RECYCLING RESET

How disruptions in the international recycling market are impacting Tacoma, and an inclusive community engagement strategy to Recycle Right

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Executive Summary
Tacoma’s residential curbside commingled recycling program was significantly impacted by changes in the global recycling industry, resulting in increased expenses to process, ship, and market these materials. These changes were spurred primarily by problems with the materials becoming contaminated both by non-recyclable materials and by cross-contamination from recyclable materials that cannot be effectively sorted into the proper material streams. After many years of calling for reductions in contamination, China closed their doors to imports of most of the materials that they previously accepted, creating a decrease in global demand that hurt the recycling economy. The total impact is approximately $1.9M per year in unbudgeted expenses for residential curbside recycling alone, which collects over 16,000 tons of recyclable material, annually.

Recycling these materials provides a significant benefit to the environment through conservation of energy and natural resources, reducing the amount of material that goes into a landfill, and providing a reduction of greenhouse gases.

To evaluate how to respond to this challenge, City staff identified a range of possible options, and engaged the community over a three-month long effort to education and solicit input from customers on what to do. This effort reached over 10,000 people in the community, including three targeted focus groups and over 7,400 responses to a survey. In addition to public feedback, staff communicated with other local and regional jurisdictions, the Department of Ecology, and several solid waste industry professional associations to gather information about what steps others were taking in response to this industry issue.
Tacoma Recycling

As one of the first cities in the nation to provide curbside recycling service, Tacoma and its residents value the ability to recycle rather than landfill. Recycling conserves material resources, saves energy, and benefits the environment; however, the current change in global markets greatly increased the cost of recycling. The marketing of recycled materials has historically produced revenues that, while not enough to cover the full costs of curbside recycling programs, helped to offset these costs.

There are 55,000 residential households receiving recycling services from the City of Tacoma Solid Waste Management. In 2018, more than 16,000 tons of waste were diverted from the landfill to recycling markets through the commingled recycling program. In order to ensure that these recyclable materials can be used to make new products, it is critical to maintain their quality. After decades of investing to create a citywide system with award-winning programs, the City of Tacoma is targeting its efforts towards the long-term, maintaining a cautiously optimistic approach and resisting sudden, regrettable changes to allow time to explore and analyze alternatives, and provide opportunities to solicit and gather customer input.

Overview of China’s New Import Policies and their impacts

China launched an import inspections program called “Operation Green Fence” in 2013, and then followed up with a stronger import policy called “National Sword” in 2017, which is being implemented through a series of actions referred to as “Blue Sky 2018.” These policies are aimed at reducing the amount of foreign garbage from entering China, as part of efforts to address China’s growing environmental pollution issues. China hopes to establish recycling collection programs within their own boundaries, and stop importing recycled materials from outside of China by 2020.

The implementation of Blue Sky 2018 banned 24 varieties of solid waste and recyclables, including mixed paper, and 3-7 plastics. It has also reduced the allowable contamination limit for imports to 0.5%, which is effectively unachievable with current recycling systems.

Until recently, China was the largest consumer of recycled materials, and low shipping rates were available due to containers needing to be backhauled to China. Other markets exist, including Malaysia, India, Vietnam, and South Korea, but shipping prices are higher and these markets are much smaller, and there are not enough alternative markets to consume the volumes of material that China has historically imported for manufacturing. In addition, the available markets have reduced their contamination limits from 5% to 2%, requiring increased processing to meet this limit.

Other Jurisdictions

City Staff reached out to a number of other jurisdictions to gather feedback on how these impacts are being addressed in the region. While jurisdictions differ in their contractual arrangements for their recycling programs, they are all experiencing issues related to cost, contamination rates, and challenges to marketing materials. Programs with more limited lists of accepted items have felt less of an impact.

There are a number of instances when recycled materials were landfilled due to an inability to find markets. State law requires contractors to request permission; and temporary waivers are granted
only if contractor is meeting contract conditions. In King County – one hauler in six cities was granted a temporary disposal waiver. In Oregon, 26 Oregon communities landfilled materials with permission from Oregon Department of Environmental Quality. The amount of materials landfilled is a small percentage of the total volume collected.

A number of jurisdictions have already implemented fee increases. For residential accounts, the rate increases have typically been in the range of $2 - $4. Rate models and haulers vary, so it is difficult to directly compare rates. Figure 1 shows the average recycling rate increases by county, based on data provided by Utilities and Transportation Commission’s reviewed commodity filings as of April, 2019.

**Figure 1: Average Recycling Rate Increase by County**

There are ongoing discussions of modifications to the list of acceptable items. Most jurisdictions are holding off, preferring to minimize changes, and waiting for clear direction. Programs like Tacoma’s system that don’t accept all 3-7 plastics do not need to “drop” them.

Many jurisdictions are hoping to delay drastic changes, and absorbing costs until the situation normalizes. In the short term, strategies to reduce contamination through education include additional messaging to public about clean recycling (e.g. Recycle Right, Quality vs Quantity), tagging at the source, and de-emphasizing (rather than officially removing) items with low/no market viability.

The Department of Ecology is developing a clear, regional, long-term strategy to address these issues. There is recognition of the need for regional partnership and harmonization.
Impacts on Tacoma’s Commingled Recycling Program

Tacoma contracts with a material recovery facility (MRF) named JMK Material Recovery Facility (JMK) in the tideflats, which is owned and operated by Waste Management (WM). JMK receives commingled recycled materials from a number of jurisdictions, including cities in Pierce and King Counties, as well as Bremerton. They also process materials shipped from Canada and Oregon. They process around 18,000 tons of material a month. Processing costs at JMK have increased slightly due to the stricter contamination limits. JMK has not shipped any materials to China since October of 2017, and has not had to landfill any of the sorted recyclables. WM is committed to finding markets for recyclables, and as the single largest entity in the solid waste industry in the United States, they have an advantage in marketing materials. WM invested in developing and supporting markets for mixed paper in India, and is working to develop local markets for mixed paper, which constitutes 50% of the total tonnage processed at JMK.

WM is recommending that problematic materials be removed from the accepted list for commingled recycling to reduce processing costs and to help reduce cross-contamination, which occurs when recyclable materials are sorted into the wrong streams. Some marginally recyclable materials that are problematic for recycling include shredded paper, plastic bags, plastic clam shells, and coated paper packaging such as gable-top milk cartons and aseptic (metal-lined) cartons. They also recommend that it would be beneficial to harmonize the commingled recycling lists across jurisdictions, particularly for areas that contribute to the same MRF, to improve the quality of the materials received and sorted. Pierce County has removed refrigerated cartons, shredded paper, and planting pots from their comingle list effective Spring 2019.

Regulatory requirements

The City of Tacoma Solid Waste Management Division (SWM) reviewed the following federal, state, and local codes, regulations, and plans to determine the feasibility of landfilling commingled recyclables:

- Title 40 Code of Federal Regulations (40 CFR), Chapter I - Solid waste;
- Title 70 Revised Code of Washington (RCW), Chapter 70.95: Solid Waste Management – Reduction and Recycling;
- 2000 Tacoma-Pierce County Solid Waste Management Plan;
- 2008 Supplement to the Tacoma-Pierce County Solid Waste Management Plan; and
- 2016 Supplement to the Tacoma-Pierce County Solid Waste Management Plan.

The Federal Government, per 40 CFR Chapter I – Solid Waste, require individual states to develop solid waste management plans, which include recycling strategies. In Washington, in accordance with the Department of Ecology’s State Solid and Hazardous Waste Plan, local government determine their own recycling regulations. Locally, the 2000 Tacoma-Pierce County Solid Waste Management Plan, and subsequent supplements, provide recommendations on what materials should be recycled, but left the decision to recycle a material to individual cities. The City of Tacoma, pursuant to current federal, state, and local codes, regulations and plans, can landfill commingled recyclables, taking into account economic, environmental, and societal impacts.
Financial Analysis

The changes in the recycling industry resulted in three types of financial impact on the City of Tacoma’s commingled recycling program. First, the lower allowable limits for contamination in the recycled product resulted in a slight increase in processing costs at JMK, which was passed on to the City. Second, the costs associated with the shipping of recycled commodities have increased, compared to the low costs to backhaul materials to China which was available previously. Finally, the reduction in demand in the market for materials lowered the value of recyclable commodities, particularly for mixed paper and other fiber streams, which comprise over 70% of the commingled recycling stream. The combined cost impact of these three factors is in the range of $110-$120 per ton of recyclable materials processed. On an annual basis, this equates to between $1.8M and $2M.

One alternative that was reviewed is the cost to landfill the commingled recycling materials. The cost to process, transport, and landfill this material as garbage would be approximately $75/ton. This equates to $1.2M annually. While this alternative could save up to $800,000 per year, it would create significant impacts in reduction in the life of the landfill, additional greenhouse gas emissions, and loss of investment in recycling education of customers.

