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BOSTON ZERO WASTE PLAN

*Task 7 : Case Studies on Zero Waste
Outreach and Communication:*

*San Francisco, CA
Seattle, WA
Austin, TX
Cambridge, MA*



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THE CENTER FOR ECOTECHNOLOGY

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I. Overview: Boston's Key Challenges and Assets

As Boston embarks on an ambitious path towards Zero Waste it must grapple with some key challenges in getting residents, businesses, and workers on board. The City has a diverse population representing numerous languages, cultures, and household types. The City also must consider a variety of housing types, business types, and large institutions. In the residential sector, the City has a high proportion of renters and students. According to research, young people and short-term residents are less likely than homeowners, long-term residents, and older individuals to recycle or participate in other waste diversion programs.¹ Students also tend to move every year and contribute a high volume of bulky items to the waste stream with every relocation.

The demographic challenges in Boston are paired with a history of a hands-off approach to the commercial sector and limited outreach and communication to waste generators in commercial, industrial, and residential sectors.

Boston has better resources for communication now than it ever has. For example, the Greenovate team uses email and social media to keep many interested Boston residents informed about environmental issues, programs, and events in the city. But a look at how peer cities handle communication suggests that these resources may still need enhancement to build a Zero Waste culture in Boston. Luckily, there are many tools to make this communication possible, including social media and apps, alongside community-based social marketing (CBSM), print media, traditional public service announcements (PSAs) and face-to-face communication. In this project, the City's population of students—creative, networked, and smart—could prove to be an asset!

Boston also has an additional crucial asset as it embarks on Zero Waste: buy-in from critical stakeholders across City government and from the broader community. Every indication is that a growing number of residents, businesses, and institutions are ready to do what is necessary to reduce reliance on incinerators and landfills.

This report shows how four cities—San Francisco, Seattle, Austin, and Cambridge— approach Zero Waste communication and outreach to change the culture of wasting in their communities. Boston's Zero Waste Advisory Committee provided input into topics of inquiry for these case studies.

¹Jean-Daniel M. Saphores and Hilary Nixon, "How Effective Are Current Household Recycling Policies? Results from a National Survey of U.S. Households," *Resources, Conservation and Recycling* 92 (November 2014): 1–10; Hilary Nixon and Jean-Daniel M. Saphores, "Information and the Decision to Recycle: Results from a Survey of US Households," *Journal of Environmental Planning and Management* 52, no. 2 (2009): 257–77; Daniel Scott, "Equal Opportunity, Unequal Results: Determinants of Household Recycling Intensity," *Environment and Behavior* 31, no. 2 (March 1, 1999): 267–90.

II. General Approach to Outreach and Communication

Among the cities most well-known for successful Zero Waste programs, there is a core recognition that the goal is long-term culture and behavior change around consumption and waste generation. The Zero Waste consultant team spoke with officials from Austin, Seattle, and San Francisco; they all view communication and outreach across sectors as a central strategy for making those changes. The three cities all devote **substantial staffing resources** to comprehensive outreach and communication activities. This allows them to develop **creative, targeted, and effective** messaging that meets people where they are and brings them along on the Zero Waste journey.

Austin

The city of Austin views Zero Waste as a behavior change challenge for individuals, households, and businesses. Behavior change is about persuasion. Austin Resource Recovery (ARR) therefore devotes considerable resources to experimenting with communication, education, and outreach to persuade Austinites to recycle, compost, and consider what they buy (consumption).

ARR employs 11 staff for residential outreach and education, 12 staff for business outreach, and 7 staff for media, advertisements, and brochure development (including video, print, press releases, and social media). All graphic and artwork is done in-house, but Austin also regularly contracts with consultants to supplement staff, and manage outreach campaigns. The city maintains a \$2 million budget for residential outreach and a \$3 million annual budget for business outreach, which covers staff, consultants, media buys, ads, and other associated expenses.

