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Improving Local Recycling Policy and Incentivizing Compliance

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LITTER

FRAMING THE ISSUE

Many cities around the country have been impacted by record amounts of refuse and increased levels of illegal dumping. This brief offers best practices, examples, and recommendations for cities working to (1) *increase curbside recycling compliance and decrease contamination*, (2) *discourage illegal dumping*, (3) *find solutions for recycling glass*.

Curbside: Increasing Recycling Compliance, Decreasing Contamination

APPROACH: PUBLIC EDUCATION AND OUTREACH

El Paso, Texas – In 2020, the city of El Paso launched an [“opt-in” recycling program](#). In Phase 1 of this program El Paso Environmental Services (EPES) targeted new renters and homeowners. When new El Paso residents (or current El Paso residents relocating within the city) called the city to set up waste management services for their new residence, EPES informed them of the “opt-in” recycling program, included in the cost of waste management services. This registration service was also made available online. To qualify for this service, residents register for a [recycling education course](#) (virtual classes and bi-weekly in-person courses offered in English and Spanish) and pass a learning assessment. After passing the recycling education course, participating residents are given a recycling education certificate and a blue-lidded cart to be used for bi-weekly recycling collection. EPES enters participating residents’ residential information and date of recycling course completion into a database to be used for Phase 2 of the “opt-in” recycling program, detailed in the following section. The “opt-in” recycling program has resulted in a 29% decrease in curbside recycling contamination. In their upcoming Phase 3, EPES plans to broaden their initiative by targeting long-term residents in addition to new El Paso residents.

Dartmouth, Massachusetts – In 2017, Dartmouth launched an initiative to lower curbside recycling contamination. Like El Paso, Dartmouth’s initiative focuses on both public education/outreach and recycling cart tagging. Dartmouth spent 4-7 weeks preparing outreach materials to score and tag recycling carts, during which time they communicated their plans to the MRF, identified and trained cart checkers, and finalized their enforcement protocols. Outreach materials included postcards, cart tags, and cart/cart decals to convey basic knowledge about which materials are acceptable for recycling and which are not, informative town vehicle magnets, A-frame posters, and two full-page ads in local newspapers. The four “core tools” used for outreach included (1) general information postcard, (2) targeted issue postcard, (3) oops cart tags, and (4) thank you cart tags. Materials were available in English and Portuguese. Examples of these materials, as well as a detailed report of the steps and stages of the initiative are available in the index.

Note: We recognize that this approach may reduce contamination and help cities meet contamination goals but does not address goals around equity and inclusivity. If implementing opt-in recycling initiatives, cities may wish to take into consideration ways to include those who do not have the ability to attend in-person classes and/or do not have internet access to attend a virtual class.

Grand Rapids, Michigan – The City is launching a new effort to reduce contamination, the Feet on the Street campaign, which will combine cart tagging with direct consumer education. Grand Rapids is supporting the program with a matching grant of \$15,000. The program kicks off with a postcard to residents reminding them of what materials are appropriate in recycling bins and notifying them that community observers will be coming to their neighborhood; those observers will physically inspect residents' carts and provide personalized feedback on recycling practices observed. The effort is a collaboration with The Recycling Partnership, which has implemented this model in 70 communities nationwide, resulting in reductions in recycling contamination.

Other Resources for a Public Education and Outreach Approach:

- The Recycling Partnership's anti-contamination toolkit and campaign builder
 - [Curbside anti-contamination kit](#)
 - [Drop-off anti-contamination kit](#)
- Free graphics signage for carts and carts: <https://recyclingpartnership.org/diysigns/>
- [Public messages about recycling issues to increase awareness of issues](#)
- [Messages about how to recycle correctly, including an infographic sent out frequently in mail and across social media](#)

APPROACH: CART TAGGING PROGRAM

El Paso, Texas – In Phase 2 of the [“opt-in” recycling program](#), employees of EPES checked and tagged (as necessary) every residence in the “opt-in” database. To reinforce recycling compliance as outlined in the recycling education course, EPES checked inside recycling carts on collection days and left a tag on the cart if its contents were not in compliance with recycling standards. Phase 2 is ongoing, but combined efforts to date have so far resulted in a 29% decrease in contamination (as referenced above with respect to Phase 1 of the program).

Dartmouth, Massachusetts – After the dispersion of educational and outreach materials (English and Portuguese versions), Dartmouth conducted a contamination check for every recycling cart along their collection routes every week for eight weeks (this was completed in two phases over 16 weeks). Dartmouth maintained a strict threshold for rejection. If recycling carts contained three or more plastic bags, the cart was rejected. After each check, the cart was given either a “thank you” tag or an “oops” tag. Dartmouth reported that having cart checkers physically present in neighborhoods gave residents the opportunity to communicate directly with cart checkers, who explained

to residents why certain items should not be put in recycling carts/ carts. Discussions of recycling outreach and the cart tagging concerns on social media platforms also helped to bring attention to the initiative. Over the eight-week tagging periods, cart tagging decreased by 48%. See Appendix for examples of cart checking maps, cart score cards, a breakdown of program cost, and other details.

