



City of Ottawa Solid Waste Survey

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1.0 Executive Summary

Nanos Research's survey of 2,000 City of Ottawa residents indicated that residents were generally satisfied with their recycling and garbage pick-up services and that most valued recycling in their city and believed it was an important service. Research also found that there was significant city-wide support for the creation of a green bin program. Seven in ten Ottawa residents (70%) indicated some interest in a green bin program with 50% saying they were very interested. This finding is consistent with opinions that the green bin program does a good job at diverting waste (62% agree) and residents' impression of such a program: 71% of residents had a positive impression of the green bin program.

Green Bin Program

Over seven in ten Ottawa residents (71%) have heard of the green bin program. Over seven in ten Ottawa residents (71%) had some positive impression of the green bin program; 48% had a very positive impression. When asked why they held their opinions (unprompted), 62% said that it does a fairly good job at diverting waste while 20% believed it does not do a good job.

Research also found that seven in ten Ottawa residents have some interest in a green bin program starting in Ottawa; 50% are very interested while 17% are not at all interested. There was a strong relationship between believing that a green bin program does a good job at diverting waste and being interested in the program. In a regression analysis, opinions on the effectiveness of the green bin program to divert waste from landfills were the strongest predictor of interest in the green bin program when a number of other variables were included in the model.

Satisfaction with Recycling and Garbage Services.

Over six in ten (65%) Ottawa residents rated their satisfaction with garbage services as high (6 or 7 out of 7) while 56% rated their satisfaction with recycling services as high. In comparison, only 21% of Ottawa residents said they were extremely or very satisfied with the overall job the City of Ottawa does in providing services. With regards to negative opinions, four percent of residents said they were extremely or very unsatisfied with garbage services in Ottawa (1 or 2 out of 7), while six percent were extremely or very unsatisfied with recycling services. In contrast, 10% of residents were extremely or very unsatisfied with the overall job the City of Ottawa does at providing services.

Ottawa Residents Believed Recycling is Important and Helps Protect the Environment.

Along with research showing that Ottawa residents were generally satisfied with their recycling and garbage pick-up services, the city-wide Recycling Attitude Index Score of 5.56 out of 7 indicated that residents generally had a positive opinion towards recycling in the City of Ottawa. Most residents believed that recycling was important and valued the role it played in protecting the environment and reducing landfill waste. Eight in ten Ottawa residents (80%) said that it was very important that the City of Ottawa had a recycling program. Only one percent said it was not at all important to them. The relative importance of the service was also clearly demonstrated by the fact that 83% of residents disagreed to some degree that if Ottawa stopped recycling it would not affect them. Another three in four



residents (75%) disagreed to some degree that stopping recycling would not affect their neighbours. Moreover, when asked (unprompted) why they believed the recycling program was important, one in three residents (32%) indicated that recycling was good for the environment while another 30% said that recycling will reduce waste in landfills. Additionally, most Ottawa residents (81%) agreed to some degree that if given the choice, their household would like to recycle more things (62% completely agreed with the statement).

Ottawa Residents “Walk the Talk”; Almost Nine in Ten Recycled Plastic, Glass and Paper.

Ottawa residents did not just talk about the importance of recycling; they also “walked the talk.” Nanos’ city-wide Activity Index Score indicated that Ottawa residents were likely to partake in recycling activities. Research indicated that 87% of Ottawa residents put plastics and glass in the blue bin for recycling, similarly 87% of residents put paper in the black bin. Yard waste recycling was done by a majority as well, with over six in ten residents (65%) indicating that they put out leaf and yard waste in paper bags for pick-up.

