

# Solid Waste Management Plan

Future Green Studio

# Timeline

Over the course of a month, we'll develop a Solid Waste Management plan.

- Identify waste streams by conducting a trash audit
- Assess current handling
- Propose opportunities for improvement
- Analyze proposal impacts

**January 26**  
Project Kick-off

**February 3**  
Waste Stream Audit

**February 22**  
Solid Waste Management  
Plan Delivery

**January 30**  
Research Phase

**February 10**  
Solid Waste Management  
Proposal

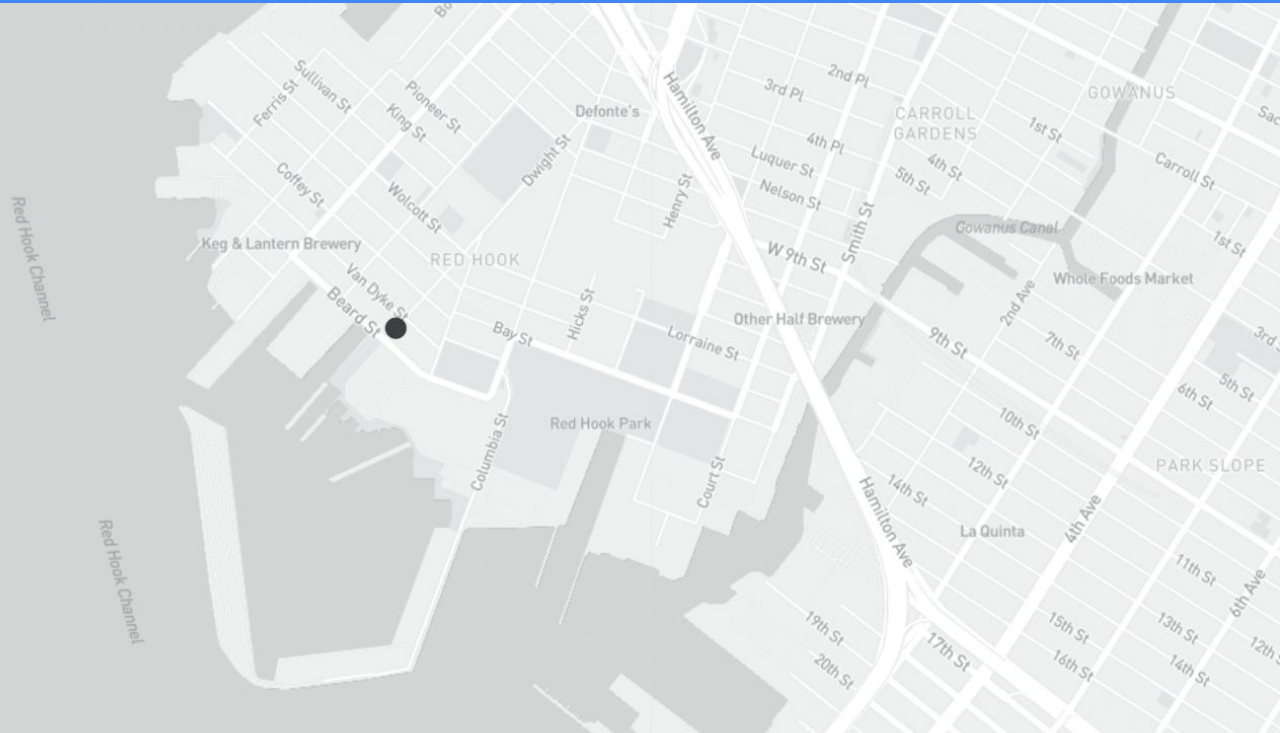


## THE GOAL

**In this plan, we'll audit Future Green Studio's current waste streams and determine more efficient ways to manage materials that will result in less waste and potential cost savings.**

# Future Green Studio Stats

- 39 employees
  - 20 remote
- Shop + Office Size
  - 8,700 square ft.



