City of Seattle

2000 Home Organics Waste Management Survey

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1. Overview

Introduction

For nearly 15 years, Seattle Public Utilities (SPU) has supported an array of organics waste management services and programs. The programs are designed to help residents reduce and manage their yard debris and food wastes. SPU not only offers residents voluntary curbside collection services for yard debris, but also provides residents with education, tools, and incentives for managing organic wastes effectively in their own backyards. These efforts mesh with SPU's overall goals for solid waste management. In its 1998 solid waste management plan, the City outlines its commitment to blend customer needs with programs that "protect public and environmental health and improve cost-effectiveness and system efficiencies."

This study is a continuation of research first conducted in 1995 to evaluate Seattle residents' attitudes, awareness, and behaviors towards the various city-sponsored backyard composting services and programs. The 1995 survey was designed to investigate the variety of organic waste management activities city residents practice, and identify ways to improve SPU services. In 1997, another survey was administered to specifically investigate residents' attitudes and practices toward grasscycling.

SPU commissioned this survey, fielded in late December 1999 through early January 2000, to assess residents' current attitudes and behavior toward organic waste management. The objectives were to identify and compare trends throughout the years, to update the city's organics recycling rate, and to explore the overall market potential for increasing or expanding organic waste management programs. The survey sampled 600 Seattle residents living in buildings with four or fewer units. The sample size provides a 95% confidence level and a ±4.1% margin of error.

SPU Programs and Services

The programs and services SPU supports for organic waste management have evolved since 1986 when the first group of Master Composters were trained to provide residents with education on the benefits of backyard yard waste composting. In 1999, several core elements of the program still remained:

- ***Compost bin distribution*** *where residents can purchase a yard waste compost bin for a subsidized price*. Bin distribution has shifted course since the program began in 1990. For the first four years, SPU offered residents yard waste composting bin delivery and educational services at no charge and in third year began distributing food waste composting bins. In 1994, SPU began to charge a subsidized fee for both yard and food waste composters and required residents to pick up a bin and receive education at a central location. In 1998, the program further evolved and residents had an opportunity to purchase a yard waste composting bin at a "truck load" sale. These once-a-year truckload sales took the Utility out of the "warehouse" business and residents were no longer required to receive education in order to purchase a compost bin.[1] By the end of 1995, approximately 23% of Seattle households (35,300) had received a yard waste compost bin, and 4% (6,600) had received a food waste compost bin

[1] Prior to 1998, SPU purchased and stored bins directly from a manufacturer. In 1996 SPU purchased the manufacturer's remaining inventory of Green Cones, a food waste composting bin, and the last of these bins were distributed in 1998.

from the City. Since 1996, an additional 9,000 yard waste composting bins and 2,000 food waste composting bins have been sold.

- ❒ ***Compost Hotline*** *that provides residents with answers to their composting questions throughout the year*. The Hotline has fielded as many as 12,000 calls per year.
- ❒ ***Master Composter*** *volunteer program that educates residents to educate others*. Over 400 resident volunteers have been trained since 1986; these volunteers provide over 500 hours of volunteer outreach each year.
- ❒ ***Curbside collection of yard debris*** *offered to residents as a voluntary service*. In 1989, SWU began the curbside yard waste collection program and participation quickly rose to over 60%. Today, approximately 54% of Seattle households participate. Residents can participate in both the curbside collection and backyard composting programs. Residents are not permitted to dispose yard waste in their household garbage.

Since 1995, other SPU initiatives have expanded that complement the City's efforts to encourage the backyard management of residential organic wastes. Most significant is SPU's participation in the *Grasscycling Gives You Mower For Less* events. These events, sponsored by Puget Sound Environmental Quality Agencies (a group comprised of 14 different regulatory agencies, solid waste agencies, utilities, and private composters located in King, Pierce, and Snohomish counties) offer residents an opportunity to buy an electric mulching lawn mower at a subsidized price. Combined sales from the first two years' sales events (1998-99) have resulted in over 2,500 mowers sold to Seattle residents.[2]

SPU has also examined the possibility of implementing a curbside food waste collection program. In 1994, SPU conducted a curbside food waste collection pilot program on four garbage routes with 900 participants and SPU continues to explore feasible options for city-wide food waste collection.

City of Seattle waste composition studies suggest that SPU's multi-pronged approach to organic waste management is justified. A 1988/89 report indicated that yard waste (leaves, grass and prunings) comprised 19.2% of Seattle's single-family residential waste stream. By 1990, that number dropped significantly to 2.2% (due to a disposal ban on yard waste and the introduction of curbside yard waste collection services). The 1998/99 waste composition study reports that yard waste now accounts for approximately 2% of the single-family waste stream. Food waste has risen from 24% in 1994/95 to 30.6% in 1998/99.

Comparison with 1995 Organics Survey

Composting Activities Have Increased

Although not statistically significant, the percentage of households that engage in composting behavior appears to be higher today than in 1995. Among the 600 residents interviewed, one of two Seattleites is currently composting yard debris and/or food scraps. Five years ago 41% of households were composting yard debris compared to 46% today. And five years ago only 25% of households were composting food scraps. Today, 31% of households report composting food scraps. Furthermore, the

[2] In 1998, discounts were offered on 3,000 mowers and sales exceeded expectations resulting in the combined sale of nearly 5,000 mowers. In 1999, a total of 3,326 mowers were sold.

percentage of households who compost neither yard nor food waste has decreased from 57% in 1995 to 50% in 2000.

More People Are Grasscycling

The percentage of single-family households with lawns who "ever" grasscycle has significantly increased over the five-year period. In 1995, 37% of single-family households reported that they "ever" left their grass clippings on the lawn. Data from the 1997 Grasscycling Survey indicates that 52% of households left grass clippings on the lawn. In 2000, 55% of the households reported that they "ever" grasscycle, for an overall increase of 18% in grasscycling activity.

Current and Future Markets

Tables 1 and 2, *Seattle Residents' Organic Waste Management*, combine data collected from the 2000 Organics Survey with information gleaned from other SPU sponsored research on organics. The table separates information on yard and food waste to examine the market conditions and market potential for each waste stream.

The "Current Market" portion of the table compares specific activities to the total number of eligible Seattle households. The "Future Market" section synthesizes information from the survey with projections regarding the impact on organic wastes diverted.

These tables reflect several assumptions. Both tables assume a total of 156,500 single-family households in Seattle; this represents a one percent increase over the assumed number of 1995 households. In addition, the "Future Market" numbers in both tables assume programs will operate in isolation. Lastly, the Future Market percentages reflect an optimistic scenario for each program in terms of participation and diversion levels. This information is valuable for comparing market penetration of alternative SPU organic waste management initiatives.

The following table presents a summary of Seattle residents' current behavior for managing yard waste and food and compostable paper waste as well as a summary of future market potential. All percents refer to the percent of total Seattle single-family households.

Table 1: Seattle Residents' Organic Waste Management: Yard Waste

Current Market			Future Market				
	Participating HHs	Diversion (Tons)	Eligible HHs Not Participating	Likely Market (HHs)	Diversion (Tons)	Potential Market (HHs)	Diversion (Tons)
Composting	72,100 (46%)	12,000	78,100 (50%)	16,400 (10%)	4,100	25,800 (16%)	6,400
Grasscycling	59,200 (38%)	10,700	78,500 (50%)	41,300 (26%)	7,400	13,700 (9%)	2,500
Curbside	85,200 (54%)	39,700					
Clean Green Drop Off		13,700					
Disposed of as Garbage		2,700					
Total		78,800					

* See Attachment I to this section for yard waste assumptions and data sources

Table 2: Seattle Residents' Organic Waste Management: Food Waste & Compostable Paper

Current Market			Future Market				
	Participating HHs	Diversion (Tons)	Eligible HHs Not Participating	Likely Market (HHs)	Diversion (Tons)	Potential Market (HHs)	Diversion (Tons)
Composting	48,500 (31%)	4,000	108,000 (69%)	25,000 (16%)	3,000	32,400 (21%)	4,000
Curbside with Charge			156,500 (100%)	44,000 (28%)	6,400	31,300 (20%)	4,600
Curbside without Charge			156,500 (100%)	78,300 (50%)	11,500	32,900 (21%)	4,800
Grinder	81,400 (52%)	5,300					
Disposed of as Garbage		32,900					
Total		42,200					

* See Attachment II to this section for food waste and compostable paper assumptions and data sources

Yard Waste

Composting

Current yard waste activities compared to the total number of single-family households within the City and the corresponding tonnage of yard debris diverted or disposed are summarized in the "Current Market" section of Table 1. Information from the 1999 Organics Survey indicates that approximately 46% of total Seattle single-family households currently compost yard debris. This activity diverts almost 12,000 tons per year.

The potential market for furthering "at home" yard waste diversion activity is summarized in the "Future Market" section of the table. As the table illustrates, approximately half of the single-family households in Seattle do not currently participate in back yard waste diversion activities. Survey respondents who do not currently compost were asked how likely they might be to do so next year if they were provided with more information on how to make it easy and pest free.

Approximately 10% (roughly 16,000 Seattle households) said that they would be "extremely" or "very likely" to compost in the next year if they were provided with more information on how to make it easy and pest free. This group is identified as the "Likely Market." It is estimated that this group's yard waste composting activities would result in approximately 4,000 additional tons diverted from the waste stream. About 16%, or approximately 25,000 households, fell into the "Potential Market," meaning that they were "somewhat likely" to compost next year if they were provided with more information on how to make it easy and pest free. This group has the potential to divert over 6,000 tons.

Grasscycling

The 1999 Organics Survey also indicates that roughly 38% of total Seattle households are "typically" grasscycling; their efforts divert over 10,000 tons of grass clippings per year. Among Seattle's single-family households, about one-quarter (26%) constitute a "Likely Market." Of the 26%, about 17% reported that they "ever" grasscycle and thus are likely candidates. Another 9% of households said they would be "very likely" to grasscycle if they had more information about the benefits. The diversion of yard debris from this likely group of grasscyclers is estimated at over 7,000 additional tons. Roughly 9% of households also said that they would be "somewhat likely" to grasscycle (the Potential Market) if they had more information about the benefits. This would result in an additional removal of approximately 2,000 tons of yard debris.

Survey respondents were also asked about their willingness to purchase a compost bin or mulching lawn mower during the next year as a way to encourage both of these yard waste diversion activities. Coincidently, the total number of households that indicated they would be likely to purchase one or both of these tools is about 5.5%, or approximately 8,600 single-family households.

Food and Compostable Paper Waste

Composting

Current and potential market conditions for composting food and compostable paper waste were also examined. Summary results appear in Table 2. Currently, almost one-third (31%) of single-family households compost food scraps, resulting in nearly 4,000 tons of material diverted per year. Over half (52%) of Seattle households use a grinder and divert roughly 5,000 tons of food waste. The remaining 33,000 tons are disposed of as garbage.

Roughly 69% of single-family households do not currently compost food scraps. Of these households, approximately 16% (roughly 25,000 households) said that they would be very likely to compost food scraps if they were provided with more or better information on how to do it easily and make it pest-free. This Likely Market of composters has the potential to divert almost 3,000 tons of waste.

About 21% of Seattle households comprise the Potential Market, meaning that they are somewhat likely to compost food scraps if they were provided with more or better information on how to do it easily and make it pest-free. Their composting activity would result in an estimated 4,000 tons of waste diverted per year.

Curbside Collection

In the 1999 Organics Survey, respondents were asked how likely they would be to use curbside collection services for food and compostable paper waste. Respondents were asked about their likelihood to use a service with or without a $2.00 per month fee for the service. Over one-quarter of Seattle households (28%) would be very likely to use curbside services if SPU charged $2.00 per month. The interest in the service doubles if the City did not charge for this service. Roughly 50% of single-family households would use curbside food waste collection services for no charge. The food waste diversion rate is estimated at almost 6,000 tons per year if there is a charge for the service. If no charge is imposed, then the estimate increases to over 11,000 tons.

The Potential Market for curbside collection of food and compostable paper waste was also determined. Approximately 20% of Seattle households are somewhat likely to use curbside collection services if the City charged $2.00 per month. This would result in diverting approximately 4,600 tons of food waste. If the City did not impose a charge, then 21% of single-family households are somewhat likely to participate and divert about 4,800 tons.

It is interesting to note that the total future potential market for using curbside collection services for food and compostable paper waste is almost 50% if the City were to charge $2.00 per month. In contrast, if the City did not impose a charge, then the total future potential market increases to just over 70%.

Conclusions

The 1999 Home Organics Survey reveals several opportunities for diverting home organic wastes. Promoting home management of organic wastes will help to achieve the goals set forth in the 1998 solid waste management plan, namely to "protect public and environmental health and improve cost-effectiveness and system efficiencies."

Grasscycling affords the best opportunity for the diversion of yard waste.
Although the total future tonnage diversion from the "likely" and "potential" market is about the same for composting and grasscycling activities, the "likely" market for grasscycling in terms of households and diversion is substantially larger. This is due, in part, to the number of households who occasionally grasscycle, plus those households who expressed a willingness to grasscycle if they were more aware of the benefits of grasscycling.

Curbside collection of food and compostable paper waste offers the greatest potential for increased diversion of organics.
Curbside collection of food and compostable paper has the potential to divert a considerable amount of material. Currently, about 32,000 tons of food and compostable paper waste is disposed of in the garbage. The likely and potential market of Seattle households that would be willing to use curbside collection services for food and compostable paper is nearly 50% even if the City were to charge $2.00 per month. This action would result in roughly 11,000 tons of diverted materials. If the City did not impose a charge, then the combined future market potential increases to just over 70% and would result in the diversion of over 16,000 tons.

Demand for composting bins and mulching mowers is limited in the short term.
The survey indicates that the total number of single-family households willing to purchase either a composting bin or mulching lawn mower during the next year is roughly 5.5%, or approximately 8,600 single-family households. Despite the limited demand for both a composting bin and mulching mower in the short term, the demand for mulching mowers may increase (or at least remain steady) since residents may need to replace this tool over time.

Providing information about benefits and ease of use appears to be an effective strategy for increasing composting and grasscycling behavior.
Survey participants responded favorably to receiving information regarding the benefits of using both a mulching mower and composting bin. Roughly one-quarter (26%) of Seattle households said that they would be at least somewhat likely to compost in the next year if they were provided with more information on how to make it easy and pest free. Similarly, about one-fifth (18%) of single-family households indicated that they would be very likely to grasscycle if they had more information about the benefits.

ATTACHMENT I
YARD WASTE ASSUMPTIONS AND DATA SOURCES

Composting

Current Market

Participating Households

The 1999 survey indicated that approximately 46% (or 72,100) of the 156,500 single-family households in Seattle compost (Table 6). The 156,100 total households is an SPU estimate based upon the most recent census.

Diversion

Households: There are three sets of households included in this calculation: 1.) those that compost with a city-provided bin and report that they do not grasscycle, 2.) those that compost with a city-provided bin and report that they also grasscycle, and 3.) those that compost with some other type of bin. The survey indicates that 30% of participating households compost with a city-supplied bin. Half of those using a city-provided bin report that they also grasscycle. A unique measure of diversion (pounds of yard waste composted per year) is used for each of these three types of households.

Pounds per Household: SPU estimates that single-family households with yards generate about 625 pounds of leaves and grass per year. The total generation of yard waste from these households is estimated by summing the yard waste from the curbside yard waste collection program (single-family only), disposed single-family waste, self-haul auto and the single-family portion of self haul truck waste, plus the estimated amount diverted through both grasscycling and backyard composting. This sum, divided by the total number of households, results in an estimate of 904 pounds of yard waste generated per household per year. The portion that is leaves and grass is estimated using data from a 1988/90 waste stream composition study that was completed before the curbside yard waste program was implemented. That study indicated that 75% of yard waste collected in the curbside garbage was leaves and grass. However, only 35% of self-haul auto yard waste was leaves and grass and only 30% of truck self-haul was leaves and grass. The remainder of the yard waste is assumed to be brush and prunings that cannot be composted in backyard bins. The result of this SPU analysis is that 625 of the total 904 pounds are estimated to be leaves and grass.

For households that use a city-supplied bin to compost and do not grasscycle, an 80% efficiency rate is assumed by SPU. This means that these households compost 80% (or 500 pounds per year) of the available 625 pounds of leaves and grass.

Since grasscycling occurs upstream of backyard composting, less grass is available for those households that both grasscycle and compost with a city-provided bin. The previously mentioned waste composition study found that 28% of the 625 pounds of yard waste is leaves and 72% is grass. SPU assumes that these households grasscycle most of the grass and none of

the leaves. Thus 80% of the leaves or 140 pounds (80%*28%* 625) plus the 20% of grass or 90 pounds that is not grasscycled (20%*72%*625) is assumed to be composted by these households. This assumption results in 230 pounds per year of yard waste that is available to backyard compost by households that both grasscycle and use city-supplied bins to compost.

For households that do not use a city-provided bin, SPU assumes that only half of the available leaves and grass or 313 pounds is composted. This assumption provides a conservative estimate of yard waste diverted from households that do not use a city-provided bin.

