Less Waste, Better Baltimore

Rethinking our waste management future

Community Meetings 3&4

June 4, 2019
Mergenthaler High School

June 15, 2019
Enoch Pratt Library – Southeast Anchor

Facilitated by:

Geosyntec consultants

NEXIGHT GROUP

Introduction to the Consultant Team

Ross Brindle

Rachel Lanspa

NEXIGHT GROUP

Jeremy Morris

Geosyntec consultants

Mark Foster

SECOND CHANCE

Retrain • Reclaim • Renew

a 501(c)(3) nonprofit corporation

Meeting Agenda

AGENDA	
6/4: 6:30pm–6:40pm **6/15: 10:30am–10:40am**	**Opening Session** • Welcome and opening remarks • Overview of meeting format and structure
6/4: 6:40pm–7:15pm **6/15: 10:40am–11:15am**	**Presentation** • Overview of master planning goals and process • Baltimore's existing solid waste management and recycling system • Review progress and findings to date • Outline path forward
6/4: 7:15pm–8:00pm **6/15: 11:15am–12:00pm**	**Questions and Comments** • Floor will be open to the public
6/4: 8:00pm **6/15: 12:00pm**	**Closing**

Welcome and Opening Remarks

Less Waste, Better Baltimore

Rethinking our waste management future

publicworks.baltimorecity.gov/lesswaste

Meeting Scope and Boundaries

Baltimore City is currently conducting a Master Planning effort to identify options for improving solid waste diversion, recycling, and disposal

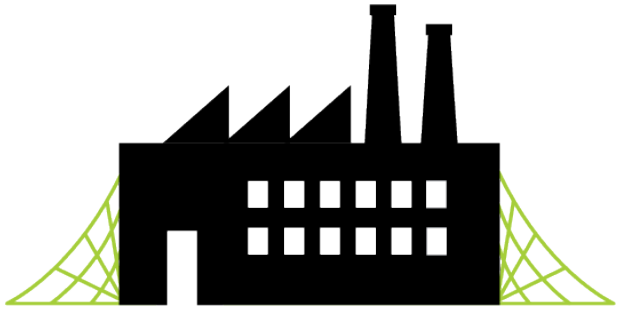
- We have conducted research and gathered input from local residents, businesses, community groups, and other stakeholders, which we have analyzed and compiled into initial findings
- The main goal of this community meeting is to review findings and answer questions

Stakeholders Invited to Participate

- Anchor Institutions
- Businesses
- Community organizers/leaders
- Economic development partnerships
- Elected officials
- Environmental protection groups
- Residents
- Other City agencies/partnerships
- Port Authority
- Schools
- Students
- Waste management companies

About the Project – Fast Facts

Landfill
The City-owned Quarantine Road Landfill—the only solid waste landfill in Baltimore City—is rapidly reaching its permitted capacity, with **approximately seven years remaining** at the current rate of disposal.



Waste-to-energy
The privately-owned Baltimore Refuse Energy Systems Co. (BRESCO) waste-to-energy (WTE) plant, where the majority of the City's waste is currently handled, is aging and **may not be a viable long-term option**.

Recycling
While the City does provide a variety of recycling options, the City's **recycling rates are among the lowest in Maryland.**

About the Project – Fast Facts

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Focus of this Stage of the Project

The Less Waste, Better Baltimore Project

A master planning effort to identify programs that will be implemented by the Department of Public Works to:

- Reduce the amount of materials generated
- Maximize materials diversion, reuse, and recycling
- Identify the best options for disposing of what's left

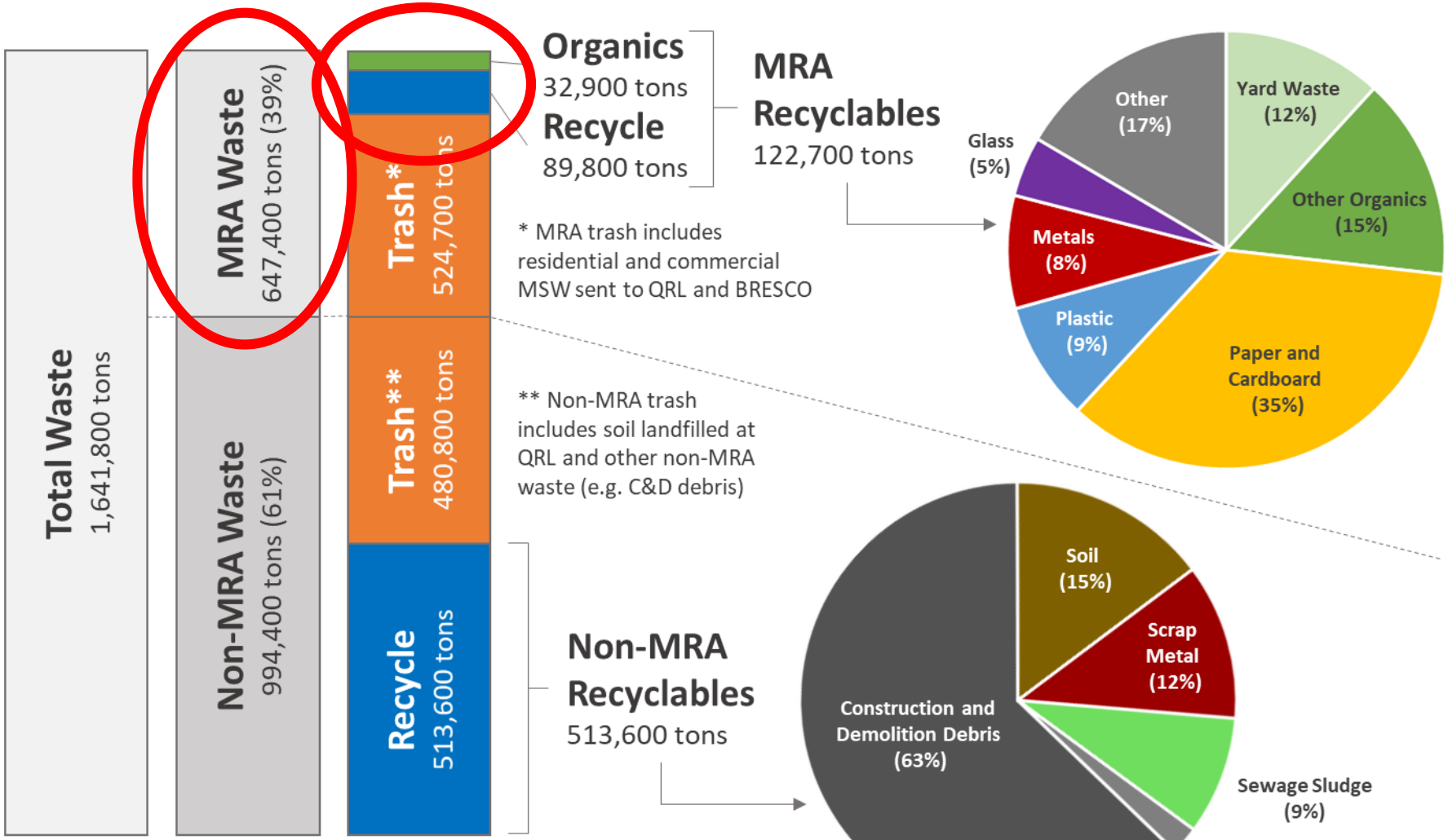
Process for Plan Development and Execution

