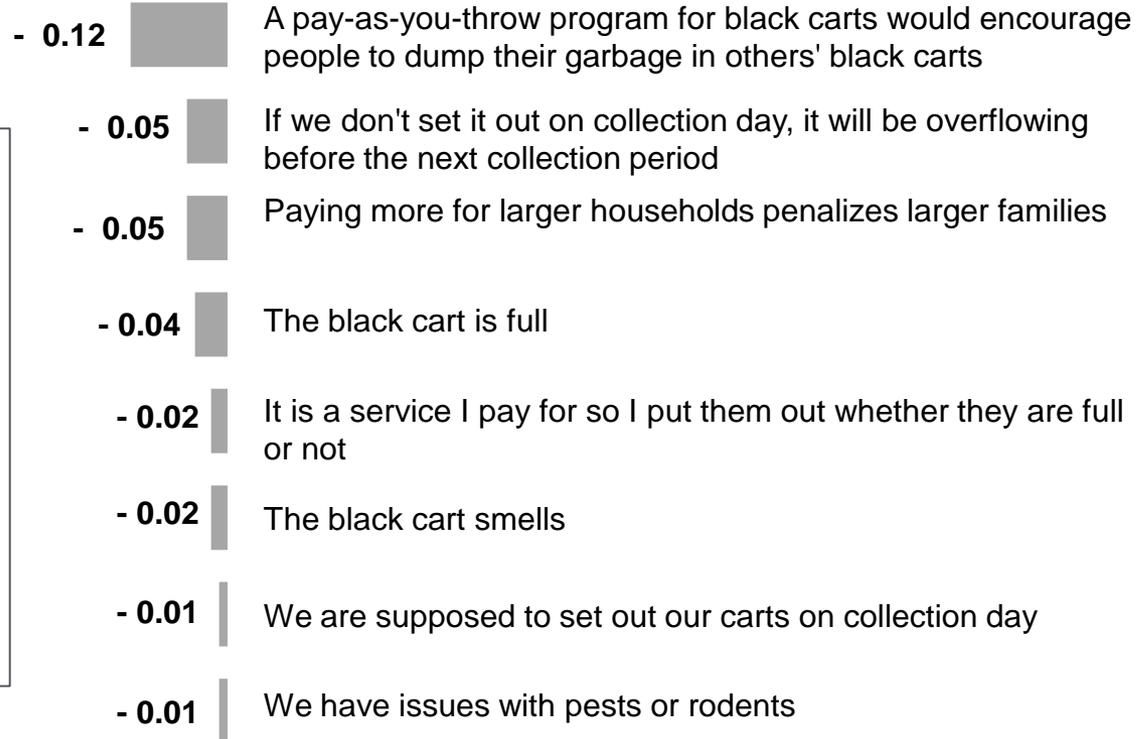


The results present the relative influence each factor has on improving support for the implementation of a Pay-as-You-Throw Program. For example, if the top factor was improved by one percentage point, it would improve overall support by 0.55%.



Key Drivers Detracting Support for the Implementation of a Pay-as-You-Throw Program

The results present the relative influence each factor has on decreasing support for the implementation of a Pay-as-You-Throw Program. For example, if the top factor increased by one percentage point, it would decrease overall support by 0.12%.





Summary | Key Driver Analyses

A second key driver analysis was conducted to better understand which factors influence the likelihood of setting out black carts less often than every two weeks if requested by The City (Q.14). This key driver analysis speaks more to factors influencing behaviours rather than attitudes.

Likelihood to Set Out Less Often | The most influential factors upon the likelihood of setting out black carts less often include municipal cost savings and environmental benefits:

- “Even if 10% of households didn't put their cart out for collection, it would likely reduce operational costs for The City”;
- “Idling produces more greenhouse gas emissions that impact air quality and contribute to climate change”; and,
- “Stopping and idling also increases fuel consumption in collection trucks which has cost impacts for The City”.

Negative Impacts | The most influential factors detracting support for the implementation of a Pay-as-You-Throw Program include:

- “A pay-as-you-throw program for black carts would encourage people to dump their garbage in others' black carts”;
- “If we don't set it out on collection day, it will be overflowing before the next collection period”; and,
- “Paying more for larger households penalizes larger families”.



