

Residential Customer Survey Results

Presented to:



Environmental Services Department



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Methodology

Survey Execution

A telephone survey was executed from November 12 – 13, 2014

Sampling Frame

All residential customers in the COT ESD database with a telephone number.

Sampling Method

A random sample of all eligible respondents from the above sampling frame was utilized.

Sample Size

The survey sample is 600, with 100 respondents from each of the six city wards. Thus using a 95% confidence interval, the margin of error is calculated as +/- 4.0%. (the following page has a more precise breakdown of sample error on an individual question basis)

Methodology

Expected error for individual questions based on sample size and result (%) at the 95% confidence interval

Result % → Sample Size ↓	10%	20%	30%	40%	50%	60%	70%	80%	90%
N = 50	8.3%	11.1%	12.7%	13.6%	13.9%	13.6%	12.7%	11.1%	8.3%
N = 75	6.8%	9.1%	10.4%	11.1%	11.3%	11.1%	10.4%	9.1%	6.8%
N = 100	5.9%	7.8%	9.0%	9.6%	9.8%	9.6%	9.0%	7.8%	5.9%
N = 150	4.8%	6.4%	7.3%	7.8%	8.0%	7.8%	7.3%	6.4%	4.8%
N = 200	4.2%	5.5%	6.4%	6.8%	6.9%	6.8%	6.4%	5.5%	4.2%
N = 250	3.7%	5.0%	5.7%	6.1%	6.2%	6.1%	5.7%	5.0%	3.7%
N = 300	3.4%	4.5%	5.2%	5.5%	5.7%	5.5%	5.2%	4.5%	3.4%
N = 350	3.1%	4.2%	4.8%	5.1%	5.2%	5.1%	4.8%	4.2%	3.1%
N = 400	2.9%	3.9%	4.5%	4.8%	4.9%	4.8%	4.5%	3.9%	2.9%
N = 500	2.6%	3.5%	4.0%	4.3%	4.4%	4.3%	4.0%	3.5%	2.6%
N = 600	2.4%	3.2%	3.7%	3.9%	4.0%	3.9%	3.7%	3.2%	2.4%

The chart to the left is a summary of the calculations of the expected error when evaluating an individual result at the 95% confidence interval. For example, if 350 respondents answered a particular question, and 30% held a certain opinion (e.g. they agreed with “the statement” in question), then you could surmise that the actual result would be within + or – 4.8% of the 30% who agreed with the statement.

Please note that the error range is valid only in relation to the sample population of each individual question (those who qualified to respond to the question) and may not be applicable for the sample population of the entire survey.

Results/Statistical Testing

Segmentation Analysis

ANOVA or Independent Samples T-Tests (with significance levels = .05) are utilized to determine whether or not respondents within various segments are significantly different in their responses from others within the sample population (e.g. is there a significant difference between the responses for Males and Females for a particular question, or did 18 – 34 year olds provide significantly different answers than those from all other age groups?). Significant differences are indicated by individual letters below each individual result (e.g. if the letter “A” appears in column “C,” then the result for column “C” is significantly greater than the result for column “A”).

Cluster Analysis

Cluster Analysis is a statistical technique that results in objects (i.e. respondents) being grouped into various clusters based on the overall similarity of their answers. A cluster is a group of relatively homogeneous cases or observations, in which objects inside of a cluster are similar to each other and are simultaneously dissimilar to objects outside the cluster, particularly those within other clusters (i.e. each cluster contains respondents who have provided responses that are 1) similar to those of others within the cluster and 2) dissimilar to answers provided by individuals outside of the cluster).

Executive Summary of Findings

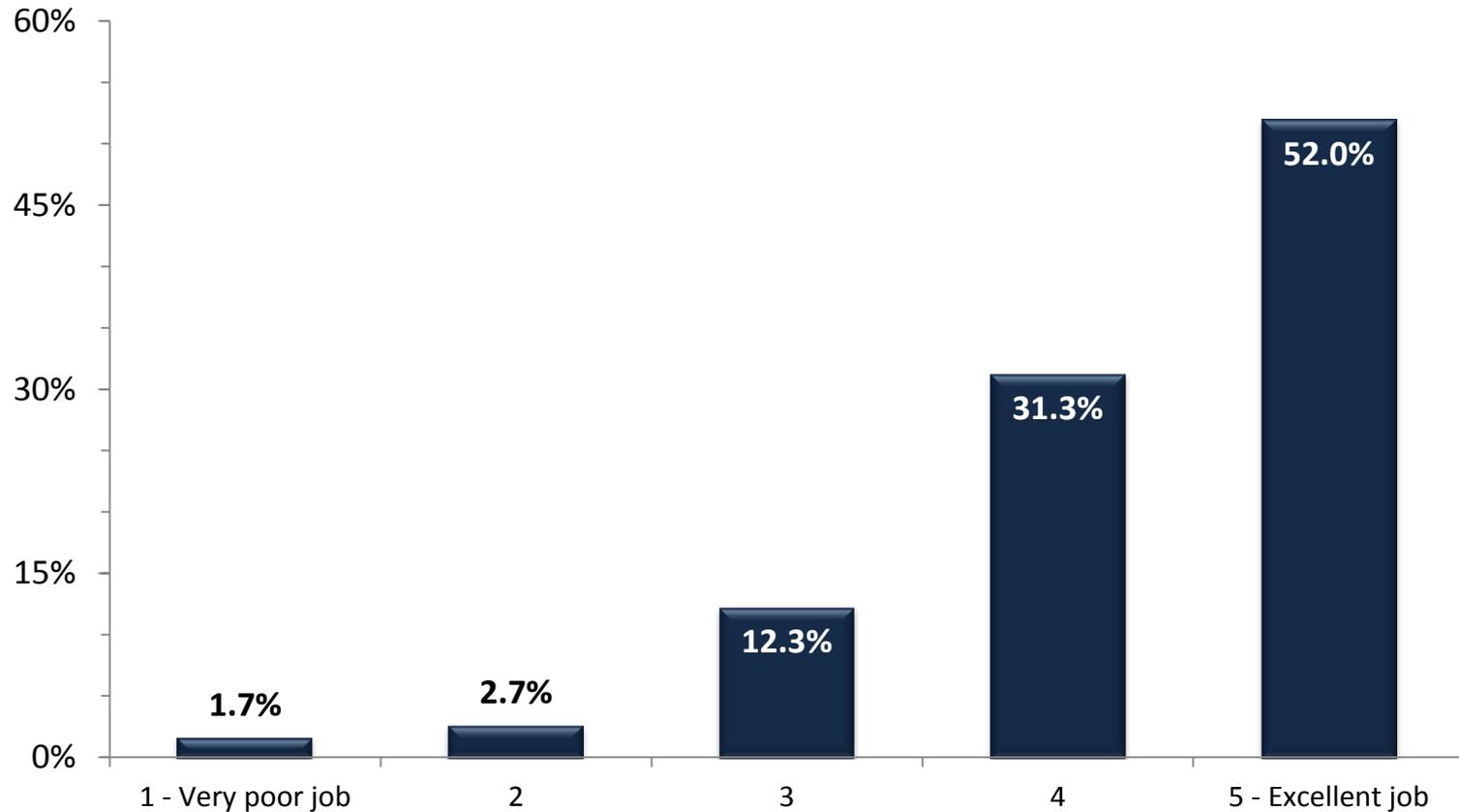
- The percentage of ESD residential customers rating the performance of the department and the individual services provided as “Excellent” has increased over previous periods
- Most residential customers are using their blue barrel recycling containers, with 86% doing so on at least a semi-monthly basis
- Charging for other services may require communications about the benefits to customers, at the \$10 price point:
 - 21% are willing to pay for the hazardous waste service
 - 12% for collection of landscape waste
 - 8% for the collection of food waste

Executive Summary of Findings

- Information sources delivered directly by the COT (inserts in utility statements/door hangers) have the greatest current recall and along with a website are the preference of most residents to receive information about ESD services
- City residents are likely to look for information about service schedules AND recycling/waste reduction information
- Many residents would utilize the ESD website to find information about service offerings, while use of Facebook and Twitter would likely require educational efforts (even among younger residents)

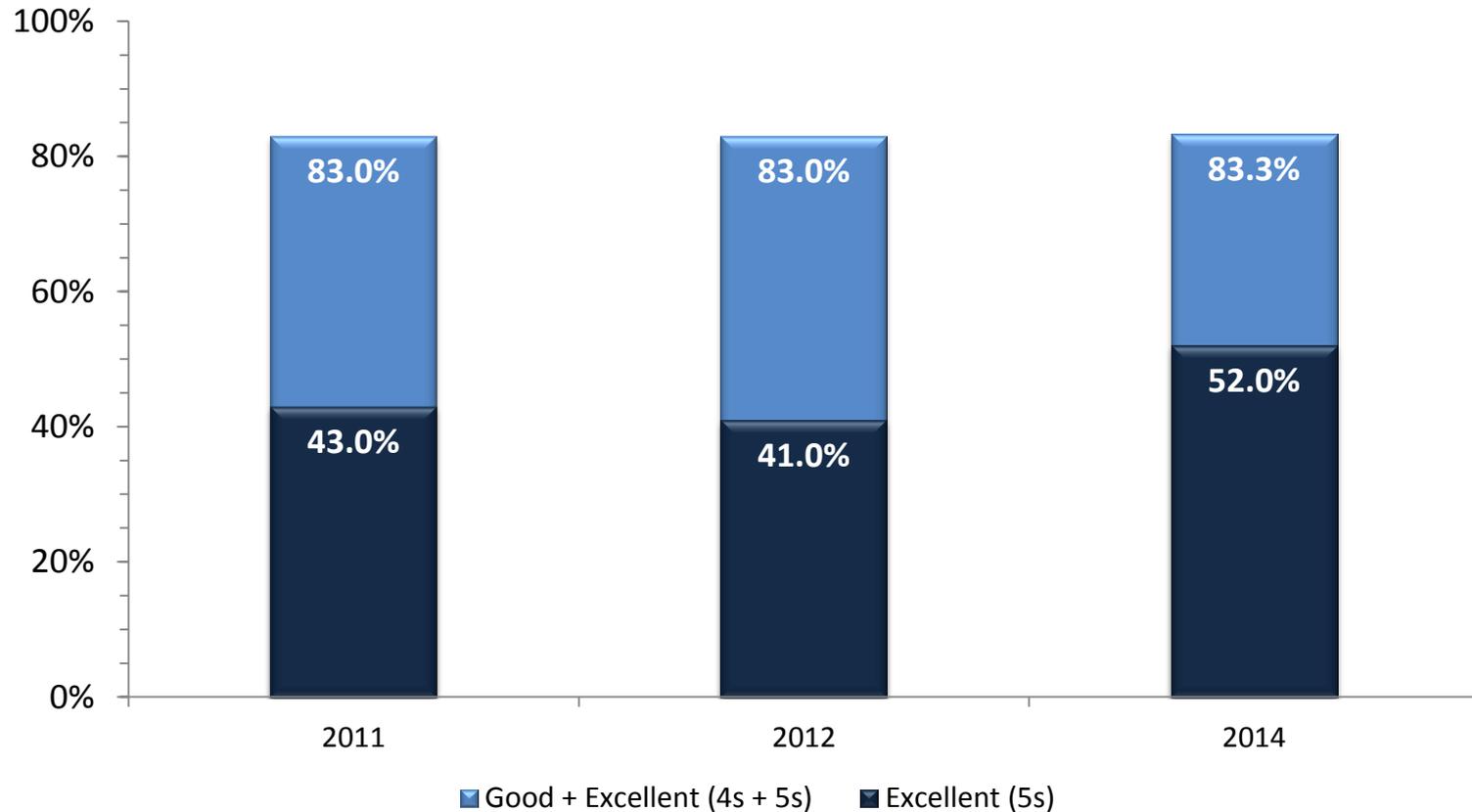
More than one-half of all residential customers feel the ESD is doing an “excellent” job and greater than four-fifths assess the department’s performance as at least a “4” on a 5-point scale

Overall assessment of the COT – Environmental Services Dept



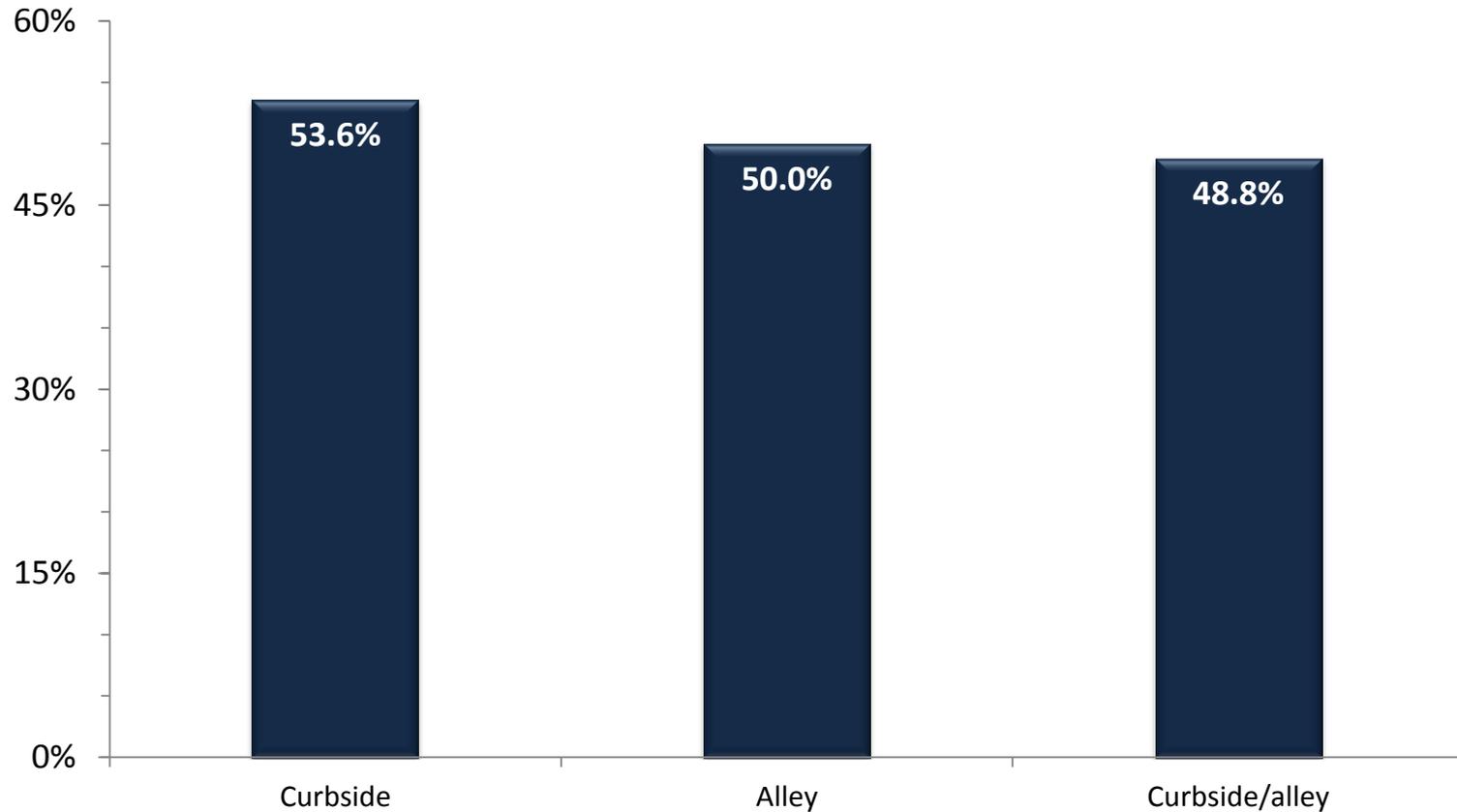
While the COT – ESD maintains a consistent satisfaction level (4s + 5s on a 5-point scale) over the last three years, the percentage of residential customers indicating the department is doing an “excellent” job has increased

Overall assessment of the COT – ESD (Trend)



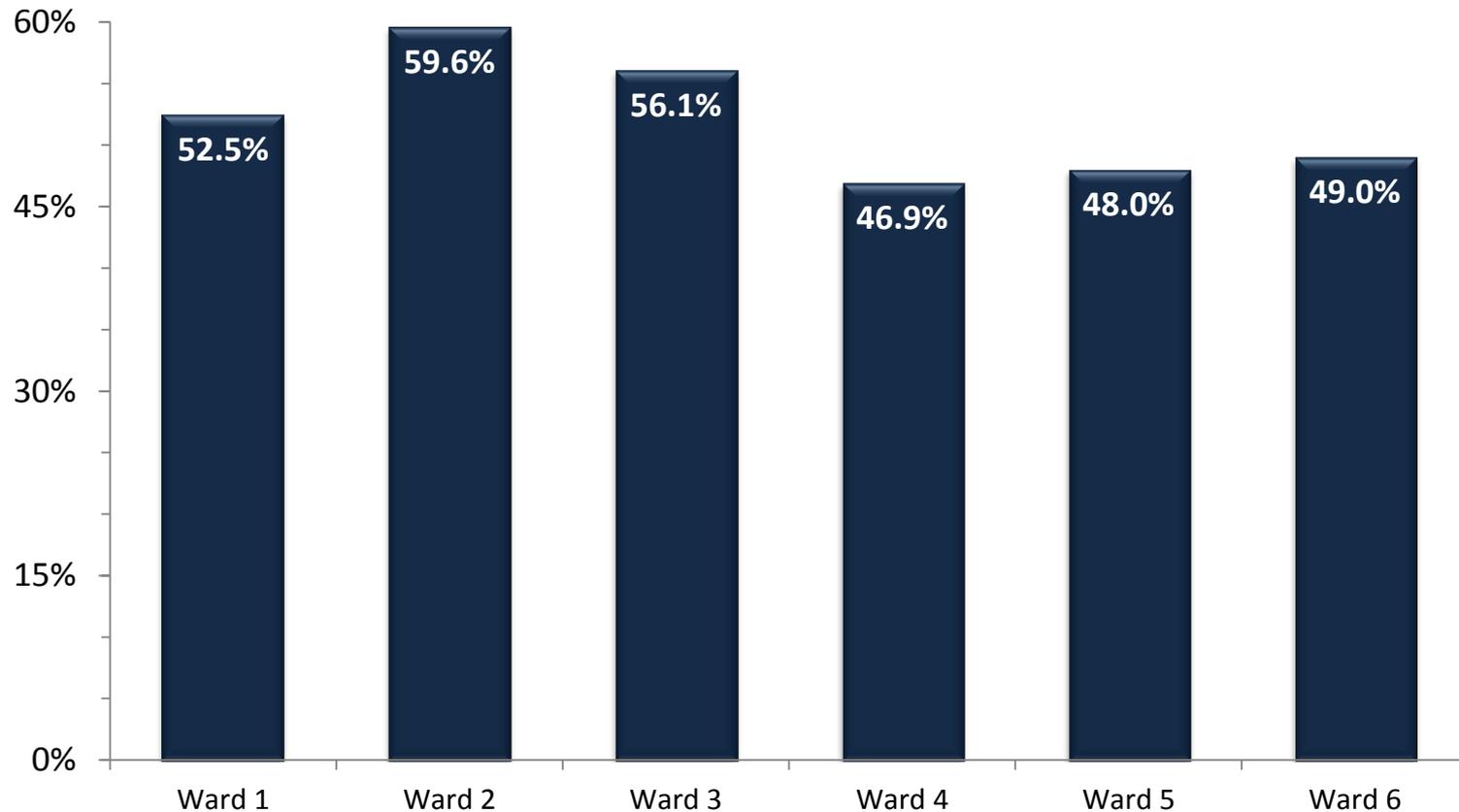
There is a slight increase in those who feel the COT – ESD is doing an “excellent” job by those with curbside service as compared to other residential customers

% of “Excellent” assessments of the COT – ESD by trash service type



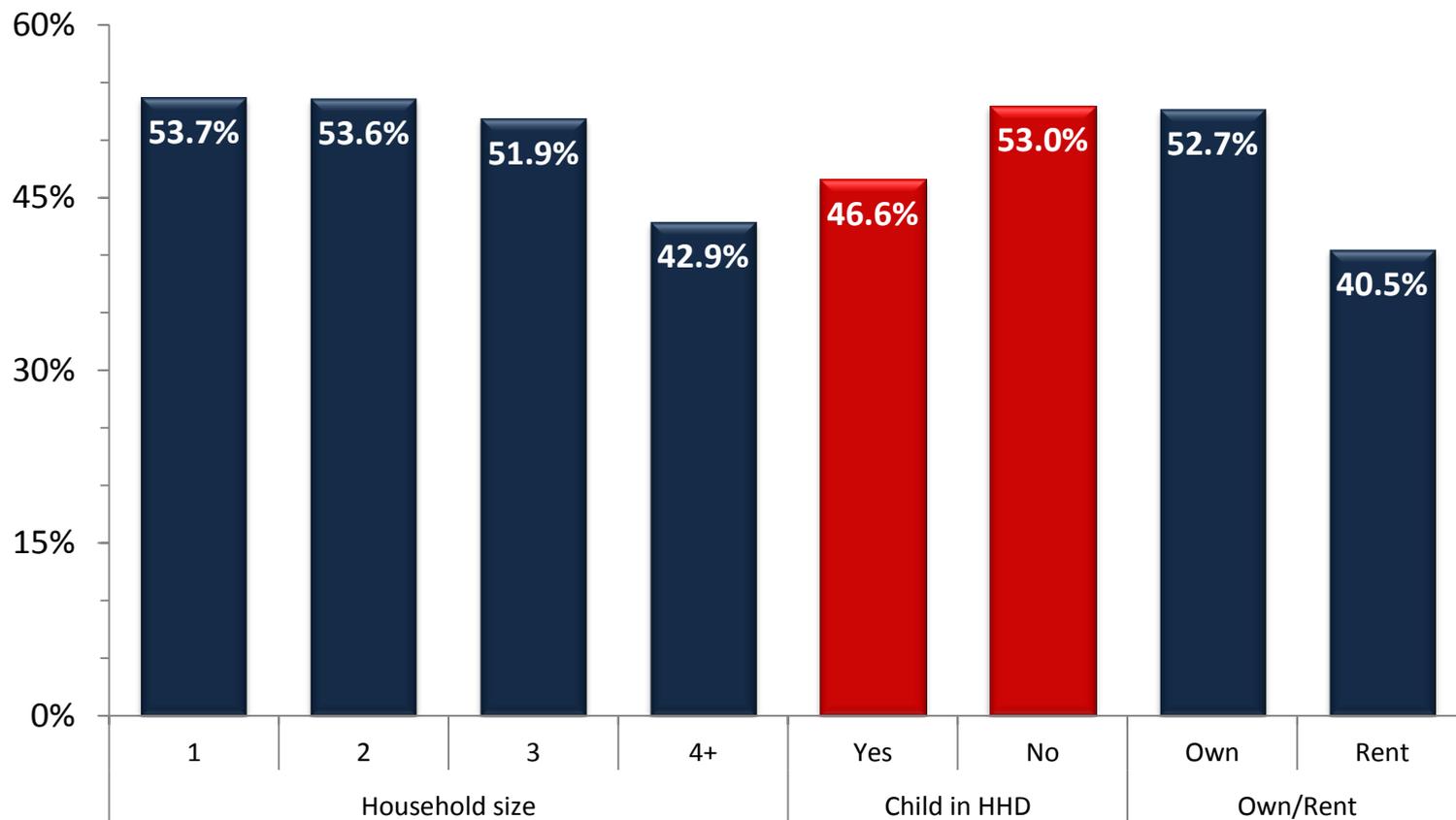
Residential customers in Wards 2, 3 and 1 are more likely to feel the COT – ESD is doing an “excellent” job as compared to residential customers in Wards 4, 5 and 6

