

Overview

RRS conducted a web-based Resident Messaging Survey on Foodservice Packaging (FSP) Recycling. The five-minute online survey was completed by 1,000 vetted panel respondents consisting of U.S. homeowners over 18 years old, with an even distribution of 500 male and 500 female respondents. Based on the number survey the results can be considered statistically significant across a region as well as nationally.

The purpose of the survey was to create a nationwide sample to gauge the effect of images, language and special instructions in communicating with the greatest clarity about recycling FSP. The following is an analysis of the survey results.

Insights from this survey will be used to inform effective messaging for communities as they add new FSP items to their current recycling programs. Since these data are statistically significant on a regional and national level, FPI has the unique opportunity to create messaging consistency as FSP acceptance continues to increase. These materials will help pave the way for correct recycling of foodservice packaging items as they enter a common suite of recyclable materials.

Key Findings and Recommendations

In general:

- A city, county or recycling company's website is the most relied upon sources for recycling information. Websites should be kept up to date and easy to navigate. If targeting a younger audience, social media should be considered
- The package was the first place most respondents refer to for recycling guidance.
- Recycling educational flyers should show images grouped by recycling material categories, i.e. paper, plastic, glass and metals, with brief descriptions and provide instructions on how to prepare recyclables to achieve quality material

Specific to foodservice packaging:

- The use of the word "clamshell" was not favored by respondents, whether the material was a rigid plastic or foam clamshell. The term "plastic container" or "foam container" is preferable.
- Images of paper bags should be visibly empty to avoid contamination.
- Flyers with additional details on how to prepare recyclables were found to be more beneficial in achieving cleaner recyclable cups. The instructions "clean and empty" should be used for achieving an acceptable paper cup for recycling. Alternately, the term "empty" by itself is more effective than "clean" by itself in this context.
- The term "clean" when referring to a pizza box is more effective in getting fibers with modest grease staining into a recycling cart versus the term "no food-soiled."
- Changing the phrasing between "recycle clean plates" and "no food-soiled plates" does not greatly affect whether a respondent would recycle or throw away a plate with the presence of food or grease residue. However, to be consistent with other paper items, it is recommended to use the term "recycle clean plates."

