

**Executive Summary**  
**Ramsey/Washington County Resource Recovery Project**  
**Public Collection Households Survey**  
**Baseline Study Results**  
**July – August 2001**

Between July 23 and August 23, 2001 the Ramsey/Washington County Resource Recovery Project Board surveyed residents in Ramsey and Washington Counties to assess their opinions of garbage service, public and open collection, waste management and government involvement in garbage collection.

This is a baseline study and should be used to gauge current levels of knowledge and opinions in Ramsey and Washington Counties.

**Findings and Recommendations**

Based on the survey results, the survey staff evaluation group presents the following findings and recommendations.

**Findings**

- There are preconceptions among many respondents about how Public Collection would be implemented which are different from the ideas being most seriously discussed by the Counties.
- Finding ways to use waste as a resource is important to respondents. Recovering energy by processing waste, landfilling with energy recovery and composting food and organic waste are preferred by respondents.
- Freedom of choice is a strong value for many respondents.
- Cost is an important factor for respondents and was cited as a justification for both open and Public Collection.
- Respondents want to retain competition between haulers. Some respondents are concerned about small haulers being put out of business under Public Collection.
- Respondents cited a number of hauler customer service issues.

**Recommendations**

The following recommendations should be part of the process to educate residents and collect their input and opinions about Public Collection.

- Communicate the wide range of flexibility and potential options that go into designing a public collection system including:
  - Individual communities could determine what type of Public Collection is advantageous to their communities and how to implement Public Collection in their communities.
  - The Counties would contract with private haulers, not employ public trucks and employees.
  - Multiple haulers could serve each county.
  - Zones may be established in which haulers operate.
  - One hauler or multiple haulers may operate in a given zone.
- Communicate the connection between Public Collection and achieving environmental and public health goals, including reducing the use of landfills.
- Communicate to residents that choice of haulers is possible under a multiple haulers per zone approach, but that this may be a tradeoff for reducing truck traffic in neighborhoods.
- Clearly and accurately communicate the direct and indirect costs to residents for solid waste collection and management.
- Communicate the Counties' commitment to ensuring a competitive process, including a level playing field between haulers of varying sizes.
- Communicate how the county could address customer service issues by including measurable and enforceable customer service standards in contracts.

**Methodology**

The telephone survey was conducted between July 23 and August 23, 2001, by MarketLine Research, Inc. The sample included 730 respondents, 521 from Ramsey County and 209 from Washington County.

The survey included randomly selected phone numbers of listed residential customers, screened so that zip codes were represented proportionately. Surveyed households included only households that arranged for their own garbage collection service or which were in organized collection municipalities; 96% were homeowners.

During weekdays, the calls were made during the day and evenings, on Saturday and Sunday calls were made only during daytime hours. Questions and response choices were rotated to reduce bias from respondents. The survey included questions about basic demographics of respondents.

## Results of Ramsey/Washington County Resource Recovery Project Public Collection Baseline Survey of Households July – August 2001

### Purpose of Survey

In June 2001 the Ramsey and Washington County Boards voted to explore Public Collection of solid waste in each of the two Counties and delegated to the Ramsey/Washington County Resource Recovery Project Board the authority to conduct the exploration process. To create a baseline of information about residents' thoughts about Public Collection and to determine what residents consider important in trash collection and disposal, a telephone survey was developed. The survey attempts to answer the following:

- what is important to residents in garbage service
- if they have an initial preference for Public Collection or open collection
- what their preference is for how trash is managed once it is collected
- specific concerns if their city or the county negotiated a contract with a private hauler for garbage collection service.

### How the Survey Was Conducted

The survey was conducted between July 23 and August 23, 2001, by MarketLine Research, Inc. Budget constraints limited the sample size to 730 respondents, 521 from Ramsey County and 209 from Washington County. Nonetheless, this sample size was sufficiently large to produce statistically valid results. Surveyed households included only households which arranged for their own garbage collection service or which were in organized collection municipalities; 96% were homeowners. This was a random survey, screened so that zip codes were represented proportionately.

The survey was done by telephone calls to randomly selected numbers of listed residential customers. Calls were made during weekday days and evenings and during the day on weekends. Responses were recorded in a CATI program which had been programmed to rotate certain questions or response choices to reduce bias from respondents tiring of the list or selecting the first response opportunity. The survey included questions about basic demographics of respondents.

