Waste Management Recycling Guide Usability F

Residential Recycling Guide Usability Research Report

Research Conducted March 2015

Prepared for:

Candy Castellanos Senior Manager, Public Education & Outreach Waste Management 720 4th Avenue, Suite 400 Kirkland, WA 98033 (425) 633-5515 cvc@wm.com

Prepared by:

Nancy Hardwick President Hardwick Research 8720 SE 45th Street Mercer Island, WA 98040 (206) 232-9400 nancy@hardwickresearch.com

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Introduction/Methodology

This report summarizes the results of the usability study that was conducted by Hardwick Research on behalf of C+C and their client, Waste Management.

Research Goals

This usability study was conducted as a series of in-depth interviews with residents of King and Snohomish Counties who are customers of Waste Management. The usability interviews were conducted in March 2015 as a means to gather feedback from Waste Management customers in the Washington Transportation Utilities Commission (WUTC) areas of the counties regarding various communication materials they receive as part of their garbage and recycling service.

Objectives of the research were to understand:

- Awareness of schedule and current recycling guide
- Effectiveness of the current WM recycling guide
- Behavior around and usage of the schedule and current guide
- Preferences for potential recycling guide (graphics, content, format)
- Where participants get their information regarding recycling
- Use of relevant terminology and descriptors

Research Process

In-person in-depth usability interviews were conducted with 26 Waste Management customers. This usability research was conducted as follows:

COUNTY	LOCATION	DATES	# INTERVIEWS	
King	Fieldwork Seattle	March 18-19, 2015	14	
Snohomish	The Inn at Port Gardner	March 30-31, 2015	12	

In order to qualify to be interviewed, a resident must:

- Live in a single family detached home in the WUTC areas of King and Snohomish counties
- Know that Waste Management collects their garbage and recycling
- Be 18 to 69 years old

The participants were balanced on gender (14 women, 12 men) with at least 2 from each age group of 18-34; 35-54; and 55-69. Effort was made to recruit foreign language speakers but ultimately, only three attended the interviews: a Japanese speaker, a Spanish speaker and a German/Russian/French speaker. Additional details regarding participant demographics can be found in the Appendix section of this report.

Each interview lasted approximately an hour, and was conducted by Nancy Hardwick. Participants received \$100 cash as a thank you for their feedback. All usability interviews were videotaped.

Summary of Results

Residential Recycling Guide

Of the 26 who participated in this usability study, 15 indicated they did not receive the guide. Those who did either saved it (7) or flipped through it and then recycled it (4). Nearly all participants indicated that the current guide contained too much information. Some suggested a simpler format with less material would be easier to read. While the guide contained helpful information, it was just too long and most lost interest after thumbing through the first few pages. Many participants learned new information about recycling while reviewing the guide during the interview, however, indicated that they would likely not take that much time looking at it at home. Participants overwhelmingly agreed that the pictures are important; they are a quick visual reference, help break up the text and continue to keep the reader's interest.

After looking at the guide, some customers still found that they were confused about whether some items were recyclable. They wanted additional information for items including drinking glasses, prescription pill bottles, plastic grocery bags, lids/caps, shredded paper, and the plastic containers fruit comes in from the grocery store. In addition, a few mentioned that they were unclear on how clean items had to be before they were placed in the recycle bin. Some participants were surprised to learn that certain items were now recyclable (e.g., Solo cups, plant pots, aerosol cans, hardback book pages) and that prescription bottles were not recyclable.

Feedback on Various Formats

The preferred formats were the current King County Recycling Guide, the Seattle Public Utilities brochure, King County Solid Waste Tri-fold Brochure, and the West Hill Four-fold brochure. Participants liked different aspects of each of these pieces. Overall, participants liked color, the images, the way the categories of waste were separated, the overall layout and the cardstock. They did not like that some pieces presented too much information and were hard to read due to small fonts and too much text.

Participants were given an opportunity to suggest other ways that Waste Management might deliver recycling guidelines information to residents. Although not everyone shared a recommendation, the responses varied greatly from those who did. Top responses included: the Waste Management website (7), the current format (6), and stickers for the bins (4).

