



MATTRESS DISPOSAL AND RECYCLING

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Collection & Disposal Issues

- Mattresses *and* box springs
- Collection/Transportation:
 - ▣ Difficult to compact
 - ▣ Inefficient
 - ▣ Light weight/large volume vs. typical ton of MSW
- Landfills: operational issues; can get tangled in equipment and do not compact
- Incinerators: can jam infeed and cause problems for facilities pre-grinding MSW

Cost of Disposal - Municipal

- Municipalities charge residents: \$10-\$60
- Municipalities pay:
 - ▣ \$10-\$15 to recyclers
 - ▣ \$15-\$50 to disposal facilities
 - These are surcharges
 - Some facilities will not accept mattresses
- Similar fees for commercial customers - ??

Where are they going?

□ Municipal

- ▣ disposal, recycling, C&D
- ▣ 2016 study showed increase in bulky waste in C&D

□ Retailer

- ▣ Refurbishment, recycling

□ Commercial (hospitals, universities, hotels)

- ▣ Disposal, recycling, ??

Mattress Discards

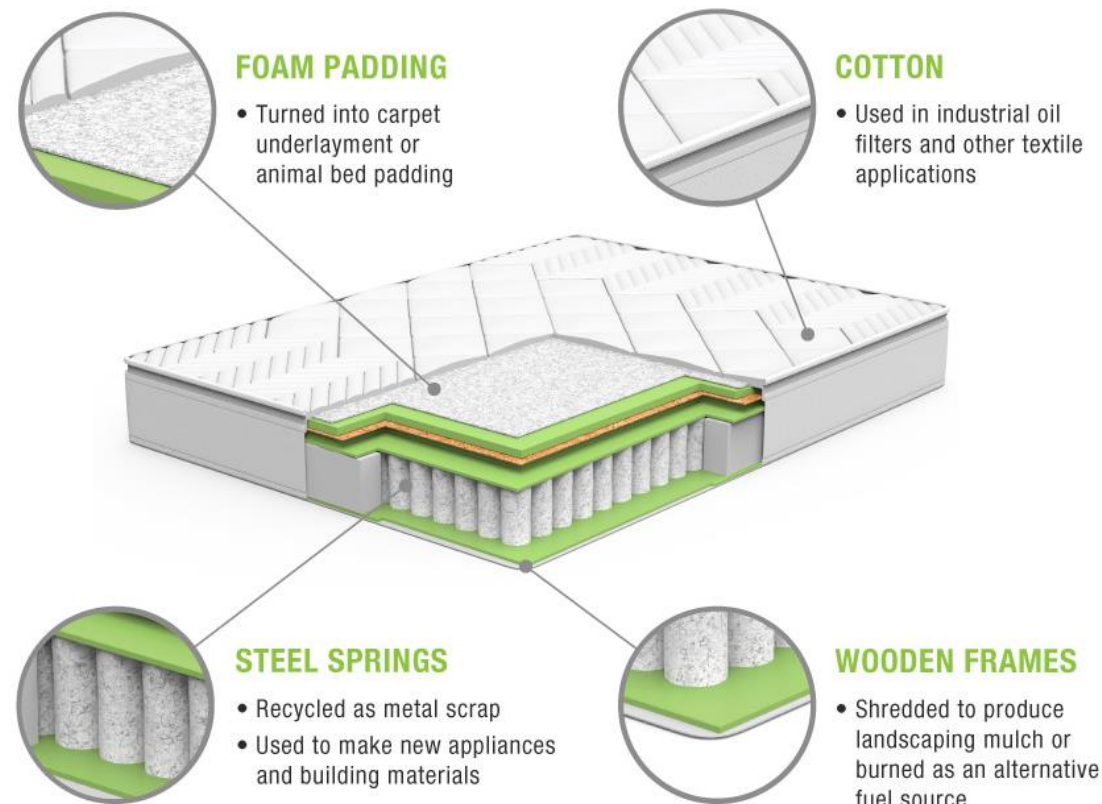


Estimated Volume

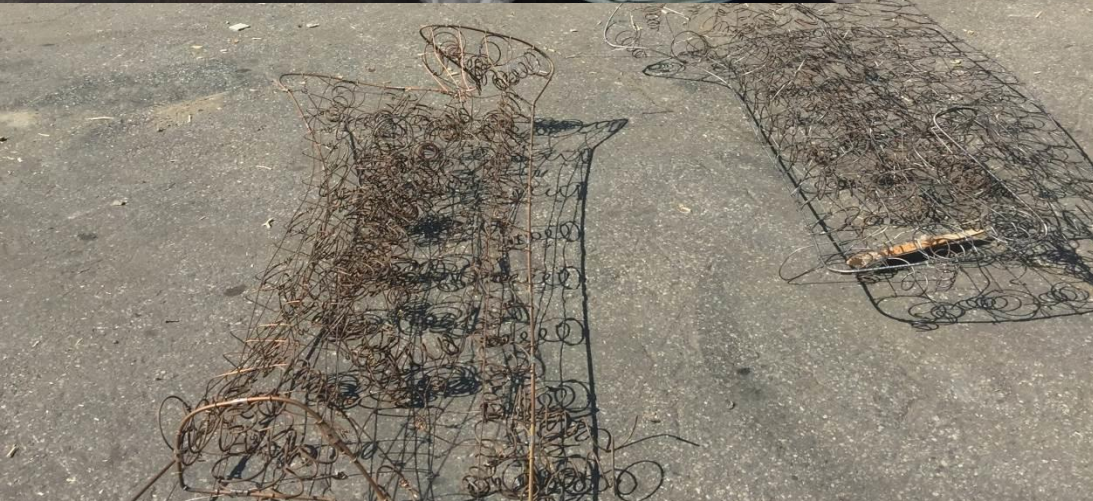
- Approximately 40 million sold in 2016
- An estimated 20 million discarded annually in US
- 600,000 in MA
- 17,000 tons
- More mattresses than box springs
 - Approximately 3 Box Springs : 10 Mattresses

Recyclability

- ❑ Steel – 48%
- ❑ Foam – 28%
- ❑ Fabrics and Fibers – 14%
- ❑ Wood – 5%
 - ❑ More wood in box springs
 - ❑ Fewer box springs discarded
- ❑ Other – 5%







MassDEP's Investments in Mattress Recycling

- Contracting
 - State Mattress Recycling Contract (FAC90)
- Municipal Grants
 - Mattress Recycling Incentive
- Market Development Investments
 - Recycling Business Development Grant
 - Recycling Loan Fund (potential)

Statewide Mattress Recycling Contract

(FAC90)

- Start Date: 7/15/15
- Renewed: 7/16/18 – 7/15/20
- Raw Material Recovery Corporation in Gardner, MA
- United Teen Equality Center in Lawrence, MA
- Ace Mattress Enterprises in Warwick, RI
- Includes pricing for:
 - Processing: \$10-\$16/unit
 - Transportation: varies based on distance from facility
 - Container rental: varies based on container type
- May be reopened to add additional vendors
- Eligible Entities:
 - Municipalities and other local governments;
 - Commonwealth agencies, independent public authorities, commissions;
