

DRAFT
Recycling Advisory Committee (RAC) Minutes
November 13, 2024, 8:00am – 9:30am
Minute Taker: Elka Kuhlman
Hybrid Meeting

Members present: Dailey Brannin, Lee Elliott, Debby Galef, Sakiko Isomichi, Debby Knight, Elka Kuhlman, Emily Lee, Richard Nurse, Carlie Peters, Diane Roseman, Meera Singh, Quinten Steenhuis. Rob Vandenabeele, Stephanie Wasiuk

Members Absent: Dave Demme, Tracie Gordon, Dawn Quirk, Helen Snively

Staff Present: Meryl Brott, Mike Orr

Public Present: Derek Li, Gabrielle Chapman, Amy Waltz

1. Housekeeping, 8:00am

Vote on October 23 Minutes - motion passed

2. Debrief of GLSD tour

Anaerobic digestion tour at the Greater Lawrence Sanitary District in North Andover, end site for Cambridge's food waste.

Food waste slurry created in Charlestown by Waste Management is injected into the local solid waste after the effluent has been removed (effluent has been purified enough to go into the river). Methane thereby produced runs the facility, and excess energy is put into the grid. It's a net zero wastewater treatment plant.

Solid remains are dried and marketed to landscapers, parks (not for human food).

Very impressive operation, including its large scale and the focus on safety. It would be useful to talk to neighbors about what is being done with our food waste.

How much more food waste can we send? Charlestown is near capacity, but can handle several tons more per day from Cambridge. GLSD could handle double what they are handling right now.

Discussion on messaging of anaerobic digestion

- We use anaerobic digestion because we need a facility nearby that can handle the quantity we collect and occasional contamination. Driving small amounts of food long distances generates excess GHGs.
- You need demand for finished compost, and MA is not a state with high demand. CA has 40% agricultural land, MA has 8%.
- We would need to ship our food waste a long distance in order to compost it into soil.
- Demand for natural gas is greater in MA than finished compost.
- They are making clean energy out of our food waste,
- They are a net zero facility. This is one of the first wastewater treatment plants that is generating electricity and selling it back to the grid,
- EPA report: anaerobic digestion does as well as composting at lowering the environmental impact.
- Is it worth renaming our compost bins and literature, in order to more clearly state what is happening to the food waste?

3. Zero Waste Master Plan DRAFT Strategies feedback

How to help property managers, especially when considering making food waste diversion mandatory

We would not be collecting for these entities... which include both residential and commercial... they would have to be working with private companies which collect food waste, of which there are many

What are we doing/telling property managers around the property manager plan, i.e. explaining why we need them to participate?.. Mike shared a partial list of steps that is being worked on by the city around messaging

Could we highlight property management buildings that are meeting the goals by doing something like providing a seal of accomplishment... bronze, silver...? This was thought to be a good idea but there was concern of getting push back from promoting private buildings

Will there be cost savings for property managers? – that depends on whether they are doing a good job now, what their contracts are with haulers.....

In the past the city met with private companies and guided them to companies that could support them – Is there a city/state department that will provide technical information?

Can businesses who have best practices support others in getting on board with their waste programs? One good example is Life Alive, which requires opting in to request cutlery when ordering online.

How much of our current waste is coming from the commercial side vs. the residential side? We don't measure commercial entities, but since they are often on much larger scales, it would be correct to assume that they produce more waste.

Having a culture of recycling and composting throughout the city will help sustain the measure going forward with property managers .

Could we invite a property manager to our meeting?

There is some confusion with the dumpster forms. it would be helpful to have them reflect more of the different conditions property managers face.

How can we add paper cups and plates to recycling? Municipalities are looking for state/federal mandates that make producers help with end of life of their products (EPR).

Can we ask hotels, temporary housing facilities, to provide waste management plans?

3. Closing, 9:20am (10 min)

Public Comment

An appeal was made to be more aggressive with our actions to bring methane levels down quicker. We need to share with people the urgency of the issue.

Action Plan/Decisions

- Request for additional time to think more about our messaging around anaerobic digestion.
- Rob will get some contacts to Mike.
- Learn more from Dailey about the complications of filling out dumpster forms.
- Folks can make Zero Waste suggestions (individually) until the end of the month. Everyone can share additional thoughts in the online form before then.

Announcements

Dec. 11 meeting will be hybrid, maybe with cookies!

Committee members are appointed by the City Manager. All meetings are open to the public. Members of the public may speak during the public comment section for up to two minutes. If you wish to speak, please

contact Mike Orr at 617 349-4815 or morr@cambridgema.gov by 1pm the day before the meeting. You may also email or mail written comments for inclusion in public comments in lieu of speaking during the meeting. The Committee Chair must grant permission to non-members who request to speak at the meeting. Meeting Minutes are located online here: [CambridgeMA.Gov/Services/Recycling](https://www.cambridgeMA.Gov/Services/Recycling)

Upcoming Meetings in 2024/2025

- December 11
- January 8, 2025
- February 12, 2025
- March 12, 2025
- April 9, 2025
- May 14, 2025
- June 11, 2025

Zoom chat:

08:02:19 From Elka to Everyone:

the computer screen in the room is not working..so we have a black screen

08:02:51 From carlie to Everyone:

Why don't you just use the camera on your laptop Mike

08:41:41 From Meera Singh to Everyone:

good point Lee...

