Curbside Recycling & Rewards Programs: Philadelphia’s Story

Maryland Recycling Network 2015 Annual Conference

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City of Philadelphia
Philadelphia Background

- Fifth-largest City in U.S. with 1.55 million residents
- Rich in U.S. history, higher education, arts, museums, culture
- Residential MSW collected by Streets Department:
  - $90 million annual budget
  - Weekly collections to ~530,000 HH (>6 units), municipal buildings, public spaces, HHW & e-Cycling drop-offs
  - ~1,200 employees
  - 200+ trucks
  - Anti-litter programs
Municipal Solid Waste in Philadelphia

Opportunities:
Total MSW Stream
= (~2.6 million tons)

Influence:
Commercial MSW and C&D
= ~75% of total

Control:
Residential MSW
= ~25% of total
PA Recycling Requirements & Policy Goals

- Act 101 (1988) keystone for recycling in PA
- 477 local governments required to comply
- 1,480 voluntarily recycle
- 12 million Pennsylvanians with access to recycling
- 8.5 million tons recovered in 2012

Service Levels / Participation
- Curbside for municipalities with >10,000
- Collect at least 3 materials
- Leaf waste collections
- Commercial & institutional
- 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
Overall Philly MSW Trends...

Total Philadelphia MSW Generation 2009-2013

Philadelphia MSW by Generator Type 2009-2013

Total “all-in” recycling & diversion rate has ranged between 44% and 51%
Philadelphia Curbside Recycling 1990s-2000s

- 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
2008: Recycling Re-brand

- Reflect innovation
- Convey action
2008: Easier still…weekly recycling

SIDEBYSIDE
RECYCLE EVERY WEEK!
Same day as your trash day.

With your extra effort and the city’s new once-a-week collection schedule, single stream recycling is working better than ever.

Please continue to put out all your recyclables all in one bin, right next to your trash can.

It’s easy to make recycling part of your weekly routine.

All together now!

recyclingPAYS.phila.gov
2008: City-wide Single-Stream
2008: By bus, trolley and train...
2010: Step it up with #3-7 plastics
2010: Mural Arts Program branding adds visual excitement...
2012: Cartons Added
Recycling Education & Rewards Program

- Philadelphia one of original Recyclebank pilots (2006)
- Program became City-wide 2010
- ~195,000 households have signed up for the program.
- Outreach, events, and overall program visibility are key elements:
  - Neighborhood targeting and canvassing
  - Recycling bin distribution events
  - America Recycles Day
  - Green Schools Project
  - U.S. Conference of Mayors Award
Mix of National and Local Rewards Partners:
Events & Accolades

Green Schools Project

U.S. Conference of Mayors

America Recycles Day

Professional Recyclers of PA
Enforcement also key...

- Recycling participation is mandatory (residential & commercial)
- Streets & Walkways Enforcement Program (a.k.a. SWEEP) officers enforce sanitation code violations & dumpster licensing
- Progressive enforcement approach
- SWEEP officers also perform outreach and event-related tasks
Philly’s Success Phantastic!

- Curbside recycling tonnages up ~155% since FY 2008
  - Per HH yield of 450+ 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

- **Plastics & OCC:** Single-stream phase-in
- **Weekly pickup:**
- **Mayor Nutter’s election:**
- **Recyclebank goes city-wide:**
- **#3-7 plastics:**
- **Cartons added:**
Shifting 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
Materials Quality Emphasis Across All-Platforms & Partnerships
Materials Quality Emphasis Across All-Platforms & Partnerships
Improved Operational Focus

- Key feature of better quality control includes renewed emphasis on collection crew performance
- Maintain crew productivity and improve materials quality
- Random route inspections key tool in reducing on-route contamination

Photo courtesy of Peter Tobia
Curbside Recyclables Load Inspections

Trucks randomly targeted in all sanitation districts

Loads tipped and examined at sanitation yards
Drilling Down into Contamination

• Contaminated loads cross-referenced by sanitation district, day, truck #, and route
• Will allow for targeted outreach and canvassing by Education & Rewards team and SWEEP
Philadelphias Challenges

Changing MSW Stream...

<table>
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<tr>
<th>Material</th>
<th>2000</th>
<th>2010</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper &amp; cardboard</td>
<td>29.0%</td>
<td>14.7%</td>
<td>-14.3%</td>
</tr>
<tr>
<td>Plastics</td>
<td>13.2%</td>
<td>10.0%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Glass</td>
<td>4.0%</td>
<td>1.9%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Metals</td>
<td>6.6%</td>
<td>3.5%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Organics</td>
<td>29.1%</td>
<td>27.2%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>C&amp;D</td>
<td>12.9%</td>
<td>24.1%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Other</td>
<td>5.2%</td>
<td>18.6%</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

Low Hanging Fruit Picked...

Non-Program Recyclable 416,582 87%
Remaining Single-Stream Recyclables 63,905
Philly’s Evolving Recycling Tons...

Inbound MRF Tons 2010

- Newspaper: 0%
- OCC: 0%
- Aluminum Cans: 1%
- Other Metal: 2%
- HDPE Mix: 1%
- Mixed Plastics/Rigid: 1%
- Rejects/Residue: 1%
- Mixed Paper: 12%
- Aseptic Containers: 4%
- Steel Cans: 17%
- PET: 23%

Inbound MRF Tons 2013

- Newspaper: 32%
- OCC: 13%
- Aluminum Cans: 2%
- Other Metal: 2%
- HDPE Mix: 32%
- Mixed Plastics/Rigid: 12%
- Rejects/Residue: 1%
- Mixed Paper: 10%
- Aseptic Containers: 1%
- Steel Cans: 17%
- PET: 17%
How to Move the Philly Needle?

- More focus on recyclables quality
- Continued integration of education & recycling rewards
- Increase public space & institutional recycling opportunities
- Expand commercial & multi-family recycling support
- Legislative & regulatory:
  - Reduce MSW denominator (e.g., review collection & set-out practices; materials bans)
  - Commercial hauler reporting