# 2017
# Solid Waste & Waste Reduction Data

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Solid Waste Advisory Committee – Data Subcommittee

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# Solid Waste Master Plan
# Disposal Reduction Goals and Progress

- From 2014 forward – publishing disposal data only
- Evaluating progress towards primary 2020 Solid Waste Master Plan goals

**GOALS**

- 30% reduction by 2020 from 2008 baseline
  - 6,550,000 to 4,550,000 tons
- 80% reduction by 2050 (to 1,310,000 tons)

**PROGRESS**

- 2017 disposal = 5,720,000 tons
- 13 % reduction from 2008

# Disposal 2016 - 2017

**Table 2 Solid Waste Tonnage and Percent Change Summary: 2016 - 2017**

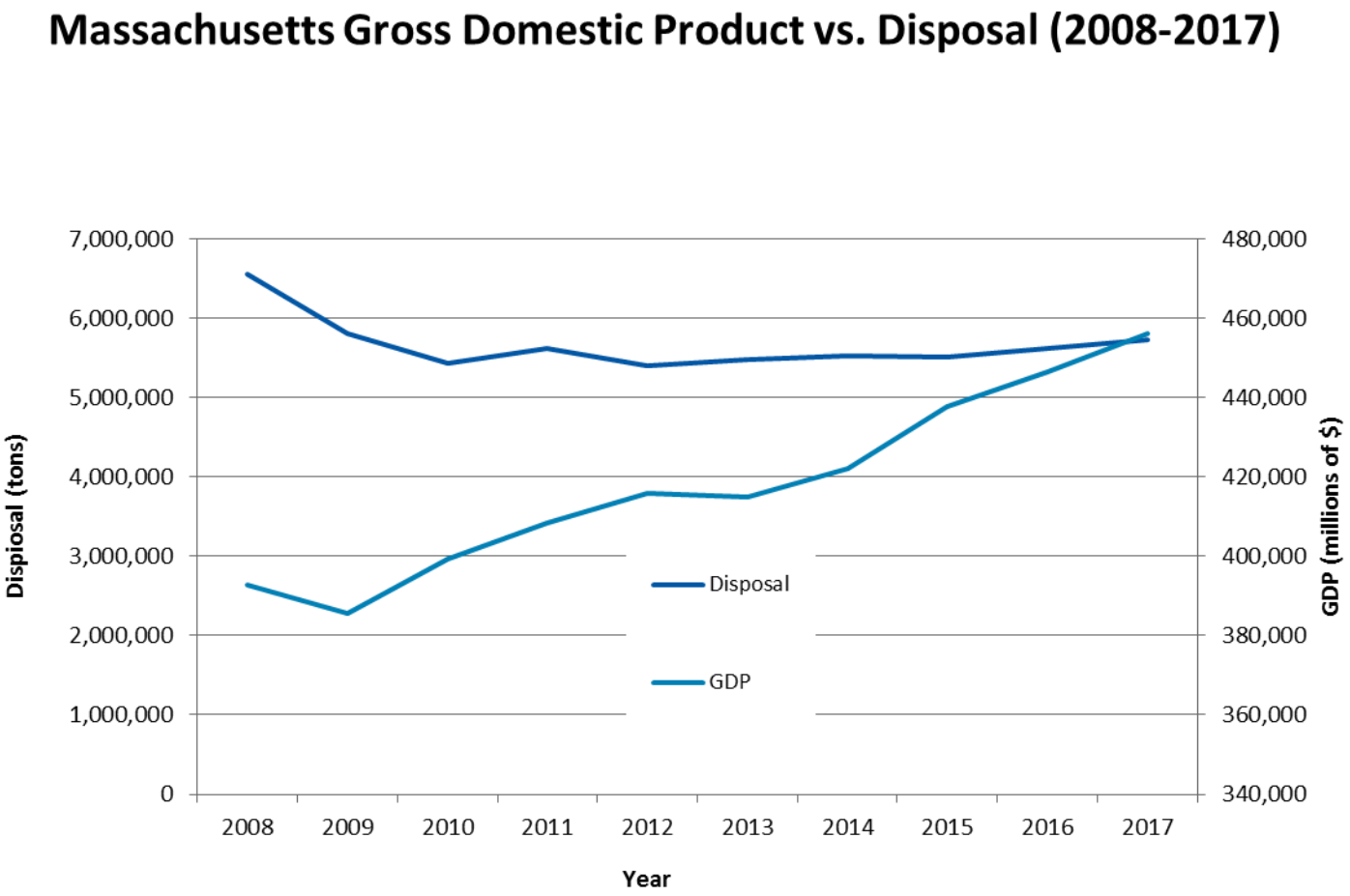
| | 2016 | 2017 | Tons Change | % Change |
|---|---|---|---|---|
| **Disposal** (Incl. Net Exports) | **5,610,000** | **5,720,000** | **110,000** | **2.0%** |
| In-State Disposal | **4,520,000** | **4,490,000** | **(30,000)** | **-0.7%** |
| Landfill | **1,330,000** | **1,310,000** | **(20,000)** | **-1.5%** |
| MSW | 1,170,000 | 1,140,000 | (30,000) | -2.6% |
| C&D | 70,000 | 70,000 | 0 | 0.0% |
| Other | 90,000 | 110,000 | 20,000 | 22.2% |
| Combustion | **3,190,000** | **3,180,000** | **(10,000)** | **-0.3%** |
| MSW | 3,170,000 | 3,140,000 | (30,000) | -0.9% |
| Non-MSW | 20,000 | 30,000 | 10,000 | 50.0% |
| Net Exports | **1,090,000** | **1,230,000** | **140,000** | **12.8%** |
| Exports | 1,560,000 | 1,790,000 | **230,000** | **14.7%** |
| MSW | 680,000 | 820,000 | 140,000 | 20.6% |
| Non-MSW | 880,000 | 970,000 | 90,000 | 10.2% |
| Imports | 460,000 | 570,000 | **110,000** | **23.9%** |
| MSW | 420,000 | 540,000 | 120,000 | 28.6% |
| Non-MSW | 40,000 | 20,000 | (20,000) | -50.0% |

