WASTE SANITATION DEPARTMENT OF PUBLIC WORKS TOWN OF EAST HARTFORD

ELABORATED BY: CESAR ZAPATA SOLID WASTE OFFICIAL



East Hartford Recycling Program Annual Report FY 22-23

The information contained in this report describes the successful results of the recycling initiatives implemented by Public Works since February 2022 under the new East Hartford Recycling Program.



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01 Initial Learning

The Department of Public Works launched a new program to boost local recycling efforts. Between April and May 2022, as a Solid Waste Official, I carried out a pilot Inspection plan for curbside recycling blue carts. I conducted a visual inspection of the contents of recycling carts on Beech (7 families), Columbus (29 families), Wadsworth (9 families) and Outlook (18 families) Streets, with 63 families in total.

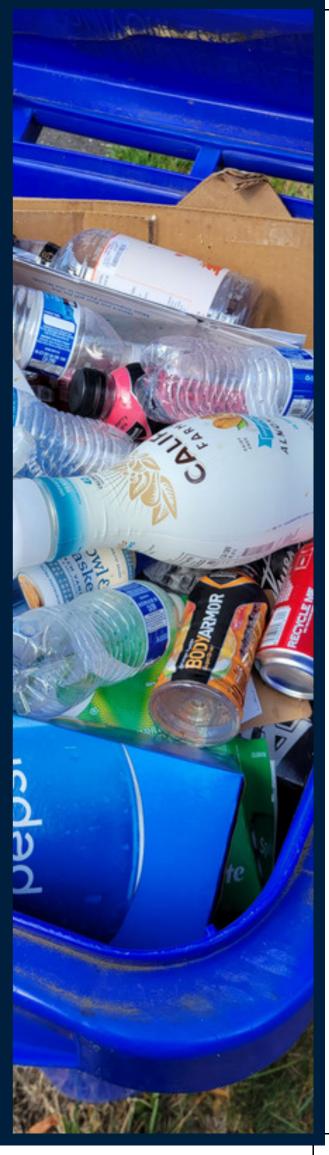
I found contaminated and unacceptable materials in the blue carts. Based on these initial findings, we defined the list of more common contaminants we coined as "Top Offenders."



During the inspection period, each household received three inspections and two letters explaining in detail the unacceptable materials I found in their blue carts. DPW sent 126 letters attached with full-color photos of the blue bins.

NEXT STEPS

It was crucial to define a baseline to measure the progress of the recycling program. The Pilot Inspection Plan and the monthly Murphy Road Recycling (MRR) reports played an essential role.



02 **Processing Data:** Analyzing the results of the Pilot Inspection Plan and the MRR reports

BARRIERS TO RECYCLING Results of the Pilot Inspection Plan

Behavior

- Residents have not established recycling as a household priority.
- Difficulties in establishing routines for sorting recyclables.
- Set-out rates inconsistent.

Lack of Knowledge

- Confusion about What's IN / What's OUT.
- Wish-cycling.
- No understanding of the impact of contamination on commodity.
- No understanding of financial impacts to Town.

Attitudes and Perceptions

- Not accepting, there is an impact on taxes.
- The environmental impact or other benefit.
- Not getting a personal motivational reward from recycling.

99

The Pilot Inspection Plan and the MRR reports made it possible to identify the barriers to recycling, evaluate the types of recyclers to define a measurement parameter and assess the Town's communication strategy to design an effective Communication Plan.

COMMUNICATION ASSESSMENT

- Town had stopped direct communication with recyclers (pandemic).
- Limited communication vehicles.
- Inconsistent informational materials (Branding/Message/Visual identity-Uniformity).
- Flyers are not enough! Missing a diverse strategy with multiple approaches.
- Enforcement & Rewards Lacking.



RESIDENT ASSESSMENT

Underperformers

- Recycling unaware or aware but inactive. Not engaged.
- Contamination rate above 20%.

Learners

- Trying their best.
- Contamination rate between 10% and 20%.

High Performers

- Broadly competent.
- Contamination rate below 10%.

The monthly MRR reports allowed us to determine three types of recyclers (underperformers, learners, and high-performers). We figured out what percentage of the loads collected by the recycling hauler are contaminated. Additionally, with the information on the truck license plate and the dumping hours, it was possible to identify the truck's route and know the neighborhoods with the highest contamination rates in blue carts.

It is important to note that the recycling facility charges a fee of \$115 per contaminated ton. They grade a load as contaminated when the contamination rate is 20% or more, and they cannot separate acceptable from unacceptable items.

