

Impacts of Single-Stream Recycling: The Philadelphia Story

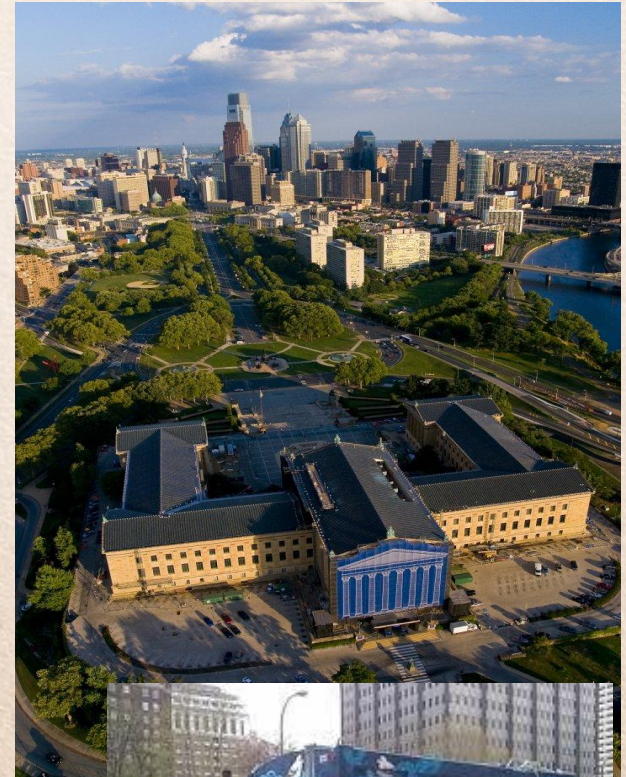
**Northeast Recycling Council 2015
Spring Conference**

*Phil Bresee
Director of Recycling
City of Philadelphia*



About Philadelphia:

- Fifth-largest City in U.S. with 1.55 million residents
- Consolidated city-county
- Residential MSW collected by Streets Department:
 - \$85 million annual budget
 - Weekly collections to ~540,000 HH (>6 units), municipal buildings, public spaces, HHW & e-Cycling drop-offs
 - ~1,200 employees
 - 200+ trucks
 - Anti-litter programs
 - *Manual collections*



PA Act 101 (1988) Recycling Requirements & Policy Goals

Service Levels / Participation

- Curbside for municipalities with >10,000
- Must collect at least 3 materials
- Leaf waste collections
- Commercial & institutional ordinance
- Disposal bans

Target / Goal

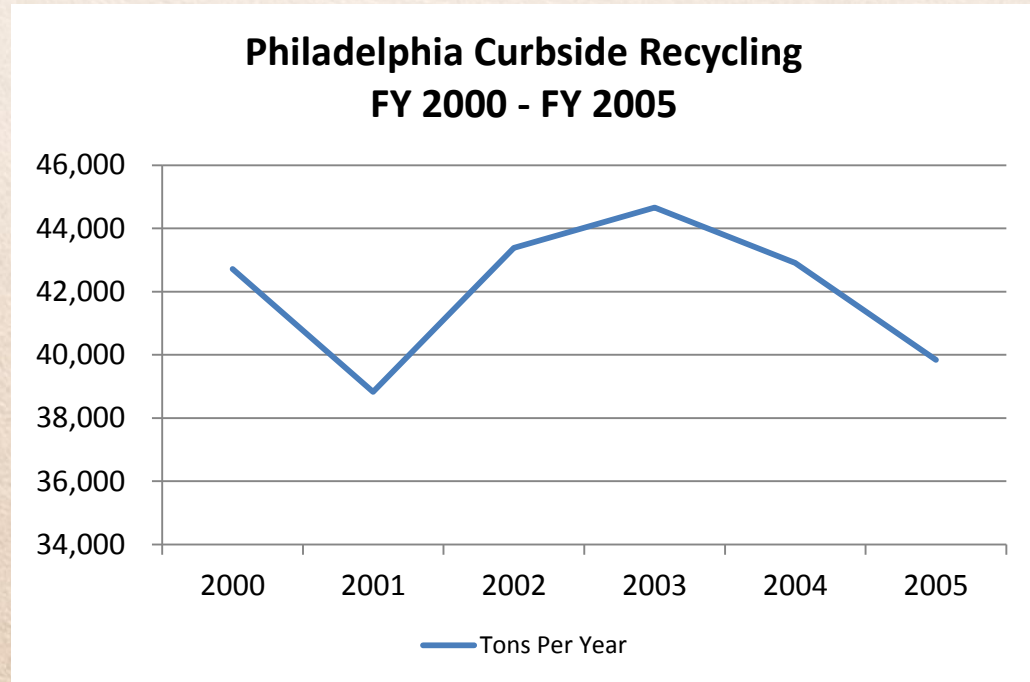
- Solid waste management planning
- 35% recycling goal
- Enforcement

