

VANCOUVER (WA) 2015 WRAP CAMPAIGN EVALUATION REPORT

*Prepared by Moore Recycling Associates for
the American Chemistry Council*

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*“Recycling
Plastic Film
Beyond
Bags”*



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Introduction

Plastic film contamination is a current concern affecting the efficiency of operation at the local Material Recovery Facility in Clark County, WA. In an effort to reduce the contamination and increase the amount of film recycled, the City of Vancouver, WA, launched a public education and outreach initiative with partners to encourage consumers to recycle plastic bags and film through return-to-retail programs. The campaign led to a more than doubled bag and film recycling increase —125 percent— at 12 Safeway stores. This campaign dovetailed with an existing regional government “Recycling Done Right” campaign that measured a 75 percent reduction in plastic bag contamination in recycling carts of residents who had received educational information from the joint efforts.

The Vancouver Wrap Recycling Action Program (WRAP) campaign was launched in the summer of 2015 as a collaborative between a Project Team of: City of Vancouver, Clark County, the American Chemistry Council's Flexible Film Recycling Group (FFRG), Safeway, and the Trex Company. The campaign sought to increase consumer awareness and recycling of additional types of polyethylene (PE) film packaging¹ beyond carryout bags in select Vancouver area Safeway stores, while decreasing plastic bags/film placed in curbside recycling carts.

The Campaign

The WRAP Project Team led an eleven-week, retail based consumer education campaign, known as “Recycle Wrap/Beyond Bags,” with technical support from Moore Recycling Associates. This campaign was conducted during the summer and fall of 2015 in 12 Safeway stores in the Vancouver area.

¹ E.g., case wrap, product wrap, bread bags, dry cleaning bags, etc.

Image 1: Campaign Bins, Signs, and Bag Stuffers



Photos by S. Jackson

The Vancouver WRAP campaign followed a regional contamination reduction effort called “Recycling Done Right” or “RDR” campaign² conducted in the spring of 2015. The RDR effort sought to discourage residents from putting contaminants including plastic bags and film in their curbside carts. Residents were encouraged to recycle plastic bags and wraps at local stores. The RDR campaign included: a video, tags on 20,000 household recycling carts, and a mailer to all 100,000 households countywide with specific information instructing citizens not to put plastic bags/wraps in the carts.

The Vancouver WRAP campaign used an enhanced methodology based on lessons learned during a similar campaign conducted in Milwaukee, Wisconsin in April 2015. The methodology entailed using clear, direct communications to consumers (e.g., bin signage, campaign flyers, counter and other store signage) to inform them about recycling plastic bags, wraps and other PE film via retail collection and not through curbside carts.

The 2015 data were collected in two parts:

1. A five-week Baseline Phase³
2. A six-week Campaign Phase⁴

Key messages of the campaign:

- Plastic bags, film, and wraps do not go in curbside recycling in the Vancouver area — instead they should be returned to participating retailers, like Safeway, for recycling. *Please visit plasticfilmrecycling.org to find a drop-off location near you.*
- Consumers can recycle many types of plastic wraps, bags and other film packaging⁵ at participating stores.
- Plastic bags, film, and wraps are valuable material and can be recycled into products such as new grocery bags, benches, and composite decking.

The in-store campaign sought to continue the outreach conducted by regional partners during RDR. The partners used easily replicable tactics to increase consumer awareness of and participation in recycling bags and film to generate measurable results. The primary tactics used in the twelve participating stores consisted of the following:

- New bag and film collection bins clearly marked with “beyond the bag” signage (see Image 1);
- Bag stuffer flyers (see Image 1);
- “L” signs wrapped around the check stand monitors (see Image 2);
- Large, free-standing signs.

² More information about this campaign can be found at: <http://clarkgreenneighbors.org/Discover/recycling-done-right.html>

³ Period of collecting bags and film before the campaign launch to measure baseline levels of consumer awareness, collection, and activity.