Overall Preferences for the Guides

When asked what they'd like in a guide, participants wanted guides that are a medium size, easy to post on their kitchen cabinet/refrigerator, easy to read with not too much text-based information and good images that were situated near the relevant text. They wanted the categories to be color coded, and explained side-by-side for easy comparison. They preferred cardstock for the perception of quality that differentiates it from junk mail. They would like a tips section to cover common questions and mistakes people make.

Junk Mail or Not

The current guide was not perceived as junk mail due to its appearance and construction. However, many still threw it out. They felt that people might be encouraged to keep it if the "please post" message was more prominent.

Communication from Waste Management

Most still receive paper bills though many pay their bill online. The majority said they received the calendar and half still had it. They used it for checking which items will be picked up in a given week.

About half of the participants said they did not receive the guide. Only a few of those who did receive it, kept it as a resource. The rest threw it out after flipping through it and determining that there was nothing new. The paper version was preferred over electronic, mostly because it was "handier" that way. Customers could not see themselves stopping to go look something up on the computer while in the process of throwing things out.

Waste Management Website

Most participants had been to the website at some point and accessed it from their PC at home. Those who visited the website did so to figure out what to do with an unusual or hazardous item. Most people were able to find what they needed, though they noted that the pick-up schedule was hard to find.

Terminology & Preparation of Recyclables

Participants almost unanimously called their curbside containers "bins." Some participants were confused about the colors associated with the bins, but it became clear that not everyone has the same color bins. This changed depending on where they live and how old their bins are.

Both coated and uncoated paper plates were referred to as "paper plates." Participants were confused about how to dispose of paper plates of both types and needed further education on this.

When shown a picture of a clean and a dirty yogurt cup, most participants knew to rinse the dirty cup before recycling it.

Offering explanations to those who did not know the correct approach for disposing of paper plates or yogurt cups helped them understand what to do.

Conclusions and Recommendations

Continue to provide the Residential Recycling Guide in a paper format.

About half the participants preferred the guide in a paper format. The majority of those who received the current guide acknowledged that they at least flipped through it before disposing of it. Those preferring an electronic version were varied on the format. Some preferred it on the Waste Management website, others wanted it via email and a few suggested an app. Although half indicated they would prefer an electronic format, it does not mean they were any more likely to review or save the guide.

All acknowledged that the current paper format would not be confused as junk mail. Most agreed that various features (the thick paper, extensive booklet of information, and the hole punched in it) imply that Waste Management intends for this guide to be saved. A change in and reorganization of the contents will help to encourage customers to review more of the guide. It may even encourage them to save it.

 Entice customers to read the guide by highlighting something new, even if it's not really "brand new."

When asked what would attract their attention, many customers indicted that receiving information on what's new is of interest to them. Most indicated they flipped through the current recycle guide looking for information regarding what has changed.

The majority of participants felt they were correctly disposing of and recycling items, however after speaking with them it was obvious that most were still doing this incorrectly. Part of the issue was that they are still following outdated rules, or weren't aware of new items added to the lists of what can be recycled or composted.

Each time a guide is issued it should contain information on what's new. This could include new items that no longer go into garbage, new rationale for requirements, or just clarifying an area of confusion. Since so many customers don't read the guide, many content choices would be perceived as new, even if they are not.

Consider highlighting areas where Waste Management knows compliance is low and confusion is high. These areas cannot be positioned as something people are doing wrong, since the majority believed they were recycling and composting correctly, rather by positioning it as "new" or "recently changed," it obviously will be new to many.

Refer customers to the website for less frequently needed information.

Customers were already turning to the Waste Management website when needing to learn how to dispose of oversized or hazardous items (such as mattresses, paint, construction materials, and other durable goods). Since participants were interested in disposing of items in the right way, it is items they don't regularly dispose of that cause them to visit the Waste Management website. Even those who had saved the Residential Recycling Guide as a reference looked on the Internet rather than the guide.

Consider cutting the three (8.5"x11") pages containing hazardous waste and community recycling options from the Residential Recycling Guide. This will save on printing and shipping costs and help to remove the impression that this guide is overwhelming. With that said, the guide should include at least one page that talks about disposing of hazardous waste and community recycling items. This page should include many pictures of the items that fall into these categories, since nearly all customers stated the images catch their attention. This page should also refer customers to the Waste Management website for more information along with a list of places where they can correctly dispose of these items. Since we know customers already look online for this type of information, directing them to the website is appropriate.