- Winter Waste Sort
- 2x Community Meetings
- Online Survey/Email Feedback
- Review of Baltimore's Existing System
- Benchmarking Against Other Cities
- Summer Waste Sort

- Review Options for Improving Waste Diversion
- Assess Potential Impact on Waste Diversion Rate
- Calculate What's Left

Total Waste Generation and Recycling

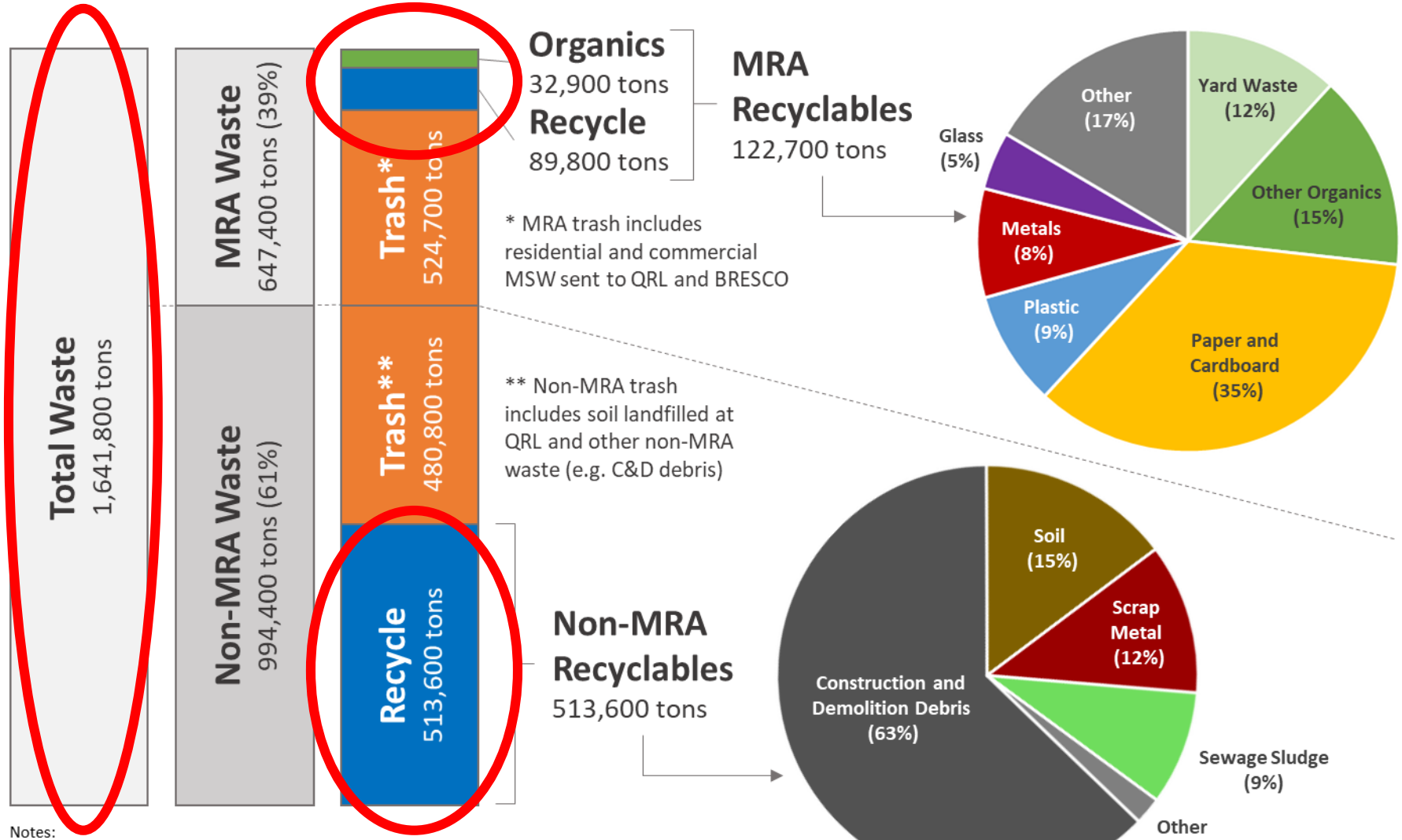
Used to Calculate the City's Published MRA Recycling Rate of 24%



Notes:
1. All tonnages and the waste breakdown for MRA recyclables are from the 2017 MDE MRA Report.
2. The waste breakdown for non-MRA recyclables is from the 2017 Baltimore City MRA Report.