Other key findings:

- ⊕ **Ottawa residents were unsure or thought the city did a similar job as other cities at garbage collection and recycling.** Four in ten respondents (38%) were unsure of the job the City of Ottawa did compared to other cities. Three in ten respondents (31%) thought that the City of Ottawa did a similar job compared to other cities, while 20% said that they did a worse job. More than one in ten respondents (12%) said that the City of Ottawa did a better job at garbage and recycling compared to other similar cities. Most residents (86%) were at least somewhat satisfied with garbage and recycling drivers’ service; 39% were very satisfied.
- ⊕ **Ottawa residents were more likely to believe they produced less garbage than their neighbours.** When asked if they produce more, less, or the same amount of waste as their neighbours, 46% of residents said they produced less than their neighbours while 41% said they produced the same amount. Only nine percent of Ottawa residents said they produced more than their neighbours.
- ⊕ **Views on Recycling**
 - Most Ottawa residents would like to recycle more materials (81% at least agreed somewhat and 62% completely agreed).
 - Most residents also think their neighbours would like to recycle more materials (72% at least agreed somewhat while 41% completely agreed).
 - A majority of residents agreed to some degree (54%) that their neighbours were happy with the types and amount of materials they can recycle; 59% agreed to some degree that their households were happy.
 - When asked (unprompted) what else the City of Ottawa could do to help reduce household waste, 21% mentioned creating a compost program/green bin program while another 15% said the city should expand the recycling program.
 - Ottawa residents believed that their neighbours did an adequate job recycling. Less than one in ten respondents gave a rating lower than 4 out of 7.
 - Nine in ten Ottawa residents (90%) said they have some understanding of how the recycling system works in the city; 49% said they completely understand. In contrast, two in three residents (66%) said their neighbours had some understanding of how the system worked; 15% said their neighbours completely understand.
- ⊕ **Only one in three Ottawa residents (33%) was aware that the city has a three bag limit for garbage.** Awareness was higher in Zone 1 (west) and interestingly, marginally higher among non-recyclers (36% aware).



⊕ **Composting in Ottawa**

- Less than four in ten Ottawa residents (38%) said they have a backyard composter. Rural residents were more likely to have a backyard composter.
- Most residents who have a composter said they compost both food and garden waste (74% compost both) and six in ten (64%) said they compost all-year round.
- Why compost? – To produce fertilizer (34%); to reduce garbage (26%); because it is good for the environment (14%).

⊕ **Hazardous Waste Program**

- Six in ten Ottawa residents (60%) said they have participated in the city's hazardous waste program. Frequency: past month (9%), past 6 months (21%), past year (29%).
- Participation in the program was higher among Zone 1 (west) residents (64%), Zone 4 (east/south) residents (57%), men (62%), and those living in single family homes (64%).
- Participation in the program was lower among Zone 3 (central) residents (51%), women (57%), and those living in townhomes or low-rise buildings (46%).
- Two in three residents who participated in the hazardous waste program (66%) were at least somewhat satisfied with the program; 33% said they were very satisfied.

⊕ **City of Ottawa Communications**

- Over seven in ten residents (71%) said they received the waste calendar. Residents in Zone 3 (central) were less likely to say they received the calendar (62%).
- Over eight in ten residents who received a waste calendar (81%) believed there is some value in the calendar; 47% believed the value was very high.
- One in two Ottawa residents (52%) said more publicity is needed on recycling, while 42% said the same amount is needed.

Key Objectives Findings

The City of Ottawa identified five key objectives for the study of public opinion towards the city's solid waste services. The following section highlights the main findings for these key objectives.

Objective #1 – Measure resident satisfaction with the City of Ottawa's Solid Waste Services

- ⊕ **Garbage Services** - The majority of respondents were satisfied with the City's garbage services, with 86% of respondents giving a somewhat satisfied (5), satisfied (6) or very satisfied (7) rating. Less than one in ten respondents gave a rating lower than 4 out of 7. Of note, only four percent of residents were either very unsatisfied (1) or unsatisfied (2) with the city's garbage services.
- ⊕ **Recycling Services** - More than three out of four (77%) respondents were somewhat satisfied (5), satisfied (6) or very satisfied (7) with the City's recycling services. Less than one in four respondents gave a rating lower than 4 out of 7. Six percent of residents were either very unsatisfied (1) or unsatisfied (2) with the City's recycling services.



