

DRAFT
Recycling Advisory Committee (RAC) Meeting Minutes
December 19, 2018, 8am – 9:30am
City Hall, 795 Massachusetts Ave, Council Chambers
Minutes taken by Anne Sherman

Members Present: Debby Galef, Rob Gogan, Susy Jones, Debby Knight, Laura Nichols, Michael Pappas, Anne Sherman, Meera Singh, Matthew St. Onge, Mary Verhage
Members absent: Ilana Bebchick, Martha Henry, Janet Mosley, Quinten Steenhuis, Kristen Watkins
Staff Present: Meryl Brott, Camilla Elvis, Mike Fitzgerald, Becky Fuentes, Mike Orr
Members of the Public present: Randi Mail, Judy Nathans, Helen Snively

Housekeeping

November minutes were approved.

Updates from Zero Waste Consultants, Christine Roarke, and Janine Ralph from HDR

Consultants have been working on research and recommendations for The City of Cambridge's Zero Waste Plan for more than a year and a half, seeking reasonable and practicable approaches. Some implementation has begun.

There is a focus on near-term solutions: a five-year timeframe is reasonable and appropriate. Anything beyond this timeframe is subject to unexpected changes, for example the sudden explosion of Amazon shipping has resulted in a large quantity of cardboard having to be disposed of.

The intention is for the report to be a "living plan", reviewing recommendations every five years. Only general goals and practices are suggested beyond a ten-year time frame, which also happens to be the lifespan of a recycling toter.

Diversion Rates & Trash

The focus is on creating patterns of behavior that discourage trash.

It's harder to divert organics than to deal with recyclables. The impacts of organics are "hidden" because they are low-volume, but high-weight and costs associated are related to weight. 60% of eligible buildings are putting out bins for collection of organics, but the 40% non-participation still represents a large opportunity for improvement.

Recommendations to encourage a reduction in trash are likely to come from restrictions, such as

- Pay-as-you-throw, or partial pay-as-you-throw programs
 - Incompatible with bin pickup since counting bags becomes a challenge
 - Partial pay as you throw can be implemented at certain times of the year when average waste typically increases (Christmas and Spring)
 - "Relief" periods or "amnesty days", when fees are waived, may be an option for certain times of the year of the year
- Smaller bin size
 - The current ordinance is very generous. 0% of households use full amount allowed.
 - The average is 32 gals/wk/household
- Bi-weekly trash pickup

Given current circumstances, the recommendation is for Cambridge to adopt smaller bin sizes, thereby solving many of the short-term problems:

- Restricting the amount of trash allowed in any given week, forcing residents to recycle and compost more
- New containers would be rat resistant
- Allowing semi-automated service would be good for labor force
- Less space is needed for smaller containers
- Supporting neater, less cluttered sidewalks

Note that bin size may impact future recommendations since there is a 10 year anticipated lifetime of bins. For example, a smaller bin size would make bi-weekly pickups a challenge.

After ten years, it may be worthwhile to revisit a bi-weekly pickup option, depending on circumstances at the time. Currently, this typically works best in suburban communities where households have more storage.

Any approach needs to show that people and their needs are being considered.

Curbside Audit: Organics

Monday route, the oldest, shows more than 50% adoption rate, with other routes not far behind. The downward trend of organics in the trash is evidence of success in Master Plan recommendations.

Benchmarking against other cities shows that Cambridge is among the middle of top performing groups in terms of waste diversion.

DPW Priorities:

Trash reduction rates:

The goal is 80% reduction by 2050: Currently on track to hit reduction goals with the continuation of the organics program.

Waste Audit:

Much more could be diverted: only 30% of what is placed in trash bins is trash.

High Quality Service:

High rates of satisfaction in DPW service from Cambridge residents.

Operational Efficiency:

Increased efficiency this year through optimization: only required one more truck to be added to the fleet for organics pickup instead of 2.

Environmental Health & Safety:

Semi-automated trash bins improve EHS outcomes for workers.

Reduced Costs:

Trash disposal is the most expensive; recycling and composting materials save the City greatly. Less contamination in recycling would avoid current fines, but it's still cheaper than trash.

Greenhouse Gas Emissions:

Most greenhouse gas emissions come from processing, not transport—which only represents a small amount of overall GHG emissions.

Education:

Continued Support and education for organics beyond the “first flush” of adoption. Community feedback can be helpful.

