

Recycling in the Centralina Council of Government Region

Why? What is currently being done? A Vision for the Future
and Recommendations

Centralina
Council of Governments

February 2009

Recycling Advisory Committee

Chair, Martha Sue Hall

County	Jurisdiction	Name
Anson	Anson County	Jarvis Woodburn
Gaston	Gaston County	John Torbett
	City of Belmont	Charlie Martin
	Cherryville	Bob Austell
	Town of Stanley	Jan Williams
Iredell	Mooresville	Frank Rader
Mecklenburg	Mecklenburg County	Jennifer Roberts,
	Matthews	Jeff Miller
	Huntersville	Ron Jullian
Rowan	Granite Quarry	Bill Feather
Union	Marvin	Nick Dispeizier
Stanly	Albemarle	Martha Sue Hall, Chair
	Richfield	Steve Morgan

Centralina COG Staff
Martha Lide
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Recycling Working Group

County	Jurisdiction	Name
Anson	Anson County	Sam Dawkins
Cabarrus	Cabarrus County	Pete Pasterz
	Concord	Allen Scott
	Concord	Amanda Smith Thompson
Gaston	Gaston County	Marcie Smith
	Gaston County	Nan Kirlin
	Cherryville	Brandon Abernathy
	Gastonia	Issac Nicolson
	Gastonia	Pat Johnson
	Mount Holly	Mike Santmire
Iredell	Iredell County	Diane Lewis
	Iredell County	Dave Lambert
	Mooresville	John Finan
Lincoln	Lincoln County	Nancy Rickard
	Lincoln County	Steve Gilbert
	Lincoln County	David Bivins
	Lincolnton	Steve Peeler
Mecklenburg	Mecklenburg County	Heidi Pruess
	Mecklenburg County	Laurette Hall
	Mecklenburg County	Bruce Gledhill
	Charlotte	Victoria Garland
	Charlotte	Brandi Williams
	Charlotte	Gerald Gorbey
	Huntersville	Gerald Vincent
Rowan	Rowan County	Lori Swaim
	Salisbury	Lynn Hillard
	Granite Quarry	Daniel Peters
Union	Union County	Jennifer Nance
	Union County	Mark Tye
	Union County	Nicole Hatch
	Monroe	Susan Osborn
Stanly	Stanly County	Jerry Morton
	Albemarle	Mike Lambert

Introduction

On August 13, 2008, the Centralina Council of Governments (CCOG) Board of Delegates, based on the recommendation of the COG Legislative Committee, approved the creation of a working group to study recycling in our nine county region including an assessment of the “state” of recycling in our region, the economic, environmental and sustainability impacts of recycling and best practices. The following report outlines:

- Incentives for increasing our regional efforts in recycling including economic, environmental, legal, and business case incentives.
- Facts and statistics about waste and recycling in the US and in the State of North Carolina, to provide some background and a frame of reference to understand recycling. This section also includes detailed information about recycling in the Centralina region including how much we recycle, how we pay for it, what is recycled, and how residential and commercial waste and recycling is collected. There is also information about the Material Recovery Facilities, Municipal Solid Waste Landfills, Construction and Demolition Landfills and Yard Waste landfills in our region, and our local source reduction and education efforts.
- Some sample “best practice” solutions to increase recycling
- A “vision” on what our region should look like in terms of recycling in the future
- Recommendations on ways to begin to move us toward that vision.

The review of recycling is an outgrowth of the Regional Environmental Summit sponsored by Mecklenburg County, the City of Charlotte, the Charlotte Regional Partnership and Catawba Regional and Centralina COGs in May 2008. The report and the recommendations of the COG Board will become part of the CONNECT Environmental Cabinet’s oversight responsibilities.

To conduct this study, recycling coordinators and solid waste professionals in counties and municipalities in our region were interviewed and pulled together in a Recycling Working Group. They compiled data to assess the current state of recycling in the region, developed a vision for the future of recycling in our region, and to compiled ideas and solutions for improving recycling. An elected officials’ Recycling Advisory Committee was formed to oversee and provide guidance for the project. Data was also gathered from NC DENR, Department of Pollution Prevention and Environmental Assistance officials. A web search for relevant recycling studies and reports was conducted to identify additional best practice alternatives. We also interviewed industry representatives and other interested stakeholders who have professional expertise in recycling issues.

The Recycling Working Group discussed and prioritized actions that they believed would be successful in this region and these are included as recommendations. The report was reviewed and discussed by the elected officials’ Advisory Committee, and is now being submitted to the full Centralina Council of Governments’ Board.

Report on Recycling In the CCOG Region

Summary of Recommendations:

The Recycling Advisory Committee and the Recycling Working Group recommend that the region work together on the following:

- Educate policy makers and decision makers about recycling
- Conduct “sub” regional meetings of solid waste and recycling staff and possibly elected officials to discuss collaborations and efficiencies.
- Conduct regular meetings of solid waste and recycling professionals in the region to share knowledge and information
- Coordinate the sale of recycled materials by developing a region wide RFP for the sale of recycled goods
 - If we work together we might get better / more consistent prices, and might have enough volume to attract better buyers
 - Include all recycled materials including white goods, scrap metal, paper, etc.
- Collaborate on education efforts
- Create regional recycling centers (MRFs) that can accept co-mingled / single stream materials

Incentives for Increasing Our Regional Efforts in Recycling

Solid waste and recycling processes vary widely across our region, but the one constant is it is very difficult to convince those who do not see the value of recycling that a change may be beneficial. Change may mean citizen complaints, financial commitments, risk as far as revenue streams, modifying contractual arrangements, etc. and there has to be a good reason to modify current practice. Below are some economic, environmental / sustainability, legal and potential “business case” incentives for local jurisdictions in our region to consider.



Economic Incentives

Often, one of the first arguments you hear about why we should not expend our efforts on recycling is that it doesn't make economic sense, that there are no markets for recycled goods, and it is too costly. Until the recent economic crisis, the prices of recycled goods had been increasing in recent years. Recycling professionals anticipate that these prices will rebound as the economy strengthens. It is important, however, to look beyond the actual exchange of cash for goods, to the business and community implications. In fact, “throwing away” potentially recyclable goods, actually negatively impacts existing recycling businesses that rely on these materials and thwarts the development of new

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recycling businesses in the region. The recycling industry also provides an increasing amount of job opportunities for our workforce.