% of “Excellent” assessments of the COT – ESD by city ward



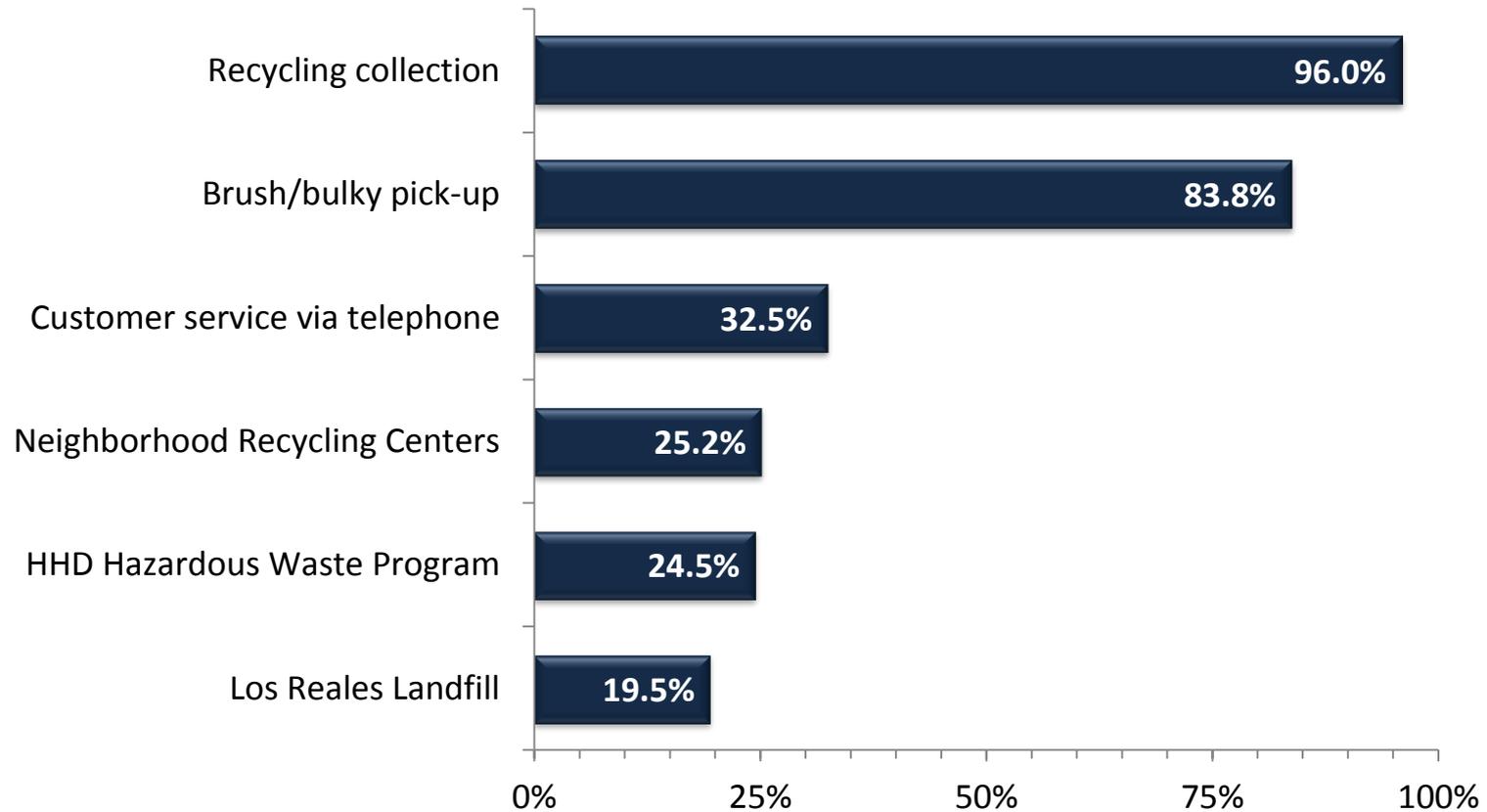
Those who own their own home are more likely to feel the COT – ESD is doing an “excellent” job, while those in larger households (4+ people) and residents with children in the household are less likely to feel similarly

% of “Excellent” assessments of the COT – ESD by other demographics



The majority of ESD residential customers have used the recycling collection and/or the brush and bulky pick-up services over the past year. About one-third have called the customer service telephone line, and between one-fourth and one-fifth have used the NRCs, the household hazardous waster pick-up and/or the Los Reales landfill

Have used at least once in the previous 12 months

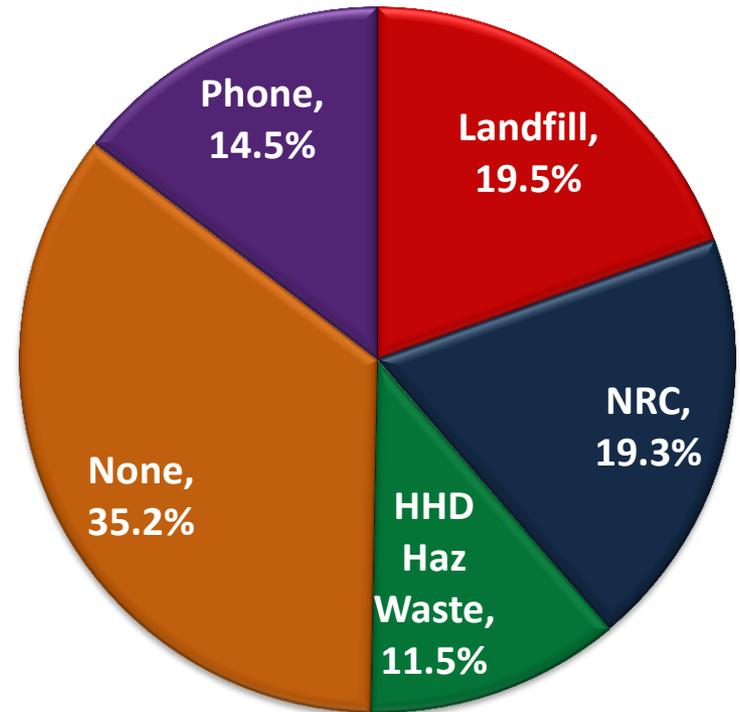


The services outside of recycling and brush/bulky pick-up have mostly unique customers (they are not highly correlated with each other) and a cluster analysis reveals unique groups of users for each service

Service utilization clusters (not including recycling and brush/bulky)

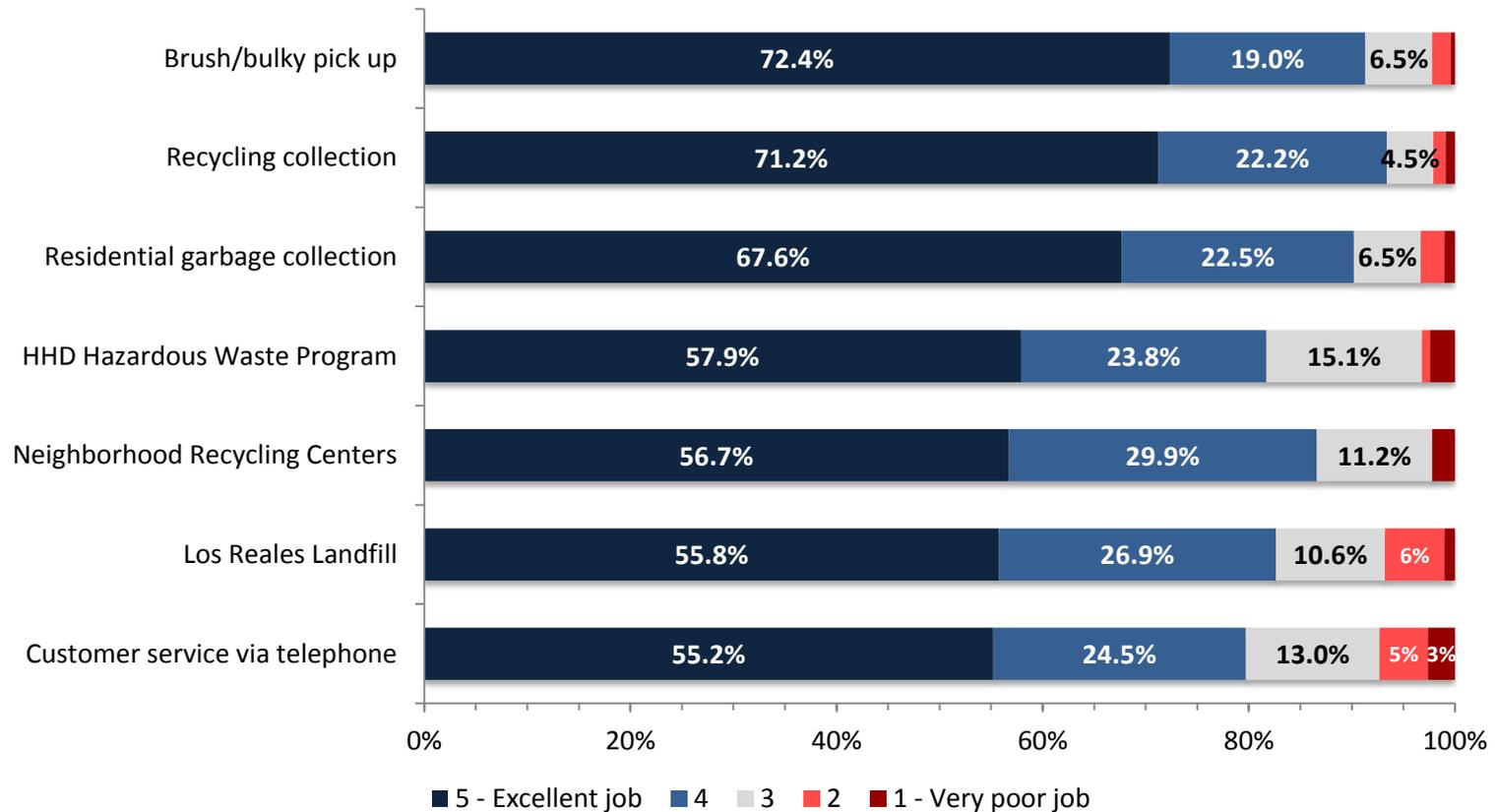
Service Utilization Cluster Size

Service utilized → Cluster ↓	HHD Haz Waste	Telephone Cust Srvc	Los Reales Landfill	NRC
Landfill	25.6%	41.9%	100.0%	29.9%
NRC	41.4%	30.2%	0.0%	100.0%
HHD Haz Waste	100.0%	34.8%	0.0%	0.0%
None	0.0%	0.0%	0.0%	0.0%
Phone	0.0%	100.0%	0.0%	0.0%



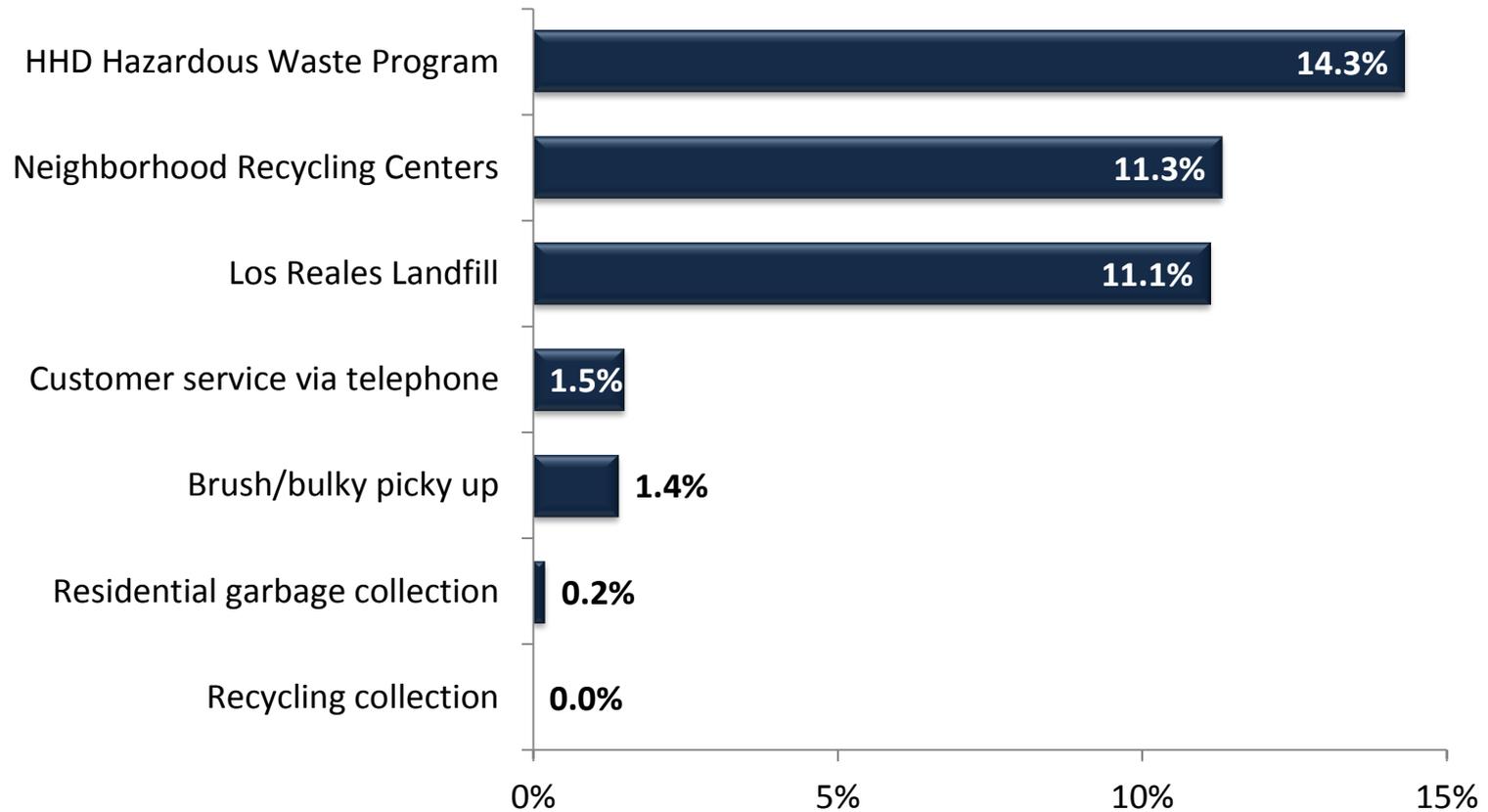
The COT – ESD rates as “Excellent” for each of the services provided by a majority of residential customers. The only services with greater than 5% of negative assessments include the Los Reales Landfill and the customer service telephone line (each with about 7% of 1s + 2s on the 5-point scale)

Individual service assessment



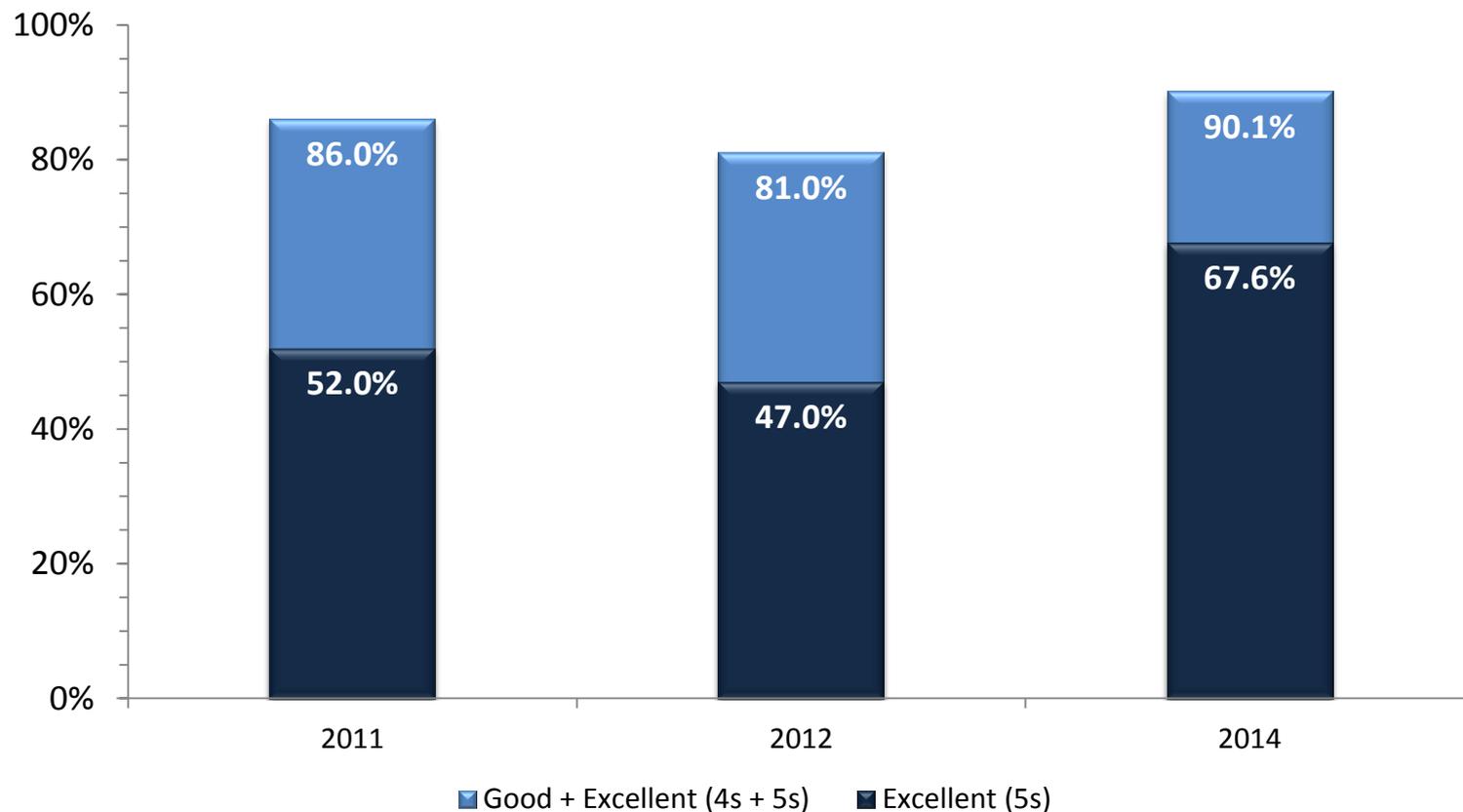
Greater than 10% of customers indicated they did not know enough about the COT – ESD’s household hazardous waste program, the neighborhood recycling centers and the Los Reales Landfill, which could provide an opportunity for educational communication

Individual service assessment – Did not know enough to provide assessment



The proportion of residential customers assessing the department's garbage collection services as "Excellent" has increased over previous years

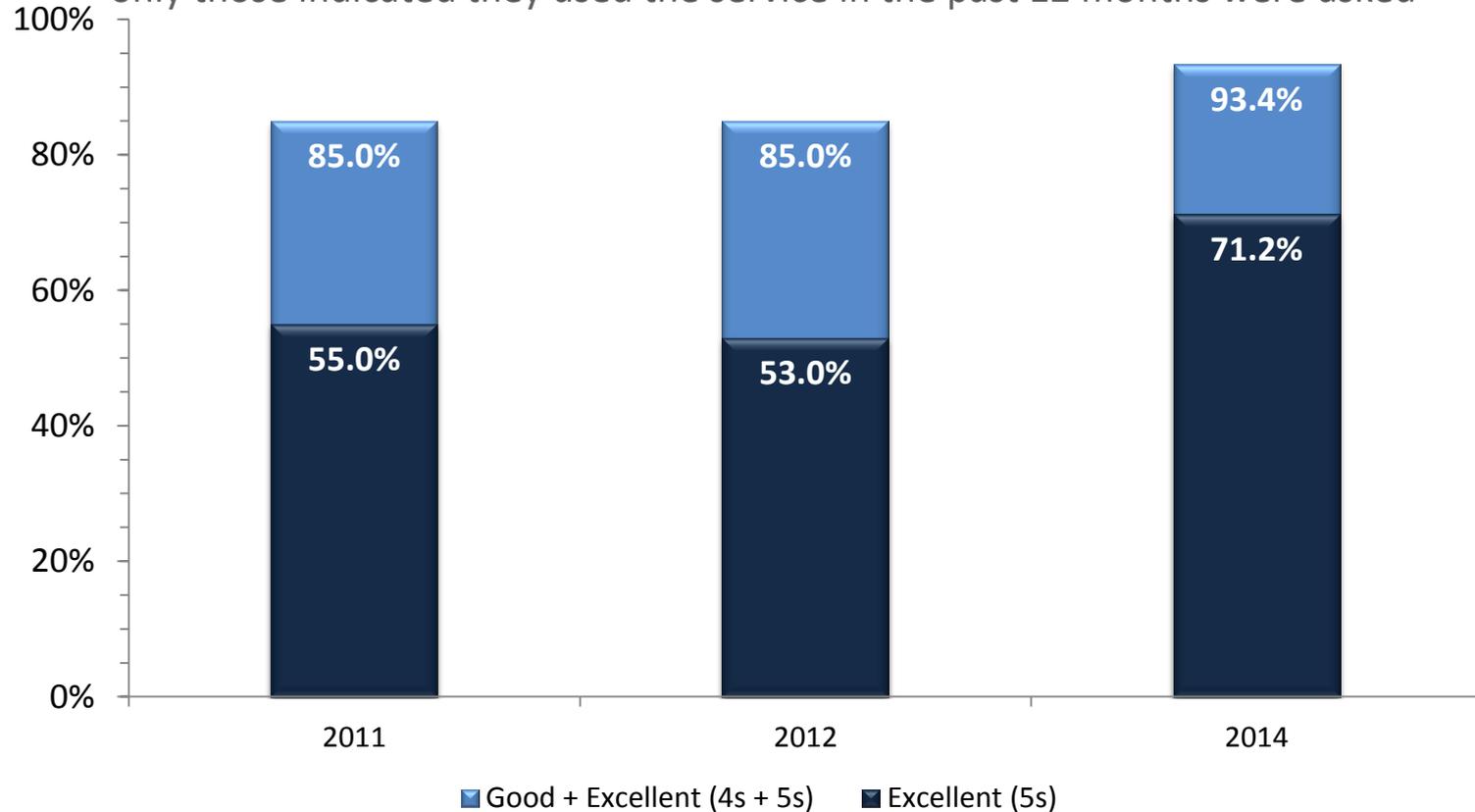
COT – ESD's residential garbage collection (Trend)



