## Recycling in Madison

COMMITTEE ON THE ENVIRONMENT
JUNE 2018

#### Two recent changes

- Rigid plastic program ending (2017)
  - ▶ Due to commodity importing restrictions

- Organics pilot program ended
  - Due to contamination and cost

# No changes in what can go into the recycling cart

## **RECYCLABLES ONLY**

#### **PLASTICS**







- » Containers #1 thru #7
- » Bottles leave on lids
- » Dairy tubs and lids
- » Milk jugs
- » Laundry bottles
- » Berry and deli containers
- » Clamshell and blister packs

Plastic bags must be bagged in clear or white bags:



#### PAPER





- » Corrugated cardboard
- » Phone books
- » Boxes
- » Newspaper & all inserts
- » Envelopes & junk mail
- » Paper bags
- » Magazines
- » Milk cartons
- » Juice boxes
- » Gable top containers

Shredded paper must be bagged in clear or white bags:



#### **METAL**





- » Aluminum cans
- » Steel & tin cans
- » Pots & pans
- » Small metal appliances
- » Empty aerosol cans
- » Metal less than 18 inches long and less than 10 pounds

Bottle caps & other small metal objects must be inside a pinched metal can:



#### **GLASS**



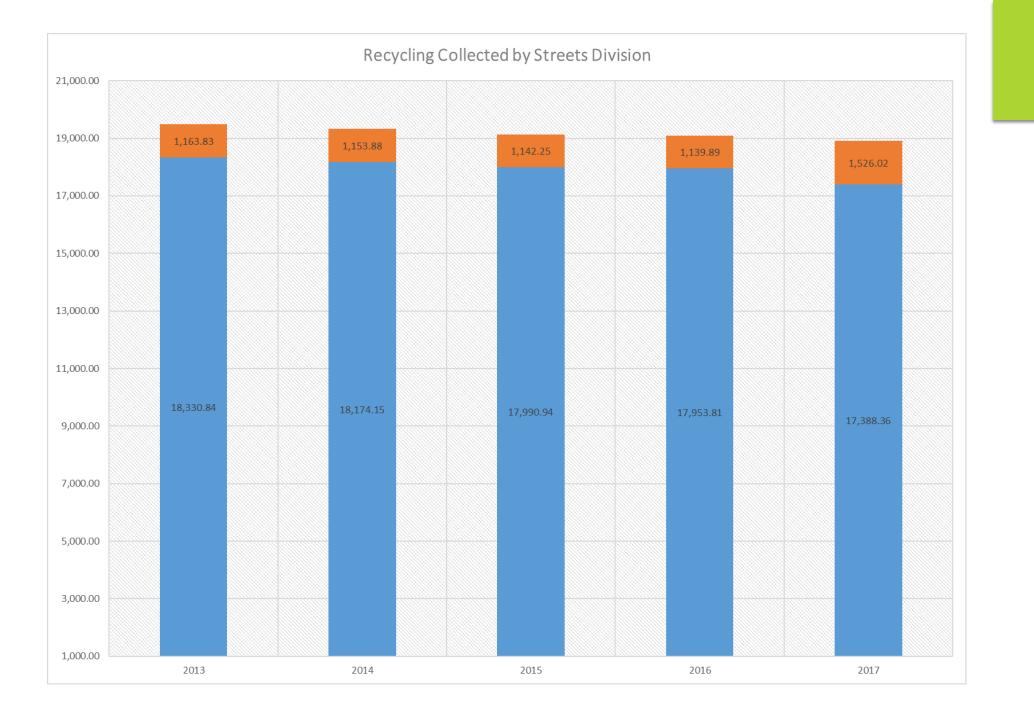
- » Bottles remove caps
- » Jars remove lids



https://youtu.be/JyzPvM\_4sJ4

# By the numbers: Recycling collected in Madison by Streets

	Recyclables	Residue	Total Tons
2013	18,330.84	1,163.83	19,494.67
2014	18,174.15	1,153.88	19,328.03
2015	17,990.94	1,142.25	19,133.19
2016	17,953.81	1,139.89	19,093.70
2017	17,388.36	1,526.02	18,914.38



