INTRODUCTION

The S.C. Solid Waste Management Annual Report is published annually by the S.C. Department of Health and Environmental Control (DHEC).

The report, which is required by the S.C. Solid Waste Policy and Management Act of 1991, is to be submitted to the Governor and General Assembly by March 15 of each calendar year reflecting activities of the previous fiscal year (FY). The report is to provide a comprehensive overview of solid waste management including: the amount and type of solid waste recycled, disposed of in landfills and incinerated; the progress of the state and each county towards meeting the state's recycling and waste disposal (reduction) goals; recommendations to the Governor and General Assembly for improving solid waste management; and any revisions to the state's solid waste plan.

This report focuses primarily on municipal solid waste (MSW). There are many types of solid waste, but South Carolina's recycling rate is measured only from the total amount of MSW generated (recycled + disposed of). See page 9 for more details. Other types of solid waste – construction and demolition debris, industrial waste and land-clearing debris – are addressed on a limited basis in this document (see page 61).

What is MSW? In South Carolina, MSW is the combined residential, commercial, institutional/non-profit and industrial packaging/ administrative waste generated. MSW includes paper, cans, bottles, food scraps, yard trimmings, packaging and other items (see Chart 2.1 for more examples). It does not include industrial pre-consumer process waste such as scraps and by-products from a manufacturing process, agricultural waste, hazardous waste, infectious waste, mining waste, radioactive waste and sewage sludge.

This report is based on data provided by counties and MSW facilities. Counties are required to provide recycling information for the previous FY to DHEC by October 1 annually. MSW landfills and MSW incinerators are required to report disposal information for the previous FY by October 15 annually. This report reflects MSW management activities for FY04 (July 1, 2003 to June 30, 2004).

There are several changes to this year's report beyond the focus on MSW. Another significant change is the length of this report. It is shorter for easier use and reference. Given that, additional information is available on the Web when you see this graphic. For the first time, some environmental impact equivalencies for recycling are provided for the state and each county. Finally, there is a section on Demonstration of Need (DON). DON is used to determine maximum allowable tonnage rates for solid waste disposal facilities.

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About this Report...

"The South Carolina Solid Waste Management Annual Report" for FY04 is published by DHEC's Division of Mining and Solid Waste Management.

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South Carolina Solid Waste Management Annual Report ■ FISCAL YEAR 2004

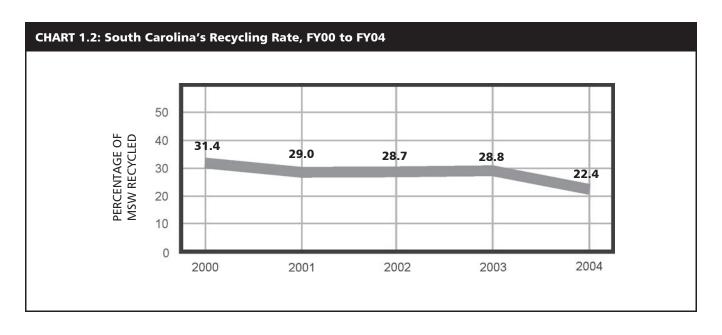
S.C. STATISTICS

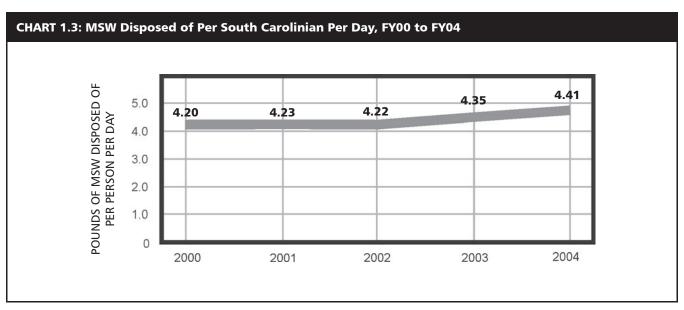
FISCAL YEAR (FY) 2004: JULY 1, 2003 – JUNE 30, 2004

	4,147,152		
Number of Counties in South Carolina	46		
MUNICIPA	L SOLID WASTE (MSW) ² MANAGEMENT		
RECYCLED			
DISPOSED OF IN MSW FACILITIES			
	3,111,627 tons		
Incinerator	227,802 tons		
TOTAL	4,305,345 TONS ³		
MSW RECYCLED			
	MSW RECYCLED		
COMMODITY	MSW RECYCLED AMOUNT COLLECTED		
Glass Metal	AMOUNT COLLECTED		
Glass Metal	AMOUNT COLLECTED 10,497 tons		
Glass Metal Paper Plastic	AMOUNT COLLECTED		
Glass Metal Paper Plastic Banned Items ⁴	AMOUNT COLLECTED 10,497 tons 135,980 tons 460,477 tons 16,020 tons 280,445 tons		
Glass Metal Paper Plastic Banned Items ⁴	AMOUNT COLLECTED		

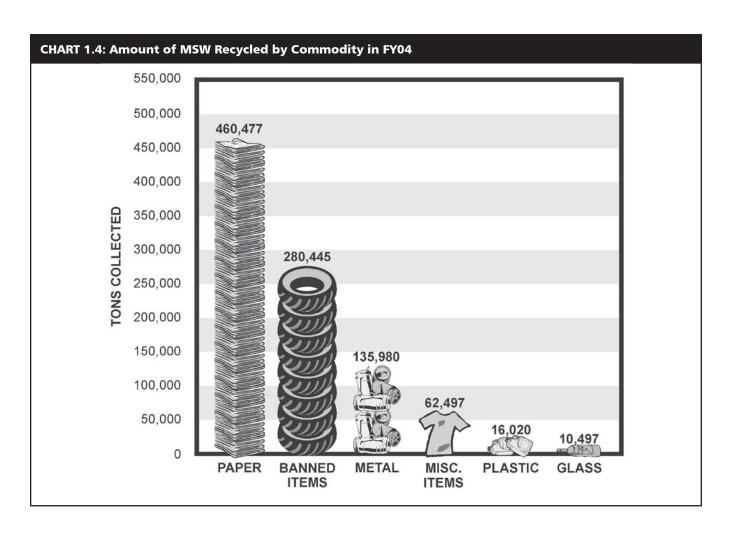
CHART 1.1: South Carolina's MSW Recycling & Waste Disposal (Reduction) Goals & Rates			
RECYCLING GOAL	35 percent of MSW by FY05		
RECYCLING RATE	22.4 percent for FY04		
WASTE DISPOSAL (Reduction) GOAL	3.5 pounds per person per day by FY05		
WASTE DISPOSAL (Reduction) RATE	4.4 pounds per person per day for FY04		

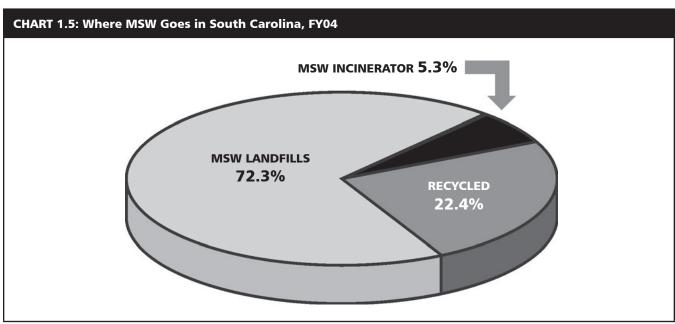
- 1. Population data is needed in order to determine recycling and disposal rates for the state. The latest figures for county and state population come from the S.C. Budget and Control Board estimates, last updated August 2004.
- 2. South Carolina's definition of MSW is the combined residential, commercial, institutional/non-profit and industrial packaging/ administrative waste generated. This includes paper, cans, bottles, food scraps, yard trimmings, packaging and other items.
- 3. This amount includes 131,164 tons of MSW that was generated in South Carolina but exported, and more importantly, does not include 1,530,256 tons of solid waste that was imported for disposal in S.C. MSW landfills.
- 4. Banned items include the following: appliances; lead-acid batteries; tires; yard trimmings; and land-clearing debris. While used oil also is a banned item, it is not considered MSW and is measured separately and can not be counted as part of the state's recycling rate.
- 5. Miscellaneous items include: antifreeze; consumer electronics; cooking oil; fluorescent bulbs; food waste (post-consumer only); hazardous household materials; latex paint; mattresses; textiles; used oil filters; wood packaging; other wood (such as furniture and cabinets); and other non-packaging products.













South Carolina Solid Waste Management Annual Report ■ FISCAL YEAR 2004

OVERVIEW

This report, which is required by the S.C. Solid Waste Policy and Management Act of 1991 (Act), provides an overview of the amount of municipal solid waste (MSW) recycled and disposed of in South Carolina for fiscal year (FY) 2004.

The Act established a comprehensive approach to managing solid waste. The Act, for example, set recycling and waste disposal (reduction) goals, required the development of a state solid waste plan as well as county plans, and provided advanced disposal fees on a number of items to fund all of the S.C. Department of Health and Environmental Control's (DHEC) solid waste programs – including all grant programs.

The Act also created DHEC's Office of Solid Waste Reduction and Recycling (Office) to provide technical assistance, education and outreach programs and grant funding to local governments, schools as well as colleges and universities.

Grant programs include solid waste, used motor oil, waste tire, college and university as well as school mini-grants. Since the grant program began in FY94, nearly \$40 million have been awarded including about \$1.5 million in FY04.

In addition, the Act also created the Recycling Market Development Advisory Council (RMDAC). DHEC funds the staff and activities of RMDAC. The mission of RMDAC is to assist in the development of markets in South Carolina for recovered materials and products with recycled content.

The Act also required county governments to report annually to DHEC the amount of MSW recycled within their county. Permitted solid waste facilities also are required to report the amount of waste disposed of at their facilities annually to DHEC.

The Act originally set a state recycling goal of 25 percent and a goal of reducing by 30 percent the amount of solid waste disposed of at MSW landfills and incinerators. Both rates were calculated by weight. Both were measured from the **total** amount of waste generated. Both were measured from a baseline of FY93 and were to be met by FY97. Both goals were met in FY96.

The Act was amended in October 2000 to reflect new state recycling and waste disposal (reduction) goals. The recycling goal was changed to 35 percent of the total MSW stream. The waste disposal (reduction) goal was changed to 3.5 pounds of MSW per person per day. Both of these goals are to be met by June 30, 2005.

The amendment also redefined what could be counted as MSW by adopting the U.S. Environmental Protection Agency's (U.S. EPA) definition with one exception – tire derived fuel. South Carolina includes that commodity when calculating its recycling rate while the U.S. EPA does not.



WHAT IS THE **DEFINITION OF MSW?**

MSW has numerous definitions – which result in making it difficult, if not impossible, to compare

recycling rates and disposal numbers between states.

South Carolina adopted the U.S. EPA definition in 2000 with the hope that other states would follow suit and comparisons could be made.

To date, South Carolina is unaware of any other state using the U.S. EPA definition. Given that, South Carolina has one of the most stringent definitions of MSW. For example, some states include construction and demolition debris as well as industrial waste when measuring their recycling

effort – thereby increasing their overall recycling rate. South Carolina does not.

South Carolina's definition of MSW is the combined residential, commercial, institutional/non-profit and industrial packaging/administrative waste

generated. This includes paper, cans, bottles, food scraps, yard trimmings, packaging and other items.

It does not include industrial pre-consumer process waste like scraps and by-products from the manufacturing process, construction and demolition debris, auto bodies, agricultural waste, mining waste and sewage sludge as well as hazardous, infectious and radioactive waste.

CHART 2.1: Sources & Examples of MSW			
SOURCES OF MSW	TYPICAL EXAMPLES OF MSW		
Residential (single- and multi-family homes)	Newspaper, clothing, packaging, cans and bottles, food scraps and yard trimmings		
Commercial (office buildings, retail and wholesale establishments and restaurants)	Old corrugated containers (OCC), office paper, yard trimmings and cafeteria waste (food scraps, disposable tableware, paper napkins, cans and bottles)		
Institutional (schools, libraries, hospitals and prisons)	Office paper, books, yard trimmings and cafeteria waste (food scraps, disposable tableware, paper napkins, cans and bottles)		
Industrial (packaging and administrative, but not process waste)	OCC, plastic film, wood pallets, office paper, and cafeteria wastes (food scraps, disposable tableware, paper napkins, cans and bottles)		

Definitions

PRE-CONSUMER WASTE: refers to materials generated in manufacturing processes such as manufacturing scrap and trimmings/cuttings. Also includes print over-runs, over issue publications (newspapers and magazines) and obsolete inventories.

POST-CONSUMER WASTE: refers to recovered materials that have been used as a consumer item (for example aluminum cans, plastic bottles, old newspapers and yard trimmings) and are diverted from municipal solid waste for the purpose of collection, recycling and disposal.

SOURCE: U.S. EPA, Measuring Recycling: A Guide for State and Local Governments (EPA530-R-97-011)

HOW MUCH MSW WAS GENERATED?

More than 4.3 million tons of MSW was generated in South Carolina in FY04 – a 9 percent decrease from the previous FY. Of that amount:

- 965,916 tons, or 22.4 percent, was recycled. By comparison in FY03, 1.3 million tons or about 28 percent was recycled.
- 227,802 tons, or 5.3 percent, was disposed of at a waste-to-energy facility (incinerator) in Charleston County; and
- 3,111,627 tons, or 72.3 percent, was disposed of at MSW landfills.

The FY04 recycling rate is down six percentage points from the year before and nearly 13 percentage points below the state's goal.

This rate also can be converted to pounds per person per day (p/p/d). In other words, South Carolinians recycled 1.3 p/p/d, which is the same as the national average according to the latest figures provided by U.S. EPA.

The amount of MSW disposed of increased slightly from 4.35 p/p/d in FY03 to 4.4 p/p/d in FY04. This rate has changed little in the past five years and remains above the state's waste disposal (reduction) goal of 3.5 p/p/d.

There is no question that South Carolina's MSW recycling rate has fallen. Why the decrease?

There are several factors contributing to the drop in the state's MSW recycling rate. They include: more accurate reporting by county governments combined with over reporting in earlier reports; an improved review of the county progress reports by DHEC; under reporting of recycling activities by businesses, schools and others; and a lack of participation by residents in local recycling programs. But clearly, the primary reasons for the drop in the recycling rate is more accurate reporting from counties combined with a more thorough review by DHEC of the annual county progress reports.

Consider that counties initially reported more materials recycled in FY04 than the previous FY. In fact, counties reported recycling 1.8 million tons of

materials in FY04 – up more than 500,000 tons from FY03.

But based on DHEC's extensive review, more than 900,000 tons of materials that were recycled were determined not to be MSW (or not generated in South Carolina) and therefore could not count towards the state's measured recycling rate. That is not to suggest that the materials were not recycled – only that they could not be counted towards the MSW recycling rate. If the 900,000-plus tons had been counted, the state's recycling rate would have been 36 percent – and South Carolina would have met its recycling goal one year before the deadline.

It appears that previous reports perhaps over reported MSW recycling. Again, this is not to suggest that the materials reported were not recycled, but they should not have been counted as part of the MSW recycling rate.

It is also important to note the recycling rate for the total amount of solid waste – not just MSW. More than 5 million tons or about 41.5 percent of the total solid waste generated was recycled in FY04. That figure clearly indicates the depth of recycling in South Carolina.

When the Act was amended in October 2000 to change the definition of how South Carolina measures its recycling rate, workshops were held with recycling coordinators to review what could and could not be included in their annual progress reports as MSW recycling efforts.

Five years later, there have been many staff changes within the counties as well as more DHEC staff working solely on the report. As a result, seven statewide meetings were held in FY04 with 32 recycling coordinators attending. These meetings went over, in detail, the types of recycling activities that can be measured as MSW. As a result, many materials that would have been reported as MSW recycling were not reported. When the DHEC review of the county progress reports was completed, there was an overall drop in the tonnages reported because much of what had been reported belonged in industrial processed waste or construction and demolition debris categories.