- **Jobs and Business - US:** According to the U.S. Recycling Economic Information Study, the recycling and reuse industry consists of approximately 56,000 establishments that employ over 1.1 million people, generates an annual payroll of nearly \$37 billion, and grosses over \$236 billion in annual revenues. This represents a significant force in the U.S. economy and makes a vital contribution to job creation and economic development.¹ Recycling creates a minimum of 10 times more jobs per ton of material than land filling.²
- **Jobs and Tax Revenue – SC:** A recent study showed that the recycling industry in South Carolina is directly responsible for more than 15,000 jobs, \$1.5 billion in annual personal income and \$69 million in tax revenue each year. In addition, the study estimates that the state's recycling industry will grow about 12 percent annually during the next five years with an economic impact of \$11 billion.³
- **Jobs and Business - NC:** The North Carolina Division of Pollution Prevention and Environmental Assistance reports that:
 - In 2004, over 500 recycling businesses in NC employed approximately 14,000 people across the state, this equates to more employed people than in biotech or agricultural livestock industries.⁴
 - While manufacturing jobs in the state declined 31% from 820,000 in 1990 to 569,000 in 2005, recycling jobs in the state have increased 60% from 8,700 in 1994 to 14,000 in 2004.⁵
 - The number of companies listed in the state's recycling markets directory⁶ has increased from 183 in 1989 to 566 in 2008, a 300% percent increase.
 - Recycling companies in North Carolina range from Fortune 500 manufacturers to single proprietary, family-owned businesses, handling hundreds of different types of materials and products. Some of these companies, including Blue Ridge Recycling and Engineered Recycling – Charlotte, now occupy old textile factories and other industrial plants abandoned by some of the state's more traditional industries.
 - NC DENR also reports that the total annual payroll for NC recycling employers was in excess of \$377 million in 2008.⁷
- **Jobs and Business - Centralina Region.**
 - There are over 125 recycling related businesses, with close to 3,700 employees, in our region included in the NC Recycling Markets Directory (**Attachment 1**) This list is not comprehensive, as there are more than a few recyclers that are not listed in the markets directory.
 - NC DENR staff conducted a search for "Recyclable Material Merchant Wholesalers", and "Material Recovery Facilities" in the Harris Directory and



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found 59 of these types of businesses in our area. The total gross sales of those businesses are over \$664 million, and they employ over 2000 employees ([Attachment 2](#)).⁸

- Some examples of recycling /economic development in our region :
 - Tri-County Environmental compost facility in Gaston County
 - Blue Ridge Recycling in Charlotte – carpet
 - CompuTel in Charlotte – electronics
 - Union Gypsum in Marshville- C&D
 - Since Mecklenburg County implemented recycling separation and Alcohol Beverage Control Laws requiring recycling went into effect, a number of new companies have sprung up in our region including Pickett Up Recycling in Charlotte, Think Green Recycling Services of Mooresville and San Kawa, LLC in Albemarle.

- **Exports:** According to the 2006 National Association of PET (Polyethylene Terephthalate, a plastic resin and a form of polyester) Container Resources Annual Report⁹ almost 40 percent of all PET bottles recovered in the U.S. now go to China. The 2006 NC Solid Waste Report states that scrap paper, much of which is destined for Chinese ports, has become one of the largest bulk exports of any commodity for the U.S.¹⁰ PET containers have the recycling symbol and the number 1 and are commonly used to package soft drinks, water, juice, peanut butter, salad dressings and oil, cosmetics and household cleaners.

- **Price of Materials:** The price of virgin materials is cyclical, and until the recent economic crisis, was rising. Below is a chart from the 2006-07 DENR Solid Waste Report showing the increase in price for most recycled products in our region.¹¹ Since recycled materials can save money in the manufacturing process, we can expect to see a continued rise in demand for recycled materials. Coca-Cola recently opened a large plastic bottle recycling facility in Spartanburg, SC where they plan to recycle 130 million pounds of soda bottles per year.

Materials	Summer 2006	Fall 2006	Winter 2006-07	Spring 2007	Summer 2007
Aluminum Cans, Lbs., loose	\$.74	\$.84	\$.92	\$.93	\$.90
Steel cans, gross tons, Baled	\$115	\$103	\$107	\$144	\$146
PETE, Lbs. Baled	\$.15	\$.13	\$.15	\$.17	\$.17
HDPE, Lbs., Baled	\$.21	\$.22	\$.23	\$.25	\$.27
Newsprint, ton, baled	\$71	\$81	\$91	\$119	\$114
Corrugated, ton, baled	\$105	\$87	\$73	\$126	\$133
Office paper, ton, baled	\$138	\$143	\$168	\$188	\$192
Mixed paper, ton, baled	\$57	\$53	\$56	\$87	\$93
Clear glass, ton	\$23	\$23	\$23	\$23	\$23
Brown glass, ton	\$17	\$17	\$17	\$17	\$17
Green glass, ton	-\$5	-\$5	-\$5	-\$5	-\$5

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- We know that the economic crisis will have significant impact on the price of recycled goods. On November 1, 2008, the price paid for old newsprint fell from over \$120 per ton to about \$40 per ton. Plastics, steel and aluminum have taken less precipitous, but still significant, tumbles as well. Most recently Pratt Industries closed their single stream MRF in our region. The reduction in the prices in recyclable material markets is driven by the lagging export market.
- **Landfill Costs- Construction and Long Term:** When considering the economic incentives for recycling, it is important to consider both the cost of construction of new landfill space and the possible long term costs related to landfills. To open a new cell for an existing landfill can cost between \$2-3 million. Constructing and defining a site for a new landfill is potentially cost prohibitive.