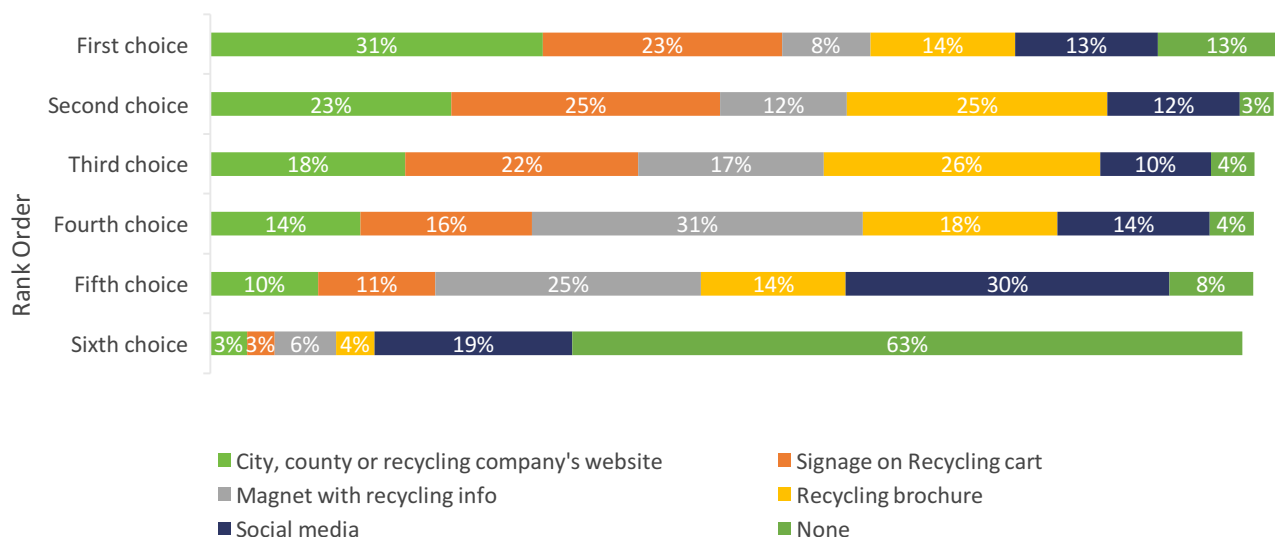
Survey Questions and Results

Q1- Which do you rely on most for recycling information? Rank in order of most relied on (1) and the least relied on (6).

- *City, county or recycling company webpage*
- *Signage on recycling cart or bin*
- *Magnet with recycling information*
- *Recycling brochure*
- *Social media*
- *None*

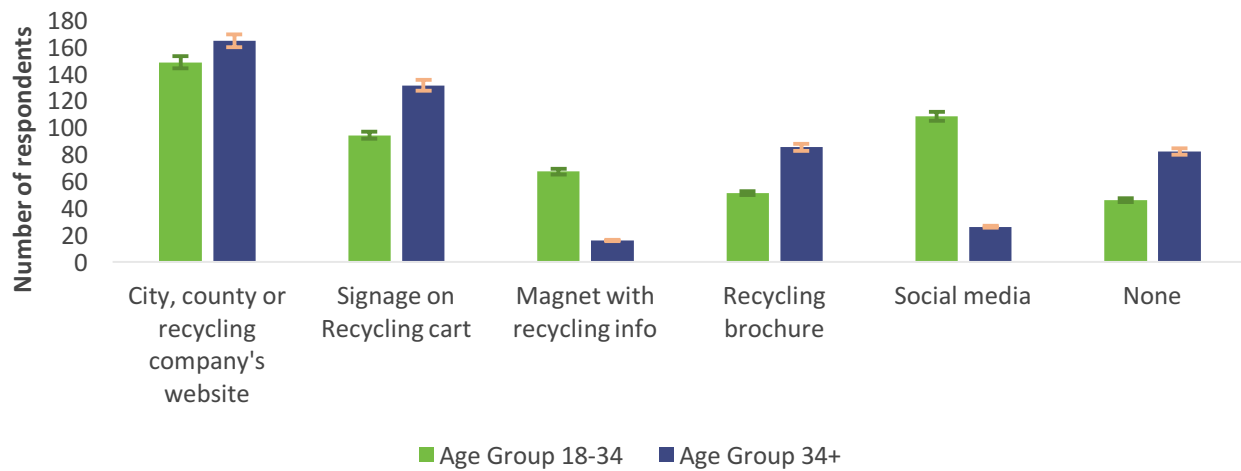
Purpose: To discover sources of reliable recycling information. This question serves to determine where the respondent is predisposed to seek reliable recycling information.

Result: The most popular first source respondents rely on for recycling information was the city, county or recycling company's website. Most respondents chose signage on recycling cart or bin, a recycling brochure or the website again as the second most relied on source. The responses for the second choice did not differ enough to fall outside of the margin of error. The most popular for the third relied on source was the brochure, surpassing the signage on cart or bin. The fourth source among respondents was the magnet. The least relied on resource was social media.



There was little difference in the rankings between men and women, but greater differences were evident between the age groups. Notably, social media ranked much higher for 18-34 year olds versus older respondents.

First Choice by Age Group

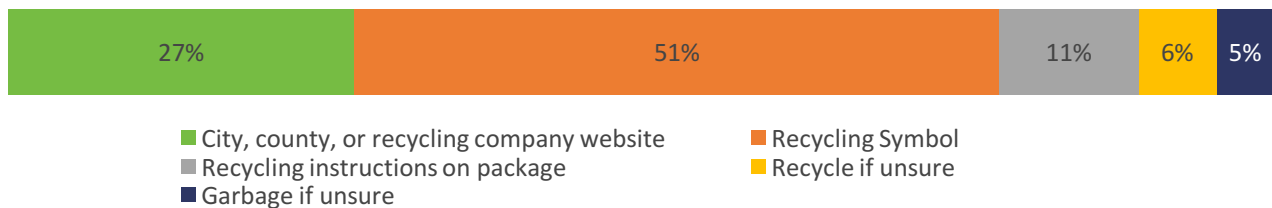


Q2 - Where do you typically look first when trying to figure out whether an item is recyclable?

