

# 2018 Home Organics Waste Management Survey Report



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# Seattle Public Utilities

## 2018 Home Organics Waste Management Survey

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### Introduction

For over 30 years, Seattle Public Utilities (SPU) has supported an array of organics waste management services and programs. The programs are designed to help people reduce and manage their yard debris and food waste. SPU not only offers curbside collection services for yard and food waste, but it also provides residents with education and tools for managing organic wastes effectively on their own property. These efforts support SPU's overall goals for environmentally responsible and cost-effective solid waste management.

This study is a continuation of research first conducted in 1995 and subsequently conducted in 2000, 2005, 2010 and 2018. The primary purpose is to evaluate and track Seattleite's awareness and behaviors regarding the many organic management programs and services designed and supported by SPU. As best-practices with organics management have evolved over time, so too have the primary objectives of this research. The 1995 survey was designed to investigate the variety of organic waste management activities practiced by those with residential curbside collection service and identify ways to improve SPU services. In 2000, the second survey was expanded to include an investigation of residents' attitudes and practices toward grasscycling. In 2005 the survey was broadened to investigate the entire range of organic waste management behaviors, including participation in curbside organic pick-up services, on-property yard and food waste composting and grasscycling. The 2010 survey was expanded to include questions related to usage and disposal of cooking fats, oils and grease generated in the kitchen, and perceptions about changing from weekly to bi-weekly garbage pick-up service. The 2018 survey added questions assessing behaviors and opinions about food that is wasted and removed questions associated with kitchen-generated fats, oils, and grease and interest in moving to bi-weekly pick-up services.

The 2018 survey was fielded in February, 2018. The survey included 600 Seattle residents using residential curbside collection service. The sample size provides 95% confidence that the results will be within plus or minus 4.1% of what they would be if all Seattleite's with residential pick-up service had been interviewed.

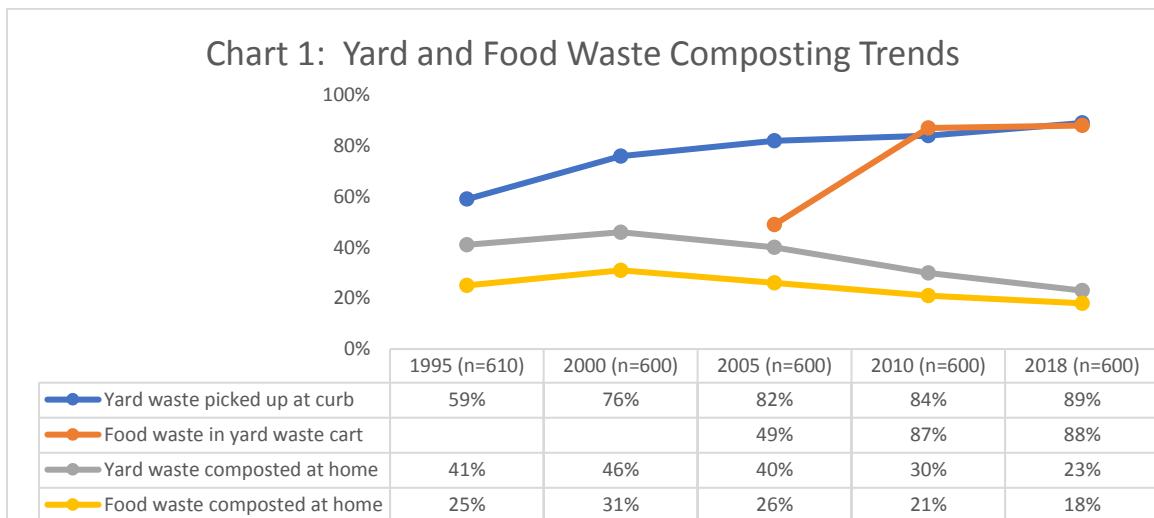
### SPU Programs and Services

The programs and services that SPU supports for organic waste management have evolved since 1986 when the first group of Master Composters was trained to provide residents with education on the benefits of composting yard waste at home. Today, in addition to its continuing support of on-property yard and food waste composting, SPU also provides

Seattleites the tools, education, and encouragement to compost their food waste by placing it in their yard and food waste cart and taking it to the curb for collection.

## Comparison with 1995, 2000, 2005 and 2018 Organics Surveys

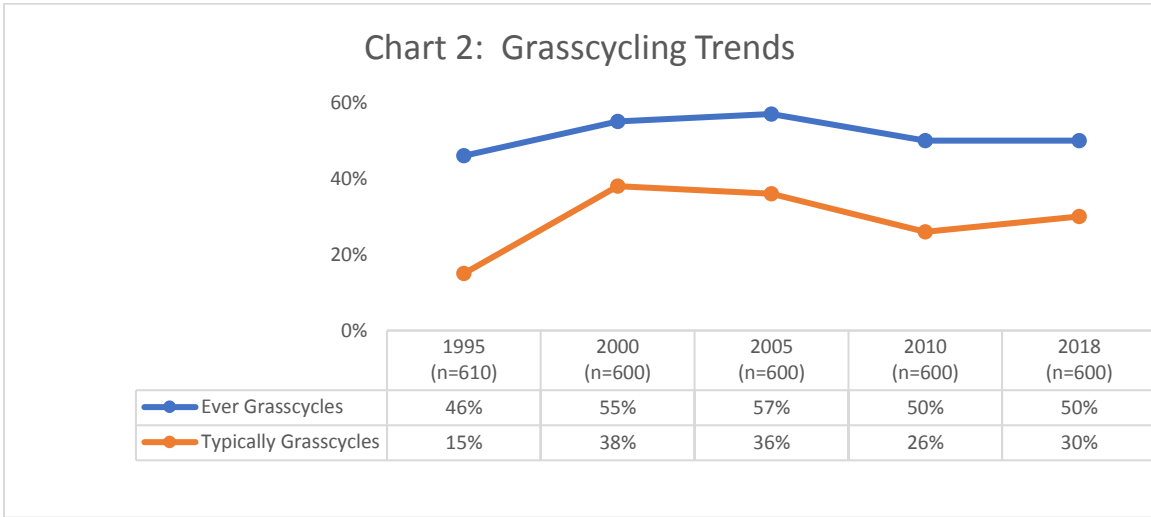
The research shows that fewer and fewer Seattleites are composting their yard and food waste at home on-property, in favor of putting it in their food and yard waste cart that is picked up at curbside. Between 1995 and 2018, there has been a 50% increase in the percentage of people taking their yard waste to the curbside for pick-up, along with a steady decline of composting yard waste on-property (from 41% to 23%). Between 2005 and 2018 there has been over a 50% increase in the percentage of people placing their food waste inside their yard waste cart (from 49% to 88%), along with a steady decline in the share of households composting their food waste on-property (from 26% to 18%).



In 2010, the data indicated that the expansion of the curbside yard waste collection program to include food waste played a role in the decline of on-property food waste composting. Eight years ago, 19% of those who placed at least some food waste in the organics cart and also composted at least some food waste at home reported that they composted food waste at home less often because of the curbside collection program. The 2018 data shows that this shift has stabilized over the eight-year period. In 2018, of those who put at least some food waste in the cart and compost at least some food waste at home, only 2% said that they've decreased the amount of food waste they compost at home over the past year.

While on-property composting has slowly declined over time for both yard and food waste, the percentage of Seattleites grasscycling has remained stable over the past several years. In both 2010 and 2018, 50% of Seattleites said they “ever” left grass clippings on the lawn when the

lawn is mowed. In 2010, one-quarter (26%) said they typically left grass clippings on the lawn, and 30% said the same in 2018.



## Key Findings

### More People are Taking Yard Waste to the Curb and Fewer are Composting at Home

The percentage of Seattleite’s with residential can service who place at least some of their yard waste at the curbside for pick-up has steadily increased over the years. Even in comparison to 2010 when this research was last conducted, the percent saying they use curbside pick-up service for all their yard waste composting needs has increased from 59% to 69%.

There has been a steady decrease in the percentage saying they compost all, or at least some, of their yard waste on their own property. Twenty percent (20%) of the 2018 respondents said they both compost yard waste on their own property and at the curbside, which is down from a high of 33% in 2000 and 2005. Only 3% of the 2018 respondents said they compost all their yard waste on their own property, which is down significantly from a high of 15% in 1995.

### Seattle’s Yard and Food Waste Pick-Up Program has been Highly Successful at Diverting Food Scraps out of the Regular Garbage and Away from Garbage Disposals

Seattleite’s use a variety of methods for disposing of food scraps. In 2018, 88% said they place food waste in their food and yard waste cart that is taken to the curb for pick-up, which is statistically on par with the 87% reporting the same in 2010. Placing food scraps in both the

regular trash and the garbage disposal have decreased significantly over time. Eight years ago, 25% said they put at least some food waste in the regular trash and only 11% say they do the same today. Eight years ago, 63% said they put at least some food waste down the garbage disposal and only 23% say they do the same today.

### Satisfaction with Food and Yard Waste Collection is High

Overall satisfaction with the City's food and yard waste collection service has increased over the past eight years. Using the same seven-point scale used in past years (where seven means extremely satisfied and one means not at all satisfied) the average rating in 2018 is 6.5. This is statistically higher than the average rating of 6.2 in 2010.

### Ending the Transition from On-Property Composting to Curbside Pick-Up

Seattle Public Utilities was very successful with its on-property composting programs, and programs to encourage curbside pickup of yard and food waste have been even more successful. Between 2000 and 2005, the amount of material collected and sent to composting facilities totaled approximately 40,000 tons. By 2017, the material collected and going to composting facilities has grown to about 90,000 pounds. Because of the education and outreach programs in which SPU invested to encourage the ethic of composting, Seattleites have found it an easy transition to migrate from on-property composting to curbside pick-up for yard and food waste—they know that both methods allow the materials to be composted.

### Future Efforts in Home Organics Waste Management will Target Food and Pet Waste

An important fraction of the remaining organic materials in the single-family waste stream are food and pet waste (41%). The results from this research will be used as the baseline against which to measure future outreach and educational efforts to encourage food waste prevention, food waste composting, and providing best-practice guidelines for the disposal of pet waste.

## Research Design

### Objectives

Seattle Public Utilities (SPU) has commissioned this quantitative research to determine the level at which Seattle city residents are currently participating in organic waste management activities; that is, utilization of curbside pick-up services, on-property yard waste composting, on-property food waste composting and grasscycling.



The specific objectives of this research were:

- To examine the extent to which Seattleites participate in organic waste management activities, including inquiries about:
  - The types of waste management activities in which they currently engage; and,
  - How behaviors have changed over the past several years.
  
- To examine the attitudes and behaviors of Seattleites who do not participate in organic waste management activities, including:
  - Interest in on-property food and yard waste composting;
  - Primary reasons for not composting or grasscycling; and,
  - Likelihood of participating in organic waste management activities.
  
- To explore behaviors and opinions about food that is wasted.
  - Concern about wasted food; and,
  - Interest in reducing the amount of wasted food.
  
- To examine how people with pets typically dispose of pet waste at home.

## Methodology

### Target Population

To qualify for inclusion in this study, all respondents were screened to be 18 years of age or older and living within the Seattle city limits. Only those residing in buildings with residential garbage pick-up service were considered eligible; thus, the universe was defined as those who had residential can service.

### Technique

Pacific Market Research of Seattle, Washington conducted 600 telephone interviews. All telephone interviews were conducted by trained, professional survey-takers under the guidance of experienced supervisors. Interviewers were thoroughly briefed on the goals and objectives of the study, and they were coached and monitored throughout data collection.

### Field Dates

Telephone interviews were conducted seven days a week between February 18, 2018 and March 11, 2018. Weekday telephone calls were primarily placed between 4:00 to 9:00 p.m.,

and weekend calls were placed during daytime hours. An attempt was made to reach every sample unit selected at least six times, and each sample unit was attempted on different days at different times.

## Questionnaire

The questionnaire was originally designed jointly by SPU and FBK Research in 2005. While every effort was made to keep the questionnaire the same in 2018, some modifications were made to honor service-level changes made by SPU and as well as changes in how people interpret waste management terminology. Questions regarding SPU's bin distribution outreach and mulch mower outreach programs were removed since they have not been funded in the past eight years. The wording of the questions was also changed to ensure clarity, primarily with the way in which the term "composting" is used. Years ago, consumers understood "composting" to be an activity that usually took place under the direction of the homeowner in his backyard. Today, the term "composting" is used more broadly and includes the activity of placing yard and food waste in the organics cart. Thus, the questions in the 2018 survey were updated to differentiate between on-property composting and curbside composting.

The instrument was pilot tested twice to ensure that the questions provided valid and reliable results, and the length of the interview was less than or equal to 15 minutes. The initial pilot test pointed to certain areas where the questions were confusing to respondents because of waste management behavioral changes. Once modifications were made and approved, the questionnaire was pilot tested again to ensure validity and reliability. After learning that the length of the questionnaire was longer than 15 minutes, a few questions were removed and the survey was approved for fielding.

## Sample

In the absence of the same sampling source used in 2005 (because of a change in SPU's financial system), the sample universe was defined as SPU's residential telephone alert system datafile. Because this datafile represents the most complete list of customers who need to be notified in the event of a service interruption, it is the best resource for surveying residential can customers. A random sample was selected in proportion to the percent of landlines and wireless lines in the datafile. Where multiple phone numbers were available, first priority was given to calling the landline, and second priority was given to the mobile number. Business phone numbers were excluded.

## Sample Profile

### Demographic Characteristics

When interpreting the findings from this survey it is important to keep in mind the characteristics of the people interviewed. The following table presents a profile of the 600 Seattleites who were included in the 2018 survey alongside similar data from the same study conducted in previous years.

Here, as elsewhere in this report, percentages may not sum to 100 because of rounding errors, because of the acceptance of multiple responses and/or because of the exclusion of answers with very low frequencies.

Table 1: Demographic Data

		March 2018 (600)	December 2010 (616)	December 2005 (600)	January 2000 (600)	January 1995 (610)
Gender:	Male	46%	47%	42%	42%	39%
	Female	54%	53%	58%	58%	61%
Age:	< 35 years old	7%	13%	14%	26%	32%
	35 – 44 years old	17%	26%	26%	28%	23%
	45 – 54 years old	18%	19%	23%	21%	16%
	55 – 64 years old	22%	20%	20%	12%	9%
	65 + years old	32%	19%	16%	12%	17%
	Declined to answer	4%	3%	1%	1%	3%
Dwelling:	Single-family	97%	96%	94%	91%	84%
	2+ units	3%	4%	6%	9%	16%
Own:	Own	95%	88%	86%	77%	71%
	Rent	2%	9%	12%	21%	28%
	Other/Declined	3%	3%	2%	2%	1%

Table 1: Demographic Data (continued)

March 2018	December 2010	December 2005	January 2000	January 1995
(600)	(616)	(600)	(600)	(610)

# in HH:	One	18%	16%	16%	16%	17%
	Two	40%	39%	44%	43%	36%
	Three	18%	18%	17%	18%	21%
	Four	16%	18%	17%	15%	15%
	Five or more	5%	7%	5%	7%	10%
	Declined to answer	3%	2%	1%	1%	1%

Race:	White	77%	81%	79%	84%	71%
	Black/African American	2%	4%	3%	4%	6%
	Asian (net)	6%	5%	4%	5%	10%
	Hispanic/Latino	2%	2%	1%	1%	3%
	Multi-racial	2%	1%	4%	2%	2%
	Other	1%	0%	0%	0%	2%
	Declined to answer	10%	7%	9%	5%	6%

Education:	High school or less	7%	7%	8%	11%	19%
	Some college	16%	17%	22%	24%	26%
	4-year college degree	35%	38%	31%	39%	28%
	Post grad work +	38%	33%	36%	25%	23%
	Declined to answer	4%	5%	3%	1%	4%

HH Income:	< \$30,000	4%	5%	7%	10%	NA
	\$30 - \$50,000	6%	9%	13%	21%	NA
	\$50 - \$75,000	10%	14%	15%	24%	NA
	\$75 - \$100,000	11%	15%	20%	15%	NA
	\$100,000+	41%	31%	25%	15%	9%
	Declined to answer	27%	26%	21%	15%	9%

The demographic characteristics of Seattle residents living in homes with residential can service has changed over the past 23 years.

- A comparison of age between 2005 and 2018 shows that Seattleite’s with residential curbside service have aged. In 2018, 32% of Seattle residential can customers are 65 years of age or older while only 19% of customers were in this same age group in 2005.
- While relatively stable between 2000 and 2005, the data shows that Seattle residential customers are more likely to own a single-family home today. In 1995, 84% of those interviewed lived in a single-family home, and 71% owned their home. Today, 97% of those interviewed live in a single-family home, and 95% own that home.

- Income has changed significantly since 2010. Today, 41% of Seattle residential can customers have household incomes of \$100,000 or more, while only 31% reported the same household income in 2010.

## Yard Characteristics

Yard waste composting (whether on-property or at curbside) implies having a yard—a lawn, garden or both—and grasscycling requires having a grass lawn. Respondents in this research were asked to provide information about their households and yards to determine the extent to which they had the need to compost yard waste and to grasscycle. The data in Table 2 below shows comparisons of yard waste characteristics since 1995.