Phoenix, Arizona – The city of Phoenix partnered with the Recycling Partnership to implement a cart tagging program that, like Dartmouth, emphasizes positive and negative feedback for curbside recycling practices. In their six-week program, recycling bins were assessed for contamination. Bins in compliance received a “shine on” tag to highlight proper recycling practices. Bins that were not in compliance received an “oops” tag with an infographic representation of which materials that were but should not have been included in the bin. At the beginning of their six-week program, 70% percent of households received “oops” tags and 30% received “shine on” tags. By the end of the program, these numbers were reversed, with 70% of households receiving “shine on” tags and 30% receiving “oops” tags.

Other resources for Cart Tagging Programs: Recycling carts and bins with lids generally experience lower levels of contamination. If your city does not have bins with lids, apply for a grant to help cover the costs of transitioning bins to carts here: <https://recyclingpartnership.org/recycling-cart-grant/>

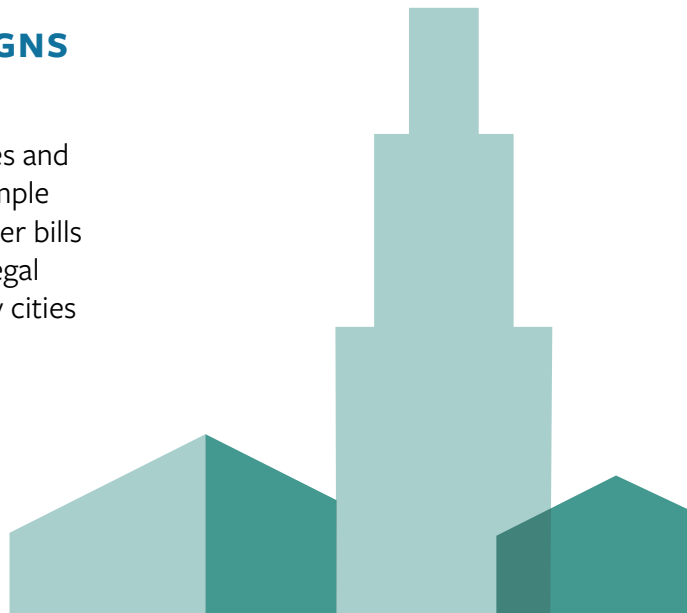
Discouraging Illegal Dumping

APPROACH: COMMUNITY DROP-OFF SITES

El Paso, Texas – El Paso residents (No commercial business/contractors) can take trash, household hazardous waste, and bulky items to one of five public drop-off locations, known as [Citizen Collection Stations](#), within the city. Trash is collected at the Citizen Collection Stations and then taken to the Greater El Paso Landfill for disposal. The Citizen Collection Stations also function as additional drop-off sites for recyclables, to complement the city’s curbside recycling program. There are no additional fees for this service to residents who pay for city utilities, requiring only that residents present a water utility bill from the past three months at the time of drop off.

APPROACH: COMPREHENSIVE CITY CAMPAIGNS AGAINST ILLEGAL DUMPING

We recognize that some cities already have recycling drop off sites and convenience centers for trash drop off for a fee. The El Paso example above includes this service free to residents of the city (using water bills to prove residency). This type of model may help cities reduce illegal dumping by residents. Below are some recent efforts launched by cities to reduce illegal dumping:



- *City of Oakland, CA:* [PROUD](#) (Prevent & Report Our Unlawful Dumping) campaign is a partnership between the city and neighborhood organizations and includes a student Ambassador program, a new Environmental Enforcement Officers Unit to reach out to suspected dumpers, and an expansion of the city's cleanup crews to address the issue.
- A number of cities, including El Paso (TX), Birmingham (AL), San Jose (CA) and Dallas (TX) have established or increased fines and launched public information campaigns to reduce illegal dumping. The public information campaigns focus on providing ways for the public to more easily report illegal dumping along with a clear message from the city that it is prioritizing the issue. These efforts can be bolstered by tech – installing lights and/or cameras at strategic sites. These approaches counter a frequent prevailing attitude/belief among residents that the city does not take illegal dumping enforcement seriously.

APPROACH: RECYCLING IN PARKS

Phoenix, Arizona – Phoenix offers [Eco-Stations](#) for recycling in parks and other public spaces. Eco-stations are huge roll-off bins, strategically placed in city-owned parks and near clusters of multi-family housing complexes. Phoenix residents and businesses are encouraged to use the eco-stations to place their recyclables at any time. This approach increases recycling access in parks while potentially reducing illegal dumping.