Total Waste Generation and Recycling

On this basis, the City's Total Recycling Rate is 39%



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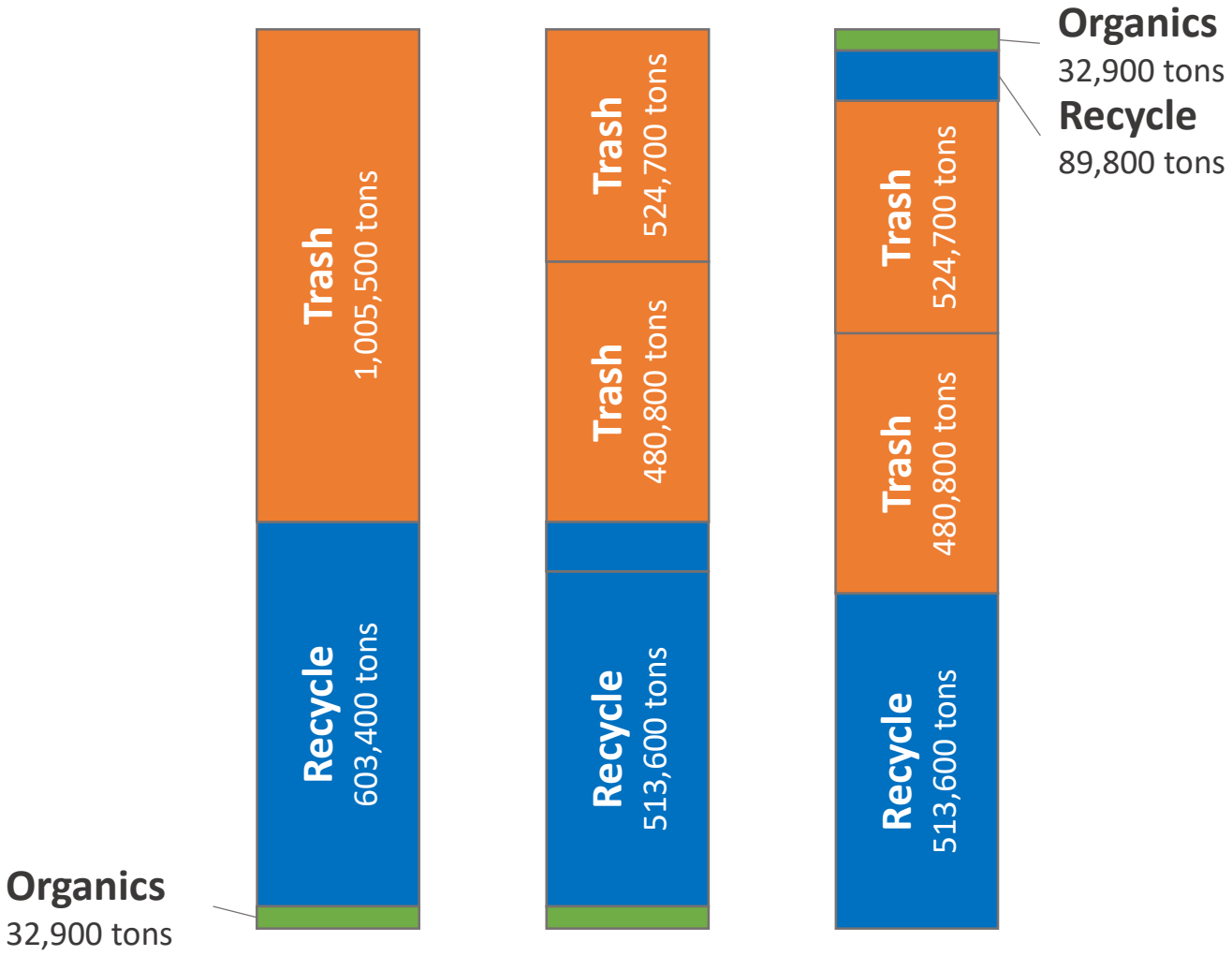
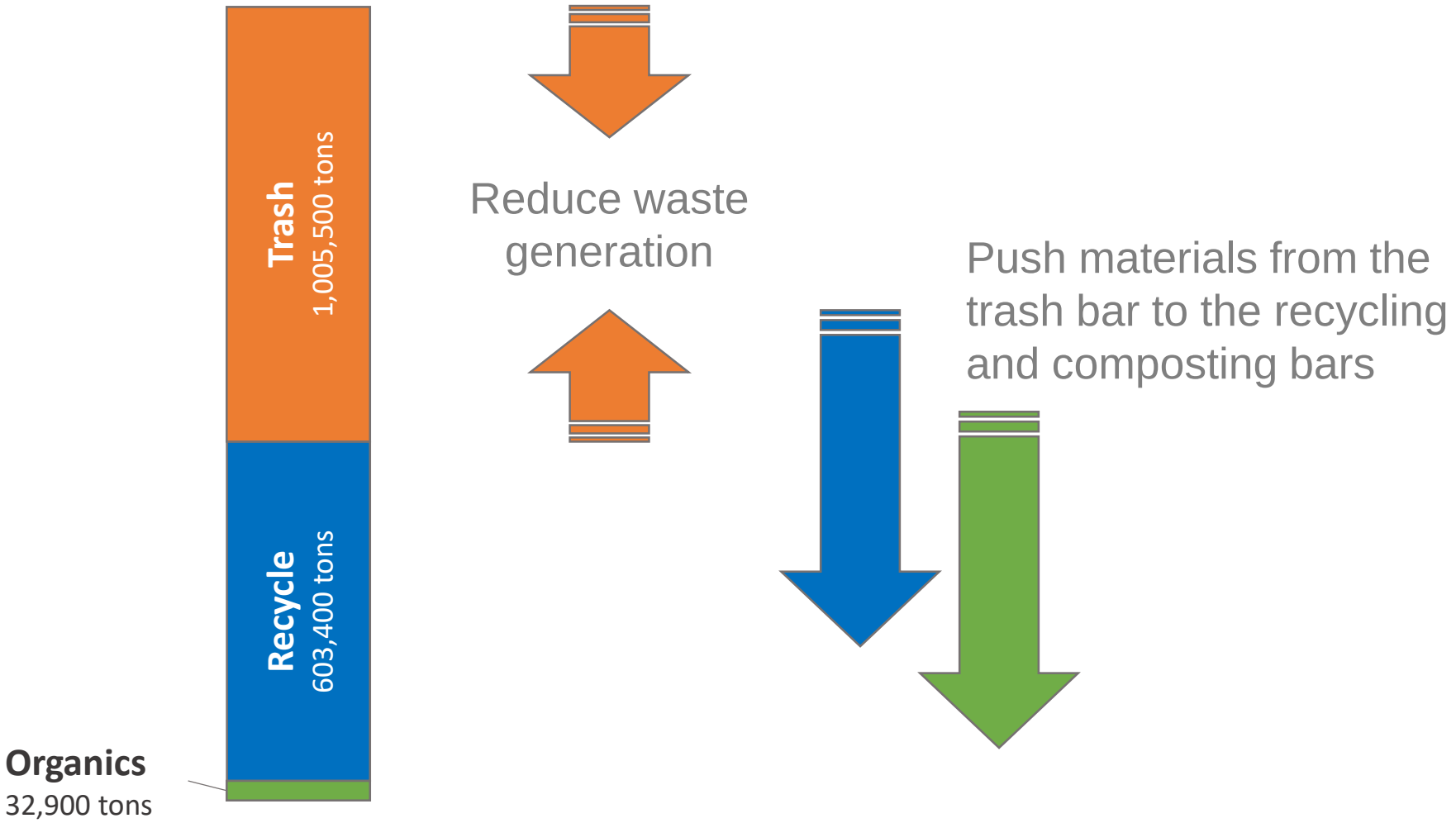
Total Waste Generation and Recycling



