

# 2030 Solid Waste Master Plan

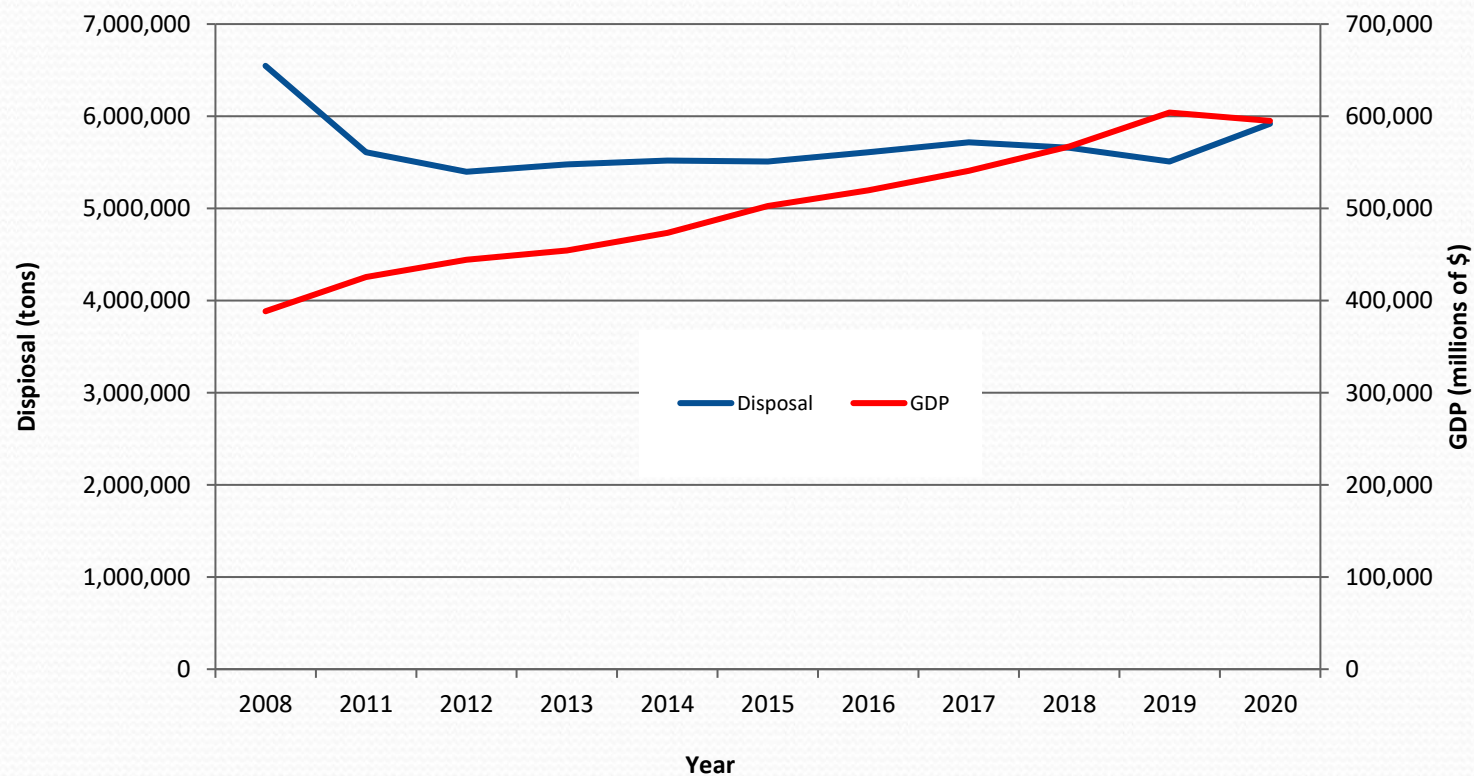


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# Solid Waste in Massachusetts

- Dispose of about 5.7 million tons of waste per year
  - Includes trash from residents, businesses, and construction activities
  - 3.0 million tons/year to in state waste to energy facilities
  - 650,000 tons/year (& declining) to in-state landfills
  - 2.2 million tons/year disposed out of state - on net basis
    - Exports minus imports
- 1650 lbs per person per year

# Massachusetts Gross Domestic Product vs. Disposal (2008-2020)



MassDEP did not calculate disposal data for 2013.