### Summary of Demographics of Survey Respondents

Respondents in Washington County were younger overall: 50% of respondents in Ramsey County, vs. 59% in Washington County, were under 50, and 26% of respondents in Ramsey County were 60 or older, vs. 12% in Washington County.

Age Category	% of Ramsey Respondents	% of Wash. Respondents	% of R/W Respondents
18 – 29	5%	2%	4%
30 – 39	17	27	20
40 – 49	28	36	30
50 – 59	20	21	20
60 – 69	13	7	12
70+	13	5	11
Refused to answer	4	2	4

Note: Columns may not total to 100% due to rounding

About 2/3 of the respondents were female, 1/3 male; results were the same for both counties.

About half of respondents in the two counties combined had at least a college degree, and over ¾ had at least some training after high school. Educational levels were slightly higher for Washington County respondents.

Last Year or Grade of School Completed	% of Ramsey Respondents	% of Wash. Respondents	% of R/W Respondents
HS graduate or less	19%	13%	17%
Some college	19	21	19
Vocational/technical school	10	12	10
College graduate	30	32	30
Post graduate	19	20	19
Refused to answer	4	2	4

Note: Columns may not add to 100% due to rounding.

Most respondents have lived in their current county of residence for a long time, with over ¾ of residents in the counties combined having lived in their county at least 10 years and 55% at least 20. As expected, a larger percentage of Washington County respondents had more recently moved to their county, 12% during the past four years vs. 6% for Ramsey County respondents, and 32% in the past 9 nine years vs. only 15% for Ramsey County.

How Long Respondent Has Lived in Their County	% of Ramsey Respondents	% of Wash. Respondents	% of R/W Respondents
Less than 6 months	1%	1%	1%
6 to 12 months	1	1	1
1 to 4 years	4	10	6
5 – 9 years	9	20	12
10 – 19 years	18	27	21
20 years or more	62	39	55
Refused to answer	4	1	3

Note: Columns may not add to 100% due to rounding.

## Summary of Key Results

### Ranking of items related to the type and quality of garbage collection service

One aspect of the survey was to identify, from a list of predetermined responses, what is important to customers who contract for trash service. The list was created from common complaints and comments received by staff from residents.

**Ranking importance of each item.** Respondents were first asked to rank each of 12 items on a 1 to 7 scale from 7 for “extremely important” to 1 for “not at all important.” The items were as follows (the list was rotated instead of always being read in the following order).

- a. Price based on the size of the garbage container
- b. Overall price
- c. Timely service
- d. Leaving the area around the container clean
- e. Appearance of trucks/equipment
- f. Where the hauler takes your waste to be disposed
- g. Recycling service provided
- h. Other services provided, such as collecting brush/branches or bulky items
- i. Hauler is clear about what is included in price and the prices for “extras”
- j. Communication about services from the hauler
- k. Ability to contact the hauler by phone on customer service issues
- l. Day of week for pickup

Responses can be examined in several ways. Attached is a chart showing the percentage of each item respondents ranked as a “7” for “Extremely Important.” Over half of respondents ranked five items “Extremely Important”:

- Leaving area clean (65%),
- Recycling service provided (59%),
- Ability to contact hauler (54%),
- Timely service (54%), and
- Hauler clear about price (52%).

“Overall Price” was ranked “7” (extremely important) by just under half of respondents. Items ranked “7” by very few respondents were Appearance of Trucks and Equipment and Day of week. (Table 1)

Also attached is a chart showing the percentage of each item respondents ranked as “1” for “Not at All Important.” Except for Day of week, which was rated as “1” by 30% of respondents, no more than 13% of respondents ranked any of the other items “1.” Eight items were ranked “1” by fewer than 5% of respondents. This would indicate that the list of items in the survey did reflect widespread issues residents have about garbage collection service. (Table 2)

Another way of examining the responses is to look at a weighted average for each item. The following list is in order of highest overall score (high importance) to lowest (lower importance) for the two counties combined. While the order of items is slightly different, overall the weighted average rankings are consistent with the two charts showing what was “Extremely Important” and “Not at All Important.”