These assumptions and calculations yield an estimated 12,000 tons that is diverted through backyard composting. The full calculation is:
0.46*156,600*.3*.5*500 / 2000 (to convert to tons) for those who do not grasscycle and compost in a city bin
plus
0.46*156,600*.3*.5*230/2000 for those who do grasscycle and compost in a city bin
plus
0.46*156,600*.7*313/2000 for those that compost but do not do so in a city-supplied bin.

Future Market

Of the 156,500 single-family households in Seattle, 96% are considered to be eligible composting households; they have a yard and/or garden (Table 4). Of these 150,240 eligible households, an estimated 78,100 (50% of all single-family households) do not participate in any type of yard waste composting (Tables 4 and 6). Twenty-one percent of these non-participating households (10% of all single-family households) also reported that they were either "extremely" or "very likely" to participate in composting in the future (Table 26). This 21% constitutes a likely market for future composting. Those households that indicated they were "somewhat likely" to compost in the future are the potential market (Table 26). The diversion for these future households was assumed to be 500 pounds per household per year. See the explanation above under "Current Market" for the derivation of this estimate.

Grasscycling

Current Market

The 1999 survey indicated that 38% (or 59,200) of the 156,600 single-family households in Seattle grasscycle (Table 11).

Diversion

SPU estimates that single-family households generate 904 pounds of yard waste each year. 625 of the 904 pounds are leaves and grass and 72% percent of this amount, or 450 pounds are grass. SPU's 80% efficiency rate (that is explained above) results in 360 pounds of grass being diverted per year per grasscycling household. Thus, the total tons grasscycled are estimated to be:
.38*156,600*360 / 2000 = (approx.) 10,700 tons per year.

Future Market

Of the 156,500 single-family households in Seattle, 88% are considered to be grasscycling eligible households; they have a lawn (Table 4). Of these 137,720 eligible households, 57% or 78,500 (50% of all single-family households) do not typically grasscycle (Tables 4 and 12). The likely market is comprised of those households that reported that they "ever grasscycle" (Table 29) plus those that are mowing their lawn but not currently grasscycling and that reported that they were "extremely' or "very likely" to grasscycle in the future (Table 31). Those households that indicated they were "somewhat likely" to grasscycle in the future (Table 31) are the potential market. Diversion estimates for these future households are based on 360 pounds per household per year (80% of 450 pounds of grass). Please see the above Current Market diversion estimate.

Curbside Pick-Up

Current Market

Participating households and annual diversion is from the December 1999 Yard Waste Report.

Self-Haul to Transfer Station

Current Market

Annual diversion is from the December 1999 Yard Waste Report.

Disposal in Garbage

Current Market

Annual disposal includes both commercially collected and self-hauled waste from single-family residences. Commercially collected single-family waste quantities are from the 1999 Seattle Waste Composition Study and self-hauled tonnage is from the 1996 Seattle Waste Composition Study

ATTACHMENT II

FOOD WASTE AND COMPOSTABLE PAPER ASSUMPTIONS AND DATA SOURCES

Composting

Current Market

Participating Households

The 1999 survey indicated that 31% (or 48,500) of the 156,500 single-family households in Seattle compost food waste at home (Table 6).

Diversion

Households: The composting households are broken into two types: those that compost food waste in a city-supplied bin, and those that do not use a city-supplied bin. Of the estimated 48,500 households that compost, 15% use a city-supplied bin and 85% compost food with some other type of bin.

Pounds per Household: These estimates are based on a 1995 food waste weighing study where 150 households were asked to weigh their food waste over a 6-month time period. The result was 370 pounds per household per year, of which 81% (or 300 pounds) was considered compostable in the backyard.

For those households composting food in a city-supplied bin, SPU assumes an 80% efficiency rate for an annual diversion estimate of 240 pounds (.8*300) per participating household. For those composting in other (non city-supplied) bins, SPU assumes a 50% efficiency rate for an annual diversion estimate of 150 pounds (.5*300) per participating household.

Future Market

All single-family households in Seattle are considered to be eligible for food waste composting. Sixty-nine percent of these households reported that they are not currently composting food waste, an estimated 108,000 households (table 6). The likely market is comprised of these non participating households that reported that they were “extremely’ or “very likely” to compost food waste in the future (Table 35). Those households that indicated they were “somewhat likely” to compost food in the future (Table 35) are the potential market. Diversion estimates for these future households are based on 240 pounds per household per year (80% of 300 pounds of compostable food waste). Please see above Current Market diversion estimate.

Curbside Pick-up

Future Market

All single-family households in Seattle are considered to be eligible for curbside pick-up of food waste. The likely market is comprised of households that reported that they were “extremely’ or “very likely” to subscribe to curbside collection of food waste in the future (Table 22 and 37).

The potential market is comprised of households that indicated they were "somewhat likely" to subscribe to curbside collection of food waste in the future (Table 22 and 37). Diversion estimates for these future households use 293 pounds of diverted food waste and compostable paper per household per year. This diversion estimate is based on results from the 1995 Seattle Solid Waste Utility Residential Food Waste Curbside Weighing Study.

Grinder Disposal

Current Market

The 1999 Organics Survey indicated that 52% of single-family households have and use a garbage disposal. Annual disposal estimates for grinders assumes 130 lbs. for each household that has a grinder. The 130-pound estimate is from the King County Department of Metropolitan Services Food Waste Discharges to the Wastewater System Study. This study estimated that 35% of food waste in households having grinders is disposed using this appliance and discharged to the wastewater collection system.

Disposal in Garbage

Current Market

Annual disposal includes both commercially collected and self-hauled food waste and compostable paper from single-family residences. Commercially collected single-family waste quantities are from the 1999 Seattle Waste Composition Study and self-hauled tonnage is from the 1996 Seattle Waste Composition Study.

References

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City of Seattle, Department of Engineering, Solid Waste Utility, WASTE STREAM COMPOSITION STUDY 1988-1989, prepared by: The Matrix Management Group, June 1989

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RESIDENTIAL WASTE STREAM COMPOSITION STUDY 1998/99, prepared by Cascadia Consulting Group, February 2000

Seattle Solid Waste Utility, GRASSCYCLING SURVEY, prepared by Elway Research, Inc., February 1997

FOOD WASTE DISCHARGE TO THE WASTEWATER COLLECTION SYSTEM, prepared by E & A Environmental Consultants, Inc., March 31, 1995

II. Research Design

Objectives

Seattle Public Utilities has commissioned this quantitative research to determine the level at which Seattle city residents are currently participating in organic waste management activities--that is, yard waste composting, food waste composting, and grasscycling.

The specific objectives of this research were as follows:

- ❒ To examine the extent to which Seattle residents are involved in organic waste management activities, including:

  - The types of waste management activities in which they currently engage;
  - Primary reasons for composting;
  - Awareness and usage of city-sponsored programs; and,
  - Interest in increased participation of organic waste management activities.

- ❒ To examine the attitudes of behaviors of Seattle residents who are not currently involved in organic waste management activities, including:

  - Awareness of and interest in composting;
  - Primary reasons for not composting or grasscycling;
  - Awareness of and interest in current and potential city-sponsored programs; and,
  - Likelihood of participating in organic waste management activities.

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 city limits of Seattle. Only those living in buildings with four or fewer units were considered eligible; thus, the "universe" was defined as being 62% of all Seattle households.[3]

Technique: Market Trends, Inc. 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 between December and January, 2000, and telephone calls were placed from 4:00 p.m. to 9:00 p.m..

[3] According to the 1990 Census, 62% of all Seattle households are in buildings with four or fewer units.

Questionnaire: FBK Research designed the questionnaire in conjunction with Seattle Public Utilities. The instrument was pilot tested to ensure that the questions included would provide valid and reliable results. The pilot test pointed to certain areas in the questionnaire that seemed to confuse respondents. As a result, major modifications were made and an additional pilot test was conducted. This pilot test revealed that the instrument was solid and only very minor changes were made before it was approved for fielding. (See Appendix 2 for a copy of the survey instrument.)

Sample: The sample for this survey was purchased from Survey Sampling of Connecticut and included a random selection of all working residential exchanges within the City of Seattle, recent to the previous six months. The sample was selected in proportion to the population within each Seattle zip code area. (See Appendix 1 for the disposition of the sample.)

Sample Profile

When interpreting the finds of 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 living in buildings with four or fewer units who were included in the survey. Here, as well as throughout this report, percentages may not sum to 100 because of rounding error, or because of the acceptance of multiple responses.

For comparison purposes, the table below also presents information obtained from the 1995 Seattle Organics Survey.

Table 3: Demographic Data

		January 2000	January 1995
Base:		***Sample of 600***	***Sample of 610***
Gender:	Male	42%	39%
	Female	58%	61%
Age:	18 to 24 years	6%	8%
	25 to 34 years	20%	24%
	35 to 44 years	28%	23%
	45 to 54 years	21%	16%
	55 to 64 years	12%	9%
	65 years or older	12%	17%
Ethnicity:[4]	Caucasian	84%	71%
	African-American	4%	6%
	Asian	5%	10%
	Hispanic/Latino	1%	3%
	Native American	1%	3%
	Other (mixed)	2%	2%
	Don't know/Refused	5%	6%
Dwelling Type:	Single-unit	91%	84%
	Multi-unit	9%	16%
Ownership	Own	77%	71%
	Rent	21%	28%
Number in Household	One	16%	17%
	Two	43%	36%
	Three	18%	21%
	Four	15%	15%
	Five or more	7%	10%
Education:	High school or less	11%	19%
	Some college	24%	26%
	4-year college	39%	28%
	Graduate work	25%	23%
Income:[5]	Under $30,000	10%	NA
	$30,000 to $50,000	21%	NA
	$50,000 to $75,000	24%	NA
	$75,000 to $100,000	15%	NA
	$100,000 or more	15%	NA
	Don't know/Refused	15%	9%

[4] In 1995, specific quotas were set for ethnicity based on census information. No quotas were set during 2000 and, as a result, the percentage of Caucasians may be skewed.

[5] In 1995, 39% of the 610 respondents reported household incomes under $40,000 and 52% reported incomes in excess of $40,000. In 2000, 31% of the 600 respondents reported household incomes under $50,000 and 54% reported incomes in excess of $50,000. Although we are not able to test for significance given the change in categories, it appears that incomes have increased over the five years.

Household Characteristics

Yard waste composting necessitates having a yard--a lawn, a garden, or both--and grasscycling necessitates 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 following table provides this information. To facilitate comparison with the baseline, similar information is presented from the research conducted in 1995.

Table 4: Household Characteristics

		January 2000	January 1995
Base:		*Sample of 600*	*Sample of 610*
Yards:	Yes	96%	95%
	No	4%	5%
Lawns:	Yes	88%	85%
	No	12%	15%
Ever Care for Yard:	Yes	94%	79%
	No	6%	21%
Have a Garden:	Yes	71%	57%
	No	29%	43%
Garden Type:	Food	37%	35%
	Flower	63%	51%
	Other	8%	1%
	Neither	29%	43%

The majority of one to four unit households (96%) have a yard and thus the opportunity to compost yard waste. The majority (88%) also has a lawn and thus the ability to grasscycle.

For the purpose of this study, it was assumed that all households have the opportunity to compost food waste, as all households generate food scraps at home.

Roughly the same percentage of respondents in 2000 as those in 1995 reported that they have a yard and a lawn. However, a significantly higher percentage of the respondents in the 2000 study reported ever caring for their yard (94% versus 79% respectively) and that they had a garden (71% versus 57% respectively). Because there were changes in the survey design, it is not possible to determine the extent to which these changes are a result of changes in behaviors.

Survey Limitations

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 Seattleites living in one to four unit buildings were interviewed. That is, in theory, had all people in the target population 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 question (e.g., 50% "no" and 50% "yes"), and is therefore the maximum error range that can be expected from a sample this size.

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.

Table 5: Survey Subgroups

Subgroup	Number of Interviews	Associated Error Range
Total Sample	600	+/- 4.1%
Yard Waste Composters	274	+/- 6.0%
Food Waste Composters	184	+/- 7.4%
Grasscyclers	327	+/- 5.5%
Yard Waste Only Composters	113	+/- 9.4%
Food Waste Only Composters	23	+/- 20.9%
Compost Both Yard and Food Waste	161	+/- 7.9%
Compost Neither Yard Nor Food Waste	303	+/- 5.7%

This sample excluded any household in which there is no telephone number, or any household in which there is only a cellular telephone number. This sample also excluded any household with a telephone exchange that was issued within six months prior to the purchase of the sample.

The data presented in this report provides a very reliable and valid picture of Seattleites' attitudes and behaviors with regard to organic waste management activities. This data is very useful when assessing the size of the current market and the future potential for program enhancement and expansion. However, it must be kept in mind that this survey cannot predict the future. While great care and the most advanced methods available 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.

III. Current Market: Detailed Findings

Characteristics of the Market

One of Two Seattleites Are Currently Composting

Among the 600 Seattle residents interviewed, about one out of every two (50%) are currently composting yard and/or food waste, and 50% are doing neither.

- 113 (19%) currently compost yard waste but not food waste (referred to as "yard waste only composters" in this report);
- 23 (4%) currently compost food waste but not yard waste (referred to as "food waste only composters" in this report);
- 161 (27%) currently compost both yard and food waste (referred to as "yard and food waste composters" in this report); and,
- 303 (50%) currently do not compost either yard or food waste (referred to as "non-composters" in this report).

Together,

- 274 (46%) currently compost yard waste (and may or may not compost food waste); and,
- 184 (31%) currently compost food waste (and may or may not compost yard waste).

The following table compares this information to that collected in 1995:

Table 6: Current Composting Behavior

	January 2000	January 1995
Base: Total Sample	*Sample of 600*	*Sample of 610*
Yard Waste Only	19%	19%
Food Waste Only	4%	3%
Both Yard and Food Waste	27%	22%
Neither Yard Nor Food Waste	50%	57%
Total Yard Waste	46%	41%
Total Food Waste	31%	25%

Although not statistically significant, the percentage of households that engage in composting behavior seems to be higher today. Five years ago only 41% of qualifying households were composting yard waste while 46% are composting yard waste today. Five years ago only 25% of qualifying households were composting food waste, while 31% are composting food waste today. The percentage of households who compost neither yard nor food waste has decreased from 57% in 1995 to 50% in 2000.

The table below provides information about the demographic characteristics of those who currently compost yard waste, those who currently compost food waste, and those who compost neither. For comparison purposes, the percentages for the total sample are repeated here.

When looking at the characteristics of those who compost, the following highlights emerge:

- The percentages of men and women who compost yard waste match the percentage of men and women in the total sample. However, a significantly higher percentage of food waste composters are women. Sixty-six percent (66%) of all food waste composters are women and only 34% are men.

  Looked at another way, the same percentage of women compost yard waste as males who compost yard waste. However, 35% of all females reported that they compost food waste compared to only 25% of all males who reported the same.

- Those who compost tend to be younger than are those who do not compost. Only 20% of those who compost yard waste are 55 years of age or older, and 17% of those who compost food waste are 55 years of age or older. Twenty-eight percent (28%) of those who compost neither yard nor food waste are 55 years of age or older. Sixty percent (60%) of those who are 55 years of age or older currently compost neither yard nor food waste.

- Those who live in single-unit dwellings are more likely to compost than are those who live in multi-family dwellings. Forty-nine percent (49%) of those who live in single-family units compost neither yard nor food waste, compared to 63% of those who live in multi-family units.

- Those who compost yard and/or food waste tend to have higher levels of education compared to those who do not compost either yard or food waste. Twenty-nine percent (29%) of the yard waste composters and 29% of the food waste composters have gone on to graduate school, while only 21% of those who compost neither yard nor food waste have done the same.

  Looked at another way, 53% of those who have a four-year college degree or less currently do not compost either yard or food waste. Forty-three percent (43%) of those who have completed post-graduate work do not compost either yard or food waste.

Table 7: Profile of Composters

	Total Sample	Yard Waste	Food Waste	Non-Composters
Base[6]: *(Percentage of Sample)*	*(600)* *(100%)*	*(274)* *(46%)*	*(184)* *(31%)*	*(303)* *(50%)*
Gender:				
Male	42% (100%)	41% (44%)	34% (25%)	44% (52%)
Female	58% (100%)	59% (47%)	66% (35%)	56% (49%)
Age:				
Under 25	6% (100%)	7% (47%)	9% (45%)	5% (39%)
25 to 34	20% (100%)	21% (48%)	24% (38%)	17% (44%)
35 to 44	28% (100%)	28% (46%)	26% (28%)	28% (51%)
45 to 54	21% (100%)	23% (49%)	22% (32%)	21% (50%)
55 to 64	12% (100%)	12% (44%)	9% (22%)	14% (56%)
65 or older	12% (100%)	8% (33%)	8% (22%)	14% (64%)
Ethnicity:				
Caucasian	84% (100%)	85% (47%)	86% (32%)	83% (50%)
Asian	5% (100%)	5% (48%)	6% (41%)	4% (41%)
African-American	4% (100%)	1% (18%)	0% (0%)	6% (82%)
Latino	1% (100%)	2% (63%)	2% (37%)	1% (25%)
American Indian	1% (100%)	0% (0%)	0% (0%)	1% (100%)
Mixed (Other)	2% (100%)	2% (50%)	3% (50%)	1% (30%)

[6] 161 respondents compost both yard and food waste; thus, these 161 respondents are included in both categories.

