



# Waste Generation and Composition Study

**PRESENTATION TO THE SOLID WASTE  
WORKING GROUP**

*JANUARY 5, 2022*

# Purpose



To clarify the process and deliverables of a waste generation and composition study.



Identify potential uses of the studies.



Obtain assistance from the municipalities and their contracted haulers.



Answer questions related to the study.

# Waste Generation Study (WGS)

**What is it?** - A generation factor derived through a statistically-defensible calculation of the average **amount** of waste (by weight) created residentially and commercially.

**How is it done?** – Generation factors established and grouped by land-use codes (LUCs) using data from:

- ▶ haulers
- ▶ scales
- ▶ municipal data
- ▶ scale house reports
- ▶ direct observation (ie, “ride-alongs”)

# Waste Generation Study (WGS)

**Result** – Generation factor for waste established by LUC

Residential Category	Garbage & Trash	
	(Tons)	Vegetation (Tons)
Single Family	1.1	0.85
Mobile Family	1.1	0.58
Multifamily Combined	0.71	0

Commercial Generation in Average Pounds per Square Foot						
PA	PA Description	Total Volume per SF Study%	Average Density PA Code	Average Density Total Study	Average Generation per SF PA Density	Average Generation per SF Study Density
1700	Dormitory	0.05	154.82	157.94	<b>8.10</b>	8.26
3400	Strip Store	0.03	139.45	157.94	<b>4.00</b>	4.53
3500	Retail Shop	0.05	156.77	157.94	<b>7.47</b>	7.53
3600	Discount Store	0.04	116.53	157.94	<b>4.92</b>	6.67
3700	Department Store	0.02	110.34	157.94	<b>1.72</b>	2.47
3800	Neighborhood Shopping Center	0.04	170.55	157.94	<b>6.58</b>	6.10
3900	Community Shopping Center	0.02	150.93	157.94	<b>3.06</b>	3.20
4000	Shopping Center Regional	0.03	228.83	157.94	<b>6.20</b>	4.28
4100	Shopping Center Super Region:	0.04	174.36	157.94	<b>6.68</b>	6.05
4200	Supermarket	0.09	180.74	157.94	<b>16.35</b>	14.29
4300	Convenience Store	0.17	122.90	157.94	<b>21.33</b>	27.42

