



Organics Collection

[nyc.gov/organics](http://nyc.gov/organics)

# Organics Collection in NYC



Bureau of Waste  
Prevention, Reuse  
and Recycling

Bridget Anderson  
NYC Department of Sanitation  
ILSR July 28, 2014

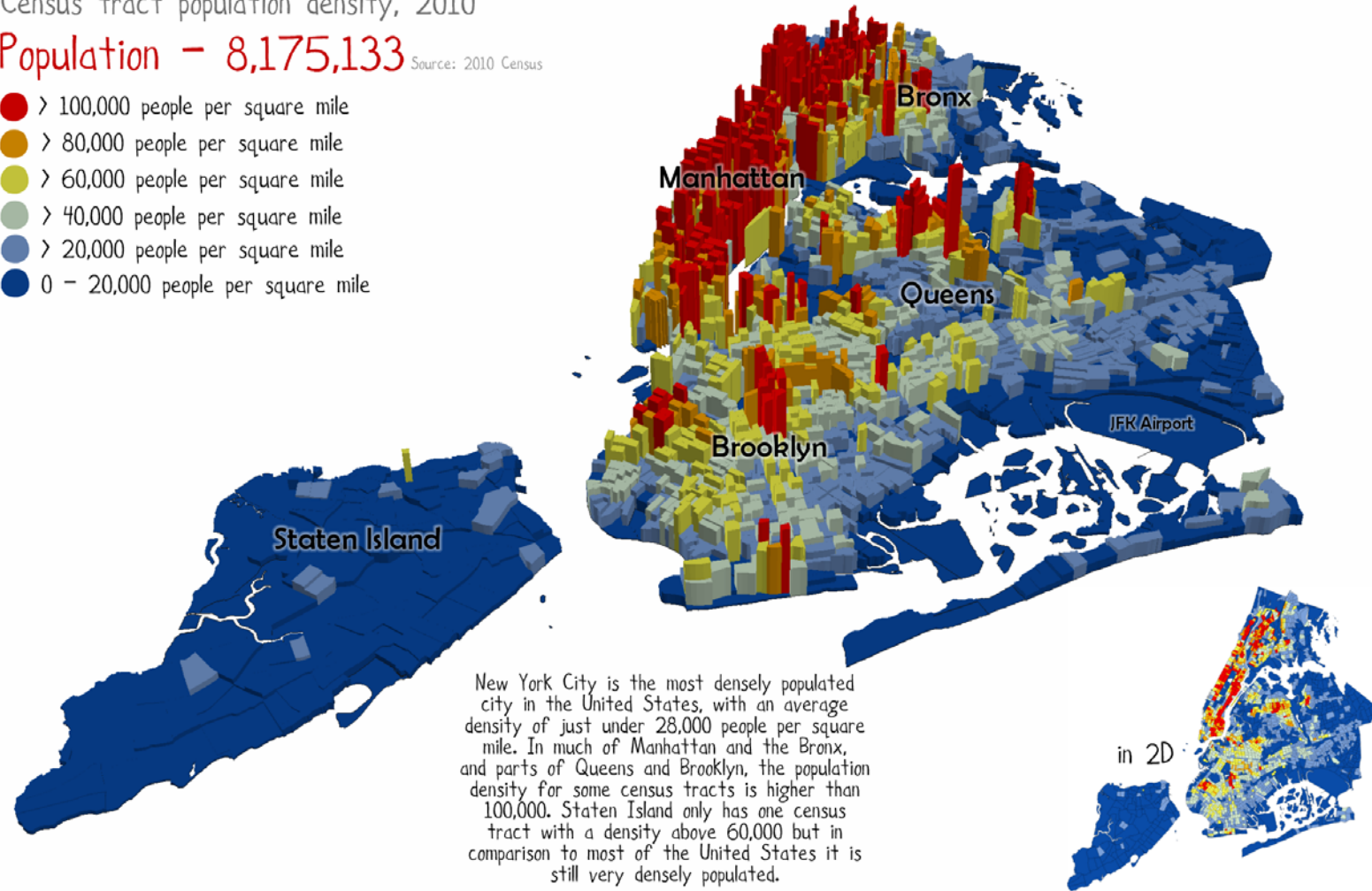
7/28/2014

# New York City<sup>in 3D</sup>

Census tract population density, 2010

Population - 8,175,133 Source: 2010 Census

- > 100,000 people per square mile
- > 80,000 people per square mile
- > 60,000 people per square mile
- > 40,000 people per square mile
- > 20,000 people per square mile
- 0 - 20,000 people per square mile



