

# Broward County Waste Composition Study and Waste Generation Study

SOLID WASTE AND RECYCLABLE MATERIALS PROCESSING  
AUTHORITY OF BROWARD COUNTY

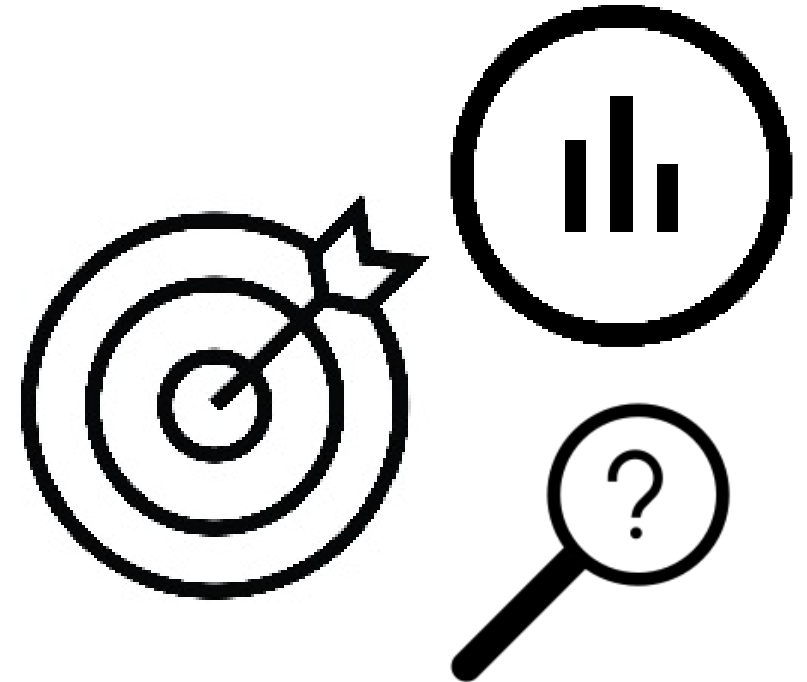
NOVEMBER 22, 2024



# Waste Composition Study

# Purpose

- ▶ Informs How Much Recycling Can Reduce Disposal
- ▶ Analyzes
  - ▶ Waste and Recycling Material Types
  - ▶ Recycling Contamination, and
  - ▶ Potential Commodities



# Waste Streams Examined



Source-Separated  
Recyclables






Municipal Solid  
Waste

Residential  
Commercial



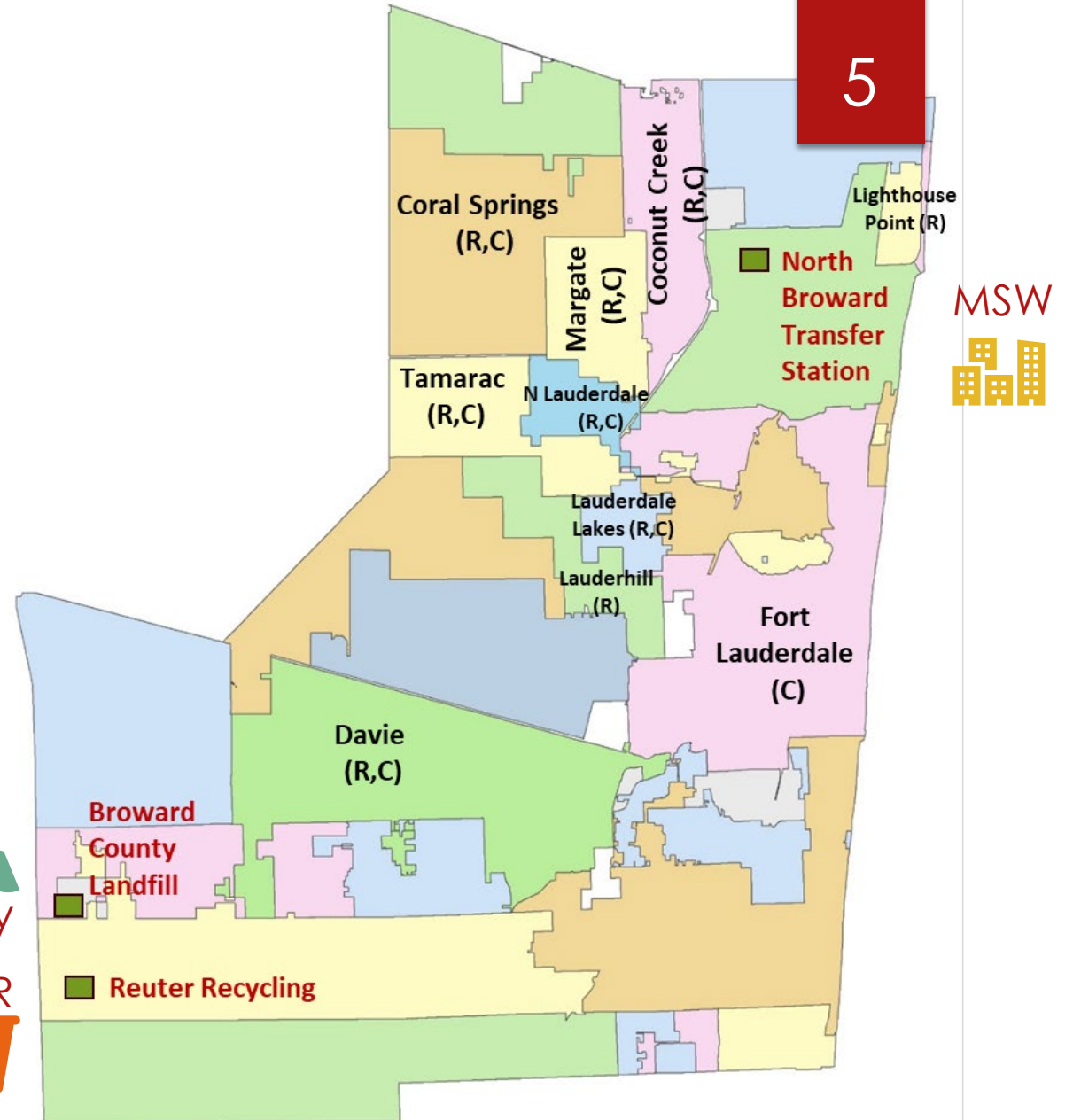
Construction/Demolition  
Debris (C&D) and Bulky  
Materials