Table 2: Yard Characteristics

		March 2018 (600)	December 2010 (616)	December 2005 (600)	January 2000 (600)	January 1995 (610)
Yard	Yes	98%	95%	98%	96%	95%
	No	2%	5%	2%	4%	5%
Lawn	Yes	83%	80%	87%	88%	85%
	No	17%	20%	13%	12%	15%
Care for Yard	Yes	81%	100%	96%	94%	79%
	No	19%	0%	4%	6%	21%
Garden	Yes	77%	74%	74%	71%	57%
	No	23%	26%	26%	29%	43%
Garden Type	Food	44%	48%	37%	37%	35%
	Flower	47%	61%	63%	63%	61%
	Other	2%	16%	13%	8%	1%
	None	22%	22%	26%	29%	43%

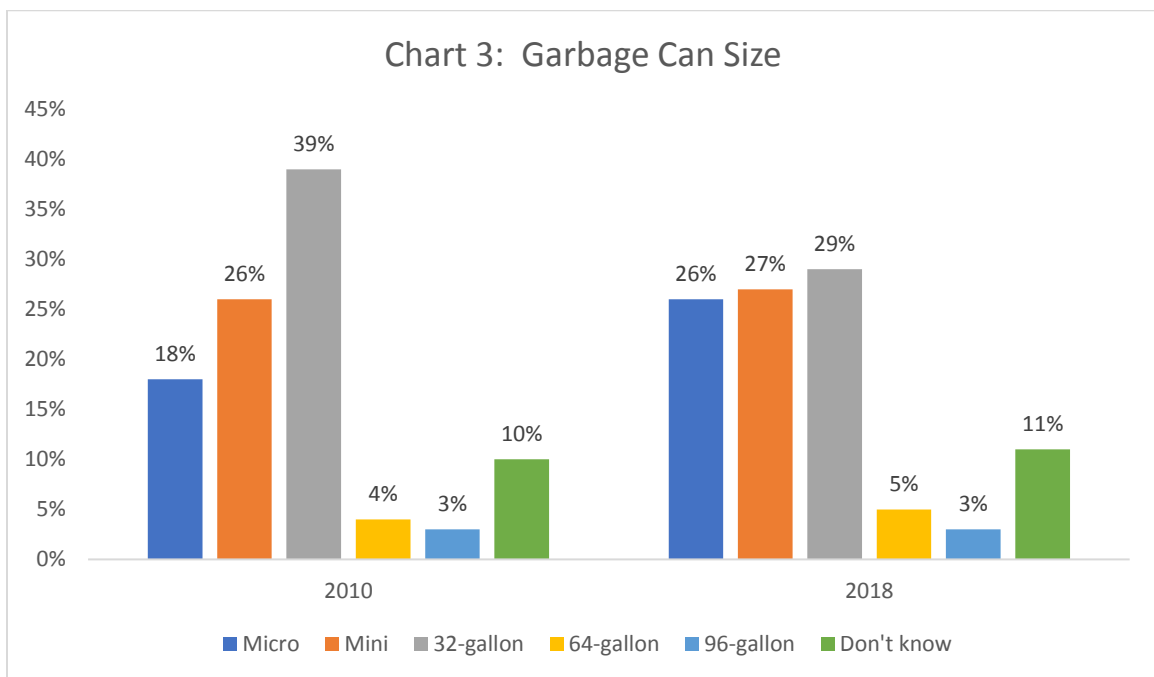
The extent to which Seattle residents with residential can service have yards and lawns has remained very steady over the past 23 years.

A change in the wording of the questions after 1995 makes it challenging to compare data from 1995 about how yards are cared for. Comparing the 2018 data to similar data going back to 2000 shows that fewer Seattle residential can customers now take at least some personal responsibility for yard care. In 2018, 81% said they cared for their own yard while 100% said they cared for their own yard eight years ago.

While the percentage of Seattle residential can customers who have a garden has remained stable over the years, the data shows that respondents are less likely to invest time in a flower garden today than they were in 2010. In 2018, 47% reported they have a flower garden while 61% said they had a flower garden back in 2010.

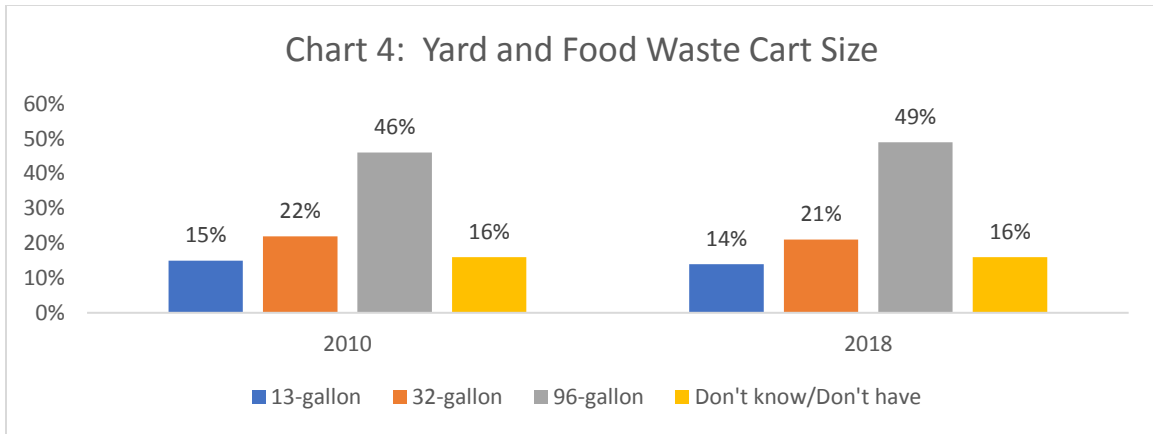
### Residential Curbside Pick-Up Services

The results show that Seattle residential customers are migrating down to the smallest size container for regular garbage. In 2010, 44% of residential can customers reported having a micro or mini garbage container (18% and 26% respectively) while today 53% report having one or the other of these smaller containers (26% and 27% respectively).



When asked how regularly they take their garbage can out to the curb for pick-up, 89% of the residential can customers in 2018 said they did so every week. This compares to 92% saying the same in 2010.

Ninety-eight percent (98%) of the 2018 respondents said their household uses curbside pick-up service for yard and food waste. Statistically on par, this compares to 97% of the 2010 respondents who said the same. The size of the yard and food waste cart taken to curbside has not changed over the past eight years (46% used a 96-gallon cart in 2010 and 49% use a 96-gallon cart in 2018).



Among the 15 respondents who do not have curbside pick-up for yard and food waste, 3 (20%) have an exemption from the City and 8 (53%) do not. Eight years ago, among those who did not have curbside pick-up for yard and food waste, 48% said they had an exemption and 33% said they did not.

### Survey Limitation

A sample size of 600 is sufficient to provide 95% confidence that the resulting data will be within plus or minus 4.1% of what it would be if all Seattle households with residential pick-up service were interviewed. That is, in theory, had all people in the target universe been interviewed, there is a 95% chance the results would be within plus or minus 4.1% of the results obtained from this sample. This error range is calculated at the 50%-50% response rate to any two-part questions (e.g., 50% “yes” and 50% “no”) and is, therefore, the maximum error range that can be expected.

### Reporting of Sample Segments

This report addresses results from several specific subgroups. The following table presents some of these subgroups, the number of interviews conducted and the associated error range for 2010 and 2018.

Table 3: Sample Sizes and Error Ranges

	2018		2010	
	Frequency	Error Range	Frequency	Error Range
Total sample	600	+/- 4.1%	616	+/- 4.0%
On-property yard waste composters	136	+/- 8.6%	186	+/- 7.3%
On-property food waste composters	110	+/- 9.5%	125	+/- 8.9%
Grasscyclers	300	+/- 5.8%	296	+/- 5.8%
On-property yard waste only composters	64	+/- 12.5%	97	+/- 10.2%
On-property food waste only composters	38	+/- 16.2%	36	+/- 16.7%
On-property yard + food composters	72	+/- 11.8%	89	+/- 10.6%
Compost neither on-property	426	+/- 4.8%	394	+/- 5.0%
Use curbside for yard waste	533	+/- 4.3%	520	+/- 4.4%
Use curbside for food waste	530	+/- 4.3%	552	+/- 4.3%

The data presented in this report provides a reliable and valid picture of Seattleites' attitudes and behaviors with waste management activities. This data is useful when assessing the size of the current market and the future market for program enhancement and expansion; however, it must be kept in mind that this survey data cannot predict the future. While great care and the most advanced methods were employed in the design, execution, and analysis of this study, these results should be interpreted only as representing the view of these respondents at the time they were interviewed.



## Current Market – Detailed Findings

### Curbside Pick-Up Service for Yard and Food Waste

Nearly everyone with residential garbage can service also subscribes to curbside pick-up service for yard and food waste (98%). Of the 98% with curbside pick-up service for organics, 51% use a 96-gallon container, 22% use a 32-gallon container and 14% use a 13-gallon container. The size of the current market for yard and food waste services and the size of the containers used by those in the current market are unchanged over the past eight years.

### Characteristics of the On-Property Composting Market

Among the 600 residential can service customers, about one-third (29%) are currently composting yard and/or food waste on their own property at home and 71% are not composting either yard or food waste on their own property at home.

- 64 (11%) currently compost yard waste on their property but not food waste;
- 38 (6%) currently compost food waste on-property but not yard waste;
- 72 (12%) currently compost both yard and food waste on-property; and,
- 426 (71%) currently do not compost either yard or food waste on their own property.

Together,

- 136 (23%) currently compost yard waste on-property (and may or may not compost food waste); and,
- 110 (18%) current compost food waste on-property (and may or may not compost yard waste).

The following table compares this information to similar information collected since 1995.

Table 4: Current On-Property Composting Behavior

	March 2018 (600)	December 2010 (616)	December 2005 (600)	January 2000 (600)	January 1995 (610)
On-Property Yard Waste Only	11%	16%	16%	19%	19%
On-Property Food Waste Only	6%	6%	2%	4%	3%
On-Property Yard + Food Waste	12%	14%	24%	27%	22%
Not Composting On-Property	71%	64%	58%	50%	57%
Total On-Property Yard Waste	23%	30%	40%	46%	41%
Total On-Property Food Waste	18%	20%	26%	31%	25%

The percent of households that report composting yard and/or food waste on-property in 2018 has decreased significantly since 2000 (from 50% in 2000 to 29% today).

The table below provides information about the demographic characteristics of those who currently compost yard waste on-property, those who currently compost food waste on-property, and those who do not compost either. For comparison purposes, percentages for the total sample are repeated here.

Table 5: Demographic Characteristics of On-Property Composters in 2018

		Total Sample	Yard Waste	Food Waste	Neither
		(600)	(136)	(110)	(426)
		(100%)	(23%)	(18%)	(71%)
Gender:	Male	46%	51%	45%	44%
		(100%)	(25%)	(18%)	(69%)
	Female	54%	49%	55%	56%
		(100%)	(20%)	(19%)	(72%)
Age:	< 35 years old	7%	7%	6%	8%
		(100%)	(15%)	(15%)	(71%)
	35 – 44 years old	17%	16%	17%	17%
		(100%)	(22%)	(19%)	(71%)
	45 – 54 years old	18%	16%	14%	18%
		(100%)	(21%)	(14%)	(74%)
	55 – 64 years old	22%	18%	17%	23%
		(100%)	(19%)	(15%)	(77%)
	65 + years old	32%	38%	42%	29%
		(100%)	(27%)	(24%)	(64%)
	Declined to answer	4%	4%	4%	5%
		(100%)	(22%)	(15%)	(78%)
Dwelling:	Single-family	97%	96%	92%	98%
		(100%)	(23%)	(17%)	(72%)
	2+ family	3%	4%	8%	2%
		(100%)	(26%)	(47%)	(47%)
Own:	Own	95%	96%	95%	95%
		(100%)	(23%)	(18%)	(71%)
	Rent	2%	2%	3%	2%
		(100%)	(21%)	(24%)	(65%)
	Other/Decline	3%	2%	2%	3%
		(100%)	(13%)	(8%)	(83%)

Table 5: Demographic Characteristics of On-Property Composters in 2018

Total Sample	Yard Waste	Food Waste	Neither
(600)	(136)	(110)	(426)
(100%)	(23%)	(18%)	(71%)

# in HH:	One	18%	18%	24%	16%
		(100%)	(24%)	(25%)	(66%)
	Two	40%	34%	38%	42%
		(100%)	(19%)	(18%)	(75%)
	Three	18%	19%	17%	18%
		(100%)	(24%)	(17%)	(71%)
Four	16%	19%	13%	15%	
	(100%)	(27%)	(15%)	(68%)	
Five or more	5%	7%	6%	5%	
	(100%)	(27%)	(21%)	(70%)	
Declined to answer	3%	3%	2%	3%	
	(100%)	(25%)	(13%)	(75%)	

Race:	White	77%	77%	67%	78%
		(100%)	(23%)	(16%)	(73%)
	Black/African American	2%	0%	2%	3%
		(100%)	(0%)	(14%)	(86%)
	Asian (net)	6%	8%	9%	5%
		(100%)	(30%)	(27%)	(62%)
	Hispanic/Latino	2%	2%	3%	1%
	(100%)	(33%)	(22%)	(56%)	
Multi-racial	2%	2%	3%	2%	
	(100%)	(25%)	(17%)	(67%)	
Other	1%	1%	1%	1%	
	(100%)	(25%)	(75%)	(25%)	
Declined to answer	10%	10%	15%	10%	
	(100%)	(21%)	(27%)	(66%)	

Education:	High school or less	7%	6%	8%	6%
		(100%)	(20%)	(23%)	(68%)
	Some college	16%	9%	15%	18%
		(100%)	(13%)	(18%)	(80%)
	4-year college degree	35%	39%	31%	35%
	(100%)	(25%)	(16%)	(70%)	
Post grad work +	38%	41%	39%	37%	
	(100%)	(25%)	(19%)	(69%)	
Declined to answer	4%	5%	6%	4%	
	(100%)	(26%)	(26%)	(70%)	

Table 5: Demographic Characteristics of On-Property Composters in 2018

Total Sample	Yard Waste	Food Waste	Neither
(600)	(136)	(110)	(426)
(100%)	(23%)	(18%)	(71%)

HH Income:	< \$30,000	4%	6%	7%	4%
		(100%)	(30%)	(30%)	(56%)
	\$30 - \$50,000	6%	9%	6%	5%
		(100%)	(33%)	(19%)	(64%)
	\$50 - \$75,000	10%	7%	10%	11%
		(100%)	(16%)	(18%)	(75%)
\$75 - \$100,000	11%	13%	16%	9%	
	(100%)	(28%)	(28%)	(63%)	
\$100,000+	41%	37%	29%	44%	
	(100%)	(20%)	(13%)	(75%)	
Declined to answer	27%	28%	31%	27%	
	(100%)	(23%)	(21%)	(70%)	

Compared to the total sample of Seattleite’s with residential can service, those who are composting yard waste on their own property:

- Tend toward being male (51% of on-property yard waste composters are male compared with 46% of all Seattleite’s with residential can service);
- Tend to live in households with three or more people (45% of on-property yard waste composters live in households with three or more people compared with 39% of all those with residential can service);
- Tend to have more education (80% of on-property yard waste composters have at least a 4-year college degree compared with 73% of the total sample); and,
- Tend to have lower household income (15% of on-property yard waste composters live in households earning under \$50,000 compared with 10% of the total sample).

Compared to the total sample of those with residential can service, those who compost food waste at their own home:

- Tend to be older (42% of on-property food waste composters are 65 years of age or older compared with 32% of the total sample); and,
- Tend to be more likely to live in a duplex, tri-plex or four-plex (8% of on-property food waste composters live in this type of dwelling compared with 3% of the total sample).

Although the sample sizes are often too small for robust analysis, when looking at the on-property composting behaviors of those in different demographic subgroups, these highlights emerge:

- Those 65 years of age or older are more likely than younger respondents to be composting either yard or food waste at home on their own property; and,

- Those living in a single-person household are more likely than their counterparts in larger households to be composting either yard or food waste at home on their own property.

Why some people continue to compost on their own property (often in addition to using curbside pickup service) is not explained in full by this research. It may be that the ethic and habit of composting is so strong among some households that eliminating this activity in its entirety is not considered an attractive option.

### Current Behavior with Yard Waste

The following table summarizes the yard waste behavior of the total sample of 600 respondents and compares it to the results from the research conducted in 1995, 2000, 2005, and 2010.

Table 6: Comparison of Yard Waste Composters  
(Based on the Total Sample)

	March 2018 (600)	December 2010 (616)	December 2005 (600)	January 2000 (600)	January 1995 (610)
No yard, grass and/or garden	6%	8%	4%	4%	5%
Do not ever care for yard	0%	0%	0%	2%	8%
All yard waste taken to curbside	69%	59%	49%	43%	33%
Composted on-property and curbside	20%	26%	33%	33%	26%
All yard waste composted on-property	3%	4%	7%	13%	15%
No on-property or curbside composting	2%	3%	6%	6%	13%

The percentage of Seattleite’s with residential can service who place at least some of their yard waste at the curbside for pick-up has steadily increased over the years. Even in comparison to eight years ago, the percent saying they use curbside pick-up service for all their yard waste composting needs has increased from 59% to 69%.

There has been a steady decrease in the percentage saying they compost all, or at least some of, their yard waste on their own property. Twenty percent (20%) of the 2018 respondents said they both compost yard waste on their own property and at the curbside, which is down from a high of 33% in 2000 and 2005. Only 3% of the 2018 respondents said they compost all their yard waste on their own property, which is down significantly from a high of 15% in 1995. Further, only 2% of the 2018 respondents said that they neither compost yard waste at the curb, nor compost it on their own property, which is down from a high of 13% in 1995.

## The Eligible Yard Waste Composting Market

Between 1995 and 2000, changes in the questionnaire (wording and skip patterns) made it impossible to compare answers about yard care across the five-year time period. To correct for these survey changes, information about disposal methods for yard waste was based on the “eligible market.” Rather than including the entire sample, the eligible market includes only those people who have a yard or garden and care for it themselves.

The following table summarizes the yard waste behavior of the eligible market and compares this information to that from earlier research.