Table 7, cont.

	Total Sample	Yard Waste	Food Waste	Non-Composters
Dwelling Type:				
Single-unit	91% (100%)	94% (47%)	93% (32%)	89% (49%)
Multi-unit	9% (100%)	6% (30%)	7% (22%)	11% (63%)
Home Ownership:				
Own	77% (100%)	78% (46%)	77% (30%)	78% (51%)
Rent	21% (100%)	20% (43%)	22% (31%)	21% (50%)
Number in Household:				
One	16% (100%)	14% (39%)	14% (26%)	18% (58%)
Two	43% (100%)	40% (43%)	40% (29%)	45% (53%)
Three	18% (100%)	20% (50%)	18% (31%)	17% (46%)
Four	15% (100%)	18% (56%)	19% (39%)	13% (43%)
Five or more	7% (100%)	7% (42%)	7% (30%)	7% (49%)
Education:				
High school or less	11% (100%)	8% (32%)	9% (25%)	14% (61%)
Some college/AA Degree	24% (100%)	24% (46%)	25% (32%)	23% (49%)
4-Year college degree	39% (100%)	38% (44%)	36% (23%)	41% (53%)
Graduate work/degree	25% (100%)	29% (54%)	29% (36%)	21% (43%)
Household Income:				
Under $30,000	10% (100%)	5% (24%)	7% (22%)	13% (66%)
$30,000 to $50,000	21% (100%)	25% (53%)	25% (36%)	19% (46%)
$50,000 to $75,000	24% (100%)	26% (48%)	27% (34%)	23% (48%)
$75,000 to $100,000	15% (100%)	17% (54%)	14% (29%)	12% (42%)
$100,000 or more	15% (100%)	12% (38%)	12% (25%)	17% (60%)

Current Yard Waste Behavior

The following table summarizes the yard waste behavior of the total sample of 600 respondents, and compares this information to that learned in the 1995 research. As depicted, 4% of the households did not have a yard in 2000, which compares closely with the 5% in 1995 who reported they did not have a yard.

Table 8: Comparison of Yard Waste Composters, 1995 v. 2000

	January 2000	January 1995
Base: Total Sample	*Sample of 600*	*Sample of 610*
No yard, grass and/or garden	4%	5%
Do not ever care for yard	2%	8%
All yard waste taken to curbside	43%	33%
Compost and use curbside collection	33%	26%
All yard waste composted	13%	15%
Neither compost nor use curbside	6%	13%

The Eligible Yard Waste Composting Market

Only 2% of those in 2000 reported that they never cared for their yard, compared to 8% in 1995. It is here that the data collection method in 2000 differed from that in 1995. The 2% who reported that they never cared for their yard in 2000 were asked to report how they handled their yard waste while the 8% who reported the same in 1995 were not asked. This change was made because people who do not care for their yard may be utilizing curbside services and therefore are able to accurately answer this question.

Still this change in methodology makes it difficult to compare this data with that from 1995. To facilitate direct comparison of the data, the following table depicts the same information based on the eligible market for yard waste composting.

Table 9: Eligible Market for Yard Waste Composting

	January 2000	January 1995
Base: Those who care for yard	*(568)*	*(527)*
All yard waste taken to curbside	45%	38%
Compost and use curbside collection	35%	30%
All yard waste composted	14%	17%
Neither compost nor use curbside	6%	15%

Curbside Service Usage

This data indicates that usage of curbside services has increased between 1995 and 2000. Eighty percent (80%) of the eligible yard waste market in 2000 reported at least some usage of curbside

services compared to only 68% in 1995. The percentage of those who reported that they neither compost nor use curbside services decreased from 15% in 1995 to 6% in 2000.

Looking at all Seattleites living in one to four unit households, the percentage using curbside services increased from 59% in 1995 to 76% in 2000. While there is evidence that usage of curbside service is on an upward trend, part of this difference might be attributed to the difference in data collection methods employed. It is possible that the 8% of those who reported that they did not take responsibility for their yard in 1995 (and were not asked this question) would have reported household usage of curbside services.

Those who do not compost their yard waste are more likely than those who do to report that they use curbside services:

- 88% of those who do not compost yard waste use curbside services and 12% do not; and,
- 72% of those who do compost yard waste use curbside collection and 28% do not.

Use of City-Provided Bin

In total, 72% of all yard waste composters are aware that the city provides a yard waste composting bin. Awareness of the City's program has not changed in the past five years. Seventy-one percent (71%) of the yard waste composters in 1995 reported they were aware that the city provides a yard waste composting bin.

Among the total of all yard waste composters in 2000:

- 32% have a city-provided bin;
- 38% have some other type of bin; and,
- 24% do something else with it.

Among the 32% who have a city-provided bin, 94% actually use that bin. Those who do not use the bin reported that the bin was either broken, or they needed more information about how to use it.

Among the 107 yard waste composters who were aware that the City offers a composting bin but did not own one, the primary reason they reported for not having a city-provided bin was that they already had an alternative system for composting (46%). The following list provides specific details about why respondents did not have a city-provided bin (percentages are based on the 107 respondents who were aware of the City bin distribution program but did not own one of these bins):

- I already have my own system for composting, 46%
- The city-provided bin wasn't big enough, 7%
- It wasn't convenient to pick up the bin, 7%
- No space for the bin, 6%
- Haven't gotten around to getting one, 5%
- Didn't know how to go about getting one, 5%

- Don't generate enough waste to justify a bin, 4%
- Didn't want to pay for it, 4%
- No need for it, 4%
- Requested one but never received it, 3%
- No need because we grasscycle, 2%
- Distribution point was out of bins, 2%
- Too lazy, 2%
- I got one but no longer have access to it, 2%
- The bins are unsightly, 2%

The 185 respondents who compost but do not have a city-provided bin were asked how likely they would be to purchase one in the next year if the cost of the bin was not a consideration. Overall, roughly one-quarter (24%) reported that they were either "extremely" or "very" likely to acquire a new bin within the next year.

When interpreting these results it is important to realize that consumer behavior does not necessarily follow stated intentions. It is for this reason that various industries have developed discount factors to estimate the percentage of people who might actually behave in the way they stated. The effectiveness of these discount factors has never been tested with composting behavior. Furthermore, usage of discount factors assumes that there will be no marketing campaign or other external factor that would influence behavior. Still, it may be useful to apply one discounting method that has been used effectively by other industries in order to examine the percentage of respondents who are likely to behave in the fashion investigated here.[7]

If we assume that 75% of those who say they are "extremely" likely and 33% of those who say they are "very" likely will actually purchase a bin, then 11% of all composters are likely to purchase a composting bin within the next year (without considering cost).

Those who were at least somewhat likely (or did not know how likely they were) to get a bin were asked how likely they would be to purchase one from the city for $20 within the next year. The following table presents the percentage of respondents giving each response, first assuming that cost was not a consideration and then assuming that the bin would cost $20.

[7] These discount factors were developed by researchers and tested (at least) by a local health care institution. The method is to assume that 75% of those who claim they are "extremely" likely and 33% of those who are "very" likely will actually engage in any given behavior. Caution should be used when interpreting these findings as the discounts have not been tested with composting behaviors.

Table 10: Likelihood of Purchasing a City Yard Waste Bin

	Percent Likely w/o Considering Cost	Percent Likely At $20 per Bin
Base: YW Composters Without City Bin	*(100%)*	*(100%)*
Extremely likely	7%	8%
Very likely	17%	9%
Somewhat likely	16%	18%
Not very likely	28%	4%
Not at all likely[8]	30%	58%

The percentage of respondents who reported that they were either "extremely" or "very" likely to purchase a bin drops from 24% when cost is not considered to 17% when the cost is stated as $20. This decrease is not statistically significant and it is interesting that there is no change in the percentage that report that they are "extremely" likely.

If we use the same discounts here, the data indicates that roughly 9% of the yard waste composters without a bin are likely to purchase one at a cost of $20. That the likelihood only decreases two percentage points (from 11% to 9%) indicates that the cost of $20 is probably perceived appropriate and reasonable.

Co-Composting Behavior

Fifty-two percent (52%) of the 161 respondents who currently compost both yard and food wastes commingle the two materials. This is down from 63% in 1995. In seems that usage of different bins or different methods for the two types of materials is on the rise.

Lawn Care Activities and Behaviors

Eighty-eight percent (528) of the 600 respondents interviewed here live in households that have a lawn. These 528 respondents were asked to describe their yard care activities and behaviors.

When asked what was typically done with the grass clippings when their lawn was mowed, 43% of these 528 respondents reported that they typically left their grass clippings on the lawn. Roughly one-third (33%) reported that they rake or bag their clippings and take them to the curb and 26% reported that they typically compost their grass clippings. Twelve percent (12%) reported that they either leave the decision up to their landscaper or do not mow their grass.

[8] These respondents were not asked this question; rather, they reported that they were not likely to acquire any new bin regardless of cost.

Table 11: Typical Disposal of Grass Clippings

		Yard Waste Composting Behavior	
	Total	Yes	No
Base: Those with a lawn	*(528)*	*(256)*	*(272)*
Leave grass clippings on the lawn	43%	49%	36%
Rake or bag and take to curb	33%	19%	47%
Compost	26%	47%	6%
Nothing (landscaper/don't mow)	12%	6%	17%
Rake or bag and take to transfer station	2%	1%	4%
Passive compost (pitch into woods)	2%	1%	3%

Those who compost their yard waste either leave their grass clippings on the lawn (49%) or compost them (47%). Those who do not compost yard waste either take their grass clippings to the curb (47%) or leave them on the lawn (36%).

The 249 respondents who reported some behavior other than leaving their grass clippings on the lawn were asked if their household ever left its grass clippings on the lawn when it was mowed. The following table summarizes the percentage of households that grasscycle.

Summary of Grasscycling Behavior

Table 12: Grasscycling Behavior

		Yard Waste Composting Behavior	
	Total	Yes	No
Base: Those with a lawn	*(528)*	*(256)*	*(272)*
Typically grasscycle	43%	49%	36%
Ever grasscycle	19%	21%	18%
Total grasscycling behavior	**62%**	**70%**	**54%**
Never grasscycle	38%	30%	46%

Yard waste composters are significantly more likely than their counterparts to report that they ever grasscycle.

Data obtained from the 1995 Home Organics Survey indicated that 46% of those who had a lawn ever left their grass clippings on the lawn. Data from the 1997 Grasscycling Survey indicated that 52% of households with a lawn ever left their grass clippings on the lawn. In 2000, 62% of the households indicated that they grasscycled. The percentage of households with lawns who ever grasscycle has significantly increased over the five year period.

To understand when people tend to leave their grass clippings on the lawn, respondents who ever grasscycled were asked to report if they "regularly," "occasionally," "rarely" or "never"

grasscycled in spring, summer and fall. There are no significant differences between those who compost and those who do not; thus, only the information for the total sample is presented below:

Table 13: Frequency of Leaving Grass Clippings on Lawn

	Spring	Summer	Fall
Regularly	60%	63%	56%
Occasionally	26%	21%	19%
Rarely	6%	7%	11%
Never	3%	5%	9%

It is curious to note that, although not significant, respondents tend to report that they leave grass clippings on the lawn less frequently in the fall. It may be true that factors other than the growth of the grass are at play—for example, leaves may create a perceived need to handle the grass clippings in some fashion other than leaving them on the lawn.

Usage of and Interest in Purchasing Mulch Mowers

Among the 519 respondents (87% of the total sample) who have a lawn and mow it, 149 (29%) reported that they typically use a mulch mower to mow their household's lawn.

The 370 respondents who do not currently use a mulch mower were asked how interested they might be in purchasing a new one within the next year or so. All respondents were asked to assume that the new mulch mower would be made by a well-known mower manufacturer and would be sold for about one-third off the retail list price.

Table 14: Likelihood of Purchasing Mulch Mower

		Grasscycling Behavior[9]		
	Total	Yes, Ever	Never	Cannot
Base: Those without mulch mower	*(370)*	*(208)*	*(114)*	*(47)*
Extremely likely	2%	2%	2%	2%
Very likely	10%	12%	9%	2%
Somewhat likely	19%	18%	25%	15%
Not very likely	32%	32%	32%	34%
Not at all likely	33%	32%	27%	47%

Overall, the likelihood of purchasing a new mulching mower in the next year is not very high. Only 2% of these respondents reported that they were "extremely" likely to purchase one and 10% reported that they were "very" likely to purchase one. That likelihood of purchasing a mulching mower is this moderate may reflect a lack of interest in or perceived need for any type of mower.

[9] Those in the column titled "Yes, Ever" are those who ever leave clippings on the lawn. Those in the column title "Never" use some method other than grasscycling to manage their clippings. Those in the column titled "Cannot" are those who do not manage their own grass clippings--either they hire it out or they don't mow their lawn.

The likelihood of purchasing a mulch mower is just as high among those who ever grasscycle as it is among those who never (but could) grasscycle. It is those who either do not mow or have someone else haul away their clippings that are least likely to purchase a mulch mower.

In applying the discounts, this data indicates that an estimated 5% of those who do not have a mulching mower are likely to purchase one in the next year.

Those who were less than "extremely likely" to purchase a mulch mower were asked how their interest in purchasing a mulch mower might change if they knew that mulch mowers make mowing the lawn easier, they create less air pollution, they help fertilize the lawn, they do not cause thatch and they leave the lawn looking healthy. The following table presents the increase in interest with this information (percentages are based on the 370 respondents who have a lawn but no mulch mower, and those who said "extremely likely" to the previous question are recorded as being "extremely likely" here):

Table 15: Likelihood of Purchasing Mulch Mower with More Information

		Grasscycling Behavior		
	Total	Yes, Ever	Never	Cannot
Base: Those without mulch mower	*(370)*	*(208)*	*(114)*	*(47)*
Extremely likely	6%	5%	8%	4%
Very likely	14%	17%	12%	2%
Somewhat likely	23%	22%	26%	23%
Not very likely	29%	29%	27%	32%
Not at all likely	27%	26%	25%	38%

Although not statistically significant, this data indicates that there may be a trend showing an increase in the likelihood to purchase a mulching mower when information about the benefits of these types of mowers is provided. Whereas 12% of those without a mulching mower were at least "very" interested without knowing these benefits, 20% became at least "very" interested after learning about the benefits. Among those who ever leave grass clippings on the lawn, 14% were at least "very" interested without knowing the benefits, and 22% were at least "very" interested after learning about the benefits. Among those who never leave grass clippings on the lawn (but could), 11% were at least "very" interested without knowing the benefits, and 20% were at least "very" interested after learning the benefits.

After discounting the data to reflect the extent to which we might expect behaviors to follow intentions, we might expect that about 14% of these households might purchase a mulching mower. This is up substantially from the 5% who were interested without being provided information about the associated benefits.

Awareness of Mulch Mower Event

The 519 respondents who have a lawn and mow it were asked if they recalled seeing or hearing anything about an event put on by local government organizations at which mulching mowers were sold at discounted prices. Overall, one-third (30%) did recall this event.

Those who ever leave grass clippings on the lawn were significantly more likely than their counterparts to recall this event. Thirty-three percent (33%) of those who ever leave clippings on the lawn were able to recall the event versus 24% of those who never leave grass clippings on the lawn.

Respondents were asked whether they had ever attended one of these events, and if so, whether they had purchased a mulching mower at the event. The following table summarizes this information:

Table 16: Even Recollection, Attendance and Purchase

		Grasscycling Behavior		
	Total	Yes, Ever	Never	Cannot
Base: Have and mow lawn	*(519)*	*(327)*	*(140)*	*(52)*
Yes, recall hearing about event	30%	33%	23%	25%
Yes, have attended an event	3%	4%	1%	4%
Yes, have purchased a mower	1%	2%	0%	0%

154 (30%) of the 519 respondents who mow their lawn were able to recall hearing about this event. Awareness of this event does not differ based on how respondents manage their lawn clippings.

Among the 154 aware respondents:

- 10% reported that they had attended one of these events; and,
- 3% reported that they had purchased a mulch mower at one of these events.

The 519 respondents who mow their lawn were asked how likely they would be to attend (another) mulch mower event within the next six months or so. Respondents were told that the event would be held at a large facility (such as the Northgate parking lot) and would include discounts on mulching mowers, staff who can give information on mulch mowing, the design and use of mulching lawn mowers, and natural lawn care. The following table provides the percentage of respondents who are likely to attend such an event.