The proportion of residential users assessing the department's recycling collection services as "Excellent" has also increased over previous years

COT – ESD's residential recycling collection (Trend)*

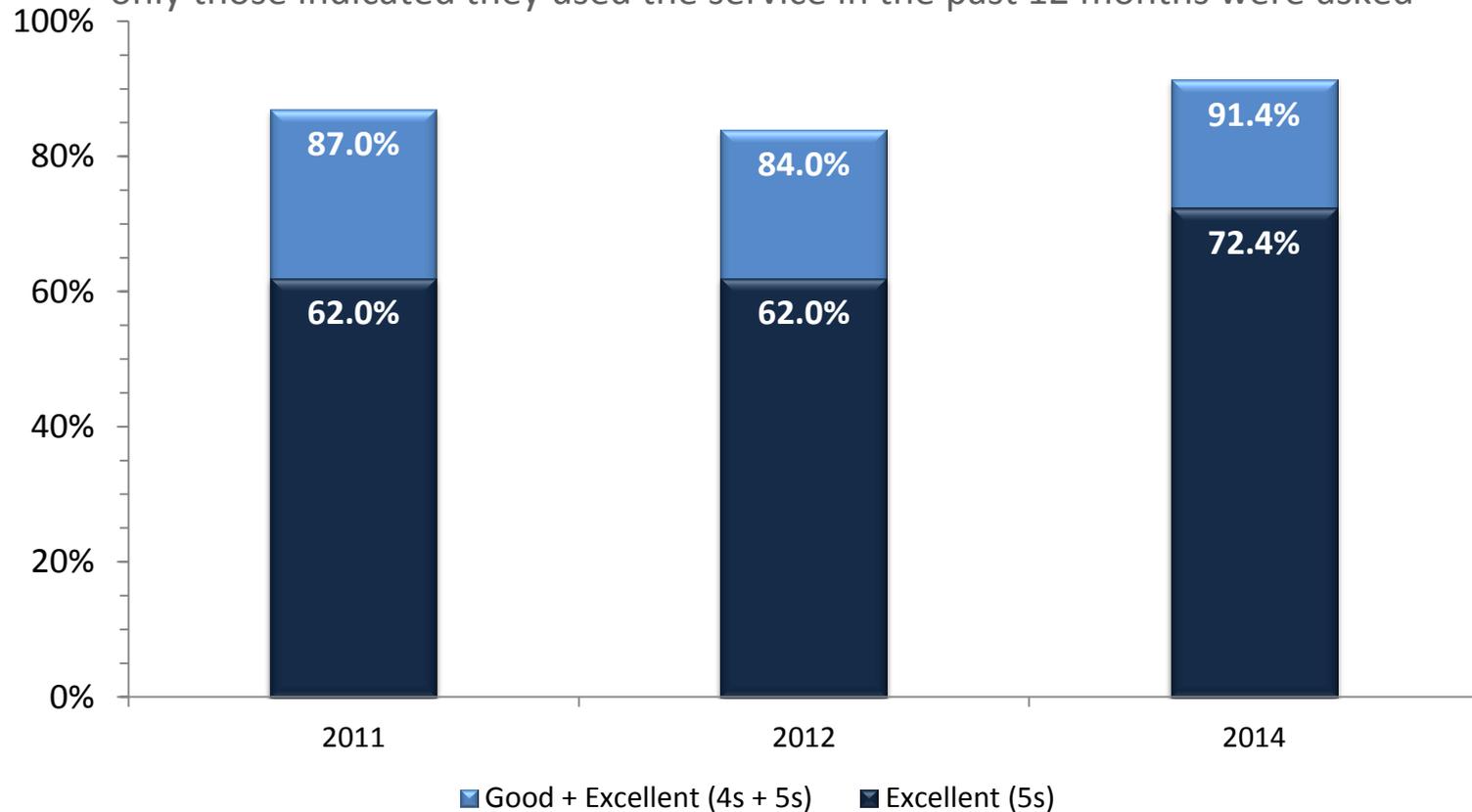
*only those indicated they used the service in the past 12 months were asked



The proportion of residential users assessing the department's brush and bulky pick-up services as "Excellent" has also increased over previous years

COT – ESD's residential brush and bulky pick-up (Trend)*

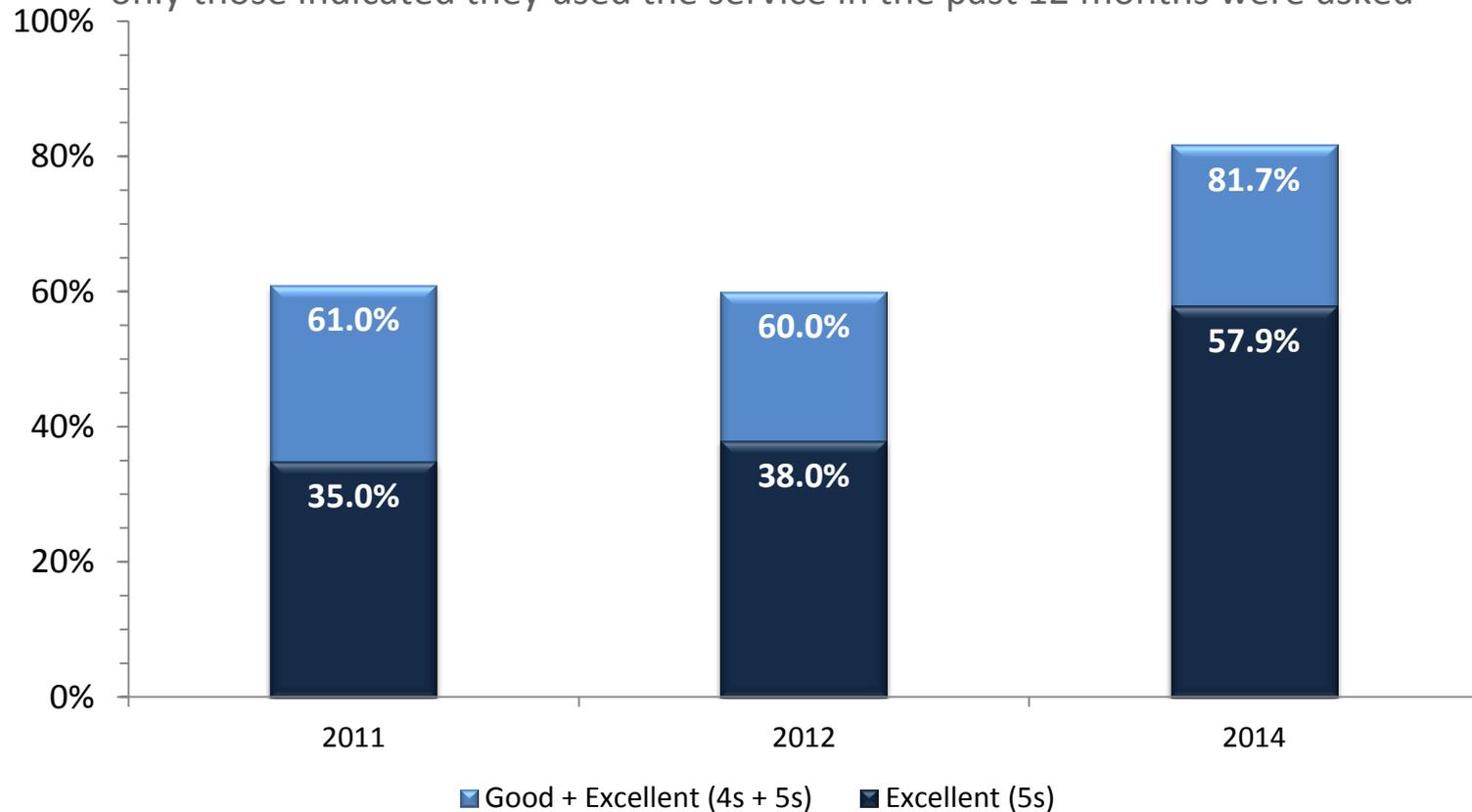
*only those indicated they used the service in the past 12 months were asked



The proportion of residential users assessing the department's household hazardous waste pick-up services as "Excellent" has also increased over previous years

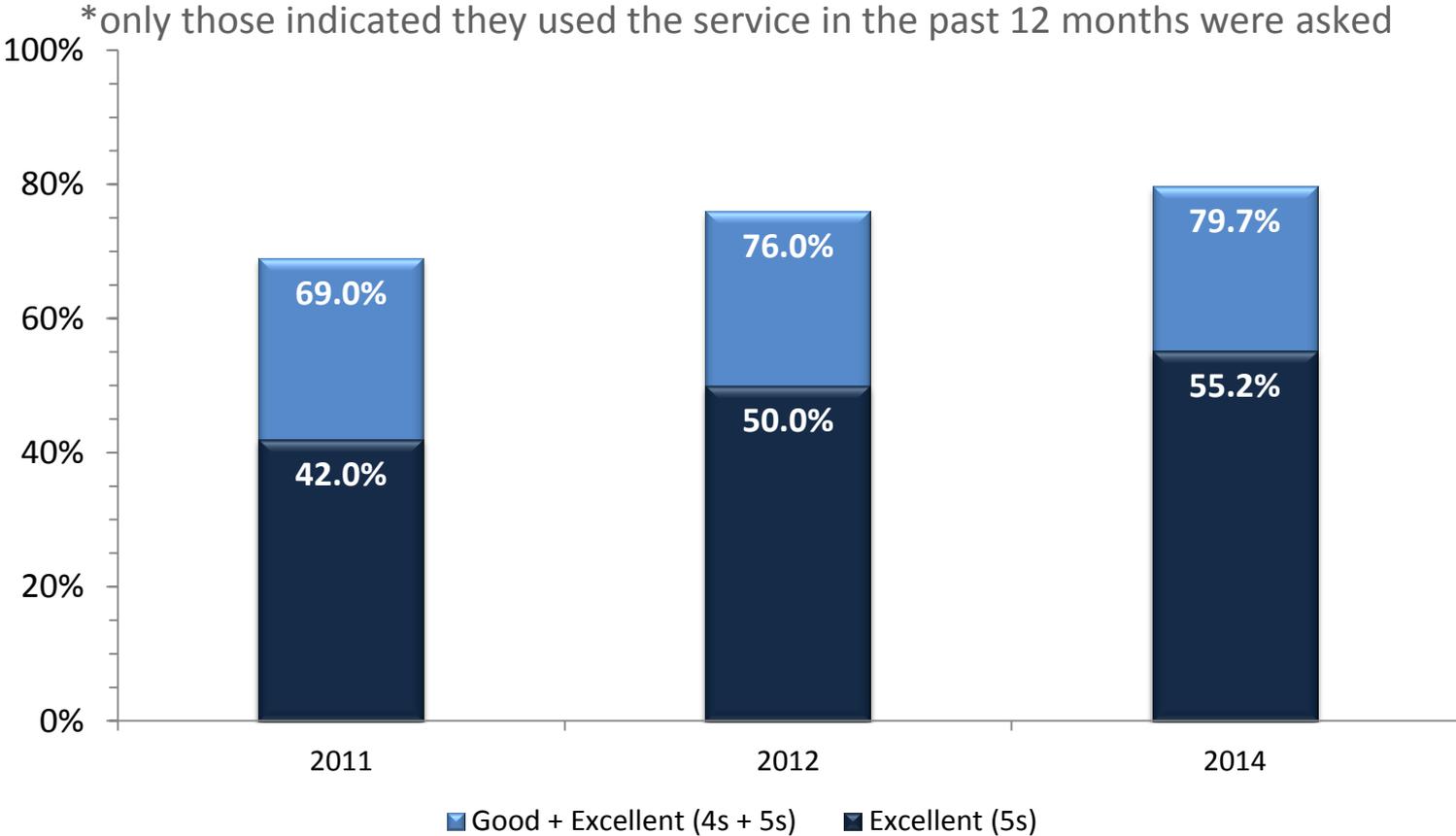
COT – ESD's residential household hazardous waste pick-up (Trend)*

*only those indicated they used the service in the past 12 months were asked



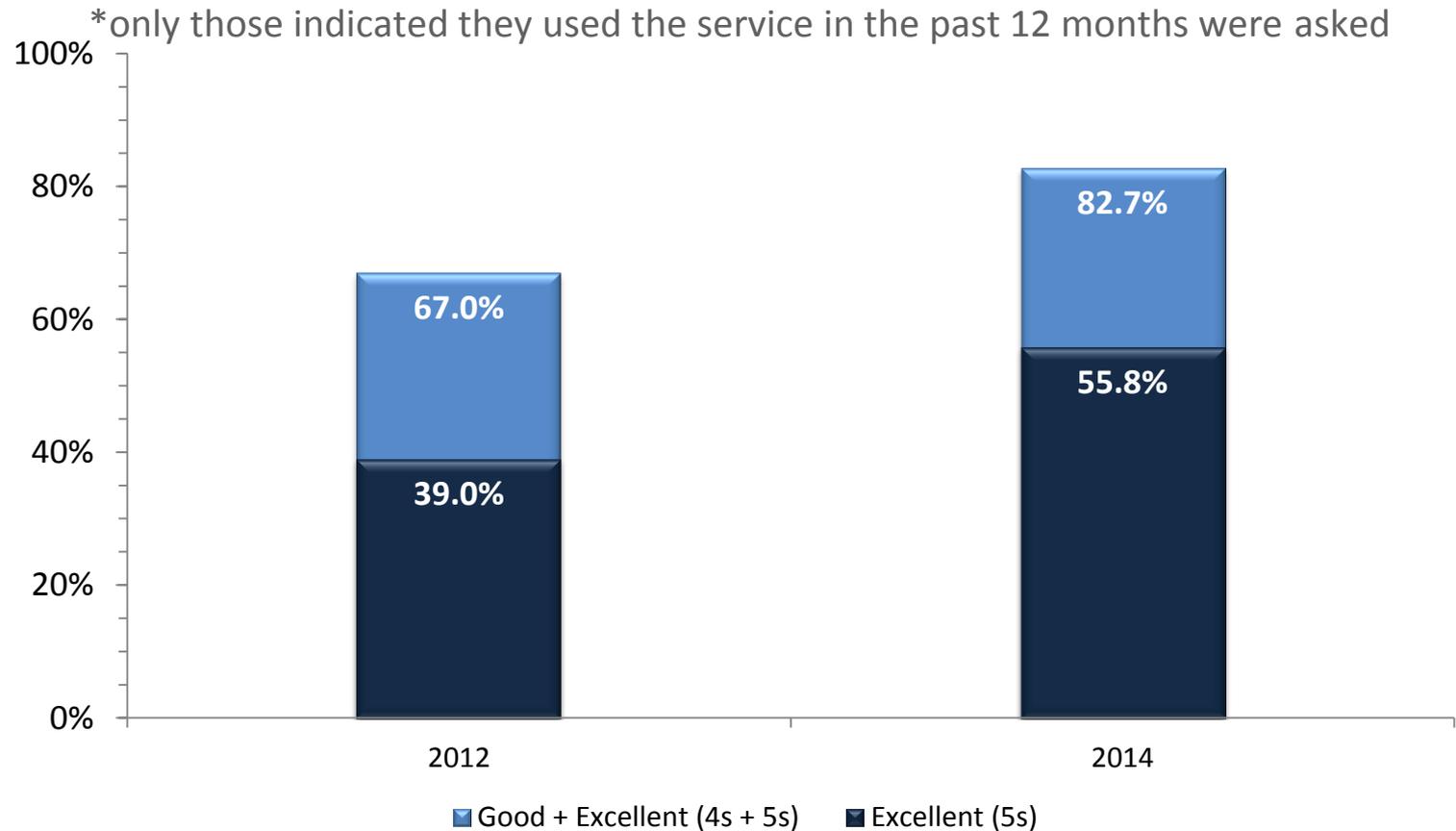
There has been a steady increase in satisfaction as well as the proportion of residential users assessing the department's telephone customer service as "Excellent" over previous years

COT – ESD's telephone customer service (Trend)*



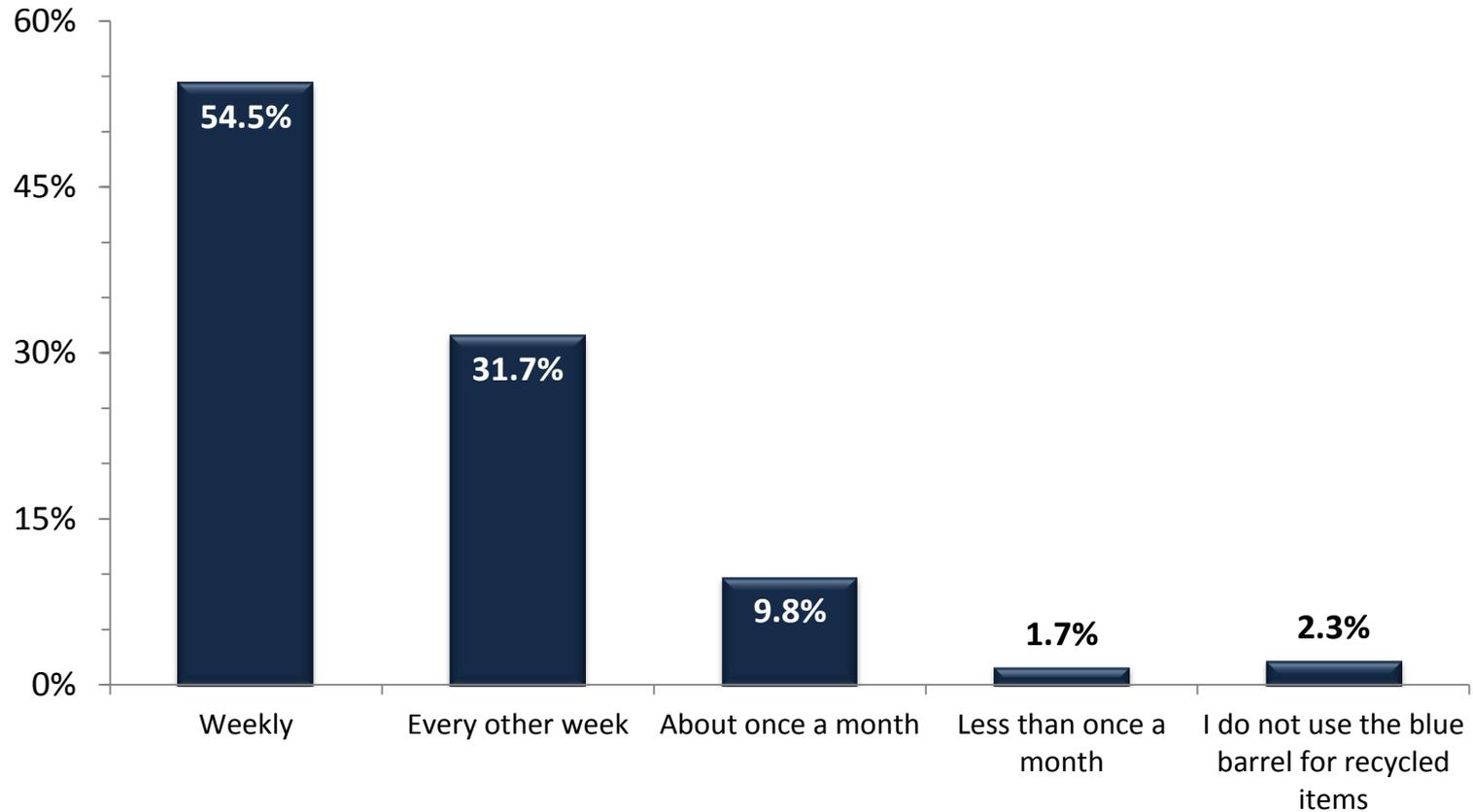
There was an increase in satisfaction (and an increase in responses of “Excellent”) for those who used the Los Reales Landfill

COT – ESD’s Los Reales Landfill (Trend)*



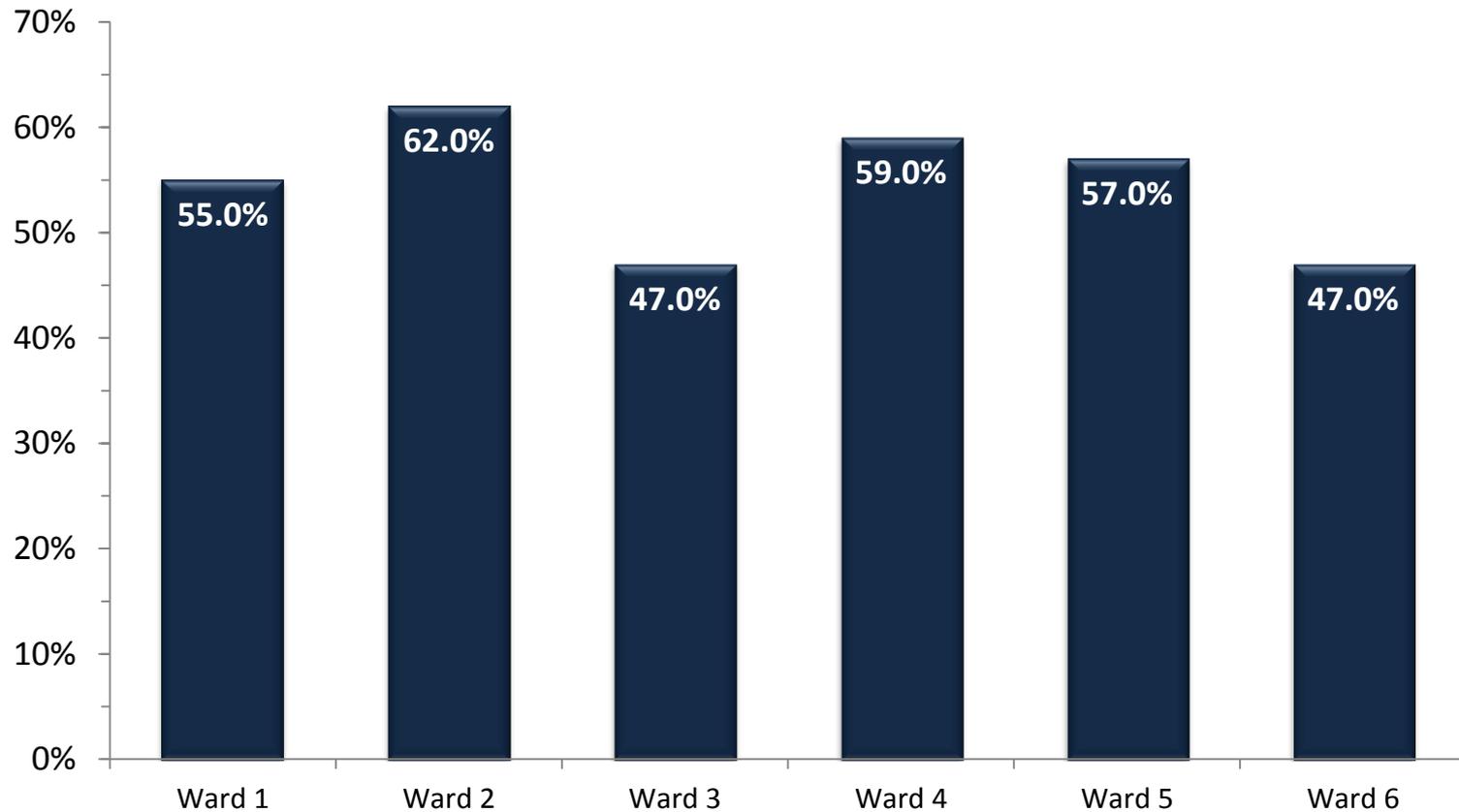
A majority of residential customers indicate they used their blue barrel for recycling items on a weekly basis, with 96% using it at least once a month and 86% at least semi-monthly