Goals of this Analysis



Options for Increasing Waste Diversion

How do we go about analyzing the City's waste flows in order to understand how to reduce waste generation and divert more material from disposal?

- → **Understand waste flows and materials**
- → **Look at what options are available and would be supported by residents and other stakeholders**
- → **Objectively assess different options in terms of expected performance**

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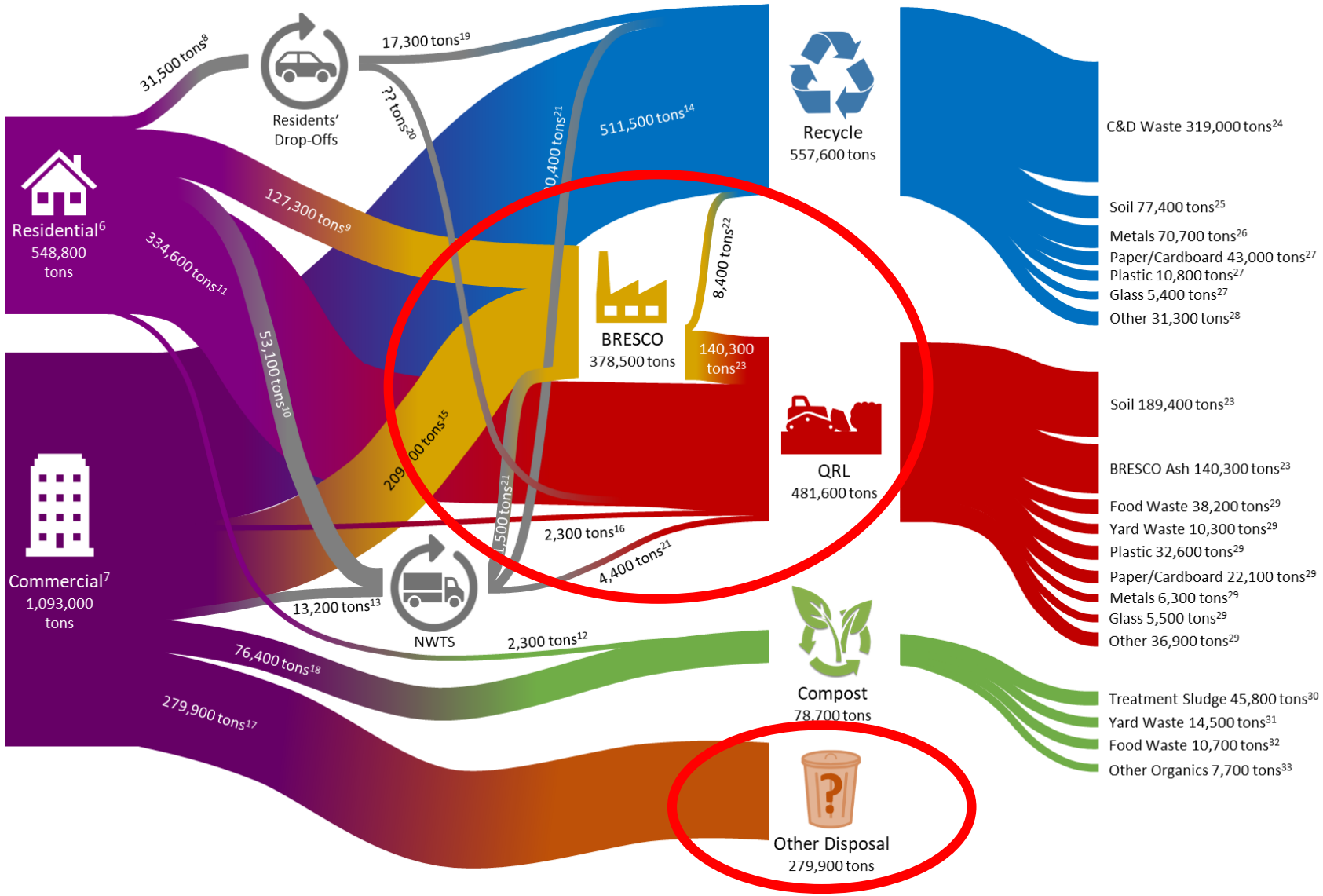
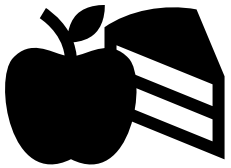
Waste Flows in Baltimore City



Winter Waste Sort – Residential Trash

Sample Classifications

Samples were divided into 11 classification categories.



