School Recycling in Massachusetts
November 18, 2020

Massachusetts Department of Environmental Protection

Ann McGovern, Consumer Waste Reduction Coordinator
Massachusetts Department of Environmental Protection
Free Resources Available from MassDEP to help your municipality implement school recycling and waste diversion

• MassDEP Waste & Recycling Grants & Assistance
  https://www.mass.gov/service-details/massdep-waste-recycling-grants-assistance
• Sustainable Materials Recovery Program grants
• Technical Assistance
• The Green Team program, www.thegreenteam.org
Sustainable Materials Recovery Program Grants
https://www.mass.gov/how-to/apply-for-a-sustainable-materials-recovery-program-smrp-municipal-grant

Include many grant items, such as:
• Recycling Dividends Program (RDP)
• School Recycling Assistance
• Small Scale Initiatives
• Mattress Recycling Incentive
• PAYT/SMART Implementation Funds
• Education & Enforcement Coordinator
• Curbside Recycling/Organics Carts
• Drop-off Equipment
• Waste Reduction/Organics Capacity Projects

Minimum Eligibility Requirements (for all SMRP grants)
• In 2021, municipal grant applicants will need to certify that paper, cardboard, bottle and can recycling is available in all municipal buildings, including schools, or will be within 30 days of award notification.
Materials Disposal Bans

https://www.mass.gov/guides/massdep-waste-disposal-bans

Materials Currently Banned from Disposal or Transfer for Disposal in Massachusetts

• Asphalt pavement, brick and concrete
• Cathode ray tubes
• Clean gypsum wallboard
• Commercial food material
• Ferrous and non-ferrous metals
• Glass and metal containers
• Lead acid batteries
• Leaves and yard waste
• Recyclable paper, cardboard and paperboard
• Single-resin narrow-necked plastic containers
• Treated and untreated wood and wood waste (banned from landfills only)
• White goods (large appliances)
• Whole tires (banned from landfills only; shredded tires acceptable)
School Recycling Assistance Grants History

• 26 school districts awarded (2013-2020)
FY13 – Abington, Boston, Chicopee, Danvers, Medfield, Middleboro, Winchester
FY14 – Ayer, Hingham, Holyoke, Rockport
FY15 – Dedham, Sharon
FY16 – Fitchburg, Greenfield, Kingston, Sandwich
FY17 – Arlington
FY18 – Salem, Somerville, Uxbridge
FY19 – New Bedford, North Andover, Stoneham
FY20 – Millbury, Townsend

Total Grant Amount Awarded: $651,876
Salem School Recycling Assistance Grant Highlights

• FY18 grant - $30,000 ($5,000 implementation; $25,000 equipment)
• Equipment inventoried and purchased as needed:
  • 18 g blue bins (classrooms);
  • 96 g wheeled carts (per recycling hauler);
  • Tandem and single dollies;
  • Recycling barrels for dollies;
  • Recycling tilt trucks for cardboard;
  • Flyer and signage printing;
• Stipend (2 years - $2000 expended; $28K on equip)
Challenges

• Grant coordinator and school recycling coordinator retired halfway through the 3-year grant duration;

• Micaela stepped in and coordinated with facilities and custodial staff to utilize the remaining funds available based on maximizing efficiency of recycling collection;

• Covid-19 interrupted the 3rd year of the grant, but Micaela was able to purchase equipment needed and wrap up the grant remotely.
Successes

• Expansion and systemization of recycling throughout the district;
• Top-down support for school recycling, including Superintendent, principals and teachers;
• Increased student involvement and leadership among peers;
• Recycling increased 6% and trash decreased 6% (2018-2019);
• Successful collaboration between Salem Engineering Dept and School Facilities Dept.
City of Salem Contact Information

Micaela Guglielmi
Waste Reduction Coordinator
City of Salem – Engineering Dept.
98 Washington Street – 2nd Floor. 01970-4023
978-619-5672
mguglielmi@salem.com
Key School Recycling Resources

• School Recycling Policy Template link
  https://www.mass.gov/doc/school-recycling-assistance-sample-recycling-policy-template-0/download

• School Recycling Implementation Plan
  Create a roadmap for your school district

• THE GREEN TEAM www.thegreenteam.org
THE GREEN TEAM
Program Highlights

• Resources on www.TheGreenTeam.org website
• Educational materials and activities
• Free recycling & composting equipment
• Free idling reduction signs and materials
• Recycling, composting and share table signage
• Webinars and videos
• Recognition and prizes
MassDEP Contact Information

Mass Department of Environmental Protection

ann.mcgovern@mass.gov
617-292-5834
FREE ASSISTANCE FOR BUSINESSES & INSTITUTIONS

RecyclingWorks in Massachusetts is funded by MassDEP, delivered under contract by the Center for EcoTechnology

recyclingworksma.com
Free Recycling Equipment
Recognition & Prizes
Free Idling Reduction Signs & Materials
Educational Materials & Activities
WHY SHOULD YOUR SCHOOL RECYCLE?