Frequency of blue barrel (recycling) use



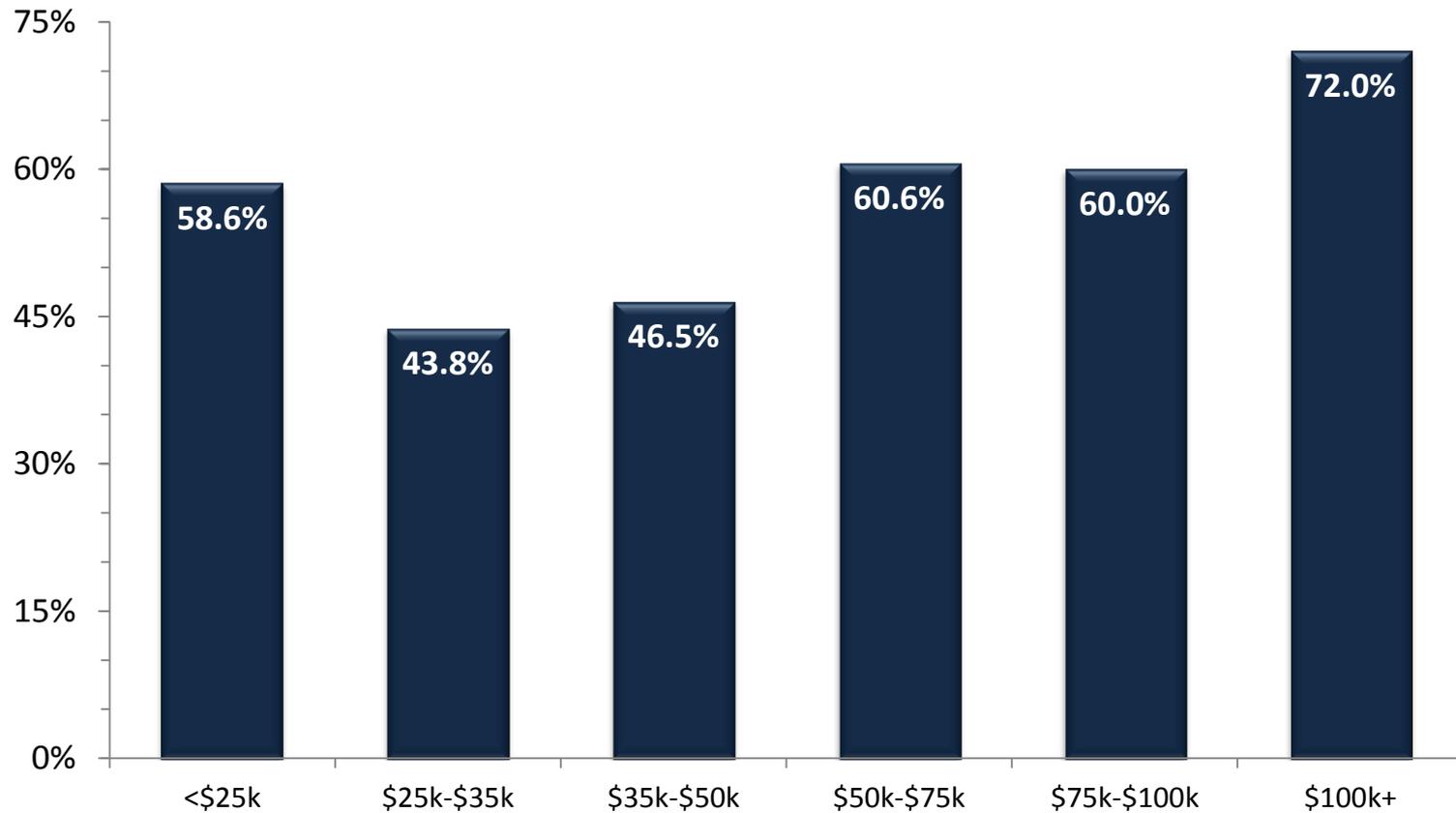
Residents in city wards 3 and 6 are least likely to use their blue barrels on a weekly basis

Residential customers using their blue barrel weekly by city ward



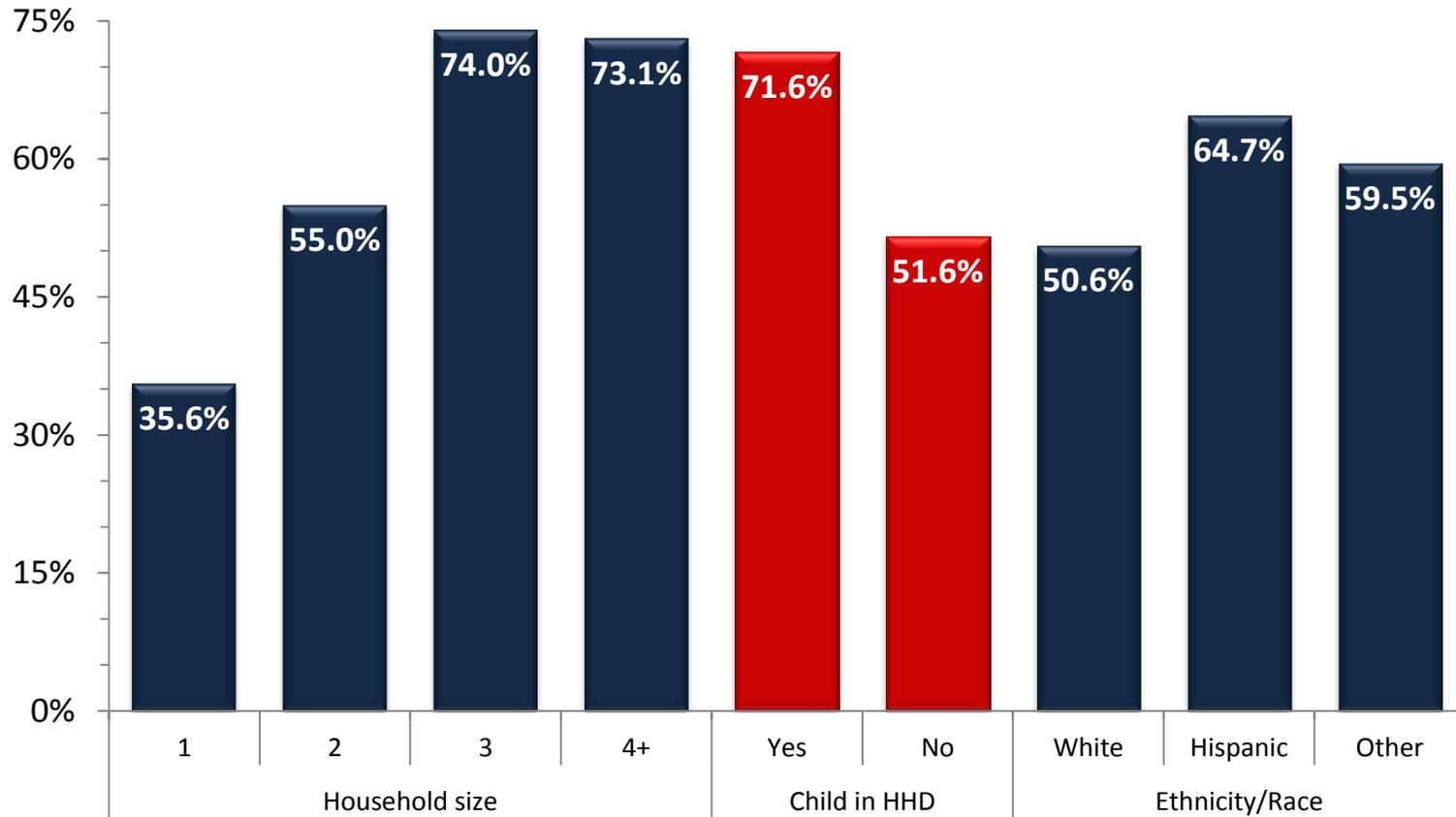
Other than those at the lowest household income level, residents with progressively higher incomes are increasingly more likely to use their blue barrels on an annual basis

Residential customers using their blue barrel weekly by annual household income



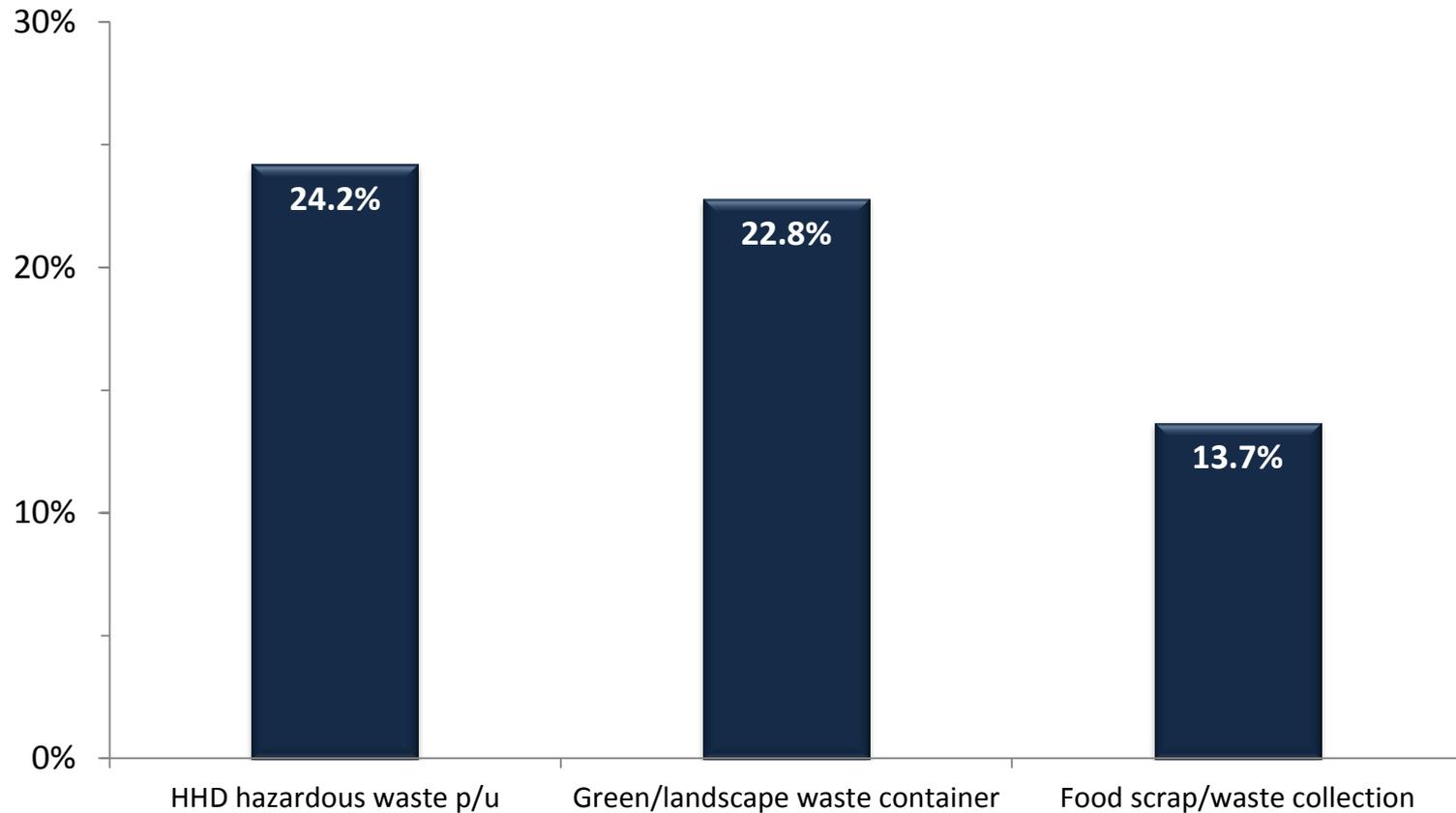
Residents with larger household sizes/with children in the household and ethnic minorities are more likely to use their blue barrels on a weekly basis

Residential customers using their blue barrel weekly by other demographics



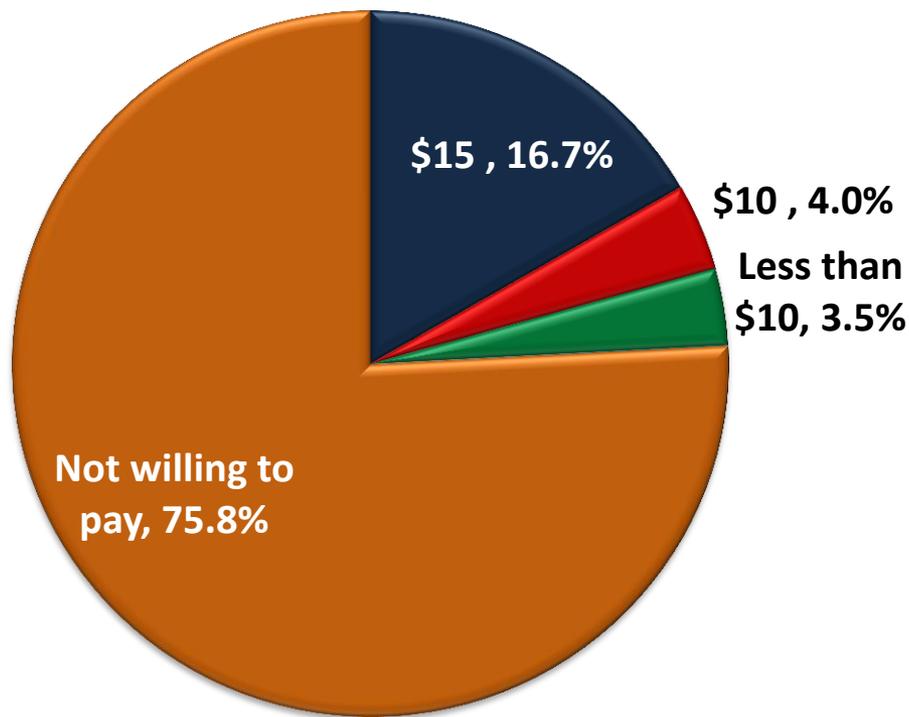
Residential customers are more likely to pay for household hazardous waste pick-up and/or to have a container for landscape waste as compared to collection of food scraps and waste

Willingness to pay for other services provided by COT - ESD



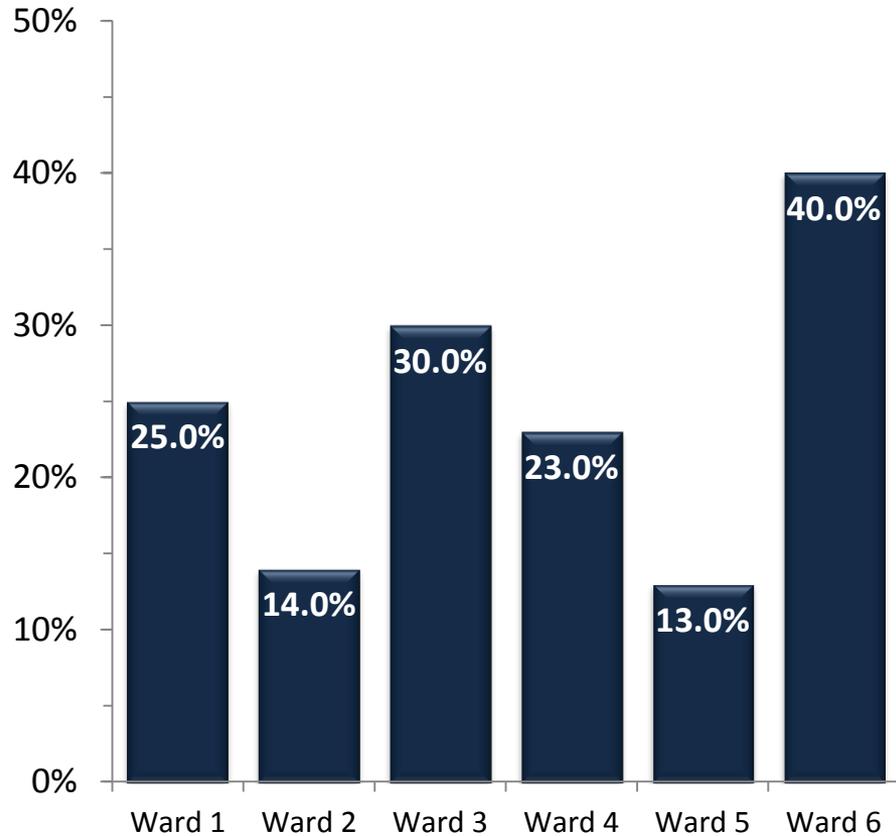
Just over one-fifth of residential customers are willing to pay \$10 for a one-time pick up of household hazardous waste products

Willingness to pay for household hazardous waste home pick-up

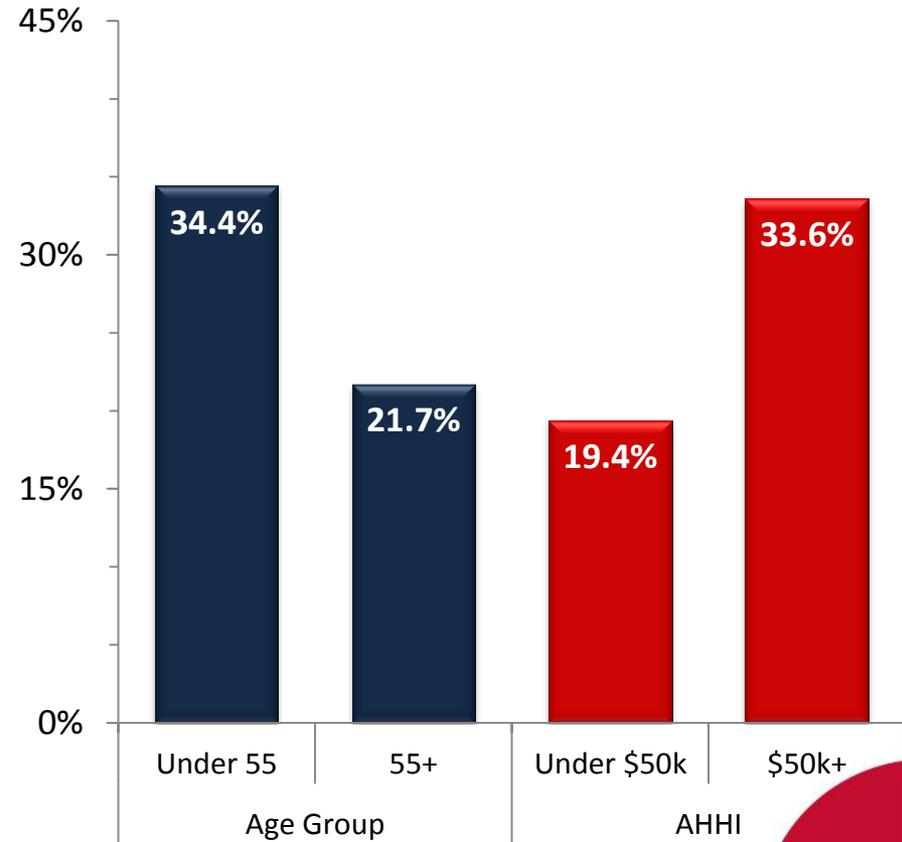


Residents in Ward 6, younger residents and those within higher income levels are the most likely to indicate they are willing to pay for a one-time pick-up of household hazardous waste products

Pay for hhd haz waste by ward

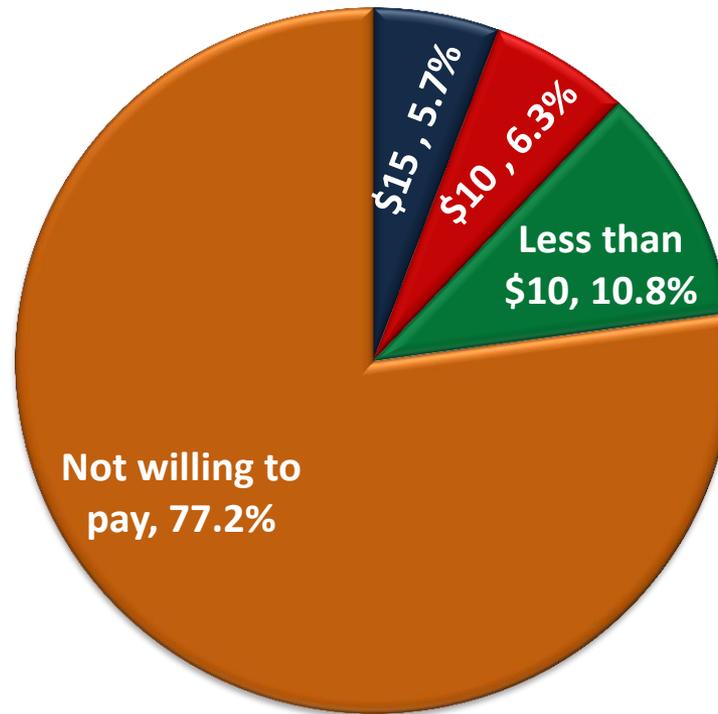


Pay for hhd haz waste by dems



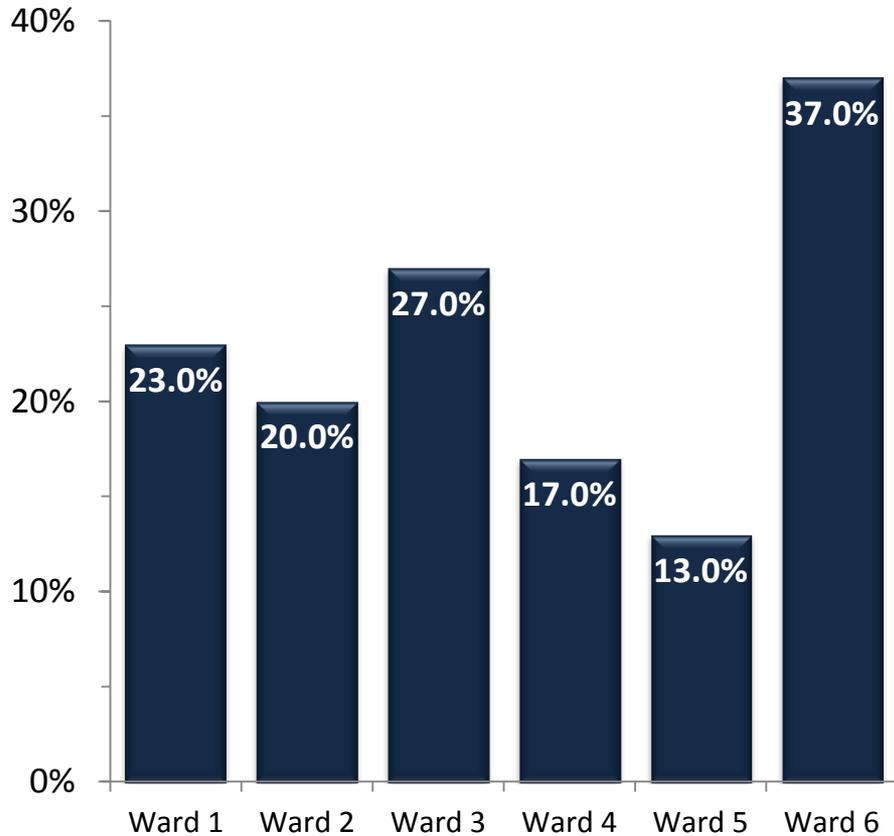
Just under one-in-eight residential customers are willing to pay \$10 a month for container to put green and landscape waste in for pick-up by the COT – ESD

