

Mattress Recycling Incentive Informational Webinar

Thursday, July 15, 2021

Rachel Smith
SMRP Grant Program, MassDEP

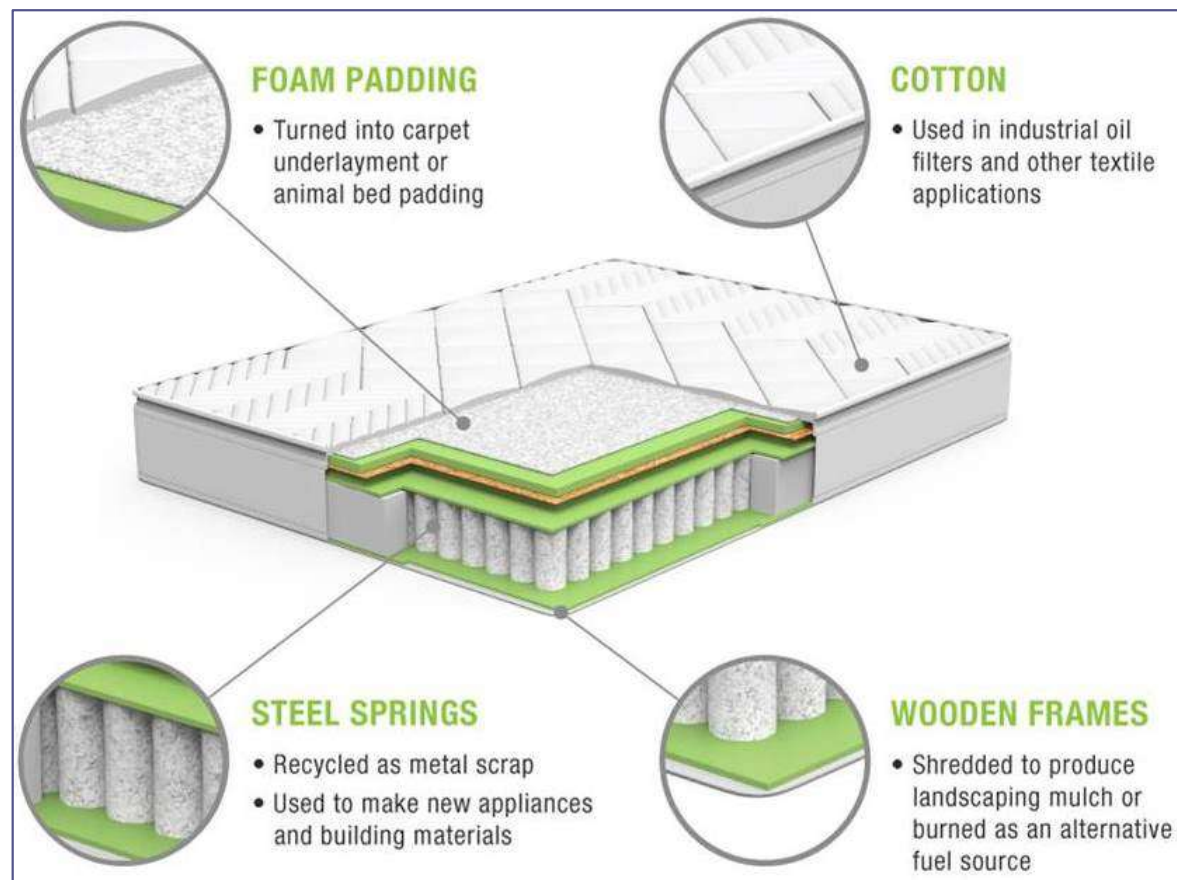


Agenda

- Program Overview
- Results, Tips from Grantees, & Lessons Learned
 - Dennis
 - Milton
 - Eastham (Regional Program)
 - Cambridge (Curbside Program)
- Important Documents / Forms
- Q & A

MRI Overview

- Promote source separation of residential mattresses and box springs for recycling and reuse



Infographic courtesy of the Mattress Recycling Council (MRC)

Mattress Waste Ban

- Waste disposal ban on mattresses proposed as part of 2020-2030 Solid Waste Master Plan.
- Still under review by the Executive Office.
- Expected implementation date for the ban will be **at least one year** from the date that the regulations are promulgated.