Food Scraps

Mixed Paper

Cardboard

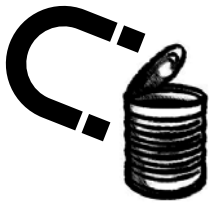
Glass

Aluminum

Mixed Plastics

Plastic No. 1

Plastic No. 2



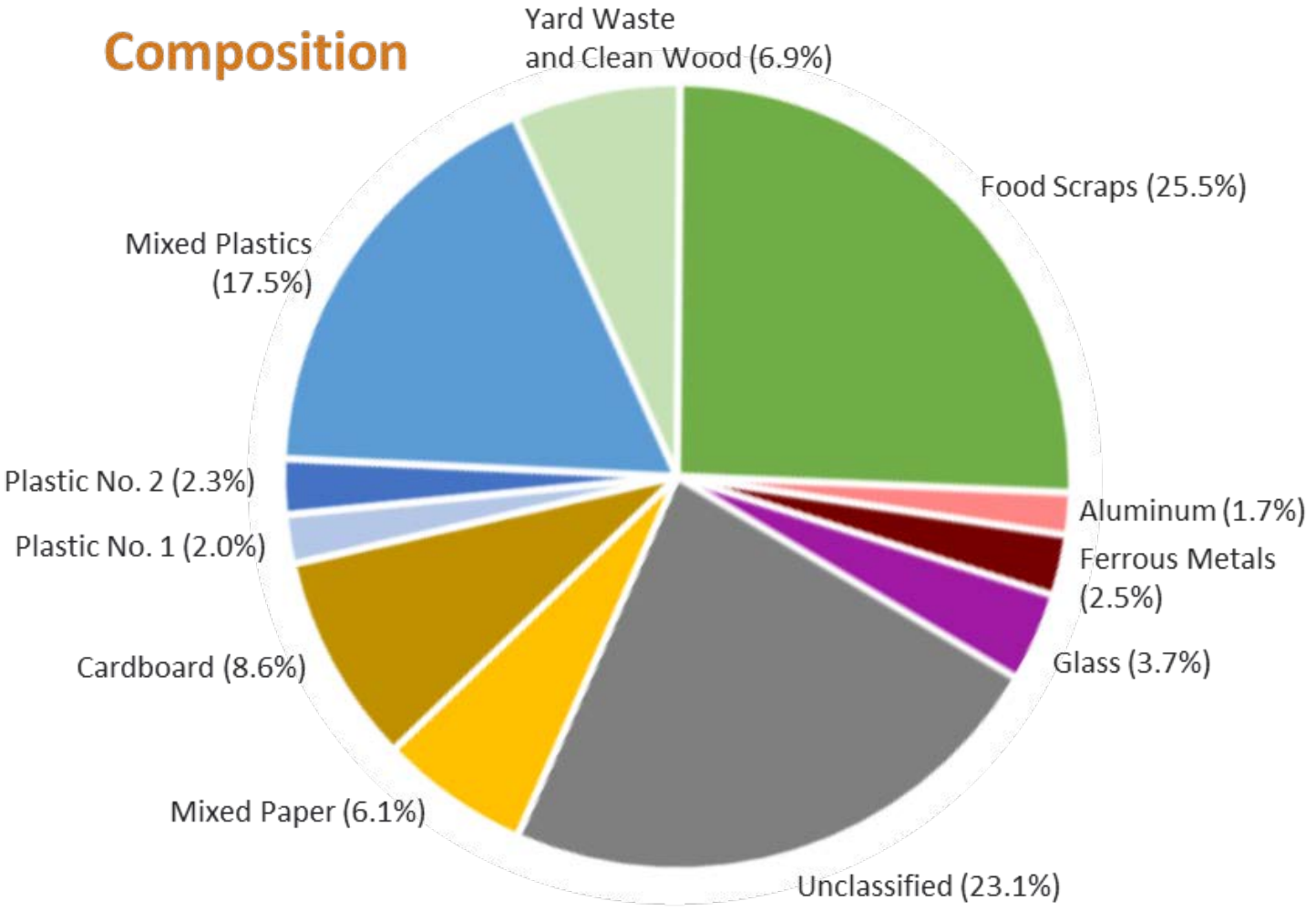
Ferrous Metal

Yard Waste and Clean Wood

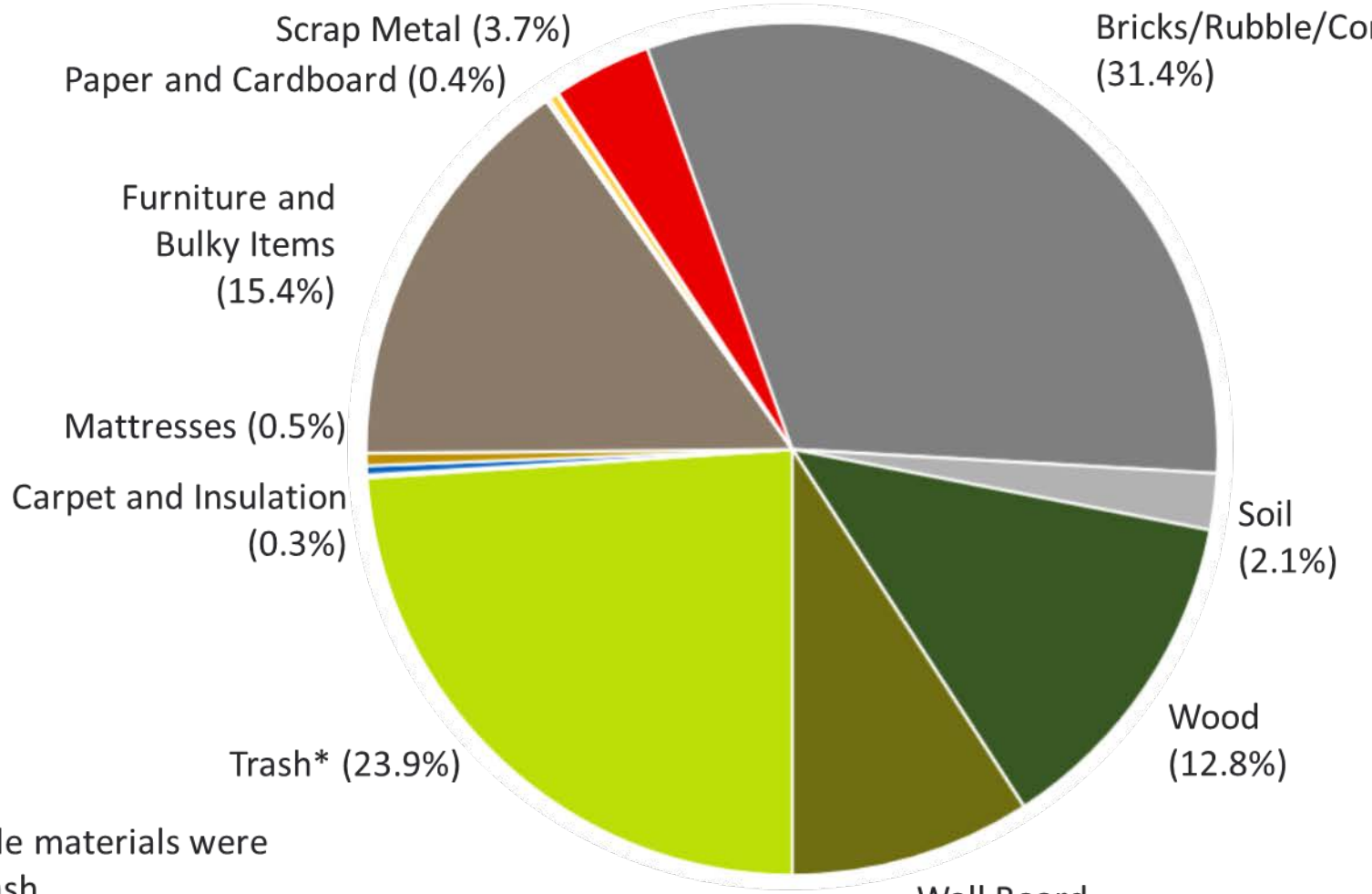
Unclassified (Other)

Unclassified materials are those that do not fit in one of the previous 10 categories, are made up of composite materials, or are unidentifiable. Diapers are a good example.

Composition



Winter Waste Sort – Small Hauler Loads



* unidentifiable materials were counted as trash

Estimated Quantities of Materials (2017)

