

Wilder  
Research

# Solid waste management in Ramsey County

*A report for Saint Paul-Ramsey County  
Public Health*

MARCH 2013

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Public Health*

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# Introduction

With the overall objective of environmental protection/conservation and a desire to prevent recyclable materials from ending up in landfills, the State of Minnesota has asked the Twin Cities metropolitan region (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties) to recycle 60 percent of all waste and recover 15 percent of organic waste from the waste stream by 2030. To guide their efforts to meet these ambitious goals and to continue their ongoing effort to understand residents' recycling and waste management attitudes and behaviors, Saint Paul-Ramsey County Public Health contracted with Wilder Research to complete their biannual resident recycling and waste management survey, in addition to a series of four resident focus groups and 30 key informant interviews with landlords and property managers in Ramsey County.

The 2012 Ramsey County residential survey addressed the knowledge and practices of households in their management and disposal of recyclable materials, organic waste, and hazardous and bulky items, as well as their awareness and use of various informational resources for household waste management. The resident focus groups expand on those findings, exploring ways to address the unmet informational needs of some residents, and delving more deeply into the factors that determine how residents manage their household hazardous waste. Finally, the interviews with property managers investigate the unique circumstances and waste management needs of multi-unit housing.

# Methods

This study of recycling and waste disposal included a self-administered survey of 809 Ramsey County residents, four focus groups with a total of 42 Ramsey County residents, and 31 key informant interviews with representatives of multi-unit residential waste management in Ramsey County (including property owners and staff in charge of waste management for multi-unit housing).

## ***Research questions***

- What is the level of residents' self-reported participation in recycling programs?
- What are the challenges that residents face when managing solid waste?
- What are residents' attitudes and behaviors related to recycling and proper handling of waste materials in the home?
- What are the trends (using data previously collected) in waste management behavior?
- What programs and educational campaigns would improve attitudes and behaviors toward recycling and solid waste management?

## ***Data collection approach***

### **Resident survey**

An address-based sample of 4,997 Ramsey County residents was purchased from Marketing Systems Group, a national sampling vendor. An address-based sample was chosen so that all households had an equal chance of being sampled for the study.

The proposed data collection methodology was a modified Dillman approach, which includes an initial survey packet mailing, followed by a reminder postcard two weeks later, and another survey packet mailing two weeks after that.

The first survey packet was mailed to the random sample of 4,997 Ramsey County households on 10/26/12. The mailed survey packets included a cover letter, survey instrument, and a postage-paid return envelope. The cover letter informed residents of the option to call Wilder Research and complete the survey over the phone. In addition, the cover letter included messages in Spanish, Somali, and Hmong to inform residents that Wilder staff speak those languages and that they could call the appropriate language-specific phone number to complete the survey in their language. The survey was not

translated into any other languages, but bilingual interviewers were available to translate the survey on the fly to administer it to Spanish-, Somali-, or Hmong-speaking residents who called in to complete the survey.

Prior to sending the reminder postcard, Wilder Research had already received more than the target of 500 completed surveys. The mailing sequence was truncated, but 809 completed surveys were received prior to the close of data collection in early December. Mailed surveys were coded and checked for completion and accuracy as they were returned.

The survey instrument can be found in the appendix.

### **Focus groups**

The 42 focus group participants were recruited from households who had completed the survey and expressed willingness to participate in a focus group. Participants were selected in part based on their survey responses, in order to recruit groups of participants who could address the following research questions:

1. What are the barriers to proper disposal of household hazardous waste, and how can Saint Paul-Ramsey County Public Health improve rates of proper disposal and use of household hazardous waste collection sites?
2. How can Saint Paul-Ramsey County Public Health's outreach and communications efforts better reach residents that they are not currently reaching?

To address the first research question, focus group recruitment drew from respondent households who were aware of, but had never used, the Ramsey County household hazardous waste collection sites. To address the second, survey respondents were contacted if they were unaware of at least three of the following:

- Ramsey County's online recycling and disposal guide, also known as "Ramsey A to Z"
- The website RethinkRecycling.com
- 633-EASY – Ramsey County's recycling and disposal hotline
- Ramsey County's Going Green Guide
- The Green Ramsey Facebook page

Participant demographics are described in the "Participants" section below, and the focus group protocols can be found in the appendix.

## **Survey of representatives of multi-unit residential waste management**

Sixty-four potential survey respondents, ranging from single-property owners to multi-property staff managers, were identified by staff of Saint Paul-Ramsey County Public Health. Sampled phone numbers of multi-unit residences were called, and survey interviewers asked to speak with the person in charge of waste management for the building(s). Respondents were offered a \$20 Target gift card for completing the interview. Interviews were administered using Computer-Assisted Telephone Interviewing (CATI) software. As illustrated in the interview instrument (see Appendix), respondents were directed to respond only for buildings that are not served by the curbside recycling programs in their respective cities.

## *Analysis*

Quantitative data were compiled and analyzed using Microsoft Excel and the Statistical Package for the Social Sciences (SPSS). To ensure that the survey data are representative of the population of adults living in Ramsey County, the data were adjusted using post-stratification weighting based on the following variables:

- Housing status (rent vs. own)
- Housing structure (detached single family home vs. other structure)
- Household location (City of Saint Paul vs. elsewhere in Ramsey County)
- Household size (single-person household vs. 2+ person household)

The data were weighted against U.S. Census Bureau 5-year (2007-2011) estimates (for housing status, household location, and household size) and 2011 IPUMS data (for housing structure). The maximum weight was 3.6, meaning that no single respondent represents more than 3.6 residents in the dataset used for analysis.

Qualitative data were analyzed using a technique known as “open coding,” meaning that we reviewed the respondents’ answers and used their own ideas and words to develop the themes to be used as codes. Proportions of responses that were assigned to each of these codes are reported, with representative quotes provided to illustrate the primary themes. Lists of open-ended responses from the interview questions and detailed notes of each focus group are available upon request.

Statistical significance was not evaluated for all findings, but when one group is described as significantly different from another, that finding has been evaluated for statistical significance ( $p < 0.05$ ).

# Participants

## *Survey respondents*

The mailed self-administered surveys were completed by 809 residents, including 413 in the City of Saint Paul and 396 in suburban Ramsey County. The overall response rate was 16 percent (Figure 1).

---

### 1. Survey response rates

Respondent Group	Number sampled	Number completing the survey	Response rate
City of Saint Paul	2,734	413	15.1%
Suburban Ramsey County	2,263	396	17.5%
All Survey Respondents	4,997	809	16.2%

Two-thirds of respondent households contain two or more adults and just over one-quarter have one or more children living with them (Figure 2). Seven in 10 respondents are over the age of 45 and nearly 9 in 10 are white. Almost two-thirds of respondent households earned \$50,000 or more in 2011, including 25 percent who earned \$100,000 or more.

Typical of surveys using this methodology, survey respondents tend to be older and have higher incomes than the overall population. They are less likely to have children and more likely to own their homes. They also disproportionately represent white and English-speaking residents. To ensure an accurate representation of the Ramsey County population in reported survey results, survey data have been weighted (as described in the “Methods” section above). As shown in Figure 2, the demographics of the weighted survey data closely approximate those of the overall population in Ramsey County.

## 2. Survey respondents

	Survey respondents (weighted)		County population <sup>a</sup>	
	Percent	N (households)	Percent	N (households)
<b>Location</b>				
City of Saint Paul	54.8%	443	54.8%	111,882
Suburban Ramsey County	45.2%	366	45.2%	92,460
<b>Housing status</b>				
Homeowner	61.6%	489	61.1%	124,904
Renter	38.4%	306	38.9%	79,438
<b>Household type</b>				
Single adult, no children	34.1%	248	34.1%	69,669
2+ adults, no children	41.2%	299	36.7%	74,906
Single adult with 1+ children	4.4%	32	10.7%	21865
2+ adults with 1+ children	20.3%	147	18.5%	37902
<b>Household income</b>				
Under \$25,000	24.8%	182	22.5%	46,052
\$25,000 – \$49,999	24.9%	183	24.8%	50,658
\$50,000 – \$74,999	18.7%	137	18.4%	37,501
\$75,000 - \$99,999	12.7%	93	12.8%	26,085
\$100,000 or more	18.9%	139	21.6%	44,046
<b>Respondent race/ethnicity</b>				
White or Caucasian	82.1%	640	80.1% <sup>b</sup>	156,935
All people of color	17.9%	139	23.2% <sup>b</sup>	47,406
Black or African American	4.0%	31	9.7%	19,821
Asian	5.4%	42	6.8%	13,895
Hispanic or Latino	2.9%	22	4.8% <sup>b</sup>	9,808
Multi-Racial/Other	5.6%	44	3.6%	7,356
<b>Respondent age</b>				
18-24	5.6%	42	6.5% <sup>c</sup>	13,250 <sup>c</sup>
25-44	28.1%	211	36.6%	74,736
45-64	38.2%	286	37.7%	77,128
65+	28.1%	210	19.2%	39,228
<b>All residents</b>	<b>100.0%</b>	<b>809</b>	<b>100.0%</b>	<b>204,342</b>

<sup>a</sup>County populations represent household heads, and are from the 2007-2011 American Community Survey.

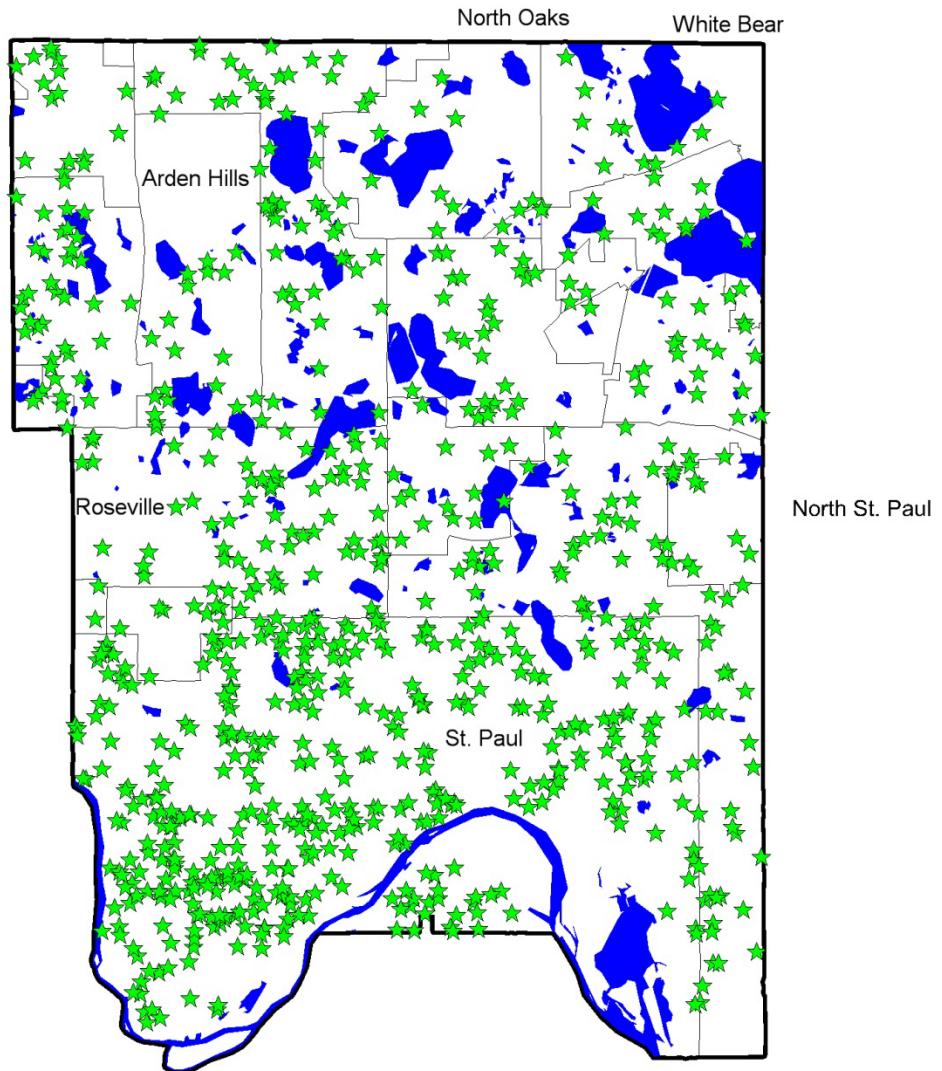
<sup>b</sup>Census data report Hispanic/Latino ethnicity separately from race. Of the 4.8 percent who report Hispanic or Latino ethnicity, 3.3 percent identify their race as “white” and the rest identify with other races. Residents of Hispanic/Latino origin are counted as people of color, even if they identify their race as “white”.

<sup>c</sup>The lowest category for Age of Householder in the U.S. Census is ages 15-24, while survey respondents were required to be 18 or older. The number of households headed by residents under age 18 is assumed to be very low.

Respondents were evenly distributed throughout Ramsey County and represent all cities in Ramsey County, as shown in the map below (Figure 3).

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### 3. Map of respondent locations



## ***Focus group participants***

Forty-two residents participated in the four resident focus groups, including 17 in the two Household Hazardous Waste focus groups and 25 in the two Communications and Outreach focus groups. All but one of the participants were 25 or older, with about one-third between the ages of 25-44, one-third between 45-64, and one-third 65 or older. Four-fifths of participants were white, and 71 percent were female. Participants tended to be relatively educated; 95 percent had completed at least some postsecondary education. About half of participants reported incomes over \$50,000 per year, and about 3 in 10 had at least one child under 18 living in their household. Most participants described themselves as very committed to recycling as much as possible (91%) and said they are very interested in environmental issues (81%).

## ***Representatives of multi-unit residential waste management***

Thirty-one property managers completed the survey, including single-building owners, staff managers who arrange waste hauling for several buildings, and a variety of roles in between. Note: these respondents will be referred to simply as “property managers” for the sake of reporting.

The geographic distribution of these managers and buildings is shown in Figure 4.

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### **4. Geographic distribution of respondent property managers**

<b>City</b>	<b>Property managers with buildings in this city</b>	<b>Buildings in this city</b>
Arden Hills	1	1
Little Canada	2	10
Maplewood	6	17
Mounds View	1	14
North St. Paul	2	5
Roseville	2	3
St. Anthony	1	8
St. Paul	22	69
Shoreview	1	10
White Bear Lake	4	9
<b>Total</b>	<b>31</b>	<b>146</b>

Respondent property managers included 12 managers of single buildings, and 19 multi-building managers. They represent 146 multi-unit residential buildings and complexes (with 5,268 residential units) in 10 cities in Ramsey County. Of the 5,268 residential units represented by these property managers, 87 percent have recycling services available at their buildings. All single-building property managers said they provide recycling services, and all multi-building managers said they provide recycling services at least some of their buildings. We were unable to interview any property managers who do not provide recycling services at any of their buildings, because the few property managers in this category did not respond to our contact attempts.

# **Findings**

## ***Recycling***

Due to consistently high recycling rates reported in past surveys, the recycling section of the 2012 survey focused largely on reducing confusion and increasing recycling opportunities for the 90 percent of residents who recycle. Findings suggest that:

- Recycling confusion was highest among residents under age 25 (57% expressed confusion), single parents (50%), residents of color (44%), and renters (43%).
- Plastics, pizza boxes, and sorting requirements create the most confusion among residents.
- Outdoor public places were the most popular choices for additional recycling bins, especially parks and athletic fields (42%) and public walkways, sidewalks, and streets (34%).
- Recycling bins are inadequate or unavailable for about one-third of residents in multi-unit housing.
- Property managers cite environmental concerns as their primary motivation to provide recycling services for their residents. Few property managers mentioned the cost savings of a lower trash bill.
- Cost and space requirements were the most frequently identified barriers to providing recycling services in multi-unit housing.

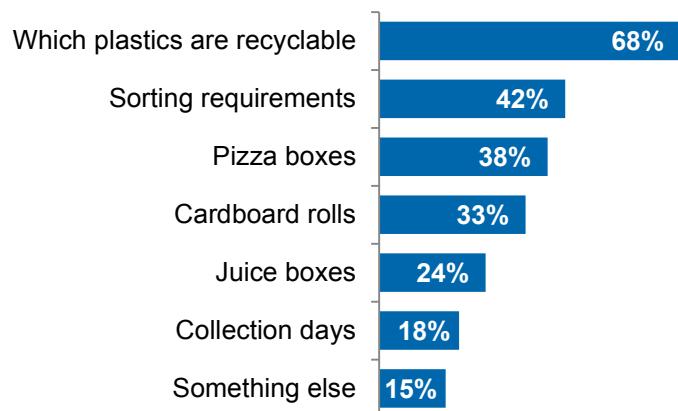
### ***Recycling confusion***

Overall, 7 in 10 residents said they have a clear understanding of the recycling program in their community. Rates of confusion were highest among residents age 18-24 (57%), single parents (50%), residents of color (44%), and renters (43%).

Among residents without a clear understanding of the recycling program in their community, the most common point of confusion was which plastics are recyclable (noted by two-thirds of these residents) (Figure 5). Two-fifths of these residents expressed confusion about sorting requirements and pizza boxes, while one-third were confused about cardboard rolls, and one-quarter were confused about juice boxes.

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## 5. Are you confused about... (N=238)



**Notes:** "Something else" included: tin/aluminum (n=6), aerosol cans (4), Styrofoam items (4), glass/colored glass (4), diapers (2), sticks/branches (2), motor oil (1), egg cartons (1), caps from bottles (1), and oil containers (1).

Homeowners and households with incomes above \$50,000 tended to express greater confusion about specific items, while renters and households with incomes below \$50,000 tended to express greater confusion about hauler arrangements (sorting requirements and collection days). Sorting requirements appear to be especially confusing to low-income residents (52%), residents of color (55%), and young residents (77%), while collection days most often appear to be confusing to renters (28%) and residents of color (36%). Hispanic/Latino residents were more likely than other residents to report confusion about all items except collection days.