#### Why are the tonnages decreasing?

- Changes to packaging
  - Stuff is getting lighter
- Changes in consumer habits
- Changes where people are living
  - Streets does not collect from apartments/condos of more than 8 units

#### Why did the residue number go up?

- Pellitteri performed a sort/audit of the material Madison collects in 2017.
  - Sort revealed a higher percentage of residue (garbage) than previous sort
- Are people putting more garbage into the recycling carts?
  - ► Maybe?

#### Where does China fit in?

- China had been a large consumer of the world's recyclable material
- China changed their importing rules in 2017
  - ▶ Set very strict standards for contamination
  - Much of the world can't hit these new standards today

#### China's impact (Part 1)

- Rigid plastic drop-off program ended
  - "Rigid plastics" are things like 5-gallon buckets, children's sandboxes, etc.
  - Rigid plastic program commingled a lot of different plastic types & at present, no market for this material

NOTE: Rigid plastic material does not go into the green recycling cart, and was not included in the numbers shown earlier in this presentation

#### China's impact (Part 2)

- Commodity prices are very, very low right now.
  - A lot of domestic supply now for recyclable materials, especially paper
  - ► 55% of what the Streets Division collects is paper products

#### What can Madison do?

- Keep recycling
  - Our material is recycled
- Keep it clean
  - ► Stop "wishcycling" things like coffee pods
- Basically, follow current collection rules

#### Organics: Brief History

- Pilot started in 2011. By 2018, grew to include approximately 1,100 homes and 40 businesses.
  - 2011 plan was to have an anaerobic biodigester by 2016 to accept and process city's food scraps
- In 2011, material was taken to a composter in Columbia County that was not producing a compost for gardeners/farmers
  - ▶ This means the system did not need to pluck out the garbage, diapers, and pet waste.
- Columbia County composter closed. Anaerobic digester dropped from budget planning. Garbage remained in the carts.
- Multiple other processors were tried, each of them making a compost for consumers. And garbage in the organics carts remained a problem.

## What do you mean by garbage?

- Plastic bags
- Plastic coffee lids
- Plastic takeout boxes
- Plastic cutlery
- Plastic netting
- Glass bottles
- Metal cans
- Butter wrappers
- Yogurt containers
- Dirt clods & brush
- Diapers
- Toys
- Clothing & towels
- And other weird stuff as well



# Who puts garbage & plastic bags in a food scrap program?

- Unclear if it's residential or businesses responsible
- Carts were collected with our automated side-loading trucks
  - Carts are not peeked into at the curb, so problems are not noticed until material is dumped out of the truck

#### Why end the pilot now?

- Only one processor that is within a 4-hour round trip drive of Madison.
- Due to contamination issues, the local processor wanted to charge an incredibly high rate to accept the material.
- Decision making went like this:
  - We know there's contamination in the material, and
  - We can't seem to control the contamination in our current routing/collection scheme, and
  - ▶ The one option to process the dirty material is too high, therefore
  - ▶ It makes sense to end the pilot and rethink how to provide this service

# How is the program successful in other cities/locations?

- All seem to have a composter nearby
- All seem to collect it by first peeking into the carts
  - Other contamination control on back end as well, either handpicking or mechanical solutions
- All seem to charge a monthly fee

## How can we make this program a success?

- Many options available
  - Including an RFP for a private hauler
- Rebranding the program as "food scrap recycling" should eliminate confusion around the word "organics"
- Strictly limit what is acceptable in the program to just food & maybe paper bags
- Need to peek into the carts at the curb and reject the bad ones
  - But cart peeking may turn a 1-person collection job into a 2-person job and makes collections slower

### There's more to recycling, too...

- Electronics (including batteries)
- Yard waste & leaves
- Brush
- And on and on....

#### Questions?

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