Willingness to pay for green/landscape waste container

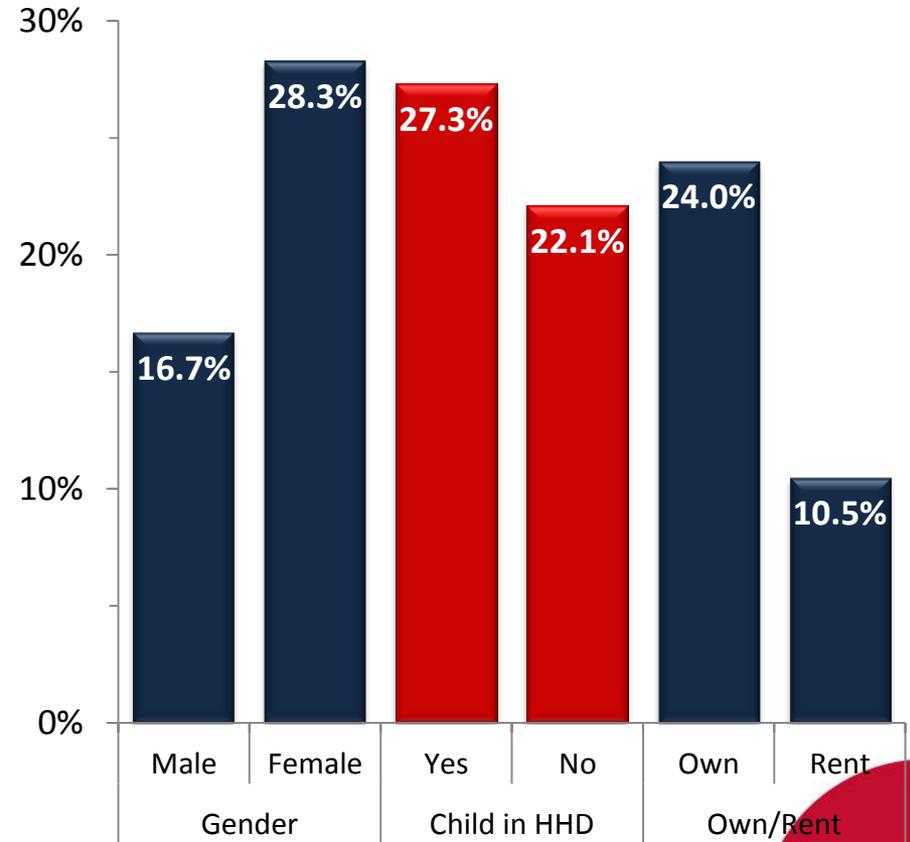


Residents in Ward 6, females, residents with a child in the household and those who own their homes are most likely to indicate they are willing to pay a monthly fee for pick-up of green and landscape waste

Pay for green collection by ward

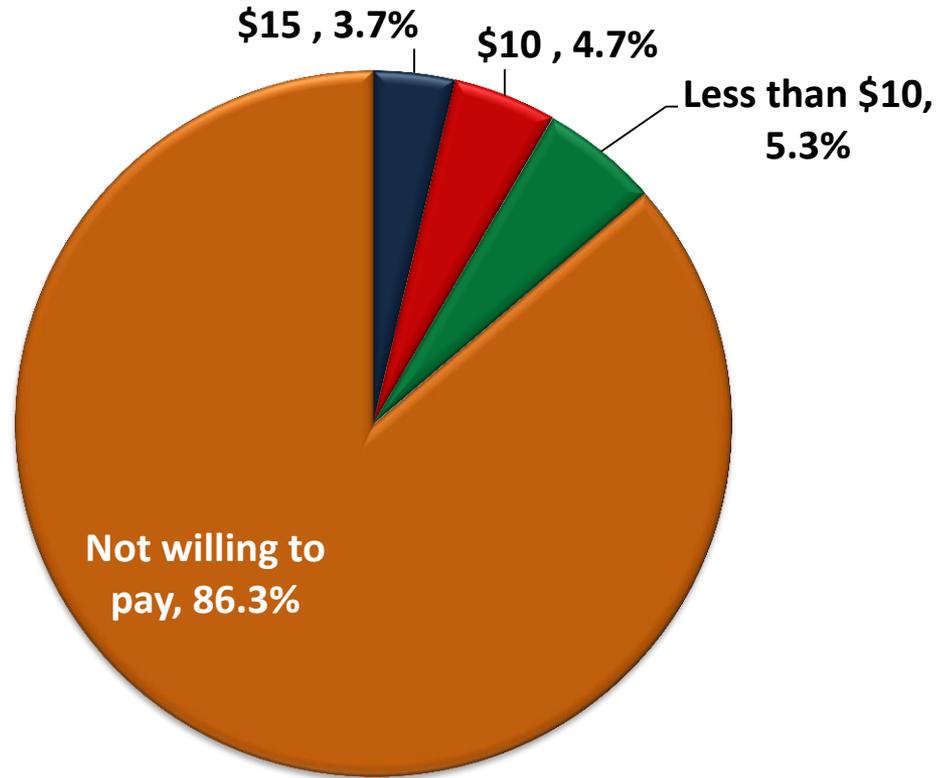


Pay for green collection by dems



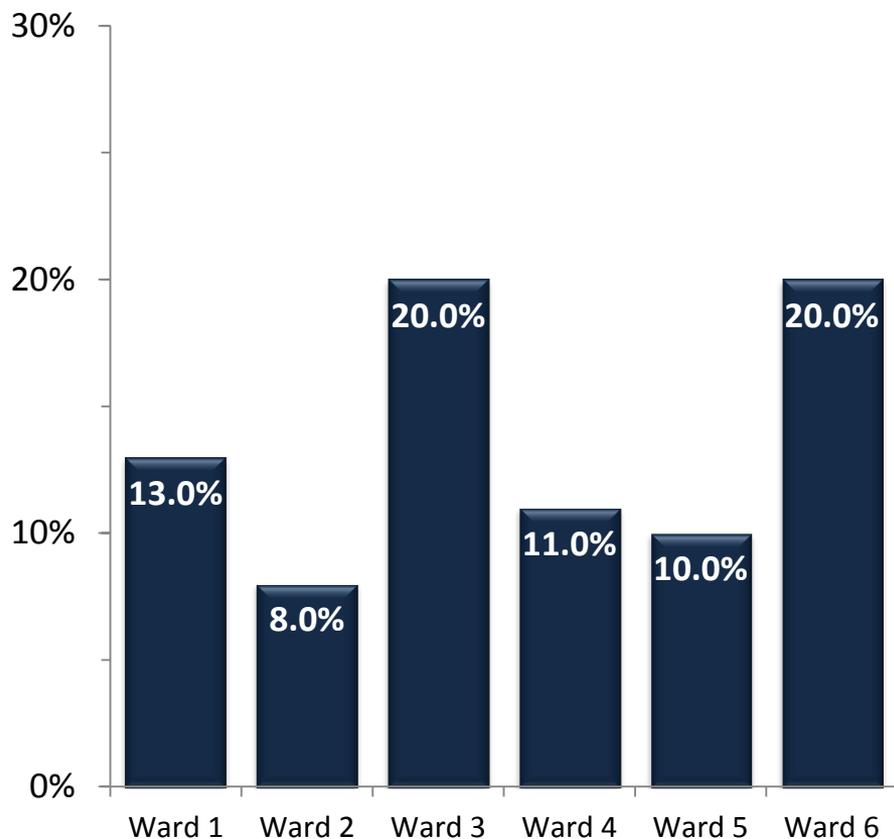
Just more than 1-in-12 residential customers are willing to pay \$10 a month for the collection of food scraps and waste by the COT – ESD

Willingness to pay for collection of food scraps and waste

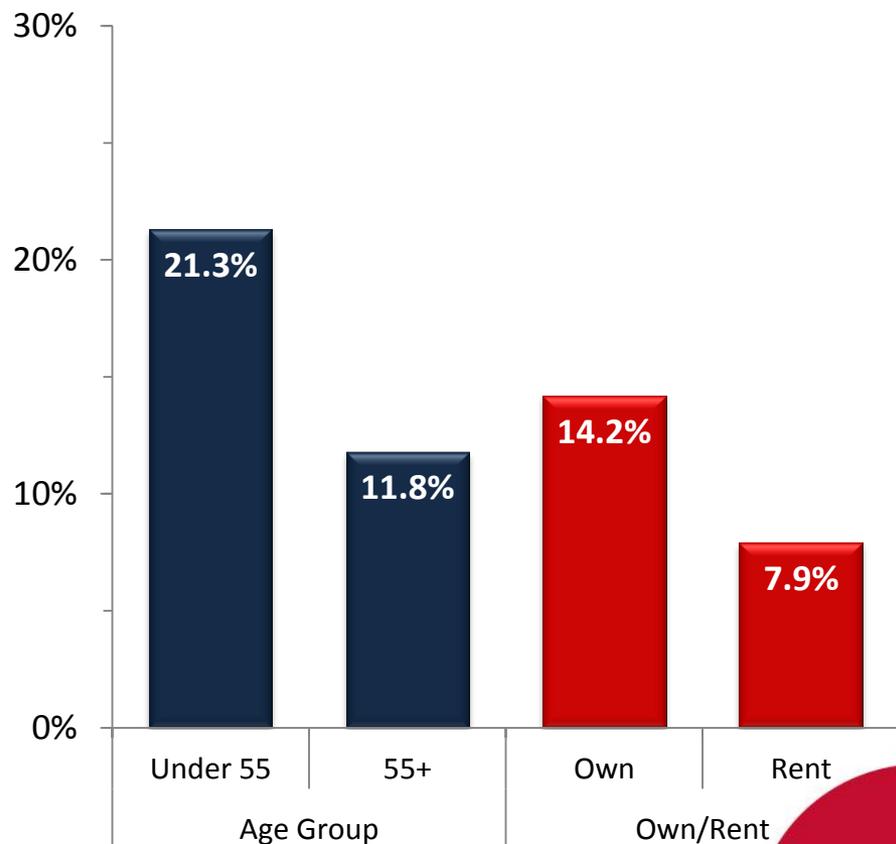


Residents in Wards 3 and 6, younger residents and those who own their homes are most likely to indicate they are willing to pay a monthly fee for collection of food scraps and waste

Pay for food waste collection by ward

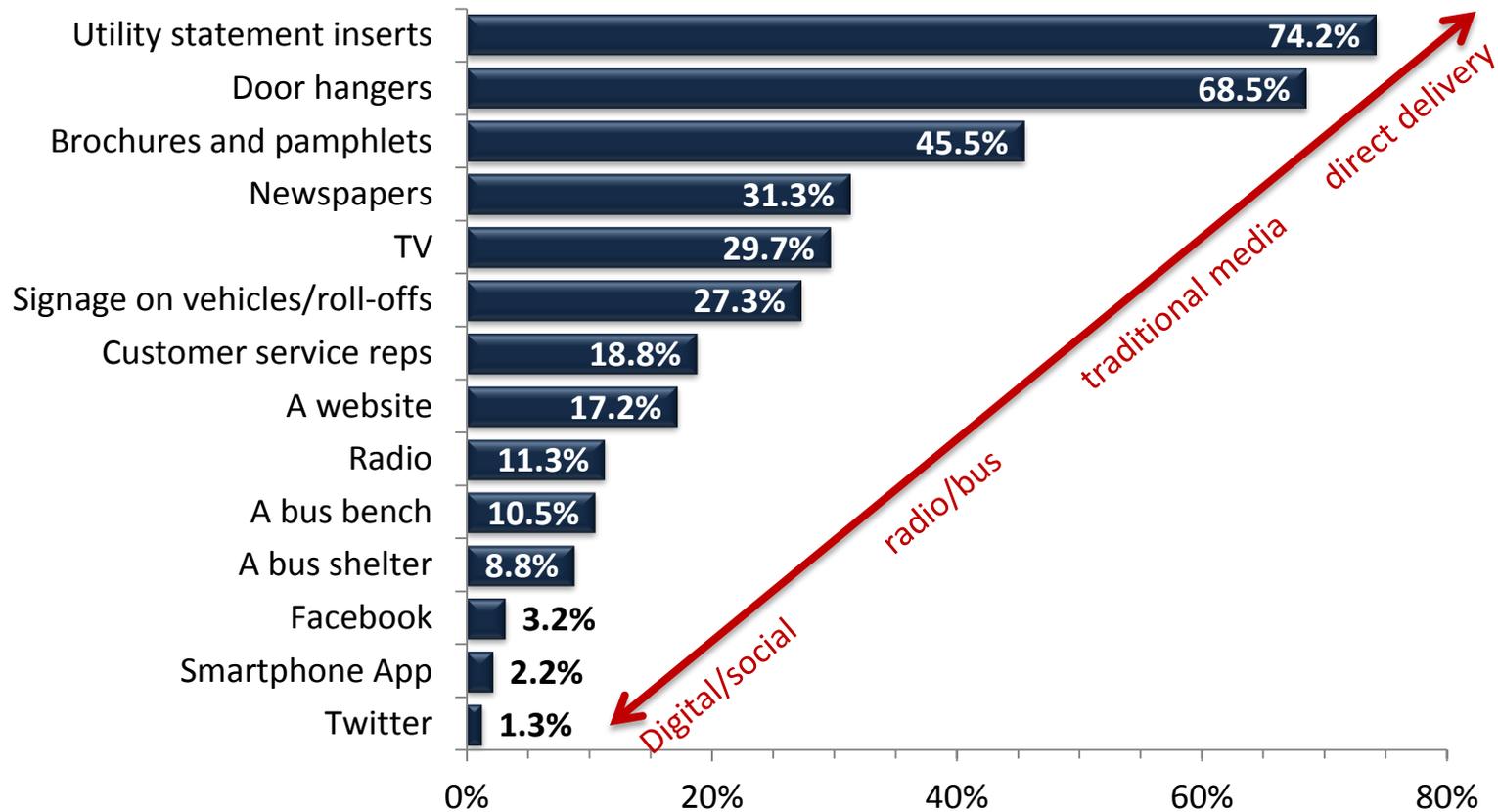


Pay for food waste collection by dems



ESD information delivered directly by the COT has the greatest recall by residents, with social/digital media garnering the least amount of recall

Received/recall information provided by COT – ESD via...



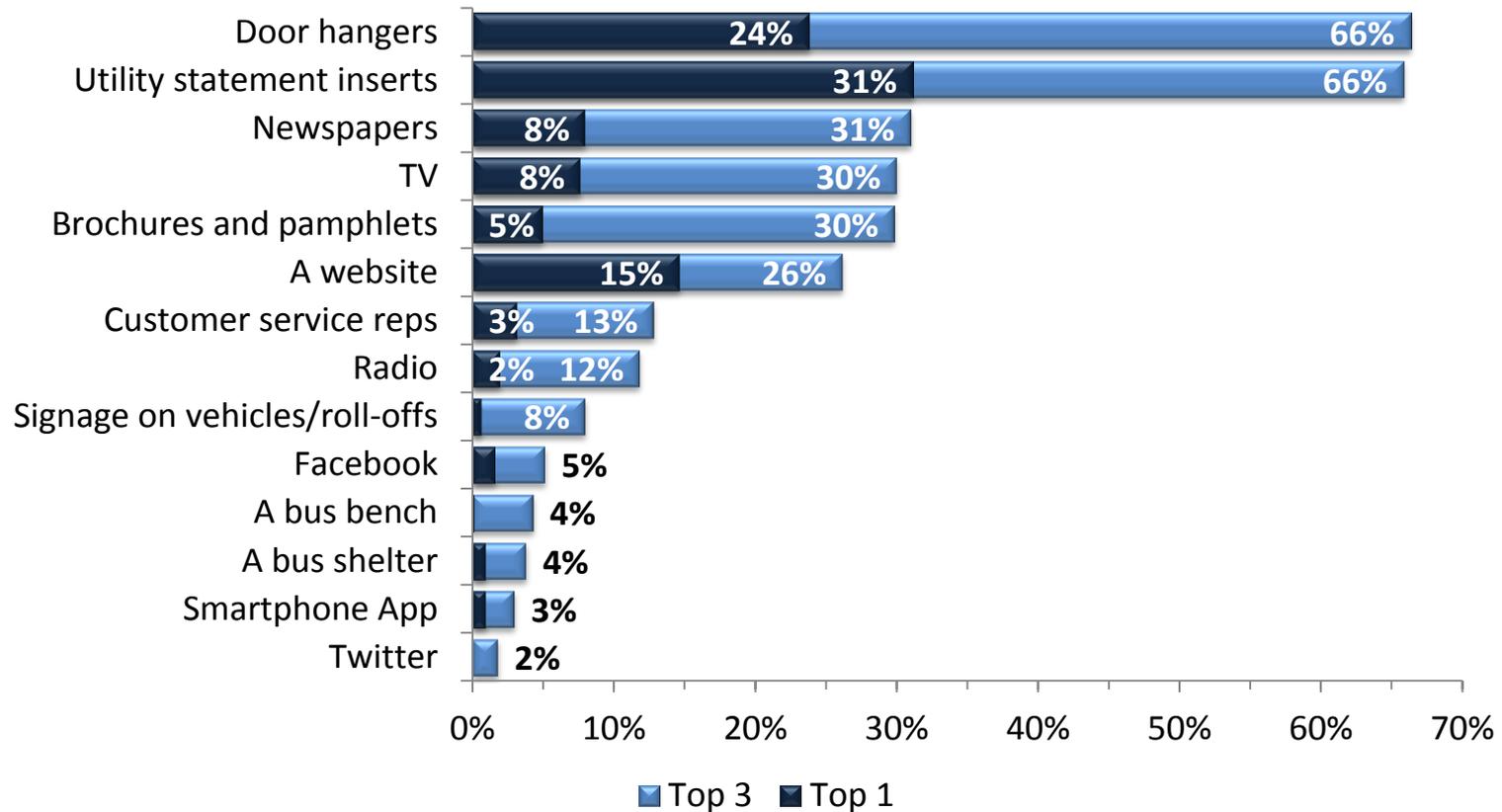
Recall of information via utility statements, brochures/pamphlets, vehicle signage and through customer service representative has increased as compared to previous years

Received/recall information provided by COT – ESD (Trend)

	2011	2012	2014
Utility statement inserts	67%	60%	74.2%
Door hangers	82%	77%	68.5%
Brochures and pamphlets	25%	25%	45.5%
Newspapers	33%	27%	31.3%
TV	25%	34%	29.7%
Signage on vehicles/roll-offs	12%	15%	27.3%
Customer service reps	8%	10%	18.8%
A website	14%	22%	17.2%
Radio	10%	21%	11.3%
A bus bench	6%	13%	10.5%
A bus shelter	6%	13%	8.8%
Facebook			3.2%
Smartphone App			2.2%
Twitter			1.3%

A total of 70% of residential customers list door hangers, utility statements or a website as their top choice to receive information about ESD services and 93% list at least one of the media in their top 3

Most likely to use get information about services provided by ESD (Top 3)



Younger residents are more likely than others to favor digital platforms such as a website or Facebook page, while older residents are more likely than others to favor traditional media such as newspapers and television

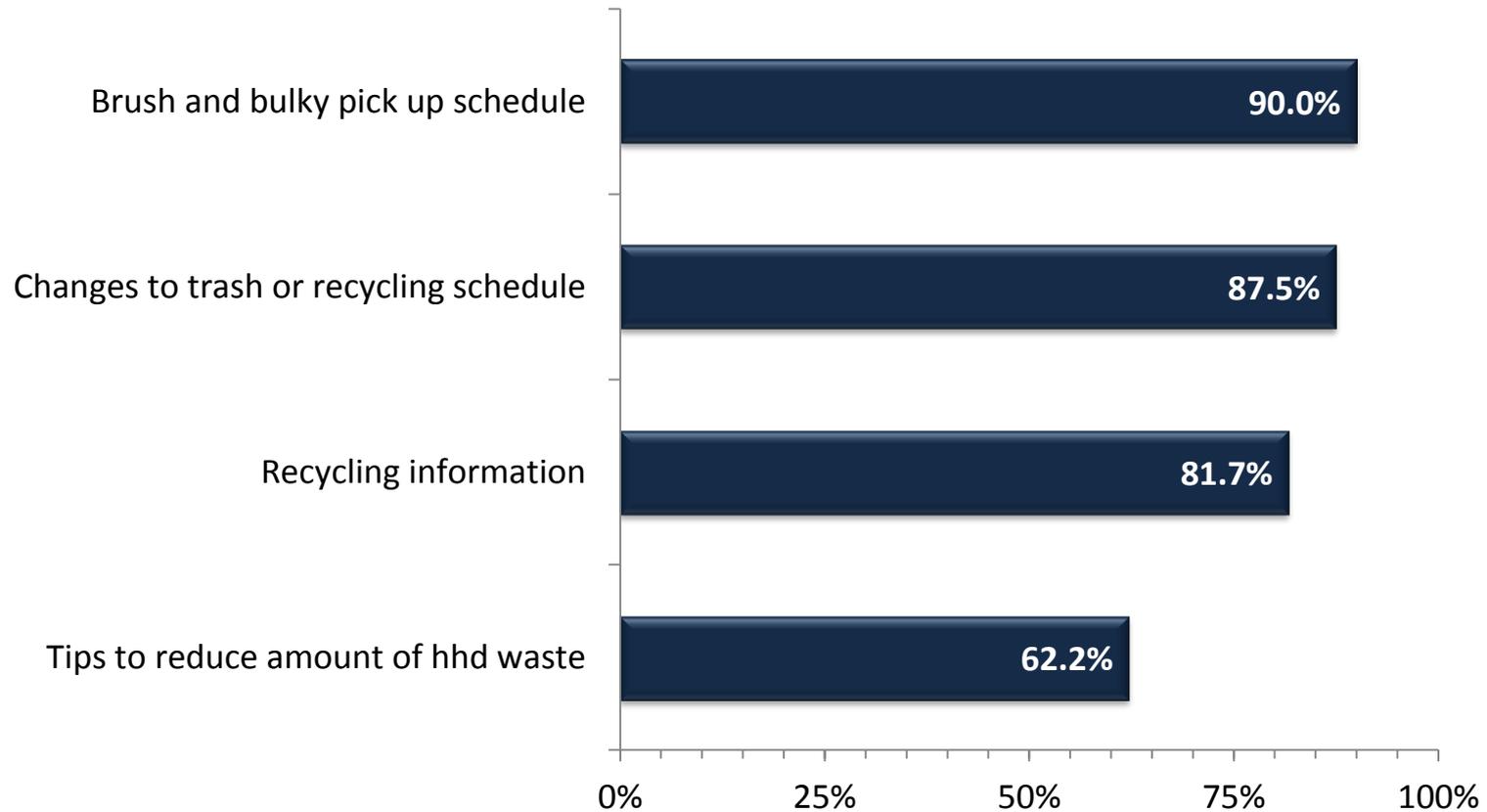
Top choice to get information about COT – ESD services

18 - 44	45 - 54	55 - 64	65 +
Utility statement - 31%	Utility statement - 31%	Door hangers - 28%	Utility statement - 35%
Website - 21%	Door hangers - 30%	Utility statement - 23%	Door hangers - 21%
Door Hangers - 14%	Website - 24%	Website - 19%	Newspapers - 12%
Facebook - 14%		TV - 9%	TV - 9%



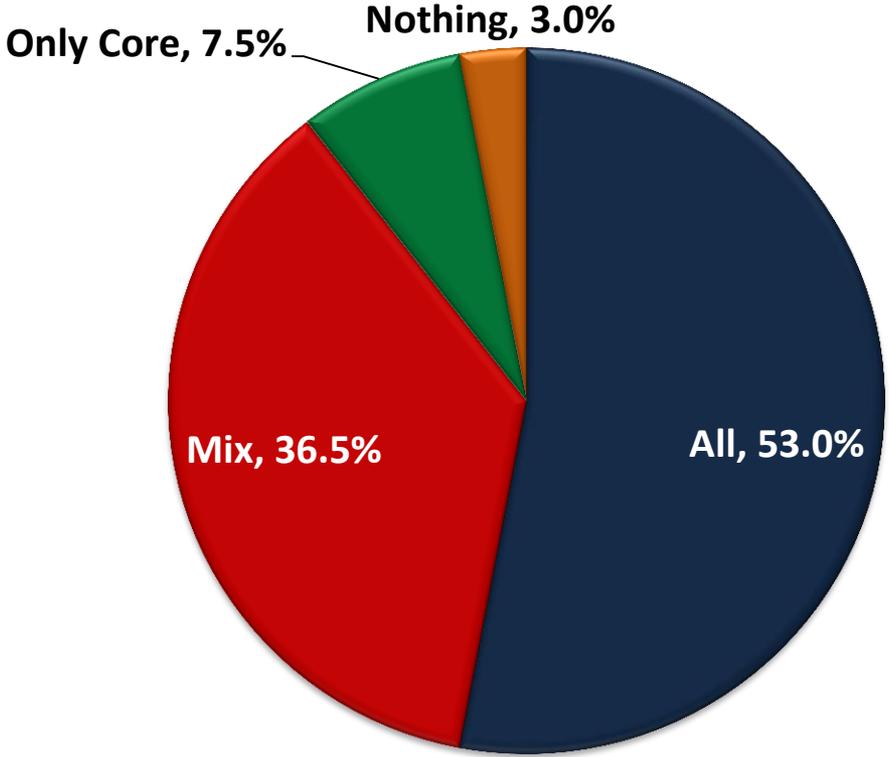
While schedule related information is the most likely to be read by residential customers, many are also interested in recycling information and ways to reduce their household waste

Likely to look for or read information regarding...



