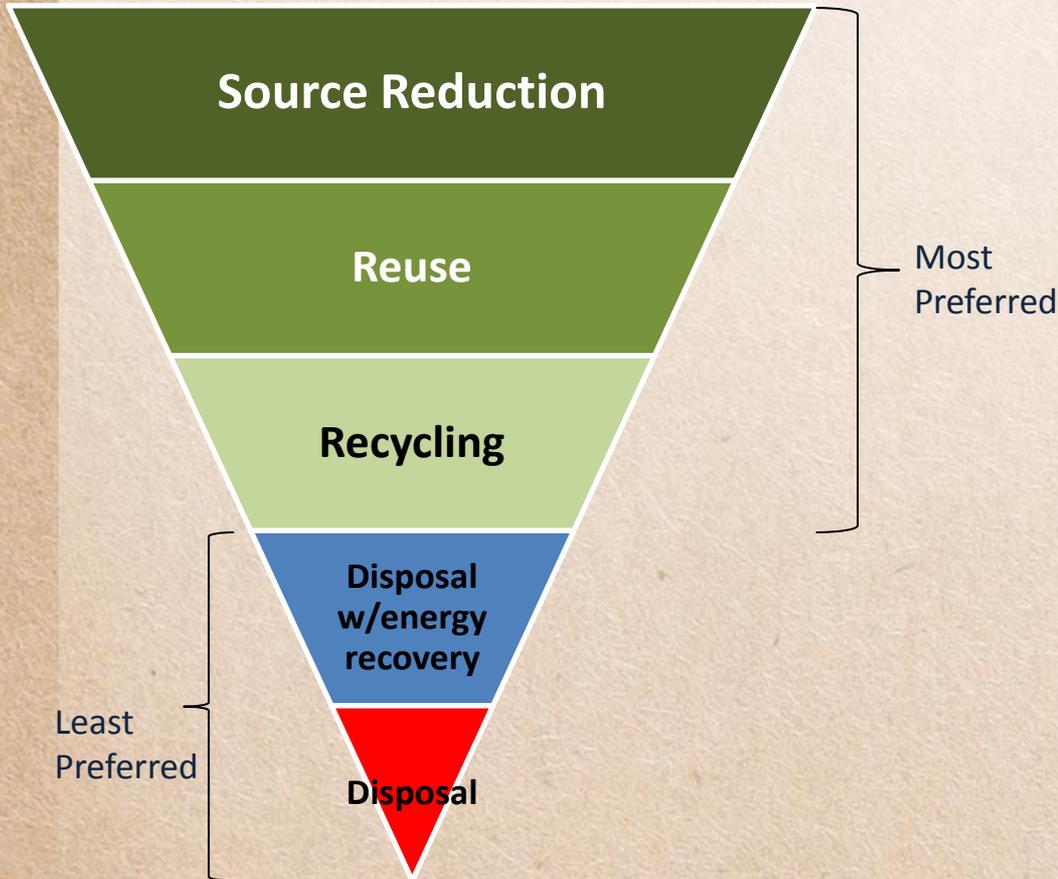


# ***Solid Waste & Recycling Trends & Issues Update***

**Philadelphia Solid Waste and Recycling  
Advisory Committee**

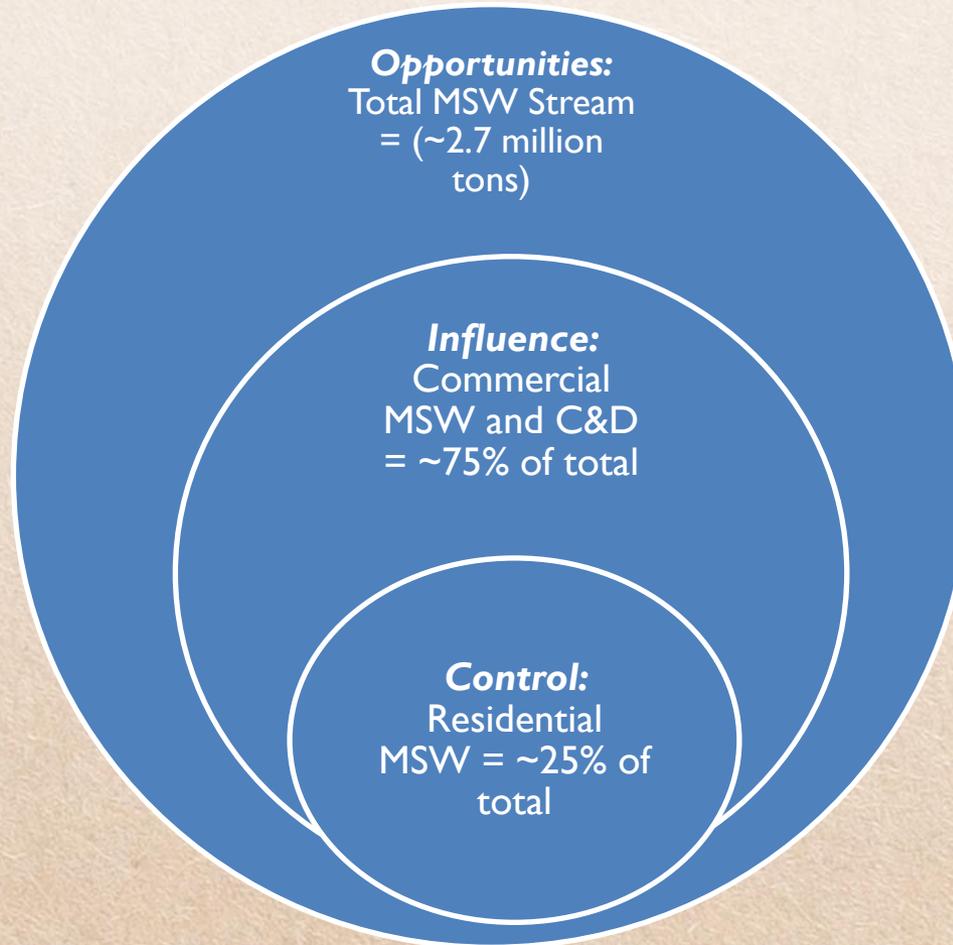
*September 25<sup>th</sup>, 2014*

