



Solid Waste & Recycling Collection

2009 Solid Waste Management Update

Waste Collection

This update will focus on the level and type of solid waste collection, processing and recycling methods available throughout the State. How these services are provided, or even if, depends greatly upon a community's size, density and demographic profile. The data contained in this report is obtained mainly from the Annual Solid Waste Management Survey and Full Cost Report. This data is used to acquire an over-all "annual snapshot" of solid waste and recycling activities in the State. Before applying any analysis to this data it should be noted that annual response rates vary greatly and may contribute to the variations in trends.

In the table entitled *Residential Waste & Recyclables Collection* the changing role of local governments as solid waste collection service providers is highlighted. One trend appears to be the decreasing availability of recycling services. In FY 2006 66% of local governments who provided or arranged for residential waste collection for their residents, also made recycling services available, in FY 2009 this number fell slightly to 65%. However, collections for individual commodities has dropped off significantly; see the tables on page C-3 for details.

Local governments can partner with the private sector to manage the waste generated within their communities by using permits, ordinances, franchise agreements, and/or contracts. Permits and ordinances governing the collection of solid waste are typically the least restrictive tools local governments use to manage solid waste collection in their community. Collection ordinances typically establish general standards by which a private sector service provider must operate. Franchise agreements, either exclusive or open, generally establish a minimum level of services that must be provided by all service providers and usually stipulate the specific operating standards. A contract between a local government and private waste service provider provides the greatest degree of management control over the waste stream, with the local government setting forth specific performance measures and standards to be met by both parties.

The number of local governments reporting they use ordinances fell slightly (373 in FY 2007 to 362 in FY 2009). This drop is likely due to slightly reduced reporting for FY 2009. Percentage-wise, ordinance use has hovered in the mid-50% range for several years.

As can be seen in the *Residential Waste and Recyclables Collection* table (C-1), the types of residential solid waste collection services range from "green box" or Dumpster drop-off service to curbside or backdoor pick-up. One trend DCA has been tracking for several years is the use of Dumpsters. They are often placed in unsupervised areas, usually in rural communities, for trash collection and frequently become dumping grounds for everything from household trash to disabled vehicles, tires, and animal carcasses. They can become an eyesore in a community and attract waste from neighboring jurisdictions. In 1994, 74 cities and 99 counties reported using them for residential waste collection. In FY 2009, just 21 cities and 21 counties reported using green boxes. This steady decline is direct evidence of improving waste management in the state.

Private/Public Partnerships for Residential Waste Collection FY 2007 - 2009						
	2007		2008		2009	
	City	County	City	County	City	County
Private collection does not exist	199	58	199	58	181	60
Issue permit or license	68	41	69	41	68	37
Local ordinance	278	95	279	95	272	90
Franchise agreement	149	42	150	42	141	40
Governments contract	274	64	275	64	263	64
Open competition – no local government oversight	151	74	151	74	153	72

Yard Trimmings Management FY 2007 - 2009						
	2007		2008		2009	
	City	County	City	County	City	County
Promote home composting	22	29	28	21	26	29
Provide for collection and disposal	326	56	304	45	304	45
Collection Options						
Staffed drop-off facilities	21	28	12	31	14	27
Unstaffed drop-off facilities	10	3	10	3	6	2
Curbside collection	302	21	295	17	297	21
Accepted at landfill/transfer station	23	31	15	24	11	20



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Recyclables Collection

During FY 2009, 385 local governments reported they provided or arranged for residential recycling services in their communities. As can be seen in the *Residential Recycling Services Providers* graph, the strong tradition of public, private, and non-profit partnerships used to provide recycling services throughout Georgia continues, however it appears that the public sector maybe taking a stronger role in providing collection services.