Under reporting of recycling activities remains a significant issue. First, there are several counties that only report their recycling activities but do not include commercial businesses, schools, colleges and universities as well as some industry. Occasionally, counties did not collect or report recycling activities of municipal and federal programs located in their county. State agencies accounted for about 6,800 tons of MSW recycled in FY04. But that total was not applied to the MSW recycling rate because of the difficulty of fairly attributing tonnages to specific counties (state agencies have hundreds of buildings throughout the state). See page 23 for more information.

Second, while residential efforts represent roughly one-third of the state's MSW recycling totals, county governments are the only group required to report. In contrast, business, industry and most schools are not required to report and therefore the number reporting tends to fluctuate from year to year. Most businesses do not report for a variety of reasons including the information being proprietary, not realizing that recycling tonnages are being collected and the fact that some counties are unwilling or unable to get from local businesses those tonnages that were recycled. In other words, whether a county

doesn't seek information or industry and business feel their numbers should be kept confidential, the numbers are not obtained and therefore not included in the recycling rate.

For example, most waste tires generated in South Carolina are sent to recycling companies by retailers that sell tires. The Office estimates that nearly 50 percent of the tires recycled in the state are not included in the county progress reports submitted to DHEC. If these tires had been included, an additional 27,000 tons could have been added to the state's FY04 MSW recycling tonnages. Doing so would have increased the state's recycling rate.

Participation – or lack thereof by residents – appears to be another significant issue. The state has a solid recycling infrastructure in place with 146 municipal curbside recycling programs, three counties that offer countywide curbside recycling programs as well as 606 drop-off recycling centers. But it appears apathy has settled on the public and recycling is not considered as important as it was in the early to mid-1990s. Still, considering all factors, this is probably the most accurate snapshot to date of the state's recycling and waste disposal efforts.

LEGISLATIVE SUMMARY

At the Federal level, there were amendments to the Resource Conservation and Recovery Act regarding MSW landfills and the Used Oil Standards.

Part 258 is the criteria for MSW landfills. Section 258.4 was added to Subpart A allowing the director of an approved state to issue research, development and demonstration permits for MSW landfills. Owners or operators proposing to use innovative and new methods may request a variance to the run-on control system, the liquids restriction and the final cover criteria listed in Part 258. Permits issued under this section shall not exceed three years and renewals may not exceed three years. The total term of the permit shall not exceed 12 years.

Part 279 was amended to address dilution of used motor oil containing polychlorinated biphenyls (PCBs). If the concentration of PCBs is below 50 parts per million (ppm) because of dilution, the used motor oil is regulated under 40 CFR Part 761 as a used motor oil containing PCBs at 50 ppm or greater. Part 279 also was amended to improve the tracking of on-specification used motor oil shipments.

During the 2004 Legislative Session of the S.C. General Assembly, there were no amendments to the Act or any of DHEC's regulations governing solid waste.

Only one local government reported making changes to their solid waste ordinance while 19 counties reported having an ordinance in place. These ordinances address such issues as litter control, fee changes, budgets, usage fees and transfer station access.

In addition, there were no revisions to the S.C. Solid Waste Management Plan in FY04. But county governments continue to update their plans.

RECOMMENDATIONS

 Increased participation is needed to meet the state's MSW recycling goal.

In a 2001 survey, the Office found that only one out of five South Carolinians described themselves (or their households) as heavy recyclers and 60 percent said they were light to moderate recyclers. Several years later, the lack of and/or under participation by residents in local recycling programs continues to be an issue.

EDUCATION: DHEC recommends that a new commitment be made to education in an effort to increase participation in recycling programs. New efforts should be made to reach all residents including non-recyclers. Educational materials should be provided in other languages. Incentives, if possible, should be considered. Non-traditional settings should be targeted including multi-family dwellings.

STAFFING: For local governments, this commitment means making recycling a higher priority. One way this can be achieved is by dedicating personnel solely to recycling efforts. In addition to recycling coordinators (required by law), recycling educator positions should be considered. By doing so, local educational efforts can be expanded – leading to increased participation.

FUNDING: Efforts should continue to secure adequate funding for local recycling programs – especially for traditional recyclables such as paper, plastics, metals and glass. Strategies for obtaining alternative funding sources to augment funding available from the Office's grant program should be developed by the state as well as local governments.

RESEARCH: DHEC recommends conducting research, assessing obstacles that hinder participation in recycling programs – away from home or at work. The use of single-serve beverage containers away from home presents a recycling dilemma. Research is needed to review current collection programs and make recommendations to increase recovery. The extent of business recycling also needs to be evaluated including who is recycling, what they are recycling and the amount. This evaluation also should include businesses that are not currently recycling to identify barriers. Other research also

should be conducted by local governments, trade associations and the recycling industry.

Policy changes are needed to meet the state's MSW recycling goal.

Increased participation can only go so far towards meeting the state's MSW recycling goal. Policy and legislative initiatives also should be explored to increase recycling efforts.

PAY-AS-YOU THROW: DHEC recommends local governments adopt the pay-as-you-throw concept – a fee-based solid waste management option – that encourages increased recycling and reduced disposal. In other words, residents pay less for solid waste services if they recycle more.

BANS: DHEC endorses the establishment of statewide and local disposal bans. Specific items like cardboard and glass beverage containers could be banned to improve the state's MSW recycling rate. Both materials are available in high volumes and have stable markets.

ELECTRONICS: DHEC supports RMDAC's efforts to establish the Electronic Equipment Recycling Program. The ever-increasing volume of discarded electronic equipment necessitates a comprehensive management plan. Local governments are encouraged to support RMDAC's efforts.

3. Market development efforts are needed to meet the state's MSW recycling goal.

To improve recycling, local governments need to increase the amount and variety of recyclables collected. This requires many efforts – including market growth.

MARKETS: RMDAC should continue to foster communication between end markets and those – including local governments and businesses – collecting recyclables. RMDAC also should raise awareness of market specifications.

BUY RECYCLED: Efforts should be made to promote the purchase of recycled content products in order to drive the demand for recyclable items from markets. RMDAC should take a lead role by compiling a list of manufacturers of recycled content products.



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RECYCLING EFFORTS

This section highlights the commodities that make up municipal solid waste (MSW) as defined by South Carolina. These commodities also form the basis for many of the state's recycling programs and the amounts collected are used to calculate the state's recycling rate.

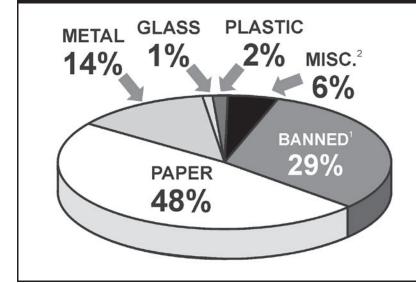
For each commodity, a definition and description are given, the recycling tonnages are provided for the past five years and an interpretation of the amount recycled in fiscal year (FY) 2004 is offered.

In addition, a chart showing the average price received for each commodity or subgroup in FY04 is provided. Again this year, pricing information was obtained from the progress reports submitted by counties. Between four and 10 counties, depending on the particular commodity, shared information on market prices. Various factors – quantity, quality, location and infrastructure – determine market prices.

Of the six categories that make up MSW (glass, metal, paper, plastic, banned and miscellaneous), only two (glass and paper) saw an increase in tonnages from FY03.







- 1. Banned items include the following: appliances; lead-acid batteries; tires; yard trimmings; and land-clearing debris. While used oil also is a banned item, it is not considered MSW, and as such, used oil recycling is measured separately and can not be counted as part of the state's recycling rate.
- Miscellaneous items include: antifreeze; consumer electronics; cooking oil; fluorescent bulbs; food waste (post-consumer only); hazardous household materials; latex paint; mattresses; textiles; used oil filters; wood packaging; other wood (such as furniture and cabinets); and other non-packaging products.

*COMMODITIES MEASURED BY WEIGHT

COMMODITY: GLASS

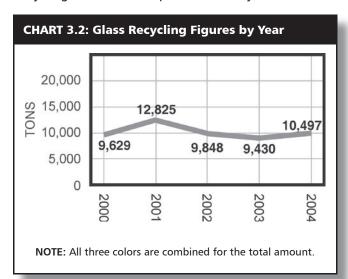
For the first time in three years, the amount of glass recycled increased in FY04 with 10,497 tons collected. While 90 percent of the glass recycled came from residential programs – both curbside and drop-off – a significant portion of the increase came from commercial businesses. This exemplifies the importance of businesses reporting their recycling efforts. In fact, all three colors of glass – brown, clear and green – saw an increase in FY04.

In addition, there also was a slight increase in the residential category. This can be directly correlated to the addition of glass to two county's recycling programs. Overall, 33 counties collect glass and of those only three do not collect green glass.

There are six counties that serve as host sites for glass collection. This allows smaller communities that don't generate a large enough volume to directly market it themselves to combine their glass with other programs. Currently, Darlington, Georgetown, Hampton, Horry, Lexington and York counties provide this host service.

Glass prices changed some over the past year with both clear and brown down slightly. And while it appears in Chart 3.4 that green glass has some value, it is worth noting that there is value only because some counties sell glass commingled for \$5 per ton, rather than separating the colors and trying to get a better price for clear and brown.

"South Carolina's supply of glass cullet has been stable and of good quality," according to the S.C. Recycling Market Development Advisory Council's

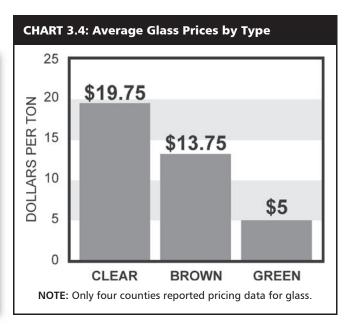


(RMDAC) 2004 Annual Report. "Fibres International says its South Carolina depot locations have been its most improved supply base, delivering increased volumes over 2003. Markets for all three colors are strong with most bottles being made going to the breweries throughout the Southeast."

For recycling purposes, glass is defined as containers like bottles and jars for drinks, food, cosmetics and other products. When recycled, container glass usually is separated into colors for conversion into new containers, construction materials or fiberglass insulation. This category does not include glass from windows, plates and drinking glasses.



CHART 3.3: Total Glass Recycled in Tons					
FY04 FY03 +/-					
Brown	2,574	2,152	+422		
Clear	3,081	2,713	+368		
Green	2,661	1,339	+1,322		
Mixed	2,181	3,226	-1,045		
TOTAL 10,497 9,430 +1,067					



COMMODITY: METAL

Metals saw an across the board decrease in each category for FY04, falling 73 percent to 135,980 tons. This is a direct result of the meetings held by the S.C. Department of Health and Environmental Control (DHEC) to assist recycling coordinators to better define what can and cannot be included as MSW recycling activities. As a result, many metals once counted – including those from industrial or construction and demolition activities as well as auto bodies – are no longer included in this report.

And while this is a significant decrease, it is more accurate in reflecting the MSW recycling efforts that are taking place across the state. Another reason for the decrease was a one-time event included in last year's figure. There was speculation about whether or not it would happen again in FY04. Clearly, it did not.

Another cause for the across-the-board drop in the metals category was the fact there was a significant amount reported in an incorrect category in FY03 that was changed in FY04.

CHART 3.5: Total Metal Recycled in Tons

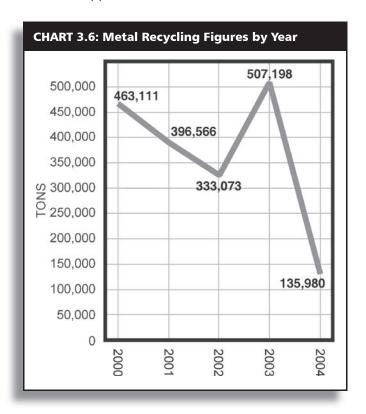
	FY04	FY03	+/-	
Aluminum	8,626	15,653	-7,027	
Steel	11,937	13,357	-1,420	
Ferrous	66,337	143,610	-77,273	
Non-ferrous	6,084	9,939	-3,855	
Other or Scrap	42,996	97,275	-54,279	
Mixed Metal	0*	178,034	-178,034	
All Metal	0*	49,330	-49,330	
TOTAL	135,980	507,198	-371,218	
*Categories eliminated for FY04 SWM Report.				

Despite the decrease in tons collected, a record 45 counties accepted some type of metal in their recycling program, whether it was steel and aluminum cans, scrap metal, strapping or even aluminum foil and lids. More than one-fourth of all metals recycled came from residential programs.

Interestingly, there was an upswing in metal pricing, reflecting increases in both aluminum and scrap metal from the year before. This commodity tends to be fairly easy to collect (although space can be an issue at some recycling centers) and the market for metal has been solid, especially considering there are several metal recyclers located in South Carolina.

Ferrous metals are magnetic and are derived from iron or steel; products made from ferrous metals include appliances, furniture, containers and packaging like steel drums and barrels. Recycled products include steel cans, strapping and metals from appliances.

Non-ferrous metals are non-magnetic metals such as aluminum, lead and copper. Products made, all or in part, from such metals include containers, packaging, furniture, appliances, electronics and aluminum foil.



More About Aluminum Cans...

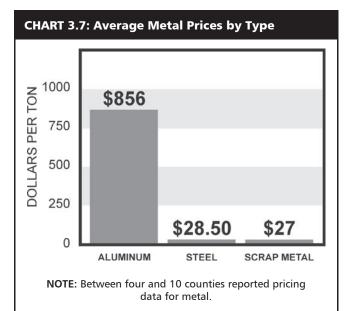
The total amount of aluminum recycled fell from 15,635 tons in FY03 to 8,626 tons in FY04. In addition, aluminum recycling in the residential category also fell from 2,538 tons in FY03 to 1,675 tons in FY04.

While overall aluminum recycling dropped by more than half, the numbers may not tell the whole story.

Aluminum cans are the most recycled consumer product in the United States today. One reason for that honor is the fact that aluminum cans are the most valuable container to recycle. Each year, the aluminum industry pays out more than \$750 million for empty aluminum cans according to The Aluminum Association. That money goes to all kinds of organizations including

Habitat for Humanity, Boy and Girl Scouts and schools. In South Carolina, one example of a similar program is the statewide effort by the Aluminum Cans for Burned Children program run by the Medical University of South Carolina.

Because aluminum cans collected by these programs do not go through local government recycling centers, the amount of cans collected generally remains unknown. Increasingly more organizations are looking to aluminum can recycling as a fund-raiser. This type of recycling effort may be one of the reasons for the decrease in the overall numbers. Again, this decrease does not mean less recycling, but rather efforts that are not captured for the state's MSW recycling rate.





COMMODITY: PAPER

The amount of paper recycled increased by 24 percent in FY04 to 460,477 tons. The increase, which ended five consecutive years of declining totals, came from industry, schools and commercial businesses. In contrast, the residential category tonnages for FY04 were down, but by less than 1,500 tons.

Clearly, the driving force behind the successful recycling of paper is the number of schools, industry and commercial businesses that are keeping paper goods out of the landfill and earning revenue on the material collected. According to RMDAC, another reason for paper's increased recycling rate could be the export demand, as markets in Asia and India continue to grow. The rest of the world continues to look to the United States to provide their needed fiber supply and this will play a major role in maintaining strong pricing.

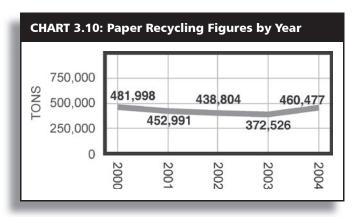
Cardboard was the No. 1 recycled item followed by newspaper and mixed paper. In FY04, 40 of the state's 46 counties reported recycling cardboard and/ or newspaper. Of those 40 counties, 36 also accepted office or mixed paper in their residential programs.

