



Environmental Services Department

Waste Diversion Community Study

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Prepared by

strongpoint
MARKETING

TUCSON ENVIRONMENTAL SERVICES DEPARTMENT WASTE DIVERSION STUDY ANALYSIS

Overview

Primary research among residents of the areas in and around Tucson, AZ was conducted during June, 2015. The purpose of the survey was to obtain statistically projectable information from the community concerning:

- Use and attitudes concerning disposal of recyclable trash.
- Implementation and attitudes concerning composting.
- Knowledge and opinions concerning the “Zero Waste” program.

The online survey (see Appendix A for a copy of the questionnaire) contained 42 questions, of which 12 were demographic. A total of 773 useful responses were completed and returned, allowing a probability that their responses echo those of Tucson’s population of 95 percent (+/- 4 percent). This report will evaluate the answers to each of the questions asked, in relation to the objectives of the survey.

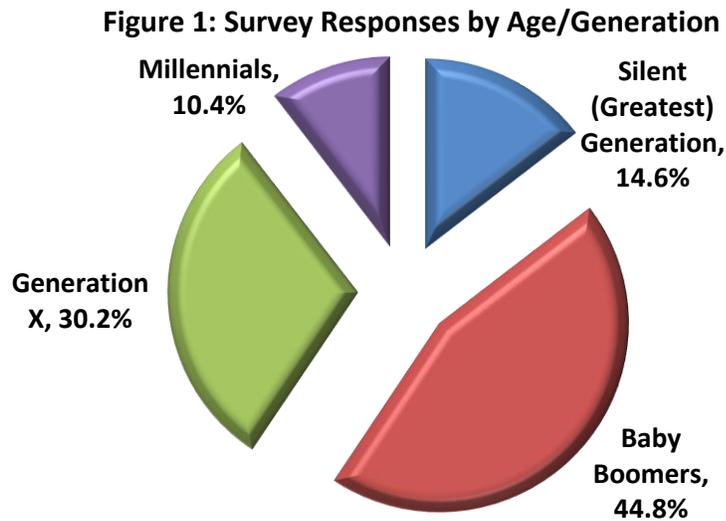
Tucson’s Demographic Profile

Tucson is a mid-sized city, comprising about 9 percent of Arizona’s total population. The number of people residing here of Hispanic or Latino descent is 40 percent higher than the state average, and more than twice the U.S. average. High school graduate levels are roughly on par with both state and national averages, although college graduation rates are about 15 percent lower. Home ownership is three-quarters of the average for both the state and the nation. The median household income level is 30 percent below state and national levels, and more than 40 percent more people are reckoned to be living in poverty.

Responses to Demographic Questions

Q30: Year of Birth

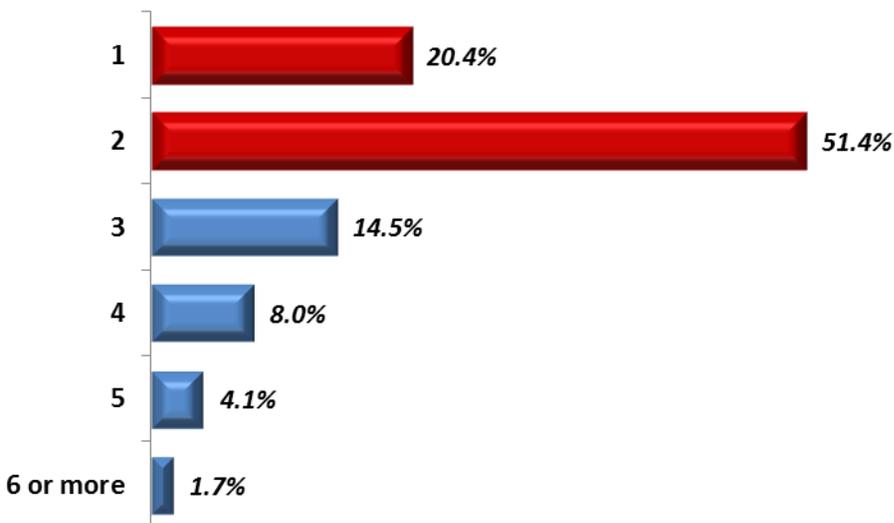
The plurality of respondents to the survey were Baby Boomers (see Figure 1), who made up 45 percent of the sample. Gen X'ers followed, with a third of the sample population.



Q31: Number of People in Your Household

Respondent households average 2.3 residents (see Figure 2). More than 7 out of every 10 contain one or two people – two adults or a single parent and child. Less than two percent house six people or more.

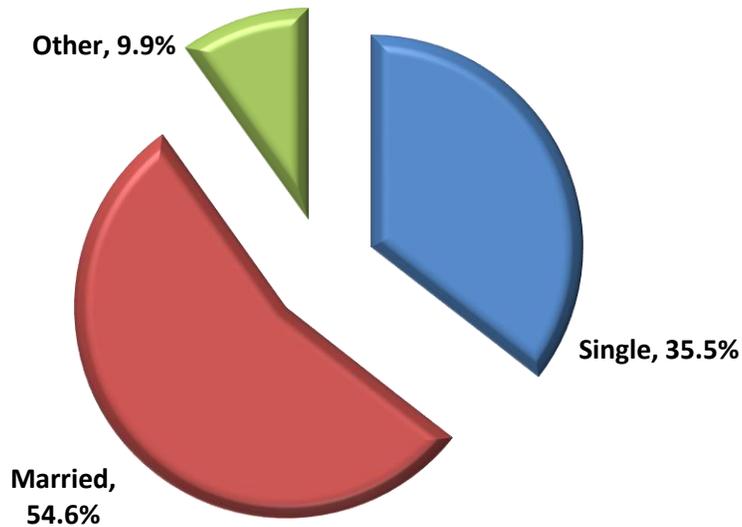
Figure 2: Respondent People per Household



Q32: Marital Status

More than half of all respondents are married (see Figure 3), and another one in every 10 report relationships other than marriage. Roughly a third are single.

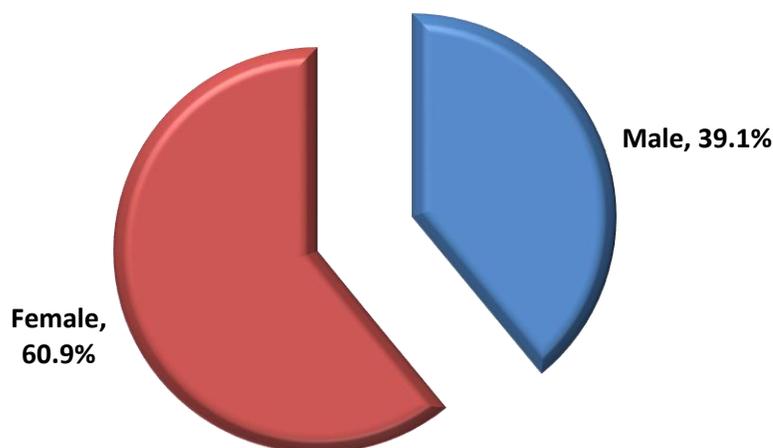
Figure 3: Respondent Marital Status



Q33: Gender

As shown in Figure 4, three-fifths of respondents to the survey were women. This probably indicates to some extent the division of work within the Tucson household. The men may take out the trash, but the ladies of the house know what gets thrown away.

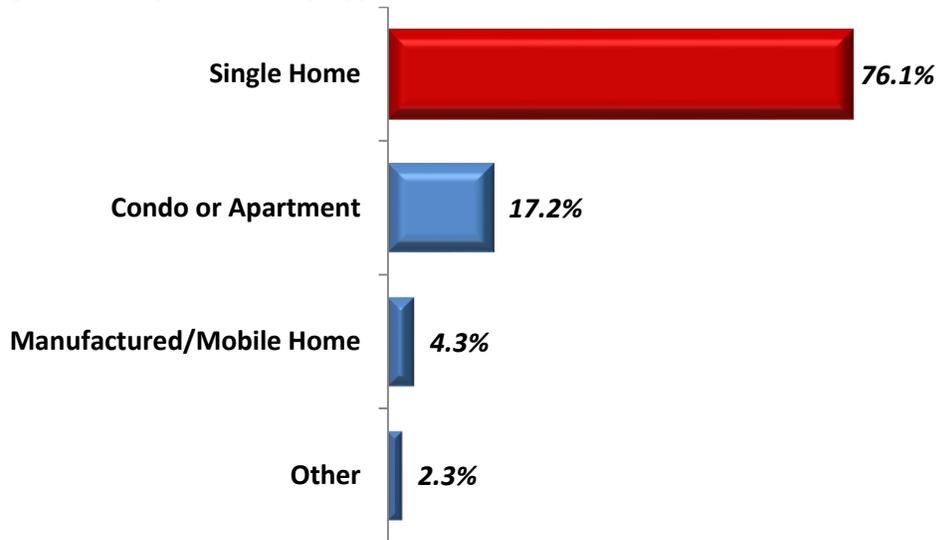
Figure 4: Respondents by Gender



Q34: Type of Residence

More than three out of every four respondents live in a single-family home (see Figure 5). Many residents of apartments and mobile homes did not think the questions in the survey pertained to them.