Table 17: Likelihood of Attending Mulch Mower Event

		Grasscycling Behavior		
	Total	Yes, Ever	Never	Cannot
Base: Those who mow lawn	*(519)*	*(327)*	*(140)*	*(52)*
Extremely likely	4%	5%	4%	0%
Very likely	13%	13%	12%	10%
Somewhat likely	26%	28%	26%	19%
Not very likely	24%	24%	22%	27%
Not at all likely	32%	30%	32%	44%

Overall, likelihood of attending such an event is moderate and does not depend on the extent to which one is currently leaving grass clippings on the lawn. Overall, one out of every six households (17%) reported that they were either "extremely" or "very" likely to attend one of these events.

Interest in attending an event like this is just as high among those who currently own a mulching mower as those who do not:

- 15% of those who currently own a mulching mower are at least "very" likely to attend this event, versus
- 18% of those who do not currently own a mulching mower.

While not statistically significant, those who compost either food or yard waste show the tendency to be more likely to attend a mulching mower event than are those who do not compost either food or yard waste. The following table provides these percentages:

Table 18: Likelihood of Attending Mulch Mower Event

	Total	Compost Yard &/or Food Waste	Compost Neither Yard nor Food
Base:	(519)	(265)	(254)
Extremely likely to attend	4%	5%	3%
Very likely	13%	16%	9%
Somewhat likely	26%	27%	26%
Not very likely	24%	22%	26%
Not at all likely	32%	29%	35%

Twenty-one percent (21%) of those who compost either yard or food waste are at least "very" likely to attend while only 12% of those who compost neither are at least "very" likely to attend. Those who currently compost both yard and food waste are the most likely—27% of these people reported that they were at least "very" likely to attend (and this percentage is significantly higher than the 12% who compost neither).

Current Food Waste Behavior

The Eligible Food Waste Composting Market

The eligible market for managing food waste is considered to be 100% of the sample since all households generate food scraps. The following table presents a summary of how the total market currently manages its food waste, and the data is compared to the same information learned in 1995.

Table 19: Food Waste Behavior

	January 2000	January 1995
Base: Total Sample	*Sample of 600*	*Sample of 610*
Compost food waste only	18%	14%
Use a disposal only	39%	33%
Both compost and use a disposal	13%	11%
Neither compost nor use a disposal	29%	43%

This data indicates that, over the five-year period from 1995 to 2000, more respondents are both using their garbage disposal and composting food scraps as a means of managing kitchen-generated organic waste. While 43% of the 610 respondents in 1995 reported that they neither composted their food scraps nor used a garbage disposal, only 30% of the 600 respondents in 2000 reported the same. Use of composting as a means of getting rid of food scraps has increased by 6% and use of the garbage disposal has increased 8%.

Thirty-one percent (31%, 184 people) reported that they currently compost at least some of their household's food waste. This compares to 25% who said the same in 1995.

Among these 184 respondents who are composting food waste:

- 161 (88%) are currently composting both yard and food waste; and,
- 23 (12%) are currently composting only food waste.

Disposal Usage

Among the 309 respondents (52% of the total sample of 600) who have and use a garbage disposal:

- 24% currently compost their food waste; and,
- 76% do not compost their food waste.

Among the 291 respondents (48% of the total sample of 600) who do not use a garbage disposal:

- 38% currently compost their food waste; and,
- 62% do not compost their food waste.

Over the five-year period from 1995 to 2000, the percentage of households using a garbage disposal who also compost their food waste has not changed (25% in 1995 and 24% in 2000). However, the percentage of respondents without disposals who do compost their food waste has significantly increased (25% in 1995 compared to 38% in 2000). It appears that the increase in overall food waste composting behavior between the five years (from 25% in 1995 to 31% in 2000) can be attributed primarily to those who do not have and use garbage disposals.

Primary Reasons for Composting

The 184 respondents who currently compost their food waste were asked to explain their primary reasons for doing so. The following list presents these responses (percentages are based on the 184 respondents who compost food waste):

- So that I can use it in the garden/It adds nutrients to the soil, 66%
- It cuts down on waste/It cuts down on my garbage, 36%
- It's good for the environment, 14%
- It's economical/I can use a smaller garbage can, 5%
- It's the right thing to do, 4%
- I believe in recycling, 4%
- It's habit/I've been doing it for a long time, 3%
- I don't like to waste anything, 3%
- It's easy to do, 3%
- I don't have a garbage disposal, 2%
- It doesn't cause the garbage to smell, 2%
- It's convenient, 2%
- We have so few kitchen scraps it's not a big deal, 2%

This data indicates that two-thirds (66%) of all food waste composters compost their food waste in order to use it in their garden. A significant percentage (36%) mentioned that they compost because it cuts down on waste they would otherwise put in their garbage.

Use of City-Supplied Bins

Among the 184 food waste composters, 19% have a city-provided bin and 15% use it.

Among those who have a city-supplied bin and use it (32 people):

- 88% reported having a green cone; and,
- 6% reported having a worm bin.

The 156 respondents who compost their food waste but do not use a city-provided bin were asked how likely they would be to purchase one in the next year at a cost of $20. Respondents were told that the bin would most likely be a green plastic cone standing about two and one-half feet tall.

Table 20: Likelihood of Purchasing Green Cone at $20

	Frequency	Percent
Base: Compost FW without city bin	*(154)*	*(100%)*
Extremely likely	16	10%
Very likely	24	15%
Somewhat likely	32	21%
Not very likely	40	26%
Not at all likely	38	24%

Roughly one-quarter (25%) of these food waste composters without a city-provided bin were at least "very" interested in purchasing a $20 city-provided bin within the next year.

When the discount factors are applied to this data in the absence of a marketing campaign, it is estimated that about 13% of these respondents would follow through with the purchase of a $20 city-provided food waste composting bin.

Co-Composting Behavior

Forty-eight percent (48%) of the 184 respondents who currently compost food waste are commingling their food waste with their yard waste.

- Mix food waste with yard waste, 48%
- Have a separate food waste bin or container, 42%
- Bury it or put it in garden without a container, 7%

Fifty-two percent (52%) of the 161 who compost both food and yard waste are commingling these materials.

Relative Use of Garbage Disposals

Fifty-two percent (52%) of the total sample of 600 respondents have a garbage disposal. A significantly higher percentage of those who do not compost food waste reported having a garbage disposal than those who do compost food waste (57% versus 41% respectively).

The following table depicts the frequency with which garbage disposals are used. Information is presented for those who currently compost food waste as well as those who currently do not compost food waste.

Table 21: Garbage Disposal Use

		Food Waste Composting Behavior	
	Total	Yes	No
Base: Total Sample	*(600)*	*(184)*	*(416)*
Have a garbage disposal	52%	41%	57%
Frequency of Use:			
Base: Those w/ disposal	*(312)*	*(75)*	*(237)*
Several times a day	37%	19%	43%
Once a day	30%	35%	28%
A few times a week	17%	17%	16%
Once a week	7%	11%	6%
Less frequently	8%	17%	6%
Never	1%	1%	1%

Food waste composters with a garbage disposal are using their garbage disposal less frequently than non-food waste composters with a garbage disposal:

- Only 54% of food waste composters use their garbage disposal at least once a day compared to 71% of non-food waste composters.

In comparing this information with that from 1995, it appears that usage of garbage disposals is on the rise. Only 43% of the study population in 1995 reported having a garbage disposal, and 52% of those in the 2000 study reported having one. It may be true that the percentage of households with garbage disposals is increasing over time.

Respondents who used their garbage disposal less often than a few times a week were asked why they didn't use it more often. The following list presents their responses (percentages are based on 102 respondents who have a disposal and use it less often than a few times a week):

- No need—we don't have very much food waste, 32%
- We prefer to compost our food waste, 22%
- Possibility of food waste clogging the drains or pipes, 19%
- No need—we don't eat at home very often, 10%
- No need (general)—we use it as often as we need to, 7%
- Usually just throw food scraps in the garbage, 6%
- Don't like putting that waste into the sewer, 5%

Interest in Curbside Collection of Food Waste

The 184 respondents who currently compost their food waste were asked to report their interest in a city-provided curbside pickup service for food waste. Respondents were told that:

"Households that participate would be asked to separate all food waste including dairy and meat products, and also used paper towels, paper plates, tissue and waxed paper. Participating households would receive a container with a tight fitting lid in which to store these food waste and paper items. Each week, households would be requested to place their food waste storage container at the curbside or alley on the same day as their regular garbage is collected. The food scraps would be delivered to a food waste composting facility."

Respondents were asked to rate their likelihood of using this service using a five-point scale from "extremely" to "not at all" likely. The table below presents their responses and assumes that there would be no charge for this service.

These results indicate that these food waste composters have an interest in a curbside collection program for food waste. Overall, if the city did not charge for it, roughly one-half (52%) of those who compost food waste are at least "very" interested in curbside collection of food waste.

Applying the discounts, we might expect to see about 29% of the food waste composters sign up for curbside collection of food waste.

The 46 respondents who did not express an interest in this curbside pick-up service were asked to explain their primary reasons:

- 65% reported that they were not interested because they want to compost their food waste; and,
- 13% stated that this service sounded like too much work.

Respondents who were at least "somewhat" interested in curbside pickup of food waste (or who didn't know how interested they were) were asked to report how likely they would be to participate in this program if the city were to charge $2.00 per month (or $4.00 per billing cycle).

The following table presents the percentage of all food waste composters who are interested in curbside pickup of food waste if the city did not charge, and if the city charged $2.00 per month. For the purposes of this table, those who previously reported that they were not interested in the service at no charge are assumed to be "not at all" likely to participate at a charge of $2.00 per month.

Table 22: Likelihood To Use Curbside Pick-Up Service for Food Waste

	% likely to use service w/o considering cost	% likely to use service at $2.00/month
Base: Food Waste Composters	*(184)*	*(100%)*
Extremely likely	29%	14%
Very likely	23%	19%
Somewhat likely	20%	20%
Not very likely	11%	11%
Not at all likely	14%	34%

Even at a charge of $2.00 per month, a significant percentage of food waste composters are interested in curbside collection of food waste. Roughly one-third (33%) of the 184 respondents composting their food waste reported that they would be "extremely" or "very" likely to participate.

With the discounts, about 16% of the food waste composters might be expected to show an interest in curbside collection at a cost of $2.00 per month. Although 16% still shows a high level of interest, the information that the program might cost $2.00 per month seems to discourage several people. The discounted interest went from 29% when the program was free to 16% when the program required a monthly expense of $2.00.

The 96 food waste composters who were at least somewhat likely to participate in curbside pickup of food waste at a cost of $2.00 per month were asked how they would manage their food waste if this service was available:

- Roughly three-quarters (72%) reported that they would still compost at least some of their food waste at home; and
- One-quarter (26%) reported that they would put all of their food waste at the curb.

Awareness and Usage of City Programs

Compost Hotline

Awareness and usage of the City's Compost Hotline has not changed over the past five years. Thirty-percent (30%) of Seattleites in one to four unit dwellings were aware of the Compost Hotline in 1995 and 31% are aware of it today. Eighteen percent (18%) reported that they had called the Compost Hotline in 1995 and 20% reported the same in 2000.

Table 23: Awareness and Usage of Compost Hotline

		Composting Behavior			
	Total	YW Only	FW Only	Both YW and FW	Non-Composters
Base: Total Sample	*(600)*	*(113)*	*(23)*	*(161)*	*(303)*
Awareness:					
Yes	31%	29%	30%	45%	25%
No	68%	69%	70%	55%	75%
Ever called:	(187)	(33)	(7)	(72)	(75)
(Based on total sample of 600)					
Yes	6%	7%	17%	14%	1%
No	94%	93%	83%	86%	99%

Composters are significantly more likely than non-composters to be aware of, and to have used the Compost Hotline. Overall, 38% of those who compost either yard or food waste are aware of the Compost Hotline, while only 25% of those who do not compost are aware of this resource. Thirty-percent (30%) of the composters who are aware of the Compost Hotline have ever called it, while only 5% of the aware non-composters have ever called this number.

The total sample of 600 respondents were asked how likely they, or someone in their household, might be to call the Compost Hotline in the future.

Table 24: Likelihood of Calling Compost Hotline in Future

		Composting Behavior			
	Total	YW Only	FW Only	Both YW and FW	Non-Composters
Base: Total Sample	*(600)*	*(113)*	*(23)*	*(161)*	*(303)*
Extremely likely	8%	4%	13%	14%	7%
Very likely	20%	27%	22%	29%	13%
Somewhat likely	34%	34%	35%	32%	34%
Not very likely	23%	16%	13%	18%	29%
Not at all likely	14%	18%	13%	6%	16%

Those who compost either yard or food waste are significantly more likely than their counterparts to report being likely to call the Compost Hotline in the future. Thirty-eight percent (38%) of those who compost are at least "very" likely to call this number in the future compared to only 20% of those who do not compost.

Master Composters

The total sample of 600 respondents were told that the City has volunteers, called Master Composters, who can staff events, make presentations, and answer questions about composting.

The following table presents the percentage of respondents who are aware of the Master Composters:

Table 25: Aware of Master Composters

		Composting Behavior			
	Total	YW Only	FW Only	Both YW and FW	Non-Composters
Base: Total Sample	*(600)*	*(113)*	*(23)*	*(161)*	*(303)*
Yes	26%	27%	22%	45%	15%
No	74%	72%	74%	55%	85%

Those who compost either yard or food waste are significantly more likely to be aware of the Master Composters than those who do not compost at all (36% versus 15% respectively). Those who compost both yard and food waste are more likely to be aware of this service than are those who compost one or the other.

IV. Potential Market: Detailed Findings

Potential Yard Waste Market

Fifty-two percent (52%) of Seattle households with a yard currently are not composting yard waste.

- About nine in ten of these households (88%) are using yard waste curbside services.

The most frequently mentioned reasons for not composting yard waste are presented below:

- Don't have the space to do it/No place to put the bin, 22%
- Don't have the time, 12%
- Don't have much yard waste, 10%
- Don't know how to do it/Need more information, 9%
- Too much work/It's a hassle/It's too difficult, 8%
- Easier to put it at the curb/Easier to pay the City to collect it, 8%
- Have no use for the end product, 6%
- Concerned about attracting animals, 5%
- I hire someone to take care of that, 5%
- Not set up for it/Don't have a bin, 5%

Those who were not composting their yard waste 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. Roughly one in five (21%) reported that they were at least "very" likely to consider it within the next year if provided this type of information.

Table 26: Likelihood to Compost if Provided More Information

	Frequency	Percent
Base: Those who do not compost yard waste	*(294)*	*(100%)*
Extremely likely	21	7%
Very likely	41	14%
Somewhat likely	97	33%
Not very likely	69	23%
Not at all likely	55	19%

To help understand the barriers to yard waste composting, the following lists present the primary reasons that respondents gave for not composting their yard waste.

Among the 21 non-yard waste composters who reported that they were "extremely" likely to compost in the future:

- 19% reported that they do not compost now because they just moved in and haven't set up the system yet;
- 19% reported that they intend to compost but just haven't gotten around to it yet;
- 19% reported that they don't feel they have the time to compost;
- 14% reported that they don't have the space to compost; and,
- 10% reported that they don't know how to compost.

Among the 41 non-yard waste composters who reported that they were "very" likely to compost in the future:

- 29% reported that they don't have the space to compost;
- 15% reported that they don't know how to compost;
- 7% reported that they don't have the time to compost;
- 7% reported that they do not have a compost bin; and,
- 7% reported that it's easier to put yard waste at the curb for collection.

Among the 97 non-yard waste composters who reported that they were "somewhat" likely to compost in the future:

- 25% reported that they don't have the space to compost;
- 11% reported that they don't have much yard waste to compost;
- 10% reported that they don't know how to compost;
- 9% reported that they don't have the time to compost; and,
- 8% reported that it's easier to put yard waste at the curb for collection.

To affect a greater share of the total market that is composting yard waste, it seems that it may be beneficial to help non-yard waste composters understand how easy and time-efficient composting can be. In addition, it may be beneficial to make available composting bins that are perceived compact enough to fit in small places.

Bin Distribution

Forty-nine (17%) of the 294 respondents who do not currently compost their yard waste have a composting bin they could use, and 23 (8%) have a city-provided bin they could use if they wanted to compost.

Among those who do not have a city-provided bin (271 respondents), 37% are aware that the City offers a yard waste bin for about $20.

The 99 respondents who were aware that the city-provided a bin but who do not have one were asked why they didn't get one. The following list presents their primary reasons (percentages are based on these 99 respondents):

- Have no space/No place to put one, 20%
- Don't want the animals it will attract, 10%
- Not interested in composting/Don't have a need for it, 9%
- Don't know where to get one/Don't know enough about the program, 9%
- No need/No desire/No use (general), 9%
- We're paying for curbside service instead, 7%
- We don't have much yard waste/Not worth our while, 7%
- Just don't have the time to compost, 4%
- Never thought about it before, 4%
- Have had negative experiences with bins, 4%

Space and pest issues top the list as reasons for not getting a city-provided composting bin. These reasons seem to have little to do with the bin itself; rather, they are likely to be reasons for not composting.