“Using a 7-point scale where “7” means Extremely Important and “1” means Not at All Important, please tell me how important each item is to you when considering the quality of your garbage collection.”		Mean Score
Response		
d.	Leaving the area around the container clean	6.33
i.	Hauler is clear about what is included in price and the prices for “extras”	6.09
k.	Ability to contact the hauler by phone on customer service issues	6.05
b.	Overall Price	6.05
c.	Timely service	6.02
g.	Recycling service provided	5.96
j.	Communication about services from the hauler	5.72
a.	Price based on the size of the garbage container	5.64
h.	Other services provided, such as collecting brush/branches or bulky items	5.49
f.	Where the hauler takes your waste to be disposed	4.78
e.	Appearance of trucks/equipment	4.05
l.	Day of week for pickup	3.42

**Ranking relative importance of each respondent’s top five items.** Respondents were then asked to rank their top five choices, based on the 1 – 7 scale, in order of importance. This list is different from the mean score ranking. The list above ranks whether an item is important and how important, on its own, the respondent considers it. The following list rates the choices in respect to each other. This shows relative importance. So, for example, while “Leaving the area around the container clean” is very important, with a mean score of 6.33 on a 7 point scale, when compared to the other choices “Overall Price” received a MOST important ranking by 20% of respondents and “Leaving the area clean” was chosen as MOST important by only 6% of respondents. The ranking of MOST important is:

- b. Overall Price (20%)
- g. Recycling service provided (14%)
- c. Timely service (11%)
- h. Other services provided, such as collecting brush/branches or bulky items (10%)
- f. Where the hauler takes your waste to be disposed (9%)
- a. Price based on the size of the garbage container (9%)
- h. Hauler is clear about what is included in price and the prices for “extras” (8%)
- d. Leaving the area around the container clean (6%)
- k. Ability to contact the hauler by phone on customer service issues (5%)
- l. Day of week for pickup (3%)
- i. Communication about services from the hauler (2%)

Appearance of trucks and equipment was not identified as MOST important by any of the respondents.

The percentages for the items chosen as MOST important are shown on Table 3.

**If you had a choice, would you prefer Public Collection or open collection?**

Respondents were asked which type of collection they preferred, how strong their preference was, and the primary reason for their preference. To minimize bias, for about half the respondents the interviewer read this question with “Public Collection” listed first, and for the remaining half, with “open collection” listed first. The following specific definitions were read to the respondent:

- "Public Collection" In this type, a private hauler who has been selected by the city or county picks up the garbage and provides the service under a city or county contract. Customers pay for the service at a rate negotiated by the city or county with the hauler. The advantage of a Public Collection program is that the rates charged to customers could lower and there are fewer garbage collection trucks in a neighborhood.
- "Open collection" In this type, the homeowner chooses their garbage hauler. Customers pay for the service at listed rates charged by their hauler. The advantage of an open collection system is that the homeowner gets to select their hauler from those providing the service in their area.

About 2/3 of respondents prefer open collection. Of the 276 responses preferring Public Collection, 101 already live in a community in which the city/township contracts for residential garbage collection. There were 138 respondents who indicated they live in a community with organized collection.

Respondents were asked the reasons they preferred either public or open collection. Their primary reasons are listed in the following charts. (note: N= 275, one respondent gave no reason) The complete list can be found in Table 4.

**Top 5 PRIMARY reasons for preference of Public Collection**

	Frequency	% of Total Sample	% of 275 Preferring Public Collection
- cheaper price/lower rates/cheaper than open rates/more economical	56	7.7%	20.4%
- fewer trucks in street/in alley/less congestion	49	6.7	17.8
- preplanned/less hassle/city negotiates/already set up	31	4.2	11.3
- only one truck per week - not several trucks every week	23	3.2	8.4
- cost effective/county negotiates for lower rates	20	2.7	7.3

**Top 5 PRIMARY reasons for preference of open collection**

	Frequency	% of Total Sample	% of 423 Preferring Open Collection
-- freedom of choice/choose hauler/make decision/be independent	128	17.5%	30.3%
- lower price with more competition/competitive price	30	4.1	7.1
-- able to change if dissatisfied with service/with price	29	4.0	6.9
- able to choose based on price/able to negotiate better	28	3.8	6.6
-- no government interference/get government out of private	20	2.7	4.7

It should be noted that for the purposes of this survey, the definition of Public Collection assumed fewer garbage trucks in a neighborhood. However, some scenarios of Public Collection would not necessarily decrease the number of trucks.

