

# CITY OF HAMILTON WASTE MANAGEMENT DIVISION

# Blue Box Recycling Public Opinion Survey

# **Benchmark Report**

March 2006









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# **EXECUTIVE OVERVIEW**

This report documents the findings of a two part research project conducted for the City of Hamilton in November and December 2005 to determine public attitudes towards its curbside recycling program. This research was carried out in two parts: a telephone survey conducted among a random sample of 702 Hamilton residents with access to curbside recycling; and, four focus groups evenly divided between female and male household heads, all with access to curbside recycling.

Based on this research, it was possible to identify a number of recommendations for the City's consideration as new public education campaigns are developed. The recommendations section is titled "Preliminary Recommendations: Building on Success." Hamilton's public education campaign enjoys very high recall rates - unparalleled by private sector organizations who have very high advertising budgets - this is something to celebrate. Hamilton enjoys an extremely high blue box participation rate (as identified in the survey). However, in contrast the recycling rate is approximately 30% and the blue box is operating at 50% capacity with a capture rate that remains at 17-18%. In order to move towards its stated goal of 65% diversion by 2008, new approaches and variations to the current communications strategy should be pilot tested and implemented to encourage behaviour change.

# RESEARCH BACKGROUND

The City of Hamilton's Waste Watch Communication and Education Project consists of a 4-year communication strategy which goal is to enable the City to reach 65% waste diversion by 2008. The strategy is built around one-year increments with each year focusing on the program that contains the most diversion potential. For 2005-06, the strategy's focus is on the Blue Box Program.

The City of Hamilton applied for funding support to Stewardship Ontario's Efficiency & Effectiveness Fund (E&E Fund) for the Blue Box Program component of its Communication and Education project. The application was recommended by Waste Diversion Ontario's Municipal – Industry Program Committee (MIPC) and approved by the Board of Stewardship Ontario in early 2006, as E & E Project # 125. The E&E's support covers the following three deliverables:

- Consumer research: Conduct a Public Opinion Survey to determine residents' awareness and knowledge of the blue box program
- Baseline waste audits: Conduct pre and post waste audits to determine set-out, participation, capture, and diversion rates before and after the implementation of the communication campaign
- Analysis and Evaluation: Summarize project learnings







The city of Hamilton retained Informa Co. Ltd. to carry out the Consumer Research component of this project. Their findings are presented in this report.

The City of Hamilton retained Ehl Harrison Consulting Inc. and Informa Inc. to conduct a public opinion survey. The results of this research will be used by the Waste Management Division to better serve the needs of Hamilton residents by modifying its educational messaging and/or its operational support to the existing recycling program. The goals of the research were to:

- Assess the level of awareness and usage of the blue box recycling program;
- Assess the level of awareness, usage and satisfaction with the waste collection calendar;
- Determine waste management practices within the home; and;
- To provide a demographic analysis of City of Hamilton recyclers.

On December 12, 2001 Hamilton City Council approved a new plan to deal with the City's solid waste. The Solid Waste Management Master Plan (SWMMP) was developed by a citizen committee and calls for an aggressive 65% waste diversion rate to be reached by 2008 through expanded recycling and large scale composting.

Currently, approximately 28% is diverted from landfill through the blue box and composting programs. Current data also indicates that the blue box program is operating at approximately 50% of its capacity, with a capture rate of 17-18%.

This Project has been delivered with the assistance of Stewardship Ontario's Effectiveness and Efficiency Fund, a Fund financed by Ontario municipalities and stewards of blue box waste in Ontario. Notwithstanding this support, the views expressed are the views of the author(s), and the Association of Municipalities of Ontario and Stewardship Ontario accept no responsibility for these views.

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# STUDY METHOD

This research was carried out in two parts: a telephone survey; and, focus groups.

A telephone survey of 702 randomly selected Hamilton residents with access to curbside blue box collection was carried out first. The survey was designed to gather insights from a sample of residents from each of Hamilton's municipalities (former). 65% of those surveyed were from the former City of Hamilton. Residents from Ancaster, Flamborough, Glanbrook, Dundas and Stoney Creek made up the balance of those surveyed. The interviews were conducted in English only, given that 92% of the City of Hamilton population speaks English at home. The remaining 8% is fragmented among nine other language groups.

The survey consisted of 20 questions that probed blue box recycling habits, opinions related to the effectiveness of the program and supporting education campaigns, along with the collection of basic demographic data. See Appendix 1 for a detailed report on the benchmark telephone survey. See Appendix 3 for a copy of the sample survey.

Four focus groups were convened with 6-8 participants each. These participants were largely from the former City of Hamilton. These focus groups were two hours in length and delved in to household recycling plans, effectiveness of current City of Hamilton recycling efforts, and effectiveness of current print and television advertising. See Appendix 2 for a detailed report on the focus group findings. See Appendix 4 for a copy of the focus group guide.

When comparing the outcomes of the two research methods, there were many findings that were consistent. Since the focus group participants were largely from Hamilton's urban core, it is also possible to draw some distinctions between this audience and those in the newer suburban areas. The focus group reporting found in Appendix 2 provides anecdotal support to the statistically significant findings of the telephone surveys. Any anomalies between the two methods are pointed out in the research documentation.







# KEY LEARNING POINTS - TELEPHONE SURVEY

## **IMPORTANT LOCAL ISSUES**

The primary issues that concern Hamilton residents are tax increases and funding of healthcare and education programs. At least one in five residents polled in the telephone survey mention these items. Other matters that also were mentioned, in order of importance are road conditions, crime/drugs, infrastructure improvements and landfill/recycling (8%).

#### **BLUE BOX RECYCLING**

Most residents (99%) claim that they are recycling using the blue box program but extent of participation varies considerably.

On average Hamilton recyclers own 2.02 blue boxes. This means that 80% have at least two boxes and only one in five have one box. Residents who have only one box tend to agree that they would recycle more if they had more capacity.

Two thirds of recyclers indicate that they put two or more blue boxes out for each collection, while one third use only one box. It is noteworthy that over 90% claim that they put their blue box out for collection every week.

The recycling chore is handled by one or two household members; only 29% report that everyone in their family is involved. Insights from focus groups indicate that women remain the lead recycler in many households as this job is defined as women's work.

#### LIST OF RECYCLABLES & DIVERSION RATES

Diversion varies depending on the material. There is a hierarchy of recycling based upon when materials were introduced into the blue box recycling program. Core items (first generation items) that were introduced when recycling was initiated tend to enjoy a high rate of recycling, whereas newer items are recycled less frequently.

- Core, first generation materials that residents are most likely to segregate from the garbage stream include: cans, newspapers, corrugated cardboard boxes, bottles, glass jars, paper products and plastic containers and tubs. From 75% to 48%, in order of presentation, mentioned them on an unaided, spontaneously recalled basis.
- Newer, Second Generation Items have lower recycling rates (between 26% and 43% claim they are recycling them on an unaided basis). This group includes: boxboard boxes, junk mail/flyers, magazines, plastic cleaning containers, and plastic bakery trays.
- Lower Recycling The lowest unaided recall rates were for laundry product containers, aluminum foil/plated, Styrofoam containers, Tetrapaks, aerosol containers and empty paint cans.







MATERIAL	INTRO DATE	RECYCLING RATE	INFLUENCES
Cans, bottles, jars,	1989	High	Habit, education
Plastic containers/food		Medium High	Habit, education
Plastic containers/ household cleaners		Medium	Low recycling zone Unaware
Tetrapaks/aseptic	2000	Medium-low	Unaware Small market
Telephone books	1995	Low	High retention –many people keep them
Aerosol containers Aluminium		Low	Not aware item can be recycled Low purchase item

# **RECALL & MATERIAL IDENTIFICATION CHALLENGES**

The ability to spontaneously recall all the items that are being recycled has become increasingly difficult due to the wide array of things that can be recycled. When prompted, people claim to be recycling many of the items. It would likely be of great benefit to remind recyclers what goes into the blue box.

Householders must also continually navigate the new (composite) materials that are on the market. In many cases, this is new types of packaging for products. It continues to be important to let people know how they can determine what items are made of and whether they can be recycled or are garbage.







# **HOME SWEET HOME- RECYCLING ZONES (likelihood of recycling)**

High Recycling Zone	Medium Recycling Zone	Low Recycling Zone
Kitchen	Living/dining room	Bedrooms
Kitchen	Living	Bedroom
Garage	Office/den	Bathroom
Garage & Basement	Kitchen	Bathroom
Yard		Basement
Kitchen	-	Garage & Basement
		Laundry
-	-	Laundry Room

According to the survey, residents are more likely to recycle in certain areas of the home. These tend to be the areas that traditionally host blue box receptacles. If this barrier is to be overcome, it will be necessary to continue promoting the "room-by-room" recycling ideas.







#### ASSESSING HAMILTON'S RECYCLING PROGRAM

# **WHAT DO I LIKE?**

Most residents had something positive to say about the blue box program in Hamilton. Primarily residents felt that it is an effective means for diverting waste from landfills. Also, over half of the mentions praised the blue box program for being convenient; weekly curbside collection, and it is continually improving. A small number mentioned that it saves recyclables for reuse.

#### WHAT DON'T' I LIKE?

Six in ten residents criticized the program. The largest category of complaints focused on collection issues - "they don't put the boxes back neatly", "they leave a mess on the sidewalk", "they don't pick up everything" and "bad service/they don't come on time". The next biggest type of complaint was about the blue box itself - insufficient room, weight/too heavy and their cost. About one in ten wished that the list of recyclables would be expanded.

#### WHAT IS THE PURPOSE OF THE PROGRAM?

The perceived purpose of blue box recycling was firstly to reduce the amount of garbage going to landfill and secondly at some distance, was its environmental aspect ("good for the environment" and reuse of materials/save primary resources). Most recyclers had a comment to make in this regard.