⁴ Period of collecting bags and film after the campaign launch, new bins and signs were placed in stores to measure the effects of these materials on awareness, collection, and activity.

⁵ E.g., bags from newspapers, produce, and bread; dry cleaning wraps; and product overwrap from bulk products (cases of water bottles, bathroom tissue, paper towels, etc.

The partners also provided additional support for the campaign by issuing press releases and social media announcements.

A campaign launch event was held on August 29th at one of the larger Safeway locations to officially kick off the education activities for all stores. The campaign theme was “Recycling Film: Beyond the Bag.” Interviews with various WRAP partners and a local councilwoman were broadcast live during a local, syndicated radio show. Representatives from the City

of Vancouver, FFRG, the Trex Company, Waste Connections, Clark County, and Safeway were on hand at the launch event to greet, inform, and answer questions from the public about recycling plastic bags, film, and wraps. Campaign signage and examples of the types of plastic that could be brought to the store for recycling were on display to educate store visitors.

Image 2: L-sign at checkout counter



Photo by C. Hubbard

Data Collection and Methods

This report presents campaign results gathered through site visits, material audits, and customer interviews conducted by Carter Hubbard & Associates LLC. The liner bag (material) audits were conducted with assistance from the Trex Company.

The WRAP consultant conducted site visits to verify proper implementation of campaign materials and guidelines, and provided feedback as appropriate. There were few errors noted in following campaign protocols or bin placement. Surveys tracked customer knowledge and the effectiveness of the pilot in directing consumer behavior before and after the campaign period. The liner bag counts and audits were used to track increases in material collection and changes in material type and/or contamination. Blue and green bags were used during the two phases of data collection to streamline the process.

Methodology

Locations

Twelve Safeway stores in the City of Vancouver and surrounding areas participated in the campaign. The stores were selected to achieve a mixed demographic of urban and rural areas without over-extending WRAP team capacity for collecting usable data in the eleven-week timeframe.

Site Visit Procedure

Site visits took place in two phases: baseline visits and campaign period visits. The site visits were important for the following reasons: to verify that bin liner bags of designated colors (green and blue) were being used as directed, to verify that recycling bins were near trash receptacles to reduce unwanted contamination, to visually gauge and document material in the bins, and to interact with store staff to answer questions or provide feedback. Observations were documented and Store Directors and Store Operation Managers were notified when improper use of designated bag liners or placement of bins was observed.

Twenty-four baseline visits were conducted. This consisted of two per site:

- Initial informational meetings with Store Directors concurrent with green, baseline bag deliveries.
- Second follow-up visits to the twelve stores were conducted to ensure campaign protocol; to address questions, concerns, and errors where observed during the second visit; and to survey customers.

Thirty-nine site visits were conducted during the Campaign Phase, which followed immediately after the baseline period.

- All twelve stores were visited immediately following the launch event and provided new recycling bins.
- An additional nineteen site visits were made within ten days to ensure campaign protocol was followed and to address questions, concerns, and errors. Also the large campaign informational inserts for the freestanding signs were distributed.
- Eight final site visits were conducted to survey customers.

Further checks were performed by phone calls to store representatives and through the regional Services Operations Specialist.

Liner Bag Counts and Audits

The twelve stores in this pilot were directed to use colored bin liners (provided by WRAP) so that the material collected during the two phases could be easily distinguished from material collected in the storerooms or from other stores. The Trex Company furnished the colored bags for auditing material. Green bin liners were used during the baseline phase and blue bin liners were used during the campaign phase. Each store was given 200 bags for use during each phase. The bags were collected from the participating stores at Safeway's Distribution Center in Clackamas, Oregon. At the end of the baseline period, unused green bags were collected and counted to determine how many bags were used.

Each store was given two new recycling bins, donated by Trex, for the six-week campaign period. During this time the stores used blue liner bags to collect material. At the end of the campaign period, the remaining blue bags were counted to assess the

quantity used during the campaign compared to the quantity used during the baseline period.