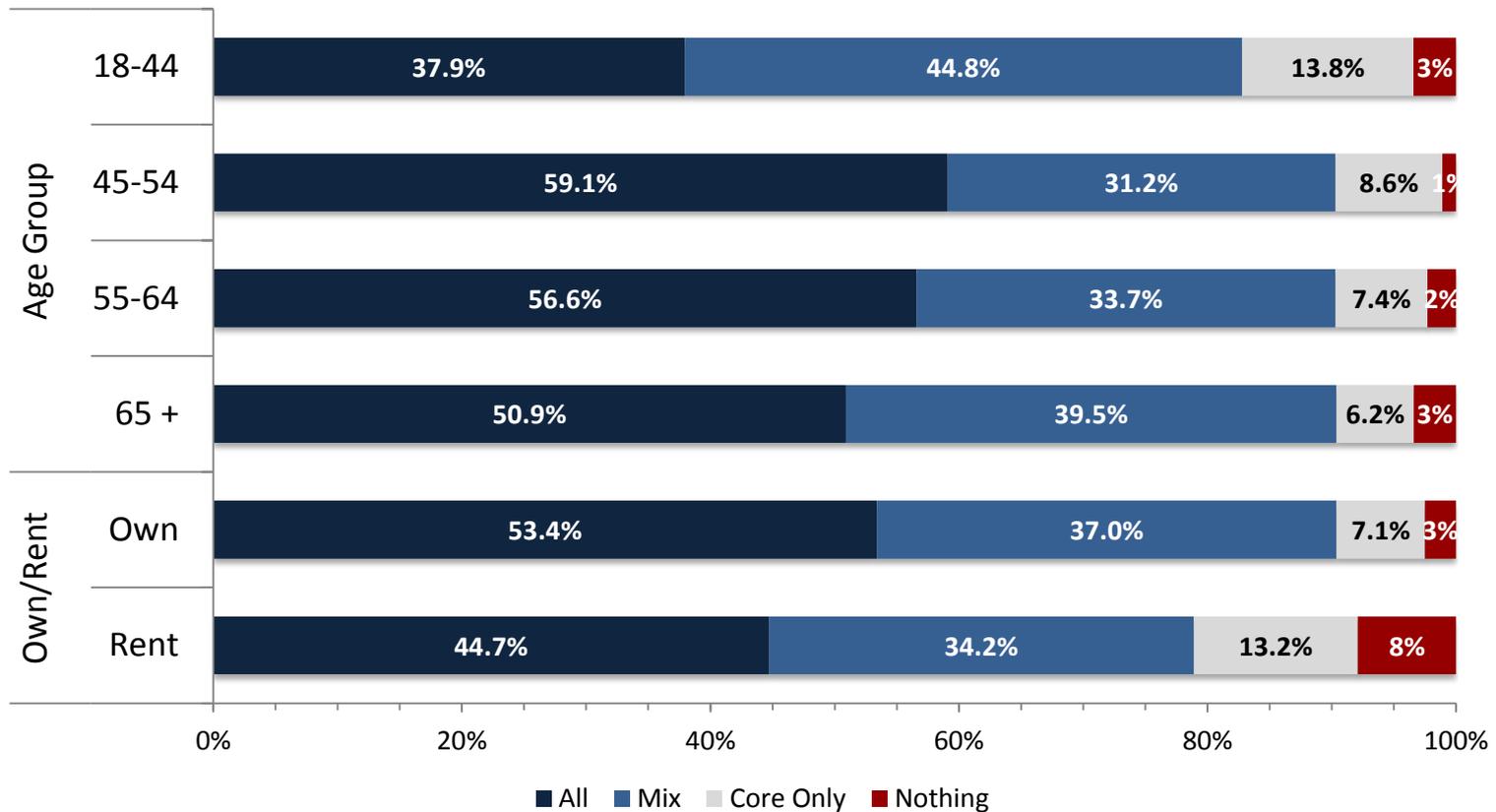
Just greater than one-half of residential customers indicate they are interested in all four types of information mentioned, with only 3% having no interest in any information and an additional 8% interested only in schedule related information pertaining to recycling and brush/bulky pick-up

Information interest groups



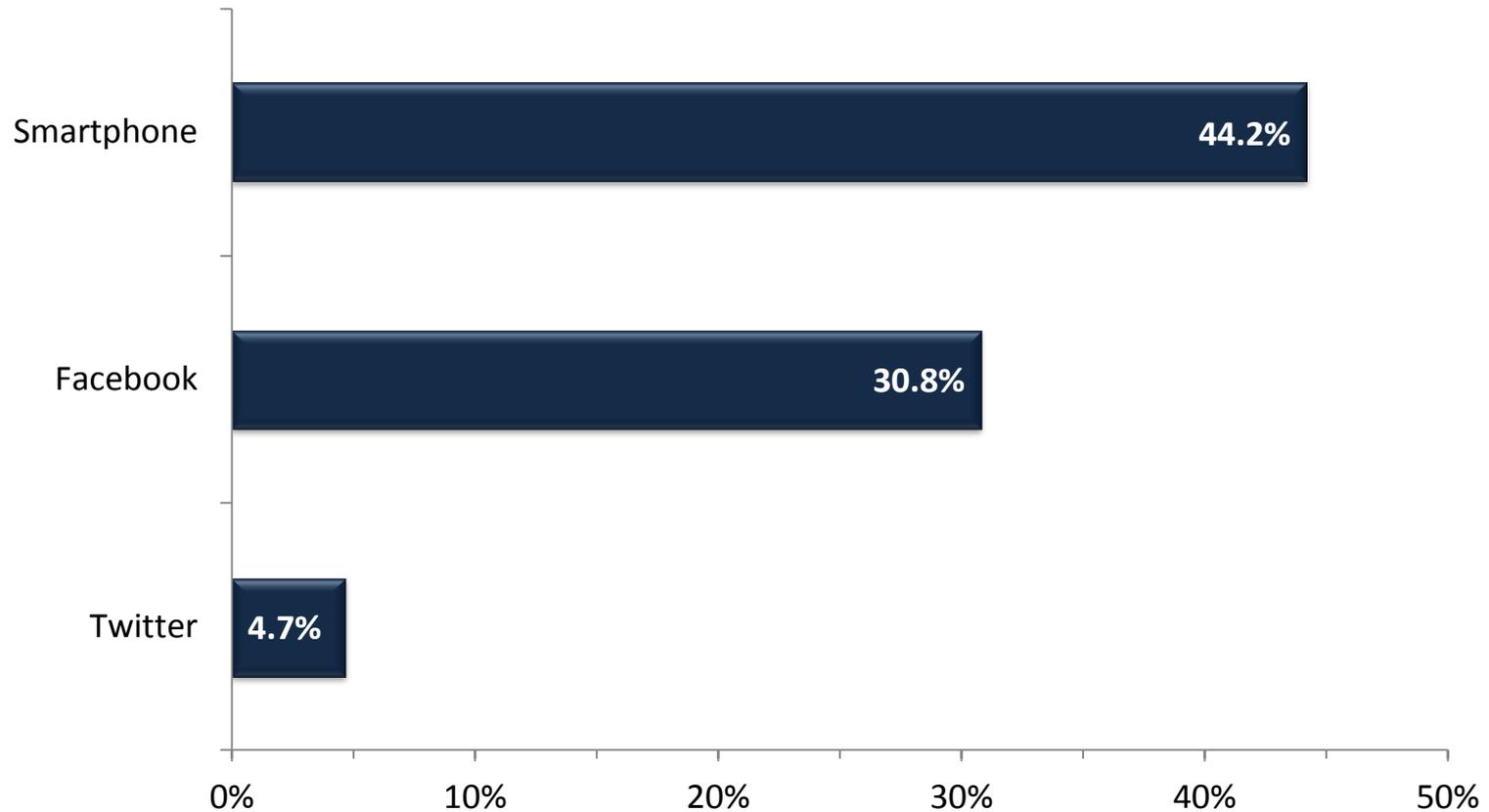
Older residential customers and those who own their home are more likely to be in the “all” or “mix” information groups

Information groups by demographics



Just under one-half of residential customers use a smartphone, with about 30% using Facebook and far fewer using Twitter

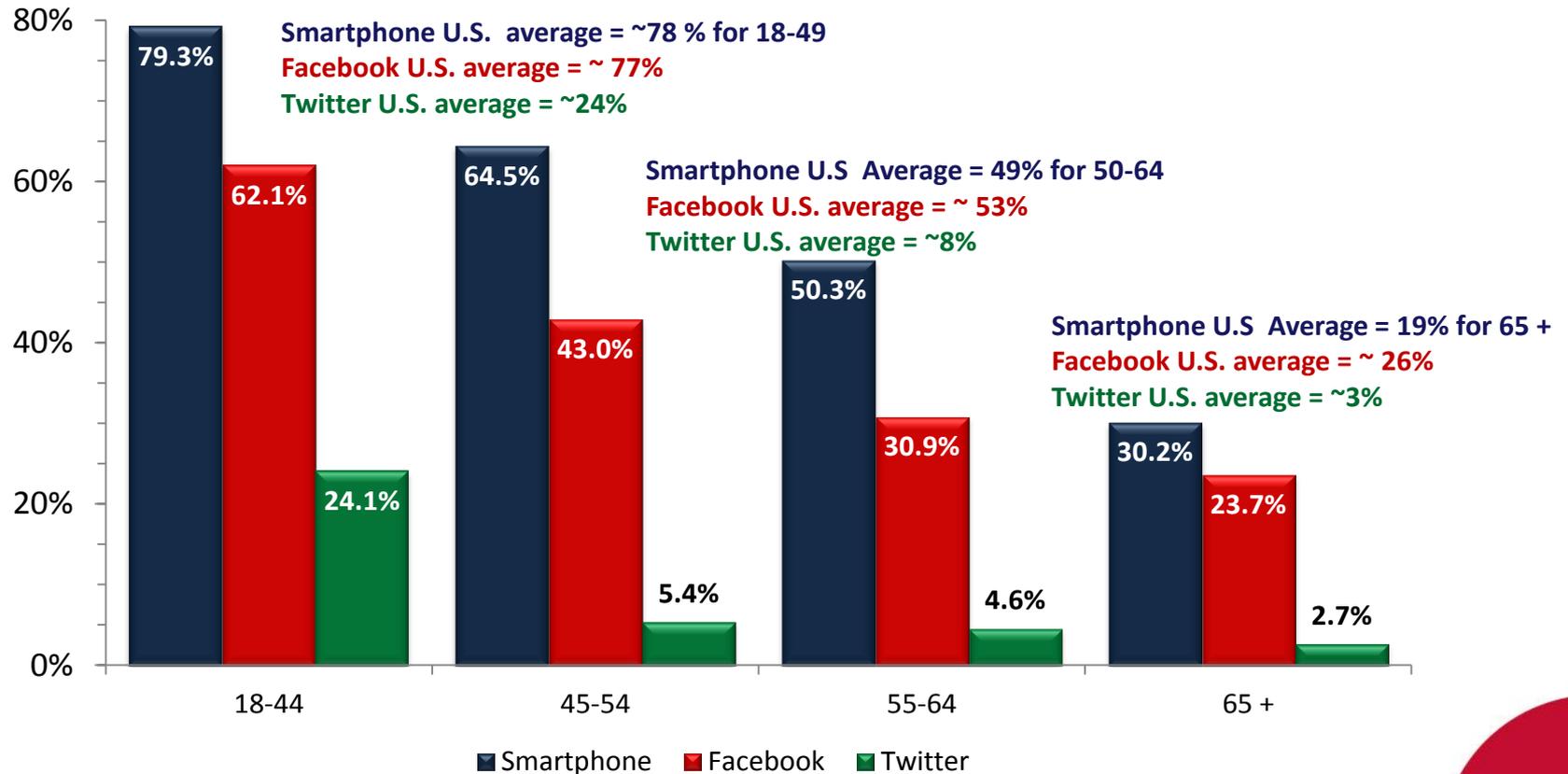
Currently use or own



Younger residential customers are more likely to own a smart phone and use Facebook and/or Twitter

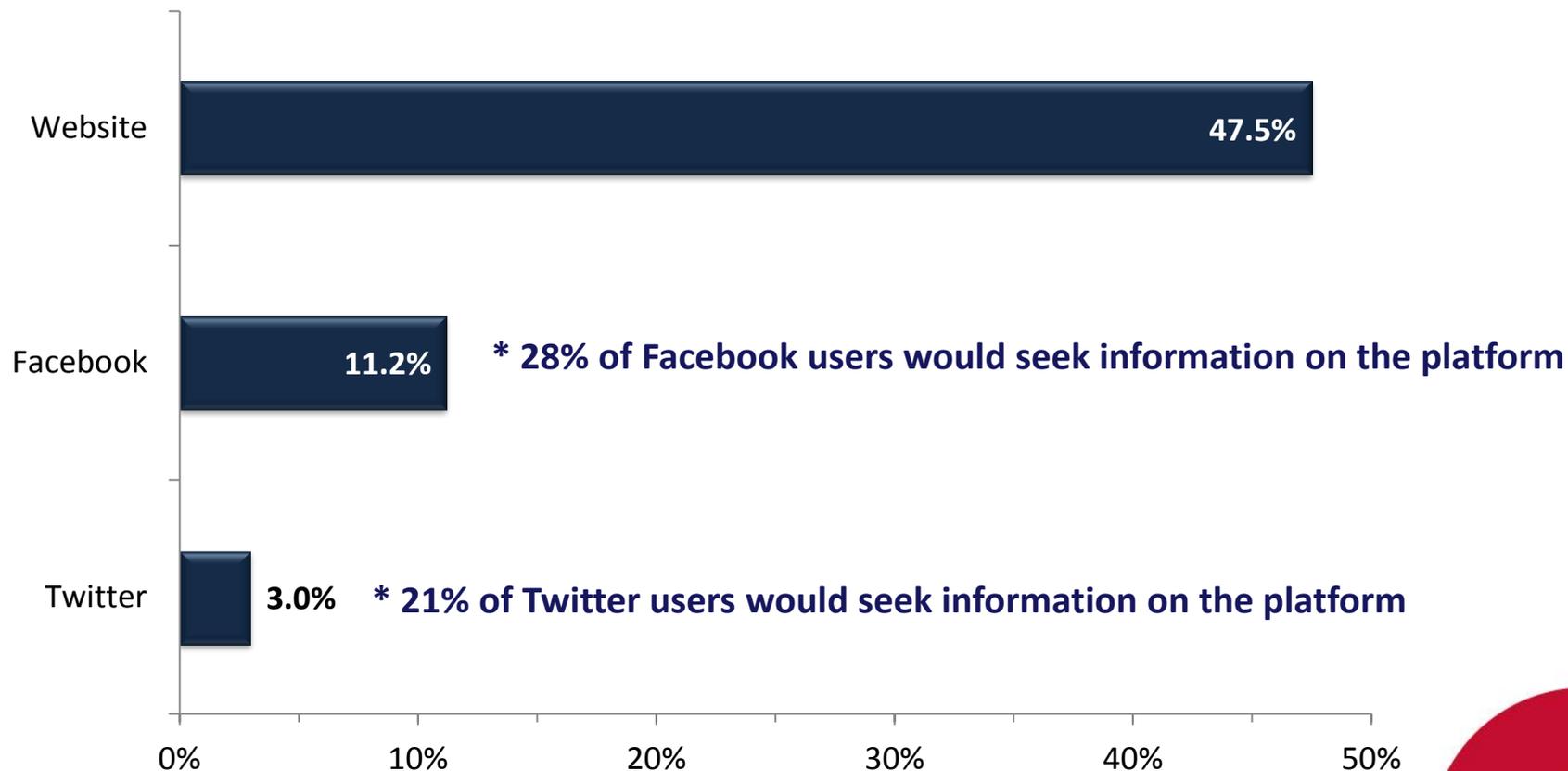
Currently use or own by age group

* "U.S. averages" are approximated using results from the Pew Research Center's Internet Project Tracking Survey



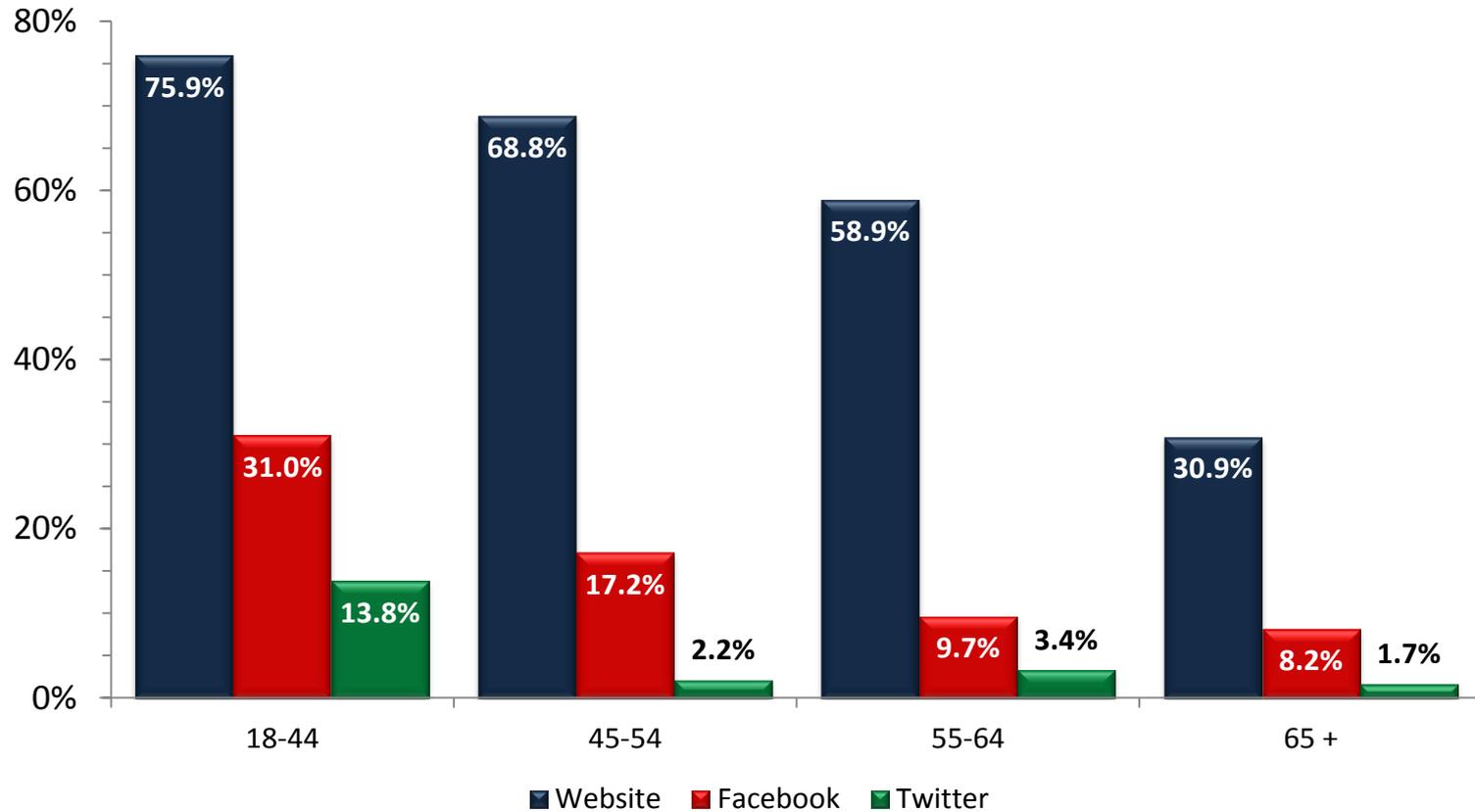
Just under one-half of residential customers are likely to use a department website to get information about services offered with far fewer likely to use a Facebook page or Twitter feed

Likely to use to get information about ESD or a similar government service provider



Younger residential customers are more likely to use digital/social media to get information about services provided by the COT – ESD

