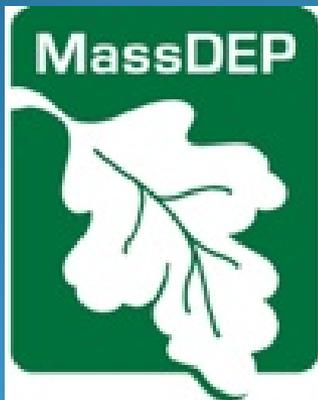


2030 Solid Waste Master Plan Review of Public Comment Draft



John Fischer
Solid Waste Advisory Committee
September 26, 2019

2020 Master Plan Progress

- Disposal down 14%, economy (GSP) up 16%
- Per capita disposal down 18%
- Food waste reduced by 180 K tons/year
- Food rescue up 60%
- MassDEP waste ban compliance
 - Conducted > 1,000 inspections
 - Inspected > 30K loads of trash
 - Issued > 800 NONS and more than 30 penalties

2020 Master Plan Progress

- Sustainable Materials Recovery Program
 - Awarded \$24 million in grants to 308 communities
 - 153 municipalities, with 52% of state's population have PAYT
 - 60 municipalities recycled more than 70K mattresses through MassDEP Mattress Recycling Incentive
 - More than 200 organizations became Recycle Smart partners to help reduce recycling contamination
- Awarded 26 recycling business grants for > \$3 million
- Awarded 39 loans for more than \$10 million

Management Capacity

- Limited capacity
 - Disposal in state and in region
 - Recycling (MRFs)
- Available capacity
 - Solid waste transfer (growing rail capacity)
 - Anaerobic digestion capacity
 - C&D processing capacity

2018 Solid Waste Data (plan appendix)

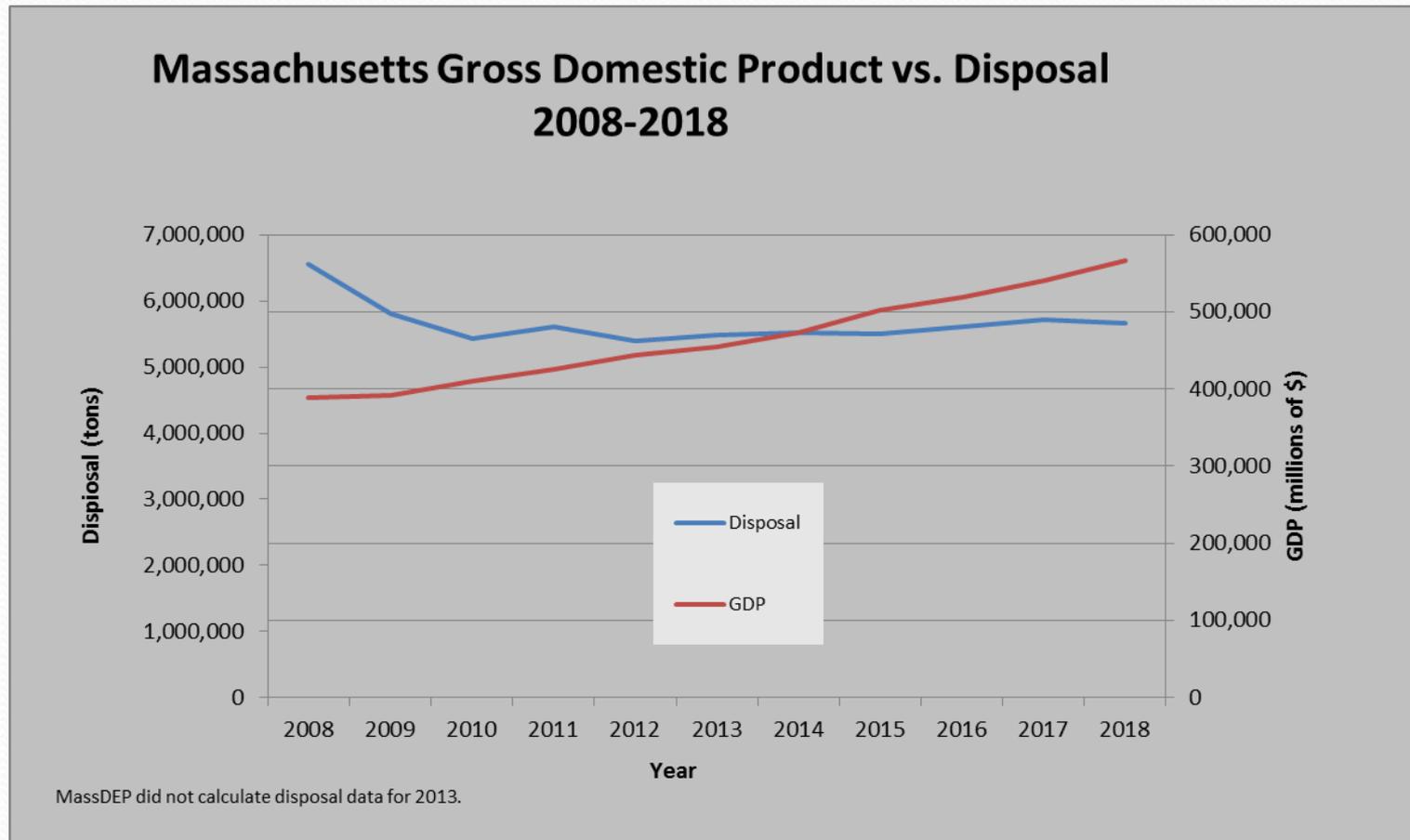
Table 2 Solid Waste Tonnage and Percent Change Summary: 2017 - 2018

