



Estimates of Connecticut Municipal Solid Waste Generated (MSW), Disposed, and Recycled FY2009

The following MSW statistics are based primarily on data reported to the Connecticut Department of Environmental Protection (DEP) by Connecticut municipalities and by Connecticut permitted solid waste facilities¹. A listing of data qualifiers can be found at the end of this webpage ([click here](#)). MSW disposed includes regular trash generated by both the residential and non-residential sectors. It does not include construction and demolition wastes, industrial sludges, or land-clearing debris. MSW recycled includes: [CT designated recyclable items](#); other types of MSW recyclables (e.g. food waste, yard waste brush and tree trimmings, plastic bottles, textiles, electronics, anti-freeze; boxboard, magazines, etc.); and material reported reused through municipal swap areas,

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Figure 1 - Summary – Connecticut (CT) MSW Reported Generated, Disposed, and Recycled¹ FY2009 (July 2008 - June 2009)

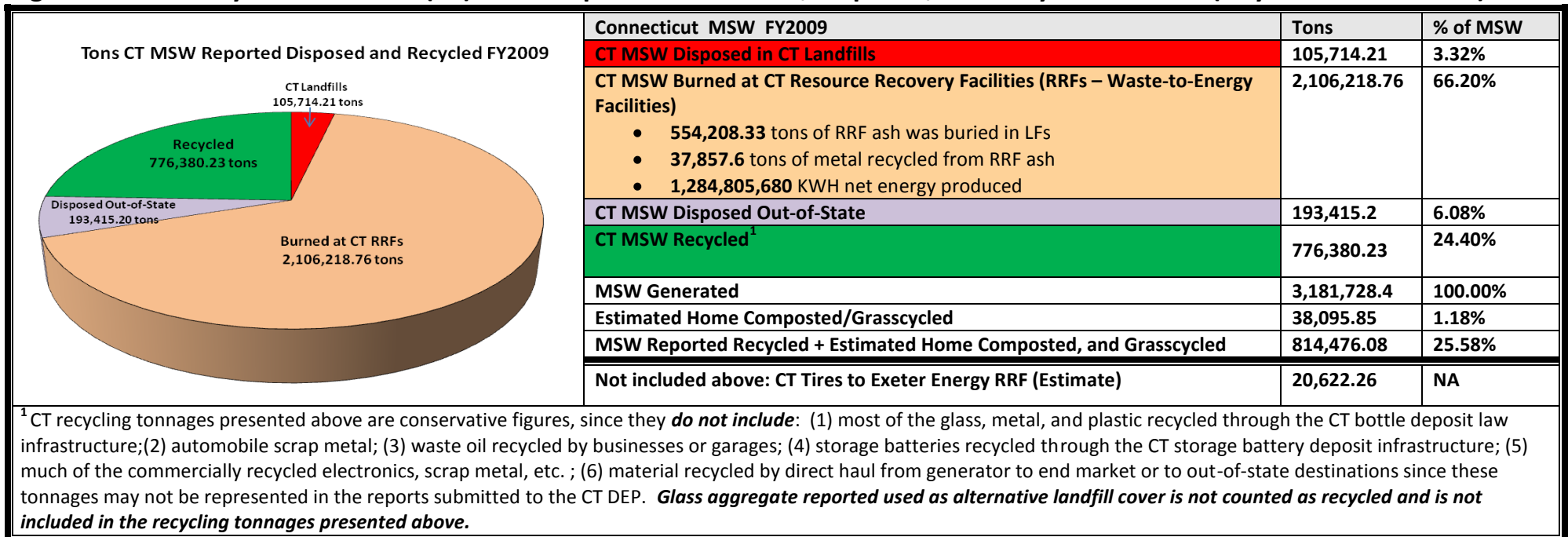
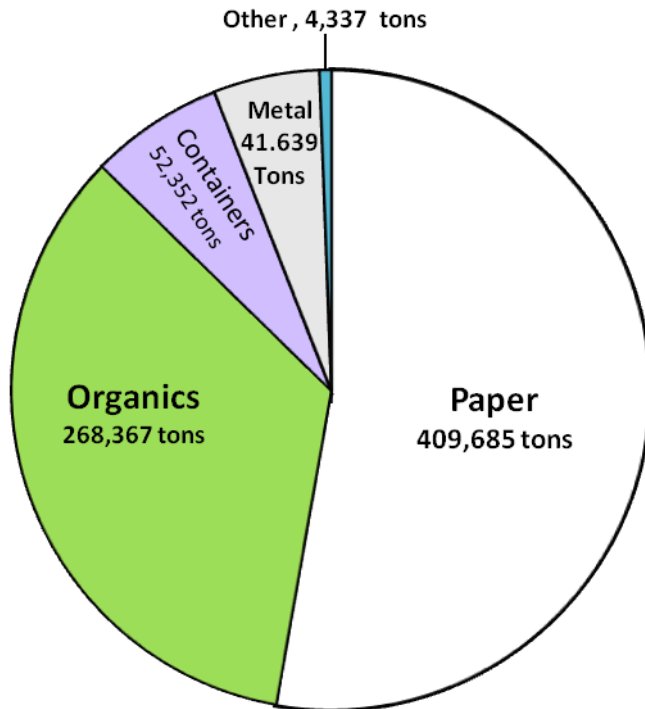