Funding

- \$2 per ton assessment on landfill disposal
- \$35-\$40 million annually
- Grants for planning, capital, salary reimbursement, performance
- Technical assistance project grants

Philadelphia Curbside Recycling 1990's-2000's

- Program much-maligned...fear of tickets biggest driver of participation
- City fiscal crises
- PA DEP Consent Decree
- Recycling chief revolving door
- Lack of political support



2006: Single-stream phases-in...

- City's MRF vendor retrofitted in 2006
- Initial Recyclebank pilots were single-stream
- Created opportunity to streamline operations, as well as promote "new" program

All Together Now

Recycle like you've never recycled before.

Now you can put cans, glass and mixed paper out at the curb in the same recycling bin. And, for the first time, add plastic containers and cardboard to the mix!

Cans: Tin and aluminum cans, empty aerosol cans, empty paint cans
Glass: Jars and bottles
Mixed Paper: Newspaper, magazines, mail (junk and personal), phone books, food boxes (remove plastic liner), computer paper, flyers, wrapping paper (no foil or plastic wrap), beverage cartons (no food-soiled paper, please!)

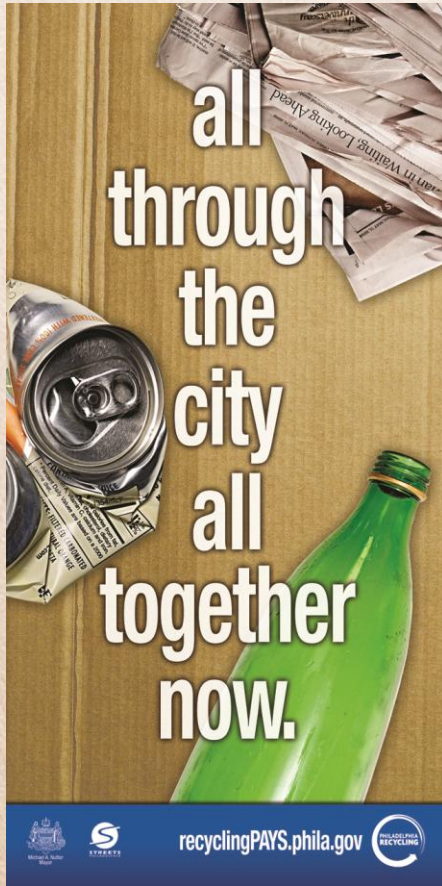
Plastic Containers: Recycle #1 and #2 plastics ONLY (mostly beverage and detergent containers). Look for the number on the bottom of the container to see if it's acceptable.
Cardboard: Empty and flattened

If one recycling bin isn't enough to hold everything, just add another container.

To find out when your Recycling Day is, visit recyclingpays.phila.gov or call 215-685-RECYCLE (7329).

recyclingPAYS.phila.gov

2008: Easier still...weekly recycling



2008: By bus, trolley and train...



2010: Website Enhancements & New Materials



2010: Mural Arts Program branding adds visual excitement...



2010: Recycling Rewards Goes City-wide



ACCOUNT EARN POINTS

10-17, 2010

Weekly Account Activity

Description	Date	Points
Coke Buy one 2L bottle, get one free	October 2, 2011	-50
Coke Buy one 2L bottle, get one free	October 12, 2011	-100
Coke Buy one 2L bottle	October 12, 2011	-60
P&G Learn and Earn	October 14, 2011	+50
Coke Buy one 2L bottle, get one free	October 18, 2011	-100
MillerCoors Learn and Earn	October 19, 2011	+50