The 239 respondents who do not compost and reported that they were not strongly opposed to doing so were asked how likely they would be to purchase a bin in the next year if cost was not a consideration.

Table 27: Likelihood of Purchasing Bin without Considering Cost

	Frequency	Percent
Base: Non-composters who are not strongly opposed to composting in the future	*(239)*	*(100%)*
Extremely likely	16	7%
Very likely	37	15%
Somewhat likely	64	27%
Not very likely	76	32%
Not at all likely	43	18%

Overall, about one in five (22%) of those who do not compost yard waste and are not strongly opposed to doing so reported that they were at least "very" likely to purchase a bin if cost was not a consideration.

In applying the discounts, it is estimated that roughly 10% of these non-composters might actually purchase a bin if cost was not a consideration.

Those who were at least somewhat likely (or did not know how likely they were) to get a bin were asked how likely they would be to purchase one from the city for $20 within the next year. Respondents were told that the bin would be made of black plastic, stand about 30" tall, and would be round at the base and would taper toward the top. They were also told that the bins would be available at central distribution points throughout the City.

Table 28: Likelihood of Purchasing a $20 Yard Waste Bin

	Frequency	Percent
Base: Non-composters who are not strongly opposed to composting in the future	*(239)*	*(100%)*
Extremely likely	10	4%
Very likely	27	11%
Somewhat likely	65	27%
Not very likely	14	6%
Not at all likely[10]	119	50%

Fifteen percent (15%) of these 239 respondents reported that they would be "extremely" or "very" likely to purchase a compost bin from the City for $20.

In applying the discounts, it is estimated that roughly 7% of these non-composters might actually purchase a city-provided bin for $20. While these non-composters seem a little more price sensitive than the composters do, this data suggests that $20 is still considered a reasonable price. Three percent (3%) reported that, while they would get a bin if it was free, they would not get one if it cost $20.

Potential Grasscycling Market

As the following table shows, 38% of the 528 respondents who have a lawn reported that they never leave grass clippings on the lawn.

[10] These respondents were not asked this question; rather, they reported that they were not likely to acquire any new bin regardless of cost.

Table 29: Summary of Grasscycling Behavior

		Yard Waste Composting Behavior	
	Total	Yes	No
Base: Those with a lawn	*(528)*	*(256)*	*(272)*
Typically grasscycle	43%	49%	36%
Ever grasscycle	19%	21%	18%
Total grasscycling behavior	**62%**	**70%**	**54%**
Never grasscycle	38%	30%	46%

Respondents were asked to report why they did not leave their grass clippings on the lawn. The following chart presents their primary reasons[11]:

Table 30: Primary Reasons For Not Grasscycling

		Yard Waste Composting Behavior	
	Total	Yes	No
Base: Those who never grasscycle	*(201)*	*(76)*	*(125)*
Landscaper/Other hauls them away	29%	21%	34%
Don't like the way it looks	22%	29%	18%
Don't have a mulching mower	8%	11%	7%
Use the mower's bag catcher	6%	12%	3%
Not good for the grass	6%	5%	6%
Use the clippings for compost	5%	12%	2%
Don't want to track grass into house	5%	5%	5%
Habit/Have always done it this way	4%	1%	6%
Don't mow the lawn	4%	5%	4%

The two primary reasons for never leaving grass clippings on the lawn are that someone else takes the responsibility for hauling them away (29%) and that it is not aesthetically appealing (22%). Those who do not grasscycle but do compost their yard waste are more concerned about the aesthetics than are their counterparts (29% versus 18% respectively).

The 185 respondents who mow their lawn but never leave grass clippings on the lawn were asked how likely they would be to leave those clippings on the lawn in the future if they had more information about it. Respondents were told that grasscycling would make lawn mowing easier, it would not cause thatch, and the lawn would maintain a clean and healthy appearance.

[11] Percentages in this table do not add to 100% for two reasons. First, response categories mentioned by fewer than 4% of the population have not been listed here. Second, respondents were allowed to provide more than one answer.

Table 31: Likelihood of Leaving Grass Clippings on Lawn with More Information:

		Yard Waste Composting Behavior	
	Total	Yes	No
Base: Mow, but don't grasscycle	*(185)*	*(68)*	*(117)*
Extremely likely	10%	6%	13%
Very likely	21%	25%	18%
Somewhat likely	28%	29%	27%
Not very likely	19%	15%	22%
Not at all likely	18%	22%	16%

Overall, roughly one third (31%) of the households that mow but do not leave grass clippings on the lawn report that they are at least "very" likely to grasscycle if they had more information about it. Those who compost their yard waste are just as likely to be influenced by this type of information as those who do not (31% of both groups reported they were at least "very" likely).

Usage of and Interest in Purchasing Mulch Mowers[12]

As previously reported, overall interest in purchasing a new mulching mower is not very high. Only 2% of the 519 respondents who mow their lawn reported that they were "extremely" interested and 10% reported that they were "very" interested. This general lack of interest may reflect more a lack of need for a new lawn mower than a disinterest in grasscycling.

Interest in purchasing a mulch mower is just as high among those who ever grasscycle as it is among those who never (but could) grasscycle. It is those who either do not mow or have someone else haul away their clippings that are least interested in purchasing a mulch mower.

Table 32: Likelihood of Purchasing Mulch Mower

		Grasscycling Behavior		
	Total	Yes, Ever	Never	Cannot
Base: Those without mulch mower	*(370)*	*(208)*	*(114)*	*(47)*
Extremely likely	2%	2%	2%	2%
Very likely	10%	12%	9%	2%
Somewhat likely	19%	18%	25%	15%
Not very likely	32%	32%	32%	34%
Not at all likely	33%	32%	27%	47%

There is some receptivity to being provided more information about the benefits of owning a mulching mower. Interest in purchasing a mulching mower increases when told that a mulch mower makes it easier to mow the lawn, causes less air pollution, helps fertilize the lawn, that it does not cause thatch, and it leaves your lawn looking healthy.

[12] Please refer to the section on mulch mowers under "Current Market" for more detailed information and tables.

Table 33: Likelihood of Purchasing Mulch Mower with More Information

		Grasscycling Behavior		
	Total	Yes, Ever	Never	Cannot
Base: Those without mulch mower	*(370)*	*(208)*	*(114)*	*(47)*
Extremely likely	6%	5%	8%	4%
Very likely	14%	17%	12%	2%
Somewhat likely	23%	22%	26%	23%
Not very likely	29%	29%	27%	32%
Not at all likely	27%	26%	25%	38%

Whereas 12% of those without a mulching mower were at least "very" interested without knowing these benefits, 20% became at least "very" interested after learning about the benefits. Among those who ever leave grass clippings on the lawn, 14% were at least "very" interested without knowing the benefits, and 22% were at least "very" interested after learning about the benefits. Among those who never leave grass clippings on the lawn (but could), 11% were at least "very" interested without knowing the benefits, and 20% were at least "very" interested after learning the benefits.

Awareness of Mulch Mower Event

Roughly one-quarter of those who never (or can't) leave grass clippings on their lawn (23%) were aware of an event sponsored by local government organizations at which mulch mowers are sold at discounted prices. Two percent (2%) of these 192 respondents have ever attended one of these events.

The 370 respondents without a mulch mower were asked how likely they might be to attend (another) mulch mower event within the next six months or so. Respondents were told that the event would be held at a large facility (such as the Northgate parking lot) and would include discounts on mulching mowers, staff who can give information on mulch mowing, the design and use of mulching lawn mowers, and natural lawn care. The following table provides the percentage of respondents who are likely to attend such an event.

Table 34: Likelihood of Attending Mulch Mower Event

	Frequency	Percent
Base: Those without mulch mowers	*(370)*	*(100%)*
Extremely likely	15	4%
Very likely	50	14%
Somewhat likely	103	28%
Not very likely	81	22%
Not at all likely	116	31%

Interest in attending an event is moderate--roughly one in five (18%) reported that they were at least "very" likely to attend.

Potential Food Waste Composting Market

Sixty-nine percent (69%) of Seattle households are not currently composting their food waste.

- Fifty-seven percent (57%) of these non-composters have a garbage disposal, and 71% of those with a garbage disposal are using it at least once a day.

The primary reasons for not composting food waste are presented below (percentages are based on the 416 respondents who do not compost food waste):

- Concerned about attracting animals, 19%
- Don't have much food waste, 14%
- Not aware that food waste can be composted, 13%
- Have a garbage disposal, 10%
- Lack of space for the bin, 7%
- Don't have enough time to compost food waste, 6%
- Have no use for the compost/Don't know what to do with it, 5%
- Concerned about odors, 5%
- Never gave it any thought, 4%
- Do not have a container or a bin, 4%
- It's not convenient to compost food waste, 4%
- Don't know how to do it, 4%

Bin Distribution

Among the 416 respondents who are not composting their food waste, 87% are aware that food waste can be composted.

- 6% of these respondents who are aware that food waste can be composted have a food waste composting bin; and,
- 4% have a city-provided food waste composting bin.

The 416 respondents who do not compost food waste were asked how likely they might be to do so in the next year if they were provided more or better information on how to do it easily and make it pest-free. The following table presents their responses:

Table 35: Likelihood of Composting Food Waste with More Information

	Total	Aware of FW Composting
Base: Those who do not compost FW	*(416)*	*(363)*
Extremely likely	8%	7%
Very likely	15%	16%
Somewhat likely	30%	28%
Not very/Not at all likely	23%	24%
Not at all likely	23%	25%

To help understand the barriers to food waste composting, the following lists present the primary reasons that respondents gave for not composting their food waste.

Among the 26 aware non-food waste composters who reported that they were "extremely" likely to compost their food waste in the future:

- 23% reported that they were not currently composting food waste because of a concern about attracting animals;
- 19% reported that they have not gotten around to purchasing a food waste composting container;
- 12% reported that they don't have the space to compost food waste; and,
- 12% reported that they don't know how to compost their food waste.

Among the 57 aware non-food waste composters who reported that they were "very" likely to compost food waste in the future:

- 26% reported that they were not currently composting food waste because of a concern about attracting animals;
- 16% reported that they have not gotten around to purchasing a food waste composting container;
- 14% reported that they don't have much food waste;
- 11% reported that they don't know how to compost their food waste; and,
- 11% reported that they just haven't gotten around to doing it yet.

Among the 101 aware non-food waste composters who reported that they were "somewhat" likely to compost food waste in the future:

- 19% reported that they were concerned about attracting animals;
- 12% reported that they use their garbage disposal instead;
- 12% have never considered composting food waste; and,
- 11% reported that they don't have much food waste to compost.

Providing information that alleviates concerns about attracting animals to composted food waste might help increase the overall size of the food composting market. Other avenues that might prove useful are to make available more information about how to compost and to provide a cost- and time-effective means for acquiring composting bins.

The 416 respondents who were not composting their food waste were asked to report how likely they might be to purchase a green cone from the City at a cost of $20. Respondents were told that the green cone was about two and one-half feet tall. The following table summarizes their likelihood:

Table 36: Likelihood of Purchasing a City-Provided Bin at $20

	Total	Percent
Base: Those who do not compost FW	*(416)*	*(100%)*
Extremely likely	24	6%
Very likely	54	13%
Somewhat likely	108	26%
Not very/Not at all likely	120	29%
Not at all likely	104	25%

Roughly one out of every five of those who do not compost yard waste (19%) reported that they are at least "very" interested in purchasing a City-provided bin at a cost of $20.

If we apply the discount factors, we might expect that the market potential for a city-provided food waste composting bin would be about 9% of all that do not compost food waste.

Interest in Curbside Collection of Food Waste

The 416 respondents who do not compost their food waste were asked to report their interest in a city-provided curbside pickup service for food waste. Respondents were told that:

> *"Households that participate would be asked to separate all food waste including dairy and meat products, and also used paper towels, paper plates, tissue and waxed paper. Participating households would receive a container with a tight fitting lid in which to store these food waste and paper items. Each week, households would be requested to place their food waste storage container at the curbside or alley on the same day as their regular garbage is collected. The food scraps would be delivered to a food waste composting facility."*

Respondents were asked to rate their likelihood of using this service using a five-point scale from "extremely" to "not at all" likely. The table below presents their responses and assumes that there would be no charge for this service.

These results indicate that those who do not compost food waste have an interest in a curbside collection program for food waste. Overall, if the city did not charge for it, roughly one-half (49%) of those who do not compost food waste are at least "very" interested in curbside collection of food waste.

The 125 respondents who were not interested in this service were asked to report the primary reasons for their disinterest:

- 26% reported that it sounded like too much work;
- 26% reported that they didn't have enough food waste to justify it;
- 10% said that they would rather use their garbage disposal; and,
- 6% stated that they were worried about the potential odor.

Respondents who were at least "somewhat" interested in curbside collection of food waste (or who didn't know how interested they were) were asked to report how likely they would be to participate in this program if the city were to charge $2.00 per month (or $4.00 per billing cycle).

The following table presents the percentage of non-food waste composters who are interested in curbside pickup of food waste if the city did not charge, and if the city charged $2.00 per month. For the purposes of this table, those who previously reported that they were not interested in the service at no charge are assumed to be "not at all" likely to participate at a charge of $2.00 per month.

Table 37: Likelihood To Use Curbside Pick-Up Service for Food Waste

	% likely to use w/o considering cost	% likely to use at $2.00/months
Base: Do not compost food waste	*(416)*	*(100%)*
Extremely likely	19%	6%
Very likely	30%	19%
Somewhat likely	20%	19%
Not very likely	16%	15%
Not at all likely	14%	38%

Even at a charge of $2.00 per month, a significant percentage of those who do not compost food waste are interested in curbside pickup of food waste. Roughly one-quarter (25%) of these 416 respondents reported that they would be "extremely" or "very" likely to participate.

Applying the discounts, we might expect that about 18% of those who do not compost food waste would be likely to sign up for curbside collection at a cost of $2.00 per month.

The 125 respondents who did not compost their food waste but had expressed interest in both this program and in purchasing a composting bin from the City for $20 were asked in which way they would prefer to manage their food waste:

- Roughly six out of ten (62%) reported that they would rather pay the City to pick up the food waste at the curb; and,
- About one-quarter (27%) reported that they would prefer to purchase their own bin.

Appendix 1: Topline Report

Select the time zone

N =	600	100%
Unassigned	0	0%
Newfoundland	0	0%
Atlantic	0	0%
East	0	0%
Central	0	0%
Mountain	0	0%
Pacific	600	100%

Hello, this is_____ with Market Trends, an independent market research firm in Seattle. Today/Tonight we are conducting a survey for the City of Seattle about yard and food waste. (PRESS F6 IF NEEDED)

N =	600	100%
Interview COMPLETE	0	0%
Call back at a later time	0	0%
No answer/answering machine/voice mail	0	0%
Busy signal	0	0%
Disconnect/FAX blocked	0	0%
Initial Refusal	0	0%
Communication barrier	0	0%
Business number	0	0%
RNA--No time specified	0	0%
Midway terminate - call back	0	0%
Midway terminate - no call back	0	0%
NO	0	0%
DNQ - Employee in Critical Industry	0	0%
YES - CONTINUE	600	100%
DELETE CASE	0	0%

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

N =	600	100%
Yes	600	100%
No	0	0%
(DO NOT READ) Don't know/Refused	0	0%

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

N =	600	100%
Yes	600	100%
No	0	0%
(DO NOT READ) Don't know/Refused	0	0%

D3. What is your home zip code?

N =	600	100%
98101	2	0%
98102	21	3%
98103	65	11%
98104	3	0%
98105	41	7%
98106	20	3%
98107	27	4%
98108	20	3%
98109	21	4%
98112	27	5%
98115	54	9%
98116	28	5%
98117	37	6%
98118	41	7%
98119	32	5%
98121	0	0%
98122	41	7%
98126	22	4%
98133	17	3%
98134	0	0%
98136	18	3%
98144	27	5%
98177	10	2%
98199	26	4%
OTHER	0	0%
DON'T KNOW/REFUSED	0	0%

S3. Before we begin, please tell me what type of home you live in. Is it:

N =	600	100%
A single family house	546	91%
A duplex	40	7%
A triplex	12	2%
A four-plex	2	0%
An apartment, condominium or townhouse with more than four units	0	0%
Something else	0	0%
(DO NOT READ) Don't know/Refused	0	0%

S4. Does your home have a yard?

N =	600	100%
Yes	574	96%
No	26	4%
(DO NOT READ) Don't know/Refused	0	0%

S5. 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?

N =	574	100%
I do it/I'm equally responsible for it	480	84%
Someone else in household takes care of it	25	4%
Have a Landscaper	33	6%
Hire someone else	29	5%
Other	7	1%
(DO NOT READ) Don't know/Refused	0	0%

S6. And, are you ever responsible for taking care of the yard and the yard waste in your household?

N =	94	100%
Yes	84	90%
No, someone else in household does it all	2	2%
No, Landscaper does it all	5	5%
No, someone else does it	3	3%
(DO NOT READ) Don't know/Refused	0	0%

S7. My next question is about food waste. When it comes to your household's food waste, are you one of the people in your household who is responsible for taking care of disposing it?