Key Drivers Influencing the Likelihood of Setting Out Black Carts Less Often

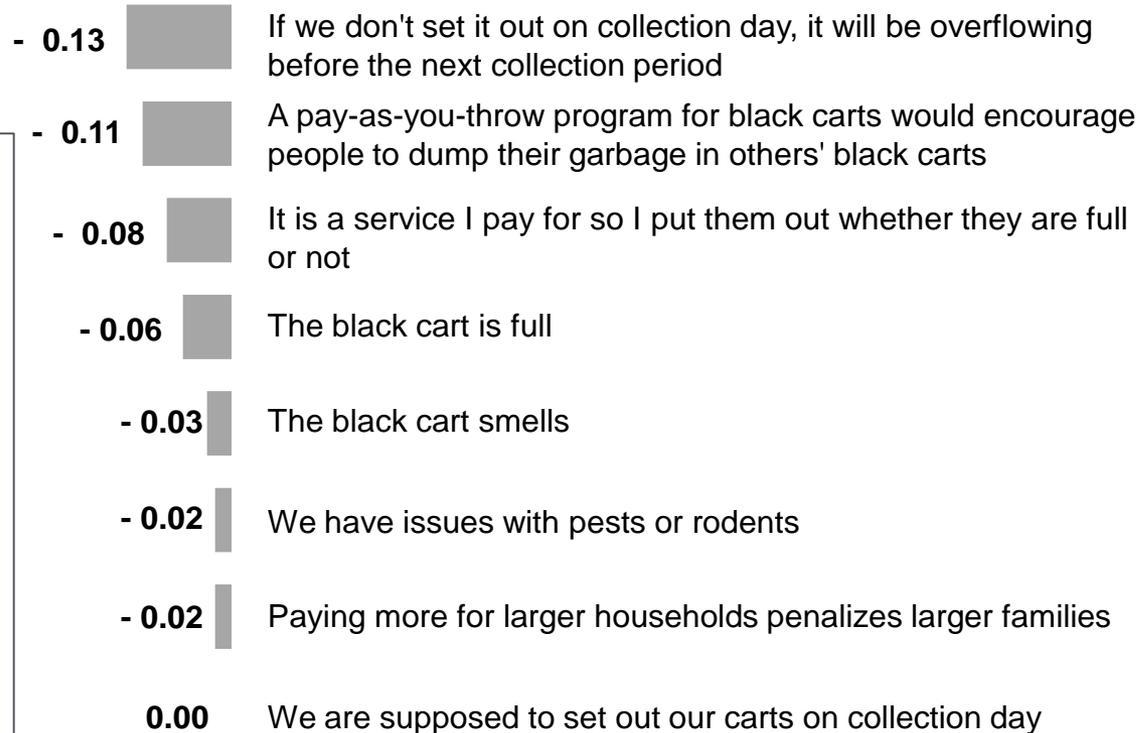


The results present the relative influence each factor has on improving the likelihood of setting out black carts less often. For example, if the top factor was improved by one percentage point, it would improve the overall likelihood of setting out black carts less often by 0.60%.



Key Drivers Influencing the Unlikelihood of Setting Out Black Carts Less Often

The results present the relative influence each factor has on decreasing the likelihood of setting out black carts less often. For example, if the top factor increased by one percentage point, it would decrease the overall likelihood of setting out black carts less often by 0.13%.





Demographics

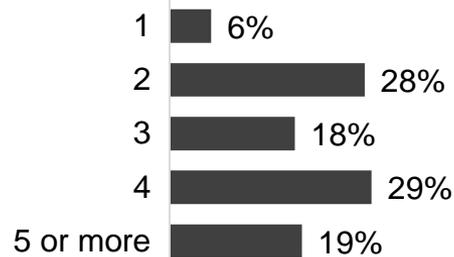




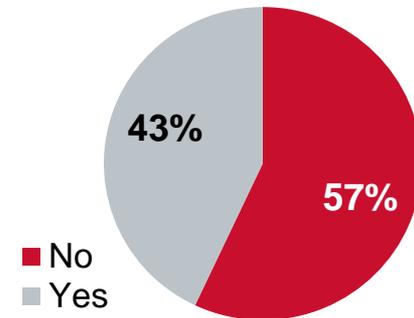
Quadrant

Quadrant	
Southwest	25%
Southeast	24%
Northwest	30%
Northeast	21%

Number of People living in Household



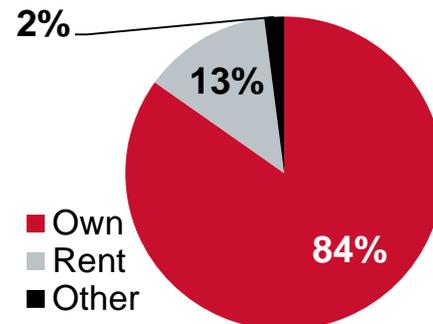
Children in Household



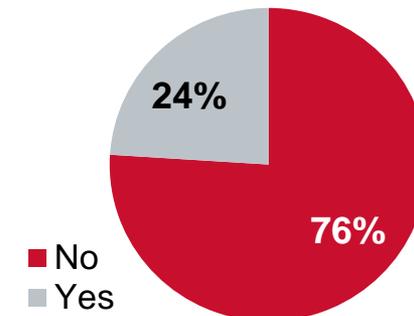
Type of Home

Type of Home	
Single detached house	88%
Duplex, triplex or fourplex	7%
Basement suite or suite in a house	5%

Own or Rent



Seniors in Household

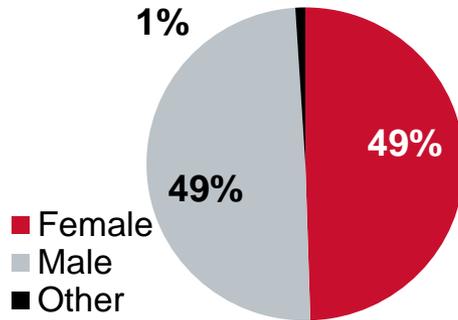


(Base: All respondents, n=500)



Demographics

Gender



Age

18 to 24	13%
25 to 34	17%
35 to 44	15%
45 to 54	25%
55 to 64	14%
65 or older	16%
<i>Mean</i>	<i>46.2 years</i>

Tenure in Calgary

10 years or less	13%
11-20 years	27%
21-40 years	37%
41+ years	23%
<i>Mean</i>	<i>28.3 years</i>

Education

Completed high school or less	13%
Some post secondary or college diploma	36%
Completed university degree or post-grad degree	49%
No response	1%

Income

Less than \$40,000	6%
\$40,000 to <\$60,000	6%
\$60,000 to <\$80,000	11%
\$80,000 to <\$100,000	13%
\$100,000 to <\$120,000	19%
\$120,000 to <\$150,000	8%
\$150,000 or more	25%
No response	11%

Primary Language Spoken at Home

English	88%
Punjabi	3%
Tagalog	1%
Mandarin	1%
French	<1%%
Cantonese	<1%%
Other	7%

(Base: All respondents, n=500)

Contact

Erin Roulston

Vice President

Ipsos Public Affairs

403-919-5609

email: erin.roulston@ipsos.com