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*****PRESS RELEASE*****

SAN FRANCISCO PUBLIC WORKS MOVES FORWARD WITH THE "SLIM SILHOUETTE" DESIGN FOR NEXT GENERATION OF THE CITY'S PUBLIC TRASH CAN TO HELP KEEP NEIGHBORHOODS CLEAN

FOR IMMEDIATE RELEASE:
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For images of Slim Silhouette: https://www.flickr.com/photos/sfdpw/albums/72177720304329650

San Francisco, CA – Public Works announced today the selection of the durable, tamper-resistant and easy-to-clean "Slim Silhouette" model as the City's preferred new public trash can design.

The Slim Silhouette design was one of six trash cans that was publicly tested this past summer. Three of the tested models, including Slim Silhouette, were custom designed and three were off-the-shelf versions. Slim Silhouette emerged as the top pick after a 2 ½-month pilot that put the different models to the rigors of real-life testing in a total of 52 locations across a broad cross section of San Francisco.

As part of the field-testing process, some design tweaks were identified that would help improve performance for Slim Silhouette, including revisiting the size of the opening where trash is deposited, the on-the-can messaging for the recycling exchange and the specific locking mechanism. In the process of manufacturing the new trash can, we expect to make these adjustments as well as match construction methods with automation capabilities of the manufacturer and gain the cost-efficiency of mass production.

"We've gone through a comprehensive feedback process, and we are excited to be moving forward with the new public trash can design," said interim Public Works director Carla Short. "The new design will be one of our tools in improving the street and sidewalk cleanliness in San Francisco."

Public Works landed on Slim Silhouette after a robust and diverse outreach campaign. The department held discussions at in-person community events in the Mission and Chinatown and received more than 1,000 online surveys as well as feedback from approximately 70 Public Works' graffiti and maintenance staff and Recology crews who empty the cans. In addition, social media posts specific to the trash can pilot garnered more than 66,000 impressions and there were more than 14,000 views of the Public Works' July and August digital newsletters that featured the trash can pilot. A website, which was visited more than 13,000 times and was linked to a QR code sticker on each pilot can, shared details on the pilot program and included the online survey.

- more -

Across all feedback, Slim Silhouette was the clear favorite and most responsive to the design criteria. It was the most successful trash can in being rummage-resistant and easiest to keep clean from graffiti and debris. The design will be outfitted with sensors that will send an alert when the can is nearing capacity and needs to be emptied, reducing the chance that trash will overflow onto the sidewalk. In addition, with its slim side profile allowing it to be less bulky and fit on narrower City sidewalks, survey respondents deemed the design as the most aesthetically pleasing of the six.

With more than 3,000 Public Works trash cans in a variety of places throughout the city – including neighborhood commercial corridors, downtown, bus stops and quiet residential streets – the new design will be a key component in helping keep San Francisco sidewalks and streets clean. Finding the right public trash can that serves the City's needs and addresses our challenges at a reasonable cost have driven this design process.

The current, green "Renaissance" can – an easy target for scavengers who rummage through them and leave behind a mess – was devised more than 20 years ago when street conditions were different, and our population and number of visitors were considerably lower.

Though San Francisco is not unique in our desire for a high-quality and durable public trash can, we do have specific criteria for this next-generation can. The Slim Silhouette proved to be the best match for the following design criteria:

- **Rummage-resistant:** Slim Silhouette uses the height of its openings as well as a snorkel design to ensure that it is difficult to rummage in the can.
- **Durable and easy to maintain**: Public Works' graffiti and maintenance teams confirmed that Slim Silhouette's stainless-steel construction is easiest to maintain and the material most durable in the long-term.
- **Tamper-proof construction:** The pilot trash cans with their variety of locking systems gave us good information about the most durable locks and keys. This information will be incorporated into the Slim Silhouette production.
- **Accommodate a rolling liner:** Slim Silhouette contains a 32-gallon rolling liner that can be used seamlessly with the Recology trucks for dumping trash.
- **Sensor-ready**: Slim Silhouette accommodates a sensor that will send alerts when nearing trash capacity so it can be emptied before overflowing.
- **Accommodate a recycling exchange:** Slim Silhouette's separated opening for bottles and cans makes it easy to deposit them and for others to collect, and so serves as anti-rummaging feature.
- **Aesthetically pleasing:** Slim Silhouette's profile and proportions were clearly preferred over the other designs. It complements the design of the new JCDecaux public toilets, the BART canopies on Market Street and other new public amenities, such as the café on Civic Center Plaza.
- **Cost-efficient:** As part of the project requirements described within an upcoming Request for Proposals for the mass production of Slim Silhouette, the target cost of $2,000 to $3,000 apiece will be included.