Likely to use to get information about ESD by age group



Appendix I : Demographic Tables

Table 1: Service Assessments by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Mean assessment on a 5-point assessment scale (1=very poor; 5=excellent) - only residents who utilized a serviced over the previous 12 months were asked to assess the service	Overall assessment	3.93	4.19	4.17	4.46	4.32	4.27
	<i>Significant Diff.</i>				A C		
	Residential garbage collect.	4.31	4.45	4.44	4.66	4.50	4.57
	<i>Significant Diff.</i>				C		
	Recycling collection	4.44	4.55	4.55	4.71	4.58	4.65
	<i>Significant Diff.</i>						
	Brush/bulky picky up	4.56	4.49	4.60	4.67	4.54	4.67
	<i>Significant Diff.</i>						A
	HHD Hazardous Waste	4.00	4.00	4.36	4.45	4.32	4.36
	<i>Significant Diff.</i>						
Cust. service via telephone	4.00	4.13	4.05	4.48	4.09	4.39	
<i>Significant Diff.</i>						A	
Los Reales Landfill	4.80	4.36	4.12	4.45	4.05	4.62	
<i>Significant Diff.</i>						A	
Neighborhood Recyc. Ctrs	4.57	4.46	4.32	4.39	4.32	4.45	
<i>Significant Diff.</i>							

Table 2: Service Assessments by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Mean assessment on a 5-point assessment scale (1=very poor; 5=excellent) - only residents who utilized a serviced over the previous 12 months were asked to assess the service	Overall assessment <i>Significant Diff.</i>	4.28	4.32	4.36	4.17	4.30	4.16
	Residential garbage collect. <i>Significant Diff.</i>	4.56	4.54	4.58	4.40	4.53	4.59
	Recycling collection <i>Significant Diff.</i>	4.64	4.61	4.63	4.55	4.61	4.65
	Brush/bulky picky up <i>Significant Diff.</i>	4.61	4.59	4.61	4.67	4.61	4.76
	HHD Hazardous Waste <i>Significant Diff.</i>	4.37	4.31	4.14	4.73	4.33	4.60
	Cust. service via telephone <i>Significant Diff.</i>	4.22	4.16	4.76	4.15	4.22	4.44
	Los Reales Landfill <i>Significant Diff.</i>	4.45	4.16	4.50	4.50	4.30	4.42
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	4.43	4.36	4.39	4.42	4.35	4.82

Table 3: Service Assessments by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Mean assessment on a 5-point assessment scale (1=very poor; 5=excellent) - only residents who utilized a serviced over the previous 12 months were asked to assess the service	Overall assessment <i>Significant Diff.</i>	4.31	4.42	4.42	4.19	4.16	4.25
	Residential garbage collect. <i>Significant Diff.</i>	4.62	4.60	4.63	4.37	4.38	4.61
	Recycling collection <i>Significant Diff.</i>	4.68	4.71	4.62	4.48	4.57	4.61
	Brush/bulky picky up <i>Significant Diff.</i>	4.68	4.63	4.65	4.49	4.51	4.70
	HHD Hazardous Waste <i>Significant Diff.</i>	4.30	4.47	4.38	4.69	4.08	4.21
	Cust. service via telephone <i>Significant Diff.</i>	4.48	3.97	4.12	4.52	4.14	4.26
	Los Reales Landfill <i>Significant Diff.</i>	4.50	3.85	4.59	4.25	4.14	4.47
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	4.35	4.63	4.30	4.35	4.31	4.47

Table 4: Service Assessments by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Mean assessment on a 5-point assessment scale (1=very poor; 5=excellent) - only residents who utilized a serviced over the previous 12 months were asked to assess the service	Overall assessment	4.33	4.35	4.01	4.33	4.19	4.27
	<i>Significant Diff.</i>	C	C				
	Residential garbage collect.	4.61	4.48	4.24	4.56	4.44	4.51
	<i>Significant Diff.</i>	C					
	Recycling collection	4.65	4.56	4.51	4.64	4.58	4.57
	<i>Significant Diff.</i>						
	Brush/bulky picky up	4.64	4.61	4.44	4.65	4.64	4.50
	<i>Significant Diff.</i>						
	HHD Hazardous Waste	4.36	4.05	4.60	4.37	4.37	4.25
	<i>Significant Diff.</i>						
Cust. service via telephone	4.35	4.22	3.94	4.34	4.22	4.09	
<i>Significant Diff.</i>							
Los Reales Landfill	4.31	4.52	3.93	4.32	4.00	4.43	
<i>Significant Diff.</i>							
Neighborhood Recyc. Ctrs	4.43	4.39	4.14	4.39	4.67	4.24	
<i>Significant Diff.</i>							

Table 5: Service Assessments by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Mean assessment on a 5-point assessment scale (1=very poor; 5=excellent) - only residents who utilized a serviced over the previous 12 months were asked to assess the service	Overall assessment <i>Significant Diff.</i>	4.33	4.14	4.23	4.29	4.34	4.41
	Residential garbage collect. <i>Significant Diff.</i>	4.56	4.46	4.58	4.53	4.52	4.62
	Recycling collection <i>Significant Diff.</i>	4.64	4.52	4.65	4.64	4.64	4.51
	Brush/bulky picky up <i>Significant Diff.</i>	4.72	4.49	4.66	4.57	4.56	4.76
	HHD Hazardous Waste <i>Significant Diff.</i>	4.33	4.52	4.55	4.29	4.00	4.30
	Cust. service via telephone <i>Significant Diff.</i>	4.63	4.11	4.18	4.14	4.37	4.27
	Los Reales Landfill <i>Significant Diff.</i>	4.22	4.62	4.40	4.53	4.36	4.14
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	4.50	4.50	4.28	4.45	4.06	4.50

Table 6: Service Utilization by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Services utilized at least once in the previous 12 months	Recycling collection <i>Significant Diff.</i>	93%	95%	96%	97%	95%	97%
	Brush/bulky picky up <i>Significant Diff.</i>	86%	86%	85%	84%	84%	83%
	HHD Hazardous Waste <i>Significant Diff.</i>	17%	24%	22%	28%	23%	26%
	Cust. service via telephone <i>Significant Diff.</i>	38%	34%	37%	28%	32%	33%
	Los Reales Landfill <i>Significant Diff.</i>	21%	28%	19%	16%	22%	17%
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	24%	28%	23%	26%	27%	23%

Table 7: Service Utilization by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Services utilized at least once in the previous 12 months	Recycling collection <i>Significant Diff.</i>	95%	96%	99%	97%	97%	90%
	Brush/bulky picky up <i>Significant Diff.</i>	76%	88% A	88%	82%	85%	68%
	HHD Hazardous Waste <i>Significant Diff.</i>	24%	29%	18%	15%	25%	16%
	Cust. service via telephone <i>Significant Diff.</i>	28%	34%	35%	35%	31%	47% A
	Los Reales Landfill <i>Significant Diff.</i>	15%	22%	18%	22%	19%	32%
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	21%	27%	26%	26%	25%	29%
						B	
						B	

Table 8: Service Utilization by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Services utilized at least once in the previous 12 months	Recycling collection <i>Significant Diff.</i>	95%	98%	96%	97%	94%	96%
	Brush/bulky picky up <i>Significant Diff.</i>	85%	77%	85%	82%	87%	87%
	HHD Hazardous Waste <i>Significant Diff.</i>	28%	24%	28%	18%	14%	35%
	Cust. service via telephone <i>Significant Diff.</i>	31%	33%	26%	33%	35%	37%
	Los Reales Landfill <i>Significant Diff.</i>	18%	16%	21%	23%	23%	16%
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	42%	16%	28%	27%	15%	23%
		B E F					
							E

Table 9: Service Utilization by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Services utilized at least once in the previous 12 months	Recycling collection <i>Significant Diff.</i>	97%	94%	94%	98% B	91%	97% B
	Brush/bulky picky up <i>Significant Diff.</i>	85%	85%	77%	84%	84%	83%
	HHD Hazardous Waste <i>Significant Diff.</i>	26%	21%	23%	24%	26%	24%
	Cust. service via telephone <i>Significant Diff.</i>	30%	35%	43%	29%	43% A	36%
	Los Reales Landfill <i>Significant Diff.</i>	19%	22%	22%	21%	14%	18%
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	26%	28%	18%	27%	19%	25%

Table 10: Service Utilization by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Services utilized at least once in the previous 12 months	Recycling collection <i>Significant Diff.</i>	99%	94%	95%	96%	99%	98%
	Brush/bulky picky up <i>Significant Diff.</i>	83%	78%	85%	90%	85%	84%
	HHD Hazardous Waste <i>Significant Diff.</i>	15%	33%	25%	26%	34%	22%
	Cust. service via telephone <i>Significant Diff.</i>	35%	35%	36%	38%	29%	22%
	Los Reales Landfill <i>Significant Diff.</i>	14%	19%	24%	15%	17%	28%
	Neighborhood Recyc. Ctrs <i>Significant Diff.</i>	23%	29%	21%	22%	29%	32%

Table 11: Blue Barrel Frequency by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Frequency of putting blue recycling barrel out for pick-up	Weekly <i>Significant Diff.</i>	62%	63%	53%	52%	58%	51%
	Every other week <i>Significant Diff.</i>	31%	28%	30%	34%	27%	36% A
	About once a month <i>Significant Diff.</i>	7%	5%	11%	10%	10%	9%
	Less than once a month <i>Significant Diff.</i>	0%	1%	3%	1%	1%	2%
	Do not use <i>Significant Diff.</i>	0%	2%	3%	2%	3%	2%

Table 12: Blue Barrel Frequency by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Frequency of putting blue recycling barrel out for pick-up	Weekly	36%	55%	74%	73%	55%	53%
	<i>Significant Diff.</i>		A	A B	A B		
	Every other week	40%	32%	23%	22%	33%	18%
	<i>Significant Diff.</i>	D					
	About once a month	17%	10%	3%	3%	9%	21%
	<i>Significant Diff.</i>	C D					A
	Less than once a month	5%	1%	0%	0%	2%	3%
	<i>Significant Diff.</i>	B					
Do not use	3%	3%	0%	3%	2%	5%	
<i>Significant Diff.</i>							

Table 13: Blue Barrel Frequency by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Frequency of putting blue recycling barrel out for pick-up	Weekly <i>Significant Diff.</i>	55%	62%	47%	59%	57%	47%
	Every other week <i>Significant Diff.</i>	33%	28%	37%	29%	30%	33%
	About once a month <i>Significant Diff.</i>	8%	6%	12%	9%	6%	18%
	Less than once a month <i>Significant Diff.</i>	2%	2%	4%	0%	2%	0%
	Do not use <i>Significant Diff.</i>	2%	2%	0%	3%	5%	2%

Table 14: Blue Barrel Frequency by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Frequency of putting blue recycling barrel out for pick-up	Weekly <i>Significant Diff.</i>	51%	65% A	60%	57%	54%	49%
	Every other week <i>Significant Diff.</i>	34%	26%	27%	34%	23%	33%
	About once a month <i>Significant Diff.</i>	12%	3%	8%	8%	13%	14%
	Less than once a month <i>Significant Diff.</i>	1%	3%	1%	1%	4%	3%
	Do not use <i>Significant Diff.</i>	2%	3%	5%	1%	7%	2%
						A	

Table 15: Blue Barrel Frequency by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Frequency of putting blue recycling barrel out for pick-up	Weekly <i>Significant Diff.</i>	59%	44%	47%	61%	60%	72% B C
	Every other week <i>Significant Diff.</i>	23%	43%	38%	31%	26%	24%
	About once a month <i>Significant Diff.</i>	12%	9%	12%	7%	11%	2%
	Less than once a month <i>Significant Diff.</i>	6%	1%	2%	0%	3%	0%
	Do not use <i>Significant Diff.</i>	1%	4%	2%	1%	0%	2%

Table 16: Willingness to Pay for Ancillary Services by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Would pay for home pick-up of household hazardous waste	Generally willing	41%	32%	23%	21%	22%	26%
	<i>Significant Diff.</i>						
	At \$10 price point	38%	28%	21%	17%	20%	21%
	<i>Significant Diff.</i>						
A third container dedicated for green or landscape waste	At \$15 price point	35%	25%	16%	13%	15%	18%
	<i>Significant Diff.</i>	D					
	Generally willing	28%	29%	23%	21%	17%	28%
	<i>Significant Diff.</i>						A
Collection of food scraps and waste	At \$10 price point	21%	17%	13%	9%	9%	15%
	<i>Significant Diff.</i>						A
	At \$15 price point	14%	9%	5%	5%	4%	7%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	Generally willing	21%	22%	15%	10%	11%	16%
	<i>Significant Diff.</i>		D				
	At \$10 price point	10%	12%	9%	7%	6%	11%
	<i>Significant Diff.</i>						A
Collection of food scraps and waste	At \$15 price point	7%	4%	3%	4%	3%	4%
	<i>Significant Diff.</i>						

Table 17: Willingness to Pay for Ancillary Services by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Would pay for home pick-up of household hazardous waste	Generally willing	25%	23%	23%	26%	24%	32%
	<i>Significant Diff.</i>						
	At \$10 price point	24%	20%	16%	22%	21%	24%
	<i>Significant Diff.</i>						
A third container dedicated for green or landscape waste	At \$15 price point	17%	17%	13%	21%	16%	24%
	<i>Significant Diff.</i>						
	Generally willing	21%	23%	22%	28%	24%	11%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	At \$10 price point	9%	13%	9%	18%	12%	11%
	<i>Significant Diff.</i>						
	At \$15 price point	4%	6%	4%	10%	6%	8%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	Generally willing	15%	14%	13%	12%	14%	8%
	<i>Significant Diff.</i>						
	At \$10 price point	9%	9%	4%	9%	8%	8%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	At \$15 price point	6%	3%	1%	5%	3%	8%
	<i>Significant Diff.</i>						

Table 18: Willingness to Pay for Ancillary Services by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Would pay for home pick-up of household hazardous waste	Generally willing	25%	14%	30%	23%	13%	40%
	<i>Significant Diff.</i>						B E
	At \$10 price point	20%	13%	26%	19%	10%	36%
	<i>Significant Diff.</i>						B D E
A third container dedicated for green or landscape waste	At \$15 price point	17%	13%	22%	17%	6%	25%
	<i>Significant Diff.</i>			E			E
	Generally willing	23%	20%	27%	17%	13%	37%
	<i>Significant Diff.</i>						D E
Collection of food scraps and waste	At \$10 price point	17%	9%	12%	7%	9%	18%
	<i>Significant Diff.</i>						
	At \$15 price point	8%	5%	4%	3%	5%	9%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	Generally willing	13%	8%	20%	11%	10%	20%
	<i>Significant Diff.</i>						
	At \$10 price point	10%	7%	11%	7%	4%	11%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	At \$15 price point	6%	5%	5%	2%	1%	3%
	<i>Significant Diff.</i>						

Table 19: Willingness to Pay for Ancillary Services by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Would pay for home pick-up of household hazardous waste	Generally willing	25%	20%	24%	25%	19%	24%
	<i>Significant Diff.</i>						
	At \$10 price point	22%	16%	19%	22%	16%	19%
	<i>Significant Diff.</i>						
A third container dedicated for green or landscape waste	Generally willing	24%	20%	22%	23%	26%	21%
	<i>Significant Diff.</i>						
	At \$10 price point	11%	14%	13%	13%	9%	12%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	Generally willing	15%	10%	14%	14%	12%	14%
	<i>Significant Diff.</i>						
	At \$10 price point	9%	6%	10%	9%	8%	7%
	<i>Significant Diff.</i>						
	At \$15 price point	4%	3%	6%	4%	2%	3%
	<i>Significant Diff.</i>						

Table 20: Willingness to Pay for Ancillary Services by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Would pay for home pick-up of household hazardous waste	Generally willing	20%	20%	19%	36%	32%	30%
	<i>Significant Diff.</i>						
	At \$10 price point	15%	15%	18%	33%	26%	30%
	<i>Significant Diff.</i>				A B		
A third container dedicated for green or landscape waste	At \$15 price point	13%	11%	13%	29%	26%	22%
	<i>Significant Diff.</i>				B C		
	Generally willing	21%	16%	22%	28%	40%	24%
	<i>Significant Diff.</i>					B	
Collection of food scraps and waste	At \$10 price point	13%	6%	13%	15%	29%	8%
	<i>Significant Diff.</i>					A B C F	
	At \$15 price point	7%	4%	6%	7%	12%	4%
	<i>Significant Diff.</i>						
Collection of food scraps and waste	Generally willing	13%	13%	15%	9%	31%	16%
	<i>Significant Diff.</i>					A B D	
	At \$10 price point	6%	5%	14%	6%	23%	10%
	<i>Significant Diff.</i>					A B D	
Collection of food scraps and waste	At \$15 price point	1%	5%	8%	1%	9%	4%
	<i>Significant Diff.</i>						

Table 21: Recall Receiving Information from ESD via... (1) by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Recall receiving information from ESD via ... over the previous 12 months	Utility statement inserts	86%	75%	73%	74%	72%	76%
	<i>Significant Diff.</i>						
	Door hangers	72%	73%	73%	65%	72%	66%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	69%	45%	43%	45%	45%	46%
	<i>Significant Diff.</i>						
	Newspapers	28%	18%	28%	38%	27%	36%
	<i>Significant Diff.</i>				B		A
	TV	59%	30%	26%	29%	27%	32%
	<i>Significant Diff.</i>	B C D					
Signage on vehicles/roll-offs	28%	28%	34%	23%	32%	23%	
<i>Significant Diff.</i>			D		B		
Customer service reprs	28%	22%	20%	16%	17%	21%	
<i>Significant Diff.</i>							

Table 22: Recall Receiving Information from ESD via... (2) by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Recall receiving information from ESD via ... over the previous 12 months	A website	31%	26%	22%	11%	15%	19%
	<i>Significant Diff.</i>	D	D	D			
	Radio	10%	11%	13%	11%	9%	14%
	<i>Significant Diff.</i>						
	A bus bench	10%	8%	12%	11%	10%	11%
	<i>Significant Diff.</i>						
	A bus shelter	17%	7%	14%	6%	8%	10%
	<i>Significant Diff.</i>			D			
	Facebook	10%	9%	2%	1%	3%	4%
	<i>Significant Diff.</i>	D	C D				
	Smartphone App	7%	5%	1%	1%	1%	3%
	<i>Significant Diff.</i>		D				
Twitter	3%	2%	2%	0%	1%	1%	
<i>Significant Diff.</i>							

Table 23: Recall Receiving Information from ESD via... (1) by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Recall receiving information from ESD via ... over the previous 12 months	Utility statement inserts	76%	76%	69%	71%	74%	71%
	<i>Significant Diff.</i>						
	Door hangers	67%	70%	64%	72%	69%	53%
	<i>Significant Diff.</i>					B	
	Brochures and pamphlets	47%	43%	55%	44%	45%	47%
	<i>Significant Diff.</i>						
	Newspapers	34%	37%	17%	22%	31%	32%
	<i>Significant Diff.</i>	C	C				
	TV	25%	31%	35%	31%	30%	24%
	<i>Significant Diff.</i>						
Signage on vehicles/roll-offs	28%	24%	31%	36%	28%	26%	
<i>Significant Diff.</i>							
Customer service reprs	15%	19%	23%	22%	18%	24%	
<i>Significant Diff.</i>							

Table 24: Recall Receiving Information from ESD via... (2) by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Recall receiving information from ESD via ... over the previous 12 months	A website	10%	23%	13%	15%	17%	16%
	<i>Significant Diff.</i>		A				
	Radio	9%	12%	12%	14%	11%	5%
	<i>Significant Diff.</i>						
	A bus bench	9%	11%	12%	12%	11%	8%
	<i>Significant Diff.</i>						
	A bus shelter	7%	8%	12%	13%	9%	8%
	<i>Significant Diff.</i>						
	Facebook	1%	4%	3%	5%	3%	11%
	<i>Significant Diff.</i>						A
	Smartphone App	0%	3%	1%	6%	2%	3%
	<i>Significant Diff.</i>				A		
Twitter	1%	1%	1%	3%	1%	3%	
<i>Significant Diff.</i>							

Table 25: Recall Receiving Information from ESD via... (1) by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Recall receiving information from ESD via ... over the previous 12 months	Utility statement inserts	65%	80%	74%	72%	79%	75%
	<i>Significant Diff.</i>						
	Door hangers	67%	63%	67%	67%	63%	84%
	<i>Significant Diff.</i>						B E
	Brochures and pamphlets	49%	45%	45%	40%	45%	49%
	<i>Significant Diff.</i>						
	Newspapers	30%	35%	38%	24%	26%	35%
	<i>Significant Diff.</i>						
	TV	32%	33%	24%	33%	31%	25%
	<i>Significant Diff.</i>						
Signage on vehicles/roll-offs	22%	26%	34%	32%	18%	32%	
<i>Significant Diff.</i>							
Customer service reprs	21%	18%	8%	22%	19%	25%	
<i>Significant Diff.</i>						C	

Table 26: Recall Receiving Information from ESD via... (2) by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Recall receiving information from ESD via ... over the previous 12 months	A website	18%	11%	16%	14%	13%	31%
	<i>Significant Diff.</i>						B D E
	Radio	17%	10%	10%	15%	8%	8%
	<i>Significant Diff.</i>						
	A bus bench	9%	9%	15%	10%	10%	10%
	<i>Significant Diff.</i>						
	A bus shelter	8%	6%	12%	9%	7%	11%
	<i>Significant Diff.</i>						
	Facebook	3%	0%	3%	8%	2%	3%
	<i>Significant Diff.</i>				B		
	Smartphone App	5%	1%	0%	5%	2%	0%
	<i>Significant Diff.</i>						
Twitter	1%	0%	4%	1%	1%	1%	
<i>Significant Diff.</i>							

Table 27: Recall Receiving Information from ESD via... (1) by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Recall receiving information from ESD via ... over the previous 12 months	Utility statement inserts	74%	76%	75%	74%	72%	76%
	<i>Significant Diff.</i>						
	Door hangers	71%	59%	68%	69%	72%	64%
	<i>Significant Diff.</i>	B					
	Brochures and pamphlets	44%	47%	48%	45%	45%	47%
	<i>Significant Diff.</i>						
	Newspapers	34%	25%	25%	31%	28%	34%
	<i>Significant Diff.</i>						
	TV	28%	37%	25%	30%	22%	34%
	<i>Significant Diff.</i>						
Signage on vehicles/roll-offs	31%	16%	23%	29%	26%	24%	
<i>Significant Diff.</i>	B						
Customer service reprs	17%	20%	27%	18%	22%	19%	
<i>Significant Diff.</i>							

Table 28: Recall Receiving Information from ESD via... (2) by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Recall receiving information from ESD via ... over the previous 12 months	A website <i>Significant Diff.</i>	19%	14%	14%	18%	11%	18%
	Radio <i>Significant Diff.</i>	10%	15%	13%	13%	9%	9%
	A bus bench <i>Significant Diff.</i>	11%	8%	13%	8%	12%	16%
	A bus shelter <i>Significant Diff.</i>	8%	9%	13%	8%	9%	12%
	Facebook <i>Significant Diff.</i>	3%	4%	3%	3%	2%	4%
	Smartphone App <i>Significant Diff.</i>	1%	5%	3%	3%	1%	0%
	Twitter <i>Significant Diff.</i>	1%	2%	3%	1%	1%	1%
							A