For the long term, a landfill owner is responsible for their landfill for 30 years after it closes. The EPA, however, believes that all landfills will leak, and contaminate soil and groundwater supplies, at some point after the 30-year time period. Experience has shown that some private owners of closed landfills have filed for bankruptcy prior to the end of their period of responsibility. Local governments are sometimes left with huge clean-up liabilities. Roughly 20% of the sites on the Superfund list (the nation's most hazardous sites) are solid waste landfills. Clean-up costs at these sites commonly run into the tens to hundreds of millions of dollars and increasingly fall upon the shoulders of taxpayers rather than the polluting industries. It was recently ruled by the EPA that cities are financially responsible *in perpetuity* for maintaining the integrity of the "cap" on Landfill sites to prevent any rainwater from entering the old landfill.¹²

Economic Conclusion:

Recycling means increases in business, jobs, and exports, as well as revenue from the sale of recycling products. We must begin to look at recyclables as a commodity – the supply of which can be controlled by local governments, and used to build businesses and jobs in our community.

Environmental and Energy Savings Incentives

In addition to the economic incentives for recycling, there are the more obvious environmental and energy savings incentives for increasing our recycling efforts. Recycling can impact the quality of our air, and our environment. Recycling prevents carbon and greenhouse gas pollution, reduces energy use, and helps us conserve natural resources. Recycling can also extend the life of a landfill – which is both an economic and environmental incentive.

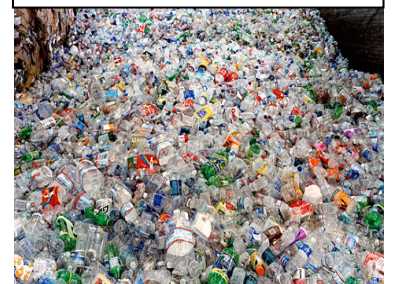
- **Reduced Carbon Emissions :**
Nationally, we recycled 85 million tons of municipal solid waste in 2007. This provides an annual benefit of 193 million metric tons of reduced carbon equivalent emissions, comparable to removing 35 million passenger cars from the road each year. ¹³
- **Reduced Greenhouse Gas Emissions:** The EPA estimates that the nearly 7 million tons of metals (which includes aluminum, steel, and mixed metals), is recycled annually eliminated greenhouse gas emissions totaling close to 6.5 million metric tons of carbon equivalent. This is equivalent to removing more than 5 million cars from the road for one year. ¹⁴
- **Energy Savings :**
 - Recycling just 1 ton of aluminum cans rather than throwing them away conserves more than 207 million BTUs, the equivalent of 36 barrels of oil or 1,655 gallons of gasoline. ¹⁵ This is one step in reducing our dependence on foreign oil.
 - In the US, we recycled and composted 85 million tons of MSW, which saved the equivalent of 10.7 billion gallons of gasoline. ¹⁶
 - A 4.4 percent increase in US recycling rates would have the same effect as removing 27 million passenger cars from the roadway each year. ¹⁷
- **Use less Resources:** Manufacturing plants that use recycled goods use less fossil fuel – because recycled materials have already been processed once from raw materials (ores, petroleum, trees) – takes less to process a second time.



Each ton of recycled paper saves 17 trees, 225 kilowatt hours of electricity and 60,000 gallons of water. Last year enough paper was recovered to fill 130 Empire State Buildings



Roughly 1 million tons of plastic bottles were recycled in 2006 only 24% of the amount American dispose of annually. Every tone of plastic bottles recycled saves about 3.8 barrels



Americans recycled nearly 54 billion aluminum cans in 2007. Aluminum is back on the shelf as a brand new beverage container 6 weeks after it hits the recycling bin.

Reference for above pictures ¹⁸

Environmental Conclusion

By increasing our recycling efforts we will help sustain the environment for future generations.

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Legal Incentives

In addition to the economic and environmental reasons for recycling, recycling is mandated for many items. NC Statutes prohibit (130A-309.10) the following items from being put into landfills.

- Used oil
- Yard trash (except in landfills approved for disposal of yard trash)
- White goods
- Antifreeze
- Aluminum Cans,
- Whole scrap tires
- Lead Acid Batteries
- Plastic Bottles (effective 10-2-09)
- Beverage containers that are required to be recycled by holders of malt beverage permits, on-premises unfortified wine, permits, on-premises fortified wine permits, and mixed beverages permits (GS 18B-1006.1)
- Motor Oil Filters (effective 10/1/09)
- Wooden Pallets (effective 10/1/09)
- Oyster shells
- Televisions (2011)
- Computer equipment (effective 1/1/12),



The Aluminum Association reports that \$1.2 billion worth of aluminum cans went into landfills in 2007.¹⁹ The disposal of aluminum cans is not only illegal in NC, but it is like throwing away revenue. In fact, as much as 25,000 tons of aluminum is still land filled in North Carolina each year. Market value of the discarded material is approximately \$25 million.²⁰

By offering additional recycling opportunities for these items we can support the legal requirements.

Business Case Incentives for Local Governments

In making decisions on recycling, local government officials must consider the cost / benefit calculation for their community in addition to the economic, environmental and legal considerations. The “business case” incentives for recycling in our region vary greatly because waste and recycling collection and disposal vary greatly.

To conduct a cost benefit analysis of recycling it is necessary to look at things such as collection costs, disposal costs, tipping fee revenues, new landfill construction costs, costs for processing recycled materials, revenues for sale of recycled materials and any other

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contractual requirements. NC DENR has worksheets to calculate the cost benefit of recycling and is working with our Recycling Working Group to assist with those calculations for jurisdictions in our region. Typically savings are realized by reduced waste disposal costs, but there are many factors that enter into the cost benefit analysis.

Some other factors which impact the business case for recycling include:

- How households are charged for waste and recycling.
The amount of collection fees and method of collecting them vary widely in our region. Waste and recycling fees may be included in property taxes, charged separately by the local government, or charged by private haulers. Some jurisdictions include recycling fees in the waste fee, others charge separately for recycling and waste collection. Waste disposal and collection fees are not always reported separately. When fees are charged directly by private haulers, the local jurisdiction may be ultimately responsible for increases due to contractual arrangements, but is one step removed from the citizen complaints that may occur. If households are charged, specifically and separately, for waste and recycling, an incentive can be created for households to recycle. If more households recycle the potential benefits are greater. **Attachment 8 has a partial list of fees charged in our region**
- Who owns and operates the landfill – who profits from dumping the waste.
Five local jurisdictions own and operate MSW landfills (Gaston, Iredell, Lincoln, Rowan, Albemarle) . Mecklenburg owns a MSW Landfill but is not currently operating it as a MSW Landfill.