The next steps in the procurement and mass production of the Slim Silhouette design are to identify the funding sources and move through all necessary approval processes, for instance, the City's Civic Design Review Committee and the Historic Preservation Commission. Public Works then will develop and release a Request for Proposals for the mass production of the new can.

Please find attached a document that synthesizes the pilot program and the feedback that was received.

BACKGROUND INFORMATION

In 2020, Public Works, in collaboration with Bay Area industrial designers at the Institute for Creative Integration (ICI), narrowed the design of the City's new public trash cans to three final concepts. In September 2020, members of the public had the opportunity to weigh in on the three custom designs in advance of design presentations at the San Francisco Arts Commission's Civic Design Review panel and the Historic Preservation Commission. More than 350 online surveys were collected, and the three custom designs received Phase 1 and Phase 2 approvals by the Arts Commission – greenlighting the next step in the process.

In 2022, APROE, a San Francisco-based product and manufacturing firm, transformed these conceptual designs into 15 prototypes that were tested on the street – along with three off-the-shelf trash can designs – during the 2022 Trash Can Pilot program.

San Francisco Public Works (www.sfpublicworks.org): As a 24/7 operation with a diverse set of responsibilities, Public Works touches every neighborhood in San Francisco. The staff designs and manages construction of civic buildings and streets, cleans and greens the right of way, maintains civic buildings, trains people for jobs, keeps the right of way free of hazards, paves the streets, repairs bridges and public stairways, expands accessibility and works at the forefront addressing some of San Francisco's biggest challenges.

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San Francisco Public Trash Can Pilot

Findings & Recommendations

November 15, 2022

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Why Redesign the Public Trash Can?

- Durability issues: persistent problems with Renaissance cans, locks and hinges
- Renaissance can's material (enameled steel) is degraded
- Recology requests 32-gallon rolling liners that fit inside the cans
- Rummaging is a persistent problem with Renaissance cans
- Recycling exchange needs better messaging

Performance Criteria for New Cans

- Rummage-resistant
- Tamper-proof
- Easy to service
- Durable and easy to maintain
- Aesthetically pleasing
- Sensor-ready
- Accommodate 32-gallon rolling liner
- Accommodate recycling exchange
- Cost-efficient: under $3,000/each

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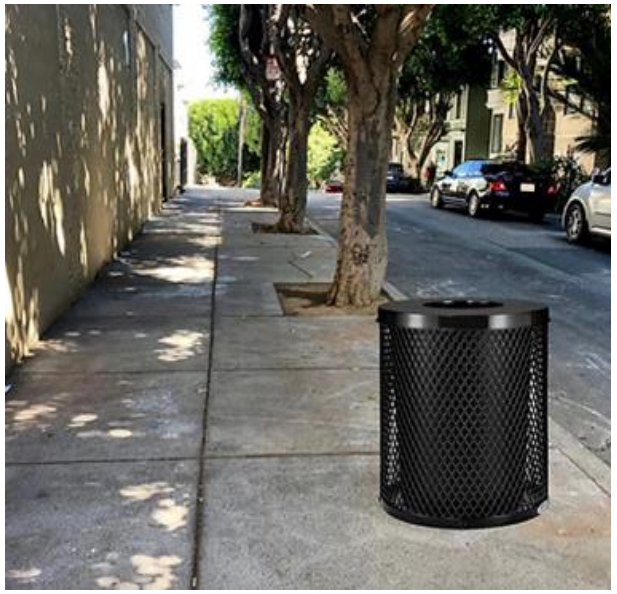
Pilot Trash Cans: Off-the-Shelf