### Recycling bin availability

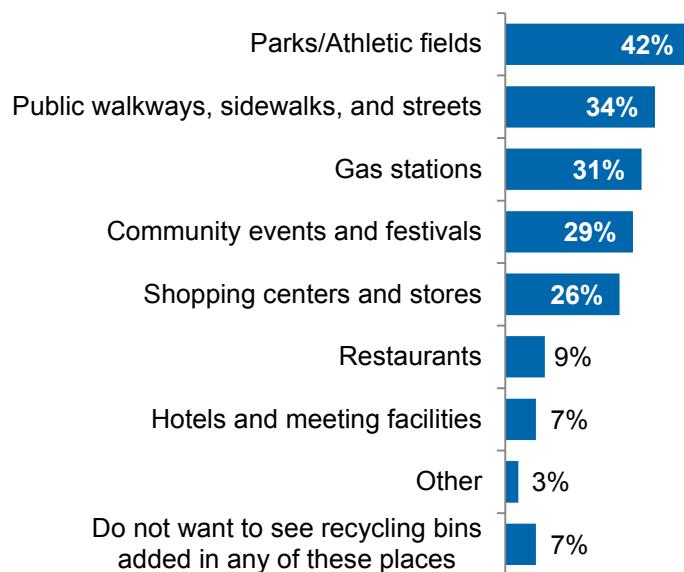
When asked about locations in which they would like to see more recycling bins, residents most frequently identified parks and athletic fields (42%) and public walkways, sidewalks, and streets (34%) (Figure 6). Requests for recycling bins along public walkways, sidewalks, and streets were significantly more popular among Saint Paul residents (42%) than residents of Suburban Ramsey County (26%). Three in 10 residents also said they would like to see more bins at gas stations (31%) and community events and festivals (29%).

Suggested locations for additional recycling bins varied significantly by race/ethnicity. Residents of color (46%) were significantly more likely than white residents (32%) to request more bins along public walkways, sidewalks, and streets. In addition, while only 9 percent of all residents requested more recycling bins in restaurants, one-third of Asian residents and one-fifth of Hispanic/Latino residents requested more recycling bins in restaurants. Similarly, one-quarter of Hispanic/Latino residents requested more recycling bins in hotels and meeting facilities, compared to only 7 percent of residents overall.

Black/African American residents were particularly likely to say they do not want to see recycling bins added to any of these places (22%, compared to 7% overall).

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**6. In which two of the following locations would you most like to see additional recycling bins? (N=766)**

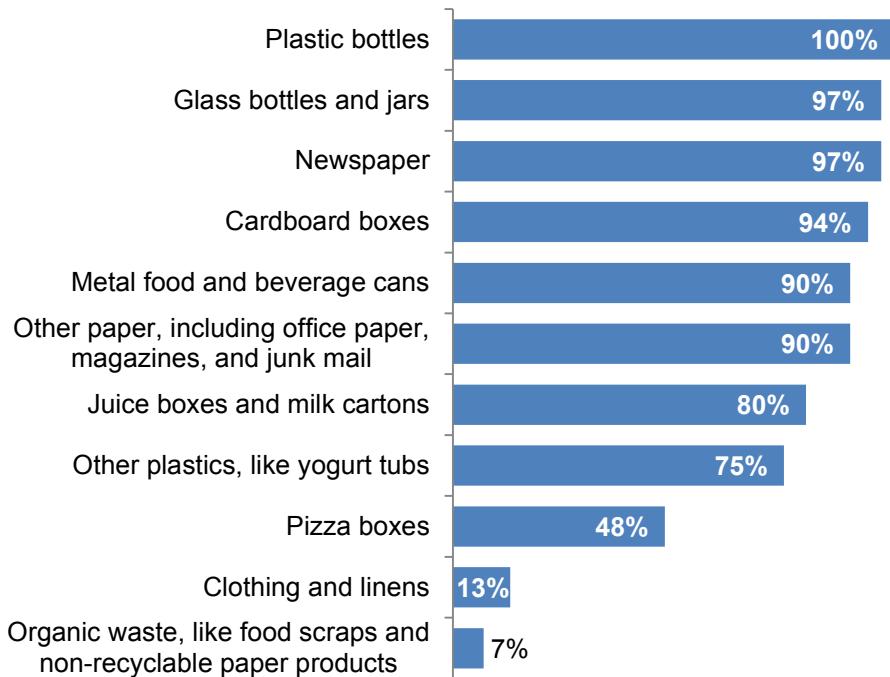


### **Recycling in multi-unit residential buildings**

The vast majority (90% or more) of property managers said their buildings' recycling haulers collect plastics bottles, glass bottles and jars, paper (including newspaper, office paper, and junk mail), cardboard boxes, and metal food and beverage cans (Figure 7). Most also collect juice boxes and milk cartons (80%), other plastics such as yogurt tubs (75%), and pizza boxes (48%), but few provide for recycling of clothing and linens or organic waste.

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**7. Which of the following materials are collected for recycling at your buildings? (N=31)**



### Availability and adequacy of recycling bins

Two-thirds of residents of multi-unit housing reported that there are enough recycling bins available in their buildings (Figure 8). Nearly one in five, however, said that there are *not* enough recycling bins in their buildings, and 14 percent said there are no recycling bins in their building. Residents of Saint Paul (18%), parents (25%), and Asian residents (33%) were most likely to report that there are no recycling bins in their buildings, while single parents (35%), Black/African American residents (30%), and residents under age 25 (28%) were most likely to report that their building has insufficient recycling bins.

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**8. If you live in an apartment, condominium, or townhome, does your building have enough recycling bins available? (N=350)**



- There are enough recycling bins available in my building
- Bins are available in my building, but there are not enough
- There are no recycling bins available in my building

Results of the property manager survey also indicate shortfalls in the availability and adequacy of recycling bins. Property managers said recycling services are provided for 87 percent of the residential units that they manage, while 13 percent of their residential units are in buildings without recycling services. While all single-building managers and 79 percent of multi-building managers provide recycling services for all of their buildings, one-fifth (21%) of multi-building managers provide recycling services for only some of their buildings.

In addition, more than half (55%) of property managers reported noticing or hearing about full or overflowing recycling bins at their buildings, confirming residents' concerns of bin capacity limitations. Frequency of recycling pick-up may contribute to full and overflowing bins, as 43 percent of property managers said their recycling is picked up every two weeks or less frequently.

Full or overflowing bins may also indicate strong residential recycling participation in multi-unit housing, but property managers' perceptions of tenant recycling participation suggest otherwise. Property managers' perceptions of tenant recycling participation rates varied widely. About one-third of managers said that less than 40 percent of their tenants recycle, one-third said that 40 to 60 percent of their tenants recycle, and one-third said that more than 60 percent of their tenants recycle. Only 14 percent said that more than 80 percent of their tenants recycle.

Three-quarters (77%) of property managers said they make additional efforts to encourage recycling or educate their tenants about recycling. Most of these efforts involved the distribution of informational materials, some passed on from haulers or public agencies, some in building newsletters or pamphlets, and others posted on signs in hallways, laundry rooms, and near the recycling bins. Several mentioned providing information and reusable green recycling bags (provided by Ramsey County) to tenants at move-in.

### **Barriers and benefits of multi-unit recycling services**

When asked why they provide recycling services in their multi-unit buildings, property managers most frequently listed environmental concerns, a motivation noted by more than three-quarters of property managers (Figure 9).

We want to recycle all the plastic, card board, anything that can be recycled. We want to keep the dump sites from getting filled up, and as a recycler, I wanted to promote it here in the building.

Many others noted the tenant interest in recycling as a key motivation for providing recycling services:

■ We try to be as efficient as we can be, and all of our residents really want the services.

Several property managers noted how tenant recycling can lower their trash bill:

■ It lowers the cost of the trash plus it helps the environment.

■ [We do it] for the cost saving to us for having less actual garbage waste.

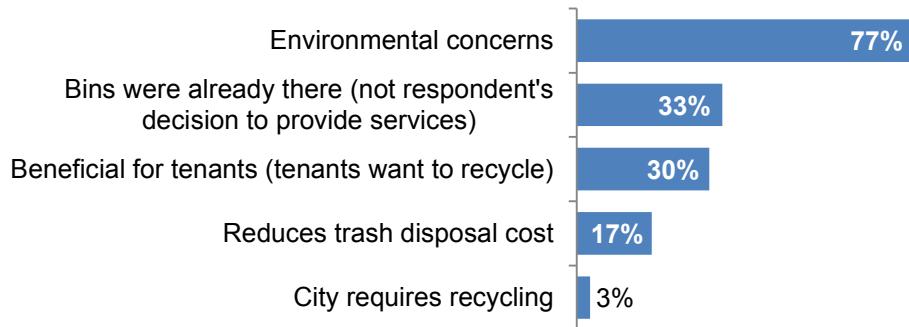
On the other hand, several other property managers noted that they bear an additional cost for recycling in order to honor their regard for the environment and their tenants' requests:

■ It is better on the environment to recycle. It does not save us money; it actually costs us more. The main thing is that it reduces the landfill usage.

■ Residents request and it is good for environment, so I do it and spend the extra money.

---

## 9. Reasons for providing recycling services for multi-unit buildings (N=31)



**Notes:** Based on responses to property manager survey question 4A in the appendix. Responses do not sum to 100% because respondents were permitted to identify up to three reasons.

In fact, when asked why they believe some property managers do not provide recycling services, the most commonly mentioned barrier was the cost of recycling services, noted by nearly half of property managers (Figure 10).

■ Additional cost. We run a really tight margin.

■ Price; they don't budget for it or just don't care.

More than two in five property managers also noted the space requirements as a barrier to providing recycling services:

Because of storage space for the bins - limited space.

Just a place to put all those stupid buckets. [There is] no location to put them sometimes.

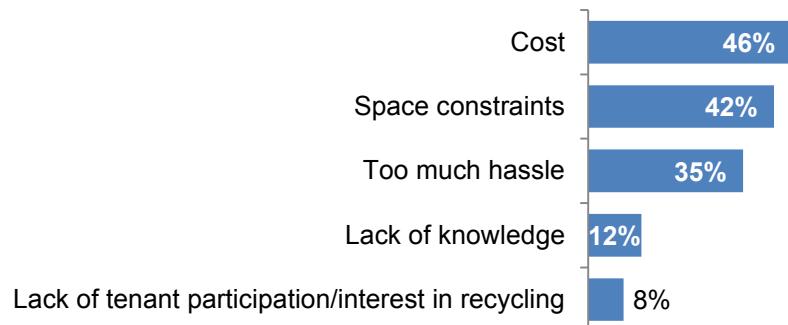
Finally, many others noted the hassle of providing recycling services, from educating tenants to arranging the haulers:

It's a big tenant education process to educate the tenants to use the bins for the right purposes and not put garbage in them.

Some don't follow and dump anything into the containers. Also it is hard to get the recycling people out to pick up things and the containers overflow.

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## 10. Barriers to providing recycling services for multi-unit buildings (N=31)



**Notes:** Based on responses to property manager survey question 4B in the appendix. Responses do not sum to 100% because respondents were permitted to identify up to three barriers.

### Satisfaction with recycling and trash haulers

Among property managers, overall satisfaction with recycling and trash haulers was high; all property managers said they were at least somewhat satisfied with their recycling haulers (and 70% said they were very satisfied). All but one property manager said they were at least somewhat satisfied with their trash haulers (and 58% very satisfied). When asked why they were satisfied with their hauling services, property managers most frequently mentioned the consistency and reliability of their hauling service, the availability of additional services (like picking up bulky items), and their haulers' quick responses to problems and requests. The most frequent negative responses were regarding the adequacy of the recycling containers and problems with spills around dumpsters after trash pick-up.

## **Disposal of organic waste**

With ambitious goals for collection and recycling of organic waste, resident buy-in is essential. Survey results suggest willingness among most residents to participate in organics recycling programs:

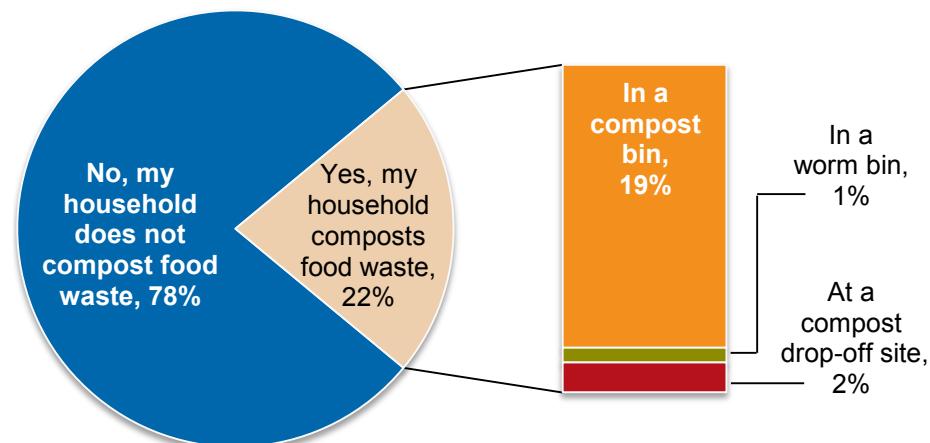
- One-fifth of residents (and one-third of residents of color) currently compost their food waste, but three-quarters are willing to separate out their organic waste for a community organics recycling program
- 7 in 10 residents would use an organics drop site located within 10 minutes of their homes if there were no additional cost for this service
- For no additional cost, 9 in 10 residents would participate in a curbside organics recycling program. More than half would participate if they were charged \$2-4 per month for this service.

### **Food waste**

More than one in five residents (22%) said they compost their food waste (Figure 11), either in a compost bin (19%), at a compost drop-off site (2%), or in a worm bin (1%). While 20 percent of white residents compost their food waste, one-third of residents of color compost their food waste, including 46 percent of Asian residents and 41 percent of Black/African American residents. Families with two or more adults and at least one child were more likely to compost (39%), while single adults with children were least likely to compost (4%).

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#### **11. Disposal of food waste (N=806)**



**Note:** Based on responses to resident survey question 4a in the appendix.

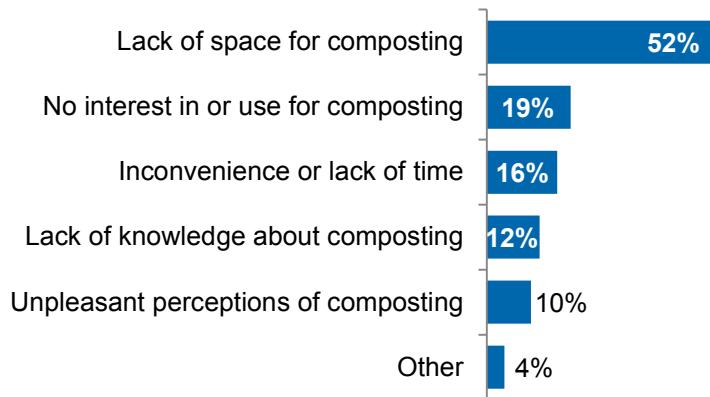
Of those who do not compost their food waste, half cited their lack of space as the reason (Figure 12). Lack of space was a particularly significant barrier to apartment dwellers, and only 7 percent of property managers said they provide organics recycling services for their tenants (Figure 7). Among other barriers to composting, a lack of interest in or use for composting was cited by one-fifth of residents (including 3 in 10 Asian residents), while 16 percent of residents (and 36% of African American residents) identified the inconvenience or lack of time as a barrier to composting.

A lack of knowledge about composting was identified as a barrier for about 1 in 10 residents, but this barrier was especially common among single parents (56%) and residents of color (29%), including Hispanic/Latino residents (62%), Asian residents (46%), and Black/African American residents (38%).

One in 10 mentioned their unpleasant perceptions of composting, such as the odor and the potential for attracting pests. Unpleasant perceptions like these were most common among higher-income residents, especially households earning more than \$100,000 per year (23%), but were not mentioned at all by Asian, Black/African American, or young (age 18-24) respondents.

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## 12. Barriers to composting food waste (N=533)



**Notes:** Based on responses to resident survey question 4b in the appendix. Results are coded from open-ended responses, and up to three reasons were accepted and coded.

*Lack of space for composting codes included: rent/live in an apartment or condo (n=184), no place to compost (bin/site) (106), insufficient space (32), and lot too small (6)*

*No interest in or use for composting included: not enough to make it worth the effort/have little to compost (32), do not want to do it (24), no garden/nowhere to use the compost (16), never looked into it (15), no reason (8), and not useful (7).*

*Inconvenience or lack of time included: easier to throw it in trash/inconvenient/too much work (64) and no time to do it (22)*

*Unpleasant perceptions of composting included: odor (26), worry about attracting animals/vermin (25), messy (14), and neighbors or others in the household disapprove (1)*

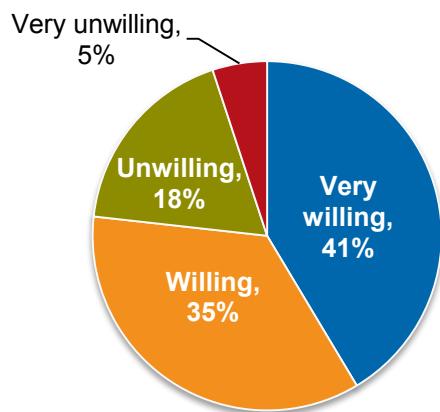
*Other included: cost of compost bin (10), physically unable to do it (9), and too cold/winter (3)*

## **Community organics recycling**

Though only one in five residents reported composting their food waste, three-quarters expressed willingness to separate their organic waste from the rest of their trash if their community offered a program to allow them to recycle their organic waste (Figure 13). Consistent with current composting rates, residents of color expressed the greatest willingness to separate their organic waste (84%), including 9 in 10 Asian residents. Residents under the age of 45 also expressed greater willingness to separate their organic waste (83%) than residents age 45 or older (74%).