**Preference for different waste management options**

Respondents were asked to rank which waste management options they preferred. “Trash is processed into fuel which is used to produce electricity” was the preference of 58.4% of respondents. “Trash is put in a landfill and the gas produced is NOT used to produce electricity” was identified as least preferable by 84% of respondents. (Table 5 shows the complete ranking of these preferences)

Note that to simplify the survey, the choices were presented as mutually exclusive. In reality an integrated waste management system can combine two or more methods.

### **Concerns about the city or county negotiating a contract with a private hauler for garbage collection service**

Finally, respondents were asked, "What concerns, if any, do you have about the city or county negotiating a contract with a private hauler for garbage collection service?" The respondents answers were recorded verbatim.

#### **Analysis of Review of Verbatim Comments**

The in-depth comments in the survey seemed to indicate that people had been aware of issues surrounding garbage collection and that those individuals had had opportunities to think about garbage collection.

#### *Misconceptions*

Even though the surveyors offered a definition of "Public Collection" people seem to assume that the government will have trucks on the road.

A small group of respondents were in favor of open collection because they felt they had more control over where their garbage would go through their ability to personally choose a hauler.

Many respondents see Public Collection as a "city" venture.

#### *Pricing and Service*

The overall theme in responses from people who prefer *both* open and Public Collection appears to be for lower prices through free market competition or by setting prices through contracts.

People who preferred open collection had very strong feelings about a free market economy and freedom of choice.

Folks want customer service, clear terms, timely pick-up and low prices.

Interest in special services: elderly rates & services, different container options, bulky pick-up, brush, Christmas trees, one-time extra large loads, etc.

#### *Local Concerns*

Respondents on both sides have favor for small haulers. The respondents expressed nostalgia, community pride and local spirit as reasons they strongly favored small, independent haulers. Additional comments included concern for minority haulers being able to remain in business, limiting opportunity for entrepreneurs to enter into the business and loss of personal service.

#### **Analysis of Review of Verbatim Comments**

#### *Trust & Confidence*

There was a group of respondents with very strong feelings of distrust of both the government and large haulers. The mistrust of government seemed to fall into two very general categories, the first being general mistrust of government and the second, mistrust of government to operate or manage a waste hauling system. A small group of respondents is concerned that large, national haulers would be awarded the contract(s) because of ability to underbid all others, ability to pay off government officials or as a result of some connection to criminal organizations. Individuals also mentioned they did not trust that either the government or the large haulers would manage the garbage in an environmentally responsible manner.

#### *Independence*

Many respondents expressed serious concerns about the loss of small and independent haulers. The reasons were varied. The respondents expressed nostalgia, community pride and local spirit as reasons they strongly favored small, independent haulers. Additional comments included concern for minority haulers being able to remain in business, limiting opportunity for entrepreneurs to enter into the business and loss of personal service.

Respondents in favor of open collection expressed concerns about loss of personal control and personal choice. Many of these concerns were related directly to the individual's desire for good service and a low price and the freedom to change haulers if either good service or low prices were not provided.

### *Pricing*

There were many expressions of concern regarding price. Individuals in favor of open collection felt they could choose the least expensive company or negotiate the best price. Conversely, individuals in favor of Public Collection felt the bargaining power of the Counties would prove in their favor. Overall, most respondents were very interested in low prices.

## **Findings and Recommendations**

Based on the survey results, the survey staff evaluation group presents the following findings and recommendations.

### **Findings**

- There are preconceptions among many respondents about how Public Collection would be implemented that are different from the ideas being most seriously discussed by the Counties.
- Finding ways to use waste as a resource is important to respondents. Recovering energy by processing waste, landfilling with energy recovery, and composting food and organic waste are preferred by respondents.
- Freedom of choice is a strong value for many respondents.
- Cost is an important factor for respondents and was cited as a justification for both open and Public Collection.
- Respondents want to retain competition between haulers. Some respondents are concerned about small haulers being put out of business under Public Collection.
- Respondents cited a number of hauler customer service issues.