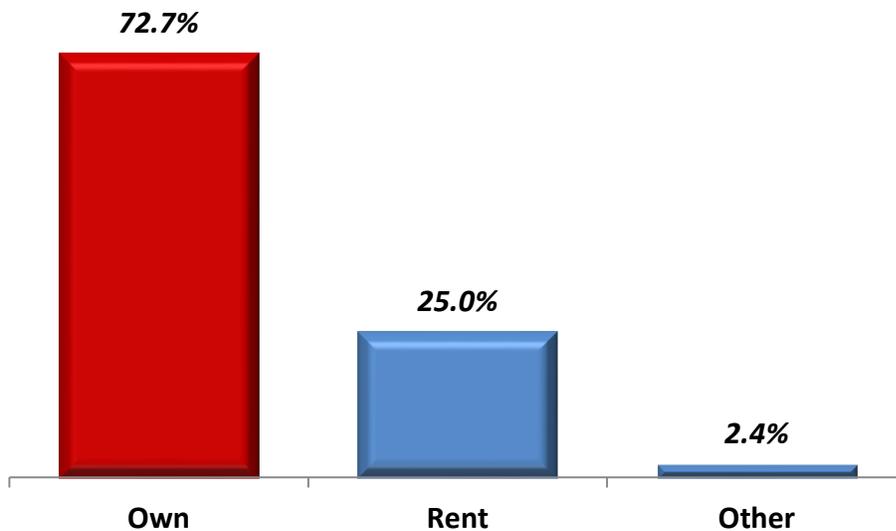
Figure 5: Respondents by Type of Residence



Q35: Residence Ownership

Seven out of every 10 respondents own their residences, as shown in Figure 6. This is somewhat above the municipal home ownership rate estimated by the U.S. Census Bureau, and may indicate lack of interest in the survey topics among area renters.

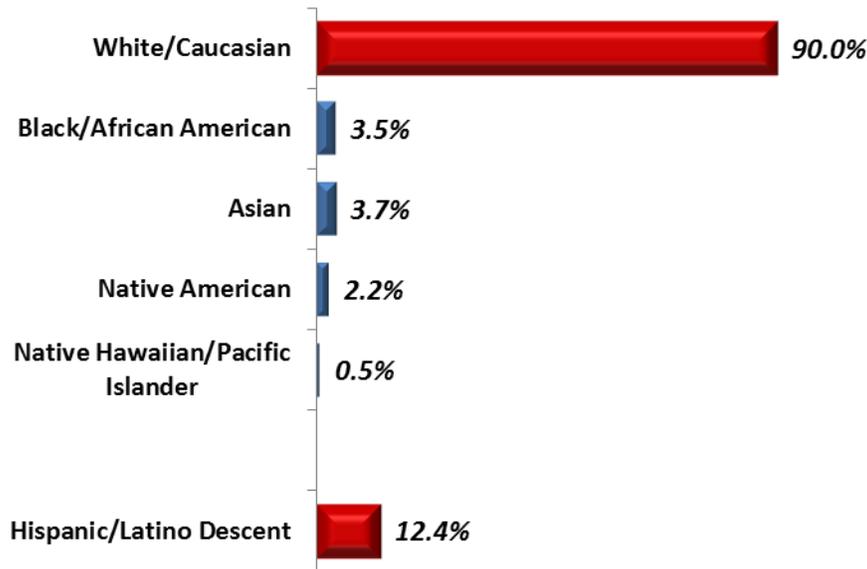
Figure 6: Respondent Home Ownership



Q36-37: Racial Heritage and Ethnic Background

Nine out of every 10 respondents chose “Caucasian” as their racial heritage, in line with the preponderance of home-owners already discovered. One in eight described Hispanic or Latino descent (see Figure 7).

Figure 7: Respondent Racial Heritage and Ethnicity

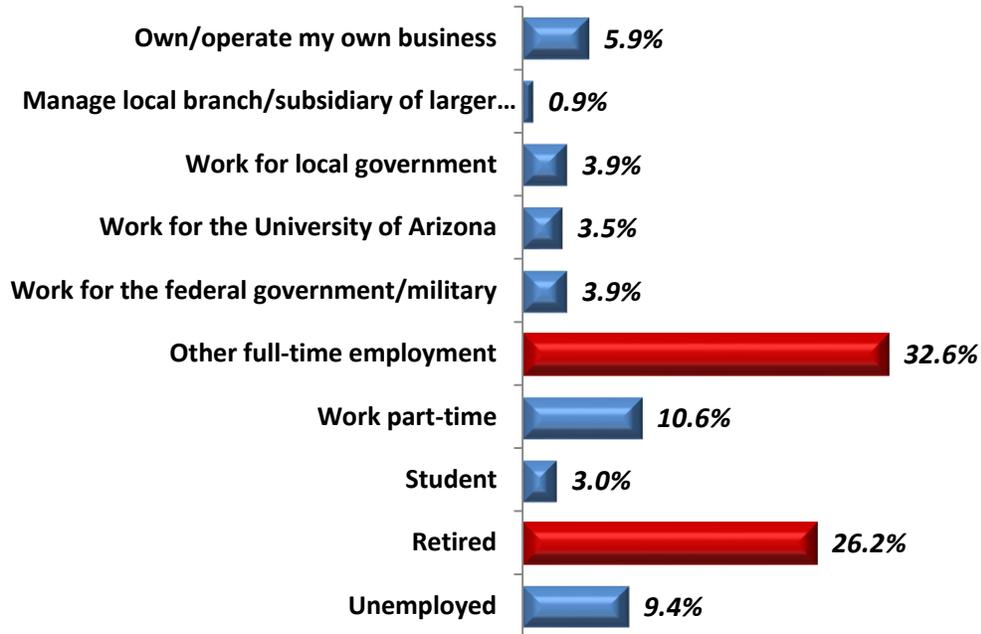


Q38: Respondent Work Outside the Home

Just over half (50.7 percent) of all respondents report working full-time outside the home (see Figure 8) and an additional 10 percent say they work part-time. More than one out of every four say they are retired, and one in every eight say they are students or unemployed.

One in every 20 are entrepreneurs, operating their own businesses.

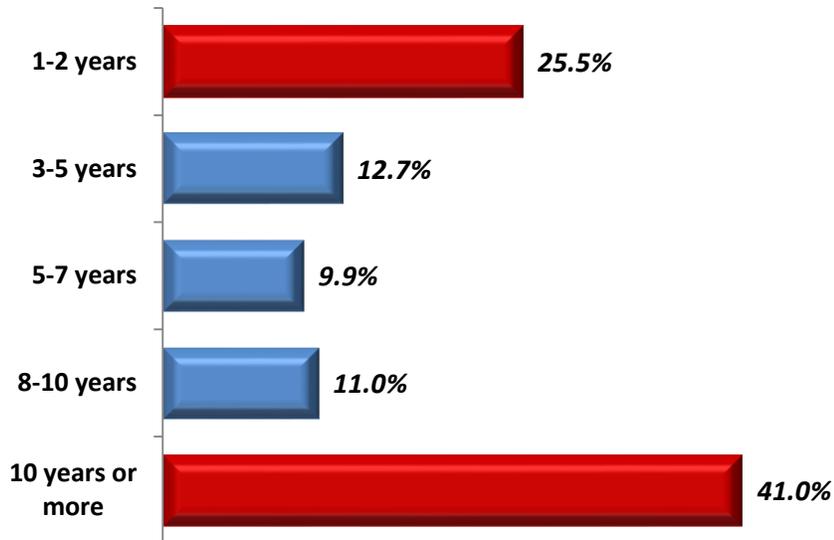
Figure 8: Respondent Work Outside the Home



Q39: Years Lived in Current Home

On average, respondents have lived in their current homes for 8.6 years. One in four moved to Tucson within the last year or two, and two out of every five have lived where they are now for more than a decade (see Figure 9).

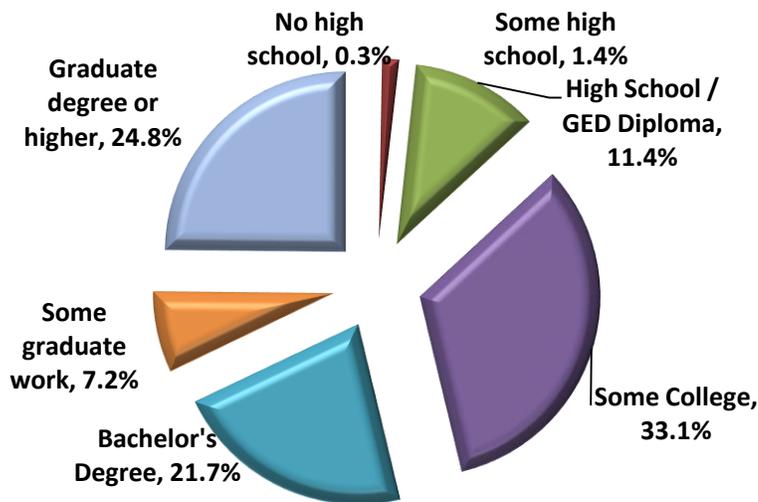
Figure 9: Respondent Years Lived in Current Home



Q40: Respondent Level of Education

More than half of all respondents have graduated from college, and another third have done some college work. Less than two percent report no high school graduation (see Figure 10).

Figure 10: Respondent Education Levels



Q41: Respondent Household Income

The average respondent to this survey reports an annual household income of \$68,100. Income questions are often skipped or ignored by respondents, and that was the case here. More than 10 percent of respondents either indicated they did not want to provide income information, or simply didn't answer the question. Among those who did, most reported household incomes above \$50,000 per year (see Figure 11).

Figure 11: Respondent-reported Household Incomes



Overview of Demographic Responses

The self-described demographics reported by respondents are not reflective of the Tucson metropolitan area as a whole. They are, instead, representative of older, more affluent home-owners who have been in the area for several years. This differential can largely be attributed to the screening questions that were asked, which allowed only those who used waste disposal services to respond. This question, by definition, excluded most people who rent apartments. As a result, the majority of the sample comes from single family home owners (see Figure 6), whose household incomes and levels of education are higher than is average for Tucson, and whose ages average higher as well.