# Locations & Sampling

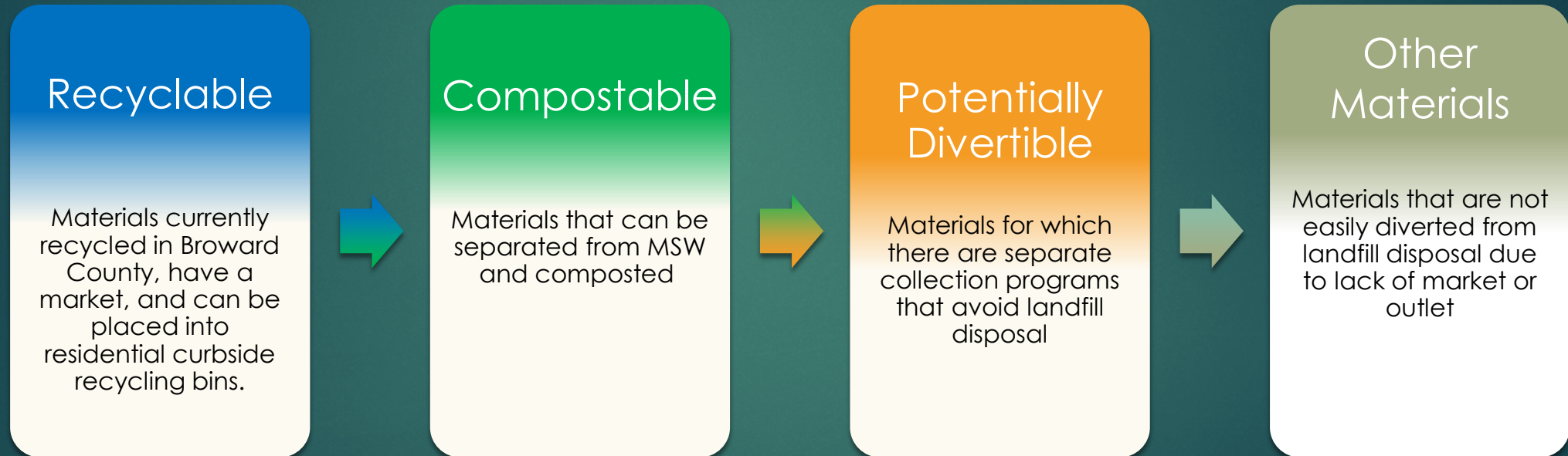
Season	Number of Samples		
	SSR 	MSW 	C&D/ Bulky 
Summer	20	50	60
Fall	--	30	61
Winter	30	48	66
Spring	--	7	65
<b>Total</b>	<b>50</b>	<b>135</b>	<b>252</b>