# How Should We Manage our Solid Waste?

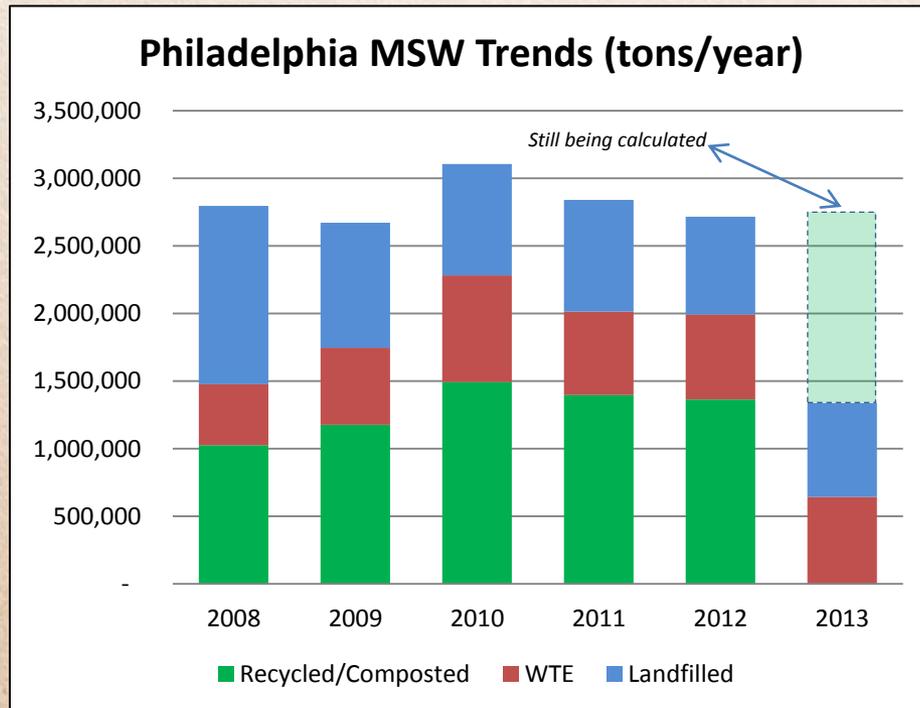


- Solid waste management evolving into “materials management”
- Source, or waste reduction means minimizing or not creating waste in the first place.
- More actions needed at beginning of product lifecycles (i.e. packaging redesign)