### **Recommendations**

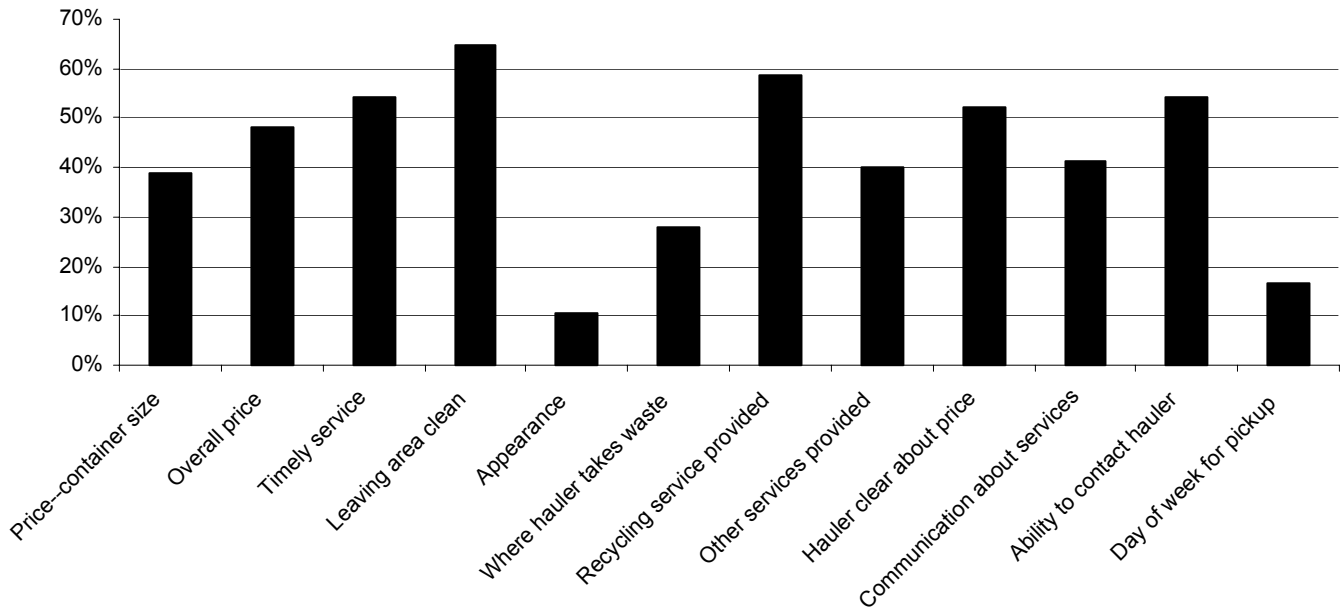
The following recommendations should be part of the process to educate residents and collect their input and opinions about Public Collection.

- Communicate the wide range of flexibility and potential options that go into designing a Public Collection system including:
  - Individual communities could determine what type of Public Collection is advantageous to their communities and how to implement Public Collection in their communities.
  - The Counties would contract with existing private haulers, not employ public trucks and employees.
  - Multiple haulers could serve each county.
  - Zones may be established in which haulers operate.
  - One hauler or multiple haulers may operate in a given zone.
- Communicate the connection between Public Collection and achieving environmental and public health goals, including reducing the use of landfills.
- Communicate to residents that choice of haulers is possible under a multiple haulers per zone approach, but that this may be a tradeoff for reducing truck traffic in neighborhoods.
- Clearly and accurately communicate the direct and indirect costs to residents for solid waste collection and management.
- Communicate the Counties' commitment to ensuring a competitive process, including a level playing field between haulers of varying sizes.
- Communicate how the county could address customer service issues by including measurable and enforceable customer service standards in contracts.