Overall, the amount of newspaper recycled grew from 56,277 tons in FY03 to 62,880 tons in FY04 – a 12 percent increase. The residential collection of newspapers also grew – by about 1,250 tons.

In fact, the only decrease came in the "Other Paper" category, which probably better reflects that the paper is separated and marketed for better prices and included in specific paper categories.

CHART 3.8: Types of Paper Recycled
TELEPHONE DIRECTORIES OFFICE PAPER/ <1% MAGAZINES COMPUTER PRINTOUTS 1% 4% OTHER PAPER/ PAPERBOARD 4% MIXED PAPER 13% 9%
NOTE: The total amount of MSW paper recycled in FY04 was 460,477 tons. This chart is a breakdown of that total (measured by weight).

CHART 3.9: Total Paper Recycled in Tons				
	FY04	FY03	+/-	
Cardboard	317,745	245,398	+72,347	
Magazines	4,837	2,235	+2,602	
Newspaper	62,880	56,227	+6,653	
Office Paper	16,680	16,173	+507	
Mixed Paper	40,084	26,370	+13,714	
Telephone Directories	639	210	+429	
Other Paper	17,612	19,437	-1,825	
All Paper	0*	6,476	-6,476	
TOTAL	460,477	372,526	+87,951	
*Category eliminated in FY04.				



The value of cardboard significantly increased to \$51 per ton, up \$21 from FY03, while office paper was lower than FY03 but not enough to negatively influence the amount of material being recycled (see Chart 3.11 for more information).

In the recycling business, paper refers to products and materials including newspapers, magazines, office papers, cardboard, bags and some paperboard packaging that can be recycled into new paper products. CHART 3.11: Average Paper Prices by Type

853
\$50
\$51
\$37.50

NOTE: Between five and nine counties reported pricing data for paper.



COMMODITY: PLASTIC

The amount of plastic recycled fell slightly in FY04 to 16,020 tons from 16,328 tons the previous FY.

Of the total, roughly one-third of the plastic recycled came from curbside or drop-off programs.

Of the 38 counties that reported collecting and and plastic, six of them also collected complete description of all plastic.

Plastic recycling presents several unique challenges compared to other traditional recyclables. First, the sheer volume of products and packaging made from plastic continues to grow. Second, the use of single-serve containers continues to increase and the use of these containers away from home clearly presents a

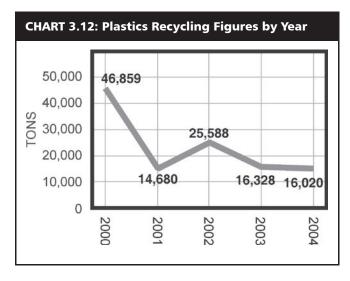
barrier to recycling. Third, the economics of recycling are not always favorable. It can be very expensive to haul plastics because of their light weight.

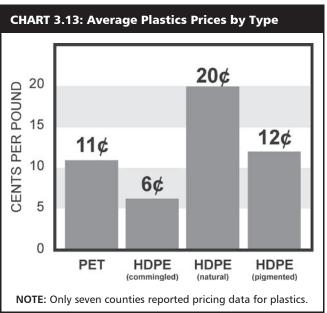
For more information about recycling markets for different materials, see the "Index of Waste Minimization Resources" at www.scdhec.gov/eqc/admin/html/wmrindex.html or call RMDAC at (803) 737-0477.

Still, there are markets for plastic. According to most industry experts, companies that need plastic are facing a shortage.

Chart 3.13 showcases that, when enough plastic is collected and baled, plastic has value. Both PET and natural HDPE saw a slight price increase over last year.

When measured for recycling, plastic refers to containers and packaging made from various resins but does not include the plastic in automobiles







and construction products like Polyvinyl Chloride (PVC) piping. Two types of plastic, Polyethylene Terephthalate (PET) and High Density Polyethylene (HDPE) are the most commonly recycled plastic in the state and nation.

Identifying Plastics

One of the other difficulties in recycling plastic is the fact that products and packaging are made from different kinds of plastic. Of course, 95 percent of all bottles are made from either PET (also known as PETE) or HDPE (2), more commonly recognized as soft drink, mouthwash, milk and laundry detergent containers. Some other plastics that also are recycled include Vinyl (PVC (2)) used in clear food packaging and medical tubing, Low Density Polyethylene (LDPE (2)) used in bread, dry cleaning and squeezable bottles, Polypropylene (PP (2)) used in yogurt cups and margarine tubs; Polystyrene (PS (2)) used in grocery store meat trays and egg cartons; and Other (7) that contains a combination of the first six types of plastic resin.

CHART 3.14: Total Plastics Recycled in Tons				
_	TYPE	FY04	FY03	+/-
	PET	2,201	2,144	+57
رثے	HDPE	5,651	3,418	+2,233
②	HDPE (Oil Bottles)	255	124	+131
	PET and HDPE	1,115	2,699	-1,584
<u>ئ</u>	V or PVC	424	412	+12
43	LDPE	1,390	603	+787
<u>ئ</u>	PP	1,452	1,451	+1
رئ	PS	455	477	-22
<u>ئ</u>	Other	3,077	5,000	-1,923
	TOTAL	16,020	16,328	-308

COMMODITIES: BANNED & MISCELLANEOUS ITEMS

BANNED ITEMS are those that cannot be disposed of in South Carolina's MSW landfills by law. These include lead-acid batteries, tires, large appliances (also known as white goods), yard trimmings and land-clearing debris. While used oil also is a banned item, it is not considered MSW and is measured separately. See page 22 for a detailed summary of South Carolina's successful used oil recycling program.

While banned items usually are not collected in curbside programs, most can be taken to county drop-off centers for recycling or to retailers when new products are purchased. Chart 3.15 shows a breakdown of the tonnages recycled for each commodity in FY03 and FY04 for comparison.

With the exception of yard trimmings and land-clearing debris, there are advance recycling fees associated with banned materials. When consumers buy motor

oil, new tires, refrigerators (or

other large appliances) and car batteries, they pay a small fee that is set aside in Solid Waste Trust Fund to help pay for recycling programs across the state. These fees have helped develop and maintain curbside and drop-off collection sites located throughout the state as well as outreach and education efforts and programs.

CHART 3.15: Total Banned Items Recycled in Tons

	FY04	FY03	+/-	
Lead-acid Batteries	7,463	7,101	+362	
Tires	27,322	29,774	-2,452	
White Goods	56,098	36,399	+19,699	
Yard Trimmings and Land- clearing Debris	189,562	235,210	-45,648	
TOTAL	280,445	308,484	-28,039	

While there was an increase in white goods and lead-acid batteries, there was a 9 percent decrease overall in banned items. Most of this decrease comes from yard trimmings that in the past inadvertently included debris from ice storms and hurricanes that is not, by definition, considered MSW.

MISCELLANEOUS ITEMS are considered non-traditional recyclables that are not disposed of in a MSW landfill but instead are recycled. Generally, they do not fall under any other category in the annual report. These are items that counties recycle based upon local and sometimes unique markets.

And while it is difficult to offer some comparison, it is worth noting that local and statewide efforts to increase recycling of certain materials has been extremely successful, with more than triple-digit percentage increases in antifreeze, cooking

oil, hazardous household materials and fluorescent lamps.

CHART 3.16: Total Miscellaneous Items	
Recycled in Tons	

COMMODITY	FY04	FY03	+/-
Antifreeze	1,516	746	+770
Consumer Electronics	379	134	+245
Cooking Oil	4,746	52	+4,694
Fluorescent Tubes	2,761	1,105	+1,656
Food Waste (post-consumer only)	946	3,426	-2,480
Hazardous Household Materials	999	21	+978
Latex Paint	172	116	+56
Mattresses	98	32	+66
Textiles	10,744	54,629	-43,885
Used Oil Filters (if not included as scrap metal)	948	812	+136
Wood Packaging	38,519	25,906	+12,613
Other Misc.	66	0	+66
Other Wood	603	17,168	-16,565
TOTAL	62,497	104,147	-41,650

COMMODITIES: USED MOTOR OIL

South Carolina continues to have one of the nation's best and most comprehensive used oil recycling programs targeted at do-it-yourself (DIYers) oil changers.

The statewide effort, partially funded by a DHEC grant program, helped DIYers recycle 1,142,199 gallons of used oil in calendar year 2003 at more than 700 collection sites throughout the state – the fifth consecutive year more than 1 million gallons of used oil was recycled. Since 1990, DIYers have recycled more than 10 million gallons of used oil.

The program, which has been developed by the Office, has grown into a one-stop shop for DIYers. In addition to collecting used oil, most of the state's 46 counties also collect and recycle used oil filters and used oil bottles from DIYers. The Office collects the amount of used oil filters and used oil bottles recycled, but counties often add filters to their metal recycling and bottles to their plastic recycling.

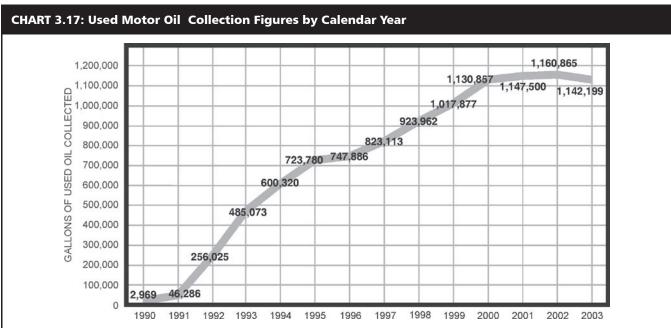
The Office encourages counties to establish farmer oil collection tanks as well as oil/gasoline mixture tanks. Farmer oil collection tanks are designed to accept the larger quantities of oil that farmers generate. Since the program began in 1998, 24 farmer oil tanks

have been set up in 21 counties.
Oil/gasoline mixture tanks are designed to accept oil, gasoline and oil/gasoline mixtures.
Nineteen oil/gasoline mixture collection sites have been established in 17 counties.

Overall, there are few barriers to the recycling of used oil, used oil filters and used oil bottles. Markets are not

an issue. Santee Cooper picks up used oil from local programs at no charge. Bottles, if properly drained, can be placed with other plastic for recycling. Local scrap dealers and steel mills accept used oil filters.

While the overall used oil program continues to be successful, the Office's goal is to have at least one farmer oil collection tank and one oil/gasoline mixture tank in each county as well as have each county collect used oil filters and bottles.



NOTE: Used oil is not considered MSW and as such used oil recycling is measured separately and can not be counted as part of the state's recycling rate. Used oil recycling sites are required by law to be registered with the state. Collection figures were taken from reports compiled and provided by Santee Cooper and DHEC's Office of Solid Waste Compliance. Figures for calendar year 2004 were not available when this document was printed.

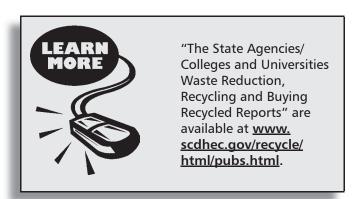
COMMODITIES: STATE AGENCIES, COLLEGES & UNIVERSITIES

The S.C. Solid Waste Policy and Management Act of 1991 (Act) was amended in October 2000 requiring state agencies as well as colleges and universities to report to DHEC their waste reduction, recycling and buying recycled activities for the previous FY by September 15 each year.

In turn, DHEC is required to compile all of the reports into one comprehensive document and submit that report to the Governor and Legislature by November 1 each year. "The State Agencies/Colleges and Universities Waste Reduction, Recycling and Buying Recycled Report" has been published annually since FY01 (July 1, 2000 to June 30, 2001).

In FY04, 69 state agencies and 30 colleges and universities reported the required recycling information (see Chart 3.18). State agencies recycled 267,817 tons of materials (an increase of more than 90,000 tons from the previous FY). Of that amount, only 6,800 tons could be considered MSW. Colleges and universities and other educational entities recycled 6,187 tons of materials (an increase of more than 2,200 tons from the previous FY). Specifically, each state agency is required to: measure materials being recycled; measure the purchases of recycled-content products; and identify waste reduction practices.

Overall, more than 274,000 tons of materials were recycled – a 51 percent increase from the previous FY. It must be made clear that fly ash recycled by Santee Cooper and reported in the "Other" category accounted for virtually all of the increase. Additional materials recycled that are part of the "Other"

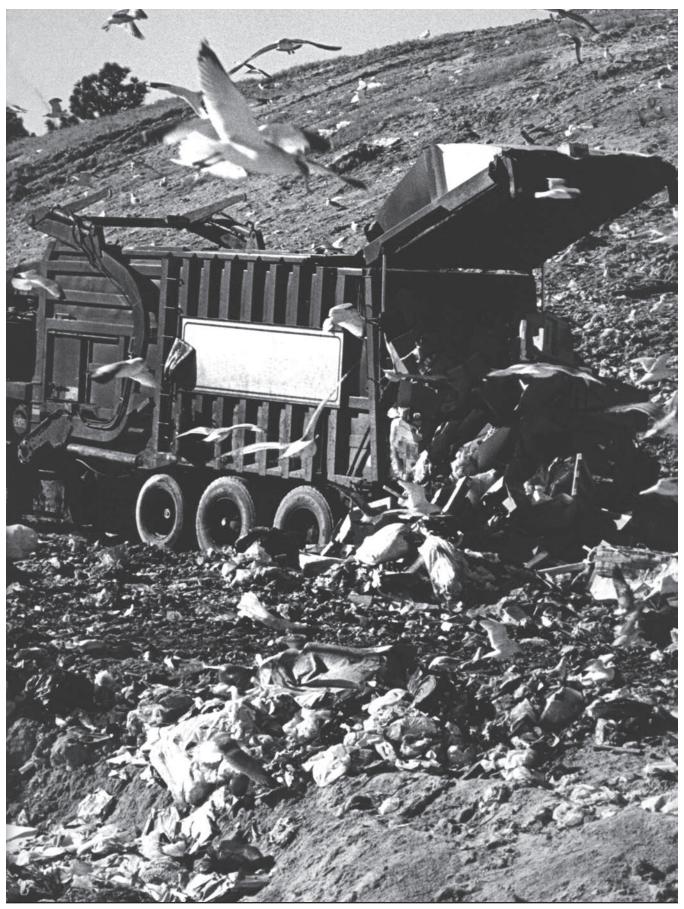


category include printer cartridges, tires, rags, utility poles, chemicals, cooking oil, ballasts, antifreeze, fly ash, VHS tapes, concrete and construction and demolition debris.

Fly ash, construction and demolition debris and some other materials recycled could not count toward South Carolina's recycling rate because they are not defined MSW. But none of the materials recycled by state agencies counted as part of the state's recycling rate (refer to page 8 of the Overview for more information).

The MSW recycled by colleges and universities counted towards the state's recycling rate and is included in this report.

CHART 3.18: Recyclables Collected in Tons					
COMMODITY	STATE AGENCIES	COLLEGES/ UNIVERSITIES			
Aluminum/ Aluminum cans	60	23			
Batteries (lead/ rechargeable)	141	3			
Books	2	43			
Cardboard	902	725			
Computers	23	231			
Fluorescent tubes	7	23			
Food waste	0	0			
Furniture	0	0			
Glass	1	30			
Magazines	47	21			
Newspaper	94	71			
Oil	945	38			
Oil filters	38	2			
Other	259,974	2,951			
Pallets	103	37			
Paper	1,566	1,434			
Phone books	34	20			
Plastic	12	43			
Steel	3,868	416			
Yard trimmings	0	76			
TOTAL	267,817	6,187			



South Carolina Solid Waste Management Annual Report ■ FISCAL YEAR 2004

DISPOSAL DATA

South Carolinians disposed of more than 3.3 million tons of municipal solid waste (MSW) in fiscal year (FY) 2004 – a slight increase from the previous FY. That figure translates into each of us disposing of about 4.4 pounds of MSW per day – roughly the same as the previous FY. That figure is about 1 pound more than the state's waste disposal (reduction) goal of 3.5 pounds per person per day (p/p/d) set by an October 2000 amendment of the S.C. Solid Waste Management Policy and Management Act of 1991 (Act).