Non-demographic Responses

After much consideration, two questions were selected to act as “banners” for the general analysis of the survey results. The first was a demographic question, Q31, which asked how many people were in a respondent’s household. The logic here is that more people in a household should mean more waste generated.

The second “banner” question chosen was Q2: “How often does your household throw out trash that you mean to be recycled? How often do you recycle?” The frequency of recycling has bearing on the answers to every other question in the survey, and so it must be used to give reference to those answers.

Q1. About how much of the trash your household gets rid of every week do you believe could be recycled? Pick the answer you agree with MOST

Most respondents believe two to three grocery bags-full or less should be all the recycling their household needs (see Figure 12). However, this amount grows to up to half a garbage barrel as family size increases. Very few think they need to get rid of a full garbage barrel or more. Among those surveyed, the average amount of trash that could be recycled reported was about 9 grocery bags-full, or about enough to fill a third of a barrel.

Figure 12: Answers to Q1 vs. “Number of People in Your Household”

	Number of People in Your Household								Total
	No Answer	1	2	3	4	5	6 or more		
None	Count	0	9	21	5	0	2	0	37
	%	0.0%	5.8%	5.3%	4.5%	0.0%	6.5%	0.0%	100%
Very little – less than a grocery bag-full	Count	0	46	95	26	10	7	2	186
	%	0.0%	29.5%	24.2%	23.4%	16.4%	22.6%	15.4%	100%
Enough to fill two or three grocery bags	Count	1	66	85	25	13	6	2	198
	%	12.5%	42.3%	21.6%	22.5%	21.3%	19.4%	15.4%	100%
Enough to fill five grocery bags	Count	0	10	34	9	8	2	3	66
	%	0.0%	6.4%	8.7%	8.1%	13.1%	6.5%	23.1%	100%
Enough to fill half a garbage barrel	Count	2	15	98	22	13	6	2	158
	%	25.0%	9.6%	24.9%	19.8%	21.3%	19.4%	15.4%	100%
Enough to fill a garbage barrel completely	Count	3	2	44	19	12	5	0	85
	%	37.5%	1.3%	11.2%	17.1%	19.7%	16.1%	0.0%	100%
Too much for my garbage barrel to hold	Count	2	2	4	1	3	0	0	12
	%	25.0%	1.3%	1.0%	0.9%	4.9%	0.0%	0.0%	100%
NO ANSWER	Count	0	6	12	4	2	3	4	31
	%	0.0%	3.8%	3.1%	3.6%	3.3%	9.7%	30.8%	1.0
Total	Count	8	156	393	111	61	31	13	773
	%	1.0%	20.2%	50.8%	14.4%	7.9%	4.0%	1.7%	100%

Although the average household amounts reported may be small, Figure 13 shows that the need for recycling is consistent. More than half of all respondent households recycle weekly, and less than a third are satisfied to put their two or three grocery bags full out less than once a month.

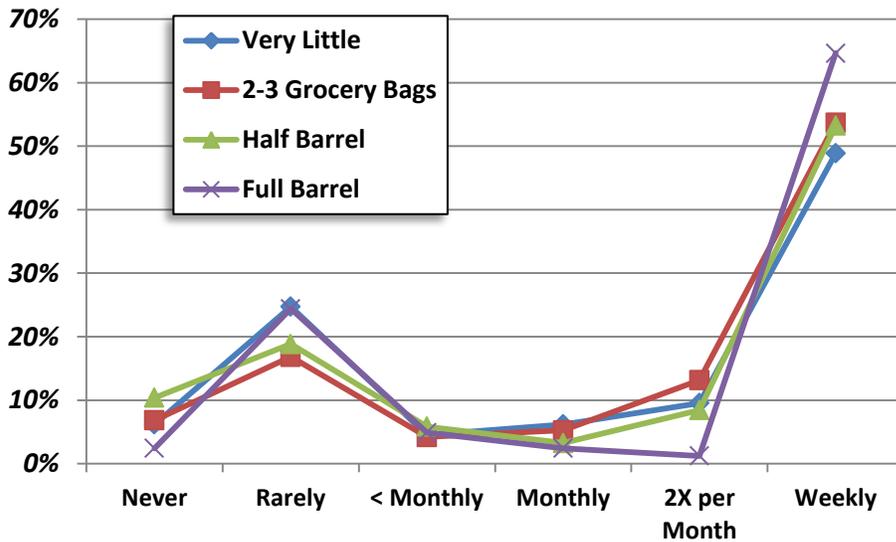
Figure 13: Answers to Q1 vs. “How often do you recycle?”

	How often do you recycle?								Total	
	No Answer	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know		
None	Count	0	19	1	0	1	6	8	2	37
	%	0.0%	51.4%	2.7%	0.0%	2.7%	16.2%	21.6%	5.4%	100%
Very little – less than a grocery bag-full	Count	1	87	17	11	8	44	11	7	186
	%	0.5%	46.8%	9.1%	5.9%	4.3%	23.7%	5.9%	3.8%	100%
Enough to fill two or three grocery bags	Count	0	102	25	10	8	32	13	8	198
	%	0.0%	51.5%	12.6%	5.1%	4.0%	16.2%	6.6%	4.0%	100%
Enough to fill five grocery bags	Count	0	36	6	3	4	12	2	3	66
	%	0.0%	54.5%	9.1%	4.5%	6.1%	18.2%	3.0%	4.5%	100%
Enough to fill half a garbage barrel	Count	0	82	13	5	9	29	16	4	158
	%	0.0%	51.9%	8.2%	3.2%	5.7%	18.4%	10.1%	2.5%	100%
Enough to fill a garbage barrel completely	Count	0	53	1	2	4	20	2	3	85
	%	0.0%	62.4%	1.2%	2.4%	4.7%	23.5%	2.4%	3.5%	100%
Too much for my garbage barrel to hold	Count	0	7	0	0	1	2	2	0	12
	%	0.0%	58.3%	0.0%	0.0%	8.3%	16.7%	16.7%	0.0%	100%
NO ANSWER	Count	0	9	2	1	0	4	3	12	31
	%	0.0%	29.0%	6.5%	3.2%	0.0%	12.9%	9.7%	38.7%	100%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%

Q2. How often does your household throw out trash that you mean to be recycled? How often do you recycle? Pick the answer you agree with MOST

Respondents were given a variety of choices to consider, from “never” to “every week.” It is interesting that no matter what amount of recyclable trash they believe their household produces, the time cycle for the disposal of that trash remains much the same. Note the chart that is Figure 14, which compares respondents who reported four different levels of recyclable trash.

Figure 14: Amount of Recycled Trash Produced vs. Frequency of Disposal (Q2)



At every level of recyclable trash volume, the frequency of recycling is almost the same. Weekly recycling is as popular with households that recycle small amounts as it is with those that recycle more. The pick-up cycle has trained all users to expect it.

Q3. Which trash barrel do you use for items you recycle at your home?

Respondents who use the city’s service almost invariably use the “blue barrel” for their recyclable waste disposal. The “some other barrel” answer is almost always from those who use another hauling service. Five percent of those surveyed answered, “It doesn’t matter,” however – and their responses are distributed throughout the recycling frequency range (see Figure 15). These respondents represent an attitudinal challenge.

Figure 15: Answers to Q3 vs. “How often do you recycle?”

		How often do you recycle?								Total
		No Answer	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
It doesn't matter. Whichever one is handy.	Count	0	15	4	1	2	5	8	2	37
	%	0.0%	40.5%	10.8%	2.7%	5.4%	13.5%	21.6%	5.4%	100%
The blue barrel.	Count	1	334	51	25	25	125	28	23	612
	%	0.2%	54.6%	8.3%	4.1%	4.1%	20.4%	4.6%	3.8%	100%
Some other barrel.	Count	0	29	7	3	7	12	8	2	68
	%	0.0%	42.6%	10.3%	4.4%	10.3%	17.6%	11.8%	2.9%	100%
My neighbor's barrel.	Count	0	2	0	0	0	0	0	0	2
	%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
I don't know.	Count	0	14	3	2	1	7	13	12	52
	%	0.0%	26.9%	5.8%	3.8%	1.9%	13.5%	25.0%	23.1%	100%
NO ANSWER	Count	0	1	0	1	0	0	0	0	2
	%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%

Q4. Do you buy any household items in bulk?

Two-thirds of respondents report buying some household items in bulk. The amount rises steadily as household population grows (see Figure 16).

Figure 16: Answers to Q1 vs. “Number of People in Your Household”

		Number of People in Your Household							Total
		No Answer	1	2	3	4	5	6 or more	
Yes	Count	7	78	257	78	48	25	7	500
	%	87.5%	50.0%	65.4%	70.3%	78.7%	80.6%	53.8%	65%
No	Count	1	78	136	33	13	6	6	273
	%	12.5%	50.0%	34.6%	29.7%	21.3%	19.4%	46.2%	35%
Total	Count	8	156	393	111	61	31	13	773
	%	1.0%	20.2%	50.8%	14.4%	7.9%	4.0%	1.7%	100%

Recycling frequency climbs with bulk purchase of household items as well (see Figure 17). However, it is uncertain how much of the increase is due to bulk purchase, and how much is simply due to the weekly recycling habit identified earlier.