  
C&D/Bulky

SSR  

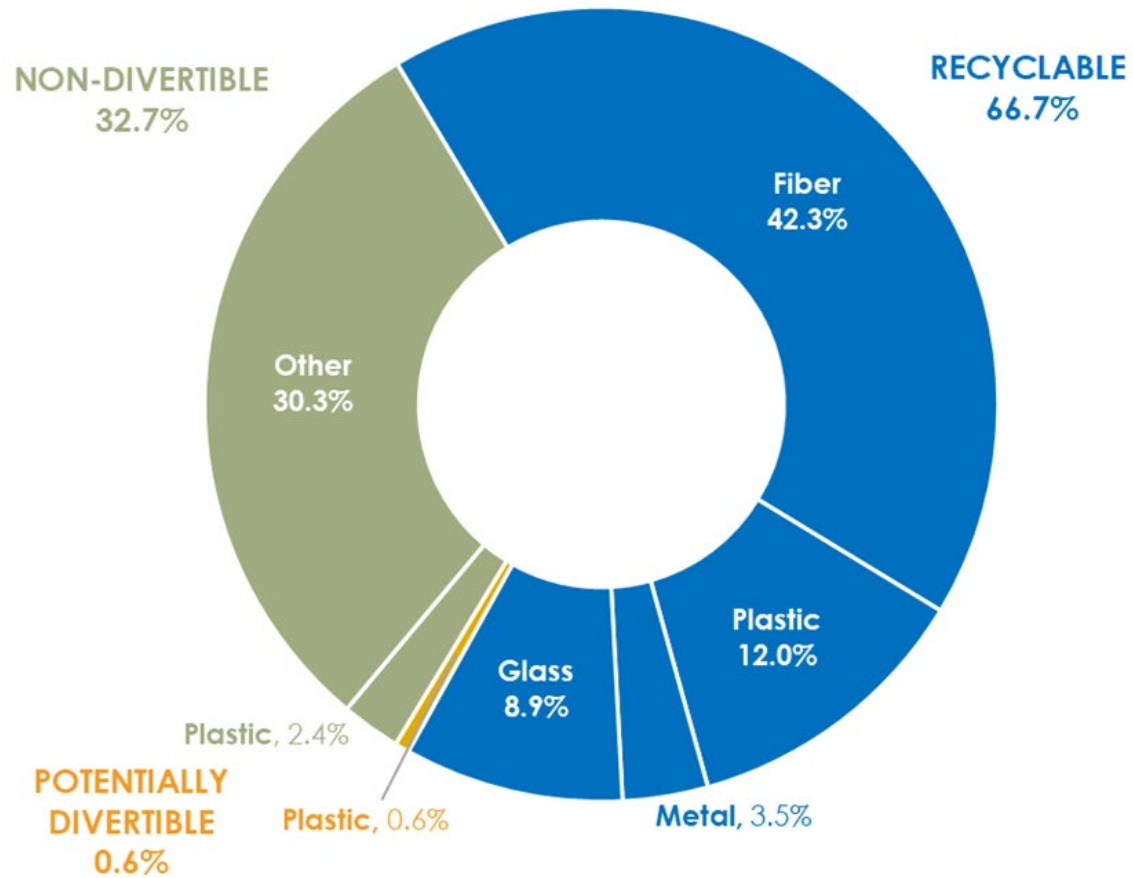
# Divertability Analysis





# Source-Separated Recycling

# Source-Separated Recycling



## Top Materials Include:

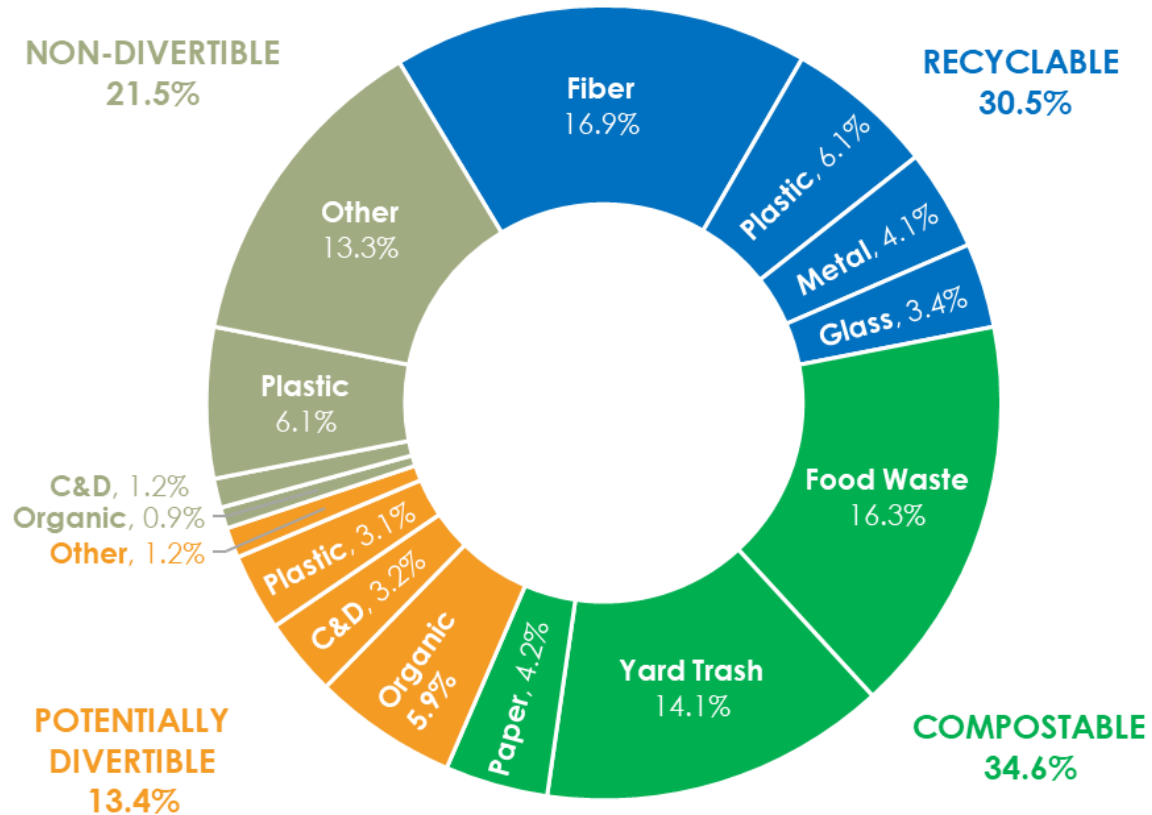
Corrugated Cardboard - 19.2%  
Mixed Paper - 11.6 %  
Glass Containers - 8.9%  
PET Bottles - 5.8%  
Magazines - 4.7%