get rewards > current points **1133**

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FEATURED REWARD

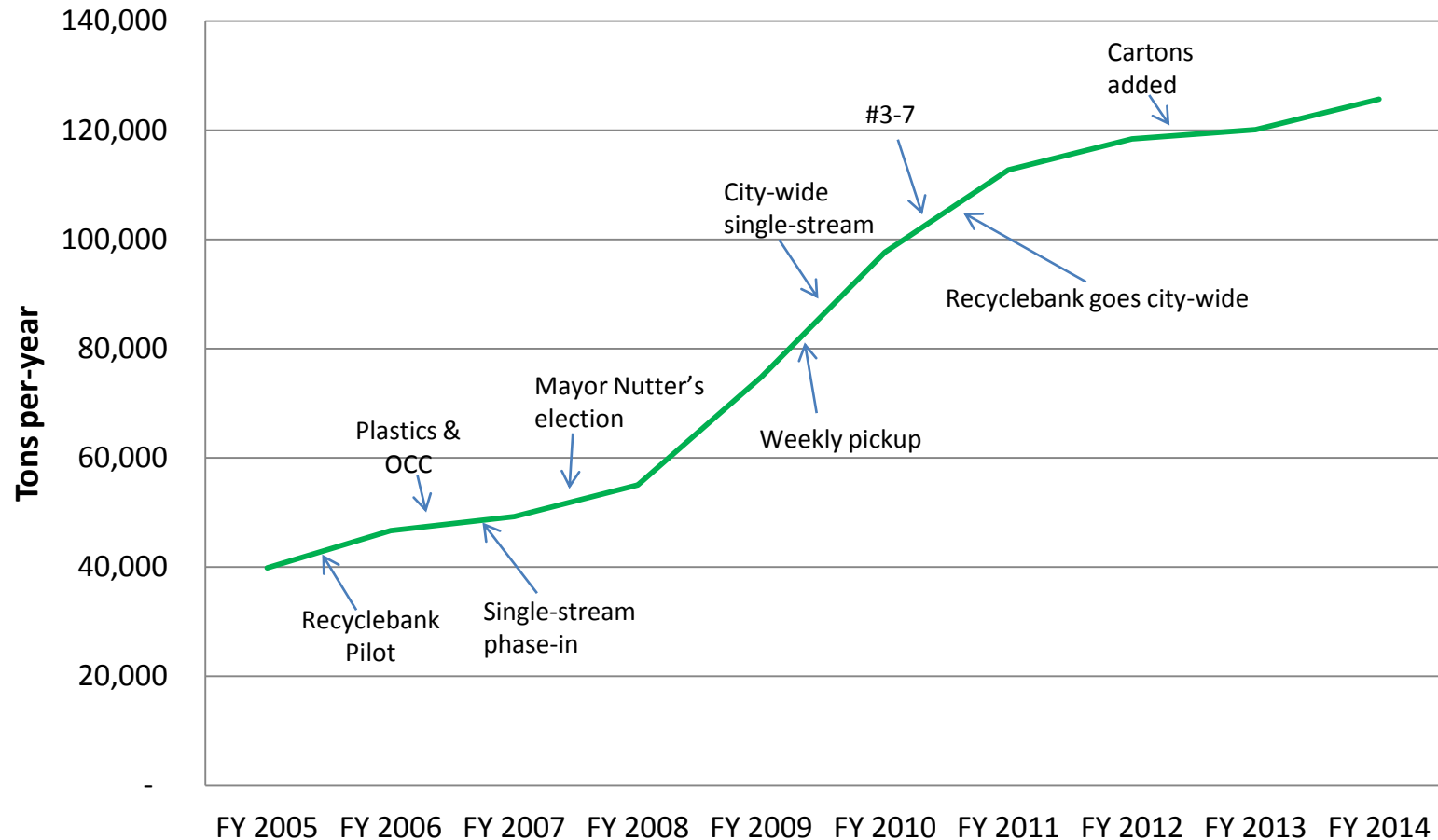
\$XX off
Naked 8.5oz



2012: Cartons Added



Philadelphia Curbside Recycling FY 2005 – FY 2014

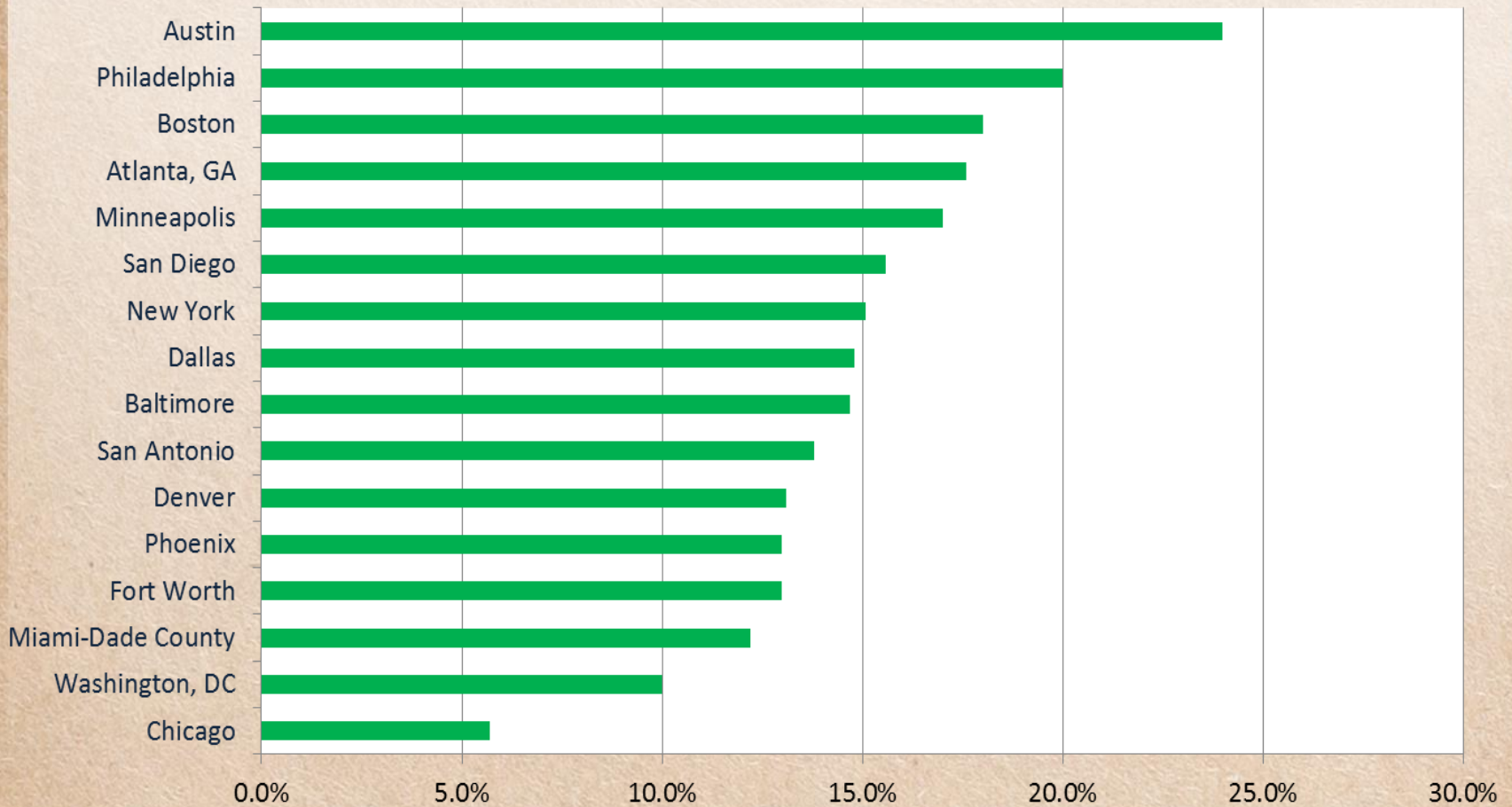


Philly's Success Phantastic!

- Curbside recycling tonnages up ~155% since FY 2008
 - Per HH yield of ~465 lbs./yr.
 - Diversion rate through single-stream = 21%
- Residential disposal tonnages down 31% from peak year (FY 2004)
- Total residential MSW generation down 19% from FY 2004
- Fiscal benefits between \$9.7 and \$15 million per year FY 2008 to FY 2014



Comparative Curbside Recycling Rates (c. 2012; single-stream recyclables only)