Jurisdictions who own and operate landfills have a great incentive to recycle because to site and construct new landfills is cost prohibitive. In addition to the cost and environmental concerns, the outcry of “not in my back yard” from the general public may increase the incentive to recycle in order to extend the life of their landfills. The costs to construct a new cell can range from \$2-3 million. Local governments often establish “enterprise” funds and can benefit from additional revenues from sale of recycled goods, but this must be balanced against the potential loss of tipping fees.



Other jurisdictions that do not own or operate landfills (Cabarrus, Union, Anson, Stanly, Mecklenburg) have contractual arrangements with haulers and their waste is taken to private landfills (Primarily Allied Chambers development in Polkton, and Allied / Charlotte Motor Speedway). Their incentive for recycling is much less direct, unless there are contractual incentives. For example Anson County does not own a landfill and also does not pay tipping fees due to their host community agreement, there is

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therefore little financial incentive for them to recycle (i.e. avoided costs). Gaston County, on the other hand, owns and operates its landfill and, therefore, has more control over disposal and more incentive to recycle.

A privately operated landfill may have less incentive to increase recycling due to lost tipping fees, unless they have a recycling operation or the remaining capacity of their landfill is very limited.

- Who collects the waste and recyclables

Some Counties or municipalities collect their own waste and recyclables and have personnel and capital equipment investments which impact the case for changing recycling collection processes. This is a potential disincentive to recycling because of capital investments and potential layoffs.

Other local jurisdictions contract with private haulers and have existing contracts for waste and in some cases recycling collection. Modifying existing relationships takes time and may have financial implications. If the hauler and landfill owner are the same, tipping fees are controlled by the contractor and there may be less of an incentive to recycle. Reduced waste due to recycling may mean less disposal fees.

In our current business environment, many processors are not paying for delivered recyclable materials. The incentives for jurisdictions who only collect waste (don't have a landfill or processing facility) must therefore be realized in reduced waste tipping fees. If or when processors are able to pay for recycled materials, there will be more incentive to collect more.

- Density of the homes are in the jurisdiction

It may be more costly to collect recycling curbside in rural areas that are less concentrated. Fuel and transportation costs must be factored into the equation.

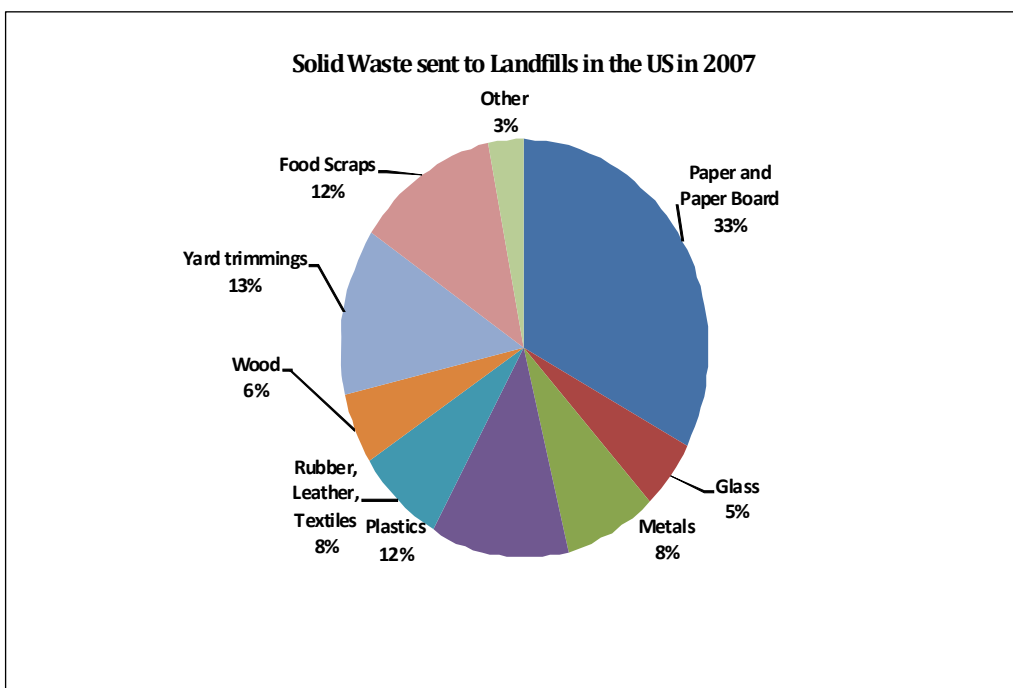
Facts and Stats for Waste and Recycling in US, NC and Centralina Region

This section of the report includes information on solid waste and recycling in the US and in North Carolina as background and to provide a frame of reference. Also included is information about recycling in the Centralina region including how much we recycle, how we pay for it, what is recycled, and how residential and commercial waste and recycling in collected. There is also information about the Material Recovery Facilities, Municipal Solid Waste Landfills, Construction and Demolition Landfills and Yard Waste landfills in our region, and our local source reduction and education efforts.