08:57:30 From Rob Vandenabeele to Everyone:

Here's the "Skip the Stuff" page I referenced for Reusable New England:

<https://www.reusablenewengland.com/skipthestuff>

09:29:49 From Lee (Shirley Elliott) to Everyone:

Yes

09:29:57 From carlie to Everyone:

Yea!

09:30:02 From carlie to Everyone:

Holiday cookie exchange!

09:30:33 From Lee (Shirley Elliott) to Everyone:

FTR:

Cambridge Compost: Food to Fuel

09:32:01 From Dailey Brannin to Everyone:

thank you!



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Zero Waste Master Plan Update

October 22, 2024



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Agenda

Introductions

Update on ZWMP 1.0

Data – Status of Waste

Strategies for ZWMP 2.0



City of Cambridge Zero Waste Goals

- Established in 2009 (2008 is our baseline):
 - 30% reduction by 2020 ✓
 - 50% reduction by 2030
 - 80% reduction by 2050
- Zero Waste Master Plan 2.0 (2025-2030) will create blueprint to meet 2030 goal.
- ZWMP 3.0: 2030-2035

DPW staff, volunteers and Recycling Advisory Committee members celebrating 5 years of citywide curbside compost



ZWMP 1.0 accomplishments

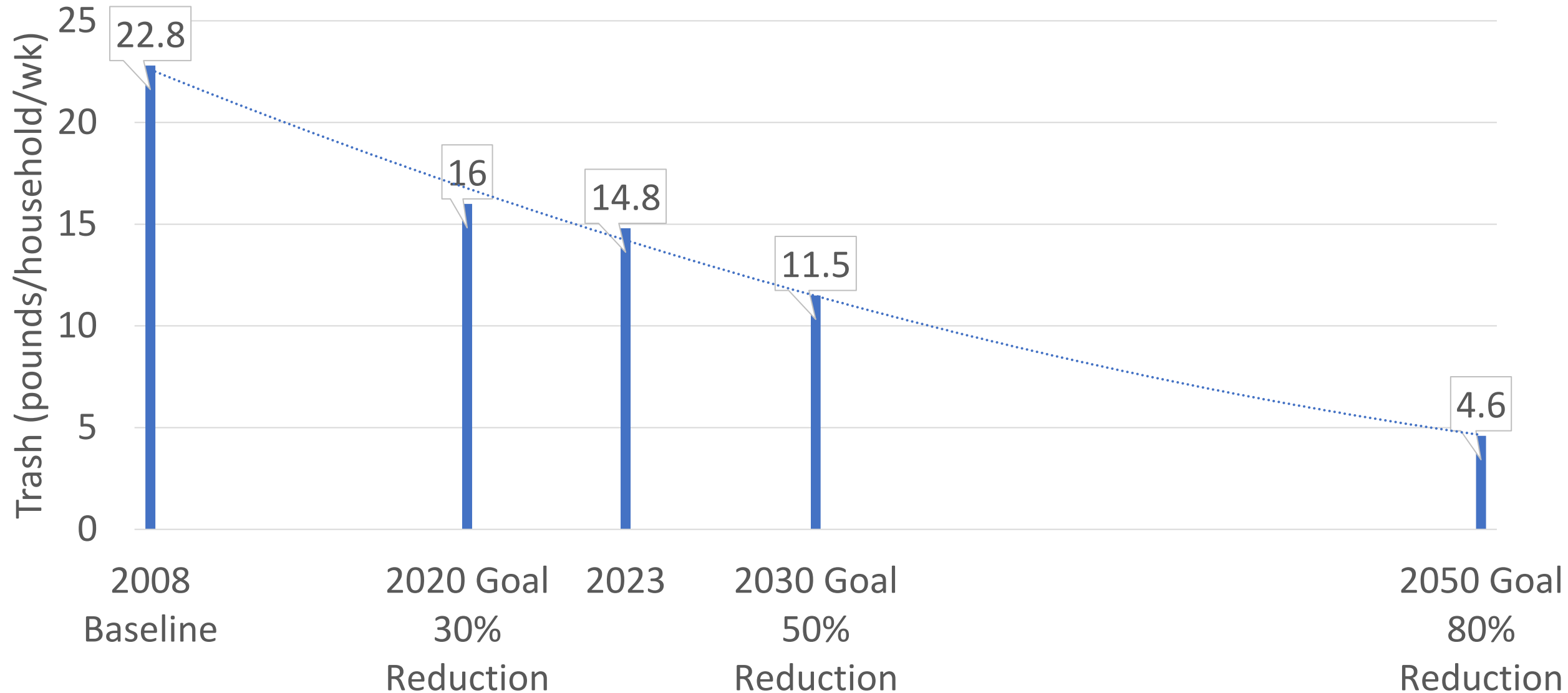
- ✓ Expand **Curbside Compost** access to all residential buildings and small food establishments
- ✓ Extend **Yard Waste Collection** by 2 weeks (thru Dec. 31)
- ✓ Improve Recycling with **Recycle Right** campaign
- ✓ Begin **Small Business Recycle Program**
- ✓ Begin **Mattress Recycling Program**
- ✓ Start **Textiles Recovery** program
- ✓ Launch **Standard Trash Carts**