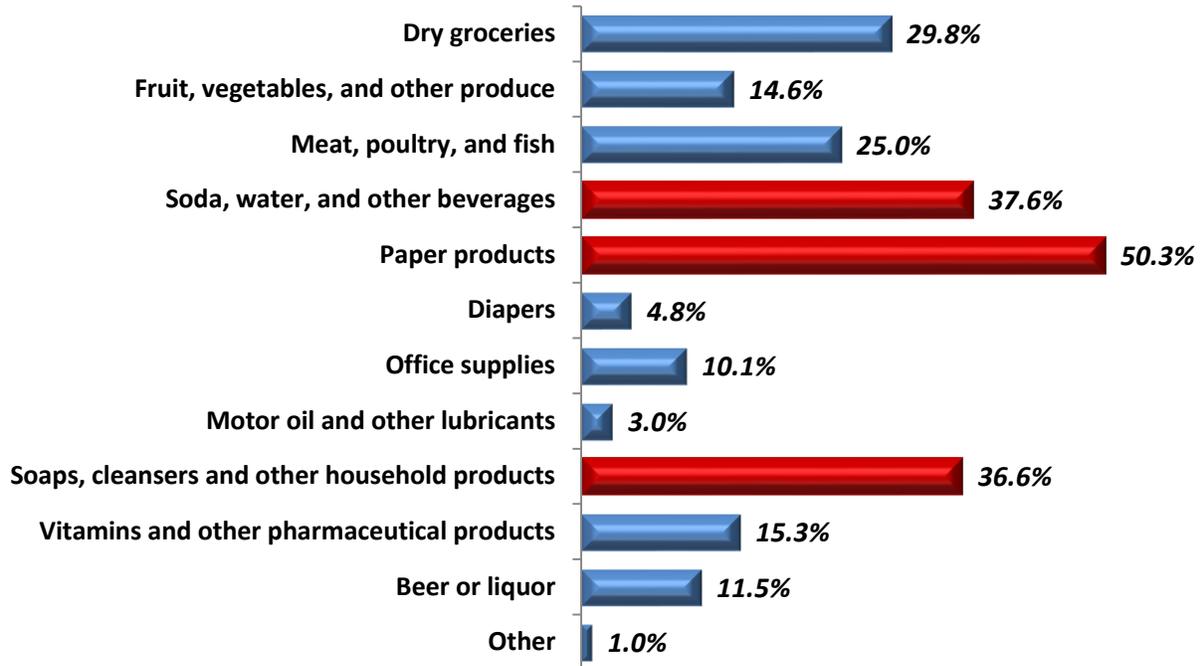
Figure 17: Answers to Q3 vs. “How often do you recycle?”

		How often do you recycle?								Total
		No Answer	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	1	268	45	19	23	93	32	19	500
	%	0.2%	53.6%	9.0%	3.8%	4.6%	18.6%	6.4%	3.8%	100%
No	Count	0	127	20	13	12	56	25	20	273
	%	0.0%	46.5%	7.3%	4.8%	4.4%	20.5%	9.2%	7.3%	100%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%

Q5. What kinds of household items do you buy in bulk? Check ALL that apply

More than half of all respondents report buying some items in bulk (see Figure 18). Beverages, paper products, and household products are the most popular categories.

Figure 17: Household Items Purchased in Bulk – Answers to Q5



Not surprisingly, the frequency of bulk purchases is highly correlated to family size – big families with six or more people are more likely to buy more items in bulk than smaller ones (see Figure 18). The exception to the rule is alcoholic beverages, which show no particular linkage to number of people in the family. There is no correlation at all between bulk purchases and frequency of recycling.

A few respondents took the effort to add categories of bulk purchases not listed in the question. Here are their unedited responses:

- | | |
|-------------------|---------------------|
| Canned Food | pet supplies & food |
| Cleaning supplies | toilet paper |
| Personal products | water |

Figure 18: Answers to Q5 vs. “Number of people in your household”

		Number of People in Your Household							Total
		No Answer	1	2	3	4	5	6 or more	
Dry groceries	Count	4	29	118	34	25	17	3	230
	%	50.0%	18.6%	30.0%	30.6%	41.0%	54.8%	23.1%	29.8%
Fruit, vegetables, and other produce	Count	3	11	53	20	16	8	2	113
	%	37.5%	7.1%	13.5%	18.0%	26.2%	25.8%	15.4%	14.6%
Meat, poultry, and fish	Count	3	21	101	30	25	11	2	193
	%	37.5%	13.5%	25.7%	27.0%	41.0%	35.5%	15.4%	25.0%
Soda, water, and other beverages	Count	5	43	152	47	29	13	2	291
	%	62.5%	27.6%	38.7%	42.3%	47.5%	41.9%	15.4%	37.6%
Paper products	Count	5	63	206	61	32	16	6	389
	%	62.5%	40.4%	52.4%	55.0%	52.5%	51.6%	46.2%	50.3%
Diapers	Count	0	0	2	10	15	8	2	37
	%	0.0%	0.0%	0.5%	9.0%	24.6%	25.8%	15.4%	4.8%
Office supplies	Count	2	9	42	9	8	7	1	78
	%	25.0%	5.8%	10.7%	8.1%	13.1%	22.6%	7.7%	10.1%
Motor oil and other lubricants	Count	0	0	13	4	5	1	0	23
	%	0.0%	0.0%	3.3%	3.6%	8.2%	3.2%	0.0%	3.0%
Soaps, cleansers and other household products	Count	4	37	140	49	32	16	5	283
	%	50.0%	23.7%	35.6%	44.1%	52.5%	51.6%	38.5%	36.6%
Vitamins and other pharmaceutical products	Count	4	17	63	16	12	5	1	118
	%	50.0%	10.9%	16.0%	14.4%	19.7%	16.1%	7.7%	15.3%
Beer or liquor	Count	1	6	49	17	13	3	0	89
	%	12.5%	3.8%	12.5%	15.3%	21.3%	9.7%	0.0%	11.5%
Other	Count	0	3	3	0	1	1	0	8
	%	0.0%	1.9%	0.8%	0.0%	1.6%	3.2%	0.0%	1.0%
Total	Count	8	156	393	111	61	31	13	773
	%	1.0%	20.2%	50.8%	14.4%	7.9%	4.0%	1.7%	100%

Q6. Why do you buy household items in bulk? Check ALL that apply

It is hardly surprising that most respondents who buy in bulk say they do so to save money, or to reduce shopping trips. That almost twenty percent report doing so to reduce packaging shows that a noticeable fraction of the surveyed community has some sense of reducing waste.

Figure 18: Answers to Q6 vs. “Number of people in your household”

		Number of People in Your Household							Total
		No Answer	1	2	3	4	5	6 or more	
To save money.	Count	7	63	236	68	42	22	7	445
	%	87.5%	40.4%	60.1%	61.3%	68.9%	71.0%	53.8%	57.6%
Less trips to the store.	Count	3	53	171	49	27	17	4	324
	%	37.5%	34.0%	43.5%	44.1%	44.3%	54.8%	30.8%	41.9%
I have a very large family.	Count	0	0	2	2	5	8	7	24
	%	0.0%	0.0%	0.5%	1.8%	8.2%	25.8%	53.8%	3.1%
I run a business out of my home.	Count	0	3	5	1	2	0	1	12
	%	0.0%	1.9%	1.3%	0.9%	3.3%	0.0%	7.7%	1.6%
To reduce packaging.	Count	3	24	69	22	8	10	0	136
	%	37.5%	15.4%	17.6%	19.8%	13.1%	32.3%	0.0%	17.6%
To more easily recycle.	Count	1	5	28	10	5	4	0	53
	%	12.5%	3.2%	7.1%	9.0%	8.2%	12.9%	0.0%	6.9%
Other	Count	0	1	2	0	0	0	0	3
	%	0.0%	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.4%
Total	Count	8	156	393	111	61	31	13	773
	%	1.0%	20.2%	50.8%	14.4%	7.9%	4.0%	1.7%	100%

Q7. About how much bottled water do you purchase every month?

Only a quarter of those answering Q5 reported buying water in bulk. Almost a third of respondents say they buy no bottled water at all. An almost equal number buy it by the carton. The propensity to buy bottled water in quantity shows no correlation to either family size or recycling frequency. It seems to be solely a matter of personal habit – the choice of bottled water versus what comes out of the tap.

Figure 18: Answers to Q7 vs. “Number of people in your household”

		Number of People in Your Household							Total
		No Answer	1	2	3	4	5	6 or more	
None	Count	3	53	127	28	14	9	4	238
	%	37.5%	34.0%	32.3%	25.2%	23.0%	29.0%	30.8%	30.8%
One or two bottles	Count	1	28	57	16	8	3	1	114
	%	12.5%	17.9%	14.5%	14.4%	13.1%	9.7%	7.7%	14.7%
A six-pack	Count	0	25	29	13	7	3	1	78
	%	0.0%	16.0%	7.4%	11.7%	11.5%	9.7%	7.7%	10.1%
A carton	Count	2	23	74	16	6	4	1	126
	%	25.0%	14.7%	18.8%	14.4%	9.8%	12.9%	7.7%	16.3%
2 - 5 cartons	Count	2	20	81	25	19	6	4	157
	%	25.0%	12.8%	20.6%	22.5%	31.1%	19.4%	30.8%	20.3%
More than 5 cartons	Count	0	8	27	14	7	7	2	65
	%	0.0%	5.1%	6.9%	12.6%	11.5%	22.6%	15.4%	8.4%
Total	Count	8	156	393	111	61	31	13	773
	%	1.0%	20.2%	50.8%	14.4%	7.9%	4.0%	1.7%	100%

Q8. Do you purchase the bottled water you buy in recyclable containers?

Irrespective of their propensity to recycle, four out of every five respondents who purchase bottled water buy it in what they believe to be recyclable containers. This is likely due to store stocking procedures, rather than directed consumer intent.

Figure 18: Answers to Q8 vs. “How often do you recycle?”