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### **13. Willingness to separate organic waste (N=790)**

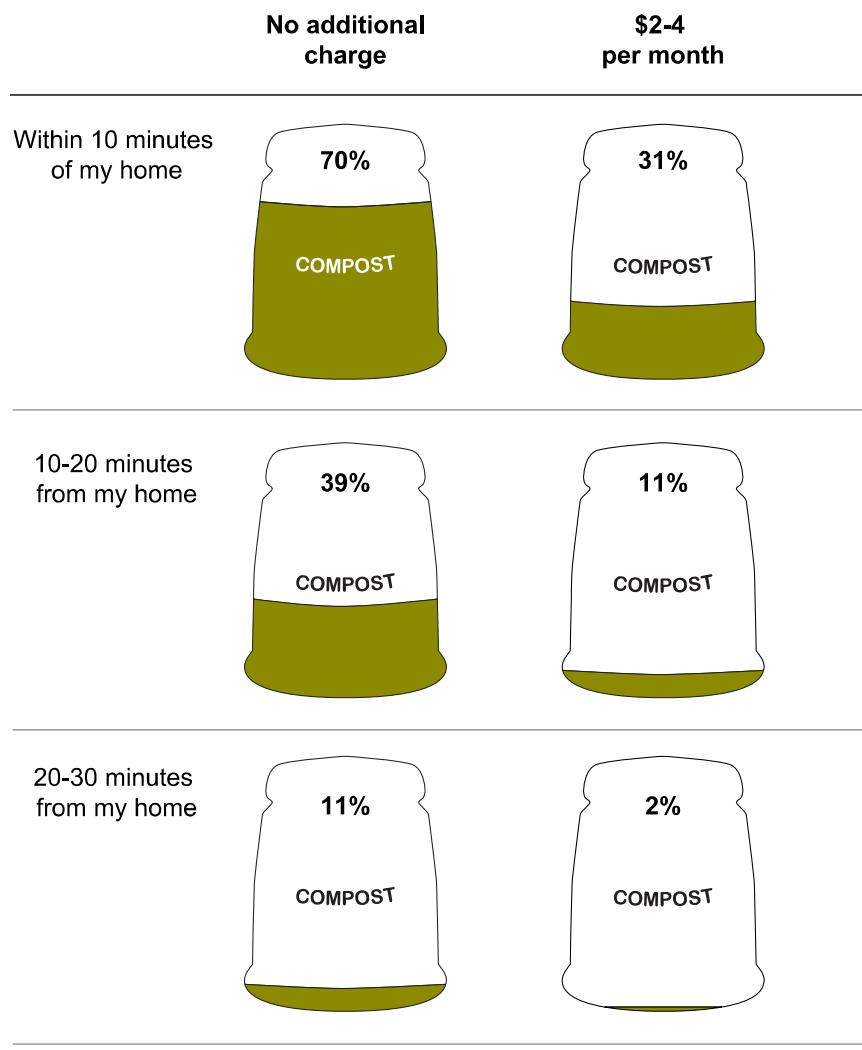


**Note:** Based on responses to resident survey question 5 in the appendix.

Further, 7 in 10 residents said they would be likely or very likely to take their organic waste to a drop-off station located within 10 minutes of their homes if they were not charged to do so (Figure 14). About 4 in 10 (39%) would take their organic waste to a drop-off station between 10-20 minutes from their home if they were not charged to do so, and 3 in 10 would take their organic waste to a drop-off station within 10 minutes of their home even if they were charged \$2-4 per month to do so. Resident willingness to use a compost drop site declines steeply with additional cost and distance.

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**14. Percent of residents who are willing to use a compost drop-off site in different cost/distance scenarios (N=536-585)**



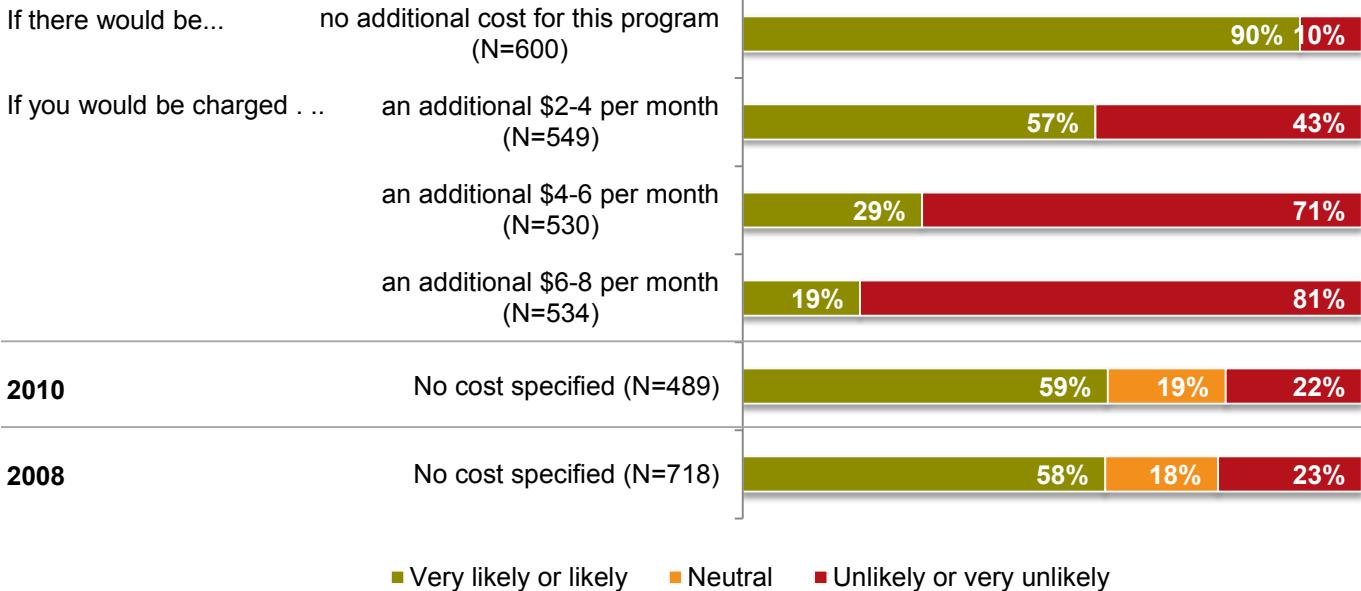
**Note:** Based on responses to resident survey question 6 in the appendix.

For the same \$2-4 monthly charge, nearly twice as many residents (57%) said they would be likely or very likely to participate in a curbside organics collection program (Figure 15), compared to an organics drop site within 10 minutes of their homes (31%). For no additional cost, 9 in 10 residents said they would be likely or very likely to participate in a curbside organics program. Three in 10 would participate for an additional \$4-6 per month, while 2 in 10 would participate for an additional \$6-8 per month. In recycling surveys conducted in 2008 and 2010, when no costs of curbside organics recycling were specified, about 6 in 10 residents said they were likely or very likely to participate in such a program.

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## 15. Likelihood of participation in curbside organics collection over time

**2012**



**2010**

No cost specified (N=489)

59% | 19% | 22%

**2008**

No cost specified (N=718)

58% | 18% | 23%

■ Very likely or likely   ■ Neutral   ■ Unlikely or very unlikely

**Notes:** Survey questions:

2012: Question 7 in the appendix.

2010: If, in addition to curbside recycling service and curbside trash pickup, you had available to you separate curbside collection or organic waste, such as food scraps and used paper products such as paper towels and pizza boxes, how likely is it that you would participate? (Very likely, likely, neutral, unlikely, very unlikely)

2008: If, in addition to curbside recycling service, your community offered separate curbside collection of organic waste such as food waste and non-recyclable paper, how likely is it that you would participate? (Very likely, likely, neutral, unlikely, very unlikely)

### **Yard waste drop-off sites**

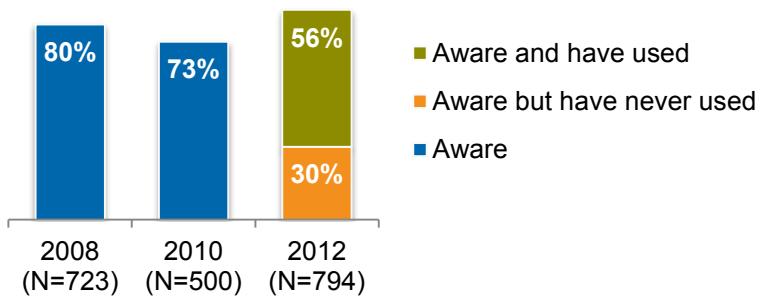
The vast majority of Ramsey County residents (86%) reported being aware of the yard waste drop-off sites, and more than half (56%) said they have used the sites (Figure 16).

The rate of awareness represents a slight increase from 2010 (73%) and 2008 (80%).

Awareness of the yard waste sites was lowest among residents age 18-24 (64%), single parents (65%), renters (70%), households with incomes under \$25,000 (75%), and residents of color (74%), especially Black/African American residents (53%). Use of the yard waste sites was also lowest among these groups.

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## 16. Awareness of yard waste sites over time



**Notes:** Survey questions:

2012: *Please tell us if you are aware of these resources, and if so, whether you have ever used them. – Ramsey County's yard waste drop-off sites*

2010: *Now I'm going to name some free services and resources Ramsey County provides. Please tell me whether you are aware of it, and if so, whether you have ever used it. Are you aware of [Item]?*

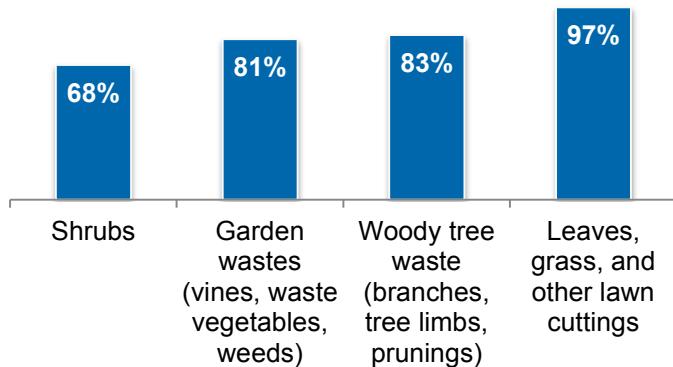
2008: *Are you aware of the Ramsey County's yard waste drop-off sites?*

The majority of residents correctly identified which items are accepted at yard waste drop-off sites (Figure 17). The most frequently mistaken items were tree roots (which are not accepted but which 46% of residents believe are accepted) and shrubs (which are accepted but which 32% of residents believe are not accepted). About one-fifth of residents also failed to correctly identify woody tree waste and garden wastes as accepted materials at the yard waste sites. In general, knowledge of the materials accepted at yard waste drop-off sites was lowest among single parents, Black/African American residents, and Asian residents.

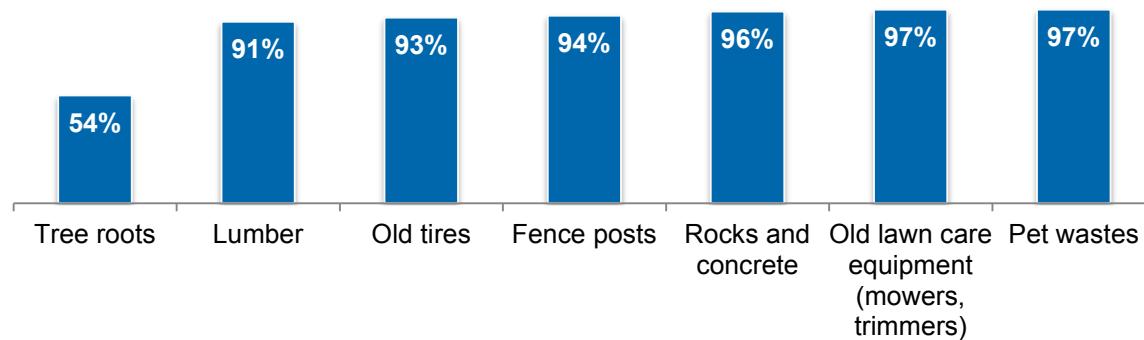
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## 17. Knowledge of materials accepted at yard waste drop-off sites (N=751)

Percent of respondents who correctly identified items accepted at yard waste sites



Percent of respondents who correctly identified items NOT accepted at yard waste sites



**Notes:** Based on responses to resident survey question 9 in the appendix. Bars show percent correctly identifying each item as accepted or not accepted.

## ***Disposal of bulky and household hazardous waste***

In addition to a series of survey questions about residents' disposal of bulky and household hazardous waste, two of the study's four focus groups focused on the barriers to proper disposal of household hazardous waste, and property managers were asked a series of questions about disposal of bulky waste in multi-unit housing. From these data sources, the following key findings emerged:

- Most residents correctly identified the need for special handling of all household hazardous waste items, but many residents incorrectly suggested special handling of several non-hazardous items.
- The greatest gaps in proper disposal knowledge and behavior were with household cleaners, aerosols, and prescription medications.
- While awareness of the Ramsey County household hazardous waste sites is high (88%), the rate of use is lower (58%). Awareness and use are much lower for the Ramsey County medicine drop boxes (43% and 6%, respectively).
- The primary barriers to proper disposal of household hazardous waste are:
  - Lack of information about proper disposal
  - Lack of incentives for proper disposal
  - High costs and inconvenience of proper disposal
- Focus group participants' suggestions to reduce these barriers are:
  - Scheduled or regular curbside pick-up of hazardous and bulky items
  - Schedule and location adjustments to improve convenience of drop-off
  - Modified fee structure
  - Improved information dissemination strategies
- Two-thirds of property managers say that bulky waste is improperly discarded outside each of their buildings twice a year or more, and one-third say this occurs at least once a month.

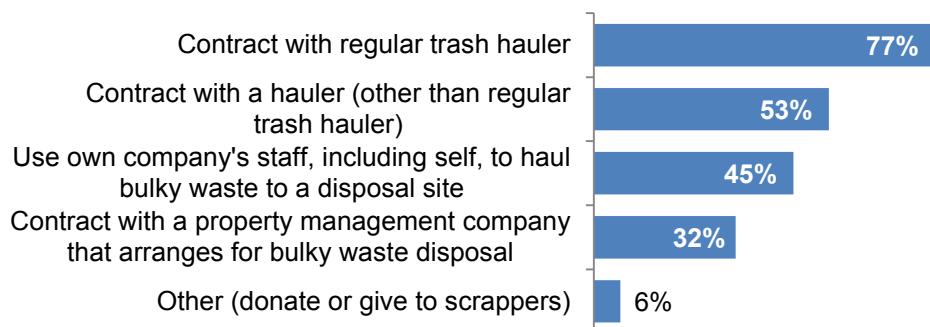
## Bulky waste disposal in multi-unit housing

The unique circumstances of multi-unit residential properties (including the high population density, the relatively high frequency of resident turnover, and the availability of large dumpsters) often lead to the improper disposal of bulky items in and around dumpsters. Due to the prevalence of this problem, the survey of property managers thoroughly addressed the issue of bulky waste disposal in multi-unit housing.

Property managers use a variety of options to dispose of their bulky waste, and two-thirds reported using two or more methods. Property managers most frequently contract with their regular trash hauler to dispose of their bulky waste, but more than half contract with other haulers, and nearly half use their own company's staff to haul bulky waste to a disposal site (Figure 18).

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### 18. Methods of bulky waste disposal among property managers (N=31)



**Notes:** Based on responses to property manager survey questions 10a-h in the appendix. Responses do not sum to 100% because respondents were able to identify multiple disposal methods.

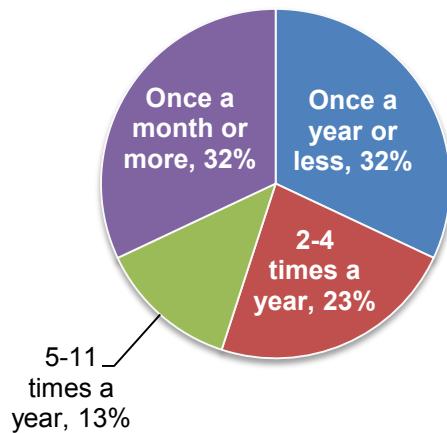
All surveyed property managers said they were at least somewhat satisfied with the service provided by their bulky waste haulers, and three-quarters said they were very satisfied with the service, generally due to the consistency and reliability of the hauling service.

About two in five property managers said they offer bulky waste disposal services for tenants, which typically includes arranging a special pick-up with the building's bulky waste hauler and passing the cost on to the tenant. About three in five property managers said they provide information to tenants about how to dispose of their unwanted bulky items. Typically, this includes information provided in person at move-in about landlord expectations for tenant disposal of their bulky waste, as well as contact information for bulky waste haulers or instructions for contacting the property manager to arrange for disposal.

Despite these efforts, two-thirds of property managers said that bulky items are dumped illegally in or around their dumpsters or elsewhere on their property at least twice a year, and one-third said this occurs once a month or more (Figure 19).

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#### 19. Frequency of improper disposal at multi-unit residential properties (N=31)



**Notes:** Based on responses to property manager survey question 12B-D in the appendix.

Similarly, when asked how they believe their tenants typically dispose of their bulky waste, half of property managers said they usually put these items in or around the dumpster or elsewhere on the property.

They put their items right next to the regular trash bins, usually in the middle of the night. I don't know who does it so we can't charge them!

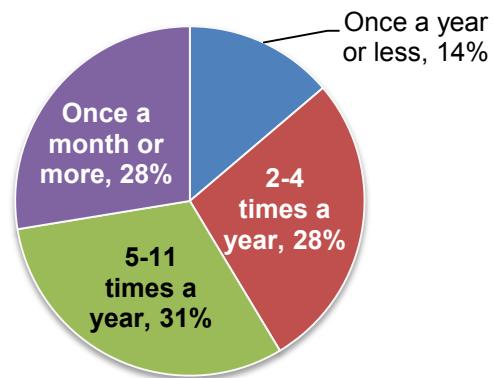
They will dump it next to the dumpsters or in the laundry room. If we recognize the items, we will bill them.

About one-third of property managers said their tenants use the bulky waste service they provide, and one-fifth said the tenants typically make their own arrangements to dispose of their bulky waste.

When asked how often they dispose of building-generated bulky waste, such as appliances, carpeting, cabinets, or construction materials, three in five property managers said they dispose of these items at least five times a year for each typical building (Figure 20). One-quarter said they dispose of these items 2-4 times per year.

