

NRDC Food Waste Assessments: New York City, Denver, & Nashville

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NRDC



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WHAT IS THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC)?

- NRDC is one of the nation's most effective environmental non-profits with over 2 million members and online activists
- Founded in 1970, NRDC works on a wide variety of environmental issues with over 500 scientists, lawyers, and policy experts in offices across the U.S. and in Beijing



Wasted food is one of NRDC's focus areas.

Baseline Food Waste Assessments

Objectives:

- Assess how much food is going to waste in commercial and residential sectors, including characteristics of the food that is wasted and reasons for waste.
- Estimate how much of the wasted food was previously edible.
- Contribute to working model for other cities to perform similar assessments.
- Use assessments to inform and inspire initiatives to:
 - Prevent wasting food
 - Rescue edible food to benefit people in need
 - Recycle food scraps

Data Gaps in Food Waste Measurement

What is actually being wasted?

- Limited direct measurement in U.S., especially at household level
- Little detail by food type, edibility, or loss reason
- Focus on landfilled food waste (little focus on drain disposal)
- Lack of consistency across measurement studies



***Understanding
what, how much, why,
and where it goes
is critical to
understanding behavior,
designing interventions, and
tracking improvement***

Baseline Food Waste Assessments

Basics:

- 3 Cities
 - Nashville, Tennessee (Pilot) – September 2016
 - Denver, Colorado – November 2016
 - New York City – January 2017
- Dual Focus Areas
 - Residential
 - Institutional, Commercial, & Industrial (ICI)



Baseline Food Waste Assessment

Residential

Kitchen Diaries –

- Tracked weight and types of food discarded for one week (using provided digital kitchen scale and diary)
- Collected info on weight, type of food, packaging, disposal destination, loss reason, and state of food

Bin Digs –

- Sampled from randomly selected households
- Sorted and categorized into 9 food categories, 1 category for inedible parts, and 6 non-food categories

Surveys –

- One before and one after kitchen diary
- Captured attitudes, motivations, and behaviors related to food

