



**STREETS**  
PHILADELPHIA

## **City of Philadelphia**

**Solid Waste & Recycling Advisory Committee**

**July 23, 2015**

# Agenda

- Call to Order – M. Feldman 5mn
- Plan Intro / Catch-up – P. Bresee 5mn
- Chapter 5 Review – J. Osborn 15mn
  - Structure
  - Key Elements
  - SWRAC Input Areas
  - Next Steps
- Chapter 5 Facilitated Discussion 120mn
- Public Participation – M. Feldman / P. Bresee 15mn
- Next Steps 5mn

# Call to Order

M. Feldman, Director

Keep Philadelphia Beautiful



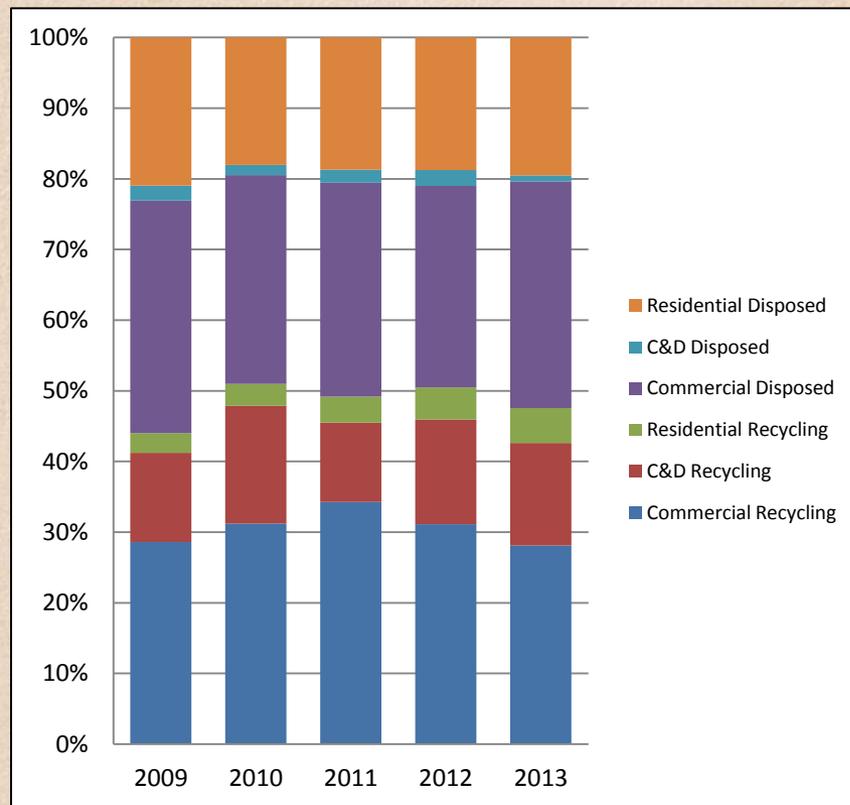
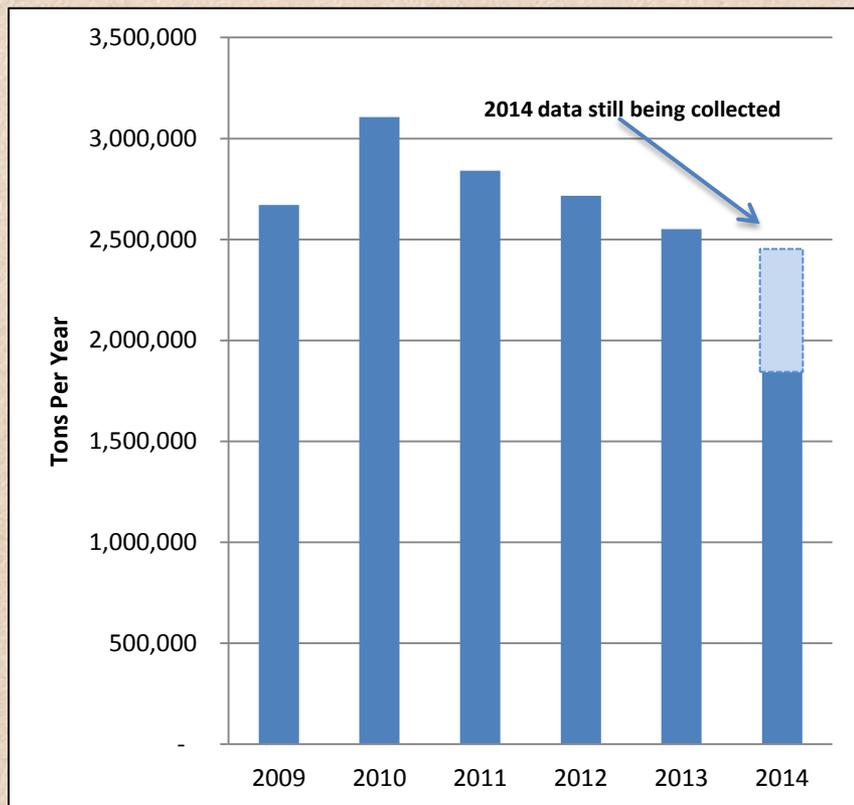
# Plan Introduction / Catch-up