# **RATING ITS IMPACT**

Hamilton's blue box program received a rating of 7.25 (out of 10) for its effectiveness in reducing the amount of waste that goes to landfill. Slightly less than half (44%) assigned a rating of between eight and ten. However, 17% were unable to assign a rating.

#### **IMPROVEMENTS**

The opportunity to improve Hamilton's blue box program elicited a variety of suggestions from 55% of recyclers. Four items prevailed: provide more boxes and increase their size; expand the materials collected; promote and advertise and improve curbside service.







# Rating program elements

Rating recycling program (1 to 10)	Average Ratings
Convenient to use.	8.2
The ease of recycling using blue boxes.	8.1
Sufficient information about how to participate in the program.	7.6
The collection workers provide a consistently effective service.	7.5
Overall evaluation of Hamilton's recycling program.	7.5
The clarity of the messages used to encourage people to recycle.	7.3
Program's effectiveness in reducing amount s that goes to landfill.	7.2
Feedback about the accomplishments of the recycling program.	5.8

From this chart, it is clear that the City of Hamilton is doing many things right in the opinion of its residents. The one aspect that should be addressed is providing feedback about the accomplishments of the recycling program. "Offer praise when things go well; let people know where they need to improve."

# **RECYCLING - MOTIVATOR AND BARRIERS**

Recyclers indicate that both negative and positive factors motivate participation. Guilt and social/community pressures "eyes on the street" prompt them to recycle. Most recyclers (75%) claim they would be more inclined to do a better job if they knew what happened to their materials.

The following barriers were identified: lack of blue box capacity (46%), confusion with program changes (39%), time hurdles (22%) and opposition at home to recycling (15%)

# HAMILTON'S COMMUNICATION& EDUCATION PROGRAM

Almost half (45%) of Blue Box recyclers saw one or more of Hamilton's communications messages, that prompted most of them to recycle more items. The campaign has prompted residents to think more about the recyclables that can be found in low incidence recycling zones (bathrooms, laundry rooms, etc.).

42% of those surveyed recall the TV ads (combination of aided and unaided recall). This recall was skewed to women and those living in the city core. Unaware residents tend to live in larger, big waste generating households, and in suburban areas.







High Impact	Medium	Low Impact
Direct Mail Pieces: Collection calendars List of recyclables	TV	Website
Brochures (focus group)	Newspaper	Word of mouth

# **COMMUNICATION - MESSAGES**

High Impact High Recall?	Medium	Low Impact
Blue box man "Bathroom, kitchen & laundry" ads	Landfill facts	TV "bedroom"
Brochure "A self guided tour"	Financial details	
Fate of recyclables	Newspaper - item specific learning	
Program feedback	Room by room calendar list	

# **DIFFERENCES AMONG HAMILTONIANS**

#### **Urban/Other Differences**

66% of the survey respondents live in the Hamilton's "urban core" (i.e. the former City). A review of the data indicates that:



There seems to be more confusion in this population regarding items that have been added to the blue box over the last few years.



There is a greater expressed need for more blue boxes.



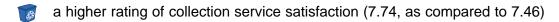
There is a clear indication that this group of Hamiltonians are more likely to recall the television advertising, therefore more impact







In the "other" (suburban) areas of Hamilton, there is:



a higher incidence of home ownership in the "other" areas

a higher incidence of management, business owners, post secondary education

It is interesting to note that both areas are virtually identical in terms of feedback on accomplishments of recycling program (5.84 out of 10). This is a very poor rating, indicating that the entire population would benefit from this type of information.

#### **Gender Differences**

There were also differences between men and women respondents to the telephone survey. It appears that largely women are responsible for the coordination of the "in the house" recycling efforts.







# **KEY LEARNING POINTS - FOCUS GROUPS**

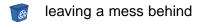
An analysis of the four focus group sessions reveals a number of key themes. Each of these themes provides anecdotal support to the findings of the telephone survey. The four key themes are described below.

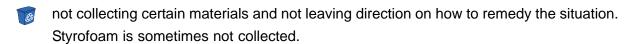
#### ALMOST EVERYONE IS RECYCLING

Participation in recycling is nearly universal. To varying degrees, and with varying commitment, Hamilton residents are participating in the recycling program. Women are the leaders for the collection of recyclables within the household, while men often place the boxes at the curb. Many participants noted that if they had more blue boxes and more collection containers of appropriate sizes for various rooms, they would be able to recycle more. Participants had mixed feelings about the appropriateness of a "user pay" system. A number of factors, as described below tend to influence this participation.

#### RECYCLING/WASTE COLLECTION STAFF: "WASTE AMBASSADORS"

Residents look to the collections staff as their main connection to the recycling program. In many cases, residents were able to point to a negative experience which may have influence their future behaviour. These negative experiences included:





certain materials collected one time and not another

#### A MEMORABLE GUY: BLUE BOX MAN

Blue Box Man was intended to provide a key focus for delivering recycling messages, but his impact varies. While the Bathroom commercial had the highest recall, focus group participants indicated that it could be a function of his unseemly behaviour. The 'Out of the bag, into the box' theme meant to provide useful recycling tips was overshadowed in the commercials by the actions of the blue box man, along with the music.

#### OTHER MEDIA MESSAGING

Focus group participants were less likely to recall the print ads, than those who took part in the telephone survey. When the ads were reviewed in the focus group context, they received positive feedback.







Many participants in both the telephone survey and the focus groups indicated that the recycling calendar was a valuable resource and reminder. Many had retained this information for use during the year.

When asked, focus group participants indicated that it would be useful for them to hear about how the program was doing, and the types of materials that are made from the materials that they put at the curb for recycling.







#### SEGMENTATION OF RECYCLERS

Based upon this research, it is possible to categorize residents in to one of four segments. This type of segmentation can help the City to refine its communications messaging. These are described below.

# "TRUE BELIEVERS"



- Engaged, hold core values
- Informed and active
- Educators
- Enthusiastic
- Female skew
- Welcome program improvements

# "DOUBTERS"

- Focus on first generation items
- Limited core values
- Respond to community pressures
- Can be motivated
- Lack education/facts
- Collection problems?



#### "STRIVERS"

- Believe in recycling/core value
- Want to be good recyclers
- Confused, lack information
- Can be motivated
- Missing tools (bins or list)



#### "DEAD BEATS"

- Recycle little or no items
- Lack core commitment/resistant
- Motivated by negative 'sticks'
- Male skew with hostility
- Disenfranchised/oppositional role



Based upon telephone survey and focus group results, it can be determined that Hamilton enjoys a large contingent of true believers and strivers. The recommendations below should assist to move more residents to the strivers and doubters categories.



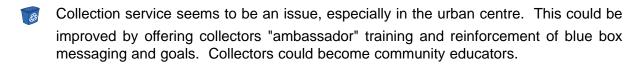




# RECOMMENDATIONS: BUILDING ON SUCCESS

Based on the outcomes of the benchmark survey and the focus groups, a number of key recommendations can be made.

#### **OPERATIONS**



#### **EDUCATION/MOTIVATION**

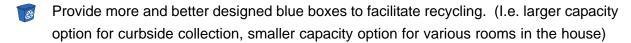
- Hamilton is one of few municipalities able to use television as a communication medium for recycling messages. The potential to reach many people is great. Continue mass media messages to encouraging positive recycling habits.
- Refine and clarify TV ads this may involve dropping the Blue Box Man theme. If he is retained, it is suggested that the City delete mixed message. Blue Box man must model correct recycling habits. It would be useful to reduce the speed of the messaging to aid viewer comprehension. The sub-titles/balloons are confusing to viewers. One important message is to show a demonstration of effective waste reduction (before and after efficient recycling). Blue Box man could be dressed in recyclables.
- In absence of the Blue Box Man, the City should pursue the development of a strong visual identity for the recycling program. This could be related to its 65% diversion goal by 2008, the positive impact of recycling; or the development another recycling icon.
- Print media campaign should continue to include room-by-room guides.
- Provide feedback on status of recycling in Hamilton
- Work with neighbourhoods to strengthen the program by identifying problems
- Where do recyclables go? Feature recycling outcomes new packages and products, clever re-use/arts and crafts
- There is an opportunity to enhance recycling rates by limiting the number of bags and promoting these limits. If this is done, limits should be enforced.

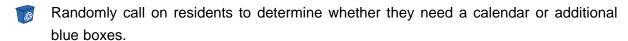






#### **TOOLS – BLUE BOXES**





#### ENHANCE COLLECTION

Focus group residents highlighted an interest in organic collection. Following a successful the pilot phase, this program will likely enjoy broader acceptance across the City.

#### **FUTURE RESEARCH**

- Continue to test education messages on a regular basis to see what is working.
- Monitor impacts of specific campaigns, capture rates and behaviour changes.
- Carry out random spot checks of collectors and curbside recyclers to determine service efficiency.
- Outcomes related to research carried out in Peel, York, Toronto and Durham, should be reviewed, when available, for additional ideas and comparisons.

#### **BUILDING SUCCESS STEP BY STEP**

In 2004, a public opinion survey was conducted to begin to gauge the levels of satisfaction with the services being offered, as well as how well people were recycling. During the same time frame, the Waste Management Division's waste audits and composition studies indicated that there was a relatively low recycling rate for fibre and packaging items that are generated in bathrooms, bedrooms, living rooms etc.

As a result of the research findings, a campaign using television, newspaper and direct mail (Canada Post delivery) was initiated. One of the main goals of this campaign was to prompt residents to recycle more of the materials that are disposed of in rooms other than in the kitchen.

The results of the 2005 benchmark survey and the supporting focus group results should assist the Waste Management Division to build on the past program, make revisions where necessary, and to continue moving steadily towards its diversion targets.