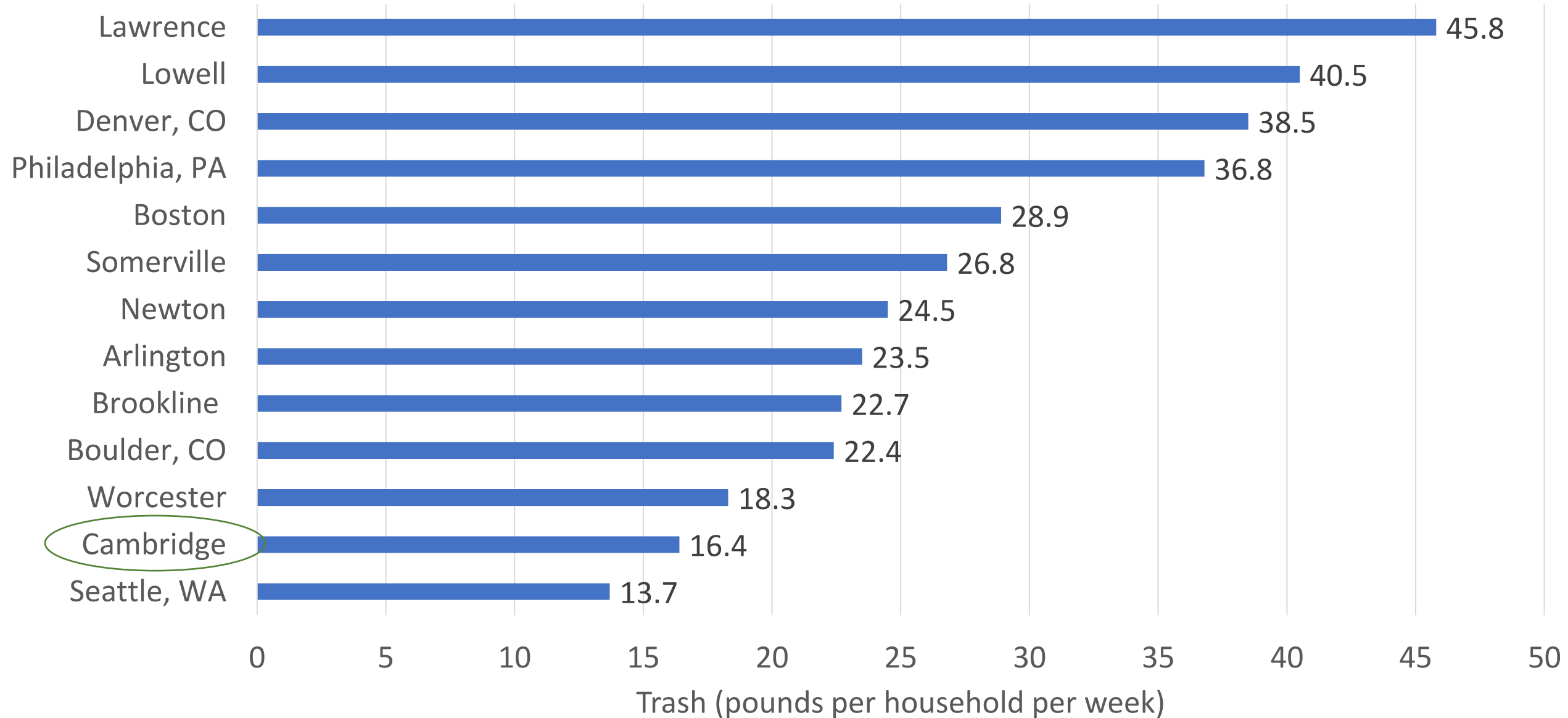
Data Collection for ZWMP 2.0



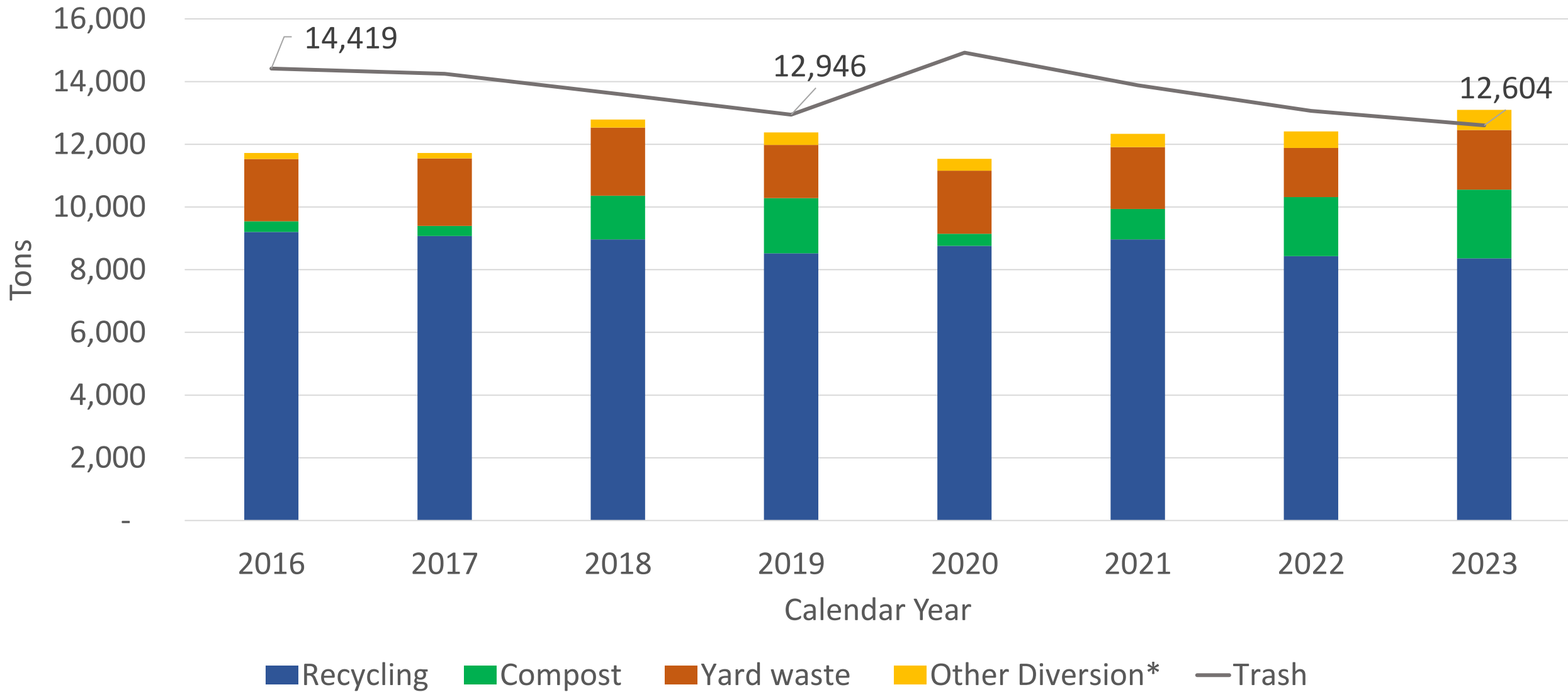
Cambridge Trash Goals



Average Household Trash Generation of MA and US peer municipalities (2021)