Waste Reduction and Diversion Recommendations:

- Standardized, smaller carts are critical to curb disposal costs and increase diversion rates.
- Mattress recycling is an excellent means of increasing diversion rates.
- The hazardous waste collection days and the limited hours of the drop off facility do not reflect household waste generation patterns.
- Mobile HHW collection could provide more access to the community and would better reflect the generation patterns while freeing up the existing drop-off facility to be used more effectively.
- The launch of small business recycling will help reduce reliance on the drop-off facility and increase diversion rates.
- Textiles are a substantial proportion of the trash and should be recycled. Curbside collection could be worthwhile. Several neighboring communities have been successful with this.
- Re-Use events could be expanded.
- Improve Recycling: high contamination rates are problematic. Messaging could be improved.
- City policies have been ahead of the curve: plastic bag and polystyrene ban as well as organics. This places Cambridge in a good position to successfully reduce trash bin size.

Discussion:

Garbage Disposal vs. Compost:

Mary Verhage: What is the impact of garbage disposals? Many large buildings being constructed are outfitting units with garbage disposal systems as the standard.

Anne Sherman: What is HDR's and Cambridge DPW's perspective on garbage disposals?

HDR: Fats from garbage disposals become problematic with sewer systems, especially older pipes and flatter lines, as in Cambridge.

Water usage to run the garbage disposals creates additional unnecessary load on the sewer system.

Meera Singh: Notes that recycling and composting is not a top priority for residents. Suggests education and outreach messaging should be more “in your face”.

Debby Galef: Re: “In your face” messaging, noted bus campaigns in Miami that were advertising “recycle this, not that”: very direct messaging targeted to a specific behavior might yield better results.

Rob Gogan: Suggests motivational tactics can be used to drive behavior. Example of hotels using messages such as “9 out of 10 hotel guests reuse their towels” instead of simply suggesting that guests reuse their towels: Guilt or social pressure can be powerful motivators. Could also be translated into competitive spirit and positive incentives.

Debby Knight: Supports HDR’s recommendation for mobile pickups: the recycling center is a challenge to access and use.

Anne Sherman: What insights does HDR have on incentives through peer pressure?

HDR: Visual symbols can be a powerful tool in motivation, particularly when used in building friendly competition. Example of the “gold box” program, where “gold” recycling boxes are provided to high performing recycling households in residential neighborhoods.

This specific example is not as easy to translate to Cambridge because of bin expense. Cart cleaning services might be a nice reward. Few incentive programs provide long-term gains beyond the competition period. ALL programs see declines over time without consistent and ongoing promotion.

Mary Verhage: Agrees that ongoing education is important. The education program in schools has been successful since it provides an opportunity for kids to teach their parents.

HDR: School implementation often does not impact parental and household behaviors as much as one would think but does set the foundation for the behaviors of kids once they become adults. Current household behaviors are impacted most by the dissemination of communication in a variety of ways.

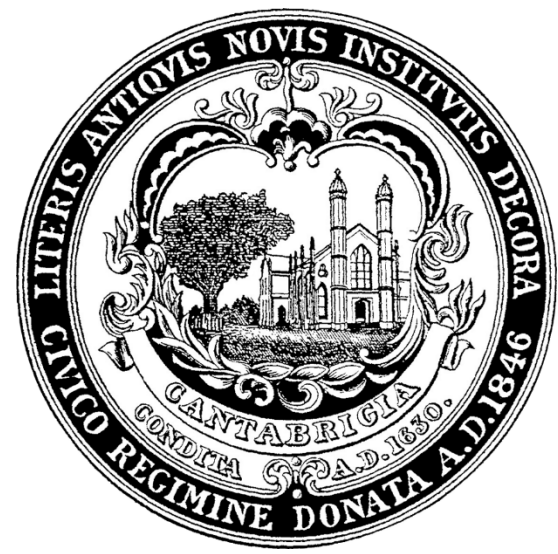
Announcements:

Rob Gogan: Fix it clinic upcoming. Dates and details will be sent via email.
January 10 will begin a cosmetics drive: unopened cosmetics and new or opened hair care products may be brought to the next RAC meeting for donation.

Meeting Adjourned at 9:30.

Zero Waste Master Plan – an Overview

December 18, 2018



What is Zero Waste?