		How often do you recycle?							Total
		Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	228	31	16	20	87	24	19	425
	%	53.6%	7.3%	3.8%	4.7%	20.5%	5.6%	4.5%	100%
No	Count	25	5	3	5	10	2	3	53
	%	47.2%	9.4%	5.7%	9.4%	18.9%	3.8%	5.7%	100%
I don't know	Count	26	7	1	2	12	6	3	57
	%	45.6%	12.3%	1.8%	3.5%	21.1%	10.5%	5.3%	100%
Total	Count	279	43	20	27	109	32	25	535
	%	52.1%	8.0%	3.7%	5.0%	20.4%	6.0%	4.7%	100%

Q9. How much trash does your household throw out each week that actually goes into the “blue barrel?” How much do you recycle on a weekly average? Pick the answer you agree with MOST

At first glance, this question seems to be nothing more than a replay of Q1. As we will see, that is not the case.

As Figure 19 shows:

- More than twice the respondents who don’t recycle believe they could.
- Most respondents who recycle very little believe they could recycle more.
- Many respondents who fill their blue barrels half- or completely full believe they could do less.

In general, there is enough dissonance between the amounts of recycling that could be done and the amounts that are actually done to indicate a lack of conviction on the part of respondents about what should go into the “blue barrel.”

Figure 19: Answers to Q9 vs. “How often do you recycle?” – Compared to Q1 Answers

	How often do you recycle?										Q1 Responses	Percent Difference
	No Answer	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	Total			
None	Count	0	33	4	3	0	13	24	5	82	37	121.6
	%	0.0%	40.2%	4.9%	3.7%	0.0%	15.9%	29.3%	6.1%	100%	100%	
Very little – less than a grocery bag-full	Count	0	35	10	9	11	32	3	5	105	186	(43.5)
	%	0.0%	33.3%	9.5%	8.6%	10.5%	30.5%	2.9%	4.8%	100%	100%	
Enough to fill two or three grocery bags	Count	1	97	25	9	9	26	7	4	178	198	(10.1)
	%	0.6%	54.5%	14.0%	5.1%	5.1%	14.6%	3.9%	2.2%	100%	100%	
Enough to fill five grocery bags	Count	0	33	7	5	4	10	4	2	65	66	(1.5)
	%	0.0%	50.8%	10.8%	7.7%	6.2%	15.4%	6.2%	3.1%	100%	100%	
Enough to fill half a garbage barrel	Count	0	110	17	4	6	34	11	4	186	158	17.7
	%	0.0%	59.1%	9.1%	2.2%	3.2%	18.3%	5.9%	2.2%	100%	100%	
Enough to fill a garbage barrel completely	Count	0	67	1	1	4	30	5	2	110	85	29.4
	%	0.0%	60.9%	0.9%	0.9%	3.6%	27.3%	4.5%	1.8%	100%	100%	
Too much for my garbage barrel to hold	Count	0	8	0	0	1	2	1	0	12	12	0.0
	%	0.0%	66.7%	0.0%	0.0%	8.3%	16.7%	8.3%	0.0%	100%	100%	
NO ANSWER	Count	0	12	1	1	0	2	2	17	35	31	12.9
	%	0.0%	34.3%	2.9%	2.9%	0.0%	5.7%	5.7%	48.6%	100%	100%	
Total	Count	1	395	65	32	35	149	57	39	773	773	
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%	100%	

Q10. Why [don't you recycle]? Rate the statements below using a “0” to “5” scale, where “5” indicates strong agreement and “0” indicates no agreement at all.

The 82 respondents who said they did not recycle at all in Q9 (11 percent of those interviewed) were asked why they didn’t, and given a choice of possible reasons for their demur, and asked to rate each on a “0” to “5” scale:

- It is too much trouble.
- I do not believe it makes any difference.
- They separate it at the dump anyway.
- Why do their work for them?
- I don’t throw out enough trash to matter.
- I don’t always know the difference between the two.
- I don’t know.

Few respondents agreed with any of the possible reasons presented (see Figure 20). All were given very low scores. This indicates that none of the most easily reckoned and understood arguments against recycling cannot explain why one in ten respondents refuse to utilize the service.

Figure 20: Scores Given to Q10 Answers

		No								Average Score
		Answer	0	1	2	3	4	5	Total	
Too much trouble	Count	4	4	39	15	11	5	4	82	1.7
	%	4.9%	4.9%	47.6%	18.3%	13.4%	6.1%	4.9%	100%	
Makes no difference	Count	4	40	16	8	8	2	4	82	1.0
	%	4.9%	48.8%	19.5%	9.8%	9.8%	2.4%	4.9%	100%	
Why do their work?	Count	4	40	19	8	10	0	1	82	0.9
	%	4.9%	48.8%	23.2%	9.8%	12.2%	.0%	1.2%	100%	
Not enough trash to matter	Count	5	40	18	7	6	2	4	82	1.0
	%	6.1%	48.8%	22.0%	8.5%	7.3%	2.4%	4.9%	100%	
Don't always know difference	Count	4	38	14	14	10	1	1	82	1.0
	%	4.9%	46.3%	17.1%	17.1%	12.2%	1.2%	1.2%	100%	
I don't know	Count	6	32	14	11	12	3	4	82	1.3
	%	7.3%	39.0%	17.1%	13.4%	14.6%	3.7%	4.9%	100%	

Q11. Do you generate landscape waste at your home?

Respondents are almost evenly divided on the generation of landscape waste. Certainly, it is much more common among those who recycle weekly than among those who do so less often (see Figure 21).

Figure 21: Q11 Answers vs. “How often do you recycle?”

		How often does your household throw out trash that you mean to be recycled? How often do you								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	0	194	39	16	13	73	23	10	368
	%	.0%	52.7%	10.6%	4.3%	3.5%	19.8%	6.3%	2.7%	
No	Count	1	201	26	16	22	76	34	29	405
	%	.2%	49.6%	6.4%	4.0%	5.4%	18.8%	8.4%	7.2%	
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	

Q12. How do you dispose of the landscape waste you generate? Check ALL that apply

The respondents who indicated that they do generate landscape waste (47.6 percent of the total) were asked in Q12 how they dispose of it. Most said they throw it in the trash (see Figure 22). Composting was the next most popular alternative chosen. One in eight do their own runs to the dump, and the fraction remaining foul the desert or take advantage of unwatched dumpsters.

Figure22: Answers to Q12 vs. “How often do you recycle?”

		How often do you recycle?							Total
		Weekly	2X Month	1X Month	> 1X Month	Rarely	Never	I don't know	
I throw it in the trash.	Count	149	28	10	5	51	19	7	269
	%	76.8%	71.8%	62.5%	38.5%	69.9%	82.6%	70.0%	73.1%
I dump it in the desert.	Count	2	1	1	3	1	1	0	9
	%	1.0%	2.6%	6.3%	23.1%	1.4%	4.3%	0.0%	2.4%
I take it to the dump.	Count	27	3	2	5	6	3	1	47
	%	13.9%	7.7%	12.5%	38.5%	8.2%	13.0%	10.0%	12.8%
I find an industrial dumpster, and put it there.	Count	5	3	1	0	2	0	1	12
	%	2.6%	7.7%	6.3%	0.0%	2.7%	0.0%	10.0%	3.3%
I compost most of it.	Count	28	8	3	5	13	4	0	61
	%	14.4%	20.5%	18.8%	38.5%	17.8%	17.4%	0.0%	16.6%
Other (specify):	Count	22	4	3	1	10	2	1	43
	%	11.3%	10.3%	18.8%	7.7%	13.7%	8.7%	10.0%	11.7%
Total	Count	194	39	16	13	73	23	10	368
	%	52.7%	10.6%	4.3%	3.5%	19.8%	6.3%	2.7%	100%

Almost 12 percent of those surveyed gave additional answers. “Brush and Bulky” city collection was listed 16 times by these respondents. Their unedited comments are shown below.

apt has people who take care of the grounds

Brush & Bulky Collection

Burn it

dedicated community dumpster

Gardner takes it

green waste disposal

have a yard service

I have a small composter

Landscape Service

I pay a yardman to dump it

landscaper removes it

Neighbors Gardners haul it away

picked up by the city twice a year

Save for brush and bulky pickup

waste mgmt. picks it up

Q13. What kind(s) of household or landscape waste do you compost? Check ALL that apply

Almost three of every five respondents report no composting of household or landscape waste (see Figure 23). Among the remainder, weeds, plants and flowers, and animal waste were the most common items mentioned. The distribution for composting activity is faintly bipolar, swinging between highs for weekly and rare use of the blue barrel.

Figure 23: Answers to Q13 vs. “How often do you recycle?”

		How often do you recycle?								Total
		No Answer	Weekly	2X Month	1X Month	> 1X Month	Rarely	Never	I don't know	
Nothing	Count	1	221	34	14	23	95	28	31	447
	%	100.0%	55.9%	52.3%	43.8%	65.7%	63.8%	49.1%	79.5%	57.8%
Food Scraps	Count	0	70	12	7	6	20	6	3	124
	%	0.0%	17.7%	18.5%	21.9%	17.1%	13.4%	10.5%	7.7%	16.0%
Animal Waste	Count	0	27	10	4	3	12	7	2	65
	%	0.0%	6.8%	15.4%	12.5%	8.6%	8.1%	12.3%	5.1%	8.4%
Mowed Grass	Count	0	33	6	5	1	10	3	0	58
	%	0.0%	8.4%	9.2%	15.6%	2.9%	6.7%	5.3%	0.0%	7.5%
Weeds	Count	0	83	17	11	8	25	16	4	164
	%	0.0%	21.0%	26.2%	34.4%	22.9%	16.8%	28.1%	10.3%	21.2%
Plants and Flowers	Count	0	89	17	8	7	28	13	1	163
	%	0.0%	22.5%	26.2%	25.0%	20.0%	18.8%	22.8%	2.6%	21.1%
Newspapers and Other Paper	Count	0	47	9	4	2	11	10	4	87
	%	0.0%	11.9%	13.8%	12.5%	5.7%	7.4%	17.5%	10.3%	11.3%
Woodchips	Count	0	28	4	4	1	7	2	0	46
	%	0.0%	7.1%	6.2%	12.5%	2.9%	4.7%	3.5%	0.0%	6.0%
Other	Count	0	28	5	2	1	7	4	1	48
	%	0.0%	7.1%	7.7%	6.3%	2.9%	4.7%	7.0%	2.6%	6.2%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%

The respondents who listed “other” items composted mentioned coffee grounds, coffee beans, leaves, and mesquite.

