

2022 Solid Waste Data Update

John Fischer

2021-2022 Summary

Table 2 Solid Waste Tonnage and Percent Change Summary: 2021 - 2022

			2021	2022	Tons Change	% Change
Disposal (Incl. Net Exports)			6,220,000	6,000,000	(220,000)	-3.5%
In-State Disposal			3,660,000	3,420,000	(240,000)	-6.6%
	Landfill		600,000	490,000	(110,000)	-18.3%
		MSW	490,000	410,000	(80,000)	-16.3%
		C&D	-	-	-	
		Other Non-MSW	110,000	80,000	(30,000)	-27.3%
	Combustion		3,060,000	2,930,000	(130,000)	-4.2%
		MSW	3,060,000	2,900,000	(160,000)	-5.2%
		Non-MSW	10,000	20,000	10,000	100.0%
Net Exports			2,570,000	2,590,000	20,000	0.8%
	Exports		2,920,000	2,890,000	(30,000)	-1.0%
		MSW	1,050,000	1,380,000	330,000	31.4%
		Non-MSW	1,870,000	1,500,000	(370,000)	-19.8%
	Imports		360,000	300,000	(60,000)	-16.7%
		MSW	300,000	230,000	(70,000)	-23.3%
		Non-MSW	50,000	80,000	30,000	60.0%

2018-2022 Summary

Table 3 Solid Waste Disposal 2018-2022 (all data in tons)							
			2018	2019	2020	2021	2022
Disposal			5,660,000	5,510,000	5,920,000	6,220,000	6,000,000
	Landfill		1,270,000	880,000	660,000	600,000	490,000
		MSW	1,190,000	820,000	570,000	490,000	410,000
		C&D	0	0	-	-	0
		Other	70,000	60,000	90,000	110,000	80,000
	Combustion		3,200,000	2,990,000	3,040,000	3,060,000	2,930,000
		MSW	3,180,000	2,970,000	3,020,000	3,060,000	2,900,000
		Non-MSW	20,000	10,000	20,000	10,000	20,000
	Net Exports		1,190,000	1,640,000	2,220,000	2,570,000	2,590,000
		Exports	1,820,000	1,970,000	2,470,000	2,920,000	2,890,000
		MSW	750,000	820,000	1,040,000	1,050,000	1,380,000
		Non-MSW	1,070,000	1,140,000	1,430,000	1,870,000	1,500,000
		Imports	630,000	330,000	250,000	360,000	300,000
		MSW	610,000	310,000	240,000	300,000	230,000
		Non-MSW	20,000	20,000	10,000	50,000	80,000

MSW & Non-MSW Summary

Table 4 MSW and Non-MSW Disposal 2018-2022							
	2018	2019	2020	2021	2022	% change vs 2018	% change vs 2021
Total Disposal (Tons)	5,660,000	5,510,000	5,920,000	6,220,000	6,000,000	6%	-4%
MSW	4,510,000	4,310,000	4,390,000	4,300,000	4,460,000	-1%	4%
Non-MSW	1,140,000	1,200,000	1,530,000	1,940,000	1,520,000	33%	-22%

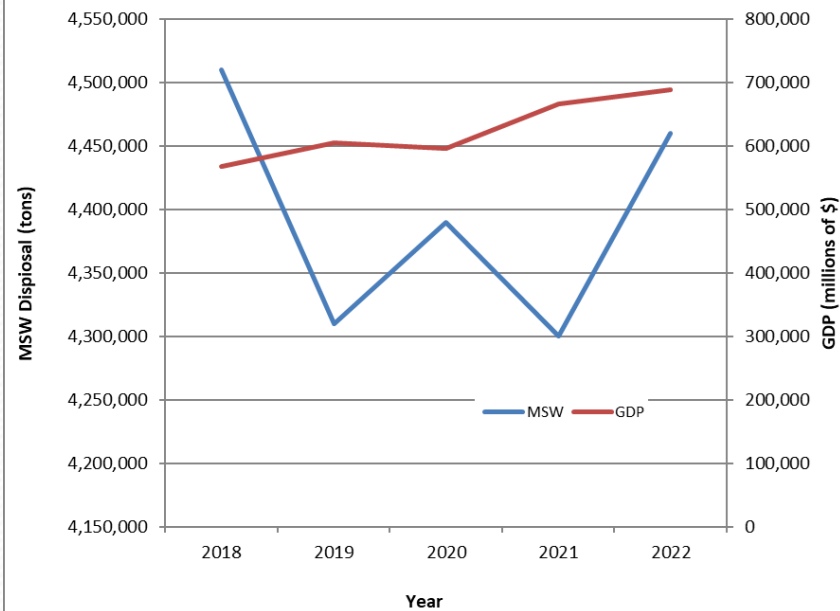
Disposal & Gross Domestic Product

Table 5: Gross domestic product (GDP) by state (millions of current dollars)