- “Zero Waste is a goal that envisions...all discarded materials are designed to become resources for others to use.”
- But we must reduce & reuse first

Zero Waste International Alliance

<http://zwia.org/standards/zw-definition/>

Purpose of the Plan



- Meet City's waste reduction goals
- Continue to maintain high quality public services
- Maximize operational efficiency
- Protect employee health & safety
- Reduce GHG emissions
- Reduce costs

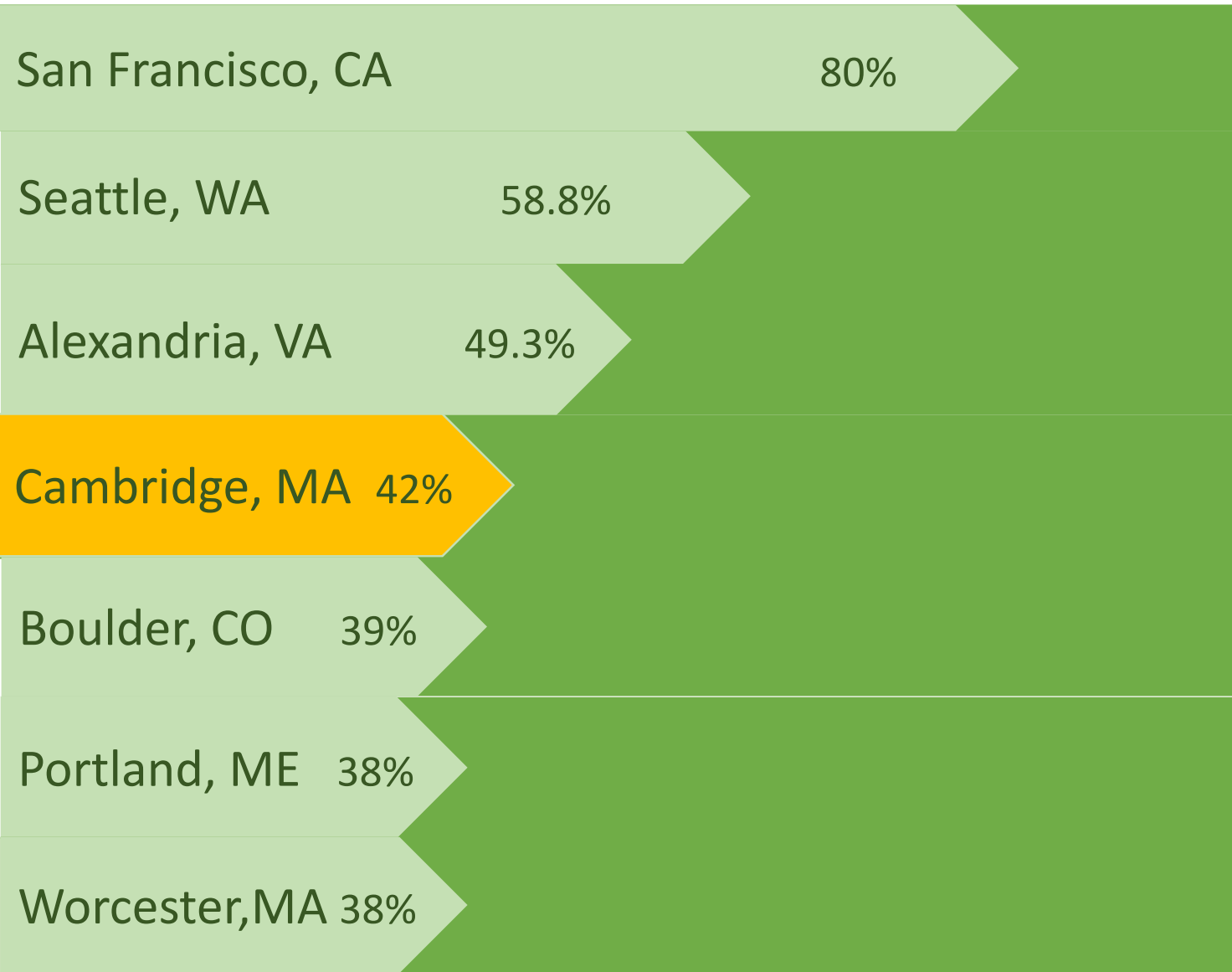
Current Waste Management System

- Trash
- Recycling
- Yard Waste
- Curbside Organics
- Household Hazardous Waste
- Electronics
- Bulky Waste
- Recycling Center