- *Information from city, county or recycling company*
- *Recycling symbol on package*
- *Recycling instructions on package*
- *If unsure, recycle it*
- *If unsure, throw it away.*

Purpose: To learn the first source for recycling information in order to determine the respondents' initial gut-reaction when trying to decipher whether an item is recyclable.

Result: More than half of respondents looked for a recycling symbol on the package first when determining whether an item is recyclable or not. This was followed by roughly a quarter of respondents who said they check information from their city, county or recycling company. More than 6 percent recycle the item if they are unsure, and 5 percent throw the item away if unsure. The difference between the "recycle, if unsure" and "throw it away, if unsure" responses is insignificant, because it falls within the 3 percent margin of error.



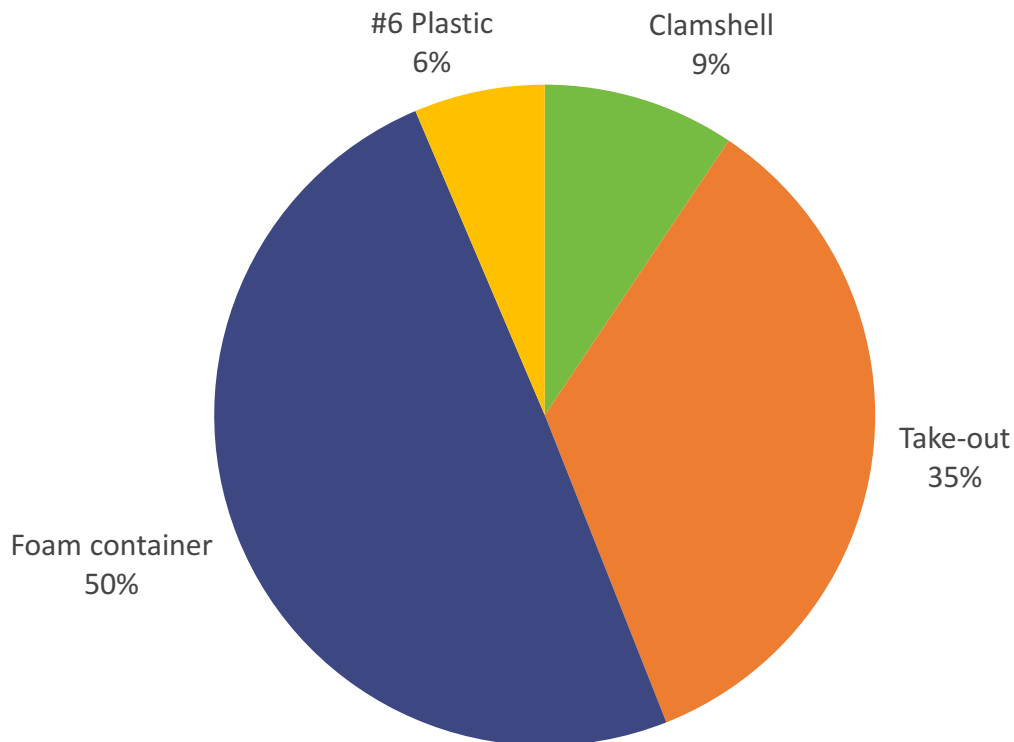
Q3 - Which term best describes this item?

- *Clamshell container*
- *Take-out container*
- *Foam container*
- *#6 plastic*



Purpose: The purpose of this question was to test what terms other than "Styrofoam®" a respondent would use to describe this item. [Note: The term "Styrofoam®" should not be used as it is a trademarked name for an insulation product from The Dow Chemical Company and is unrelated to foodservice packaging.]

