



Carolyn Browne Associates

3420 Camano Vista St. □ Greenbank, WA 98253 □ 360-222-6820

**FOOD WASTE RECYCLING PARTICIPATION AND ATTITUDES:
SURVEY OF SINGLE-FAMILY HOUSEHOLDS
IN ISSAQUAH AND KIRKLAND**

Conducted November 2005

Prepared for

**City of Issaquah
1775 – 12th Avenue NW
Issaquah, WA 98027-1307
and**

**City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033**

Prepared by

**Carolyn Browne Tamler, Principal
Carolyn Browne Associates**

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Food Waste Recycling Survey with Single-family Households In the Cities of Issaquah and Kirkland Conducted November 2005

INTRODUCTION AND METHODOLOGY

Purpose of the study

The City of Kirkland initiated a kitchen waste recycling program in December, 2003, which allowed single-family residents to add food and other kitchen waste to the yard waste recycling cart for regular pickup. The City of Issaquah began the same program one and a half years later in July, 2005.

The two cities contracted with Carolyn Browne Associates, a local community involvement and marketing research consulting firm, to conduct a survey with single-family households living within the city limits of each of the cities, to learn about current levels of awareness of, attitudes toward, and participation in the food waste recycling programs.

The two cities decided to use the same survey questionnaire and to have a single report so that they could see any differences in behavior patterns of those who participate in the program in each of the cities, and to be able to see if there were common patterns among the households choosing to participate in the kitchen waste recycling programs.

History of the kitchen waste recycling program in Kirkland

In December, 2003, Kirkland was the first city in Washington State to implement kitchen waste recycling for all single-family residents as part of the enhanced services of their new solid waste and recycling contract with Waste Management. For the first time, residents could recycle fruit, vegetable, meat, fish, cheese and dairy scraps, as well as food-soiled paper at the curb in their gray yard waste cart. The City produced educational materials and distributed reusable, 2-gallon, plastic containers for collecting food waste in the kitchen to every single-family residence. The reusable kitchen containers were designed to hold a small amount of food waste prior to transferring it to the larger gray yard waste cart. The following instructional materials were distributed with the containers:

- Garbage and Recycling Collection Guidelines brochure
- Large refrigerator magnet for quick reference
- Sticker for the kitchen food waste container showing accepted materials
- Sticker for the blue recycling cart showing guidelines for All-In-One recycling

History of the kitchen waste recycling program in Issaquah

The City of Issaquah introduced its new kitchen waste recycling program in July, 2005. This program involved significant changes for all customers – a new contractor took over collection services and all customers received new color-coded garbage, recycling and yard debris carts. An extensive outreach effort accompanied the roll-out of services, including news releases, recycling handbooks, magnets, postcards, container stickers and promotion at one community event. Kitchen containers were not distributed during the roll-out; however, stickers for use on customer-provided kitchen containers were distributed as a part of the 'start-up' information package' (which were delivered with new recycling carts).

Survey design and methodology

Telephone interviews were conducted from November 11 to 17, 2005, with 800 randomly-selected male and female heads of households, 400 each residing in single-family residences in the City of Issaquah and the City of Kirkland. Calling was done from 4:00 PM to 8:00 PM,

Monday through Friday, and on Saturday from 10:00 AM to 6:00 PM. Consumer Opinion Services of Burien, Washington conducted the interviews from two of their monitored phone bank locations. Calls were monitored and validated throughout the data collection process. MR Data of Bellevue performed the computer tabulation of the survey responses. Carolyn Browne Tamler, principal of Carolyn Browne Associates, completed the questionnaire design, coordinated the data collection and coding, analyzed the data, and prepared this report.

Many questions were asked in an open-end format with no suggested responses supplied by the interviewers. Thus, the responses for many of the questions accurately reflect what was on peoples' minds at the time they were surveyed. For many of the tables, a statement in parenthesis - "Multiple, open-end responses; do not add to 100%" - indicates that people were allowed to answer the questions without any prompting or suggestions, and were permitted to have more than one answer to the question. Responses were coded based upon the patterns in the answers. The responses that did not fit into coding patterns (in other words, where few others had the same response) are listed for each question in the Appendix of this report.

The random sample of 800 provides data that is projectable to the total population from which it is drawn, with an error range of +/- 3.5% and a 95% confidence level. For sample sizes of 400, for each of the cities, the error range, with the same confidence, is +/- 4.9%; and for samples of 200, the error range is +/- 6.9%. Where data is reported based on sample sizes of less than 200, care should be taken in drawing conclusions, as the error range increases sharply as the sample size drops below 200.

Definitions and Report Organization

Tables in this report include data for the 800 residents in both cities, and for 400 residents in Issaquah and in Kirkland. Comparisons are between those who currently participate in the kitchen waste recycling program ("Yes") and those who do not ("No").

For purposes of clarity, the following terms are used in this report:

Total Sample – The 800 single-family head of households who were interviewed in the cities of Issaquah and Kirkland.

Households/families – Within this report, all of the households/families referred to are single-family households. Surveys were conducted with the male or female head of the household.

Respondents – The 800 heads of households interviewed for this survey.

Recycle kitchen waste/participate in kitchen waste recycling program – respondents that placed food and other kitchen waste in their yard waste carts at least once in the month prior to being called.

The Detailed Survey Results include tables that document the information contained in each section. Individual responses to the open-end questions and a copy of the survey questionnaire are in the Appendix.

Detailed Survey Tabulations, which include cross-tabulations of the survey questions, are in separate, bound volumes each at the City of Issaquah and at the City of Kirkland.