Recycling in the US

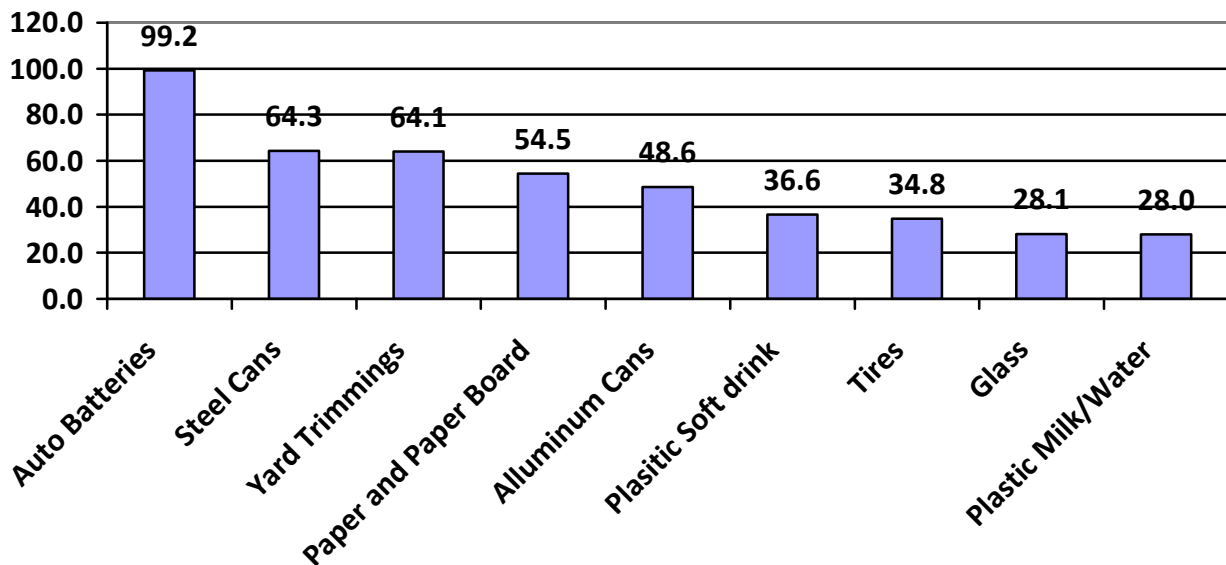
In 2007, the total Municipal Solid Waste (MSW) generation in the US was 254 million tons and 85 million tons, or 33%, was recovered through recycling and composting. Sixty three (63) million tons were recycled materials and 22 million tons were composted. On average, we recycled and composted 1.5 of our individual waste generation of 4.6 pounds per person per day. ²¹

The EPA estimates that 55%-65% of municipal solid waste is generated by residential users and 35%-45% is generated by schools and commercial locations, such as hospitals and businesses.²² Organic materials, such as food waste and yard trimmings, and paper and paperboard continue to be the large components of MSW. Below is the breakdown of materials sent to landfills in 2007: ²³



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A 2007 EPA study ²⁴ estimates the following recycling rates for selected products:



Recycling in North Carolina

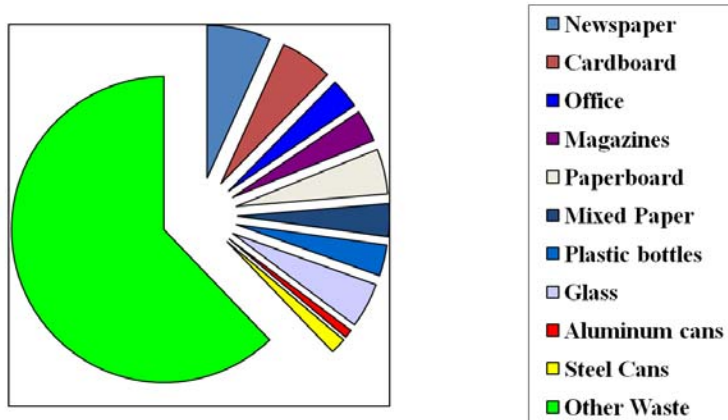
In North Carolina, according to the 2006-07 North Carolina Solid Waste Management Report produced by the Department of Environment and Natural Resources²⁵, a total of 11.8 million tons of municipal and construction and demolition waste were generated by North Carolina communities and was disposed in facilities in North Carolina and outside of the State. There was 1.35 million tons of waste recycled in North Carolina in 2006, which represents 11% recovery ratio (recycled material: disposed material).²⁶

North Carolina actually exports significantly more waste than it imports: During 2006-07 close to 130 thousand tons of waste was imported from other states and over 1.3 million tons of waste was exported. The same report found that if the rate of landfill use in North Carolina remains the same as in 2005-06, the State would have 19.64 years of remaining land fill capacity.²⁷ The report also found that the average landfill tipping fee for North Carolina was \$35 per ton, which is one of the lowest in the US. Tipping fees for our region are in many cases, below the North Carolina Average.²⁸ ([Attachment 3: NC Tipping Fees](#))

NC DENR has found that of the 1880 pounds of solid waste generated per household, a fully developed recycling program could potentially provide up to 745 pounds of recyclables per year (40% of waste). North Carolina households however, are only recycling 226 pounds per household served per year through local recycling programs. The Statewide average per capita pounds per year of recycling is 115 pounds in curbside programs. NC DENR estimates that if NC recycling programs were fully functioning the

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amount of recycled commodities would increase by more than 350,000 tons.²⁹ Below is an estimate of the breakdown of household waste by recyclables³⁰:



Recycling in Centralina Region

How much is recycled?

Recycling efforts in our region vary widely. Below is a table which shows our regions' 2006-07 waste and recycling tons and waste and recycling pounds per person by county.

Counties	2006-07 Tons Waste ^[1]	Pounds Waste/ person *	2006-07 Tons Recycled ^[1]	Pounds Recycled / person
Mecklenburg	1,543,924	3,734	72,142	174
Iredell	237,068	3,265	12,501	172
Lincoln	93,816	2,632	3,787	106
Union	264,469	3,074	8,582	100
Cabarrus	361,884	4,605	6,002	76
Gaston	250,611	2,541	4,225	43
Anson	23,919	1,886	615	49
Rowan	155,407	2,310	3,326	49
Stanly	75,409	2,574	589	20
Totals	3,006,507	2,958	111,769	125

- Includes all waste regardless of source which is disposed of in C&D and MSW landfills

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We estimate that our region on average is recycling 125 pounds per person per year - but there is wide disparity between areas. Some municipalities are doing exceptionally well in recycling: Davidson 578 lbs per person, Huntersville 216 lbs per person, Waxhaw 164 lbs per person, Concord 123 pound per person. ([Attachment 4 List of recycling tons collected in 2006-07 for municipalities available](#))

Below is the NC DENR ranking of the Counties in our region compared to other North Carolina Counties in terms of per capita pounds of recycling (municipal recycling in each County is included in County figures).³¹ Dare County and Catawba County ranked 1 & 2 respectively.