Result: The term "foam container" was the preferred pick among half of respondents. The second preferred choice among overall residents was "take-out container," followed by "clamshell container" and "#6 plastic."



Q4 - Which of the following set of instructions is clearest in explaining how to prepare the “before” paper cup to look like the “after” paper cup for recycling?



BEFORE

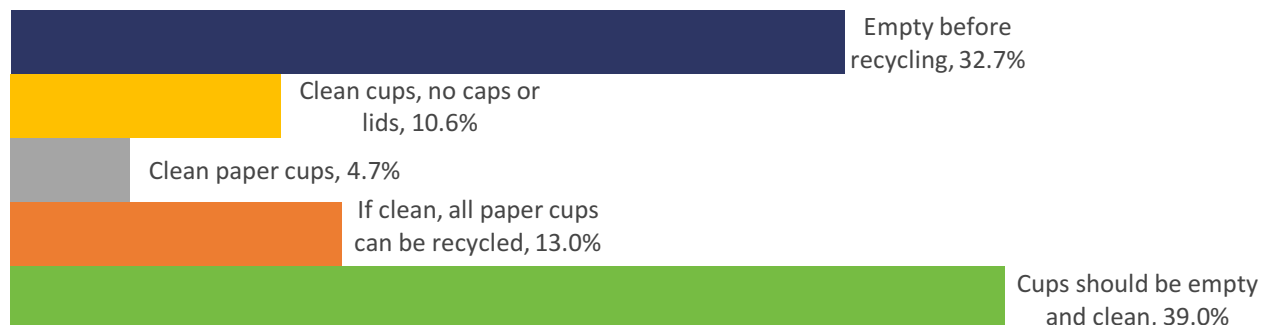


AFTER

- *Cups should be empty and clean*
- *If clean, all paper cups can be recycled*
- *Clean paper cups*
- *Clean cups, no caps or lids*
- *Empty before recycling*

Purpose: To determine how much detail in instructions is needed to achieve a clean paper cup. The question focuses on the clearest terminology that results in the “before” cup appearing as the “after” cup.

Result: Nearly 40 percent of total respondents preferred the instructions “cups should be empty and clean.” This was followed closely by the simplified “empty before recycling” at 32 percent. The term “clean” used by itself was not as clear in achieving the preferred cup.



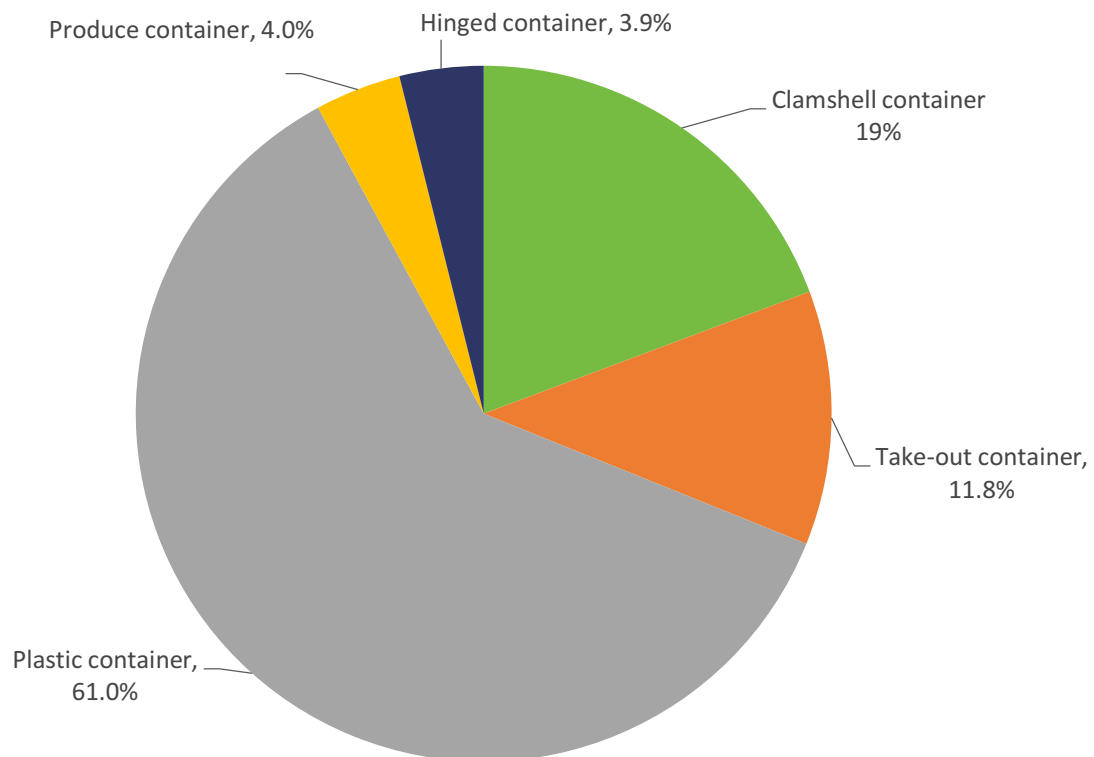
Q5 - Which term best describes the following item?