# Municipal Solid Waste

# MSW - Residential



## Top Materials Include:

Food Waste - 16.3%

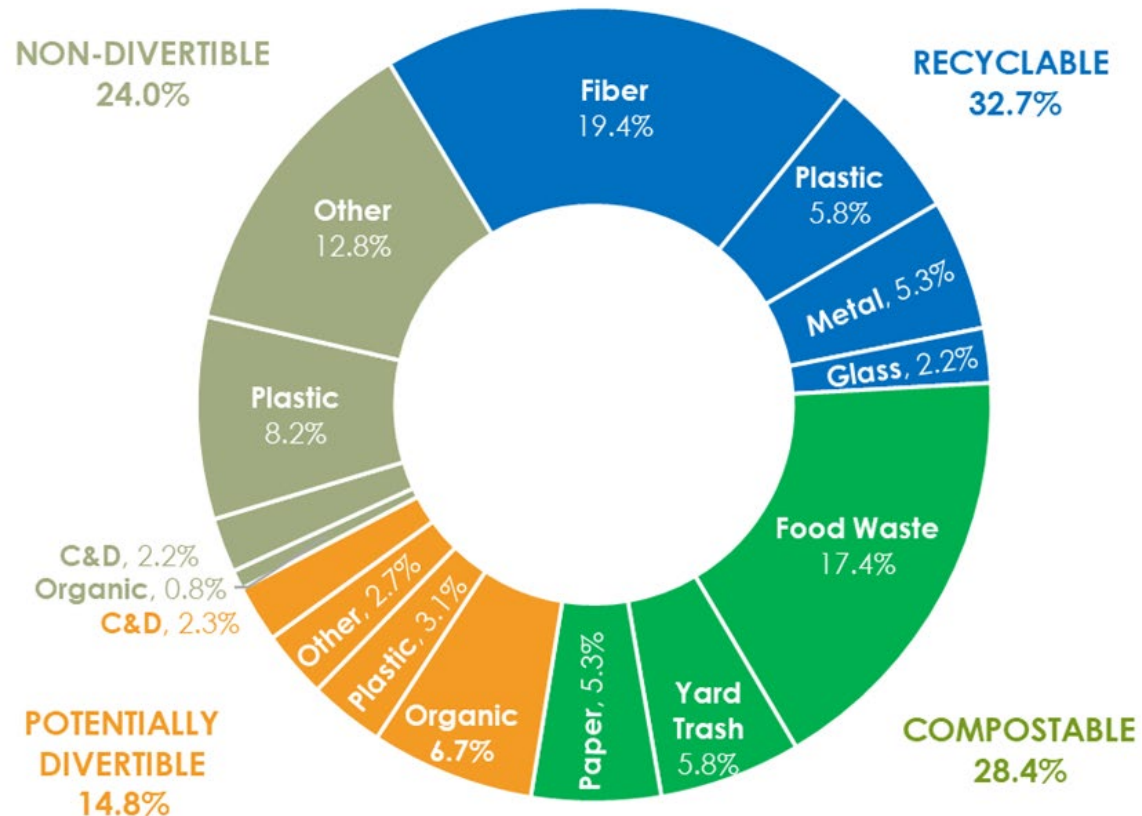
Yard Waste - 14.1%

Other - 13.3%

Mixed Paper - 8.9%

Textiles - 5.7%

# MSW - Commercial



## Top Materials Include:

Food Waste - 17.4%

Other - 12.8%

Corrugated Cardboard - 8.7%

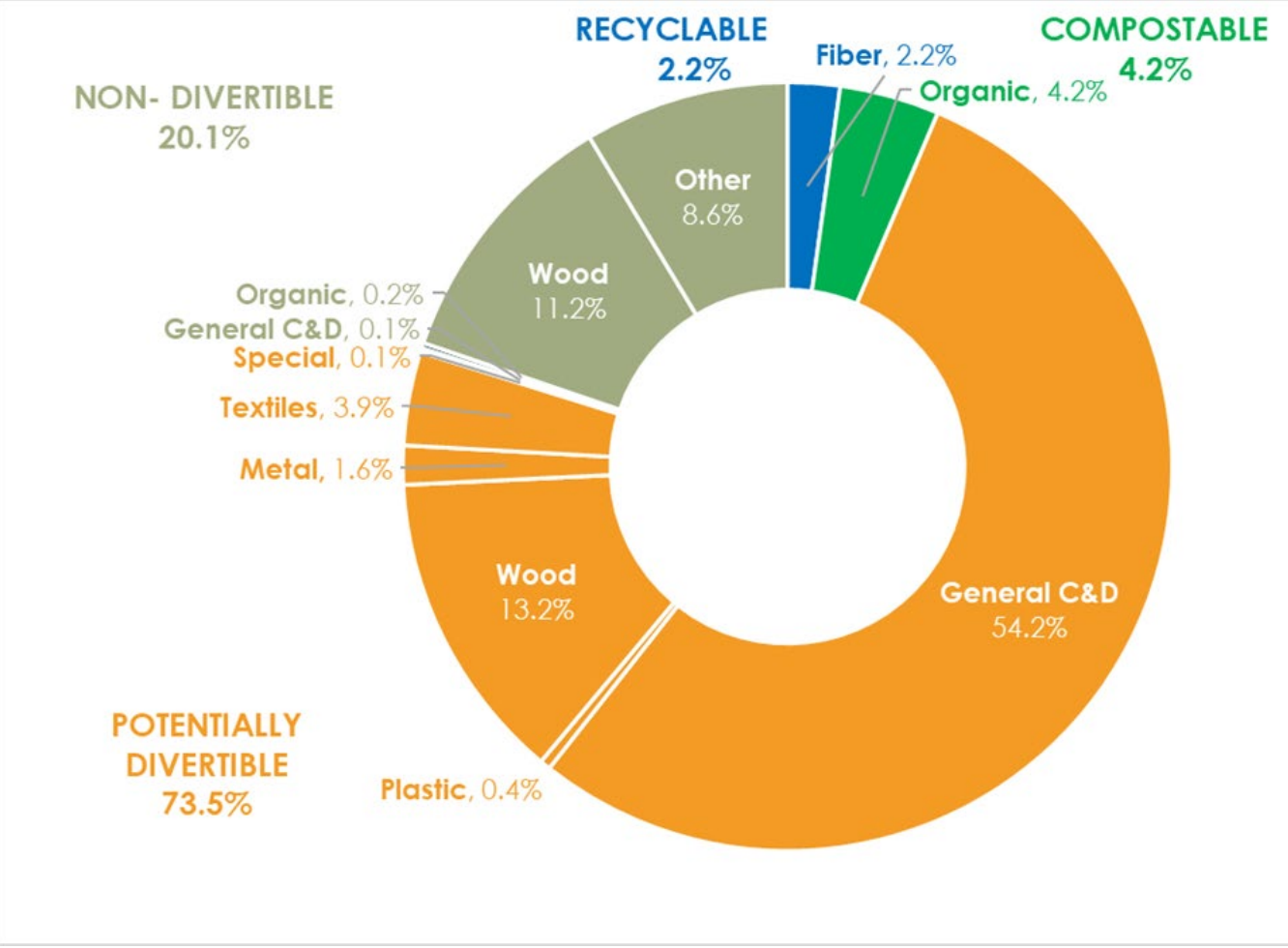
Mixed Paper - 6.9%

Yard Trash - 5.8%



C&D/Bulky

# C&D/Bulky



## Top Materials Include:

- Asphalt Roofing - 25.7%
- Clean Engineered Wood - 13.2%