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**20. Frequency of building-generated bulky waste disposal (per-building average) (N=29)**

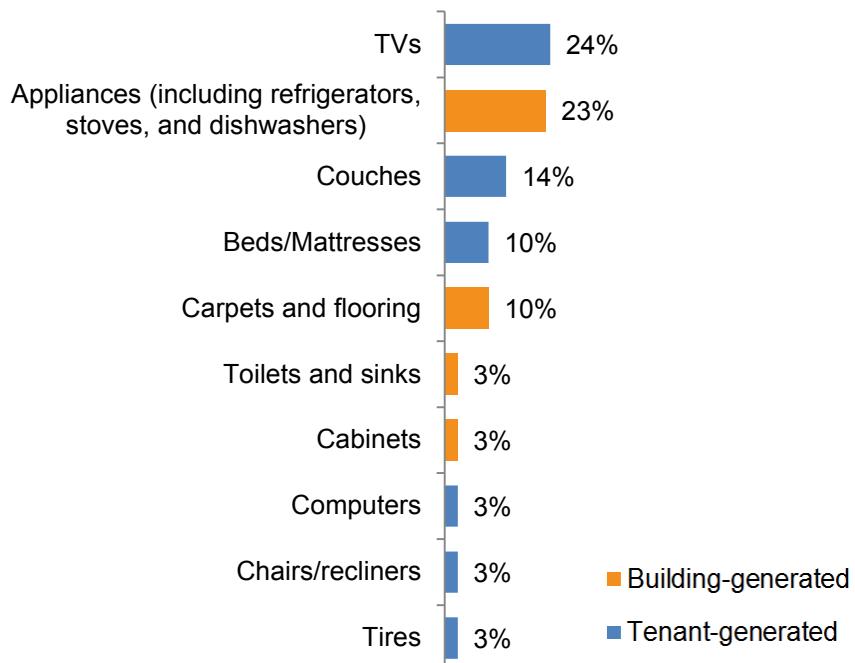


**Notes:** Based on responses to property manager survey question 14B-C in the appendix.

Of the 10 items that property managers listed as most difficult to discard, six were tenant-generated items, while the other four were appliances and other building-owned materials (Figure 21). Among the tenant-generated items, televisions (24%), couches (14%), and beds and mattresses (10%) were most frequently mentioned. Appliances (including refrigerators, ranges, and dishwashers) were the most common building-owned bulky items listed.

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**21. Most difficult bulky items to discard properly (N=31)**



**Notes:** Based on responses to property manager survey question 16 in the appendix. Responses do not sum to 100% because respondents were permitted to identify up to three items.

When asked how their haulers or Ramsey County could make it easier to properly dispose of bulky waste, few property managers offered specific suggestions. The most common requests were for better communication about bulky waste disposal options and the different bulky items accepted at different sites, expanded hauling service to include all bulky items, and reduced cost of (or added financial incentives for) proper disposal of bulky items.

Provide us resources, companies, and ways that bulky waste can be hauled off or disposed of, as well as educational materials for tenants as far as the disposal of bulky waste.

I think it would be great if they provided a pickup service less expensive than the haulers, because they are pretty expensive. Or maybe a place we could take appliances for free that would be convenient, a central place.

I have one building where people will just dump furniture there. If there was some way that I would not have to pay for that, if it was just a random dumper. There is a lot of money that I have to pay out for that. I wish there was a way to deal with that.

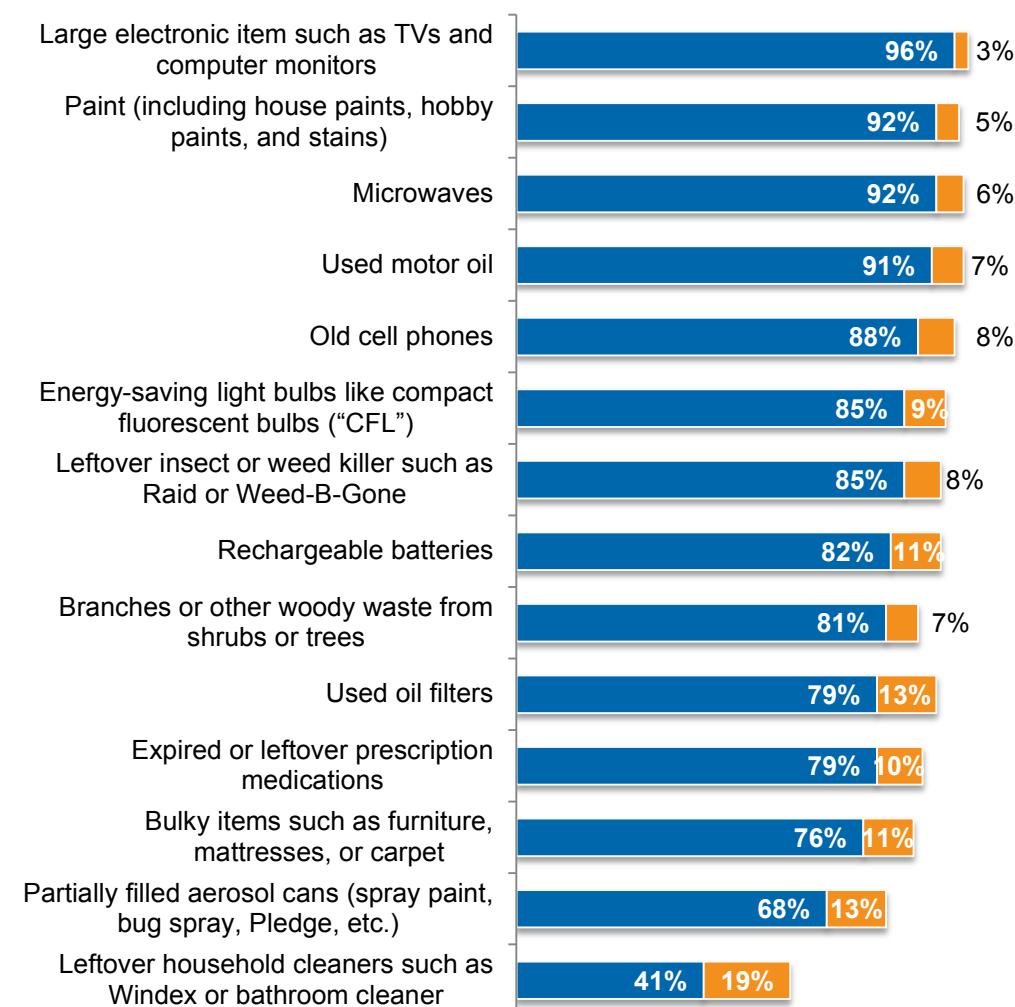
### **Household hazardous waste disposal knowledge and behavior**

In general, the majority of resident survey respondents knew which items could be thrown in the trash and which should be handled differently (Figure 22). More than 9 in 10 residents correctly noted that large electronic items, paint, microwaves, and used motor oil should be handled differently. More than 8 in 10 knew that old cell phones, CFLs, insecticides and herbicides, and branches and woody waste should be handled differently. Fewer residents correctly identified the proper disposal method for their used oil filters (79%), expired or leftover prescription medications (79%), bulky items (76%), and partially filled aerosol cans (68%), and only 41 percent correctly noted the need to handle their unwanted household cleaners differently.

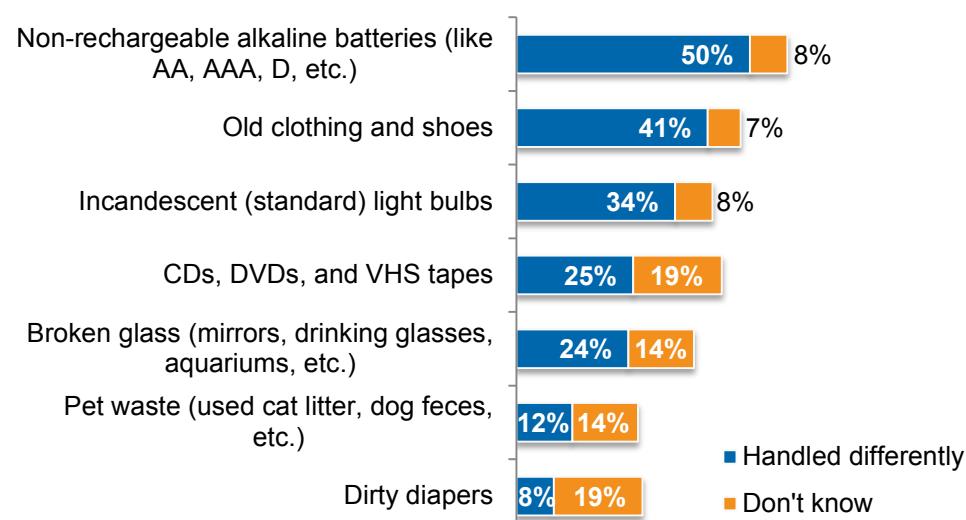
On the other hand, at least one-quarter of residents failed to correctly identify each of the items that can be thrown in the trash, indicating some limitations to resident knowledge of the items that must be handled differently. Recycling programs exist in some communities for alkaline batteries, old clothing and shoes, and even CDs, DVDs, and VHS tapes, which might cause some residents to say that these items should be handled differently. However, pet waste, dirty diapers, broken glass, and incandescent light bulbs have few (if any) alternative disposal methods. The high rates of incorrect and unsure responses to these items may indicate an overall bias among the survey respondents to select “handle differently” as their response, so the rates of correct responses among items that must be handled differently may overstate actual resident knowledge of proper disposal.

## 22. Knowledge of proper waste disposal (N=793-800)

### Must be handled differently



### Can be thrown in the trash

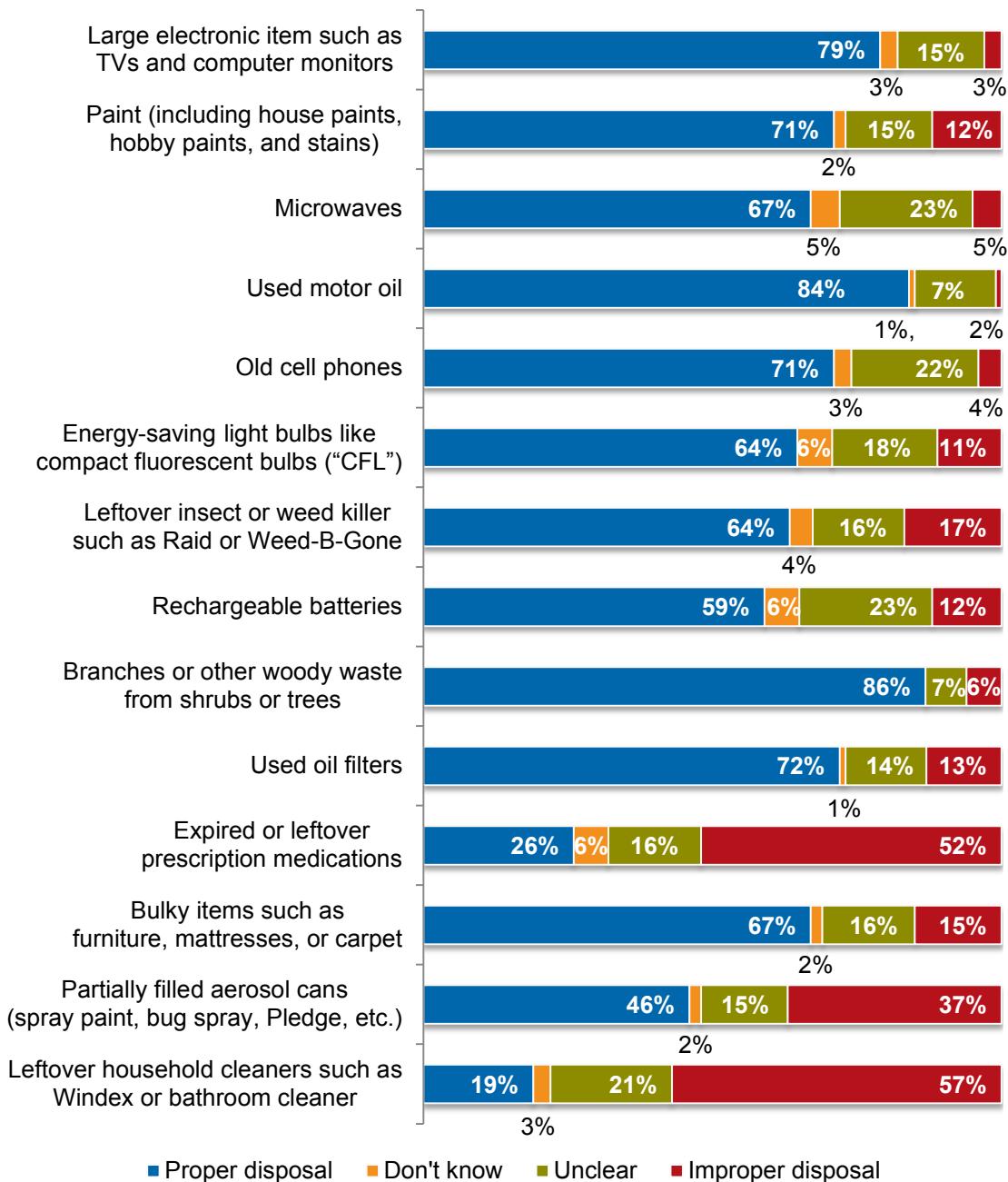


**Notes:** Based on responses to resident survey question 10 in the appendix.

Resident knowledge of proper disposal of these items was generally unrelated to their demographic characteristics, though a few patterns emerged. In general, single parents and Black/African American residents were more likely than others to say that household hazardous waste items could be thrown in the trash.

Consistent with resident knowledge of the proper disposal of these items, the highest rates of improper disposal were of leftover household cleaners (57%), expired or leftover prescription medications (52%), and partially filled aerosol cans (37%) (Figure 23). For these items and most others, rates of improper disposal were highest among renters, low-income households, and residents of color.

### 23. Disposal of bulky and household hazardous waste items (N=757-781)



**Notes:** Based on responses to resident survey question 11 in the appendix. Each line represents disposal methods only for the residents who reported having that item in their home in the last two years. Information on the percentages of residents who had each of these items in their homes is presented in the appendix.

Focus group participants presented a dismal perspective on the prevalence of improper disposal of household hazardous waste items. With a series of anecdotes describing piles of fluorescent light bulbs in dumpsters, used motor oil dumped in the sewer, and leftover

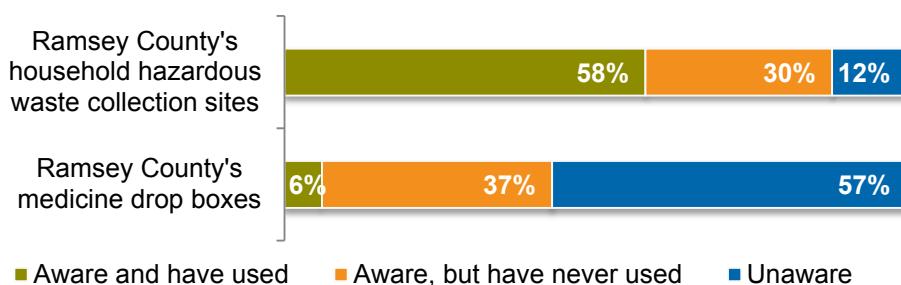
weed killer poured on a hidden, unimportant part of the lawn, focus group participants explained their belief that the most common methods of household hazardous waste disposal are improper and unsafe. Focus group participants identified several reasons for improper disposal of household hazardous waste items, which are explored in depth in the **Barriers** section below.

### **Awareness and use of household hazardous waste disposal options**

Nearly 9 in 10 residents were aware of the Ramsey County household hazardous waste collection sites, but less than half (43%) were aware of the Ramsey County medicine drop boxes. Similarly, more than half (58%) of residents said they have used the household hazardous waste sites, but only 6 percent had used the medicine drop boxes (Figure 24).

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#### **24. Awareness and use of Ramsey County's household hazardous waste sites and medicine drop boxes (N=786-801)**



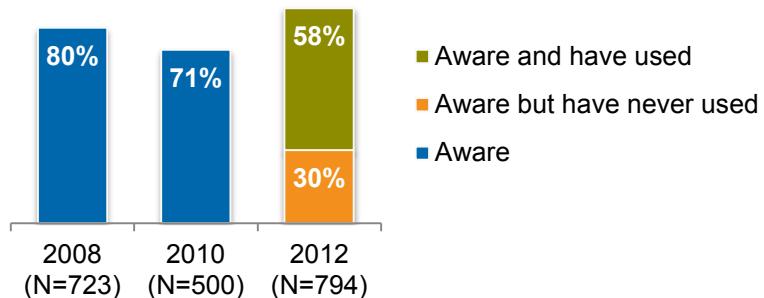
**Note:** Based on responses to resident survey questions 8a and 8c in the appendix.

More than two-fifths of residents were either aware but had not used the household hazardous waste sites (30%) or were unaware of the sites (12%). Renters, households with incomes under \$25,000 per year, residents of color (especially African American residents), single parents, and residents under the age of 45 (especially those under 25) were significantly more likely to be unaware of the household hazardous waste sites. With the exception of single parents, all of these groups were also significantly less likely to have used the household hazardous waste sites if they were aware of them.

Awareness of the Ramsey County household hazardous waste sites appears to have increased slightly since the 2010 survey, with 88 percent of residents claiming awareness of the household hazardous waste sites, compared to 71 percent in 2010 (Figure 25).

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## 25. Awareness of household hazardous waste sites over time



**Notes:** Survey questions:

2012: Survey question 8a in the appendix.

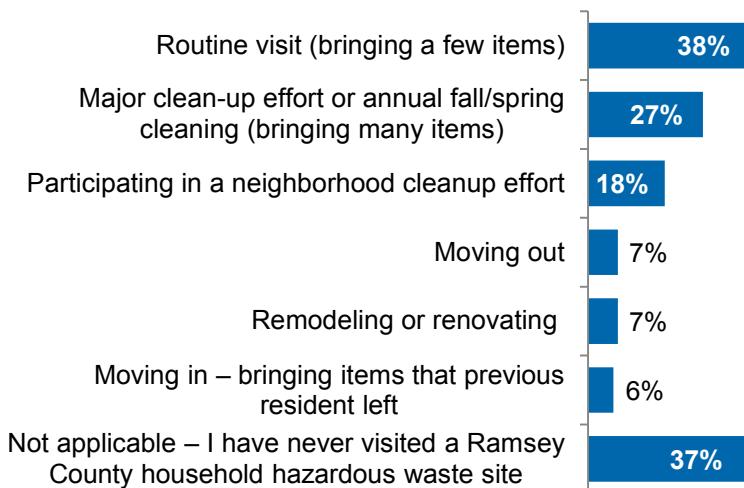
2010: Now I'm going to name some free services and resources Ramsey County provides. Please tell me whether you are aware of it, and if so, whether you have ever used it. Are you aware of [item]?