P. Bresee, Director

City of Philadelphia Recycling Office



# State of Recycling & Solid Waste Management in Philly - 2015

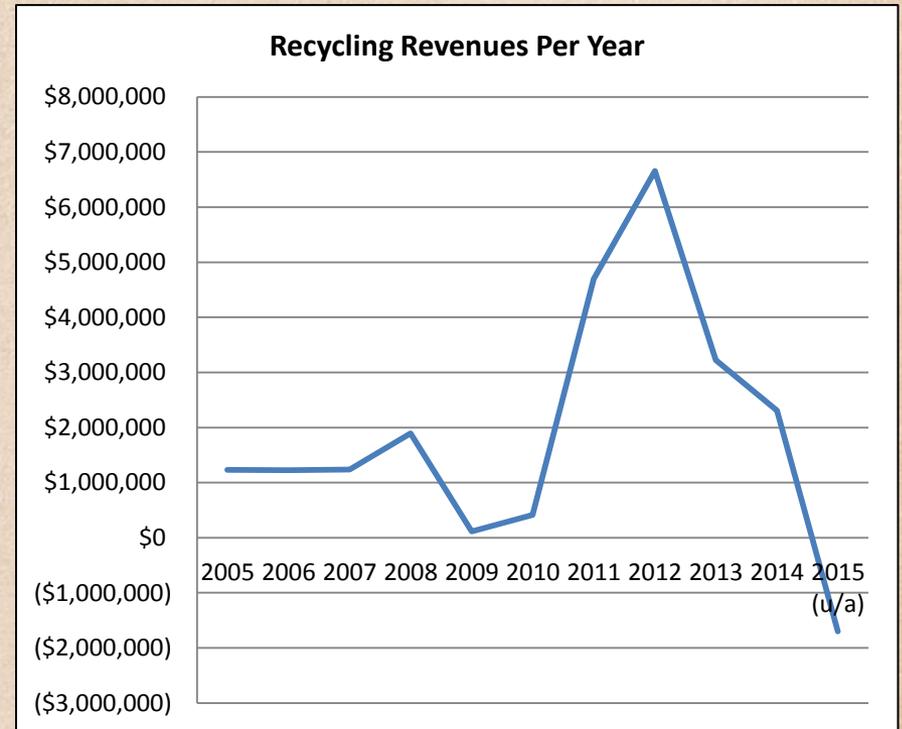
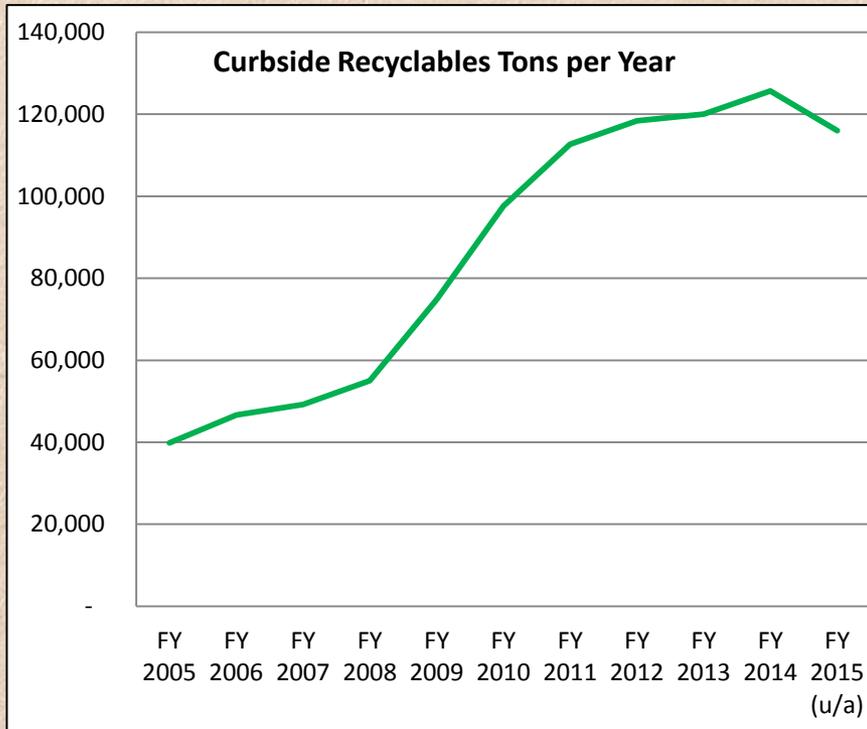