Residential Waste Collected by Calendar Year

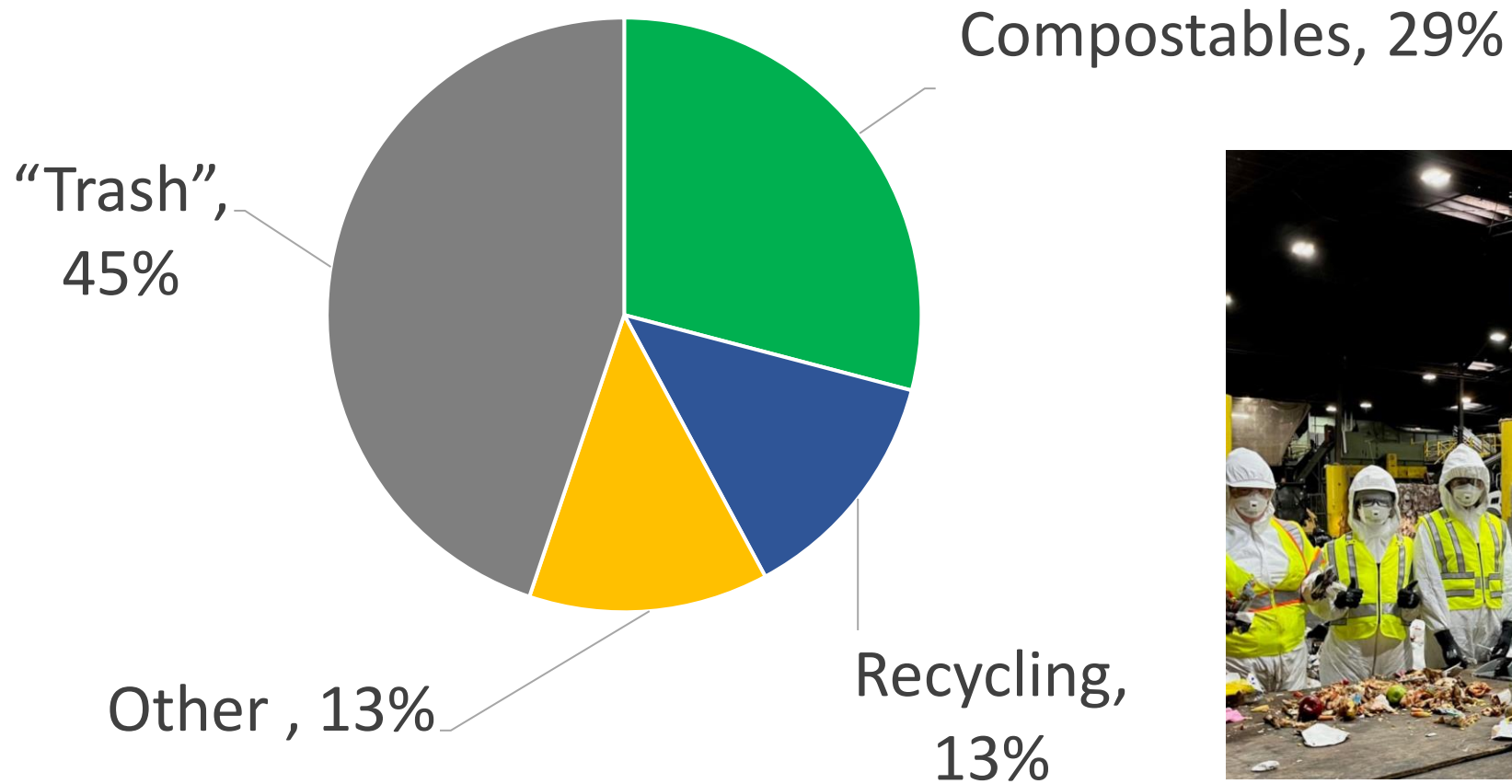


*Other Diversion= E-waste, metal, mattresses, and textiles.



What is in Cambridge's Trash?

