



# Solid Waste & Recycling Collection

## 2008 Solid Waste Management Update

### Waste Collection

The primary objective of waste management is to protect the public and environment from potential harm. The traditional role of government in solid waste management is the creation and enforcement of regulation to ensure the safety of the public and environment. A historical as well as a futuristic view is necessary to be able to enact and enforce relevant effective regulation. One way of acquiring a historical and futuristic view is by using a set of metrics that captures and analyzes the key indicators of a solid waste management program. The Annual Solid Waste Management Survey and Full Cost Report provide us with information on some of the key indicators of solid waste management programs throughout the State.

This update will focus on the level and type of solid waste collection, processing and, recycling methods available throughout the State. The level and type of solid waste, recycling and yard trimmings collection services provided throughout the state varies greatly depending 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. Many local governments are now "providing for" rather than "arranging for" solid waste collection services. One potential trend appears to be the increasing 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 2008 this number increased to 79%.

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.

<b>Residential Waste and Recyclables Collection FY 2006 - 2008</b>			
	2006	2007	2008
No. of local governments responding to Solid Waste Management Survey	631	643	663
<b>Solid Waste Service Providers</b>			
Local governments providing/arranging for residential waste collection	593	640	509
Provided by public sector	335	347	429
Provided by private sector	356	293	214
<b>Types of Residential Programs</b>			
Curbside/backdoor			
City	436	448	370
County	66	71	45
Staffed Drop-off			
City	42	21	43
County	80	57	78
Unstaffed Drop-off			
City	40	26	22
County	43	32	14
Dumpsters (Green box)			
City	23	20	22
County	25	17	27
<b>Recycling Service Providers</b>			
Local governments making residential recycling services available	395	408	401
Provided by public sector	264	290	315
Provided by private sector	77	112	104
Provided by non-profit organization	80	80	108

<b>Private/Public Partnerships for Residential Waste Collection FY 2006 - 2008</b>						
	2006		2007		2008	
	City	County	City	County	City	County
Private collection does not exist	181	59	199	58	199	58
Issue permit or license	57	37	68	41	69	41
Local ordinance	267	84	278	95	279	95
Franchise agreement	142	41	149	42	150	42
Governments contract	260	63	274	64	275	64
Open competition – no local government oversight	169	72	151	74	151	74



## Solid Waste & Recycling Collection 2008 Update

The number of local governments reporting they use ordinances continues to increase (351 in FY 2006 to 374 in FY 2008). The wording of this question as well as the section of the survey in which the question was asked was changed in FY 2005. We will continue to monitor the trending of this question in the future.

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 the Department of Community Affairs 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. The number of local governments using green boxes for residential waste collection has dwindled. In 1994, 74 cities and 99 counties reported using them for residential waste collection. In FY 2008, just 22 cities and 27 counties reported using green boxes.

### Yard Trimmings Collection

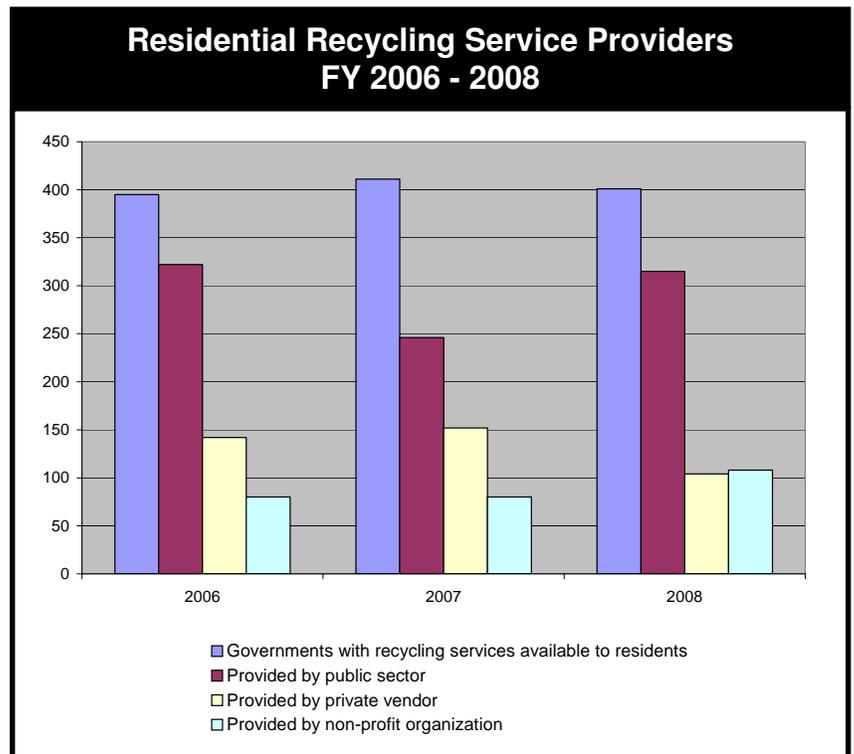
The number of local governments reporting that they provide for the collection and disposal of yard trimmings increased from 291 in FY 2006 to 349 in FY 2008. The number of local government reporting they provide the service has increased from 253 in FY 2006 to 290 in FY 2008. The type of collection service options ranged from accepting yard trimmings at solid waste management facilities like a solid waste transfer station to curbside collection programs.