*“All-in” recycling & diversion rates have averaged between 44% and 51%*

# State of Recycling & Solid Waste Management in Philly - 2015

Progress	Work Still Left to Do	Challenges
Curbside recycling up ~125% since 2008	Commercial recycling	Fiscal & budgetary (equipment & resources)
35% state recycling goals met	Recycling in multi-family buildings	Recyclables end markets
Greenworks 70% landfill diversion goals met	Institutional recycling; intergovernmental coordination	Recycling's "evolving ton"
Overall waste reduction	Public space recycling	Changes to waste stream composition
Overall	Anti-litter efforts	Goals & Metrics?
Recycling Rewards, improved outreach & communications	Outreach needs to stay relevant, expand reach	
Improved stakeholder engagement	Legislative efforts & new regulatory authority	

# Philadelphia Curbside Recycling Trends FY 2005 – FY 2015



*FY 2015 tonnages = 8% decrease from FY 2014*

# State of Recycling in the U.S.?

Against Us?

With Us?

End-Markets; materials  
quality; waste stream  
changes

Re-emergence of "dirty  
MRFs"?

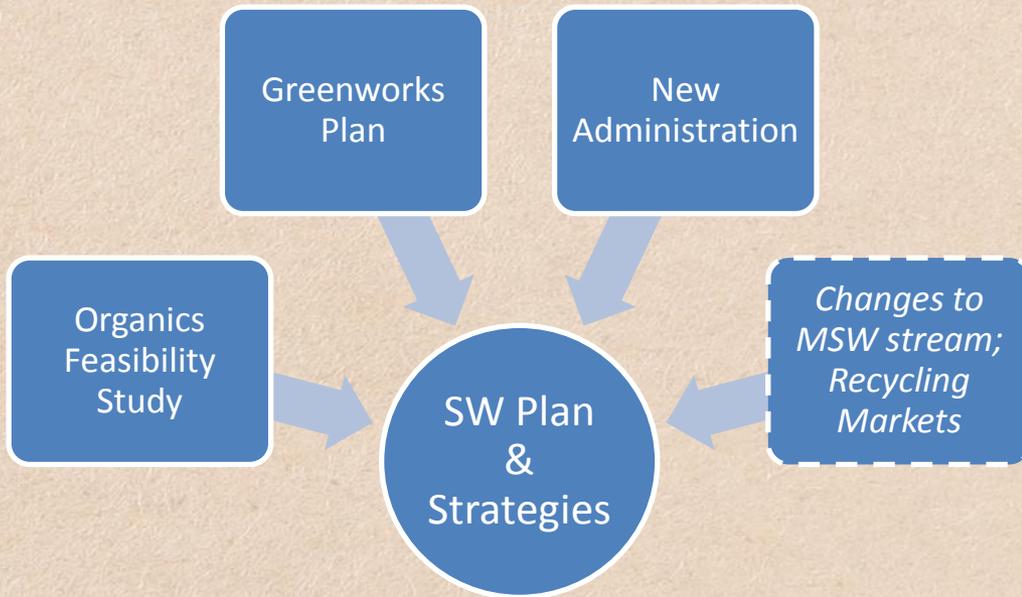
Recycling & Zero Waste  
goals

Closed Loop Fund;  
Recycling Partnership;  
Stakeholder engagement

US Conf. of Mayors Zero  
Waste Reso.