In this case, they grade the entire load as unacceptable. Below 20%, the recycling facility processes the materials in the sorting equipment, and the cost for clean recyclables is zero dollars. A sample of what we described above is in the following table (MRR report for June 2023). On June 1, 2023, ticket 4587654 indicates that the hauler dumped the first load at 9:17 am. 45% (3.18 tons) of the collected materials were contaminated, and 55% (3.89 tons) were clean. However, the recycling facility could not separate the unacceptable load from the clean recyclables. As a result, the Town had to pay \$365.7 to dispose of contaminated items and \$447.35 to dispose of clean recyclables.

Date	TICKET	SITEID	WASTE	QUANTITY	Rate	AMOUNT	TRUCK	TIME_IN	TIME_OUT	PCT
06/01/23	4587654	BERLIN	CONI	3.18	\$115.00	\$365.70	TA-A22	09:17:57	09:20:56	45
06/01/23	4587654	BERLIN	SSRI	3.89	\$115.00	\$447.35	TA-A22	09:17:57	09:20:56	55
06/01/23	4588437	BERLIN	CONI	1.24	\$115.00	\$142.60	TA-A22	12:42:29	12:46:26	25
06/01/23	4588437	BERLIN	SSRI	3.73	\$115.00	\$428.95	TA-A22	12:42:29	12:46:26	75
06/02/23	4589779	BERLIN	CONI	1.03	\$115.00	\$118.45	TA-A22	09:31:46	09:35:57	20
06/02/23	4589779	BERLIN	SSRI	4.10	\$115.00	\$471.50	TA-A22	09:31:46	09:35:57	80
06/08/23	4598015	BERLIN	CONI	0.98	\$115.00	\$112.70	TA-A22	09:36:34	09:39:23	20
06/08/23	4598015	BERLIN	SSRI	3.90	\$115.00	\$448.50	TA-A22	09:36:34	09:39:23	80
06/09/23	4599583	BERLIN	CONI	2.79	\$115.00	\$320.85	TA-A22	08:11:17	08:14:01	50
06/09/23	4599583	BERLIN	SSRI	2.79	\$115.00	\$320.85	TA-A22	08:11:17	08:14:01	50
06/12/23	4601936	BERLIN	CONI	1.12	\$115.00	\$128.80	TA-A22	10:04:19	10:07:20	20
06/12/23	4601936	BERLIN	SSRI	4.50	\$115.00	\$517.50	TA-A22	10:04:19	10:07:20	80
06/15/23	4607580	BERLIN	CONI	0.99	\$115.00	\$113.85	TA-A22	08:13:13	08:18:18	20
06/15/23	4607580	BERLIN	SSRI	3.98	\$115.00	\$457.70	TA-A22	08:13:13	08:18:18	80
				38.22		\$4,395.30				

NEXT STEPS

We established a baseline. The contamination rate in blue carts before the launch of the new recycling program was 53%. Outreaching the findings starting July 2022 was a key component. We prepared a Communication Plan to define the most appropriate communication vehicles to approach the community.

03 **Communication Plan:** How did we get our communication right?

RESIDENT CONCERNS AROUND THE RECYCLING PROGRAM Why? What is the value?

The most common resident concerns regarding recycling inspections are 1). The cost to taxpayers of inspecting recycling, and 2). Is there any value to recycling? These two key concerns indicate most residents do not know how the solid waste management system works and how much it costs the taxpayers.

To address these issues and raise residents' awareness and identity towards the recycling program, DPW redesigned the brand and motto of the recycling program. In addition, new educational flyers were prepared on how solid waste management works and what are the costs involved in this process.

RECVCLES

VISUAL IDENTITY

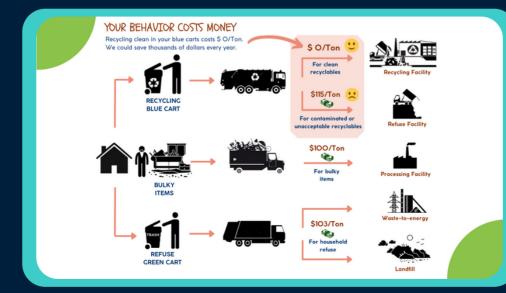
Branding and Messages

New Motto

• East Hartford Recycles Clean!

Messages

- Top Offenders!
- Your Behavior Costs Money!
- Recycling Clean to Save Tax Dollars!!
- When in Doubt, Throw It Out!



COMMUNICATION STRATEGY

Identifying where we are was the first step. I gathered information to assess our current position and conduct a situational analysis. It was crucial to collect demographic data about East Hartford and the people who live there.

The Town of East Hartford has a population of approximately 50,000. People under 18 make up 22%, the population from 18 to 64 is 65%, and people aged 65 and over-represents 13%. As for educational attainment, one-third went to high school.