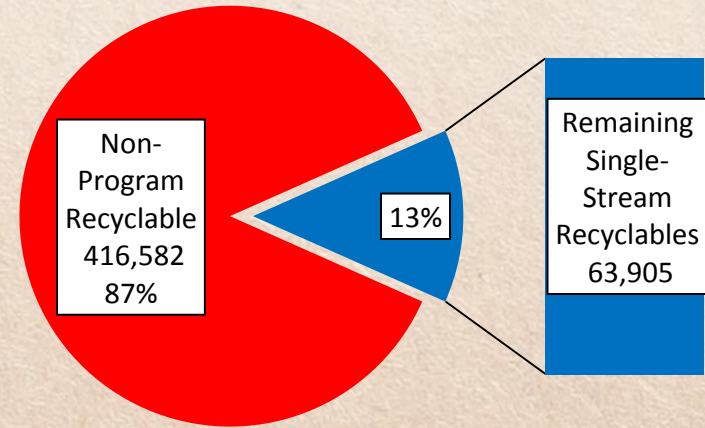


Philadelphia's Challenges

Changing MSW Stream...

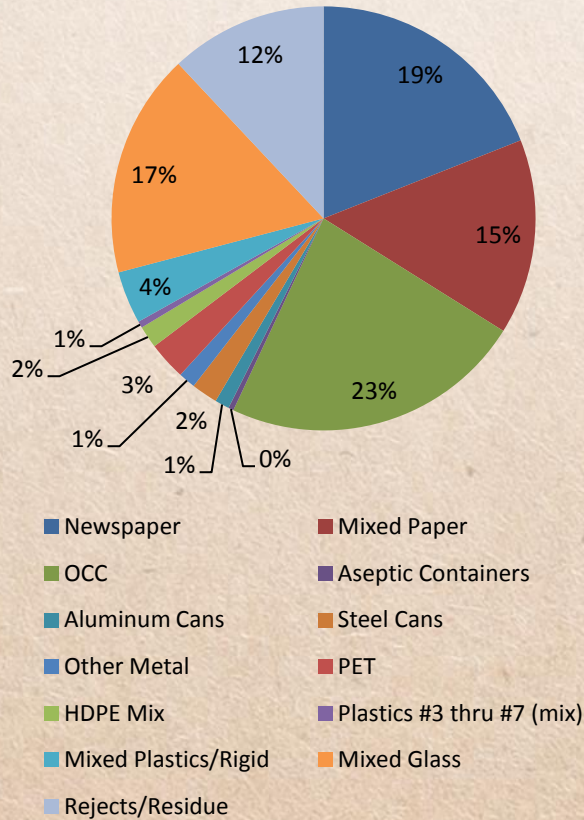
Residential MSW by Major Categories			
Material	2000	2010	Difference
Paper & cardboard	29.0%	14.7%	-14.3%
Plastics	13.2%	10.0%	-3.2%
Glass	4.0%	1.9%	-2.1%
Metals	6.6%	3.5%	-3.1%
Organics	29.1%	27.2%	-1.9%
C&D	12.9%	24.1%	11.2%
Other	5.2%	18.6%	13.4%

Low Hanging Fruit Picked...

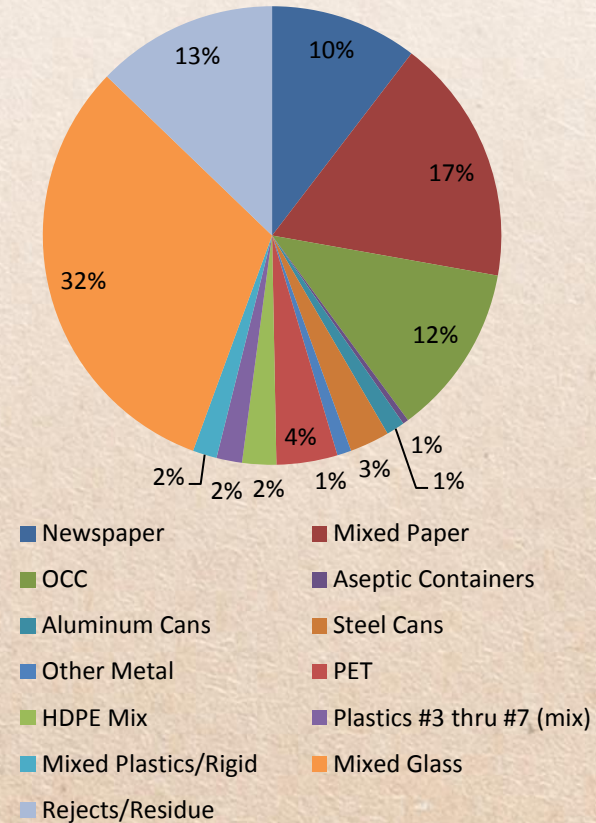


Philly's Evolving Recycling Ton...