# Future Green Studio Stakeholders

**Brian Sullivan**

Operations Director

**Elisia Langdon**

Green Team Committee Chair

**Clinton Penny-Langdon**

Shop Waste Manager

**Grace Burke**

Office Manager

# Pratt SES Team



**Alexandra Blakeslee**

Onsite Audit,  
Presentation and Content



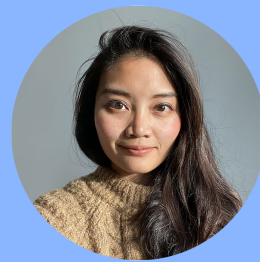
**Elisia Langdon**

Onsite Audit, Follow-up  
Interviews, Research



**Rajvi Shah**

Onsite Audit and Final  
Report content



**Nia Starr**

Onsite Audit, Listening  
Survey, Design, Photo  
Documentation



**Sarah Varghese**

Follow-up Interview,  
Meeting Minutes, Input  
& Feedback, Final  
Report

# Monthly Cost Analysis



What does that add up to?

**\$8,380**

per year





**WASTE CONNECTIONS OF NEW YORK INC**  
 120 WOOD AVE SOUTH #302  
 ISELIN, NJ 08830  
 Phone: (212) 268-1322  
 nyservice@wasteconnections.com

**WASTE REMOVAL & RECYCLING SERVICES**  
**24 HOUR CONTAINER SERVICE**  
 10-40 Yard Rolloff Containers  
 Construction Debris  
 Mini Containers

**WASTE CONNECTIONS**  
 Connect with the Future

BIC No. 1059

DATE	CUSTOMER NO
2/4/2022	101052096
BLANKET PO #	INVOICE NO
	2402449851
AMOUNT DUE	PAID
2,058.28	

**NOTICE:** If your account balance remains unpaid for more than 30 days, this invoice is your 14 day Discontinuation of Service Notice.

SERVICE LOCATION
FUTURE GREEN STUDIO 18 BAY ST BROOKLYN, NY 11231-1905

BILL TO
FUTURE GREEN STUDIO GRACE BURKE 18 BAY ST BROOKLYN, NY 11231-1905

SERVICE DATE	PO NUMBER	SERVICE DESCRIPTION	QTY	RATE	CHARGES	TAX	TOTAL
<b>Site 0001 FUTURE GREEN STUDIO 18 BAY ST</b>							
02/01/22-02/28/22		TRASH SERVICE IN 100LBS	36.3488	13.62	495.07	43.94	539.01
02/01/22-02/28/22		RECYCLE SERVICE IN YARDS	11.6298	12.58	146.35	12.99	159.34
Total Rate:			26.20			<b>Site Total \$</b>	<b>698.35</b>

RATE BASED ON: ESTIMATE

PREVIOUS BALANCE	PAYMENTS	LATE FEE	CURRENT CHARGES	TAX AMOUNT	PAY THIS AMOUNT	
1,359.93	0.00	0.00	641.42	56.93		2,058.28
AGING SCHEDULE BASED ON NUMBER OF DAYS SINCE INVOICING		CURRENT	1-30	31-60	61-90	OVER 90
698.35		0.00		698.35	661.58	0.00

Waste Connections will not be responsible for any violations issued by a New York City Agency for material left on the sidewalk or picked up late. Please do not put material out for collection until one hour prior to closing.

Please do not put out rubbish on union holidays. There will be no pick-ups. Call for special pickup.

NEW YEARS DAY MARTIN LUTHER KING DAY PRESIDENTS DAY	MEMORIAL DAY LABOR DAY INDEPENDENCE DAY	THANKSGIVING DAY CHRISTMAS DAY
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THE CUSTOMER HAS AGREED TO BE CHARGED ON A FIXED RATE BASIS. THE ABOVE STATED CHARGE IS DETERMINED BY CALCULATING THE LOW TO HIGH RANGE OF THE CUSTOMER'S ANNUAL WASTE AND REFUSE WHICH IS COLLECTED BY THE CARTER.