# NYC Requirements

## 2006 Solid Waste Management Plan

- Sound business principles: Long term contract for processing recyclables
- Environmental concern: Intermodal transportation
- Environmental justice



## Local Law 40 of 2010

- Amendments to original LL19 of 1989
- By 2020
  - 25% diversion rate DSNY curbside & containerized
  - 33% diversion rate DSNY-managed



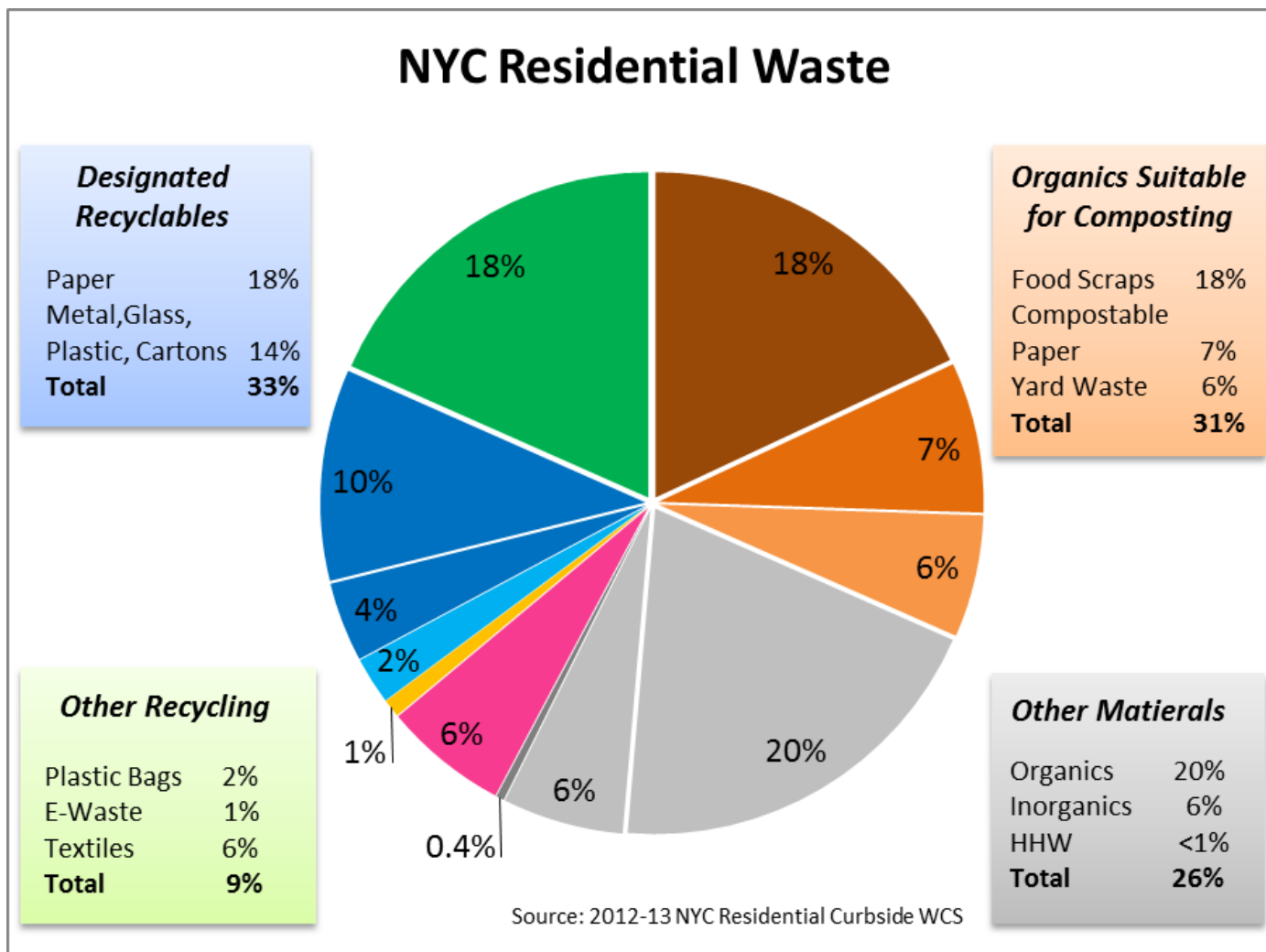
# NYC Goals



- Divert 75% of our solid waste from landfills (residential and commercial)
- Double diversion from residences & institutions by 2017
- Divert 50% food waste from restaurants