# **APPENDIX 1:**

# **DETAILED FINDINGS – TELEPHONE SURVEY**

## *METHODOLOGY*

A telephone survey of 702 randomly selected Hamilton residents with access to curbside blue box collection was carried out during November and December 2005. The survey was designed to gather insights from a sample of residents from each of Hamilton's municipalities (former). 65% of those surveyed were from the former City of Hamilton. Residents from Ancaster, Flamborough, Glanbrook, Dundas and Stoney Creek made up the balance of those surveyed. The survey itself consisted of 20 questions that probed blue box recycling habits, opinions related to the effectiveness of the program and supporting education campaigns, along with the collection of basic demographic data. See Appendix 1 for a detailed report on the benchmark telephone survey. See Appendix 3 for a copy of the sample survey.

The following report outlines the findings of this telephone survey. In combination with the results of the focus group research that was carried out during the same time period, it was possible to make a number of key recommendations. These recommendations should assist the City in shaping its communications messaging in the coming year(s).

# IMPORTANT LOCAL ISSUES

The survey began by probing what local issues "most affect your municipal government right now, which you think should receive the greatest attention from your municipal leaders?" On a spontaneous, unaided basis Hamilton residents identified a long list of items of import. The list includes local, provincial and federal government responsibilities. The three leading items are:

- Taxes/tax increases (27%) seniors and families with children are most concerned.
- Healthcare/health funding (25%) women are much more worried about it than men, as are younger adults (under 40 years).
- Education/school funding again women and younger adults, plus people with children were most likely to mention it.

# Second tier issues include:

- Road conditions (16%) of greatest concern to seniors
- Crime/drugs (11%) mention of issue evenly distributed over all population segments.

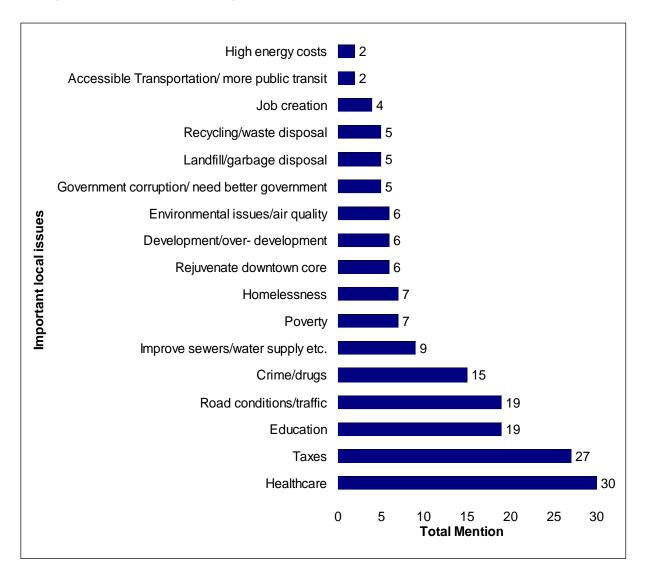






- Improvements in infrastructure e.g. sewers, water supply professional/managerial most interested in this issue.
- Landfill/recycling (8%) − ignites people with university degrees, aged 41 − 50 years, managers/business owners and families with three or more children. Residents who mentioned this issue were more likely than the rest of the Hamilton population to recall recycling messages.

Other matters that received lower mention include: homelessness (7%), poverty/child poverty (7%), development/overdevelopment (6%), revitalization of the downtown core (6%), hospitals/bed shortages 5%, government corruption (5%), job creation (4%), traffic congestion (3%), youth crime (3%), air quality (3%) and environmental issues (3%).









# **BLUE BOX RECYCLING**

## PARTICIPATION IN BLUE BOX RECYCLING

- Almost all households that have access to curbside recycling are participating in the program.
- only 1% of eligible households admitted that they did not recycle.
- A variety of reasons were given for not recycling including: "too much trouble", "don't' believe in it" and "dirty/messy"

	Total %
Yes	99
No	1

# **REASONS FOR NOT RECYCLING**

A total of 12 respondents indicated they did not recycle. The following reasons were mentioned:

- "Trouble/ too much effort"
- "Don't believe in it"
- "Dirty/messy"
- "Storage/not enough room"
- "No recycling bins close to home"

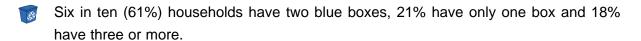
# NUMBER OF BLUE BOXES ON HAND

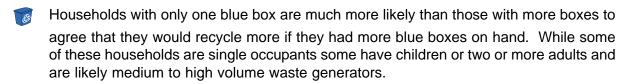
On average Hamilton curbside recyclers own 2.02 blue boxes. The 18% of households with higher than average number of blue boxes (three or more) also report that they have many occupants (five or more), share the task of recycling and are more likely to recall Hamilton's recycling messages.











#### NUMBER OF BLUE BOXES PLACED AT CURB

- On average Hamilton curbside recyclers put out 1.84 blue boxes per collection, and given that they own an average of 2.02 containers identifying an interesting gap between number of bins owned and the number put out for collection.
- One third (32%) of households are below the average putting out only one bin, more than half (54%) use two bins and the remaining 13% use three or more bins.
- While many of the larger waste contributing households, families with children or adultonly households with two or more members, are using two or more bins, it is noteworthy that some are only filling one blue box each week.

	Number of Blue Boxes or other recycling containers owned	Number of boxes at curb
One	21	32
Two	61	54
Three	13	10
Four or more	5	3
Don't know	-	1
Average	2.02	1.84

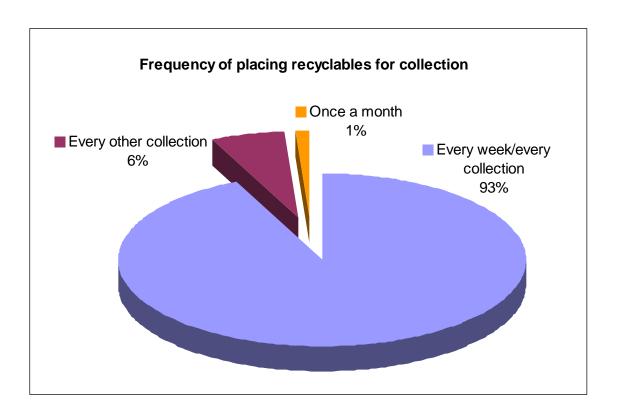






#### RECYCLING FREQUENCY

- More than nine in ten (93%) of Hamilton households report that they place their blue box at the curb for collection every week.
- This high frequency of curbside recycling was most marked among households with two or more members and one or two children.
- Most of the remainder (6%) usually recycle their materials on a biweekly basis.



#### RECYCLING ACTIVITY

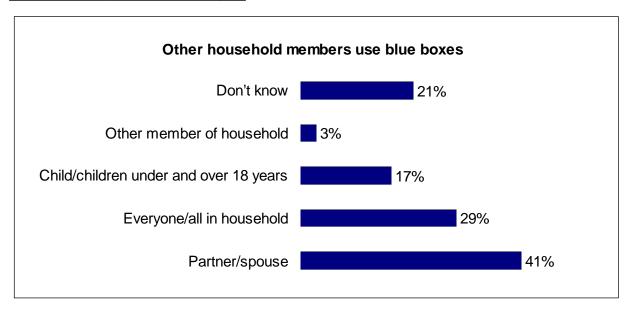
- The task of recycling, like so many other household chores, tends to be relegated to one or two adults.
- Three in ten households (29%) report that everyone participants in recycling.
- The presence of children does not have a considerable impact on participation only 32% of households with offspring report that "everyone recycles".
- Most households that have children do not mention that they are recycling.







# **FREQUENCY OF RECYCLING AID**



Frequency other household members recycle. (Base: Total specific household member recycle)

Other household members	All or most%	Some%	Very few %
Partner/spouse	88	9	2
Child/children under 18 years	77	21	3
Child/children over 18 years	79	12	5
Other member of household	75	15	10
Everyone/all in household	94	5	1







# RECYCLED ITEMS

The issue of what materials residents recycled in their blue boxes was examined accordingly:

- Unaided recall
- Aided recall of all items not mentioned on an unaided basis
- How much of each recyclable item was recycled: all or most, some or very few/none?

# **UNAIDED RECALL**

# MAJOR RECYCLABLE ITEMS - 75 - 48%

The major, top-of-mind recyclable items are:

- s cans
- newspapers and boxes
- glass bottles and jars
- paper products (packaging, rolls and wrap)
- plastic food containers.

Unaided Recall	Total %
Cans, tin cans, i.e. soup cans, pet food	75
Newspapers	66
Cardboard boxes/ corrugated boxes	64
Bottles – wine, liquor, pop and juice	61
Glass jars/bottles, i.e. pickles	54
Paper products: egg cartons, paper towels, toilet paper rolls, wrapping paper	49
Plastic containers & tubs: cottage cheese, yogurt, sour cream, margarine	48







Aside from plastic food containers, this list of the most easily recalled recyclables is dominated by core materials that have been part of the blue box collection system since its inception.

There is a direct correlation between the number of blue boxes Hamilton residents put at the curb and the list of recyclables they recall on a spontaneous, unaided basis. With the exception of a couple of items, people who use two or more recycling boxes spontaneously mention more recyclables than those who report that they put only one box out for collection.

Respondents who noted that they recycled these items were then asked if they recycled "all or most", "some" or "very few" of each item. As the following table reveals the claimed rate of recycling was very high. Most respondents reported that they recycled "all or most" of their cans, newspapers, etc. Based on their recall, about 10% of items such as toilet paper rolls are not captured in the recycling bin.

Unaided Recall Items - Recycle:	All or most %	Some %	Very few %
Cans, tin cans, i.e. soup cans, pet food	95	4	1
Newspapers	95	3	-
Cardboard boxes/ corrugated boxes	94	4	1
Bottles – wine, liquor, pop and juice	95	3	2
Glass jars/bottles, i.e. pickles	93	5	2
Paper products: egg cartons, paper towels, toilet paper rolls, wrapping paper	89	8	2
Plastic containers & tubs: cottage cheese, yogurt, sour cream, margarine	91	6	2





# MIDDLE TIER RECYCLABLE ITEMS – 26-43%

Between 26% and 43% mentioned that they usually recycle these items, without prompting. The middle tier of unaided recyclable items covers several types of fibres (boxboard, junk mail/mail/computer paper, magazines) and plastic cleaning product containers.