Objective #2 – Measure resident satisfaction with Solid Waste Services for each of the City’s wards and the five garbage and recycling collection zones

Collection Zone	Mean Satisfaction with Garbage Services	Variance from City-Wide Mean*	Mean Satisfaction with Recycling Services	Variance from City-Wide Mean**
Zone 1 (West)	5.70	- 0.02	5.53	+ 0.09
Zone 2 (South/West)	5.64	- 0.08	5.40	- 0.04
Zone 3 (Central)	5.60	- 0.12	5.20	- 0.24
Zone 4 (East/South)	5.83	+ 0.11	5.46	+ 0.02
Zone 5 (East)	5.83	+ 0.11	5.68	+ 0.24

* City-wide mean (Garbage Services) = 5.72/7

** City-wide mean (Recycling Services) = 5.44/7

Objective #3 – Measure resident knowledge and attitudes in regards to the “Green Bin” program and bi-weekly garbage pick-up

- ⊕ Most Ottawa residents were aware of green bin programs (71%) and a majority had a positive impression of them (71% had some positive impression; 48% had a very positive impression). One in two residents said they were very interested in a green bin program while 17% said they were not very interested.

Objective #4 – Develop a client satisfaction baseline in support of a longitudinal Solid Waste Services tracking program

- ⊕ Three client satisfaction baseline measures were created. Respondents were asked to rate their satisfaction with the job done by the City of Ottawa in providing a number of services on a seven point scale. Respondents were most satisfied with the job done by the City of Ottawa in garbage services (mean = 5.72), followed by the job they did in recycling services (mean = 5.44). Respondents were comparatively less satisfied with the overall job done by the City of Ottawa in providing services (mean = 4.54)

Objective #5 – Develop a composite index score for performance measurement and, should the client wish, public reporting purposes.

- ⊕ The City of Ottawa’s Solid Waste Services Department has a composite Index Score that can be used as a baseline for the measurement of services and program improvements on a longitudinal basis. The Satisfaction Index Score is meant to gauge the level of satisfaction in the City of Ottawa’s overall garbage and recycling services. The Satisfaction Index Score for all respondents was 5.36 out of 7.

Analysis and Discussion

1. Regional variation

Generally speaking, opinions across regional areas in Ottawa were fairly consistent. Differences, however, usually manifested themselves among residents of Zone 3 (central). For example, the mean Satisfaction Index Score for central area residents was lower than the city-wide average (central mean 5.15/7; Ottawa mean 5.36/7). One explanation for this difference is the central area residents' desire for more recycling opportunities. Moreover, central area residents were:

- more likely to believe that recycling is important (central mean 6.73; Ottawa mean 6.57);
- less likely to be happy with the types and amount of recyclable materials (central 4.26; Ottawa 4.63)
- more likely to have a higher impression of the green bin program (central 5.76; Ottawa 5.39)
- more likely to believe that Ottawa does a poorer job of garbage and recycling than other cities (central 28% worse job than other cities; Ottawa 20% worse job than other cities);
- most likely to put out yard waste (central 69% all the time; Ottawa 65% all the time); and,

It is clear that any expansion of the recycling program would be most supported in the central area of the city and that these residents are more likely to take advantage of the expanded services. However, one should note that across the city, behaviour and opinions generally pointed to support for expanded recycling services (see point #3 below).

2. Can we explain the behaviour of non-recyclers and fairweather recyclers?

Based on the research, it is unclear why a significant portion of Ottawa residents (26%) hold views that classified them as fairweather or non-recyclers. However, based on research, we can eliminate lack of communication as a cause of their different opinions on recycling. Fairweather and non-recyclers were:

- likely to say they received a waste calendar from the City of Ottawa (fairweather 75%; non-recyclers 64%; recyclers 72%);
- likely to believe that the waste calendar was valuable (fairweather 5.54/7; non-recyclers 5.61/7; recyclers 5.72/7);
- likely to use the waste calendar (fairweather 52% all the time; non-recyclers 57% all the time; recyclers 60% all the time);
- just as likely to be aware of the city's garbage bag limit (fairweathers 31% aware; non-recyclers 36% aware; recyclers 32% aware); and,
- just as likely to believe that the City of Ottawa should publicize the recycling program more (fairweather 42% more publicity; non-recyclers 48% more publicity; recyclers 55% more publicity).



Clearly, residents who believed that stopping Ottawa's recycling service would not have an effect were as likely to receive information about garbage and recycling services. Therefore, based on the research, lack of communication can be ruled out as a cause of these opinions.