Disposal figures are reported annually to the S.C. Department of Health and Environmental Control (DHEC) by permitted solid waste facilities whether publicly or privately owned. There are currently 404 permitted solid waste facilities operating in South Carolina. While there are 15 types of facilities, only three specifically handle MSW: MSW transfer stations; MSW incinerators; and MSW landfills.

There were 35 permitted MSW transfer stations operating in FY04. A transfer station, as defined by the Act, is a combination of structures, machinery or devices at a facility where solid waste is taken from collection vehicles and placed in other transportation units, with or without reduction in volume, for movement to another solid waste management facility.

Another method of disposal is incineration. South Carolina has one MSW incinerator – Montenay Charleston Resource Recovery – where 227,802 tons of MSW was burned for energy recovery in FY04. As a result, 56,826 tons of ash was generated and disposed of in the Oakridge MSW Landfill in Dorchester County.

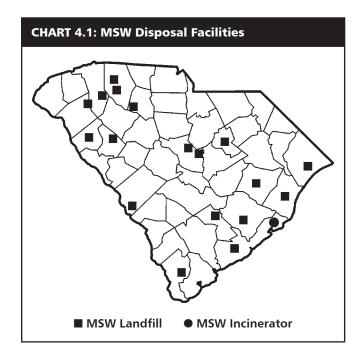
Finally, there is the MSW landfill, which by law must meet minimum criteria for siting, design, construction, operation and post-closure. All new MSW landfills and lateral expansions to existing landfills must comply with the requirements of the Resource Conservation Recovery Act (RCRA) Subtitle D federal requirements.

In FY04, there were 18 permitted operating MSW landfills (see Charts 4.1 and 4.2 for locations). Local

governments own 10 of the landfills and eight are privately owned. Two MSW landfills (Bees Ferry MSW Landfill in Charleston County and Williamsburg County MSW Landfill) continue to operate under DHEC consent orders. These consent orders allow the landfills to continue accepting MSW for disposal even though they do not meet RCRA Subtitle D requirements. The remaining 16 landfills meet RCRA standards.

It is important to note that MSW landfills accept waste other than MSW. About 5.8 million tons of solid waste – which includes construction and demolition debris, imported solid waste, industrial waste and MSW – was disposed of in the 18 MSW landfills in FY04. The total reflects a 10 percent increase from the previous FY when 5.3 million tons of solid waste was disposed of in MSW landfills.

The majority of the solid waste disposed of in the state is disposed of in privately owned MSW landfills. In FY04, landfill owners/operators reported more than 4.4 million tons of solid waste being disposed of in eight private MSW landfills compared with 4.1 million tons in FY03. In addition, three of those private MSW landfills (Lee County Landfill, Palmetto



Landfill, Richland Landfill) accepted 48 percent of all the solid waste that was disposed of in S.C. MSW landfills.

Finally, about 1.4 million tons of solid waste was disposed of in the state's 10 publicly owned MSW landfills in FY04 – a slight increase from the 1.2 million tons in FY03.

Tipping fees are the prices paid to dispose of solid waste at a landfill. Tipping fees were provided on the MSW landfill reports submitted to DHEC. While tipping fee data is incomplete (only a portion of the facilities actually reported this number), it is worth noting that in FY04 the average MSW landfill tipping fee was \$32 per ton.

More than 1.5 million tons of the 5.8 million tons of solid waste disposed of in MSW landfills in South Carolina was imported from nine states. The states are: Delaware; Florida; Georgia; Massachusetts; New Jersey; North Carolina; Tennessee; Texas; and Virginia. By comparison, five South Carolina counties – Chester, Lancaster, Oconee, Pickens and York

- Chester, Lancaster, Oconee, Pickens and

- exported 131,164 tons of MSW.

Imported solid waste, of which the majority is MSW, is not calculated into the state's recycling and disposal rates. Imported solid waste, however, impacts the state's landfill capacity. Overall, the amount of imported waste reflects an increase of 25 percent from the previous FY.

Of the 5.8 million tons of waste disposed of in permitted MSW landfills during FY04, 5.7 million tons or about 99 percent was disposed of in MSW landfills meeting federal Subtitle D standards.



For more information about MSW disposal facilities in South Carolina, visit www.scdhec.gov/lwm/html/min.html. Click on the county map at the bottom of the page for data about facilities in your community.

A Closer Look at Remaining Landfill Capacity

The current total **permitted** annual rate of disposal at the 18 MSW landfills in the state is 9.2 million tons. Based on the current rate of disposal at these landfills – which has averaged 5.26 million tons per year for the past three years – the estimated remaining capacity of the MSW landfills is slightly less than 100 million tons. Six of the 18 MSW landfills currently account for 76 percent of the state's total remaining capacity.

Based on FY04 disposal rates and barring any capacity adjustments, the state's total MSW landfill life expectancy is 17.1 years. At the **permitted** rate of disposal – that is if the MSW landfills accept the maximum waste currently allowed by DHEC – the total life expectancy of MSW landfills is 10.8 years. See Chart 4.2 for details.

South Carolina has more disposal capacity currently than it has had in the past decade. At the same time, the overall number of MSW landfills has decreased since the stringent federal Subtitle D standards were adopted.



CHART 4.2: MS	W Landfills, Ren	naining Capacity	y & Disposal			
NAME OF MUNICIPAL SOLID WASTE LANDFILL (MSWLF)	COUNTY	PERMITTED YEARLY DISPOSAL RATE IN TONS	FY04 DISPOSAL RATE IN TONS	ESTIMATED REMAINING CAPACITY OF MSWLF IN TONS	ESTIMATED REMAINING LIFE OF MSWLF BASED ON PERMITTED DISPOSAL RATE IN YEARS	ESTIMATED REMAINING LIFE OF MSWLF BASED ON FY04 DISPOSAL RATE IN YEARS
Abbeville County MSWLF	Abbeville	46,000	23,492	417,685	9.1	17.8
Anderson Regional Landfill	Anderson	438,000	347,690	8,012,200	18.3	23.0
Bees Ferry Road MSWLF	Charleston	150,000	80,097	247,500	1.7	3.1
Berkeley County MSWLF	Berkeley	1,000,000	255,505	3,101,936	3.1	12.1
Enoree Phase II MSWLF	Greenville	243,750	223,601	370,597	1.5	1.7
Georgetown County MSWLF	Georgetown	79,582	47,416	1,634,280	20.5	34.5
Greenwood County MSWLF	Greenwood	114,000	92,616	4,501,635	39.5	48.6
Hickory Hill MSWLF	Jasper	302,000	227,131	4,648,862	15.4	20.5
Horry County MSWLF	Horry	250,000	219,815	3,878,270	15.5	17.6
Lee County Landfill, LLC	Lee	1,944,939	1,079,920	25,810,116	13.3	23.9
Northeast Sanitary Landfill	Richland	218,400	217,174	330,956	1.5	1.5
Oakridge MSWLF	Dorchester	1,144,000	633,573	9,232,741	8.1	14.6
Palmetto MSWLF	Spartanburg	1,200,000	1,051,733	4,820,160	4.0	4.6
Richland Landfill, Inc.	Richland	655,000	654,475	7,246,977	11.1	11.1
Three Rivers MSWLF	Aiken	500,000	291,534	18,873,774	37.7	64.7
Union County Regional MSWLF	Union	730,000	232,934	5,945,052	8.1	25.5
Wellford MSWLF	Spartanburg	150,000	112,034	301,400	2.0	2.7
Williamsburg County MSWLF	Williamsburg	35,000	18,131	154,995	4.4	8.5
STATE TOTAL		9,200,671	5,808,869	99,529,136	10.8	17.1



THE STATE & COUNTIES AT A GLANCE

South Carolina's municipal solid waste (MSW) recycling rate as well as the total amount of materials recycled fell in fiscal year (FY) 2004 from FY03.

The state's recycling rate in FY04 was 22.4 percent – a drop of slightly more than 6 percentage points from the recycling rate of 28.8 percent in FY03. The total amount of MSW recycled fell 27 percent this past FY to 965,916 tons from about 1.3 million tons in FY03. In addition, local government residential recycling programs (both curbside and drop-off) saw a 5 percent decrease.

The S.C. Department of Health and Environmental Control (DHEC) attributes the decreases in the rate and tonnages to dramatically improved reporting from the counties as well as DHEC's review process.

In South Carolina, only municipal solid waste (MSW) is used to measure the state's recycling efforts.

As discussed in the Overview, beginning on page 7, DHEC held statewide workshops with county governments to review the strict interpretation of how MSW is defined. In addition, DHEC thoroughly reviewed each county's progress report.

It is important to note that counties initially reported more materials recycled in FY04 than the previous FY. In fact, counties reported recycling 1.8 million tons of materials in FY04 – up more than 500,000 tons from the previous FY. But based on DHEC's extensive review process, about 900,000 tons of materials that were recycled were determined not to be MSW and could not count towards the state's measured recycling rate. It appears that previous reports reflected this type of over reporting. Again, this is not to suggest that the materials reported were not recycled, but should not have been counted as part of the MSW recycling rate.

While not counted toward the state's goal, 42 percent of all solid waste generated was recycled in FY04.

CHART 5.1: S.C. MSW Recycling Rate					
FY04	FY04 FY03 CHANGE				
22.4%	28.8%	-6.4 points			

CHART 5.2: S.C. MSW Recycling Efforts							
FY04	TONS	+/- IN TONS FROM FY03	CHANGE				
State Recycling Effort	965,916	-352,203	-27%				
Residential Programs Only	329,530	-17,169	-5%				

About this Section...

"Section 5: The State & Counties At A Glance" details state and county efforts to manage their solid waste through recycling and disposal. Because of the amount of information being provided, this section has been broken into three parts.

The first part – "County Recycling & Disposal Rates" (beginning on page 30) profiles recycling and disposal activities, measured both in tons and pounds per person per day for each of the 46 counties as well as the state total.

In the next part, – "State & County Recycling Data" (beginning on page 32) the amount of material collected for recycling by each county is provided, broken down by category. In addition, population data, the number of curbside and drop-off recycling programs as well as environmental comparisons are provided.

Finally, the last part of this section – "Full-cost Disclosure" (beginning on page 56) highlights full-cost data.

AT A GLANCE: STATE & COUNTY MSW RECYCLING & DISPOSAL RATES

All S.C. counties are required to provide MSW recycling data. They report recycling efforts for glass, metal, paper, plastic, banned and miscellaneous items. The data is categorized into residential, commercial, institutional/non-profit and industrial packaging/administrative. Disposal data is reported annually to DHEC by permitted solid waste facilities.

Of the state's 46 counties, only Oconee County met both the state's recycling and waste disposal (reduction) goals. Oconee County had a 36.6 percent recycling rate – exceeding the state's goal of 35 percent. In addition, the county disposed of 3.2 pounds of MSW per person per day (p/p/d), meeting the 3.5 p/p/d waste disposal (reduction) goal.

Another 23 counties also met the waste disposal (reduction) goal of 3.5 p/p/d. Two additional counties (Charleston and Jasper) met the recycling goal of 35 percent. See Chart 5.3 for a complete list of counties that met recycling and/or waste disposal (reduction) goals.

Chart 5.4 provides a county-by-county breakdown of MSW recycling and disposal. Recycling data is listed by percentage rate and tons by county as well as p/p/d. The total amount of MSW disposed of in a landfill or incinerated is combined and listed in the DISPOSED column of the chart. The MSW disposed of is listed in tons by county and by p/p/d.

CHART 5.3: S.C. Counties That Met MSW Recycling & Waste Disposal Goals						
COUNTY	MET RECYCLING RATE	MET DISPOSAL RATE				
Abbeville		Yes				
Aiken		Yes				
Allendale		Yes				
Bamberg		Yes				
Calhoun		Yes				
Charleston	Yes					
Chesterfield		Yes				
Clarendon		Yes				
Colleton		Yes				
Dillon		Yes				
Dorchester		Yes				
Edgefield		Yes				
Jasper	Yes					
Kershaw		Yes				
Lancaster		Yes				
Laurens		Yes				
Lee		Yes				
Lexington		Yes				
Marion		Yes				
McCormick		Yes				
Oconee	Yes	Yes				
Pickens		Yes				
Saluda		Yes				
Sumter		Yes				
Union		Yes				
Williamsburg		Yes				

CHART 5.4: State & County MSW Recycling & Disposal Rates							
COUNTY	POPULATION	RECYCLING RATE (percent)	RECYCLED (p/p/d)	DISPOSED (p/p/d)	RECYCLED (tons)	DISPOSED (tons)	
Abbeville	26,381	15.0	.6	3.1	2,659	15,075	
Aiken	146,736	21.7	.9	3.5	25,548	92,405	
Allendale	10,934	28.1	1.2	2.9	2,284	5,847	
Anderson	171,510	16.2	.9	4.2	25,691	132,456	
Bamberg	16,040	4.4	.2	3.2	441	9,484	
Barnwell	23,369	34.4	1.9	3.6	8,006	15,244	
Beaufort	132,889	19.7	1.4	5.6	33,459	136,646	
Berkeley	146,449	21.0	1.6	5.8	41,476	156,010	
Calhoun	15,367	6.5	.1	1.9	364	5,285	
Charleston	321,014	39.4	3.3	5.2	196,718	303,173	
Cherokee	53,555	24.7	1.4	4.5	14,342	43,774	
Chester	33,906	3.1	.1	3.6	718	22,130	
Chesterfield	43,251	13.2	.3	2.1	2,488	16,308	
Clarendon	32,871	9.6	.3	2.9	1,850	17,371	
Colleton	39,173	7.6	.2	2.8	1,656	20,010	
Darlington	67,956	17.3	.8	3.7	9,661	46,334	
Dillon	31,027	7.9	.1	1.8	873	10,145	
Dorchester	104,168	25.5	1.0	2.8	18,502	54,177	
Edgefield	24,703	14.7	.4	2.7	2,071	12,013	
Fairfield	23,840	8.0	.4	5.1	1,924	22,151	
Florence	128,335	15.5	1.0	5.4	23,462	127,509	
Georgetown	58,924	23.4	1.3	4.2	13,942	45,562	
Greenville	395,357	28.3	2.3	5.7	163,251	412,728	
Greenwood	67,503	25.0	2.0	6.1	24,913	74,545	
Hampton	21,391	17.7	.8	4.1	3,417	15,853	
Horry	210,757	24.5	1.8	5.6	69,749	214,794	
Jasper	20,998	53.3	5.5	4.9	21,344	18,688	
Kershaw	54,481	22.0	.9	3.4	9,451	33,583	
Lancaster	62,520	11.5	.4	2.7	4,047	31,242	
Laurens	70,269	9.3	.3	3.3	4,334	42,356	
Lee	20,331	11.1	.3	3.2	1,462	11,706	
Lexington	226,528	24.0	1.0	3.4	43,798	139,005	
Marion	35,113	13.0	.4	3.0	2,836	18,949	
Marlboro	28,411	15.8	.7	4.0	3,858	20,590	
McCormick	10,233	16.3	.4	2.3	823	4,218	
Newberry	36,840	17.9	1.3	6.2	9,031	41,525	
Oconee	68,523	36.6	1.9	3.2	23,390	40,559	
Orangeburg	91,028	11.7	.5	4.3	9,378	70,843	
Pickens	112,859	24.7	.8	2.7	17,923	54,699	
Richland	332,104	11.1	.6	5.0	38,085	303,677	
Saluda	19,087	11.9	.3	2.2	1,030	7,638	
Spartanburg	261,281	9.0	.5	5.2	24,525	248,800	
Sumter	105,957	23.4	.9	2.8	16,637	54,478	
Union	29,105	8.9	.2	3.0	1,542	15,720	
Williamsburg	36,008	13.8	.5	3.0	3,126	19,574	
York	178,070	22.8	1.3	4.1	39,831	134,611	
STATE TOTAL	4,147,152	22.4	1.3	4.4	965,916	3,339,429	

AT A GLANCE: STATE & COUNTY RECYCLING DATA

Counties are required to complete a progress report every FY, detailing any recycling activities, by commodity, that take place in their county, whether it is a local government, college/university, school or business recycling program. The numbers reported, as previously stated in the Overview (see page 7), fall into one of four categories; residential, commercial, institutional/nonprofit or industrial packaging/administrative. In addition, the number of drop-off and curbside recycling programs came from county progress reports and "South Carolina Recycles: A Directory of Recycling Programs" for 2004.