- Comply with Massachusetts waste bans
- Promote environmental stewardship
- Easy setup with DEP resources
STEPS TO SET UP A RECYCLING PROGRAM

- Build support & identify decision makers
- Identify what materials to collect
  - Where are they generated?
  - Who will move them?
  - How will they get moved?
  - What equipment is needed?
  - Does this match what your hauler can take?
- Training & messaging for users and movers
- Right-size dumpsters
- Celebrate & refocus!
### WHAT KIND OF RECYCLABLES, AND WHERE?

<table>
<thead>
<tr>
<th></th>
<th>Kitchen/Receiving</th>
<th>Cafeteria</th>
<th>Classrooms</th>
<th>Offices</th>
<th>Copy Room</th>
<th>Gym/Sports Fields</th>
<th>Events</th>
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[Link to Recycling Information](https://recyclingworksma.com/waste-bans-and-compliance/)
WHO IS MOVING MATERIALS?

- Determine before purchasing equipment
- Students – certain classes or Green Team clubs
- Custodial staff
- What kind of equipment will be most helpful for them?
CONTAINER TYPES & CONSIDERATIONS

• Outdoor containers – ground level or loading dock

• Deskside bins vs. central collection areas in common spaces (staff)

• Paired bins

• Color-coding
CUSTODIANS ARE YOUR RECYCLING CHAMPIONS

- Address concerns from custodial staff
- Same material, just separated.
- Feedback welcomed for continuous improvement.
- Incorporate language into contracts about compliance with all federal/state/local regulations
CONSOLIDATING MATERIALS

- Handle both streams daily → avoid heavy consolidation before hauler pickup day
- Interim containers to put material in dumpster (e.g. tilt cart)
- Dual or split carts vs. making multiple rounds
Always Empty Recyclables out of Plastic Bags

Bags tangle recycling equipment causing delays, injuries and extra costs.

1. Pair trash and recycling bins whenever possible. Use color-coded plastic bags as liners to keep bins clean and make it easier to move materials.
2. Leave recycling bags untied or loosely tied so they are easy to empty.
3. Color-coded plastic bags make it easier to visually differentiate so that trash doesn't get confused with recycling in one cart.
4. Always empty recyclables out of the plastic bag into the dumpster.
5. Reuse or dispose of the plastic bag in the trash.
MANAGING CARDBOARD

- Hard to collect in outdoor carts (e.g. 32 gallon)
- May use different containers for collection
  - Flatbed cart
  - Tilt cart
  - Hamper
- Place cardboard dumpster by kitchen for year-round deliveries
KITCHEN COLLECTION

- Materials generated from deliveries, food preparation
- Easily accessible and available bins – clustered bins
- Keep recyclables clean
- Good housekeeping practices
- Shared responsibilities
CAFETERIA WASTE STATIONS

- Placement must accommodate end-of-lunch rush
- Student or staff monitors to improve sorting
- Mobile stations
- Design for the student AND custodian
MANAGING FOOD WASTE OFF-SITE VS. ON-SITE

• Materials accepted vary by end site/process

• Larger schools may be subject to commercial organics waste ban

• New Age Composters & worm vouchers available through THE GREEN TEAM

• Contract with local composter or animal feed operation
SIGNAGE CAN REDUCE CONTAMINATION

• Use images of materials found at school

• Keep it clean – avoid too much text

• Confirm with Recycle Smart MA & your hauler about what goes in the bin

• Place at eye-level for your students

Label at each bin or barrel.
FUNDING CONSIDERATIONS

• Strive for cost-neutrality
• Potential savings from avoided trash hauls
• Align programs with school fiscal year, as soon as district starts planning
• Commodity pricing
• Free equipment through THE GREEN TEAM
• SMRP District Grants & RDP Funds
RESULTS

- Increased diversion can result in reducing trash service
- Use hauler/custodial feedback and reports to shape program.
- Share story to school committee/press
- Great Job to all involved!
USEFUL RESOURCES