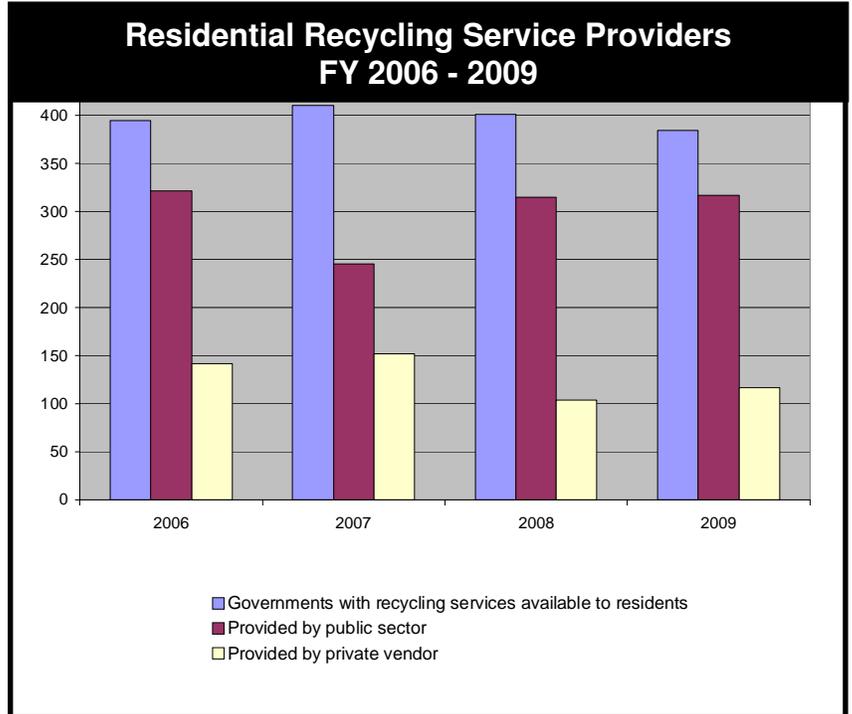
The number of local governments whose residents have access to recycling services has dropped off after making steady gains through the 2000s. The recycling industry is not immune from the economic recession, and commodity prices dropped in the fall of 2008 as global demand slumped. Some local governments, having grown accustomed to the revenue their recycling programs brought, cut collections. Since the public sector recovery will likely lag behind the private sector, Georgia will once again see our strong end-use markets clamoring for more material from a supply chain disrupted at the local level.

As shown in the *Number of Jurisdictions Collecting Materials for Recycling* tables on page C-4, there has been a steady increase in the number of local governments making residential recycling services available in their jurisdictions. Nationally and regionally, market prices for recycled materials have risen steadily. Over the past year we have seen a stabilization of the price for recycled materials. This price stabilization along with local residents demand has prompted local governments to add recycling services and to increase the number of materials they accept in their program.

This report does not address the scale of the individual local recycling operations, which would be difficult to quantify. Rather, it focuses upon the level of recycling services being offered throughout the state. Since 1992, newspaper has been reported as the residential recyclable material most widely collected in Georgia, followed by aluminum cans. During FY 2008, the most popular commodities recycled from residences were newspaper (307 jurisdictions reporting collection); aluminum (310); and PET (# plastic, 244.) It should be noted that there was a decrease in the number of jurisdictions collecting these materials.

We will continue to monitor this decrease.

The tables on page C-4 tally the number of local governments collecting commercial and residential materials for recycling.



Processing of Residential Recyclables FY 2007 - 2009

	2007		2008		2009	
	City	County	City	County	City	County
Source-separated	77	92	74	71	72	65
Commingled	31	13	78	21	86	27
Both	9	8	23	20	23	17



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Recyclables Processing

In FY 2009 137 local governments reported processing residential recyclables as source separated materials, or reported that they collect source-separated materials from their customers. Source-separated means the materials are separated before being collected, typically by the consumer. For example, a homeowner may have to place glass, plastic and metal in separate containers before collection. Commingled collection means the consumer places all the material in one container and the material is sorted after collection, often by paid staff, inmates or probationers. The chart below labeled 'Processing of Residential Recyclables' reflects Georgia's shift toward single-stream processing. While source-separated processing fell from 169 local governments in 2007 to 137 in 2009, single-stream processing rose from 44 to 113 local governments.

Georgia continues to have adequate collection and processing capacity for recyclable material; the demand for more material remains constant.

Transfer Stations

With fewer, more regional-sized landfills in the state and a wide array of solid waste collection programs, solid waste transfer stations continue to be a popular method of streamlining solid waste collection services. Transfer stations are especially effective when collection routes are farther than 50 miles from a landfill. Combining several conventional rear-loader garbage truck loads into a single tractor-trailer for the trip to the landfill saves fuel costs, vehicle wear and tear, and means fewer trucks can service more customers. Only 70 counties reported that they or their contractors used transfer stations for the collection or disposal of residential waste in FY 2005. By FY 2009, 84 counties and 108 cities or their contractors were using transfer stations to manage residential waste.