- Treated Wood - 11.2%
- Brick - 8.8%
- Concrete - 8.0%

# Recommendations

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Improve Recycling Behavior

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Reduce Recyclables in MSW

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Divert Compostable Materials

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C&D Diversion

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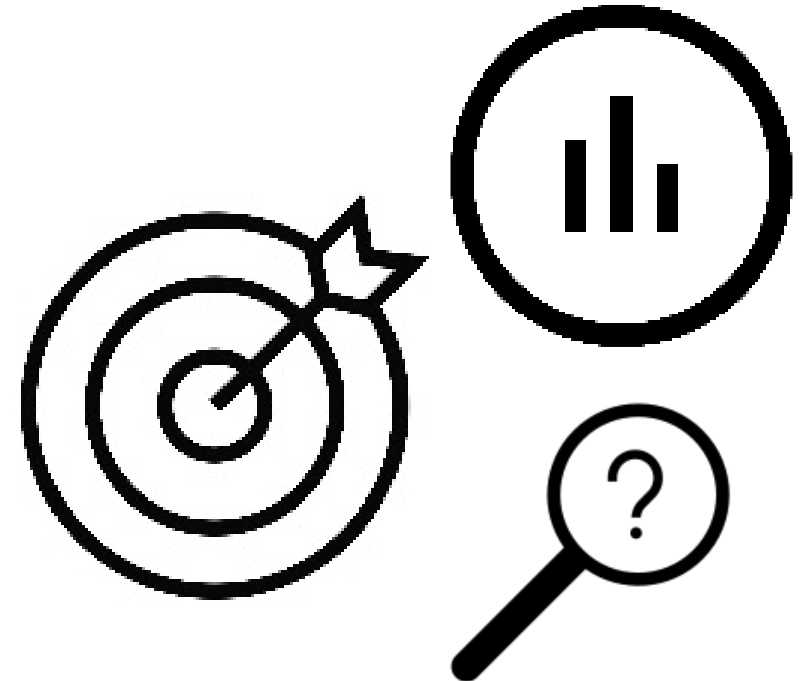
Periodic Waste Composition Studies