To maintain the full curbside recycling services currently offered, based on how the market has adjusted since the beginning of 2018, it is projected that an additional $1.9M in annual revenue is required. This can be generated with a $3/month surcharge for each residential customer, not including customers who currently are receiving low-income billing assistance.

The cost of curbside glass recycling was also reviewed. The current system requires 3 to 4 dedicated drivers and collection trucks daily to collect glass and deliver it to the glass processing and recycling facility in Seattle. Cost savings of over $500,000 per year could be generated by transitioning this model to a system of unmanned glass drop-off stations similar to Pierce County.

Commercial Recycling Impacts

Commercial recycling revenues and expenses for 2018 and the first quarter of 2019 were reviewed to evaluate the impacts of the recycling industry changes on this line of business. Commercial recycling includes commingled, cardboard, glass, and yard waste services, each of which may be utilized in an “a la carte” basis with separate rates based on type, size, and frequency of service. The recycling industry changes resulted in higher expenses for processing commingled recycling and cardboard, however, cardboard makes up about 60% of this volume, compared to 40% commingled. The increase in costs for source separated cardboard recycling is about half as much as the increase in costs for commingled recycling because it has less contamination and requires less sorting. This mitigated some of the impacts to the commercial recycling. The total unbudgeted expenses experienced for commercial recycling totaled about $350,000 in 2018 and is projected to be about $300,000 in 2019. Overall, in 2018 and through first quarter of 2019, the actual commercial recycling revenues have been high enough to cover the increased expenses. This is due in part to operations efficiencies that were not captured in the budget such as lower fuel and maintenance costs.

At this time, no adjustment to commercial recycling rates is required, and these rates will be evaluated in more detail during the next rate/budget cycle.
Sustainability Impacts

The Environmental Protection Agency’s (EPA’s) Waste Reduction Model (WARM) tool compares baseline scenarios (how materials are managed) to an alternative method, and assess the energy and greenhouse gas implications that would occur throughout the material life cycle. It provides a big picture understanding of material inputs, energy inputs, and environmental impacts associated with materials management (including manufacturing, use, transportation, and disposal). SWM used WARM to assess the environmental implications of diverting current commingled recyclables to the LRI Landfill in Graham, WA.

Using WARM, diverting one metric ton of commingled recyclables to the LRI Landfill would result in a net emissions increase of 2.78 tons of CO$_2$. From July 2017 thru June 2018, SWM processed 16,698 tons of commingled recyclables. If landfilled, it would result in an additional 46,056 tons of CO$_2$ emissions.

According to EPA’s Greenhouse Gas Equivalencies Calculator, the annual emissions of 46,056 tons of CO$_2$ to the atmosphere is equivalent to the following:

Another environmental impact of not recycling is a reduction in the life of the local landfill. Tacoma currently has a contract through 2030 to long-haul waste for disposal at the LRI Landfill operated by Waste Connections, which is located in Graham. Landfilling recyclable materials will take up some of the available landfill space. When the LRI Landfill closes, which is projected to be in approximately 15 to 20 years, other alternatives for waste disposal will need to be explored. It is probable that waste for disposal would be hauled by rail to larger, regional landfills located in drier climates east of the Cascades.

Equity Impacts

An additional surcharge for residential customers will have a financial impact, particularly on lower income residents who already may be struggling to cover the continually rising costs of utilities. To mitigate these impacts, SWM recommended that any additional surcharge for covering the increased costs of recycling should be waived for those customers who are already enrolled in the City’s low-income billing assistance programs (Discount Rate Program and Bill Credit Assistance Plan). The proposed surcharge amounts are based on this assumption.

The Tacoma Municipal Code allows for utility fees and charges to be waived or adjusted for individuals who qualify as low-income.
Options

A number of alternatives for how to respond in the short-term to the changes in the recycling industry were investigated. There are four alternative options that were identified and presented to customers through SWM’s community engagement process. These alternatives include:

- **OPTION 1** - Landfilling: This option would cease residential curbside collection of recyclables, and collect those materials as waste for landfilling. In the short-term, this appears to be lower cost to the system, although there would be unpredictable cost impacts to the residential customers. As noted above, landfilling the commingled recycling materials would be less expensive than processing these materials for recycling. However, customers would have to choose to pay more for a larger garbage service, self-hauling their recyclable materials to recycling drop-off centers, or reducing their waste generation. Not recycling would result in an overall increase in greenhouse gas emissions. This would also impact the available landfill capacity and would result in a loss of the current value of Tacoma’s public education investment. This option would still require an increase over existing rates, because the expense of landilling recyclable materials that have traditionally generated revenue was not budgeted.

- **OPTION 2** – Limited Recycling: This option would maintain the current curbside commingled recycling program, but would eliminate curbside glass and battery collection, as well as remove some items from the accepted commingled recycling list. The process of collecting glass in a separate curbside bin is inefficient and generates significant air emissions impacts that offset much of the environmental benefits of glass recycling. Glass would be collected at approximately six satellite, unstaffed, drop-off stations located throughout the City.

- **OPTION 3** – Full Recycling: This option maintains the current curbside recycling system, with some minor modifications to the accepted recycling list. Shredded paper and plastic bags are difficult to process with the automated sorting technology and should be removed from the commingled stream.

- **OPTION 4** – Recycling Plus: This option would include the same recycling system included in option 3, with the addition of funding for recycling related education to promote better recycling and less contamination, which will improve the quality of the end product. Education strategies would be developed with input from the community.

Some alternatives were identified as not feasible in the short-term because of the limitations of how much the City of Tacoma can control within the larger recycling industry. For example, significant structural changes to the curbside recycling system, such as using one barrel for containers (plastic, glass, and metal) and one barrel for fiber (cardboard and mixed paper) would require a broader adoption of this approach by other regional partners who use the same MRF. Another longer term solution would be promoting and/or investing in the recycling industry end-use markets to provide better outlets for recyclable material. The City’s Community and Economic Development office are looking in to ways to stimulate this kind of development in the local economy.
Community Engagement

In December 2018, the Infrastructure, Planning, and Sustainability (IPS) Subcommittee of the Tacoma City Council instructed City staff to gather information and feedback from the Tacoma community on the various options for the future of Tacoma’s recycling program. SWM and the Office of Environmental Policy and Sustainability (OEPS) collaborated on project design to create a dynamic community engagement plan, which utilized multiple tactics in gathering community feedback. Some of these tactics included partnering with the consulting firm, EnviroIssues, to conduct focus groups, presentations to community-based organizations, presentations to Neighborhood Councils, tabling at community events, a dedicated page on the City’s website with an online survey, both print and television media coverage, and a presence on the City’s social media pages.

The project has two phases with the goals of gathering feedback to help guide the Council’s decision on the future of Tacoma’s recycling program, and developing materials that educate residents on and program changes as well as how to “Recycle Right” (i.e. ensure items are accepted in Tacoma’s program and empty, clean, and dry). The first phase was devoted to gathering community input on the four options proposed by SWM by using the aforementioned tactics. The second phase of the project will use a participatory, community-based strategy to develop a strategy to educate residents on any changes adopted by Council and how to “Recycle Right.”

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
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<tbody>
<tr>
<td>January 2019</td>
<td>Focus Groups &amp; Community Engagement</td>
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<tr>
<td>February 2019</td>
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<tr>
<td>March 2019</td>
<td>City Council makes decision on any changes</td>
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<td>May 2019</td>
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<td>June 2019</td>
<td>Rollout changes via multiple media avenues (e.g. social media, door hangers, news coverage, website, radio, etc.)</td>
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Phase 1 – Community Engagement

In the first phase of the project, project staff recognized that a multifaceted approach to gathering community feedback would be necessary given the breadth of those impacted (over 53,000 customers) and the timeline. Under project staff’s direction, SWM, OEPS, Media and Communications Office (MCO), and Neighborhood and Community Services (NCS) collaborated on various tactics that maximized reach to the community. Through the use of multiple communication outlets, community partnerships, and City resources, project staff reached tens of thousands of community members across Tacoma and Pierce County.

Tacoma Recycling Changes Website Development and Survey

Initially, staff worked to develop and launch a website (www.tacomarecycles.org/changes) to assist in educating the community on the background of China’s new policy and its impact on Tacoma’s recycling program, in addition to explaining the proposed options presented by SWM. Staff developed a survey (see Appendix A) that would measure customer type (residential vs. commercial), individual’s recycling habits, perception of Tacoma’s recycling program, and feedback on which of the four proposed options that they would prefer. The survey was posted on the website in the six languages most widely spoken languages in Tacoma (English, Spanish, Korean, Khmer, Russian, and Vietnamese) to increase accessibility to the information for non-native, English speakers. Project staff worked with NCS and OEPS to electronically send out information about the website to community partners associated with Safer Streets, Hilltop Action Coalition, and other neighborhood block groups. Those groups also shared information about the website and survey on Facebook, helping project staff reach thousands of individuals across Tacoma.