Surveys

The baseline and post-campaign interviews represent the views of a small number of individuals and serve to indicate trends; they do not provide a statistically viable representation of customer knowledge and practices.

Customer Interview Procedure

All interviews were conducted while customers waited in checkout lines to avoid interfering with their shopping decisions. Interviewers chose customers whose place in line or quantity of items to purchase would ensure adequate time to complete the survey, and a new interview subject was approached as soon as the prior interview concluded. Out of consideration for store employees and to avoid times when customers are more hurried, the surveys were conducted between the hours of 3:00pm and 7:00 pm. At each site, a few customers who were asked to participate opted out of the interview. Participants were given a thank you gift after the survey was completed: a WRAP shopping list pad or refrigerator magnet.

During the baseline portion of the campaign, customer interviews were conducted at the 12 participating stores over the course of several days. Ten customers were interviewed at each site for a total of 120 respondents. At the end of the campaign, customers were surveyed in eight locations for a total of 80 respondents.

The surveyor asked questions about customer knowledge of and participation in the store's film collection program, how they learned of the program, and invited them to identify obstacles to participation in plastic bag and film recycling. Respondents also were asked whether the presence of bag and film recycling programs created a positive impression and made them more likely to choose a store for their shopping.

Audit Findings

As a pilot campaign, all results from this Vancouver project provide useful information for the design and execution of future retail campaigns and projects.

Liner Bag Counts

Of note, the use of colored bin liners was unique and done to

Image 3: Examples of various recycling bins in use prior to the campaign



Photo by C. Hubbard

allow the Project Team to identify customer-returned material from these twelve campaign stores for bag audits. *Colored liners were used for auditing purposes only; participating stores or chains do not intend to continue using them.*

The stores' existing variety of bins (see Image 3) was used for the baseline phase and the new cylindrical bins replaced these for the campaign period. The recycler (Trex) confirmed that the new cylindrical bins could hold an average of 40-60 percent more material than existing bins.

There was only one error found during the baseline period, which involved the incorrect use of the colored liners and was corrected without recurrence.

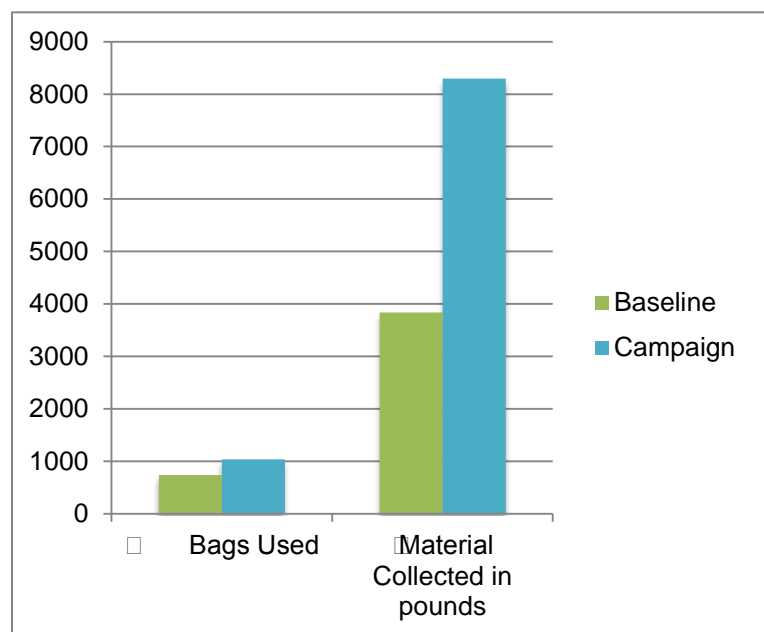
Among the twelve stores, liner bags for the collection of front-of-store plastic bags and wraps were used at an average rate of 12.3 per week during the Baseline Phase. During the Campaign Phase, these stores used liners bags at an average rate of 14.4 per week. This was a 17 percent increase per week, and a 40 percent increase in bags used between the two phases.