Inbound MRF Tons 2010



Inbound MRF Tons 2013




Changing Outreach Focus

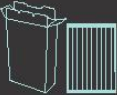





- Earlier campaigns & branding focused on encouraging recycling participation
- Emphasis on recyclables quality now key message across all platforms & partnerships
 - Recyclebank
 - Keep Philadelphia Beautiful
 - Recyclebycity.com
 - Civic associations

RECYCLING IN PHILADELPHIA IS AT AN ALL-TIME HIGH, BUT SOME UNACCEPTED ITEMS ARE STILL ENDING UP IN RECYCLING BINS. THESE ITEMS CAN DAMAGE RECYCLING MACHINERY AND SLOW DOWN THE PROCESS. CHECK THIS LIST AND GET BEHIND RECYCLING, THE RIGHT WAY.


KNOW THE RECYCLING INS & OUTS



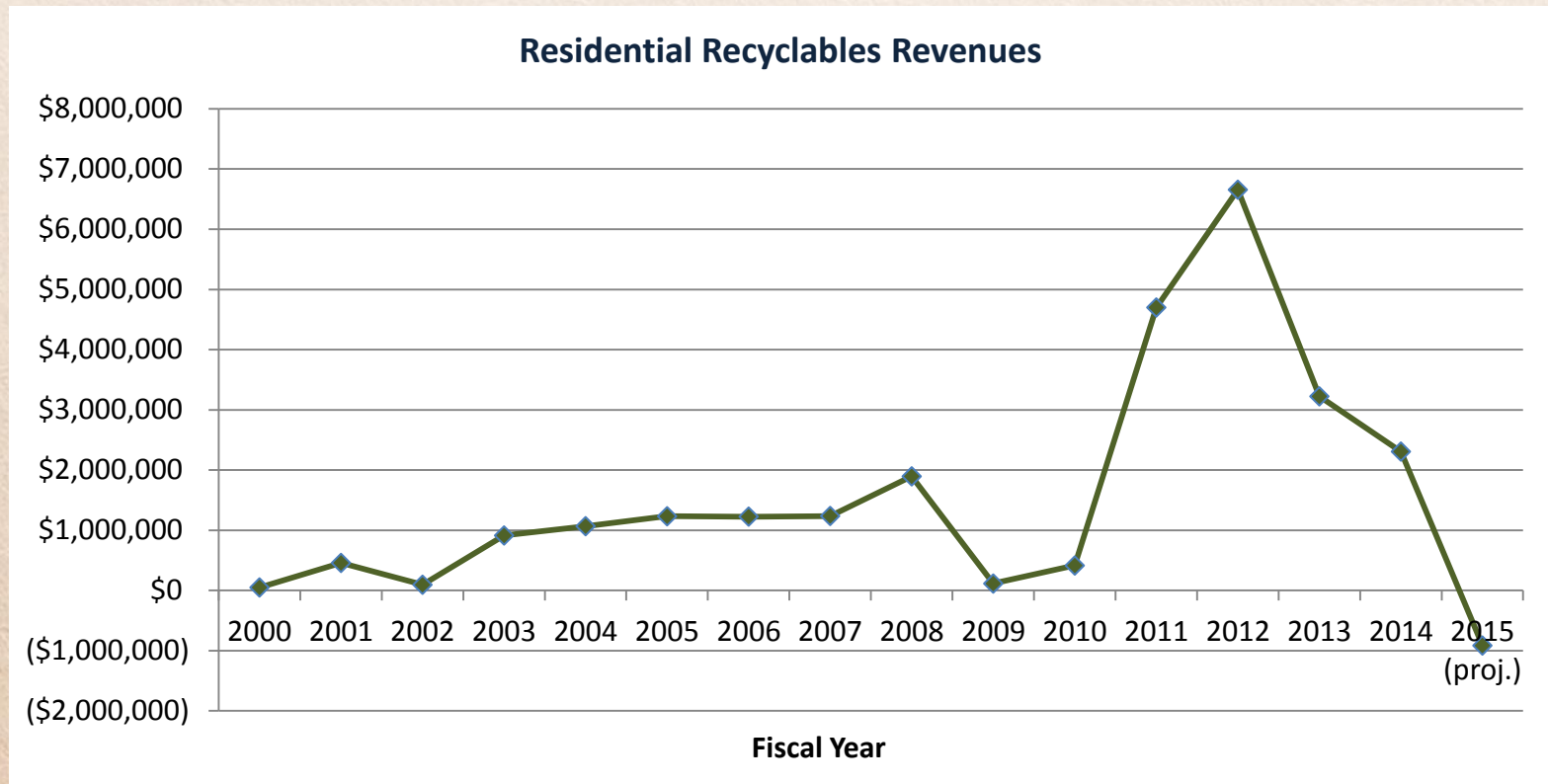
IN **OUT**

 CARDBOARD	 PAPER	PLASTIC BAGS
 METAL	 CARTONS	SOILED PAPER AND CARDBOARD
 PLASTICS	 GLASS BOTTLES AND JARS	TISSUES / PAPER TOWELS NAPKINS
		STYROFOAM™
		VHS TAPES
		ELECTRONICS