Q14. Why don't you compost?

Q13 showed that the majority (58.7 percent) of those surveyed do not compost. These respondents were asked why they don't, and were given several reasons to choose among:

- It is too much trouble.
- I don't create that much waste.
- It is messy and smelly.
- I have no use for it.
- It is easier to throw the waste out.
- I live in an apartment or townhouse.
- I don't know what “composting” means.

The most common response among non-composting respondents was, “I have no use for it” (see Figure 24). Composting is not, after all, a means to itself. It is only useful if applied to plants or vegetables which require nurturing. The desertscapes popular in many Tucson neighborhoods belie its utility. Almost 20 percent of those surveyed noted that they live in multi-family dwellings – apartments or townhouses – and have no place to perform composting, even if the need were there. Finally, one in every 10 respondents pleaded ignorance. These people are simply not sure what composting is, or what it entails.

Figure 24: Answers to Q14 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Not Answered	Count	0	1	0	0	0	0	0	0	1
	%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
It is too much trouble.	Count	0	17	2	1	2	6	4	4	36
	%	.0%	47.2%	5.6%	2.8%	5.6%	16.7%	11.1%	11.1%	100.0%
I don't create that much waste.	Count	0	50	9	3	6	17	4	2	91
	%	.0%	54.9%	9.9%	3.3%	6.6%	18.7%	4.4%	2.2%	100.0%
It is messy and smelly.	Count	0	11	3	0	2	7	1	2	26
	%	.0%	42.3%	11.5%	.0%	7.7%	26.9%	3.8%	7.7%	100.0%
I have no use for it.	Count	0	56	9	4	4	27	8	7	115
	%	.0%	48.7%	7.8%	3.5%	3.5%	23.5%	7.0%	6.1%	100.0%
It is easier to throw the waste out.	Count	0	21	2	0	1	7	3	0	34
	%	.0%	61.8%	5.9%	.0%	2.9%	20.6%	8.8%	.0%	100.0%
I live in an apartment or townhouse.	Count	1	38	7	4	3	19	2	5	79
	%	1.3%	48.1%	8.9%	5.1%	3.8%	24.1%	2.5%	6.3%	100.0%
I don't know what “composting” means.	Count	0	6	0	1	1	3	1	4	16
	%	.0%	37.5%	.0%	6.3%	6.3%	18.8%	6.3%	25.0%	100.0%
I don't know.	Count	0	21	2	1	4	9	5	7	49
	%	.0%	42.9%	4.1%	2.0%	8.2%	18.4%	10.2%	14.3%	100.0%
Total	Count	1	221	34	14	23	95	28	31	447
	%	0.2%	49.4%	7.6%	3.1%	5.1%	21.3%	6.3%	6.9%	100.0%

Q15. Are you aware of the zero waste initiative here in Tucson?

One in every eight of those surveyed said that they are aware of Tucson’s zero waste initiative. Respondents who recycle more are significantly more likely to be aware of the initiative than those who use the service less (see Figure 25).

Figure 25: Answers to Q15 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	0	58	9	4	6	17	9	4	107
	%	.0%	54.2%	8.4%	3.7%	5.6%	15.9%	8.4%	3.7%	100.0%
No	Count	1	337	56	28	29	132	48	35	666
	%	.2%	50.6%	8.4%	4.2%	4.4%	19.8%	7.2%	5.3%	100.0%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q16. Which of the statements below most closely matches your understanding of the term “zero waste”? Choose ONE

Respondents were asked to choose among five statements to indicate their understand of what the zero waste initiative means:

- No more garbage – or at least very little. The vast majority of what currently goes to the landfill is instead recycled or reprocessed in some way.
- No more garbage pick-ups. Residents take care of their own household waste.
- No more use of plastic. Only paper containers are allowed.
- No more recycling – all household waste is thrown out as garbage.
- None of the above.

Almost two-thirds of respondents agreed with the statement, “No more garbage – or at least very little. The vast majority of what currently goes to the landfill is instead recycled or reprocessed in some way.” As their understanding of the meaning of the zero waste initiative (see Figure 26). A quarter of those interviewed did not think any of the statements were representative.

Figure 26: Answers to Q16 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
No more garbage – or at least very little.	Count	1	251	47	25	23	97	38	16	498
	%	.2%	50.4%	9.4%	5.0%	4.6%	19.5%	7.6%	3.2%	100.0%
No more garbage pick-ups.	Count	0	12	0	0	2	3	1	3	21
	%	.0%	57.1%	.0%	.0%	9.5%	14.3%	4.8%	14.3%	100.0%
No more use of plastic. Only paper containers are allowed.	Count	0	22	7	0	3	10	2	3	47
	%	.0%	46.8%	14.9%	.0%	6.4%	21.3%	4.3%	6.4%	100.0%
No more recycling – all household waste is thrown out as garbage.	Count	0	6	0	1	0	1	0	2	10
	%	.0%	60.0%	.0%	10.0%	.0%	10.0%	.0%	20.0%	100.0%
None of the above.	Count	0	104	11	6	7	38	16	15	197
	%	.0%	52.8%	5.6%	3.0%	3.6%	19.3%	8.1%	7.6%	100.0%
Totals	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q17. Which of the following components of a zero waste program for Tucson would you most like to see? Choose ONE

Respondents who chose the “no more garbage” answer to Q16 were asked what they’d most like to see a program for Tucson contain. Among the four options put forward, composting and business recycling were most popular, gaining support from 24 and 27 percent of those surveyed, respectively. “Awards to residents and businesses” ran a close third. However, all the components proposed received noticeable support.

Figure 27: Answers to Q17 vs. “How often do you recycle?”

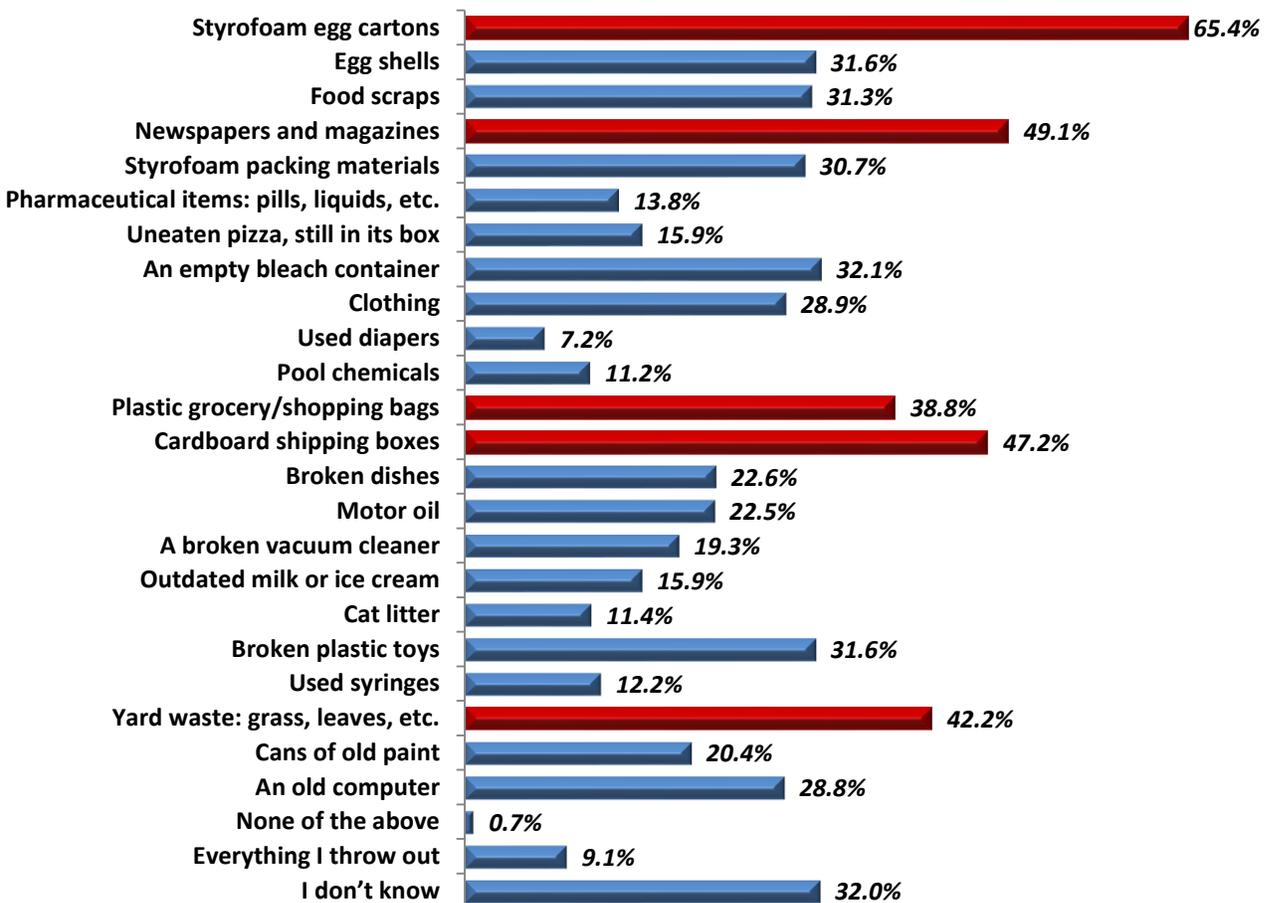
		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Not Answered	Count	0	2	0	0	0	0	0	0	2
	%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
A composting option.	Count	0	73	10	6	3	20	5	3	120
	%	.0%	60.8%	8.3%	5.0%	2.5%	16.7%	4.2%	2.5%	100.0%
Business recycling.	Count	0	63	10	9	8	29	10	6	135
	%	.0%	46.7%	7.4%	6.7%	5.9%	21.5%	7.4%	4.4%	100.0%
Regular reports to residents on program success.	Count	0	42	13	3	3	20	13	1	95
	%	.0%	44.2%	13.7%	3.2%	3.2%	21.1%	13.7%	1.1%	100.0%
Awards to residents and businesses that do the best job in meeting program goals.	Count	1	58	12	6	7	24	6	4	118
	%	.8%	49.2%	10.2%	5.1%	5.9%	20.3%	5.1%	3.4%	100.0%
Other (specify):	Count	0	13	2	1	2	4	4	2	28
	%	.0%	46.4%	7.1%	3.6%	7.1%	14.3%	14.3%	7.1%	100.0%
Total	Count	1	251	47	25	23	97	38	16	498
	%	.2%	50.4%	9.4%	5.0%	4.6%	19.5%	7.6%	3.2%	100.0%