- *Clamshell container*
- *Take-out container*
- *Plastic container*
- *Produce container*
- *Hinged container*






Purpose: To discover the best term to refer to a plastic foodservice packaging clamshell.

Result: The overwhelming first choice was “plastic container.” The distant second place choice was “clamshell container.”



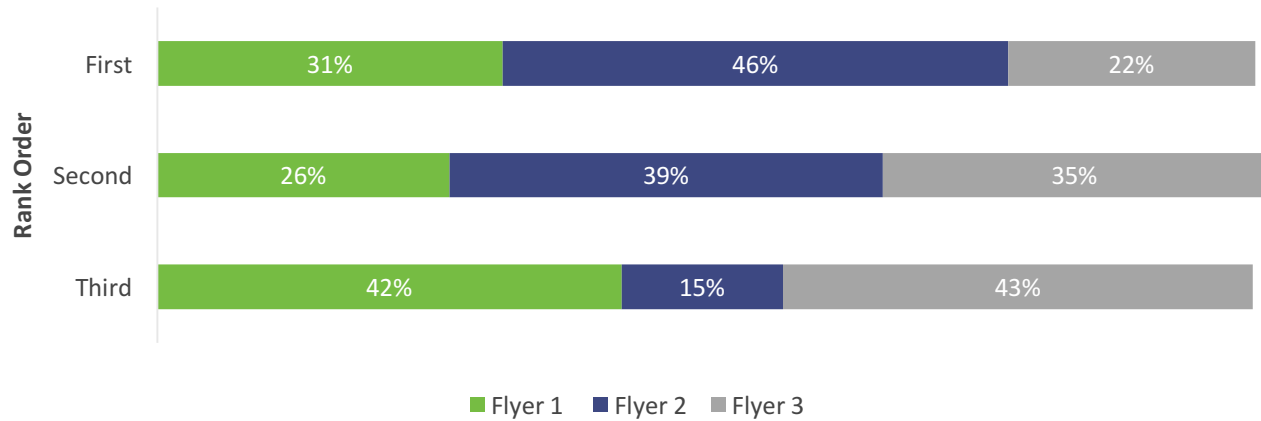
Q6 - Which of the following flyers most clearly describes how to recycle this plastic container? Rank your options from 1-3, for 1 as the clearest and 3 as the least clear.



Flyer 1- Images grouped together by recyclables, compost and garbage.	Flyer 2- Images grouped by category, paper, plastic, glass and metal.	Flyer 3- Images appear individually not sorted by category.
		
<p>Clamshell image used? Yes, highlighted</p>	<p>Clamshell Image used? No, only plastic cup and dairy container</p>	<p>Clamshell image used? No, only plastic sandwich container</p>
<p>Text description: “Plastic trays, cups and containers”</p>	<p>Text description: “Clean plastic food containers & cups”</p>	<p>Text description: “Plastic tubs, jars & trays”</p>

Purpose: To determine which flyer format was most clear in determining whether to recycle a plastic clamshell container. Respondents were asked to rank in order to determine the most to least clear format. Some flyers refer to “plastic containers” or simply show images of similar plastic containers.