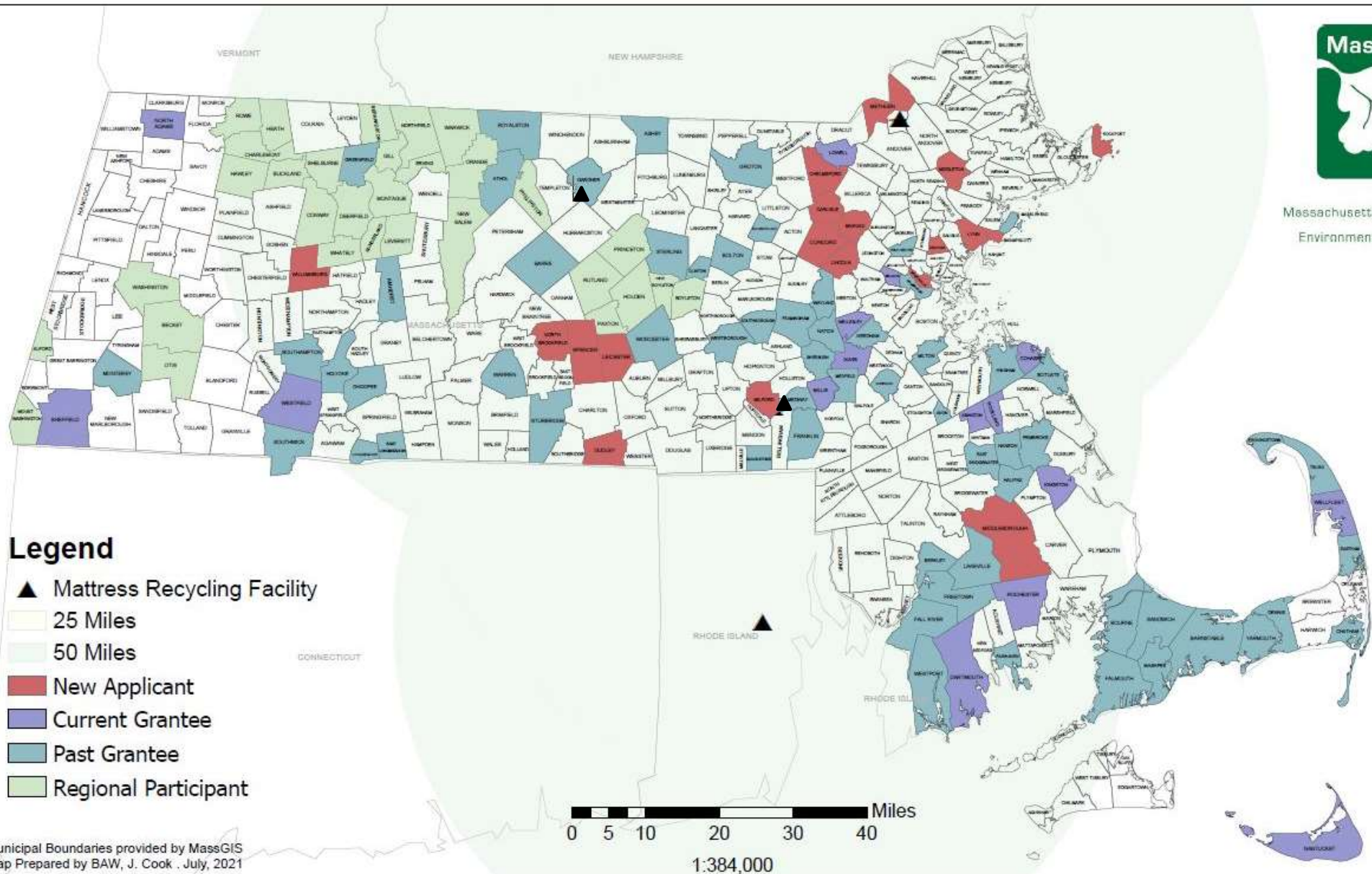
MRI Overview

- CY16 = 33 grantees
- CY17 = 3 grantees
- CY18 = 7 grantees
- CY19 = 19 grantees
- CY20 = 16 grantees
- CY21 = 19 awards
- Grantees are matched with a recycling vendor – MassDEP assigns them based on location and cost
- Grant provides (individual awards may vary):
 - Recycling services
 - Transportation services
 - SOME municipalities also received reimbursement for a collection container (up to \$7,500)

MRI Overview



Massachusetts Department of
Environmental Protection



Recycling Vendors

- Ace Mattress Recycling – West Warwick, RI
<https://acemattressrecycling.com>
- Green Mattress – Milford, MA
www.greenmattressco.com
- Raw Material Recovery – Gardner, MA
www.rawmatrec.com
- United Teen Equality Center – Lawrence, MA
<https://utec-mattress.org>

Grant Process

1. Award letter – sent to municipalities on **May 6, 2021**
2. Complete and submit checklist – **August 1st**
3. Receive grant agreement for signature
4. Return signed grant agreement by both email and hard copy mail – **September 1st**
5. Receive approval from MassDEP to start your program
6. Purchase container, label/signage, and request reimbursement, if applicable – **December 31st**
7. Begin collecting
8. Grant ends – **October 31, 2022**

Acceptable Mattresses

- Mattresses and box springs from residents only
- Twin, double, queen, king, and California king
- Traditional mattresses constructed out of metal, textiles, wood, and foam
- Full foam mattresses
- Crib mattresses
- Discolored or worn mattresses that are not wet



Unacceptable Mattresses

- Torn, punctured, soiled, or moldy items
- Twisted or crushed