Unaided Recall Items	Item %
Boxes i.e. cereal, tissue, cracker, cookie and detergent boxes	43
Mail, junk mail, flyers, computer paper, letters, etc.	40
Magazines	38
Household plastic containers, i.e. cleaners, shampoo, detergent, household cleaners, Windex, CLR, Fantastik	29
Plastic bakery trays and fruit trays	26

Again, residents were probed about their claimed recycling behaviour – did they recycle "all or most", "some" or "very few" of each item? As the table below reveals, most recyclers say they are diverting "all or most" of each of these second tier items. This pattern is similar to the one noted above for more easily recalled, popular recyclables.

Unaided Recall Items - Recycle:	All or most %	Some %	Very few %	Don't Know %
Boxes i.e. cereal, tissue, cracker, cookie and detergent boxes	94	4	2	-
Magazines	90	6	3	2
Mail, junk mail, flyers, computer paper, letters, etc.	90	7	3	1
Household plastic containers, i.e. cleaners, shampoo, detergent, household cleaners, Windex, CLR, Fantastik	89	8	3	1
Laundry products i.e. – bleach, detergent and fabric softener bottles	93	6	-	1
Plastic bakery trays and fruit trays	84	10	3	3







# **LOWER TIER RECYCLABLE ITEMS – 6 – 17%**

Lower spontaneous recall focused mainly on relatively recent additions to the list of recyclables, including: aluminum, Styrofoam, Tetrapaks, aerosol containers and paint cans. Less than one in five mentioned these items, with paint cans trailing all items at 6%. Some items are a regular part of the family garbage while others are not, for instance, telephone books are only replaced on an annual basis.

Better educated residents tended to better at remembering some of these less popular categories.

Unaided Recall Items	Item %
Laundry products i.e. – bleach, detergent and fabric softener bottles	17
Aluminum/foil plates	17
Styrofoam containers – takeout food containers, meat trays	15
Telephone books	14
Tetra packs/drink boxes/aseptic packaging	10
Aerosol containers i.e. spray paint, spray starch	8
Paint cans – empty and lids	6

And, did residents recycle "all or most", "some" or "very few" of each item? As noted for other more popular recyclables, respondents claimed that they recycled most of these lower tier items. The few exceptions were paint cans and aerosol containers.







Unaided Recall Items - Recycle:	All or most %	Some %	Very few %	Don't Know %
Laundry products i.e. – bleach, detergent and fabric softener bottles	93	6	-	1
Aluminum/foil plates	85	9	5	2
Styrofoam containers – takeout food containers, meat trays	86	5	3	6
Telephone books	95	2	1	2
Tetra packs/drink boxes/asceptic packaging	87	4	6	3
Aerosol containers i.e. spray paint, spray starch	71	14	14	2

# **AIDED RECALL**

Respondents who did not mention that they recycled a particular item on an unaided basis were then asked if they recycled it. Their recycling behaviour was probed for each item that they did not initially identify as one they regularly recycle.

As the table below indicates most people then claimed that they indeed did recycle it even if they had neglected to mention the particular recyclable initially. To illustrate, 75% of respondents spontaneously listed cans as one of the items they usually recycle and most (23%) of the remainder claimed that they recycled cans when they were asked specifically about the item. Therefore 98% (combined unaided and aided) of Hamilton recyclers claimed that they recycled cans and only 2% regularly put them in the garbage.







Aided Recall - Do they recycle:	Yes recycle %	N0, Not Recycle %
Cans, tin cans, i.e. soup cans, pet food	23	2
Newspapers	36	4
Cardboard boxes/ corrugated boxes	34	2
Bottles – wine, liquor, pop and juice	35	4
Glass jars/bottles, i.e. pickles	44	2
Paper products: egg cartons, paper towels, toilet paper rolls, wrapping paper	55	5
Plastic containers & tubs: cottage cheese, yogurt, sour cream, margarine	44	9
Boxes i.e. cereal, tissue, cracker, cookie and detergent boxes	53	4
Mail, junk mail, flyers, computer paper, letters, etc.	54	6
Magazines	57	5
Household plastic containers, i.e. cleaners, shampoo, detergent, household cleaners, Windex, CLR, Fantastik	64	7
Plastic bakery trays and fruit trays	55	14
Laundry products i.e. – bleach, detergent and fabric softener bottles	73	10
Aluminum/foil plates	52	31
Styrofoam containers – takeout food containers, meat trays	50	36
Telephone books	78	8
Tetra packs/drink boxes/aseptic packaging	68	22
Aerosol containers i.e. spray paint, spray starch	35	57
Paint cans – empty and lids	41	53





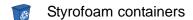


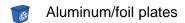
# **NEGLECTED BLUE BOX ITEMS**

The claimed rate of recycling most of the other recyclable materials is very high. However, at least one in five Hamilton residents admit that their household is not recycling the following items:

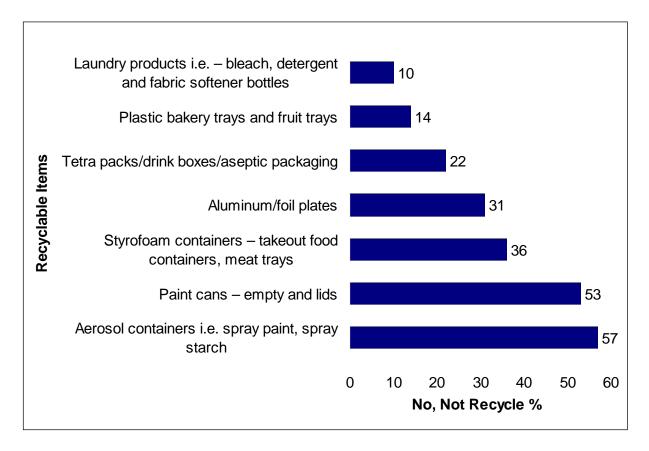








Some of the more recently introduced recyclables are still being landfilled. According to our Hamilton recyclers at least half of householders are not diverting their used aerosol containers and their empty paint cans. Also, potentially more frequently used packages such as styrofoam containers, aluminum pie plates, Tetrapaks, plastic bakery/fruit trays and plastic laundry product containers are being missed.









Recyclable Items	Less Likely to Recycle Item
Aerosol containers i.e. spray paint, spray starch	41-60 yrs. Large families
Paint cans – empty and lids	Widespread – no particular skew
Styrofoam containers – takeout food containers, meat trays	41-60 yrs. Large families
Aluminum/foil plates	Women, young adults (under 40 yr.)
Tetra packs/drink boxes/aseptic packaging	Widespread – no particular skew
Plastic bakery trays and fruit trays	Widespread – no particular skew
Laundry products i.e. – bleach, detergent and fabric softener bottles	Men, recent arrivals in community

# SUMMARY TABLE - UNAIDED AND AIDED RECALL

Items	Unaided recall %	Aided recall %	Total claimed %	Not recycling %
Cans, tin cans, i.e. soup cans, pet food	75	98	100	2
Newspapers	66	96	99	4
Cardboard boxes/ corrugated boxes	64	98	99	2
Bottles – wine, liquor, pop and juice	61	96	98	4
Glass jars/bottles, i.e. pickles	54	98	99	2
Paper products: egg cartons, paper towels, toilet paper rolls, wrapping paper	49	95	97	5
Plastic containers & tubs: cottage cheese, yogurt, sour cream, margarine	48	92	96	9
Boxes i.e. cereal, tissue, cracker, cookie and detergent boxes	43	96	98	4
Mail, junk mail, flyers, computer paper, letters, etc.	40	94	97	6







Items	Unaided recall %	Aided recall %	Total claimed %	Not recycling %
Magazines	38	95	97	5
Household plastic containers, i.e. cleaners, shampoo, detergent, household cleaners, Windex, CLR, Fantastik	29	93	95	7
Plastic bakery trays and fruit trays	26	81	86	14
Laundry products i.e. – bleach, detergent and fabric softener bottles	17	90	92	10
Aluminum/foil plates	17	69	74	31
Styrofoam containers – takeout food containers, meat trays	15	65	70	36
Telephone books	14	92	93	8
Tetra packs/drink boxes/aseptic packaging	10	78	80	22
Aerosol containers i.e. spray paint, spray starch	8	43	47	57
Paint cans – empty and lids	6	47	50	53

# RESIDENTS LIKE RECYCLING HAMILTON'S PROGRAM BECAUSE......

#### **MAIN BENEFITS:**

- Garbage reduction and waste reduction dominate. Women are much more focused on this outcome than men.
- Half of recyclers' mentions commented favourably on the blue box program its convenience, constant improvement, mass participation, and frequency and ease of collection were mentioned. Men were more likely to mention the program's convenience than women.
- one in four (27%) applaud it for saving resources it is good for the environment.
- Most respondents (88%) have something good to say about blue box recycling. Women are more verbal, have more positive comments about recycling; men have less to say.







Like most	Total mentions %
Saves landfill	39
Diverts waste	29
Convenient	24
Saves recyclables	16
Improving recycling	13
Good for the environment	11
Gets everyone recycling	9
Like weekly pickups	4
Like curbside pickup	2
Other	3
None/nothing	8
Don't know	4

# RESIDENTS DISLIKE RECYCLING BECAUSE......

Just over half of Hamilton's recycling population criticized the recycling program, while most of the remainder had no negative remarks. A range of factors were mentioned that bothered some recyclers, concentrating on the following:

- Collection issues (17%) They don't put the boxes back properly/neatly, leave a mess on street/sidewalk, they don't pick up everything, bad service/ don't come on time/too early/too late.
- Blue box matters (15%) Not enough room in boxes, Blue boxes too expensive, Need bigger boxes, Blue Boxes are too heavy.
- Individual Effort (13%) Too much effort/work, Don't like cleaning containers/dirty/smelly.
- Recyclables (11%) mixed comments: Should expand list of recyclables, Recycling program keeps changing.