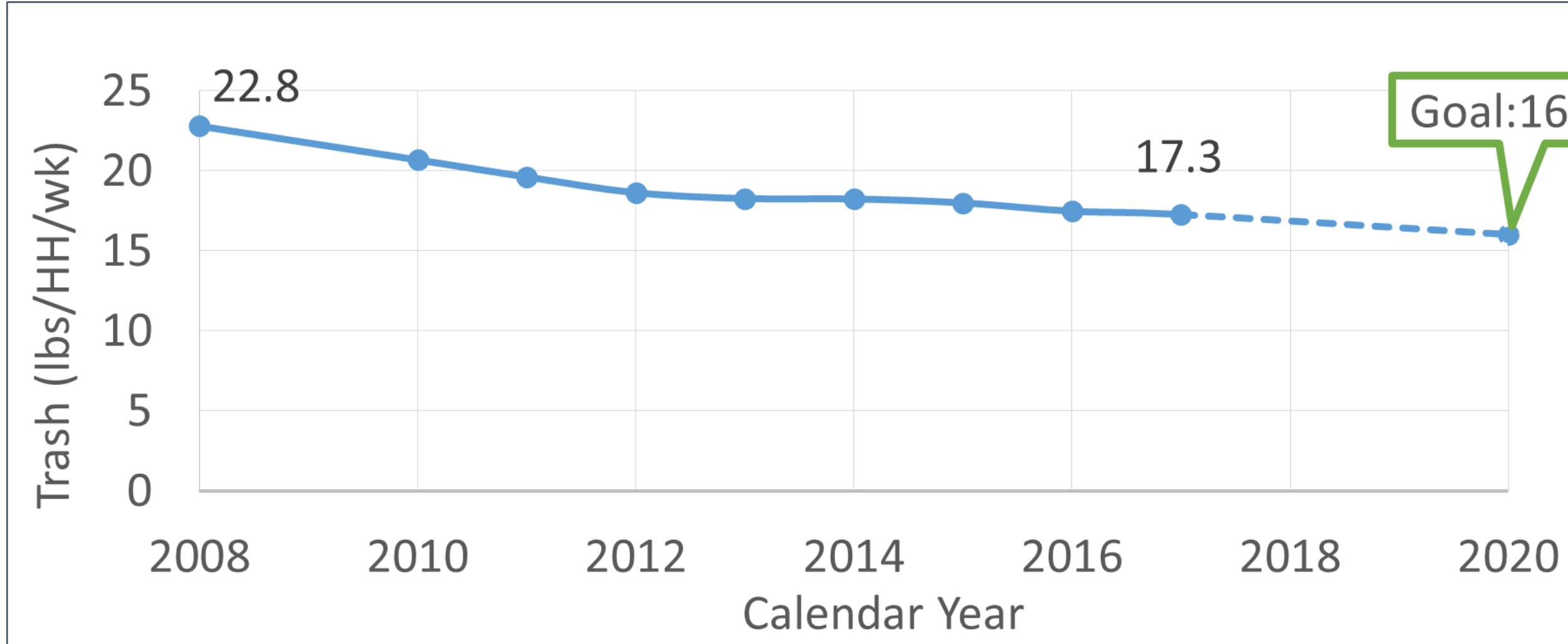


How are we doing compared to others?

Recycling Rates among select big cities (2016 data)