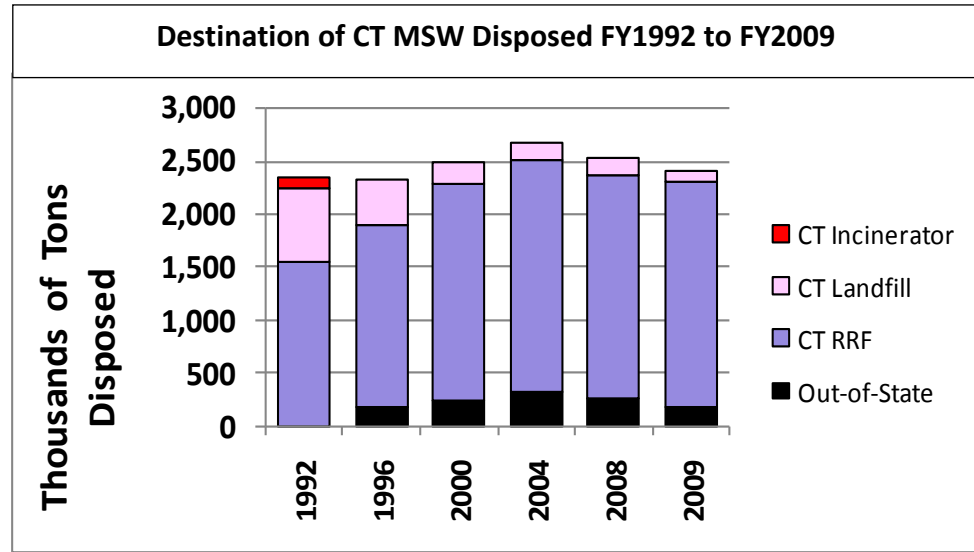
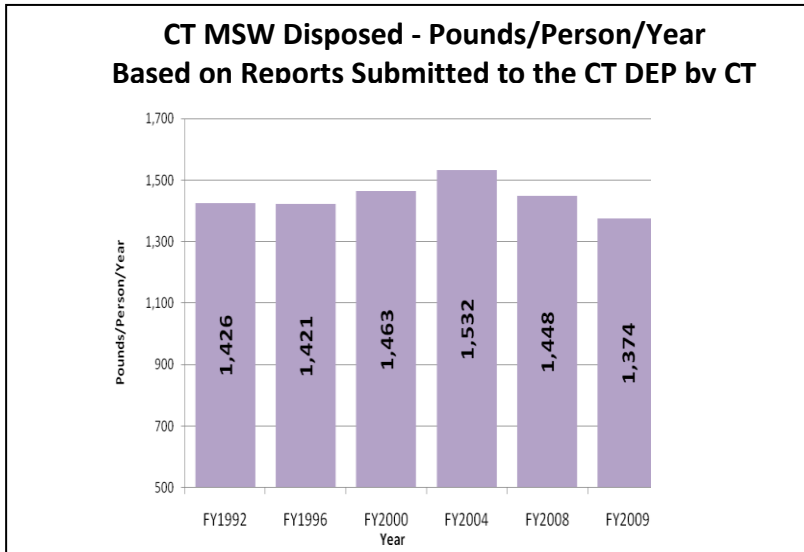
Figure 2 - Summary - Types of Connecticut MSW Reported Recycled¹ FY2009MSW Reported Recycled¹ FY2009

Material Type Reported Recycled	Tons Reported Recycled FY2009	% of MSW Recycled
Paper	409,685.41	52.77%
Organics	268,367.25	34.57%
Containers (bottles & cans) – Grossly under-reported Doesn't include material recycled through the CT bottle deposit law infrastructure	52,351.77	6.74%
Scrap Metal	41,638.89	5.36%
Other <ul style="list-style-type: none"> Electronics - 1,737.64 tons Other - 2,115.18 tons (Anti-freeze, batteries, oil filters, waste oil, sneakers, used clothing, Hg lamps, etc) - 	4,336.92	0.56%
Total MSW Reported Recycled	776,380.24	100.00%