Open Wire Mesh
Manufactured by
Global Industries



Ren Bin
Manufactured by
Victor Stanley

Bear Saver
Manufactured by
Securr

Pilot Trash Cans: Custom

Soft Square

- Stainless steel construction
- Openings for trash and bottles/cans are behind hopper door
- Bottle/can opening also in the back

Slim Silhouette

- Stainless steel pipe construction
- Slim side profile allows more space on sidewalks
- Single-sided access
- Height of opening and chute deter rummaging

Salt & Pepper

- Galvanized steel construction
- Two separate openings, with cans/bottles above and regular trash below
- Height of opening and shape deter rummaging

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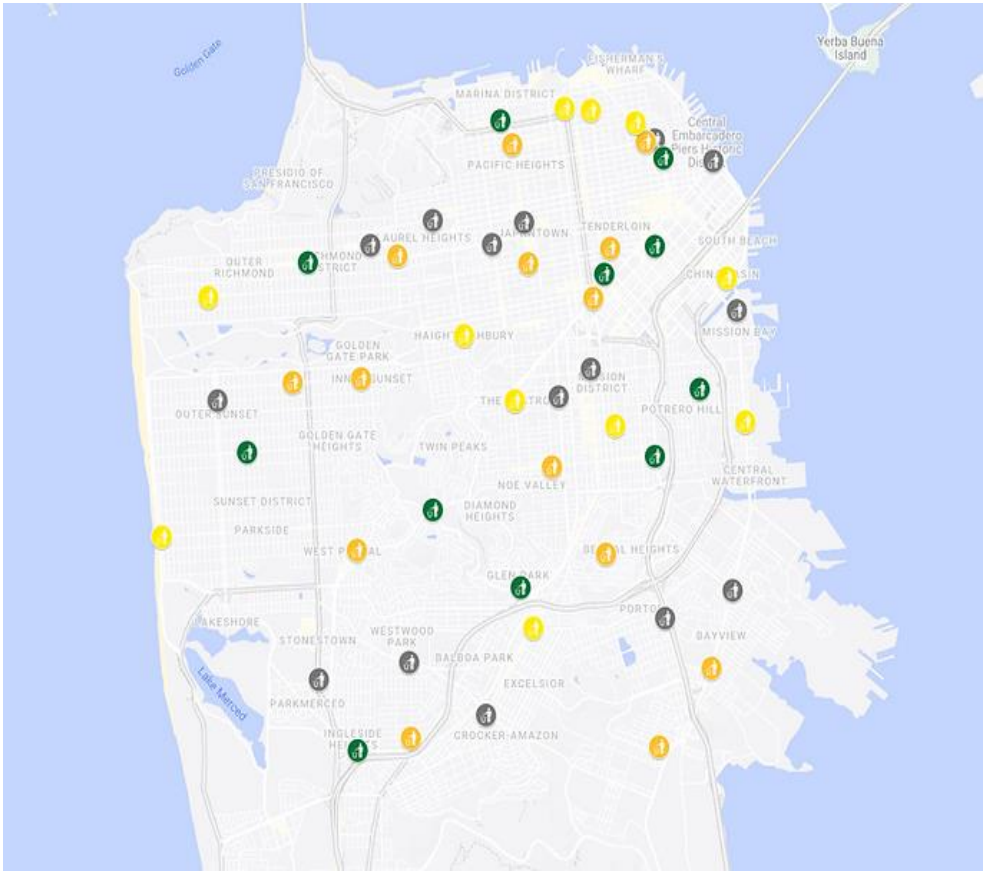
Outreach Strategy

- July 25 to September 23, with two 30-day installations
- Outreach methods:
  - Website with overview and online survey
  - QR codes affixed to trash cans
  - Online survey: 1,027 responses
    - 1,010 in English
    - 10 in Chinese
    - 6 in Spanish
  - In-person public events: Chinatown, Mission
  - Social media posts
    - 66,000+ impressions on Twitter
  - Articles in Public Works digital newsletter
    - 7,676 views in July
    - 7,259 views in August



52 locations of pilot trash cans

First installation	Second installation
Off-the-shelf cans	Off-the-shelf cans
Custom cans	Custom cans

Public Survey Results

Which can is the most resistant to rummaging?