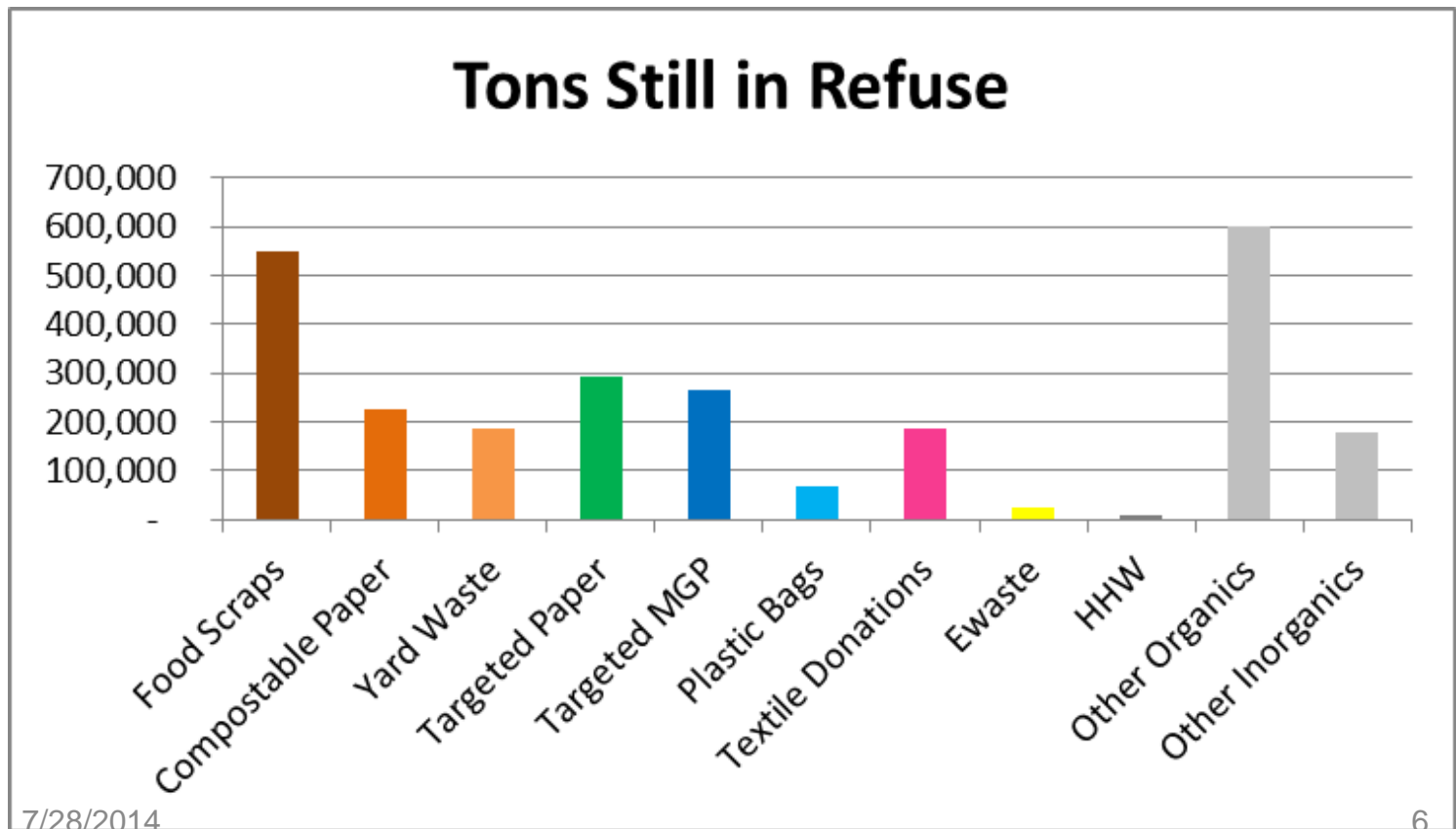


# 2013 Waste Characterization Study



# Double diversion from residences & institutions

- Current residential diversion ~15%
- To reach 30%, need **500K additional tons!**





# Organics Recovery: Potential Benefits

- Increase total waste diversion away from landfill
- Decrease costs associated with disposal
- Create compost for beneficial use
- Provide an alternative source of energy
- Reduce rodent populations (when organics set out in containers)



# NYC Organics Recovery Programs

- Green Market Drop-Offs
  - started at Union Square
  - now in all 5 Boroughs



- Community Drop-Offs & Local Organics Processing





# NYC Organics Recovery Programs

- Community Gardens & Backyard Composting

**NYC  
Compost  
Project**



- Christmas tree collection and mulching

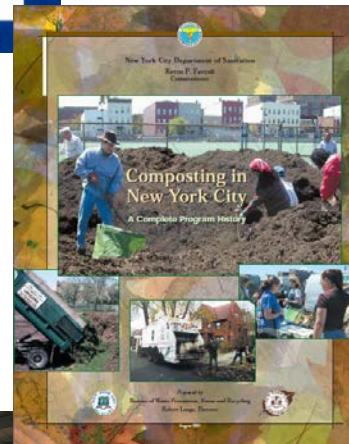


- Seasonal leaf & yard waste collection  
(budget permitting – currently suspended)



# Previous DSNY Studies

- Organics Collection Pilots
  - 1992
- Backyard, On-Site, Decentralized Composting
  - 1999
- Mixed Waste Composting
  - 2004