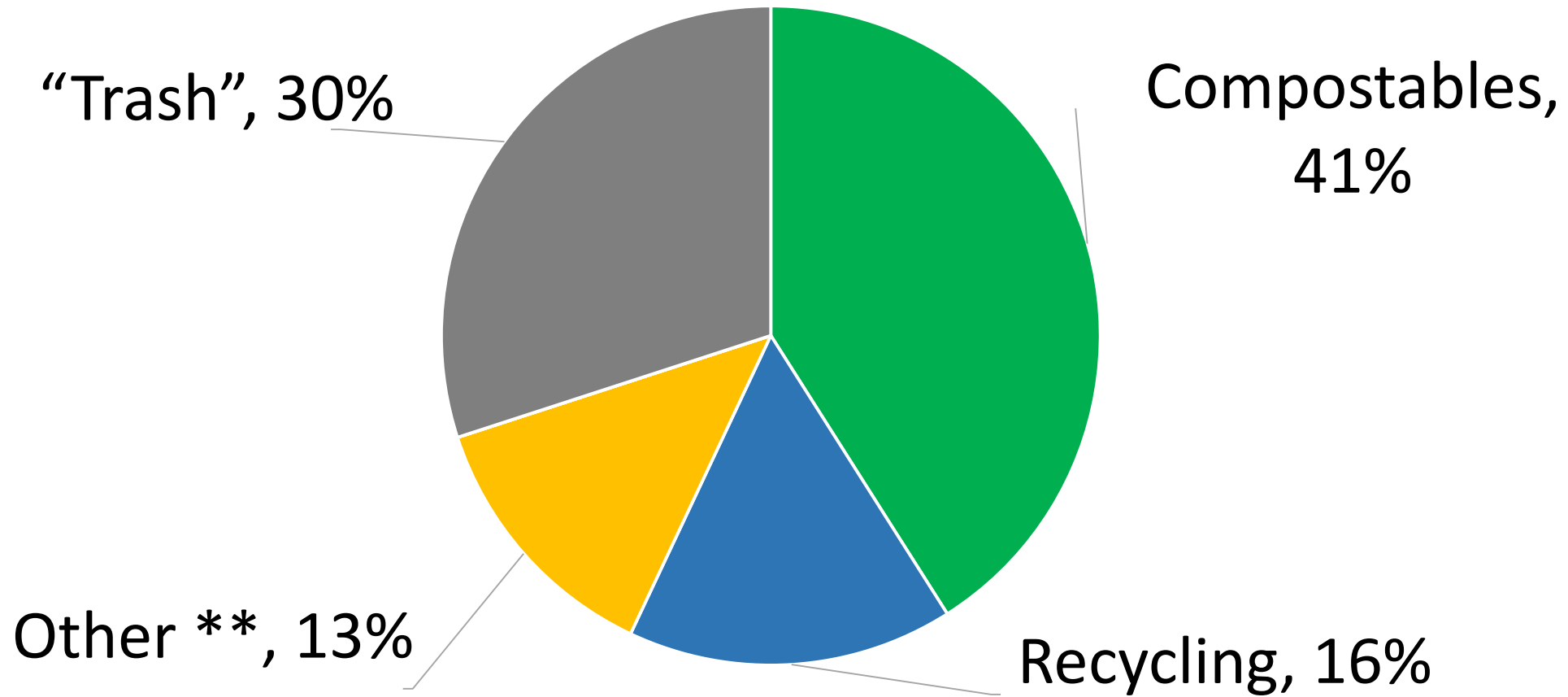


Trash Generation Rate



2050 Goal: 80% reduction in municipal waste, 4 lbs/HH/wk

What's still in our trash barrels?



**Other: Textiles, Electronics, Scrap metal

DATA: 2016 waste audit

Goal – Maintain High Quality Service

- City has consistently high Customer satisfaction
 - 90%+ of residents rate recycling and trash collection as “excellent or good”



City collects trash from +/- 32,000 HH/week

Goal – Maximize Operational Efficiency

- Example: Expansion of curbside organics program increased DPW fleet by 1 truck, not 2 trucks.
- Route Optimization