An alternative explanation may be the values of these residents. However, this explanation was also not well supported by the research. For example, while non-recyclers were less likely than recyclers to believe that it was important for the city to have a recycling program than recyclers; over two in three non-recyclers (67%) still believed that it was very important. Perhaps these residents would be more inclined to recycle if it was more convenient or if there were greater incentives to do so. More research is needed to better explain the behaviour and opinions of these two subgroups.

3. Changes to Ottawa's recycling program

Overall, research indicated that Ottawa residents would be in favour of expanding the current recycling program. There was considerable support for the introduction of a green bin program - 70% of residents showed some interest, with 50% saying they are very interested. However, while support for a green bin program was high, current composting activities were low when compared to other forms of recycling. Only 38% of Ottawa residents said they have a backyard composter (38%) and of those who compost, 64% compost all year round.

Despite this apparent gap between opinion and behaviour, one should consider the requirements, disadvantages, and time commitment of having a backyard composter. Backyard composters require yard space, can produce an odour, and may be too inconvenient for many residents to operate all-year round. Interest in a green bin program is influenced by attitudes toward recycling and whether or not a resident currently recycles yard waste or has a backyard composter. However, a majority of residents who do not have a backyard composter indicated some level of interest in a green bin program (see page 46). This indicates that although support is stronger among those who currently have a backyard composter, many residents who may not be inclined to recycle food and garden waste in their own yard may be willing to put it out in a green bin once per week. Readers should also note that based on our analysis, it appears that satisfaction with current city recycling and garbage services has no independent effect on interest in a green bin program. This indirectly suggests that residents believe that the city can manage and operate such a program.

With regards to expanding the current recycling program, there appears to be an appetite among some residents to increase the types of materials that can be recycled. While most residents said their households were happy with the amount and types of materials they currently recycle, 29% said they were not happy. Moreover, most Ottawa residents (81%) agreed to some degree that, if given the choice, their household would like to recycle more things (62% completely agreed with the statement). These respondents seem to be the most supportive of the recycling program and their satisfaction would be improved if more materials were eligible for recycling.



Recommendations from the Research Study

1. Focus communications on the effectiveness of the green bin program in diverting waste from landfills.

Although awareness and interest in a green bin was high across the city, one opportunity for improvement is opinion regarding the effectiveness of green bin programs to divert waste from landfills. Only one in four Ottawa residents (25%) believed that green bin programs do a very good job at diverting waste while another 15% rated the program as good. Despite these fairly strong opinions, there exists a considerable portion of the Ottawa population that believes it does not do a good job. This may inhibit interest in the program in the city.

Education strategies and tactics should address this gap in public opinion but highlight the impact of the green bin program at reducing landfill waste. As the regression analysis indicates below (section 13.5), there is a strong, statistically significant correlation between opinions about a green bin's effectiveness at diverting waste and interest in the program when we control for a set of other variables. Increasing the public's perception of the effectiveness of the program to divert waste from landfills will have the greatest impact on interest in the program.

Furthermore, communication efforts should be directed at concerns regarding composting that may be similar to dislikes about a green bin program. When asked to indicate what they liked and disliked about composting, the top two likes were that it reduces waste (34%), and they can recycle more waste (18%) while the top three dislikes were the odour/mess it makes (11%), it is too time consuming (7%) and the pick-up is not frequent enough (5%). Communication should focus on the positive side of composting and using the green bin program while addressing the possible resident concerns.

For example, communications can explain how easy a green bin is to use and by offering tips and suggestions on reducing odour and fruit flies. These "quick fixes" can be paralleled with the effectiveness of the green bin program to divert waste from landfills and offer clients with more recycling options.

2. Consider expanding the types of materials accepted for recycling.

If the City of Ottawa decided to expand the current recycling program, there would be wide-ranging support in principle for the decision. Research found that most residents supported an expansion of the current recycling program. Although most residents were generally happy with the amount and type of materials recycled in the city, 62% strongly agreed that their household would recycle more things. Women were more likely to support an expansion of the current recycling program than men (women 66% strongly agreed, men 57% strongly agreed). Research also found that even a majority of residents classified as "non-recyclers" agreed that they would appreciate an expansion of the current recycling program.