Note: % Change is calculated based on the rounded amounts in this table.
Percentages may not add exactly to 100% due to rounding.

# Disposal 2008-2017

| Table 3 Solid Waste Disposal 2010-2017 (all data in tons) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | **2008** | **2010** | **2011** | **2012** | **2014** | **2015** | **2016** | **2017** |
| **Disposal** | | | **6,550,000** | **5,430,000** | **5,610,000** | **5,400,000** | **5,520,000** | **5,510,000** | **5,610,000** | **5,720,000** |
| | **Landfill** | | **1,740,000** | **1,560,000** | **1,650,000** | **1,700,000** | **1,560,000** | **1,380,000** | 1,330,000 | 1,310,000 |
| | | MSW | 1,560,000 | 1,280,000 | 1,390,000 | 1,380,000 | 1,380,000 | 1,260,000 | 1,170,000 | 1,140,000 |
| | | C&D | 130,000 | 120,000 | 70,000 | 100,000 | 50,000 | 50,000 | 70,000 | 70,000 |
| | | Other | 50,000 | 170,000 | 190,000 | 220,000 | 130,000 | 70,000 | 90,000 | 110,000 |
| | **Combustion** | | **3,230,000** | **3,180,000** | **3,260,000** | **3,210,000** | **3,270,000** | **3,250,000** | **3,190,000** | **3,180,000** |
| | | MSW | 3,210,000 | 3,170,000 | 3,250,000 | 3,210,000 | 3,260,000 | 3,250,000 | 3,170,000 | 3,140,000 |
| | | Non-MSW | 10,000 | 10,000 | 10,000 | - | - | 10,000 | 20,000 | 30,000 |
| | **Net Exports** | | **1,580,000** | **690,000** | **700,000** | **490,000** | **690,000** | **880,000** | **1,090,000** | **1,230,000** |
| | | Exports | 1,850,000 | 1,270,000 | 1,340,000 | 1,050,000 | 1,190,000 | 1,380,000 | 1,560,000 | 1,790,000 |
| | | MSW | 840,000 | 690,000 | 630,000 | 510,000 | 460,000 | 620,000 | 680,000 | 820,000 |
| | | Non-MSW | 1,010,000 | 580,000 | 710,000 | 540,000 | 730,000 | 760,000 | 880,000 | 970,000 |
| | | Imports | 270,000 | 580,000 | 640,000 | 560,000 | 490,000 | 500,000 | 460,000 | 570,000 |
| | | MSW | 240,000 | 440,000 | 390,000 | 420,000 | 460,000 | 460,000 | 420,000 | 540,000 |
| | | Non-MSW | 30,000 | 140,000 | 240,000 | 150,000 | 40,000 | 50,000 | 40,000 | 20,000 |

# Disposal Data vs. Economic Change




MassDEP did not calculate disposal data for 2013.