EXECUTIVE SUMMARY

Major Themes

- While citizens in Issaquah and Kirkland almost universally recycle at least some paper, plastic, metal or glass products, less than one-half of the single-family households currently participate in the kitchen waste recycling programs offered by the cities.
- Participation in kitchen waste recycling is currently higher in Issaquah, where the program was recently initiated, than in Kirkland, where residents have been able to do this for two years.
- The great majority of households participating in kitchen waste recycling say that they have noticed a decrease in the amount of trash they put out for pickup.
- Those who do not currently recycle kitchen waste are most interested in getting more information to encourage them to participate in the program.
- Over two-thirds of the households surveyed can see benefits from the cities having kitchen waste recycling programs, whether or not they participate.
- Those who choose to participate are comfortable placing vegetable and fruit scraps, yard waste, and other table scraps in the yard waste cart, but a much smaller proportion place pizza boxes, meat and poultry bones, and paper products used with food in the cart.
- Most households that participate use some type of food waste container in their kitchen that they take out weekly or semi-weekly to the yard waste cart.
- The greatest concerns with the kitchen waste recycling program are associated with odor and mess, the inconvenience and bother of doing it, attracting pests and using the big yard waste cart when only kitchen waste is being placed in it for pickup.
- Of the 67% not currently participating in the kitchen waste recycling program (58% of the Issaquah households and 75% of the Kirkland households), nearly one-third (31%) have done so in the past.
- Of four items suggested to the respondents to encourage greater participation in kitchen waste recycling, only one – having lower collection rates for those who recycle – receives a high rating by the majority (70%) of households surveyed. However, 62% of the Issaquah respondents say that having a kitchen container provided by the City would encourage them to participate. In Kirkland, this incentive receives the lowest ranking of the four choices (35%). Kirkland supplied all households with kitchen containers at the start of the program two years ago.
- Households with children, compared to households with no children, are nearly one-third more likely to currently recycle kitchen waste (47% vs. 36%). Although demographic information was gathered from respondents about their age, household size, length of time residing in their city and the Puget Sound area, only the demographic of having children under 18 in the household appears to have a connection with participation in kitchen waste recycling.

David Fujimoto

Comment: Perhaps it would be more appropriate to cite the actual figure derived from the survey. * I agree. PD

REPORT SUMMARY

Attitudes toward current waste disposal services

- The great majority (73%) of households in both Issaquah (73%) and Kirkland (72%) are “Very satisfied” with the current garbage and recycling services they receive.
- Nearly all (98% of Issaquah and 99% of Kirkland) households currently recycle at least some paper, plastic, metal or glass products.
- Newspapers and other paper are almost universally recycled; but all other types of recyclables are placed out for pickup by just over half of the respondents.
- Only one-third of the households recycle kitchen waste; however, a higher proportion of Issaquah households, compared with those in Kirkland, have placed out some kitchen waste materials for pickup in the month prior to being surveyed (41% vs. 25%).

Current practices of those participating in kitchen waste recycling

- Over three-fourths of the respondents from both cities say they have noticed a decrease in the trash placed out for pickup.
- A majority of these households who are recycling food waste say they place vegetable and fruit scraps and other table waste in their yard waste carts (which may include paper products); however, in response to this open-end question, most did not specifically name pizza boxes, food paper waste, and wrappers as items they place in their carts.
 - 65% Vegetable and fruit scraps
 - 56% Yard waste
 - 56% All food and table scraps
 - 29% Pizza boxes
 - 26% Meat and poultry bones
 - 26% Paper plates, napkins and cups
 - 11% Paper food wrappers
- Kirkland households, compared with those in Issaquah, are far more likely to place yard waste out for pickup (76% vs. 45%); and somewhat more likely to place vegetable and fruit scraps out (71% vs. 61%).
- Half (52%) of the Issaquah respondents, and two-thirds (66%) of the Kirkland respondents place their yard waste cart out every week for pickup.
- The great majority (71%) of respondents from both cities carry their kitchen waste out to the yard waste cart at least every two or three days.
- Plastic kitchen containers are the most commonly used for food waste; however, 40% of the Issaquah residents, where containers were not supplied by the city, use a container they purchased, while 49% of the Kirkland residents use a container provided by the City; 23% of the Kirkland residents purchased their own plastic container. Many respondents use paper bags or plastic bags, glass or ceramic containers they purchased themselves, or simply do not use a container because they take food directly out to the cart.
- When specifically asked if they had placed pizza boxes and other paper products in their yard waste carts, two-thirds (68%) of the respondents said they had done so (71% of the Issaquah participants compared with 64% of the Kirkland participants).

patd

Comment: I think that these needs extra emphasis to separate it from the larger pool of respondents.

patd

Comment: This conclusion is confusing for a number of reasons. I suggest deleting it.

General Attitudes of all respondents toward the Kitchen Waste Recycling Program

- Two-thirds of the respondents from Issaquah and Kirkland name at least one benefit their city provides with respect to its kitchen waste recycling program. A substantial portion of residents see their program as good and as a way to reduce the amount of trash: The most frequently named benefits include:
 - 28% Good for the environment
 - 26% Less trash going to the landfill
 - 19% Good thing to do
 - 17% Less trash for pickup
- Less than half of those surveyed suggest any problems or concerns relating to kitchen waste recycling. Of those who mention something, the items named most often are:
 - 17% Odor and mess
 - 12% Inconvenient/too much bother
 - 11% Attracts pests
 - 8% Cart is too big/not easy to use
- Seven out of 10 (70%) of the respondents say that the instructions originally provided about the kitchen waste recycling program were easy to understand; 13% say they were not easy to understand, or could not recall how they responded; 9% say they never received instructions.

patd

Comment: Does this section still refer just to households participating in food waste collection, or does it refer to the entire group? It would help to clarify.

Current and previous participation in kitchen waste recycling

- Over half (54%) of the respondent households currently participate (33%) or have participated (21%) in the kitchen waste recycling program since it began. The rate of participation is higher for the City of Issaquah (64%: 42% + 22%) than for the City of Kirkland (44%: 25% + 19%).

Incentives to encourage participation

- Lower collection rates for those who recycle is, by far, the incentive respondents believe to be most likely to encourage greater participation in kitchen waste recycling (70%).
- City of Kirkland residents give strongest support to lower collection rates (75% vs. 67% of the Issaquah households). The majority of those from Issaquah, when this was given to them as an option, also believe that having the City provide a plastic kitchen container would also be a major incentive (62% vs. 35% of the Kirkland households; Kirkland households received a free kitchen container from the City).

patd

Comment: I thought it was interesting that not many Issaquah respondents came up with this on their own, but cited it as an incentive when it was mentioned.

Demographic differences between the two cities

There are major demographic differences between the residents of the City of Issaquah and the City of Kirkland:

- The proportion of heads of households who are under 35 in Issaquah is nearly double that of Kirkland (46% vs. 27%); conversely the proportion of household heads who are 55 and older in Kirkland is nearly twice that of Issaquah (44% vs. 25%).
- There are far more households with children in Issaquah than in Kirkland (44% vs. 32%).
- A much greater proportion of Issaquah respondents have been living in their city for 10 years or less compared with the residents of Kirkland (65% vs. 34%).