Tracking South Carolina's recycling efforts is important for several reasons. Recycling reduces the need to build landfills and incinerators. Recycling conserves natural resources as well as energy. Recycling reduces pollution caused by the extraction and processing of virgin materials and the manufacturing of products using virgin materials. In addition, recycling reduces greenhouse gas (GHG) emissions.

GHGs are emitted at nearly every stage of a product's life cycle – including the management of solid waste – and contribute to global climate change. How solid waste is managed can have a substantial impact on GHG emissions. Practices such as waste prevention

and recycling can result in significant reductions in GHG emissions.

South Carolina recycled 965,916 tons of MSW in FY04. Those tonnages came from glass, metal, paper, plastic, miscellaneous items and materials banned from the landfill. See Chart 5.5 for a complete breakdown of commodities and the amount recycled for the state.

The following pages highlight each individual county's reported efforts, broken down by type of material recycled, origin as well as population data and the number of drop-off and curbside recycling programs.

In partnership with the U.S. Environmental Protection Agency's WasteWise program, DHEC's Office of Solid Waste Reduction and Recycling (Office) also has provided "Climate Profiles" for each county based on their FY04 progress reports. The "Climate Profiles" provide detailed information on GHG emission reductions along with equivalencies, putting the environmental impact of recycling in perspective. Select equivalencies are provided below for the state and on the following pages for each county. For a complete "Climate Profile" for the state or by county, please call 1-800-768-7348.

SOUTH CAROLINA

Population: 4,147,152

Number of Drop-off Recycling Centers: **606** Number of Curbside Recycling Programs: **149**

189,182.13

329,529.67

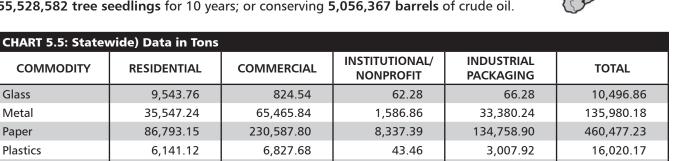
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Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. South Carolina recycled **965,916 tons** of MSW resulting in an environmental impact equivalent to: removing **470,360 cars** from the road for one year; growing **55,528,582 tree seedlings** for 10 years; or conserving **5,056,367 barrels** of crude oil.

87,211.03

34.967.75

425,884.64



2,898.62

21.054.53

195,166.49

280,444.77

62,497,39

965,916.59

1,152.98

4.152.83

15,335.80

Banned Items

Miscellaneous

TOTAL

ABBEVILLE COUNTY

Population: 26,381

Drop-off Recycling Centers: 7

Curbside Recycling Programs: Municipalities of Calhoun Falls, Due West and

Ware Shoals

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Abbeville County recycled **2,659 tons** of MSW resulting in an environmental impact equivalent to: removing **880 cars** from the road for one year; growing **103,896 tree seedlings** for 10 years; or conserving **9,461 barrels** of crude oil.

CHART 5.6: Abbeville County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	0.00	0.00	0.00	0.35	0.35	
Metal	5.96	0.00	0.25	0.00	6.21	
Paper	193.97	0.71	2.00	1,091.33	1,288.01	
Plastics	21.01	0.00	0.00	202.10	223.11	
Banned Items	380.50	7.80	0.00	0.00	388.30	
Miscellaneous	2.80	65.10	0.79	684.04	752.73	
TOTAL	604.24	73.61	3.04	1,977.82	2,658.71	

AIKEN COUNTY

Population: 146,736

Drop-off Recycling Centers: 12

Curbside Recycling Programs: Municipalities of Aiken, Burnettown, Jackson,

New Ellenton, North Augusta and Wagener

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Aiken County recycled 25,548 tons of MSW resulting in an environmental impact equivalent to: removing 20,565 cars from the road for one year; growing 2,427,788 tree seedlings for 10 years; or conserving 221,072 barrels of crude oil.

CHART 5.7: Aiken County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	50.63	0.00	0.00	0.00	50.63	
Metal	2,788.54	4,540.50	2.69	2,603.47	9,935.20	
Paper	5,647.78	5,786.17	74.41	1,313.16	12,821.52	
Plastics	192.26	19.64	4.00	208.66	424.56	
Banned Items	805.68	15.20	0.30	106.75	927.93	
Miscellaneous	16.47	576.72	227.42	567.24	1,387.85	
TOTAL	9,501.36	10,938.23	308.82	4,799.28	25,547.69	



ALLENDALE COUNTY

Population: 10,934

Drop-off Recycling Centers: 2

Curbside Recycling Programs: Municipalities of Allendale and Fairfax

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Allendale County recycled **2,284 tons** of MSW resulting in an environmental impact equivalent to: removing **787 cars** from the road for one year; growing **92,900 tree seedlings** for 10 years; or conserving **8,459 barrels** of crude oil.

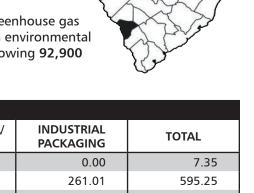


CHART 5.8: Allendale County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	7.35	0.00	0.00	0.00	7.35	
Metal	0.64	333.60	0.00	261.01	595.25	
Paper	36.11	0.25	0.00	0.00	36.36	
Plastics	0.47	61.38	0.00	0.00	61.85	
Banned Items	59.02	3.00	0.00	0.00	62.02	
Miscellaneous	0.32	1,520.85	0.00	0.00	1,521.17	
TOTAL	103.91	1,919.08	0.00	261.01	2,284.00	

ANDERSON COUNTY

Population: 171,510

Drop-off Recycling Centers: 16

Curbside Recycling Programs: Municipalities of Belton, Honea Path, Pendleton

and Williamston

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Anderson County recycled 25,691 tons of MSW resulting in an environmental impact equivalent to: removing 8,850 cars from the road for one year; growing 1,044,787 tree seedlings for 10 years; or conserving 95,137 barrels of crude oil.

CHART 5.9: Anderson County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	161.62	0.75	5.20	0.00	167.57	
Metal	17.59	3,231.42	2.40	0.00	3,251.41	
Paper	2,031.56	4,826.33	112.54	0.00	6,970.43	
Plastics	85.53	1,335.70	1.47	0.00	1,422.70	
Banned Items	3,958.75	35.55	0.00	0.00	3,994.30	
Miscellaneous	39.60	9,845.17	0.00	0.00	9,884.77	
TOTAL	6,294.65	19,274.92	121.61	0.00	25,691.18	

BAMBERG COUNTY

Population: 16,040

Drop-off Recycling Centers: **0** Curbside Recycling Programs: **0**

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Bamberg County recycled **441 tons** of MSW resulting in an environmental impact equivalent to: removing **95 cars** from the road for one year; growing **11,172 tree** seedlings for 10 years; or conserving **1,017 barrels** of crude oil.

CHART 5.10: Bamberg County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	0.00	0.00	0.00	0.00	0.00	
Metal	2.00	1.00	0.00	0.00	3.00	
Paper	0.00	6.00	140.00	0.00	146.00	
Plastics	0.00	0.00	0.00	0.00	0.00	
Banned Items	292.00	0.00	0.00	0.00	292.00	
Miscellaneous	0.00	0.00	0.00	0.00	0.00	
TOTAL	294.00	7.00	140.00	0.00	441.00	

BARNWELL COUNTY

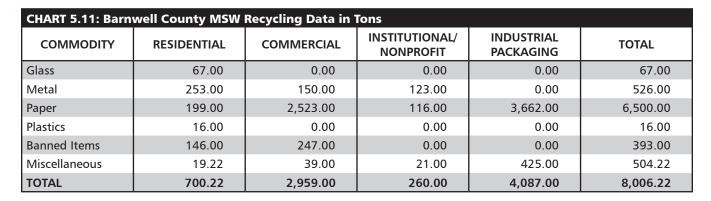
Population: 23,369

Drop-off Recycling Centers: 9

Curbside Recycling Programs: Municipalities of Barnwell, Blackville, Snelling

and Williston

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Barnwell County recycled **8,006 tons** of MSW resulting in an environmental impact equivalent to: removing **4,710 cars** from the road for one year; growing **556,026 tree seedlings** for 10 years; or conserving **50,631 barrels** of crude oil.





BEAUFORT COUNTY

Population: 132,889

Drop-off Recycling Centers: 16

Curbside Recycling Program: City of Beaufort

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Beaufort County recycled **33,459 tons** of MSW resulting in an environmental impact equivalent to: removing **5,881 cars** from the road for one year; growing **694,302 tree seedlings** for 10 years; or conserving **63,222 barrels** of crude oil.

CHART 5.12: Beaufort County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	620.84	2.25	0.00	0.00	623.09	
Metal	40.51	30.35	129.11	0.00	199.97	
Paper	1,448.03	3,861.48	2,143.30	0.00	7,452.81	
Plastics	118.75	24.00	0.00	0.00	142.75	
Banned Items	2,650.74	22,076.59	31.27	0.00	24,758.60	
Miscellaneous	1.64	183.83	96.59	0.00	282.06	
TOTAL	4,880.51	26,178.50	2,400.27	0.00	33,459.28	

BERKELEY COUNTY

Population: 146,449

Drop-off Recycling Centers: 33

Curbside Recycling Programs: Municipalities of Bonneau, Goose Creek,

Hanahan, Moncks Corner and St. Stephen

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Berkeley County recycled **41,476 tons** of MSW resulting in an environmental impact equivalent to: removing **16,325 cars** from the road for one year; growing **1,927,247 tree seedlings** for 10 years; or conserving **175,493 barrels** of crude oil.

CHART 5.13: Berkeley County MSW Recycling Data in Tons					
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL
Glass	192.79	0.50	0.73	0.15	194.17
Metal	176.36	6,161.44	19.72	473.89	6,831.41
Paper	1,335.02	9,370.02	95.74	430.73	11,231.51
Plastics	91.66	0.48	1.94	2.97	97.04
Banned Items	21,676.77	372.95	1.58	0.00	22,051.31
Miscellaneous	12.14	9.58	4.30	1,044.19	1,070.21
TOTAL	23,484.74	15,914.97	124.01	1,951.93	41,475.64

CALHOUN COUNTY

Population: 15,367

Drop-off Recycling Centers: 10

Curbside Recycling Programs: Municipalities of Cameron and St. Matthews

Calhoun County's greenhouse gas emission equivalencies are not available.

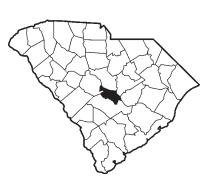


CHART 5.14: Calhoun County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	0.00	0.00	0.00	0.00	0.00				
Metal	0.00	0.00	0.00	0.00	0.00				
Paper	0.00	0.00	0.00	0.00	0.00				
Plastics	0.00	0.00	0.00	0.00	0.00				
Banned Items	321.13	41.22	0.00	0.00	362.35				
Miscellaneous	1.60	0.00	0.00	0.00	1.60				
TOTAL	322.73	41.22	0.00	0.00	363.95				

CHARLESTON COUNTY

Population: 321,014

Drop-off Recycling Centers: 51

Curbside Recycling Programs: Countywide service

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Charleston County recycled 196,718 tons of MSW resulting in an environmental impact equivalent to: removing 118,007 cars from the road for one year; growing 13,931,323 tree seedlings for 10 years; or conserving 1,268,570 barrels of crude oil.



CHART 5.15: Charleston County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	1,596.79	1.00	1.80	3.00	1,602.59			
Metal	1,914.16	28,477.15	475.47	1,170.03	32,036.81			
Paper	10,745.02	26,405.84	2,058.58	84,031.88	123,241.32			
Plastics	759.24	268.90	10.31	25.08	1,063.53			
Banned Items	17,929.97	13,402.31	432.94	8.00	31,773.22			
Miscellaneous	216.07	3,293.24	2,587.02	904.07	7,000.40			
TOTAL	33,161.25	71,848.44	5,566.12	86,142.06	196,717.87			

CHEROKEE COUNTY

Population: 53,555

Drop-off Recycling Centers: 2

Curbside Recycling Programs: Municipalities of Blacksburg and Gaffney

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Cherokee County recycled **14,342 tons** of MSW resulting in an environmental impact equivalent to: removing **3,985 cars** from the road for one year; growing **470,419 tree seedlings** for 10 years; or conserving **42,836 barrels** of crude oil.

CHART 5.16: Cherokee County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	47.80	0.00	0.00	2.60	50.40			
Metal	29.80	0.80	0.00	768.60	799.20			
Paper	430.40	0.00	0.00	4,335.40	4,765.80			
Plastics	54.30	0.00	0.00	0.00	54.30			
Banned Items	922.10	0.60	0.00	0.00	922.70			
Miscellaneous	1.10	12.60	0.00	7,736.20	7,749.90			
TOTAL	1,485.50	14.00	0.00	12,842.80	14,342.30			

CHESTER COUNTY

Population: 33,906

Drop-off Recycling Centers: 12

Curbside Recycling Program: City of Chester

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Chester County recycled **718 tons** of MSW resulting in an environmental impact equivalent to: removing **247 cars** from the road for one year; growing **29,131 tree seedlings** for 10 years; or conserving **2,653 barrels** of crude oil.

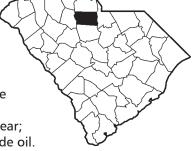


CHART 5.17: Chester County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	24.60	0.00	0.00	0.00	24.60			
Metal	12.79	0.00	0.00	0.00	12.79			
Paper	359.08	0.00	0.00	0.00	359.08			
Plastics	22.79	0.00	0.00	0.00	22.79			
Banned Items	299.05	0.00	0.00	0.00	299.05			
Miscellaneous	0.00	0.00	0.00	0.00	0.00			
TOTAL	718.31	0.00	0.00	0.00	718.31			

CHESTERFIELD COUNTY

Population: 43,251

Drop-off Recycling Centers: 7

Curbside Recycling Programs: Municipalities of Cheraw, Chesterfield, Jefferson, McBee, Mount Croghan, Pageland, Patrick and Ruby

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Chesterfield County recycled **2,488 tons** of MSW resulting in an environmental impact equivalent to: removing **1,147 cars** from the road for one year; growing **135,458 tree seedlings** for 10 years; or conserving **12,335 barrels** of crude oil.

CHART 5.18: Chesterfield County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	29.25	0.00	0.00	0.00	29.25				
Metal	416.24	0.00	0.00	0.00	416.24				
Paper	34.58	227.80	5.72	719.05	987.15				
Plastics	38.49	0.00	0.00	0.00	38.49				
Banned Items	1017.13	0.00	0.00	0.00	1017.13				
Miscellaneous	0.00	0.00	0.00	0.00	0.00				
TOTAL	1535.69	227.80	5.72	719.05	2,488.26				

CLARENDON COUNTY

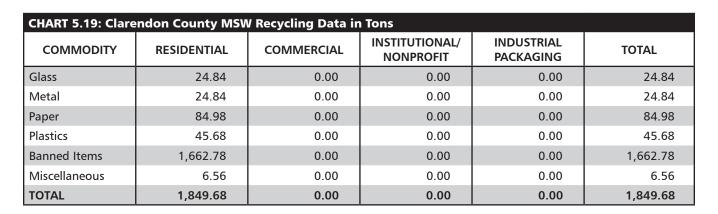
Population: 32,871

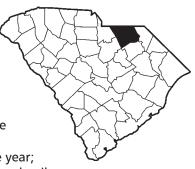
Drop-off Recycling Centers: 13

Curbside Recycling Programs: Municipalities of Manning, Summerton and

Turbeville

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Clarendon County recycled **1,850 tons** of MSW resulting in an environmental impact equivalent to: removing **98 cars** from the road for one year; growing **11,602 tree seedlings** for 10 years; or conserving **1,056 barrels** of crude oil.