Create a guide that incorporates the following features:

Eliminate pages with non-critical information – Customers thought the guide contained too much information and glossed over much of the Guide to get to the "heart" of the issue—what is recyclable, compostable or garbage. To help ensure customers will actually review the entire document, remove content that is not considered critical. The following content should remain in the Residential Recycling Guide: "Collection Guidelines," "Recycling Myth Busters," "Recycling," "Compost," "Garbage," and one page that combines the "Hazardous Waste" and "Community Recycling" details. The remainder of the current content should be removed.

Present the pictorial guidelines in three separate color-coded, side-by-side sections — Participants were drawn to those brochures that included the information about recycling, composting and garbage in three distinct sections. These sections should be color-coded so that they are clearly separated; using background colors that are pale (see West Hill Fourfold Guide for example colors). The sections should match up with the folds of the document, unlike the Seattle Public Utilities brochure that folded in the middle of one of the section of groupings.

Continue to use lots of colorful images and place images next to the relevant text — Participants were drawn to the spreads with lots of images. They asked for more images to break up large text groupings. In addition, they wanted to see images lined up with the corresponding descriptive text. When the images were placed in a more random fashion (King County Solid Waste Tri-fold brochure), participants found them confusing to follow. Those brochure examples that placed the images next to the relevant text were found to be much easier to understand (West Hill Four-fold and King County/Snohomish County Recycling Guide).

Optimize the guide to be mid-sized — Participants preferred the guides that were mid-sized among those presented (West Hill Four-fold Guide and King County/Snohomish County Recycling Guide, as examples.) This size was liked best because it would be big enough to hold relevant information, and a good size to be posted somewhere at home like inside a cabinet door.

Limit the number of fold-outs – Participants did not like the guides that folded out to be too wide to hang on a cabinet door, like the West Hill Four-fold Guide. They want to see all categories (garbage, compost, recycling) at once; a trifold seemed to be the largest size that could work.

Consider using a "Tips" section rather than a FAQ section – Some respondents felt that the FAQ format was too text heavy and harder to read. The tips were found to be lighter and less detailed, while still providing helpful information.

Better explain that customers need to ignore the recycling symbol stamped on plastic.

The Guide needs to be clearer when explaining that the triangle located on the bottom of plastic items no longer has meaning when it comes to recycling. Explain that the numbers are to be ignored and that shapes are what matters now. Perhaps placing a large "X" over the image of the triangles and a brief explanation will make it clearer that customers should ignore those symbols. Note, the current text does not actually state that customers "should no longer use the numbers." Rather it just says that they indicate what the plastic is made of and that not all plastics can be made into new products. After reading it multiple times, some customers still thought they should use the numbers, so additional clarification is needed.

Detailed Findings

These one-on-one usability interviews were conducted with King and Snohomish County residents who are customers of Waste Management.

Terminology & Preparation

In addition to having customers review the guides, we took the opportunity to ask a questions about three items of confusion:

- 1. What do residents call their curbside cart?
- 2. Do customers know the difference between a coated paper plate and an uncoated paper plate?
- 3. Do customers know how to prepare a yogurt tub for recycling?

Cart or Bin?

As a means of gathering feedback from customers regarding what they call their curbside containers, three images were shown to participants. In each case the participants were shown an image and then asked, "What do you call this?"







The majority of participants refer to these containers as bins. Recycling bin, yard waste bin and garbage bin. There was some confusion as to which bin is yard waste and which is garbage. The confusion stems from the color of these two bins. Apparently the age of your bins and the area you live in affect the bins' color. Specifically some customers have a grey yard waste bin and some have a grey garbage bin.

Coated vs. Uncoated Paper Plates





After the curbside containers, participants were shown two different types of clean paper plates. One was uncoated and the other coated. For each plate participants were asked, "What do you call this? How do you dispose of it as it sits? Would you do something different if it had food on it?"