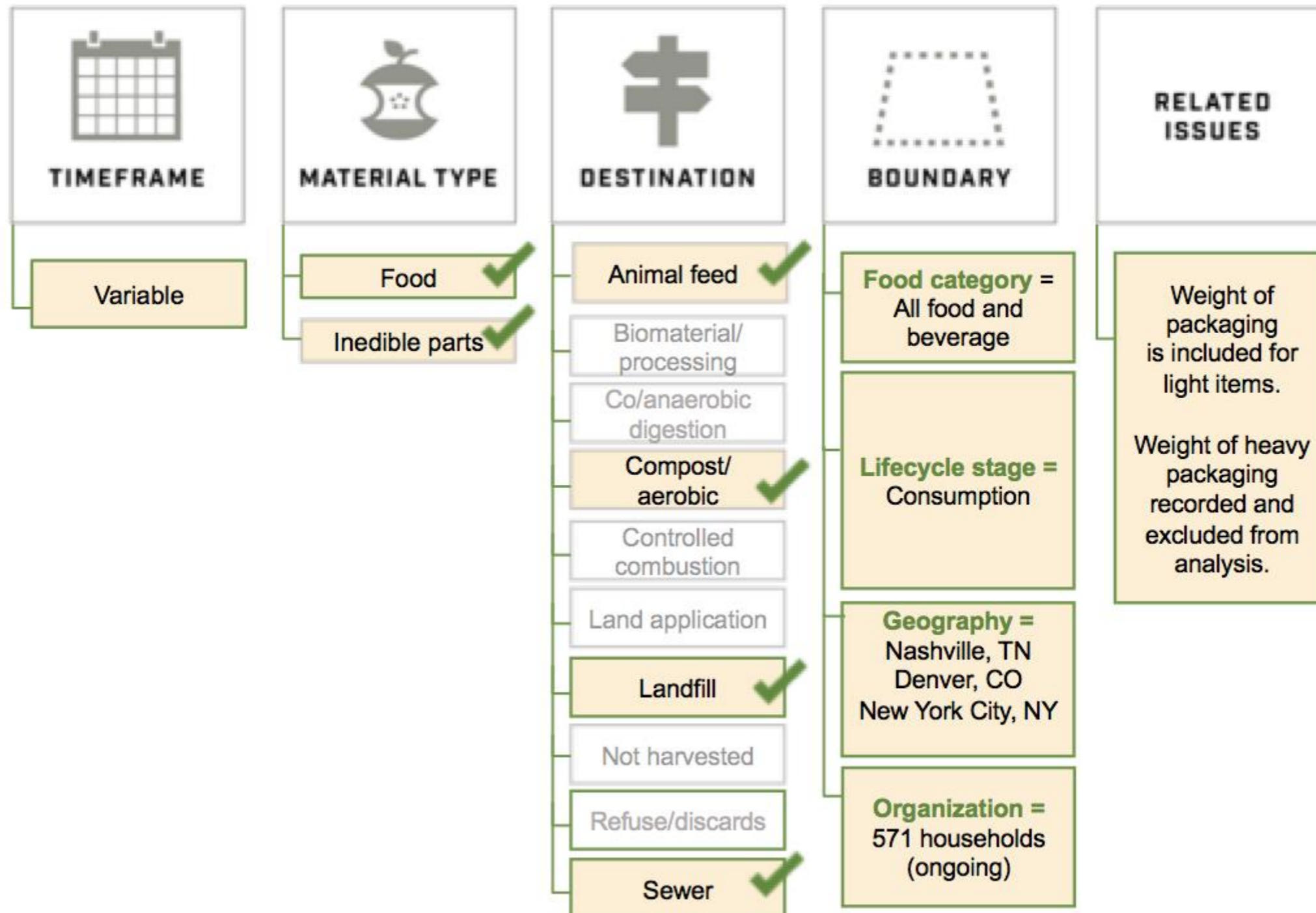
Baseline Food Waste Assessments

	Residential				
	Number of Households Recruited	Number of Completed Kitchen Diaries	Number of Completed Surveys	Number of Completed Bin Digs (Trash Only)	Number of Completed Bin Digs (Trash & Compost)
Nashville (Pilot)	115	71	76	104 (includes before and after digs)	n/a
Denver	350	199	222	51	14
New York City	686	301 (ongoing)	419 (ongoing)	94	10



Baseline Food Waste Assessment

Residential



Baseline Food Waste Assessment

Institutional, Commercial, & Institutional (ICI)

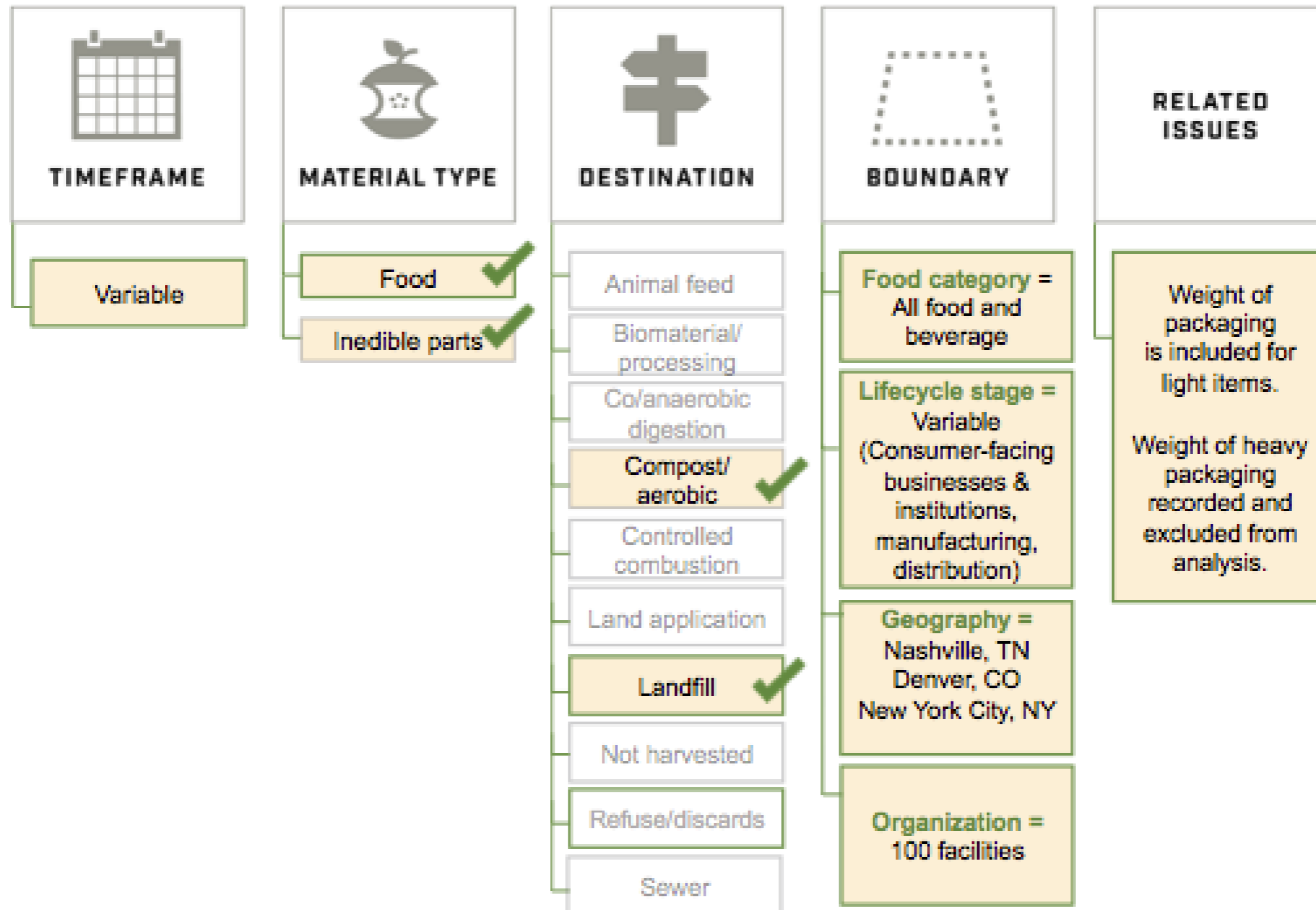
- ICI Sector Food Waste Generation Estimates– Used equations from previous studies and list of food generating facilities in each city to estimate total food waste generation
- Bin Digs – Sampled from small number of selected facilities to “ground-truth” equations used in method above (used same bin dig categories as for residential measurement).