		2017	2018	Tons Change	% Change
Disposal (Incl. Net Exports)		5,720,000	5,660,000	(60,000)	-1.0%
In-State Disposal		4,490,000	4,470,000	(20,000)	-0.4%
	Landfill	1,310,000	1,270,000	(40,000)	-3.1%
	MSW	1,140,000	1,190,000	50,000	4.4%
	C&D	70,000	-	(70,000)	-100.0%
	Other	110,000	70,000	(40,000)	-36.4%
	Combustion	3,180,000	3,200,000	20,000	0.6%
	MSW	3,140,000	3,180,000	40,000	1.3%
	Non-MSW	30,000	20,000	(10,000)	-33.3%
Net Exports		1,230,000	1,190,000	(40,000)	-3.3%
	Exports	1,790,000	1,820,000	30,000	1.7%
	MSW	820,000	750,000	(70,000)	-8.5%
	Non-MSW	970,000	1,070,000	100,000	10.3%
	Imports	570,000	630,000	60,000	10.5%
	MSW	540,000	610,000	70,000	13.0%
	Non-MSW	20,000	20,000	0	0.0%

Note: % Change is calculated based on the rounded amounts in this table.

Percentages may not add exactly to 100% due to rounding.

2018 Solid Waste Data



2018 Solid Waste Data

Table 5 Disposal Import/Export Data by State (tons): 2017-2018

MSW Exported				C&D Exported		
State	2017	2018	State	2017	2018	
CT	37,638	1,857	CT	13,443	0	
ME	46,800	40,762	ME	8,864	20,647	
NH	398,872	388,499	NH	891	108,147	
NY	148,271	164,743	NY	184,746	77,037	
OH	189,201	140,229	OH	360,744	556,091	
RI	-	-	RI	1,579	11,474	
VA		15,966	TOTAL	570,267	773,396	
VT	3,219	-				
TOTAL	824,001	752,056				
MSW Imported				C&D Imported		
State	2017	2018	State	2017	2018	
CT	85,134	93,516	CT	195	596	
ME	6,830	52	ME	75	79	
NH	220,429	290,444	NH	9,391	6,219	
NY	18,802	33,970	NY	1	1	
RI	210,642	191,336	RI	4,783	643	
VT	1,466	2,012	VT	5	0	
TOTAL	543,303	611,330	TOTAL	14,450	7,538	

2018 Solid Waste Data

Landfill	Projected Closure Year
Bondi Island*	2023
Carver Marion Wareham	2020
Ward Hill Neck	2021
Peabody	2025
Wheelabrator Saugus	2022
Wheelabrator Shrewsbury	2028
*Permit application in-house that would provide an additional 7-8 years.	

2018 Solid Waste Data

Table 6A: Municipal Waste Combustor Ash Management (2018)				
Combustion Facility	Ash Disposed (tons)	Disposal Facilities	Pre-Combustion Metal Recovery (tons)	Post-Combustion Metal Recovery (tons)
Haverhill	147,127	Ward Hill, Haverhill	100	13,943
Millbury	117,687	Shrewsbury	75	9,070
North Andover	101,247	Shrewsbury	-	7,226
Pittsfield	482	Bondi's Island, Springfield	-	2,068
Saugus	122,762	Saugus, Shrewsbury	-	6,204
SEMASS	185,875	Bourne, Carver/Marion/Wareham	26,786	10,935
Springfield	37,901	Bondi's Island, Springfield	98	5,371
Totals	713,081		27,059	54,817

2018 Solid Waste Data

Table 7: 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	198	53,262	MSW, C&D
New England Waste Disposal	SERO	Taunton	Operating	940	244,400	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	Falmouth	Operating	286	74,360	MSW, C&D
Western Recycling	WERO	Wilbraham	Operating	645	167,700	MSW, C&D
Yarmouth-Barnstable Regional Rail Transfer Station	SERO	Yarmouth	Operating	530	137,800	MSW
TLA Holbrook	SERO	Holbrook	Permit under review	1,000	260,000	MSW
Casella	WERO	Holyoke	Permitted	1,250	382,500	MSW, C&D
Howard Transfer Station	NERO	Roxbury	Permitted	-	-	-
Parallel Products of New England	SERO	New Bedford	Seeking approval	1,500	390,000	MSW, C&D
Wood Recycling, Inc.	NERO	Peabody	Permitted	-	-	-
Covanta SEMASS	SERO	Wareham	Seeking approval			MSW
United Materials Management of Leominster	CERO	Leominster	Seeking approval	1,000	300,000	MSW, C&D
McNamara Transfer Station	WERO	Springfield	Under construction	699	181,740	MSW, C&D
Totals				10,099	2,721,422	