Category	Residential Waste (tons)	Commercial Waste (tons)	Total (tons)
Total Disposal	**319,500**	**505,100**	**824,600**
Food and Other Compostables	99,400	73,500	172,900
Cardboard and Paper	45,400	29,400	74,800
“Easy-to-Recycle” Plastics	13,200	8,900	22,100
“Hard-to-Recycle” Mixed Plastics	53,600	36,200	89,800
Other Traditional Recyclables	24,700	19,100	43,800
Mixed C&D Waste	4,300	255,300	259,600
Wood	1,700	21,300	23,000
Bulky Waste, Mattresses, Carpets	2,100	2,200	4,300

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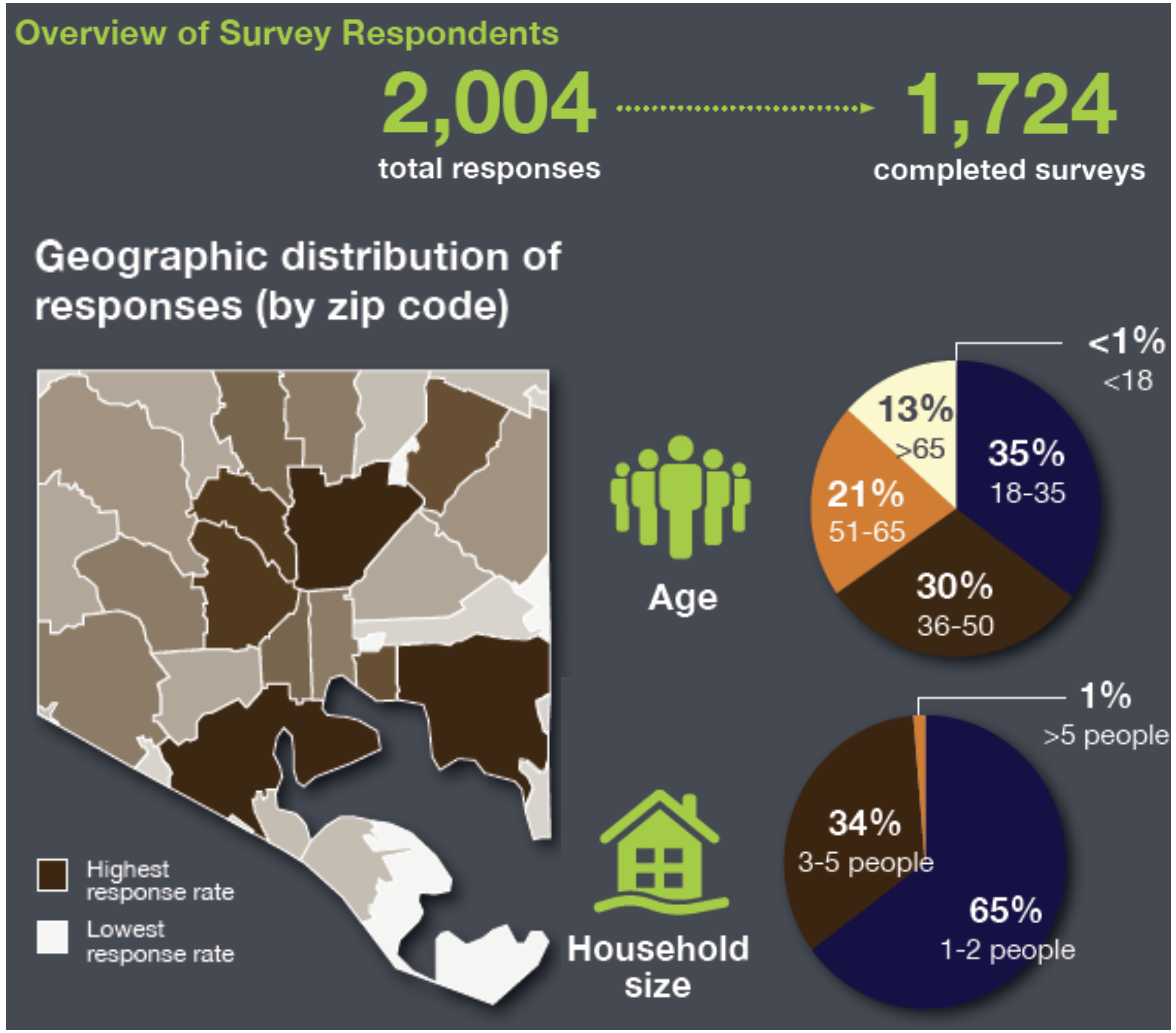
Public Input