2008: Are you aware of the Ramsey County Household Hazardous Waste Collection sites?

When asked about the timing of their visits to household hazardous waste sites, about two in five residents (38%) said they had gone for a routine visit, bringing a few items, while about one-quarter (27%) visited during a major clean-up effort like spring cleaning (Figure 26). One-fifth (18%) visited a household hazardous waste site as part of a neighborhood clean-up effort.

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## 26. Timing of and reasons for visits to household hazardous waste sites (N=785)



**Note:** Based on responses to resident survey question 12 in the appendix.

Focus group participants, who were selected from survey respondents who had not used the household hazardous waste sites, suggested that their household hazardous waste

clean-up efforts generally occur in response to an event that prompts them (e.g., a neighborhood clean-up event, a holiday dinner that inspires residents to clean their houses, or a major life change like a move or a new baby). Aside from these external prompts, focus group participants said that only exhausting all of their storage space for household hazardous waste items would compel them to take their household hazardous waste to the sites, because routine trips to drop off only a few items are not convenient.

Focus group participants suggested that they were much more likely to take their bulky or household hazardous waste items to a Community Clean-up Event in their neighborhood. These events, they noted, serve as a reminder to clean out their unwanted hazardous and bulky items, while providing a conveniently located outlet for these items. For residents who have not used the household hazardous waste sites, these neighborhood events appear to be a popular disposal option.

While neighborhood clean-up efforts dominated the focus group discussions among residents who do not use the household hazardous waste sites, the popularity of these events may be lower among the overall Ramsey County population. About one-third (35%) of residents reported taking their bulky or harder-to-recycle items to a Community Clean-up Event. Rates of participation in these events were significantly lower among residents of color (23%), especially Black/African American residents (2%), Hispanic/Latino residents (16%), and Asian residents (18%), as well as residents under age 25 (2%) and households with incomes under \$25,000 per year (22%).

### **Barriers to proper disposal of bulky and household hazardous waste**

Focus group participants identified three main explanations for improper disposal of household hazardous waste:

- Lack of information and awareness about which items are hazardous and how and where to properly dispose of these items
- Absence of a compelling incentive to properly dispose of household hazardous waste
- High costs (in time, energy, and money) of proper disposal

First, participants noted that the public is generally unaware of which items require special disposal and how and where they should dispose of these items. Further, they shared that inconsistent policies across communities, neighborhood clean-up events, and household hazardous waste sites lead to a great deal of confusion about the requirements and procedures of proper household hazardous waste disposal. Participants said they are typically unsure whether and how much they will be required to pay, where household hazardous waste sites are located, when the sites are open, whether they will be required

to show identification, and how the disposal transaction takes place at any given disposal site. As two participants said:

It's confusing. You don't know what they accept.

I don't know what to do with the items, so I just keep them for years and years and years.

Overall, focus group participants were able to compile impressive lists of household hazardous waste disposal locations and policies, but no single individual knew more than a few details of specific disposal options. This uncertainty, they claimed, tends to overcome the good intentions of even the most environmentally conscious residents, leading many residents to simply store their household hazardous waste items until a clear and convenient disposal opportunity presents itself.

Second, participants noted that, to overcome the costs of proper disposal that are identified below, residents must be aware of a compelling incentive to properly dispose of their household hazardous waste. Participants knew of no legal ramifications of improper disposal and no benefit of properly disposing of their household hazardous waste.

If you were going to get fined for dumping these things in the trash, you might worry more about it.

What about incentives for them to take their stuff to the site? They gain nothing. There's no perk for them, taking it upon themselves to care about the environment. There's a lack of incentive.

Some acknowledged their environmental concerns as their own internal motivation to properly dispose of their waste, but participants described what they believed to be a common perception that the impact of an individual's household hazardous waste, when improperly discarded, is negligible. Participants concluded that this perception, paired with a lack of general knowledge about the impact of improperly discarded household hazardous waste, limits individual residents' motivation to properly dispose of their household hazardous waste.

Finally, while participants identified few incentives to proper disposal of household hazardous waste, they identified a long list of *disincentives* to proper disposal, in the form of time, energy, and monetary costs. Proper disposal of household hazardous waste generally requires a special trip to a household hazardous waste site or neighborhood clean-up event, which requires time, planning, a vehicle, and the physical ability to transport the items (some of which are bulky or heavy).

I do not drive so unless I can place it at the curb, I cannot recycle it.

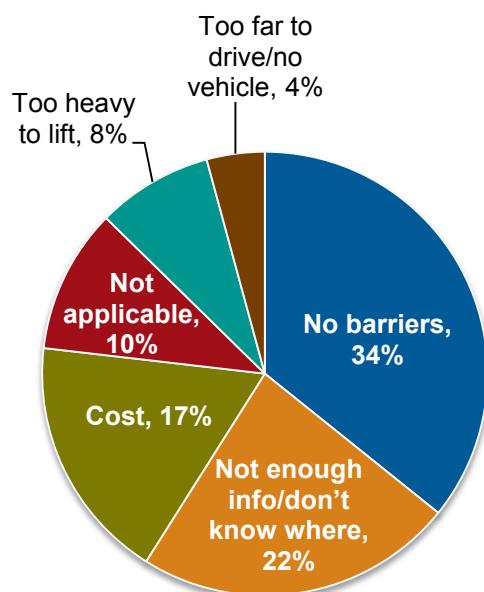
I have a bunch of old computers that my kids left. I can't even lift some of that stuff. If things are too heavy, I just don't deal with it. I don't know what to do.

Participants noted long and unpredictable wait times (particularly for neighborhood clean-up events), household hazardous waste site locations are inconvenient for some, and hours of operation are inconsistent and do not often include the evening and weekend hours when most residents are available to drop off their household hazardous waste. Finally, participants noted that fees are charged to dispose of many items, an explicit disincentive to proper disposal. Participants did not differentiate between fees for household hazardous waste disposal and those for bulky items, nor did they differentiate between fees at neighborhood clean-up events (where fees are assessed) and household hazardous waste collection sites (where household hazardous waste disposal is free). The general perception seemed to be that the disposal of bulky and household hazardous waste involves an unclear fee schedule that varies widely by location and item.

Consistent with the focus group findings, survey respondents selected similar reasons when asked about barriers to proper disposal of their electronic waste (Figure 27). The most commonly selected barrier was a lack of information about proper disposal (22%), followed by cost (17%) and ability and mobility barriers (12%). One-third of residents, however, said they have no barriers to proper disposal of their electronic waste.

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## 27. Barriers to proper disposal of electronic waste (N=702)



*Note:* Based on responses to resident survey question 14 in the appendix.

## **Recommendations to reduce barriers to proper waste disposal**

When asked how Ramsey County could better encourage proper disposal of household hazardous waste, focus group participants' recommendations primarily targeted the current costs and inconvenience of proper household hazardous waste disposal.

The most popular suggestion to reduce barriers to proper household hazardous waste disposal was curbside pick-up of bulky and household hazardous waste items, which participants felt would significantly improve rates of proper disposal. Participants stated that a curbside pick-up service addresses many barriers to proper disposal (such as the inconvenience of the location and schedule, the time investment, and the ability and mobility challenges), and is convenient and consistent with residents' existing waste disposal routines.

Recognizing the potential cost of such a program, participants recommended that the service operate on a monthly, quarterly, semi-annual, or call-as-needed schedule. They also recommended pairing this program with one or more of the suggestions in the fee reduction paragraph below to recoup costs of this program.

Focus group participants strongly encouraged the reduction or elimination of *explicit or per-item* fees for disposal of bulky and household hazardous waste, as well as improved communication about and consistency of the existing fee structure. Participants expressed an understanding of budget limitations, but emphasized that explicit fees for proper disposal, if they can be avoided by storing items or dumping them illegally, will result in a disincentive to proper disposal. They recommended that fees be applied uniformly across all residents, possibly using the same billing structure as curbside recycling (i.e., billing on property taxes). This structure, they argued, would encourage residents to use the service for which they have already paid. Participants also recommended a voucher or coupon program to allow free disposal for a limited number of items or trips per resident, to minimize abuse of free disposal.

On a related note, participants recommended offering incentives for proper disposal, either paired with fee reduction or as a means of offsetting those fees. They suggested reaching out to retailers for sponsorship of these incentives, such as coupons or gift cards. Finally, they proposed offering random prizes for residents who properly dispose of their hazardous and bulky items.

As an alternative to curbside pick-up, participants suggested several possible improvements to the schedules and locations of household hazardous waste collection sites and events to make them more convenient for residents. They recommended modified hours of operation to accommodate a variety of residents' schedules (similar to library schedules) with evening hours on certain days of the week and greater availability of weekend hours. They recommended increasing the frequency of neighborhood clean-up events to reduce

wait times and more easily fit residents' schedules. Finally, they suggested partnering with retailers to sponsor clean-up events at their stores, broadening the variety of convenient disposal locations available to residents, and enabling residents to combine their household hazardous waste disposal trip with a shopping trip that they already plan to take.

Participants in one focus group also emphasized the need to communicate more with residents regarding the importance of proper disposal, the items that must be handled differently, and the disposal options available (including the requirements, schedule, fees, etc.). Recommendations for communications and outreach are more fully explained in the findings of the two focus groups dedicated to that topic (below), but household hazardous waste focus group participants recommended tapping into existing communication that residents receive from public agencies. For example, they suggested providing this information in neighborhood publications, utility bills, or property tax statements. To reach elderly residents who face mobility barriers as well as generational barriers to proper disposal, participants suggested partnering with elder care service providers. Finally, participants noted the demonstrated effectiveness of promoting recycling through children, and recommended that proper household hazardous waste disposal be emphasized in schools.

## ***Communications and outreach***

Two focus groups (conducted with 25 residents who were unaware of at least three of the five Ramsey County recycling resources identified in Figure 29 below) supply the bulk of the information presented in this section of the report regarding the most effective communications and outreach strategies to reach Ramsey County residents. Two questions from the resident survey and several in the property manager interviews supplement the analysis. Some key findings are:

- Most respondent property managers expressed interest in receiving more information from Ramsey County about ways to increase recycling participation among tenants in their multi-unit residential buildings.
- Property managers suggested that the effectiveness of a recycling educator program might vary significantly across buildings, but that the program has the potential to improve recycling participation in some multi-unit residential buildings.
- Three-quarters of residents said they receive about the right amount of information from Ramsey County and their cities about recycling and trash management. Only 2 percent said they receive too much information.

- About half of residents were aware of the Ramsey A to Z website and Going Green Guide mailing, but less than one-third had used these resources. Awareness and usage rates of other informational resources were lower.
- To improve communications and outreach with harder-to-reach residents, focus group participants recommended:
  - Continued and expanded use of the Going Green Guide and other direct mail
  - Increased use of media and advertising, especially on buses and in bus shelters, to promote existing informational resources like the website
  - In-person outreach at special events and in schools

### **Communication and resource needs of property managers**

In general, respondent property managers expressed a great deal of interest in receiving more information from Ramsey County about recycling. Though three-quarters of property managers said their recycling hauler provides recycling information for tenants, two-thirds suggested that Ramsey County expand the scope and frequency of distribution of their informational materials (Figure 28).

If they had more regular flyers, or maybe welcome letters or regular newsletters.

Maybe additional literature on the benefits, or maybe breaking it down to people on the amounts of kinds of things that go into landfills if they don't tackle these things.

Provide statistics about how beneficial it would be, how many trees it saves.

They also requested more recycling information in multiple languages.

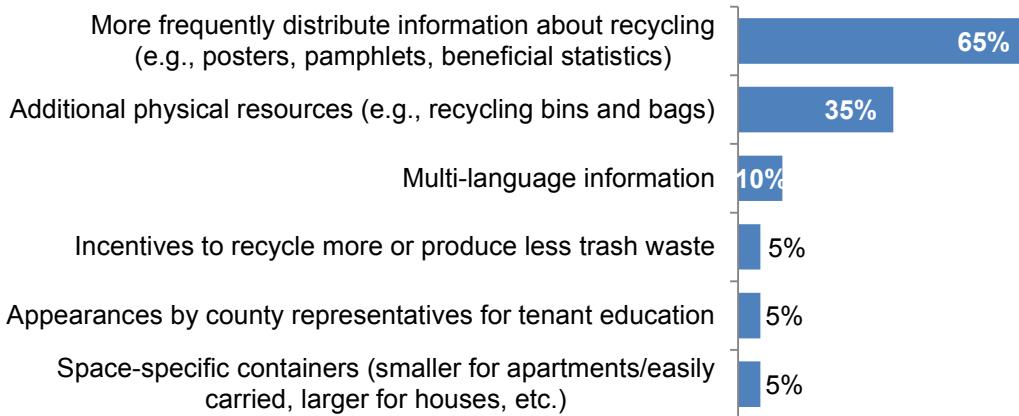
Three-quarters of surveyed property managers said they would like to be contacted with more information about increasing recycling participation. Finally, one-third of property managers requested additional physical resources, like recycling bins and bags to make recycling easier for tenants:

Provide some tote bags for our tenants to make it easier for people to recycle.

Recycling containers for apartments, convenient containers located in apartment and easy to carry up and down stairs to add to main bin, not bulky.

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## 28. Resources requested by property managers



**Notes:** Based on responses to property manager survey question 7C in the appendix. Responses do not sum to 100% because respondents were permitted to identify up to three ideas.

Property managers were also asked to provide feedback on a proposed recycling educator program, which would involve recruiting volunteer residents to be trained by Ramsey County to conduct face-to-face outreach to other tenants in their buildings about recycling and proper disposal of hazardous and bulky waste. This program's objective would be to increase recycling rates at rental properties, while reducing trash volume and the number of bulky and household hazardous waste items in the dumpsters. Most property managers said they believe this program would be somewhat effective (60%) or very effective (10%) in increasing recycling rates in buildings like theirs.

Anything you can do to get people educated to recycle at any cost is a good thing, because we all have to pay attention to it for the environment. I don't think you can put a price tag on safety and health.

Many also noted the potential limitations of such a program, depending on the current engagement of residents and the skill set of the recycling educator:

In buildings like ours where we already have a lot of information, it would not be very effective, but in other buildings, I think it could be effective.

[It] depends on the personality. If they have good leadership, and are passionate about recycling, explain how recycling works, it could be very effective.

About one-third said that a recycling educator would not be very effective in buildings like theirs, largely due to low levels of tenant interest in recycling:

Some people just don't care. People who do care are already recycling.

It is hard to educate them on a lot of stuff. They are busy in their lives.

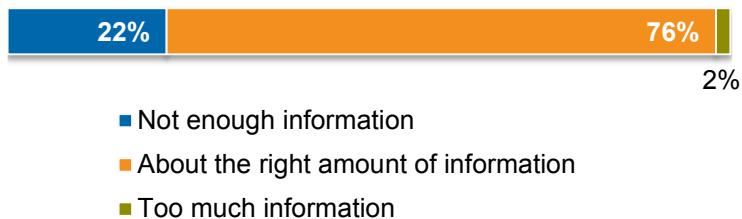
About half of property managers expressed an interest in learning more or contributing their ideas to this program, including 13 percent who said they would be willing to lower the recycling educator's rent in exchange for their service.

### Sources of information

Three-quarters (76%) of residents said they receive about the right amount of information from Ramsey County and their city about recycling and trash management (Figure 29). One-fifth said they do not receive enough information, including 47 percent of single parents, 46 percent of Hispanic/Latino residents, and 36 percent of residents of color overall.

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**29. Please think about the information you receive from Ramsey County and your city about recycling and trash management. Would you say you receive... (N=803)**

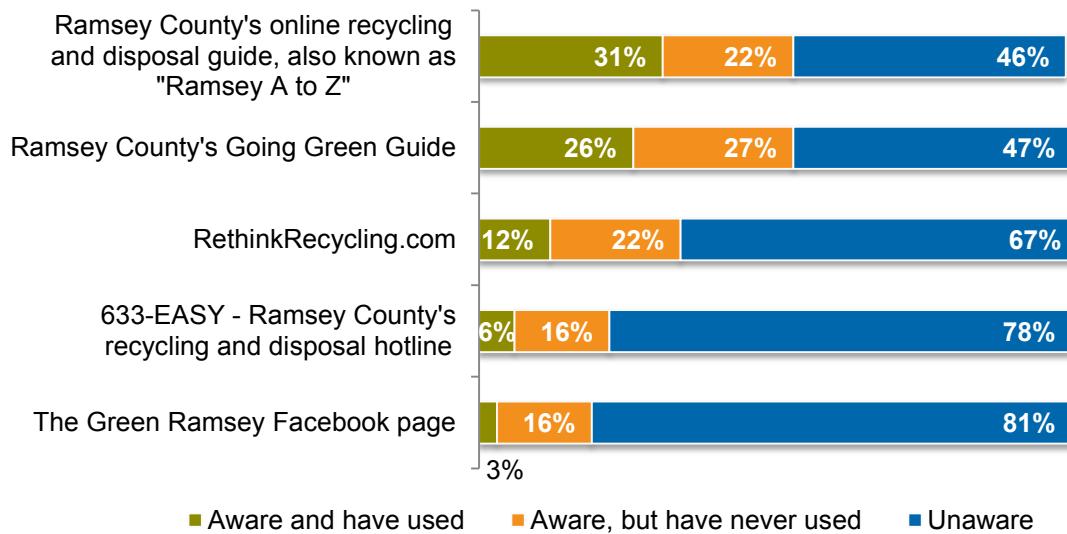


**Note:** Based on responses to resident survey question 3 in the appendix.

About half of residents were aware of Ramsey County's online recycling and disposal guide (Ramsey A to Z) and Ramsey County's annual direct-mailed Going Green Guide, and about one-quarter of residents had used each of these resources (Figure 30). Awareness was lower for RethinkRecycling.com (33%), the Ramsey County recycling and disposal phone hotline (22%), and the Green Ramsey Facebook page (19%). In general, rates of awareness and use were lowest among renters, single parents, low-income households, residents under age 25, and Hispanic/Latino residents.