	ICI	
	Number of Trash Samples	Number of Compost Samples
Nashville (Pilot)	22	1
Denver	28	11
New York City	50	33

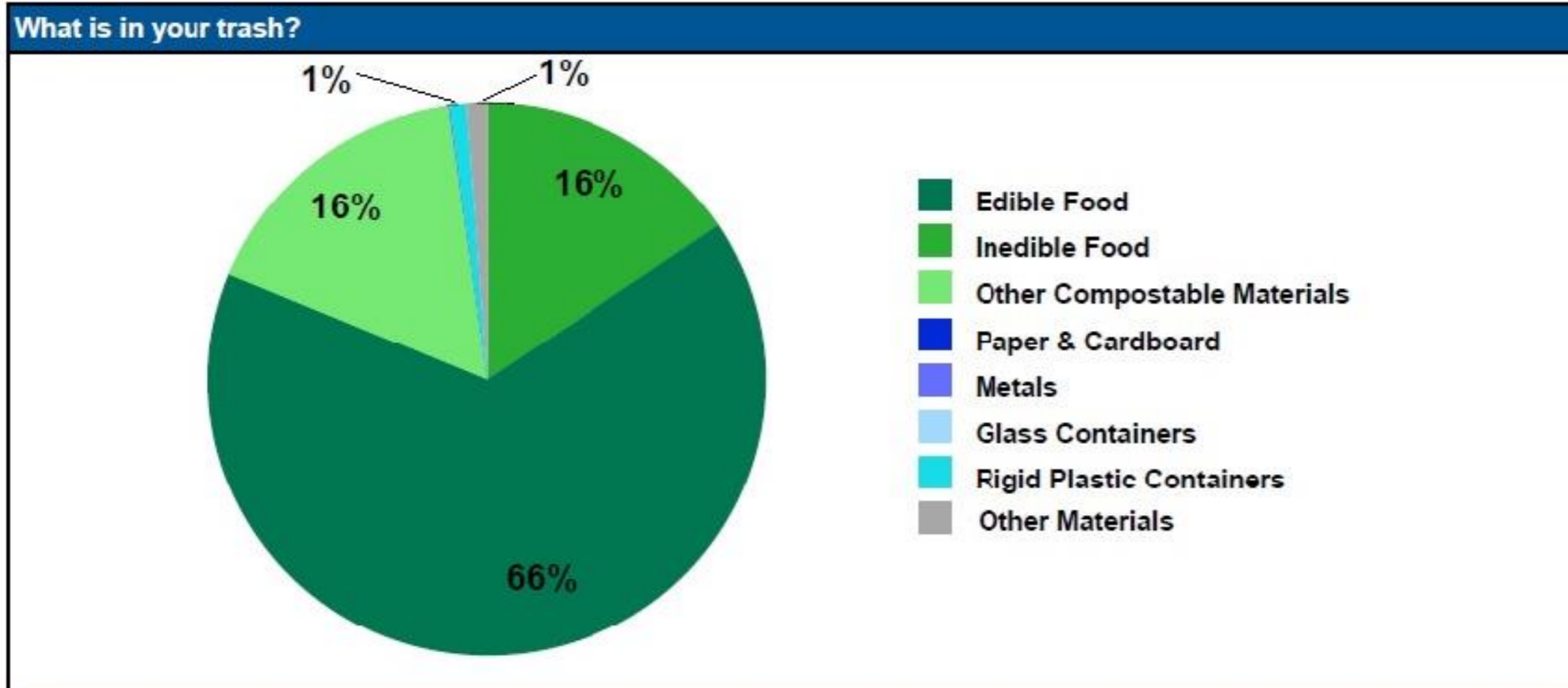


Baseline Food Waste Assessment

Institutional, Commercial, & Institutional (ICI)