# MSW Export for Disposal

| | MSW Exported | | | |
|---|---|---|---|---|
| | State | 2015 | 2016 | 2017 |
| | CT | 14,339 | 11,078 | 37,638 |
| | ME | 52,372 | 20,400 | 46,800 |
| | NH | 332,804 | 372,210 | 398,872 |
| | NY | 30,095 | 62,950 | 148,271 |
| | OH | 181,064 | 209,419 | 189,201 |
| | RI | 29 | 0 | 0 |
| | VT | 9,206 | 0 | 3,219 |
| | TOTAL | 619,909 | 676,057 | 824,001 |
| | | | | |

# MSW Import for Disposal

| | MSW Imported | | | |
|---|---|---|---|---|
| | State | 2015 | 2016 | 2017 |
| | CT | 189,171 | 62,386 | 85,134 |
| | ME | 2,182 | 1,095 | 6,830 |
| | NH | 85,217 | 126,079 | 220,429 |
| | NY | 20,357 | 22,622 | 18,802 |
| | RI | 157,274 | 206,816 | 210,642 |
| | VT | 1,202 | 1,741 | 1,466 |
| | TOTAL | 455,403 | 420,739 | 543,303 |

# C&D Export for Disposal

| | C&D Exported | | | |
|---|---|---|---|---|
| | State | 2015 | 2016 | 2017 |
| | CT | 21630.20 | | 13,443 |
| | ME | 11,863 | 0 | 8,864 |
| | NH | 14,872 | 24,098 | 891 |
| | NY | 68,274 | 144,060 | 184,746 |
| | OH | 229,708 | 228,575 | 360,744 |
| | RI | 827 | 23 | 1,579 |
| | TOTAL | 347,174 | 396,756 | 570,267 |
| | | | | |

# C&D Import for Disposal

| | C&D Imported | | | |
|---|---|---|---|---|
| | State | 2015 | 2016 | 2017 |
| | CT | 4 | 14 | 195 |
| | ME | 22 | 59 | 75 |
| | NH | 4,801 | 6,439 | 9,391 |
| | NY | 0 | 0 | 1 |
| | RI | 76 | 5,588 | 4,783 |
| | VT | 0 | 0 | 5 |
| | TOTAL | 4,903 | 12,100 | 14,450 |