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### 30. Awareness and use of informational resources (N=787-793)



*Note:* Based on responses to resident survey questions 8d-8h in the appendix.

When asked about their current sources of information about recycling and waste disposal, focus group participants identified the Internet (in particular, websites provided by the city, county, or their trash or recycling hauler) and the Going Green Guide as their primary sources of information. Ramsey A to Z was not mentioned by name, but many of the participants' references to content were consistent with the content on the Ramsey A to Z website. A few participants also mentioned phoning their city, county, or local municipality for information.

### **Focus group recommendations for resident communications**

#### **Going Green Guide**

Most focus group participants were satisfied and generally impressed with the Going Green Guide, and recommended its continued use as a primary means of communicating recycling information to residents. Participants reviewed the Guides during the sessions and described the Guide as well-designed, with a reader-friendly layout and organization. They agreed that direct mail format is an ideal method of reaching residents without annoying them, but suggested that the Guide should be mailed more frequently or should be made more readily available to residents who do not receive the annual mailing. Between one-quarter and one-half of participants did not remember receiving the Guide. Residents recommended a semi-annual mailing or, to reduce costs, a reminder postcard midway through the year that refers residents to the website and tells residents how they can request a copy of the Guide. They also suggested that recycling information be

added to the US Postal Service's packets sent to residents when they move, and that trash and/or recycling haulers provide Ramsey County resources to residents when they move or change services.

While participants generally approved of the Going Green Guide in its current design, they recommended several small changes to increase resident use of the resource. To keep the Guide out and visible to residents, they suggested that a magnet be attached to the back of the Guide (so it could more easily be hung on a refrigerator) or that a hole be punched in the corner so it can be hung on a hook. To more effectively refer residents to the website, participants recommended that the website be more prominently featured and that it should look more like a typical web link, with "www" in front and with the standard blue, underlined formatting. Participants suggested that this would help the website stand out, especially to older or less tech-savvy residents. Finally, participants encouraged the inclusion of coupons or other incentives to entice residents (especially those who are less interested in recycling) to open the Guide.

### **Media and advertising opportunities**

Aside from direct mailings, participants recommended several forms of advertising and media to inform residents about proper recycling and waste disposal, including posters, billboards, television and radio public service announcements, and (limited) Internet advertising. They recommended that the Ramsey A to Z website be listed on all materials. To grab residents' attention in any media approach, participants recommended simple, clutter-free displays. They noted that funny or surprising images grab attention, and that their eyes are most drawn to images that their brains process as unusual (the Delta YouTube video mentioned below includes several good examples). Simple images with few words were encouraged. For example, one participant suggested a billboard with an image of an item that causes recycling confusion (a yogurt tub, for example) with a simple message: "Can I recycle this? [www.RamseyAtoZ.com](http://www.RamseyAtoZ.com)."

Others noted a slightly different approach that involves more of a call to action or informational approach, including the impact of recycling or choosing not to recycle. For example, participants suggested a public service announcement that describes the paths of two plastic bottles, one that gets recycled and one that does not. Participants noted that these materials should empower and encourage residents to make a difference with their individual actions.

The most popular platform on which to display these messages was the available space in, on, and around buses and bus shelters. Participants explained that bus travel involves a great deal of down time, and that residents would most likely read recycling information posted inside bus shelters and on buses. Participants also recommended approaching

Minnesota Public Radio and TV stations to air a public service announcement emphasizing the importance of recycling and guiding residents to resources that explain recycling policies and practices in their area.

Finally, participants proposed limited use of the Internet in promoting and informing residents about recycling. They discouraged use of Facebook ads and said that most of them would not look for recycling information via social media, but suggested that the Green Ramsey Facebook page must be clever, flashy, and well-advertised on all mailed materials to encourage a critical mass of residents to “like” it. Rather than using Facebook to connect with residents, participants encouraged the development of a clever and informative video on YouTube. One participant used the recent Delta Airlines safety video as an example of absurd comedy that grabs attention while communicating important information.

### **In-person connections**

Focus group participants recommended two main strategies to connect with residents in person and inform them about recycling opportunities and policies: participating in large events and working with schools.

Participants suggested that Ramsey County should set up booths in high-traffic areas at events like the Living Green Expo, the Ramsey County Fair, and the State Fair. Token giveaways, such as bags or pens, were strongly encouraged at events like these. One particularly creative suggestion was the Going Green Guide on a stick, a tribute to State Fair customs. Participants also suggested a greater presence at sports events to encourage recycling at the events and at home, and a few suggested the more ambitious task of requesting public service announcements from professional athletes at these events.

Participants in all four focus groups strongly recommended distributing information to households via their children in schools. Participants noted the impact that children have had on recycling participation overall, and asserted that they could have a similar impact on improving resident understanding of accepted materials for recycling, household hazardous waste, composting, or other aspects of household waste management. Because the focus group participants were not students or staff, they were not able to provide specific ideas for implementation of this outreach strategy, but a focus group or set of interviews with teachers and administrators could provide more information on the feasibility of this strategy.

Finally, participants were asked for their feedback on a proposed program of residential recycling captains, who would serve as a local recycling and waste disposal resource to residents in a small geographic area (such as a block or multi-unit building). The two focus groups came to opposite conclusions about the potential effectiveness of such a

program; while one focus group agreed that recycling captains would be unpopular, perceived as recycling enforcers, and unsafe in the more challenging neighborhoods where they would be needed most, the other focus group suggested that this approach could work very well, and a few focus group participants said they would volunteer to serve as recycling captains.

Both focus groups agreed that, should this program proceed, the recycling captains should be accessible but not overbearing, acting as a resource rather than an enforcer. They recommended communicating with residents using flyers on residents' doors, providing contact information for the recycling captain and informing residents of their availability to address any of their recycling and waste management questions. They discouraged recycling captains from contacting residents via phone, but said that email contact is ideal if residents are willing to share their email addresses. They recommended recruiting volunteers at the Living Green Expo or similar events and on the Facebook and Twitter pages (which many of the highly motivated residents likely follow). Finally, they suggested connecting with Girl and Boy Scout troops to either supplement or participate in this program, because residents are generally most willing to connect with children, especially when cookies are involved.

# Issues to consider

Overall, the results of this study indicate that residents are interested in and concerned about recycling and proper waste disposal, but a shortage of information presents a significant barrier to their full participation in the programs and services available in Ramsey County. Though residents identified several other important barriers to recycling and proper waste disposal, their limited access to information arose as a significant barrier throughout the study and represents a relatively low-cost opportunity to improve participation in recycling and waste management programs.

Resident surveys from 2010 and earlier years have revealed consistently high rates of recycling participation and interest. Similarly, this study finds high levels of resident willingness to participate in organics recycling programs and to properly dispose of their bulky and household hazardous waste. It also finds, however, relatively high rates of confusion about recycling programs, a limited understanding of backyard composting, and spotty knowledge of household hazardous waste items and the available methods of proper disposal for them.

The need for (and interest in) more information about recycling and proper waste disposal emerged in every segment of the study, with every respondent group. In the survey, residents noted their confusion about sorting requirements and whether certain plastics and pizza boxes were recyclable. They identified their lack of knowledge as a key barrier to backyard composting, and demonstrated many gaps in their knowledge of proper disposal of several household hazardous waste items, most notably cleaning products, aerosols, and leftover prescription medications.

Focus group participants confirmed the limited resident knowledge of the available methods for proper disposal of household hazardous waste. Furthermore, each group noted that remaining uninformed about the impact of their actions (never knowing where their TV ends up after they toss it in their dumpster) allows residents to comfortably discard their waste improperly.

Property managers repeatedly described the improper waste disposal habits of their tenants, attributing these habits most frequently to their poor understanding of proper disposal or (as focus group participants mentioned) their limited knowledge of the environmental consequences of their actions. Even property managers themselves demonstrated information gaps, most notably the prevalent perception that recycling services necessarily represent a net cost, as few property managers acknowledged the reduced dumpster size enabled by the diversion of recyclable waste into recycling bins.

These results all point to a great opportunity to improve resident participation in existing programs through the use of expanded and enhanced distribution of information. Focus group participants and survey respondents suggested a need for additional information about household hazardous waste disposal requirements and options, especially the prescription medication drop boxes, of which very few residents were aware. In addition, focus group participants identified several strategies to reach the significant minority of residents who said they do not receive enough information about recycling and waste management from Ramsey County. With a variety of creative suggestions ranging from improving the usability of the Going Green Guide, to billboard and bus advertisements and expanding the visibility of Ramsey County Public Health's presence at public events, focus group participants enthusiastically encouraged Ramsey County to repackage and more widely distribute the high-quality information they already provide.

This study has found a great deal of resident interest in recycling and proper waste disposal. Improving access to information may equip Ramsey County residents with the knowledge they need to align their behavior with their values.

# Appendix

## 31. Have you had this item in your home in the past 2 years? If yes, how did/would you dispose of it?

		Properly disposed	Did not know how to dispose	Disposal method unclear	Improperly disposed	Did not have
Can be thrown in the trash	Non-rechargeable alkaline batteries (like AA, AAA, D, etc.)	74%	2%	8%	0%	16%
	Old clothing and shoes	84%	0%	6%	0%	10%
	CDs, DVDs, and VHS tapes	61%	3%	11%	0%	25%
	Incandescent (standard) light bulbs	75%	1%	8%	0%	15%
	Broken glass (mirrors, drinking glasses, aquariums, etc.)	58%	1%	8%	4%	30%
	Dirty diapers	21%	0%	2%	0%	76%
	Pet waste (used cat litter, dog feces, etc.)	43%	0%	3%	0%	54%
Must be handled differently	Leftover household cleaners such as Windex or bathroom cleaner	9%	1%	10%	26%	54%
	Partially filled aerosol cans (spray paint, bug spray, Pledge, etc.)	21%	1%	7%	17%	54%
	Bulky items such as furniture, mattresses, or carpet	37%	1%	9%	8%	44%
	Expired or leftover prescription medications	14%	3%	8%	27%	48%
	Used oil filters	19%	0%	4%	3%	74%

**31. Have you had this item in your home in the past 2 years? If yes, how did/would you dispose of it? (continued)**

		Properly disposed	Did not know how to dispose	Disposal method unclear	Improperly disposed	Did not have
Must be handled differently	Branches or other woody waste from shrubs or trees	50%	0%	4%	4%	42%
	Rechargeable batteries	28%	3%	11%	6%	52%
	Leftover insect or weed killer such as Raid or Weed-B-Gone	28%	2%	7%	7%	56%
	Energy-saving light bulbs like compact fluorescent bulbs ("CFL")	40%	4%	11%	7%	38%
	Old cell phones	39%	2%	12%	2%	46%
	Used motor oil	26%	0%	4%	1%	69%
	Microwaves	26%	2%	9%	2%	61%
	Paint (including house paints, hobby paints, and stains)	35%	1%	7%	6%	51%
	Large electronic item such as TVs and computer monitors	64%	2%	12%	2%	20%
	Non-rechargeable alkaline batteries (like AA, AAA, D, etc.)	50%	0%	4%	4%	42%

**Notes:** Reported rates of having these items in their homes were lower than would be expected for some items, such as large electronic items and bulky items. It appears that many respondents may have interpreted the survey question not as, "Have you had this item in your home in the last two years?" but rather, "Have you wanted to dispose of this item in the last two years?"

## **Resident survey**

### **RESIDENTIAL RECYCLING SURVEY 2012 Ramsey County**

In order for Ramsey County to truly understand current recycling habits, please answer all questions as honestly as you can.

#### **RECYCLING**

1a. Do you believe you have a clear understanding of the recycling program in your community?

- <sup>1</sup> Yes (Go to Q2)
- <sup>2</sup> No (Go to Q1b)
- <sup>3</sup> Not sure (Go to Q1b)

1b. **IF NO OR NOT SURE**, which items are you confused about? (**CHECK ALL THAT APPLY**)

- <sup>1</sup> Which plastics are recyclable
- <sup>2</sup> Pizza boxes
- <sup>3</sup> Cardboard rolls (paper towels, toilet paper)
- <sup>4</sup> Juice boxes
- <sup>5</sup> Sorting requirements
- <sup>6</sup> Collection days
- <sup>7</sup> Other (please specify: \_\_\_\_\_)

2. In which **two** of the following locations would you **most** like to see additional recycling bins?  
**(PLEASE SELECT YOUR TOP TWO FROM THE FOLLOWING LIST)**

- <sup>1</sup> Parks/athletic fields
- <sup>2</sup> Gas stations
- <sup>3</sup> Shopping centers and stores
- <sup>4</sup> Public walkways, sidewalks, and streets
- <sup>5</sup> Restaurants
- <sup>6</sup> Community events and festivals
- <sup>7</sup> Hotels and meeting facilities
- <sup>8</sup> Other (please specify: \_\_\_\_\_)
- <sup>9</sup> I do not want to see recycling bins added in any of these places

3. Please think about the information you receive from Ramsey County and your city about recycling and trash management. Would you say you receive...

- <sup>1</sup> Not enough information
- <sup>2</sup> About the right amount of information
- <sup>3</sup> Too much information

## DISPOSAL OF ORGANIC WASTE

Next we would like to ask you about how your household disposes of organic waste, including biodegradable items such as food scraps and used paper products like paper towels.

- 4a. Do you compost food waste (such as banana peels, coffee grounds, and uneaten food) in a backyard compost bin, worm bin, or compost drop-off site?

- <sup>1</sup> Yes, in a compost bin (Go to Q5)
- <sup>2</sup> Yes, in a worm bin (Go to Q5)
- <sup>3</sup> Yes, at a compost drop-off site (Go to Q5)
- <sup>4</sup> No, my household does not compost (Go to Q4b)

- 4b. IF NO, Why not? \_\_\_\_\_

5. In general, how willing would you be to separate organic waste (such as banana peels and other food scraps, and non-recyclable paper products like paper towels) from the rest of your household's trash, if your community had a program that would allow you to recycle this waste?

- <sup>1</sup> Very willing (Go to Q6)
- <sup>2</sup> Willing (Go to Q6)
- <sup>3</sup> Unwilling (Go to Q8 on next page)
- <sup>4</sup> Very unwilling (Go to Q8 on next page)

6. One potential organic waste recycling program is a centralized drop-off station where residents can drop off their organic waste (such as food scraps and used paper products like paper towels and tissue). If your community provided a drop-off station for organic waste, how likely is it that you would take your organic waste to this station in the following situations?

How likely are you to take your organic waste to a drop-off station if...	Very likely	Likely	Unlikely	Very unlikely
a. You would be charged <b>\$2-4 per month</b> and the drop-off station would be <b>within 10 minutes</b> of your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>
b. You would be charged <b>\$2-4 per month</b> and the drop-off station would be <b>between 10-20 minutes</b> of your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>
c. You would be charged <b>\$2-4 per month</b> and the drop-off station would be <b>20-30 minutes</b> from your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>
d. There would be <b>no additional charge</b> and the drop-off station would be <b>within 10 minutes</b> of your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>
e. There would be <b>no additional charge</b> and the drop-off station would be <b>between 10-20 minutes</b> of your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>
f. There would be <b>no additional charge</b> and the drop-off station would be <b>20-30 minutes</b> from your home?	<input type="checkbox"/> <sup>1</sup>	<input type="checkbox"/> <sup>2</sup>	<input type="checkbox"/> <sup>3</sup>	<input type="checkbox"/> <sup>4</sup>

7. Another potential organic waste recycling program would include weekly curbside pick-up of organic waste, similar to the way trash and recycling are collected. (If you live in an apartment, you would share an organic waste bin with other residents, as with trash and recycling bins.) If a curbside organic waste recycling program were available in your community, how likely is it that you would participate in the following situations?

<b>How likely are you to participate in a curbside organic waste recycling program if...</b>	<b>Very likely</b>	<b>Likely</b>	<b>Unlikely</b>	<b>Very unlikely</b>
a. You would be charged an additional <b>\$6-8 per month?</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
b. You would be charged an additional <b>\$4-6 per month?</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
c. You would be charged an additional <b>\$2-4 per month?</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
d. There would be <b>no additional cost</b> for this program?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

## AWARENESS AND USE

8. Please tell us if you are aware of these resources, and if so, whether you have ever used them.

	<b>Unaware</b>	<b>Aware, but have never used</b>	<b>Aware and have used</b>
a. Ramsey County's household hazardous waste collection sites	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b. Ramsey County's yard waste drop-off sites	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c. Ramsey County's medicine drop boxes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d. Ramsey County's online recycling and disposal guide, also known as "Ramsey A to Z"	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e. The website RethinkRecycling.com	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
f. 633-EASY – Ramsey County's recycling and disposal hotline	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
g. Ramsey County's Going Green Guide	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
h. The Green Ramsey Facebook page	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

9. As far as you know, which of the following items are accepted at Ramsey County's yard waste collection sites? (CHECK ALL THAT APPLY)

- <sup>1</sup> Woody tree waste (branches, tree limbs, prunings)
- <sup>2</sup> Tree roots
- <sup>3</sup> Lumber
- <sup>4</sup> Fence posts
- <sup>5</sup> Shrubs
- <sup>6</sup> Old tires
- <sup>7</sup> Rocks and concrete
- <sup>8</sup> Garden wastes (vines, waste vegetables, weeds)
- <sup>9</sup> Leaves, grass, and other lawn cuttings
- <sup>10</sup> Pet wastes
- <sup>11</sup> Old lawn care equipment (mowers, trimmers)

## **WASTE DISPOSAL**

Next, we would like to find out more about your knowledge and practices around the disposal of other kinds of waste. Remember, your responses are confidential, and your honest answers are very important to us.

10. For each item, please tell us whether you think the item can be disposed of with the normal trash or if it should be handled differently from normal trash. If you are uncertain, you can say you “don’t know”.