Large families and those 41 to 60 years were most likely to complain about lack of blue box capacity. Well educated people were keen to see the list of recyclables expand as were those aged 41 to 60.

Dislikes	Total mentions %
Too much work/effort	11
Should expand list of recyclables	9
Not enough room in boxes	9
They don't put the boxes back properly/neatly	6
Leave a mess on street/sidewalk	5
Recycling not really working	3
Bad service/don't come on time/ too early/too late	3
They don't pick up everything	3
Don't like cleaning containers/dirty/smelly	3
Blue Boxes are too expensive	2
Recycling program keeps changing	2
Need bigger boxes	2
Blue Boxes are too heavy	1
Other	6
Don't know	5
None	41



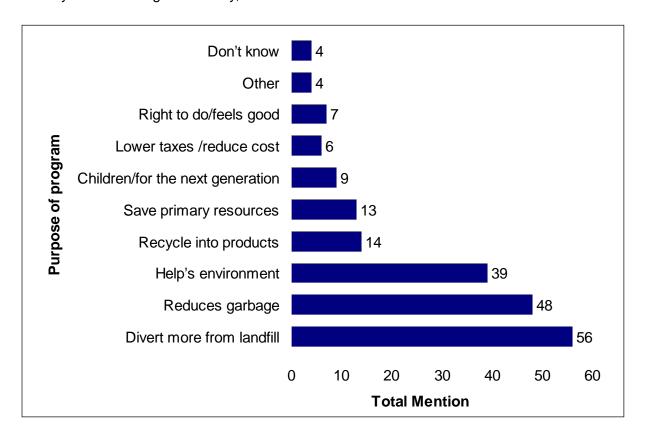


### **PURPOSE OF RECYCLING**

Respondents were asked their opinion of blue box recycling – what is the purpose of this program? As the data reveals Hamilton recyclers understand that blue box recycling has been introduced for the following purposes:

- Reduce garbage (48%) and divert these materials from landfill (56%). Aggressive recyclers (place two or more blue boxes at the curb) were most likely to mention this point. They also had higher recall of Hamilton's recycling messages.
- For the good of the environment (39%), benefits future generations (9%), it is a good thing/right thing to do (4%), and it makes people feel that they are helping (3%).
- Recycling also saves primary resources (13%) and provides materials for new products and packages (14%).
- Recycling has financial benefits in that it reduces Hamilton's operating costs (6%) and creates jobs (3%).

It should be noted that most residents had an opinion about the purpose of the program score with only 4% indicating uncertainty, skewed towards seniors.









### RATING PROGRAM WASTE REDUCTION EFFECTIVENESS

Hamilton recyclers rated the recycling program's effectiveness in reducing the amount of waste that goes to landfill. Using a scale from one to ten where one is the lowest score and ten in the highest score the average rating was <u>7.25</u>. Just over four in ten (44%) provided a score from eight to ten; they were even happier with the program's impact than the average.

The highest scores were provided by people aged 41 to 60 years and households with two or more occupants. They were less likely than others to be confused by recent program changes and found the recycling messages clear and easy to understand.

Less than one in five (17%) were unable to assign a rating.

### SUGGESTIONS TO IMPROVE CURBSIDE RECYCLING

Six out of ten Hamilton recyclers offered at least one suggestion for enhancing the blue box recycling program. While there were many factors that were seen to have a positive impact on the program, the majority were concentrated on:

- Public Education and Promotion (16%) skewed to larger households, post secondary education, professionals/managers and adults under 61 years.
- More blue boxes (15%) skewed to same sectors as identified above.
- Improve collection service (11%), more frequent collections (3%) tends to be more concentrated amongst those who are confused by recent program changes.
- Increase the list of recyclables (10%) again, this segment is more confused by the program's recent changes.

### Lower level mentions include:

- Introduce green box collection (7%) of particular interest to adults under 61 years, well educated residents and those who are professionals/managers.
- Bigger blue boxes (3%)
- Limit the number of garbage bags (3%)
- Ban recyclables from landfill (2%)







Just over four in ten were unable to comment on what could be done to improve Hamilton's recycling program. Lack of response was most evident among seniors, less educated residents. It should be noted that this pocket of recyclers had very positive perceptions of the program even though they were less likely than others to remember seeing the recycling messages.

Suggestions	First mention %	Total mentions %
Give out more blue boxes	12	15
Promote/advertise recycling	12	16
Better collection/more efficient collection	8	11
Increase the number of materials accepted	7	10
Add green box for organic/composting	6	7
More frequent collections	2	3
Nothing would help	2	3
Bigger recycling box	2	3
Limit number of garbage bags allowed	1	3
Refuse to allow recyclables in landfill	1	2
Other	4	6
Don't know	4	6
None	39	39

### FATE OF RECYCLABLES – WHAT HAPPENS TO THEM?

# ... WHEN THEY ARE PUT IN THE BLUE BOX

Most Hamilton recyclers believe that their blue box materials are being processed and reused; describing it accordingly:

Recycle (defined as to pass (a substance) through a system again for further treatment or use) – 61%





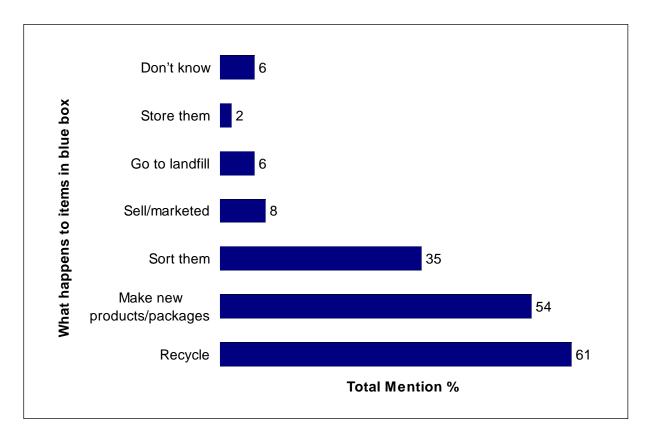


Remanufactured into new products/packages – 54%

Sort them - 35%

Sell/marketed – 8%

However, a small minority, 13% either don't know or think that their recyclables are being landfilled.



### ... WHEN THEY ARE PUT IN THE GARBAGE

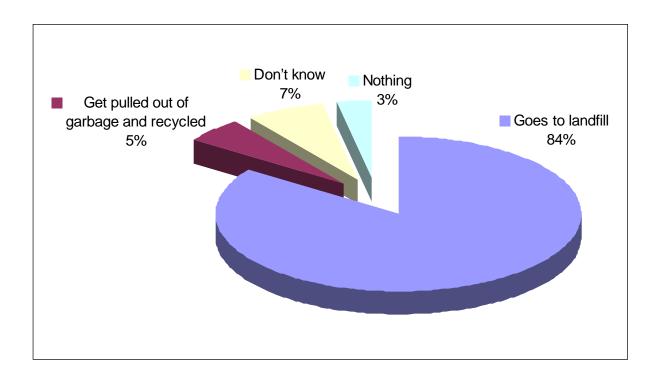
The majority (84%) of recyclers think that recyclables that are put in the garbage results in landfilling these items.

A minority of Hamilton recyclers, totaling 16% are not convinced that that recyclables are wasted when they don't bother to put them in the blue box. Some people simply don't know what happens to them and others imagine that garbage is sorted after collection to recover recyclable items.









#### REASONS FOR LESS EFFICIENT RECYCLING – OTHER PEOPLE

Most Hamilton recyclers had a theory or two why some people fail to recycle items that belong in the blue box. Possibly, they have personally experienced some of these barriers themselves.

The list of factors that were seen to influence people's recycling behaviour covered the following items:

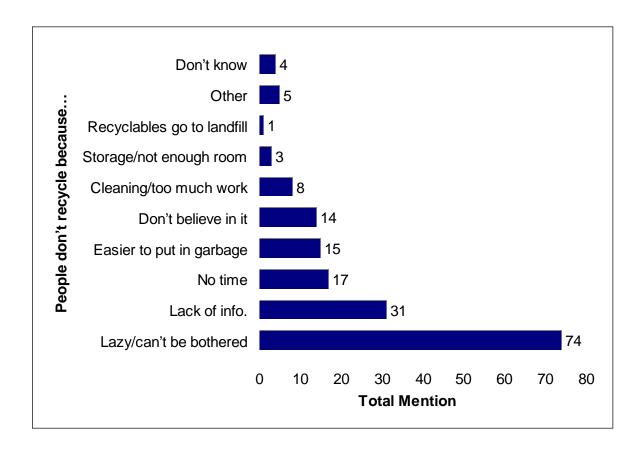
- "Lazy/can't be bothered" (74%) people in all population segments agreed that this was the leading reason for not recycling efficiently.
- "Don't have the proper information" (31%) non-seniors, well educated people, professionals/managers tended to think that less efficient recycling was a function of ignorance. Expanding public education was the way to help people recycle more effectively.
- "Easier to put in the garbage" (15%) "too much work" (8%) a combination of lack of convenience and the demands of recycling were seen to work against recycling.
- "Time/no spare time" (17%) lack of sufficient time to segregate materials could result in less recycling.





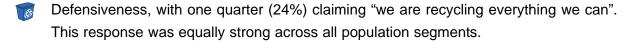


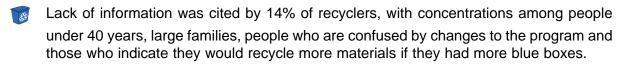
- "Don't believe in recycling" (14%) opposition to recycling was sited as a barrier for some people.
- Very few residents mentioned factors such as infirmity/physical barriers or lack of hygiene.