The survey received 7,438 responses between the launch of the website on January 23, 2019 and the removal of the survey on March 18, 2019 (see Appendix B). Of those responses, 6,818 responses were from within Tacoma’s SWM service area (see Appendix C). In an attempt to focus input on those who would be most impacted, project staff used the 6,200 responses from single family or duplex residents that fall within SWM’s service area for data analysis (see Appendix D). The results of that analysis resulted in the chart below, which shows the percentage of total respondents that chose each option based on their council district.

![Option Preference Percentage by Council District](image_url)
In addition to the survey question regarding which option proposed by SWM the respondent would choose, there was an open question that asked, “Is there anything else you would like us to know about the proposed changes or how we could improve the City’s recycling program?” Through this question, project staff receive 2,478 comments, which were categorized into 28 different themes (see Appendices E). Many comments were categorized into multiple themes since they addressed multiple issues. The top five themes among all comments were: Education (627 comments); General Support for the Program (444 comments); Location of Satellite Stations as a Barrier to Participation (244 comments); General Comments (203 comments); Increased Cost as a Barrier to Participation (199 comments). The overall sentiment of the comments relayed a strong culture of environmentalism and desire to do the environmentally-friendly thing; however, there is widespread confusion regarding what is actually recyclable. Additionally, people view this area as an expensive place to live and see an increase in program fees and taking away the curbside bin as barriers to participating in Tacoma’s recycling program.

Focus Groups

In addition to the survey, staff worked closely with the consulting firm, EnviroIssues, to conduct three focus group sessions with the goal of examining how these proposed changes are viewed by specific demographic groups. The three groups interviewed were Tacoma residents over the age of 45, Tacoma residents under the age of 45, and Tacoma residents with a household income of less than $60,000 per year, respectively. In collaboration with project staff, EnviroIssues developed a moderator’s guide to facilitate a discussion on the participant’s current understanding of the state of recycling, recycling behaviors at home, and which of the proposed options they preferred (see Appendix F). As the chart below shows, responses of proposed option preference from the focus groups was similar to the survey results, however, the overall preference was Option 3.

Community Events

Another tactic in the community engagement strategy was to “meet people where they’re at” and have individual conversations with Tacoma SWM customers at community events (see Appendix G). Considering the City’s equity goals, the engagement strategy placed an emphasis on tabling at events that drew attendees who SWM has not traditionally reached (i.e. communities of color and...
non-native English speakers). Given these outreach focal populations, we provided the survey in multiple languages at events and collected them in the language that was most comfortable for each respondent. In addition to collecting surveys, we had the opportunity to discuss with both Tacoma SWM customers and non-customers about encouraging quality recycling over quantity, and go over what materials are accepted in Tacoma’s commingled recycling program relative to other programs in the Puget Sound region.

These conversations were informative, in that they confirmed that many people were interested in continuing to participate in Tacoma’s recycling program, but were confused by the different messages they received from different programs. We were able to educate many people on the differences in different programs, and gave materials to them that showed accepted items in Tacoma’s program, or information on how they can check if a material is accepted.

**Neighborhood Councils and City Commissions**

Another, more formalized, tactic utilized in the community engagement strategy was to speak with the City’s eight Neighborhood Councils, the Community Council, and three city-sanctioned commissions (see Appendix H). These efforts allowed project staff to utilize the established structures for input from the community on City proposals, with the caveat that the Neighborhood Councils represent a piece of the entire neighborhood or district.

The Neighborhood Councils tended to draw attendance from those that were already plugged into the City’s communications networks, and tended to represent an older population. Most attendees were already aware of the issues facing the recycling industry and that the City Council was currently considering some changes to the recycling program. The majority of attendees were vocal about wanting to see the recycling program continue, but also expressed concern that they were confused as to what was accepted in Tacoma’s program.

**Community-Based Groups**

In an attempt to branch out from the traditional outreach to the Neighborhood Councils and city-sanctioned commissions, project staff also collaborated with a few community-based groups to present the proposed changes to their supporters (see Appendix I). Four of these presentations were done in collaboration with the Korean Women’s Center (KWA) where the organization provided translation services for Vietnamese and Cambodian attendees in their native language. One project staff member, who is bilingual in English and Korean, translated the presentation for the Korean group associated with KWA.

These multilingual presentations highlighted some previously made assumptions such as, that non-native English speakers can read and/or write in their native language(s) or that immigrant communities see value in recycling. Many of the attendees at the KWA presentations were elders in their communities and did not grow up or experience the same emphasis on recycling that may be more prevalent in Tacoma. Also, many of the Cambodian elders experienced the threat of direct harm if they were known to be educated, and therefore never learned to read or write. This made taking the survey quite difficult for them, but many were still able to take it with the assistance of KWA staff. The groups at the KWA presentation, on average, were more supportive of stopping the recycling program and landfilling those materials. This is possibly due to a combination of a lack of education on the benefits of waste reduction, not previously participating in a curbside recycling
program in their home country, being on a fixed income, and therefore choosing the “least expensive” option.

Media Coverage and Social Media
Project staff worked closely with MCO to spread awareness about the proposed changes through numerous media outlets such as, print, television, radio, and social media. Project staff, MCO, and senior leadership at SWM developed a press release about the proposed changes under consideration and circulated it to media on February 8, 2019. There was immediate interest in the topic (see Appendix J), and there was exponential growth in survey responses with the release of the first article from the *Tacoma News Tribune* entitled, “Tacoma might eliminate curbside recycling, add fees to deal with tightening market.”

Project staff utilized social media to promote awareness about the proposed changes and how community members can get involved. Through creating events and posts on the Environmental Services (ES), Tacoma Sustainability (OEPS), and the City of Tacoma Facebook page, project staff was able to share upcoming meetings and how to take the survey with various local groups. There were a total of nine, unique, unpaid posts on the ES Facebook page with an average reach of 1,944 people. There were two posts that were “boosted” or paid to target specific ZIP codes where survey responses were lower than in other ZIP codes. The two boosted posts reached 39,975 people (10,576 due to the boost) and 17,432 people (11,900 due to the boost). Across all posts, there was an average engagement rate of 12.5%, which is extremely high for Facebook with a “good” engagement rate for a post usually considered to be greater than 1%. This signifies that Facebook followers were extremely interested in the subject matter of the post and chose to react (e.g. “Like”), click on links, or share the post.

The messaging on social media was a large help to redirect people to take the survey on the Tacoma Recycling Changes webpage. Over 58% of total survey respondents (4,072) heard about the survey on Facebook. Other social media websites or apps that were cited as where respondents heard about the survey were Twitter and Next Door. As established social media platforms (e.g. Facebook and Twitter) continue to grow and new platforms arise, it will be important for project staff to continue to utilize these avenues as effective means for communicating information in Phase 2 of the project.

Phase 2 – Rollout of Changes through Education and Outreach
In phase two of the project, staff worked to design an education and outreach campaign to inform the community on the adopted changes and the need to “Recycle Right.”

Planning
To ensure a thoughtful and inclusive process within the organization, project staff assembled an internal workgroup with representatives from MCO, SWM, and OEPS. This workgroup identified communication, outreach, and education opportunities based on the project staff’s plan (Appendix M). This workgroup identified a need to communicate the changes on both an internal and external level, so that staff, particularly SWM customer service staff, felt informed about the changes and how to effectively communicate them to customers.

From an external perspective, the two main goals were to inform SWM’s residential customers of the changes adopted by Council, and how to Recycle Right. While project staff was gathering input
from customers during phase one of the project, the Washington State Department of Ecology (WSDE) was simultaneously conducting research through a consulting firm on best ways to message Recycle Right while beginning to develop materials for a statewide campaign. The City’s internal workgroup agreed that it was important to coordinate as much as possible with the statewide campaign to avoid confusing customers.

Additionally, the workgroup felt it was important to test messaging and materials used around Tacoma that describe how to Recycle Right with community members. Project staff will utilize engagement opportunities to gauge interest in the development of a community member workgroup to provide feedback on external Recycle Right materials. This community member workgroup will also inform project staff on appropriate outreach and engagement tactics with identified communities.

Also, project staff will identify opportunities with current City programming that offers coordination with ongoing activities. Project staff is also working with NCS, OEPS, and SWM to coordinate education and outreach about the changes to the recycling program with activities such as, Community Cleanups, Health Homes/Health Neighborhoods, and other events that will take place through Summer 2019.

Activities
The Outreach and Engagement Logical Framework (Appendix M) identifies numerous activities that will take place to help notify and educate customers on the residential recycling program changes. Some of these activities include presentations to all groups that project staff previously presented to about the changes when soliciting feedback, outreach at events, developing and distributing information to a listserv derived from the initial survey contacts of people that want to be kept up-to-date with any changes, translating materials for accessibility, and focused canvassing in areas with high contamination rates.