Other findings verify the widespread support for expanded recycling. When asked to consider their neighbours' opinion, 41% strongly agreed that their neighbours would recycle more materials if they could. Furthermore, when asked why residents held opinions about the recycling services, some with less favourable opinions identified the need for more materials to be recycled in the program (12% of all respondents). Results indicate a clear demand for more recycling in Ottawa.

3. Respond to concerns about the hazardous waste program.

Although residents were very satisfied with recycling and garbage services, the hazardous waste program was comparatively less favourably viewed by Ottawa residents. The hazardous waste program was used less by residents



(22% of residents aware of the program last used it more than two years ago), and only six in ten (60%) said they have participated in the program. One possible reason for this comparatively lower participation is lower satisfaction. In fact, research indicates that the mean satisfaction score for the hazardous waste program (5.09) was considerably lower than that of recycling services (5.44) and garbage services (5.72). When asked why they held their opinions on the hazardous waste program, negative responses included “too few drop off locations,” “the program is inefficient,” and the “line-up is too long.”

Another potential cause for lower participation may be a lack of communication. Research found a relationship between having received a waste calendar and participating in the hazardous waste program. Two in three residents who received a waste calendar (67%) said they have participated in the hazardous waste program compared to only 43% of those who did not receive a waste calendar. If the waste calendar is the most important means of receiving information about the hazardous waste program, then a portion of the public may not be aware of how the program works and when and where to bring their hazardous materials. We recommend that the City of Ottawa consider responding to these concerns through an education campaign about the program and addressing resident concerns regarding drop-off locations and line-ups.

4. Recognize and nurture support for recycling through communications.

Ottawa residents are highly environmentally conscious and value the role they play in protecting the environment and diverting waste from landfills through recycling. Research found that 80% of residents considered Ottawa’s recycling program to be very important to them. When asked (unprompted) why they held their views on recycling, 32% mentioned that it was good for the environment while another 30% said it reduces waste in landfills.

However, not only do Ottawa residents value recycling, they participate in the services offered by the city. Participation is high for paper and bottle recycling, while a majority said they participated in the yard waste service. It is clear that support for recycling in the city runs wide and deep.

The City of Ottawa should nurture the public’s support and enthusiasm for recycling by congratulating residents for their commitment to recycling and the role each and every resident plays in protecting the city’s environment. By recognizing each individual’s effort, it can further improve participation and support for the program. Communication campaigns should also consider championing women in the advertising. Research indicated that women were more likely to support recycling programs and more likely to participate. There is an opportunity to showcase the role women play in protecting the environment through recycling and encourage all residents to follow their example. It may also be worthwhile to link the public’s overwhelming support of and participation in recycling programs with the need for a green bin program. For example, a catch phrase such as “Ottawa is a blue bin city. Now, let’s take the next step. Let’s become a green bin city” can stress past success and turn it into momentum for future expansion.

5. Avenues for Further Exploration – Non-Recyclers, Tax Implications, Hi-Rise Residents, Tracking

A review of the baseline data suggests there are a series of avenues which may merit further investigation:

Non-recyclers – Central to the long term success of the program will be the ability to educate current naysayers of the benefits of recycling. Research suggests that current household residents in Ottawa who recycle can be converted to greater diversion. However, incrementally shifting the opinions of those who are skeptical of the merits of recycling will be critical to the long term success of waste management in Ottawa. This could be done through further research including focus groups to explore challenges and educational opportunities.



Tax Implications – Readers should note that the opinions gathered were done so without extensive testing of the impact of the tax environment and cost implications for the initiatives explored. Understanding the financial trade-offs and benefits will be important to further understanding public attitudes and behavior.

Hi-Rise Residents – The current research excludes the views of Ottawa residents who live in high-rise apartment/condominium buildings. Next phases could include collecting feedback from landlords, condominium associations and residents who live in high density buildings.

Tracking – The City should consider developing a core tracking initiative of selected key performance indicators from the baseline research. This will allow decision-makers to evaluate the impact of activities over time.