Based on the five-pound average weight of a bag during the Baseline Phase, an estimated 3,838 pounds of plastic bags, film, and wraps were collected. The average weight of the bag during the Campaign Phase was eight pounds, containing an estimated 8,296 pounds of material (see Figure 1). This represents a 125 percent increase in material collected (see Figure 2).

Material Audit Data

The bag audits showed a significant increase in the collection of film packaging⁶ from 1.75 percent of the 57 pounds audited during the baseline period to 9 percent of the 53 pounds audited after the campaign period. This is a 500 percent increase in the amount of “beyond the bag” material seen over the course of the campaign. Furthermore, there were ten times as many newspaper bags and twice as much product overwrap seen in the post-campaign audits compared to the baseline

Figure 1: Audit Results from Bag Liners



⁶E.g., case wrap, product overwrap, bread bags, newspaper bags, etc.

data. These results are positive and are most likely attributed to the overall Vancouver outreach. However, they are tempered by the small sample size. More data would be necessary to confirm these results.

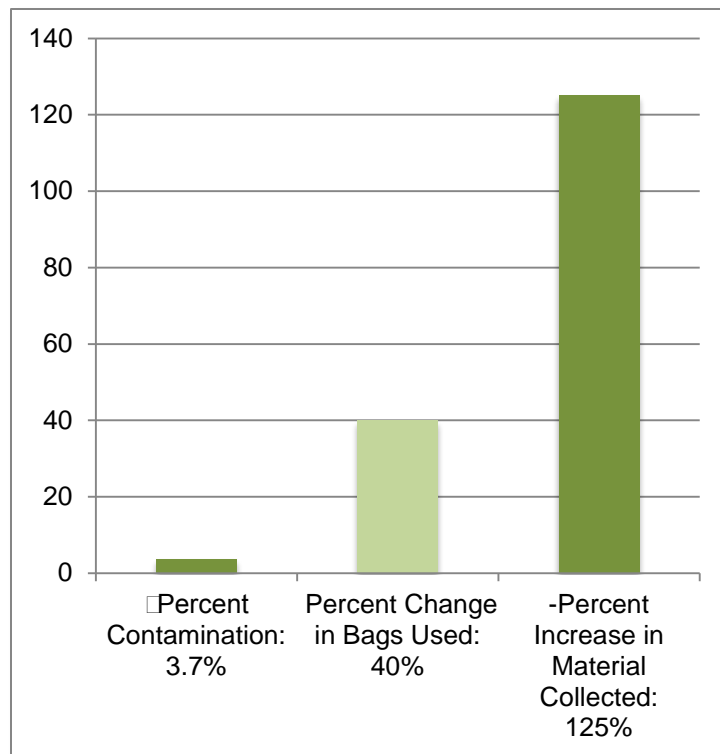
Additionally, the data showed only a small increase in contamination between the baseline and campaign material, from 1.75 percent to 3.7 percent. In nearly all cases, the contaminants were store receipts, other recyclables, and general trash, including sanitizer wipes. It should be noted that virtually no food contamination, like crumbs, was found in the material in either the baseline or campaign bag audit data. Information about the type of contamination provides useful information to stores about how to mitigate it. For example, based on the contaminants found in the material, it likely would be helpful to place recycling bins away from sanitizer wipe dispensers and provide a garbage can nearby. Contaminants are a problem for buyers of collected material because they are incompatible with the processing of polyethylene bags and film.

The conclusion from this audit data is that the increase in good material outweighs the minimal increase in contamination.