### REASONS FOR LESS EFFICIENT RECYCLING - SELF

Hamilton recyclers, most of whom are not diverting 100% of their recyclables, had quite a different response to this issue when it pertained to their own recycling behaviour. Here is a list of their reactions:





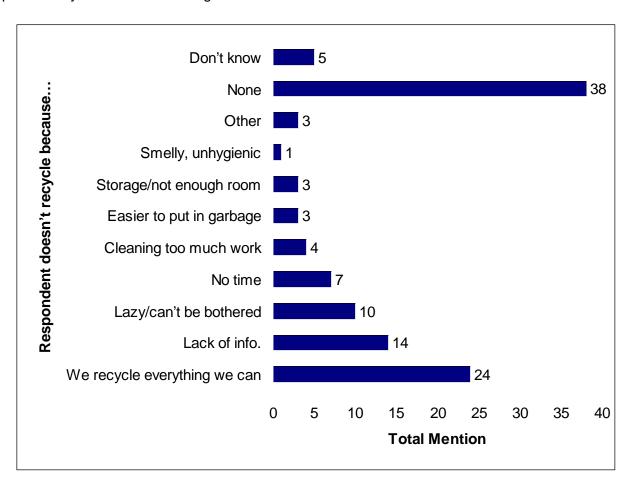






- Laziness was acknowledged by 10% of recycling. This reaction was concentrated in young adults (under 40 years).
- Time pressures (7%) affected a small proportion of recyclers.
- Too much work" and "easier to put in the garbage" were admitted by a total of 8% of recyclers.
- The remaining minority cited a variety of factors such as "not enough storage room", "don't believe in recycling (only five residents) and sickness.

Almost four in ten (38%) indicated that they had no excuses. While this response applied to all population sectors it was more concentrated among seniors and people who lived alone, presumably low volume waste generators.









#### RECYCLING ATTITUDES AND PERCEPTIONS

#### **RECYCLING MOTIVATORS**

USAGE OF RECYCLABLES - Three quarters (75%) of Hamilton recyclers agreed that they would put more effort in recycling if they knew that their recyclables were being remanufactured into new products and packages. This is a reward for their effort, knowing that these materials are being reused. While this response was common across all population sectors it was particularly strong among those who claim to be confused by recent program changes and those who report that they would recycle more if they had more blue boxes.

GUILT DRIVES RECYCLING – Almost six in ten (59%) confess that guilt prompts them; when they don't recycle they feel remorse. This reaction was particularly evident among women, professionals/managers, large families and people who had moved into the community in the past five years. Men and seniors on the other hand, are less likely to experience self-reproach when they don't recycle.

### **RECYCLING BARRIERS**

Lack of Capacity – Just under half (46%) of Hamilton recyclers claim that they do not have enough blue boxes for their eligible materials. This problem was most evident among large families, generally large waste generators, renters and those who are confused by recent program changes. However, only one in five (19%) admit that they actually stop recycling as soon as their blue box is full. This response was more prevalent among young adults (under 40 years) than other sectors.

Confusion – Four in ten (39%) report that they are sometimes confused given that the program "seems to be changing a lot." This factor was more evident among people who had less education, lower program effectiveness raters, and those who would recycle more if they had more blue boxes.

Time Constraints – lack of time effects 22% of recyclers. Those who were most likely to cite this reason worked in non-professional occupations and tended to live alone.

Opposition to Recycling – Only 15% of respondents reported that their efforts to recycle are impeded by other households members who are against it. While it was more evident in some groups than others the most problematic instance of this was found among larger families.

### **COLLECTION ISSUES**

Co-mingling – About half (48%) of the recycling population agreed that collection crews throw all the recyclables that householders have separated into the truck. While in itself this might not be negative for some residents, some focus group participants were disturbed by this practice. It begged a lot of questions, such as: What happens to these items if they are all mixed







together? Did this mean that they are again resorted? Is this an efficient handling method? Why insist that householders separate their materials?

The remaining half of the sample was evenly divided between those who disagreed that the materials are co-mingled and those who did not know the answer.

Statements	Strongly agree %	Somewhat agree %	0,	Somewhat disagree %	Don't know %
Sometimes I don't recycled because I don't have time	10	12	63	13	1
If I knew that recyclables were being made into new products & packages I would make more of an effort to recycle them.	58	17	13	7	5
Sometimes I am confused because Hamilton's recycling program seems to be changing a lot.	17	22	30	24	7
I would recycle more things if we had another blue box.	31	16	35	16	3
I usually stop recycle as soon as our blue box is full.	11	8	66	13	2
I would like to recycle more but other members of our household do not want to recycle.	7	8	70	11	4
When I don't recycle as much as possible, I feel guilty about it.	7	8	70	11	4
The collection crew throws everything together in the truck after I have sorted it.	31	17	16	11	26





### HAMILTON RECYCLING ADVERTISING RECALL AND AWARENESS

### **INTRODUCTION**

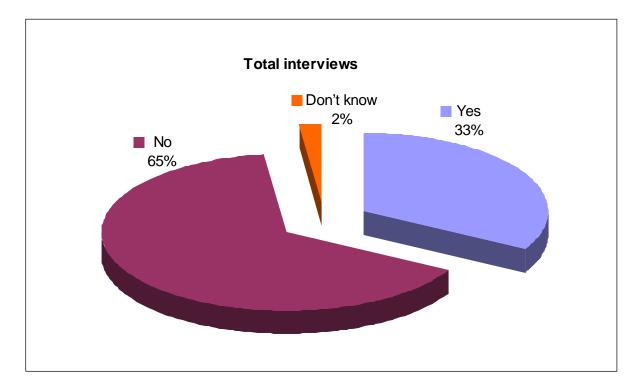
The level of recall of Hamilton's recycling public education advertising was measured on both an unaided and on an aided basis. Also, content of awareness and the source of each message was examined.

### **UNAIDED AWARENESS**

### **MESSAGE AWARENESS**

As a starting point all residents (recyclers and non-recyclers) were asked if they had seen or heard any messages about recycling in Hamilton.

One third (33%) of the recycling population claimed that they recalled messages, pertaining to a variety of campaign components (see section that follows) . The awareness scores were relatively consistent across all sectors of the community.







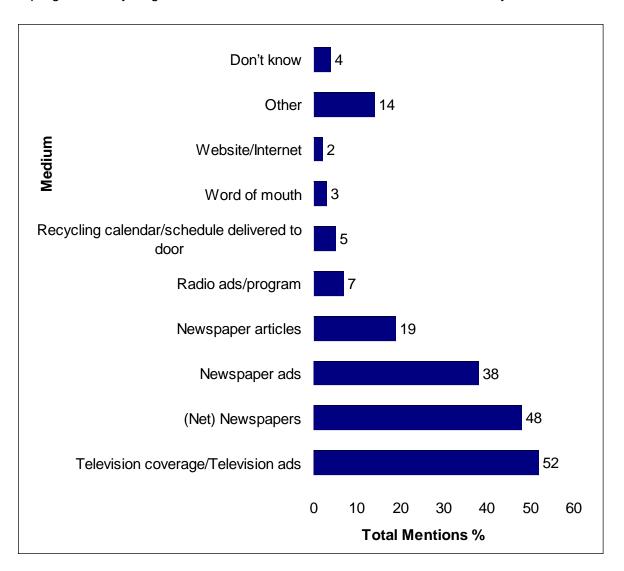


### MESSAGE SOURCE

Among the one third of the population that claimed that they had indeed seen or heard messages about recycling, there was high recall for both the "blue Box Man' television messages and those that appeared in Hamilton newspapers – 52% and 48%, respectively. It is surprising to reach such a high level of awareness for the print medium; television messages usually generate considerably higher recall.

Newspaper references to the blue box program included the Hamilton recycling campaign, material-specific ads and also articles or editorial references about recycling or waste management issues.

Also, there was much lower, unaided recall of other communication mediums: radio ads/programs, recycling calendar, word of mouth, the internet and community events.









### MESSAGE CONTENT - TELEVISION ADS

Blue Box Man was the star of the television campaign, dominating unaided recall. Three quarters (74%) of people who said they had seen one or more of the messages mentioned the hero. The exact content of this recall describes this character as "Blue Box Man/Blue Superman/Funny blue man". While these descriptors dominated, smaller numbers of viewers referred to specific messages with "Blue Man/Recycling in the bathroom" was the leading item. There was much lower reference to those ads that featured recycling in the laundry or the kitchen. And, there was no specific mentions of the message about recycling in the bedroom.

A small number of people who claimed that they had seen the television ads recalled more general themes such as "promoting recycling" and "about recycling lots of things." Less than one in ten were unable to recall any specific content.

Blue Box Man recall was highest among women, much more so than men. And this same rule applied to the somewhat controversial Blue Box Man in the Bathroom message.

Ads	Total %
(Net) Any Blue Man	74
Blue Box Man/Blue Superman/Funny blue man	55
Blue man/ Recycling man in bathroom	27
Blue man/ Recycling man in laundry	3
Blue man/ Recycling man in kitchen	2
Promoting recycling	7
About recycling lots of things/more things	5
Funny/crazy TV ads	3
'out of the bag, into the box' slogan	1
Other	3
Don't know	8
Nothing	5







### MESSAGE CONTENT - NEWSPAPER ADS

Recall of the print campaign was scattered over a number of topics. The biggest single category pertained to "listing what could be recycled" (40%). About one in ten (9%) mentioned Blue Box man, who did not feature in the newspaper campaign. Smaller numbers of residents made specific reference to particular recyclable materials: paper, computer paper, scrap paper, chubby/plastic bottles, wine bottles, tin cans, pickle jar and paper boxes/hair colour boxes.