Public Input

Ratings of Current Waste/Recycling Collection and Drop-Off Services

Public Input

66% of people surveyed have put something in the recycling bin they weren't sure was recyclable

83% of people surveyed rinse and clean off recyclables before putting them in the bin

Reasons why people don't divert more waste:

- Difficulty accessing composting and recycling services for certain materials (e.g., plastic bags, styrofoam)
- Uncertainty about what can be recycled (e.g., what types of plastic and food packaging is recyclable)
- Difficulty finding food that isn't heavily packaged and limited recyclability of food packaging
- Food contamination on recyclable materials
- Bins are too small and not accessible to everyone
- Unreliable/infrequent collection services

Public Input

Support for Potential Policies and Approaches

96%

of people surveyed agree or strongly agree that they **support policies that lead to improved waste reduction, recycling and reuse**

86%

of people surveyed agree or strongly agree that they **support policies that ban single-use plastics or other manufacturer/retailer responsibility laws**

The City should:

- **Provide literature that focuses more on waste reduction and reuse** → **73%** agree or strongly agree
- **Increase access to curbside recycling** (e.g., provide recycling bins/carts to every single-family homes, provide multi-unit buildings with assistance in implementing recycling) → **84%** agree or strongly agree
- **Encourage reduced waste from construction and demolition** → **90%** agree or strongly agree
- **Provide more alternatives to waste disposal** like curbside collection of organics for composting, even if these alternatives cost residents more → **66%** agree or strongly agree

Benchmarking – Learning from Other Cities

Benchmarking – Learning from Other Cities

		Baltimore	Austin	Boston	Charleston	Charlotte	Portland
Materials with Disposal or Usage Regulations[1]	Single-Use Bags		✓	✓	✓		✓
	Single-Use Plastics				✓		✓
	Polystyrene	✓					✓
	Construction and Demolition Debris		✓	✓			
	Food		✓	✓			✓
	Yard Waste			✓		✓	
	General Recyclables – plastics, paper, cardboard, glass, metal		✓	✓		✓	
	Appliances, Electronics, Batteries, Other Special Waste				✓	✓	✓
	Bottle Redemption Program						✓
Zero Waste	Zero Waste Initiatives		✓	✓		✓	
	Zero Waste Target Year		2050	2050		2040	

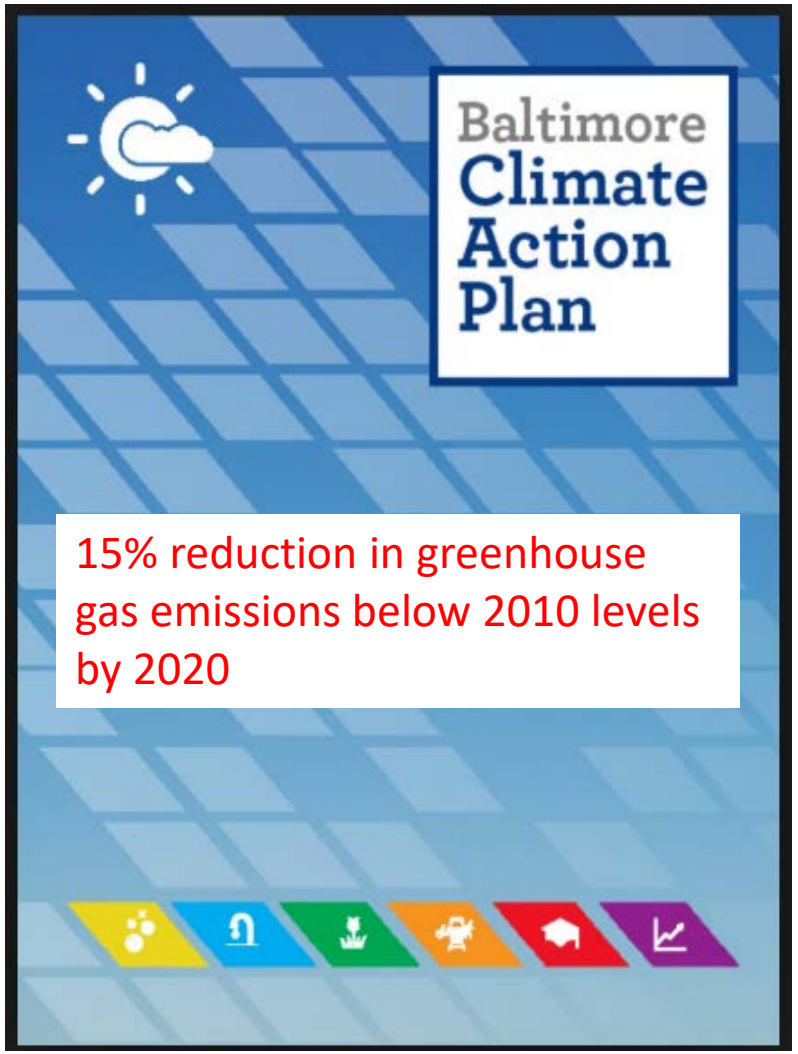
Baltimore City's Strategic Plans

Zero waste aspirations
Increase recycling
Reduce litter
Legislative and policy changes
Waste-to-Wealth Initiative