- Wet or frozen pieces
- Infested with bed bugs, mice
- Futons and fold-out sofa beds
- Mattress pads and toppers
- Infant sleeping pads
- Air or water beds
- Other furniture or textiles



Bed Bugs

- Small, flat, oval shaped insects about the size of an apple seed (1/4")
- Very infrequent
- Inspect mattresses by looking along edges and corners for clusters or smeared black spots
- Bed bugs do not transmit any diseases



Collection Containers



Massachusetts State Contract FAC113: www.commbuys.com/bso/

Signage



www.mass.gov/eea/agencies/massdep/about/massdep-image-gallery.html

Loading Containers

- Stacking efficiency is key!
- General rule of thumb is 1 mattress per cubic yard capacity (based on queen size)
 - 20-foot sea container (40-yard roll-off) = 40-50+
 - 40-foot sea container = 60-100+
 - 48-foot trailer = 110-150+
 - 53-foot trailer = 125-180+
- Municipal staff must rearrange or restack mattresses as necessary in order to maximize space

Loading Containers

- Municipal employees should load or actively direct residents
- Do not stack or store mattresses outside of the container
- Track the number of units collected on the bill of lading (BOL)
- Collect payments, if applicable



Hauling Efficiencies

- Low piece count = cost inefficiency
- Grantee is required to create procedures that support stacking efficiency
- Underperformance may result in removal from program



Hauling Procedures

- Schedule a pick-up when the container is almost full
 - at least 2 days notice
 - ▣ Pick a time when an employee will be available to communicate with the hauler
- Complete a BOL; keep 1 copy for your records and give 1 to the driver