Table 29: Recall Receiving Information from ESD via... (1) by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Recall receiving information from ESD via ... over the previous 12 months	Utility statement inserts	75%	76%	80%	73%	71%	72%
	<i>Significant Diff.</i>						
	Door hangers	58%	56%	71%	74%	80%	84%
	<i>Significant Diff.</i>					A B	A B
	Brochures and pamphlets	44%	44%	56%	44%	42%	48%
	<i>Significant Diff.</i>						
	Newspapers	20%	35%	31%	33%	42%	40%
	<i>Significant Diff.</i>						
	TV	31%	33%	36%	31%	22%	30%
	<i>Significant Diff.</i>						
Signage on vehicles/roll-offs	25%	28%	40%	24%	28%	36%	
<i>Significant Diff.</i>							
Customer service reprs	20%	20%	26%	20%	12%	22%	
<i>Significant Diff.</i>							

Table 30: Recall Receiving Information from ESD via... (2) by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Recall receiving information from ESD via ... over the previous 12 months	A website	8%	11%	18%	26%	28%	22%
	<i>Significant Diff.</i>				A	A	
	Radio	12%	5%	19%	13%	17%	10%
	<i>Significant Diff.</i>						
	A bus bench	8%	13%	15%	10%	11%	10%
	<i>Significant Diff.</i>						
	A bus shelter	7%	13%	13%	6%	14%	6%
	<i>Significant Diff.</i>						
	Facebook	2%	3%	6%	6%	3%	0%
	<i>Significant Diff.</i>						
	Smartphone App	2%	0%	3%	3%	0%	4%
	<i>Significant Diff.</i>						
Twitter	0%	0%	2%	1%	3%	0%	
<i>Significant Diff.</i>							

Table 31: Preferred Information Source by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Most likely to use to get information about ESD	Utility statement inserts	31%	31%	23%	36%	29%	33%
	<i>Significant Diff.</i>				C		
	Door hangers	14%	30%	27%	21%	27%	22%
	<i>Significant Diff.</i>						
	A website	21%	24%	19%	8%	12%	17%
	<i>Significant Diff.</i>		D	D			
	Newspapers	3%	1%	6%	12%	9%	8%
	<i>Significant Diff.</i>				B		
	TV	3%	5%	9%	9%	6%	9%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	7%	1%	5%	7%	7%	3%
	<i>Significant Diff.</i>					B	
	Customer service reps	3%	1%	3%	4%	4%	3%
	<i>Significant Diff.</i>						
	Radio	0%	0%	3%	2%	3%	1%
	<i>Significant Diff.</i>						
Facebook	14%	2%	2%	0%	0%	3%	
<i>Significant Diff.</i>	C D					A	
A bus shelter	3%	0%	2%	0%	2%	0%	
<i>Significant Diff.</i>							
Smartphone App	0%	3%	1%	0%	1%	1%	
<i>Significant Diff.</i>							
Signage on vehicles/roll-offs	0%	1%	0%	1%	1%	0%	
<i>Significant Diff.</i>							

Table 32: Preferred Information Source by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Most likely to use to get information about ESD	Utility statement inserts	34%	27%	44%	27%	31%	29%
	<i>Significant Diff.</i>			B			
	Door hangers	23%	23%	22%	31%	24%	21%
	<i>Significant Diff.</i>						
	A website	12%	17%	12%	15%	14%	24%
	<i>Significant Diff.</i>						
	Newspapers	7%	11%	4%	3%	9%	3%
	<i>Significant Diff.</i>						
	TV	6%	7%	7%	14%	8%	11%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	6%	5%	7%	1%	5%	3%
	<i>Significant Diff.</i>						
	Customer service reps	5%	3%	1%	3%	3%	5%
	<i>Significant Diff.</i>						
	Radio	3%	3%	0%	0%	2%	3%
	<i>Significant Diff.</i>						
Facebook	1%	2%	1%	3%	2%	3%	
<i>Significant Diff.</i>							
A bus shelter	1%	0%	1%	4%	1%	0%	
<i>Significant Diff.</i>							
Smartphone App	1%	1%	1%	0%	1%	0%	
<i>Significant Diff.</i>							
Signage on vehicles/roll-offs	1%	1%	0%	0%	1%	0%	
<i>Significant Diff.</i>							

Table 33: Preferred Information Source by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Most likely to use to get information about ESD	Utility statement inserts	29%	33%	26%	29%	41%	29%
	<i>Significant Diff.</i>						
	Door hangers	23%	18%	23%	28%	19%	32%
	<i>Significant Diff.</i>						
	A website	16%	12%	18%	12%	11%	19%
	<i>Significant Diff.</i>						
	Newspapers	7%	12%	6%	7%	6%	10%
	<i>Significant Diff.</i>						
	TV	6%	11%	7%	7%	12%	3%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	11%	6%	6%	3%	0%	4%
	<i>Significant Diff.</i>						
	Customer service reps	2%	3%	6%	4%	3%	1%
	<i>Significant Diff.</i>						
	Radio	1%	1%	6%	1%	2%	1%
	<i>Significant Diff.</i>						
Facebook	0%	2%	0%	3%	4%	1%	
<i>Significant Diff.</i>							
A bus shelter	4%	0%	0%	2%	0%	0%	
<i>Significant Diff.</i>							
Smartphone App	0%	2%	1%	2%	1%	0%	
<i>Significant Diff.</i>							
Signage on vehicles/roll-offs	1%	0%	0%	2%	1%	0%	
<i>Significant Diff.</i>							

Table 34: Preferred Information Source by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Most likely to use to get information about ESD	Utility statement inserts	28%	40%	37%	31%	26%	35%
	<i>Significant Diff.</i>		A				
	Door hangers	27%	18%	19%	23%	26%	25%
	<i>Significant Diff.</i>						
	A website	17%	6%	18%	16%	13%	13%
	<i>Significant Diff.</i>	B		B			
	Newspapers	9%	7%	5%	10%	5%	5%
	<i>Significant Diff.</i>						
	TV	6%	10%	10%	8%	7%	8%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	5%	7%	3%	5%	5%	5%
	<i>Significant Diff.</i>						
	Customer service reps	4%	1%	4%	1%	6%	7%
	<i>Significant Diff.</i>					A	A
	Radio	2%	2%	3%	2%	6%	1%
	<i>Significant Diff.</i>						
Facebook	1%	4%	1%	1%	4%	2%	
<i>Significant Diff.</i>		A					
A bus shelter	1%	3%	1%	1%	2%	0%	
<i>Significant Diff.</i>							
Smartphone App	1%	2%	0%	1%	1%	2%	
<i>Significant Diff.</i>							
Signage on vehicles/roll-offs	1%	1%	0%	1%	1%	0%	
<i>Significant Diff.</i>							

Table 35: Preferred Information Source by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Most likely to use to get information about ESD	Utility statement inserts	34%	44%	33%	29%	19%	18%
	<i>Significant Diff.</i>		E F				
	Door hangers	19%	18%	28%	30%	29%	28%
	<i>Significant Diff.</i>						
	A website	11%	8%	10%	15%	25%	26%
	<i>Significant Diff.</i>						
	Newspapers	5%	9%	9%	6%	8%	12%
	<i>Significant Diff.</i>						
	TV	12%	8%	7%	8%	2%	4%
	<i>Significant Diff.</i>						
	Brochures and pamphlets	2%	8%	5%	2%	5%	8%
	<i>Significant Diff.</i>						
	Customer service reps	5%	3%	3%	2%	8%	0%
	<i>Significant Diff.</i>						
	Radio	5%	1%	1%	2%	2%	4%
	<i>Significant Diff.</i>						
Facebook	5%	1%	3%	1%	2%	0%	
<i>Significant Diff.</i>							
A bus shelter	4%	1%	0%	0%	3%	0%	
<i>Significant Diff.</i>							
Smartphone App	1%	1%	0%	3%	0%	0%	
<i>Significant Diff.</i>							
Signage on vehicles/roll-offs	0%	0%	2%	1%	0%	0%	
<i>Significant Diff.</i>							

Table 36: Information Interests and Digital Platform Use/Ownership by Age Group and Gender

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		AGE GROUP				GENDER	
		18-44 [A]	45-54 [B]	55-64 [C]	65 + [D]	Male [A]	Female [B]
Likely to read or look for information about...	Trash/recycling schedule <i>Significant Diff.</i>	86%	86%	91%	87%	86%	89%
	Brush/bulky pick up sched <i>Significant Diff.</i>	90%	97%	90%	88%	89%	91%
	Recycling information <i>Significant Diff.</i>	76%	87%	81%	82%	76%	87%
	Reducing household waste <i>Significant Diff.</i>	55%	71%	63%	60%	54%	70%
							A
Likely to use to get information about...	Website <i>Significant Diff.</i>	76%	69%	59%	31%	44%	50%
	Facebook <i>Significant Diff.</i>	31%	17%	10%	8%	7%	15%
	Twitter <i>Significant Diff.</i>	14%	2%	3%	2%	4%	3%
							A
Currently use or own	Facebook <i>Significant Diff.</i>	62%	43%	31%	24%	26%	35%
	Twitter <i>Significant Diff.</i>	24%	5%	5%	3%	5%	4%
	Smartphone <i>Significant Diff.</i>	79%	65%	50%	30%	49%	40%
						B	

Table 37: Information Interests and Digital Platform Use/Ownership by Household Size and Own/Rent

[A/B/C/D] indicate a significant difference above the specified variable at a 95% confidence interval		HOUSEHOLD SIZE				OWN/RENT	
		1 [A]	2 [B]	3 [C]	4+ [D]	Own [A]	Rent [B]
Likely to read or look for information about...	Trash/recycling schedule <i>Significant Diff.</i>	87%	89%	84%	85%	88% B	76%
	Brush/bulky pick up sched <i>Significant Diff.</i>	90%	89%	92%	92%	90%	87%
	Recycling information <i>Significant Diff.</i>	80%	82%	84%	80%	83% B	68%
	Reducing household waste <i>Significant Diff.</i>	62%	62%	66%	59%	62%	63%
	Website <i>Significant Diff.</i>	39%	53% A	46%	50%	47%	55%
Likely to use to get information about...	Facebook <i>Significant Diff.</i>	9%	12%	16%	9%	10%	24% A
	Twitter <i>Significant Diff.</i>	1%	3%	5%	5%	3%	5%
	Facebook <i>Significant Diff.</i>	28%	32%	30%	33%	31%	40%
Currently use or own	Twitter <i>Significant Diff.</i>	4%	5%	3%	6%	5%	5%
	Smartphone <i>Significant Diff.</i>	35%	44%	58% A	51%	44%	55%

Table 38: Information Interests and Digital Platform Use/Ownership by City Ward

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		CITY WARD					
		Ward 1 [A]	Ward 2 [B]	Ward 3 [C]	Ward 4 [D]	Ward 5 [E]	Ward 6 [F]
Likely to read or look for information about...	Trash/recycling schedule <i>Significant Diff.</i>	89%	88%	92%	78%	84%	94%
	Brush/bulky pick up sched <i>Significant Diff.</i>	89%	89%	94%	88%	90%	90%
	Recycling information <i>Significant Diff.</i>	82%	80%	84%	79%	84%	81%
	Reducing household waste <i>Significant Diff.</i>	58%	61%	69%	61%	65%	59%
				D			D
Likely to use to get information about...	Website <i>Significant Diff.</i>	46%	43%	54%	52%	36%	54%
	Facebook <i>Significant Diff.</i>	11%	7%	10%	16%	14%	9%
	Twitter <i>Significant Diff.</i>	4%	2%	2%	4%	4%	2%
Currently use or own	Facebook <i>Significant Diff.</i>	29%	29%	36%	27%	32%	32%
	Twitter <i>Significant Diff.</i>	8%	4%	6%	3%	2%	5%
	Smartphone <i>Significant Diff.</i>	46%	43%	38%	49%	43%	46%

Table 39: Information Interests and Digital Platform Use/Ownership by Ethnicity/Race and Trash Service Type

[A/B/C] indicate a significant difference above the specified variable at a 95% confidence interval		ETHNICITY/RACE			TRASH SERVICE TYPE		
		White [A]	Hispanic [B]	Other [C]	Curbside [A]	Alley [B]	Curbside/alley [C]
Likely to read or look for information about...	Trash/recycling schedule <i>Significant Diff.</i>	89%	85%	82%	87%	93%	86%
	Brush/bulky pick up sched <i>Significant Diff.</i>	90%	91%	91%	89%	93%	92%
	Recycling information <i>Significant Diff.</i>	83%	79%	77%	83%	83%	79%
	Reducing household waste <i>Significant Diff.</i>	63%	62%	58%	62%	63%	64%
Likely to use to get information about...	Website <i>Significant Diff.</i>	50%	39%	48%	48%	48%	46%
	Facebook <i>Significant Diff.</i>	9%	17% A	14%	10%	13%	12%
	Twitter <i>Significant Diff.</i>	2%	8% A	4%	3%	4%	1%
Currently use or own	Facebook <i>Significant Diff.</i>	32%	28%	29%	30%	30%	34%
	Twitter <i>Significant Diff.</i>	5%	5%	4%	6%	2%	2%
	Smartphone <i>Significant Diff.</i>	44%	41%	52%	46%	41%	41%

Table 40: Information Interests and Digital Platform Use/Ownership by Annual Household Income

[A/B/C/D/E/F] indicate a significant difference above the specified variable at a 95% confidence interval		ANNUAL HOUSEHOLD INCOME					
		<\$25k [A]	\$25k-\$35k [B]	\$35k-\$50k [C]	\$50k-\$75k [D]	\$75k-\$100k [E]	\$100k+ [F]
Likely to read or look for information about...	Trash/recycling schedule <i>Significant Diff.</i>	89%	83%	84%	97% B	91%	92%
	Brush/bulky pick up sched <i>Significant Diff.</i>	93%	88%	89%	95%	88%	90%
	Recycling information <i>Significant Diff.</i>	83%	81%	84%	86%	86%	80%
	Reducing household waste <i>Significant Diff.</i>	60%	66%	60%	69%	59%	56%
	Website <i>Significant Diff.</i>	31%	41%	50%	57% A	55% A	62% A
Likely to use to get information about...	Facebook <i>Significant Diff.</i>	15%	14%	14%	11%	12%	4%
	Twitter <i>Significant Diff.</i>	5%	3%	3%	3%	3%	2%
	Facebook <i>Significant Diff.</i>	26%	23%	37%	35%	39%	42%
Currently use or own	Twitter <i>Significant Diff.</i>	5%	1%	5%	5%	8%	10%
	Smartphone <i>Significant Diff.</i>	24%	39%	52% A	41%	57% A	70% A B D

Appendix II : Survey Respondents

Survey Respondents

Age Group	Under 35	8.5%
	35-44	13.4%
	45-54	15.8%
	55-64	24.7%
	65 +	37.6%
Gender	Male	47.0%
	Female	53.0%
Household size	1	27.2%
	2	47.0%
	3	12.8%
	4+	13.0%
Child in HDD	Yes	14.7%
	No	85.3%
Trash service type	Curbside	63.6%
	Alley	14.4%
	Curbside/alley	22.0%

Ward	Ward 1	16.7%
	Ward 2	16.7%
	Ward 3	16.7%
	Ward 4	16.7%
	Ward 5	16.7%
	Ward 6	16.7%
Ethnicity/ Race	White/Caucasian	67.5%
	Hispanic/Latino	19.3%
	Black/African American	2.7%
	Native American	1.3%
	Asian American	1.2%
	Other	8.0%
AHHI	<\$25k	18.0%
	\$25k-\$35k	16.6%
	\$35k-\$50k	21.0%
	\$50k-\$75k	20.5%
	\$75k-\$100k	13.5%
	\$100k+	10.4%

Appendix III : Survey Instrument

Survey Instrument

Hello, my name is _____, and I am calling on behalf of Strongpoint Marketing a local marketing research company. We are surveying local Tucson residents to better understand your perceptions regarding services provided by the City of Tucson Environmental Services Department. This is not a sales call, your identity will remain anonymous to our client and all of your responses will remain completely confidential. This brief survey will take approximately nine to ten minutes depending on the length of your answers. Do you have time to answer some of my questions?

Q1. For this survey, we would like to speak to the head of household, who is at least 18 years of age. Are you the head of household and at least 18 years of age?

1. Yes
2. No (Ask to speak to the head of household, at least 18 years old. If none are available, thank and terminate)

To begin the survey, I would like to ask you some questions about the City of Tucson's Environmental Services Department, which is responsible for picking up your trash and recycling.

Q2. In your opinion, how good a job is the City of Tucson's Environmental Services Department doing on a scale from 1 to 5, where 5 means an excellent job and 1 means a very poor job?

1. 1 – 5 scale
2. 6 = Don't know (DO NOT READ)

Survey Instrument

Q3. I would now like to ask you which of the following services provided by the Environmental Services Department you have used at least once within the past 12 months:

Randomize Options

1. Collection of recyclable materials in the blue barrels
2. Brush and bulky collection offered twice per year
3. Household Hazardous Waste Program
4. Customer service via telephone
5. Los Reales Landfill
6. Neighborhood Recycling Centers
 1. Yes
 2. No

Q4. I am now going to read you some specific services provided by the Environmental Services Department. For each service I mention, please tell me how the Department is doing on a scale from 1 to 5, where 5 means an excellent job and 1 means a very poor job?

**** For Options 2 through 7, skip if they have not used within the previous 12 months, based on Question 3) ****

Randomize Services

1. Collection of residential garbage, trash and/or refuse
2. Collection of recyclable materials in the blue barrels
3. Brush and bulky collection
4. Household Hazardous Waste Program
5. Customer service via telephone
6. Los Reales Landfill
7. Neighborhood Recycling Centers
 1. 1 – 5 scale
 2. 6 = Don't know (DO NOT READ)

Survey Instrument

Q5. How often do you currently put your blue barrel for recycled items out for pick up?

1. Weekly
2. Every other week
3. About once a month
4. Less than once a month
5. I do not use the blue barrel for recycled items

Q6. I would now like to ask you a few questions about other services that are currently being offered. Please indicate whether or not you would be willing to pay for:

Randomize Services

1. Home pick up of household hazardous waste
2. A third container dedicated for green or landscape waste
3. Collection of food scraps and waste
 1. Yes
 2. No

If Q6.1 = YES

Q7. Considering what you feel would be a reasonable fee for a one-time scheduled pick-up of household hazardous waste including paint, pesticides and household cleaners, 90% of which are recycled or reused, would it be worth \$15 to you

1. Yes (skip to Question 9 if applicable)
2. No

Q8. Would it be worth \$10 to you?

1. Yes
2. No

Survey Instrument

If Q6.2 = Yes

Q9. Considering what you feel would be a reasonable fee for monthly pick-up of landscape or yard waste at your home, would it be worth \$15 per month to you?

1. Yes (skip to Question 11, if applicable)
2. No

Q10. Would it be worth \$10 per month to you?

1. Yes
2. No

If Q6.3 = Yes

Q11. Considering what you feel would be a reasonable fee for the collection of food scraps and waste, would it be worth \$15 per month to you?

1. Yes (skip to Question 13)
2. No

Q12. Would it be worth \$10 to you?

1. Yes
2. No

I now have some questions for you about the ways in which the Environmental Services Department communicates with the residents it serves.

Survey Instrument

Q13. Please tell me if you have received or gotten information over the past 12 months about the Environmental Services Department from each of the following:

Randomize Options

1. Inserts in your monthly water bill or utilities statement
 2. Door hangers
 3. Brochures and pamphlets
 4. A bus shelter
 5. Signage on vehicles or roll-offs
 6. A bus bench
 7. Newspapers
 8. TV
 9. Radio
 10. Customer service representatives
 11. A website
 12. Facebook
 13. Twitter
 14. Smartphone App
1. Yes
 2. No

Survey Instrument

Q14. Of the possible information sources I just read to you, which three are you most likely to use to get information about the services provided by the Environmental Services Department?

1. Inserts in your monthly water bill or utilities statement
2. Door hangers
3. Brochures and pamphlets
4. A bus shelter
5. Signage on vehicles or roll-offs
6. A bus bench
7. Newspapers
8. TV
9. Radio
10. Customer service representatives
11. A website
12. Facebook
13. Twitter
14. Smartphone App
 1. First mention
 2. Second mention
 3. Third mention

Survey Instrument

Q15. I am now going to read you various types of information that may be sent out by the City of Tucson. Please indicate whether or not you are likely to read or look for this information:

Randomize Options

1. Changes to the trash or recycling schedule
2. Brush and bulky pick up schedule
3. Recycling information
4. Tips on how to reduce the amount of household waste generated

Q16. When thinking about the services offered by the Environmental Services Department, or those of other similar government agencies and service providers, which of the following are likely to use to get information about the services being offered:

Randomize Options

1. The Department's website
2. The Department's Facebook page
3. The Department's Twitter feed
 1. Yes
 2. No

Q17. Which of the following do you currently use or own:

Rotate Options

1. Facebook
2. Twitter
3. Smartphone such as an iPhone, Galaxy or other Droid phone
 1. Yes
 2. No

Survey Instrument

Demographics

Finally, we would like to get some additional information about you that will help us to better understand your responses. This information will be used for classification purposes only, and as a reminder your identity will remain anonymous and all of your responses will remain completely confidential.

Q18. How many years have you lived within the City of Tucson? (if respondents asks – the question is about living within the City of Tucson and not just within the metropolitan Tucson area)

1. Open ended numeric response

Q19. Do you own or rent your current residence

1. Own
2. Rent

Q20. Which of the following best describes your age group?

1. 18 to 24
2. 25 to 34
3. 35 to 44
4. 45 to 54
5. 55 to 64
6. 65 or above
7. Refused (DO NOT READ)

Q21. How many people currently live in your home?

1. Number of people

Survey Instrument

Q22. Which of the following best describes the type of service you have for trash pick-up?

1. Curbside only
2. Alley only
3. Both curbside and alley
4. Don't know (DO NOT READ)

If Q22 = 1, go to Q23, all others go to Q24

Q23. Were you previously aware that you can choose the size of your trash collection container, with the monthly fees lower for smaller containers?

1. Yes
2. No/don't know

Q24. Which of the following best describes your race or ethnicity?

1. White/Caucasian
2. Hispanic/Latino
3. Black/African American
4. Native American
5. Asian American
6. Other

Survey Instrument

Q25. Which of the following best describes your total combined annual household income?

1. Less than \$25,000
2. Between \$25,000 and \$34,999
3. Between \$35,000 and \$49,999
4. Between \$50,000 and \$74,999
5. Between \$75,000 and \$99,999
6. \$100,000 or more

Q26. Are there any children under the age of 18 living with you in your home?

1. Yes
2. No

Q27. Code respondent Ward

1. Ward 1
2. Ward 2
3. Ward 3
4. Ward 4
5. Ward 5
6. Ward 6

Q28. Code respondent Gender

1. Male
2. Female