Examples\*

**Uses** – to provide a basis for determining a special assessment and/or for planning purposes.

# Waste Composition Study (WCS)

**What is it?** – An evaluation of the *composition/type* of waste (ie, recyclables, yard waste) generated.

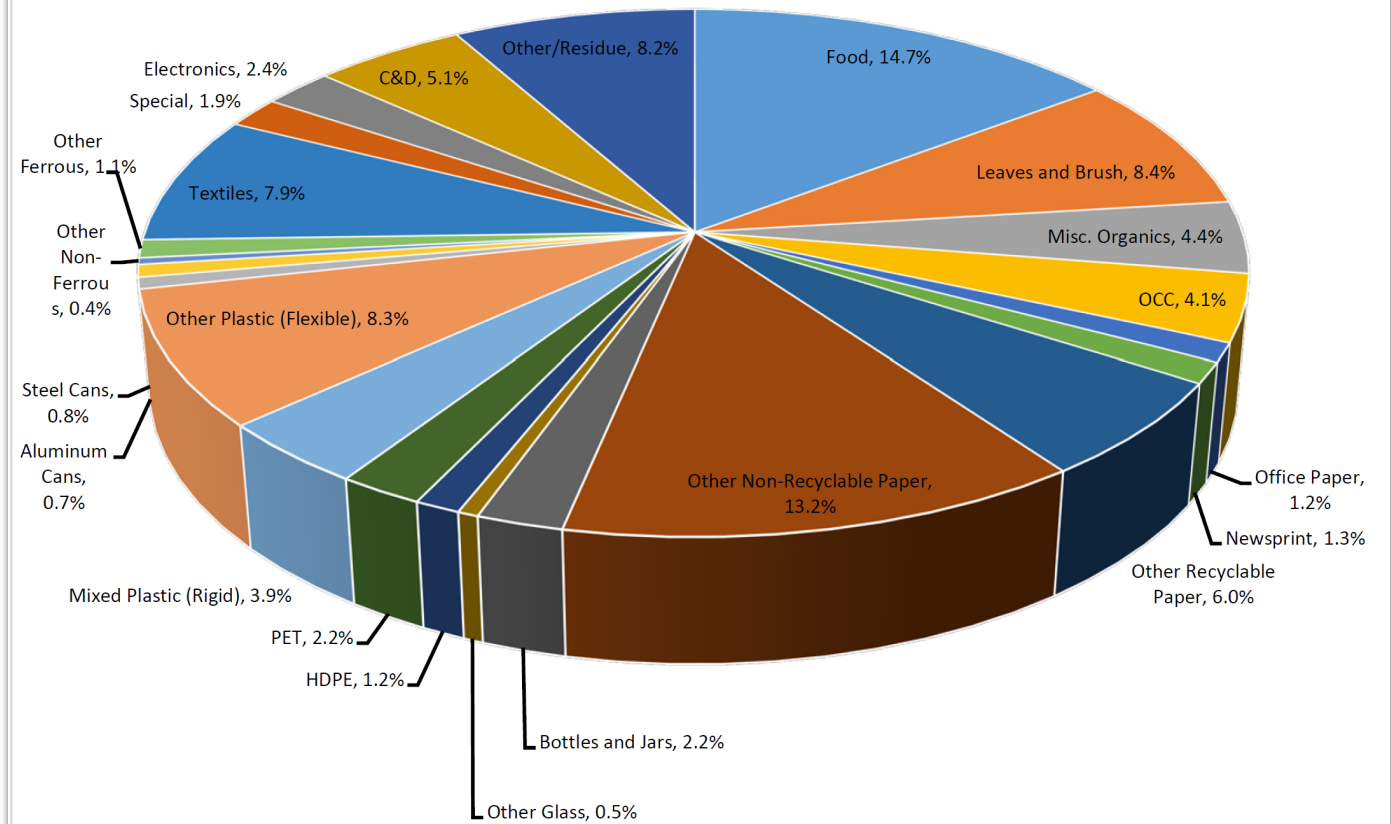
**How is it done?** – Waste composition data is collected by direct observation (ie, “sorts”).



# Waste Composition Study (WCS)

**Result** – Analysis of composition of waste

**Uses** – planning purposes, educational campaigns, and/or to determine types of facilities needed.



Example\*

# Optional Services to be Considered

7

## Revenue Requirement/Financial Projections

*Provide a financial model that projects revenue requirements for the new entity.*

**Cost Estimate: \$33,000**

## Non-Ad Valorem Assessment and Rate Planning

*Utilizing the data from WGS, develop a statistically-valid special assessment rate structure to meet the revenue requirements of the new entity.*

**Cost Estimate: \$60,000**

## Tipping Fee Surcharge Study

*Determine the level of surcharges required to meet the interim financial need of the system until a special assessment is in place.*

**Cost Estimate: \$40,000**

## Support to Bond Issuance

*Provide feasibility reports needed for revenue bond financing of capital assets.*

**Cost Estimate: \$31,000**

## Communication/Outreach

*Planning and implementing public relations/ communications with stakeholders to educate on the importance of solid waste and obtain support for the new system/special assessment.*

**Cost Estimate: \$38,000**

## Solid Waste Master Plan

*Establish a comprehensive planning framework and strategic direction for the management of waste for the County and its municipalities for the upcoming decades.*

**Covered by CCNA**

# Municipal and Hauler Support



Once a Consultant has been engaged, municipalities will be asked to:

- Introduce the studies to their municipal haulers
- Identify their municipal hauler(s) and point of contact for residential and commercial service
- Identify disposal location(s) used by municipal hauler(s) for residential and commercial service
- Provide collection schedules and maps (if available)
- Provide historical tonnages by commodity (if available)
- Other information as needed



# Questions