Dealing with Glass

El Paso, Texas – El Paso's recycling system does not handle glass in their single-stream. As an alternative to glass recycling, EPES accepts glass at their community drop off centers from any El Paso resident who can provide (1) proof of address and (2) proof that they pay utility bills to the city. The glass collected at these centers is crushed and tumbled and made available to any utility paying resident for use in home improvement projects, landscaping, etc.

The power of local partnerships – Many cities across the US are eliminating glass from their curbside recycling programs. In [Pennsylvania](#), a number of municipalities facing this dilemma have collaborated with a local non-profit to sponsor pop up glass collection sites that will collect and ship glass to a glass mill. Another option comes from [Silver City](#) which has purchased its own commercial grade glass pulverizer. The town uses this to process glass on-site into two different grades of sand to be used in Public Works projects.

Other considerations

Increasing revenue to cover costs and expand services - We reviewed curbside collection fees for several cities and listed them below:

- Phoenix \$26.80/month
- El Paso \$19/month plus tax
- Tucson \$15-16.75 depending on container size
- Austin \$24.95/month
- San Antonio \$16.50-\$49.26 depending on container size

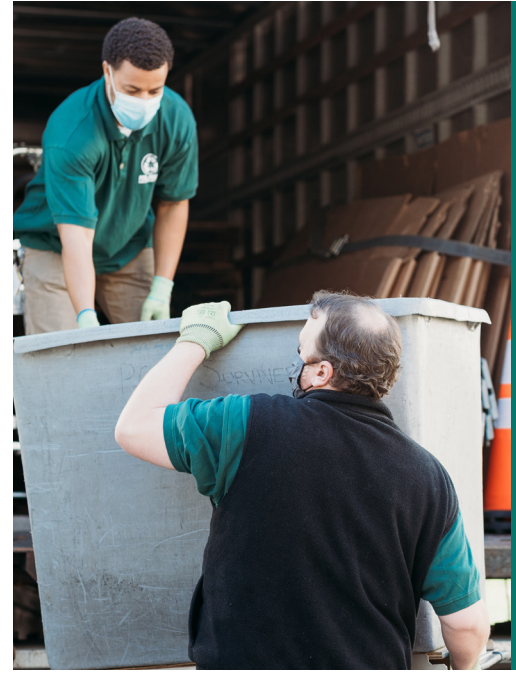
Increasing the fee for curbside pickup seems like a viable option for cities and enables the ability to pursue additional innovative ideas and/or fund compliance efforts.

Behavioral science approaches - MIP worked with the city of Wisconsin Rapids, WI to run an experiment to see if providing messages from the trash contractor – instead of from “the city” – would increase recycling compliance. The city tagged recycling carts in a “study” neighborhood with messages signed by and written from the point of view of Gerry, the waste management specialist who collects refuse in the city.

While the experiment showed no statistically significant decrease in contamination, we suspect this is due from the small size of the study and the study period of just 3 months – there is evidence from the field of behavioral science that such an intervention could help increase compliance.

The circular economy – Glass in particular is a nearly infinitely recyclable material and can be used in a number of building and construction materials. There are many examples of cities working collaboratively with local business to create local markets for glass recycling – for example with local building and construction companies, or with local breweries and distilleries. Boulder’s circular economy plan, [available here](#), details how the city will decrease waste through implementing circular business models.

Consider pricing cues that align with your goals - The city of Phoenix services all single-family households for waste and recycling, while apartments and multi-family buildings are serviced by Waste Management and do not receive recycling services. To provide an affordable and convenient means to provide recycling options to residents in multi-family buildings, Phoenix located one of their free recycling drop off [Eco-Stations](#) in each council district of Phoenix and disseminated educational information about use of Eco-Stations to apartments and multi-family buildings across Phoenix. More broadly speaking, cities could consider restructuring prices for bulk garbage and recycling to prioritize recycling by charging more for garbage or determining rates based on garbage volume. The city of San Francisco has had a Mandatory Recycling and Composting Ordinance in effect since 2009. They charge residents a flat fee for all services based on the cost of their refuse cart size – if residents can reduce their refuse by recycling and composting more, they can request a smaller refuse cart to reduce their cost.



This brief is part of a series of publications MIP has released that was originally researched and compiled as a technical assistance memo to a participating member city. This memo was written in 2020 in response to a specific research question submitted by that member city. To make this publicly available, we've removed references to the original request and any location-specific recommendations. MIP members are invited to please reach out to us at knspear@mayorsinnovation.org to request their own policy memo on this or other topics.

For context, the original research question that prompted this memo was: How can the City increase curbside recycling compliance and decrease contamination, discourage illegal dumping, and find solutions for recycling glass?

About Mayors Innovation Project

The Mayors Innovation Project is a learning network among American mayors committed to “high road” policy and governance: shared prosperity, environmental sustainability, and efficient democratic government. We are a project of High Road Strategy Center.



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