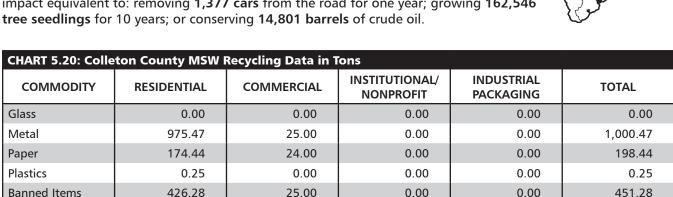
COLLETON COUNTY

Population: 39,173

Drop-off Recycling Centers: 12

Curbside Recycling Program: City of Walterboro

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Colleton County recycled **1,656 tons** of MSW resulting in an environmental impact equivalent to: removing **1,377 cars** from the road for one year; growing **162,546** tree seedlings for 10 years; or conserving **14,801 barrels** of crude oil



0.00

0.00

0.00

74.00

DARLINGTON COUNTY

Population: 67,956

Miscellaneous

TOTAL

Drop-off Recycling Centers: 12

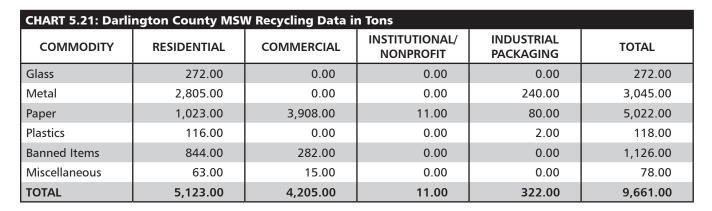
Curbside Recycling Programs: Municipalities of Darlington, Hartsville, Lamar

6.00

1.582.44

and Society Hill

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Darlington County recycled **9,661 tons** of MSW resulting in an environmental impact equivalent to: removing **6,979 cars** from the road for one year; growing **823,947 tree seedlings** for 10 years; or conserving **75,028 barrels** of crude oil.





6.00

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0.00

0.00

DILLON COUNTY

Population: 31,027

Drop-off Recycling Centers: 12

Curbside Recycling Program: City of Dillon

Dillon County's greenhouse gas emission equivalencies are not available.



CHART 5.22: Dillon County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	0.00	0.00	0.00	0.00	0.00			
Metal	0.00	0.00	0.00	0.00	0.00			
Paper	0.00	0.00	0.00	0.00	0.00			
Plastics	0.00	0.00	0.00	0.00	0.00			
Banned Items	873.30	0.00	0.00	0.00	873.30			
Miscellaneous	0.00	0.00	0.00	0.00	0.00			
TOTAL	873.30	0.00	0.00	0.00	873.30			

DORCHESTER COUNTY

Population: **104,168**

Drop-off Recycling Centers: 18

Curbside Recycling Programs: Municipalities of Harleyville, St. George and

Summerville

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Dorchester County recycled **18,502 tons** of MSW resulting in an environmental impact equivalent to: removing **1,718 cars** from the road for one year; growing **202,812 tree seedlings** for 10 years; or conserving **18,468 barrels** of crude oil.

CHART 5.23: Dorchester County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	106.54	0.00	0.00	0.00	106.54			
Metal	33.91	0.00	0.00	0.00	33.91			
Paper	1,744.58	0.00	0.00	0.00	1,744.58			
Plastics	50.65	0.00	0.00	0.00	50.65			
Banned Items	15,624.99	0.00	0.00	0.00	15,624.99			
Miscellaneous	941.40	0.00	0.00	0.00	941.40			
TOTAL	18,502.07	0.00	0.00	0.00	18,502.07			

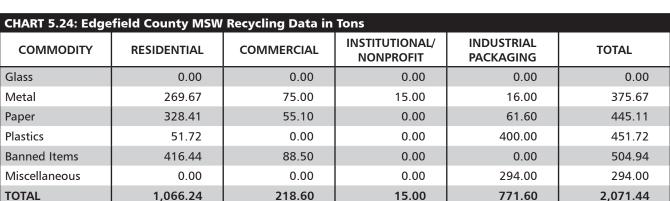
EDGEFIELD COUNTY

Population: 24,703

Drop-off Recycling Centers: 8

Curbside Recycling Programs: Municipalities of Edgefield and Johnston

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Edgefield County recycled **2,071 tons** of MSW resulting in an environmental impact equivalent to: removing **888 cars** from the road for one year; growing **104,835 tree seedlings** for 10 years; or conserving **9,546 barrels** of crude oil.



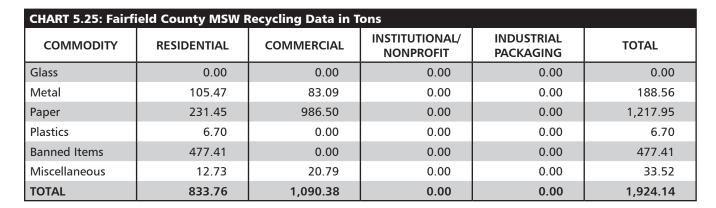
FAIRFIELD COUNTY

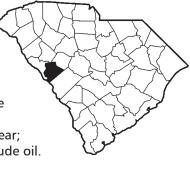
Population: 23,840

Drop-off Recycling Centers: 9

Curbside Recycling Programs: Towns of Ridgeway and Winnsboro

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Fairfield County recycled **1,924 tons** of MSW resulting in an environmental impact equivalent to: removing **1,002 cars** from the road for one year; growing **118,261 tree seedlings** for 10 years; or conserving **10,769 barrels** of crude oil.





FLORENCE COUNTY

Population: 128,335

Drop-off Recycling Centers: 16

Curbside Recycling Programs: Municipalities of Coward, Florence, Lake City,

Pamplico, Quinby, Scranton and Timmonsville

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Florence County recycled **23,462 tons** of MSW resulting in an environmental impact equivalent to: removing **15,175 cars** from the road for one year; growing **1,791,436 tree seedlings** for 10 years; or conserving **163,126 barrels** of crude oil.

CHART 5.26: Florence County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	143.64	0.00	0.00	0.00	143.64				
Metal	50.10	22.21	2.70	9,849.51	9,924.52				
Paper	1,113.25	1,046.03	49.00	1,743.41	3,951.69				
Plastics	180.28	20.61	1.20	16.67	218.76				
Banned Items	5,144.24	2,766.24	60.00	695.77	8,666.25				
Miscellaneous	3.20	9.10	0.50	544.21	557.01				
TOTAL	6,634.71	3,864.19	113.40	12,849.57	23,461.87				

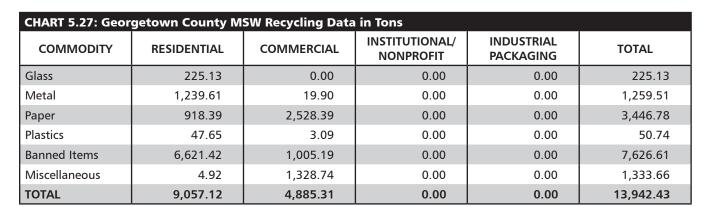
GEORGETOWN COUNTY

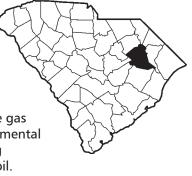
Population: 58,924

Drop-off Recycling Centers: 14

Curbside Recycling Programs: Municipalities of Andrews and Georgetown

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Georgetown County recycled 13,942 tons of MSW resulting in an environmental impact equivalent to: removing 4,031 cars from the road for one year; growing 475,827 tree seedlings for 10 years; or conserving 43,328 barrels of crude oil.





GREENVILLE COUNTY

Population: 395,357

Drop-off Recycling Centers: 29

Curbside Recycling Programs: Cities of Fountain Inn, Greenville, Greer,

Mauldin, Simpsonville and Traveler's Rest

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Greenville County recycled **163,251 tons** of MSW resulting in an environmental impact equivalent to: removing **91,948 cars** from the road for one year; growing **10,855,009 tree seedlings** for 10 years; or conserving **988,444 barrels** of crude oil.

CHART 5.28: Greenville County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	999.48	789.50	0.00	0.00	1,788.98			
Metal	5,240.60	9,898.66	8.45	20.00	15,167.71			
Paper	10,611.37	95,110.16	64.61	8,026.00	113,812.14			
Plastics	1,543.82	3,391.61	0.00	0.00	4,935.43			
Banned Items	15,156.10	1,823.70	0.90	50.00	17,030.70			
Miscellaneous	106.77	8,270.09	1,034.85	1,104.65	10,516.36			
TOTAL	33,658.14	119,283.72	1,108.81	9,200.65	163,251.32			

GREENWOOD COUNTY

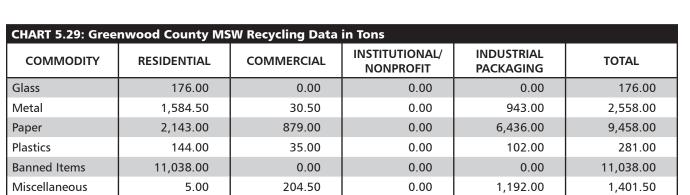
Population: 67,503

Drop-off Recycling Centers: 9

Curbside Recycling Programs: Countywide service

15.090.50

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Greenwood County recycled **24,913 tons** of MSW resulting in an environmental impact equivalent to: removing **9,603 cars** from the road for one year; growing **1,133,655 tree seedlings** for 10 years; or conserving **103,229 barrels** of crude oil.



1.149.00

8,673.00

24,912.50

0.00

TOTAL

HAMPTON COUNTY

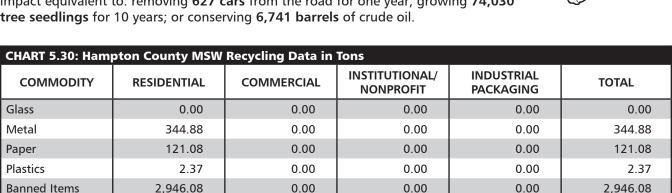
Population: 21,391

Drop-off Recycling Centers: 10

Curbside Recycling Programs: Municipalities of Brunson, Estill, Hampton,

Varnville and Yemassee

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Hampton County recycled **3,417 tons** of MSW resulting in an environmental impact equivalent to: removing **627 cars** from the road for one year; growing **74,030 tree seedlings** for 10 years; or conserving **6,741 barrels** of crude oil.



0.00

0.00

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HORRY COUNTY

Miscellaneous

TOTAL

Population: 210,757

Drop-off Recycling Centers: 26

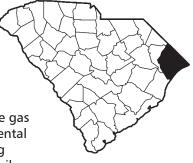
Curbside Recycling Programs: Municipalities of Briarcliffe Acres, Conway,

Loris, Myrtle Beach, North Myrtle Beach and Surfside Beach

2.95

3,417.36

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Horry County recycled **69,749 tons** of MSW resulting in an environmental impact equivalent to: removing **22,841 cars** from the road for one year; growing **2,696,550 tree seedlings** for 10 years; or conserving **245,545 barrels** of crude oil.



2.95

3,417.36

0.00

0.00

CHART: 5.31: Horry County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	766.91	0.00	0.00	54.18	821.09			
Metal	7,148.15	10.00	70.11	18.74	7,247.00			
Paper	13,498.31	5,566.86	0.00	287.42	19,352.59			
Plastics	377.93	0.00	0.00	115.77	493.70			
Banned Items	32,612.28	5,785.74	2.04	0.39	38,400.45			
Miscellaneous	22.93	3,330.11	1.82	79.54	3,434.40			
TOTAL	54,426.51	14,692.71	73.97	556.04	69,749.23			

JASPER COUNTY

Population: 20,998

Drop-off Recycling Centers: 7

Curbside Recycling Programs: Municipalities of Hardeeville and Ridgeland

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Jasper County recycled **21,344 tons** of MSW resulting in an environmental impact equivalent to: removing **5,632 cars** from the road for one year; growing **664,899 tree seedlings** for 10 years; or conserving **60,545 barrels** of crude oil.

CHART 5.32: Jasper County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	22.86	0.00	0.25	0.00	23.11			
Metal	595.22	0.00	4.00	217.10	816.32			
Paper	214.53	6,216.81	0.00	0.00	6,431.34			
Plastics	15.74	9.15	0.25	0.10	25.24			
Banned Items	730.94	13,200.00	0.00	10.00	13,940.94			
Miscellaneous	87.75	6.60	0.00	12.85	107.20			
TOTAL	1,667.04	19,432.56	4.50	240.05	21,344.15			

KERSHAW COUNTY

Population: 54,481

Drop-off Recycling Centers: 11

Curbside Recycling Program: City of Camden

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Kershaw County recycled **9,451 tons** of MSW resulting in an environmental impact equivalent to: removing **2,246 cars** from the road for one year; growing **265,198 tree seedlings** for 10 years; or conserving **24,149 barrels** of crude oil.

CHART 5.33: Kershaw County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	121.92	14.00	0.00	0.00	135.92			
Metal	16.05	276.60	2.90	336.91	632.46			
Paper	402.40	301.70	24.00	1,141.40	1,869.50			
Plastics	51.32	7.10	0.00	0.00	58.42			
Banned Items	6,709.76	9.20	0.00	0.00	6,718.96			
Miscellaneous	34.34	1.50	0.00	0.00	35.84			
TOTAL	7,335.79	610.10	26.90	1,478.31	9,451.10			

LANCASTER COUNTY

Population: 62,520

Drop-off Recycling Centers: 12

Curbside Recycling Programs: Municipalities of Heath Springs, Kershaw and

Lancaster

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Lancaster County recycled **4,047** tons of MSW resulting in an environmental impact equivalent to: removing **3,587** cars from the road for one year; growing **423,416** tree seedlings for 10 years; or conserving **38,556** barrels of crude oil.

CHART 5.34: Lancaster County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	50.67	0.00	0.00	0.00	50.67				
Metal	2,391.81	0.00	0.00	30.21	2,422.02				
Paper	521.74	177.04	75.00	77.73	851.51				
Plastics	56.34	0.00	0.00	5.23	61.57				
Banned Items	648.22	0.00	0.00	0.00	648.22				
Miscellaneous	13.14	0.00	0.00	0.00	13.14				
TOTAL	3,681.92	177.04	75.00	113.17	4,047.13				

LAURENS COUNTY

Population: 70,269

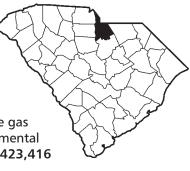
Drop-off Recycling Centers: 12

Curbside Recycling Programs: Municipalities of Clinton, Gray Court and

Laurens

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Laurens County recycled **4,334 tons** of MSW resulting in an environmental impact equivalent to: removing **1,798 cars** from the road for one year; growing **212,258 tree seedlings** for 10 years; or conserving **19,328 barrels** of crude oil.