# DSNY Organics Collection Pilot Local Law 77 of 2013



- Two year pilot program Oct 2013 - July 2015
- Curbside collection of source-separated organic waste
  - **Residential Neighborhoods**
  - **Schools**
    - (High Rise Apartment Buildings)
    - (Agency Facilities)
- Suspend seasonal leaf & yard collection during pilot



**Partner  
Agencies**



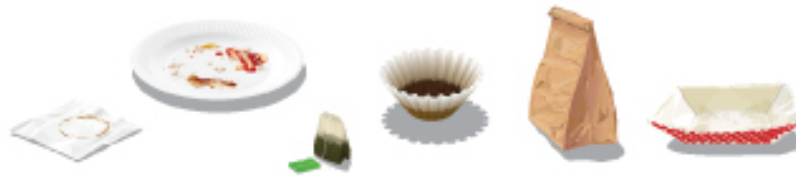
# DSNY Organics Collection Pilot

## What is collected?

all food scraps



food-soiled paper



plants and yard waste



# DSNY Organics Collection Pilot Residential Neighborhoods

## Pilot Areas

- Low to medium density
- 1 to 9 unit residential buildings
- Weekly or bi-weekly collection

## Spring 2013

- Staten Island
- ~3,200 households

## Fall 2013

- Expanded in Bronx, Brooklyn, Staten Island
- ~ 30,000 households total

## Spring 2014

- Expanded in Queens, Brooklyn, Staten Island
- ~100,000 households total





# DSNY Organics Collection Pilot Residential Starter Kit

## Delivered to households:

- 12 or 21 gallon brown organics bin
- Kitchen container
- Brochure
- Sample supply compostable liners or coupons donated by:  
BioBag, Glad, Ucan,  
Ecosafe, Bag to Nature