Result: Overall, Flyer 2 was clearest, followed by Flyer 3, then Flyer 1.



Q7 - If recycling guidelines state that "paper" is accepted, which of these paper bags would you recycle?

- *Paper bag full*



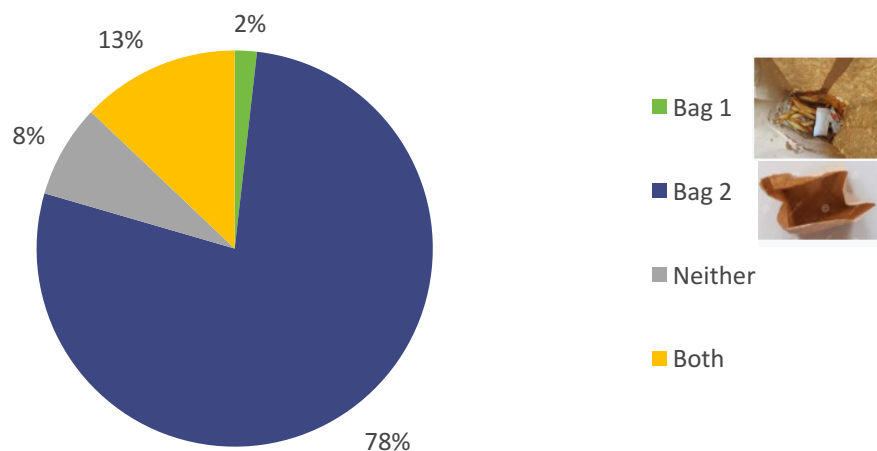
- *Paper bag empty*



- *Neither*
- *Both*

Purpose: To test language and behavior when referring to a paper take-out bag in the general “paper” category.

Result: The empty bag was selected by the vast majority of respondents. The bag with the food left in the bottom received the least tallies. It should be noted that 13 percent of respondents indicated they would recycle both bags. Education around emptying the bag before recycling may be necessary.



Q8 - If your recycling program instructions state "recycle clean pizza boxes" [or "no food-soiled pizza boxes"], how likely are you to recycle the following pizza boxes? Use slider bar to rate your response from 5 for the most likely to recycle and 1 for the least likely to recycle.