MRF Audit Data

The “Recycle WRAP/Beyond Bags” campaign blended seamlessly with a regional “Recycling Done Right” campaign in Clark County. As part of RDR, Clark County used state grant-funds to commission a Recycling Characterization Study on curbside recyclables collected from select single-family homes that received education materials on their recycling carts. The purpose was to measure the impact before and after their RDR educational outreach campaign, including plastic film and bags. Three audits of material collected from recycling carts were performed before the outreach in April, and after in June and October 2015. The results showed a reduction in the contamination levels (“unacceptable materials⁷”) in curbside recycling. Localized cart tagging (i.e. instructions to residents on what not to include in the curbside cart) supported

Figure 2: Chart of Campaign Results



⁷ Examples include: non-recyclable types of paper and plastic, glass bottles, plastic film and bags, and other contaminants.

by the WRAP retail campaign helped decrease the number of plastic bags found in the MRFs (e.g., no bags of bags and a 75 percent reduction in loose bags). NOTE: These results were from very small samples (approximately half a ton), and therefore, are not a statistically valid sample. However, these studies in general continue to demonstrate that leaving an instruction tag on residents' carts does appear to have an effect on recycling behavior.

Customer Interview Demographics

The data from this campaign is used to indicate trends and is not intended to *be statistically significant*. Post-campaign interviews were conducted with 80 customers—10 each at eight of the participating stores. This was compared to 120 conducted in the baseline period.

An average of 78 percent of the participants described themselves as customers who regularly shopped at the stores where they were interviewed. Interviewing customers during the busy afternoon hours may have provided access to a wider subset of people. Over 75 percent of the plastic bags counted in the bag audit sample were Safeway brand bags, reflective of repeat customers loyal to the brand.

Figure 3: Survey Demographics

	2015
Male	47.5 percent
Female	52.5 percent
Under 30	15 percent
30 - 60	74 percent
Over 60	11 percent

Survey Results

The same survey questions and methodology were used in both the baseline and post-campaign phases to measure consumer awareness, thoughts, and practices related to recycling plastics bags and film. The following details a comparison of the pre- and post-campaign survey results.

Customer Knowledge of Plastic Bag and Wrap Recycling

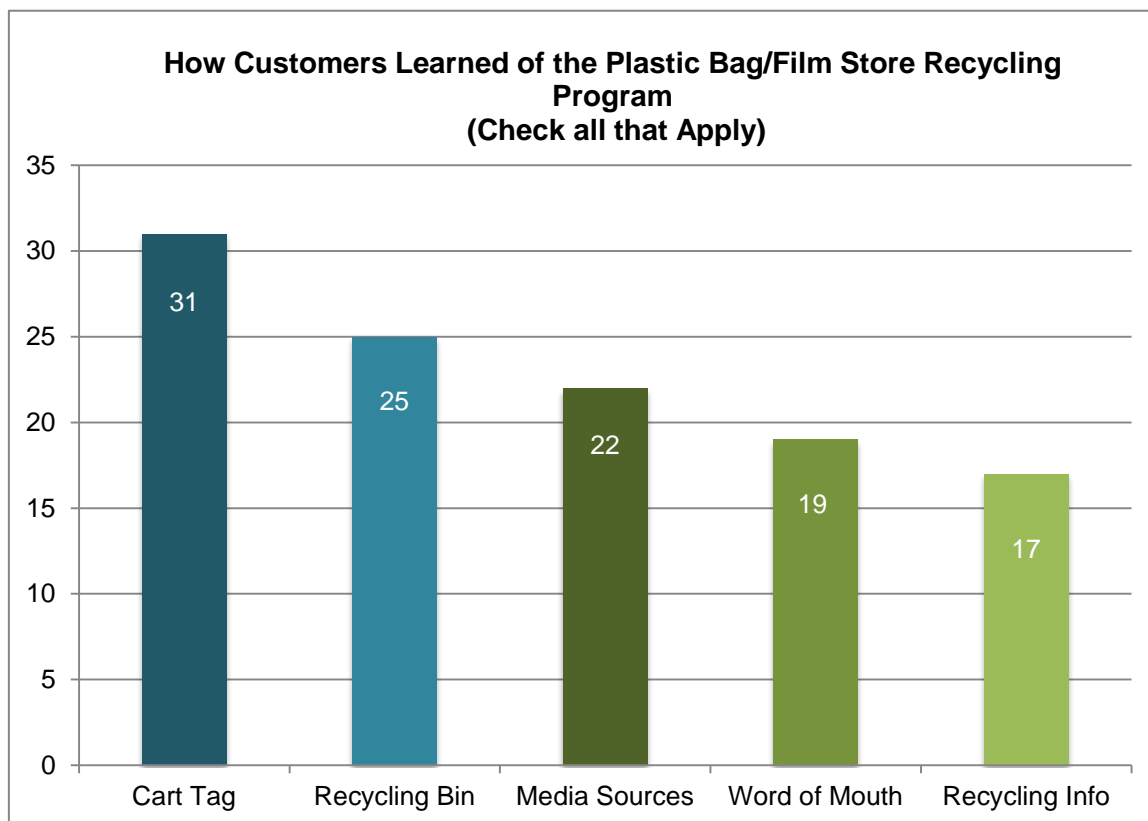
Post-campaign surveys revealed there was an increase from 44 percent to 51 percent of respondents reporting that they knew the “beyond the bag” materials could be recycled at stores. Furthermore, during visual inspections conducted by the WRAP consultant as part of the site visits, there was a noticeable increase in these “beyond the bag” materials in the bins. Additionally, 53 percent of respondents—up from 41 percent—reported that they knew these materials should not be put in the curbside carts.