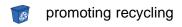
Ads	Total %
Listing what could be recyclable	39
Blue Box man	9
Paper, computer paper, scrap paper	7
'Out of the bag, into the box'	6
Cubby/plastic bottles	5
Wine bottles	5
Tin Cans	5
Pickle jar	5
Paper boxes/hair colour boxes	4
Other	11
Nothing	5
Don't know	18

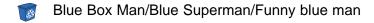




### **MESSAGE CONTENT – OTHER ADS**

Recycling messages that residents recalled seeing on an unaided basis in mediums other than television or newspapers - radio ads/programs, recycling calendar, word of mouth, the internet and community events also had impact. While about half of respondents who cited these other sources could not recall specific content those who did so focused on a few themes:





8	About recycling lots of things/more things
60	The car is eyemig fore or a mige, more a minge

Ads	Total %
Promoting recycling	20
Blue Box Man/Blue Superman/Funny blue man	14
About recycling lots of things/more things	14
Long ads TV ads	1
'out of the bag, into the box' slogan	1
Other	20
Don't know	18
Nothing	30

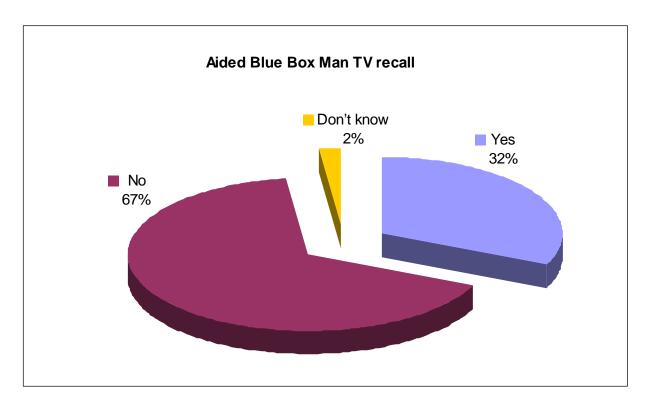




### **AIDED AWARENESS**

# **TELEVISION 'BLUE BOX MAN'**

When prompted, about one third (32%) of the population claimed that they had seen the television ads that featured Blue Box Man "who rushed around the house finding lots of things that could be recycled". Awareness of the campaign on an aided basis was higher among these sectors: women, seniors, retired people, adult-only households, families with one or two children.



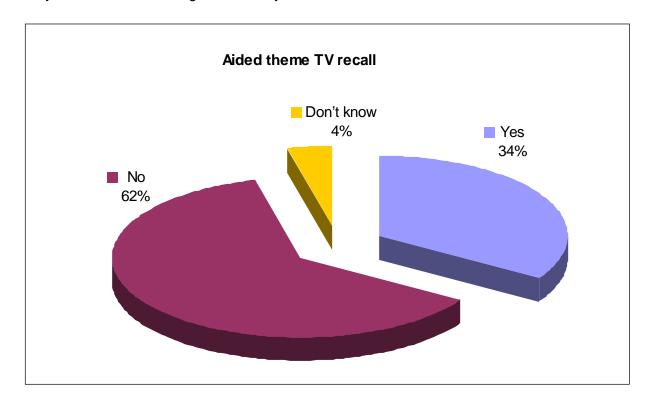






# TELEVISION THEME 'OUT OF THE BAG AND INTO THE BOX'

With prompting one third (34%) indicated that they remembered the campaign slogan, 'Out of the bag and into the box'. Women and residents without post secondary reduction were most likely to remember the slogan once they were reminded of it.









Ads	Total %
(Any) Blue Box Man/Blue Superman/Funny blue man	46
Listing what could be recyclable	19
Promoting recycling	10
About recycling lots of things/more things	7
Paper, computer paper, scrap paper	4
'Out of the bag, into the box' slogan	4
Cubby/plastic bottles	3
Wine bottles	3
Tin cans	3
Pickle jar	2
Paper boxes/hair colour boxes	2
Funny/crazy TV ads	1
Other	8
Nothing/don't know	12

### COMBINED UNAIDED AND AIDED AWARENESS - BLUE BOX MAN

Just over four in ten (42%) of Hamilton recyclers claimed that they had seen one or more of the Blue Box Man television messages. Here are the key findings:



of the four in ten (42%) remembered seeing Blue Box Man – 15% mentioned it without any prompting and another 27% were able to remember this character once he was mentioned.



Overall recall of Blue Box Man was much higher among women than men. And it registered both with those living in adult only households and those with children.



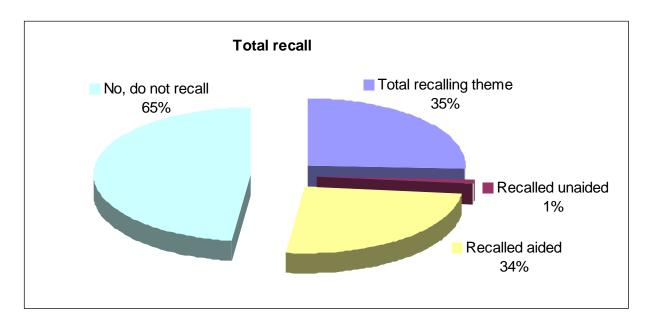
About six in ten (58%) Hamilton recyclers could not remember having seen any of the Blue Box Man television ads. Lack of awareness was particularly high in larger households, the major waste generators.





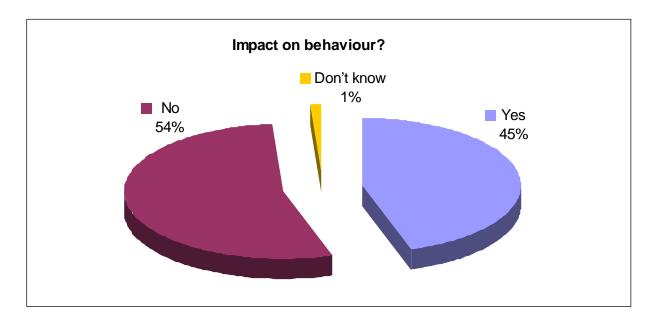


Total unaided and aided recall of television ad promoting theme "Out of the bag and into the box"



### **IMPACT OF BLUE BOX MESSAGES**

Almost half (45%) of Hamilton recyclers who saw one or more of the blue box recycling messages claimed that this exposure had an impact on the way they are dealing with waste. People living in larger households, those with three or more children and adults under 60 years were most likely to have been affected by the ads.

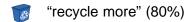






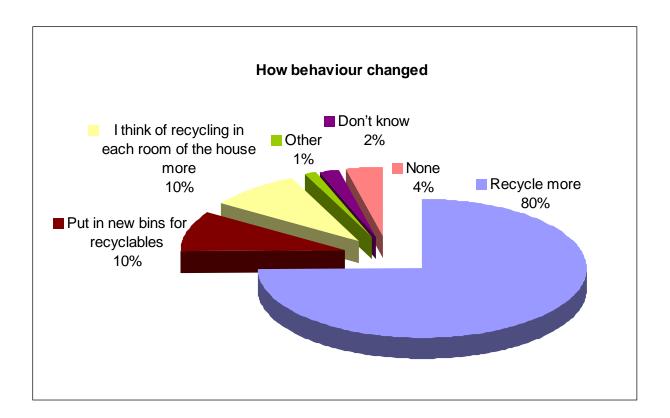


### Specific impacts were:



put in new bins for recycling" (10%)

"I think of recycling in every room." (10%), most prevalent among women.



### HAMILTON RECYCLING CALENDAR

### RECALL RECEIVING THE CALENDAR

Annually, Hamilton sends residents a new recycling calendar complete with a full description of what can be recycled and diverted through other programs (household hazardous waste, bulk goods, leaf and yard waste, etc.).

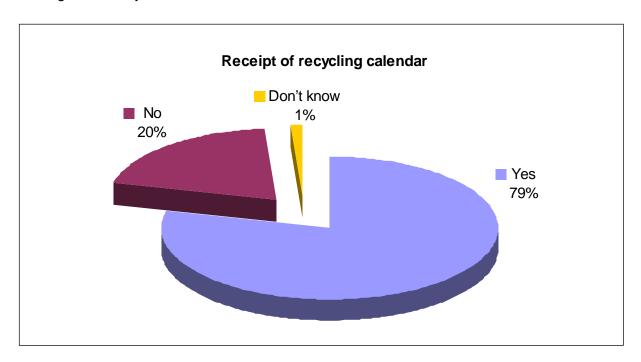
About eight in ten (79%) recall receiving their recycling calendar. Residents who report that they got this item are more likely than the 20% of the population who claim that they did not receive it not to be confused by recent changes in the program. Also, the former segment







(recall getting the calendar) have a higher recall of advertising messages and find that the messages are easy to understand.



# **RETAINED THE CALENDAR**

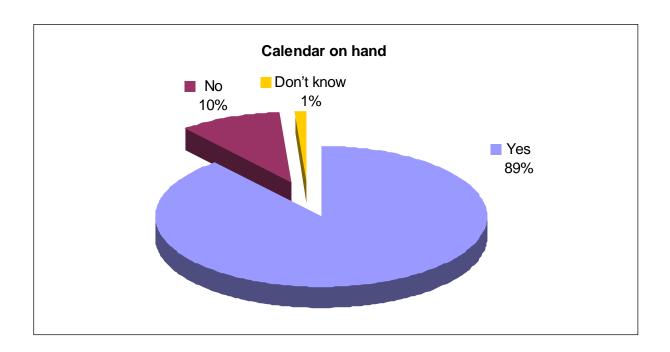
The calendar retention rate is high. Nine in ten (89%) of those who said they received the calendar indicate that they kept it for reference. Seniors were more likely to have it while young adults were more inclined than other segments to dispose of it.

Residents who have retained the recycling calendar are more likely to place two or more boxes of recyclables at the curb, while those who do not keep it tend to place only one box out for collection.



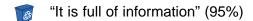


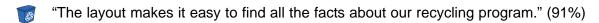




# **ASSESSING THE RECYCLING CALENDAR**

Most people who kept the calendar agree that





<b>E</b>	"I was surprised to see all the things that can be recycled." (76%) - skewed towards
	women and younger adults.