These resources have allowed the city to pioneer many creative outreach techniques in the residential and commercial sectors. The city utilizes a full palette of communication strategies including a robust social media presence, direct mailings, public school curricula, and outreach through a neighborhood block leader program. The city also partners with non-profit and community organizations to reach broader audiences. For instance, the it has partnered with a local affiliate of Keep America Beautiful to develop recycling curricula for public schools.

One especially innovative communication experiment in Austin was a reality TV program called “Dare to go Zero,” which is available on the city of Austin’s website (<http://www.austintexas.gov/daretogozero>). Over the six-episode series, Austin families competed to see who could reduce their household waste the most. The program showcased the creative solutions of real Austin families to all manner of household waste from leftover soap cakes to empty propane tanks.

Another creative endeavor was an electronic “Town Hall Meeting” that ARR ran with the support of Austin’s IT staff. The “meeting” included webinar and call-in streams and was designed to gather citizen input into how to prioritize new programs. Specifically, ARR wanted

know which to do first: move from every-other-week to weekly recycling collection or implement food waste collection. The meeting was structured to include interactive polling. The more than 1,000 Austin citizens that participated voted for food waste collection.

In addition to novel media production and feedback techniques, the city has also experimented with neighborhood and block competitions to encourage waste reduction and diversion at the household level. Recently, the City did a council district competition, measuring recycling setouts and volume collected in each of the 11 council districts. The councilperson for each district was the champion and coach. The competition ran from America Recycles Day (Nov 15) to Earth Day (April 22). The winning district received a local community enhancement project with recycled content benches and new park landscaping from made from composted material.

Seattle

Seattle's solid waste department has 6 full-time staff who focus on communications and outreach to residents, property managers, and the commercial sector. The city also relies on interns, consultants, and a host of "community liaisons" to maintain a steady stream of information and communication between the city and waste generators. Fundamentally, Seattle approaches communication as a key component of *sustained behavior change*. As a result, they maintain high levels of communication even about programs that have been running for years. As Becca Fong, the city's lead on communication in the residential sector puts it: "we've been recycling for 30 years, and we still talk to people about recycling all the time!" This approach ensures that residents and businesses build and maintain new behaviors, learn continuously about Seattle's progress towards its Zero Waste goal, and that newcomers have ample opportunities to learn about the city's programs.

Seattle does at least one direct mailing to single-family residences, multi-family residences, and businesses every year. The city also includes information in solid waste bills. This ensures that every household and business is reached at least once. In addition, the city uses social media and a variety of direct, person-to-person outreach techniques. For example, city staff work with property managers of large residential complexes to solve problems and train residents. City staff set up tables in building lobbies or work with building managers to create targeted plans to manage discarded furniture in high-turnover buildings.

When Seattle rolls out new programs, it ramps up communications by bringing in consultants, and investing in mainstream media outreach. The city views this communication to be essential, but it also works to develop consistent services and infrastructure so that people can practice that same behavior no matter where they are. Bins, signage, and colors have to be consistent and available everywhere so that new behaviors like composting can become second nature. You shouldn't have to think about what bin to throw something in—it should become instinctive!



Example of an image tweeted out by Seattle Public Utilities; this poster is not affiliated with any new programming, but is just a reminder for residents.

San Francisco

San Francisco has built a robust education and communication effort. The backbone of the city's communication program is face-to-face engagement with residents, landlords, property managers, and business owners. The city has found this direct, in-person contact to be the most effective strategy to provide information, build trust, and change behavior.

This is a lot of work. In total, San Francisco has 24 full-time staff devoted to outreach, which includes a grassroots team that does the face-to-face outreach to businesses and residents, a school education team, and an outreach team focused on broader messaging. This staff is responsible for education around several environmental issues, but they are funded through the city's solid waste rates, and the bulk of their work relates to Zero Waste and toxics reduction. Aside from the full-time outreach staff, almost half of the Department of Environment's 100-110 staff members are involved in some form of outreach, communications, or marketing—including web design, graphic design, social media, press, CBSM, community partnerships and engagement, in-school and community based education, etc.