CHART 5.35: Laurens County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	18.64	1.80	0.00	0.00	20.44				
Metal	2.04	0.00	0.00	712.00	714.04				
Paper	521.05	6.00	0.00	507.00	1,034.05				
Plastics	0.00	0.00	0.00	810.00	810.00				
Banned Items	1,012.30	388.40	0.00	48.10	1,448.80				
Miscellaneous	0.00	2.61	0.00	303.82	306.43				
TOTAL	1,554.03	398.81	0.00	2,380.92	4,333.76				

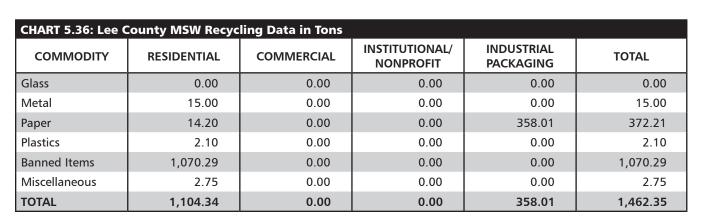


LEE COUNTY

Population: 20,331

Drop-off Recycling Centers: 9 Curbside Recycling Programs: 0

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Lee County recycled **1,462 tons** of MSW resulting in an environmental impact equivalent to: removing **288 cars** from the road for one year; growing **34,043 tree seedlings** for 10 years; or conserving **3,100 barrels** of crude oil.



LEXINGTON COUNTY

Population: 226,528

Drop-off Recycling Centers: 12

Curbside Recycling Programs: Municipalities of Batesburg-Leesville, Cayce,

Irmo, Lexington, Springdale and West Columbia

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Lexington County recycled **43,798 tons** of MSW resulting in an environmental impact equivalent to: removing **16,806 cars** from the road for one year; growing **1,984,062 tree seedlings** for 10 years; or conserving **180,666 barrels** of crude oil.

CHART 5.37: Lexington County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	446.13	0.00	0.00	0.00	446.13			
Metal	1,135.28	6,404.97	6.47	12.35	7,559.07			
Paper	2,931.92	6,310.14	387.79	896.06	10,525.91			
Plastics	400.76	4.83	0.00	277.67	683.26			
Banned Items	2,805.29	19,119.64	30.00	0.00	21,954.93			
Miscellaneous	99.44	2,523.88	0.05	5.09	2,628.46			
TOTAL	7,818.82	34,363.46	424.31	1,191.17	43,797.76			

MARION COUNTY

Population: 35,113

Drop-off Recycling Centers: 2

Curbside Recycling Programs: Municipalities of Marion, Mullins and Nichols

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Marion County recycled **2,836 tons** of MSW resulting in an environmental impact equivalent to: removing **1,382 cars** from the road for one year; growing **163,190 tree seedlings** for 10 years; or conserving **14,860 barrels** of crude oil.



CHART 5.38: Marion County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	20.00	0.00	0.00	0.00	20.00			
Metal	5.00	0.00	0.00	0.00	5.00			
Paper	0.00	1,439.49	0.00	765.85	2,205.34			
Plastics	8.90	3.00	0.00	0.00	11.90			
Banned Items	101.25	485.66	0.00	0.00	586.91			
Miscellaneous	0.00	6.08	0.32	0.00	6.40			
TOTAL	135.15	1,934.23	0.32	765.85	2,835.55			

MARLBORO COUNTY

Population: 28,411

Drop-off Recycling Centers: 4 Curbside Recycling Programs: 0

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Marlboro County recycled 3,858 tons of MSW resulting in an environmental impact equivalent to: removing 2,148 cars from the road for one year; growing 253,609 tree seedlings for 10 years; or conserving 23,093 barrels of crude oil.

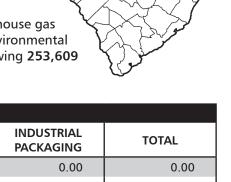


CHART 5.39: Marl	CHART 5.39: Marlboro County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	0.00	0.00	0.00	0.00	0.00				
Metal	0.00	0.00	0.00	0.00	0.00				
Paper	0.00	3,115.54	0.00	312.37	3,427.91				
Plastics	0.00	0.00	0.00	48.00	48.00				
Banned Items	47.45	195.33	0.00	0.00	242.78				
Miscellaneous	1.15	0.00	0.00	138.25	139.40				
TOTAL	48.60	3,310.87	0.00	498.62	3,858.09				

McCORMICK COUNTY

Population: 10,233

Drop-off Recycling Centers: 5

Curbside Recycling Program: Town of McCormick

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. McCormick County recycled **823 tons** of MSW resulting in an environmental impact equivalent to: removing **351 cars** from the road for one year; growing **41,462 tree seedlings** for 10 years; or conserving **3,776 barrels** of crude oil.

CHART 5.40: McCormick County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	0.00	0.00	0.00	0.00	0.00				
Metal	161.47	5.25	2.75	2.00	171.47				
Paper	108.33	0.00	0.00	105.00	213.33				
Plastics	12.35	0.00	0.00	1.50	13.85				
Banned Items	202.51	48.50	1.75	0.50	253.26				
Miscellaneous	0.15	0.00	0.00	170.73	170.88				
TOTAL	484.81	53.75	4.50	279.73	822.79				

NEWBERRY COUNTY

Population: 36,840

Drop-off Recycling Centers: 12

Curbside Recycling Programs: Municipalities of Newberry, Prosperity and

Whitmire

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Newberry County recycled **9,031 tons** of MSW resulting in an environmental impact equivalent to: removing **4,096 cars** from the road for one year; growing **483,519 tree seedlings** for 10 years; or conserving **44,029 barrels** of crude oil.

CHART 5.41: Newberry County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	46.89	12.21	0.00	0.00	59.10			
Metal	4.07	2,012.05	0.00	0.00	2,016.12			
Paper	492.31	967.54	13.62	734.09	2,207.56			
Plastics	26.64	8.01	0.00	177.30	211.95			
Banned Items	3,126.76	921.57	0.00	1.00	4,049.33			
Miscellaneous	4.80	292.15	0.00	190.14	487.09			
TOTAL	3,701.47	4,213.53	13.62	1,102.53	9,031.15			

OCONEE COUNTY

Population: 68,523

Drop-off Recycling Centers: 16

Curbside Recycling Programs: Municipalities of Seneca, Walhalla, West Union

and Westminster

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Oconee County recycled 23,390 tons of MSW resulting in an environmental impact equivalent to: removing 11,657 cars from the road for one year; growing 1,376,144 tree seedlings for 10 years; or conserving 125,310 barrels of crude oil.

CHART 5:42: Oconee County MSW Recycling Data in Tons									
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL				
Glass	233.16	0.00	3.20	0.00	236.36				
Metal	43.82	45.00	1.48	4,478.41	4,568.71				
Paper	2,659.67	5,267.39	158.02	1,199.50	9,284.58				
Plastics	62.56	5.60	0.90	127.80	196.86				
Banned Items	4,498.42	2,620.39	0.01	15.08	7,133.90				
Miscellaneous	492.89	3.11	0.50	1,473.20	1,969.70				
TOTAL	7,990.52	7,941.49	164.11	7,293.99	23,390.11				

ORANGEBURG COUNTY

Population: 91,028

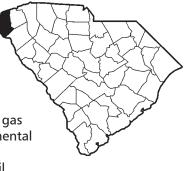
Drop-off Recycling Centers: 21

Curbside Recycling Programs: Municipalities of Bowman, Branchville, Elloree,

Eutawville, Holly Hill, North and Orangeburg

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Orangeburg County recycled **9,378 tons** of MSW resulting in an environmental impact equivalent to: removing **6,346 cars** from the road for one year; growing **749,127 tree seedlings** for 10 years; or conserving **68,215 barrels** of crude oil.

CHART 5.43: Orangeburg County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	21.00	0.00	0.00	0.00	21.00			
Metal	762.00	1,161.00	0.00	561.00	2,484.00			
Paper	58.00	3,822.00	135.30	1,149.00	5,164.30			
Plastics	10.00	34.00	0.00	0.00	44.00			
Banned Items	298.00	375.00	0.00	0.00	673.00			
Miscellaneous	0.00	779.25	0.00	212.15	991.40			
TOTAL	1,149.00	6,171.25	135.30	1,922.15	9,377.70			



PICKENS COUNTY

Population: 112,859

Drop-off Recycling Centers: 29

Curbside Recycling Programs: Municipalities of Central, Clemson, Easley,

Liberty, Norris, Pickens and Six Mile

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Pickens County recycled 17,923 tons of MSW resulting in an environmental impact equivalent to: removing 8,448 cars from the road for one year; growing 997,342 tree seedlings for 10 years; or conserving 90,817 barrels of crude oil.

CHART 5.44: Pickens County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	457.93	0.03	11.60	0.00	469.56			
Metal	91.44	80.35	5.36	1,001.36	1,178.51			
Paper	3,338.07	2,693.09	722.60	4,367.73	11,121.49			
Plastics	138.07	0.07	3.29	15.00	156.43			
Banned Items	4,520.25	315.84	0.00	1.09	4,837.18			
Miscellaneous	10.74	35.22	0.00	113.63	159.59			
TOTAL	8,556.50	3,124.60	742.85	5,498.81	17,922.76			

RICHLAND COUNTY

Population: **332,104** Drop-off Recycling Center: **4**

Curbside Recycling Programs: Municipalities of Arcadia Lakes, Columbia, Eastover, Forest Acres, Irmo and unincorporated Richland County

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Richland County recycled **38,085 tons** of MSW resulting in an environmental impact equivalent to: removing **22,459 cars** from the road for one year; growing **2,651,391 tree seedlings** for 10 years; or conserving **241,433 barrels** of crude oil.

CHART 5.45: Richland County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	897.74	0.00	38.00	0.00	935.74			
Metal	1,087.33	0.00	698.00	0.00	1,785.33			
Paper	5,477.70	24,277.20	1,850.61	0.00	31,605.51			
Plastics	476.86	1,245.83	16.00	0.00	1,738.69			
Banned Items	1,296.53	0.00	549.00	0.00	1,845.53			
Miscellaneous	0.00	0.00	174.50	0.00	174.50			
TOTAL	9,236.16	25,523.03	3,326.11	0.00	38,085.30			

SALUDA COUNTY

Population: 19,087

Drop-off Recycling Centers: 7

Curbside Recycling Programs: Towns of Ridge Spring and Saluda

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Saluda County recycled **1,030 tons** of MSW resulting in an environmental impact equivalent to: removing **656 cars** from the road for one year; growing **77,392 tree seedlings** for 10 years; or conserving **7,047 barrels** of crude oil.

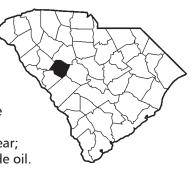


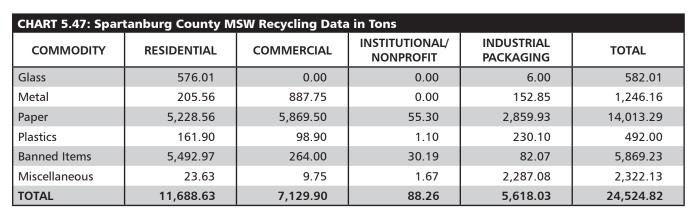
CHART 5:46: Saluda County MSW Recycling Data in Tons								
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL			
Glass	0.00	0.00	1.50	0.00	1.50			
Metal	206.25	85.70	6.00	0.00	297.95			
Paper	214.55	25.00	23.00	117.00	379.55			
Plastics	32.20	0.00	3.00	110.00	145.20			
Banned Items	95.12	71.00	12.00	6.50	184.62			
Miscellaneous	1.25	2.50	0.00	17.75	21.50			
TOTAL	549.37	184.20	45.50	251.25	1,030.32			

SPARTANBURG COUNTY

Population: **261,281** Drop-off Centers: **20**

Curbside Recycling Programs: Municipalities of Campobello, Chesnee, Cowpens, Duncan, Inman, Landrum, Lyman, Pacolet and Spartanburg

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Spartanburg County recycled **24,525 tons** of MSW resulting in an environmental impact equivalent to: removing **10,485 cars** from the road for one year; growing **1,237,783 tree seedlings** for 10 years; or conserving **112,711 barrels** of crude oil.



SUMTER COUNTY

Population: **105,957**

Drop-off Recycling Centers: 11

Curbside Recycling Program: City of Sumter

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Sumter County recycled 16,637 tons of MSW resulting in an environmental impact equivalent to: removing 6,264 cars from the road for one year; growing 739,518 tree seedlings for 10 years; or conserving 67,340 barrels of crude oil.

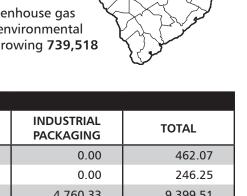


CHART 5.48: Sumter County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	462.07	0.00	0.00	0.00	462.07	
Metal	141.27	104.98	0.00	0.00	246.25	
Paper	4,531.18	108.00	0.00	4,760.33	9,399.51	
Plastics	330.77	0.00	0.00	14.00	344.77	
Banned Items	2,291.48	983.91	0.00	0.00	3,275.39	
Miscellaneous	13.56	2,010.84	1.25	883.30	2,908.95	
TOTAL	7,770.33	3,207.73	1.25	5,657.63	16,636.94	

UNION COUNTY

Population: 29,105

Drop-off Recycling Centers: 10

Curbside Recycling Program: City of Union

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Union County recycled **1,542 tons** of MSW resulting in an environmental impact equivalent to: removing **862 cars** from the road for one year; growing **101,802 tree seedlings** for 10 years; or conserving **9,270 barrels** of crude oil.

CHART 5.49: Union County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	17.50	0.00	0.00	0.00	17.50	
Metal	227.40	2.00	0.00	0.00	229.40	
Paper	377.26	530.20	0.75	0.00	908.21	
Plastics	32.92	0.00	0.00	0.00	32.92	
Banned Items	342.60	9.85	1.00	0.00	353.45	
Miscellaneous	0.10	0.00	0.00	0.00	0.10	
TOTAL	997.78	542.05	1.75	0.00	1,541.58	

WILLIAMSBURG COUNTY

Population: 36,008

Drop-off Recycling Centers: 20

Curbside Recycling Programs: Towns of Hemingway and Kingstree

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. Williamsburg County recycled **3,126 tons** of MSW resulting in an environmental impact equivalent to: removing **1,629 cars** from the road for one year; growing **192,371 tree seedlings** for 10 years; or conserving **17,157 barrels** of crude oil.

CHART 5.50: Williamsburg County MSW Recycling Data in Tons						
COMMODITY	RESIDENTIAL	COMMERCIAL	INSTITUTIONAL/ NONPROFIT	INDUSTRIAL PACKAGING	TOTAL	
Glass	0.00	0.00	0.00	0.00	0.00	
Metal	172.66	0.00	11.00	239.97	423.63	
Paper	139.04	0.00	18.50	1,599.95	1,757.49	
Plastics	0.00	0.00	0.00	12.67	12.67	
Banned Items	497.13	0.00	0.00	7.10	504.23	
Miscellaneous	0.00	0.00	0.25	427.28	427.53	
TOTAL	808.83	0.00	29.75	2,286.97	3,125.55	

YORK COUNTY

Miscellaneous

TOTAL

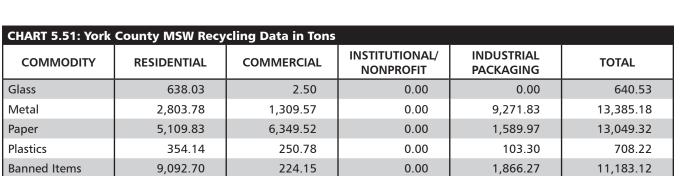
Population: 178,070

Drop-off Recycling Centers: 17

Curbside Recycling Programs: Municipalities of Clover, Fort Mill, River Hills,

Rock Hill, Tega Cay and York

Waste prevention and recycling can result in significant reductions in greenhouse gas emissions. York County recycled **39,831 tons** of MSW resulting in an environmental impact equivalent to: removing **25,455 cars** from the road for one year; growing **3,005,148 tree seedlings** for 10 years; or conserving **273,645 barrels** of crude oil.