Many participants refer to both the uncoated and coated paper plates as "paper plates." Those who said "coated paper plate" were adding on the additional qualifier of "coated" because I was asking them what each was. Most lack clarity on how paper plates should be disposed of. Most would put the "coated" paper plate in the recycle bin (if not soiled). Some would even put soiled paper plates (no matter which type) into the recycling bin.

Preparation of Yogurt Tubs





To gather further information on Waste Management customers' preparation of recyclables knowledge, we showed each person a picture of a clean yogurt container followed by a dirty container. In both cases, participants were asked, "What would you do with this?" Nearly everyone understood the dirty yogurt cup needs to be rinsed before recycling it.

The correct answers regarding how to dispose of the paper plates and yogurt containers were not shared with participants until after they answered all terminology questions. Since many were confused by how to correctly dispose of paper plates, it quickly became evident that explaining that food soiled items will contaminate the clean paper (like junk mail) rendering it unrecyclable, helped many to understand how to dispose of paper plates. Some participants still wondered why a clean coated paper plate cannot be placed into the recycle bin.

Communication from Waste Management

Although most participants are still receiving paper bills from Waste Management, many are paying their bill online. Each customer was asked what they received in the mail from Waste Management besides their bill.

Calendar

The majority say they received the calendar, about half of which still have it. Of those, around half said they keep the calendar on their refrigerator. Others taped it into a kitchen cabinet or pantry. Most agreed the size was perfect. Although some do refer to the schedule, most just admitted they like having it just in case they need to confirm which item will be picked up this week.

Those who no longer have the calendar indicate that they recycled it. Several noted it was clutter that they did not need. Many explained that it is easy for them to keep track of which bin needs to be placed at the curb each week. Some admitted relying on their neighbors, while a few said they would check online if they had a question about the schedule. About half said they'd prefer the calendar in an electronic format, either on the web or emailed to them. A few declared they would like an app or a way to sync the Waste Management pick up schedule with their online (Outlook) calendar.

Residential Recycling Guide

About half (15) of the participants (total of 26) indicated that they did not receive the Guide. Of those who did receive it (11), only a portion report keeping the guide (7). Some of those who received it indicated that they flipped through it when it arrived, saw nothing new, and decided not to save it (4). Those who kept the guide consider it a resource. They like the fact that it contains a lot of detail, although most have not referred back to it.

Interestingly, the paper version of the guide was preferred slightly over an electronic version. The paper guide is considered a handy way to look things up quickly. Those who indicated an electronic version would be nice were split on the best format. Some preferred it via email, while others liked the idea of having it on the Waste Management website. A few more suggested some type of app.

The challenge with an electronic version is that customers did not see themselves stopping in the midst of disposing of an item and going to their computer to look up how to handle it. That was seen as an extra step. They admitted they were more likely to guess or just place the item in garbage. They did however have the impression that a paper version would be quicker to access, but the likelihood of actually looking something up was still low.

Additionally, with the paper version arriving in the mail, they were likely to at least flip through it looking to see what's new. If it arrived electronically, participants said they might file it away and not remember where they saved it, or delete the message without spending the time to look through the recycling guide.

Junk Mail or Not

Customers who participated in the usability interviews all agreed, the current Waste Management Residential Recycling Guide does not look like junk mail. It is large and substantial in size, printed on heavy paper and says "Recycle Guide" right on the cover. Additionally, the inclusion of the Waste Management logo and the strong colors help to set it apart from any junk mail.

It appears the issue is not that this is being confused as junk mail, but rather those receiving it have chosen not to save it. Most participants would at least glance through the brochure to see what is new. A few said they do so specifically because they know it is from Waste Management.

When asked what they thought would encourage people to keep the Recycle Guide, some noted that the hole punched in the guide implies that it is meant to be saved. (Of those who saved it, only a few have hung it. Most have tucked it into a spot where they keep bills and other important papers. They felt it was too thick to hang.) A few suggested that if the "please save and post for easy reference" message on the front cover was larger or in a different color font it might help encourage customers to save the piece.

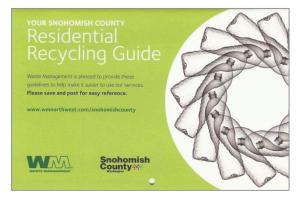
Residential Recycling Guide

Participants were handed the Residential Recycling Guide and asked to go through it as if they had just received the guide in the mail at home. There was one caveat; as they went through it they were asked to talk aloud and share feedback on anything, positive or negative, that caught their attention.