Q18. Which of the items described below are or can be part of a waste diversion or zero wastes collection? Check ALL that apply

The list of possible candidates for a “zero waste” trash barrel indicate the level of Tucson resident knowledge about what should – and shouldn’t – be part of a reasonable pick-up. The answers given by respondents (see Figure 28) indicate that education about what should be part of such a program requires attention. Examples:

- Almost a third of respondents believe Styrofoam packing materials are OK.
- One in eight thinks pharmaceutical items – pills, for example – are acceptable.
- A similar number believe uneaten pizza in its box is alright for the barrel.
- Almost two out of every five would like to throw grocery bags into the barrel, as well.
- One in five believes the blue bin is a good place to discard used motor oil.
- One in eight is fine with disposing of used syringes in their barrels, as well as cans of old paint, and old computers.
- Nine percent are even more expansive. They believe “everything I throw out” is fair game.

Figure 28: Answers to Q18



Q19. Have you ever used the city’s monthly HHW (Household Hazardous Waste) collection service?

One respondent in every five reports use of the city’s HHW collection service (see Figure 29). There is a high degree of correlation between use of this service and use of composting.

Figure 29: Answers to Q19 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	0	103	13	7	6	37	9	2	177
	%	.0%	58.2%	7.3%	4.0%	3.4%	20.9%	5.1%	1.1%	100.0%
No	Count	1	292	52	25	29	112	48	37	596
	%	.2%	49.0%	8.7%	4.2%	4.9%	18.8%	8.1%	6.2%	100.0%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q20. Why haven’t you used the monthly HHW (Household Hazardous Waste) collection service? Rate the statements below using the “0” to “5” scale, where “5” indicates strong agreement and “0” indicates no agreement at all.

Respondents who have not used the county’s HHW service agree that the major reason they have not is that they were not aware of it. There was some agreement with statements “I don’t have any trash which requires that kind of service” and “I don’t know what falls under “HHW,” as well (see Figure 30).

Figure 30: “0” to “5” Scale Ratings for Q20 Questions

		I was not aware of the service	A month is too long to wait	No trash that demands that service	It's inconvenient	Their job, not mine	Don't know what's under HHW	I don't Know
Not Answered	Count	20	48	38	64	41	45	82
	%	3.4%	8.1%	6.4%	10.7%	6.9%	7.6%	13.8%
0	Count	75	208	107	186	265	105	167
	%	12.6%	34.9%	18.0%	31.2%	44.5%	17.6%	28.0%
1	Count	50	117	73	126	138	61	70
	%	8.4%	19.6%	12.2%	21.1%	23.2%	10.2%	11.7%
2	Count	32	84	86	99	69	70	76
	%	5.4%	14.1%	14.4%	16.6%	11.6%	11.7%	12.8%
3	Count	116	79	110	61	59	135	79
	%	19.5%	13.3%	18.5%	10.2%	9.9%	22.7%	13.3%
4	Count	38	22	58	31	7	50	32
	%	6.4%	3.7%	9.7%	5.2%	1.2%	8.4%	5.4%
5	Count	265	38	124	29	17	130	90
	%	44.5%	6.4%	20.8%	4.9%	2.9%	21.8%	15.1%
Average Score		3.3	1.3	2.4	1.3	0.9	2.4	1.7

Q21. Do you shred and recycle documents at home?

More than three-quarters of respondents report shredding and recycling documents at home (see Figure 31).

Figure 31: Answers to Q21 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	1	315	51	28	28	114	40	22	599
	%	.2%	52.6%	8.5%	4.7%	4.7%	19.0%	6.7%	3.7%	100.0%
No	Count	0	80	14	4	7	35	17	17	174
	%	.0%	46.0%	8.0%	2.3%	4.0%	20.1%	9.8%	9.8%	100.0%
Total	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q22. Why don't you shred and recycle documents at home? Choose ONE

Almost a quarter of those surveyed report that they do not shred and recycle documents at home. These respondents were asked why they did not. Most complain about the cost of a shredder, or say they do their shredding at work. However, 26 respondents gave additional reasons, for the most part reiterating that they use facilities at work for their shredding activities.

Figure 32: Answers to Q22 vs. “How often do you recycle?”

		How often do you recycle?							Total
		Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
A shredder is expensive.	Count	9	4	1	2	7	1	1	25
	%	36.0%	16.0%	4.0%	8.0%	28.0%	4.0%	4.0%	100.0%
It is too much trouble.	Count	3	1	0	1	3	1	0	9
	%	33.3%	11.1%	.0%	11.1%	33.3%	11.1%	.0%	100.0%
It takes too much time.	Count	3	0	1	0	0	0	1	5
	%	60.0%	.0%	20.0%	.0%	.0%	.0%	20.0%	100.0%
I do it at work.	Count	24	0	1	1	8	1	3	38
	%	63.2%	.0%	2.6%	2.6%	21.1%	2.6%	7.9%	100.0%
I don't need to do it.	Count	25	6	0	2	13	7	8	61
	%	41.0%	9.8%	.0%	3.3%	21.3%	11.5%	13.1%	100.0%
I don't want to do it.	Count	5	1	0	0	1	1	2	10
	%	50.0%	10.0%	.0%	.0%	10.0%	10.0%	20.0%	100.0%
Other (specify):	Count	11	2	1	1	3	6	2	26
	%	42.3%	7.7%	3.8%	3.8%	11.5%	23.1%	7.7%	100.0%
Total	Count	80	14	4	7	35	17	17	174
	%	46.0%	8.0%	2.3%	4.0%	20.1%	9.8%	9.8%	100.0%

Q23. How important do you believe recycling is to your community? Make your answer a score between “0” to “5”, where “5” indicates very important and “0” indicates not important at all.

Respondents rate the importance of recycling to Tucson at a score of 4.1 out of a possible “5.0,” according to the answers shown in Figure 33. The overwhelming majority of those who scored the question ranked it above “3.” Less than 10 percent ranked it below “3.”

Figure 33: Rankings for Q23 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
0	Count	0	1	2	0	0	0	2	2	7
	%	.0%	14.3%	28.6%	.0%	.0%	.0%	28.6%	28.6%	.9%
1	Count	0	2	0	0	2	1	3	2	10
	%	.0%	20.0%	.0%	.0%	20.0%	10.0%	30.0%	20.0%	1.3%
2	Count	0	24	2	3	2	6	2	5	44
	%	.0%	54.5%	4.5%	6.8%	4.5%	13.6%	4.5%	11.4%	5.7%
3	Count	0	91	14	7	8	33	18	7	178
	%	.0%	51.1%	7.9%	3.9%	4.5%	18.5%	10.1%	3.9%	23.0%
4	Count	0	43	13	4	4	20	8	6	98
	%	.0%	43.9%	13.3%	4.1%	4.1%	20.4%	8.2%	6.1%	12.7%
5	Count	1	234	34	18	19	89	24	17	436
	%	.2%	53.7%	7.8%	4.1%	4.4%	20.4%	5.5%	3.9%	56.4%
Total	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q24. How important do you think your neighbors (the people who live close by) consider recycling? Make your answer a score between “0” to “5”, where “5” indicates very important and “0” indicates not important at all.

This convoluted question asks respondents to look into the minds of their neighbors and determine how important recycling is to them – by scoring what is believed their scores are on the same “0” to “5” scale as was used for their own determination (see Figure 34).

Those surveyed don’t believe their neighbors are as recycling-conscious as they are themselves. Their “neighbor” score is only 3.5 out of a possible 5, against their own 4.1.

Figure 34: “Neighbor” Recycling Importance Ratings, Compared to Respondent Ratings

		How often do you recycle?									
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	Total	
Not Answered	Count	0	2	0	0	0	0	0	1	3	Q23 Scores
	%	.0%	66.7%	.0%	.0%	.0%	.0%	.0%	33.3%	0.4%	7
0	Count	0	8	1	1	0	1	4	1	16	7
	%	.0%	50.0%	6.3%	6.3%	.0%	6.3%	25.0%	6.3%	2.1%	.9%
1	Count	0	19	2	2	2	12	7	4	48	10
	%	.0%	39.6%	4.2%	4.2%	4.2%	25.0%	14.6%	8.3%	6.2%	1.3%
2	Count	0	77	10	7	10	25	11	8	148	44
	%	.0%	52.0%	6.8%	4.7%	6.8%	16.9%	7.4%	5.4%	19.1%	5.7%
3	Count	0	109	20	8	15	45	20	8	225	178
	%	.0%	48.4%	8.9%	3.6%	6.7%	20.0%	8.9%	3.6%	29.1%	23.0%
4	Count	1	86	14	7	2	36	8	9	163	98
	%	.6%	52.8%	8.6%	4.3%	1.2%	22.1%	4.9%	5.5%	21.1%	12.7%
5	Count	0	94	18	7	6	30	7	8	170	436
	%	.0%	55.3%	10.6%	4.1%	3.5%	17.6%	4.1%	4.7%	22.0%	56.4%
Total	Count	1	395	65	32	35	149	57	39	773	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%	100.0%

Q25. How well do you believe your community does at recycling, compared to other towns and cities in the nation?