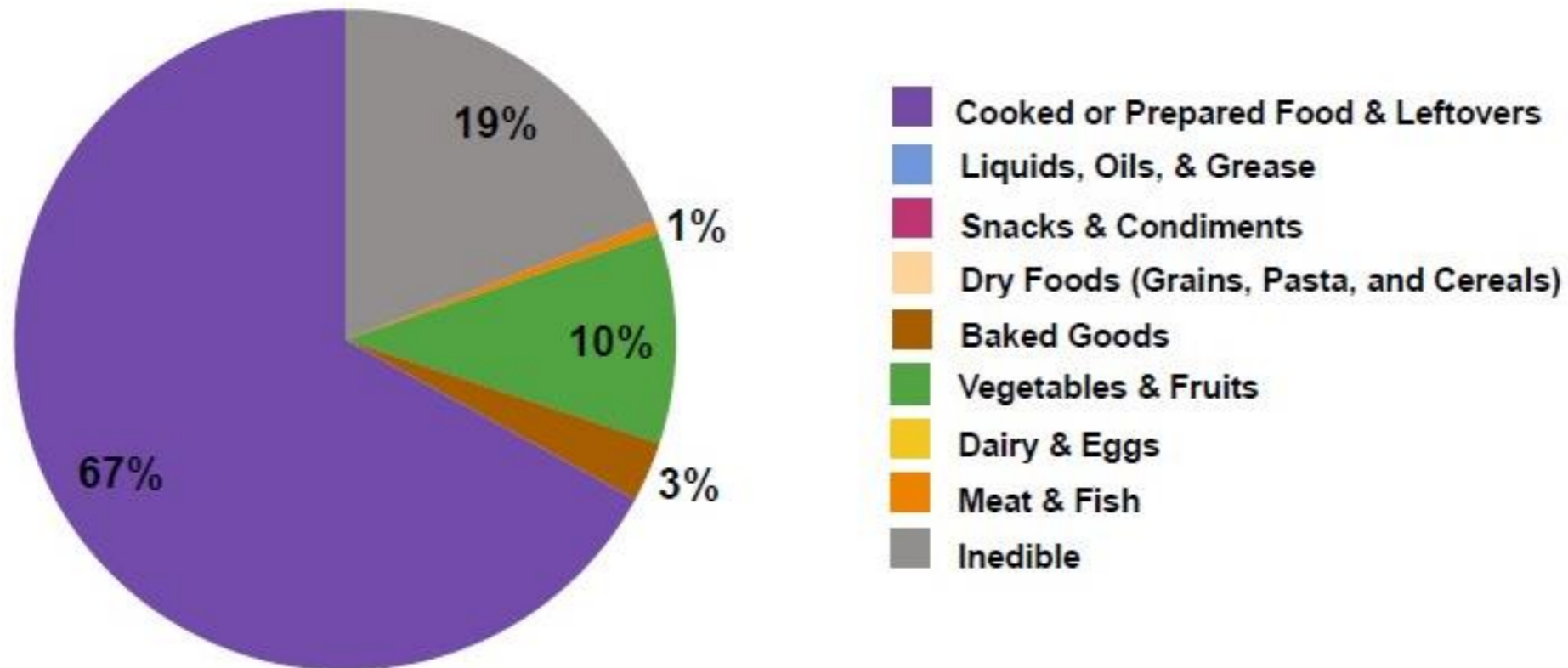
NRDC Food Waste Assessment – Report Template



Material Categories	Examples
Inedible Food	Inedible peels (banana, citrus, melon, winter squash), apple cores, pits, shells, bones, husks, animal fat and tendons
Edible Food	Meat, fish, dairy, eggs, vegetables, fruits, baked goods, dry goods, grains, pastas, cereals, snacks, condiments, canned goods, candy, snacks, drinks, water, oil, fats, cooked meals
Other Compostable Materials	Food-soiled paper, pizza boxes, paper cups, paper towels/napkins, grass, leaves, branches, yard trimmings
Recyclable Materials	Paper, cardboard, metal containers, glass containers, rigid plastic containers
Other Materials	All other materials such as non-container glass, plastic bags, plastic wrap, polystyrene foam, hygiene products, clothing, electronics

NRDC Food Waste Assessment – Report template

What types of food waste are in your trash?



Material Categories	Examples
Inedible Food	Inedible peels (banana, citrus, melon, winter squash), apple cores, pits, shells, bones, husks, animal fat and tendons
Edible Food	Meat, fish, dairy, eggs, vegetables, fruits, baked goods, dry goods, grains, pastas, cereals, snacks, condiments, canned goods, candy, snacks, drinks, water, oil, fats, cooked meals
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Recyclable Materials	Paper, cardboard, metal containers, glass containers, rigid plastic containers
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Thanks and Questions!



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