Nearly all participants indicated that the current Waste Management Recycling Guide contains too much information. Some suggested a simpler format with less information would be easier to read. While the guide contained helpful information, it was just too long and most lost interest after thumbing through the first few pages.

The majority of participants learned new information about recycling while reviewing the guide. However, many indicated that they would likely not take that much time to look through it at home. They further explained that the request to verbalize what they were looking at caused them to pay closer attention and spend more time than they would have at home.

Participants overwhelmingly agreed that pictures are critical. They provide a quick visual reference, help to break up the text, and keep the reader's interest. The following is a page by page summary of the feedback shared by customers regarding the content of the Residential Recycling Guide. (Please note that residents from King County were provided the King County version of this guide to review, while those from Snohomish County received their version.)



WM Front Cover

Many thought it was clear from the cover (and the heavier paper) that this was an important guide to be kept as a reference tool. Some felt that the holes were great. They indicated you should save the guide and hang it up on the wall, though most admitted they would not. There were a couple negative comments surrounding the image of the plastic bottles.



WM Page 2-3

Nearly all participants mentioned the image that indicates how curbside bins should be positioned for pick up. Being the only image on this page, it was eye catching and quickly communicated the message.

In the section regarding customer service, some expected to see complete contact information for Waste Management (the customer service telephone number and email address) right next to the hours, in addition to the bottom of the page.

The "Steps to Recycling Success" page was skipped over by many participants. Some commented that it was not needed because the information is already understood.



WM Page 4-5

Many commented that this page contains too much text. Some said they know why they can't recycle everything and would just skip past this.

However, the "Recycling Myth Busters" section was appealing to some participants. The words "myth busters" caught their attention and caused many to stop and read that section. Interestingly, the contents of this section ended up being confusing for some. They were not clear if they needed to take the numbers in the triangle into consideration when recycling plastics or not. They understood that the number indicated what type of plastic the item is made out of, but were unclear how that applied to recycling. They also understood that they should recycle by shape. They did not understand that they needed to ignore the numbers entirely and only recycle based on shape.



WM Page 6-7

More times than not, this page was just skipped. Many glanced at it and then turned the page. Those who took the time to read it felt they knew this information and were already implementing these things in their lives. While a few thought the "Waste Watchers" was a catchy phrase (some noting the "play" on the Weight Watchers name), many were not sure what the image had to do with recycling.



WM Page 8-9

Once participants arrived on this page, there was a visible and audible change in their response to the guide. Many actually verbalized their pleasure in arriving at this page. It contained the content they expected to see in the guide. Everyone stopped flipping pages and actually spent some time on this page. Some even commented that this was what they wanted to see.

All participants felt this page had very helpful information. Some felt strongly that this information should be placed nearer to the front of the guide.

Nearly everyone agreed that this page has the right amount of information, images and text. The photos appeared clearly on the white background. Many added that they liked how the photos were visibly associated with the text.

A few did not like the yellow colored text box and thought there were too many words in the box. Some liked the highlighted blue box. They thought the color caught your attention and attracted your eye to the message contained in the box.

A few participants voiced surprise to learn that certain items were now recyclable (e.g., Solo cups, plant pots, aerosol cans, and hardback book pages) and that prescription bottles were not recyclable.



WM Page 10-11

Most commented that the Compost page was very helpful and felt that it should come sooner in the guide. Like the previous recycle page, they agreed that this page contained the right amount of information, images and text.

A few participants noted that some images were not always easily discernable (e.g., shredded paper, nuts). Many glossed over the "Be a Foodcycler!" section, but those who stopped to read it voiced interest in having additional information on how to compost food scraps.



WM Page 12-13

The garbage page, with its similar format to the recycle and compost pages, was likewise well received.

Participants spent some time on this page reviewing what should be placed in the garbage. Many talked about confusing items including drinking glasses, prescription pill bottles, plastic grocery bags, lids/caps, shredded paper, and the plastic containers fruit comes in from the grocery store.

Some liked the blue highlighted speech bubbles. They commented that the color and shape brought their eye to the text. A few felt there were too many words in the yellow text box and indicated they would not read it.