Yard Trimmings Management FY 2006 - 2008						
	2006		2007		2008	
	City	County	City	County	City	County
Promote home composting and grasscycling	25	25	22	29	28	21
Provide for collection and disposal	258	33	326	56	304	45
<b>Collection Options</b>						
Staffed drop-off facilities	19	28	21	28	12	31
Unstaffed drop-off facilities	9	3	10	3	10	3
Curbside collection	294	22	302	21	295	17
Accepted at landfill/transfer station	21	32	23	31	15	24

### Recyclables Collection

During FY 2008, 401 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 increased slightly during the last three years. Collection programs for paper, beverage containers and plastics continue to rise. It appears that cities and counties are expanding collection programs at about the same rate. This increase in programs may be linked to the rise in prices for recyclable commodities. What is notable is the increase in the number of Counties who reported collecting other





## Solid Waste & Recycling Collection 2008 Update

Household Hazardous Waste.

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 (492 jurisdictions reporting collection); aluminum (448); corrugated cardboard (431); magazines (430); and Phone books (415). 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.

### Recyclables Processing

In FY 2008 145 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.



Processing of Residential Recyclables FY 2006 - 2008						
	2006		2007		2008	
	City	County	City	County	City	County
Source-separated	79	97	77	92	74	71
Commingled	46	14	31	13	78	21
Both	6	9	9	8	23	20



## Solid Waste & Recycling Collection 2008 Update

Number of Jurisdictions Collecting Commercial Materials for Recycling by Type FY 2005 - 2008				
	2005	2006	2007	2008
<b>Automobile components</b>				
tires	62	54	47	31
auto batteries	44	38	13	26
motor oil	50	36	14	24
<b>Metals</b>				
aluminum	248	196	187	74
scrap metal	106	94	94	49
<b>Paper</b>				
newspaper	293	254	252	69
magazines	189	84	67	48
corrugated cardboard	202	177	174	83
white paper	98	66	66	*
phone books	163	71	71	60
other paper	92	50	31	35
<b>Misc.</b>				
plastic	214	181	162	*
glass	139	57	47	56

Number of Jurisdictions Collecting Residential Materials for Recycling by Type FY 2005 - 2008				
	2005	2006	2007	2008
<b>Automobile components</b>				
tires	117	142	127	224
auto batteries	89	100	88	167
antifreeze	18	21	24	78
motor oil	66	95	100	187
oil filters	18	28	25	75
<b>Metals</b>				
aluminum	292	452	463	448
steel cans	118	226	228	289
scrap metal	124	208	204	294
aerosol cans	16	39	35	101
<b>Paper</b>				
newspaper	344	509	507	492
magazines	269	378	381	430
corrugated cardboard	280	368	386	431
phone books	202	322	324	415
paper board	111	72	105	293
other paper	172	236	253	339
<b>Misc.</b>				
#1 plastic	247	360	363	378
#2 plastic	208	311	324	348
other plastic	52	69	72	238
glass	180	303	311	361
white goods	246	225	222	324
Christmas trees	253	262	254	363
C&D materials	51	48	45	0
agricultural chemical containers	15	10	8	37
electronics	12	76	102	221
<b>Household Hazardous Waste</b>				
paint	42	29	27	93
cleaning products	0	2	0	44
pesticides	4	4	4	19
other	19	12	6	65

### 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 2008, 82 counties or their contractors were using transfer stations to manage residential waste.

Use of Solid Waste Transfer Stations FY 2005 - 2008		
	City	County
2005	153	70
2006	157	72
2007	157	77
2008	106	82



## Solid Waste & Recycling Collection 2008 Update

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 1<sup>st</sup> 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.

Annually, DCA surveys local governments to determine how they collect, process and use yard trimmings generated within their communities. During FY 2008, 28 cities and 21 counties reported actively promoting waste minimization practices such as home composting or beneficial reuse of yard trimmings. During FY 2008, 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 79 local governments reported disposing the collected materials into an inert landfill. 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.

<b>Yard Trimmings Management FY 2006 - 2008</b>						
	<b>2006</b>		<b>2007</b>		<b>2008</b>	
	City	County	City	County	City	County
Promote Home Composting and Beneficial Reuse	25	25	22	29	28	21
Provide for collection and disposal	258	33	326	56	304	45
<b>Collection</b>						
Not available	178	96	189	96	203	98
Your government	242	76	245	8	254	36
Another government	17	22	12	9	4	0
Solid Waste Authority	8	11	7	8	1	1
Private vendor via individual subscription	11	24	8	17	8	0
Private vendor via government contract	35	11	36	9	35	5
<b>Collection Options</b>						
Staffed drop-off facilities	16	32	20	29	12	31
Unstaffed drop-off facilities	10	8	10	3	10	3
Curbside collection	240	16	277	22	295	17
Accepted at landfill/transfer station	21	44	23	54	15	24
Other	8	6				
<b>Processing Methods</b>						
Composting	48	18	35	9	9	1
Solid waste landfill	22	8	42	5	40	1
Inert landfill	154	92	104	30	63	16
Grind/chip into mulch	183	76	158	30	99	12
Own a chipper/shredder	143	29	144	17	0	0
Contract out chipping/shredding	31	33	47	21	0	0
Use another local government's chipper/shredder	18	9	21	3	0	0
Burning	24	4	26	0	21	0
Other	23	6	0	0	10	1
<b>Beneficial Use</b>						
Give away	178	68	159	16	73	0
Sell	8	8	11	3	2	0
Used by local government	97	41	48	17	7	0
Becomes property of private contractor	39	15	39	21	15	0