### **Uses and Limitations of This Information**

As with any survey using a sample of a population, there is a statistical margin for error. Thus, small differences between different responses to the same question may not be meaningful

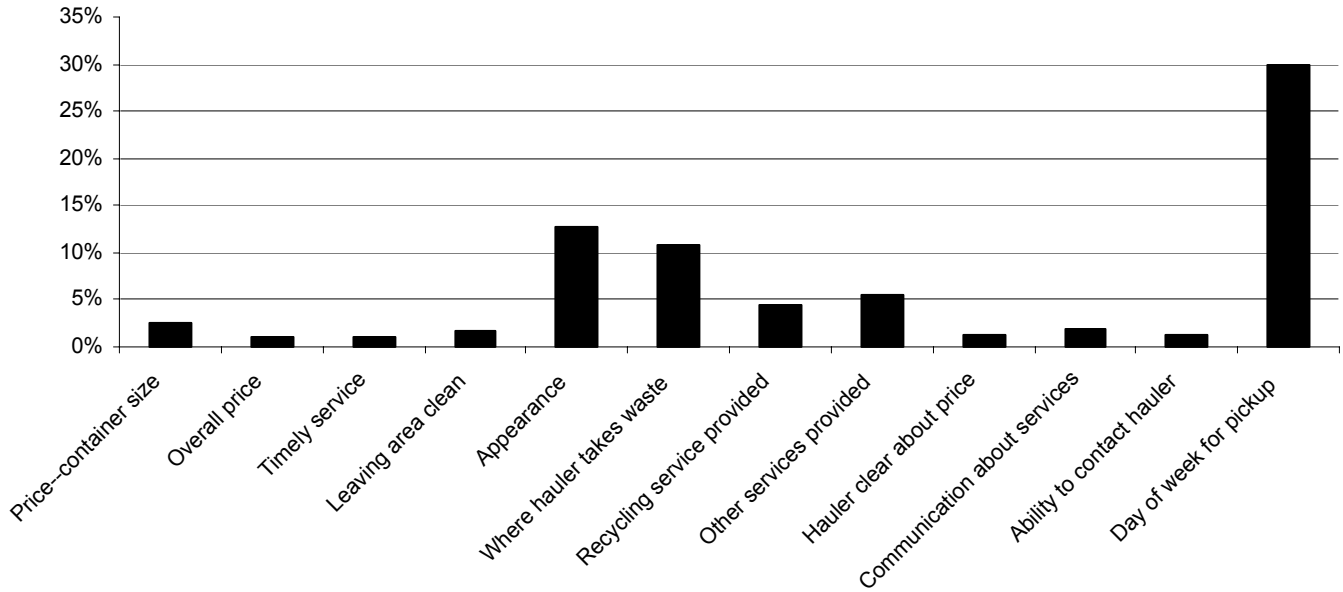
**Table 1:  
% of Respondents Ranking Item "Extremely Important"**



**% of Respondents Ranking Item "Extremely Important"**

Price--container size	39%
Overall price	48%
Timely service	54%
Leaving area clean	65%
Appearance	11%
Where hauler takes waste	28%
Recycling service provided	59%
Other services provided	40%
Hauler clear about price	52%
Communication about services	41%
Ability to contact hauler	54%
Day of week for pickup	16%

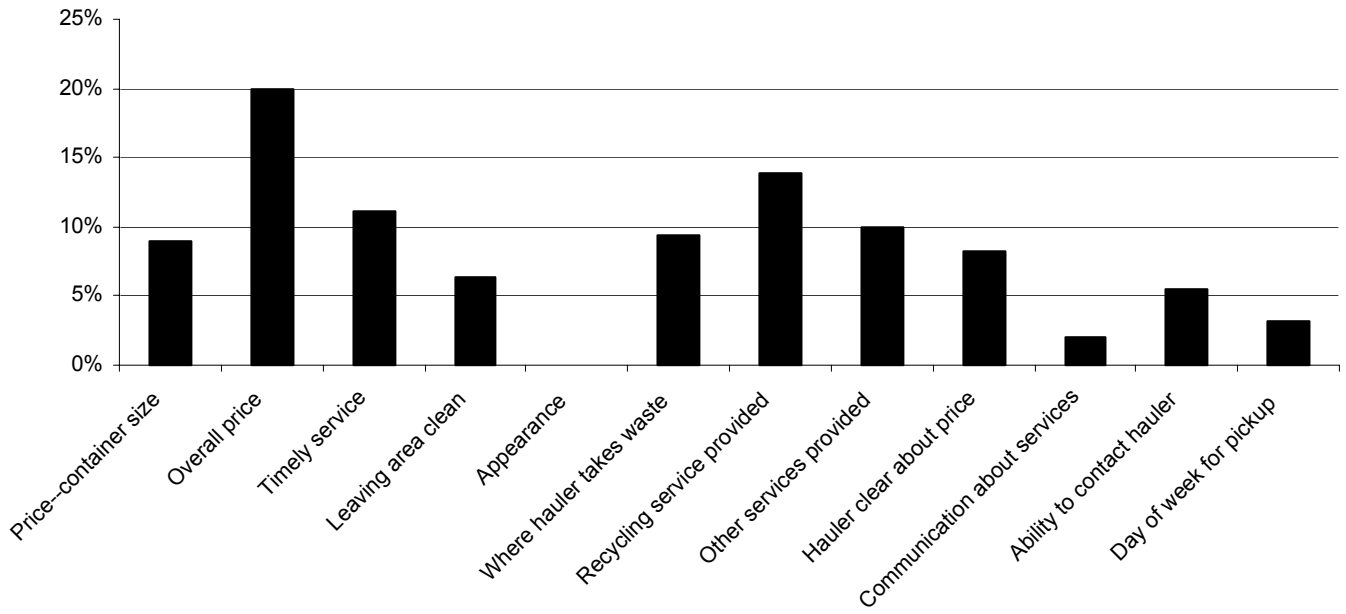
**Table 2:  
% of Respondents Ranking Item "Not at All Important"**