N =	600	100%
Yes	588	98%
No	12	2%
(DO NOT READ) Don't know/Refused	0	0%

S8. For this survey, I need to speak with someone in this household who is responsible for taking care of the home's yard waste. May I please speak with that person?

N =	10	100%
No (Schedule call-back)	0	0%
Don't know/Refused (Schedule call-back)	0	0%
Yes	10	100%

Hi, this is _____ with Market Trends, an independent market research firm in Seattle. Today/Tonight we are conducting a survey for the City of Seattle about yard and food waste.

(PRESS F6 IF NEEDED)

N =	10	100%
Interview COMPLETE	0	0%
Call back at a later time	0	0%
No answer/answering machine/voice mail	0	0%
Busy signal	0	0%
Disconnect/FAX blocked	0	0%
Initial Refusal	0	0%
Communication barrier	0	0%
Business number	0	0%
RNA--No time specified	0	0%
Midway terminate - call back	0	0%
Midway terminate - no call back	0	0%
NO	0	0%
DNQ - Employee in Critical Industry	0	0%
YES - CONTINUE	10	100%
DELETE CASE	0	0%

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

N =	574	100%
Yes	528	92%
No	46	8%
(DO NOT READ) Don't know/Refused	0	0%

A2. Does your home have a garden?

N =	574	100%
Yes	425	74%
No	149	26%
(DO NOT READ) Don't know/Refused	0	0%

A3. Is it a food garden, a flower garden, or some other type of garden?

N =	425	100%
Food (Vegetable and/or fruit)	225	53%
Flower (Ornamental/shrub/plants)	375	88%
Herb	48	11%
Other (specify)	0	0%
(DO NOT READ) Don't know/Refused	0	0%

A4. I am interested in knowing what your household does with its yard waste. Does your household ever put its yard waste out at the curb or alley for collection?

N =	568	100%
Yes	455	80%
No	113	20%
(DO NOT READ) Don't know/Refused	0	0%

A5. For the purposes of this survey, the word "compost" means the breakdown of food or yard waste into a material that can be used to improve soil.

Does your household currently compost any of its yard waste at home?

N =	568	100%
Yes	274	48%
No	293	52%
(DO NOT READ) Don't know/Refused	1	0%

A6. Does your household have a yard waste compost bin that you got from the City, do you have some other type of bin, or do you do something else with your yard waste?

N =	274	100%
Have a City-supplied bin	89	32%
Have some other type of bin	104	38%
Do something else with it	66	24%
Don't know - Bin was here when we moved in	8	3%
(DO NOT READ) Don't know/Refused	7	3%

A7. Does your household use the bin that you got from the City?

N =	89	100%
Yes	84	94%
No	5	6%
(DO NOT READ) Don't know/Refused	0	0%

A8. For what reasons doesn't your household use the bin that you got from the City?

N =	5	100%
RECORD VERBATIM ON PAPER	5	100%

A9. Were you aware compost bins can be purchased from the City?

N =	185	100%
Yes	107	58%
No	77	42%
(DO NOT READ) Don't know/Refused	1	0%

A10. What is the main reason your household didn't get one?

N =	107	100%
RECORD VERBATIM ON PAPER	107	100%

A11. Why don't you compost your yard waste?

N =	294	100%
RECORD VERBATIM ON PAPER	294	100%

A12. Does your household currently have a bin that you could use if you decided to compost your yard waste?

N =	294	100%
Yes	49	17%
No	243	82%
(DO NOT READ) Don't know/Refused	2	1%

A13. Does your household have a yard waste compost bin that you got from the City, or do you have some other type of bin?

N =	49	100%
Have a City-supplied bin	23	47%
Have some other type of bin	20	41%
Don't know--Bin was here when we moved in	5	10%
(DO NOT READ) Don't know/Refused	1	2%

A14. Were you aware that the City offers a yard waste compost bin? These bins typically cost about $20.

N =	271	100%
Yes	99	37%
No	172	63%
(DO NOT READ) Don't know/Refused	0	0%

A15. What is the main reason your household didn't get one?

N =	99	100%
RECORD VERBATIM ON PAPER	99	100%

A16. I am interested in knowing how likely your household might be to compost your yard waste in the next year or so if you were provided more information about how to make it easy and pest free. Would your household be:

N =	294	100%
Extremely likely	21	7%
Very likely	41	14%
Somewhat likely	97	33%
Not very likely	69	23%
Not at all likely	55	19%
(DO NOT READ) Don't know/Refused	11	4%

A17. 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 your household's yard waste? Would you say you are:

N =	424	100%
Extremely likely to purchase a (new) composting bin	29	7%
Very likely	69	16%
Somewhat likely	93	22%
Not very likely	127	30%
Not at all likely	99	23%
(DO NOT READ) Don't know/Refused	7	2%

A18. As you may know, the City of Seattle has a program for distributing bins that are designed for composting yard waste. I would like to know how interested you are in this program. The bin is black plastic, it stands about 30" tall, it's round at the base and gets smaller toward the top. The city currently charges $20 for this yard waste composting bins and they are available at central distribution points throughout the City.

In the next year or so, how likely are you to purchase a $20 yard waste composting bin from the city? Would you say you are:

(IF NEEDED: Even though you may currently have a bin supplied by the city, I want to know how interested you might be in getting another one in the future.)

N =	198	100%
Extremely likely	25	13%
Very likely	44	22%
Somewhat likely	99	50%
Not very likely	22	11%
Not at all likely	0	0%
(DO NOT READ) Don't know/Refused	8	4%

A19. Now, about your lawn. When you mow your lawn, or have your lawn mowed, what is typically done with the grass clippings?

N =	528	100%
Rake or bag and bring to curb	176	33%
Rake or bag and bring to transfer station	13	2%
Compost	136	26%
Leave them on the lawn	225	43%
Don't mow	9	2%
Landscaper hauls them away	47	9%
Other (specify)	0	0%
Passive compost (use around trees/shrubs/pitch into woods)	10	2%
Other	1	0%
(DO NOT READ) Don't know/Refused	5	1%

A20. Does your household ever leave grass clippings on the lawn when it's mowed?

N =	249	100%
Yes	102	41%
No	140	56%
(DO NOT READ) Don't know/Refused	7	3%

A21. Why don't you ever leave grass clippings on your lawn?

N =	140	100%
RECORD VERBATIM ON PAPER	140	100%

A22. I am interested in knowing how likely your household might be to leave your grass clippings on the lawn if you were provided more information about it. Next year, how likely would you be to leave your grass clippings on the lawn if you knew that it makes lawn mowing easier, it would not cause thatch and the lawn would maintain a clean and healthy appearance? Would you be:

N =	185	100%
Extremely likely	19	10%
Very likely	38	21%
Somewhat likely	51	28%
Not very likely	36	19%
Not at all likely	34	18%
(DO NOT READ) Don't know/Refused	7	4%

A23. When your household's lawn is mowed during the spring, that is, March, April and May, how often do you leave your grass clippings on the lawn? Would you say the grass clippings are left on the lawn regularly, occasionally, rarely or never?

N =	334	100%
Never	11	3%
Rarely	20	6%
Occasionally	86	26%
Regularly	200	60%
(DO NOT READ) Don't know/Refused	17	5%

A23. When your household's lawn is mowed during the summer, that is, June, July and August, how often do you leave your grass clippings on the lawn?

(IF NEEDED: Would you say the grass clippings are left on the lawn regularly, occasionally, rarely or never)?

N =	334	100%
Never	15	5%
Rarely	23	7%
Occasionally	70	21%
Regularly	211	63%
(DO NOT READ) Don't know/Refused	15	4%

A23. When your household's lawn is mowed during the fall, that is, September, October and November, how often do you leave your grass clippings on the lawn?

(IF NEEDED: Would you say the grass clippings are left on the lawn regularly, occasionally, rarely or never?)

N =	334	100%
Never	29	9%
Rarely	38	11%
Occasionally	63	19%
Regularly	188	56%
(DO NOT READ) Don't know/Refused	16	5%

A24. I am interested in knowing how likely your household might be to leave your grass clippings on the lawn more often if you were provided more information about it. Next year, how likely would you be to leave your grass clippings on the lawn more often if you knew that it makes lawn mowing easier, it would not cause thatch and the lawn would maintain a clean and healthy appearance? Would you be:

N =	25	100%
Extremely likely	5	20%
Very likely	5	20%
Somewhat likely	9	36%
Not very likely	2	8%
Not at all likely	2	8%
(DO NOT READ) Don't know/Refused	2	8%

A25. I am interested in knowing what type of a mower is typically used for your household's lawn. 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?

N =	519	100%
Yes, use a mulch mower	149	29%
No, not a mulching mower	286	55%
Someone else mows	31	6%
(DO NOT READ) Don't know	53	10%

A26. Assume that you could purchase a new mulch mower made by a well-known mower manufacturer for about 1/3 off the retail list price. In the next year or so, how likely is your household to purchase a mulch mower like I described?

N =	370	100%
Extremely likely	7	2%
Very likely	37	10%
Somewhat likely	71	19%
Not very likely	120	32%
Not at all likely	121	33%
(DO NOT READ) Don't know/Refused	14	4%

A27. If you were provided with research information that shows how using a mulch mower would make it easier to mow the lawn, cause less air pollution, help fertilize the lawn, that they do not cause thatch and they leave your lawn looking healthy, how likely would you be to get a new mulch mower like I just described?

In the next year or so, would you be:

N =	363	100%
Extremely likely to purchase a new mulch mower like I described	14	4%
Very likely	51	14%
Somewhat likely	86	24%
Not very likely	106	29%
Not at all likely	101	28%
(DO NOT READ) Don't know/Refused	5	1%

A28. Do you recall seeing or hearing anything about an event put on by local government organizations at which mulch mowers are sold at discounted prices?

N =	519	100%
Yes	154	30%
No	362	70%
(DO NOT READ) Don't know/Refused	3	0%

A29. Have you ever attended one of these events?

N =	154	100%
Yes	16	10%
No	138	90%
(DO NOT READ) Don't know/Refused	0	0%

A30. Did your household purchase a mulch mower from the City at one of these events?

N =	16	100%
Yes	5	31%
No	11	69%
(DO NOT READ) Don't know/Refused	0	0%

A31. The City of Seattle is considering holding another event in the next six months or so. This event will be held at a large facility, such as the Northgate parking lot, and will include discounts on mulching mowers, staff who can give you information on mulch mowing, the design and use of mulching lawn mowers, and natural lawn care.
How likely are you to attend an event like this? Would you say you are:

N =	519	100%
Extremely likely to attend	21	4%
Very likely to attend	67	13%
Somewhat likely	137	26%
Not very likely	124	24%
Not at all likely	165	32%
(DO NOT READ) Don't know/Refused	5	1%

B1. These next questions are about food waste. Does your household compost any of its food waste--that is, kitchen scraps left over from cooking or eating?

N =	600	100%
Yes	184	31%
No	413	69%
(DO NOT READ) Don't know/Refused	3	0%

B2. Do you use a separate bin or container for your food waste, do you mix your food waste with yard waste, or do you do something else?

N =	184	100%
Have a separate food waste bin or container	77	42%
Mix it with my yard waste	89	48%
Other (specify)	0	0%
Bury it/put it in garden/yard (no container)	13	7%
Other	2	1%
(DO NOT READ) Don't know/Refused	3	2%

B3. Does your household have a separate food waste bin or container that you got from the City for food waste only?

N =	184	100%
Yes	34	19%
No	148	80%
(DO NOT READ) Don't know/Refused	2	1%

B4. Does your household currently use the food waste bin that you got from the City?

N =	34	100%
Yes	28	82%
No	4	12%
(DO NOT READ) Don't know/Refused	2	6%

B5. Is the food waste bin or container that you got from the City a green cone, a worm bin, or is it something else?

N =	32	100%
A green cone	27	85%
A worm bin	1	3%
Both	1	3%
Neither--Something else (specify)	0	0%
(DO NOT READ) Don't know/Refused	3	9%

B6. For what reasons do you compost your food waste?

N =	184	100%
RECORD VERBATIM ON PAPER	184	100%

B7. Did you know that food waste can be composted?

N =	416	100%
Yes	363	87%
No	52	13%
(DO NOT READ) Don't know/Refused	1	0%

B8. Does your household currently have any kind of bin for composting food waste?

N =	363	100%
Yes	23	6%
No	340	94%
(DO NOT READ) Don't know/Refused	0	0%

B9. I'm interested in knowing what type of bin you have. Do you have a food waste compost bin or container that you got from the City?

N =	23	100%
Yes	13	57%
No	9	39%
(DO NOT READ) Don't know/Refused	1	4%

B10. What type of bin do you have from the City?

N =	13	100%
Green cone	10	77%
Homemade bin	0	0%
Store bought bin	0	0%
Worm bin	0	0%
Other (specify)	0	0%
Black drum/black two piece	2	15%
Wood bin	1	8%
(DO NOT READ) Don't know/Refused	0	0%

B11. For what reasons have you decided against composting your food waste?

N =	363	100%
RECORD VERBATIM ON PAPER	363	100%

B12. How likely would you be to compost your food waste in the next year or so if you had more or better information on how to do it easily and make it pest-free? Would you be:

N =	416	100%
Extremely likely to compost food waste in the future	32	8%
Very likely	64	15%
Somewhat likely	123	30%
Not very likely	96	23%
Not at all likely	98	23%
(DO NOT READ) Don't know/Refused	3	1%

B13. As you may know, in the past the City of Seattle has had a program to distribute food waste composting containers at discounted prices. The bins they have been distributing are green plastic cones that stand about two and one-half feet tall and they cost about $20. If the program was available within the next year or so, how likely would you be to purchase a (new) food waste composting bin or container from the City if it was available for $20? Would you be:

N =	600	100%
Extremely likely	44	7%
Very likely	82	14%
Somewhat likely	143	24%
Not very likely	166	28%
Not at all likely	153	25%
(DO NOT READ) Don't know/Refused	12	2%

B14.The City of Seattle is currently evaluating curbside pickup of food waste. Households that participate would be asked to separate all food waste including dairy and meat products, and also used paper towels, paper plates, tissue and waxed paper. Participating households would receive a container with a tight fitting lid in which to store these food waste and paper items.

N =	600	100%
Enter	600	100%

Each week, households would be requested to place their food waste storage container at the curbside or alley on the same day as their regular garbage is collected. The food scraps would be delivered to a food waste composting facility.

Assuming that there was no separate charge for this program, how likely is your household to sign up for and participate in this program of curbside collection of food waste? Is your household ... (READ LIST)

N =	600	100%
Extremely likely	130	22%
Very likely	168	28%
Somewhat likely	122	20%
Not very likely	89	15%
Not at all likely	82	14%
(DO NOT READ) Don't know/Refused	9	1%

B15. For what reasons is your household not likely to participate?

N =	171	100%
RECORD VERBATIM ON PAPER	171	100%

B16. If the City were to charge $2.00 per month, or $4.00 per billing cycle, for this service, how likely would your household be to participate in this program of curbside collection of food waste? Would your household be:

N =	429	100%
Extremely likely	51	12%
Very likely	115	27%
Somewhat likely	115	27%
Not very likely	84	20%
Not at all likely	49	11%
(DO NOT READ) Don't know/Refused	15	3%

B17. You mentioned that you are currently composting your own food waste. If your household signed up for and participated in curbside pickup of food waste, would you still compost at least some of your food waste at home, or would you put it all out at the curb?

N =	96	100%
Compost at least some at home	69	72%
Put it all out at the curb	25	26%
(DO NOT READ) Don't know/Refused	2	2%

B19. You mentioned that you might be interested in purchasing a food waste composting bin from the City for about $20, and you might be interested in participating in curbside pickup of food waste. Which would you prefer--to purchase a bin and compost your own food waste, or pay the City $2.00 per month to pick up your food waste at the curb?

N =	125	100%
Purchase my own bin	34	27%
Pay the City to pick it up	78	62%
(DO NOT READ) Don't know/Refused	13	11%

B20. Changing the topic, do you have a garbage disposal at home?

N =	600	100%
Yes	312	52%
No	287	48%
(DO NOT READ) Don't know/Refused	1	0%

B21. How often does your household use it?

N =	312	100%
Several times a day	117	37%
Once a day	93	30%
A few times a week	52	17%
Once a week, or	21	7%
Less frequently	26	8%
(DO NOT READ) Never	3	1%
(DO NOT READ) Don't know/Refused	0	0%

B22. Why doesn't your household use your garbage disposal (more often)?

N =	102	100%
RECORD VERBATIM ON PAPER	102	100%

C1. Now. About some programs that the City of Seattle offers. The City of Seattle has a compost hotline that you can call to ask questions about composting. Have you ever heard of Seattle's compost hotline?

IF NEEDED: The number for the compost hotline is (206) 633-0224.

N =	600	100%
Yes	187	31%
No	410	68%
(DO NOT READ) Don't know/Refused	3	1%

C2. Have you, or has anyone in your household ever called the compost hotline?