 - Public schools, hospitals, colleges and universities;
 - Non-profits doing business with the Commonwealth;
 - Other entities as approved by State Purchasing Agent.

Mattress Recycling Incentive

- Sustainable Materials Recovery Program Grant
 - Municipalities collect drop-off or at the curb
 - Covers transportation, recycling, container (individual awards vary)
- Utilizes Statewide Contract FAC90
- 43 municipalities in first three years
- 22 awards announced November 2018
- 63,000 units recycled
- DEP's Average Cost: \$15.25/mattress or box spring



Market Development: Investment Programs

Recycling Business Development Grant:

- ❑ Mattresses are a target material
- ❑ 2 Awards in 2016
- ❑ United Teen Equality Center: Lawrence, MA
 - ❑ Awarded \$150,000
 - ❑ Roll-off truck
 - ❑ Heated trailer for sterilization
 - ❑ Warehouse equipment
- ❑ Raw Material Recovery: Gardner, MA
 - ❑ Awarded \$152,000
 - ❑ Transportation frame for shipping containers
 - ❑ Wood shredder with magnet



Mattress EPR Laws in the Northeast

- ❑ Fee with new mattress purchases that funds a statewide program to recycle all mattresses discarded in the state
- ❑ Collection points include municipal and private transfer stations, recycling facilities
- ❑ International Sleep Products Association
 - ❑ Created non-profit Mattress Recycling Council to manage recycling programs
- ❑ CT implemented in 2015
 - ❑ Fee set at \$9 - 500,000 units collected
- ❑ RI implemented in 2016
 - ❑ Fee set at \$10, increased to \$16 - 175,000 units collected
- ❑ Accepts material from public and private entities



Potential Actions in MA

- Product Stewardship/EPR
 - ▣ Requires state legislation
- Waste Ban
 - ▣ MassDEP regulation
 - ▣ Enforced at waste disposal facilities
- Continued investment in infrastructure to improve efficiency and effectiveness of mattress recycling

Stakeholders

- Waste facilities
- Mattress recyclers
- C&D facilities
- Municipalities
- Residents
- Mattress manufacturers
- ICI generators
 - ▣ Colleges & Universities
 - ▣ Hospitals
 - ▣ Prisons
 - ▣ Hotels
- Mattress retailers

Questions and Contacts

Topic	Contact Person	Email
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Municipal Mattress Recycling Grant		
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