Additionally, project staff will work with the internal workgroup to finalize new materials such as an updated recycling poster, rack cards/door hangers that describe the residential program changes, and policy briefs for residents who would like to know more detailed information on the changes to the program. Staff will also design and execute a media engagement plan that will seek to air the program changes adopted by the City Council via print, radio, and television media.

Lastly, in an attempt to maintain transparency and inclusivity in the process, project staff will keep the project website up-to-date with the latest information for where we are in the process of adopting new changes, and how people can get involved. Additionally, we compiled a list of frequently asked questions that seeks to answer many of the common questions project staff received in the field or internally.

Outcomes
The overall goals of the outreach and education efforts are to inform SWM customers about any changes to the residential recycling program, and encourage participants to “Recycle Right” (i.e. ensure materials are empty, clean and dry). Specifically, project staff wants to ensure communication is successfully achieved in areas with high contamination rates and areas that are not traditionally plugged in to the City of Tacoma’s communications streams. We will use multiple metrics to measure success, which are outlined by activity in Appendix M. Overall, we would like to
see a decrease in recycling contamination in the residential program, and an increase in awareness of how to obtain materials and/or information about the program.
Appendices

Appendix A – Recycling Changes Survey

City of Tacoma Recycling Changes Survey

Last year, China banned the import of most paper and plastic for recycling. Much of the material they received was considered contamination because it was too dirty or not valuable. Recycling markets around the globe are feeling the impacts of the ban and are working to adjust. The United States generates a lot of recyclable material, but the current system isn’t set up to process it all domestically. The increased cost of processing and lower market values make Tacoma’s recycling program more expensive. Tacoma’s Solid Waste Management (SWM) is exploring options to offset increased costs. SWM identified four options to offset costs and these were presented to members of the Tacoma City Council in December 2018. The Council would like feedback from recycling customers on what they think is best for the City.

Please leave us your contact information and you will be entered into a drawing for a $50 Visa gift card!

Submit your answers by March 15th for your chance to win!

1. Do you rent or own your home?
   □ Rent
   □ Own
   □ Other ________________________________

2. Do you live in...
   □ a single-family house.
   □ a duplex.
   □ a triplex.
   □ an apartment in a development.
   □ a condo.
   □ Other ________________________________

3. Do you participate in the City of Tacoma’s curbside recycling program?
   □ Yes
   □ No

4. If so, why do you recycle? (Check all that apply)
   □ It conserves space in landfills.
   □ It saves me money on my utility bill.
□ It helps other communities be less impacted by waste.
□ Other ________________________________

5. I recycle...

□ everything I can.
□ some things that I know are recyclable, but not others when I'm unsure.
□ nothing.
□ Other ________________________________

6. I think the City's recycling program...

□ generates money for the City.
□ costs the City money.
□ does not generate or lose money for the City.
□ I'm not sure

7. When I have questions about recycling, I...

□ ask a friend or family member.
□ call the Solid Waste Management information line.
□ call TacomaFIRST 311.
□ look at the City’s website.
□ None of the above
□ Other_______________________________

8. Have you seen the poster below before?
9. If so, where have you seen it? (Check all that apply)

- Home
- Work
- School
- Church/Temple/religious building
- Social Media
- Communication from the City of Tacoma
- City of Tacoma website
- Other ______________________

10. Have you seen/heard the phrase "Recycle Right"?

- Yes
- No
- Maybe

11. If so, where have you seen/heard it? (Check all that apply)

- Work
- School
- Church/Temple/religious building
- Newspaper
- Radio
- Social Media
- Other ______________________

12. Non-recyclable items in our curbside recycling bin cause problems for the City...

- none of the time.
- some of the time.
- all the time.

13. In order to continue the City of Tacoma’s curbside recycling program as is, I would pay...

- $0
- $1-$2/month
- $2-$3/month
- $3-$4/month
- $4-$5/month
- $5 or more/month
14. All of the options below are being considered by the Tacoma City Council as a way to address the problems in the recycling market. 
Note: Option 1 is a permanent rate increase and Options 2 through 4 are intended to be temporary surcharges.

Given the changes in the recycling market, the City of Tacoma is considering the options above to make adjustments to the recycling program. Which of the options below would you be most likely to support?

- Option 1
- Option 2
- Option 3
- Option 4
- None of the options

In the space below, is there anything else you would like us to know about the proposed changes or how we could improve the City's recycling program?
OPTIONAL: We would appreciate your feedback as the City determines what is best for our recycling program and our residents. If you would like to stay up-to-date about any changes in the program, then please provide us with your contact information below. Your name and email will not be used other than to update you about changes to the program.

Please leave us your contact information (First Name, Last Name, Email) and you will be entered into a drawing for a $50 Visa gift card! Submit your answers by March 15th for your chance to win!

First Name: 
_____________________________________________________________________________________

Last Name: 
_____________________________________________________________________________________

Home Address: 
_____________________________________________________________________________________

ZIP Code: ______________________

Email Address: 
_____________________________________________________________________________________

Would you like to receive email updates about changes to the recycling program?

☐ Yes
☐ No

How did you find out about this survey? (Check all that apply)

☐ Community event
☐ Neighborhood Council
☐ Facebook
☐ City of Tacoma website
☐ Word of mouth
☐ Utility bill
☐ Tacoma T.V.
☐ EnviroNews
☐ Other___________________________________
Appendix B – Map of Survey Responses (All Responses)
Appendix C – Map of Survey Responses (SWM Customers Only)
Appendix D – Map of Survey Responses (SWM Customers - Single Family and Duplex Only)
### Appendix E – Examples of Survey Comment Themes