Starting a School Recycling Program

Hauler Contract Guidance

Cardboard Box Graphic

Plastic Bag Graphic

Recycle Smart MA

Food Waste Diversion Guide for Schools

Cafeteria Source Separation Video
Recycling in Cambridge Schools
Building a Culture for a Sustainable Program

Meryl Brott, Recycling Program Manager
Dept of Public Works
Schools

• 11 Elementary
  (avg. 300 students each)

• 4 Upper Schools inside
  4 Elementary School
  Buildings
  (avg. 600 students each)

• 1 Combo Elementary +
  Upper
  (425 students)

• 1 High School
  (1,950 students)
Department of Public Works

- Recycling Program Manager
  (works with schools in addition to other duties)

- Supplies for recycling
  - Carts (dumpsters, hampers)
  - Bins - "blue bins" and "deskside bins"
  - Recycle and trash for entrances

- Materials for teachers, posters, signage
Custodians

• Top-down support
  • Meeting with Chief Operating Officer and Senior Custodians
• Present annually before school year begins
• Visit schools, build relationships
• Provide carts & classroom bins
• Follow up on feedback re: where attention is needed
• Custodians remove recycling from classrooms
• "Get Rid of It Right" document
Interoffice Recycling Memo

To: Senior Custodians, Cambridge Public Schools
   James Maloney, Chief Operating Officer CPS
   Dr. Jeffrey Young, Superintendent of Schools
   Jack Mingle, Food & Beverage Director
   Principals, Cambridge Public Schools
   Kitchen Supervisors
   Lisa Peterson, DPW Commissioner
   John Nardone, DPW Assistant Commissioner for Operations
   John Fitzgerald, DPW Environmental Services Manager
   Randi Mail, Recycling Director
   Recycling Advisory Committee
   School Committee

Cc: Meryl Brott, Recycling Program Manager, DPW

From: Dana Ham, Director of Facilities

RE: School Recycling Procedures

Please keep this reference for recycling and waste procedures, which should be normal routine. Senior custodians are the main point person for recycling staff, but all school contacts should be aware of the procedures and operations at your building.

DPW rubbish crews notify recycling staff if there are any unauthorized materials in a school trash dumpster such as cardboard, computer monitors, televisions, fluorescent bulbs or metal items. These items are banned from disposal in MA and the state has increased enforcement efforts. If there is a problem, Meryl immediately contacts the school to troubleshoot the issue.

Most custodians are already facing the self-reporting worksheets. You can also call or email the info to x4836 / mbrott@cambridgema.gov or send through interoffice mail. Please start this week if you are not reporting recycling. We use this information to track your recycling progress and ensure that programs are sustainable.

If you have any questions, let us know. We look forward to working with you to promote recycling among the school community. Again, thank you for your continued efforts to maintain a solid recycling program.

All the best,

Dana Ham
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Meryl Brott
Recycling Program Manager
Cambridge Public Works
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mbrott@cambridgema.gov
Recycling Reports

• Weekly reports of recycling quantities.

• Allows for reporting impact of recycling.
Principals

Connect via email over the summer

Request time to present at teacher/staff meeting before school starts (or just after school begins)

Forward emails to teachers
- Start of school
- Periodic updates
- Go Green Challenge
- End-of-year clean-out
Teachers

- Provide recycling information for teachers to share & post in room
- Recommend: recycle and trash side-by-side
- Offer presentations
- Emails:
  - Start of school
  - Periodic updates
  - Go Green Challenge
  - End-of-year clean-out
Reaching Other Staff

• Food Services
  • Presentation before school year starts
• Human Resources
  • Information for new hires
• Clerks and Family Liaisons
  • Key partners
• Librarians
  • Presentations, books/displays, recycle quiz
Cafeteria

- "Get Rid of It Right" here too
- Organize volunteers (start of school mostly)
- Work with Lunch Aides
- (Include in Lunch Aide job description)
Bringing Composting to Schools

• Presentation to teachers; packet of materials including Lesson Plans and Fact Sheets

• Logo, launch w/ banners, posters, pledge sheets, etc. and assembly -- made it a "big deal" and a source of school pride.

• CPS Sustainability Manager pressed principals: when/how soon would they start? (not if)

• Custodians knew it was coming; senior custodian on the school’s implementation team

• “Five Easy Steps” doc - replaced exhaustive 9-page Guide
We “get rid of it right”...

- Start of the school year packet for teachers
- Sorting Games for youngest kids, presentations
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Recycling Program Manager
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617-349-4836