N =	187	100%
Yes	38	20%
No	147	79%
(DO NOT READ) Don't know/Refused	2	1%

C3. In addition to providing information about composting, the Compost Hotline provides information on water conservation in the garden and on minimizing your use of fertilizers and pesticides. Knowing this, how interested are you or someone in your household in using the Compost Hotline as a resource in the future? Would you say you are ____?

N =	600	100%
Extremely interested	50	8%
Very interested	120	20%
Somewhat interested	202	34%
Not very interested	138	23%
Not at all interested	82	14%
(DO NOT READ) Don't know/Refused	8	1%

C4. The City has volunteers, called Master Composters, who can staff events, make presentations, and answer questions about composting. Have you ever heard of the Master Composters?

N =	600	100%
Yes	154	26%
No	442	74%
(DO NOT READ) Don't know/Refused	4	0%

D1. These next questions are for classification purposes only. What is your age please? Are you:

N =	600	100%
Under 25	38	6%
25 to 34	120	20%
35 to 44	166	28%
45 to 54	128	21%
55 to 64	73	12%
65 or over	69	12%
(DO NOT READ) Don't know/Refused	6	1%

D2. Do you own or rent the home you live in?

N =	600	100%
Own	464	77%
Rent	127	21%
Other	6	1%
(DO NOT READ) Don't know/Refused	3	1%

D4. Including yourself, how many people currently live in your household?

N =	600	100%
One	95	16%
Two	257	43%
Three	111	18%
Four	90	15%
Five	23	4%
Six	9	1%
Seven	5	1%
Eight or more	6	1%
(DO NOT READ) Don't know/Refused	4	1%

D5. And how many of those are over 18 years of age?

N =	505	100%
One	19	4%
Two	385	76%
Three	56	11%
Four	29	6%
Five	6	1%
Six	4	1%
Seven	0	0%
Eight or more	2	0%
(DO NOT READ) Don't know/Refused	4	1%

D6. What is your race or ethnic background? Are you:

N =	600	100%
Caucasian/White	501	84%
African American	22	4%
Asian (Pacific Islander)	27	5%
Latino	8	1%
American Indian	3	1%
Other (specify)	0	0%
Mixed (specify ON NEXT SCREEN)	11	2%
(DO NOT READ) Don't know/Refused	28	5%

D6. What is your race or ethnic background? Are you:
SPECIFY MIXED RACE

N =	11	100%
SPECIFY MIXED RACE	0	0%
Refused	1	9%
Caucasian and Asian	3	27%
Caucasian and American Indian	2	18%
Caucasian and Latino	1	9%
Caucasian and African American	2	18%
American Indian and African American	1	9%
African American and Asian	1	9%

D7. What is the highest level of education you have had the opportunity to complete?

N =	600	100%
High school graduate or less	69	11%
Some college/Technical school/AA degree	142	24%
4-year college degree	234	39%
Post graduate work/degree	148	25%
(DO NOT READ) Don't know/Refused	7	1%

D8. And finally, into which of the following categories did your household's total annual income for 1998 fall? Was it:

N =	600	100%
Under $30,000	58	10%
$30,000 - $50,000	128	21%
$50,000 - $75,000	145	24%
$75,000 - $100,000	89	15%
$100,000 or over	88	15%
(DO NOT READ) Don't know/Refused	92	15%

RECORD GENDER BY OBSERVATION -- DO NOT ASK!

N =	600	100%
MALE	252	42%
FEMALE	348	58%

That concludes our survey. Thank you very much for your time and opinions. These answers will be very helpful.

N =	600	100%
PRESS ENTER TO CONTINUE	600	100%

A8. For what reasons doesn't your household use the bin that you got from the City?

N =	5	100%
RECORD VERBATIM FROM PAPER	0	0%
I don't know how to use it/need more information	2	40%
The bin is broken/it fell apart (it was old)	3	60%

A10. What is the main reason your household didn't get one?

N =	107	100%
RECORD VERBATIM FROM PAPER	0	0%
Don't know	1	1%
I already have my own system for composting/we built/have our own bin	49	46%
It wasn't big enough/was too small	8	7%
Lack of space/no room for it	6	6%
We don't generate enough waste (to need a bin)	4	4%
Because you have to pay for it/didn't want to spend the money on it	4	4%
No need because we leave the grass on the lawn	2	2%
Distribution point was out of bins/not available at that time	2	2%
I requested one from the city (when they were free) and I never received it	3	3%
Was not convenient to get it/my schedule didn't allow me to pick it up at that time	7	7%
Chose not to/no need for it - general	4	4%
Haven't gotten around to it/not one of our priorities	5	5%
Didn't know about them/didn't know I was offered one/unsure of how to purchase one	5	5%
Too lazy	2	2%
I did get one (chose not to use it/dog chewed it up)	2	2%
Bins are plastic/unsightly	2	2%
Other	9	8%

A11. For what reasons have you decided against composting your yard waste?

N =	294	100%
RECORD VERBATIM FROM PAPER	0	0%
Don't know	10	3%
Concerns about attracting animals/rats/raccoons	16	5%
Don't have much yard waste/not enough yard waste	29	10%
Concerns about odor/smell	10	3%
Don't have the time (to compost)	34	12%
I'm too lazy	7	2%
Just moved in (and haven't set that up yet)	12	4%
Too much work/is a hassle/too difficult	23	8%
I rent/the landlord says its not necessary	5	2%
Easier to/prefer to put it at the curbside/let the city collect it (am paying for)	23	8%
Don't have the space to do it/there is no place to put a compost pile/bin in the yard	66	22%
I hire someone to take care of my yard (and yard waste)	15	5%
Too old to go through all that/am disabled/not physically capable of	8	3%
Not interested in/don't like to work in the yard	5	2%
Don't know how to set it up/don't know anything about it/would like more information	25	9%
I have no use for the end product/no place to use the composted material	19	6%
Not convenient - general	4	1%
Concerns about attracting bugs/insects/flies	4	1%
Leave grass clippings on the lawn/have a mulching mower/use leaves, grass clippings, and pine needles as mulch	7	2%
Don't have a composting bin/composting supplies/not set up for composting	14	5%
Have too much yard waste (bin not big enough for my amount of yard waste/too much waste so it never composted/broke down)	3	1%
Just haven't gotten around to it (yet)	10	3%
Don't want to/no reason to- general	9	3%
Never thought about it	4	1%
Concerns that the children/dogs would get into it	5	2%
Other happy with the way/easier to do it the way I do now	8	3%
Other	15	5%

A15. What is the main reason your household didn't get one?

N =	99	100%
RECORD VERBATIM FROM PAPER	0	0%
Don't know/have no idea	2	2%
Already have one	3	3%
I have no space/no place to put the bin in our yard	20	20%
Don't want the animals it might attract/it attracts rats and raccoons	10	10%
Don't need since we use the curbside service/we're paying for waste pickup	7	7%
No use for it since we don't use compost/not interested in composting	9	9%
We don't need the end product (the compost)/have no place to put compost, no garden to fertilize	3	3%
I don't know where to get one/lack of information on the program	9	9%
We don't have that much yard waste/have very little to compost (to make it worthwhile)	7	7%
Haven't gotten around to it yet/haven't done it yet	3	3%
We just don't have the time to compost	4	4%
They weren't the right kind/waiting for them to improve their compost bins	3	3%
Did not need/want one/have a use for one - general	9	9%
Bin is expensive/don't want to pay for it	3	3%
Didn't give it much thought/never thought about it (at that time)	4	4%
Our landlord makes the decision	2	2%
Negative experiences with use of a bin	4	4%
Happy with doing things the way we do now	2	2%
Too hard to do/work required is too much for what needs to be done	3	3%
Other	7	7%

A21. Why don't you ever leave grass clippings on your lawn?

N =	140	100%
RECORD VERBATIM FROM PAPER	0	0%
Don't like the way it looks/not attractive	44	31%
Don't want to track the lawn clippings into my house	10	7%
I hire somebody to mow my lawn and they take care of the clippings	12	9%
Don't think it is good for the grass/might kill the grass/make it brown/thatch	12	9%
We use it for compost/use them in flower and vegetable garden to control weeds	11	8%
The landlord doesn't want us to/landlord's decision	4	3%
We don't have a mulching mower/our mower doesn't clip the grass up small enough	17	12%
We have a bag/catcher on our mower that picks everything up	13	9%
We have allergies and it makes them worse to leave the clippings/if leave on and you lay on the grass it makes you all itchy	2	1%
Makes the lawn difficult to mow/don't think our lawn mower is good enough to handle mowing the lawn if we leave the clippings on	3	2%
Have a very small lawn/backyard	5	4%
Habit not to/that is how I've always done it	9	6%
Reasons relating to dogs (e.g., dog eats them and gets sick)	4	3%
To keep the yard clean/it is messy	3	2%
We don't mow that frequently/clippings usually too long	5	4%
Never thought about it	2	1%
Have just moved in recently (no chance yet/need to redo lawn)	2	1%
Have to pay for collection service (so want to get my money's worth)	1	1%
Don't know/no clue	2	1%
Other	10	7%

B6. For what reasons do you compost your food waste?

N =	184	100%
RECORD VERBATIM FROM PAPER	0	0%
Not sure/don't know	3	2%
To use in the garden/makes good compost/adds nutrients back to the earth	121	66%
Good for the environment/more ecologically sound	25	14%
Cuts down on waste/garbage (in landfills/in what I throw away)	67	36%
So I can get by with smaller can and save money/is economical/cheaper	10	5%
It is the right thing to do	8	4%
Don't have a garbage disposal	4	2%
It's easy to do/an easy way to go/to get rid of it	5	3%
Habit/have been doing it for a long time	6	3%
Doesn't smell up the garbage/garbage smells less	4	2%
To recycle my waste/I believe in recycling	8	4%
Convenience	4	2%
It is not wasteful/I don't like to waste anything	6	3%
Because I can	2	1%
We have very little of it/don't have much waste	3	2%
To dispose of what won't go down the disposal	2	1%
Other	10	5%

B11. For what reasons have you decided against composting your food waste?

N =	363	100%
RECORD VERBATIM FROM PAPER	0	0%
Concerns about attracting animals/rats/rodents/raccoons	79	22%
Have a garbage disposal/use garbage disposal	41	11%
Give food waste to dogs/to our animals	10	3%
Don't have much food waste	58	16%
Concerns about odor/smells bad	19	5%
No time/I don't have the time	25	7%
Haven't given it much thought/never considered it/never occurred to me	18	5%
I'm too lazy	13	4%
Too much work/too much trouble/it is a hassle/a bother	15	4%
Lack of space/no space for a bin	29	8%
Don't know what I would use it for/have no use for compost so why do it	21	6%
We had no containers/haven't gotten around to buying a container	17	5%
Don't have a garden	8	2%
Not convenient	17	5%
Haven't gotten around to it/taken the time to do it	12	3%
No reason in particular/no interested/simply don't do it	12	3%
It's messy	7	2%
Don't know much about it/how to compost/what it entails	17	5%
Small household/don't have a big family	7	2%
We rent/landlord will not allow it/would consider it if I was in a house	7	2%
Attracts insects/flies/maggots/bugs	6	2%
Other	26	7%
Would want one without worms	3	1%
I don't eat here/eat out a lot	3	1%
Appearance of/would be an eyesore	5	1%
Concerns about children/dog getting into it	4	1%
Easier to put it in the garbage/the garbage man picks it up	5	1%

B15. For what reasons is your household not likely to participate?

N =	171	100%
RECORD VERBATIM FROM PAPER	0	0%
Have a disposal/easier/more convenient to use the disposal	13	8%
Too much work/takes too much time (to separate everything)/easier not to	38	22%
Don't have enough food waste/have hardly any food waste	34	20%
Concerns about the smell/by the end of the week it will stink	9	5%
Concerns about attracting animals/rats/dogs/raccoons	8	5%
We compost it/keep it for personal use in/to fertilize our garden	35	20%
Too many bins to deal with/would just be an extra container	7	4%
Just don't want to/not interested	8	5%
I'm not at home much/eat out a lot	8	5%
I live alone (so not worth it)	6	4%
Unless they wanted to pay us for it/want reduction in rates	4	2%
I do enough recycling as it is/we separate enough already	6	4%
I'm too lazy/concerns about getting other people in the house to participate (they're too lazy)	6	4%
I have no room in my kitchen to put the bins	6	4%
It would be messy	4	2%
Inconvenient - general	5	3%
Will be moving	2	1%
Attracts insects	2	1%
Live on (steep) hill, tough to carry to the curb	2	1%
Germs/isn't sanitary	2	1%
Other	16	9%
Don't know/refused	3	2%

B22. Why doesn't your household use your garbage disposal (more often)?

N =	102	100%
RECORD VERBATIM FROM PAPER	0	0%
We compost our food waste/prefer to compost (recycle)	22	22%
Possibility of it clogging pipe/drain/my pipes/disposal not very good/it backs up	19	19%
Not home much/don't eat at home every night	10	10%
No need because we do not have very much food waste/scraps	33	32%
No need (general)/that is as often as it needs to be used	7	7%
Usually throw it in the garbage/or we just throw it away	6	6%
I live alone/there is only two of us	4	4%
I don't cook much/aren't very good cooks I guess	4	4%
Can't see putting that waste into the water/don't want all those things going into the sewer	5	5%
We just don't put food down the drain that often	2	2%
Not convinced they work well/don't think it is very efficient	2	2%
Other	11	11%
Don't know	2	2%

RECORD CALL RESULT

N =	600	100%
Interview COMPLETE	600	100%
Call back at a later time	0	0%
No answer/answering machine/voice mail	0	0%
Busy signal	0	0%
Disconnect/FAX blocked	0	0%
Initial Refusal/Don't know/Refused	0	0%
Communication barrier	0	0%
Business number	0	0%
Respondent not available - no time specified	0	0%
Midway terminate - call back	0	0%
Midway terminate - no call back	0	0%
(INT01) NO	0	0%
DNQ - Employee in Critical Industry	0	0%
REFUSED/Not 18 years of age or older	0	0%
DNQ - Do not live in Seattle	0	0%
S3:Live in an apartment, condominium or townhouse with more than four units	0	0%
S3:something else	0	0%
S3:don't know/refused	0	0%
S8:Don't know/Refused (Schedule call-back)	0	0%
S9:Refused correct person	0	0%
INCORRECT ZIP CODE	0	0%
Over quota--Zips	0	0%
(INT01) YES - CONTINUE	0	0%
DELETE CASE	0	0%

Appendix 2: Survey Instrument

Name _____ **I.D. #** _____

Date: _____ **Finish Time:** _____

Telephone Number: _____ **Start Time:** _____

Comments: _____ ***Total Time:*** _____

Male 1
Female 2

Telephone Number: __ __ __ - __ __ __ __

Screener

Hello, this is _____ with Market Trends, an independent market research firm in Seattle. Today/Tonight we are conducting a survey for the City of Seattle about yard and food waste.

IF NEEDED: This is not a sales call. Market Trends does not sell any type of consumer products or services. This survey is being conducted for market research purposes only and everything you say will remain strictly anonymous and confidential. I assure you that neither your name nor telephone number will be placed on any type of mailing list as a result of your participation. I would sincerely appreciate the opportunity to include your opinions.

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

1. Yes (Continue)
2. No (Ask to speak with someone who is)
9. DK/REF (Ask to speak with someone who is)

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

1. Yes (Continue)
2. No (T&T[13])
9. DK/REF (T&T)

[13] T&T=Thank & Terminate

S3. Before we begin, please tell me what type of home you live in. Is it:

1. A single family house
2. A duplex
3. A triplex
4. A four-plex
5. An apartment, condominium or townhouse with more than four units (T&T)
6. Something else (T&T)
9. DK/REF (T&T)

S4. Does your home have a yard?
1. Yes (Continue)
2. No (Skip to Q S7)
9. DK/REF (Skip to Q S7)

S5. 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?
1. I do it/I'm equally responsible for it (Skip to Q S 7)
2. Someone else in household takes care of it (Continue)
3. Have a Landscaper (Continue
4. Hire someone else (Continue)
5. Other (Continue)
9. DK/REF (Skip to Q S7)

S6. And, are you ever responsible for taking care of the yard and the food waste in your household?
1. Yes
2. No, someone else in household does it all
3. No, Landscaper does it all
4. No, someone else does it
9. DK/REF

S7. My next question is about food waste. When it comes to your household's food waste, are you one of the people in your household who is responsible for taking care of disposing it?

1. Yes
2. No
9. DK/REF

IF "YES" TO Q S6, SKIP TO SECTION A.
IF "YES" TO Q S4 AND "NO" OR "DK" TO Q S6, SKIP TO S8.
IF "NO/DK/REF" TO Q S4 AND "YES" TO Q S7, SKIP TO SECTION B
ALL OTHERS SHOULD CONTINUE WITH S9.

S8. For this survey, I need to speak with someone in this household who is responsible for taking care of the home's yard waste. May I please speak with that person?