Table 7: Comparison of Yard Waste Composters  
(Based on the Eligible Market)

	March 2018	December 2010	December 2005	January 2000	January 1995
	(566)	(566)	(574)	(568)	(527)
All yard waste taken to curbside	73%	64%	51%	45%	38%
Composted on-property and curbside	21%	28%	34%	35%	30%
All yard waste composted on-property	3%	5%	8%	14%	17%
No on-property or curbside composting	2%	3%	6%	6%	15%

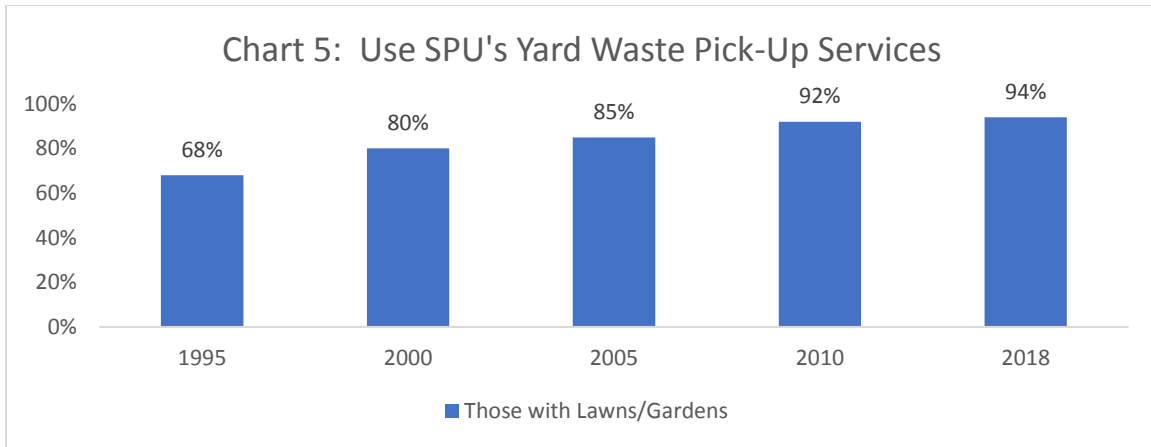
Even when adjusted for better comparisons, the same situation is evident. The percent of Seattle residents who take all their yard waste to the curbside for pick-up has steadily increased over time. In 1995, 38% of the eligible market reported that all the yard waste was taken to the curb and in 2018 73% said the same.

The percent who compost their yard waste on-property has decreased over the years and is now about one-fifth of what it was in 1995 (from 17% in 1995 to 3% in 2018). Only 2% of the eligible market in 2018 say they neither compost their yard waste on their own property nor take it to the curb compared with 15% saying the same back in 1995.

Historically there has been a correlation between those who compost on-property and those who tend a garden. This relationship remains true – on-property composters are more likely than their non-composter counterparts to have a garden (92% versus 75%). The same relationship is not evident when comparing those who compost food waste on their property to those who don’t. Among both audiences, about one-quarter do not have a garden (26% of those who compost only food waste on their property do not have a garden and 25% of those who do not compost anything on their property do not have a garden).

## Curbside Service Usage among Households with a Yard

In total, 94% of those with a lawn or garden report that they use the curbside yard waste pick-up service provided by the City. This percentage has steadily increased since 1995.



In the past, respondents who use the City's curbside pick-up service have been asked whether the amount of yard waste they take to the curb has changed in the last year. This question was removed in 2018 because during the pilot test it became evident that the habit of using curbside pick-up service for organics was so ingrained that people couldn't reasonably figure out how their volume usage had changed in the last year.

### Yard Waste Self-Haul Behaviors

People with yard waste were asked whether they ever took their yard waste to a central facility (like a transfer station) for composting. In 2018, 87% said they never took their own lawn or garden waste to a transfer station for composting. This percent is up only slightly from 2010 when 84% said they never used transfer stations for composting yard waste.

In 2018, among the 13% who used a transfer station for composting yard waste, the typical transfer station user takes yard waste there about three times a year:

- 39% self-hauled yard waste once in the past year;
- 24% self-hauled yard waste twice in the past year;
- 17% did it three times in the past year; and,
- 14% did it four or more times in the past year.

Usage of transfer stations shows more stability in 2018 than it did in 2010. Among those who self-hauled yard waste to a transfer station in 2018, 79% said that their household is using the transfer station for yard waste the same amount in 2018 as they always have. In 2010, only 59% said that their usage of the transfer station was the same as it had been in the past.

As was true in 2010, those who were changing the frequency with which they self-hauled yard waste to the transfer station were mostly going to the transfer station less often than before. While not a statistically significant change, in 2010, 30% said they were using the transfer

station less often than they previously had, and in 2018 27% said they were using the transfer station less often than they previously had.

In both 2010 and 2018, only a small percentage reported an increase in their usage of transfer stations. In 2010, 10% said they were self-hauling yard waste there more often while the figure in 2018 was 4%.

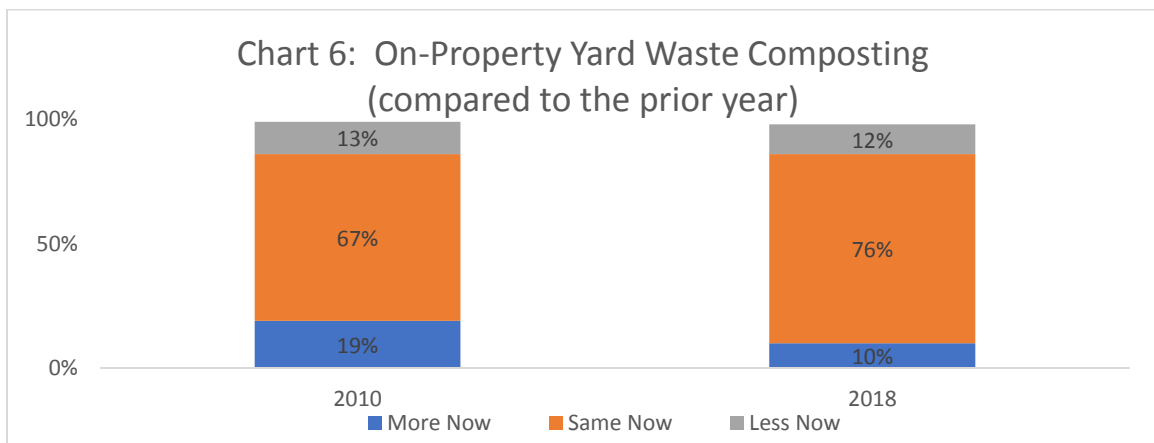
### Yard Waste Composting Behaviors On-Property

In 2018, 24% of those with yard waste reported that they compost at least some of that yard waste at home on their own property. This is down from 33% who said the same in 2010. When asked how much of their yard waste they compost on-property, 48% said they compost at least one-half of it on their own property, and 48% said they compost less than one-half of it on their own property.

- 29% compost all or almost all on-property
  - 4% compost about three-quarters of it
  - 15% compost about one-half of it
- } 48%
- 
- 25% compost about one-quarter on-property
  - 23% compost less than one-quarter of it
- } 48%

Of those who compost yard waste on their own property at home, three-quarters (76%) say that they are composting just as much now as they did last year. Ten percent (10%) say they are composting more now than they did last year, and 12% say they are composting less now.

A comparison of how people self-report changes in their on-property yard waste composting behavior shows that behaviors are stabilizing and indicates that people are less inclined to make efforts to compost at home.

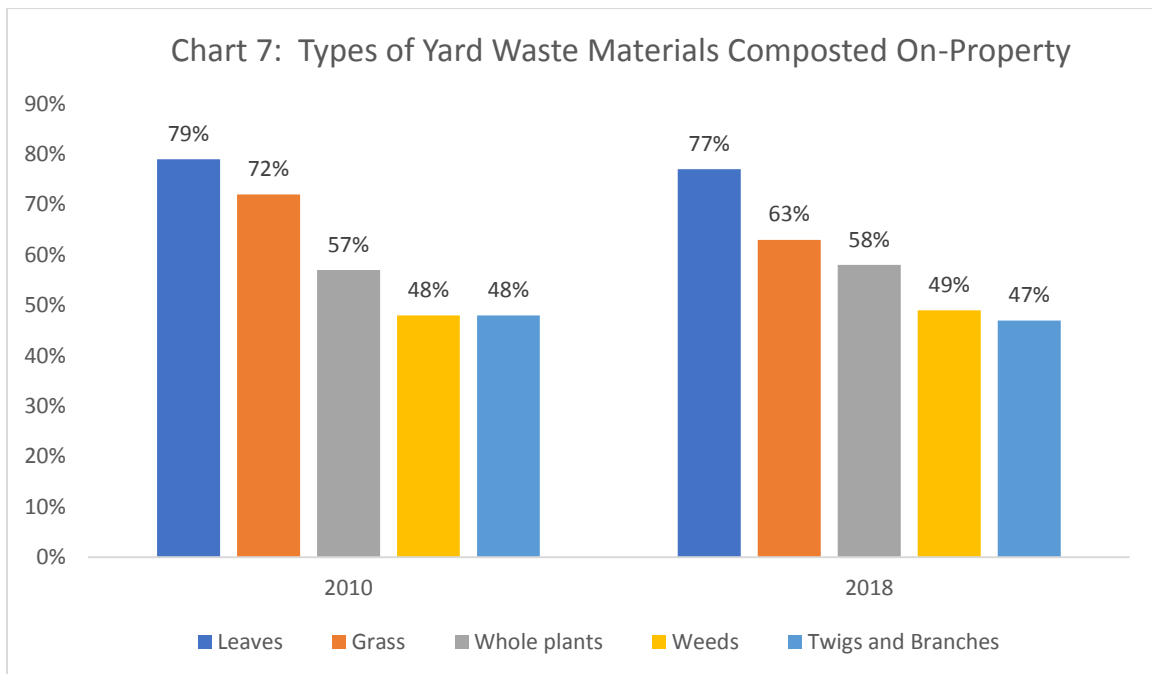




Those who reported composting less of their yard waste at home on their own property were asked why they had changed their composting practices.

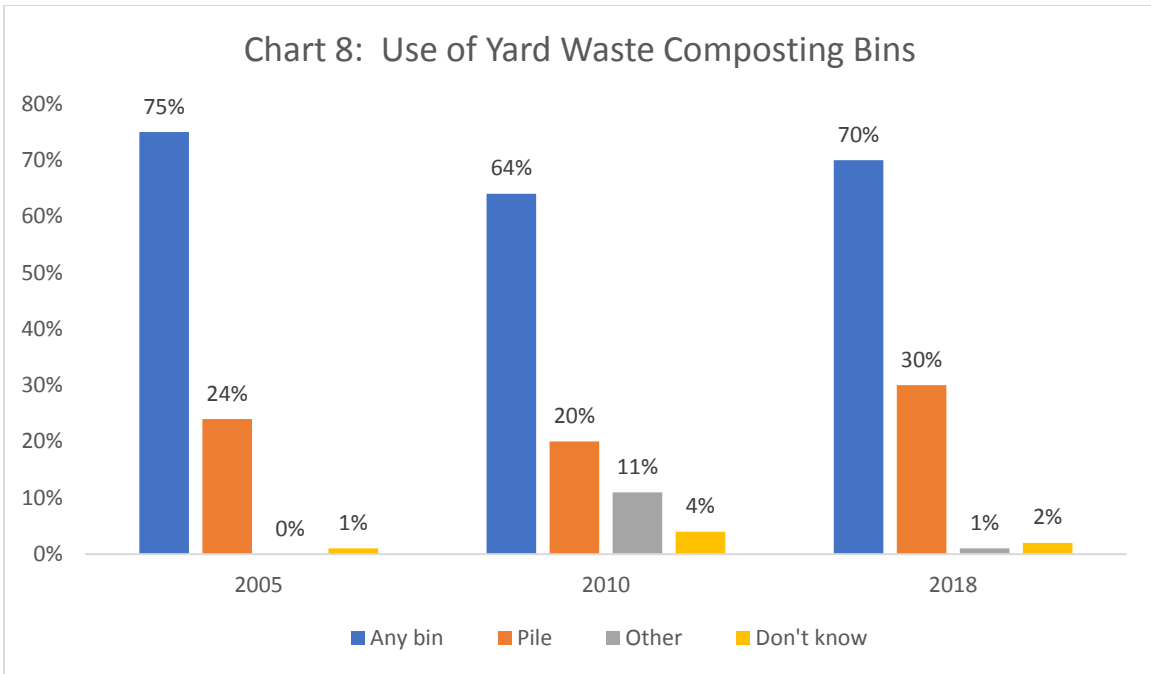
- 25% said they are using curbside collection for more of their yard waste;
- 25% said that the area they plant isn't as big now;
- 19% said they had fewer leaves, grass, clippings (general);
- 12% said they had removed various trees or shrubs that were creating yard waste; and,
- 12% mentioned some other reason.

The materials Seattleite's report composting at home have stayed the same over the past 18 years. The percent responding that they compost grass clippings on their own property is down from 72% in 2010 to 63% in 2018.



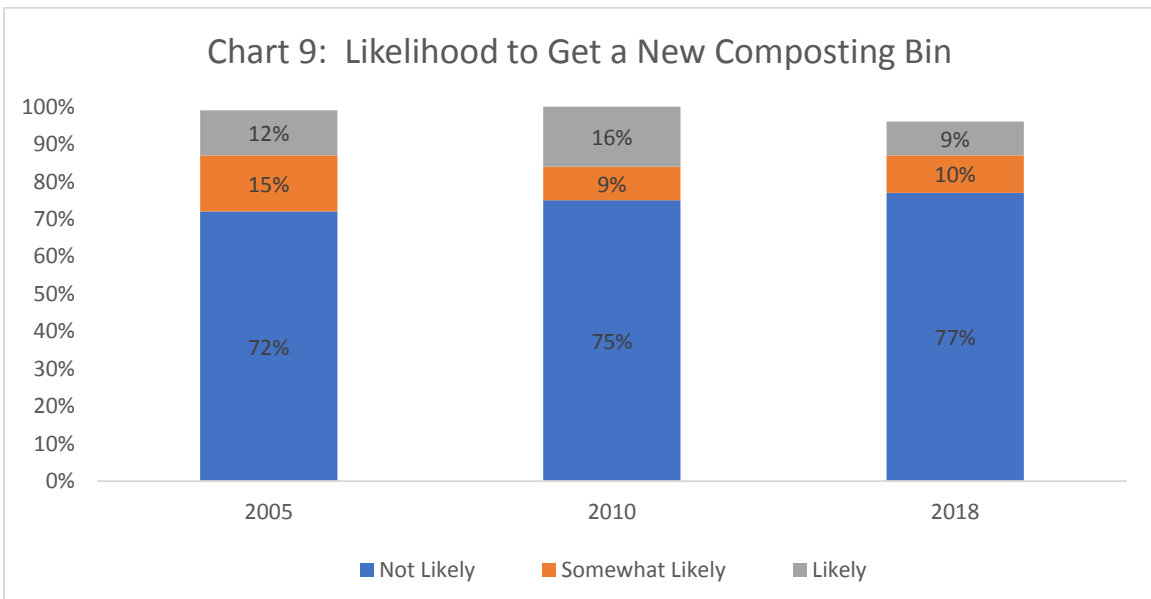
### Use of Composting Bins

While the 2010 data showed that fewer at-home composters were using composting bins, the 2018 data shows bin usage heading back upward. Today, 70% say they use a bin for yard waste composting on their own property, which is statistically the same as the 70% saying they used a bin in 2005.



In 2018, questions asking whether composting bins were provided by SPU were dropped, primarily because SPU has decreased its investment in this outreach program.

On-property composters were asked their likelihood of buying a new composting bin for home, assuming cost was not a consideration. Overall, 77% said they were not likely (not very or not at all) to purchase a new compost bin in the next year or so.



To adjust for the fact that behaviors sometimes do not follow stated intentions, a “follow-through estimator” has been used to convert intentions to a more realistic estimator of actual behavior. The same process applied in 2018 was also applied in 2010 and 2005:

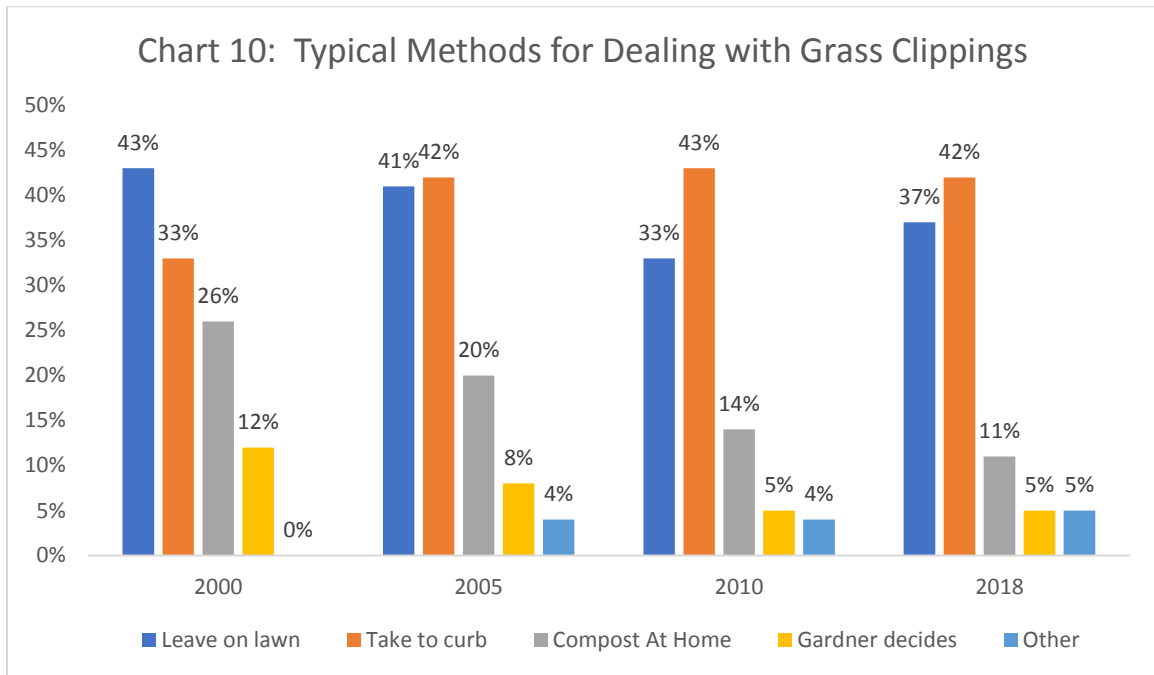
Follow-through Estimator: A method to convert stated intentions to an estimate of likely behavior. The percentage of those who say they are *extremely likely* to perform the act in question is discounted by 25% (so, 75% are considered to be likely to follow through) and the percentage who say they are *very likely* to perform the act in question is discounted by 67% (so, 33% are considered to be likely to follow through).