County	Per Capita Pounds Recovery Recycling Rate	Rank out of 100 NC Counties on Per Capita Pounds Recovery Recycling Rate
Mecklenburg	174.49	12
Iredell	172.15	13
Lincoln	106.22	36
Union	99.74	41
Cabarrus	76.38	55
Rowan	49.44	73
Anson	48.50	74
Gaston	42.84	78
Stanly	19.92	96

Due to incomplete reporting to the State, it is difficult to come up with a recycling rate for our waste stream (excluding yard waste). Below are a few examples where we could come

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up with a reasonably accurate estimate of the recycling rate.

Jurisdiction	Estimated recycling Rate*
Concord	9%
Gastonia	1%
Statesville	3%
Lincolnton	4%
Charlotte	10%
Davidson	18%
Salisbury	16%
Stallings	10%
Indian Trail	7%
Waxhaw	10%
Huntersville	15%
Based on Waste and Recycling as reported to State in 2006-07	



How much and how do we pay for it?

The total cost of collection, disposal and recycling and mulching for 2006-07 for our region is estimated to cost over \$115 million and an estimated 33% of the total costs, or over \$37 million, was paid to private contractors as reported to NC DENR. **Attachment 5 shows cost breakdown by local government.**

Funding for a recycling program can come from local taxes, or garbage collection fees in our region.

What is recycled?

Counties and municipalities determine how recyclables will be collected, who will process them and how to conduct education and outreach programs. What is recyclable depends on markets and processing facilities that are available. The types of materials recycled vary by County and municipality. **Attachment 6 shows a breakdown of what is recycled in various jurisdictions of our region.**

Collection of Waste and Recycling - Residential and Commercial

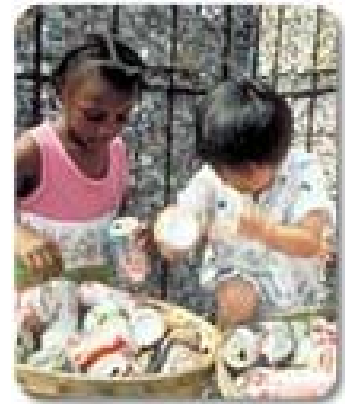
Residential

In the US there are several ways recycling is collected including: curbside, drop-off centers, buy-back centers, and deposit/refund programs. In the Centralina region we offer drop off centers and curbside pickup.

- Recycling Convenience Sites – Convenience sites are one successful method of collection. Our region has a well developed system of convenience sites with over 60 sites that collect a fairly comprehensive list of materials. Most counties offer drop off sites for waste ([Attachment 7-Map](#)).
 - Some Counties are expanding the materials collected at these sites to include yard waste, white goods. Each County is required to have at least one white goods collection point.
 - Anson County does not have fully established County recycling convenience sites, but Allied Waste has installed some paper recycling bins. They are working with the schools to expand school sites and allow residents to drop off recyclables.
 - Some Counties (Gaston and Cabarrus) offer reduced costs for waste disposal at collection sites if the customer also recycles.
 - City of Albemarle residents do not officially have access to the Stanly County sites.

- Curbside Recycling
 - 13+ communities offer curbside recycling to single family residents
 - Charlotte, Davidson, and Huntersville offer curbside recycling to some multifamily households
 - Mooresville is conducting a “single stream” curbside recycling pilot program using 64 gallon roll out containers. Recyclables, until the recent economic crisis, were being taken by City employees and vehicles to Pratt Industries. The pilot was going well but they have some logistical problems mostly related to the time and travel in taking the recyclable materials to the Pratt Facility. Pratt Industries closed in November.
 - Gastonia has a “subscription” recycling collection service – only those who want to pay for the service use the service. In other areas, this type of services results in low participation and inefficient collection routes.

- Who Collects Waste and Recycling and How
There are various types of waste and recycling collection and hauling efforts ([Attachment 6 Recycling Collection by Municipality](#)).



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- Some municipalities operate their own collection trucks
- Some counties and municipalities contract / franchise with specific private haulers who are the only ones authorized to collect in the area (Cabarrus)
- Some counties and municipalities use private haulers but do not regulate / franchise them
- Some jurisdictions regulate where the recycling/ waste must be taken – others do not.
- At this point, only Mooresville is collecting single stream recycling, as a pilot. All others are dual stream. Mecklenburg is scheduled to go to single stream – in July 2010. They also plan to use larger 64 gallon wheeled recycle roll out carts.
- Albemarle does not offer residential recycling but does recycle white goods, batteries, metal from businesses and residents that drop off at landfill.



Commercial

Commercial recycling efforts include all non residential activities except construction and demolition activities.

- Commercial waste accounts for approximately 43% of all solid waste in Mecklenburg County³² (Mecklenburg County 2006-07 Solid Waste Plan)
- Starting in January 2008 ABC permit holders statewide were required to recycle beverage containers
- Only Mecklenburg County has a Mandatory Source Separation Ordinance which require businesses to separate corrugated cardboard and office paper from their trash in order to recycle it.
- Only Mecklenburg offers designated Commercial Drop Off Centers that may be used by commercial entities.
- Commercial businesses generally privately contract with commercial recycling haulers

Material Recovery Facilities (MRFs)

Once collected, recyclable materials are sent to a “Materials Recovery Facility” (MRF) where they are sorted and prepared for marketing to manufacturing and other entities or if separated are sent directly to a broker. Household recyclables from our region go to one of three MRFs listed below. Two are owned by local governments and one is owned by a

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private entity. Pratt Industries recently closed their single stream MRF in November as a result of the global economic problems.

- Metrolina Recycling Facility (Mecklenburg County MRF) – one of first in NC. This actually operates as a private- public partnership – the County owns and FCR operates the facility.
- Rowan County MRF
- Uwharrie owned by Republic (Montgomery County outside Centralina region)



Some local governments send non-mixed materials directly to other private processors as well and in some cases it may go directly from a local government to a mill.