#### Recycling Survey Theme Examples

<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of Responses</th>
<th>Comment Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td>627</td>
<td>“I know you guys are doing everything you can, but people DO NOT understand what is recyclable and what is not! I constantly am picking things out of the recycling at work and putting them in the trash. I’d love to know what the city’s recycling, waste management, and environmental opinion is on this issue: What’s the best possible option here? I’d be willing to pay a lot more to keep our recycling but I understand curbside recycling means uneducated people throw trash into their recycle bins.”</td>
</tr>
<tr>
<td><strong>General Support</strong></td>
<td>444</td>
<td>“Keep the current program please!!!”</td>
</tr>
<tr>
<td><strong>Barrier – Location</strong></td>
<td>244</td>
<td>“People are getting more and more things delivered to their houses these days and are generating a ton of large cardboard items that can be recycled but that take up a TON of space in cans (so it's not practical to put them in the trash). I have a small kid and don't have time to make weekly runs to a drop off center, and a 3-4 dollar increase seems more than reasonable to maintain the current level of service.”</td>
</tr>
<tr>
<td><strong>General Comment</strong></td>
<td>203</td>
<td>“It is irresponsible for any city to not encourage recycling and to provide the best program possible to the rate payer/customer. It is about what is right. Don’t let the bean counters win this one.”</td>
</tr>
<tr>
<td><strong>Barrier – Cost</strong></td>
<td>199</td>
<td>“We live on a fixed income and any increases in monthly bills affects us financially.”</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>191</td>
<td>“I am extremely concerned about the future of recycling in our City and across the US and what it means for landfills, social responsibility and the environment. We cannot go backwards.”</td>
</tr>
<tr>
<td><strong>Domestic Processing</strong></td>
<td>188</td>
<td>“You have preached recycling to us for YEARS, and now that most people are doing it, we are being penalized for it!! Why can’t the USA build recycling plants here rather than sending it all to China? I’m sure there are plenty of people looking for work that would be able to fill most, if not all of the positions. Keep it in the USA, save $$$. Tired of the constant rate increases for everything....power, water, sewer, recycling! Looking to buy a new home, but you can bet it will NOT be in Tacoma!”</td>
</tr>
<tr>
<td><strong>New Policy</strong></td>
<td>113</td>
<td>“If the city feels it has to charge for recycling, a program that should be self-supporting, it will need to include an option to 'opt out' of curbside recycling.”</td>
</tr>
<tr>
<td><strong>General Question</strong></td>
<td>108</td>
<td>“What are the costs of removing items put in recycling bins that are not recyclable?”</td>
</tr>
<tr>
<td><strong>Glass</strong></td>
<td>108</td>
<td>“I want more recycling even if it costs money. I would love glass recycling drop off boxes at easy to remember locations. Perhaps every public library?”</td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td>87</td>
<td>“Find or develop new uses for recycled materials, using the Tagro program as a model.”</td>
</tr>
<tr>
<td><strong>Decrease Consumption</strong></td>
<td>70</td>
<td>“Recycling is really important but I think reducing is really important also.”</td>
</tr>
<tr>
<td><strong>General Disapproval</strong></td>
<td>66</td>
<td>“Eliminate it all together..........People just cannot be trusted to follow the rules. Very madding.”</td>
</tr>
<tr>
<td>Topic</td>
<td>Score</td>
<td>Comment</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Producer Responsibility</td>
<td>61</td>
<td>“You need to hold the producers of the trash accountable, aka manufactures. If they used sustainable materials, then we wouldn’t have to worry about a recycling crisis. The burden and cost always gets pushed to the consumer and not the big business.”</td>
</tr>
<tr>
<td>Penalization</td>
<td>58</td>
<td>“Consider additional charges or fees to penalize people who recycle improperly, both for putting recyclables in the trash and non-recyclables in the recycle.”</td>
</tr>
<tr>
<td>Pro-Glass</td>
<td>52</td>
<td>“I want curbside glass and recycling with a surcharge if needed.”</td>
</tr>
<tr>
<td>Incentive</td>
<td>48</td>
<td>“I would be willing to pay more if we could get a credit for recycling right. Kind of like an incentive to recycle like the Oregon bottle and can recycling.”</td>
</tr>
<tr>
<td>Multi-Stream</td>
<td>42</td>
<td>“The city should stop comingle recycling and go back to separating recyclables.”</td>
</tr>
<tr>
<td>Barrier – Confusion</td>
<td>40</td>
<td>“It’s confusing, and I wish more things could be recycled not less.”</td>
</tr>
<tr>
<td>Transparency</td>
<td>39</td>
<td>“Be honest. Don’t sugar coat the issues.”</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>38</td>
<td>“Please let us put pizza boxes in the yard waste bin and use the green compostable bags for food waste.”</td>
</tr>
<tr>
<td>Senior</td>
<td>30</td>
<td>“I am disabled and elderly and need curbside service. I am retired so I would prefer to spend $3-$5 extra a month. Right now I fill 2 large blue cans and 2 medium green cans so it would really impact my bill to add more green cans. I figure I would need at least 3 large green cans. I am very careful to put only accepted material in recycling, but more education would be good. Thanks.”</td>
</tr>
<tr>
<td>Disability</td>
<td>29</td>
<td>“I am disabled and would not be able to bring my recycling to a satellite site. I don’t have other people who would do this for me. This is a paid service that I would continue to pay for, without curb side recycling, recycling would pile up and cause a hazard in my home or would go into regular garbage. The second of which isn’t a good option and would fill out the dump faster.”</td>
</tr>
<tr>
<td>Low Income</td>
<td>27</td>
<td>“I think it’s important as a community and city to continue recycling as much as we possibly can to eliminate as much as possible from landfills. We are willing to pay extra to continue this service including helping subsidize lower income households.”</td>
</tr>
<tr>
<td>Enforcement</td>
<td>26</td>
<td>“Enforce curbside recycling when neighbors report abuses such as putting garbage in recycling containers.”</td>
</tr>
<tr>
<td>Efficiency</td>
<td>23</td>
<td>“I would like your business to save money/time/gas by eliminating alley way pick up of garbage and recycling. Unless it’s the only option for a residential customer. Our bills could be lowered, and there would be extra money left for recycling.”</td>
</tr>
<tr>
<td>Anti-Glass</td>
<td>20</td>
<td>“I want the City to do what it thinks best for long-term sustainability of curbside recycling and agree glass should be by satellite. Fewer trucks, less gas.”</td>
</tr>
<tr>
<td>Decrease Service</td>
<td>7</td>
<td>“We don’t need monthly glass bin, it takes forever to fill up, I suggest you add a monthly, or bi-monthly, or &quot;as needed&quot; glass pickups, instead of every two weeks. Right now we are paying for glass pick up that we don’t use 2/3 of the time, so it is a rip off, to charge monthly glass bin for multifamily homes! We don’t need the pick up every two weeks, and the glass bin size is too large. At least you should get smaller and cheaper glass bins for multifamily homes or a once a month pick up or once in 2 months. It takes 1-2 months to fill up a bin of the size you provide for multifamily homes. It is really not fair!!!!!!”</td>
</tr>
</tbody>
</table>
RESEARCH OBJECTIVES

- What do people know about the current state of recycling in Tacoma?
- What do people value when it comes to recycling service?
- How do people respond to the current problem statement and proposed solutions?
- How do people respond to messaging statements?

MODERATOR’S GUIDE

I. Welcome and introduction (0:00 to 0:10)

Purpose: Create “safe space”: explain purpose of conversation, confidentiality and that discussions are confidential/anonymous, strictly for research purposes, including moderator is not an expert on subject matter and does not have a personal stake in anything discussed; video cameras and microphones present.

A. To get us started, please take a few seconds to tell me a bit about yourself. (Provide answer first then ask each to share):
   1. Your name, what you do for work/fun, and what issue affecting Tacoma you are paying most attention to.

II. Assess awareness of recycling service, (0:10 to 0:35)

Purpose: Understand existing levels of awareness of recycling issues.

A. Tacoma residents pay for garbage and recycling services through the City of Tacoma.
   1. What do you find most valuable about curbside recycling?
   2. What role do you see for the City and what role do you see for individuals to ensure that recycling is done right?
   3. Is there anything the city should be doing differently to help residents recycle?

B. Have you heard anything in the news lately related to your recycling service? Is anything new or different happening?

C. After recycling is collected at the curb, it’s sorted. What do you think happens to the recycling materials after that?

   1. What happens when materials are placed in the bin that are: dirty or not recyclable? Does this impact the recycling program?
   2. Do you know where to find information about what the City of Tacoma accepts in recycling bins? If so, where do you find it?
   3. How often do you look for information about Tacoma’s recycling program?
D. How many of you (show of hands) have heard that countries that previously accepted U.S. recyclables are placing stricter quality standards on what they will accept?

1. What caused this change?
2. Why are the standards changing?
3. Any ideas where we go from here?

III. Gathering values (0:35 to 0:55)
Purpose: Understand habits at home, motivations and perceptions of equity/access/fairness.

A. HANDOUT 1: Which of these statements applies to your household?
1. We rarely recycle at home.
2. We have separate recycling and garbage bins, but I don’t pay much attention to what goes where.
3. We have separate recycling and garbage bins. We recycle when it’s convenient and a no-brainer. When I’m not sure something can be recycled, I usually put it in the recycle bin as my best guess.
4. We have separate recycling and garbage bins and I pay a lot of attention to what gets recycled and what goes in the garbage. When there are updates to what goes where, I follow suit.

B. HANDOUT 2: Why do you recycle?
1. Cost (i.e. save money on garbage fees)
2. Convenience
3. Protecting the environment
4. Everyone else does it
5. Other: __________________

Discuss responses to Handouts 1 & 2

C. Do you think your individual efforts to recycle are making a difference?

D. I the City of Tacoma, the costs for recycling are included within your monthly garbage fee.
1. What thoughts do you have about how the City has combined the costs of recycling into your garbage bill?
2. The costs to maintain service and population growth have both contributed to rate increases. A few questions about this:
   i. Are you hearing about rate increases and where did you hear it? If not, what is the best way to get you that information?
   ii. Do you feel informed about why rate increases are happening?
   iii. Have rate increases been reasonable or unreasonable?
E. What would you think if a portion of the rate increases paid by residential customers were used to increase access to recycling throughout the city, in all neighborhoods, and for all types of residents including renter in multi-family apartment buildings?
   1. Why is this model a good idea?
   2. What are the downsides to this model?

IV. Reactions to problem statement and proposed solutions (0:55 to 1:35)

*Purpose: Assess reactions to the problem and understand how residents want to approach solving it.*

A. I’ve shared two problems with you so far: a problem with what’s going in the bins and a problem with how international markets have responded to increased contamination. Of the two, have you heard anything about what the City of Tacoma is doing?

B. **HANDOUT #3:** Take a minute and read through this short article that you might read in the local news. I will also read it out loud.
   1. Use your yellow highlighter to highlight important information as you are reading.
   2. Use your orange highlighter to highlight something that you don’t understand or need more information about.

C. What was the main message of the article/what did you highlight in yellow?

D. What were some things that were confusing or you’d need more information about?

E. What solutions did you read about in the article? We’re going to discuss the options and I’d like to get your reactions [HANDOUT #4 OR GRAPHIC OR VISUAL ON BOARD]

   1. Eliminate curbside recycling, go to satellite drop-off centers, landfill, 3% rate increase (permanent)
   2. Eliminate glass recycling, go to glass drop-off centers, temp surcharge of $2.40/month
   3. Continue curbside recycling, temp surcharge of $3.00/month to cover cost of recycling
   4. Continue curbside recycling, temp surcharge of $4.00/month to cover cost of recycling, satellite drop-off center, and increased education on recycling properly

F. **[EASEL]:** What questions do you have? (Probe if necessary):
   1. Cost of recycling surcharge, perm vs. temporary
   2. Other charges, i.e. garbage costs
   3. Satellite locations, staffing, hours, pros/cons of this model
   4. What are other cities doing? What does Pierce County do with its glass?
   5. Impacts to low-income residents
G. Are there any other ideas you have that haven’t been proposed yet?
   1. “Do nothing” solution
      i. Can the city afford this?
      ii. Would you rather maintain curbside recycling and see cuts in other departments rather than a surcharge?