- Food waste
- C&D waste
- Wood

Goals for 2040

- 50% food waste reduction
- 80-90% diversion of food waste from disposal to composting and digestion



15% reduction in greenhouse gas emissions below 2010 levels by 2020

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Methodology for Assessment

Waste Diversion Potential:
Total tonnage
Materials
Interaction with Other Options

Benefits:
Social/Environmental
Greenhouse Gas Emissions
Job Creation
Revenue/Cost Offsets

Costs:
Capital
Operation and Maintenance
Labor

Challenges to Implementation:
Permits
Infrastructure and Land Required
Training

Timeline:
Short – Medium – Long Term
Time Lag before Seeing Benefits

Experience:
DPW's Experience
Local Private Sector Experience
Other Jurisdictions

1. Waste Reduction and Reuse

- Requires significant political action and behavioral changes by consumers, manufacturers, businesses (e.g., restaurants, stores), and online vendors
- Major goal of the Sustainability Plan and Food Waste Reduction Strategy

Examples of potential strategies may include:

Reducing Food Wastage

Fix-It/Repair Clinics

Materials/Resource Sharing

2. Waste/Recycling Collection

- Need to address immediate concerns (litter, cleanup of illegal dumping) as well as longer-term aspirations for improved waste collection and recycling services
- Major goal of the Sustainability Plan

Examples of potential strategies may include:

Increased Access to Recycling

Expanded Recycling in Public Spaces/Special Events

Pay-as-you-Throw (Save-as-you-Recycle)

3. Diversion of Food Scraps and Other Organics

- Compliments food waste reduction measures
- Requires infrastructure and systems for separate collection of organics and processing (composting or anaerobic digestion)
- Major goal of the Sustainability Plan and Food Waste Reduction Strategy

Examples of potential strategies may include:

Encourage Backyard and Community Composting

Separate Curbside Collection

Develop New Processing Capacity

4. Diversion of C&D Materials and Wood Waste

- 90% support among survey responders
- Major goal of the Sustainability Plan
- Policies/incentives needed to encourage “deconstruction” over “demolishing”

Examples of potential strategies may include:

Existing Facilities in Baltimore City

Camp Small Wood Recycling Yard

Develop New State-of-the-Art Recycling Facility

5. Bulk Trash Management and Recovery Parks

- Additional opportunities for curbside bulk trash collection and/or large accessible recycling center
- Efforts to expand reuse/recycling options for bulk trash are highly visible and effective means of promoting recycling in general

Examples of potential strategies may include:

Existing Facilities in Baltimore City

Resource Recovery Parks (Eco-Parks)

Drop-Off Depots

6. Expanded Options for Recycling

- Expansion both in terms of better services as well as wider range of materials
- Focus on overcoming barriers to participation
- Increase private sector participation and collaboration

Examples of potential strategies may include:

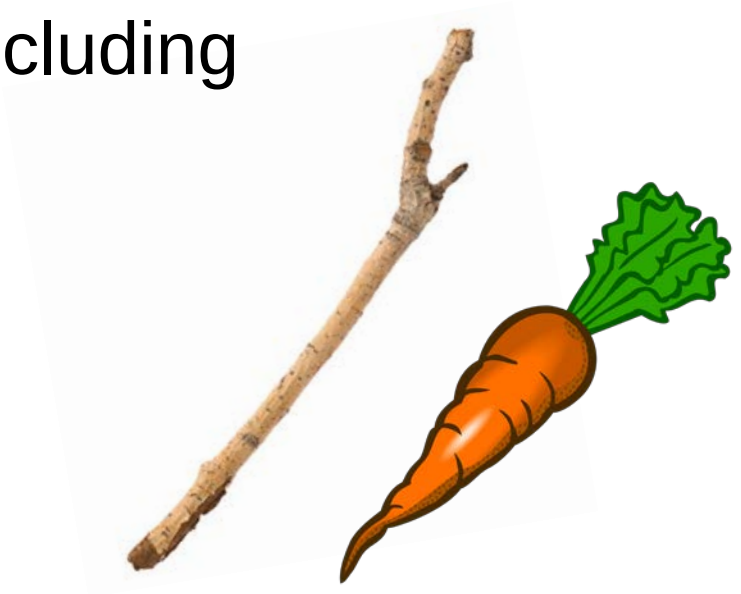
Mobile Drop-Off Facility

Expanded Range of Materials Accepted

CHaRM (Center for Hard-to-Recycle Materials)

“Soft Infrastructure” Options

- Examples may include:
  - Changes in City policies, regulations, and funding mechanisms for waste management and recycling services, including financial incentives and taxes
  - Operational and administrative changes, including improvements in the City’s 311 service
  - Education and enforcement measures



Thank you

- End of Presentation Portion of Meeting

Question and Comments – Ground Rules

GOAL: Active sharing of ideas through transparent process

- ✓ Be respectful and listen to others
- ✓ Be collaborative – feed off others' ideas
- ✓ Stay focused and on topic
- ✓ Be concise

Thank you for your time and contributions!

Meetings 3 & 4: Complete

DATE	TIME	LOCATION
Tuesday June 4, 2019	6:30pm–8:00pm	Mergenthaler High School 3500 Hillen Road Baltimore, MD 21218
Saturday June 15, 2019	10:30am-12:00pm	Enoch Pratt Library Southeast Anchor 3601 Eastern Ave Baltimore, MD 21224

+ One additional meeting later in the year (TBD) to present to Draft Master Plan

Other ways to stay up-to-date:

- LWBB website: **publicworks.baltimorecity.gov/lesswaste**
- Email us: **lesswaste@baltimorecity.gov**