# Waste Generation Study

# Purpose

- ▶ Basis for Non-Ad Valorem Assessment
- ▶ Provide Revenue to Authority Operations
- ▶ Fees Based on Type of Property and Associated Waste Generation

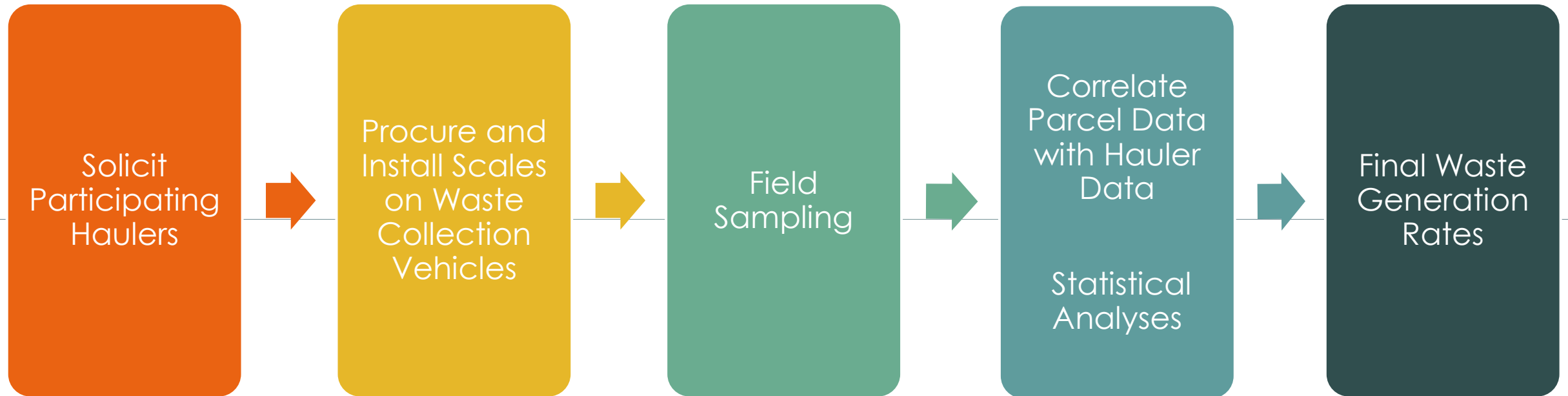




# Waste Streams Not Included

- ▶ Bulk Trash
- ▶ Construction and Demolition
- ▶ Yard Waste

*These waste streams are usually seasonal or inconsistent, and usually have separate funding mechanisms. Therefore, they are not typically included in Waste Generation Rates.*