- Negative national media coverage
- Recovered materials values have decreased by 50%+
- + Stakeholder investments and engagement at all-time high
- + Policy makers doubling down on commitment to recycling & sustainable materials management

# Solid Waste Planning not Performed in Vacuum



- Plan and approaches to MSW management more influenced by convergence of key issues & events
- Go-forward plan will need to be more “living & breathing”

# SWRAC Input to Date

- August 2014 Visioning Meeting
- SWRAC Vision Statement
  - Sustain and enhance quality of life for community
  - Proactive management of waste stream
- Breakout Sessions
  - Recycling program and initiatives
  - Public participation
  - MSW management program and technologies
  - Implementing entity
- SWRAC Discussions Incorporated into Chapter 5
- June 1<sup>st</sup> Greenworks Forum

# Review of Chapter 5: Selection and Justification of Municipal Waste Management Program

J. Osborn, President

Alternative Resources, Inc.



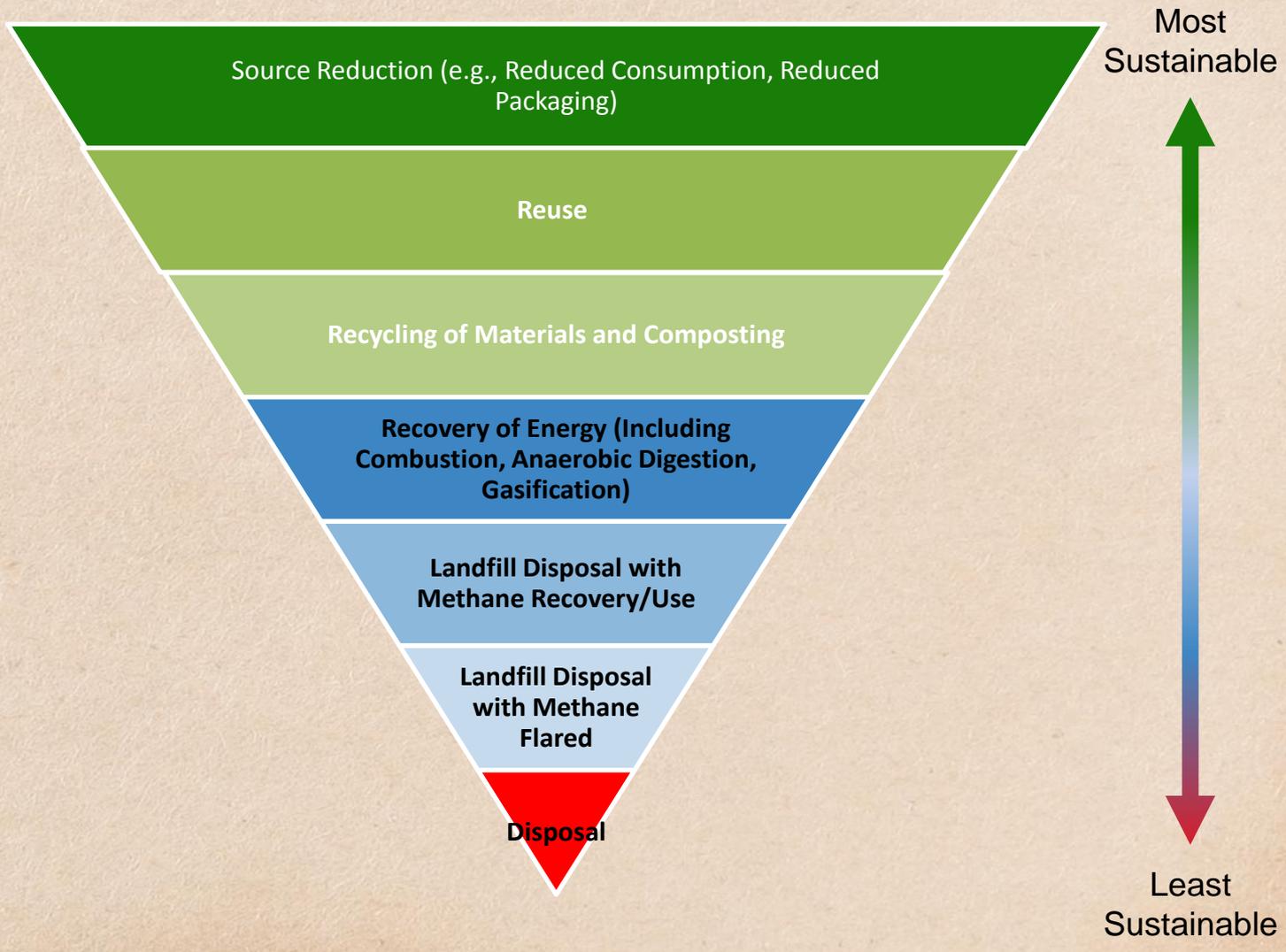
# Overview of Municipal Waste Management Plan