ITEM	Normal Trash	Handled Differently	Don't Know
a. Rechargeable batteries	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
b. Incandescent (standard) light bulbs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
c. CDs, DVDs, and VHS tapes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
d. Large electronic item such as TVs and computer monitors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
e. Leftover insect or weed killer such as Raid or Weed-B-Gone	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
f. Energy-saving light bulbs like compact fluorescent bulbs (“CFL”)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
g. Broken glass (mirrors, drinking glasses, aquariums, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
h. Expired or leftover prescription medications	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
i. Used motor oil	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
j. Used oil filters	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
k. Dirty diapers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
l. Non-rechargeable alkaline batteries (like AA, AAA, D, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
m. Leftover household cleaners such as Windex or bathroom cleaner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
n. Old cell phones	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
o. Pet waste (used cat litter, dog feces, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
p. Partially filled aerosol cans (spray paint, bug spray, Pledge, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
q. Bulky items such as furniture, mattresses, or carpet	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
r. Microwaves	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
s. Branches or other woody waste from shrubs or trees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
t. Paint (including house paints, hobby paints, and stains)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8
u. Old clothing and shoes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8

11. Please tell us whether you have had the following items in your home in the past 2 years, and if so, how you would dispose of the item when you no longer wanted it. Remember, your answers are confidential; no one from Ramsey County will see your individual responses.

<u>Have you had this item in your home in the past 2 years?</u>	<b>Yes ➔</b> Go to last column	<b>No</b>	<b>Don't know</b>	<b>If yes, how did/would you dispose of it?</b>
a. Rechargeable batteries	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
b. Incandescent (standard) light bulbs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
c. CDs, DVDs, and VHS tapes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
d. Large electronic item such as TVs and computer monitors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
e. Leftover insect or weed killer such as Raid or Weed-B-Gone	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
f. Energy-saving light bulbs like compact fluorescent bulbs ("CFL")	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
g. Broken glass (mirrors, drinking glasses, aquariums, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
h. Expired or leftover prescription medications	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
i. Used motor oil	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
j. Used oil filters	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
k. Dirty diapers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
l. Non-rechargeable alkaline batteries (like AA, AAA, D, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
m. Leftover household cleaners such as Windex or bathroom cleaner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
n. Old cell phones	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
o. Pet waste (used cat litter, dog feces, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
p. Partially filled aerosol cans (spray paint, bug spray, Pledge, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
q. Bulky items such as furniture, mattresses, or carpet	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
r. Microwaves	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
s. Branches or other woody waste from shrubs or trees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
t. Paint (including house paints, hobby paints, and stains)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	
u. Old clothing and shoes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 8	

12. At which of the following times have you visited a Ramsey County household hazardous waste site? (CHECK ALL THAT APPLY)
- <sup>1</sup> Not applicable – I have never visited a Ramsey County household hazardous waste site  
 <sup>2</sup> Participating in a neighborhood cleanup effort  
 <sup>3</sup> Major clean-up effort or annual fall/spring cleaning (bringing many items)  
 <sup>4</sup> Routine visit (bringing a few items)  
 <sup>5</sup> Remodeling or renovating  
 <sup>6</sup> Moving in – bringing items that previous resident left  
 <sup>7</sup> Moving out  
 <sup>8</sup> Other (please specify: \_\_\_\_\_)
13. Have you ever taken bulky items or harder to recycle items to a Community Clean-up Event?
- <sup>1</sup> Yes  
 <sup>2</sup> No
14. What is the **biggest** barrier for you to get rid of electronic waste such as an unwanted or broken TV or computer monitor? (CHECK ONE)
- <sup>1</sup> Not applicable – my household does not have any electronic waste  
 <sup>2</sup> No barriers to getting rid of electronic waste  
 <sup>3</sup> Cost  
 <sup>4</sup> Don't have enough information or don't know where to take it  
 <sup>5</sup> Too heavy to lift  
 <sup>6</sup> Too far to drive or don't have vehicle  
 <sup>7</sup> Other (please specify: \_\_\_\_\_)

## DEMOGRAPHICS

These last questions are to make sure we have gathered opinions from a variety of people. As with all of your other responses, they will be kept private.

15. In what year did you move to your current home? \_\_\_\_\_ (Year)
16. Do you own or rent your current home?
- <sup>1</sup> Own  
 <sup>2</sup> Rent
17. What type of home do you live in? (CHECK ONE)
- <sup>1</sup> Detached single family home (Go to Q19)  
 <sup>2</sup> Condominium or townhome (Go to Q18)  
 <sup>3</sup> Apartment, including duplex, triplex, and larger multi-unit housing (Go to Q18)  
 <sup>4</sup> Mobile home / Manufactured home (Go to Q19)  
 <sup>5</sup> Other (please specify: \_\_\_\_\_) (Go to Q19)

18. If you live in an apartment, condominium, or townhome, does your building have enough recycling bins available?
- <sup>1</sup> There are NO recycling bins available in my building  
 <sup>2</sup> Bins are available in my building, but there are NOT ENOUGH  
 <sup>3</sup> There are ENOUGH recycling bins available in my building
19. Do you ever access the Internet from a mobile device?
- <sup>1</sup> Yes  
 <sup>2</sup> No
20. Would you like to receive information about recycling or other waste management programs in Ramsey County via Facebook or Twitter?
- <sup>1</sup> Not applicable – I am not on Facebook or Twitter  
 <sup>2</sup> Yes → You may follow “Green Ramsey” on Facebook and/or Twitter  
 <sup>3</sup> No
21. Including yourself, how many adults (age 18 or older) live in your household? \_\_\_\_\_ Adults
22. How many children (age 17 or younger) live in your household? \_\_\_\_\_ Children
23. In what year were you born? \_\_\_\_\_ (Year)
24. Are you...
- <sup>1</sup> Male  
 <sup>2</sup> Female  
 <sup>3</sup> Other
25. What is the highest year or grade of school you have completed? (**CHECK ONE**)
- <sup>1</sup> Less than high school  
 <sup>2</sup> High school graduate or GED  
 <sup>3</sup> Some college  
 <sup>4</sup> Vocational/Technical graduate (associate's degree)  
 <sup>5</sup> College graduate (bachelor's degree)  
 <sup>6</sup> Some graduate school or more
26. Are you of Hispanic, Latino, or Spanish origin?
- <sup>1</sup> Yes       <sup>2</sup> No
27. Which of the following best describes your race? (**CHECK ALL THAT APPLY**)
- <sup>1</sup> White or Caucasian  
 <sup>2</sup> Black or African American  
 <sup>3</sup> Asian or Pacific Islander  
 <sup>4</sup> American Indian or Alaska Native  
 <sup>5</sup> Some other race (please specify: \_\_\_\_\_)
28. What language do you speak most at home?

- <sup>1</sup> English
- <sup>2</sup> Spanish
- <sup>3</sup> Hmong
- <sup>4</sup> Somali
- <sup>5</sup> Other (please specify: \_\_\_\_\_)

29. Please tell us your household's annual household income in 2011 from all earners and all sources, before taxes. Remember, your responses are confidential.

- <sup>1</sup> Under \$15,000
- <sup>2</sup> \$15,000 - \$24,999
- <sup>3</sup> \$25,000 - \$34,999
- <sup>4</sup> \$35,000 - \$49,999
- <sup>5</sup> \$50,000 - \$74,999
- <sup>6</sup> \$75,000 - \$99,999
- <sup>7</sup> \$100,000 - \$149,999
- <sup>8</sup> \$150,000 or over

30. Wilder Research will be conducting several focus groups with Ramsey County residents in January 2013 to better understand the results of this survey. As a focus group participant, you would receive a \$20 Target gift card to thank you for your time. Are you interested in participating in one of these focus groups?

- <sup>1</sup> Yes
- <sup>2</sup> No

30a. **IF YES**, please provide your name, phone number, and/or e-mail address below.

Your name: \_\_\_\_\_

Phone number: (\_\_\_\_) \_\_\_\_\_

E-mail: \_\_\_\_\_

31. Are you interested in receiving information about volunteering to educate students, neighbors, and other community members about recycling in Ramsey County?

- <sup>1</sup> Yes
- <sup>2</sup> No

31a. **IF YES**, please provide your name, phone number, and e-mail address below (if you have not already done so above).

Your name: \_\_\_\_\_

Phone number: (\_\_\_\_) \_\_\_\_\_

E-mail: \_\_\_\_\_

Thank you very much for your time.

If you have any questions about how to dispose of an item from your home, you can visit [www.RamseyAtoZ.com](http://www.RamseyAtoZ.com) or call the Ramsey County Telephone Hotline at 651-633-EASY (that is 651-633-3279) for information. This number is answered by trained information staff 24-hours a day, seven days a week.

# ***Property manager key informant interview instrument***

Ramsey County Solid Waste Management  
Property Manager Interviews

## **Recruiting script**

Hi! My name is \_\_\_\_\_, and I am calling on behalf of St Paul-Ramsey County Public Health. Wilder Research is conducting this study to learn how the county can improve the system of recycling and waste disposal for **multi-unit buildings**. St. Paul-Ramsey County Public Health staff suggested that we contact {{name}} /the person in charge of waste management at {property name} to gather input on this topic. Are you the person in charge of waste management at {property}?

YES – Continue.

NO – Ask to speak with the person in charge of waste management at {property}.

The person who completes this interview will receive a \$20 Target gift card to thank them for their time. The interview is confidential – neither your name nor the business or property name will be identified in any reporting on this study. Because the interview contains both closed-ended and open-ended questions, the length of the interview will be controlled by what you choose to say – we estimate the interview will generally take about 20-30 minutes. We can do the telephone interview now or schedule another time that is convenient for you. Would you like to do the interview now or set up another time that works in your schedule?

NOW – Continue.

SCHEDULE A TIME – Set appointment.

REFUSED - For our records, can you tell me why you're not willing to complete the interview?

## **Introduction:**

We understand that you may own or manage buildings outside of Ramsey County. For the purposes of this interview, please think **only** about your buildings **in Ramsey County**. Remember, your responses will be kept confidential, so please answer these questions as completely and openly as you can.

First, we'd like to know how many residential buildings you own or manage in each city in Ramsey County. For our purposes, please define each separate free-standing structure with three or more residential units as a separate building, even if it is located next to another building that you own or manage.

1A. First, do you own or manage multi-unit residential buildings in more than one city in Ramsey County?

Yes .....	1
No.....	2

1B. In which city/cities are your buildings located?

	<b>Yes</b>	<b>No</b>	<b>1D. Of your buildings located in {CITY}, how many have {CUTOFF} or more residential units?</b>
a. Arden Hills	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=3}
b. Falcon Heights	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=5}
c. Lauderdale	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=11}
d. Little Canada	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=3}
e. Maplewood	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=5}
f. Mounds View	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=3}
g. New Brighton	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=4}
h. North St. Paul	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=5}
i. Roseville	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=11}
j. St. Anthony	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=3}
k. St. Paul	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=11}
l. Shoreview	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=7}
m. Vadnais Heights	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=9}
n. White Bear Lake	<input type="checkbox"/>	<input type="checkbox"/>	{CUTOFF=5}

Based on what you've told me, I've got a total of {insert sum of 1Da-n} building(s) that you own or manage in Ramsey County. Is that right? (IF NOT, CORRECT AS NEEDED AND/OR EXPLAIN THE ISSUE IN COMMENTS. DO NOT ADD BUILDINGS WITH FEWER UNITS THAN THE CUTOFFS LISTED IN Q1D.) For the rest of this interview, we'd like you to focus only on {this building/these buildings}.

(IF SUM OF 1Da-n=1) (For owners/managers of one building)

1D. Do you provide recycling services at the building? (INTERVIEWER NOTE: Providing recycling services refers to making sure recycling services are available to tenants in the building, by either arranging for hauling services or directly providing those hauling services.)

Yes .....	(GO TO Q4A) ..... 1
No.....	(GO TO Q2A) ..... 2

(IF SUM OF 1Da-n>1) (For owners/managers of multiple buildings)

1E. Would you say you provide recycling services at... (INTERVIEWER NOTE: Providing recycling services refers to making sure recycling services are available to tenants of the building, by either arranging for hauling services or directly providing those hauling services.)

All of your multi-unit residential buildings in Ramsey County..... (GO TO Q4A) ..... 1
Some of your multi-unit residential buildings in Ramsey County..... (GO TO Q3A) ..... 2
None of your multi-unit residential buildings in Ramsey County..... (GO TO Q2A) ..... 3

(If 1D="No" or 1E= "None")

- 2A. What keeps you from providing recycling services at your building(s)?

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- 2B. Ramsey County aims to encourage landlords and property managers to provide recycling services at their buildings, and can offer some services, such as technical assistance, signage, and educational materials in English and other languages. Thinking of these services or other ideas you might have, what could Ramsey County do to encourage you to provide recycling services at your building(s)?

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(Go to Q9A)

(If 1E="Some")

- 3A. What keeps you from providing recycling services at some buildings? (Probe as needed: Are there certain features of the buildings, the tenants, or the services available that make it more difficult to provide recycling services at those buildings?)

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- 3B. Ramsey County aims to encourage landlords and property managers to provide recycling services at their buildings, and can offer some services, such as technical assistance, signage, and educational materials in English and other languages. Thinking of these services or other ideas you might have, what could Ramsey County do to encourage you to provide recycling services at all of your buildings?

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- 4A. Why do you provide **recycling** services for your tenants?

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- 4B. In general, what do you think are the 1 or 2 main reasons why some landlords **do not** provide **recycling** services to tenants?

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4C. Which of the following materials are collected for recycling at your buildings?

What about...	IF VOLUNTEERED: For some buildings but not all		
	Yes	No	
a. Newspaper	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
b. Other paper, including office paper, magazines, and junk mail	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
c. Cardboard boxes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
d. Juice boxes and milk cartons	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
e. Glass bottles and jars	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
f. Plastic bottles	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
g. Other plastics, like yogurt tubs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
h. Metal food and beverage cans	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
i. Clothing and linens	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
j. Organic waste (like food scraps and non-recyclable paper products)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
k. Do you provide recycling bins for any other items? (Specify _____)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

4D. Does your recycling hauler pick up the recycling at your building(s)...

- Monthly ..... 1
- Every two weeks ..... 2
- Weekly ..... 3
- Twice a week, or ..... 4
- More than twice a week? ..... 5
- (IF VOLUNTEERED: VARIES,  
DIFFERENT FOR DIFFERENT BUILDINGS) ..... 6
- Refused ..... -7
- Don't know ..... -8

IF Q4D= "Varies", Please explain:

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4E. Since you've been receiving recycling services from your current recycling hauler, have you ever noticed or heard about recycling bins or carts being full or overflowing at your building(s)?

- Yes ..... 1
- No ..... 2
- Refused ..... -7
- Don't know ..... -8

- 5A. We're trying to understand how well recycling haulers in Ramsey County are doing. In general, how satisfied are you with the service provided by the recycling hauler(s) at your building(s)? Would you say...

Very satisfied .....	1
Somewhat satisfied.....	2
Somewhat dissatisfied, or .....	3
Very dissatisfied?.....	4
Refused..... (GO TO Q5C) .....	-7
Don't know .....	(GO TO Q5C) -8

- 5B. Why do you say that?
- 
- 

- 5C. Does your recycling hauler provide you with recycling informational materials for tenants?

Yes .....	1
No.....	2
IF VOLUNTEERED: HAULER PROVIDES/PASSES ALONG MATERIALS PRODUCED BY COUNTY OR CITY .....	3
Refused.....	-7
Don't know .....	-8

- 5D. Does your recycling hauler provide you with information on the tonnage hauled away from your buildings?

Yes .....	1
No.....	2
Refused.....	-7
Don't know .....	-8

6. (CATI INSERT IF Q1C=SOME: In the buildings where recycling services are offered,) About what percentage of tenants use the recycling services on a regular basis? Would you say...

None of them use the recycling services .....	1
1-20% use the recycling services .....	2
21-40%.....	3
41-60%.....	4
61-80%, or .....	5
81-100% use the recycling services? .....	6
Refused.....	-7
Don't know .....	-8

- 7A. Aside from informing tenants about the recycling bins, do you make additional efforts to educate them about recycling or to encourage them to recycle?

Yes .....	1
No.....(Go to Q7C) .....	2
Refused.....(Go to Q7C) .....	7
Don't know .....	(Go to Q7C) .....
	8

- 7B. What efforts do you make to educate your tenants about recycling or to encourage them to recycle?

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- 7C. Can you think of any resources that Ramsey County could offer you to help you encourage recycling among your tenants?

Yes .....	
No.....(Go to Q7D) .....	2
Refused.....(Go to Q7D) .....	7
Don't know .....	(Go to Q7D) .....
	8

- 7C. Please describe in detail:

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- 7D. Would you like to be contacted by Ramsey County with information about available resources to increase recycling participation among your tenants?

Yes .....	
No.....(GO TO Q8A) .....	2
Refused.....(GO TO Q8A) .....	7
Don't know .....	(GO TO Q8A) .....
	8

- 7E. Let me confirm your contact information so Ramsey County can get in touch with you.

(CATI – Show contact info that we have.)

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Email address: \_\_\_\_\_

Next, we'd like to talk about your trash service.

9A. How satisfied are you with the service provided by the trash hauler(s) at your building(s)? Would you say...

- |                                 |                   |
|---------------------------------|-------------------|
| Very satisfied .....            | 1                 |
| Somewhat satisfied.....         | 2                 |
| Somewhat dissatisfied, or ..... | 3                 |
| Very dissatisfied? .....        | 4                 |
| Refused.....(GO TO Q10) .....   | 7                 |
| Don't know .....                | (GO TO Q10) ..... |
|                                 | 8                 |

9B. Why do you say that?

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Q10. I'm now going to ask some questions about **bulky** waste. For our purposes, bulky waste includes items such as appliances, furniture, mattresses and beds, tires, televisions, computers, old carpet, and other items that cannot be collected with the regular trash due to size or hazardous components. This first set of questions is about the different ways you might arrange for disposal of **all** kinds of bulky waste, including both tenant-generated bulky waste (like furniture) and bulky waste that belongs to the building (like carpet or construction materials from remodeling).

In which of the following ways do you arrange for disposal of bulky waste at your building(s)?