Municipal Solid Waste (MSW) Landfills

There are five local government owned and operated, open municipal solid waste (MSW) landfills (Gaston, Iredell, Lincoln, Rowan, Albemarle), one local government (Mecklenburg) owned MSW landfill that is not currently being operated in our region and including two privately owned and operated landfills. Albemarle is the only municipality in our region that operates a landfill. Mecklenburg does not currently utilize their municipal solid waste landfill for municipal waste, but instead sends their waste to Allied's Charlotte Motor Speedway Landfill. Below is a listing of our region's landfill capacity of as shown in the NCDENR 2006-07 Solid Waste Plan.³³ A comments column has been added to reflect changes that have been approved since DENR Published its report to show a more realistic picture of remaining capacity.

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Local Government Owned and Operated MSW Landfills						
Name	Address	Remaining Constructed Capacity	Overall Remaining Capacity	Remaining Constructed Capacity in Years (2006-07 TPY)	Remaining Overall Capacity in years (2006-07 TPY)	Comments added through Interviews
Gaston County Landfill	3155 Philadelphia Church Road, Dallas	-98,441	3,096,886	-0.91	28.51	New cell has been constructed since report
Iredell County Landfill	354 Twin Oaks Road ,Statesville	334,882	1,863,228	1.99	11.09	Plan to open more cells and phases of landfill, projected life will be 40-50 years
Lincoln County Landfill	SR 1169, Lincolnton	-15,564	1,619,942	-0.35	35.93	
Rowan County Landfill	Campbell Rd SR 1947, Salisbury	564,388	6,880,686	5.96	72.7	
Albemarle Landfill	SR 1740, Albemarle	54,900	2,616,114	1.18	56.12	Remaining capacity does not show expansion which has been approved
Mecklenburg County Landfill	17131 Lancaster Hwy, Charlotte	2,169,927	7,511,950	13.13	45.46	Not used for MSW, does have capacity
Private Owned and Operated MSW Landfills						
Allied - Chambers Development MSWLF	RT. 1, Box 235, Polkton	1,045,028	15,133,829	3.83	55.41	
Allied (Formerly BFI) - Charlotte Motor Speedway Landfill	5105 Morehead Road, Concord	7,111,942,942	21,619,942	5.7	17.33	

Construction and Demolition (C&D) Landfills and Recycling

- There are 10 C&D landfills in our region, eight are local government owned and operated, two are privately owned and operated. None of the C&D Landfills offer the full range of C&D recycling, Union and Mecklenburg do some separation of selected items.

Local Government Owned and Operated		
Cabarrus	4441 Irish Potato Road, Concord	Going Through expansion phase, No recycling offered, 2 years out to fill,
Gaston County C&D Landfill	3155 Philadelphia Church Road, Dallas	Early Stages of Recycling - wood, gypsum, shingles
Iredell County C&D	354 Twin Oaks Road, Iredell	
Lincoln County C&D	5291 Crouse Road, Crouse	
North Mecklenburg C&D Landfill	15300 Holbrook Rd, Huntersville	
Rowan County C&D	Campbell Road SR 1947, Salisbury	
Albemarle C&D Landfill	SR 1740, Albemarle	
Union County C&D Landfill	2125 Austin Chapel Rd, Wingate	
Privately Owned and Operated		
Private	DH Griffin Brothers - Highway 49 C&D Landfill and Recycling	2105 Speed Rail Court, Concord
Private Operator	BFI-Lake Norman Landfill	7099 Quarry Lane, Stanley (Lincoln County)

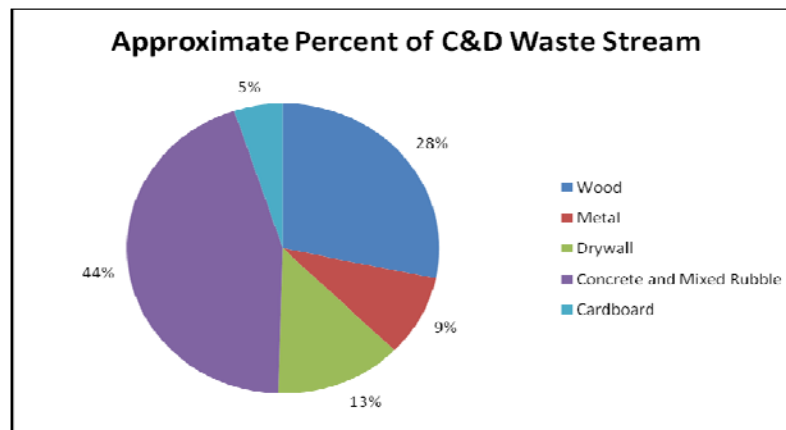
The State estimates that 30%-35% of total Municipal Solid Waste is C&D Waste. The following table represents some very rough estimates of C&D waste in our region.

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C&D Waste Estimate	MSW Tons Disposed 2006-07	Estimated Tons C&D Waste
Anson	23,919	7,176
Cabarrus	361,884	126,659
Gaston	250,611	87,714
Iredell	237,068	82,974
Lincoln	93,816	28,145
Mecklenburg	1,543,924	540,373
Rowan	155,407	54,392
Stanly	75,409	26,393
Union	264,469	92,564

The C&D waste stream is more closely tied to the ups and downs of the economy than other waste streams. It is also the stream where there is a great potential because C&D Recycling is grossly under captured, and is the least recycled segment of our waste stream. Some of the constraints to more C&D recycling include low tipping fees for disposal, low value of recycled materials when related to processing costs, and the “need” to co-locate C&D recycling facilities with C&D landfills.

The makeup of the C&D Waste Stream, as estimated by Mecklenburg County, shown ³⁴



- The EPA estimates that region 4 (which includes our region) that C&D is growing 25-40%.³⁵ The projected growth in our area makes C&D recycling critical to managing local landfills and potential profits from the waste stream.

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- In Regional Environmental Summit sponsored Mecklenburg County, the City of Charlotte, the Charlotte Regional Partnership and Catawba Regional and Centralina COGs in May 2008, C&D recycling was a #1 priority in our region.