- A much greater proportion of Kirkland respondents have resided in the Puget Sound area for more than 20 years (70% vs. 45%).

Demographic differences between those who do and do not participate in kitchen waste recycling

- Between the two cities, households with children are significantly more likely to participate in kitchen waste recycling (47% compared with 36% of the households without children). There are no significant differences for the other demographics that were measured – age of respondent, number in the household, numbers of children, years as a resident of the city, and years as a resident of Puget Sound.

**DETAILED
SURVEY RESULTS
AND
SUPPORTING TABLES**

CURRENT WASTE DISPOSAL ATTITUDES AND PRACTICES (Table 1)

Satisfaction with garbage services

Residents of both Issaquah and Kirkland are equally satisfied with the current garbage and recycling services they receive; 73% and 72%, respectively, are “Very satisfied,” while most of the remaining respondents (24% each) say they are “Somewhat satisfied,” and a small percentage (3% and 4%) have any level of dissatisfaction.

Recycling practices

Nearly everyone who lives in the two cities participates in some level of recycling. Nine out of 10 (91%) recycle newspapers and paper; two-thirds (66%) recycle plastic; 61% recycle metal and aluminum; 59% recycle glass; and 56% recycle cardboard and cardboard boxes. Recycling participation is about the same for both cities; however, a slightly higher proportion of Issaquah residents recycle glass and cardboard (63% and 58% respectively, compared with 56% and 53% in Kirkland).

Participation in kitchen waste recycling

While participation in recycling is about the same for the two cities, residents of Issaquah, compared with those in Kirkland, are more likely to participate in the kitchen waste recycling program.

Currently, 41% of the single-family residents of Issaquah participate in some form of kitchen waste recycling, compared with 25% of the single-family residents of Kirkland, and 10% of the residents of Kirkland volunteered that they did not know about the program (compared with just 2% of the Issaquah residents). Kirkland’s food waste educational campaign started in December 2003, while Issaquah’s educational program was initiated in July 2005.

Table 1. Current Waste Disposal Attitudes & Practices					
Question/ Response	Total Sample (Base=800)	City of Issaquah (Base=400)	City of Kirkland (Base=400)	Recycle Kitchen Waste	
				Yes (Base=266)	No (Base=534)
Q2. Overall, how satisfied are you with the current garbage and recycling services you are receiving?					
Very satisfied	73%	73%	72%	74%	72%
Somewhat satisfied	24	24	24	23	24
Somewhat/very dissatisfied	3	3	4	3	4
Q3. In the last month, did you place any materials in your blue recycling cart for pickup?					
Yes	98%	98%	99%	100%	98%
Q3. (If yes) Which ones? (open-end, multiple responses; do not add to 100%)					
Paper/newspapers	91%	90%	92%	94%	89%
Plastics	66	66	67	69	64
Metals/aluminum	61	63	60	70	57
Glass	59	63	56	62	58
Cardboard/cardboard boxes	56	58	53	54	56
Q4a. In the last month, did you place any of your kitchen food waste in the large green/gray waste cart provided for yard and kitchen waste pickup?					
Yes	33%	41%	25%		
No	61	57	65		
No, didn't know I could do this	6	2	10		

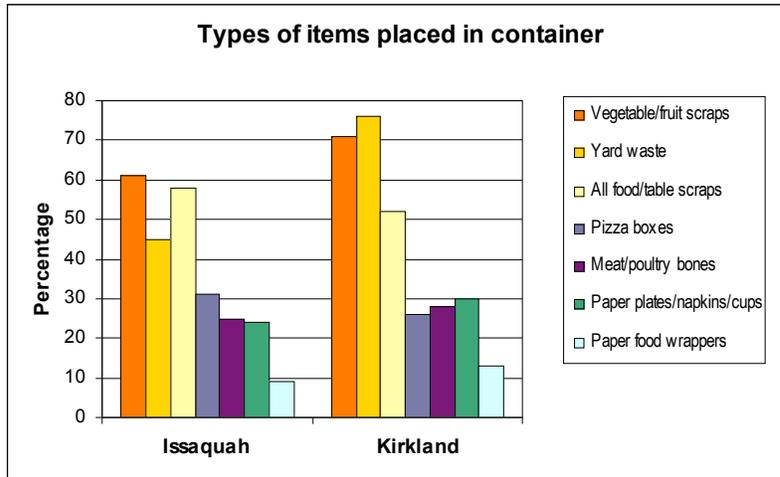
KITCHEN WASTE RECYCLING PATTERNS OF PROGRAM PARTICIPANTS (Table 2)

Although Issaquah households participate in the kitchen waste recycling program at a higher rate than Kirkland households, the recycling patterns of the households in each city are fairly similar.

Types of waste being placed in the yard waste cart

People who choose to participate tend to use the program mostly for food waste products; however, there is a lack of awareness that pizza boxes, meat and poultry bones, and paper products used with food can also go into the yard waste cart for pickup.

The majority of those participating in the program dispose of vegetable and fruit scraps (65%), yard waste (56%), and all food and table scraps (56%) in the yard waste cart. A smaller proportion place out pizza boxes (29%), meat and poultry bones (26%), and paper products used with food (26%), and paper food wrappers (11%).



Frequency of use

Just over one-half (58%) of the participants place some kitchen waste in their yard waste recycling cart every week; 21% place kitchen waste out every other week, 13% place kitchen waste out for pickup about once a month; and the remainder (8%) leave it out less than once a month.

Two-thirds (66%) of the Kirkland households, compared with just 52% of the Issaquah households, leave kitchen waste out for pickup on a weekly basis.

How often is kitchen waste taken from the kitchen to the recycling cart?

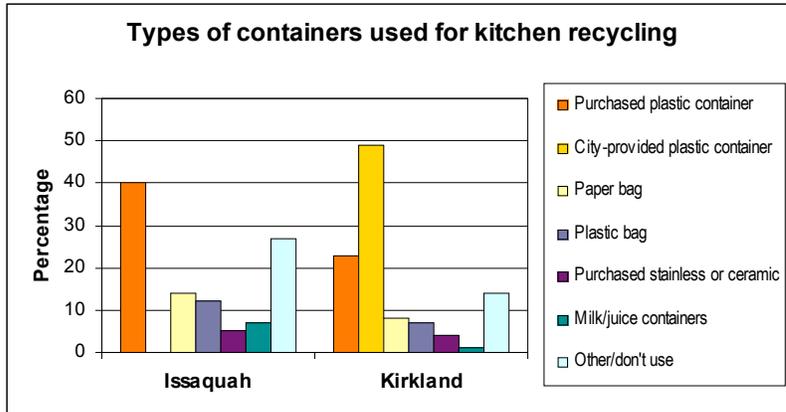
The majority (52%) of the participants in the program take their kitchen waste out to the recycling cart every two or three days; 19% take it out everyday, while 16% take it out about once a week; and 11% take it out less often than once a week (2% are not sure).