Pizza Box 1 -
Visible cheese residue and oil



Pizza Box 2 -
Little oil, no food residue

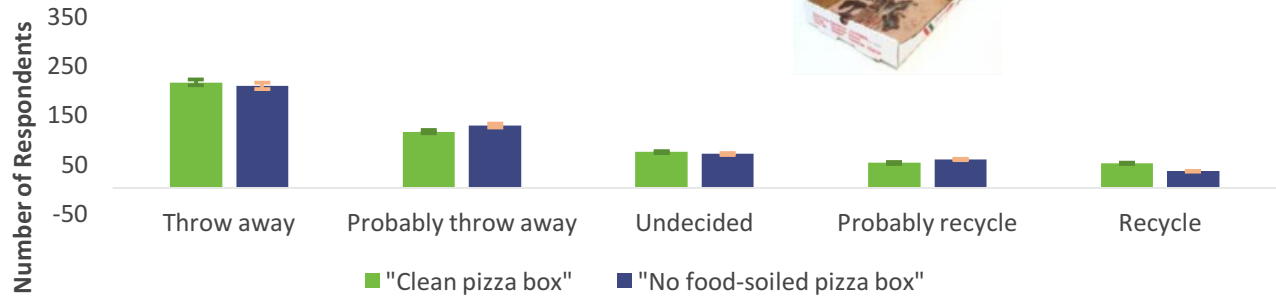


Pizza Box 3 -
Oil on both lid and base

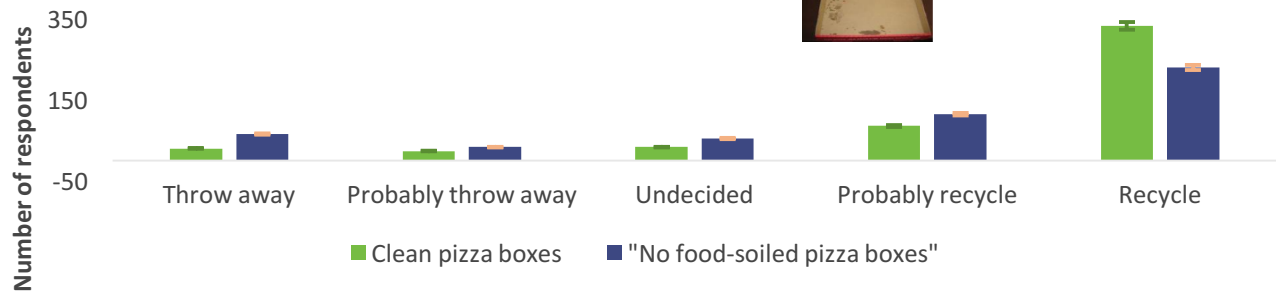
Purpose: This question served to discover the impact of language in recycling instructions. This question was A/B tested, meaning half of the respondents were shown the instructions that read "recycle clean pizza boxes" and the other half were shown instructions that read "no food-soiled pizza boxes." Comparing the results between the two language options shows which instructions were most effective in achieving acceptable pizza boxes.

Result: The term "recycle clean pizza boxes" succeeds at achieving recyclable pizza boxes without visible food residue into the recycling container more than the term "no food-soiled pizza boxes". From these data the term "food-soiled" could cause confusion when oil or grease is present.

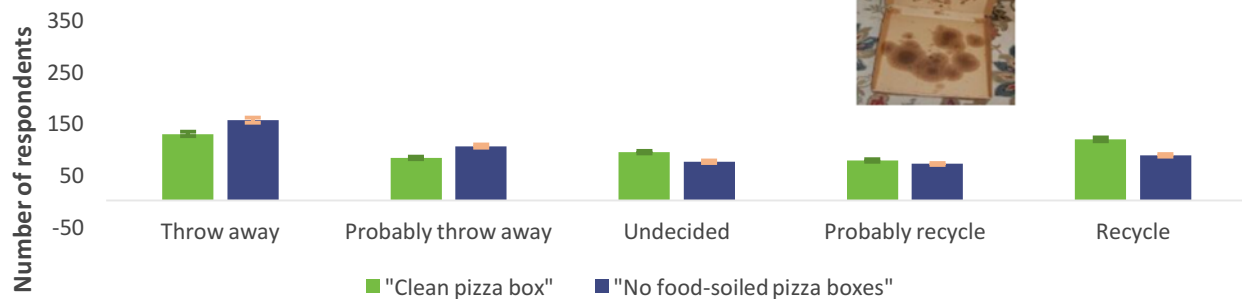
Pizza Box 1



Pizza Box 2



Pizza Box 3



Q9 - According to the following flyer, how would you prepare this coffee cup for recycling? Select all of the actions you would take.

- ☐ *Recycle cup as is*
- ☐ *Empty Liquid*
- ☐ *Rinse Cup*
- ☐ *Recycle Lid*
- ☐ *Discard Lid*



Recycle cup as is

Flyer 1 - Pictures images with basic text. In the paper category, there is an image of a white paper cup with no lid or straw with the text “clean paper cups.”