In 2018, the percent of current yard waste composters likely to purchase a new bin is estimated to be about 4%. This is half the market potential identified in 2010 when it was estimated that 8% of the current at-home yard waste composters would be likely to purchase a new bin.

### Lawn Care Activities and Behaviors

Eighty-three percent (83%, 497 people) of the total respondents live in households that have a lawn. These 497 Seattleite’s with residential can service were asked to describe their yard care activities and behaviors.

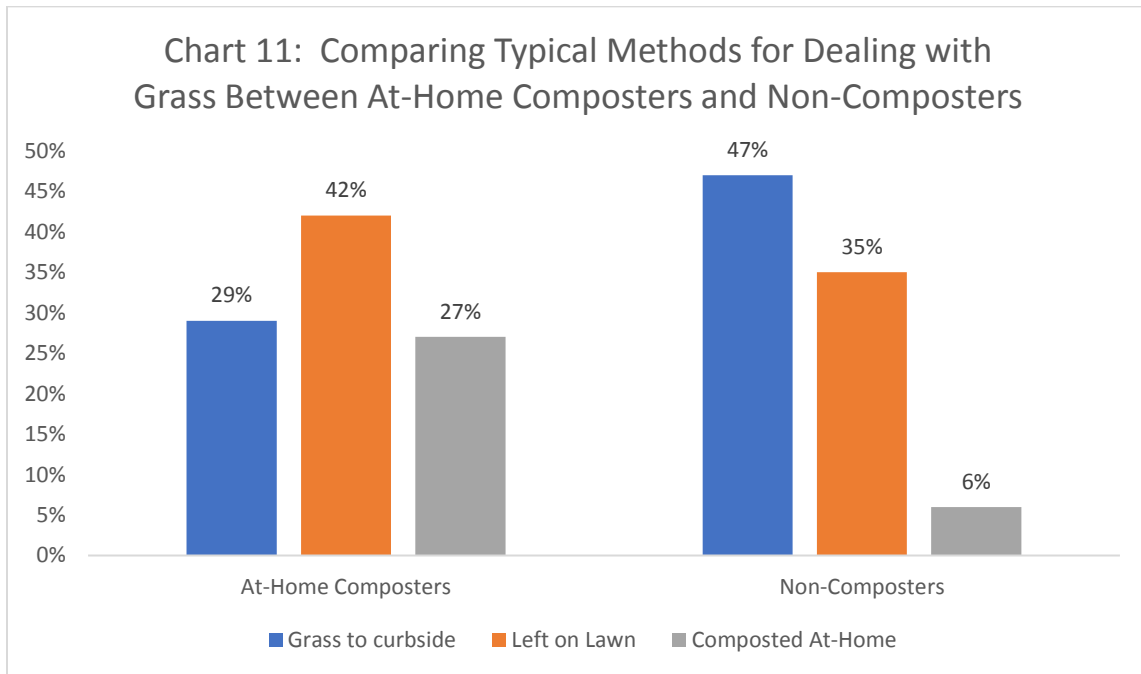
The following chart shows the methods typically used for dealing with grass clippings among those with a lawn. For comparison purposes, typical behaviors are tracked since 2000.



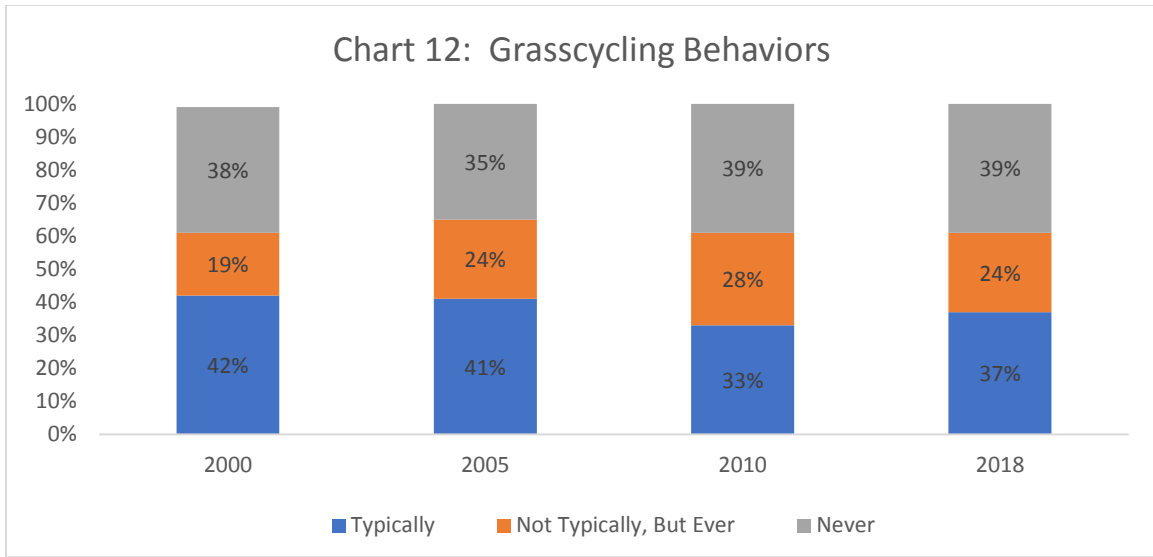
The percent of those who typically leave their grass clippings on the lawn has been stable between 2010 and 2018 (from 33% in 2010 to 37% in 2018). There is also no change in the share saying they typically take their grass clippings to the curb (from 43% in 2010 to 42% in 2018). Over the 18 years, there has been a steady decline in the share saying they compost their grass clipping. In 2000, 26% said they composted their grass clippings on their own property and in 2018 only 11% said the same.

As has been true historically, those who compost either food and/or yard waste on their own property at home are much less likely to typically use curbside pick-up services for grass clippings. Twenty-nine percent (29%) of the at-home composters typically take their grass clippings to the curb, while 47% of those who do not compost either food or yard waste at home typically take their grass clippings to the curb for pick-up.

Comparing the behaviors of those who compost food and/or yard waste at home to those who do not, the at-home composters are just as likely as their non-composting counterparts to typically leave grass clippings on the lawn (42% and 35% respectively); however, they are more likely than their non-composting counterparts to typically compost their grass clippings at home on their own property (27% versus 6% respectively).



Those who reported some behavior other than typically leaving their grass clippings on the lawn were asked if their household ever left its grass clippings on the lawn when the lawn was mowed. In 2018, 61% of those with a lawn ever grasscycle (even if not typically).



Grasscycling behaviors have not shown significant change since 2000. Prior to 2000, the percent of those engaging in grasscycling increased steadily:

- In 1995, 46% of those with a lawn ever grasscycled; and,
- In 1997, 52% of those with a lawn ever grasscycled.

To understand more about when people tend to leave their grass clippings on the lawn, grasscyclers were asked to report if they “regularly,” “occasionally,” “rarely,” or “never” grasscycled in spring, summer, and fall. The following table presents the results for 2010 and 2018:

Table 8: Regularity of Grasscycling by Season

	2018			2010		
	Spring	Summer	Fall	Spring	Summer	Fall
Regularly	63%	66%	60%	58%	64%	58%
Occasionally	25%	18%	17%	29%	20%	22%
Rarely	8%	11%	13%	8%	8%	10%
Never	3%	4%	8%	3%	6%	8%

In the past, those with a lawn have reported that they grasscycle at least occasionally, regardless of the season. The 2018 data suggests that people are least likely to grasscycle in the fall.

The 23 respondents who ever leave grass clippings on the lawn, but only do so rarely, were asked how likely they would be to start leaving clippings on the lawn more often if they knew that doing so makes mowing easier, improves the health of the lawn, and saves money on fertilizer applications. Although the sample sizes are much too small to be conclusive, the evidence suggests that having this type of information could change behavior. In 2018, 43% said that having this type of information would make them at least very likely to start grasscycling. In

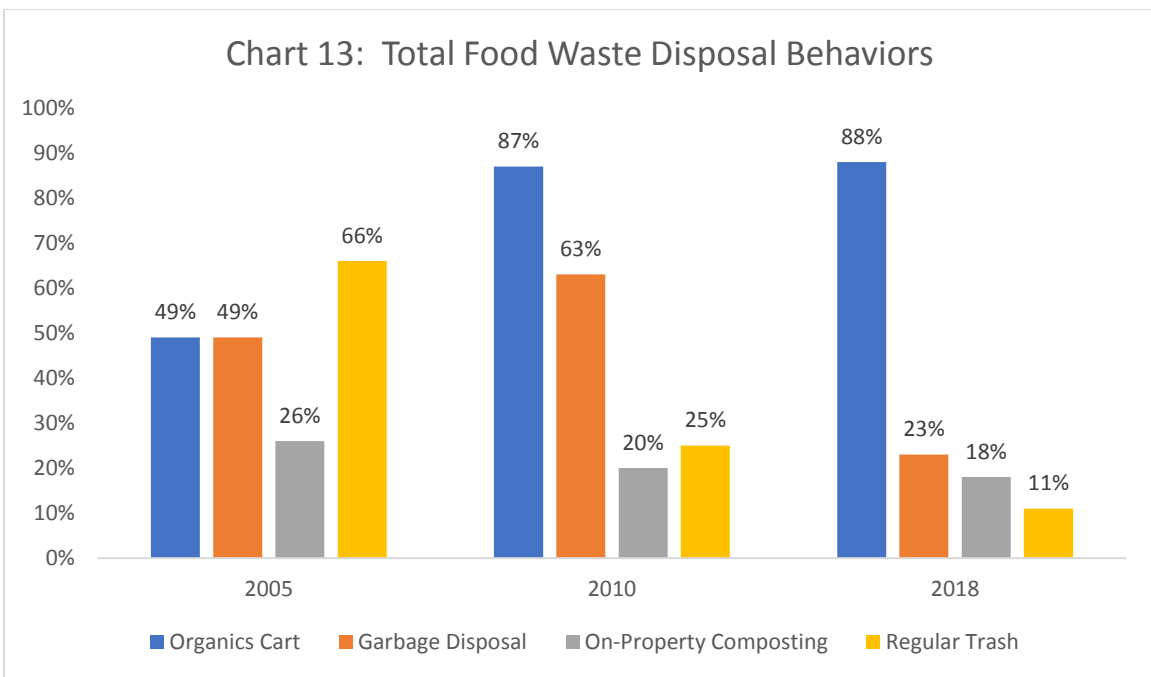
2010 only 29% said that having this type of information would make them very likely to start grasscycling.

Table 9: Impact of Having More Information About the Benefits of Grasscycling

	2018	2010
Base:	(23)	(24)
Extremely likely to start grasscycling	17%	21%
Very likely to start grasscycling	26%	8%
Somewhat likely to start	22%	29%
Not very likely to start	13%	8%
Not at all likely to start	9%	17%

### Current Food Waste Behavior

The eligible market for managing food waste is 100% since all households generate food scraps. As the following chart shows, households use a variety of methods for disposing of food scraps:



Compared with reported behaviors in 2010, the 2018 Seattleite’s with residential can service continue to place food waste in their organics cart that is taken to the curb for pick-up at the same rate (87% use the organics cart in 2010 and 88% use it today). Placing food scraps in both the regular trash and the garbage disposal have decreased significantly over time. Eight years ago, 25% said they put at least some food waste in the regular trash and only 11% say they do the same today.

Males are more likely than females to admit to putting at least some food waste in the regular trash can, and those under 45 years of age are more likely than their counterparts to admit the same.

- 14% of males said they put at least some food waste in the regular trash can compared with only 9% of females.
- 18% of those under 45 years of age said they put at least some food scraps in the regular trash can compared with only 9% of those 45 years of age or older.

Those who are less educated are also more likely to put food scraps in the regular trash can:

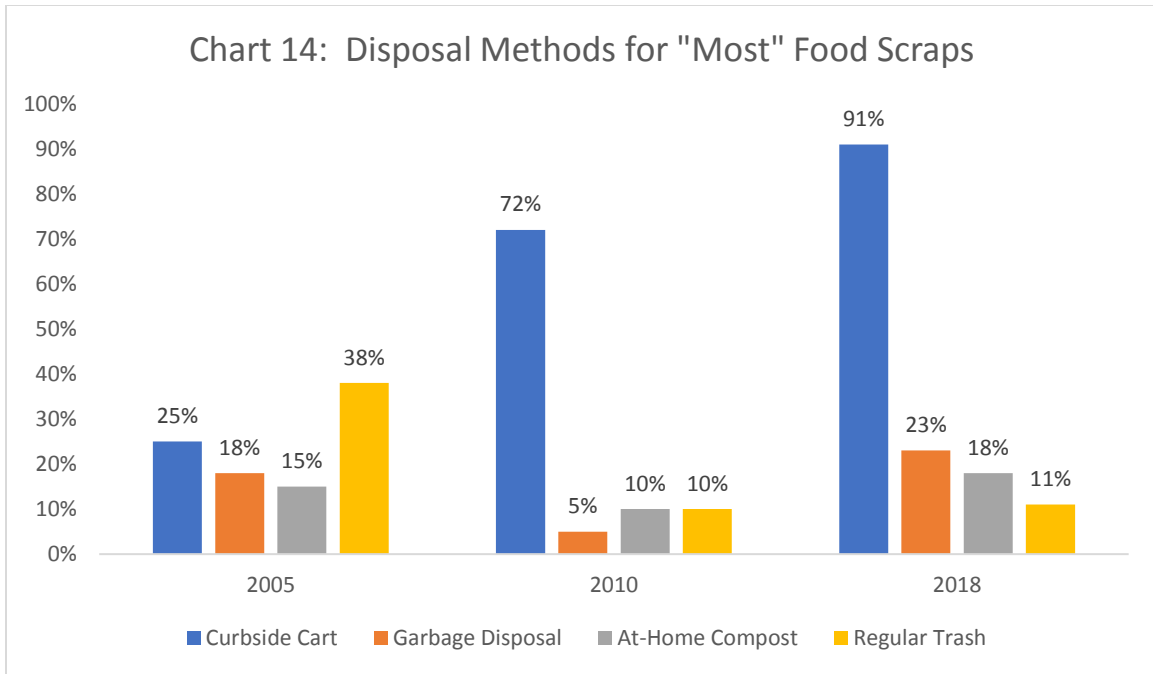
- 18% of those with less than a 4-year college degree said they put at least some food scraps in the regular trash can compared with 9% of those with a 4-year college degree or more.

Eight years ago, 63% of Seattleite's with residential can service said they put at least some food waste down the garbage disposal when disposing of food scraps and only 23% say they do the same today.

The garbage disposal is used for at least some food scraps more often by males, those under 45 years of age, and those with children in the household.

- 27% of males said they put at least some food scraps in the garbage disposal compared with only 20% of females;
- 35% of those under 45 years of age said they use the garbage disposal for food scraps compared with only 19% of those 45 years of age or older; and,
- 29% of those with children in the household use the garbage disposal for some food scraps compared with only 21% of those without children in the household.

Respondents were asked how they handled the disposal of most of the food waste generated in their households. This year, as well as in years past, interviewers were allowed to accept more than one answer to this question only if the respondent insisted there was no primary method. That said, the data in 2018 shows that respondents are increasingly unwilling to declare what disposal method they use for most of their food and instead insist that they use different methods for different foods and different reasons.

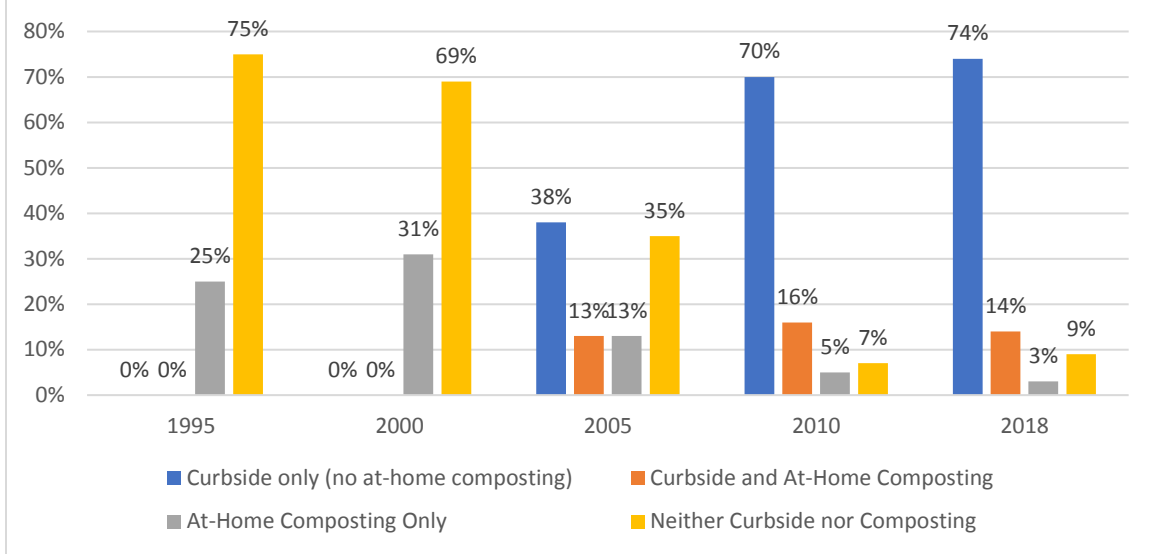


Beyond using the organics curbside collection cart for food waste, the 2018 data indicates that those households using any other type of disposal method are usually very committed to the alternative disposal method (in addition to their commitment to using the curbside cart). Overall, in 2018, 23% said they used the garbage disposal for at least some of the food waste and 23% said they used it for most of their food waste. Eighteen percent (18%) said they composted at least some of their food scraps on their own property and 18% said they composted most of their food scraps on their own property. Eleven percent (11%) said they put some food scraps in the regular trash, and 11% said they put most of their food scraps in the regular trash. It seems that people using one of these alternative methods use it for most every type of food waste they can, and then use the curbside collection cart for everything else (as needed). For them, apparently, calculating what percent of the total food wasted goes to each of the methods used, then determining which percentage is highest, is a large ask in a telephone interview.