2022 Waste Characterization Study

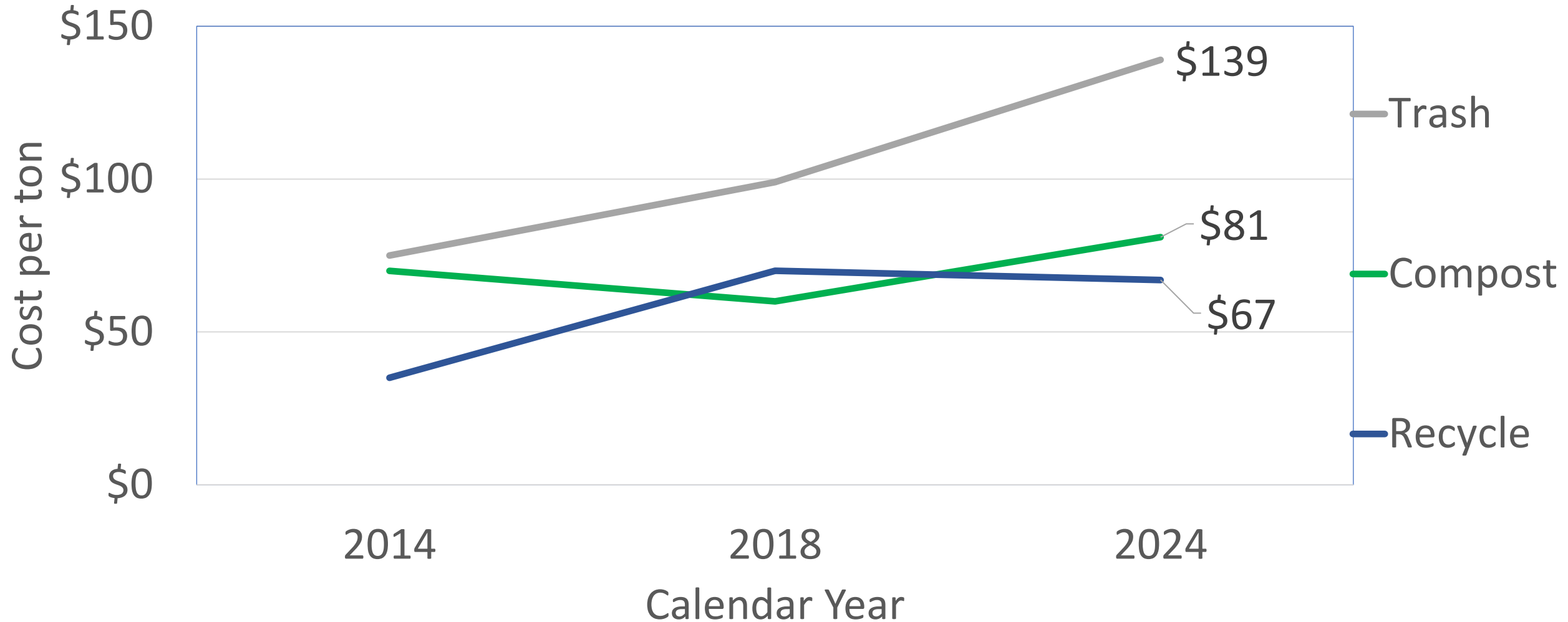


Other =Textiles, Metal, and E-waste

Source: DPW



Disposal Fees for Cambridge Waste



- Recycling has variable price based on market conditions.
- Costs don't include collection expenses.

Source: DPW



Value of Recyclables

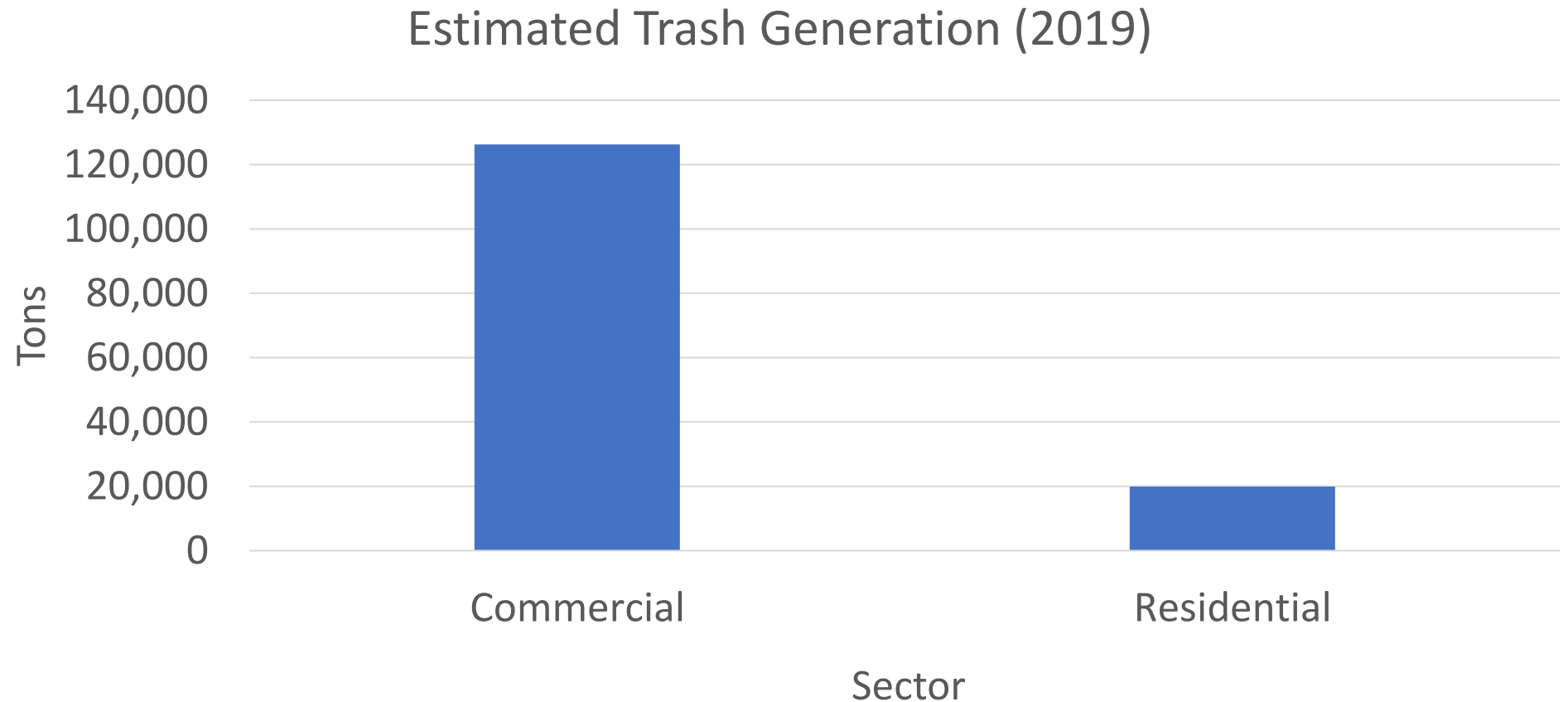
Commodity	Est. Percent of Recycling	Approximate Value (\$/ton)	Examples
Papers	61%	\$90	Cardboard, white paper, newspaper
Glass	26%	-\$60	Glass bottles, jars
Plastic #1	7%	\$400	Water/soda bottles
Plastic #2	2%	\$500	Milk jugs, detergent bottles
Aluminum	1%	\$1,900	Soda/beer cans
Steel cans	1%	\$200	Canned food/soup cans
Plastic #5	1%	\$140	Yogurt cups
Bulky Plastics	1%	\$10	Milk crates, laundry basket, broken waste carts