Customers' Sources of Recycling Information

Participants who knew about the bag and film recycling program at their store were asked to recall when they learned about it. While all respondents reported learning about the program before the in-store education campaign began in late August, the campaign and other outreach provided more and new information about recycling “beyond the bag” material at the store. Figure 4 shows responses to the question about how respondents

learned about the return-to-retail program—the highest number of respondents (31 percent) learned from the tags placed on their recycling carts, 25 percent learned by noticing signage on the recycling bins in the front of the store, and another 19 and 22 percent cited word of mouth and media sources, respectively. Lastly, seven respondents indicated they had learned more about film recycling as a result of the survey experience.

Figure 4: Consumer Survey Responses



At-Store Film Recycling Programs: Customer Participation Challenges

Respondents from both surveys indicated that the stores are doing a good job of making the bag, film, and wrap recycling programs easy to use. Sixteen percent of total respondents from both surveys indicated that plastic bag and wrap recycling was confusing. The biggest obstacles stated to participating in the program included: forgetting to bring material back to the store and not knowing what kinds of materials were accepted for recycling.

Even though half of the respondents in both the pre- and post-campaign surveys knew about the store-recycling program, and there was little confusion or few perceived obstacles, only a quarter of respondents answered that they had recycled bags and film “recently,” meaning within the last month. Thus, the question remains, *what motivates consumers to take advantage of a store bag and film recycling program?*

Impressions of Participating Stores

Interview subjects were asked if the recycling program gives them a positive impression of the store—nearly 80 percent said that it did. When asked if the recycling program makes them more likely to choose the store for their shopping, almost 20 percent responded that it did.

Store Directors' Feedback

To communicate the protocol for implementing the campaign and to provide the materials, the campaign relied on Safeway's corporate communications channels in addition to direct interaction by the WRAP consultant with the Store Managers, Directors, and staff maintaining the bins.

The key lessons learned to help effectively execute a WRAP campaign is that more information and guidance should be provided directly to store staff to prepare them adequately for implementing the campaign protocol.

80 percent of interview participants said that the bag and wrap recycling program gives them a positive impression of the store.

20 percent said that the program makes them more likely to choose the store for their shopping.

The stores were generally enthusiastic about receiving the two new bins; some even wanted a third. Store staff that managed the recycling bins reported that the new bins were easy to maintain. However, often the bins were turned in a direction prohibiting the information from being viewed by customers. To address this issue, additional signage was added to the opposite side of all the bins; a suggested best practice going forward when using cylindrical bins.