	City	County
2006	157	72
2007	157	77
2008	106	82
2009	108	84

	2006	2007	2008	2009
Automobile components				
tires	142	127	224	108
auto batteries	100	88	167	81
antifreeze	21	24	78	23
motor oil	95	100	187	79
oil filters	28	25	75	29
Metals				
aluminum	452	463	448	310
steel cans	226	228	289	160
scrap metal	208	204	294	173
aerosol cans	39	35	101	39
Paper				
newspaper	509	507	492	307
magazines	378	381	430	266
corrugated cardboard	368	386	431	254
phone books	322	324	415	233
paper board	72	105	293	148
other paper	236	253	339	200
Misc.				
#1 plastic	360	363	378	244
#2 plastic	311	324	348	214
other plastic	69	72	238	99
glass	303	311	361	199
white goods	225	222	324	192
Christmas trees	262	254	363	206
C&D materials	48	45	0	37
agricultural chemical containers	10	8	37	12
electronics	76	102	221	119
Household Hazardous Waste				
paint	29	27	93	44
cleaning products	2	0	44	17
pesticides	4	4	19	8
other	12	6	65	29

	2006	2007	2008	2009
Automobile components				
tires	54	47	31	24
auto batteries	38	13	26	23
motor oil	36	14	24	24
Metals				
aluminum	196	187	74	83
scrap metal	94	94	49	52
Paper				
newspaper	254	252	69	83
magazines	84	67	48	75
corrugated cardboard	177	174	83	88
white paper	66	66	*	*
phone books	71	71	60	69
other paper	50	31	35	54
Misc.				
plastic	181	162	*	*
glass	57	47	56	54



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Yard Trimmings

Georgia banned yard trimmings from lined Municipal Solid Waste (MSW) landfills in 1996, as part of an effort to extend landfill disposal capacity. Effective September 1st 1996, each city, county and solid waste management authority was required to impose restrictions on yard trimmings generated in or disposed within their jurisdiction. The restrictions required that yard trimmings:

- Not be placed in or mixed with municipal solid waste;
- Be sorted and stored for collection to facilitate composting or other handling;
- To the maximum extent feasible be sorted, stockpiled or chipped for composting or used as a mulch or for other beneficial purposes; and
- Be banned from disposal at MSW disposal facilities having liners and leachate collection systems.

The number of local governments providing for the collection and disposal of yard trimmings increased from 291 in FY 2006 to 349 in FY 2009. The number providing the service themselves has increased from 253 in FY 2006 to 291 in FY 2009. The type of collection service options ranged from accepting yard trimmings at solid waste management facilities like a solid waste transfer station to curbside collection programs.

Annually, DCA surveys local governments to determine how they collect, process and use yard trimmings generated within their communities. During FY 2009, 26 cities and 29 counties reported actively promoting waste minimization practices such as home composting or beneficial reuse of yard trimmings. During FY 2009, 304 cities and 45 counties reported

collecting yard trimmings for diversion from MSW landfills. It is not surprising, given lot sizes and population densities, that cities lead the way in providing yard trimmings collection services. Most local governments also reported that they provided the collection services with just a few indicating they contracted with a private vendor to collect yard trimmings. In many areas, especially urban and suburban communities, the visible result of the yard trimmings ban has been the presence of large paper bags of leaves and grass at curbsides. Collection of yard trimmings in paper bags enables them to be ground into a mulch or feedstock for composting. The majority of local governments who reported collecting yard trimmings either ground or shredded the collected material for use as mulch, however 75 local governments reported disposing the collected materials into an inert landfill. Twenty-five cities report burning yard trimmings. Composting and chip into mulch were also reported as common processing methods.

Yard trimmings, when processed properly, have numerous beneficial uses in a community. The use of compost and mulch is extremely beneficial for slowing storm-water runoff and retaining moisture around plants. Many local governments use processed yard trimmings as mulch for their landscaping and civil engineering applications or report offering the processed yard trimmings to their citizens for residential landscaping.

Yard Trimmings Management FY 2007 - 2009						
	2007		2008		2009	
	<u>City</u>	<u>County</u>	<u>City</u>	<u>County</u>	<u>City</u>	<u>County</u>
Promote Home Composting and Beneficial Reuse	22	29	28	21	26	29
Provide for collection and disposal	326	56	304	45	304	45
Collection						
Not available	189	96	203	98	193	100
Your government	245	8	254	36	252	30
Another government	12	9	4	0	6	0
Solid Waste Authority	7	8	1	1	0	2
Private vendor via individual subscription	8	17	8	0	8	0
Private vendor via government contract	36	9	35	5	35	6
Collection Options						
Staffed drop-off facilities	20	29	12	31	14	27
Unstaffed drop-off facilities	10	3	10	3	6	2
Curbside collection	277	22	295	17	297	12
Accepted at landfill/transfer station	23	54	15	24	11	12
Other	20	29	12	31	18	33
Processing Methods						
Composting	35	9	9	1	10	1
Solid waste landfill	42	5	40	1	35	2
Inert landfill	104	30	63	16	64	11
Grind/chip into mulch	158	30	99	12	91	14
Burning	26	0	21	0	25	0
Other	0	0	10	1	6	1
Give away	159	16	73	0	72	0
Sell	11	3	2	0	5	0
Used by local government	48	17	7	0	4	0
Becomes property of private contractor	39	21	15	0	15	17