Source: DPW & Casella



Citywide Waste Generation in Cambridge

We estimate the following trash disposal volume in the residential and commercial sectors:



Source: CalRecycle, CDM
Smith analysis for City of
Cambridge (2022)



Trash Disposal Concerns for New England

- MA has **highest trash disposal cost** of all states.
- **Limited disposal capacity** → more exporting
 - 2014: 700K tons exported out of state.
 - 2020: 2.2M tons were exported.
- Nearby States have limited capacity:
 - CT exports 40% of their trash
 - ME has banned out-of-state trash

In 2023, all regions of US saw *decrease* in trash disposal costs, except the **Northeast** which saw a **10% increase in disposal costs**



Apprx 33% of Cambridge's trash is incinerated in MA
Apprx 67% of Cambridge's trash is exported to landfill in NH or VA



Zero Waste Master Plan 2.0



Zero Waste Master Plan 2.0 Process

- **Resource Recycling Systems (RRS)** hired to provide consultant services and analyze current programs
- Conduct staff interviews, **engage with residents**, study peer communities, **collect data**, and understand **market conditions** to develop **9 short- and medium-term DRAFT strategies**.
- Final Zero Waste Master Plan 2.0 will include **additional strategies**.



Outreach

- **Kick-Off event** at King-Open on June 12
- Resident **Survey**
- **Meetings:**
 - Inspectional Services Dept
 - Economic Opportunity Division
 - University Staff
 - Property Managers
 - Other stakeholders (contractors, DPW staff, Recycling Advisory Committee)



Draft Short-Term Strategies (1-3 years)

1. Require Property Managers to submit annual **Solid Waste Management Plans**
2. **Mandatory Food Waste Diversion** for all residential and commercial buildings
3. Pilot methods to **reduce move-out trash**
4. **Reduce single-use** serviceware from Food Establishments
5. Improve location and ease of use of **Recycle Center**



Strategy #1: Property Manager Solid Waste Plans

- Plans can help ensure compliance with City regulations in **commercial and residential buildings**
- Increased **communication** between City and Property Managers for better compliance, improved sanitation and rodent control
- Annual **turnover rate** in rental housing is 20%: Re-education via property managers is important to meet waste diversion goals



Strategy #2: Mandatory Food Waste Diversion

- Other cities **mandated**: Toronto, San Francisco, Seattle, Boulder. (CA & VT have mandates statewide)
- Largest portion of **divertible trash (29%)**
- Compost disposal (\$81) is **less expensive** than trash (\$139)
- Significant **environmental benefits**
- Removing food waste from trash can **reduce rodent activity** (2024 audit: **only 2% of compost bins have rodent holes**).



Strategy #3: Reduce move-out waste

- Trash increases by 20% during move-out weeks.
- The Recycling Advisory Committee (RAC) Piloted a “**Free Store**” idea which was very successful.
- Other avenues include: **Buy Nothing** groups, collaboration with **University’s**, and more.



April 2024



August 2024



Strategy #4: Reduce single-use serveware from Food Establishments

- **Single-use products**, especially plastics are a hot topic. We need to reduce the use of single-use products.
- Environmentally, there are no universal best product between plastic, paper, glass, and aluminum: *UN Lifecycle Institute Report*.

Potential Ordinance Changes:

- Require foodservice businesses to ask customers to **opt-in** to single-use items (napkins, utensils, straws, etc) rather than opt-out
- Require each food establishment to provide patrons with **access to recycling and composting**



Strategy #5: Make Recycle Center more accessible

- **Relocating** the Recycle Center within in the DPW Yard and **improving accessibility** to reduce trash and improper disposal of universal waste (i.e. rechargeable batteries, fluorescent bulbs).



Draft Medium-Term Strategies (4-6 years)

- **Enforce** mandatory **food waste diversion**
- Research and analyze whether City should implement **Hybrid Pay-As-You-Throw** (100+ MA communities have PAYT)
- Provide **technical assistance** to commercial sector to facilitate reduce/reuse and improved recycling/composting
- Work with CHA and other **property managers** to increase diversion and sanitation



Other Draft Strategies

Weaving into these strategies the City will **continue** to:

- **Educate** and conduct **outreach** to achieve the City's waste reduction goals
- Encourage **reduce & reuse**, through online exchange, peer-to-peer swaps, Fix It Clinics, etc.
- Continue engaging with people that may need assistance accessing our programs
- Stay connected to **State Policy and legislation changes** (i.e. extended producer responsibility (EPR) legislation or new waste bans.)