Plan Chapters
1.0 Description of Waste
2.0 Description of Facilities
3.0 Estimated Future Capacity
4.0 Description of Recycling Program
<b>5.0 Selection and Justification of Municipal Waste Management Program</b>
6.0 Location
7.0 Implementing Entity Identification
8.0 Public Function
9.0 Copies of Ordinances and Resolutions
10.0 Orderly Extension
11.0 Methods of Disposal Other than by Contract
12.0 Noninterference
13.0 Public Participation
14.0 Other Information



- Most important part of Plan
- An analysis of the program, including facility selection and cost of disposal
- Builds on earlier Plan sections (history, data, etc.)

# Waste Management Hierarchy (5.1)



# Management of City Collected Materials

- Recyclables (5.2)
  - Collection (commitment to single stream)
  - Processing Agreement with ReCommunity Recycling
    - Separate glass collections?
  - Recycling Education Programs
- Waste (5.3)
  - Waste Transfer and Disposal Agreements
    - Waste Management of Pennsylvania
    - Covanta 4 Recovery

# Options for Residential Management Systems

- Collections and Containers
- Materials Stream (new materials)
- Separate Collection of Glass
- Sanitation/Drop-off Center Network
- Outreach and Education

# Management of Privately Collected Waste and Recyclables (5.4)

- City does not control disposal facilities used by private haulers, but must show capacity exists for waste generated in Philadelphia
- Plan will include identification of facilities interested in accepting privately-collected waste for disposal (Chapter 6)
- Private haulers encouraged (but not required) to use listed facilities
- On-line survey form to identify interested facilities; advertised in BioCycle

**PUBLIC NOTICE**

City of Philadelphia  
Streets Department - Sanitation Division

**Preparation of the  
City of Philadelphia Municipal  
Waste Management Plan  
Disposal Facilities List**

In accordance with Pennsylvania Code Title 25, Chapter 272.225 Municipal Waste Planning, Recycling and Waste Reduction, the City of Philadelphia is preparing a new Municipal Waste Management Plan 2015 - 2024. This plan replaces the existing plan last updated in 2005. In order to complete this process, updated data is required concerning waste generation rates and facilities listed that accept municipal waste and their design / permitted capacity.

To demonstrate that capacity has been made available for the disposal of municipal waste generated in Philadelphia, an on-line survey form has been developed to update the disposal facilities list. Disposal facilities interested in participating in the City's municipal waste management planning process must complete an on-line survey at [PhiladelphiaStreets.com](http://PhiladelphiaStreets.com).

If your facility is interested in being listed as a designated disposal facility in the City of Philadelphia Municipal Waste Management Plan, please complete the form and check yes for the certification document which can be down loaded. Disposal capacity must be available during the ten (10) year planning period ending in 2024 and be a portion of your facility's existing permitted capacity. Completion of the on-line survey form prior to September, 15, 2015 is a requirement for being listed in the City's Municipal Waste Management Plan. For questions please contact the Streets Department's Sanitation Division at 215-686-5553.