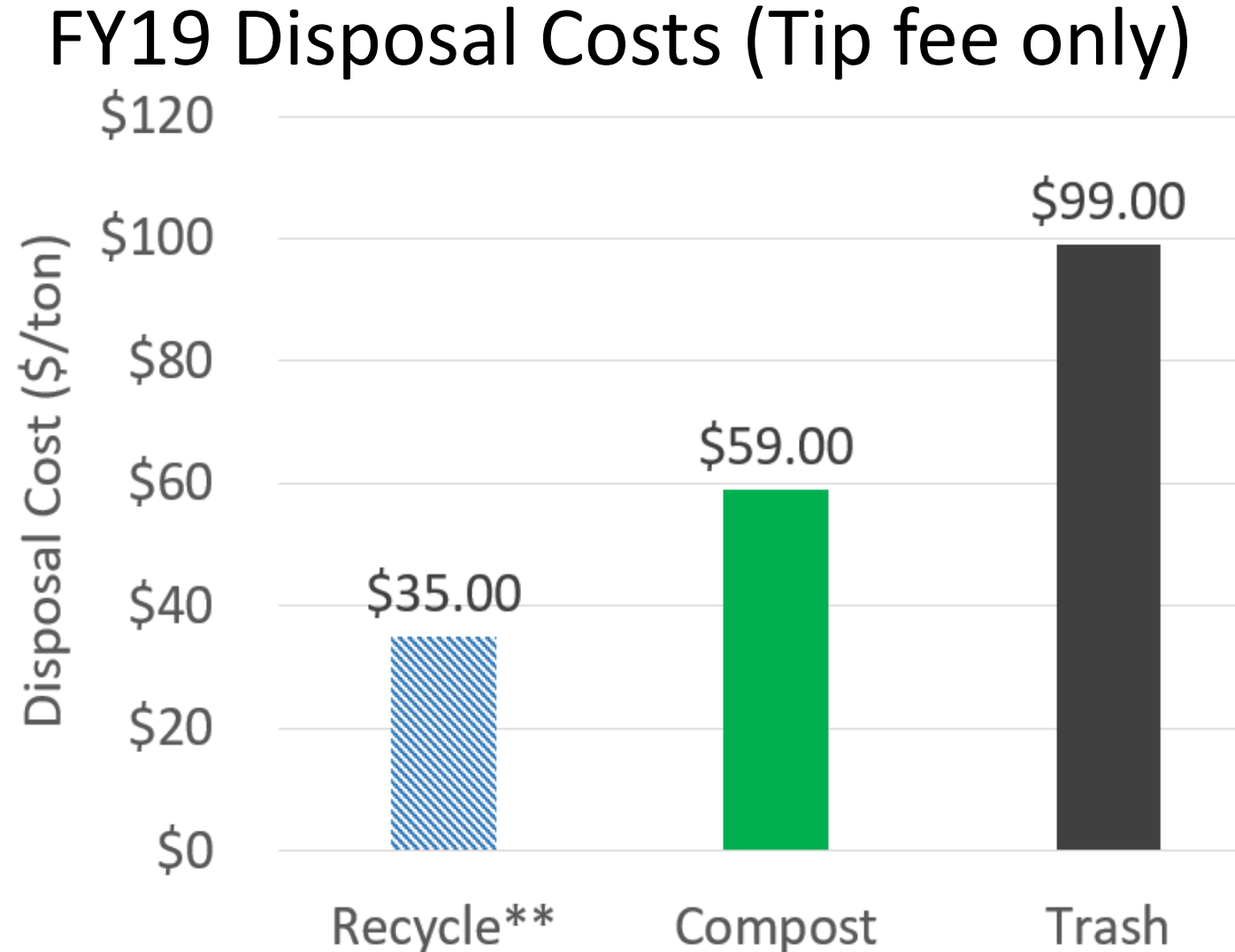
A photograph of a residential street during winter. In the foreground, there is a pile of snow and fallen brown leaves. Behind the snow, several large plastic trash bins are lined up at the curb. From left to right, there is a green bin, a grey bin with a red label that says "YARD WASTE ONLY" and "FACT LABEL TOWARD STREET", and a blue bin with a white recycling symbol. The blue bin is partially filled with cardboard boxes. The scene is brightly lit, suggesting daytime.

Goal – Protect Employee Health & Safety

- **Example: reduce lifting impacts with semi-automated curbside trash collection**

Goal – Evaluate Costs

- Reduce costs by diverting materials from trash
- Reduce contamination in recycling