ZWMP 2.0 Next Steps

- The strategies presented today are **drafts**.
- DPW & RRS are **continuing outreach** with property managers and residents.
- We **welcome feedback** through the end of November 2024.
- Anticipated **completion** date: **early-2025**
- **ZWMP 3.0**: Starts in 2030



Questions?

- Email: Recycle@CambridgeMA.Gov
- Sign-up for Recycle Newsletter:
www.CambridgeMA.Gov/Subscribe



Appendix of Extra Information

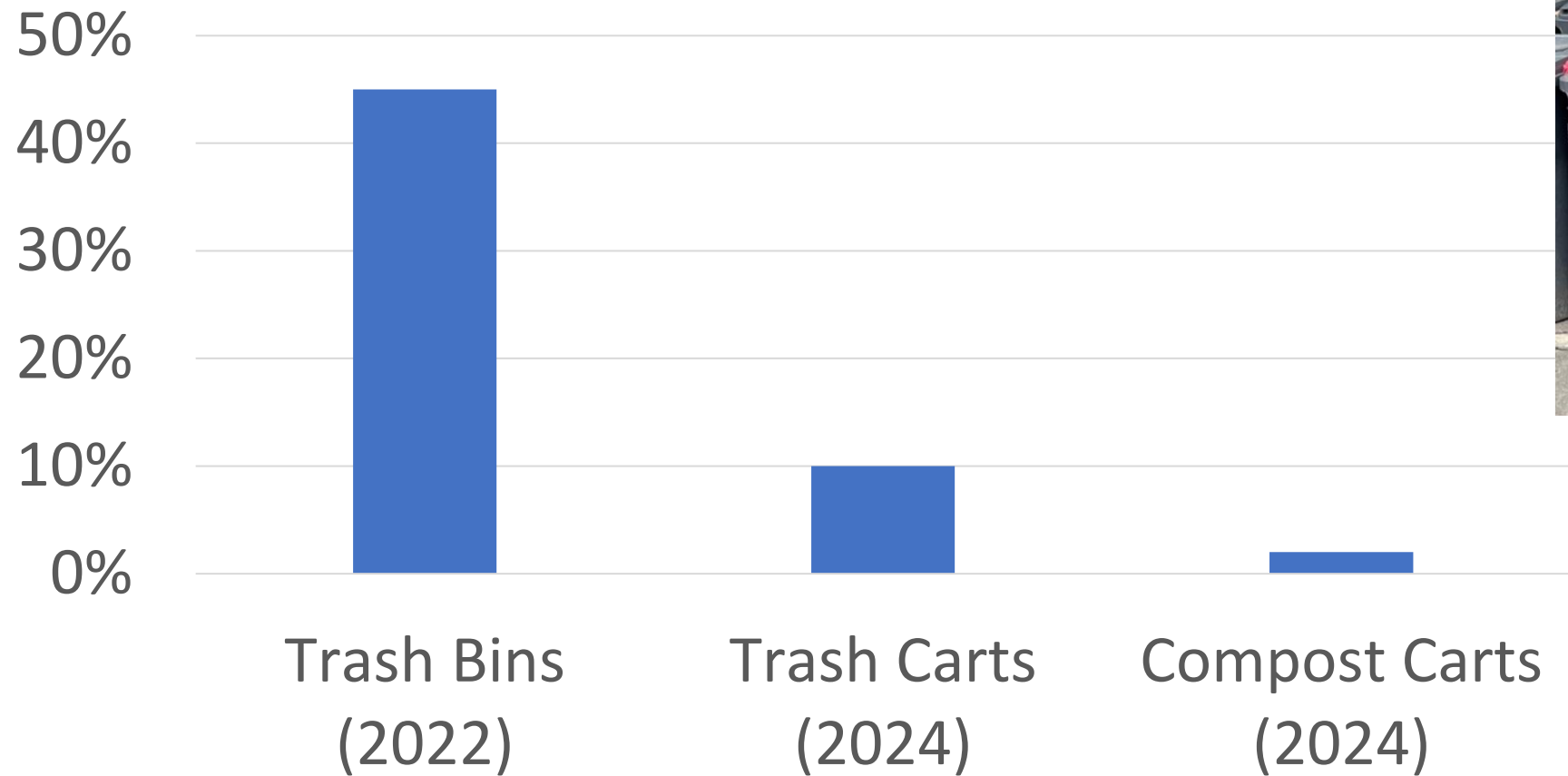


Emissions Reduction of Collection Fleet

- DPW sends 10 trucks for daily collection
 - 3 trucks are hybrid vehicles
 - 1 EV truck in service by Nov. 2024
 - 2 EV truck arriving in early-2025
 - 1 EV truck funded
- Recycle & Yard Waste new hauling contract starts in 2025 and will include two EV trucks.



Collection Bins with Rodent Holes



NOTE: 2024 Audit: Many compost carts are 6 years old.

Source: June 2024 audit