WM Page 14-15

There was definitely interest in the Hazardous Waste page. Many participants acknowledged that at some point in time they have needed or expect to need this information.

Many did NOT like the color scheme on this page. They understood why the colors were chosen because of the hazardous waste content, but felt they were off-putting, especially the orange. Some noted the orange background made the text very difficult to read.

Customers liked the photos, which enabled them to quickly spot information regarding an item they might need to dispose of, but thought there was too much text on this page.

Some participants noted that this information does not actually have to be in this guide. Because this is addressing items not typically dealt with, they had no problem with the guide referring them to the Waste Management website for information. Most customers are interested in learning how to correctly dispose of these

WM Pages 16-17 and 18-19

items.

The Community Recycling Options pages were skimmed over by the majority of participants. They were placed so far back in the guide that by the time they got there, they were losing interest. Some thought the information on this page was not necessary and could easily be accessed on the Waste Management website. Also, a few commented that there were too many words and not enough pictures to capture their interest.





Overall

Participants agreed this Residential Recycling Guide is very comprehensive. A small group found that ideal, while most were overwhelmed by the contents. They indicated that there is just too much information to go through. A guide with less content and more pictures is preferred. It needs to highlight what has changed to be appealing to customers.

Interestingly, most participants felt they were following the rules outlined in the Residential Recycling Guide. When asked what percent of the time they followed the guidelines, responses ranged from 70% to 100% of the time. However, after listening to their responses to the questions, taking into consideration the information they provided about how they dispose of items and the questions they asked, it is obvious that most were not following the guidelines nearly as well as they proclaimed.

Feedback on Various Formats

As part of this research process, participants were shown six potential formats for the recycling guide and asked to provide feedback on each format. Brochures were provided to each participant in a spread-out pile that was sorted differently each time. Participants were asked to go through the brochures and share their thoughts on each. Although we tracked the order in which participants picked up the brochures, the results from that exercise did not correlate with preference.

Seattle Public Utilities Brochure



One of the well-liked formats was the three-fold piece developed by Seattle Public Utilities. This piece (pictured to the left, folded) is appealing due to its bright colors and lots of pictures. The fact that recycling, food/compostables, and garbage are split into three color coded sections was well received.

Some participants liked the piece's format. They felt it could easily be

posted on the refrigerator or in some other location. A few noted the contents of the backside are not critical and therefore it would be okay to have them inaccessible once posted.

On this Seattle Public Utilities piece, the clean-dirty example was pointed out by participants as something they liked. Additionally, the "no" information was also considered very helpful.



Specifically the red bars at the top of each section (recycle, food/compost, and garbage) provided additional direction to customers regarding how to correctly dispose of items.

Some participants were frustrated by the way that the different categories did not match up with the crease where the brochure was folded. They wanted to be able to flip it and see a complete section.

Some felt this piece did not look "official" and that it was too much like an advertisement or grocery store flyer with coupons. This was in part due to the glossy paper. They did not think they would keep it as it felt like junk mail. One participant said, "Don't know if I would keep this. I would look at it and throw it away." Another said, "It looks too much like an advertisement. It does not catch my attention." Others thought the appearance of this guide made it look like it was meant to be a reminder or that it was announcing something new.

Finally, a few participants would like to see the piece include the contact information for the locations that accept items not collected the curb.

King County Solid Waste Tri-fold Brochure



Participants liked many aspects of this brochure. They found it very useful to have all three classes of garbage laid out side by side for easy comparison. They liked the light colored background for the images, as well as the brighter colors used as accents. Some mentioned they wish this was a sticker so they could place this on their garbage can.

Other elements that participants liked about this brochure were the "Tips and Hints" section and the example of the available bin sizes as compared to an adult. "Tips and Hints" were liked in part because they were topical rather than conversational like a FAQ. A few also liked The "What Do I Do With?" section.

Some participants found this guide to be too big, although they liked the overall layout, contents, fonts, and colors. They felt it was very easy to read, comprehensive and not too wordy. As one

said, "It's simple to look at, it's all right there."

The front cover of the King County Solid Waste guide was not well-liked. Participants did not like the random images on the upper right, and the text column listed between "your" and "guide." Some felt this whole page should be on the back, rather than the front page.