Issaquah and Kirkland households have about the same frequency patterns in taking their kitchen waste to the recycling cart.

Type of food waste container kept in the kitchen

Participants use a variety of containers to store kitchen waste before taking it out to their yard waste recycling cart. A little over one-half (53%) use some type of plastic container; 27% use paper bags, plastic bags, stainless steel or ceramic containers; and 8% use other types of containers (milk and juice cartons, coffee cans, etc.). Some (18%) do not use any type of container in their kitchen, but take waste directly to their cart outside.

Kirkland residents were given a plastic container at the beginning of the program. Nearly one-half (49%) of those who are still participating use this container to store the kitchen waste before taking it out to the recycling cart. An additional 23% use a plastic container they purchased. Since Issaquah residents were not given a kitchen container, they are currently using plastic, paper, plastic, or other types of containers they purchased or obtained themselves.



Disposal of paper products associated with food

Two-thirds (68%) of the participants say they have placed pizza boxes and other paper products used with food in their yard waste cart. Issaquah households are somewhat more likely to be doing this than are Kirkland households (71% vs. 64%). Five percent (5%) of the participants claim that they did not know they could do this.

Awareness of decrease in trash

Over three-fourths (77%) of the participants say that they have noticed that the amount of trash going in their regular trash container has decreased since they have been participating in the kitchen waste recycling program (and the proportion is the same for both cities).

Table 2. Current Waste Disposal Attitudes & Practices			
(Base = Those participating in Kitchen Waste Recycling)			
Question/ Response	Total Participants (Base=266)	City of Issaquah (Base=166)	City of Kirkland (Base=100)
Q4b. What types of items have you placed in the green/gray yard waste cart for pickup? (Multiple responses; do not add to 100%)			
Vegetable/fruit scraps	65%	61%	71%
Yard waste	56	45	76
All food/table scraps	56	58	52
Pizza boxes	29	31	26
Meat/poultry bones	26	25	28
Paper plates/napkins/cups	26	24	30
Paper food wrappers	11	9	13
Q4c. How often does your green/gray yard waste cart have kitchen or food waste for pickup?			
Nearly every week	58%	52%	66%
Every other week	21	24	16
About once a month	13	15	12
Less often than once a month	7	8	4
Not sure	1	1	2
Q4d. How often do you carry your kitchen and food waste out to the green/gray yard waste cart?			
Every day	19%	20%	19%
Every two or three days	52	51	55
About once a week	16	14	18
Less often than once a week	11	13	7
Not sure	2	2	1
Q4e. What type of food waste container, if any, do you keep in your kitchen to store the waste until you take it out to the green/gray yard waste cart? (Some multiple responses; do not add to 100%)			
Plastic container I purchased	34%	40%	23%
Plastic container provided by the City	19	--	49
Paper bag	12	14	8
Plastic bag	10	12	7
Stainless steel/ceramic one purchased	5	5	4
Milk/juice containers	4	7	1
Other	4	6	1
Don't use container/take directly to cart	18	21	13

Table 2. Current Waste Disposal Attitudes & Practices - continued			
<i>(Base = Those participating in Kitchen Waste Recycling)</i>			
Question/ Response	Total Participants <i>(Base=248)</i>	City of Issaquah <i>(Base=152)</i>	City of Kirkland <i>(Base=96)</i>
<i>Q4f. Have you ever placed any pizza boxes, paper plates or other paper products used with food in the green/gray yard waste cart?</i>			
Yes	68%	71%	64%
No	24	22	27
Didn't know that I could	5	5	5
Not sure	3	2	4
<i>Q4g. Have you noticed a decrease in the amount of trash going in your regular trash container?</i>			
Yes	77%	76%	77%
No	17	19	15
Trash has increased	2	--	5
Not sure	4	5	3

PRACTICES OF HOUSEHOLDS NOT CURRENTLY DOING KITCHEN WASTE RECYCLING (TABLE 3)

Of the 67% not currently participating in the kitchen waste recycling program (58% of the Issaquah households and 75% of the Kirkland households), nearly one-third (31%) have done so in the past.

A significantly higher proportion of Issaquah households, compared with Kirkland households, (38% vs. 24%) previously recycled kitchen waste.

Only 11% of those who have previously participated place any pizza boxes or other paper products used with food into their recycling carts. Although this proportion is the same for both cities, a somewhat higher proportion of Kirkland residents say they did not know they could do this (21% vs. 14%).

Most of those who tried and no longer participate in the kitchen waste recycling program currently throw their kitchen waste in the trash (71%) or use their garbage disposals.

More information appears to be the primary action that would encourage greater participation in kitchen waste recycling programs. It is especially important to the Kirkland households (46% compared with 25% of the Issaquah households), possibly because the program, and the promotion for the program, got started more recently in Issaquah. Several other ideas were suggested, but 18% said that nothing would encourage them to participate, and another 25% could not think of any suggestions.