**NOTICE TO CUSTOMERS:** Please check that the Business Integrity Commission sticker Waste Connections provided you with is visible from the entrance of your business. If the sticker is damaged or you do not have one, please contact our office right away at (212) 268-1322 so we can provide you with a new sticker. Waste Connections will not be responsible for any violation received for not properly displaying the sticker. The maximum rate that may be charged by your trade waste removal is regulated by the New York City Business Integrity Commission. The current maximum rate in effect is \$20.76 per yard or \$13.62 per 100 pounds. Lower rates may be charged. If you have any questions or complaint concerning waste removal, contact the Business Integrity Commission at (212) 676-6300.

The Address below is for **PAYMENTS** only. Please use the Address and Telephone Numbers above for any other correspondence.

**FOR CHANGE OF ADDRESS PLEASE CALL OR WRITE OUR OFFICE**

FUTURE GREEN STUDIO  
 GRACE BURKE  
 18 BAY ST  
 BROOKLYN, NY 11231-1905

**PLEASE RETURN THIS PORTION WITH PAYMENT**

Customer ID	101052096	Date	2/4/2022
Invoice No	2402449851	Amount Due	2,058.28
<b>Amount Paid with this Coupon</b>		\$	

**Please use this coupon to make your payments by check.**

Pay online!  
 Visit us at [www.wcicustomer.com](http://www.wcicustomer.com)  
 As always, you still have the option to pay by phone via ACH or Credit/Debit Card by calling our Customer Service at:  
 Phone: (212) 268-1322

36.35x 100 lbs per month - roughly 4.5 (or 454 pounds) per pick-up → monthly flat rate of \$495.07 +tax.

Per dumpster by weight = **\$61.88** (what FGS pays now)

Per dumpster by volume (regulated max.) = \$41.52

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The current maximum rate in effect is \$20.76 per yard or \$13.62 per 100 pounds. Lower rates may be charged.

# Cost in Comparison to the Average

## Average Cost

Average cost per month for large carter:

$\$9.60 \times 2 \text{ cubic yards} = 1 \text{ dumpster} = \$19.20$

$\$19.20 \times 8 \text{ dumpsters per month}$

**= \$153.6 per month**

**\$1,843.20 per year**

## Future Green Studio

Monthly cost per month paid to hauler:

1 dumpster = \$87.29

$\$87.29 \times 8 \text{ dumpsters per month}$

**= \$698.35 per month**

**\$8,380 per year**

How much could Future Green Studio be saving?

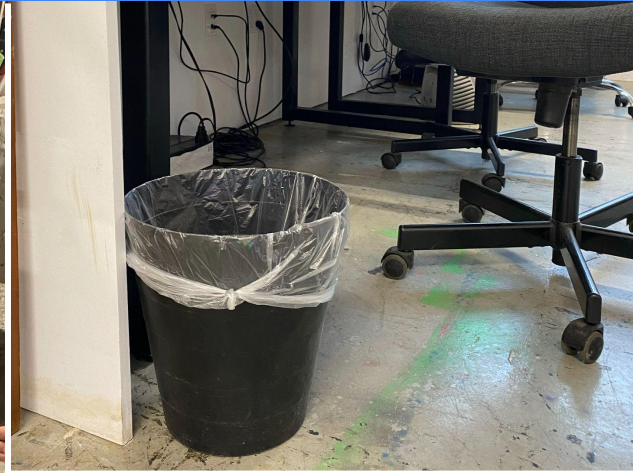
**\$6,536**

per year

# The Waste Audit

When you know exactly how much waste you generate, you can build a baseline for setting goals to reduce it.