BILL OF LADING			
Sustainable Materials Recovery Program: Mattress Recycling Incentive Grant Program			
Municipality to Complete this Section - Keep a copy for your records and send the original along with the mattress shipment. The Receipt Information will be provided by the recycler.			
Municipality: _____			
Haul Date: _____			
Number of Mattress and Box Spring Units in Load: <input type="text"/>			
Collection Container Type (check one): <input type="checkbox"/> 40 yd. roll-off <input type="checkbox"/> 20 ft. sea container <input type="checkbox"/> 40 ft. sea container <input type="checkbox"/> 48 ft. trailer <input type="checkbox"/> 53 ft. trailer <input type="checkbox"/> other: _____			
Collection Site Certified Net Weight (if available): _____ lbs.			
The information provided here is to the best of my knowledge true, accurate and complete. All of the products described in this document were discarded by residents of my municipality (or other grantees, as assigned by MassDEP).			
Name (print)	Phone	Signature	Date

Recycling Vendor to Complete this Section - Keep a copy of the completed form for your records and submit the original to MassDEP. Each invoice submitted must include a Bill of Lading for each load.			
Company Name: _____			
Units Accepted for Recycling: _____			
Units Rejected/Disposed: _____; these units were (check one): <input type="checkbox"/> rejected at the collection site <input type="checkbox"/> received at the recycling facility			
Notes/Explanations of Discrepancies: _____ _____ _____ _____			
The information provided here is to the best of my knowledge true, accurate and complete.			
Name (print)	Signature		Date
_____	_____		_____

Outreach

- Municipal Website
- Email Newsletters
- Social Media
- Hard Copy Mailers
- Signs
- Billboards
- Local Newspapers



Mattress Recycling



Did you know your old mattress can be recycled at the Hanson Transfer Station?

Mattresses and box springs contain materials that can be recycled including:



What can be recycled?

- Mattresses of any size
- Box Springs of any size

Items must be in good condition and not ripped / torn / moldy/ water damaged

What is the cost?

- \$15 per item*

The Town of Hanson has partnered with UTEC mattress recycling company, and with the assistance of MassDEP is able to provide a reduced cost mattress disposal to Hanson residents. Landfills in Massachusetts are rapidly running out of space and as a result municipalities need to focus on ways to reduce solid waste. Approximately 85% of contents of mattresses and box springs can be recycled. With recycling programs, such as this one, a large quantity of mattresses can stay out of the landfills and be saved from incineration, which will help to curb greenhouse gasses. In order to provide easier disposal, Hanson has a special container at the transfer station used solely for the disposal of mattresses that qualify for recycling.

* A trip ticket from the BOH is required
If a mattress or box spring cannot be recycled, it can still be disposed of at the Hanson Transfer Station for a cost of \$30.

Recycle Right

Cambridge's curbside recycling continues to be recycled despite challenges in the industry. But, costs have increased. Help us reduce costs by cleaning up contamination in your recycling.

Remember:



Mattress Recycling

Beginning April 8, mattresses and box springs will no longer be trashed. The City has partnered with a nonprofit to collect and recycle mattresses at no cost to residents. To schedule your free collection visit CambridgeMA.Gov/Mattress.

Get Rid of It Right

Wondering how to dispose of an item? Download the "Zero Waste Cambridge" app or visit CambridgeMA.Gov/Recycle.

Citywide Composting Turns One!

Thank you for joining in this effort. CambridgeMA.Gov/Compost

Stay updated on your waste services:
Subscribe to Recycling's monthly e-newsletter at CambridgeMA.Gov/Subscribe.

MRI Program Results

- To date, more than 110,270 mattresses have been recycled through the MRI program.
- Approximately 3,032 tons of material diverted from disposal.
- MassDEP has spent more than \$2.75 million in grant funding for this program.
- Average cost to MassDEP is \$21.22 per mattress.

Data compiled as of May 31, 2021

MRI Case Study

Town of Dennis

- Container purchased from Conexwest 40' x 8' x 9'. The additional height makes it much easier for loading.
- Staff are trained to visually inspect mattresses as they come in to the transfer station. Any that are unacceptable are put in a separate container for disposal.
- Recycled **2,327 mattresses** during the MRI program.



