And I Would Walk A Third of a Mile: Lessons in Community Composting From Providence, Rhode Island

Tyson Birch Harvest Cycle Compost



Harvest Cycle Compost is:

100% Bicycle Powered food scrap collection program.

Community composting service in Providence, RI with two options: residential drop off and individual pickup.

As of March 2025:

<u>380</u> pickup customers

<u>430</u> residential dropoff

THE PROBLEM



Central Landfill is expected to fill up by 2046. Food waste accounts for 33% of all trash.

Rhode Island needs to start composting – but how?



"Community composting is a model of composting that sources organic materials locally, engages the **community** in the composting process, and uses the compost produced in local soils."(US EPA, 2025)





From Food Scrap to Compost



Processing



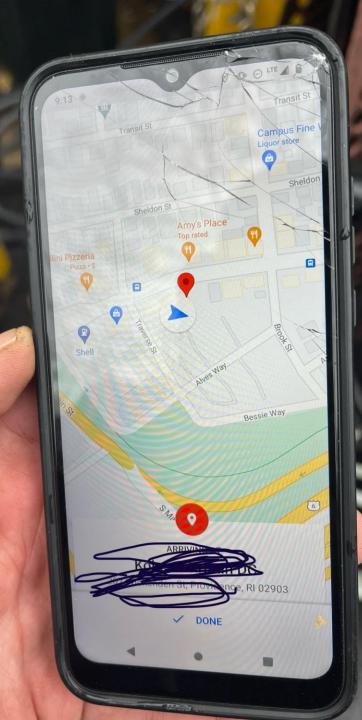
Distribution



HYPOTHESES:

- Pickup customers would fall into **clusters** located around the city.
- Dropoff customers would **follow the urban trails** in the city.





Collection



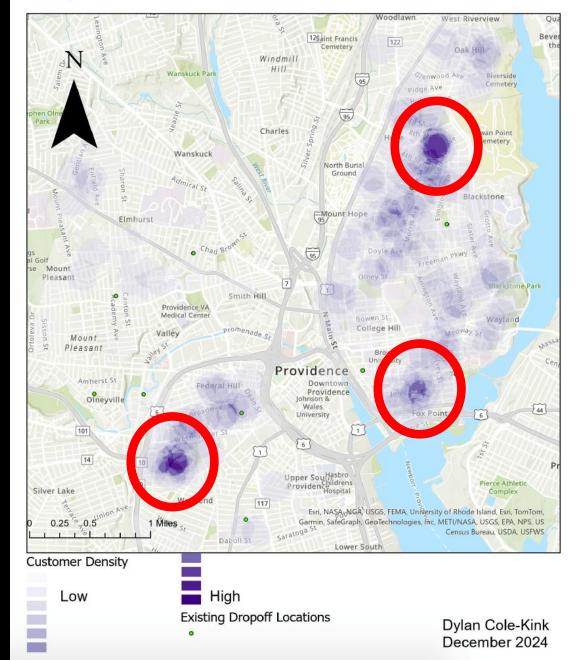
All routes are programmed with **StopSuit**e Bike is a **Surly Big Easy** and **Main Street Pedicab** Trailer is made by **Bikes At Work** Two aggregation points at Ring Street (West End) and Jewish Community Center (East Side).

Food scraps collected at dump sites are either brought by **Remix Organics** to the Anaerobic Digester, collected by **Epic Renewal** for bokashi composting, or **processed in house**.

TRENDS WITH INDIVIDUAL PICKUP:

- Customers gather in CLUSTERS.
- Neighbors see buckets around their neighborhood and join as well.
- Hotspots include Fox Point, Hope Street, Federal Hill.
- Price for individual pickup starts at
 \$16/month compared to \$10/month for residential dropoff.

Harvest Cycle Customer Density and Existing Dropoff Locations



TRENDS WITH RESIDENTIAL DROPOFF:

435 surveys with 121 responses (27%)

Responding customers **do not walk or bike** on citywide urban trails.

WALK (48.7%)

Bike (5%) DRIVE (44.6%)

 Average distance for walkers (n=59): 0.3 miles

 Average visit frequency for walkers: 1.1 times a week

COMMUNITY COMPOST: TOOD WASTE COLLECTION SIT

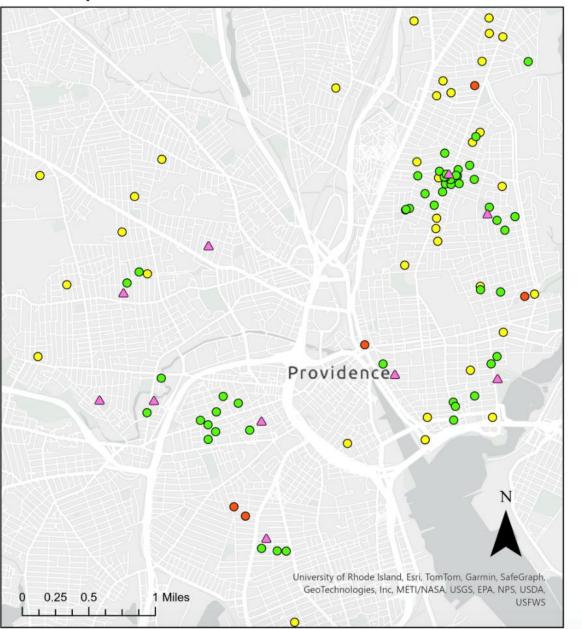
A. Vincent Iglion

Average distance for car drivers (n=54): **2.7 miles** Average visit frequency for drivers: **0.79 times** a week Reasons for using dropoff overwhelmingly included "price" and "proximity to home."



17 dropoff locations spaced around the city with more on the way!

Harvest Cycle Dropoff Customer Addresses and Modes of Travel to Dropoff Locations

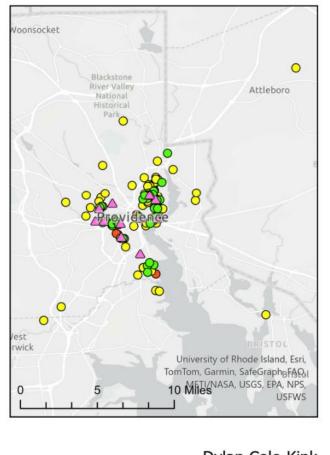


Dropoff Locations

Customer Home and Mode of Travel

Bike

CarWalk



Dylan Cole-Kink 3/5/2025 Farthest distance traveled by car:

19.5 miles (Attleboro to Power Street)

Average distance traveled by car:

2.5 miles

Frequency visited a week:

0.79

Farthest distance traveled by foot:

0.9 miles

Average distance traveled by foot:

0.3 miles

Frequency visited a week:

1.06



Processing is mostly done by staff but our volunteers include pickup and dropoff customers who want to help out whenever they can. Groundwork RI high school Green Team and Adult Job Training students also help with processing. Many hands make light labor!



FINDINGS:

 Pickup customers fall into clusters located around the city.

Dropoff customers would follow the urban trails

in the city to get to their dropoff.

- Dropoff customers walk an average of 0.3 miles to drop off their compost.

Harvest Cycle Diverted **156 tons** of food scrap from the landfill last year.

(Up from 111 tons in 2023)

Every Spring there is a compost "giveback" available to all subscribers to receive 5-10 gallons of finished compost.