Statements	Agree %	Disgree %	Don't Know %
I kept it on hand for reference	97	2	1
It is full of useful information	95	3	3
The layout makes it easy to find all the facts about our recycling program	91	5	4
I was surprised to see all the things can be recycled	76	21	3







### **IMPROVING THE RECYCLING CALENDAR**

Respondents were invited to suggest ways of improving their recycling calendar.

More than half of residents (54%) were satisfied with the calendar as it is. And, another 17% were unable to make any suggestions

However, the remaining minority offered some tips on strengthening its value.

- Size of printing, skew people 41 to 60 years.
- Not enough information, more likely men and people under 40 years.
- Should expand the list of recyclables, mainly women.
- Simplify the messages/messages too complicated
- Send it more often/people tend to lose them.
- More bulk item days service frequency issue.
- Make it like a fridge magnet/can stick on fridge

There were also a few scattered comments: too many information, too many pictures, more pick-up days, not enough pictures.

Suggestions	Total %
Size of printing	6
Not enough information	6
Should expand list of recyclables	3
Messages too complicated	2
Send it more often/people tend to lost them	2
More bulk item days	2
Make it like a fridge magnet/can stick on fridge	2
Other	8
Don't know	17
Nothing	54







### **INTEREST IN OTHER RECYCLING TOPICS**

The level of interest in three specific topics were examined among Hamilton recyclers.

- 77% indicated a desire to obtain a complete list of recyclables
- 68% wanted tips for recycling
- 66% were interested in knowing what happens to recycled items

Women were more interested than men in all three topics.

Statements	Yes %	No %	Don't Know %
Tips for recycling	68	32	1
A complete list of all things that can be recycled	77	22	1
What happens to recycled items	66	34	1

### RATING HAMILTON'S RECYCLING PROGRAM

Hamilton recyclers rated their recycling program from a number of aspects, using a rating scale from one to ten where one is the lowest score and ten is the highest score.

Rating Levels -

- The program's convenience and ease of recycling using blue boxes received the highest score 8.2 and 8.1 respectively.
- Facts on how to take part in the program 7.6
- Consistently effective service on the part of the collection crews 7.5
- Overall evaluation of the recycling program 7. 5
- Clarity of messages used to encourage recycling 7.3









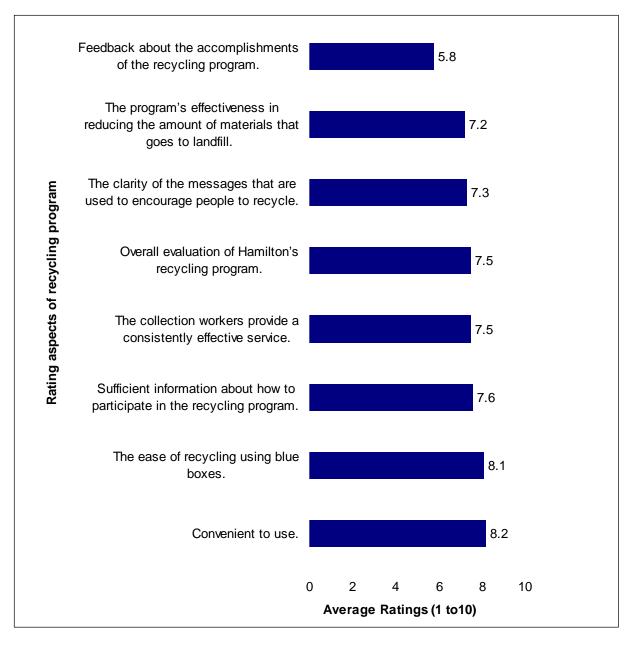
Program effectiveness in reducing the amount of materials that go to landfill - 7.2

It is noteworthy that women assigned higher ratings than their male counterparts on all the above factors.

The one area that scored below acceptable levels was program successes:



Feedback about the accomplishments of the recycling program – 5.8









# **CONCLUSION**

Based upon the findings outlined in this report, and the findings of the focus group research, it will be possible to make a number of key recommendations to assist the City as it moves forward with a new media campaign and drives toward its recycling targets.







# **APPENDIX 2:**

# **DETAILED FINDINGS FOCUS GROUPS**

### *METHODOLOGY*

4 focus group meetings took place, two each during the evenings of November 28 and November 29, 2005. Recruiting for the groups was done based upon the following criteria:

- recruit 10 for eight to participate;
- all residents will have access to curbside recycling;
- two groups of women and two groups of men (This will show gender differences and allow appropriate targeting of messaging depending on roles in household waste management);
- heads of household;
- age range 25 and over (including retirees);
- most participants will represent households with two or more members; no more than three living alone;
- half of households will have child/children under 18 living at home;
- mix of occupations, education and ethnic backgrounds;
- respondents will include urban, suburban and small centre/rural communities

Two groups of women were recruited, and two groups of men were recruited. In general, the groups conformed to these criteria, however, participants were largely from the "urban core" of the city.

A focus group guide (See Appendix 4) was used to direct the discussions. The outcomes of these discussions are described in detail below.







### FEEDBACK ON HAMILTON'S RECYCLING PROGRAM

Participants were invited to discuss their overall impressions of and experience with the city's recycling program. Key points raised across the sessions were:

- collectors provide valuable feedback to recyclers.
- Inconsistent collectors confuse respondents.
- Collectors leave a mess behind with no constructive feedback.
- Many are uncertain how to prepare items for recycling and exactly which items are recyclable. This is particularly true for newer items on the recycling calendar, and newer items on the market.

### RECYCLING PARTICIPATION

The City of Hamilton seems to enjoy a very high rate of recycling participation. The following key points were raised during the discussion regarding recycling participation.

- Near universal participation with great variety of commitment
- Both men and women are involved in recycling, sometime kids are active too
- Women tend lead, task part of "women's work"
- A few men refuse to participate in recycling or just do the minimum

### **CAPTURING RECYCLABLES AT HOME**

Participants in the focus groups are mainly recycling traditional items in the kitchen and bathrooms, to a lesser extent. This points to a great opportunity for the City to capture currently missed items. Key points raised during this discussion were:

- The majority of recycling is gathered within the kitchen area.
- Collection occurs between the bathrooms and kitchen.
- Plastic water, pop bottles and newspapers are a primary recyclable category.
- Lack of separate waste containers require manual sorting later, an unpleasant chore.
- More little bins needed to separate recyclables at source, especially in the bathroom.







#### AWARENESS OF RECYCLABLE ITEMS

When asked about the items that are accepted in the recycling program, there were a number of themes in responses from across all four groups. These were:

- Awareness of first generation materials (newspapers, card board, cans, glass bottles and plastic containers).
- Low awareness for second generation materials (aerosol cans, toilet paper rolls, tooth paste boxes, coffee take out trays, empty medicine/vitamin containers, empty paint cans).
- Frustration that Styrofoam is listed as a recyclable item but not collected.

#### PUBLIC EDUCATION MESSAGING

#### REACTIONS TO EXISTING TV MESSAGES

Focus group participants were shown all of the Blue Box Man commercials. The responses to the advertising were quite strong across all of the groups. There was a very high recognition of Blue Box Man among participants. This is the good news. However, in general, the reactions were not positive. Participants felt that:

- Blue Box man shows how not to recycle, given requirement to separate streams
- there are too many visuals, "here is what you recycle", moving too quickly
- Bathroom ad is the most notorious and troubling, Bedroom commercial is "scary", as it could imply that there is a "break and enter" taking place.
- Kitchen and Laundry commercails were more positively received.

#### PRINT ADS

In contrast to the responses regarding the television commercials, print ads had a lower recall, while participants were more receptive to their presentation. In particular, there was:

- Low recall, respondents mainly not newspaper readers. This is in contrast to those in the "other" areas who responded to the telephone survey, who had a higher recall of the ads.
- Limited impact through messaging







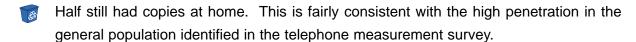


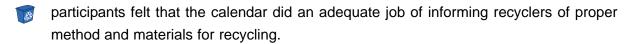
Positive response regarding format of advertisements and use of this media.

Participants felt that messaging should reinforce current messages and educate residents about known and "new" recyclables.

### **DIRECT MAIL - CALENDAR AND LIST OF RECYCLABLES**

During this segment of the focus group sessions, participants were asked about the recycling calendar. Feedback included:





One message that participants felt would be of great use would be for the City to let people know what happens to recyclables after they are collected. Participants were also interested in learning how the city's program is progressing or the challenges it faces.

#### MOST EFFECTIVE WAYS TO REACH RECYCLERS

Focus group participants felt that the following media were effective at reaching out with recycling messaging.





#### **DESIRED MESSAGES**

The following messages were identified as being keys to inspiring participation:

- Repetition of recyclable materials
- Outcome what happens to recyclables new products and packages?
- Before and after demonstrate waste reduction with efficient recycling. Demonstrate explicitly how recycling reduces garbage
- Progress report & the goal how are we doing?
- What is happening to our recyclables? Show positive results







### **DIFFERENCES IN GROUPS**

One of the key differences that can be highlighted is the difference in gender responses. Female participants tended to be more active and enthusiastic recyclers, while men assumed the responsibility of placing the boxes at curbside. Both groups felt some disappointment and frustration when collectors left materials behind or left a mess to be cleaned up.

### **CONCLUSION**

The results of the focus groups provide anecdotal support to the outcomes of the telephone survey. The focus group participants have provided valuable insights into the City's media campaign and key areas where "tweaks" can be made to improve capture and participation rates. It is suggested that the recommendations be considered when developing the next media campaign. Testing should be carried out before the campaign (focus groups) to pilot any new messages, and once the campaign has been run. In this way, the City can continue to monitor its success and identify way of improving and moving toward its diversion targets.