¹CT recycling tonnages presented above are conservative figures, since they **do not include**: (1) most of the glass, metal, and plastic recycled through the CT bottle deposit law infrastructure; (2) automobile scrap metal; (3) waste oil recycled by businesses or garages; (4) storage batteries recycled through the CT storage battery deposit infrastructure; (5) much of the commercially recycled electronics, scrap metal, etc. ; (6) material recycled by direct haul from generator to end market or to out-of-state destinations since these tonnages may not be represented in the reports submitted to the CT DEP. ***Glass aggregate reported used as alternative landfill cover is not counted as recycled and is not included in the recycling tonnages presented above.***

Figure 3 – MSW Reported Recycled and Disposed – Historic Perspective (After FY2001 state-wide recycling tonnages were based on recycling facility marketing reports and municipal annual reports. Previous to FY2002 recycling tonnages were based on annual municipal recycling reports only.)





The economic downturn starting in the fall 2008 contributed to a reduction in FY2009 (July 2008-June 2009) of both the CT MSW percapita disposal rate and in the CT MSW percapita recycling rate. However, because both the amount disposed and recycled dropped, the FY2009 percent of MSW recycled i.e. about 24.4% only dropped slightly from the FY2008 recycling rate of 25.4%.

Factors related specifically to the decrease in the amount of material recycled in FY2009 include the following:


- Prior to the 2008 economic downturn demand for finished product was at an all time high and as a result, so was the demand for feedstock (including recyclables) used to manufacture those products. Often manufacturers and paper mills were forced to accept poorly prepared recyclables in order to meet the increased demand for their products.
- When the demand for finished product dropped due to the poor economy, manufacturers and paper mills (especially those in China) either stopped buying recyclables and/or became pickier about the quality of the recyclables they were purchasing. Recycling facilities that were churning out poorly processed recyclables could no longer market their material. Those recycling facilities that had maintained the quality of their recyclables during times of greater demand, were able to market their recyclables, albeit at a lower price.
- FY2009 also saw a change in the types and amounts of recyclables collected – especially noticeable was a downturn in the amount of newsprint collected for recycling. This drop was probably in part attributable to the decrease in newsprint generated in the US related to the ongoing drop in newspaper print circulation in the US.



Connecticut needs to maintain and expand efforts to reduce waste thereby realizing the global environmental benefits of source reduction and recycling while at the same time avoiding increased public expenditures for additional disposal capacity. An MSW waste disposal characterization study conducted in CT in 2009 indicated that CT designated (mandatory) recyclable items still accounted for 22.5% of the weight of CT MSW disposed, and food waste accounted for another 13.5% of the CT MSW disposed in 2009 (see Table 6 – Page 15 of the [study](#)). *We have the potential to do a much better job of source reduction and recycling and **we need to do that in a manner that ensures the quality of the material we collect for recycling.***



Table 1 – Connecticut MSW – Detailed Statistics FY2009 – Includes Residential and Non-Residential MSW
 (please see note re data qualifiers)


CT MSW Reported Recycled	
Tons CT MSW Reported Recycled FY2009	776,380.23
CT Population Estimate – July 1, 2008 CT Department of Public Health Estimate	3,501,252
TPY (Tons/Person/Year) CT MSW Reported Recycled	0.2217
PPY (Pounds/Person/Year) CT MSW Reported Recycled	443.40
PPD (Pounds/Person/Day) CT MSW Reported Recycled	1.21
Estimates of Amounts of Organic Material Grasscycled and Home Composted	
Tons Organic Material Estimated Grasscycled and Home Composted (Based on municipal programs promoting grasscycling and home composting) FY2009	38,095.85
TPY (Tons/Person/Year) Organics Estimated Grasscycled and Home Composted FY2009	0.0109
PPY (Pounds/Person/Year) Organics Estimated Grasscycled and Home Composted FY2009	21.80
PPD (Pounds/Person/Day) CT MSW Estimated Grasscycled and Home Composted FY2009	0.06
Disposed	
Tons CT MSW Estimated Disposed FY2009	2,405,348.17
TPY (Tons/Person/Year) CT MSW Estimated Disposed FY2009	0.6870
PPY (Pounds/Person/Year) CT MSW Estimated Disposed FY2009	1,374
PPD (Pounds/Person/Day) CT MSW Estimated Disposed FY2009	3.76
Generated	
Tons CT MSW Estimated Generated FY2009	3,181,728.4
TPY (Tons/Person/Year) CT MSW Estimated Generated FY2009	0.9087
PPY (Pounds/Person/Year) CT MSW Estimated Generated FY2009	1,817.4
PPD (Pounds/Person/Day) CT MSW Estimated Generated FY2009	4.98
Summary	
% CT MSW Estimated Recycled FY2009	24.40%
% CT MSW Estimated Recycled, Grasscycled, and Home Composted	25.58%