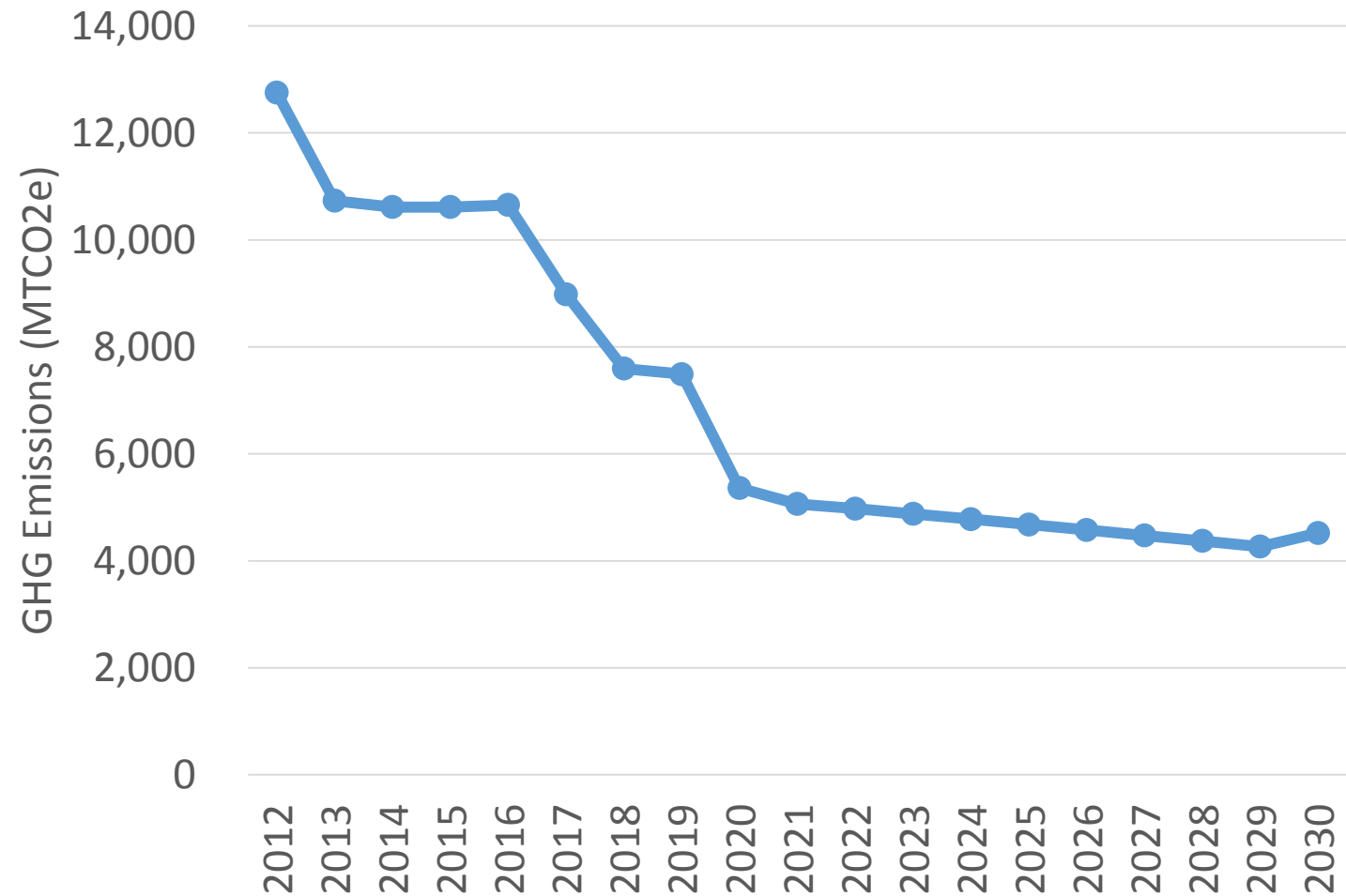


**Currently pay \$70/ton to recycle due to excessive contamination.

Goal – Evaluate Impact of GHG Emissions

- Most of the emissions come from disposal, not transportation
- Waste reduction and diversion have potential to significantly decrease CO₂ emissions from waste operations

Estimated Changes in GHG Emissions





Master Plan Recommendations

Expand

Curbside Organics



Evaluate

Trash disposal and collection
processes



Expand

Waste reduction and diversion
programs



Evaluate

Existing City policies

Expand Curbside Organics

Early Implementation

April
2014:

- 600 HH
- 6 tons/month

Oct
2015:

- 5,200 HH
- 30 tons/month

April
2018:

- 25,000 HH
- 140 tons/month

Moving Forward - Recommendations

- Expand to 13+ units: fall 2019 to fall 2020
- Continue evaluating options for disposal sites of food waste
- Evaluate ordinances to increase diversion
- Potential to reduce trash disposal by 4 to 5 lbs/HH/week

Expand Curbside Organics

An audit this Fall found that the set out rate for organics was less than 60%.

What do you think would increase participation in the program?

- Providing more compost bags periodically?
- More guidance on how to use the program?
- More peer-to-peer education about reducing trash?
- Mandatory composting ordinance?
- All of the above?
- Other actions?



***Curbside Organics
August 2018 Survey:
1300 respondents, over
90% approval rating***

Expand Curbside Organics

Processing Organics

- Contract to implement program (expires April 1, 2021)
- Current program focus is to increase quantity of organics diverted
- Increase in state-wide permitted processing capacity offers new options



CORe in Charlestown pre-processes food scraps into a slurry sent to Greater Lawrence Sanitary District in North Andover