	Bear Saver	Ren Bin	Salt & Pepper	Slim Silhouette	Soft Square	Wire Mesh
Shape	45 (32.1%)	26 (35.6%)	154 (46.8%)	86 (50.3%)	67 (36.6%)	29 (28.7%)
Opening	31 (22.1%)	12 (16.4%)	80 (24.3%)	52 (30.4%)	49 (26.8%)	24 (23.8%)
Trash outside the can	14 (10%)	11 (15.1%)	128 (38.9%)	42 (24.6%)	69 (37.7%)	23 (22.8%)
Surroundings: very clean	53 (37.9%)	21 (28.8%)	49 (14.9%)	36 (21.1%)	25 (13.7%)	22 (21.8%)
Surroundings: somewhat clean	39 (27.9%)	27 (37%)	96 (29.2%)	73 (42.7%)	62 (33.9%)	31 (30.7%)
Total responses per can	140	73	329	171	183	101

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darkest = best result

Public Survey Results

Which can is the most resistant to tampering?

	Bear Saver	Ren Bin	Salt & Pepper	Slim Silhouette	Soft Square	Wire Mesh
Materials	54 (38.6%)	21 (28.8%)	103 (31.3%)	68 (39.8%)	67 (36.6%)	21 (20.8%)
Opening	31 (22.1%)	12 (16.4%)	80 (24.3%)	52 (30.4%)	49 (26.8%)	24 (23.8%)
Trash outside the can	14 (10%)	11 (15.1%)	128 (38.9%)	42 (24.6%)	69 (37.7%)	23 (22.8%)
Least damage reported	10 (7.1%)	16 (21.9%)	77 (23.4%)	27 (15.8%)	57 (27.3%)	9 (8.9%)
Total responses per can	140	73	329	171	183	101

darkest = best result

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Public Survey Results

Which can is the most durable and easy to maintain?

	Bear Saver	Ren Bin	Salt & Pepper	Slim Silhouette	Soft Square	Wire Mesh
Materials	54 (38.6%)	21 (28.8%)	103 (31.3%)	68 (39.8%)	67 (36.6%)	21 (20.8%)
Shape	45 (32.1%)	26 (35.6%)	154 (46.8%)	86 (50.3%)	67 (36.6%)	29 (28.7%)
Opening	31 (22.1%)	12 (16.4%)	80 (24.3%)	52 (30.4%)	49 (26.8%)	24 (23.8%)
Least damage reported	10 (7.1%)	16 (21.9%)	77 (23.4%)	27 (15.8%)	57 (27.3%)	9 (8.9%)
Total responses per can	140	73	329	171	183	101

darkest = best result

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Public Survey Results

Which can is the most aesthetically pleasing?

	Bear Saver	Ren Bin	Salt & Pepper	Slim Silhouette	Soft Square	Wire Mesh
Materials	54 (38.6%)	21 (28.8%)	103 (31.3%)	68 (39.8%)	67 (36.6%)	21 (20.8%)
Shape	45 (32.1%)	26 (35.6%)	154 (46.8%)	86 (50.3%)	67 (36.6%)	29 (28.7%)
Opening	31 (22.1%)	12 (16.4%)	80 (24.3%)	52 (30.4%)	49 (26.8%)	24 (23.8%)
Overall look	38 (27.1%)	18 (24.7%)	136 (41.3%)	83 (48.5%)	61 (33.3%)	25 (24.8%)
How it fits with surroundings	22 (15.7%)	14 (19.2%)	68 (20.7%)	40 (23.4%)	31 (16.9%)	20 (19.8%)
Don't like the look (Darkest = most beautiful)	48 (34.3%)	33 (45.2%)	84 (25.5%)	23 (13.5%)	50 (27.3%)	21 (20.8%)
Total responses per can	140	73	329	171	183	101

darkest = best result

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Feedback from Other Stakeholders

Recology staff preferred designs that:

