



Caps On Case Study – Chicago, IL

MUNICIPALITY: City of Chicago, IL

WEBSITE: <http://www.recyclebycity.com/chicago>

POPULATION: 2.7 Million

HOUSEHOLDS: 1.2 million single family and multi-family units

IMPLEMENTATION OF CURBSIDE CART RECYCLING: 2010

INITIAL MATERIAL LIST:

- Aluminum
- Tin Cans
- Glass
- Plastic #1-2
- Paper
- Cardboard

CURBSIDE RECYCLING EXPANSION: 2013

EXPANDED MATERIALS LIST INCLUDES:

- Glass bottles and jars
- Metal (aluminum cans, tin/steel cans, clean aluminum foil)
- Paper (paperboard, cardboard, paper bags, newspaper and mail)
- Cartons
- Plastic bottles, tubs and jugs (caps and lids on)

REASONS FOR EXPANDING:

- The city discontinued the original Blue Bag recycling program in 2010 and began rolling out the new Blue Cart Residential Recycling, expanded citywide in 2013. Service providers helped influence which materials would be included in the acceptable recycling lists.
- The decision to include caps was made for two main reasons to increase plastics recycling:

1. When a cap is left on a bottle, it helps the bottle remain 3-Dimensional. If the bottle is flattened, it causes most bottles to be carried onto the paper stream during processing and sorted incorrectly.
2. When caps are left off of bottles and recycled, the caps typically fall through the processing screens into the glass. Caps left in the glass material are then sent to glass manufacturers where they are taken out and discarded into the trash.

EDUCATION AND OUTREACH:

The city educated residents on the new expanded material list through flyers, social media and website updates.

- Chicago uses Recycle by City to assist with education and outreach to residents and a new look for their Recycling Guide.
- The city provides specific outreach for unique materials including plastic caps. They provide tips about recycling plastic caps by “squeezing a little air out before screwing caps on to ensure they don’t pop-off during processing,” ensuring caps make it through the recycling facility. Information about how caps are processed and separated from the bottles to be sold for reuse is also available on their website.



Recycling Tip: Bottle Caps

Caps are usually made of a different type of plastic than their bottles, so we used to be asked to recycle them separately. But because of their small size, many caps wouldn't make it through the sorting process.

In recent years, recyclers have developed a process where plastic bottles are ground into flakes and then put into a bath. In the bath, different types of plastics float at different depths, so the plastic from the caps can be efficiently separated from the bottles and sold for reuse. Gotta love technology!

Pro Tip: To earn extra thanks from the recycling crew, squeeze a little air out before screwing caps on to ensure they don't pop-off during processing.

PLASTIC RECOVERY VOLUMES:

Plastic caps can make a large difference in the way plastic bottles are processed in a facility, but are typically too small to track in material volumes.

- The city of Chicago's service provider, Waste Management of Illinois, Inc., visually estimates a little less than 25% of their plastic stream includes plastic bottles with caps left on.
- Although not a large amount, it was stated that caps have assisted the efficiency of processing plastic bottles by helping the bottle remain as a 3-Dimensional product when collected.

CHALLENGES:

- The city reported no main issues with the addition of including caps in their accepted materials list. There has always been a small amount of confusion when it comes to including or not including caps, however, they hope to decrease the amount of confusion through continuous educational efforts.

LESSONS LEARNED:

- Leaving caps on can lead to proper sortation through allowing bottles to maintain their shape. This leads to increased plastic recovery which benefits consumers and processors.
- Education is key. Residents must be educated to empty their bottles as best as possible before putting the cap back on. If residual liquid is left in the bottle, the weight of the bottle can confuse the sorting equipment during processing and cause the bottle to be sorted into the wrong stream or end up in the trash.

***SEE NEXT PAGE FOR EXAMPLE OF EDUCATIONAL RESOURCES:**

CONTACT INFORMATION:

Chris Sauve

Streets and Sanitation Department

City of Chicago

312-744-4616

csauve@cityofchicago.org

Chicago Blue Cart Recycling Guide

Recyclables need to be empty and dry. **Go bagless**, place items loose in the blue cart without a bag.

GLASS	METAL	PAPER	PLASTIC
	 aluminum cans	 paper (free of glitter & metallic ink)	 bottles (caps on)
 bottles	 tin/steel cans	 paperboard (discard plastic bags & wrap)	 tubs (lids on)
 jars (recycle lids separately)	 clean aluminum foil	 cardboard (flatten to save room), cartons	 jugs (caps on)
 glass other than bottles and jars	 electronics, cords, pots & pans	 coffee cups, greasy cardboard, napkins	 plastic bags, polystyrene/foam #6, cups

For more info including drop-off locations for the hazardous stuff, visit recyclebycity.com/chicago

© 2016 Civil Agents