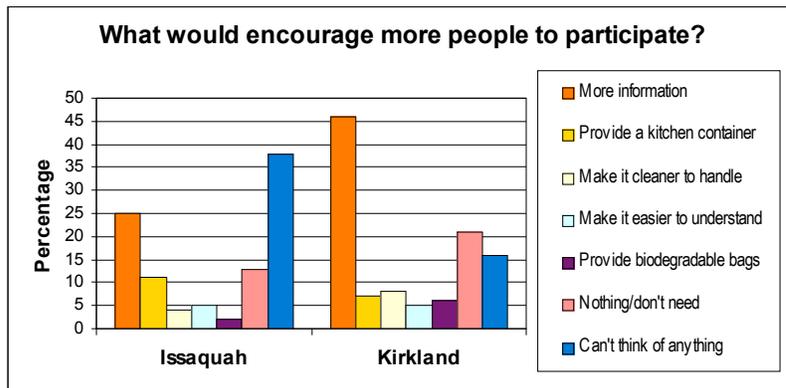


Table 3. Practices of Those Not Currently Doing Kitchen Waste Recycling (Base = Those not participating in Kitchen Waste Recycling)			
Question/ Response	Total Participants <i>(Base=534)</i>	City of Issaquah <i>(Base=234)</i>	City of Kirkland <i>(Base=300)</i>
Q5a. Have you ever placed any kitchen or food waste in the green/gray yard waste cart since this program was started by the City?			
Yes	31%	38%	24%
No	60	59	61
No, didn't know I could do this	9	3	15
Q5b. Have you ever placed any pizza boxes, paper plates or other paper products used with food in the green/gray yard waste cart? (Asked of those who answered "Yes" to Q5a)			
	<i>(Base=370)</i>	<i>(Base=145)</i>	<i>(Base=225)</i>
Yes	11%	11%	11%
No	69	72	67
No, didn't know I could do this	18	14	21
Not sure	2	3	1
Q5c. How do you currently dispose of your household's kitchen and food waste? (Multiple responses; do not add to 100%)			
Throw in with the trash	71%	68%	72%
Use garbage disposal	45	43	46
Place in my compost bin	9	9	9
Other	1	3	1

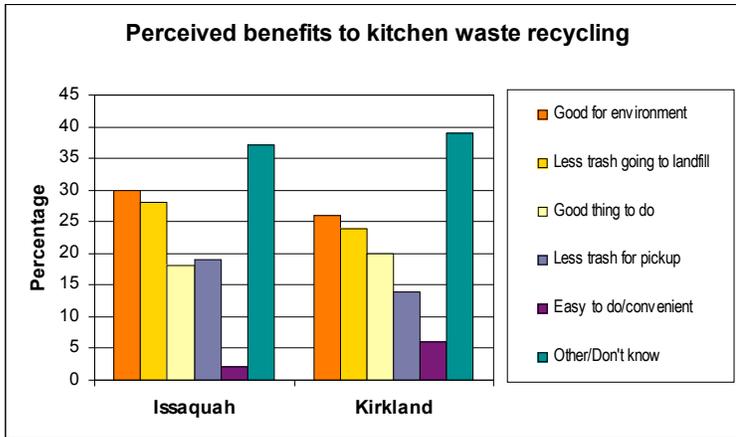
Table 3. Practices of Those Not Currently Doing Kitchen Waste Recycling - continued			
(Base = Those not participating in Kitchen Waste Recycling)			
Question/ Response	Total Participants <i>(Base=370)</i>	City of Issaquah <i>(Base=145)</i>	City of Kirkland <i>(Base=225)</i>
<i>Q5d. What, if anything, might encourage you to participate in the City's food waste recycling program and place your food and soiled paper items in the yard waste cart for pickup? (Open-end multiple responses; do not add to 100%)</i>			
More information	38%	25%	46%
Provide a kitchen container	9	11	7
Make it cleaner to handle	6	4	8
Make it easier to understand	5	5	5
Provide biodegradable bags	4	2	6
Make it more convenient to do	3	3	2
Lower trash costs for participation	2	--	4
Need a yard waste recycling cart	1	1	1
Nothing/don't need this	18	13	21
Can't think of anything	25	38	16

GENERAL ATTITUDES TOWARD THE KITCHEN WASTE RECYCLING PROGRAM (TABLE 4)

Perceived benefits of kitchen waste recycling

Residents of both cities agree that there are benefits to providing kitchen waste recycling, and about the same proportion of households share the same ideas. Two-thirds (68%) of the respondents from both cities suggest at least one benefit. The most frequently-named benefits include: It’s good for the environment (28%); less trash goes to the landfills (26%); it is a good thing to do (19%); and there is less trash for pickup (17%).

Those who currently recycle kitchen waste, compared with those who do not, are considerably more likely to see the benefits from this program (82% vs. 61% name at least one benefit), and they are more likely to recognize that recycling kitchen waste means that less trash goes to the landfills.



Concerns or problems with the kitchen waste recycling program

About one-half of the respondents site concerns or problems with the program, most notably, with the odor and mess (17%); inconvenience and bother (12%); pests (11%); and with using the large yard waste carts (8%).

Kirkland households are slightly more concerned with the kitchen waste recycling program: 50% vs. 43% of the Issaquah households express at least once concern.

Those who currently participate in the program have somewhat fewer concerns than those who do not recycle kitchen waste (39% vs. 51%).

Were the instructions originally provided easy to understand?

Most (70%) of the Issaquah and Kirkland households say that the original instructions for kitchen waste recycling were easy to understand; 8% did not feel the instructions were easy to understand, 13% could not recall, and 9% say they did not receive any instructions.

Those who currently recycle kitchen waste are considerably more likely to say that they received good instructions (86% vs. 62% of those who do not participate).

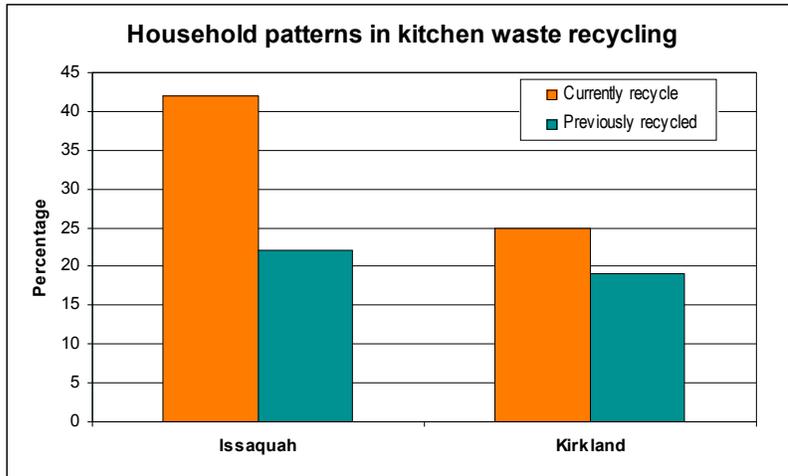
Table 4. General Attitudes toward the Kitchen Waste Recycling Program