The city also works closely with their franchised hauler, Recology on messaging and rollout, although the city and hauler have separate materials.

Outreach activities include marketing, advertising, social media, and grassroots campaigns. The grassroots efforts, which is how the city describes face-to-face communication with stakeholders, is the largest component of the outreach program. A team of 11 people spend most of their time on the ground going to events, knocking on doors, and meeting with property and business owners. City employees identify businesses that are struggling to recycle

and work with them one-on-one to resolve barriers to compliance. City outreach staff also routinely make cold calls and visits to businesses throughout the city to offer assistance and answer questions. In general, the city makes an effort to build relationships with individuals, organizations, and neighborhoods across the city and across sectors so that problem-solving becomes easier and so that everyone becomes a part of solving the problem of wasting.

As Cara Gurney, head of the city's outreach team explains it, the more staff show up places, the more they are invited. When they are invited, they have the biggest impact. So city staff constantly show up at community events, libraries, meetings, and businesses to build trust and relationships so that they are then invited to attend more events in the future.

The grassroots team also does outreach to families and homeowners, and tends to make door-to-door house calls in the evening. But not all residents are easily reachable in person. Short-term residents and younger residents are easier to reach "through their phones"—i.e. through social media and digital marketing campaigns, and so the city invests considerable resources into these types of outreach.

Because San Francisco, like Boston, is diverse, the city does all print and digital marketing in at least three languages. They will also design unique campaigns for specific neighborhoods, and design materials that rely on images rather than text. For instance, during a recent expansion of the recycling program, the city designed a campaign specifically for Chinatown. Materials were designed by a Chinatown-based marketing company, and were exclusively in Chinese with no English translations.

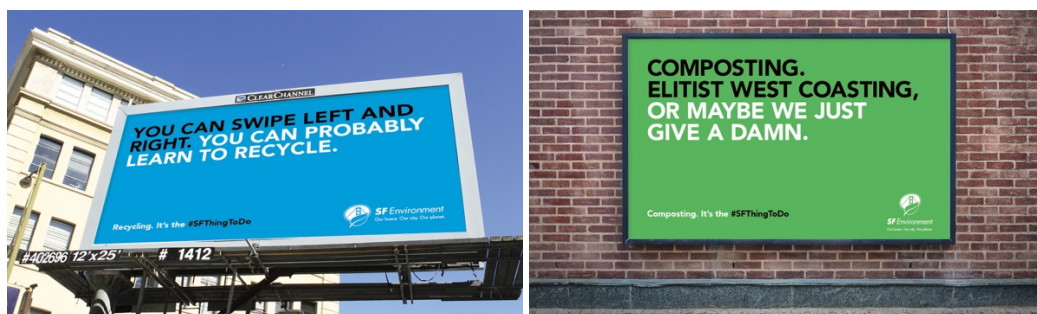


Tri-lingual and image-based recycling and composting poster.

For the most part, San Francisco designs print and social media campaigns to educate people about what to put in which bin. They take a creative approach that is tailored to specific groups and neighborhoods. Like Seattle, the city constantly communicates about recycling and composting programs, even though the programs have been operational for many years. As

Gurney explains it, city outreach staff are always asking, “what are their whys?” Gurney’s team spends a lot of time getting to know different individuals, groups and business, and trying to understand what might motivate them to recycle and compost.

For some groups, like seniors, the city has found that they need a lot of information. If they understand the system, they do the right thing. Millennials need different kinds of motivation and explanations, and respond better to humorous campaigns. One recent campaign involved advertisements that threatened: “Recycle, or we’re adding more hills.” Below are some additional examples.



San Francisco tends to avoid billboards, as they haven’t found them to be the most effective form of communication, but these images from a recent campaign show a particular tone and approach targeting younger city residents.