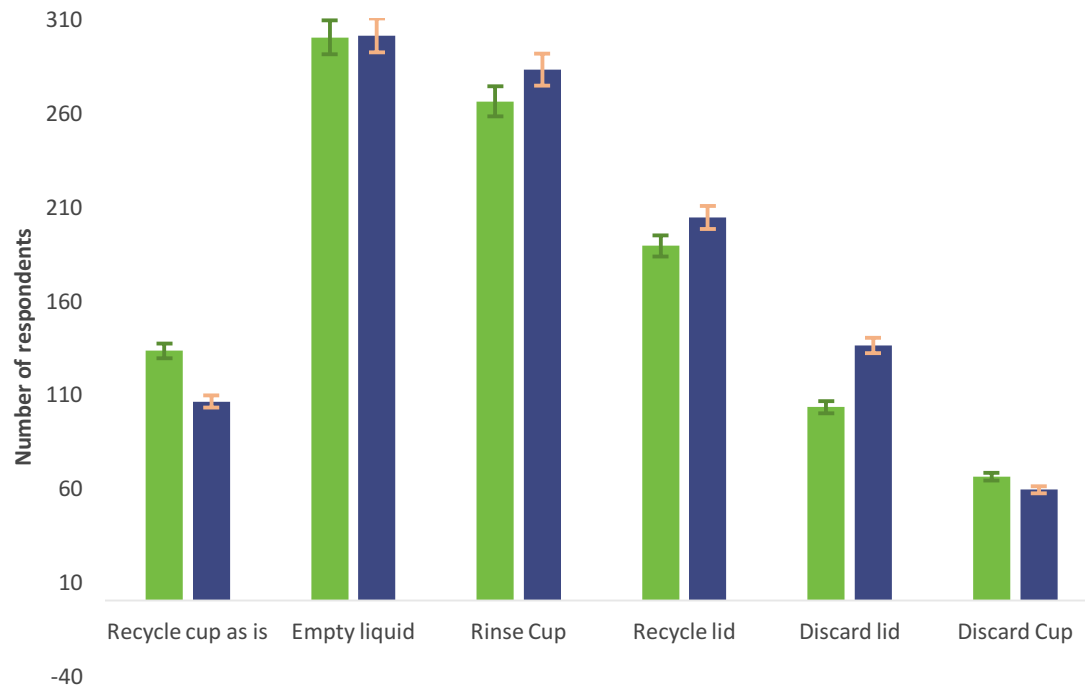
Flyer 2 - Shows the same flyer with additional text instructions (indicated by the red box above) as follows:

How to prepare your recyclables:

- *No food, liquid, loose plastic bags. Bag all plastic bags together.*
- *Remove all lids from containers & no lids less than 3 in.*
- *Do not bag or box recyclables; leave loose.*
- *Put additional recyclables in sturdy bins, boxes, large paper bags, or 32-gal. cans marked "Recycle" next to your recycling cart; not to exceed 60 lbs.*

Purpose: To A/B test language where half of respondents saw a simple flyer and the other half were shown the same flyer with additional instructions. The purpose served to find out how much image versus text instructions help to clarify special recycling rules in order to recycle a coffee cup with lid. Respondents were asked to click all of the steps they would take to prepare this coffee cup for recycling.

Result: Twenty-five percent more respondents opted to recycle the cup “as is” when shown the educational materials without the additional preparation instructions. It is important to note that the additional instructions did not specify to rinse the cup, yet 7 percent more respondents would take that step. In addition, including specific instructions about how to handle the lid (i.e. recycle or discard) should be considered, as there seemed to be confusion among respondents.



Q10 - Based on these instructions "No food-soiled paper" [or "Recycle clean paper"], how likely are you to recycle the following paper plates? Rank your response from 1-5, where 5 is most likely to recycle and 1 least likely to recycle. Use the slider bar to rate your response.



Plate 1 with grease residue



Plate 2 with food residue



Plate 3 with dry food residue (crumbs)

Purpose: To test how terminology used in recycling instructions impacts recycling or disposal behavior. This question was A/B tested where half of respondents were shown instructions that included the words "no food-soiled paper" while the other half saw "recycle clean paper" to find out how much these terms in the instructions affect the decision to recycle or throw away a food residue or grease-soiled plate.

Result: There was little difference in whether the respondents would recycle the paper plates, given the two different sets of instructions. The majority of respondents would throw away plates 1 and 2 and recycle plate 3 based on their appearance; regardless of whether the instructions stated "recycle clean paper" or "no food-soiled paper."