# Future Green's material flow



**Wood** 15.5%



**Soft Plastics** 6.3%



**Rigid Plastics** 6.3%



**Foam** 46.9%



**Latex Gloves** 0.8%



**Textiles** 1.6%



**Metal** 6.3%



**Paper** 20.3%



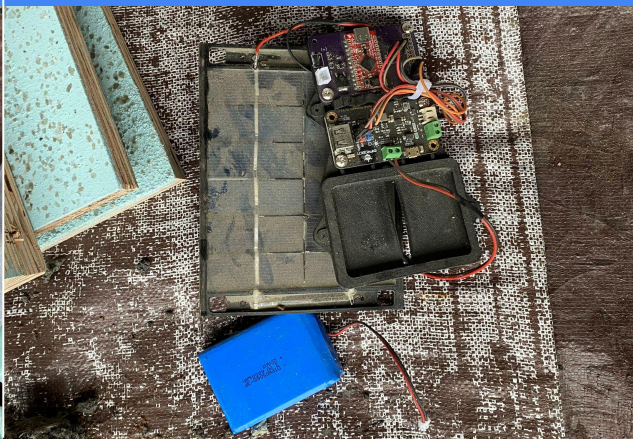
**Concrete** 2.3%



**Sawdust** 1.6%



**Electronic** ~0%



**~70%**  
**is project**  
**dependent**

# The Waste Station

What does your workshop and in-office waste station look like?

- [1] 2 cubic yard dumpster
- [20] 4-gallon waste bins
- [8] 32-gallon waste bins
- [7] 10 gallon recycling bins for
  - Metal
  - Glass
  - Plastic
  - Paper





# What Impacts Your Waste Streams?

## Job Dependent

Projects require an amount of over-purchasing to manage risk (~15%) which leads to additional materials after a project is completed

## Design

Design sizes  $\neq$  standard material sizes

\*Unique structure as a design-build company\*

## Space

Limited warehousing of extra materials

**Is recycling  
actually  
recycled?**

Single stream...  
but bag separately!

# Local Solid Waste Laws

# Current laws

- All businesses must either arrange with a private carter to have its garbage collected, or obtain a “Self-Hauler” registration
- All commercial businesses/commercial tenants are required by law to recycle. This applies to all business entities including stores, restaurants, offices, and other entities serviced by private carters.

## FINES FOR BUSINESSES THAT FAIL TO RECYCLE

First Offense **\$100**

Second Offense **\$200**

Third Offense **\$400**



## Final Zone Map – 3 Carters Per Zone

New!  
Local Law 199



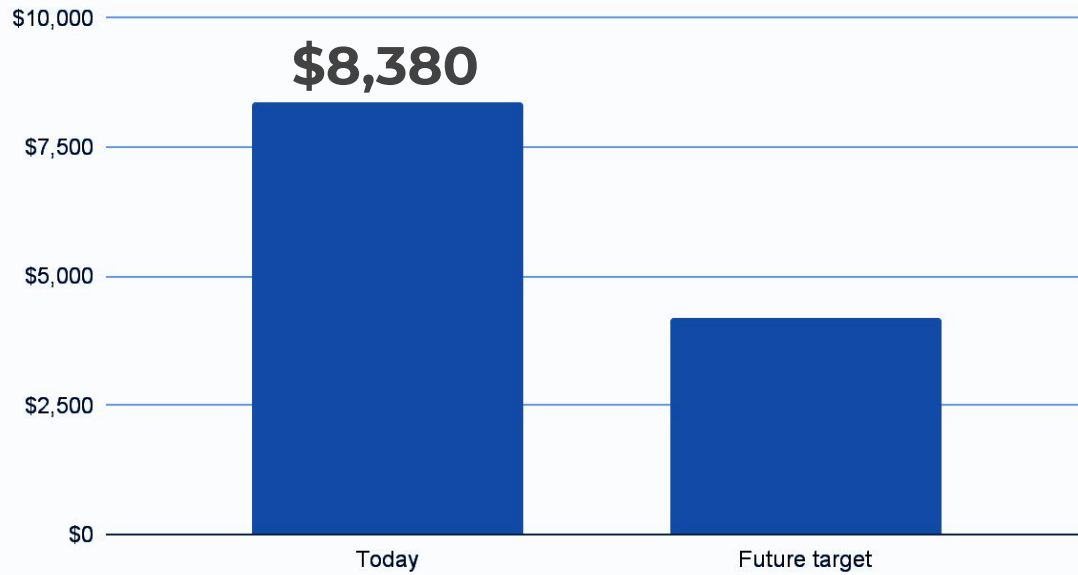
\*Midtown North and Midtown South are both part of CD 105