**% of Respondents Ranking Item "Not at All Important"**

Price--container size	2%
Overall price	1%
Timely service	1%
Leaving area clean	2%
Appearance	13%
Where hauler takes waste	11%
Recycling service provided	5%
Other services provided	6%
Hauler clear about price	1%
Communication about services	2%
Ability to contact hauler	1%
Day of week for pickup	30%

**Table 3:  
% of Respondents Ranking Item "MOST Important"**



**% of Respondents Ranking Item "Most Important"**

Price--container size	9%
Overall price	20%
Timely service	11%
Leaving area clean	6%
Appearance	0%
Where hauler takes waste	9%
Recycling service provided	14%
Other services provided	10%
Hauler clear about price	8%
Communication about services	2%
Ability to contact hauler	5%
Day of week for pickup	3%

**Table 4**

*Primary Reasons for Preferring Public or Open Collection*

Q4A1. What is the PRIMARY reason for your preference (for Public Collection)?

	Frequency	Percent (of total sample)
Total	275	37.7
- cheaper price/lower rates/cheaper than open rates/more economical	56	7.7
- fewer trucks in street/in alley/less congestion	49	6.7
- preplanned/less hassle/city negotiates/already set up	31	4.2
- only one truck per week - not several trucks every week	23	3.2
- cost effective/county negotiates for lower rates	20	2.7
- collection one day only/all done same day/same area	11	1.5
- more organized/more efficient use of time/of service	9	1.2
- everyone with same hauler/uniformity/consistency	9	1.2
- better service if done by city/more at stake/might lose contract	8	1.1
Others	8	1.1
- reliable/dependable/gets picked up/open not dependable	6	.8
- familiar with/satisfied with/have used/have now	6	.8
- timely/on time/more timely than open	5	.7
- no extra charges/pick up more without charging	4	.5
- rates consistent/rates not raised	3	.4
- able to call/able to make complaint/city handles	3	.4
- billed quarterly/one less monthly bill/part of water bill	3	.4
- less noise with fewer trucks/distracted by trucks	3	.4
- safer for children with fewer trucks/fewer accidents	3	.4
- less damage to streets/to alleys/not torn up	3	.4
- discounts available/senior citizens discount	2	.3
- includes recycling/everyone recycles	2	.3
- proper disposal/well regulated/environmentally friendly	2	.3
- additional price/rates	1	.1
- cleaner/less mess	1	.1
- additional ease/consistency	1	.1
- less gas used/less emissions/less energy used	1	.1
- additional use of trucks	1	.1
don't know	1	.1

Q4A2. What is the PRIMARY reason for your preference (prefer open collection)?