Offering the service of disposing of food scraps in the yard waste curbside collection container has changed the way Seattle residents deal with their food scraps. The following chart is presented as a summary to facilitate comparisons with prior years.



Chart 15: Summary of Food Waste Composters  
(At Curbside versus At-Home)

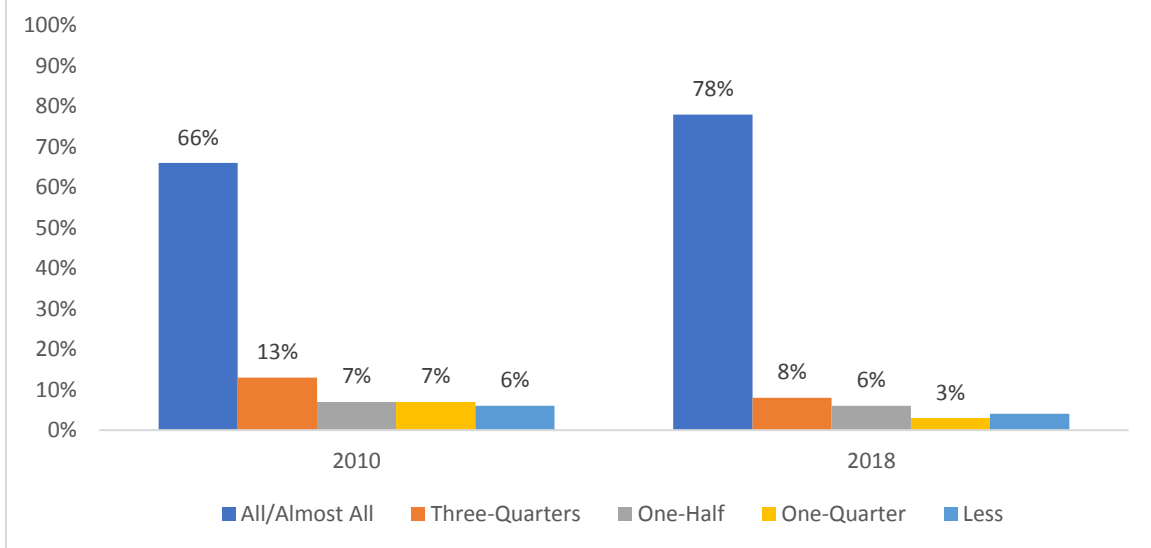


This summary shows that at-home composting of food scraps is slowing declining over the years:

- In 2005, 26% composted at least some of their food scraps on their own property;
- In 2010, 21% composted at least some of their food scraps on their own property; and,
- In 2018, 17% composted at least some of their food scraps on their own property.

When asked how much of their total food scraps end up in the food and yard waste cart, 78% said that all, or almost all, of the food scraps generated in the household go into the cart. Comparing answers from 2018 to those from 2010, there is an upward trend in households that try to put almost all (or all) of their food scraps in the curbside food and yard waste organics cart.

Chart 16: Comparison of Food Scrap Amount Going to Organics Cart



Among the 110 respondents who compost at least some food scraps at home on their own property, a little over one-half (57%) say that they compost at least one-half of all their food scraps there:

- 40% compost all or almost all on-property
  - 9% compost about three-quarters of it
  - 8% compost about one-half of it
- } 57%
- 14% compost about one-quarter on-property
  - 13% compost less than one-quarter of it
- } 27%

Among the people who compost food waste on their own property, most say they are composting at home about as much food waste today as they were one year ago:

- 70% compost about the same amount at home now as they did a year ago;
- 12% compost more at home now than they did last year; and,
- 5% compost less at home now than they did last year.

Only 5 people said that they compost at home less now than they used to:

- 2 people said that they are placing more in their curbside container now;
- 1 person said that they didn't like attracting pests or rodents;
- 1 person said it was just easier to eat out and not take left-overs; and,
- 1 person didn't know why they were composting at home less now.

Fourteen percent (14%) of the 600 respondents said that they both compost at home on their own property and occasionally put food scraps in their food and yard waste cart. Among these people, most say that the amount of food they compost has remained the same over the years:

- 85% say that the amount of food they compost at home has not changed since they started using their food and yard waste cart for food waste;
- 2% said that the amount of food waste they compost at home has decreased; and,
- 8% said that the amount of food waste they compost at home has increased.

As was also true in 2010, females are more likely than males to say that all, or almost all, of their food scraps go into the food and yard waste cart.

- 82% of females in 2018 said that all, or almost all, of their food scraps go into their food and yard waste cart, which is significantly up from the 69% of females who said the same in 2010.
- 75% of males in 2018 said that all, or almost all, of their food scraps go into their food and yard waste cart, which is also up significantly from 61% of males who said the same in 2010.

All Seattleite's who put food scraps in their food and yard waste cart were asked whether the amount of food scraps they put in their regular garbage has changed over the past year. Because the ban on food scraps in the regular trash happened fairly recently, all those using an organics cart for food scraps were asked this question (whether or not they also placed some food scraps in the regular trash). Seventy-one percent (71%) of respondents using their food and yard waste cart for food waste said that the amount of food waste they put in their regular trash has stayed the same over the past year. Twenty percent (20%) said that the amount of food waste placed in the regular trash can has decreased, and 3% said that it's increased.

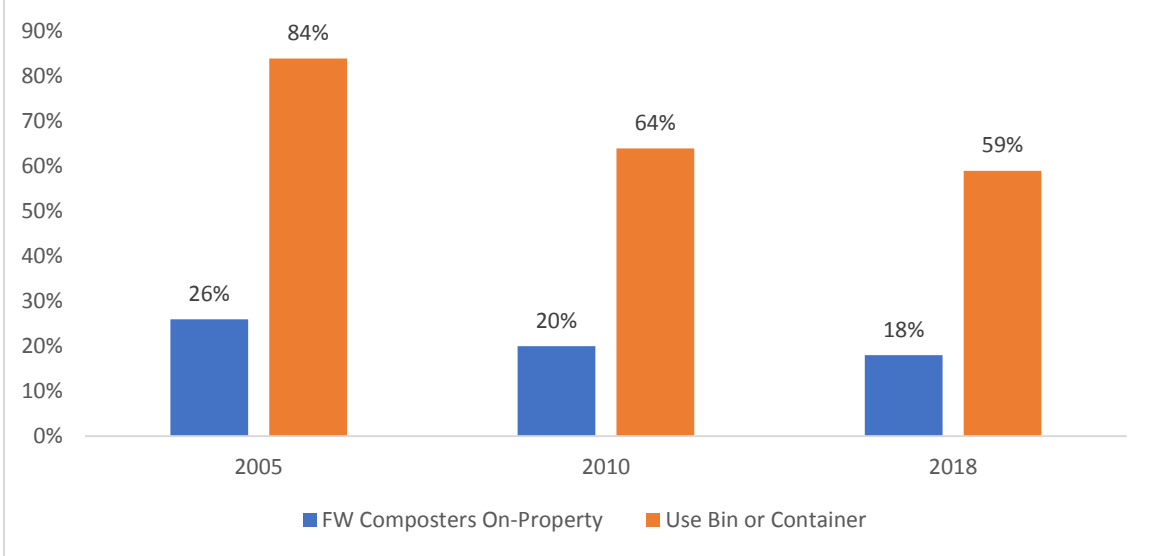
Among the 105 respondents who are now placing less of their food waste in their regular trash, one-third (31%) said that they have changed, or considered changing, the size of the garbage can they use.

### Use of Food Waste Composting Bins

The 100 people who currently compost at least some of their food scraps at home on their own property were asked if they used any type of outdoor bin or container. About one-half (59%) said they used an outdoor bin, and of those, 38% use a green cone and 28% use a worm bin.

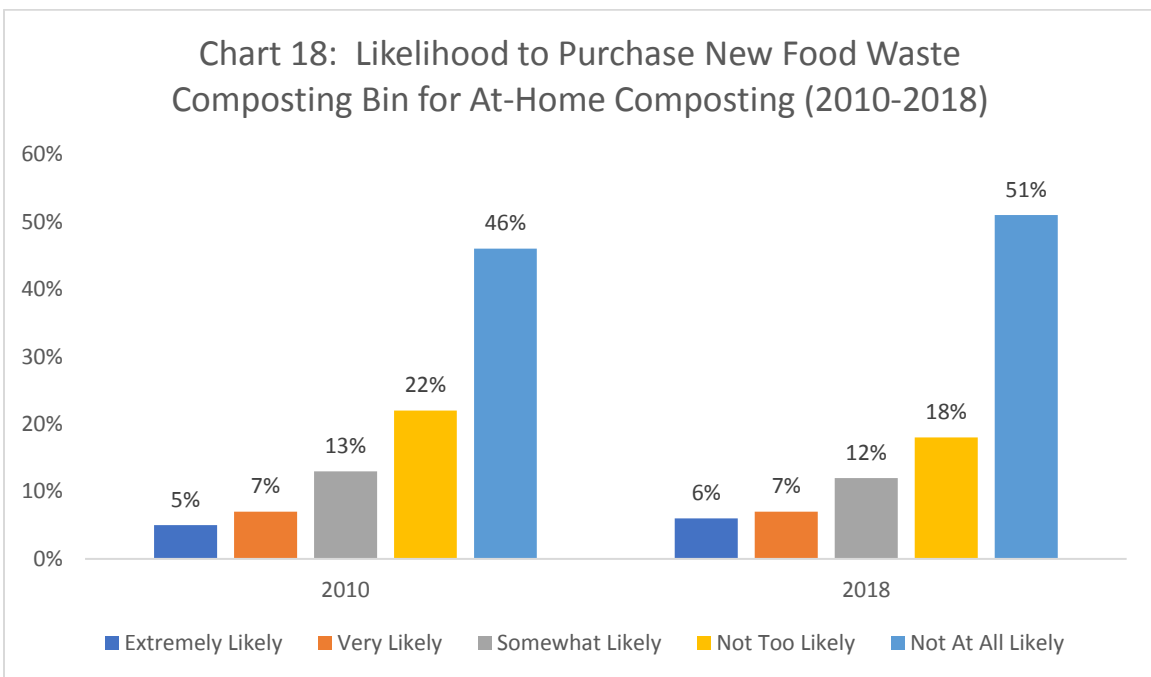
As on-property composting of food scraps has continued to decrease over the years (from 26% in 2005 to 18% in 2018), so has use of outdoor bins or containers (from 84% of on-property food waste composters in 2005 to 59% of the same today).

Chart 17: On-Property Food Waste Composters and Their Bin Usage Over Time



Those who compost food waste on their own property were asked about their likelihood of purchasing a new composting bin the next year or so. In 2018, 13% said they were extremely likely or very likely to purchase a new bin and an additional 12% said they were somewhat likely. Likelihood to purchase a new food waste composting bin in 2018 is very similar to that in 2010:

Chart 18: Likelihood to Purchase New Food Waste Composting Bin for At-Home Composting (2010-2018)



After applying the standard discount algorithm, about 7% of the at-home food waste composters say they are likely to purchase a new bin in the next year or so (without considering cost).

### Garbage Disposal Use

Among the 600 Seattleite's with residential can service, 88% say they have a garbage disposal and 26% of those with a garbage disposal say they use it at least occasionally for food scraps. This is very much in line with the results from 2010 when 90% said they had a garbage disposal and of those, 30% used the garbage disposal at least occasionally.

Among the 26% who report at least occasional use:

- About one-half (47%) say they use it at least once a day;
- 32% say they use it several times a week; and,
- 20% say they use it once a week or less often than that.

### Storage of Curbside-Bound Food Scraps

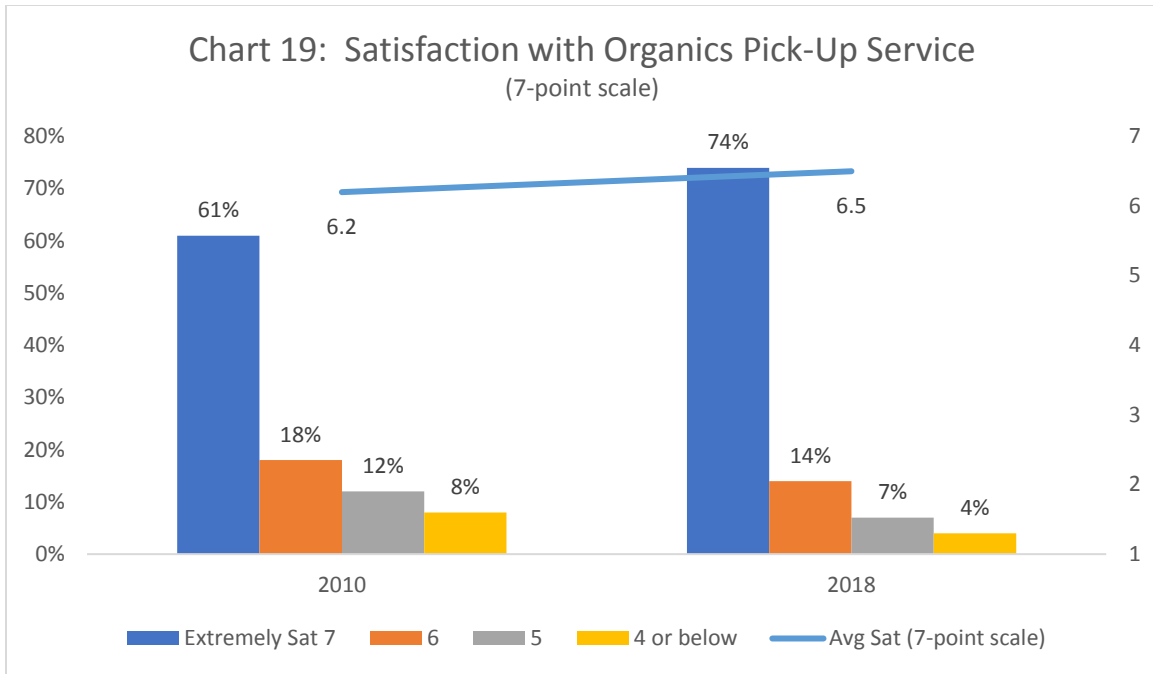
Eighty-percent (80%) of those who place at least some of their food scraps in their curbside food and yard waste cart say that they store those food scraps in a container in the kitchen before taking them to the cart.

Regardless of how food scraps are stored prior to being taken to the curb, respondents were asked how they usually put food scraps into their cart.

- 48% use compostable bags (bio-bags)
- 35% said they put food scraps in loose
- 17% put them in a paper bag and then into the organics cart
- 10% put them in a plastic bag then into the organics cart
- 5% wrap the food scraps in newspaper first

### Satisfaction with Food and Yard Waste Pick-Up Services

Overall satisfaction with the City's food and yard waste collection service has increased over the past eight years. Using the same seven-point scale used in prior years, the average satisfaction is now 6.5%.



## Potential Market – Detailed Findings

### Potential Yard Waste Market

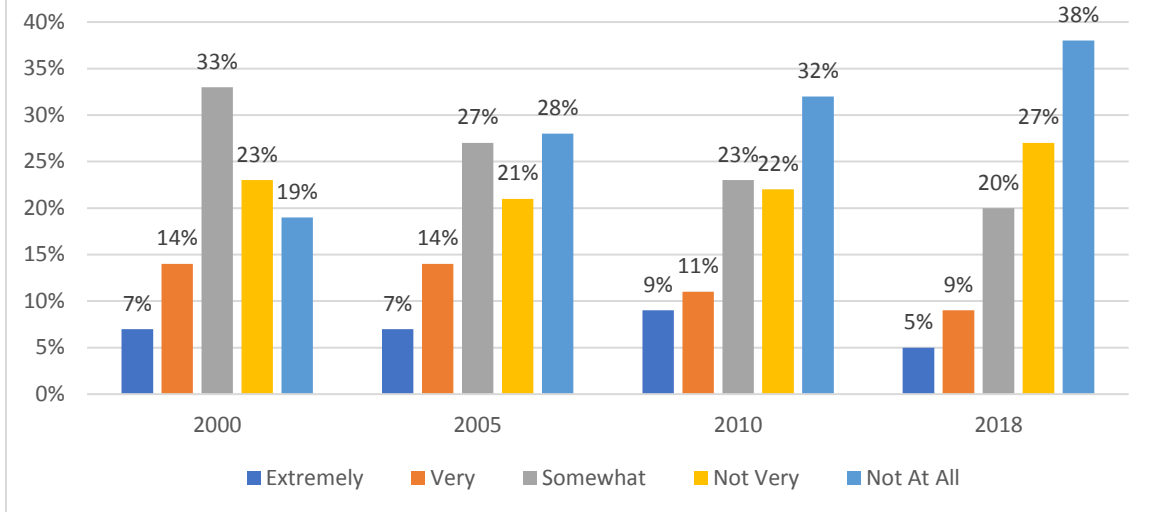
Seventy-six percent (76%) of those with a lawn or garden currently do not compost any of their yard waste on their own property. This is up from 67% in 2010, and 59% in 2005.

Ninety-nine percent (99%) of those who do not compost yard waste on their own property have curbside pick-up service for yard waste. This is up from 95% in 2010 and from 88% in both 2005 and 2000.

Those who were not composting their yard waste on their own property were asked how likely they might be to do so in the next year or so if they were provided more information about how to make it easier and pest-free. The likelihood to start composting on-property among those not engaging in the behavior now continues to decrease over time.

Chart 20: Likelihood to Start On-Property Composting of Yard Waste in Next Year

(among those not composting on-property)



The percent of those not composting on their own property who are extremely or very likely to start in the next year has decreased from 20% in 2010 to 14% in 2018. When discounted to better reflect likely behaviors, the data continues to indicate that about 8% of those not composting at home are likely to start composting in the next year.