2018 Solid Waste Data

- Combustion capacity projected level at 3.2 million tons
- Landfill capacity to drop to 60K tons by 2030 (1 MSW landfill)
- Projected net export for disposal in 2030
 - If meet 2030 goal = 780K tons
 - If disposal stays flat = 2.4 million tons

Structure of 2030 SWMP

- Goals
- Material Priorities
- Source Reduction & Reuse
- Organics Waste Reduction
- Residential Waste Reduction
- Commercial Waste Reduction
- C&D Waste Reduction
- Market Development
- Solid Waste Facility Oversight & Capacity Management

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

Material Priorities

1. Greatest diversion potential
 - Food material – 570K tons
 - Cardboard – 220 K tons
 - Untreated wood – 135K tons
 - Textiles – 130K tons
 - Bulky materials – 130K tons
2. Difficult to recycle – reduce use
 - Single use packaging

Material Priorities

3. Reuse & Donation

- Food donation
- Building materials
- Office furniture & equipment
- Textiles

4. Local Markets

- Food material
- Mattresses
- Glass
- Textiles

Source Reduction & Reuse

- Source reduction and reuse closely connected
- Reduce waste at source and extend product lifespan
- Product categories – durable goods, retail and distribution packaging, food, building materials
- Strategic Reduce & Reuse Plan
 - Assess opportunities
 - Identify barriers & needs
 - Provide data
 - Create network
- Reuse grants – municipal, non-profit, for profit

Organics Waste Reduction

- Reduce disposal by additional 500K tons/year by 2030
- Foster increased donation and source reduction
- Continue to build inspections, compliance assistance and outreach
- Reduce threshold for commercial organics ban
- Targeted grants and loans to support capacity development
- Develop multi-pronged approach for small business and residential food waste

Residential Waste Reduction

- Emphasis – improve quality/reduce contamination
- Additional target materials – mattresses, textiles, food, bulky materials
- 3 legged stool
 - Grants
 - Technical Assistance
 - Education & outreach
- Additional waste bans – textiles & mattresses
- Extended Producer Responsibility (EPR)
 - – including paint, electronics, carpet
- Hauler recycling requirement – level playing field

Commercial Waste Reduction

- Reduce waste ban failed load rate from 26% to 10% by 2030
- Target materials – food, cardboard, furniture, mattresses & other bulky materials
- Continue mix of enforcement and technical assistance
 - Ramp up enforcement resources
 - Formal information requests/outreach
 - Continue RecyclingWorks in Massachusetts
 - Additional waste bans

Construction & Demolition Waste Reduction

- Reduce disposal by 260K tons by 2030
- Target materials – wood, cardboard, gypsum
- C&D facility minimum performance standards
- C&D facility targeted grants & loans
- Technical assistance and model local ordinances -
source separation, deconstruction & reuse

Market Development

- Target materials – food, furniture, mattresses & other bulky materials, glass, textiles
- Develop comprehensive market development plan
- Connect with & leverage other market development resources
- Connect with new waste ban development
- Leverage state purchasing power

Solid Waste Facility Oversight & Capacity Management

- Safely manage in state facilities & address management capacity challenges
- Ongoing permitting, inspections, oversight & enforcement of active & inactive facilities
- Requirements for closed landfills after 30 years
- Solid waste regulation revisions
- Maintain MWC moratorium, but allow for replacement capacity within current limits, if efficiency & emissions improved
- Maintain allowance for up to 350K TPY for alternative waste to energy technologies

Plan Appendices

- Action Items by Program Area Chart
- 2030 Goal Analysis Spreadsheet
- Draft 2018 Solid Waste Data Update

Public Comment Period

- 9/27/19 – 12/6/19
- Will be posted at:
 - www.mass.gov/guides/solid-waste-master-plan
- Submit comments to:
 - dep.swmp@mass.gov

OR

- John Fischer, MassDEP, One Winter Street, Boston, MA
02108

Public Hearings

- 10/30/19, 5:00 pm, MassDEP Central Regional Office, Worcester
- 11/6/19, 5:00 pm, MassDEP Northeast Regional Office, Wilmington
- 11/7/19, 10:00 am, MassDEP Boston Office
- 11/12/19, 5:00 pm, Springfield City Library, 1187 Parker Street, Springfield
- 11/19/19, 5:00 pm, MassDEP Southeast Regional Office, Lakeville