	Frequency	Percent (of total sample)
Total	423	57.9
-- freedom of choice/choose hauler/make decision/be independent	128	17.5
- lower price with more competition/competitive price	30	4.1
-- able to change if dissatisfied with service/with price	29	4.0
- able to choose based on price/able to negotiate better	28	3.8
-- no government interference/get government out of private	20	2.7
-- more selections/more options/able to shop around/flexible	15	2.1
-- dislike being told what hauler to use	15	2.1
- want cheapest price/most economical price/lower price	12	1.6
- have now/only way to know/satisfied with/will not change	12	1.6
fosters competition/able to bid/have equal opportunity/keep	12	1.6
- more costs with government/hidden costs	11	1.5
no job loss/provides employment/no loss of business	9	1.2
- control over service/service that meets needs	8	1.1
- better service/better than city collection/best service	6	.8
- reliable/prompt/pick up on time/timely	6	.8
- competition means better service/quality service	6	.8
-- able to choose recycling center/where disposed	6	.8
-- government inept/incompetent/can't do anything right	6	.8
- distrust government pricing/able to raise prices/raise if	6	.8
- present hauler courteous/trustworthy/kind like trash man	6	.8
- better service with smaller company/support small company	5	.7
-- my choice if I'm paying	5	.7
-- additional freedom of choice	5	.7
Others	5	.7
- better communication about services/able to discuss needs	4	.5
-- government corrupt/not trustworthy/under the table payment	4	.5
-- more like communism/like socialism/believe in capitalism	4	.5
- phone accessible/answer when called/able to contact	3	.4
-- able to choose specifics: container size/when picked up	3	.4
don't know	3	.4
- more services/fewer restrictions on service	2	.3
- additional price/rates	2	.3
- other things picked up: clothing/large items/recycling	1	.1
- meet personal needs/more personal contact/more personalize	1	.1
- no discarded trash/clean up/neater	1	.1
-- unresponsive to needs/unresponsive to calls/to problems	1	.1
-- too much bureaucracy in government	1	.1
- no extra charges for pick-ups	1	.1
none/no other	1	.1

**Table 5**

*Ramsey/Washington County Resource Recovery Project  
2001 Resident Telephone Survey Respondents Trash Management Preferences*

Q6a. Once the trash has been picked up, there are different ways to manage it. If you had to put the different ways for managing trash from your home or business in a preferred order; Which of the following would you prefer?

	Frequency	Percent
Trash is processed into fuel which is used to produce electricity	426	58.4
Trash is put in a landfill and the methane produced by the landfill (land fill gas) is used to produce electricity	60	8.2
Trash is put in a landfill and the gas produced is NOT used to produce electricity	3	.4
Trash is recycled	132	18.1
Trash is separated and food or organic waste used for composting	109	14.9
Total	730	100.0

Q6b. Of the remaining, which would you prefer?

	Frequency	Percent
Trash is processed into fuel which is used to produce electricity	177	24.2
Trash is put in a landfill and the methane produced by the landfill (land fill gas) is used to produce electricity	256	35.1
Trash is put in a landfill and the gas produced is NOT used to produce electricity	10	1.4
Trash is recycled	140	19.2
Trash is separated and food or organic waste used for composting	147	20.1
Total	730	100.0

Q6c. Which of the last three would you prefer?

	Frequency	Percent
Trash is processed into fuel which is used to produce electricity	77	10.5
Trash is put in a landfill and the methane produced by the landfill (land fill gas) is used to produce electricity	186	25.5
Trash is put in a landfill and the gas produced is NOT used to produce electricity	51	7.0
Trash is recycled	231	31.6
Trash is separated and food or organic waste used for composting	185	25.3
Total	730	100.0

Q6c2. Which of the last two would you prefer?

	Frequency	
Trash is processed into fuel which is used to produce electricity	39	5.3
Trash is put in a landfill and the methane produced by the landfill (land fill gas) is used to produce electricity	208	28.5
Trash is put in a landfill and the gas produced is NOT used to produce electricity	53	7.3
Trash is recycled	193	26.4
Trash is separated and food or organic waste used for composting	237	32.5
Total	730	100.0

Q6d. [DO NOT READ] - Select last option for managing trash

	Frequency	Percent
Trash is processed into fuel which is used to produce electricity	11	1.5
Trash is put in a landfill and the methane produced by the landfill (land fill gas) is used to produce electricity	20	2.7
Trash is put in a landfill and the gas produced is NOT used to produce electricity	613	84.0
Trash is recycled	34	4.7
Trash is separated and food or organic waste used for composting	52	7.1
Total	730	100.0