Question/ Response	Total Sample (Base=800)	City of Issaquah (Base=400)	City of Kirkland (Base=400)	Recycle Kitchen Waste	
				Yes (Base=266)	No (Base=534)
Q6. What benefits, if any, do you see in the City providing a food and kitchen waste recycling program? (Multiple, open-end responses; do not add to 100%)					
Good for environment	28%	30%	26%	33%	25%
Less trash going to landfill	26	28	24	38	20
Good thing to do	19	18	20	23	17
Less trash for pickup	17	19	14	27	12
Easy to do/convenient	4	2	6	6	3
Other suggestions	6	4	8	9	7
Don't know	32	33	31	18	39
Q7. What concerns or problems, if any, do you have with this program? (Multiple, open-end responses; do not add to 100%)					
Odor/mess	17%	14%	20%	12%	20%
Inconvenient/too much bother	12	12	11	5	15
Attracts pests	11	8	15	7	14
Cart is too big/not easy to use	8	11	6	9	8
Instructions not clear	3	2	5	3	4
Recycling is confusing enough	3	3	4	3	3
Waste of money/no need	2	2	3	3	3
Other concerns: See Appendix					
No concerns or problems	53	57	50	61	49
Q8. Do you feel the instructions originally provided explaining how to participate in the City's food and kitchen waste recycling program were easy to understand?					
Yes	70%	73%	68%	86%	62%
No	8	8	8	6	9
Not sure/don't recall	13	10	16	3	18
Did not receive instructions	9	9	8	5	11

HOUSEHOLDS THAT CURRENTLY PARTICIPATE OR PREVIOUSLY PARTICIPATED (Table 5)

Combining those who currently participate with those who did so previously, over one-half (54%) of the households in the two cities has participated in kitchen waste recycling. Residents of Issaquah have significantly higher rates of trying the program (64% of the Issaquah households have, or are now, participating compared with 44% of the Kirkland households).

	Total Respondents	Issaquah	Kirkland
• Currently recycle kitchen waste	33%	42%	25%
• Previously recycled kitchen waste	<u>21</u>	<u>22</u>	<u>19</u>
Total kitchen waste recycle experience	54%	64%	44%



Of the total households that do not currently recycle food waste, nearly one-third (31%) have participated in some kitchen waste recycling since the program was started in their city.

Table 5. Comparisons: Households with Experience vs. No Experience with Kitchen Waste Recycling					
(Combining those currently recycling with those who tried it but are no longer doing so)					
Question/ Response	Total Sample (Base=800)	City of Issaquah (Base=400)	City of Kirkland (Base=400)	Recycle Kitchen Waste Yes (Base=266)	Recycle Kitchen Waste No (Base=534)
<i>Q4 and Q5a combined: Households that currently participate, or previously participated in kitchen waste recycling program.</i>					
Currently participate	33%	42%	25%	100%	--
Previously participated	21	22	19		31%
Total with kitchen waste recycling experience	54%	64%	44%		

INCENTIVES TO ENCOURAGE PARTICIPATION IN KITCHEN WASTE RECYCLING (Tables 6a and 6b)

Respondents were asked to rate four incentives (on a five-point scale) according to how likely they would be to encourage people to participate in kitchen waste recycling, where 5 is “Very likely” and 1 is “Not at all likely.” By far, the top suggestion offered by residents of both cities is “Lower collection rates for those who recycle.” The top ratings given to the four suggested incentives include:

	<u>Percent of Total Giving a 5 or 4 Rating</u>
• Lower collection rates for those who recycle	70%
• Plastic kitchen container provided by the City	48
• Biodegradable bags that can be purchased at a store	45
• Education program to explain what and how to recycle	41

Issaquah households are more likely to favor having a kitchen container provided by the City (62% compared with 35% for Kirkland residents, who already have this incentive). Kirkland residents give stronger ratings to each of the other incentives, but give considerably higher ratings to having lower collection rates for those who recycle (75% of the Kirkland respondents).

The majority of those who currently recycle kitchen waste believe that lower garbage collection rates and a plastic kitchen container provided by the City would be the greatest incentives (74% and 56%, respectively). Lower collection rates is a choice for 69% of those who do not currently recycle kitchen waste; this is the only choice given a top rating by a majority of the respondents who do not currently participate.

Table 6a. Incentives to Encourage Participation in Kitchen Waste Recycling (Top priorities)

(Percentage of total respondents giving a 5 or 4 rating, where 5 is "Very Likely" and 1 is "Not at all Likely;" arranged in order of highest 5 and 4 ratings)

Possible Incentive	Total Sample (Base=800)	City of Issaquah (Base=400)	City of Kirkland (Base=400)	Recycle Kitchen Waste	
				Yes (Base=266)	No (Base=534)
Lower collection rates for those who recycle	70%	67%	75%	74%	69%
Plastic kitchen container provided by the City	48	62	35	56	45
Biodegradable bags that can be purchased at a local store for storing kitchen waste prior to placing it in the green cart	45	45	44	43	45
Education program to explain what and how to recycle	41	36	47	44	40

Table 6b. Incentives to Encourage Participation in Kitchen Waste Recycling (Highest to lowest ratings)

(Arranged in order of highest "Likely to encourage" rating)

Possible Incentive	Very likely ----- Not at all likely to encourage participation					Don't Know
	5	4	3	2	1	
Lower collection rates for those who recycle	51%	19%	14%	6%	6%	4%
Plastic kitchen container provided by the City	29	19	14	12	21	5
Biodegradable bags that can be purchased at a local store for storing kitchen waste prior to placing it in the green cart	24	21	16	16	20	3
Education program to explain what and how to recycle	23	18	26	14	15	4

DEMOGRAPHICS OF RESPONDENTS (TABLE 7)

Interestingly, the only demographic category where there are significant differences between those participating in the kitchen waste recycling programs, and those who are not, is having children under 18 in the household. In general, households with children, compared with those without, are significantly more likely (47% vs. 36%) to participate in the kitchen waste recycling programs.

The demographics listed below relate to only single-family households in the two cities.

Age of Head of Household

There are major differences in the ages of the populations of the two cities. Issaquah has a much younger population with 46% of the heads of households under 45 years of age. Kirkland, by contrast, has only 27% in this age group. And, for Issaquah, 25% of the heads of households are 55 and over, compared with 45% of those in Kirkland.

Number in household

Issaquah and Kirkland have the same proportion of households with one person and with four or more people, but Kirkland has a somewhat higher proportion of two-person households (44% vs. 37% in Issaquah). Issaquah has a somewhat higher proportion of three-person households (22% vs. 14% for Kirkland).

Children in household

There are significant differences in the proportions of households with children under 18. Some 44% of the Issaquah single-family households have children, compared with just 32% of those in Kirkland.