Do you...	IF VOLUNTEERED: For some buildings but not all			
	Yes	No		
a. Contract with a property management company that arranges for bulky waste disposal?	<input type="checkbox"/> 1 →	<input type="checkbox"/> 2	<input type="checkbox"/> 3 →	b. Which company do you use? _____
c. Contract with a hauler, other than your regular trash hauler, to remove bulky waste?	<input type="checkbox"/> 1 →	<input type="checkbox"/> 2	<input type="checkbox"/> 3 →	d. Which company do you use? _____
e. Contract with your regular trash hauler to remove bulky waste?	<input type="checkbox"/> 1 →	<input type="checkbox"/> 2	<input type="checkbox"/> 3 →	f. Which company do you use? _____
g. Use your own company's staff, including yourself, to haul the bulky waste to a disposal site?	<input type="checkbox"/> 1 →	<input type="checkbox"/> 2	<input type="checkbox"/> 3 →	
h. Dispose of bulky waste in any other ways?	<input type="checkbox"/> 1 →	<input type="checkbox"/> 2	<input type="checkbox"/> 3 →	i. How do you dispose of bulky waste? _____

(CATI – Skip to Q11A if 10a, c, e, and h are all “no”)

10J. How satisfied are you with the service provided by the bulky waste removal hauler(s) at your building(s)?

Would you say...

- |                                 |                    |
|---------------------------------|--------------------|
| Very satisfied .....            | 1                  |
| Somewhat satisfied.....         | 2                  |
| Somewhat dissatisfied, or ..... | 3                  |
| Very dissatisfied? .....        | 4                  |
| Refused.....(GO TO Q11A) .....  | 7                  |
| Don't know .....                | (GO TO Q11A) ..... |
|                                 | 8                  |

10K. Why do you say that?

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These next questions are about bulky waste that is generated by **tenants**.

11A. Do you provide information to tenants about how to dispose of unwanted bulky items?

Yes .....	1
No..... (Go to Q12A) .....	2
Refused..... (Go to Q12A) .....	-7
Don't know .....	(Go to Q12A) .....
	-8

11B. Please describe the information you provide.

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11C. Do you provide removal services to your tenants to dispose of these bulky items?

Yes .....	1
No..... (Go to Q12A) .....	2
Refused..... (Go to Q12A) .....	-7
Don't know .....	(Go to Q12A) .....
	-8

11D. Please describe the bulky waste service you provide to tenants.

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11E. To your knowledge, do tenants in your building(s) ever dispose of their bulky waste using means **other than** the bulky waste service that you provide?

Yes .....	1
No..... (Go to Q12B) .....	2
Refused..... (Go to Q12B) .....	-7
Don't know .....	(Go to Q12B) .....
	-8

12A. As far as you know, how do tenants typically dispose of their bulky waste?

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- 12B. Some landlords have told us that tenants or other residents in the neighborhood have disposed of their bulky waste improperly, that is, left their unwanted bulky items on curbs, near the building's dumpster, or elsewhere on the property or nearby properties. Has this ever happened at your building(s)?

Yes .....	1
No..... (Go to Q14A) .....	2
Refused..... (Go to Q14A) .....	-7
Don't know .....	(Go to Q14A) .....

..... -8

(For owners/managers of one building)

- 12C. How often are bulky items left on your property? Would you say...

Once a year or less.....	1
2-4 times a year .....	2
5-11 times a year .....	3
Once a month .....	4
A couple of times a month, or.....	5
Once a week or more?.....	6
Refused.....	-7
Don't know .....	-8

(For owners/managers of more than one building)

- 12D. Thinking of a typical Ramsey County building that you own or manage, how often are bulky items left on the property? Would you say... (AS NEEDED: We're trying to get a per-building average.)

Once a year or less.....	1
2-4 times a year .....	2
5-11 times a year .....	3
Once a month .....	4
A couple of times a month, or.....	5
Once a week or more?.....	6
Refused.....	-7
Don't know .....	-8

- 12E. What are the **2 or 3** bulky items most frequently left on the property by tenants?

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- 12F. How do you typically remove bulky waste that has been left on the property by tenants?

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- 14A. In addition to bulky waste generated by tenants, sometimes bulky waste is generated when buildings are renovated or when individual units are updated. Bulky waste generated from the building can include carpets, appliances, sinks, toilets, bathtubs, and other items. How do you typically dispose of bulky waste items that belong to the building?

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(For owners/managers of one building)

14B. How often do you dispose of bulky waste items that belong to the building? Would you say...

Once a year or less.....	1
2-4 times a year .....	2
5-11 times a year .....	3
Once a month .....	4
More than once a month?.....	6
Refused.....	-7
Don't know .....	-8

(For owners/managers of more than one building)

14C. Thinking of a typical Ramsey County building that you own or manage, how often do you dispose of bulky waste items that belong to the building? Would you say... (AS NEEDED: We're trying to get a per-building average.)

Once a year or less.....	1
2-4 times a year .....	2
5-11 times a year .....	3
Once a month .....	4
More than once a month?.....	6
Refused.....	-7
Don't know .....	-8

14D. Thinking of the bulky waste items that belong to the building, what **2 or 3** bulky waste items do you dispose of most often?

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16. What types of bulky waste are most difficult for you to remove from your building(s)?

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17A. Is there anything that your waste disposal company could do to make removing bulky waste easier?

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17B. Is there anything that Ramsey County or your city could do to make removing bulky waste easier?

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We have just a few more general questions about your buildings and tenants.

18A. How many residential units are in the {insert number} Ramsey County building(s) that we've discussed today?

Number of residential units: \_\_\_\_\_

(IF 1C=Some)

18B. How many of those residential units are in buildings with recycling services?

Number of residential units: \_\_\_\_\_

19A. Next, we'd like to ask about your interest in a recycling educator program that Ramsey County is thinking of launching. Recycling educators are tenants who would volunteer to be trained by Ramsey County to conduct face-to-face outreach to other tenants in the building about recycling and proper disposal of hazardous and bulky waste. The program objective would be to increase recycling rates at rental properties, while reducing trash volume and the number of bulky and hazardous items in the dumpsters. Offering an incentive to recycling educators would help motivate them to do the best job they can to reach goals set by the County and the property manager. If a tenant in your building was interested in being a recycling educator, would you consider lowering that person's rent in exchange for his or her services?

Yes .....	(GO TO Q19C) .....	1
No.....		2
Refused.....		-7
Don't know .....		-8

(IF NO)

19B. Ramsey County would like to connect with landlords and property managers who are interested in providing input or working with Ramsey County as they develop the recycling educator program. Are you interested in learning more about this program or contributing your ideas to the recycling educator program planning process?

Yes .....	1	
No.....	(GO TO Q19E) .....	2
Refused.....	(GO TO Q19E) .....	-7
Don't know .....	(GO TO Q19E) .....	-8

19C. Saint Paul – Ramsey County Public Health would like to have contact information for landlords and property managers who are interested in the recycling educator program. We'll still keep the rest of your responses private. May we have your permission to share your contact information with them?

Yes .....	1	
No.....	(GO TO Q19E) .....	2
Refused.....	(GO TO Q19E) .....	-7
Don't know .....	(GO TO Q19E) .....	-8

19D. INTERVIEWER: Ask respondent to verify or provide all contact info fields.

CATI – Show contact info that we have, including anything entered into 7E.

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Email address: \_\_\_\_\_

19E. How effective do you think a recycling educator program would be in increasing recycling rates in buildings like yours? Would you say...

Very effective .....	1
Somewhat effective.....	2
Not very effective, or .....	3
Not at all effective? .....	4
Refused.....	-7
Don't know .....	-8

19F. Why do you say that?

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20. Those are all the questions we have for you today. As promised, we'll send you a \$20 Target gift card to thank you for your time. We'll have to give your name and address to the Saint Paul-Ramsey County Department of Public Health so that they can mail you your gift card. The person mailing the gift cards will know that you have completed the interview, but they **will not** receive any information about your responses in this interview. Is it alright with you if we provide your name and address to them so they can send you your gift card?

Yes .....	(GO TO Q21) .....	1
No.....		2

21. Where should the gift card be sent? (Mailing address)

(IF YES) Your gift card will be mailed within 4 weeks. Thank you very much for your time!

(IF NO) I'm sorry, we're not able to send your gift card without providing your address to the person mailing them. Thank you very much for your time!

**Saint Paul – Ramsey County Department of Public Health**  
**Resident Focus Groups Communications Protocol**

**A. Welcome (5 minutes)**

1. Background/Purpose: We're conducting this focus group on behalf of the Saint Paul – Ramsey County Department of Public Health to learn more about the sorts of outreach that are most effective in reaching Ramsey County residents. The Saint Paul – Ramsey County Department of Public Health uses a variety of methods to promote resident awareness of the recycling and waste management programs and policies in Ramsey County. Our resident survey last fall revealed, however, that many residents are unaware of these outreach efforts. In today's focus group, we'd like to learn more about what catches your attention, to help inform the development of outreach and informational materials on recycling and waste management in Ramsey County.
2. Ground Rules (*list on flip chart*)
  - a) Please participate actively and allow others to do so as well.
  - b) Be respectful.
  - c) We'll keep your opinions and ideas confidential. Please do the same for each other.
  - d) Eating during the discussion is fine.
  - e) Others?
3. *Describe purpose of note taker and recorder (to use as back-up in case we miss anything in the notes – we want to record your thoughts accurately)* and ask everyone's permission to turn it on.
4. *Agenda for the evening (Summarize the discussion and activities)*

**B. Introductions – First name and where you live (neighborhood, suburb, etc.) (5 minutes)**

**C. Warm-up Questions (5 minutes)**

1. What types of advertising are most likely to get your attention? Think of any advertisement you have seen recently that appealed to you. Please think about both the format (such as billboards, TV and radio ads, print ads in newspapers, online (like on google or facebook), or direct mail to your house) AND specific aspects of the ad itself (like style, placement, timing, key words, etc.) Tell me what the ad was and why it stuck in your mind.
2. Now let's discuss your interest in environmental topics in general. Are you interested in environmental issues? What specific areas under the broad category of "the environment" do you care most about or pay most attention to?

**D. Discussion Questions**

1. Next, let's talk about recycling. (*10 minutes*)
  - a. In your community, what can you recycle?
  - b. What can't you recycle?
  - c. How do you get information about what you can and can't recycle? What sources do you have for recycling information?
  - d. *Show images of items that commonly create recycling confusion (pizza boxes, #5 plastics):* Can you recycle this? *When responses are mixed, ask:* How would you find out the "correct" answer to the question – where would you look to find this info?

2. Now let's talk about the best ways for Ramsey County to get information to you and people like you about recycling and waste management programs and policies, such as the kinds of materials you can and can't recycle, the recycling pick up schedule, various recycling and waste disposal options and resources in the County, etc. (50 minutes)
  - a. Ramsey County typically uses direct mail format to distribute this sort of information. (*Provide Green Guides as example*) What specifically about this format does or does not work for you?
  - b. How likely are you to use social media like Twitter or Facebook to get more informed about recycling in Ramsey County? Are there any specific strategies Ramsey County should use to make sure their social media strategies are as effective as possible at reaching residents like you?
  - c. Remember, we're trying to learn about the ways Ramsey County could get information to residents like you about our local recycling and waste management programs and policies. What other low-cost ways can you think of for Ramsey County to communicate with residents about recycling and waste management programs and policies?
  - d. Ramsey County is considering using volunteer neighborhood recycling captains at the block level and within apartment complexes. These recycling captains would help to provide information to all their neighbors about recycling and other environmental issues. They would use face-to-face conversations and possibly other ways of communicating that works for their neighbors.
    - i. What is appealing to you about this idea? Do you think it will work?
    - ii. How would you prefer the recycling captains to interact with you?
    - iii. What suggestions do you have for Ramsey County as they develop this program?
    - iv. Do you have any concerns or things you would recommend that Ramsey County avoid when they are developing this program?
  - e. (*Distribute two sticky dots to each participant.*) Now that we've discussed a wide variety of strategies for Ramsey County to communicate with residents like you, we'd like to get a better sense of which of these ideas you think will work best. Using the two sticky dots that I've given you, please vote for the two methods or strategies that would be most effective to share information with you about Ramsey County recycling and waste management programs and policies.

E. *Survey and Incentives (10 minutes)*

1. *Distribute survey*
2. Please fill out this survey and then turn it in to {note taker}. Once you've turned in your survey and signed out your gift card from {note taker}, you're free to leave. Thank you very much for coming!

**Saint Paul – Ramsey County Department of Public Health  
Resident Focus Groups HHW Protocol**

**A. Welcome (5 minutes)**

1. Background/Purpose: We're conducting this focus group on behalf of the Saint Paul – Ramsey County Department of Public Health to learn more about how Ramsey County residents store and dispose of unwanted household hazardous waste. (We'll talk more about what we mean by "hazardous waste" in a few minutes.) Your input today will inform efforts to make sure household hazardous waste is safely discarded in Ramsey County.
2. Ground Rules (*list on flip chart*)
  - a) Please participate actively and allow others to do so as well.
  - b) Be respectful.
  - c) We'll keep your opinions and ideas confidential. Please do the same for each other.
  - d) Eating during the discussion is fine.
  - e) Others?

3. *Describe purpose of note taker and recorder (to use as back-up in case we miss anything in the notes – we want to record your thoughts accurately)* and ask everyone's permission to turn it on.

4. *Agenda for the evening (Summarize the discussion and activities)*

**B. Introductions – First name and where you live (neighborhood, suburb, etc.) (5 minutes)**

**C. Warm-up Questions (5 minutes)**

1. When you think of "hazardous waste", what images come to mind? What about "household hazardous waste"?
2. (*Display list of household hazardous waste items accepted at Hazardous Waste Site*) Which of these things do you have in your own home?

**D. Discussion Questions**

1. Storage – First, let's talk about the hazardous items in your house.
  - a) Where in your home do you store these sorts of items?
  - b) Do you feel that these items are stored safely in your home? Do you have any concerns or know of any risks of storing these hazardous products? What are those concerns or risks?
  - c) Do you ever hang onto hazardous items, even after you no longer have a use for them? Why? What do you eventually do with them, or plan to do with them?
2. Disposal – Now let's talk about what happens when you want to get rid of these hazardous items. (*List examples, including cleaning products and paint cans that still have some product inside.*)
  - a) Which of these items do you want to get rid of most often?
  - b) When do you usually want to get rid of these sorts of items? Are there any particular events or times of year that prompt you to dispose of these sorts of items?
  - c) When it comes time to get rid of these items, what do think most people do to get rid of them?
  - d) Do you have any concerns or know of any risks of disposing of hazardous products?

3. Ramsey County Household Hazardous Waste Site – Now let's talk about the Ramsey County Household Hazardous Waste Site. First, I'd like to note that you were all selected to attend this focus group because you said on your survey that you're aware of the Ramsey County Household Hazardous Waste Site but have never used it.
  - a) For starters, what do you know about the Ramsey County Household Hazardous Waste Site? (Where is it? What do they accept there? What do you need to do to take your household hazardous waste there?)
  - b) What keeps you from taking your household hazardous waste to the Household Hazardous Waste Site?
    - *(Record ideas on a flip chart or blue wall. When all ideas are in, distribute two sticky dots to each participant.)*
    - We're trying to identify the most important factors that keep residents from taking their household hazardous waste to the Household Hazardous Waste Site. Please take your two sticky dots and place them next to the two most important barriers for your family.
  - c) *(Identify top 2-4 barriers)* Looking at these barriers, what could Ramsey County do to reduce these barriers and better encourage you to take your household hazardous waste to the Household Hazardous Waste Site?
4. *Survey and Incentives (10 minutes)*
  - a) *Distribute survey*
  - b) Please fill out this survey and then turn it in to {note taker}. Once you've turned in your survey and signed out your gift card from {note taker}, you're free to leave. Thank you very much for coming!

## **Focus group post-survey**

### **Saint Paul – Ramsey County Public Health Focus Group Questionnaire**

1. In general, how committed are you to recycling as much as possible?  
<sup>1</sup> Very committed  
<sup>2</sup> Somewhat committed  
<sup>3</sup> Not committed
2. In general, how interested are you in environmental issues?  
<sup>1</sup> Very interested  
<sup>2</sup> Somewhat interested  
<sup>3</sup> Not interested
3. Have you ever taken your household hazardous waste to a Ramsey County Household Hazardous Waste site?  
<sup>1</sup> Yes  
<sup>2</sup> No ➔ 1b. Why not?  
\_\_\_\_\_  
\_\_\_\_\_
4. What is your age?  
<sup>1</sup> 18-24  
<sup>2</sup> 25-44  
<sup>3</sup> 45-64  
<sup>4</sup> 65+
5. Are you...  
<sup>1</sup> Female  
<sup>2</sup> Male  
<sup>3</sup> Other
6. What is your current relationship status?  
<sup>1</sup> Single, never married  
<sup>2</sup> Married or living with a partner  
<sup>3</sup> Divorced or separated  
<sup>4</sup> Widowed
7. How many children (under age 18) live in your household?  
<sup>1</sup> 0  
<sup>2</sup> 1-2  
<sup>3</sup> 3-4  
<sup>4</sup> 5+
8. What is the highest level of education you have completed?  
<sup>1</sup> Some high school  
<sup>2</sup> High school graduate/GED  
<sup>3</sup> Some college/technical school  
<sup>4</sup> Associate's degree/certificate  
<sup>5</sup> Bachelor's degree  
<sup>6</sup> Some graduate school or more  
<sup>7</sup> Less than high school
9. How do you identify your race/ethnicity?  
*(Please check ALL that apply.)*  
<sup>1</sup> African American  
<sup>2</sup> American Indian  
<sup>3</sup> Asian/Pacific Islander  
<sup>4</sup> White/Caucasian  
<sup>5</sup> Hispanic/Latino/a  
<sup>6</sup> Other (Specify: \_\_\_\_\_)
10. Primary language spoken at home?  
\_\_\_\_\_
11. What is your total annual household income?  
<sup>1</sup> Less than \$15,000  
<sup>2</sup> \$15,000 - \$24,999  
<sup>3</sup> \$25,000 - \$34,999  
<sup>4</sup> \$35,000 - \$49,999  
<sup>5</sup> \$50,000 - \$74,999  
<sup>6</sup> \$75,000 - \$99,999  
<sup>7</sup> \$100,000 or more