H. How would you personally go about choosing between the options?

I. Mitigations for low-income residents
   1. Would you pay more to waive the surcharge for low-income households

V. Message testing (1:35 to 1:50)
   Purpose: Explore what message statements are compelling/believable.

   HANDOUT 5: I will be reading each statement aloud. After you listen to each statement, use the scale provided from 0 to 10, where a 0 means you disagree completely with the statement and 10 means you agree completely with the statement.

   1. Recycling is part of our household routine.
   2. The City’s program makes enough profit from selling our recyclables to pay for itself.
   3. I would be willing to pay a monthly surcharge ($3.00 to $4.00/month) to continue the curbside recycling.
   4. Low-income households should be exempt from additional fees or surcharges.
   5. Recycling programs around the world are having problems because of dirty materials.
   6. Recycling is an environmentally-responsible way to manage waste.
   7. When non-recyclable items are mixed in with recyclables, they create a problem for the City’s recycling program.
   8. The benefits of recycling outweigh the costs.
   9. It is my personal responsibility to recycle correctly.
   10. I understand what can be recycled and what cannot.
   11. I expect my neighbors to recycle.
   12. I feel good about myself when I recycle.
   13. Recycling is convenient for my household.
   14. For me, household recycling is difficult.

Discuss reactions, high/low ratings.

VI. Conclusion (1:50 to 2:00)
   Purpose: Explore what stands out as the most important thoughts from the discussion.
   A. We’ve talked a lot today. What’s did you enjoy most about participating in this discussion?

   B. [HANDOUT 4]: You may hear from several individuals or groups on this issue. Please use a ranking of 1 to 7, with each number used once, where 1 means you trust the person or
group the most to give fair and accurate information and 7 means you trust the person or group the least to give fair and accurate information.

a. City Council
b. City’s Environmental Services Director
c. Recycling truck drivers
d. Neighborhood leaders
e. Scientists and/or academics
f. Business leaders in recycling
g. Other influencers: _____________________

C. Any other advice for the City of Tacoma?
## Outreach at Community Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Approximate Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Waste Washington’s Fix-It-Fair</td>
<td>January 19th, 2019</td>
<td>100+</td>
</tr>
<tr>
<td>MLK Day Celebration</td>
<td>January 21, 2019</td>
<td>500+</td>
</tr>
<tr>
<td>Asia Pacific Cultural Center New Year Celebration</td>
<td>February 23, 2019</td>
<td>2500+</td>
</tr>
<tr>
<td>Zero Waste Washington’s Fix-It-Fair</td>
<td>February 23, 2019</td>
<td>100+</td>
</tr>
<tr>
<td>Lincoln International District Lunar New Year Festival</td>
<td>February 24, 2019</td>
<td>100+</td>
</tr>
<tr>
<td>South Sound Sustainability Expo</td>
<td>March 2, 2019</td>
<td>2500+</td>
</tr>
</tbody>
</table>
## Outreach to Neighborhood Councils and Commissions

<table>
<thead>
<tr>
<th>Council or Commission Name</th>
<th>Meeting Date</th>
<th>Approximate Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Tacoma Commission</td>
<td>January 24, 2019</td>
<td>7 Commissioners 10 from the public</td>
</tr>
<tr>
<td>Central Tacoma Neighborhood Council</td>
<td>February 7, 2019</td>
<td>4 Council Members 10 from the public</td>
</tr>
<tr>
<td>Eastside Neighborhood Council</td>
<td>February 19, 2019</td>
<td>15 Council Members 25 from the public</td>
</tr>
<tr>
<td>New Tacoma Neighborhood Council</td>
<td>February 20, 2019</td>
<td>5 Council Members 3 from the public</td>
</tr>
<tr>
<td>West End Neighborhood Council</td>
<td>February 20, 2019</td>
<td>10 Council Members 40 from the public</td>
</tr>
<tr>
<td>Northeast Neighborhood Council</td>
<td>February 21, 2019</td>
<td>12 Council Members 25 from the public</td>
</tr>
<tr>
<td>Commission on Immigrant and Refugee Affairs</td>
<td>February 25, 2019</td>
<td>10 Council Members 5 from the public</td>
</tr>
<tr>
<td>South End Neighborhood Council</td>
<td>February 25, 2019</td>
<td>12 Council Members 25 from the public</td>
</tr>
<tr>
<td>Community Council</td>
<td>February 28, 2019</td>
<td>15 Council Members 5 from the public</td>
</tr>
<tr>
<td>North End Neighborhood Council</td>
<td>March 4, 2019</td>
<td>15 Council Members 50 from the public</td>
</tr>
<tr>
<td>Environmental Service Commission</td>
<td>March 7, 2019</td>
<td>10 Council Members 10 from the public</td>
</tr>
<tr>
<td>South Tacoma Neighborhood Council</td>
<td>March 20, 2019</td>
<td>10 Council Members 25 from the public</td>
</tr>
</tbody>
</table>
## Appendix I – Table of Outreach to Community-Based Groups

<table>
<thead>
<tr>
<th>Community Group</th>
<th>Meeting Date</th>
<th>Approximate Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Streets Neighborhood Block Group</td>
<td>March 13, 2019</td>
<td>5</td>
</tr>
<tr>
<td>Hilltop Action Coalition</td>
<td>March 18, 2019</td>
<td>25</td>
</tr>
<tr>
<td>Korean Women’s Association – Vietnamese Group</td>
<td>March 18, 2019</td>
<td>40</td>
</tr>
<tr>
<td>Korean Women’s Association – Cambodian Group</td>
<td>March 19, 2019</td>
<td>40</td>
</tr>
<tr>
<td>Korean Women’s Association – Korean Group</td>
<td>March 20, 2019</td>
<td>75</td>
</tr>
<tr>
<td>Korean Women’s Association – International Group</td>
<td>March 21, 2019</td>
<td>30</td>
</tr>
<tr>
<td>Green Group at United Church of University Place</td>
<td>March 24, 2019</td>
<td>15</td>
</tr>
<tr>
<td>Article/Segment Title</td>
<td>Publication/T.V. Channel</td>
<td>Date Published</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Tacoma Proposes Changes to Curbside Recycling Program</td>
<td><em>South Sound Business</em></td>
<td>February 7(^{th}), 2019</td>
</tr>
<tr>
<td>Tacoma might eliminate curbside recycling, add fees to deal with tightening market</td>
<td><em>Tacoma News Tribune</em></td>
<td>February 12(^{th}), 2019</td>
</tr>
<tr>
<td>Curbside recycling pickup could go away in Tacoma, and some people aren’t happy about it.</td>
<td>KIRO 7</td>
<td>February 13(^{th}), 2019</td>
</tr>
<tr>
<td>Tacoma considers eliminating curbside recycling amid market changes</td>
<td><em>KING 5</em></td>
<td>February 13(^{th}), 2019</td>
</tr>
<tr>
<td>Washington community plans for changes to recycling program</td>
<td><em>Recycling Today</em></td>
<td>February 14(^{th}), 2019</td>
</tr>
<tr>
<td>We buy too much stuff. Changing Tacoma’s recycling program, increasing fees won’t fix that</td>
<td><em>Tacoma News Tribune</em></td>
<td>March 18(^{th}), 2019</td>
</tr>
</tbody>
</table>
Changes in China's acceptable recycled material is putting a crimp on recycling in America, including the Tacoma Recycling Center in Tacoma, Washington.

By Tony Overman

Tacoma residents soon might be charged for recycling services, even if the city does away with curbside recycling altogether.

According to a news release, city officials are considering four proposals:
Tacoma considers recycling changes, including no pickup | Tacoma News Tribune

- Limited recycling: Would eliminate curbside recycling and offer two satellite drop-off centers for an additional average rate increase of $1.33 a month to cover landfill costs for items no longer recycled.

- Partial recycling: Would eliminate curbside glass recycling but provide satellite glass boxes or recycle stations for a $2.40 monthly surcharge.

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- Maintain full curbside recycling: Comes with a $3 monthly surcharge.

- Maintain full recycling plus: Comes with increased recycling education, provides satellite glass boxes or recycle stations with a $4 monthly surcharge.

The surcharges, according to the release, “are intended to be temporary and will be re-examined as the recycling market stabilizes.”

Commercial customers would not be affected.

The changes are sought after international markets for recycling were, as the City of Tacoma put it in the news release, “disrupted,” making it more expensive to process recycling.

In 2018, China banned importing most paper and plastic for recycling by imposing strict limits on contaminated items, what it considered dirty or of low value. By August, many cities nationwide were opting for residents to toss normally recycled items in trash.

Tacoma so far has found alternative markets but needs to change its recycling program.
“Last year, China, which was the world’s largest importer of recycled material, greatly reduced its import disrupting the world’s recycling market,” said Lewis Griffith, Solid Waste Management division manager, in the release.

“We’ve been actively studying, analyzing and evaluating the impacts China’s actions would have on our local recycling programs. We had hoped that the markets would rebound faster, yet the impacts are resulting in a loss of recycling revenue and an increase in cost to the utility to get recyclables to market.”