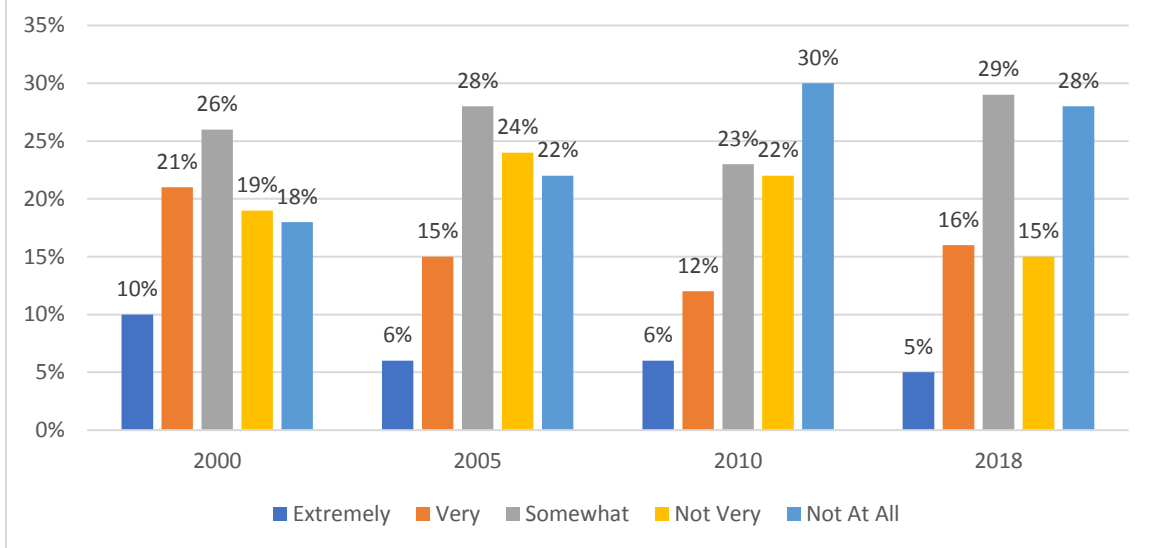
The data continues to support the conclusion that those not composting at home have increasingly strong feelings about it. In 2000, 33% were somewhat likely to start composting, and in 2018 only 20% were somewhat likely to start. This indicates that fewer people are on the fence (somewhat likely) about the possibilities of at-home composting. Instead, in 2000, only 19% said they were not at all likely to start composting yard waste at home. In 2018, this percentage has more than doubled to 38%. It may be that with the alternative means of composting in a responsible way (curbside organics composting), Seattleite's are increasingly less likely to feel guilty about not composting on their own property.

### Potential Grasscycling market

About one-third (33%) of those who deal with their own lawn clippings report that they never leave grass clippings on their lawn. In 2010, 39% said they never left grass clippings on the lawn and in 2005 33% said they never left grass clippings on the lawn.

Respondents were asked how likely they would be to leave grass clippings on the lawn in the future if they had more information about how this makes mowing the lawn easier, improves the health of the lawn, and saves money on fertilizer applications. As the chart below shows, intentions to start grasscycling continue to decline slightly over time.

Chart 21: Likelihood to Grasscycle in the Future  
(among those who never grasscycle now)



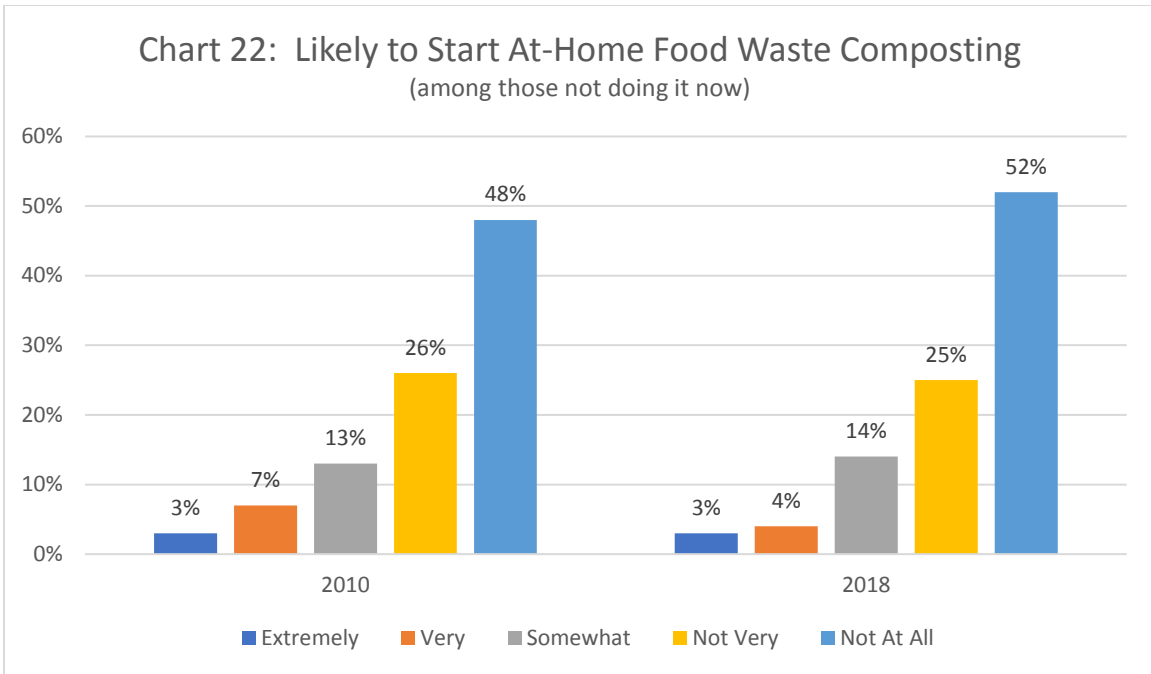
In 2018, 21% stated they were likely to grasscycle if they had information about how it made it easier to mow and improved the health of the lawn. This compares to 18% saying the same in 2010, and 31% saying the same in 2000.

Discounted to reflect likely behaviors, the 2010 data suggest that even with an effective and compelling educational program, about 8% of those with a lawn who aren't grasscycling now will start leaving at least a few clippings on the lawn.

### Potential Food Waste Composting Market

Among the 490 Seattle residential can customers who are not currently composting their food scraps on their own property, likelihood to start composting in the next year or so is low. Only 7% said they are either extremely or very likely to start their own food waste composting.

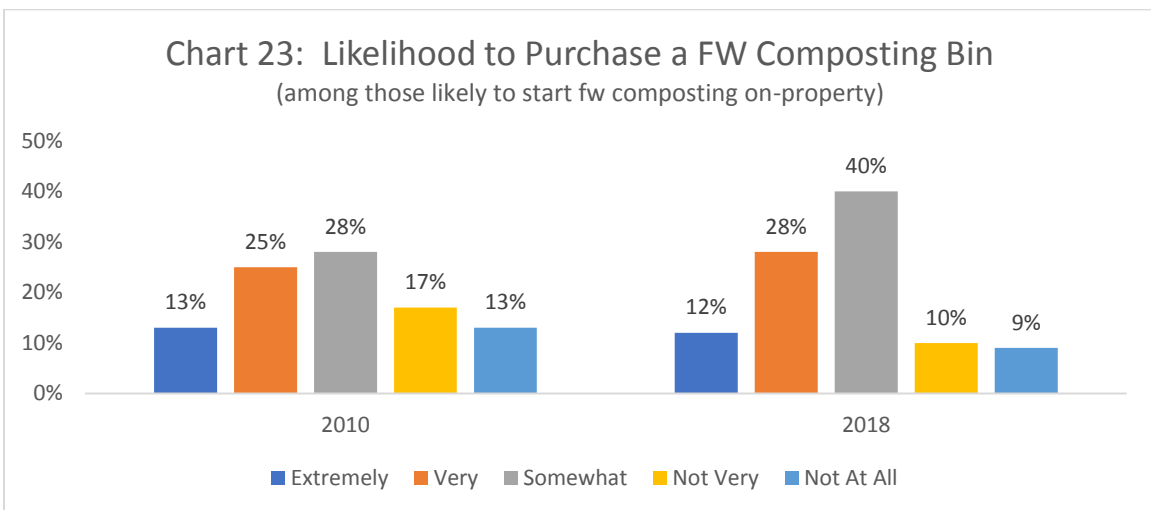




Applying the discount algorithm, these results indicate that about 4% of those not composting food scraps at-home are likely to start doing so (compared to 5% in 2010).

### Bin Distribution

Among those who are likely to start composting food scraps at home, interest in purchasing a new food waste bin in the next year or so is moderate. Comparing the 2018 results to those from 2010, there is a decrease in the percentage of people who claim they're not going to buy a bin and an increase in the percentage saying they're somewhat likely to buy a bin.



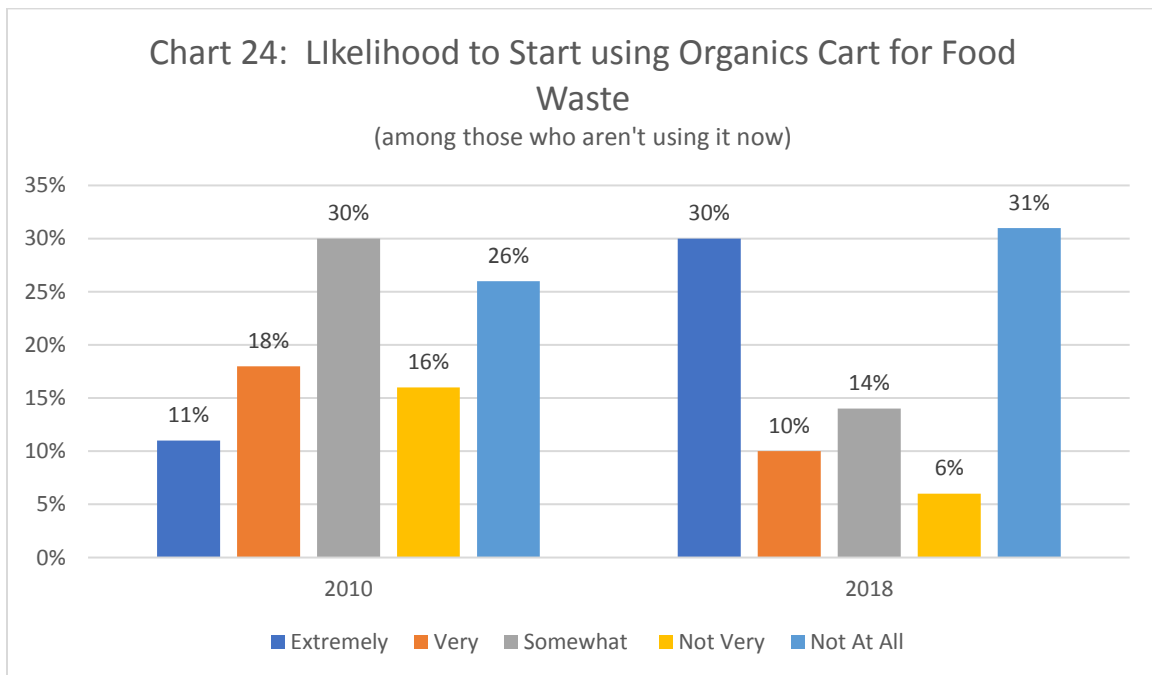
Applying the discount algorithm, we might expect to see about 18% of the people likely to compost food scraps on their own property interested in purchasing a new bin if the cost were not a consideration.

### Use of Curbside Pick-up for Food Scraps

Of the small percentage of the market who do not use curbside pick-up for food scraps (70 people), 74% are aware that food waste can be placed in the food and yard waste cart. Their primary reasons for not putting food scraps in the food and yard waste cart are:

- 25% use a food waste only cart instead<sup>1</sup>
- 21% compost their food scraps on their own property instead
- 13% do not have an organics cart
- 13% say it's too hard and/or too big a hassle
- 8% say they don't have enough food scraps to make it worth their time

The 70 people who were not using curbside pick-up for food waste were asked how likely it is that their household will start putting at least some of the food waste in the organics cart within the coming year. As the following chart shows, likelihood to start using the curbside organics cart for food scraps is relatively strong with 40% saying they are at least very likely.



<sup>1</sup> These 13 people with a “food waste cart” did not believe they put food waste in their “food and yard waste cart.” Every effort was made to re-ask questions without violating research best-practices.

Discounted, the data indicates that about 26% of the non-curbside organics service households will start using the curbside cart in the coming year.

## Wasted Food

A new section addressing wasted food was included in the 2018 Home Organics Survey. The questions selected included a subset of those asked in the **2017 Oregon Wasted Food Statewide Phone Survey**.

Respondents were asked how concerned they are about the amount of food their household throws away because it goes bad, expires, has been in their refrigerator too long, or because nobody wants to eat it. A seven-point scale was used where seven indicated that people are very concerned about it, and one indicated that people were not at all concerned about it. Overall concern about wasted food is modest, with an average rating of 3.6 on this seven-point scale.

- 16% rate their concern a value of seven (very concerned)
- 9% rate their concern a six
- 12% rate their concern a five
- 8% rate their concern a four
- 13% rate their concern a three
- 13% rate their concern a two
- 25% rate their concern a one (not at all concerned)

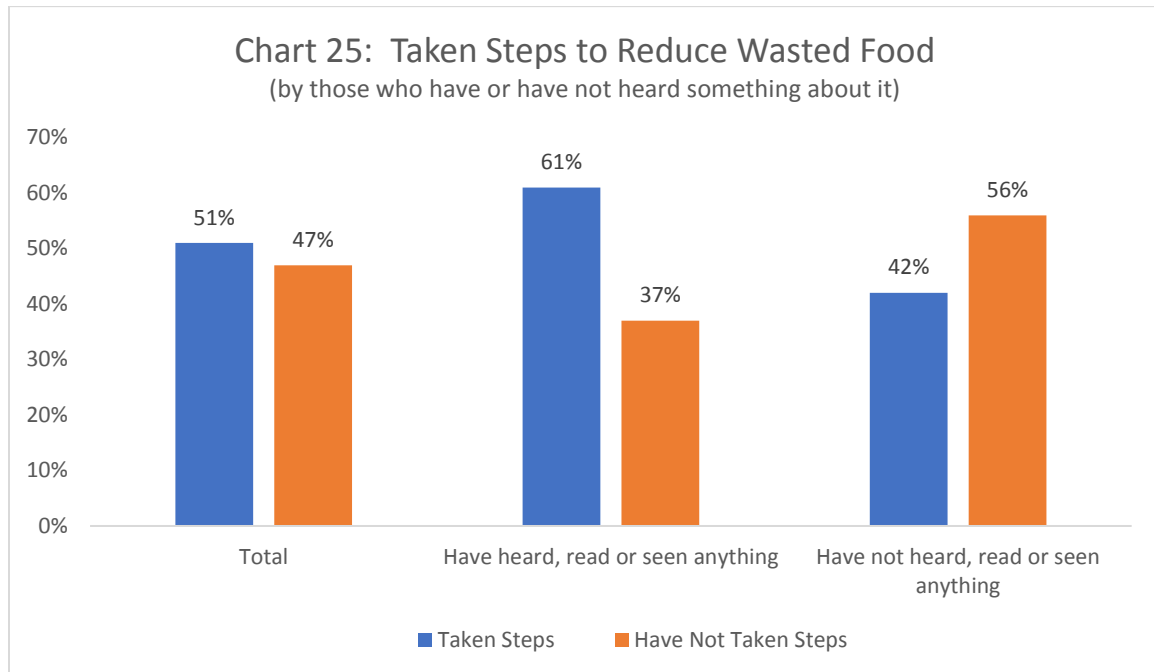
The modest level of concern may be driven by the perception that it would be difficult to avoid wasting the food that is being wasted. When asked how much food they think they could avoid wasting:

- 9% said they could avoid wasting all or almost all of it
- 6% said they could avoid wasting about three-quarters of it
- 8% said they could avoid wasting about half of it
- 51% said they could avoid wasting about one-quarter of it
- 14% said they couldn't avoid wasting any of the food that is wasted
- 8% said there is no food wasted now
- 4% didn't know how to respond

Overall, 74% of Seattleite's said they could avoid wasting at least one-quarter of the food they're currently wasting. This result indicates that a large percentage of Seattleite's could benefit from an enhanced understanding of the ramifications of wasted food.

Just as many people say they have heard about, read, or seen something about food that is wasted or about ways to reduce the amount of food that is wasted at home, as those who haven't (47% versus 49% respectively).

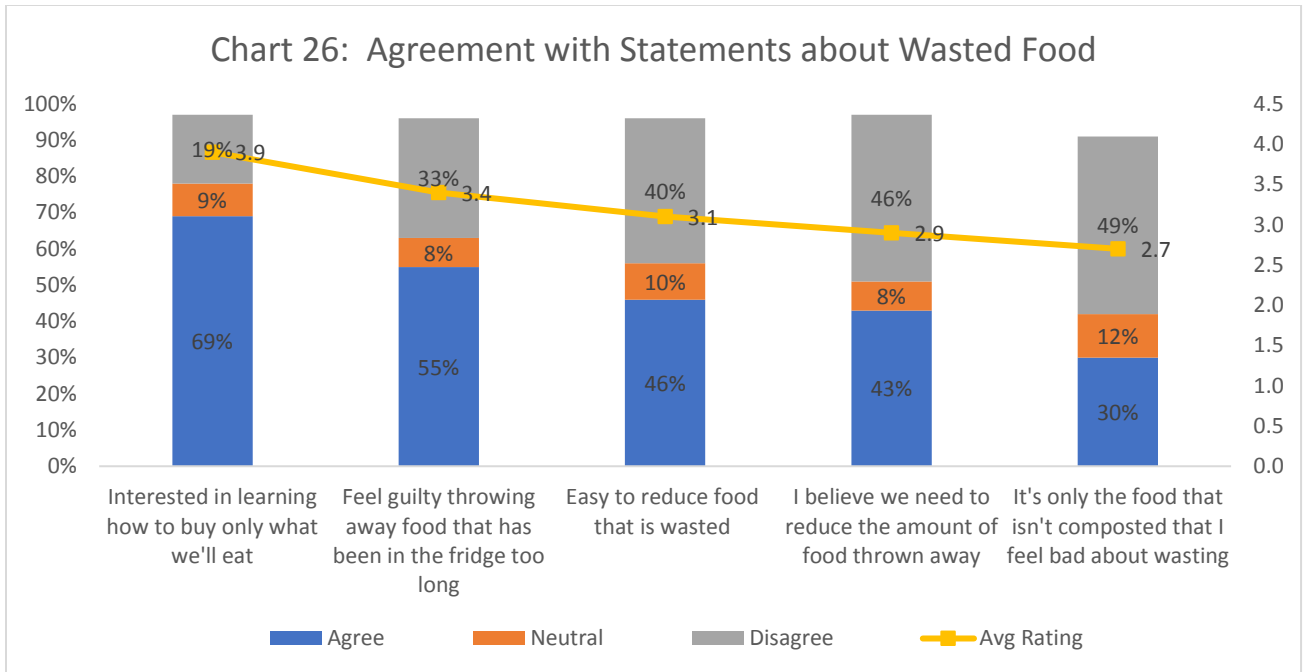
About one-half (51%) say their household has taken steps in the past year or so to reduce the amount of food that is wasted. Those households that have heard about wasted food are more likely than those that haven't to have taken steps to reduce the waste (61% versus 42% respectively).