Table 2- Connecticut MSW Reported Recycled¹ by Material Type FY2009 (see [note #1](#) in Figure 1 - re CT recycling tonnages not reported to DEP and therefore not included in CT MSW estimates)

Material Category	Recyclable Item Reported Collected or Marketed	Tons Recycled FY2009
CONTAINERS- Glass, Metal, Plastic - Bottles, Cans, & Other Containers - 52,351.77 tons Tonnage mainly based on data obtained from marketed reports submitted by CT solid waste facilities permitted to process source separated recyclables. Some municipal recycling report data also included.	Aluminum Cans	1,811.8
	Aluminum Foil	127.43
	Commingled Containers (mix of bottles and cans – may contain a small amount of bottle bill material)	1,347.02
	Ferrous Cans	6,189.33
	Glass Aggregate - Does not include glass aggregate used as landfill cover.	16,374.13
	Glass Brown	761.835
	Glass Containers	347.59
	Glass Flint	2,833.88
	Glass –Green	2,977.07
	Metal Containers	562.52
	Plastic – Baled	673
	Plastic – Clear PET	3,313.92
	Plastic – Mixed Or Pigment PET	4,107.87
	Plastic - Natural HDPE	2,274.21
	Plastic Mixed	4,487.42
	Plastic-Mixed or Pigmented HDPE	3,759.22
	PLASTIC - #3 - #7	54.32
	Plastic - Other Plastic	278.39
	Containers Collected as Part of a Single Stream Recyclable Mix (Estimated that containers were 11%, by weight, of the single stream mix)	45.97
	Containers Collected Dual Stream but Weighed Together with Paper (Estimated that containers were 11%, by weight of the material collected dual stream)	24.84
 ELECTRONICS - 1,737.64 tons Based on data obtained from the FY2009 Annual Municipal Recycling Reports. This is probably an underestimate of the amount of electronics actually recycled since it does not	CELL PHONES	0.04
	ELECTRONICS	1737.6

Material Category	Recyclable Item Reported Collected or Marketed	Tons Recycled FY2009
include most of the electronics recycled from non-residential sectors.		
ORGANICS - 268,367.25 tons  Based on data reported in the FY2009 Annual Municipal Recycling Reports and FY2009 data submitted by Scotts/Hyponex in Lebanon CT.	Brush - Yard Waste	45204.59
	Christmas Trees	30
	Food Proc Residuals (Source separated)	9.48
	Grass	3583.09
	Leaves	137,287.21
	Oil - Cooking Grease	0.80
	Wood – Untreated - (Furniture, pallets, logs, other)	23.77
	Wood Chips From Yard Waste	5878.71
	Yard Waste	40,360.60
	Yard Waste- Additional tonnage reported received by Scotts/Hyponex and which appeared not to be represented in municipal annual recycling reports	35,989
PAPER - 409,685.41 tons Tonnage based mainly on data obtained from marketed reports submitted by CT solid waste facilities permitted to process source separated recyclables. Some municipal recycling report data also included. 	Boxboard	1,515.05
	Coated Bookstock	924.19
	Computer Paper	180.64
	Cores Paper	3,283.28
	Corrugated	185,789.48
	Corrugate/Magazine/Newspaper Mix	9,000.2
	Corrugated/Newsprint Mix	19,276.46
	Magazines	326.36
	News Blank	5,516.93
	Newspaper	49,763.01
	Newspaper #8	5,144.5
	Office- High Grade White Ledger Paper	2,411.28
	Office - Mixed Ledger	298.45
	Office Paper	49,537.95
	Office Paper Sorted Mixed	1,336.95
	Other Paper Grade	1,121.03
	Paper Mixed	62,842.56