# Proposed Solutions



- Process/access
- Material-specific solutions
- Social Media Outreach

## Hauling costs/year





# Process/Access

- Negotiate price structure with carter
- Make recycling more accessible
- Package like-size materials together at the end of each project
  - Create kits
- Connect available materials to users
  - Craigslist
  - On own website, social media
  - Find partners

# Material-specific solutions

- Wood
  - Mulch companies
  - Custom wood-carved frame makers
  - High schools/colleges with wood shops
- Aluminum
  - Melt down for own reuse

# Potential Partners



**The Beam Center**

[www.beamcenter.org](http://www.beamcenter.org)



**Pratt Institute**

[www.pratt.edu](http://www.pratt.edu)



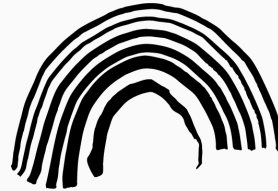
**Big Reuse**

[www.bigreuse.org](http://www.bigreuse.org)



**Material Lab**

[www.materiallab.org](http://www.materiallab.org)



Wide Rainbow is a 501c3 non-profit contemporary art after school program.  
We provide access to the arts, artists, and arts education.  
[www.widerainbow.org](http://www.widerainbow.org)

**Wide Rainbow**

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# Owned Channels for Materials Advertisement



futuregreenstudio

FUTURE GREEN

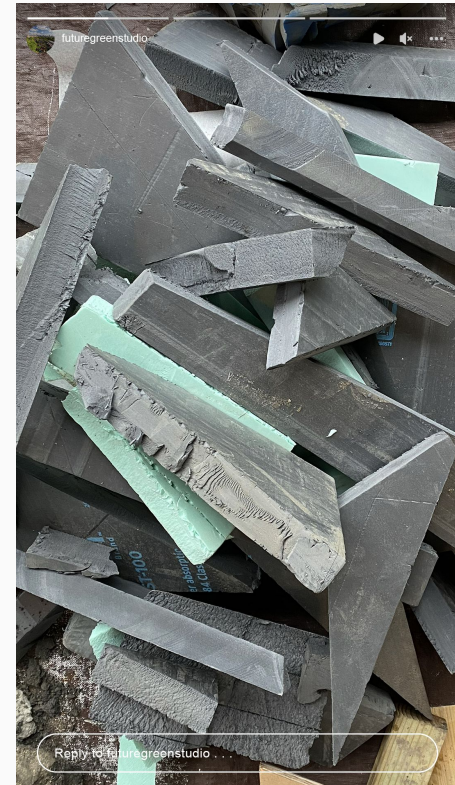
Our Green Team is looking for someone to upcycle these materials!

Available for pick-up this week.

DM us or e-mail  
info@futuregreenstudio.com

→

Reply to futuregreenstudio . . .



# Impacts

- Benefits
  - Save money on carting
  - Make money on discounted sale of “waste” items
  - Recycling incentive when new commercial waste zone law goes into effect
- Costs / Time
  - Initial upfront reorganization of processes
  - Installation of waste separation stations?
  - Time spent on sorting → make sustainable

**Thank you.**

# References

<https://www1.nyc.gov/assets/dsny/site/resources/recycling-and-garbage-laws/collection-setout-laws-for-business>

<https://www1.nyc.gov/assets/dsny/site/resources/recycling-and-garbage-laws/recycling-laws-for-business>



# Open Questions & Feedback

- Is it confirmed that the carter actually recycles?
- How often is each “extra material” area expected to be cleaned out of the shop?
- Will someone need to oversee the waste diversion partnership? Ex:  
Manage wood scraps pickup

# Current costs