# Projected Disposal Capacity

**Table 6: Projected Disposal Capacity 2018-2023 (Tons Per Year)**

| Municipality | Permitted Capacity | End of current permitted capacity | Lifetime of LF | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|
| **Active Landfills** | | | | | | | | | |
| Bourne | 30,000 | 2021 | **2024** | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 219,000 |
| Carver | 101,125 | 2018 | **2020** | 101,125 | 101,125 | 101,125 | 0 | 0 | 0 |
| Chicopee | 365,000 | 2018 | **2018** | 365,000 | 0 | 0 | 0 | 0 | 0 |
| Dartmouth | 115,000 | 2018 | **2026** | 115,000 | 115,000 | 115,000 | 115,000 | 115,000 | 115,000 |
| Middleborough | 60,000 | 2020 | **2031** | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 |
| Nantucket | 26,000 | 2020 | **2030** | 26,000 | 26,000 | 26,000 | 26,000 | 26,000 | 26,000 |
| Southbridge | 405,600 | 2018 | **2018** | 280,600 | 0 | 0 | 0 | 0 | 0 |
| Taunton | 120,120 | 2019 | **2020** | 120,120 | 120,120 | 120,120 | 0 | 0 | 0 |
| Westminster | 390,000 | 2024 | **2024** | 390,000 | 390,000 | 390,000 | 390,000 | 390,000 | 390,000 |
| **Municipal Waste Combustors** | | | | | | | | | |
| Agawam | 131,400 | | | 131,400 | 131,400 | 131,400 | 131,400 | 131,400 | 131,400 |
| Haverhill | 602,250 | | | 602,250 | 602,250 | 602,250 | 602,250 | 602,250 | 602,250 |
| Millbury | 529,575 | | | 529,575 | 529,575 | 529,575 | 529,575 | 529,575 | 529,575 |
| North Andover | 460,500 | | | 460,500 | 460,500 | 460,500 | 460,500 | 460,500 | 460,500 |
| Pittsfield | 84,000 | | | 84,000 | 84,000 | 84,000 | 84,000 | 84,000 | 84,000 |
| Rochester | 1,250,000 | | | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 |
| Saugus | 460,500 | | | 460,500 | 460,500 | 460,500 | 460,500 | 460,500 | 460,500 |
| | *5,131,070* | *3,518,225* | | | | | | | |
| **TOTAL PERMITTTED COMBUSTION CAPACITY** | *3,518,225* | | | *3,518,225* | *3,518,225* | *3,518,225* | *3,518,225* | *3,518,225* | *3,518,225* |
| **ADJUSTED TOTAL COMBUSTION CAPACITY*** | | | | *3,190,000* | *3,190,000* | *3,190,000* | *3,190,000* | *3,190,000* | *3,190,000* |
| **TOTAL PERMITTED CAPACITY** | | | | **5,006,070** | **3,940,470** | **3,724,345** | **3,604,225** | **3,578,225** | **3,578,225** |
| **TOTAL POTENTIAL CAPACITY** | | | | **4,677,845** | **4,032,245** | **4,032,245** | **3,811,000** | **3,811,000** | **4,000,000** |
| **KEY:** | | | | | | | | | |
| Permitted Capacity | Number without shading | | | | | | | | |
| Potential Additional Cap | Number with shading | | | | | | | | |
| **ESTIMATED TOTAL POTENTIAL AVAILABLE CAPACITY** | | | | **4,400,342** | **3,875,155** | **3,875,155** | **3,695,175** | **3,695,175** | **3,848,924** |
| **93% of potential for LFs and 91 % of potential for combustion** | | | | | | | | | |
| **Actual combustion varies per year, has never reached capacity** | | | | | | | | | |
| Total Potential Landfill Capacity | | | | 882,117 | 356,930 | 356,930 | 176,950 | 176,950 | 330,699 |

Actual 2017 disposal for MWCs is actual tonnage burned minus post combustion metal recovery.
MWC disposal capacity is not a fixed tonnage amount, but rather a function of the facility's air permit and may vary slightly.
2017 % Landfill Capacity 81%

# Waste Management Capacity Projections

| Table 7: Waste Management Capacity Projections: 2018-2023 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Total Disposal (baseline) | 5,720,000 | 5,720,000 | 5,720,000 | 5,720,000 | 5,720,000 | 5,720,000 | 5,720,000 |
| Total Disposal (reduced) | 5,720,000 | 5,467,748 | 5,226,620 | 4,996,126 | 4,775,797 | 4,565,185 | 4,363,860 |
| Combustion Capacity | 3,180,000 | 3,190,000 | 3,190,000 | 3,190,000 | 3,190,000 | 3,190,000 | 3,190,000 |
| Potential LF Capacity | 1,310,000 | 1,061,327 | 458,378 | 458,378 | 251,749 | 251,749 | 428,263 |
| In-state Disposal Capacity | 4,490,000 | 4,251,327 | 3,648,378 | 3,648,378 | 3,441,749 | 3,441,749 | 3,618,263 |
| Net Disposal Export (baseline disposal) | 1,230,000 | 1,468,673 | 2,071,622 | 2,071,622 | 2,278,251 | 2,278,251 | 2,101,737 |
| disposal) | 1,230,000 | 1,216,421 | 1,578,242 | 1,347,748 | 1,334,048 | 1,123,435 | 745,597 |

| Assumptions for Annual Percent Change: | 2018-2023 |
|---|---|
| Baseline Disposal Tonnage | 0.0% |
| Decreased Disposal Tonnage | -4.4% |

2017 data shows actual figures.

Combustion Capacity is projected to remain level from 2018 through 2023 based on permit limits.

Future landfill capacity is calculated to be 81% of total potential based on 2017 acceptance rate.

# Contact Information

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