# Solid Waste in Massachusetts

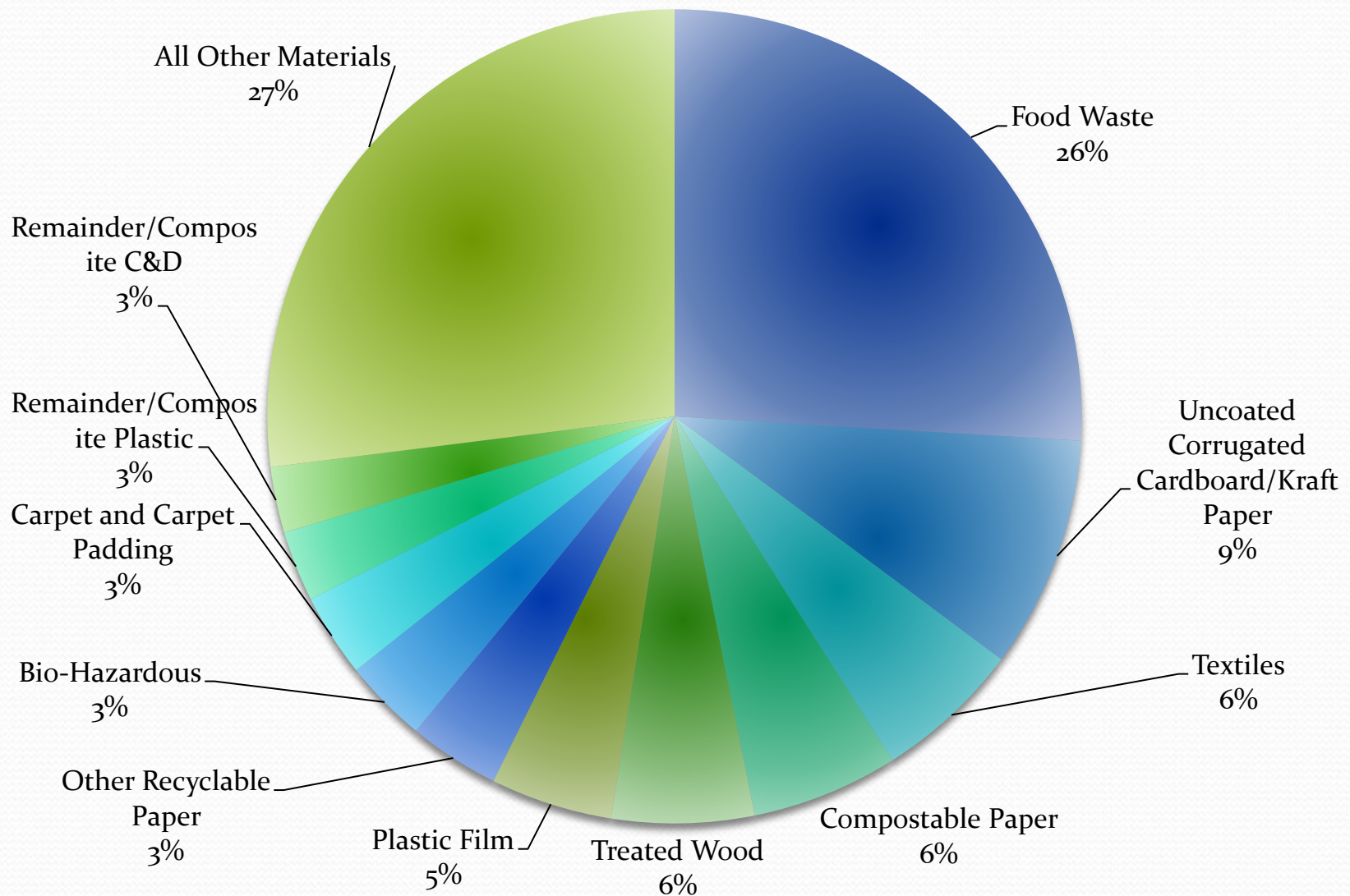
- 5 waste to energy facilities
- 5 active landfills that accept solid waste
- About 200 waste transfer stations
- About 20 construction waste processing facilities
- 9 material recovery facilities (MRFs) that process and sort recyclables
- About 50 locations that accept food materials
  - Animal feed, compost, or anaerobic digestion
- About 150 leaf and yard waste compost sites