# Philadelphia's MSW Circle of Influence



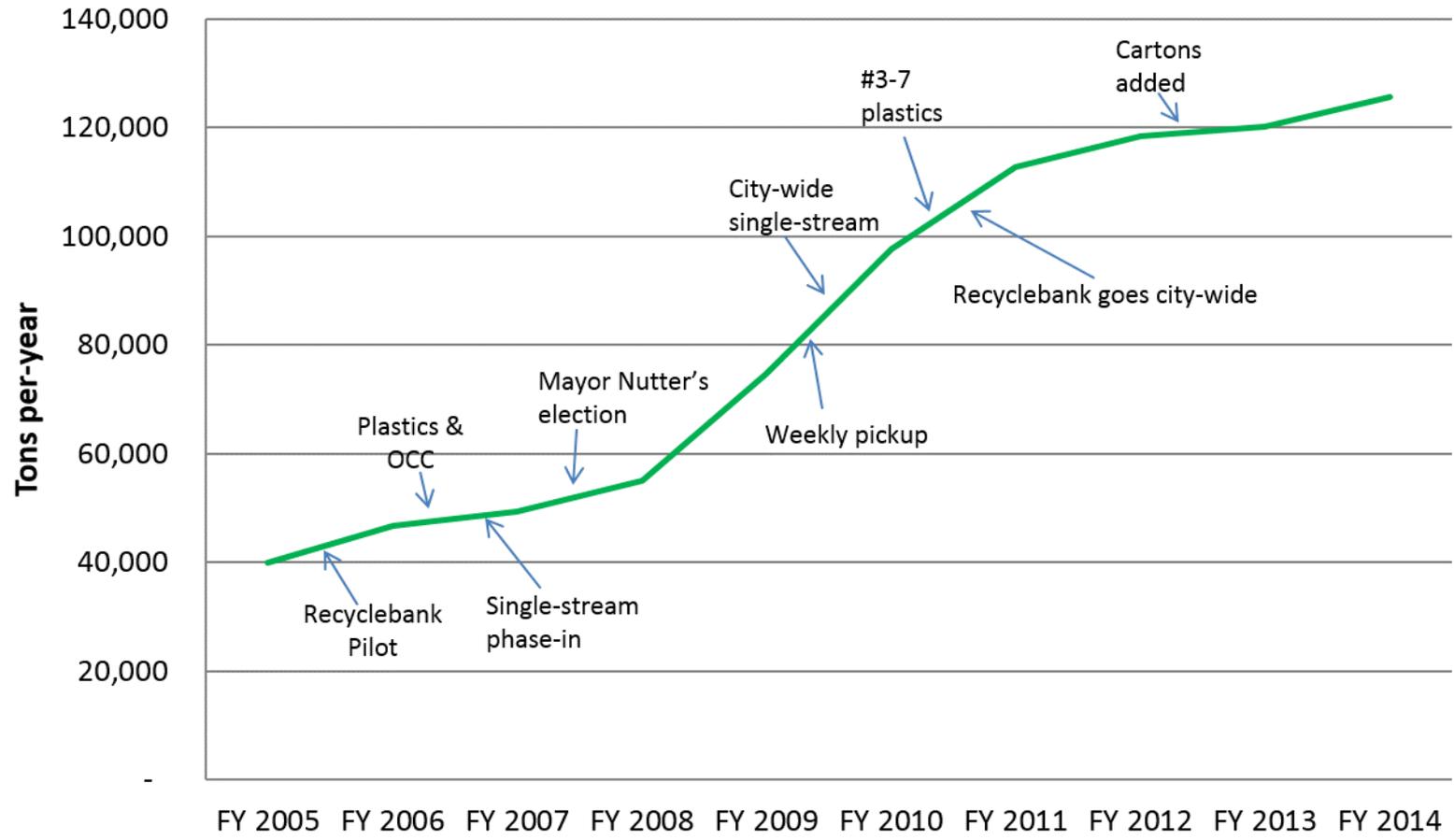
# Overall Positive Trends Continue



- MSW generation has leveled off
- “All-in” recycling rates of 40-50%
- C&D continues to be recycled at 80% plus rate
- Residential progress:

	FY 2004	FY 2014
Disposed	948	635
Recycled	57	162
Total MSW	1,005	797

# Philadelphia Curbside Recycling FY 2005 – FY 2014



# Challenges Ahead...



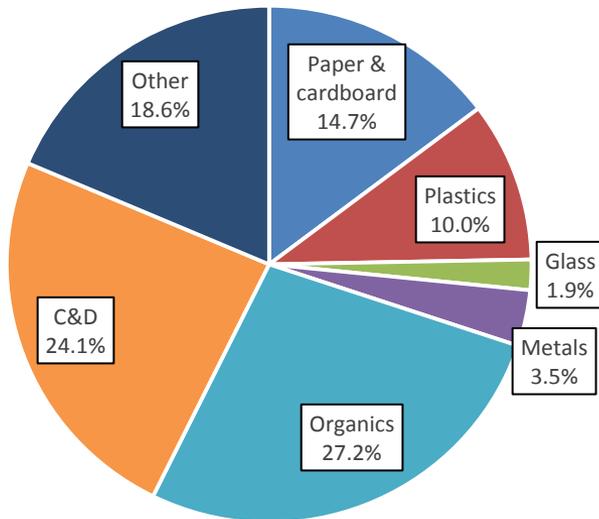
# Local Recycling Programs Influenced Globally



- Macro and microeconomic forces impacting recycling:
  - Operation “Green Fence”
  - Changes to recyclables stream
  - Glass markets
  - Increased recyclables processing costs
  - Local and regional market dynamics
  - Place in time

# Changing Solid Waste Stream

Philadelphia's Residential MSW 2010



Material	2000	2010	Difference 2010 vs. 2000
Paper & cardboard	29.0%	14.7%	-14.3%
Plastics	13.2%	10.0%	-3.2%
Glass	4.0%	1.9%	-2.1%
Metals	6.6%	3.5%	-3.1%
Organics	29.1%	27.2%	-1.9%
C&D	12.9%	24.1%	11.2%
Other	5.2%	18.6%	13.4%

- MSW stream continues to evolve
- Fewer traditional recoverable materials

# Changing Recyclables Stream (The Evolving Ton)

- Materials mix:
  - 80/20 paper vs. containers (vintage 2000)
  - 50/50 paper vs. containers (c. 2014)
- “Modern” MRF designed to process 10-year old materials mix
- Packaging changes will continue (flexible plastics)
- Newspaper readership continued decline = less paper

Material	Current %	Trending
Newspaper	10.4%	-
Cardboard	12.1%	+
Other paper	18.2%	-
Glass containers	29.6%	-
Plastics (PET/HDPE)	6.7%	+
Other plastics	5.5%	+
Aluminum	1.3%	0
Steel	2.8%	-
Other	3.4%	+
Rejects/Residue	10.0%	+/-