1. Yes (Continue with that person)
2. No (Ask for a call-back time)
3. DK/REF (Ask for a call-back time)

S9. For this survey, I need to speak with someone in this household who is responsible for taking care of the home's yard waste or food waste. May I please speak with that person?

1. Yes (Continue with that person)
2. No (Schedule call-back time)
9. DK/REF (T&T)

Section A – Yard Waste Composting Section

(Asked of those who have a yard)

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

1. Yes
2. No
3. DK/REF

A2. Does your home have a garden?

1. Yes (Continue with A3)
2. No
3. DK/REF

IF "NO" OR "DK/REF" TO BOTH A1 & A2, SKIP TO SECTION B.
IF "YES" TO A2, CONTINUE.
IF "NO" OR "DK/REF" TO A2, SKIP TO A4.

A3. Is it a food garden, a flower garden, or some other type of garden? MULTIPLE RESPONSES ACCEPTABLE.

1. Food (Vegetable and/or fruit)
2. Flower
3. Herb
4. Other (specify)
5. DK/REF

A4. I am interested in knowing what your household does with its yard waste. Does your household ever put its yard waste out at the curb or alley for collection?

1. Yes
2. No
3. DK/REF

A5. For the purposes of this survey, the word "compost" means the breakdown of food or yard waste into a material that can be used to improve soil.

Does your household currently compost any of its yard waste at home?

1. Yes (Continue)
2. No (Skip to Q A 11)
9. DK/REF (Skip to Q A 11)

Asked of those who compost yard waste.

A6. Does your household have a yard waste compost bin that you got from the City, do you have some other type of bin, or do you do something else with your yard waste?

1. Have a City-supplied bin (Continue)
2. Have some other type of bin (Skip to Q A 9)
3. Do something else with it (Skip to Q A 9)
4. DK--Bin was here when we moved in (Skip To Q A 9)
5. DK/REF (Skip to Q A 9)

A7. Does your household use the bin that you got from the City?

1. Yes (Skip to Q A 19)
2. No (Continue)
3. DK/REF (Continue)

A8. For what reasons doesn't your household use the bin that you got from the City?

_____

_____

_____

SKIP TO Q A 19

A9. Were you aware compost bins can be purchased from the City?

1. Yes (Continue)
2. No (Skip to Q A 17)
3. DK/REF (Skip to Q A 17)

A10. What is the main reason your household didn't get one?

_____

_____

_____

(a) SKIP TO Q A 17

Asked of those who do not compost yard waste

A11. Why don't you compost your yard waste?

_____

_____

_____

A12. Does your household currently have a bin that you could use if you decided to compost your yard waste?

1. Yes (Continue)
2. No (Skip to Q A 14)
3. DK/REF (Skip to Q A 14)

A13. Does your household have a yard waste compost bin that you got from the City, or do you have some other type of bin?

1. Have a City-supplied bin (Should be Q A 16)
2. Have some other type of bin (Continue)
3. DK--Bin was here when we moved in (Continue)
4. DK/REF (Continue)

A14. Were you aware that the City offers a yard waste compost bin? These bins typically cost about $20.

1. Yes (Continue)
2. No (Skip to Q A 16)
3. DK/REF (Skip to Q A 16)

A15. What is the main reason your household didn't get one?

_____

_____

_____

A16. I am interested in knowing how likely your household might be to compost your yard waste in the next year or so if you were provided more information about how to make it easy and pest free. Would your household be:

1. Extremely likely
2. Very likely
4. Somewhat likely
5. Not very likely
6. Not at all likely (Skip to Q A 19)
7. DK/REF

A17. 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 your household's yard waste? Would you say you are:

1. Extremely likely to purchase a (new) composting bin (Continue)
2. Very likely (Continue)
3. Somewhat likely (Continue)
4. Not very likely (Skip to Instructions After Q A 19)
5. Not at all likely (Skip to Instructions After Q A 19)
6. DK/REF (Continue)

A18. As you may know, the City of Seattle has a program for distributing bins that are designed for composting yard waste. I would like to know how interested you are in this program. The bin is black plastic, it stands about 30" tall, it's round at the base and gets smaller toward the top. The city currently charges $20 for this yard waste composting bins and they are available at central distribution points throughout the City. In the next year or so, how likely are you to purchase a $20 yard waste composting bin from the City? Would you say you are:

IF NEEDED: Even though you may currently have a bin supplied by the City I want to know how interested you might be in getting another one in the future.

1. Extremely likely
2. Very likely
3. Somewhat likely
5. Not very likely
6. Not at all likely
7. DK/REF

IF "YES" TO A1, CONTINUE. ALL OTHERS SHOULD SKIP TO SECTION B.

Grasscycling Section--Asked of those who have a lawn.

A19. Now, about your lawn. When you mow your lawn, or have your lawn mowed, what is typically done with the grass clippings? PROBE FOR TYPICAL, BUT MULTIPLE RESPONSES ARE ACCEPTABLE.

1. Rake or bag and bring to curb
2. Rake or bag and bring to transfer station
3. Compost
4. Leave them on the lawn (Skip to A 23)
5. Don't mow (Skip to Section B)
6. Landscaper hauls them away (Skip to A 22)
7. Other (specify)
8. DK/REF

A20. Does your household ever leave grass clippings on the lawn when it's mowed?

1. Yes (Skip to Q A 23)
2. No (Continue)
3. DK/REF (Skip to Q A 23)

A21. Why don't you ever leave grass clippings on your lawn? PROBE THOROUGHLY.

_____

_____

_____

A22. I am interested in knowing how likely your household might be to leave your grass clippings on the lawn if you were provided more information about it. Next year, how likely would you be to leave your grass clippings on the lawn if you knew that it makes lawn mowing easier, it would not cause thatch and the lawn would maintain a clean and healthy appearance? Would you be:

1. Extremely likely
2. Very likely
3. Somewhat likely
4. Not very likely
5. Not at all likely
6. DK/REF

(b) SKIP TO Q A 25

A23. When your household's lawn is mowed during the _____, how often do you leave your grass clippings on the lawn? READ FIRST TIME, AND THEN AS NEEDED: Would you say the grass clippings are left on the lawn regularly, occasionally, rarely or never?

	Reg	Occ	Rare	Never	DK
Spring, that is, March, April and May	4	3	2	1	9
Summer, that is, June, July and August	4	3	2	1	9
Fall, that is, September, October and November	4	3	2	1	9

IF "RARELY," "NEVER," AND/OR "DK/REF" TO ALL, CONTINUE. OTHERWISE, SKIP TO Q A 25

A24. I am interested in knowing how likely your household might be to leave your grass clippings on the lawn more often if you were provided more information about it. Next year, how likely would you be to leave your grass clippings on the lawn more often if you knew that it makes lawn mowing easier, it would not cause thatch and the lawn would maintain a clean and healthy appearance? Would you be:

7. Extremely likely
8. Very likely
9. Somewhat likely
10. Not very likely
11. Not at all likely
12. DK/REF

A25. I am interested in knowing what type of a mower is typically used for your household's lawn. 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?

1. Yes, use a mulch mower (Skip to Q A 28)
2. No, Not a mulching mower
3. Someone else mows
4. Don’t know

A26. Assume that you could purchase a new mulch mower made by a well-known mower manufacturer for about 1/3rd off the retail list price. In the next year or so, how likely is your household to purchase a mulch mower like I described?

1. Extremely likely (Skip to Q A 28)
2. Very likely (Continue)
3. Somewhat likely (Continue)
4. Not very likely (Continue)
5. Not at all likely (Continue)
9. DK/REF (Continue)

A27. If you were provided with research information that shows how using a mulch mower would make it easier to mow the lawn, cause less air pollution, help fertilize the lawn, that they do not cause thatch and they leave your lawn looking healthy, how likely would you be to get a new mulch mower like I just described?

In the next year or so, would you be:

1. Extremely likely to purchase a new mulch mower like I described
2. Very likely
3. Somewhat likely
4. Not very likely
5. Not at all likely
6. DK/REF

A28. Do you recall seeing or hearing anything about an event put on by local government organizations at which mulch mowers are sold at discounted prices?

1. Yes (Continue)
2. No (Skip to Q A 31)
3. DK/REF (Skip to Q A 31)

A29. Have you ever attended one of these events?

1. Yes (Continue)
2. No (Skip to Q A 31)
3. DK/REF (Skip to Q A 31)

A30. Did your household purchase a mulch mower from the City at one of these events?

1. Yes
2. No
3. DK/REF

A31. The City of Seattle is considering holding another event in the next six months or so. This event will be held at a large facility, such as the Northgate parking lot, and will include discounts on mulching mowers, staff who can give you information on mulch mowing, the design and use of mulching lawn mowers, and natural lawn care.

How likely are you to attend an event like this? Would you say you are:

1. Extremely likely to attend
2. Very likely to attend
3. Somewhat likely
4. Not very likely
5. Not at all likely
6. DK/REF

Section B – Food Waste Composting

(Asked of everyone)

B1. These next questions are about food waste. Does your household compost any of its food waste--that is, kitchen scraps left over from cooking or eating?

1. Yes (Continue)
2. No (Skip to Q B 7)
3. DK/REF (Skip to Q B 7)

B2. Do you use a separate bin or container for your food waste, do you mix your food waste with yard waste, or do you do something else?

1. Have a separate food waste bin or container
2. Mix it with my yard waste
3. Other (specify)
4. DK/REF

B3. Does your household have a separate food waste bin or container that you got from the City for food waste only?

1. Yes (Continue)
2. No (Skip to Q B 6)
3. DK/REF

B4. Does your household currently use the food waste bin that you got from the City?

1. Yes
2. No
3. DK/REF (Skip to Q B6)

B5. Is the food waste bin or container that you got from the City a green cone, a worm bin, or is it something else?

1. A green cone
2. A worm bin
3. Both
4. Neither--Something else (specify)
5. DK/REF

B6. For what reasons do you compost your food waste?

_____

_____

_____

SKIP TO Q B 13

Asked of those who do not compost food waste.

B7. Did you know that food waste can be composted?

1. Yes (Continue)
2. No (Skip to Q B 12)
3. DK/REF (Skip to Q B 12)

B8. Does your household currently have any kind of bin for composting food waste?

1. Yes (Continue)
2. No (Skip to Q B 11)
3. DK/REF (Skip to Q B 11)

B9. I'm interested in knowing what type of bin you have. Do you have a food waste compost bin or container that you got from the City?

1. Yes (Continue)
2. No (Skip to Q B 11)
3. DK/REF (Skip to Q B 11)

B10. What type of bin do you have from the City?

1. Green cone
2. Homemade bin
3. Store bought bin
4. Worm bin
5. Other (specify)
6. DK/REF

B11. For what reasons have you decided against composting your food waste?

_____

_____

_____

B12. How likely would you be to compost your food waste in the next year or so if you had more or better information on how to do it easily and make it pest-free? Would you be:

1. Extremely likely to compost food waste in the future
2. Very likely
3. Somewhat likely
4. Not very likely
5. Not at all likely
6. DK/REF

B13. As you may know, in the past the City of Seattle has had a program to distribute food waste composting containers at discounted prices. The bins they have been distributing are green plastic cones that stand about two and one-half feet tall and they cost about $20. If the program was available within the next year or so, how likely would you be to purchase a (new) food waste composting bin or container from the City if it was available for $20? Would you be:

1. Extremely likely
2. Very likely
3. Somewhat likely
4. Not very likely
5. Not at all likely
6. DK/REF

Food Waste Program Evaluation (Ask All)

B14. The City of Seattle is currently evaluating curbside pickup of food waste. Households that participate would be asked to separate all food waste including dairy and meat products, and also used paper towels, paper plates, tissue and waxed paper. Participating households would receive a container with a tight fitting lid in which to store these food waste and paper items.

Each week, households would be requested to place their food waste storage container at the curbside or alley on the same day as their regular garbage is collected. The food scraps would be delivered to a food waste composting facility.

Assuming that there was no separate charge for this program, how likely is your household to sign up for and participate in this program of curbside collection of food waste? Is your household ____ ?

1. Extremely likely (Skip to Q B 16)
2. Very likely (Skip to Q B 16)
3. Somewhat likely (Skip to Q B 16)
4. Not very likely (Continue)
5. Not at all likely (Continue)
6. DK/REF (Skip to Q B 16)

B15. For what reasons is your household not likely to participate?

_____

_____

SKIP TO Q B 20.

B16. If the City were to charge $2.00 per month, or $4.00 per billing cycle, for this service, how likely would your household be to participate in this program of curbside collection of food waste? Would your household be:

1. Extremely likely (SEE INSTRUCTION BOX BELOW)
2. Very likely (SEE INSTRUCTION BOX BELOW)
3. Somewhat likely (SEE INSTRUCTION BOX BELOW)
4. Not very likely (SKIP TO Q B 20)
5. Not at all likely (SKIP TO Q B 20)
6. DK/REF (SKIP TO Q B 20)

IF RESPONDENT COMPOSTS FOOD WASTE ("YES" TO Q B 1), CONTINUE. ALL OTHERS SHOULD SKIP TO INSTRUCTIONS BEFORE Q B 19.

B17. You mentioned that you are currently composting your own food waste. If your household signed up for and participated in curbside pickup of food waste, would you still compost at least some of your food waste at home, or would you put it all out at the curb?

1. Compost at least some at home (Continue)
2. Put it all out at the curb (Skip to Q B 20)
3. DK/REF (Skip to Q B 20)

IF RESPONDENT DOES NOT COMPOST FOOD WASTE ("NO" OR "DK/REF" TO Q B 1) AND IS AT LEAST SOMEWHAT LIKELY TO PURCHASE A BIN IN Q B 13, CONTINUE WITH Q B 19. ALL OTHERS SHOULD SKIP TO Q B 20.

B19. You mentioned that you might be interested in purchasing a food waste composting bin from the City for about $20, and you might be interested in participating in curbside pickup of food waste. Which would you prefer--to purchase a bin and compost your own food waste, or pay the City $2.00 per month to pick up your food waste at the curb?

1. Purchase my own bin
2. Pay the City to pick it up
3. DK/REF

Garbage Disposal Questions

B20. Changing the topic, do you have a garbage disposal at home?

1. Yes (Continue)
2. No (Skip to Section C)
3. DK/REF (Skip to Section C)

B21. How often does your household use it? READ LIST:

1. Several times a day (Skip to Section C)
2. Once a day (Skip to Section C)
3. A few times a week (Continue)
4. Once a week, or (Continue)
5. Less frequently (Continue)
6. Never -- (Continue)
7. DK/REF (Skip to Section C)

B22. Why doesn't your household use your garbage disposal (more often)?

_____

_____

_____

Section C - Awareness and Use of City Programs

C1. Now, about some programs that the City of Seattle offers. The City of Seattle has a compost hotline that you can call to ask questions about composting. Have you ever heard of Seattle's compost hotline?

IF NEEDED: The number for the compost hotline is 206.633.0224.

1. Yes (Continue)
2. No (Skip to Q C3)
3. DK/REF (Skip to Q C3)

C2. Have you, or has anyone in your household ever called the compost hotline?

1. Yes
2. No
3. DK/REF

C3. In addition to providing information about composting, the Compost Hotline provides information on water conservation in the garden and on minimizing your use of fertilizers and pesticides. Knowing this, how interested are you or someone in your household in using the Compost Hotline as a resource in the future? Would you say you are ____?

1. Extremely interested
2. Very interested
3. Somewhat interested
4. Not very interested
5. Not at all interested
6. DK/REF

C4. The City has volunteers, called Master Composters, who can staff events, make presentations, and answer questions about composting. Have you ever heard of the Master Composters?

1. Yes
2. No
3. DK/REF

Section D – Demographics

D1. These next questions are for classification purposes only. What is your age please? Are you:

1. Under 25
2. 25 to 34
3. 35 to 44
4. 45 to 54
5. 55 to 64
6. 65 or older
7. DK/REF

D2. Do you own or rent the home you live in?

1. Own
2. Rent
3. Other
4. DK/REF

D3. What is your home zip code?

9 8 ___ ___ ___

D4. Including yourself, how many people currently live in your household?

1. One (Skip to Q D 7)
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight or more
9. DK/REF

D5. And how many of those are over 18 years of age?

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight or more
9. DK/REF

D6. What is your race or ethnic background? Are you:

1. Caucasian/White
2. African American
3. Asian
4. Latino
5. American Indian
6. Other (specify)
7. Mixed (specify)
8. DK/REF

D7. What is the highest level of education you have had the opportunity to complete?

1. High school graduate or less
2. Some college/Technical school/AA degree
3. 4-year college degree
4. Post graduate work/degree
5. DK/REF

D8. And finally, into which of the following categories did your household's total annual income for 1998 fall? Was it

1. Under $30,000
2. $30,000 to $50,000
3. $50,000 to $75,000
4. $75,000 to $100,000
5. $100,000 or over
6. DK/REF

D9. Record gender on front page.

That concludes our survey. Thank you very much for your time and opinions. These answers will be very helpful.