	2018	2019	2020	2021	2022	% change vs. 2018	% change vs. 2021
GDP (millions of dollars)	567,255	604,208	595,183	665,893	688,392	21%	3%
Disposal (tons)	5,660,000	5,510,000	5,920,000	6,220,000	6,000,000	6%	-4%
MSW Disposal (tons)	4,510,000	4,310,000	4,390,000	4,300,000	4,460,000	-1%	4%
Non-MSW Disposal (tons)	1,140,000	1,200,000	1,530,000	1,940,000	1,520,000	33%	-22%
Accessed from the BEA website - https://bea.gov/regional/index.htm - August 2023							

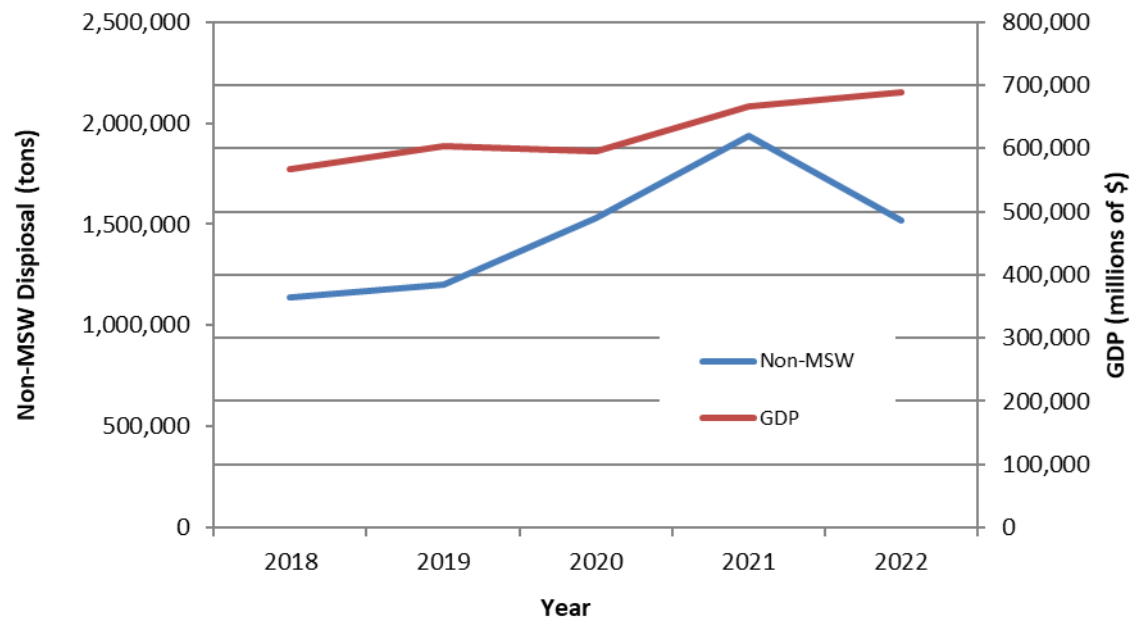
MSW vs. GDP

Chart 1: Massachusetts Gross Domestic Product vs. MSW Disposal (2018-2022)



Non-MSW vs. GDP

Chart 2: Massachusetts Gross Domestic Product vs. Non-MSW Disposal (2018-2022)



Import/Export Data by State

Table 6 Disposal Import/Export Data by State (tons): 2021-2022					
MSW Exported			Non-MSW Exported		
State	2021	2022	State	2021	2022
AL	85,775	226,611	ME	1,084	1,817
CT	35,314	43,378	NH	321,857	225,144
ME	224	1,709	NY	121,389	103,882
MI	15,760	222,520	OH	1,395,055	1,125,612
NH	401,746	365,272	VA	2,551	34,123
NY	338,804	294,089	MI	1,152	-
OH	53,765	118,541			
SC	96,286	94,899			
VA	26,242	17,906			
TOTAL	1,053,916	1,384,925	TOTAL	1,843,088	1,490,578
MSW Imported			Non-MSW Imported		
State	2021	2022	State	2021	2022
CT	33,290	28,908	CT	9,538	13,294
ME	0	4,903	ME	98	198
NH	32,995	65,002	NH	43,658	51,832
NY	499	0	RI	1,636	10,649
RI	232,134	124,903	VT	0	6
VT	2,064	1,491	NJ	0	261
			PA	0	14
TOTAL	300,982	225,207	TOTAL	54,930	76,240

MWC Ash Management

Table 7: Municipal Waste Combustor Ash Management (2022)				
Combustion Facility	Ash Disposed (tons)	Disposal Facilities	Pre-Combustion Metal Recovery (tons)	Post-Combustion Metal Recovery (tons)
Haverhill	129,017	Ward Hill, Haverhill	29	16,962
Millbury	122,970	Wheelabrator Shrewsbury	74	8464
North Andover	87,134	Shrewsbury	0	7,265
Saugus	117,865	Saugus, Shrewsbury	0	8,535
SEMASS	181,931	Bourne, Carver/Marion/Wareham	31,749	9,874
Totals	638,977		31,852	51,100

Ash Landfills Capacity

Table 7A: Ash Landfills Anticipated Capacity	
Landfill	Projected Closure Year
Bondi's Island, Springfield	2030
Peabody	2033
Wheelabrator Saugus	2026
Wheelabrator Shrewsbury	2028