The 305 respondents who have taken steps were asked to describe the steps they've taken:

- 58% said they do a better job with their meal planning before they go grocery shopping;
- 17% said they eat more leftovers
- 14% make an official shopping list
- 14% cook smaller portions
- 10% have invested in better food storage to keep food fresher, longer
- 10% freeze more leftovers and/or more food
- 7% buy less food

Respondents were asked to rate the extent to which they agree or disagree with five statements about wasting food. A five-point scale was used where five meant "strongly agree" and one meant "strongly disagree." The statements have been modified very slightly in the chart that follows for clarity.



Overall, two-thirds (69%) agree with the statement that ***“I am very interested in learning how to buy only the food we’ll eat.”*** Those under 45 years of age are significantly more likely than their older counterparts to agree with this statement (average rating of 4.2 versus 3.8 respectively).

About one-half (55%) agree with the statement ***“I feel guilty about throwing away food that has been in the refrigerator for a long time.”*** Females are more likely than their male counterparts to agree with this statement (average rating of 3.5 versus 3.2 respectively) and those who are under 45 years of age are more likely than their older counterparts to agree (average rating of 3.8 versus 3.3 respectively).<sup>2</sup>

About one-half (46%) agree with the statement ***“It would be easy to reduce the amount of food that goes to waste in the house.”*** Females and those with children in the household are more likely than their counterparts to agree with this statement:

- The average rating provided by females was 3.3 compared with an average rating of 2.9 provided by males;
- The average rating provided by those with children living in the household was 3.3 compared with an average rating of 3.0 provided by those without children in the household.

About four out of ten (43%) agree with the statement ***“I believe my household needs to reduce the amount of food we throw away,”*** and 46% do not agree. Those who are under 45 years of age are more likely to agree with the statement (providing an average rating of 3.2), and those

<sup>2</sup> The wording of this question was modified from the Oregon study because respondents in two independent pilot tests were confused about how to answer the question as worded in the Oregon study.

45 years of age or older are more likely to disagree (providing an average rating of 2.8). Likewise, those with children in the household are more likely to agree with the statement (average rating of 3.3), and those without children in the household are more likely to disagree (average rating of 2.8).

About one-third (30%) agree with the statement ***“It’s only the food that doesn’t get composted that I feel bad about wasting”*** and 49% disagree with it. There are no differences based on demographics.

## Handling of Pet Waste

Overall, 52% of Seattleite’s with residential can service said they have dogs, cats or other animals that generate waste at home. Of those with these types of pets, 84% said their household throws their pet’s waste into the household’s regular garbage can. Nine percent (9%) said that the household buries the pet waste in their yard and 6% put it in their food and yard waste cart.

The sample sizes of those who do not put their pet waste in the regular garbage can are too small for analysis, and no interesting differences emerge based on demographics. That said, there is some evidence that some households have more than one way to deal with pet waste:

- Of the 28 pet owners who bury their pet waste, 21% also throw some of it in the regular garbage and 11% also say they throw some of it in the food and yard waste cart; and,
- Of the 20 pet owners who put their pet waste in the food and yard waste cart, 15% also throw some of it in the regular garbage and 15% also bury some of it.

## Appendix

### Questionnaire and Frequencies

S1. Do you live in this household and are you 18 years of age or older?

	Frequency	Percent
Yes	600	100%

S2. Do you live within the city limits of Seattle? PROMPT IF NEEDED: The city limits include the area north of 100<sup>th</sup> Street in South Seattle and south of 145<sup>th</sup> Street in North Seattle.

	Frequency	Percent
Yes	600	100%

S3. How many years have you lived in Seattle?

	Frequency	Percent
<b>Base = Total sample</b>	<b>(600)</b>	<b>(100%)</b>
Fewer than 5	42	7%
5 – 19	143	24%
20 or more	411	68%
Don't know / Refused	4	1%

**Average years in Seattle = 30.8**

S4. What type of home do you live in?

	Frequency	Percent
<b>Base = Total sample</b>	<b>(600)</b>	<b>(100%)</b>
Single-family home	581	97%
Duplex/Triplex/Four-Plex	19	3%

S5. For this survey, I need to speak with the person in this household who is most responsible for handling the household's organic waste—that is, yard waste and food waste. Would that be you?

	Frequency	Percent
<b>Base = Total sample</b>	<b>(600)</b>	<b>(100%)</b>
Yes	547	91%
Shared responsibility	53	9%

S6. Does your home have a yard?

	Frequency	Percent
<b>Base = Total sample</b>	<b>(600)</b>	<b>(100%)</b>
Yes	591	98%
No	9	2%



- S7. Do you personally take care of your yard at home, does someone else in your household take care of it, do you hire a professional landscaper, or do you hire someone else to do it?

	Frequency	Percent
<b>Base = Those with a yard</b>	<b>(591)</b>	<b>(100%)</b>
I do it / I'm equally responsible for doing it	448	76%
Someone else in the household does it	39	7%
Landscaper	33	6%
Hire someone else	61	10%
Other	9	1%
Don't know / Refused	1	<1%

### Curbside Pickup Subscription Information

*(Asked of everyone)*

- S8. Does your household have curbside pick-up service for yard and food waste?

	Frequency	Percent
<b>Base = Total sample</b>	<b>(600)</b>	<b>(100%)</b>
Yes	585	98%
No	14	2%
Don't know / Refused	1	<1%

- S10. What size yard and food waste container does your household have?

	Frequency	Percent
<b>Base = Those with curbside p/u</b>	<b>(585)</b>	<b>(100%)</b>
13-gallon container	83	14%
32-gallon container	126	22%
96-gallon container	296	51%
Don't know	80	13%

- S11. Does your household have a special exemption from the City saying you don't need to sign up for curbside pick-up for yard and food waste?

	Frequency	Percent
<b>Base = Those without y/w p/u</b>	<b>(15)</b>	<b>(100%)</b>
Yes	3	20%
No	8	53%
Don't know	4	27%

## Section A – Yard Waste Composting Section

*(Asked of the 591 people with a yard in S6)*

- A1. These next questions are about your yard. Does your home have a lawn—that is, an area with grass?

	Frequency	Percent
<b>Base = Those with a yard</b>	<b>(591)</b>	<b>(100%)</b>
Yes	497	84%
No	94	16%

- A2. Does your home have a vegetables or fruit garden, a flower garden or some other type of garden?

	Frequency	Percent
<b>Base = Those with a yard</b>	<b>(591)</b>	<b>(100%)</b>
Yes, vegetable or fruit	264	45%
Yes, flower garden	281	48%
Yes, other	13	2%
No	127	21%
Don't know	2	<1%

- A4. These next questions ask how your household manages its yard waste. For the purposes of this survey, when we use the word “compost” it means the breakdown of food or yard waste into a material that can be used to improve the soil. Composting is considered an intentional practice, and requires dedicated time, attention and space.

Does your household ever put yard waste out at the curb or alley for collection?

	Frequency	Percent
<b>Base = Those with a lawn or garden</b>	<b>(567)</b>	<b>(100%)</b>
Yes	533	94%
No	34	6%

- A7. Does your household ever take yard waste to a central facility—like a transfer station—where they compost your yard waste?

	Frequency	Percent
<b>Base = Those with a lawn or garden</b>	<b>(567)</b>	<b>(100%)</b>
Yes	72	13%
No	491	87%
Don't know	4	<1%

A8 Thinking about the past year, how many times have you or has someone in your household, dropped off yard waste at a transfer station?

	Frequency	Percent
<b>Base = Take waste to transfer station</b>	<b>(72)</b>	<b>(100%)</b>
Once	28	39%
Twice	17	24%
3 – 4 times	12	17%
5 – 9 times	5	7%
10 – 14 times	2	3%
15 or more times	3	4%
Don't know / Refused	5	6%

A9 Compared to last year, is your household taking yard waste to transfer stations more often, less often or about the same amount?

	Frequency	Percent
<b>Base = Take waste to transfer station</b>	<b>(72)</b>	<b>(100%)</b>
More often	3	4%
Same amount	57	79%
Less often	23	27%

A10 Currently, does your household intentionally compost any of its yard waste in a bin or special compost pile on your own property?

	Frequency	Percent
<b>Base = Those with a lawn or garden</b>	<b>(567)</b>	<b>(100%)</b>
Yes	136	24%
No	429	76%
Don't know	2	<1%

A10b About how much of the yard waste that your household generates—including leaves, grass, prunings, etc.—would you estimate you intentionally compost on your property? Would you say you compost:

	Frequency	Percent
<b>Base = Backyard Y/W composters</b>	<b>(136)</b>	<b>(100%)</b>
All or almost all	39	29%
About three-quarters	6	4%
About one-half	20	15%
About one-quarter	34	25%
Less than one-quarter	31	23%
Don't know	6	4%

A11 Thinking about just the yard waste that you intentionally compost on your own property, compared to last year, would you say that you now compost more yard waste at home, less yard waste, or are you composting about the same amount of yard waste at home?

	Frequency	Percent
<b>Base = Backyard Y/W composters</b>	<b>(136)</b>	<b>(100%)</b>
More now	14	10%
About the same	103	76%
Less now	16	12%
Don't know / Refused	3	2%

A12 Why does your household compost less at home than you did last year? (DO NOT READ. RECORD ANSWER VERBATIM)

	Frequency	Percent
<b>Base = Compost Less Now</b>	<b>(16)</b>	<b>(100%)</b>
The area that we plant is smaller than before	4	25%
Using curbside collection for more	4	25%
Removed Trees / Shrubs	2	12%
Less leaves / grass / clippings	3	19%
Too much work	1	6%
Other	1	6%
Don't know / Refused	1%	1%

A13 Which of the following types of yard waste materials are you currently composting at home on your own property?

	Frequency	Percent
<b>Base = Backyard Y/W composters</b>	<b>(136)</b>	<b>(100%)</b>
Leaves	105	77%
Grass	86	63%
Whole plants (tomato plants or annuals)	79	58%
Weeds	67	49%
Small twigs and branches	64	47%
Other	6	4%
Don't know / Refused	3	2%

A14. Still thinking about the yard waste composting you intentionally do at home on your own property, does your household use a yard waste compost bin, do you pile it up without a bin, or do you do something else with it?

	Frequency	Percent
<b>Base = Backyard Y/W composters</b>	<b>(136)</b>	<b>(100%)</b>
Use a bin	95	70%
Pile it up without a bin	41	30%
Other	1	1%
Don't know / Refused	3	2%

A18. Just thinking about the next year or so, and assuming that cost was not a consideration, how likely are you to get a (new) composting bin for the yard waste you compost on your own property? Would you say you are:

	Frequency	Percent
<b>Base = Backyard Y/W composters</b>	<b>(136)</b>	<b>(100%)</b>
Extremely likely to purchase a new bin	5	4%
Very likely	7	5%
Somewhat likely	14	10%
Not very likely	34	25%
Not at all likely	71	52%
Don't know / Refused	5	4%

**Asked of those who do not compost yard waste**

A24. How do you feel about composting your yard waste at home on your property? If you got information about how to make it easy and pest free, how likely would you be to start composting yard waste at home in the next year or so? (**Base = have a lawn or garden, but are not composting on their own property.**)

	Frequency	Percent
<b>Base = Not backyard Y/W composters</b>	<b>(431)</b>	<b>(100%)</b>
Extremely likely	21	5%
Very likely	39	9%
Somewhat likely	86	20%
Not very likely	116	27%
Not at all likely	165	38%
Don't know / Refused	4	1%

A25. Thinking about the next year or so, and assuming that cost was not a consideration, how likely are you to get a (new) bin designed specifically to compost yard waste at home? Would you say you are:

	Frequency	Percent
<b>Base = Likely to start backyard Y/W composting</b>	<b>(146)</b>	<b>(100%)</b>
Extremely likely	19	13%
Very likely	35	24%
Somewhat likely	65	45%
Not very likely	15	10%
Not at all likely	12	8%

**Grasscycling Section**

*Asked of those who have a lawn*

A29 Now about your lawn. When you mow your lawn, or have your lawn mowed, what is typically done with the grass clippings? (A few multiple responses were accepted.)

	Frequency	Percent
<b>Base = Have a lawn</b>	<b>(497)</b>	<b>(100%)</b>
Put in curbside yard waste bin	209	42%
Leave them on the lawn	183	37%
Composted on my property	57	11%
Landscaper hauls them away	27	5%
Raked/Bagged and taken to the curb	15	3%
Don't mow	7	1%
Raked/Bagged and taken to transfer station	6	1%
Other	2	<1%
Don't know	8	2%

A30. Does your household ever leave grass clippings on the lawn when it's mowed?

	Frequency	Percent
<b>Base = Deal with their own lawn clippings</b>	<b>(464)</b>	<b>(100%)</b>
Leave on the lawn most often (A29)	183	39%
Yes, ever leave them (not typically)	117	25%
No	151	33%
Don't know	13	3%

A31. If you had more information about how leaving the grass clippings on the lawn makes mowing easier, improves the health of the lawn, and saves money on fertilizer applications, how likely would you be to start leaving your clippings on the lawn? Would you be:

	Frequency	Percent
<b>Base = Never leave clippings on lawn</b>	<b>(166)</b>	<b>(100%)</b>
Extremely likely	8	5%
Very likely	26	16%
Somewhat likely	48	29%
Not very likely	25	15%
Not at all likely	46	28%
Don't know / Refused	13	7%

A32. When your household’s lawn is mowed during the spring (March, April or May), how often do you leave your grass clippings on the lawn?

	Frequency	Percent
<b>Base = Ever leave grass clippings on lawn</b>	<b>(299)</b>	<b>(100%)</b>
Regularly	189	63%
Occasionally	74	25%
Rarely	24	8%
Never	9	3%
Don’t know / Refused	3	1%

A32. When your household’s lawn is mowed during the summer (June, July, August), how often do you leave your grass clippings on the lawn?

	Frequency	Percent
<b>Base = Ever leave grass clippings on lawn</b>	<b>(299)</b>	<b>(100%)</b>
Regularly	196	66%
Occasionally	54	18%
Rarely	32	11%
Never	11	4%
Don’t know / Refused	6	1%

A32. When your household’s lawn is mowed during the fall (September, October, November), how often do you leave your grass clippings on the lawn?

	Frequency	Percent
<b>Base = Ever leave grass clippings on lawn</b>	<b>(299)</b>	<b>(100%)</b>
Regularly	179	60%
Occasionally	51	17%
Rarely	38	13%
Never	23	8%
Don’t know / Refused	8	2%

A33 If you had more information about how leaving the grass clippings on makes mowing easier, improves the health of the lawn, and saves money on fertilizer applications, how likely would you be to start leaving your clippings on the lawn? Would you be:

	Frequency	Percent
<b>Base = Only rarely/never leave grass clippings on lawn throughout the season</b>	<b>(23)</b>	<b>(100%)</b>
Extremely likely	4	17%
Very likely	6	26%
Somewhat likely	5	22%
Not very likely	3	13%
Not at all likely	2	9%
Don’t know / Refused	3	13%

A34 What type of a mower is typically used for mowing your household’s lawn now? Is the mower a mulch mower—that is, a mower designed specifically to chop grass clippings into small pieces so they can be left on the lawn?

	Frequency	Percent
<b>Base = Put clippings in bin / bag them / compost them (A29)</b>	<b>(281)</b>	<b>(100%)</b>
Yes, use a mulch mower	68	24%
No, not a mulch mower	157	56%
Someone else mows / landscaper	19	7%
Don’t know / Refused	37	13%

**Section B – Food Waste Composting**

*(Asked of everyone)*

B1. These next questions are about food waste—that is, table or kitchen scraps left over from eating or cooking, including the scraps left on plates after a snack or meal. These include paper napkins, greasy cardboard pizza boxes, used coffee filters and teabags, along with leftover bones, meat, cheese, grains, fruit and vegetables.

In your household, who usually organizes what happens with food scraps in the kitchen, that is, organizing how the food scraps are handled, stored and disposed? Would that be

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
You	439	73%
Your spouse or partner	49	8%
Shared equally	104	17%
Some other family member	3	<1%
Someone else	1	<1%
Don’t know / Refused	4	1%

B2. And, who usually takes the food scraps out -- that is, who puts them in the compost or garbage? Would that be ...

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
You	418	70%
Your spouse or partner	74	12%
Shared equally	83	14%
A child	13	2%
Some other family member	7	1%
Someone else	2	<1%
Don’t know	3	<1%



B3 When you think about these food scraps, or other types of food waste that you need to dispose of, what does your household do with them?