The City Council is expected to make a decision later in March with a program roll out in June.

There's still time to offer your opinion. A survey on the proposed changes runs through March 15.

More information about the options, dates, locations and times for community outreach meetings and survey itself are online at [TacomaRecycles.org/Changes](http://TacomaRecycles.org/Changes). Participation in the survey also enters you into a drawing for a $50 Visa gift card.

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**LOCAL**

With China restricting imports, is Whatcom’s recycling still being, well, recycled?

OCTOBER 29, 2018 05:00 AM

DEBbie COCKRELL

Debbie Cockrell has been with The News Tribune since 2009. She reports on business and development, local and regional issues.

**Comments**
Appendix L – *Tacoma News Tribune*, “We buy too much stuff. Changing Tacoma’s recycling program, increasing fees won’t fix that”

3/27/2019

Tacoma residents consume too much. Recycling can’t fix that | Tacoma News Tribune

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**MATT DRISCOLL**

**We buy too much stuff. Changing Tacoma’s recycling program, increasing fees won’t fix that**

**BY MATT DRISCOLL**

MARCH 18, 2019 04:13 PM, UPDATED MARCH 18, 2019 05:38 PM

Changes in China’s acceptable recycled material is putting a crimp on recycling in America, including the Tacoma Recycling Center in Tacoma, Washington.

By Tony Overman

Tacoma’s recycling program is about to change. That much is certain.

After months of community outreach, the City Council soon will decide what to do. The potential changes range from eliminating curbside recycling entirely to a Cadillac option that

maintains and strengthens it, including additional educational efforts.

There are four options in all, each carrying an increased cost to residential customers -- from just over $1 a month to $4.

That's because, like many cities, Tacoma's recyclables are sold overseas, mainly in Asia. New, stricter policies on the quality of these recyclables, particularly in China — like hard limits on the number of peanut butter-covered jars or soiled cardboard food containers — have made the endeavor significantly more expensive.

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There are takeaways in all this, but they don't end with the need to make sure people are recycling the right things and a reminder of the country's over-reliance on foreign recycling markets.

Put simply, we've got a serious consumption problem, and the state of recycling in Tacoma — and across the country — should serve as a wake-up call.

Recycling programs, for all their value, are more like a Band Aid than a cure — and they're quickly becoming less and less feasible.

They might soon be obsolete.

For decades, these programs have had the perhaps unintended consequence of helping make Americans feel complacent or at least a lot better about all the stuff we buy and chuck into our big, blue bins.

"We are in a crisis moment in the recycling movement right now," Fiona Ma, the treasurer of California, recently told The New York Times in a large piece about cities scrapping recycling programs because of increased costs.
In some cities chronicled in the New York Times piece, recyclable material is being burned for energy or sent straight to the landfill.

Luckily, according to Preston Peck, a project specialist with Tacoma’s office of Environmental Services, things aren’t as dire in the City of Destiny.

All of our recyclables are still being recycled, Peck says, though it’s getting more and more challenging and expensive.

In 2011, Peck says, the city actually had a monthly net revenue from recycling of about $100 per ton. The program wasn’t a money-maker, but it was breaking even.

Now, it’s costing the city about $100 a ton to do the same thing, which is why changes to the program — and increased cost to consumers — are right around the corner, one way or another.

In total, Tacoma generates more than 16,000 tons of recycling every year.

“There is a strong culture of recycling and doing the environmentally right thing here, and that’s across all zip codes,” Peck said of the responses the city has received about the potential changes, which aim to get the city back to break-even status.

“That being said, people are sensitive to cost. This is an expensive place to live, and wages haven’t necessarily risen ... People want to do the right thing, and the environmentally friendly thing, but I think it’s important that we are considerate to their sensitivity to cost increase,” he continued.

Rightly so. But this ever-changing cycle of cost-versus-benefit brings us back to the obvious — we’re producing too much throw-away material, whether it’s old-school garbage or supposedly greener recyclables.
Remember this when you’re recycling: Keep it clean and dry! Clean, flatten and dry paper recycling products. Empty and rinse of food residue plastic bottles and tubes, as well as aluminum cans. When in doubt, throw it out.

By Tony Overman

For starters, shipping recyclable materials across the Pacific Ocean is inherently stupid. Even when you consider that some of this material makes its way to Asia in shipping containers that might otherwise be empty, it’s a silly proposition if the motivation is sustainability.

Developing a legitimate local, domestic option for recycling, while it won’t come overnight, has to be part of the conversation.

More importantly, the blind illusion that our insatiable consumption habit — including all the needless plastic packaging that encases so many of the products we buy — can be solved by recycling only masks the true extent of the problem.

At best, the plastic we recycle largely returns to us in the form of lesser plastic that eventually finds its way to the landfill anyway.

It helps, but it’s not a solution.

All of this is a long way of saying that, in addition to updating the city’s recycling program and doing a much better job educating people about how to recycle better, the city and its residents need to think long and hard about the future.

On a personal level, people need to be more aware of how much waste they’re producing and take steps to curb it. That means seemingly small steps like choosing products with less
packaging and ditching the plastic sandwich bags at lunch in favor of reusable containers.

More importantly, on a policy level, city leaders need to continue to find ways to pressure — or inspire — companies to do a better job if they want to do business here.

“I think the future could be kind of whatever we want it to be,” Peck says, acknowledging that getting to the root of Tacoma’s consumption habit is a priority the city is already keenly aware of.

“I think this is an opportunity to step back and think about the whole system and what we’re trying to accomplish with that system,” Peck says.

That’s good to hear, because, in the end, the goal can’t just be making our recycling program sustainable.

It has to be about making Tacoma sustainable.
## Appendix M – Outreach and Engagement Logical Framework

### Goal: Inform SWM residents of the adopted changes to the recycling program and seed stops

<table>
<thead>
<tr>
<th>Activity</th>
<th>Inputs</th>
<th>Outcomes</th>
<th>Metrics</th>
<th>Assumptions</th>
<th>Potential Partners</th>
<th>Date Range</th>
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</thead>
<tbody>
<tr>
<td>Develop informational materials.</td>
<td>(1) Envelop a FAQ section (2) Envelop an updated list of accepted materials (3) Envelop a next steps/how-to-go-involved page (4) Translates materials (3-2 business days)</td>
<td>(1) A more informed non-native English speaking community about the City’s recycling program (2) Community input on how to effectively update them about the recycling program (3) Increased involvement from non-native English speakers in the City’s recycling program</td>
<td>(1) Ensures that all residential recycling materials are in all the major languages spoken in Tacoma (2) Develops 2-3 new community champions to help spread the word in the non-native English speaking community (3) Non-native English speakers do not have regular access to information about recycling in Tacoma (4) Non-native English speakers want more information about recycling</td>
<td>Preston, Kogan, Leah</td>
<td>Media and Communications Office, Neighborhood and Community Services, SWM, Tacoma, Women’s Association, Solid Waste Management Office, Zero Waste Washington, University of Washington, International Business District</td>
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### Objective 1: Prioritize informing non-Native English speaking community

Present to non-Native English speaking communities about the adopted changes and answer questions

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<th>Activity</th>
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<th>Potential Partners</th>
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<tbody>
<tr>
<td>Update <a href="http://www.tacomacycles.org/changes">www.tacomacycles.org/changes</a> with translated versions of what changes the Council adopted</td>
<td>(1) Envelop messaging (2) Translate Materials (1-2 business days) (3) Coordinate sending out information with community partners (4) Schedule presentations in collaboration with community partners (5) Schedule translators for presentations</td>
<td>(1) Increased electronic access to information on the adopted changes (2) Strengthened partnerships with community groups</td>
<td>(1) Community groups will help to spread the message</td>
<td>Preston, Kogan, Leah</td>
<td>Media and Communications Office, Neighborhood and Community Services, SWM, Tacoma, Women’s Association, Solid Waste Management Office, Zero Waste Washington, University of Washington, International Business District</td>
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### Multilingual social media posts

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<th>Activity</th>
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<th>Potential Partners</th>
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<tbody>
<tr>
<td>Present to Non-City Community Groups</td>
<td>(1) Develop a presentation (2) Schedule presentations</td>
<td>(1) Increased communication between SWM and non-native English speaking communities (2) Increased trust between the City and the community (3) Opportunity to recruit for educational design team</td>
<td>(1) Present to at least 3 community-based groups (2) Reach at least 50 people (3) Identify at least one person from each group who is interested in being on the educational campaign design team</td>
<td>SWM will be invited to present to community-based groups (2) People will be interested and attend (3) People will be interested in joining the educational campaign design team</td>
<td>Preston</td>
<td>Neighborhood and Community Services Office, Environmental Policy and Sustainability Initiative: Coalition The Block Collective</td>
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### Present to Neighborhood Councils