Rail Transfer Capacity

Table 8: Summary of Rail Transfer Facilities

Facility Name	Region	Town	Current Status	Tons/Day	Tons/Year	Waste
Champion City Recovery	SERO	Brockton	Operating	1,000	286,000	C&D
Devens Recycling Center	CERO	Devens	Operating	1,500	390,000	MSW, C&D
Lenox Valley Waste Transfer Facility	WERO	Lenoxdale	Operating	250	67,250	MSW, C&D
McNamara Transfer Station	WERO	Springfield	Operating	699	218,088	MSW, C&D
New England Waste Disposal	SERO	Taunton	Operating	1,650	495,000	MSW, C&D
Tri-County Recycling	WERO	Ware	Operating	750	195,000	C&D
Trojan Recycling	SERO	Brockton	Operating	500	140,400	MSW, C&D
Upper Cape Regional Transfer Station	SERO	Sandwich	Operating	286	74,360	MSW, C&D
United Materials Management of Leominster	CERO	Leominster	Operating	1,000	300,000	MSW, C&D
Western Recycling	WERO	Wilbraham	Operating	2000	312,000	MSW, C&D
Yarmouth-Barnstable Regional Rail Transfer Station	SERO	Yarmouth	Operating	530	137,800	MSW
Casella	WERO	Holyoke	Permitted	1,250	382,500	MSW, C&D
Howard Transfer Station*	NERO	Roxbury	Permitted	810	-	MSW-
Wood Recycling, Inc.*	NERO	Peabody	Permitted	1,350	-	MSW-C&D
Parallel Products of New England	SERO	New Bedford	Seeking approval	1,500	468,000	MSW, C&D
TLA Holbrook	SERO	Holbrook	Seeking Approval	1,000	260,000	MSW
Totals				16,075	3,726,398	

Disposal Facility Projections

Table 9: Projected Disposal Capacity 2022-2030 (Tons Per Year)

Municipality	Permitted Capacity	End of current permitted capacity	Lifetime of LF	2022	2023	2024	2025	2026	2027	2028	2029	2030
Active Landfills												
Bourne	30,000	2024	2040	218,018	30,000	30,000	219,000	219,000	219,000	219,000	219,000	219,000
Dartmouth	115,000	2024	2026	91,670	115,000	115,000	115,000	115,000	0	0	0	0
Middleborough	60,000	2031	2031	56,403	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Nantucket	26,000	2029	2029	5,055	26,000	26,000	26,000	26,000	26,000	26,000	26,000	0
Westminster	538,200	2030	2030	265,541	538,200	538,200	538,200	538,200	538,200	538,200	538,200	538,200
Municipal Waste Combustors												
Haverhill	602,250			603,009	602,250	602,250	602,250	602,250	602,250	602,250	602,250	602,250
Millbury	529,575			491,938	529,575	529,575	529,575	529,575	529,575	529,575	529,575	529,575
North Andover	547,500			418,583	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500
Rochester	1,250,000			1,051,202	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Saugus	547,500			397,618	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500
TOTAL PERMITTED COMBUSTION CAPACITY	3,476,825			2,962,350	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825	3,476,825
ADJUSTED TOTAL COMBUSTION CAPACITY				2,962,350	3,052,041	3,052,041	3,052,041	3,052,041	3,052,041	3,052,041	3,052,041	3,052,041
TOTAL POTENTIAL CAPACITY LF&CMBST				3,599,037	3,821,241	3,821,241	4,010,241	4,010,241	3,895,241	3,895,241	3,895,241	3,869,241
KEY:												
Permitted Capacity	Number without shading											
Potential Additional Capacity	Number with shading											
ESTIMATED TOTAL POTENTIAL AVAILABLE CAPACITY				3,452,350	3,542,041	3,542,041	3,662,438	3,662,438	3,589,180	3,589,180	3,589,180	3,572,618
100% of potential for LFs and 88 % of potential for combustion												
Actual combustion varies per year, has never reached total permitted capacity												
Total Potential Landfill Capacity				490,000	490,000	490,000	610,398	610,398	537,140	537,140	537,140	520,577
2022 capacity for MWCs is actual tonnage burned minus post combustion metal recovery. MWC permitted capacity is not a fixed tonnage amount, but rather a function of the facility's air permit and may vary slightly.												
2022 % Landfill Capacity used	64%											
2018-2022 % Permitted Combustion Capacity Used	87.78%											
Average total combustion (last four years):												
3052040.6												
Note: Bourne 189,000 of 219,000 tons of annual capacity dedicated to SEMASS ash disposal through 2024.												

Capacity & Net Export Projections

Table 10: Waste Management Capacity Projections: 2022-2030

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2022 Food Waste Diversion

Type of Use	2021	2022
Compost	25,273	31,931
Animal Feed	24,719	43,033
Anaerobic Digestion	175,264	217,180
Other	40,380	43,615
Food Donation	23,592	22,085
Total	289,227	357,844

For More Information

- <https://www.mass.gov/guides/solid-waste-master-plan#-solid-waste-data-updates->