# Waste Management Capacity

- Limited capacity
  - Disposal in state and in region
  - All but one Mass landfill projected to close by 2030
  - Recycling (MRFs)
- Available capacity
  - Solid waste transfer (growing rail capacity)
  - Anaerobic digestion capacity
  - Construction materials processing capacity



## Top 10 Materials in the Trash (2016)



# Massachusetts Solid Waste Master Plan

- MassDEP statutorily obligated to develop Plan
- Provides overall policy framework for managing solid waste in Massachusetts
- 10 year planning periods – current plan 2020-2030
- Ensure environmentally safe ways to manage our solid waste
- Has always emphasized reducing trash disposal
- Includes trash from residents, businesses, and construction



# Proposed 2030 and 2050 Goals

- 2030 goal
  - reduce disposal by 1.7 million tons (30 percent) from 5.7 to 4.0 million tons
- 2050 goal
  - reduce disposal by 5.1 million tons (90 percent) to 570K tons
- Reduce the toxicity of the solid waste stream





# Key Elements of Plan

1. Reduce & Reuse
2. Organics (Food Waste) Diversion
3. Residential Waste Reduction
4. Commercial Waste Reduction
5. Recycling Market Development
6. Solid Waste Facility Oversight

# Waste Ban History & Approach

- First waste bans promulgated in early 1990s
- Boost recycling and encourage recycling investment
- Develop and implement new waste bans over period of several years
- Combine technical assistance, education and outreach, municipal grants and market development initiatives
- New bans – emphasize compliance assistance initially
- Inspections, Compliance & Enforcement





# New Waste Disposal Bans

- Effective date of new bans - November 1, 2022
  - Mattresses
  - Textiles
  - Food waste threshold (from 1 ton to ½ ton per week)



# Food Waste Ban

- Food waste largest portion of MSW – about 1/5<sup>th</sup>
- Will add about 2,000 entities – restaurants are the sector with the largest increase
- May affect about 30 largest public schools, RecyclingWorks Food Waste Estimator Tool
  - <https://recyclingworksma.com/food-waste-estimation-guide/>
- RecyclingWorks Technical Assistance and Guidance

# Textiles

- Dispose about 260K tons/year – about 5% of trash
- All types of textiles – bedding, clothing, curtains, fabric, footwear, towels, stuffed animals, etc
- Even worn, torn, and stained items
- Key is material must be clean, dry, not contaminated
- Many active charity and private collection programs in Mass.
  - <https://www.mass.gov/doc/textile-collection-organizations-operating-in-massachusetts-august-2022/download>



# the secret double life of donated textiles

NEARLY **100%** OF DONATED TEXTILES ARE RECYCLED! They are separated into three grades:

**45%**

USABLE CLOTHING



**20%**

FIBER CONVERSION GRADE



**30%**

WIPING CLOTH GRADE



Recycled fiber products **SAVE MONEY and RESOURCES** by using existing materials.



## CLOSING THE LOOP

Recycled cloth rags use **LESS WATER, LESS ENERGY** and create a **LOWER CARBON FOOTPRINT** than all other alternatives.