Of households with children, a significantly higher proportion of those living in Issaquah, compared with those in Kirkland, have one child (49% vs. 38%). More Kirkland households have two children (46% vs. 38% in Issaquah); and there is about the same proportion of households with three or more children (13% for Issaquah and 16% for Kirkland).

As mentioned above, having children appears to be a strong motivator for participation (47% vs. 36% of the households without children). Further, children in the household, and not the number of children, seems to be the key factor.

Years as a resident of the City

The younger Issaquah households are reflected in their length of residence in the city. While one-third (49%) of the Issaquah households interviewed have lived in the city for 5 years or less, this is true for just 21% of the Kirkland households; 16% and 13%, respectively, have lived in Issaquah and Kirkland for six to 10 years. At the opposite end of the spectrum, one-third (35%) of the Issaquah households have resided in the area for more than 10 years compared with two-thirds (66%) of the Kirkland households.

Years as a resident of Puget Sound

Participants in Issaquah households have lived in the Puget Sound area for a considerably shorter time than those in Kirkland households. While one-third (34%) of the Issaquah residents have been in the Puget Sound area for 10 years or less, only 15% of the Kirkland families have been in the area for that length of time. One-half (50%) of the Kirkland households have lived in the Puget Sound area (and most of those years in Kirkland) for more than 30 years, compared with only 29% of the Issaquah households.

Gender of respondent

Interviewers were instructed to try to obtain a sample with about an even proportion of men and women. Overall, 54% of the respondents are female and 46% are male. In Issaquah, 53% of those interviewed are female, and for Kirkland, 55% are female.

Neighborhoods of respondents

Respondents were chosen approximately in proportion to population for both cities. Neighborhoods for each city are listed in Table 8.

Table 7. Demographics of Respondents					
Question/ Response	Total Sample (Base=797)	City of Issaquah (Base=397)	City of Kirkland (Base=400)	Recycle Kitchen Waste Yes (Base=263)	Recycle Kitchen Waste No (Base=532)
Q10. Age of respondent					
Under 35	14%	21%	7%	15%	13%
35 – 44	22	25	20	23	22
45 – 54	29	29	29	27	30
55 – 64	18	12	22	17	18
65 and older	17	13	22	18	17
Q11a. Number in household					
One	15%	15%	16%	12%	17%
Two	41	37	44	38	42
Three	18	22	14	22	17
Four or more	26	26	26	28	24
Q11b. Children in household					
Yes	38%	44%	32%	47%	36%
Number of children	<i>(Base=306)</i>	<i>(Base=177)</i>	<i>(Base=129)</i>	<i>(Base=115)</i>	<i>(Base=191)</i>
One	44%	49%	38%	47%	42%
Two	42	38	46	40	43
Three or more	14	13	16	13	15
Q12. Years as a resident of city					
	<i>(Base=800)</i>	<i>(Base=400)</i>	<i>(Base=400)</i>	<i>(Base=266)</i>	<i>(Base=534)</i>
One year	13%	20%	6%	12%	14%
Two to five years	22	29	15	20	22
Six to 10 years	15	16	13	17	13
11 to 20 years	23	20	27	22	24
More than 20 years	27	15	39	29	27
Q13. Years as a resident of Puget Sound					
Five years or less	14%	19%	9%	12%	15%
Six to 10 years	10	15	6	12	10
11 to 20 years	18	21	15	18	18
21 to 30 years	18	16	20	19	17
More than 30 years	40	29	50	39	40
Gender of respondent					
Female	54%	53%	55%	46%	46%
Male	46	47	45	54	54

Table 8. Neighborhoods of Respondents					
Question/ Response	Total Sample (Base=800)	City of Issaquah (Base=400)	City of Kirkland (Base=400)	Recycle Kitchen Waste	
				Yes (Base=266)	No (Base=534)
Issaquah neighborhood:					
Squak Mountain		32%		28%	35%
Issaquah Highlands		25		22	27
Downtown		13		13	12
Talus		6		*	*
Montreux		5		*	*
Other neighborhoods (2% or less) – See Appendix		17		*	*
Don't know		2		*	*
Kirkland neighborhood:					
Houghton/Central Houghton			14%	11%	15%
North Juanita			12	7	13
North Rose Hill			12	15	10
Norkirk			11	15	10
South Rose Hill			11	10	11
Bridal Trails			10	10	11
South Juanita			8	*	*
Highlands			7	*	*
Market			5	*	*
Totem Lake			3	*	*
Other neighborhoods (2% or less) – See Appendix			5	*	*
Don't know			2	*	*

*Numbers too small for significance.

APPENDIX:
INDIVIDUAL RESPONSES TO OPEN-END QUESTIONS
SURVEY QUESTIONNAIRE

ADDITIONAL RESPONSES FROM OPEN-END QUESTIONS

(Number of responses, beyond one, shown in parenthesis)

Q4e. What type of food waste container, if any, do you keep in your kitchen to store waste until you take it out to the yard waste cart?

Coffee can (5); freezer (2); plastic yogurt container; metal bowl.

Q5c. How do you currently dispose of your household's kitchen and food waste?

Add to yard waste cart during summer months only (2); throw in forest; recycling.

Q5d. What, if anything, might encourage you to participate in the City's food waste recycling program?

Need a yard waste recycling cart (4); separate container for food waste only (2); more animal proof container (2); easier to use disposal (2); will do it only if required to do so.

Q6. What benefits, if any, do you see in the City providing a food and kitchen waste recycling program?

Good compost/great for people who compost (15); less need to use disposal/add to sewer (15); don't need to export trash (14); will lower rates over time (6); lower garbage bill now because I use a smaller trash container (6).

Q7. What concerns or problems, if any, do you have with this program?

Attracts bears (9 – all Issaquah); small container not easy to use (8 – all Kirkland); pickup men leave mess (6); not everyone is participating (5); infrequent winter pickup (5); no room for container (5); people use disposals (4); bacteria (3); vandalism (2); don't know schedule (2); more trucks on the road (2); take electronics (2); people not using containers that have been provided.

Q14. Neighborhoods – Issaquah

Summer Hill (9); Sycamore (8); Old Town (8); The Woods (8); Cougar Mountain (7); Inniswood (7); Forest Rim (6); Morgan's Ridge (4); Wildwood (2); Issaquah Woods; Dogwood; Mountaineer; Mt. Olympus; Mt. Pak Estates; Terra Highlands; Lakemont; Sugar Ridge; Gilman; Francis Woods.