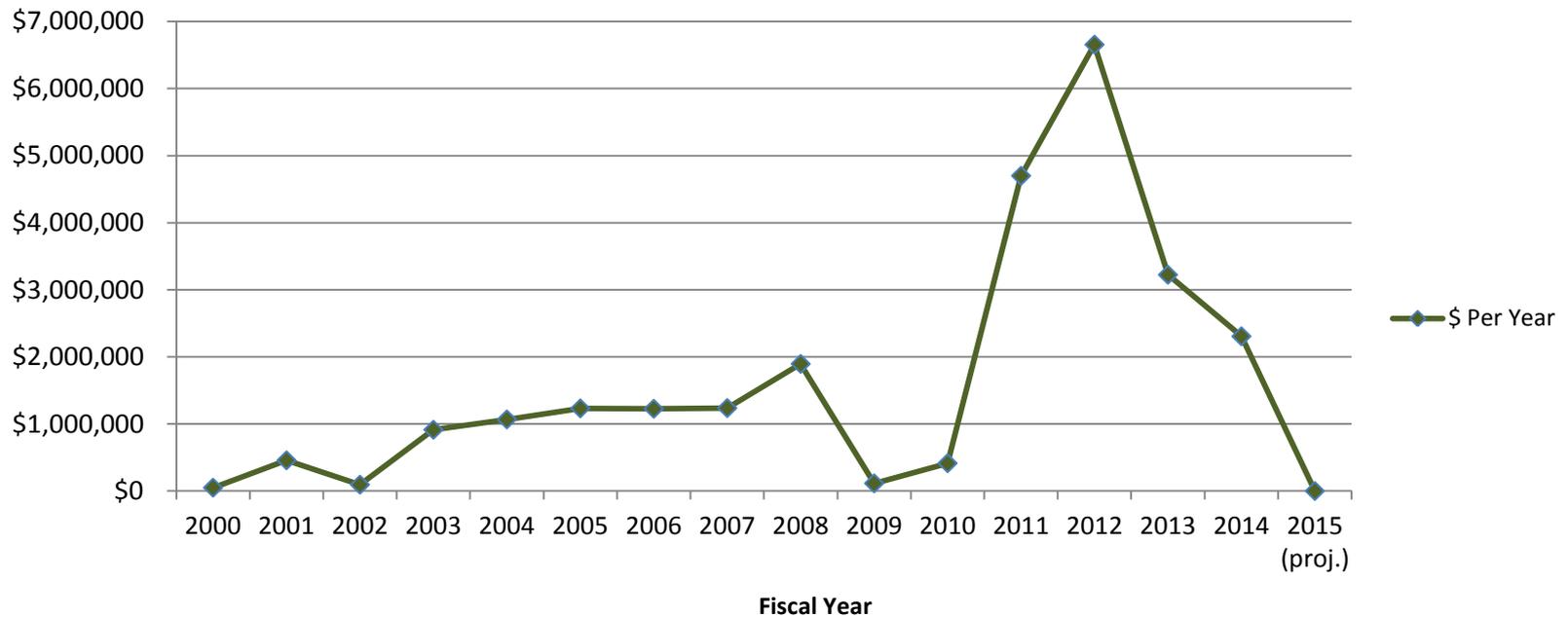
# Recycling More vs. Recycling Right

- Recyclable materials quality critical issue throughout U.S.
- Need to refocus on recycling right
- Planned & ongoing initiatives:
  - Website changes
  - Revised program literature
  - Plastic bags messaging
  - Media (op-ed, news stories)
  - Enhance social media presence
  - Outreach to civics and PMBC block captains
- Operational approaches:
  - Crew training & feedback
  - Random recyclables load inspections



# New Fiscal Reality?

## Residential Recyclables Revenues



- Recyclables revenues down, but still cheaper than disposal.
- \$0 ton revenue vs. \$60 tipping fee = \$7 million annual avoided disposal savings.