The city also designs occasional campaigns that are intended to raise larger issues and shift thinking towards a Zero Waste mindset. A recent campaign in this vein was designed to encourage millennials and tech workers to compost. But rather than take an educational approach, the city instead focused on core values.

Understanding that these groups appreciate good food, the campaign was called “real foodies.” The campaign was intended to transform the image of composting from something icky into something integral to the creation of beautiful, whole food. The campaign included social media with attractive

photographs of fresh vegetables atop piles of rich, dark dirt, and scrolling text reading: “real foodies compost. Real foodies use the green bin.”



Image from the “Real Foodies Compost” campaign.

The “real foodies compost” campaign provides information about how to properly dispose of different materials, but it also seeks to change the culture around consumption and wasting of food.

San Francisco treats communication as a central part of its Zero Waste programming. It uses outreach to maintain participation in long-standing programs, and to garner attention for programmatic changes. It uses humor and community-specific messaging to reach the broadest possible range of waste generators, and invests heavily in building relationships through face-to-face communication with individuals across sectors.

III. Managing Communication about New Programs

Residential Organics Collection in Cambridge, MA

In 2014 Cambridge launched a small, opt-in curbside organics collection pilot in one small section of one neighborhood. After a brief testing period, the city expanded to the entire collection area, providing curbside organics containers and pick-up once per week. In April of 2018, Cambridge expanded the program city-wide.

To ramp up for the expansion, Cambridge used a number of techniques. First, the city mailed a post-card to every eligible household, which included every residential unit in buildings with 12 or fewer units. This ensured that every household was reached at least once. In addition, for a month leading up to the roll-out, a notification was posted on Cambridge's homepage, and Public Works posted broadly, and frequently across social media platforms.



Notice posted across the City of Cambridge's website leading up to the city-wide roll-out of curbside composting.

In addition to household mailings and digital marketing, the city made an effort to get the word out in public spaces and on city streets. Cambridge purchased ads on Blue Bikes, and used donated ad space on bus shelters to inform residents about the program. They worked with MassRecycle to put ads on recycling bins in subway stations. Local businesses hung posters about the program prominently in shop windows around the city. These ads had the effect of

bringing the program out into the open, and also provided another opportunity to reach people who might have missed the mailing, or who don't follow social media.

Recognizing that messaging needs to be paired with convenient and reliable service, Cambridge also distributed kitchen collection bins to every eligible household in the city. Because organics separation requires new behaviors in the home, distributing the kitchen bins is a way to help individual and families create new habits. Public Works has also been working with retailers to ensure that the biodegradable bags for the kitchen bins are widely available, and is even considering distributing the bags, at cost, themselves. The goal with bins and bags is to remove potential barriers to participation, and to provide a visible reminder to participate.

When the program launched city-wide it garnered about the same amount of participation as the initial pilot, suggesting that the communication was effective. Though there is still a way to go before the city captures all, or even most of the organic stream, public works officials feel confident that the program will grow naturally as people see their neighbors participating and get used to the new program.

Cambridge, like Boston, struggles with communication to students and short-term tenants. One thing the city will do to address the challenge of high turnover will be to make kitchen bins available every September to new city residents, or residents who have relocated.

It should be noted that Cambridge has promoted this program as a composting program, yet the organics materials are not composted. Rather, they are mixed with sludge and anaerobically digested, with energy captured and the digestate dried and used as fertilizer. Cambridge most likely used the "compost" language because it was familiar to residents and easy to understand. However, some residents have raised concerns with the city because their food scraps are not in fact composted. It is unknown whether this impacts participation, but it illustrates the importance of being clear with residents in any marketing. Austin's case highlights a similar conclusion, below.

Piloting New Programs in Austin

Austin tests every new program with a pilot, and uses the pilot to test different educational techniques. When the City is ready to expand the pilot city-wide, the City outreach staff has selected the educational techniques that were most successful in the pilot.