- Use a 32-gallon liner that works well with their truck
- Do not need to be re-locked with a key after servicing
- Had locking mechanisms at an easily accessible height
- Are rummage-resistant

Public Works staff preferred designs that:

- Are easy to remove graffiti: designs with 3-dimensional surfaces are more difficult to clean; graffiti-repellant coating comes off easily
- Are easy to clean: inside of hoppers can't be cleaned
- Have locking mechanisms that are durable
- Are mechanically simple: complex designs have more things that can break
- Are stainless steel rather than galvanized steel: stainless is easier to maintain and less prone to discoloration over time

Summary of all Feedback

OPEN WIRE MESH

- Used as a baseline
- Doesn't meet design criteria
- Though inexpensive, not liked

BEAR SAVER

Pros:

- Difficult to rummage
- Vinyl wrap
- Durable
- Anti-vermin

Cons:

- Hard to clean hopper
- No foot pedal; don't like handle
- Mechanical mechanism = maintenance issues
- Large flat surfaces attract graffiti and hard to keep clean
- Large and bulky on sidewalk
- "Ugly and utilitarian-looking; least attractive – looks like it's for a campsite not for the City."

REN BIN

Cons:

- Too easy to rummage
- Material not durable
- Graffiti coating damaged easily
- "Finish is not holding up well. Looks pretty degraded and ugly."
- "It doesn't look very secure with exposed hinge bolts right there to be unscrewed."

Quotes are directly from online survey.

Summary of all Feedback

SOFT SQUARE

Pros:

- Hopper = rummage-resistant
- Foot pedal more sanitary than a handle

Cons:

- Large, flat surfaces show dirt and spills
- Uneven surface from panel perforation makes graffiti difficult to remove
- Openings for trash and recycling too small
- Recycling opening on street side not safe
- Trash gets stuck in hopper
- Recology and Public Works staff expressed durability concerns: too many moving parts

"Opening at top with the chute is disgusting; the shelf in this can doesn't actually drop the trash down into the can."

Quotes are directly from online survey.

Summary of all Feedback

SALT & PEPPER

Pros:

- Visual asset on the street
- Sturdy and durable design
- “Metal fins make it feel somewhat open and airy.”
- “Great design; modern update that is a good representation of a modern, beautiful San Francisco.”

Cons

- Trash can collect between ribs
- Openings for trash and recycling may be too small

“The metal looks unfinished; its material just doesn’t look good. Can you either please wash them or use a different finish?”

Quotes are directly from online survey.

Summary of all Feedback

SLIM SILHOUETTE

Pros:

- Visual asset on the street
- “The brushed stainless steel is great as it does not require painting maintenance and is easy to clean and remove scratches.”
- “Trash and recyclables can't accidentally fall out and can be easily collected.”

Cons:

- Trash opening may be too small
- Trash can collect between ribs
- “The opening, however, is a bit small. It’s hard to throw out containers; needs to be able to put takeout and beverage containers.”

“Innovative design; sleek design; distinctive; unobtrusive.”

Quotes are directly from online survey.

Recommendations

- Mechanically simple: no foot pedals, drawers
- Stainless steel
- Flat, 2-dimensional perforated metal surfaces best for cleaning and graffiti removal
- Durable and tamper-resistant locking mechanism – to be designed in collaboration with Public Works and Recology staff
- Moderate size so it can fit on smaller, more heavily trafficked sidewalks
- Relatively closed design to discourage rummaging
- Recycling exchange needs clearer messaging
- Recycling exchange that can be emptied easily by Recology

Recommendations

Slim Silhouette meets the above criteria with a few modifications:

- Reexamine the locking mechanism
- Reexamine the size and shape of main opening
- Redesign symbol for recycling exchange

Next Steps

- Determine how project will be funded
- Return to Civic Design Review and Historic Preservation Commission
- Develop a Request for Proposal
- If working with custom-design:
    - RFP will contain detailed specifications of design. But the identified manufacturer will need to do shop drawings as part of the process
    - Manufacturer most likely will need to build prototypes and have an iterative design process related to fabrication methods
    - Cost: there are many variables regarding manufacturing cost: type of automation available, material availability, inflation, supply chain issues, labor costs, etc.