<table>
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<tr>
<th>Activity</th>
<th>Inputs</th>
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<th>Potential Partners</th>
<th>Date Range</th>
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<tbody>
<tr>
<td>Envelop a presentation</td>
<td>(1) Develop a presentation (2) Schedule meetings with each Council</td>
<td>(1) Increased transparency between the City and the community (2) Increased trust between the City and the community (3) Opportunity to recruit for educational design team</td>
<td>(1) Present to all Neighborhood Councils (2) Reach at least 200 people (3) Identify 5 people from all Councils who are interested in being on the educational campaign design team</td>
<td>SWM will be invited to present to the Neighborhood Councils (2) People will be interested and attend (3) People will be interested in joining the educational campaign design team</td>
<td>Preston</td>
<td>Neighborhood and Community Services Neighborhood Councils</td>
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### Objective 2: Inform Native English speaking community groups

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<tr>
<th>Activity</th>
<th>Inputs</th>
<th>Outcomes</th>
<th>Metrics</th>
<th>Assumptions</th>
<th>Potential Partners</th>
<th>Date Range</th>
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<tbody>
<tr>
<td>Public community events</td>
<td>(1) Graphic relevant events for 2020 (2) Coordinate with team to develop schedule of clarifying all events (3) Coordinate with event organizers (4) Handout materials at event</td>
<td>(1) Increased visibility and accessibility in the community (2) Increased education on the changes to the program and what is accepted in the recycling program</td>
<td>(1) Staff can identify at least 5 events that are relevant to the goals of the recycling program (2) SWM can adequately staff the events (3) People will be interested in engaging with SWM</td>
<td>Preston</td>
<td>Neighborhood and Community Services, Media and Communications Office, Solid Waste Management Office, Environmental Policy and Sustainability Initiative, Tacoma Cultural Center, Safeway Stores of the South Sound, Zero Waste Washington, University of Washington, International Business District</td>
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<tr>
<td>Objective 1: Increase awareness and build support for recycling program</td>
<td>1. Develop stories and talking points to spread awareness about recycling program</td>
<td>1. Increased communication and transparency from the City to CRM customers</td>
<td>1,000 people on listerv</td>
<td>1. People want regular information regarding the recycling program</td>
<td>Preston and Leah</td>
<td>Media and Communications Office, Office of Environmental Policy and Sustainability</td>
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<td></td>
<td>2. Increase flow of information to people who are specifically interested in recycling issues</td>
<td>2. Increased communication and transparency from the City to CRM customers</td>
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<td>2. Those who sign up want to receive more information about what changes are happening with the program</td>
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<tr>
<td>Answer Questions from Survey</td>
<td>1. Develop responses for all questions asked in the survey/committee</td>
<td>1. Increased communication and transparency from the City to CRM customers</td>
<td>Provide answers to all appropriate survey questions</td>
<td>1. Survey respondents asked their questions to get answers</td>
<td>Preston</td>
<td>Media and Communications Office</td>
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<tr>
<td></td>
<td></td>
<td>2. Increased knowledge on recycling and available behind program changes</td>
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<td>2. Respondents were able to ask questions i their questions</td>
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<tr>
<td>Objective 2: Generate media coverage around adopted changes</td>
<td>Send out press release to print and video media sources</td>
<td>1. Establish messaging</td>
<td>1. Increased community awareness about the changes to the program</td>
<td>1. Major media will want to cover this story</td>
<td>Megan and Preston</td>
<td>Media and Communications Office, Tacoma News Tribune, Tacoma Weekly, KING 5, KOIN 6</td>
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<tr>
<td></td>
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<td>2. Draft press release</td>
<td>2. Help to define the narrative on why the changes are needed and how they will be implemented</td>
<td>2. SWM and MCO staff will have control over the messaging</td>
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<tr>
<td>Interview on Cityline</td>
<td>Schedule interview</td>
<td>1. Establish messaging</td>
<td>1. Increased community awareness about the changes to the program</td>
<td>1. Cityline reporters will want to interview someone about the changes</td>
<td>Megan and Preston</td>
<td>TV Tacoma, Media and Communications Office</td>
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<td>2. Choose spokesperson</td>
<td>2. Help to define the narrative on why the changes are needed and how they will be implemented</td>
<td>2. People will watch the video</td>
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<tr>
<td>Interview on Tacoma Reports</td>
<td>Schedule interview</td>
<td>1. Establish messaging</td>
<td>1. Increased community awareness about the changes to the program</td>
<td>1. Tacoma Reports reporters will want to interview someone about the changes</td>
<td>Megan and Preston</td>
<td>TV Tacoma, Media and Communications Office</td>
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<td>2. Choose spokesperson</td>
<td>2. Help to define the narrative on why the changes are needed and how they will be implemented</td>
<td>2. People will watch the video</td>
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<tr>
<td>Objective 1: Develop a stakeholder team to assist in designing campaign</td>
<td>Identify key stakeholders in committee</td>
<td>1. Draft a job description for committee member</td>
<td>1. Increased community participation in the design of the strategy</td>
<td>1. People will want to participate in this design</td>
<td>Preston</td>
<td>Neighborhood and Community Services, Media and Communications Office, Tacoma Action Coalition, Asia Pacific Cultural Center, Korean Women’s Center, Sustainable Tacoma Commission</td>
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<td>2. Promote opportunity to locate with a focus on equity</td>
<td>2. Increased diversity in outreach approach</td>
<td>2. There will be a diverse approach due to the make up of the stakeholder team</td>
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<td></td>
<td>Identify stakeholders</td>
<td>3. Review applications</td>
<td>3. Diverse group of stakeholders and opinions</td>
<td>3. People are willing to collaborate</td>
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<td>4. Draft email to recycling listeners with a call for applications</td>
<td>4. Increased community participation in the design of the strategy</td>
<td>4. Diverse group of stakeholders and opinions</td>
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<td>Objective 1: Develop a plan to design and implement the education and outreach plan</td>
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<td>1. Hold monthly meetings to design and develop the education and outreach plan</td>
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<td>2. Collectively develop group norms and decision-making process</td>
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<td>3. Develop workplan and timelines</td>
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<td>4. Increased community participation in the design of the strategy</td>
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<td>5. Increased efficiency in the outreach approach</td>
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<td>6. Diverse group of stakeholders and opinion leaders</td>
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<td>7. Innovative outreach and outreach plan</td>
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<td>8. People will want to participate in the design</td>
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<td>9. There will be a diverse approach due to the make-up of the stakeholder team</td>
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<td>10. People will be willing to collaborate</td>
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| Project |
| Neighborhood and Community Services Neighborhood and Community Services Office, Hilltop Action Coalition, Eastside Women’s Center, Sustainable Tacoma Commission Safe Streets |

<table>
<thead>
<tr>
<th>Objective 2: Develop a plan to promote appropriate materials to encourage people to recycle right</th>
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<tbody>
<tr>
<td>1. Collaborate with WA Department of Ecology on shared messaging and materials</td>
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<tr>
<td>2. Provide input into local municipality tool kit via survey</td>
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<tr>
<td>3. Encourage messaging across WA about how to recycle right</td>
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<tr>
<td>4. Increased awareness about how to recycle right</td>
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<tr>
<td>5. Reach number of people</td>
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<tr>
<td>6. Enhanced communication to Tacoma residents about recycling</td>
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<td>7. The materials will be relevant for Tacoma</td>
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<tr>
<td>8. People will change recycling habits based on this messaging</td>
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| Project |
| Regional Ecology (Bill King’s) Media and Communications Office, Neighborhood and Community Services Hilltop Action Coalition, Eastside Women’s Center Sustainable Tacoma Commission Safe Streets |

<table>
<thead>
<tr>
<th>Objective 3: Develop materials that explain Tacoma’s changes</th>
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<tbody>
<tr>
<td>1. Collectively with city partners to share materials, timing, and messaging</td>
</tr>
<tr>
<td>2. Coordinate with MUD to distribute materials through City’s channels</td>
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<tr>
<td>3. Coordinate with community partners, stakeholders, and other community based organizations to distribute materials</td>
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<tr>
<td>4. Consistent messaging across WA about how to recycle right</td>
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<tr>
<td>5. Increased awareness about how to recycle right</td>
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<tr>
<td>6. Reach number of people</td>
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| Project |
| Department of Ecology will share materials with us in a timely manner |
| The materials will be relevant for Tacoma |
| People will change recycling habits based on this messaging |

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<thead>
<tr>
<th>Objective 4: Develop materials that explain Tacoma’s changes</th>
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<tbody>
<tr>
<td>1. Develop new materials</td>
</tr>
<tr>
<td>2. Increased communication to Tacoma residents about recycling</td>
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<tr>
<td>3. Increased awareness about how to recycle right</td>
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<tr>
<td>4. Reach number of people</td>
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| Project |
| Healthy Homes, Healthy Neighborhoods Neighborhood and Community Services, Hilltop Action Coalition, Eastside Women’s Center Sustainable Tacoma Commission Safe Streets |