East Hartford is a diverse community where the population of Hispanic origin represents the first majority (37%), followed by the white people (32%) and the black community (24%). The most spoken languages are English and Spanish. For this reason, we translated into the two main languages all our educational materials.

Moving the East Hartford Recycles Clean Program forward has four guidelines:

- Get our messaging straight
- Create consistency
- Educate the right people and
- Targeted persistent education

Below is a table with the methods of approaching the community and the specific communication activities to reach our target population:

Approach Methods	Communication Activities					
Direct marketing and education	Door-to-door canvassing focused on Low Performers Recyclers					
Mayor's monthly newsletter	Monthly information about the East Hartford Recycling Program					
Town Website & Social Media Mayor's Office	Monthly information about the East Hartford Recycling Program					
Printed materials (Decals)	• Retagging blue carts: Labels on covers (What's IN - What's OUT)					
Newspaper Advertising	• The Gazette & La Vision.					
Workshops/Roadshows Public speaking/presentations	• Senior Center, Religious and cultural groups or local societies e.g. Women's organizations, youth groups, student groups, public schools, religious networks and communities such as churches, etc.					

04 **Recycling Clean Gets Going!** Education Saturation

The main components of the communication strategy are the inspection of blue carts and door-to-door tagging. So far, we inspected more than 5,000 blue bins and have sent out more than 1,500 letters educating the population. The innovation in this strategy is that each letter is attached with pictures of the unacceptable materials found in the blue carts of the inspected neighborhood. In other words, we have personalized the content of the letters to raise awareness about inappropriate recycling practices individually.

See below a summary of the approach methods to reaching out to the community and the communication activities carried out in the fiscal year 2022.

NOTICE TAG

ETIQUETA DE AVISO

<section-header><complex-block>

<image>

DIRECT MARKETING AND EDUCATION

Door-to-door canvasing focused on lowperformers recyclers. It is the most effective approach method to the community. We designed door tags in **English and** Spanish. Residents reacted positively to this initiative.

MAYOR'S MONTHLY NEWSLETTER



The Solid Waste Official Reports Cesar Zapata

We created a new section in the mayor's monthly newsletter called: The Solid Waste Official Reports

The Pulse of East Hartford

- <u>7/3/2023 Electronic Devices & Lithium Batteries</u>
- 6/1/2023 World Environment Day
- <u>5/1/2023 Are You Recycling or Wish-cycling?</u>
- <u>4/3/2023 Earth Day Spring Cleaning</u>
- 3/1/2023 Global Recycling Day No Plastic Bags!
- <u>2/1/2023 Bulky Free Pick-Up Reminder</u>
- <u>1/3/2023 Door Notice Tags</u>
- <u>12/1/2022 Holiday Recycling Tips</u>
- <u>11/1/2022 America Recycles Day</u>
- <u>10/3/2022 Transfer Station New Updates</u>
- <u>09/1/2022 Transfer Stations New Updates</u>
- <u>08/1/2022 Recycling Cart Inspections</u>

TOWN WEBSITE & SOCIAL MEDIA MAYOR'S OFFICE

At least one post each month in the last year.





RETAGGING BLUE CARTS -LABELS ON COVERS (WHAT'S IN/WHAT'S OUT)

So far we have relabeled more than 40% of blue carts town-wide.

The cart tagging program involves a high level of inspection and communication with residents about contamination in the residential recycling stream.

NEWSPAPER ADVERTISING



La Vision: Spanish-language newspaper



Lead for Santiago de Surco, Lima. Peru. a city of 300.000.

where he successfully imple-mented the first recycling facil-ity.

. In his new role as a Solid

The Gazette: English-language newspaper

WORKSHOPS/PUBLIC SPEAKING **PRESENTATIONS/ONLINE MEETINGS**



Senior Center (October 25, 2022)

DEEP

(October 4, 2022) CCSM COALITION MEETING: EAST HARTFORD RECYCLING PROGRAM



05 Outcomes: Waste Management Metrics Review

BEFORE THE LAUNCH OF THE PROGRAM (FEB 2022)

 (\times) DIVERSION RATE (FEB 2022)

20%

9% Recyclables 11% Bulky Items

) CONTAMINATION RATE IN BLUE CARTS

53%

ACCEPTABLE RATE IN BLUE CARTS

47%

EXPENSES FOR DISPOSAL OF RECYCLABLES RENDERED MSW

\$203,738

AFTER THE LAUNCH OF THE PROGRAM (JUN 2023)

DIVERSION RATE (JUN 2023)