		WINDOW GLASS
		RUBBER
		FABRICS

LEARN MORE AND GET REWARDED FOR RECYCLING THE RIGHT WAY AT PHILADELPHIASTREETS.COM/RECYCLING



Philadelphia's Challenges



Boom revenue years set new expectations...

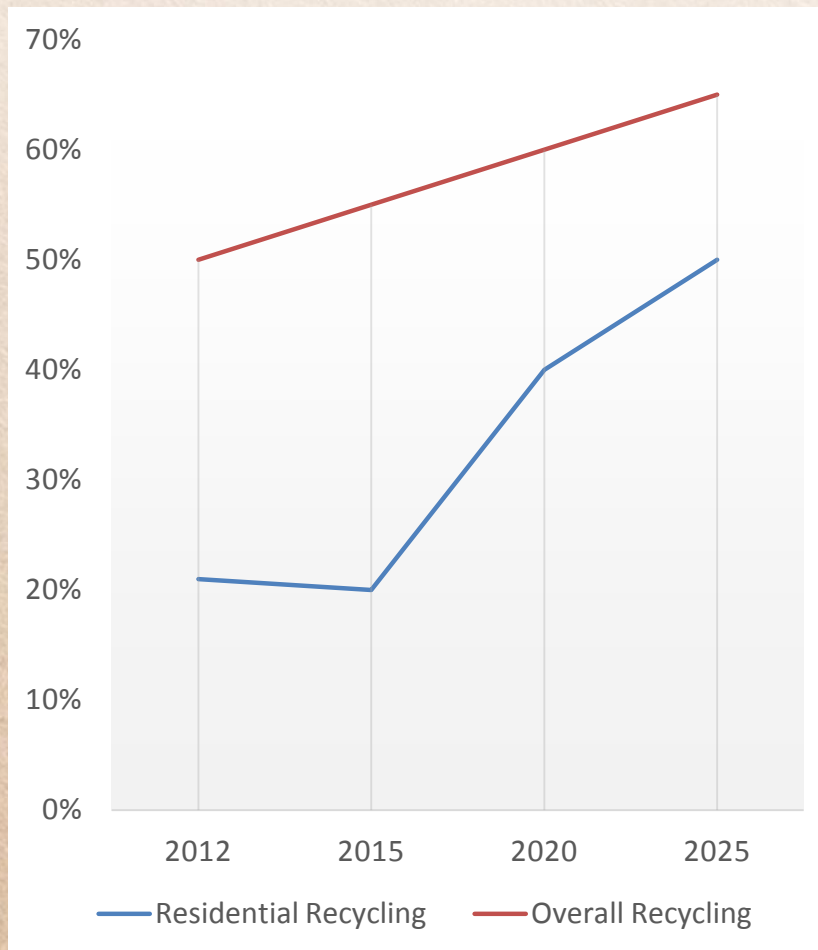
Philadelphia's Challenges



Photo courtesy of Peter Tobia

- Single-stream capture rate = ~65%
- Could ROI be achieved on recycling infrastructure (carts, trucks) investment?
- Logistical and operational challenges
- Politics (new mayor 2015)

How to Move the Philly Needle?



- More focus on recyclables quality
- Increase public space & institutional recycling opportunities
- Increase recycling in multifamily communities
- Expand commercial recycling support
- Pursue bigger targets (organics)
- Legislative & regulatory:
 - Reduce MSW denominator (e.g., review collection & set-out practices; materials bans)
 - Commercial hauler reporting