JULY 2015 45

# Management of Privately Collected Waste and Recyclables (cont.)

- Also includes educational and institutional (schools, colleges & universities, hospitals)
- New Recycling Ordinance – Establish Universal Recycling
  - Business requirements
  - Multi-family requirements
  - Public space
  - Penalties and fines?
- Hauler requirements
  - Minimum service requirements
  - Reporting to City
  - Licensing

# Education and Outreach

- Residential:
  - Expanded outreach; rebranding
  - Stronger on-line and social media presence
  - Recycling bin distribution events
  - America Recycles Day
  - Green Schools Project
  - U.S. Conference of Mayors Award
  - Recyclebank incentives
  - Partnerships (Keep Philadelphia Beautiful, SDP GreenFutures, civics)
- Commercial:
  - Business recycling toolkit
  - Web resources
  - Outreach through BIDs, business corridors, etc.
  - New focus on multi-family properties

# Innovative and Alternative Technology Assessment and Planning (5.5)

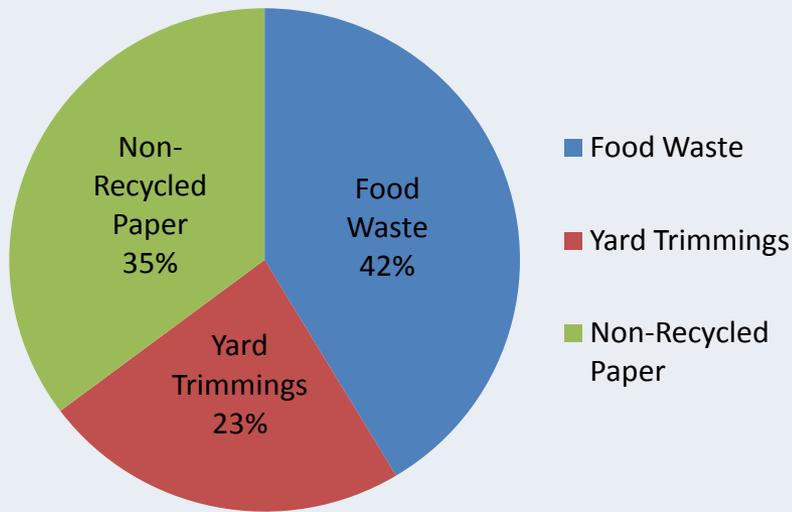
- Act 101 requires fair, open and competitive process for selecting among alternative waste management programs or facilities
- Plan includes identification and assessment of technology alternatives
  - Organics Management Strategies
  - Alternative Solid Waste Management Technologies

# Organics Management Strategies

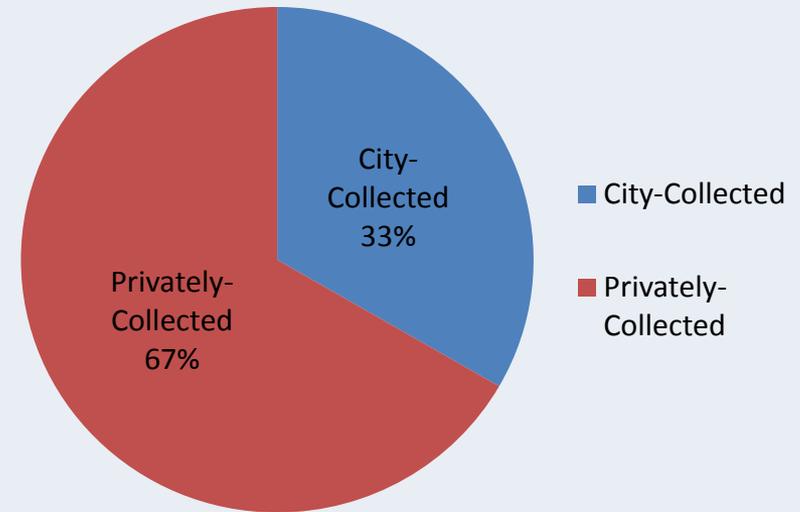
- Address food waste, yard trimmings, and non-recycled paper
- Alternative collection, processing and implementation options
- Representative large-city initiatives
- Philadelphia initiatives
  - Composting programs
  - Hearings
  - Organics Feasibility Study

# Estimated Organic Fraction of MSW (2013 data)

### Organic Components



### Source of Organics



It is estimated that more than 550,000 tons per year of organic waste is generated in Philadelphia and currently disposed.

# Organics Management Strategies

Collection Options	Processing Options	Implementation Options	Issues
Drop-off	Composting	Pilot	City Infrastructure
Curbside (City)	Anaerobic Digestion	City-Wide	Area Infrastructure
Curbside (Private)		Voluntary	Cost
Hybrid		Mandatory	Education
			Enforcement

Plan incorporates a proposed Organics Feasibility Study to explore organics management strategies for Philadelphia.

