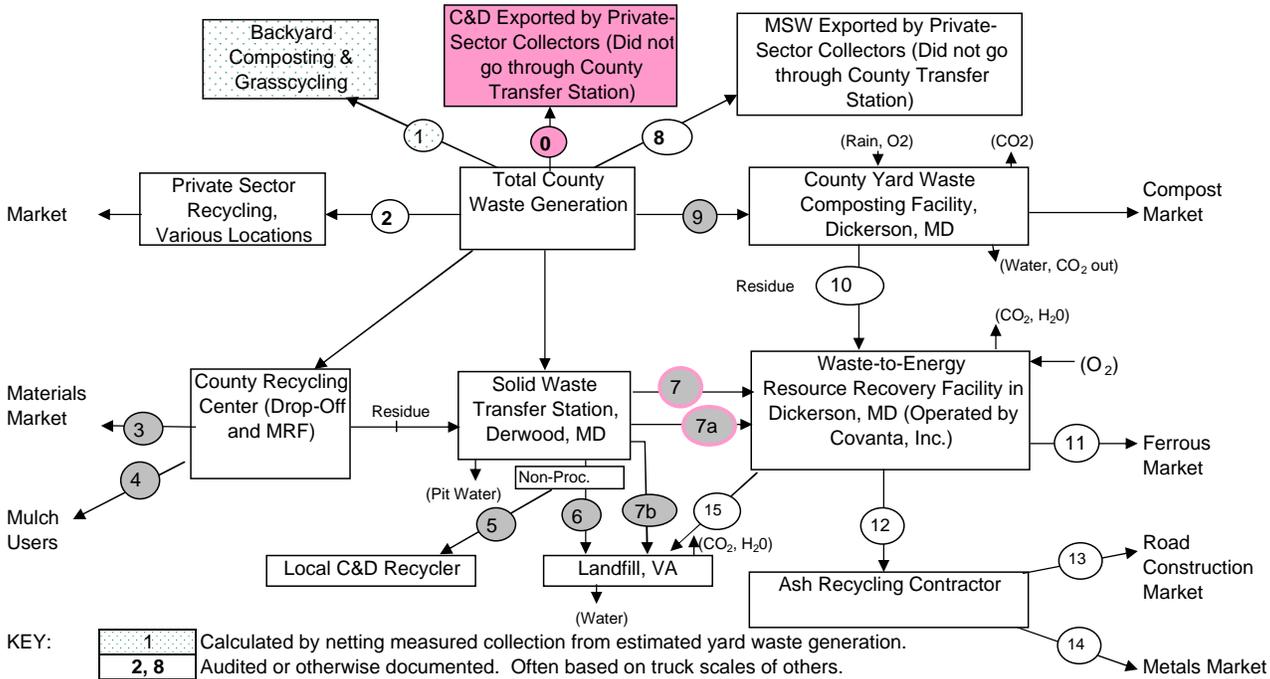


MATERIAL FLOW DIAGRAM Fiscal Year 2009



- KEY:**
- 1 Calculated by netting measured collection from estimated yard waste generation.
 - 2, 8 Audited or otherwise documented. Often based on truck scales of others.
 - Data is from State-certified County truck scales Owned by County.
 - Data is from State-certified truck scales, privately operated under contract to County.
 - This color indicates C&D waste, which is not MSW, not eligible for recycling and is not to be included in recycling rate calculation.*

Total Waste Generation, Including C&D Exported by Private Sector	1,332,969
County-Managed Waste (CMW) = 1 + 2 + 3 + 4 + 5 + 6 + 7+7a+7b + 8 + 9 =	1,230,775
MSW Generated (above less streams 5, 6 and 7a)	1,121,364

Stream No.	Material Description	Sources of Data	Total (tons/yr)	Comments
0	Construction & Demo Debris Private Export	Licensed Collector Reports under ER 92-59	102,193	Not County-managed and not eligible for recycling
1	Yard Waste Source Reduction	Calculated w/ estimates & measurements	62,475	17.5% of MSW less leakage less yard waste facility tons
2	Recycled via non-County Facilities	Collector, Processor, Business & Self-Hauler Rpts.	221,631	Filtered to avoid double-counting
3	County Recycling Facility Material Sales	County TS & MRF Scales, Outbound	90,720	Outgoing to Market from County Recycling Center
4	Mulch Loaded Out From TS	County Transfer Station (TS) Scale Records	39,754	Scaled Out As Taken to Mulch Preserve Locations
5	Non-Processibles Recycled**	County TS Scale Out Records	23,554	
6	Non-Processibles Land filled**	County Trans. Stat'n. & Covanta Scale Records	33,265	
7	Loaded on Rail to RRF (MSW burned)	Covanta Scales as Loaded	487,814	Total Tons Loaded on Rail to RRF Net of 7a
7a	Loaded on Rail to RRF (C&D Burned)	County Transfer Station (TS) Scale Records	52,593	In-Bound C&D less Outbound Non-Processibles Landfilled
7b	By-pass (Accepted Processible Land filled)	County TS Scale Out Records	-	
8	Refuse Disposed Out of County	Audited 6-Mo. Hauler Reports	151,041	Private Sector MSW Collection not delivered to County TS
9	All Incoming Leaves and Grass	Compost Facility & TS Scale Records	67,928	Includes 0 to Backup Composters
10	Composting Residue to RRF	Covanta Scale Records	-	
11	Ferrous recovered at RRF	Covanta Scale Records	12,862	
12	Ash Loaded to Ash Recycling Contractor	No ash recycling at this time.	-	No ash recycling at this time.
13	Non-Metal Outgoing from ash Recycler	No ash recycling at this time.	-	No ash recycling at this time.
14	Metals (Fe, Cu, Brass, Coins)	No ash recycling at this time.	-	No ash recycling at this time.
15	All ash not recycled	Covanta Scale Records	160,023	

Recycling Rate Calculations		Numerator	Denominator	Rate
County Recycling Rate	$(1 + 2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 5 - 6 - 7a) =$	495,371	1,121,364	44.2%
County Recycling Rate "Without Ash"	(Same as above but without Stream 13)	495,371	1,121,364	44.2%
State Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 1 - 5 - 6 - 7a) =$	426,457	1,052,462	40.5% ***
State Recycling & Reduction Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (CMW - 1 - 5 - 6) + 5.0% =$	426,457	1,052,462	45.5% ***
EPA Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 14) / (CMW - 1 - 5 - 6 - 7a) =$	426,469	1,052,462	40.5% ***

- Notes:**
- ** Nonprocessibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.
 - *** For State and EPA methods, numerator and denominator exclude motor oil
- Nomenclature:**
- "C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.
 - "CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.
 - "MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.
 - "TS" stands for the County's "Transfer Station", located in Derwood, Maryland, just south of Gaithersburg.