# Waste Generation Study Process

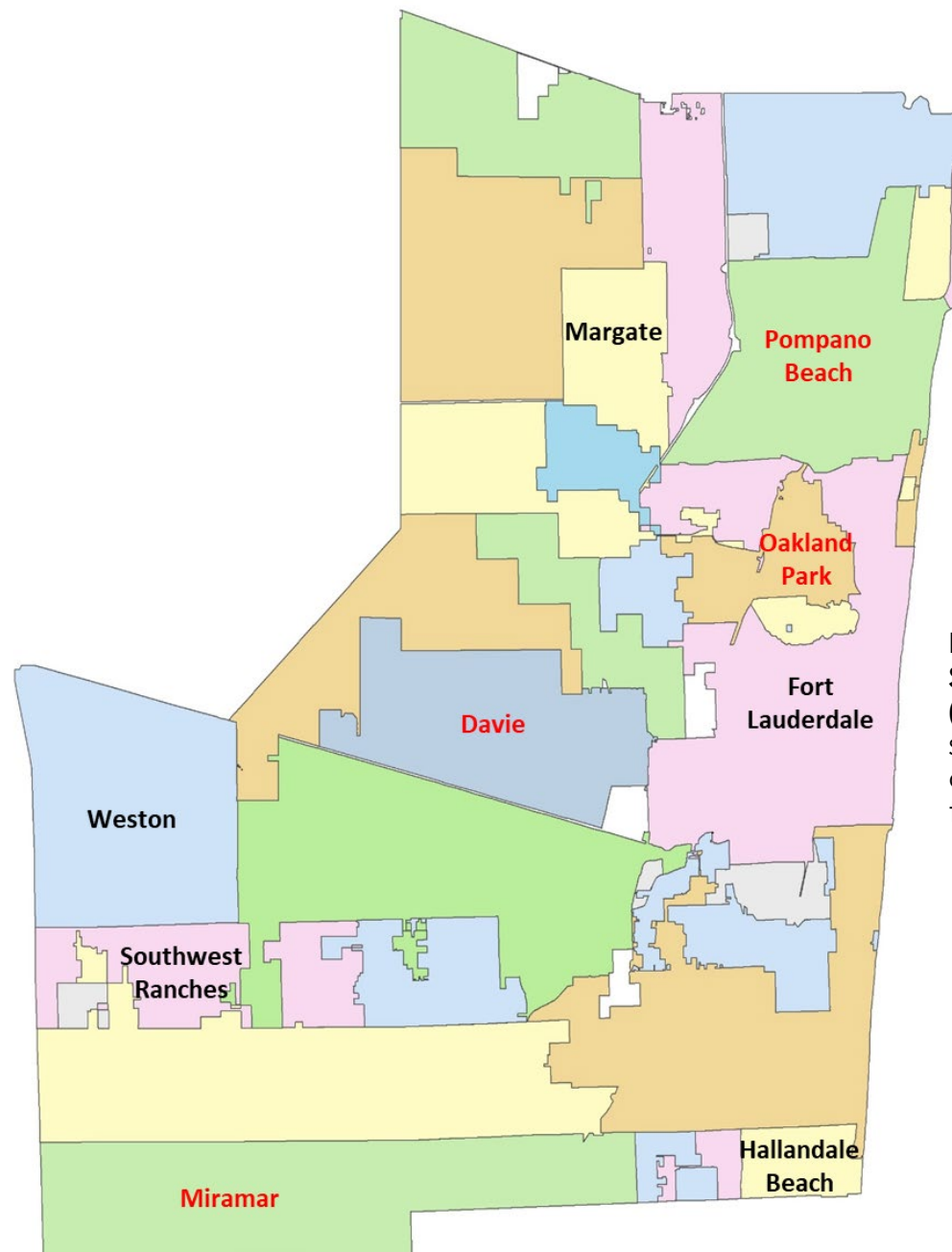
# SCS and Hauler Coordination

- ▶ SCS Coordinated Directly with Haulers
  - ▶ Non-Disclosure Agreements
  - ▶ Procured and Arranged Installation of On-Board Truck Scales (4 trucks)
  - ▶ Selected Routes and Reviewed Customers
  - ▶ Arranged Ride-Alongs to Collect Data



# Represented Areas

- ▶ Municipalities in **black text** provided residential waste collection information.
- ▶ Municipalities in **red text** were included in the commercial waste field study.



**Broward Municipal Services District (Unincorporated)** – shown in white areas contiguous to Fort Lauderdale.

# On-Board Scales

**LOADMAN**

Weigh-in-motion



# Field Sampling / Ride-Alongs

November 2022 to June 2023

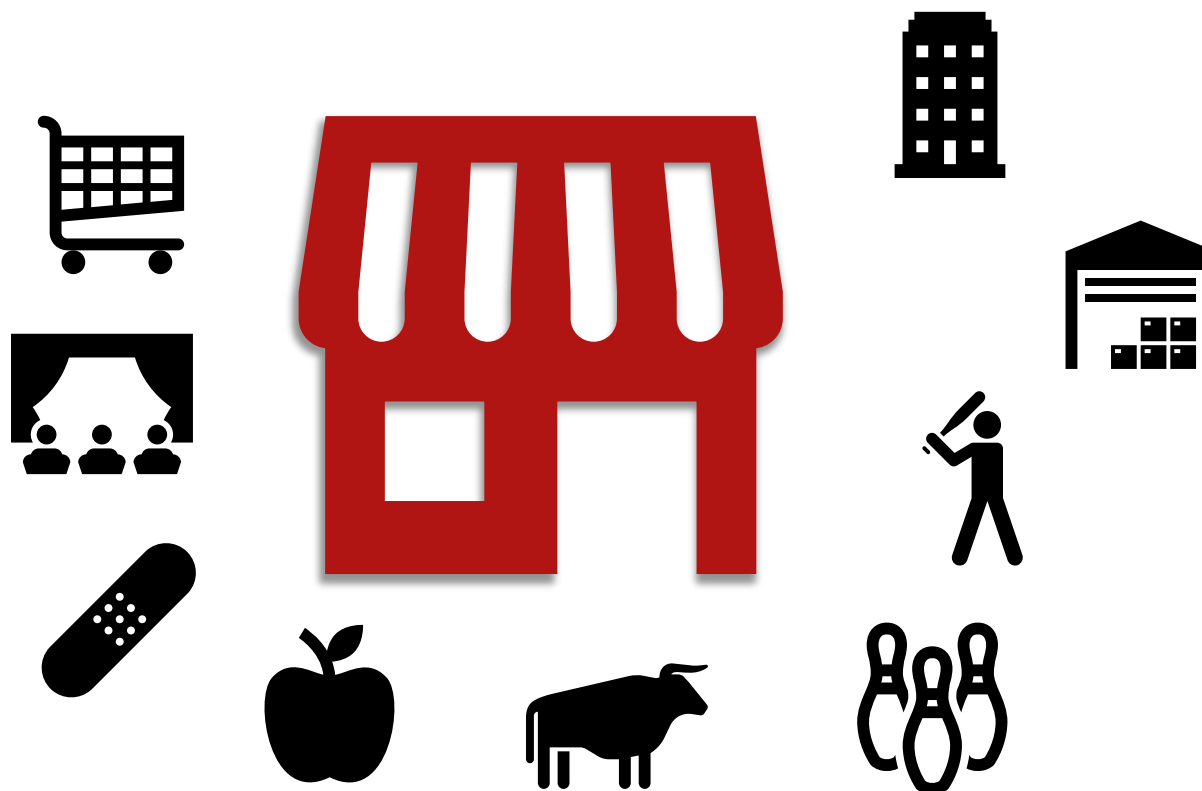
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graph TD; A[November 2022 to June 2023] --> B[Ride-Alongs for 35 Days]; B --> C[1,199 Properties Measured];
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Ride-Alongs for 35 Days