Many participants wanted the guide to be smaller. They found it to be too big to post or store easily, and also didn't like that they couldn't fold it in half.

Some found the overall layout to be confusing because the images were placed randomly and not directly associated with text. They wanted the relevant text to be near the pictures and to have the pictures laid out more linearly. They wanted it to be laid out in such a way that you could tell if "it's good or bad stuff."

A few participants were distracted by the color-coded bars describing each class of solid waste. The mix of orange/blue, then green/blue, then orange/green was confusing.

West Hill Four-fold Guide



Overall, participants liked this brochure. They liked having all three categories of waste laid out side-by-side so they could easily compare all three. As one said, "It feels organized with three sections." They also like the color scheme of this guide best, relative to the other guides presented. The blue, grey and green tones highlighting each category of waste were very appealing.

The way the items were grouped was preferred: lined up and under the relevant text. Participants also liked having the information regarding where to take items not accepted curbside.

This guide was seen by many participants as being a good size and having a substantial feel. Some said they would keep it and refer to it. Some mentioned that they liked that there were fewer pages relative to the current guide.

Participants were frustrated by the large amount of text when the guide was first opened, as well as on the next opened page. (These were the darker green pages, an example is included

below.) The font was considered too small. One said, "I'll never read the small text. It seems complicated to me." Some also felt there was too much of the darker green color used on the pages.

Additionally, several felt the guide was unwieldy with all the folds. It was too wide to post on their refrigerator as they wanted to post it spread open so they could easily see each category.



Auburn Bi-fold



This version of the guide generated mixed opinions. On the positive side, participants liked the small size and the card stock, with some saying they "would keep this one around," and could post it easily as a reference. The way in which the important information was consolidated inside meant nothing would be missed when posted.

Participants felt this piece contained the basic information. However, on closer review, many felt it lacked important information. As one said, "It's down to just about nothing. Not enough information for me."

Some thought the front was "kind of boring" and that it looked like "a million other things in the mail." They also thought that with its smaller size, it would get lost in the mail.

Canadian Version



This Canadian version was not liked by participants. Participants shared more concerns with this version. On the upside one or two participants mentioned they liked the garbage truck on the front (but as many said they didn't like it.) What generated the most favorable comments was the yes/no format which participants thought would be very helpful for understanding what can and cannot go in each bin.

Many felt the small size of this brochure would make it too easy to ignore. Nearly everyone felt the print was too small. Some added the

amount of information seemed overwhelming to the point they would not read it. It was widely agreed that this piece would need to be printed on card stock to make it seem more important.



Auburn Four-fold



The four-fold Auburn piece did not engage participants. A few liked it for its simplicity ("It tells the most with less stuff") and the fact that the calendar was incorporated.

Some did not want the calendar included, while others felt the calendar was hard to read in part due to the light color used. They preferred the coloring of the current calendar they receive in the mail from Waste

Management.

The majority felt the print was too small and there was too much text in the sections describing the services. Participants also thought the guide itself was too small and because of that would get lost in the mail.

A couple of participants noted the dancing garbage can mascot, referring to it as goofy.

Overall Preferences for the Guides

When asked what they thought were "must haves" for a recycling guide, participants shared many expectations.

Physical characteristics: They would like a guide to be roughly the same dimensions as the current version, with fewer pages, but filled with information so that it feels comprehensive. They also would like the guide printed on cardstock, which they believed felt less like junk mail, and its durability would signal that it was something to keep. Some would like a hole punched so they could hang it. Additionally, they'd like a tear-out summary of the disposal categories (recycle, compost and garbage) that could be posted at home. The idea of having the calendar, also as a pull-out, was appealing to some. The majority like the color groupings of the categories. All would like fewer words, more visuals and high-quality picture to break up the text.

<u>Content</u>: Participants were interested in further education on recycling. They would like to see the different categories of items displayed next to each other for comparison. In addition, they would like side-by-side examples of various items, pictured next to each other that clearly delineate what can and cannot be recycled. For example, show various plastic items and where they go.

Participants were very interested in learning what Waste Management considers to be most important when it comes to recycling. They would like Waste Management to highlight areas in which customers are regularly making mistakes so that they can learn what needs to be done.