For example, when Austin test-piloted mattress collection, they learned that there was a misconception: residents thought the City would reuse the mattresses. Because residents were resistant to the idea of mattress reuse, they were not participating in the program. Instead, the City contracted with Goodwill Industries to disassemble the mattresses and box springs, and recycle the components. After discovering the public misconception, the city designed educational materials that outlined the end use of the mattress components. This new material eased public concern and helped to ramp up participation in the program.

When Austin piloted residential food scrap collection, they tested a various means of communicating what is organic and compostable, and could be included in the curbside bin. The city learned that bin lid labels needed to include pictorials. They also learned that face-to-face communication, which the city did through door knocking, was crucial.

IV. Enforcement

San Francisco and Seattle have well-developed enforcement programs to accompany convenient service and robust outreach and education programs. Interestingly though, neither city relies heavily on enforcement (with the exception of large commercial generators). Enforcement is costly and complex. So, instead, both cities have developed multi-step programs to inform residents and businesses when they make mistakes or are out of compliance, making every effort to help waste generators across sectors to do the right thing before levying fines or fees.

Seattle

The most recent program that Seattle rolled out was the curbside collection of organics in 2011. The city then banned organics from the trash in 2015. As part of the ban, the city is empowered to levy fines on households, properties, or businesses that continue to discard compostable organic waste.

There was an immediate bump in organics collection after the ban went into effect. But participation leveled out. Although the city is not capturing nearly all organics, it has not yet used fines in the residential sector. It is complicated and expensive to establish a procedure for collecting fines at the household scale, and the city maintains that most people will comply if they understand the rules and have the services available.

So instead, the city has focused on understanding where and why compliance isn't happening. They conduct regular surveys of households and businesses, and pay close attention to the areas where violations tend to occur. They use this information to structure outreach and communication.

In a few instances, the city has fined multi-family properties and businesses; at that scale the fines seem to be more effective. Because the volumes are large, the fines are large, and they work to get the attention of property or business owners. Once the property or business managers are paying attention, the city's staff works closely with them to figure out how to make composting happen.

San Francisco

San Francisco places most emphasis on education, and, like Seattle, does some enforcement for businesses and residences with over five units.

The city has recently adopted a new enforcement process. Inspections are conducted by the city's hauler, Recology, during collection. If a violation is spotted, Recology drivers will first tag the bin and provide some info about what went wrong and how to correct the problem. If the violation continues, there will then be a firm letter with an explanation of the violation. This will be followed by a warning, then a formal notice, and then a charge. Charges are executed through the solid waste bill, so it is technically a fee to pay for liquidated damages incurred by the City and Recology rather than a fine. The idea behind this process is to provide businesses and residents with multiple opportunities to learn processes and correct practices before applying the stick of an extra fee.

The tags, letters, and fees are all processed by Recology. The warning, notice, and fee come from the city, but are still processed by the contractor since they have an automatic process established that would be difficult and expensive for the city to replicate.

At the moment the city does not do enforcement for small residences with up to five units. For this sector, the city instead focuses on communication and education.

Austin

Unlike Seattle and San Francisco, the Austin City Council has not, to date, authorized direct enforcement actions for non-compliance to the Universal Recycling Ordinance. Therefore, the City staff use a variety of different tactics to gain voluntary compliance. The City MRF contractor will notify staff of highly contaminated loads of recyclables by truck number. City staff then inspect that particular route to narrow the problem to a small neighborhood, and follows up with door-to-door Recycle Right campaign. City staff also attend neighborhood block parties where contamination is identified to offer additional outreach to the residents.

To increase recycling participation, staff offer a variety of competitions, including a council supported district competition as well as web posting of neighborhood set-out rates.

V. Conclusion

Leading Zero Waste cities view communication and outreach as essential components in cultivating new cultures of consumption and wasting. They recognize that service provision alone cannot move a city to Zero Waste, and therefore expend considerable resources—in terms of budget, staff time, capacity, and expertise—on nurturing relationships with residents, businesses, and community leaders, developing marketing messages for every constituency, and engaging constantly with stakeholders about materials management programs new and old.