1,199 Properties Measured

# Broward County Property Appraiser

- ▶ **Matched** Hauler Customer to Parcel for
  - ▶ Land Use Code
  - ▶ Building Size (Total Living Area)
- ▶ Developed **Use Code Groups**



# Association Difficulties – Parcels/Customers



Single Property –  
Multiple Tenants –  
Multiple Waste  
Contracts



Multiple Properties –  
Single Waste  
Contract



Physical Address  
Discrepancies



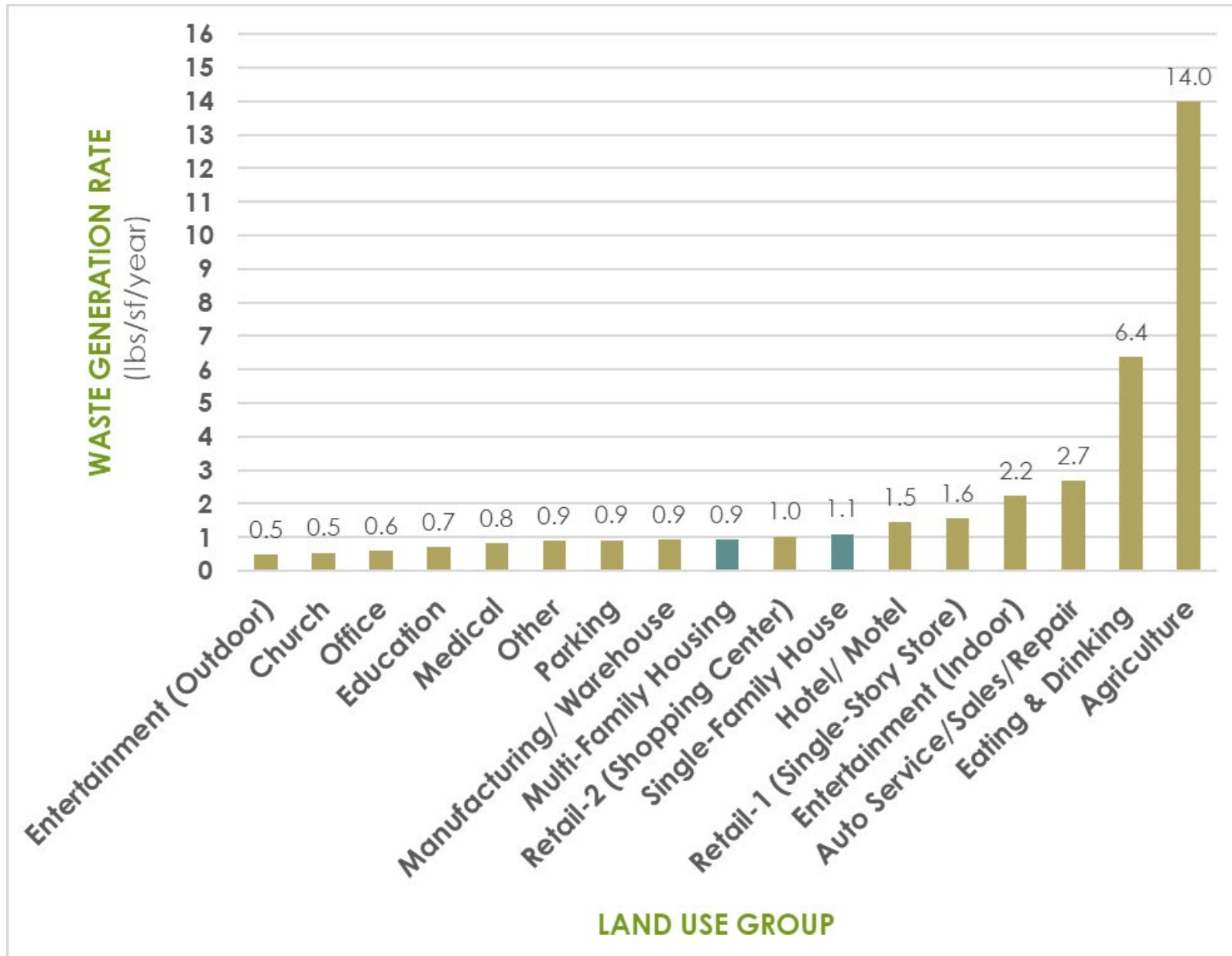
## Residential

- Single-Family Houses
- Multi-Family Housing

## Non-Residential

- Retail-1 (Single-Story Store)
- Retail-2 (Shopping Center)
- Office
- Transportation
- Eating & Drinking
- Auto Service/Sales/Repair
- Entertainment (Indoor)
- Entertainment (Outdoor)
- Hotel/ Motel
- Manufacturing/ Warehouse
- Agriculture
- Church
- Education
- Medical
- Parking & Mobile Homes
- Other

Use  
Code  
Groups



# Waste Generation Rates

## Contact Information

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# Discussion/Questions