# Alternative Solid Waste Management Technologies

- Technologies
  - Mixed Waste Processing (including SpecFUEL™)
  - Anaerobic Digestion
  - Gasification
- Factors to Consider
  - Status of development
  - Cost
  - Implementation impacts
  - Consistency with goals and objectives
- Plan Incorporation
  - Previously allowed as part of waste transfer and disposal procurement
  - Will be allowed as part of future competitive procurement, based on fiscal impact and consideration of other factors

# Management of Other Waste Streams (5.6)

Method	Plan Incorporation
C&D Waste	During planning period, consider opportunities to increase recycling in the residential sector (collection sites, policies, education and enforcement, partnerships)
Electronic Waste	During planning period, consider opportunities to increase recycling
Tires	Consider actions to remove illegal dumping. Examine tire dealer licensing options.
Biosolids	Manage through Biosolids Recycling Center. As part of Organics Feasibility Study, consider co-digestion of food waste at water treatment plants.
Household Hazardous Waste	During planning period, consider opportunities to promote source reduction

# Potential Policy and Legislative Actions (Local & State)

- Local Level:
  - Rewrite of Recycling Ordinance / Update Regulations (esp. commercial and institutional)
  - Single-use bags
  - Polystyrene (EPS)
  - Pay-as-you-Throw Collection Programs
  - Environmentally Preferable Purchasing (EPP)
  - Tire Dealer Licensing (w/L&I)
- State Level:
  - Container Deposit Legislation
  - Extended Producer Responsibility (EPR)
  - Market Development

# Next Steps

- Facilitated discussion and feedback from SWRAC for Chapter 5 (today)
- Completion of private facility survey for Chapter 6 (September 2015)
- Revise Chapter 5 and other Plan chapters, as needed; provide to PADEP for review
- Conduct public participation process
  - Opportunity for additional SWRAC input
  - Public forum
- Finalize and adopt Plan

# Facilitated Discussion

# Facilitated Discussion

- Goal:
  - Gain SWRAC insight, direction and approval of key aspects of Chapter 5
- Ground Rules:
  - Full group engagement
  - Clear, concise commentary
  - Focus on solutions and creative thinking (not barriers/problems)
  - Push for decision making (consensus taking) on all major meeting topic areas
  - Identify topics that need to be addressed in plan as “in development”

# Discussion Topics

1. Municipal Waste Management by Sector:
  - a) Residential
  - b) Commercial
  - c) Institutional / Public Space
2. Organics
3. Alternative Technologies & Disposal Systems
4. Resources
5. Legislative / Policy Approaches

# Discussion Topic 1

## Municipal Waste Management by Section

### A. Residential:

- Collection & Containers
- Materials Stream
- Glass
- Sanitation & Drop-off Centers
- Household Hazardous Waste
- Tires
- Outreach & Education

# Discussion Topic 1

## Municipal Waste Management by Sector

### B. Commercial:

- Universal vs. Mandatory
- Required Materials
- C&D Waste
- Reporting Requirements
- Hauler Licensing
- Multi-family
- Outreach & Education

# Discussion Topic 1

## Municipal Waste Management by Sector

### C. Institutional/Public Space:

- City Agencies & Facilities (Parks and Rec)
- School District
- Colleges & Universities
- Philadelphia Housing Authority
- SEPTA
- PHL & Prisons
- Public Space & Events
- Outreach & Education

# Discussion Topic 2

## Organics

- Collection
- Processing
- Implementation
- Issues

# Discussion Topic 3

## Alternative Technologies & Disposal Systems

- Mixed Waste Processing
  - Vendor proposals to be evaluated based on fiscal impact
- Anaerobic Digestion
- Gasification

# Discussion Topic 4

## Resources

- Infrastructure
- Equipment
- Staffing
- Costs/Revenues

# Discussion Topic 5

## Legislative/Policy Approaches

- Recycling Ordinance
- Single-use Bags
- Styrofoam
- Bottle Deposits
- EPP/Procurement
- Producer Responsibility
- Outreach & Education

# Discussion Wrap Up

- Key Decisions Review
- Next Steps

**Thank You!**

Next SWRAC Meeting Date?