Material Category	Recyclable Item Reported Collected or Marketed	Tons Recycled FY2009
PAPER (cont'd)	Printer Paper Waste	10,826.18
	Phone Books	17.99
	Paper Collected as Part of a Single Stream Recyclable Mix (Estimated that paper was 89%, by weight, of the single stream mix)	371.96
	Paper Collected Dual Stream but Weighed Together with Containers (estimated that paper was 89% by weight of the material collected dual stream).	200.96
SCRAP METAL - 41,638.89 tons  <p>Based on data obtained from the FY2009 Annual Municipal Recycling Reports and FY2009 MidCT RRF Operation Reports.</p> <p>There were an additional 37,858 tons of post-combustion Fe recycled from RRF ash. (Ash is categorized as a "special waste").</p> <p>This is probably an underestimate of the total amount of scrap metal recycled since it does not include most scrap metal recycled from commercial sectors.</p>	Propane Tanks	31.90
	Scrap Metal - 15% subtracted to account for residue	28,889.45
	Scrap Metal – APPLIANCES	8.35
	Scrap Metal – RRF Pre-Combustion	12,709.19
TEXTILES - 484.1 tons Based on data obtained from the FY2009 Annual Municipal Recycling Reports. 	Sneakers	5.10
	Used Clothes/Goods	479.00

Material Category	Recyclable Item Reported Collected or Marketed	Tons Recycled FY2009
OTHER MSW Recycled - 2,115.18 tons Based on data obtained from the FY2009 Annual Municipal Recycling Reports. 	Automotive Recyclables - Includes: Anti-Freeze, Oil Filters, Storage Batteries, and Waste Oil	1,966.33
	Ballasts	4.65
	Mercury	0.09
	Batteries (Other)	2.52
	Eyeglasses (actually >0, but tonnage not reported)	0
	Film	4.48
	Freon	2.83
	Household Batteries (Alkaline)	3.14
	Laser Toner Cartridges	2.25
	Mercury Lamps; Fluorescent Lamps; Hid's; Specialty Lamps	45.34
	Nickel – Cadmium Rechargeable Batteries	5.62
	“Other” MSW Recyclables	61.40
	Paint – Latex	13.57
	Paint & Stains	0.00
	Plastic Film	2.96

QUALIFIERS FOR DATA USED TO CALCULATE CONNECTICUT MSW RECYCLING, DISPOSAL, GENERATION RATES

Recycling Data Qualifiers:

- Recycling data is based on information provided on quarterly reports submitted to the CT DEP by CT solid waste facilities permitted to process source separated recyclable items, CT regional solid waste transfer stations permitted to transfer recyclables, and the Annual Municipal Recycling Reports submitted to the CT DEP.
- The tonnage of leaves or other yard waste recorded as being recycled at municipal sites is usually estimated on the basis of cubic yards. The reliability of the conversion factor may be affected by the moisture content of the leaves and other material.
- An estimate of the amount of yard waste and food waste backyard composted and the amount of grass “grasscycled” is based on descriptions in the Annual Municipal Recycling reports of municipal or regional programs to promote those activities.
- Recycling tonnages generally **do not** include glass, metal, and plastic recycled through the Connecticut bottle deposit law infrastructure.
- Tonnages of non-residential material recycled **are generally under-reported**.
 - Recycling tonnages **do not** include: most of the commercially recycled scrap metal, automobile scrap metal, waste oil recycled by businesses or garages, or most of the storage batteries which are recycled through the Connecticut storage battery deposit infrastructure.
 - Recycling tonnages generally **do not** include material backhauled by retail chains to out-of-state distribution centers for recycling or any other recyclable material which does not pass through a permitted CT solid waste/recycling facility.

- Tonnage of landclearing and demolition material recycled is not included in the MSW statistics
- Tonnages of material reported as “recycled” reflect the amount of MSW reported collected for recycling, or, in the case of bottles, cans, and paper the amount reported marketed to brokers, beneficiators, or end users by Connecticut recycling processing facilities. ***Recycling tonnages do not necessarily reflect the amount actually used to make products.*** For example, the amount of residue generated at and disposed by secondary processing facilities (e.g. glass beneficiators) and the amount of residue and unusable materials disposed by end users (e.g. paper mills) or brokers is not reflected in the recycling statistics.
- Material used as alternative daily landfill cover material is not considered recycled.
- Material (other than waste oil) burned for energy is not considered recycled.

MSW Disposal Data Qualifiers

- Disposal data is based on information provided on quarterly reports submitted to the CT DEP by Connecticut permitted solid waste facilities including resource recovery facilities (waste-to-energy facilities), landfills, solid waste transfer stations, recycling facilities (residue), C&D VRPs (MSW separated out from C&D waste and disposed), and annual municipal recycling reports submitted to the CT DEP.
- Data regarding MSW hauled directly out-of-state for disposal is not currently reported to DEP. Therefore, there may be additional tonnages of MSW disposed that is not included in the CT MSW stats.
- Tonnages of MSW disposed do not always include the tonnage of disposed bulky MSW (furniture, carpets, etc.) which is often reported to DEP as "bulky waste" or “construction and demolition (C&D)” waste.
- MSW disposal figures represent residential and non-residential disposal.