Evaluate Trash Disposal and Collection

Early Implementation

- Decreased trash truck fleet from 7 to 6 in April 2018
- Route optimization



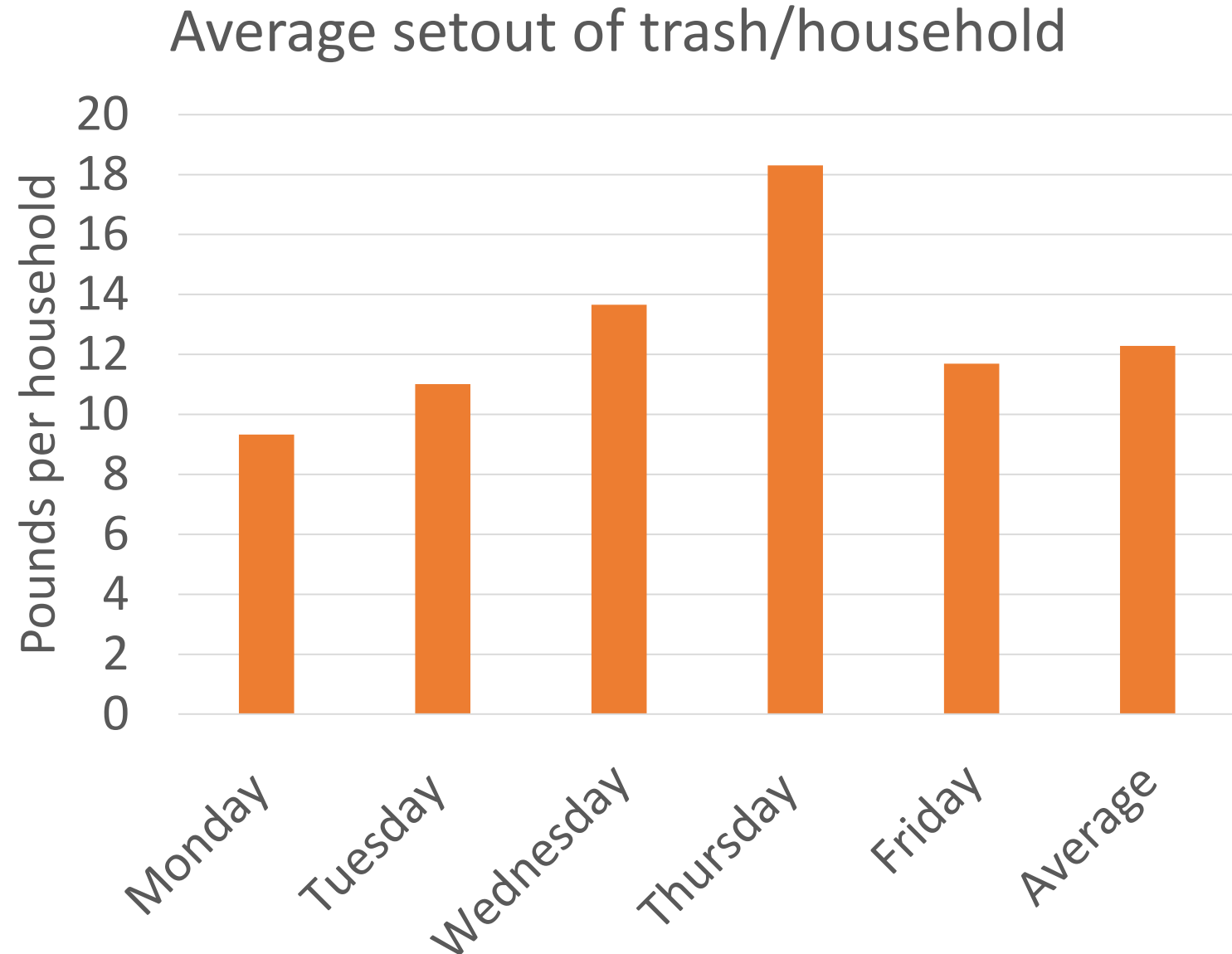
Moving Forward - Recommendations

Standard Trash Container

- Semi-automated collection, reduces lifting impacts
- Reinforced plastic helps rodent control
- Improved sidewalk accessibility
- Less trash spills
- Increased diversion

Curbside Audit Results

- Over 75% of households set out less than 32 gallons of trash that week
- Monday route example of mature organics program



Waste Reduction & Diversion

Early Implementation

- Recycle Right Campaign
- Small Business Recycling Pilot (Nov 2018 launch)



Moving Forward- Recommendations

- Mattress Recycling
- Examine existing recycling center, 2020
- Textile recycling strategy, 2020/2021
- Continue support for food waste reduction, sharing libraries, reuse events
- Potential to reduce trash by 2 to 3 lbs/HH/week

Improving Recycling

40% of recycle carts had moderate to major contamination. What do you think would help people reduce contamination?

- More guidance on how to use the program?
- Notices on the carts when contamination is present?
- Not emptying cart with contaminated material?
- All of the above?
- Other actions?



Evaluate Existing City Policies

Early Implementation

- BYOB and Polystyrene Ordinances, 2016 (50 to 80% reduction in single-use bag consumption)
- Mandatory Recycling Ordinance

Moving Forward- Recommendations

- Reduction in Trash Setout (from 150 gallons/HH to one standard trash container)

What are your thoughts
on goals and objectives for
the Zero Waste Master
Plan Recommendations?



Visit CambridgeMA.Gov/ZWMP
Email Recycle@cambridgema.gov to comment