# DSNY Organics Collection Pilot Residential Education

## Mailers



## Brochures



## Door Hangers



## DSNY Organics Collection Pilot





# DSNY Organics Collection Pilot High-Rise Apartment Buildings

## Pilot Buildings

- Enroll to participate
- Multiple strategies
- DOHMH Rat Study

## Spring 2013

- Two buildings in Manhattan
- Morningside Gardens - 980 units
- The Helena - 500 units

## Summer 2014

- Manhattan and Brooklyn
- 90+ buildings



# DSNY Organics Collection Pilot Schools

## 2011-12

Four DOE schools

- Spearheaded by a few PTA's in Manhattan

## 2012-13

90+ DOE and private schools

- Manhattan, Brooklyn

## 2013-14

300+ DOE and private schools

- Manhattan, Brooklyn, Staten Island

## 2014-15

400+ DOE and private schools

- All five boroughs



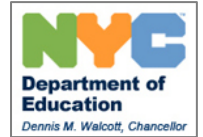


# DSNY Organics Collection Pilot School Kitchens and Cafeterias

**Kitchen Staff**



**Students, Teachers, Admin**



**Custodial Staff**



**DSNY Collection Staff**



7/28/2014



# Commercial Organics

Commercial Food Waste  
487,000 tons/year<sup>1</sup>

**336,000** MTCO<sup>2</sup>e  
Produced<sup>3</sup>

As heavy as  
**1.3** Empire State  
Buildings<sup>2</sup>...

Equivalent to  
CO<sup>2</sup> Emitted from  
**66,000** Passenger  
Vehicles<sup>4</sup>



# Mayor's Food Waste Challenge

- Voluntary and Free
- *Commitment:*  
50% food waste diversion goal
- Recognition for Leadership
- Best Practices
- Technical Assistance
- Track Diversion











# FWC Participant Examples



# Feedback through Tracking



How many bags/toters of... ?	Sun.	Mon.	Tues.	Weds.	Thurs.	Fri.	Sat.	Bag/toter Size
< 50 % full 	_____	_____	_____	_____	_____	_____	_____	_____
<b>FOOD WASTE</b> > 50 % full 	_____	_____	_____	_____	_____	_____	_____	
100% full 	_____	_____	_____	_____	_____	_____	_____	
<b>TRASH</b> 	_____	_____	_____	_____	_____	_____	_____	_____
<b>RECYCLING</b> 	_____	_____	_____	_____	_____	_____	_____	_____
<b>FOOD DONATION*</b> 	_____	_____	_____	_____	_____	_____	_____	_____



# Commercial Organics Law Local Law 146 of 2013

**Goal:** divert 50% of food waste

## **Covered businesses must:**

- Provide separate bins for the disposal of organic waste
- Post instructions on the proper separation of organic waste
- Provide for collection by a private carter of organic waste



## **Covered carters must:**

- Deliver collected organic waste to a facility for purposes of composting, aerobic or anaerobic digestion, or any other method of processing organic waste that the department approves by rule.
- Or to a transfer station that will delivery it to such facility.



# How much is there?



# Who are the players?



# Commercial Organics Law

## Covered Establishments

### **Proxy for quantity of food waste generated:**

- venue size (square footage)
- # people served
- # beds

### **Covered Establishments include:**

- Arenas or stadiums
- Food service establishments
- Catering establishments
- Food preparation establishments
- Food service within hotels
- Retail food stores
- Food wholesalers
- Public events



# Commercial Organics Law Timeline

- Goes into effect July 2015
- Commissioner must determine sufficient organics processing capacity for a viable program
  - 100 mile radius from NYC
- Commissioner may determine to start program with a subset of covered establishments
- Warnings in lieu of violations for first year.





# DSNY Organics Collection Pilot Organics Processing

## Composting

DSNY-managed facilities

- NYSDEC permission



Processing BID

- existing regional capacity for pilot period

## Anaerobic Digestion

- Test: fall 2013-spring 2014
  - DEP Newtown Creek Facility
  - bio-slurry 
- New facilities planned or being built