**Currently, do you ever put them in your regular garbage can?**

	<b>Frequency</b>	<b>Percent</b>
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	67	11%
No	530	88%
Don't know / Refused	3	<1%

**Currently, do you ever put them down the garbage disposal?**

	<b>Frequency</b>	<b>Percent</b>
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	138	23%
No	383	64%
Don't have one	72	12%
Don't know / Refused	7	1%

**Currently, do you ever compost them in your food and yard waste cart that you take to the curb or alley for pick-up?**

	<b>Frequency</b>	<b>Percent</b>
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	530	88%
No	56	9%
Don't have curbside pick-up	9	2%
Don't know / Refused	5	1%

**Currently, do you ever put them in your compost bin or pile at home on your property?**

	<b>Frequency</b>	<b>Percent</b>
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	110	18%
No	403	67%
Don't have one	82	14%
Don't know / Refused	5	1%

**SUMMARY OF AT-HOME COMPOST BEHAVIOR (ON OWN PROPERTY)**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Compost yard waste	136	23%
Compost food waste	110	18%
Compost either yard or food waste	174	29%
Compost both yard and food waste	72	12%
Do not compost either yard or food waste	426	71%

B4. You mentioned that you use a garbage disposal for some of your food waste. How often does your household use the garbage disposal?

	Frequency	Percent
<b>Base = Use garbage disposal for food waste</b>	<b>(138)</b>	<b>(100%)</b>
Several times a day	23	17%
Once a day	41	30%
A few times a week	44	32%
Once a week	13	9%
Less often than once a week	15	11%
Never	2	1%

B5. When you think about all the table scraps, kitchen scraps or food waste that your house generates, how do you handle most of it? *(Interviewers probed to learn how “most of it” was handled; however, consumers often wanted to provide more than one answer so multiple responses were accepted.)*

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Put it in a food and yard waste cart that is taken to the curbside for pick-up	548	91%
Put it down the garbage disposal	138	23%
Put it in a compost or worm bin, or compost pile at home	111	18%
Put it into the regular garbage can	67	11%
Other	3	<1%
Don't know / Refused	4	1%

B6b. Of all the food scraps your household has, how much would you say goes into your food and yard waste cart?

	Frequency	Percent
<b>Base = Compost in F/Y waste cart</b>	<b>(530)</b>	<b>(100%)</b>
All or almost all of it	416	78%
About three-quarters	45	8%
About one-half	30	6%
About one-quarter	16	3%
Less than that	19	4%
Don't know	4	1%

B6c. Did you ever compost any of your household’s food scraps in a compost bin or compost pile at home?

	Frequency	Percent
<b>Base = Compost, but not on property</b>	<b>(446)</b>	<b>(100%)</b>
Yes	77	17%
No	368	83%
Don’t know	1	<1%

B6d. Why did you stop composting food scraps in your compost bin or pile at home? (OPEN END)

	Frequency	Percent
<b>Base = No longer compost</b>	<b>(77)</b>	<b>(100%)</b>
Use the cart instead	21	27%
At home composting attracts pests	21	27%
Too much work	11	14%
Wasn’t success at it (didn’t have the right mix, worms died, etc.)	9	12%
Not enough space for it	8	10%
Not physically able to do the work	6	8%
Stopped gardening	5	6%
Takes too much time	3	4%
Bin / Green cone fell apart	3	4%
Bin too full / Material too heavy	3	4%
Odors	2	3%
No use for the output	2	3%
Other	1	1%
Don’t know	4	5%

B7. Now that you’re putting food scraps in your curbside food and yard waste cart, compared to last year, has the amount of food that you compost in your backyard increased, decreased or stayed about the same?

	Frequency	Percent
<b>Base = compost both at home and curbside</b>	<b>(84)</b>	<b>(100%)</b>
Increased	7	8%
Stayed the same	71	85%
Decreased	2	2%
Don’t know	4	5%

B8. And, now that you put food scraps in your curbside food and yard waste cart, compared to last year, has the food that you put into your regular garbage increased, decreased or stayed about the same?

	Frequency	Percent
<b>Base = compost at curbside</b>	<b>(600)</b>	<b>(100%)</b>
Increased	14	3%
Stayed the same	376	71%
Decreased	105	20%
Don’t know	35	6%

B9 Since you've decreased what goes into your regular garbage, have you changed or considered changing the size of the garbage can you use?

	Frequency	Percent
<b>Base = food waste in garbage decreased</b>	<b>(105)</b>	<b>(100%)</b>
Yes	33	31%
No	70	67%
Don't know / Refused	2	2%

B11. In your household, what is typically done with food scraps at the time they are generated? Do you usually store them in a container in the kitchen, do you refrigerate or freeze them, do you immediately take them outside, or is there a better description?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Store them in a container in the kitchen	477	80%
Immediately take them outside	85	14%
Refrigerate or freeze them	33	6%
Bin / Waste Bin (unspecified)	4	1%
Compost (unspecified)	3	<1%
Other	3	<1%
Don't know Refused	4	1%

B13. When you put your food scraps inside your curbside food and yard waste cart, do you usually put the food scraps in loose, do you contain them inside a paper or plastic bag, do you wrap them in newspaper, or do you handle it some other way?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Compostable bag / Bio-bag	277	48%
Loose	212	35%
Paper bag	102	17%
Plastic bag	59	10%
Wrapped in newspaper	31	5%
Cardboard food box (crackers, cereal, etc.)	7	1%
No scraps and/or no cart	5	1%
Other container	4	1%
Waxed milk carton	3	<1%
Other	1	<1%
Don't know / Refused	10	2%

B15 Overall, how satisfied are you with the City’s food and yard waste collection service? Would you rate this a 7, meaning you are extremely satisfied, a 1 meaning you are not at all satisfied, or would you rate it some number in between?

	Frequency	Percent
<b>Base – Compost with F/Y waste cart</b>	<b>(530)</b>	<b>(100%)</b>
7 – Extremely satisfied	392	74%
6	75	14%
5	39	7%
4	6	1%
3	5	1%
2	6	1%
1	5	1%
Average Rating:	6.5	

**Have food yard waste collection but do not use it for food waste**

B17 You mentioned that you are not currently putting food scraps in your food and yard waste cart for curbside pickup. Before now, were you aware that the City picks up food scraps as part of its curbside yard waste pickup service?

	Frequency	Percent
<b>Base = No food waste in curbside cart</b>	<b>(70)</b>	<b>(100%)</b>
Yes	52	74%
No	13	19%
Don’t know / Refused	5	7%

B18 For what reasons don’t you put your food scraps in with your yard waste for pickup?

	Frequency	Percent
<b>Base = Aware of food and yard waste p/u</b>	<b>(52)</b>	<b>(100%)</b>
Use a food waste cart	13	25%
Compost them in the back yard	11	21%
Too hard / Too big of a hassle	7	13%
Don’t have a yard waste cart	7	13%
Don’t have any / many food scraps	4	8%
The cost / You have to pay for it	4	8%
Takes too much time	3	6%
Attracts pests / rodents	3	6%
All food scraps go down the disposal	2	4%
They go in the garbage	1	2%
Other	1	2%

B19 (As you may know,) As part of its food and yard waste pickup program, the City picks up food waste that is placed inside the yard waste cart. Knowing that, how likely is your household to start putting at least some of its food waste in your food and yard waste cart within the next year or so? Is your household:

	Frequency	Percent
<b>Base = Do not compost in F/Y waste cart</b>	<b>(70)</b>	<b>(100%)</b>
5 – Extremely likely	21	30%
4 – Very likely	7	10%
3 – Somewhat likely	10	14%
2 – Not very likely	4	6%
1 – Not at all likely	22	31%
Average Rating	3.0	
Don't know	6	9%

B21 Did you know that as of January 2015 food waste is no longer allowed in the regular garbage can?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	511	85%
No	81	14%
Don't know / Refused	8	1%

N1 You mentioned that you (also) compost some food scraps at home. How much of your food waste do you compost at home?

	Frequency	Percent
<b>Base = Compost at home on property</b>	<b>(110)</b>	<b>(100%)</b>
All or almost all of it	44	40%
About three-quarters of it	10	9%
About one-half of it	9	8%
About one quarter of it	15	14%
Or less than that	14	13%
Don't know / Refused	18	16%

N2 Compared to last year, would you say that you now compost more food waste at home, less food waste at home or are you composting about the same amount?

	Frequency	Percent
<b>Base = Compost at home on property</b>	<b>(110)</b>	<b>(100%)</b>
More now	13	12%
About the same	77	70%
Less now	5	4%
Don't know / Refused	15	14%

N3 Why does your household compost less food waste at home now?

	Frequency	Percent
<b>Base = Composts less at home now</b>	<b>(5)</b>	<b>(100%)</b>
More goes into the curbside cart	2	40%
Attracted pests / rodents	1	20%
Easier to eat out	1	20%
Don't know	1	20%

B22. Does your household currently use any type of outdoor bin or container for composting these food scraps?

	Frequency	Percent
<b>Base = Compost at home on property</b>	<b>(110)</b>	<b>(100%)</b>
Yes	65	59%
No	41	37%
Don't know / Refused	4	4%

B23 What kind of food waste composting bin do you have? (Multiple responses accepted)

	Frequency	Percent
<b>Base = Use outdoor bin / container</b>	<b>(65)</b>	<b>(100%)</b>
Worm bin	18	28%
Green cone	25	38%
Compost bin/ Tumbler bin/ Store bought	10	15%
Some other type of bin	3	5%
Don't know / Refused	13	20%

N5 Just thinking about the next year or so, and assuming that cost was not a consideration, how likely are you to get a (new) food waste composting bin for the food waste you compost on your own property?

	Frequency	Percent
<b>Base = Compost at home on property</b>	<b>(110)</b>	<b>(100%)</b>
5 - Extremely likely	7	6%
4 - Very likely	8	7%
3 - Somewhat likely	13	12%
2 - Not very likely	20	18%
1 - Not at all likely	56	51%
Average Rating	1.9	
Don't know	6	5%

B28. I understand that you are not composting food waste at home on your property right now. Even though you may not be using it, does your household own a green cone or any kind of container that is designed for composting **food waste** in your yard at home if you wanted to? (Please do not include the yard waste container that you take to the curbside if you have one.)

	Frequency	Percent
<b>Base = Do not compost at home on property</b>	<b>(490)</b>	<b>(100%)</b>
Yes	58	12%
No	425	87%
Don't know	7	1%

B31. Thinking about the next year or so, how likely are you to start making some of your own compost by depositing your own food scraps at home on your property?

	Frequency	Percent
<b>Base = Do not compost at home on property</b>	<b>(490)</b>	<b>(100%)</b>
5 – Extremely likely	14	3%
4 – Very likely	22	4%
3 – Somewhat likely	68	14%
2 – Not very likely	124	25%
1 – Not at all likely	255	52%
Average Rating	1.8	
Don't know/Refused	7	1%

N6 Thinking about the next year or so, and assuming that cost was not a consideration, how likely are you to get a (new) bin designed specifically to compost food waste at home?

	Frequency	Percent
<b>Base = Likely to start composting</b>	<b>(104)</b>	<b>(100%)</b>
5 – Extremely likely	12	12%
4 – Very likely	29	28%
3 – Somewhat likely	42	40%
2 – Not very likely	10	10%
1 – Not at all likely	9	9%
Average rating	3.2	
Don't know	2	2%



### Section D – Regular Garbage Pickup Service

D1 These next questions are about regular garbage service. How often does your household put its garbage can out for pick-up?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Every week	532	89%
Every other week	42	7%
Three times a month	8	1%
Once a month	15	2%
Less often than once a month	1	<1%
Don't know / Refused	2	<1%

D2 What size is the garbage can that you currently use? Are you using a...

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Micro container (12 gallons)	153	26%
Mini container (20 gallons)	163	27%
32-gallon container	173	29%
64-gallon container	30	5%
96-gallon container	17	3%
Don't know / Refused	64	11%

#### **Wasted Food Section:**

- These next questions are about food that **comes into your home but is not used**. Considering the food your household buys to eat at home or to prepare meals, or food that is picked-up or delivered for eating at home, how concerned are you about the amount of food that gets thrown away because it goes bad, expires, has been in your refrigerator for a long time, or because no one wants to eat it? Would you rate this a 7, meaning you're very concerned about the food wasted at your home, a 1 meaning you're not at all concerned, or would you rate it some number in between?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
7 – Very concerned	98	16%
6	54	9%
5	72	12%
4	49	8%
3	79	13%
2	77	13%
1 – Not at all concerned	152	25%
Average rating	3.63	

2. Considering the food your household throws away or composts in the average week, how much of that food do you think you could avoid wasting? Could you avoid wasting :

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
All or almost all of the food that is wasted	54	9%
About three-quarters of it	33	6%
About half of it	51	8%
About one-quarter of it	306	51%
None of it	87	14%
NA / Don't throw any away now	48	8%
Don't know	21	4%

3. Have you heard about, read or seen anything about food that is wasted or about ways to reduce the amount of food that is wasted at home?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	284	47%
No	295	49%
Don't know	21	4%

4. In the past year or so, have you taken any steps in your home to reduce the amount of food that is wasted?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	305	51%
No	282	47%
Don't know	13	2%

5. What steps have you taken?

	Frequency	Percent
<b>Base = Have taken steps</b>	<b>(305)</b>	<b>(100%)</b>
Plan meals before shopping	176	58%
Eat more leftovers	51	17%
Make a shopping list	44	14%
Cook smaller portions	44	14%
Improve food storage so it stays fresher	31	10%
Freeze more leftovers / food	30	10%
Buying less	22	7%
Just being more aware	8	3%
Use food before it expires	8	3%
Share with others / Share with neighbors	5	2%
Cook at home / Eat out less	4	1%
Grown my own food	3	1%

Find new ways to incorporate leftovers	3	1%
Use a food service / delivery service	2	1%
Other	4	1%
None	1	<1%
Don't know	1	<1%

6. I'm going to read some statements and I'd like to know whether you agree or disagree with each one. First, do you agree or disagree with this statement: **I feel guilty about throwing away food that has been in the refrigerator for a long time.**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
5 - Strongly agree	209	35%
4 - Somewhat agree	123	20%
3 - Neither	47	8%
2 - Somewhat disagree	84	14%
1 - Strongly disagree	116	19%
Average rating	3.4	
Don't know	21	4%

**I am very interested in learning how to buy only the food we'll eat.**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
5 - Strongly agree	271	45%
4 - Somewhat agree	144	24%
3 - Neither	55	9%
2 - Somewhat disagree	41	7%
1 - Strongly disagree	71	12%
Average rating	3.9	
Don't know	18	3%

**It's only the food that doesn't get composted that I feel bad about wasting.**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
5 - Strongly agree	103	17%
4 - Somewhat agree	76	13%
3 - Neither	75	12%
2 - Somewhat disagree	120	20%

1 - Strongly disagree	173	29%
Average rating	2.7	
Don't know	53	9%

**I believe my household needs to reduce the amount of food we throw away.**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
5 - Strongly agree	116	19%
4 - Somewhat agree	145	24%
3 - Neither	48	8%
2 - Somewhat disagree	112	19%
1 - Strongly disagree	161	27%
Average rating	2.9	
Don't know	18	3%

**It would be easy to reduce the amount of food that goes to waste in the house.**

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
5 - Strongly agree	142	24%
4 - Somewhat agree	131	22%
3 - Neither	58	10%
2 - Somewhat disagree	131	22%
1 - Strongly disagree	107	18%
Average rating	3,1	
Don't know	31	5%

### Section F – Demographics

F1. The next questions are for classification purposes only. What is your age please? Are you:

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Under 25	3	<1%
25 – 34	45	8%
35 – 44	100	17%
45 – 54	105	18%
55 – 64	130	22%
65 or older	190	32%
Don't know / Refused	27	4%

F2. Do you own or rent the home you live in?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Own	571	95%
Rent	14	2%
Other	3	<1%
Don't know / Refused	12	2%

F3. How many years have you lived in your current home? (LESS THAN 1 YEAR = 0)

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Fewer than 5 years	123	20%
5 – 19 years	208	35%
20 years or more	260	43%
Don't know / Refused	9	2%

F5. What is your home zip code?

F7. Including yourself, how many people currently live in your household?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
One	106	18%
Two	240	40%
Three	109	18%
Four	96	16%
Five	23	4%
Six	7	1%
Seven	1	<1%
Eight or more	2	<1%
Don't know / Refused	16	3%

F8. And how many of those are over 18 years of age?

	Frequency	Percent
<b>Base = Those with more than 1</b>	<b>(478)</b>	<b>(100%)</b>
One	13	3%
Two	357	75%
Three	76	16%
Four	21	4%
Five or more	6	1%
Don't know /Refused	5	1%

N1 Do you have dogs or cats, or other pets that generate waste at home?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	315	52%
No	273	46%
Don't know / Refused	12	2%

N2 How does your household usually handle the pet waste generated at home? (Multiple responses accepted.)

	Frequency	Percent
<b>Base = Have pets</b>	<b>(315)</b>	<b>(100%)</b>
Throw it in the garbage	265	84%
Put in in the food and yard waste cart	20	6%
Bury / Compost it in my yard	28	9%
Flush it down the toilet	6	2%
Outside cat / Buried / Left in yard	3	1%
Something else	6	2%
Don't know	5	2%

F9. Are you of Hispanic, Latino or Spanish origin?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Yes	19	3%
No	554	92%
Don't know / Refused	27	5%

F10. What is your race, please? (Allow multiple responses)

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
White / Caucasian	460	77%
Black or African American	14	2%
Asian (net)	37	6%
Multi-racial	12	2%
Hispanic / Latino	9	2%
Other	4	1%
Don't know / Refused	64	10%

F11 What is the primary language spoken at your home?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
English	559	93%
Chinese / Mandarin / Cantonese	7	1%
Other European	7	1%
Spanish	2	<1%
Other	9	2%
Don't know / Refused	16	3%

F12. What is the highest degree or level of school you completed?

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
High school graduate or less	40	7%
Some college / Technical school / AA degree	96	16%
4-year college degree	211	35%
Post graduate work / degree	226	38%
Don't know / Refused	27	4%

F13. And finally, into which of the following categories did your household's total annual income for 2017 fall? Was it:

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Under \$30,00	27	4%
\$30,000 - \$50,000	36	6%
\$50,000 - \$75,000	61	10%
\$75,000 - \$100,000	64	11%
\$100,000 - \$150,000	98	16%
\$150,000 - \$200,000	51	8%
\$200,000 or over	101	17%
Don't know / Refused	162	27%

F13. Record gender:

	Frequency	Percent
<b>Total</b>	<b>(600)</b>	<b>(100%)</b>
Male	273	46%
Female	327	54%