One customer would like a You Tube video of what happens to garbage after it leaves his house. Participants believed it was worth educating people to reduce contamination.

Some felt that they'd rather have more frequent mailings with less content, than larger ones less often. One participant explained, "If there is too much info ... I won't read it."

<u>Language</u>: All participants preferred that the guide be provided in English for their family. Some shared that they noticed it is available in Spanish. Another remarked that on the Seattle Public Utilities version they could see that the guide could be obtained in many languages.

Participants were given an opportunity to suggest other ways that Waste Management might deliver recycling guidelines information to residents. Although not everyone shared a recommendation, the responses varied greatly from those who did. The most recommended location was on the Waste Management website, with 3 of the 7 specifically mentioning they assumed it was there already. Six noted they prefer the current format. Stickers for the bins were also popular (4 mentioned it), although one respondent said he would not put it on if it were mailed to him; he assumed the waste collectors would do so. Email (3), an insert in the bill (1), a link with the electronic bill (1), and add it to the back of the schedule (1) were also suggested. A phone app (2), a laminated version (1) and a magnet for their refrigerator (1) rounded out the suggestions.

Waste Management Website

Many participants said they have been to the Waste Management website at some point in the past. Most used their PC from home to access the site. A few used their smart phone. The Waste Management website is typically accessed when a major item needs to be disposed of. This occurs when people are at home sitting at their computer, not when using their phone.

The majority of those who visited the Waste Management website did so to learn what to do with unusual or atypical items. Mattresses, paint, construction waste, and needles/sharps were some if the items the researched. A few visited the Waste Management website to access their schedule or billing information.

Overall customers are comfortable turning to the Waste Management site for information. Most seemed to be able to find what they needed, but a few noted finding the pick-up schedule was much harder than they expected. It is important to note that customers do not turn to the website to gather information on how to dispose of the more "typical" everyday items as most felt (in some cases incorrectly) they already knew what to do with those items. Customers do think to turn to the Waste Management website for unusual items; even those who had saved the paper Recycling Guide, still turned to the website rather than the guide for information.

Appendix

The following shows the demographic breakdowns for the participants.

King County

Name	Type of Home	Rent or Own	Age	Primary Language	Other Languages	Ethnicity	Gender
Art	Single family	Own	55	English	None	Caucasian	Male
David	Single family	Own	57	English	None	Caucasian	Male
Noriko	Single family	Own	42	English	Japanese	Asian	Female
Lyndsey	Single family	Own	29	English	None	Caucasian	Female
Susan	Single family	Own	59	English	None	Caucasian	Female
Hank	Single family	Own	59	English	None	Caucasian	Male
Tony	Single family	Own	56	English	None	Caucasian	Male
Allen	Single family	Own	66	English	None	Caucasian	Male
Tammi	Single family	Own	54	English	None	Caucasian	Female
Sharlene	Single family	Own	63	English	None	Caucasian	Female
Daneen	Single family	Own	59	English	None	Caucasian	Female
Tom	Single family	Own	66	English	None	Caucasian	Male
Susan	Single family	Own	58	English	None	Caucasian	Female
Justin	Single family	Rent	36	English	None	Caucasian	Male

Snohomish County

Name	Type of	Rent or	Age	Primary	Other	Ethnicity	Gender
	Home	Own		Language	Languages		
Kathy	Single family	Own	55	English	None	Caucasian	Female
William	Single family	Rent	39	English	Spanish	Caucasian	Male
Sandra	Single family	Own	48	English	None	Caucasian	Female
Steven	Single family	Own	68	English	None	Caucasian	Male
Todd	Single family	Own	35	English	None	Caucasian	Male
Charles	Single family	Own	59	English	None	Caucasian	Male
Richard	Single family	Own	64	English	German,	Caucasian	Male
					Russian,		
					French		
Sandy	Single family	Own	60	English	None	Caucasian	Female
Carla	Single family	Own	52	English	None	Caucasian	Female
Angela	Single family	Own	47	English	None	Caucasian	Female
Carrie	Single family	Own	33	English	None	Caucasian	Female
Don	Single family	Own	63	English	None	Caucasian	Male