Q14. Neighborhoods – Kirkland

Central (8); Everest (5); Forbes Creek (4); Lakeview (3); Brookhaven; Wellington Way; Bridlewood Circle; Kirkwood; Sablewood.

SURVEY QUESTIONNAIRE

Carolyn Browne Associates
3420 Camano Vista St.
Greenbank, WA 98253
360-222-6820

INTERVIEWER _____
START _____
STOP _____
TOTAL _____

Person Called: _____

Phone: _____

City of Kirkland/Issaquah
Food Waste Recycling Survey Questionnaire
November 2005

Hello, I'm _____ and I'm calling for the City of Kirkland/Issaquah to learn about your attitudes toward the City's garbage and recycling collection services. Are you the (male/female) head of your household? (IF NOT, ASK TO SPEAK WITH THE APPROPRIATE PERSON OR FIND A TIME TO CALL BACK TO TALK WITH THAT PERSON.)

1. Are you a resident of the City of Kirkland/Issaquah and do you currently reside in a single-family home?

- 1 Yes to both questions – CONTINUE
- 2 No to either question – TERMINATE POLITELY

2. Overall, how satisfied are you with the current garbage and recycling services you are receiving? Are you:

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat dissatisfied
- 4 Very dissatisfied
- 5 Not sure/No opinion (DON'T READ)

3. In the last month, did you place any materials in your blue recycling cart for pickup? (IF YES) Which ones? Anything else?

- 1 Paper/newspapers
- 2 Cardboard/cardboard boxes
- 3 Glass
- 4 Plastics
- 5 Metals/aluminum
- 6 Other: _____

- 9 No, not placing any recyclables out for pickup
- 10 Take recyclables to a recycling center

4a. In the last month, did you place any of your kitchen food waste in the large gray/green yard waste cart provided for yard and kitchen waste pickup?

- 1 Yes
- 2 No – SKIP TO QUESTION 5
- 3 No, didn't know that I could do this– SKIP TO QUESTION 5

4b. What types of items have you placed in the gray/green yard waste cart for pickup? (DO NOT READ LIST; MARK ALL THAT APPLY)

- 1 Vegetable/fruit scraps
- 2 Meat/poultry bones
- 3 All food/table scraps
- 4 Pizza boxes
- 5 Paper plates, napkins, cups
- 6 Paper food wrappers
- 7 Yard waste
- 8 Other: _____
- 9 Do not use the gray/green yard waste cart
- 10 Not sure/don't know

4c. How often does your gray/green yard waste cart have kitchen or food waste for pickup? Would you say it was:

- 1 Nearly every week
- 2 Usually every other week
- 3 About once a month
- 4 Less often than once a month – SKIP TO QUESTION 5
- 5 Not sure (DON'T READ)

4d. How often do you carry your kitchen and food waste out to the gray/green yard waste cart? Is it:

- 1 Every day
- 2 Every two or three days
- 3 About once a week
- 4 Less often than once a week
- 5 Not sure (DON'T READ)

4e. What type of food waste container, if any, do you keep in your kitchen to store the waste until you take it out to the gray/green yard waste cart? (DO NOT READ LIST)

- 1 Plastic container provided by the City
- 2 Plastic container I purchased
- 3 Stainless steel/ceramic container I purchased
- 4 Paper bag
- 5 Plastic bag
- 6 Take food directly out to the recycling cart
- 7 Don't use container
- 8 Other: _____

4f. Have you ever placed any pizza boxes, paper plates or other paper products used with food in the gray/green yard waste cart?

- 1 Yes
- 2 No
- 3 Didn't know that I could
- 4 Not sure

4g. Have you noticed a decrease in the amount of trash going in your regular trash container?

- 1 Yes
- 2 No
- 3 Not sure

SKIP TO QUESTION 6

5a. Have you ever placed any kitchen or food waste in the gray/green yard waste cart since this program was started by the City?

- 1 Yes – SKIP TO QUESTION 6
- 2 No
- 3 No, didn't know that I could do this

5b. Have you ever placed any pizza boxes, paper plates or other paper products used with food in the gray/green yard waste cart?

- 1 Yes
- 2 No
- 3 Didn't know that I could
- 4 Not sure

5c. How do you currently dispose of your household's kitchen and food waste?
(DON'T READ; MARK ALL THAT APPLY)

- 1 Throw in with the trash
- 2 Use garbage disposal in sink
- 3 Place in my compost bin
- 4 Add to yard waste container during the summer months only
- 5 Other: _____

5d. What, if anything, might encourage you to participate in the City's food waste recycling program and place your food and soiled paper items in the gray/green yard waste cart for pickup?

6. What benefits, if any, do you see in the City providing a food and kitchen waste recycling program?

7. What concerns or problems, if any, do you have with this program?

8. Do you feel that the instructions originally provided explaining how to participate in the City's food and kitchen waste recycling program were easy to understand?

- 1 Yes
- 2 No
- 3 Not sure/don't recall
- 4 Did not get a set of instructions

9. The City is currently looking at some possible ways to encourage residents to participate more fully in the kitchen waste recycling program in order to add to the life of the landfill and keep trash collection rates down. As I read each of the possible incentives the City is evaluating, will you tell me how likely you believe this would encourage people to do kitchen waste recycling on a 5-point scale where 5 is "Very likely" and 1 is "Not at all likely." (ROTATE LIST) First, how about.....

Alternative	Very likely-----Not at all likely					Don't Know
	5	4	3	2	1	
Education program to explain what and how to recycle	5	4	3	2	1	0
Biodegradable bags that can be purchased at a local store for storing kitchen waste prior to placing it in the gray/green cart	5	4	3	2	1	0
Plastic kitchen container provided by the City	5	4	3	2	1	0
Lower collection rates for people who use smaller trash carts	5	4	3	2	1	0

I am going to ask a few demographic questions for classification purposes only. Your responses will not be identified with your name.

10. What is your age? _____ (IF PERSON HESITATES, READ THE RANGES)

- 1 Under 25
- 2 25 - 34
- 3 35 - 44
- 4 45 - 54
- 5 55 - 64
- 6 65 and older

11a. How many people, including yourself, are in your household? _____
(IF 1, SKIP TO QUESTION 12)

11b. How many children under 18 years of age are in your household? _____

12. How many years have you been a resident of Kirkland? _____

13. How many years have you been a resident of the Puget Sound Area? _____

14. Finally, in what neighborhood do you reside? _____

Sex of respondent:

- 1 Male
- 2 Female