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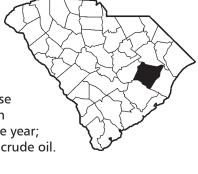
0.00

244.12

13,075.49

569.84

8,706.36



50.17

18,048.65

864.13

39,830.50

AT A GLANCE: FULL-COST DISCLOSURE

County and local governments that provide solid waste services to residents are required by the S.C. Solid Waste Policy and Management Act of 1991 to report the cost per person of those services. The counties and municipalities complete and submit a full-cost disclosure report to DHEC annually for the previous FY. Full-cost reports from 191 counties and municipalities were received for FY04 (see Chart 5.53).

The annual cost for providing solid waste services in South Carolina during FY04 ranged from \$10.02 per person to \$118.29 per person. In FY03, local governments reported \$9.87 per person to \$148.26 per person. The average per capita cost for solid waste services in FY04 was \$55.19; a \$9.95 increase from FY03. Almost \$229 million were spent on solid waste services in FY04.

It also is worth comparing the recycling efforts of the top six counties, by population, as well as their full-cost numbers. Greenville, Richland, Charleston, Spartanburg, Lexington and Horry counties make up 55 percent or 536,126 tons of the total amount of MSW recycled in South Carolina in FY04.

Chart 5.52 shows that counties with large populations do not necessarily correlate directly with increased recycling efforts. In other words, large numbers of people do not mean increased recycling tonnages, percentage rates or high program costs. Please note that full-cost data does include information from municipalities located within the county and is not necessarily representative of the county's own recycling program.

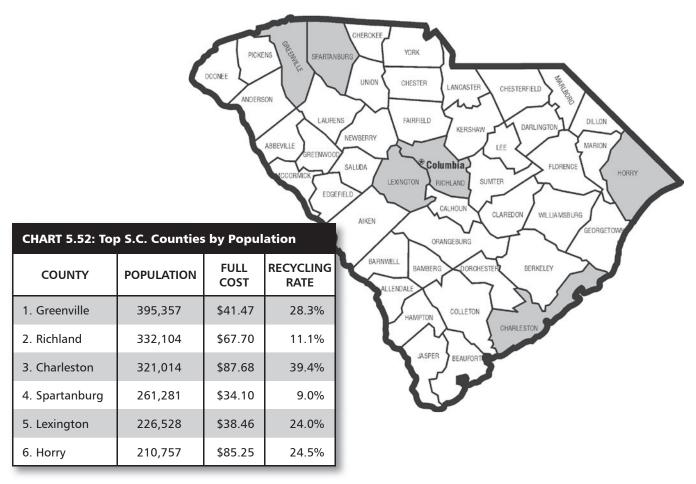


Chart 5.53: Full-cost Disclosure					
COUNTY	TOTAL NET COST IN DOLLARS	POPULATION	COST PER CAPITA	MUNICIPALITIES REPORTING	
Abbeville	\$1,661,878	26,381	\$63.00	2	
Aiken	\$9,294,288	146,736	\$63.34	6	
Allendale	\$341,311	10,934	\$31.22	1	
Anderson	\$6,259,452	171,510	\$36.50	6	
Bamberg	\$1,084,149	16,040	\$67.59	4	
Barnwell	\$1,049,932	23,369	\$44.93	4	
Beaufort	\$6,571,018	132,889	\$49.45	2	
Berkeley	\$1,894,837	146,449	\$12.94	4	
Calhoun	\$938,036	15,367	\$61.04	2	
Charleston	\$28,148,013	321,014	\$87.68	7	
Cherokee	\$3,140,581	53,555	\$58.64	2	
Chester	\$2,165,353	33,906	\$63.86	2	
Chesterfield	\$1,371,780	43,251	\$31.72	6	
Clarendon	\$2,193,713	32,871	\$66.74	3	
Colleton	\$2,381,804	39,173	\$60.80	1	
Darlington	\$3,608,868	67,956	\$53.11	3	
Dillon	\$2,621,906	31,027	\$84.50	3	
Dorchester	\$5,956,625	104,168	\$57.18	4	
Edgefield	\$1,193,029	24,703	\$48.29	2	
Fairfield	\$2,374,028	23,840	\$99.58	2	
Florence	\$7,455,225	128,335	\$58.09	5	
Georgetown	\$6,970,316	58,924	\$118.29	2	
Greenville	\$16,395,510	395,357	\$41.47	6	
Greenwood	\$4,132,429	67,503	\$61.22	3	
Hampton	\$510,261	21,391	\$23.85	2	
Horry	\$17,966,915	210,757	\$85.25	6	
Jasper	\$609,277	20,998	\$29.02	0	
Kershaw	\$2,687,233	54,481	\$49.32	2	
Lancaster	\$2,393,358	62,520	\$38.28	2	
Laurens	\$2,346,987	70,269	\$33.40	1	
Lee	\$203,759	20,331	\$10.02	0	
Lexington	\$8,711,752	226,528	\$38.46	4	
Marion	\$3,121,641	35,113	\$88.90	2	
Marlboro	\$630,401	28,411	\$22.19	2	
McCormick	\$363,056	10,233	\$35.48	1	
Newberry	\$3,068,945	36,840	\$83.30	3	
Oconee	\$5,491,284	68,523	\$80.14	3	
Orangeburg	\$4,872,070	91,028	\$53.52	3	
Pickens	\$5,374,715	112,859	\$47.62	7	
Richland	\$22,484,835	332,104	\$67.70	4	
Saluda	\$678,059	19,087	\$35.52	2	
Spartanburg	\$8,909,475	261,281	\$33.32	7	
Sumter	\$3,814,776	105,957	\$34.10 \$36.00	2	
Union	\$1,548,779	29,105	\$53.21	4	
		·		2	
Williamsburg	\$1,230,353	36,008	\$34.17		
York	\$12,642,676	178,070	\$71.00 \$FF 10	4	
STATE TOTAL	\$228,864,685	4,147,152	\$55.19	145	



South Carolina Solid Waste Management Annual Report ■ FISCAL YEAR 2004

DEMONSTRATION OF NEED

The S.C. Solid Waste Policy and Management Act was amended in October 2000 to be consistent with the U.S. Environmental Protection Agency's recycling and disposal (reduction) goals. As a result, South Carolina changed the way recycling, disposal and generation are defined and measured. See page 8 for specific definition.

The Demonstration of Need Regulation (DON), R.61-107.17, established the criteria for demonstrating the need for construction of new solid waste disposal facilities and the expansion of existing facilities. These facilities include municipal solid waste (MSW) landfills, industrial solid waste landfills, long-term construction and demolition debris landfills, industrial incinerators and MSW incinerators. The regulation establishes a 75-mile planning area around proposed MSW and commercial industrial solid waste landfills and solid waste incinerators. It also establishes a 10-mile planning area around commercial construction and demolition debris landfills.

When determining need for a solid waste disposal facility, the S.C. Department of Health and Environmental Control considers specific criteria including the location of the proposed facility or expansion, the number of commercial disposal facilities within the planning area of the proposed new or expanded facility, and the amount of waste generated (including MSW) within the planning area. It is important to note that an operator of existing solid waste disposal facilities can expand or build a replacement without meeting DON when the existing solid waste disposal facility is closed. The maximum annual tonnage of solid waste that a solid waste disposal facility can accept is calculated by adding the total tonnage of waste generated within the borders of all counties that fall within or touch the planning area. Waste generation numbers for each county are listed in Charts 6.1 on page 60. Counties may further limit the maximum tonnage through their local solid waste management plans.



MSW Generation

MSW generation is the primary consideration when determining the need for a solid waste disposal facility.

MSW generation is calculated by adding the amount of MSW disposed of in landfills, incinerated and exported (generated in South Carolina and disposed out of state) to the amount of MSW recycled.

In FY04, 4.3 million tons of MSW was generated in the state. Of this total, about 3.3 millions tons were disposed of in landfills and 965,916 tons were recycled. South Carolinians generated about one-third of the MSW that was recycled during FY04.

Commercial businesses, institutions and industry generated the remaining two-thirds. South Carolinians, on average, generated (recycled + disposed and incinerated = generation) 5.7 pounds per person per day of MSW in FY04.

South Carolinians accounted for 56 percent of the MSW that was disposed of in landfills, incinerated and exported during FY04. Commercial businesses, institutions and industry made up the remaining 44 percent.

Chart 6.1: Solid Waste Generated for Disposal in Tons for Use In Demonstrating Need					
COUNTY	FY04	FY03	FY02	FY01	FY00
Abbeville	18,817	25,909	23,792	25,879	25,486
Aiken	149,515	111,935	101,193	121,897	103,087
Allendale	5,903	6,540	6,549	6,297	6,303
Anderson	148,849	148,232	170,387	136,770	165,060
Bamberg	11,652	13,768	17,911	19,644	17,606
Barnwell	19,373	18,247	71,924	20,570	22,064
Beaufort	167,383	151,624	142,337	139,979	134,951
Berkeley	353,891	305,575	172,888	155,071	132,499
Calhoun	8,660	9,659	10,183	3,938	12,697
Charleston	391,841	180,463	149,955	159,547	212,498
Cherokee	71,332	73,943	78,519	86,395	97,981
Chester	37,070	44,435	58,377	31,543	31,311
Chesterfield	21,941	24,514	22,506	24,842	57,554
Clarendon	18,403	10,932	14,222	32,148	32,850
Colleton	35,071	31,737	52,805	19,762	39,291
Darlington	52,057	68,953	45,920	51,138	39,352
Dillon	13,925	34,092	31,961	38,571	18,607
Dorchester	94,275	93,306	64,906	65,143	73,767
Edgefield	13,969	14,870	14,774	14,822	13,765
Fairfield	22,546	23,076	19,664	21,065	23,130
Florence	152,909	151,123	148,367	150,094	131,033
Georgetown	49,736	70,531	71,720	59,655	70,117
Greenville	589,204	613,417	489,216	526,467	498,874
Greenwood	109,407	91,719	93,699	105,728	111,454
Hampton	18,188	22,039	20,656	20,203	20,701
Horry	227,469	212,686	193,573	199,410	195,960
Jasper	27,039	17,692	15,457	15,351	13,968
Kershaw	40,162	45,597	39,716	37,575	36,358
Lancaster	35,623	35,088	36,565	30,175	33,433
Laurens	51,636	57,940	50,477	51,133	49,167
Lee	14,981	14,670	27,034	19,245	18,674
Lexington	256,226	221,323	172,856	128,951	125,788
Marion	21,673	4,796	13,668	13,830	50,571
Marlboro	21,815	15,289	13,846	10,401	13,003
McCormick	5,183	11,869	4,682	5,333	4,746
Newberry	48,591	47,893	47,662	44,292	40,326
Oconee	45,533	45,260	46,749	50,400	44,351
Orangeburg	92,969	98,350	84,278	85,677	78,506
Pickens	59,873	56,938	56,669	58,572	47,353
Richland	349,087	327,966	323,740	342,760	365,878
Saluda	9,684	9,197	8,619	8,702	10,360
Spartanburg	373,060	418,942	307,298	314,706	316,587
Sumter	135,220	119,698	95,752	96,023	84,072
Union	18,988	12,835	15,794	17,241	19,659
Williamsburg	25,582	26,100	26,966	36,385	33,215
York	152,150	147,720	139,609	144,255	137,258

This data is solely for use in calculating annual MSWLF tonnage limits as related to R.61-107.17, Demonstration of Need. Any other use of this data may lead to an inaccurate conclusion.

OTHER TYPES OF SOLID WASTE

While the primary focus of this year's report involves the generation, recycling and disposal of municipal solid waste (MSW), there are other types of solid waste that are generated and disposed of in South Carolina.

This waste, which includes construction and demolition debris, land-clearing debris and industrial solid waste, accounts for more than 2.5 million tons or 21 percent of the total solid waste disposed of in the state.

Construction and demolition debris landfills (short-term, long-term and industrial) accept various types of construction and demolition wastes that have not come in contact with hazardous constituents such as lead-based paint, friable asbestos, petroleum products, polychlorinated biphenyls (PCBs), solvents and preservatives.

Land-clearing debris landfills accept solid waste generated from land-clearing activities, storm events and natural disasters (e.g., hurricanes and tornadoes). Overall, there were 136 construction and demolition debris and land-clearing debris landfills in the state in fiscal year (FY) 2004. See Chart 7.1 for more details on construction and demolition debris as well as land-clearing debris disposal in FY04.

Industrial solid waste landfills accept certain types of non-hazardous industrial waste. Most industrial landfills are located on the sites of industries that generate the waste. In FY04, there were 51 industrial solid waste landfills. Chart 7.2 reflects industrial waste disposal details for the FY.





For more information about construction and demolition debris landfills as well as industrial solid waste landfills, visit on-line at www.scdhec.gov/lwm/html/annual_report_04.html.

by Facility Type and C	LONG-TERM C&D	LCD	INDUSTRIAL C&D	TOTAL FOR
COUNTY	LANDFILLS	LANDFILLS	LANDFILLS	EACH COUNTY
Abbeville	557	12,953	0	13,510
Aiken	74,412	14,305	350	89,067
Allendale	1,578	0	0	1,578
Anderson	35,206	2,110	0	37,316
Bamberg	4,883	0	0	4,883
Barnwell	8,329	0	20,998	29,327
Beaufort	121,464	0	0	121,464
Berkeley	66,023	0	0	66,023
Calhoun	4,139	0	369	4,508
Charleston	108,148	0	0	108,148
Cherokee	10,658	0	0	10,658
Chester	3,220	240	0	3,460
Chesterfield	12,805	0	0	12,805
Clarendon	5,500	0	0	5,500
Colleton		0	0	-
	13,157	0		13,157
Darlington	12,614		0	12,614
Dillon	11,412	0	0	11,412
Edgefield	2,678	764	0	3,442
Fairfield	126	0	0	126
Florence	883	0	0	883
Georgetown	33,680	0	0	33,680
Greenville	87,157	0	0	87,157
Greenwood	7,408	1,500	0	8,908
Hampton	7,444	0	0	7,444
Horry	170,856	0	0	170,856
Jasper	240	572	0	812
Kershaw	33,277	0	0	33,277
Lancaster	0	115	1,205	1,320
Laurens	8,434	11,200	0	19,634
Lexington	231,899	8,025	0	239,924
Marion	16,493	0	0	16,493
Marlboro	1,040	0	0	1,040
McCormick	920	37	0	957
Newberry	797	200	0	997
Oconee	20,608	8,671	0	29,279
Orangeburg	23,222	875	0	24,097
Pickens	16,049	7,831	0	23,880
Richland	199,805	6,505	0	206,310
Saluda	1,176	0	0	1,176
Spartanburg	58,803	12,750	0	71,553
Sumter	42,747	0	0	42,747
Union	4	1,014	0	1,018
Williamsburg	2,585	0	0	2,585
York	82,448	16,829	0	99,277
Total C&D/LCD from SC	1,544,886	106,496	22,922	1,674,304
Out of State		·		
(origin not specified)	4,951	0	0	4,951
TOTAL AMOUNT OF C&D/LCD LANDFILLED	1,549,837	106,496	22,922	1,679,255

Chart 7.2: Commercial and On-site Industrial Solid Waste Landfill (ISWLF) Disposal Data in Tons						
ISWLF BY COUNTY OF ORIGIN	TOTAL DISPOSED OF AT COMMERCIAL ISWLFS	TOTAL DISPOSED OF AT ON-SITE ISWLFS	TOTAL INDUSTRIAL SOLID WASTE DISPOSED			
Berkeley	0	337,318	337,318			
Charleston	187,981	0	187,981			
Chester	18,434	0	18,434			
Darlington	0	40	40			
Dillon	13,045	0	13,045			
Dorchester	69,655	0	69,655			
Florence	92,832	0	92,832			
Lancaster	33,894	0	33,894			
Lexington	0	77,634	77,634			
Marlboro	0	752	752			
Newberry	0	6,163	6,163			
Richland	22	125,000	125,022			
STATE TOTAL	415,863	546,907	962,770			

