



CASE STUDY: CITY OF GREENFIELD'S REGIONAL PROGRAM MATTRESS RECYCLING INCENTIVE

Mattresses are made up mostly of recyclable materials. Once disassembled, more than 75% of their components can be recycled. Mattresses discarded in the trash are notoriously difficult to manage. They are expensive to transport, take up a lot of space in trash trucks and landfills, are hard to compact, and get caught in equipment at waste-to-energy facilities. MassDEP's Mattress Recycling Incentive (MRI) grant program provides funding to municipalities to aid in the collection, transportation, and recycling of residential mattresses and box springs.

In some cases, it makes sense for municipalities to establish a **Regional Program** in order to save money on mattress collection and transportation charges. This is certainly true for small or rural towns where the number of discarded mattresses is low.

Regional Population: 65,588

Number of Households in Region: 22,238

Participating Municipalities:

Cities and towns that are members of the Franklin County Solid Waste Management District (FCSWMD): Bernardston, Buckland, Charlemont, Colrain, Conway, Deerfield, Erving, Gill, Hawley, Leverett, Montague, New Salem, Northfield, Orange, Rowe, Shelburne, Sunderland, Warwick, Wendell, and Whately.



Services Provided:

The City of Greenfield has a 20-foot storage container where residents can drop-off their mattresses and box springs for recycling. Residents of Greenfield pay a \$20 fee per piece, while residents of the other towns pay a \$25 fee. All customers are limited to 4 pieces per day.

PROGRAM OVERVIEW:

- The City of Greenfield launched their regional mattress recycling program in March 2016.
- They invited 20 neighboring communities to participate. Residents from these towns bring their mattresses and box springs to the Greenfield Transfer Station to be consolidated and sent for recycling.
- MassDEP assigned Raw Material Recovery Corporation (RMR), one of the four mattress recycling vendors on state contract FAC90, to collect and process the mattresses for the three year duration of the grant.
- RMR picked up full containers from Greenfield's Transfer Station and brought them back to their facility for mattress deconstruction, separating the fabrics from the wood, steel, and foam and recycling each component separately.
- RMR invoiced MassDEP for transportation costs and the per-piece mattress recycling rate at the state contract price.
- Grant funding covered the rental of a collection container initially. In 2018, additional grant funds allowed Greenfield to buy a 20-foot storage container for mattresses.

PROGRAM RESULTS:

- **In three years, 3,552 total mattresses** were collected and recycled from the towns participating in Greenfield's program.
- The costs of this program, including the collection container, transportation, and processing, were paid for by MassDEP via the MRI grant and **totaled \$62,893**.
- Most importantly, all of these mattresses were diverted from disposal. Wood, metal, textiles, and foam were recovered and sent to recycling markets.

REGIONAL BENEFITS:

- While some FCSWMD towns have bulky waste containers at their transfer stations and accept mattresses for disposal, others do not have any options. This regional program benefited up to 20 additional communities that would otherwise not have been able to implement a mattress recycling program.
- Many of these towns have small populations – some as few as 200 households. MassDEP estimates that 5% of households dispose of 1 mattress per year. A 20-foot container holds about 40 mattresses. So, a municipality with 500 households would likely generate 25 mattresses in a year – not enough to fill a container or get a recycling vendor to empty it.



Allowing multiple towns to participate makes it more efficient and cost-effective, as the container fills up more quickly and more mattresses can be processed.

POST GRANT:

- The City of Greenfield continues to collect mattresses for recycling at their transfer station, and RMR continues to provide transportation and recycling processing.
- FCSWMD continues to promote the program as an option for their member towns.
- Recycling mattresses and box springs, instead of disposing of them, will continue to save money for the City of Greenfield and other participating municipalities. Not including transportation, municipalities typically pay \$10-\$20 per unit for mattress recycling, while landfills and waste-to-energy facilities charge about \$20-\$60 for disposal.



FOR MORE INFORMATION:

Greenfield: Janine Greaves, Recycling Coordinator, at 413-772-1528 or JanineG@greenfield-ma.gov

MassDEP: Rachel Smith at 617-292-5704 or Rachel.Smith@mass.gov; or visit:

<https://www.mass.gov/service-details/mattress-recycling>

Massachusetts Department of Environmental Protection

One Winter Street Boston, MA 02108-4746

Produced by the Bureau of Air & Waste | February 2021

This information is available in alternate format by calling our ADA Coordinator at 617-574-6872