



Solid Waste & Recycling Collection

2007 Solid Waste Management Update

Waste Collection

Solid waste management is essential to reduce the harmful effect of waste on our health, environment and to recover valuable resources from it. 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 in FY 2004 there was a significant drop in the response rate (from 93% in FY 2003 to 79% in FY 2004). It is believed that the switch to the online reporting system is the primary reason for the significant drop in the response rate. Statistically this is the first year of reliable data collection since returning to a significant response rate. As a result this data should only be used for primary analysis.

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 2004 91% of those responding to the survey indicated that they provided or arranged for recycling services for their residents, in FY 2006 this number increased to 99%. It should be noted that this trend can not be validated until two more years of data is collected.

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 continues to increase (300 in FY 2004 to 351 in FY 2006). Since this is only the second year of data collection since the wording of the question as well as the section of the survey in which the question was asked has changed, it would be premature to establish this as a trend.

Residential Waste and Recyclables Collection FY 2004 - 2006			
	2004	2005	2006
No. of local governments responding to Solid Waste Management Survey	546	631	643
Solid Waste Service Providers			
Local governments providing/arranging for residential waste collection	501	593	640
Provided by public sector	336	335	347
Provided by private sector	379	356	293
Types of Residential Programs			
Curbside/backdoor			
City	374	436	448
County	60	66	71
Staffed Drop-off			
City	44	42	21
County	95	80	57
Unstaffed Drop-off			
City	17	40	26
County	25	43	32
Dumpsters (Green box)			
City	27	23	20
County	49	25	17
Recycling Service Providers			
Local governments making residential recycling services available	390	395	408
Provided by public sector	266	264	290
Provided by private sector	67	77	112
Provided by non-profit organization	57	80	80

Private/Public Partnerships for Residential Waste Collection FY 2004 - 2006						
	2004		2005		2006	
	City	County	City	County	City	County
Private collection does not exist	158	55	178	59	181	59
Issue permit or license	48	31	56	34	57	37
Local ordinance	230	70	251	79	267	84
Franchise agreement	103	36	134	40	142	41
Governments contract	202	53	248	60	260	63
Open competition – no local government oversight	139	66	167	72	169	72



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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 recent years. In 1994, 74 cities and 99 counties reported using them for residential waste collection. In FY 2006, just 20 cities and 17 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 fell from 422 in FY 2004 to 382 in FY 2006. This apparent decrease may be attributable to local governments using private contractors to arrange for this service. The number of counties reporting they provide collection services has increased from 33 in FY 2005 to 56 in FY 2006. From the information reported it appears that this increase is occurring in the curbside

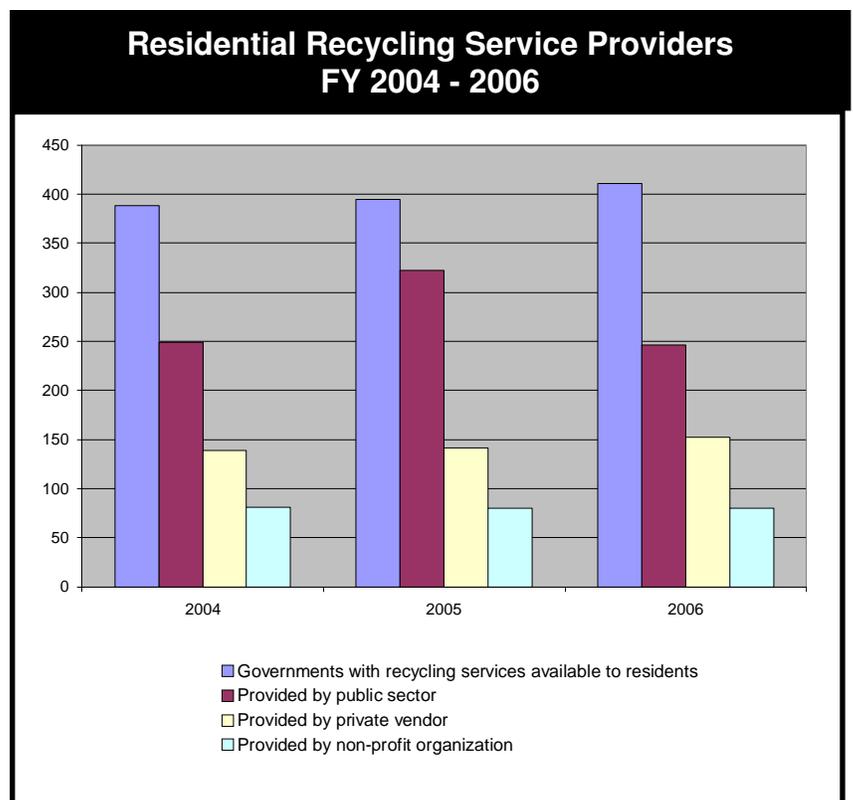
programs. The type of collection service options ranged from accepting yard trimmings at solid waste management facilities like a solid waste transfer station to curbside collection programs.

Yard Trimmings Management FY 2004 - 2006						
	2004		2005		2006	
	City	County	City	County	City	County
Promote home composting and grasscycling	24	27	25	25	22	29
Provide for collection and disposal	365	57	258	33	326	56
Collection Options						
Staffed drop-off facilities	14	16	19	28	21	28
Unstaffed drop-off facilities	9	3	9	3	10	3
Curbside collection	220	5	294	22	302	21
Accepted at landfill/transfer station	3	15	21	32	23	31
Other	13	3	16	6	18	7

Recyclables Collection

During FY 2006, 408 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.