MRI Case Study

City of Framingham

- Curbside collection by appointment only – the DPW staff collects the mattresses curbside and consolidates in the collection container (\$5 surcharge).
- Recycled **4,689 mattresses** during the MRI program.
- Continues to collect and send mattresses to UTEC, but self-hauls to UTEC instead of paying them for transportation.
- The City charges residents \$20-25 per mattress; they estimate their actual costs at \$18.25 per unit.



MRI Case Study

Town of Milton

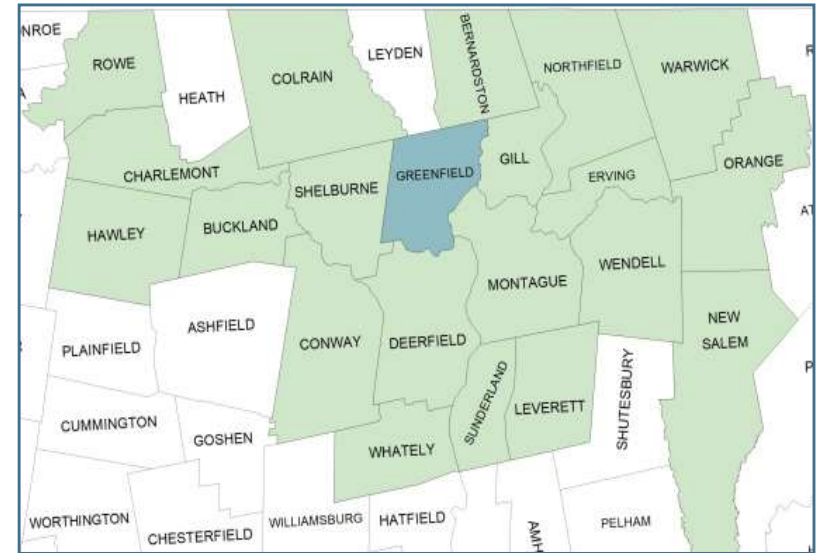
- Drop-off site at the Town Recycling Center (\$3 fee).
- Curbside collection by appt only. DPW staff collect the mattresses curbside and consolidate in the collection container (\$15 fee).
- Recycled **1,530 mattresses** during the MRI program.



MRI Case Study

City of Greenfield - Regional

- Drop-off center in Greenfield; residents of 20 towns in the FCSWMD are allowed to bring mattresses to this site.
- RMR picks up full container and swaps with an empty one.
- Recycled **3,552 mattresses** during the MRI program.
- Regional model increases participant access, improves the quality of mattresses being recycled, and is more cost effective.



MRI Case Study

Town of Eastham - Regional



- Eastham serves as a consolidation site for 5 Cape Cod municipalities.
- This type of model is more convenient for residents and can be cost effective for participating municipalities.
- Altogether this group recycled **4,700 mattresses** during the MRI program.

MRI Case Study

City of Cambridge - Curbside

- Residents schedule a pick-up online. UTEC collects mattresses curbside and loads into a box truck.
 - Missed scheduled pick-ups
 - Overages
 - Weather damage
- Promote on their website:
www.cambridgema.gov/Services/MattressRecycling
- Recycled **9,335 mattresses** during the MRI program.



MRI Tips & Lessons Learned

- Combination of drop-off and curbside collection increases participation.
 - If you are allowing curbside pick-up, schedule by appointment-only and charge a higher fee.
 - May have to deal with more mattresses being rejected by vendor due to damage from rain/snow/ice.
- Charge fees for mattresses in order to balance costs borne by the municipality.
- Prohibit curbside pick-up of mattresses for disposal in contracts with trash haulers.
- Outreach and education is important!

Important Documents

- Checklist
- Grant Agreement
- Invoice Template (for containers)
- Grantee Guidance Document
- Bill of Lading

MRI Contact Info

Rachel Smith

Regional Planner

MassDEP

Rachel.Smith@mass.gov

www.mass.gov/service-details/mattress-recycling