Respondents believe Tucson does slightly better than the average U.S. community at recycling (see Figure 35). One in five believes the city does below average or worse, and one in eight rate Tucson as better than average. Another fifth doesn't know how to judge the city against others, and less than two percent simply don't care.

Figure 35: Answers to Q25 vs. “How often do you recycle?”

		How often do you recycle?									
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	Total	
Very well, better than average.	Count	1	49	8	5	3	21	9	3	99	
	%	1.0%	49.5%	8.1%	5.1%	3.0%	21.2%	9.1%	3.0%	12.8%	
About average.	Count	0	194	27	17	12	75	19	13	357	
	%	.0%	54.3%	7.6%	4.8%	3.4%	21.0%	5.3%	3.6%	46.2%	
Below average.	Count	0	64	10	4	13	20	8	3	122	
	%	.0%	52.5%	8.2%	3.3%	10.7%	16.4%	6.6%	2.5%	15.8%	
Not well at all, far below average.	Count	0	22	2	3	1	10	6	2	46	
	%	.0%	47.8%	4.3%	6.5%	2.2%	21.7%	13.0%	4.3%	6.0%	
I don't know.	Count	0	61	16	3	5	23	11	15	134	
	%	.0%	45.5%	11.9%	2.2%	3.7%	17.2%	8.2%	11.2%	17.3%	
I don't care	Count	0	5	2	0	1	0	4	3	15	
	%	.0%	33.3%	13.3%	.0%	6.7%	.0%	26.7%	20.0%	1.9%	
Total	Count	1	395	65	32	35	149	57	39	773	
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%	

Q26. If you knew that your neighbors thought recycling was important, would that make recycling more important to you?

The power of social pressure is tested in Q26, which asks respondents how affected they are by their neighbors’ opinions. Roughly a third say recycling would become more important to them if they knew their neighbors felt it was (see Figure 36). But half report that it would make no difference. The remainder is unsure.

Figure 36: Answers to Q26 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	0	145	24	15	14	48	17	10	273
	%	.0%	53.1%	8.8%	5.5%	5.1%	17.6%	6.2%	3.7%	35.3%
No	Count	1	201	31	12	15	73	33	18	384
	%	.3%	52.3%	8.1%	3.1%	3.9%	19.0%	8.6%	4.7%	49.7%
I don't know	Count	0	49	10	5	6	28	7	11	116
	%	.0%	42.2%	8.6%	4.3%	5.2%	24.1%	6.0%	9.5%	15.0%
Total	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q27. If neighbors who got high recycling “scores” were given some kind of recognition, would that make you take recycling more seriously than you currently do?

Almost two-fifths of all respondents say they would not be swayed by rewarded neighbors to take recycling more seriously (see Figure 37). But one in five say they would, and a like number might well follow, depending upon the nature of the recognition given. Households that recycle more frequently are more likely to react to their neighbors’ recognition.

Figure 37: Answers to Q27 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Not Answered	Count	0	2	0	0	0	1	0	0	3
	%	.0%	66.7%	.0%	.0%	.0%	33.3%	.0%	.0%	.4%
Yes	Count	0	93	9	11	9	35	7	5	169
	%	.0%	55.0%	5.3%	6.5%	5.3%	20.7%	4.1%	3.0%	21.9%
No	Count	0	145	21	9	11	55	36	12	289
	%	.0%	50.2%	7.3%	3.1%	3.8%	19.0%	12.5%	4.2%	37.4%
It would depend on the recognition	Count	0	89	20	4	11	36	2	11	173
	%	.0%	51.4%	11.6%	2.3%	6.4%	20.8%	1.2%	6.4%	22.4%
I don't know	Count	1	66	15	8	4	22	12	11	139
	%	.7%	47.5%	10.8%	5.8%	2.9%	15.8%	8.6%	7.9%	18.0%
Total	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Q28. How do you currently get information about the city’s recycling programs? Check ALL that apply

Among the 12 sources of information listed for respondents to consider, the highest percentage (38.4 percent) report that they get their city recycling information from mailed notices they receive (see Figure 38). Newspapers were a distant second, at 18.8 percent response rate. Almost a third of those surveyed say they don’t get information.

Figure 38: Responses to Q28 vs. “How often do you recycle?”

		How often do you recycle?								Total
		No Answer	Weekly	2X Month	1X Month	> 1X Month	Rarely	Never	I don't know	
From newspaper ads and articles.	Count	0	85	12	6	2	33	5	2	145
	%	0.0%	58.6%	8.3%	4.1%	1.4%	22.8%	3.4%	1.4%	18.8%
From other local publications I read.	Count	0	44	9	4	5	11	5	0	78
	%	0.0%	56.4%	11.5%	5.1%	6.4%	14.1%	6.4%	0.0%	10.1%
From TV programs I watch.	Count	0	45	13	5	7	20	2	1	93
	%	0.0%	48.4%	14.0%	5.4%	7.5%	21.5%	2.2%	1.1%	12.0%
From radio stations I listen to.	Count	0	31	4	3	2	10	1	2	53
	%	0.0%	58.5%	7.5%	5.7%	3.8%	18.9%	1.9%	3.8%	6.9%
From notices I get in the mail.	Count	0	151	27	13	14	71	11	10	297
	%	0.0%	50.8%	9.1%	4.4%	4.7%	23.9%	3.7%	3.4%	38.4%
From Websites I visit online.	Count	1	59	6	2	3	25	6	1	103
	%	1.0%	57.3%	5.8%	1.9%	2.9%	24.3%	5.8%	1.0%	13.3%
From social media sites I visit.	Count	0	22	5	1	1	9	2	0	40
	%	0.0%	55.0%	12.5%	2.5%	2.5%	22.5%	5.0%	0.0%	5.2%
From information my children bring home from school.	Count	0	11	1	0	2	3	2	0	19
	%	0.0%	57.9%	5.3%	0.0%	10.5%	15.8%	10.5%	0.0%	2.5%
From neighbors, friends, and family members.	Count	1	34	4	6	4	14	4	2	69
	%	1.4%	49.3%	5.8%	8.7%	5.8%	20.3%	5.8%	2.9%	8.9%
From signs and posters I see.	Count	1	66	9	1	8	19	5	3	112
	%	0.9%	58.9%	8.0%	0.9%	7.1%	17.0%	4.5%	2.7%	14.5%
From the city workers who pick up my trash.	Count	0	19	4	1	3	9	1	1	38
	%	0.0%	50.0%	10.5%	2.6%	7.9%	23.7%	2.6%	2.6%	4.9%
From organizations I belong to.	Count	0	6	1	1	0	5	2	0	15
	%	0.0%	40.0%	6.7%	6.7%	0.0%	33.3%	13.3%	0.0%	1.9%
From some other source (specify):	Count	0	16	3	3	3	6	2	1	34
	%	0.0%	47.1%	8.8%	8.8%	8.8%	17.6%	5.9%	2.9%	4.4%
I don't get any information	Count	0	121	18	7	7	43	27	16	239
	%	0.0%	50.6%	7.5%	2.9%	2.9%	18.0%	11.3%	6.7%	30.9%
I don't know	Count	0	23	3	3	2	5	8	9	53
	%	0.0%	43.4%	5.7%	5.7%	3.8%	9.4%	15.1%	17.0%	6.9%
Total	Count	1	395	65	32	35	149	57	39	773
	%	0.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100%

Q29. Do you believe you need more, regular communication about recycling than you currently receive?

Three out of five respondents believe more communications concerning recycling is needed (see Figure 39). This response correlates well with those who rank the importance of recycling to the community at 4 or above (Q23). Taken in tandem with the percentage of respondents who report that they “don’t get any information,” the responses to this question underline the need to review recycling communications efforts.

Figure 39: Answers to Q29 vs. “How often do you recycle?”

		How often do you recycle?								Total
		Not Answered	Every week	Twice a month	Once a month	Less than once a month	Very rarely	Never	I don't know	
Yes	Count	1	248	46	18	25	89	30	21	478
	%	.2%	51.9%	9.6%	3.8%	5.2%	18.6%	6.3%	4.4%	61.8%
No	Count	0	103	10	10	5	45	20	5	198
	%	.0%	52.0%	5.1%	5.1%	2.5%	22.7%	10.1%	2.5%	25.6%
I don't know	Count	0	44	9	4	5	15	7	13	97
	%	.0%	45.4%	9.3%	4.1%	5.2%	15.5%	7.2%	13.4%	12.5%
Total	Count	1	395	65	32	35	149	57	39	773
	%	.1%	51.1%	8.4%	4.1%	4.5%	19.3%	7.4%	5.0%	100.0%

Epilogue

The responses to this survey prove community interest in recycling, but also underline misunderstandings and lack of knowledge among residents. Many are unaware of programs already in place to help them remove categories of dangerous or bulky refuse from their properties. The need for information was underlined in several responses. The misunderstanding of what can and cannot go in the “blue barrel” will continue to hamper and retard serious recycling efforts until it is corrected.