25%

13% Recyclables 12% Bulky Items

CONTAMINATION RATE IN BLUE CARTS

33%

ACCEPTABLE RATE IN BLUE CARTS

67%

EXPENSES FOR DISPOSAL OF RECYCLABLES RENDERED MSW

\$123,911

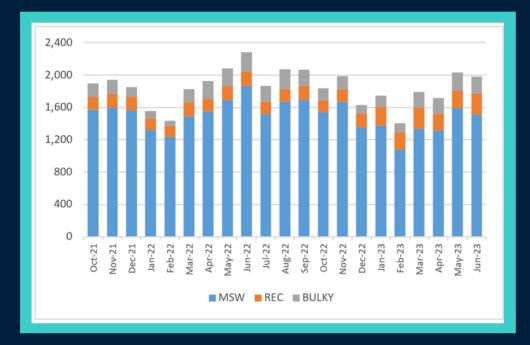
SAVINGS FOR LESS DISPOSAL OF RECYCLABLES RENDERED MSW \$ 79,827 (39.2% COMPARED WITH THE PREVIOUS YEAR)

Waste Management Metrics Key Performance Indicators - June 2023

A new Solid Waste Official position was created on February 2022, to focus on solid waste management improvements to help the community achieve waste minimization and diversion goals. The goals of the new Solid Waste Official were to:

- 1) Increase the diversion rate (Base Line 20% Feb 2022)
- 2) Reduce the high contamination rate in blue carts (Base Line: Annual Average 53% Feb 2022)
- 3) Increase the percentage of acceptable items in the single stream (Base Line: 47% Feb 2022)
- 4) Reduce expenses for disposal of recyclables rendered municipal solid waste (Base Line 203.7K/FY 2022

Municipal Solid Waste (MSW), Recycling & Bulky Recyclable Items





FY 22-23

Diversion Rate

The diversion rate is the portion of waste not sent to the landfill.

Recycling & Bulky Recyclable Items represent 25% of MSW.



Recyclables



Bulky Recyclable Items

Contamination Rate in Blue Carts (Acceptable vs Unacceptable)

53% ↓ **33%**

Average C<u>ontamination</u> <u>Rate</u> in Blue Carts

Represent the percentage of unacceptable items in blue carts. The rate dropped 18% compared to the previous year.

47% 167%

Average <u>Acceptable Rate</u> in Blue Carts.

Represent the percentage of acceptable items in blue carts. The rate has increased 18% compared to the previous year.



Expenses and Savings for Less Disposal of Recyclables Rendered MSW FY 22-23



\$79,827 Savings FY 2023

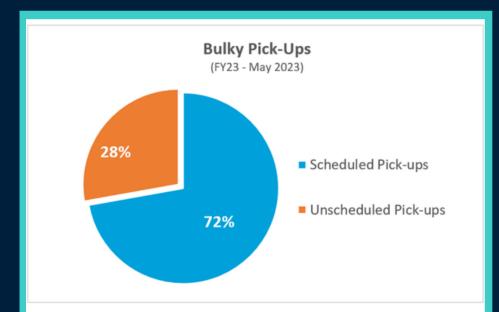
The savings represent 39.2% compared to the previous year and exceed the annual investment in the Solid Waste Official position created in the fiscal year 2022.

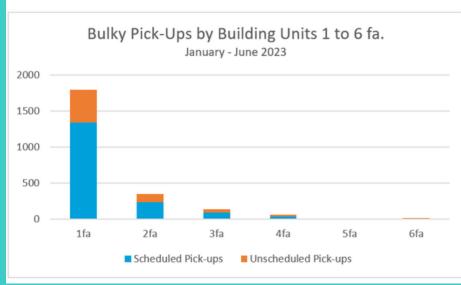
\$ 203,738 Expenses FY 2022 (*)

(*) July 2021 - June 2022

\$ 123,911 Expenses FY 2023 (*) (*) July 2022 - June 2023

Bulky Pick-Ups (New Service) & Transfer Station Metrics - FY 23





10,652 Transfer Station Visits

3,867

Bulky Waste Curbside Scheduled (New service - All American Waste)

1,490

Bulky Waste Curbside Unscheduled (Town of East Hartford)

Curbside bulky pick-up is now FREE. Residents can call All American Waste (860) 289-7850 for their appointment.

- Properties 1-2 families are allowed two (2) visits per unit FREE per Fiscal Year (July 1, 2022 – June 30, 2023). \$25 for each additional appointment scheduled beyond the FREE pickups.
- Properties 3-6 families are allowed four (4) visits per unit FREE per Fiscal Year (July 1, 2022 – June 30, 2023). \$25 for each additional appointment scheduled beyond the FREE pickups.

PREPARED BY CESAR ZAPATA

Visit our website for more information about East Hartford Recycles Clean

EASTHARTFORDCT.GOV