Conclusions and Recommendations

Leading with the "Not Curbside" Message

All tactics used to communicate to customers about the bag and wrap collection program at Safeway included a statement that the materials should not be recycled curbside. Municipal recycling programs, private hauling companies, and statewide recycling informational programs have recently emphasized this message.

As part of a larger "Recycling Done Right" campaign in the spring, the City of Vancouver and its regional solid waste partners provided information to residents through a number of sources about not putting bags and film in curbside recycling carts and instead returning this material to retail drop-offs. These sources included: an online educational video, tags on a sample of 20,000 recycling carts, mailers to 100,000 households countywide, bill inserts, and other written materials (e.g., neighborhood newsletters).

To quantify these efforts, Clark County conducted a Recycling Characterization Study on the materials placed in the recycling carts of customers who received cart tags (see

image on this page). The materials were examined for contaminants prior to and after the cart tags were delivered (see previous section entitled MRF Audit Data). Furthermore, 31 percent of the post-campaign survey respondents reported that they learned about recycling bags and film at the store as a result of the cart tags. This seems to indicate that the inclusion of this message is important in future materials and programs, where appropriate.

Awareness, Knowledge & Behaviors

Of the participants interviewed at stores, there was an increase in the number who learned that “beyond the bag” materials were accepted at store drop-offs for recycling. However, with roughly 50 percent of customers aware of the program after the campaign and only one quarter reporting that they recently recycled the material, the question remains: *What motivates consumers to take advantage of store programs to recycle bags and film?* An investigation into promising practices for instilling behavior changes would be of value to inform future efforts.

Each store distributed approximately 3,000 bag stuffers. However, since total store traffic data was unknown, this information was likely seen by a small percentage of total shoppers during the educational campaign period. Shoppers who were not aware of the program had multiple opportunities to see the campaign information. This indicated that effective message penetration would require multiple communication approaches and touch points.

One third of the customers interviewed mentioned the cart tags issued by the regional RDR campaign as mode of learning about the store film recycling program indicating that communications outside of the stores were useful.

Conclusions

The Vancouver campaign demonstrates the potential to capture significantly more valuable material for recycling through consistent messaging, particularly the adoption of appropriate signage and direct consumer outreach. Retail collection of postconsumer film plastic can benefit both retailers and communities because it’s an efficient means of recovering this material. Most large retailers generate revenue from recycling their own commercial film (i.e., pallet wrap), and adding other types of post-use film can add to that revenue stream.

Image 4: Cart Tags



Recycling cart tag used in the regional “Recycling Done Right” campaign.

-Courtesy of City of Vancouver

While the campaign generated moderate increases in consumer participation, the impact of the early adopters/motivated recyclers was important because there was an increase in materials returned to the store and more “beyond the bag” materials were seen in the post-campaign audits.

The 2015 WRAP campaign conducted in twelve Vancouver-area Safeway stores resulted in a positive measurable impact on customers’ knowledge of the stores’ plastic bag and film recycling program. Additionally, the campaign resulted in a net positive for Safeway—more material of value was collected for recycling; there was an insignificant increase in contamination; and consumers had a positive impression of the stores because of the bag and film recycling opportunities.

The campaign and the methods used to evaluate it generated useful insights. Shoppers credited a variety of sources of information for their knowledge of the store’s bag and wrap collection program, but the visible presence of well-labeled recycling bins was an important means of alerting shoppers. However, data indicates that bins alone are not enough to compel shoppers to recycle.

Questions about motivation and best incentives to spur more consumers to participate in return-to-retail recycling programs are yet to be answered. However, this pilot indicates that these factors are important to informing more customers and motivating behavior change. Some suggestions include more person-to-person outreach, similar to new product promotions, in which customers can speak to and get information from a store associate about recycling bags and other “beyond the bag” material.

Finally, stores that offer programs to collect plastic bags and film for recycling have much to gain in the form of customer appreciation. An overwhelming majority of shoppers stated that the program gives them a positive impression of the store.