The second hand clothing market provides **AFFORDABLE CLOTHING** to those in need and **ENCOURAGES GLOBAL ENTREPRENEURSHIP.**

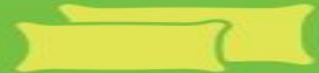
### SECOND LIFE ...



stained t-shirt → wiping cloth



lone sock → pillow stuffing



old denim → household insulation



teddy bear → car seat stuffing



car seat stuffing



torn bath towel → wiping cloth

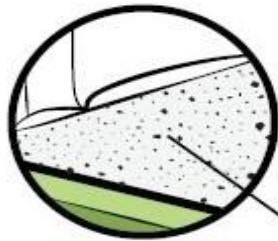


wiping cloth



# Mattresses

- About 600K mattresses generated/year – about 200K residential
- All size mattresses and box springs
- Includes foam mattresses
- Over 75% of mattresses recyclable (springs, wood, fabric, foam)
- Municipal collection programs, retailer takeback, local cleanout companies
- Recycling infrastructure in place and growing



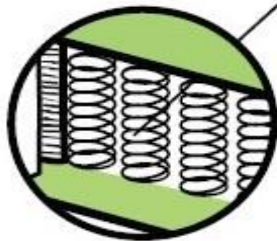
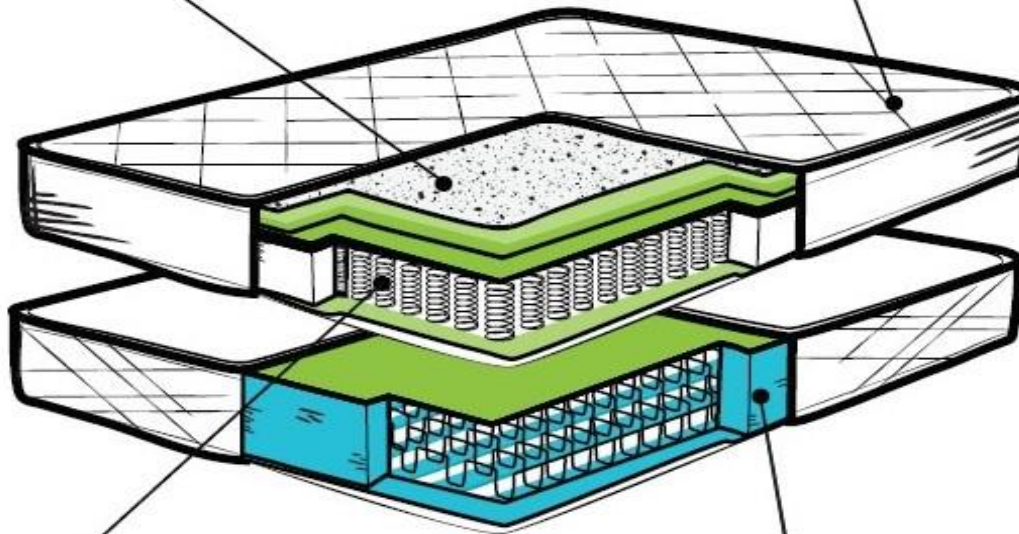
### Foam Padding

- Turned into carpet underlayment or animal bed padding



### Fabric/Fibers

- Used in industrial oil filters and other textile applications



### Steel Springs

- Recycled as metal scrap
- Used to make new appliances and building materials



### Wooden Frames

- Shredded to produce landscaping mulch or burned as an alternative fuel source



# MassDEP Waste Reduction Support

- Municipal grants & technical assistance
- Commercial business assistance –Recycleworks in MA
- Recycling industry grants and loans
- Public education and outreach – Recycle Smart





## Recyclopedia: Can I recycle it?

Enter name of item (ex. bottle)

Search

Read the newsletter

WHAT YOU  
**PUT IN**  
**YOUR BIN**  
**MATTERS**



# For More Information

- <https://www.mass.gov/guides/solid-waste-master-plan>
- <https://www.mass.gov/guides/massdep-waste-disposal-bans>
- <https://www.mass.gov/service-details/mattress-recycling>
- <https://www.mass.gov/guides/massdep-textile-recovery>
- <https://www.mass.gov/lists/massdep-waste-recycling-grants-assistance>
- <https://www.recyclingworksma.com>
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