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 jurisdictions who reported collecting special wastes such as electronic items.





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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 2006, the most popular commodities recycled from residences were newspaper (507 jurisdictions reporting collection); aluminum (463); corrugated cardboard (386); magazines (381); and #1 plastic (363). As the prices for recyclable glass increases local governments have added this material to their recycling programs.

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

Recyclables Processing

In FY 2006 169 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 2004 - 2006						
	2004		2005		2006	
	City	County	City	County	City	County
Source-separated	75	97	79	97	77	92
Commingled	32	12	46	14	31	13
Both	8	10	6	9	9	8
Unknown	52	34	32	21	27	34



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Number of Jurisdictions Collecting Commercial Materials for Recycling by Type FY 2002 - 2006					
	2002	2003	2004	2005	2006
Automobile components					
tires	89	88	62	54	47
auto batteries	70	71	44	38	13
motor oil	71	75	50	36	14
Metals					
aluminum	249	238	248	196	187
scrap metal	170	168	106	94	94
Paper					
newspaper	258	257	293	254	252
magazines	202	198	189	84	67
corrugated cardboard	257	253	202	177	174
white paper	190	177	98	66	66
phone books	176	168	163	71	71
other paper	153	148	92	50	31
Misc.					
plastic	353	326	214	181	162
glass	176	177	139	57	47

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 20 cities reported that they or their contractors used transfer stations for the collection or disposal of residential waste in FY 1995. By FY 2006, 157 cities or their contractors were using transfer stations to manage residential waste.

Use of Solid Waste Transfer Stations FY 2002 - 2006		
	City	County
2002	143	67
2003	146	70
2004	153	70
2005	157	72
2006	157	77

Number of Jurisdictions Collecting Residential Materials for Recycling by Type FY 2002 - 2006					
	2002	2003	2004	2005	2006
Automobile components					
tires	137	136	117	142	127
auto batteries	93	91	89	100	88
antifreeze	22	24	18	21	24
motor oil	101	93	66	95	100
oil filters	17	23	18	28	25
Metals					
aluminum	362	334	292	452	463
steel cans	165	157	118	226	228
scrap metal	212	214	124	208	204
aerosol cans	41	40	16	39	35
Paper					
newspaper	380	365	344	509	507
magazines	298	280	269	378	381
corrugated cardboard	314	287	280	368	386
phone books	241	234	202	322	324
paper board	129	132	111	72	105
other paper	234	206	172	236	253
Misc.					
#1 plastic	268	256	247	360	363
#2 plastic	244	255	208	311	324
other plastic	85	76	52	69	72
glass	266	251	180	303	311
white goods	250	239	246	225	222
Christmas trees	245	244	253	262	254
C&D materials	60	65	51	48	45
agricultural chemical containers	22	23	15	10	8
electronics	27	40	12	76	102
Household Hazardous Waste					
paint	21	24	42	29	27
cleaning products	8	10	0	2	0
pesticides	3	7	4	4	4
other	25	21	19	12	6

n/a: Question not asked on that year's survey

*Prior to the 2000 survey, DCA did not separate #1 and #2 plastics in its survey.



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Georgia banned yard trimmings from lined Municipal Solid Waste (MSW) landfills in 1996, as part of an effort to extend landfill disposal capacity. Effective Sept. 1, 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 2006, 22 cities and 29 counties reported actively promoting waste minimization practices such as home composting or beneficial reuse of yard trimmings. During FY 2006, 326 cities and 56 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 134 local governments reported disposing the collected materials into an inert landfill. Composting and burning 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 stormwater 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 2004 - 2006						
	2004		2005		2006	
	City	County	City	County	City	County
Promote Home Composting and Beneficial Reuse	24	27	25	25	22	29
Provide for collection and disposal	365	57	258	33	326	56
Collection						
Not available	137	86	178	96	189	96
Your government	308	54	242	76	245	8
Another government	18	12	17	22	12	9
Solid Waste Authority	7	6	8	11	7	8
Private vendor via individual subscription	8	20	11	24	8	17
Private vendor via government contract	19	12	35	11	36	9
Collection Options						
Staffed drop-off facilities	16	23	16	32	20	29
Unstaffed drop-off facilities	9	6	10	8	10	3
Curbside collection	220	15	240	16	277	22
Accepted at landfill/transfer station	19	39	21	44	23	54
Other	8	6	8	6		
Processing Methods						
Composting	46	12	48	18	35	9
Solid waste landfill	35	8	22	8	42	5
Inert landfill	177	94	154	92	104	30
Grind/chip into mulch	177	55	183	76	158	30
Own a chipper/shredder	146	20	143	29	144	17
Contract out chipping/shredding	35	33	31	33	47	21
Use another local government's chipper/shredder	17	9	18	9	21	3
Burning	24	0	24	4	26	0
Other	0	0	23	6	0	0
Beneficial Use						
Give away	180	56	178	68	159	16
Sell	8	7	8	8	11	3
Used by local government	112	26	97	41	48	17
Becomes property of private contractor	39	13	39	15	39	21