Yard Waste Landfills

Mecklenburg, Gaston, Lincoln, Rowan, Iredell, Union and Albemarle landfills all process yard waste. Many mulch or compost materials which are then made available to businesses and residents, but numbers were not gathered for this report.

Source Reduction and Education Efforts

The education efforts to increase recycling in our region vary widely. Activities include:

- Educational pamphlets, posters, banners
- Educational presentations to schools and community groups
- Recycle hotlines
- Mass mailings
- Promotional items
- WebPages,
- Special Events
- Contests and challenges at schools –
- Special events – electronics recycling day, composting workshops

Attachment 9 is a chart which shows that various education efforts being conducted throughout our region

Best Practice Solutions

Below is a very small sample of some practices that have been implemented to improve recycling. A more complete list of best practice solutions can be found at the NC DENR website: <http://www.p2pays.org/bmp/>. Increasing recycling can be accomplished through state legislative actions, local ordinances, changing economic incentives, increasing collection efforts, increasing education efforts, and building new composting and recycling facilities.

Sample State Legislative actions:

- Increasing producer responsibility – “Take Back” programs, where the producer is required to take the product back for disposal or recycling, have been authorized by several states. Some programs include advance disposal fees on items such as white goods and tires. Maine has a law requiring industry to take back and recycle the discarded computer monitors and televisions that municipalities collect. California requires that retailers of cell phones collect used products for reuse, recycling, or

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proper disposal. Thirty seven states currently have laws requiring retailers to take back car and truck lead-acid batteries. ³⁶ Eleven states currently encourage the recycling of beverage containers through deposit laws, or bottle bills (Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, Vermont, California, Connecticut, and Delaware). ³⁷

- Increasing restrictions on what can be put in landfills and increasing enforcement options is another way the states can impact recycling. The list of items which are banned from landfills, such as fluorescent lighting which contains mercury, aluminum cans, batteries, etc., varies widely between states.

Examples of Local Ordinances

- According to a GAO report³⁸ residential and commercial recycling is mandated in some cities including
 - Seattle, where haulers are instructed not to collect trash cans that contain 10 percent or more recyclable materials. Six months after Seattle began enforcing this ordinance, city officials announced that approximately 95 percent of the apartments and businesses inspected were recycling correctly and less than 1 percent of household garbage cans were not collected because they contained more than 10 percent of recyclable materials.
 - New York City which requires all businesses to separate recyclable materials from trash and has different recycling requirements for different types of businesses. For example, people in office buildings are required to recycle office paper, newspapers, magazines, and corrugated cardboard, and people in food or beverage establishments are required to recycle metal cans, glass bottles and jars, plastic bottles and jugs, aluminum foil products, and corrugated cardboard. New York City officials can fine residents and businesses that mix recyclable materials with their trash.
 - Portland, Oregon, which distributes recycling containers to businesses and requires all businesses to recycle at least 50 percent of their total waste.
- Local Source Separation Ordinances
 - C& D Contractors are required to separate and recycle materials in Orange County and Wake County. Contractors must buy a disposal permit at the time of getting their building permit.
 - Orange County requires recycling of corrugated cardboard, clean wood, and scrap metal. Their ordinance requires that C&D projects must have a waste management plan in place, that waste haulers must be licensed, and that these requirements will be enforced. The Town of Chapel Hill, on behalf of Orange County, reviews and processes Regulated Materials Permits and charges a fee of 8% of the building permit fee. Enforcement penalties include double tipping fees for missed loads, civil citations for no permit and hauling without a license. All materials are taken to a “certified recycling facility” and separated there.

Changing Economic Incentives

- A GAO report³⁹ found that financial incentives can be very important to a successful recycling program:
 - In Austin, Portland, San Francisco, and Seattle, residential garbage collection fees are based on the size of the garbage can used. If residents recycle that can use a smaller can and pay less.
 - In Minneapolis residents who actively participate in the city's recycling program through processing, sorting, separating, and bagging their recyclables receive a \$7 credit in their monthly garbage bill.
 - In Philadelphia, has a "Recycle Bank" where residents can receive up to \$25 per month in coupons—based on the weight of their recyclable materials—that can be redeemed at major retailers.
 - A US EPA Study identified more than 3,400 communities in 1995 that use some type of Pay-As-You-Throw system where residents pay for their garbage pick up based on the amount they generate.⁴⁰ In some towns in Pennsylvania residents are required to purchase trash bags from City /County – and only those will be picked up

Increasing Collection Efforts

- A GOA reports referenced some successful strategies for encouraging residents of multifamily dwellings such as: providing economic incentives, requiring recycling plans, and making recycling as convenient as garbage disposal through techniques such as retrofitting building garbage chutes to be recycling compatible.⁴¹
- An EPA study found that offering curbside and drop-off collection contributed to high recycling rates because the ease of recycling made residents more likely to recycle.⁴² The Town of Clayton, NC reported greater than 200% increase in recycling by changing to wheel out large size recycling containers.
- Iredell County increased their collection of commercial material by working with larger commercial sources to recycle. They recently won the 2008 Ralph W. Ketner Employee Productivity award for working with companies and recycling rigid plastics. The County gets \$.10 per pound, processed over 324,000 pounds, collected \$32,400 in sales fees, and saved 311 cubic yards of land fill, while companies avoided \$5,670 in tipping fees.

Increasing Education Efforts

- A recent General Accounting Office Report⁴³ found that public education and outreach programs were critical to efforts to increase recycling. Public education is correlated to higher recycling rates. All of the recycling coordinators that were interviewed in their study used mass media to educate the public about recycling.

Establishing Composting facilities

According to a GAO Report ⁴⁴composting has increased recycling rates in some major cities (San Francisco 14% increase in 2004, Seattle 13% increase in 2003). Composting not only reduces the amount of waste sent to landfills, but reduces pollution because less methane gas is produced. The EPA has also found that composting can be used to enrich soil, suppress plant diseases and pests, reduce or eliminate the need for chemical fertilizers, and promote higher yields of agricultural crops

Vision for Region 2030

The region's recycling professionals were asked what their vision is for "the state of recycling" in the future. All wanted to increase the percentage of recycled materials diverted from landfills in our region. Their ideas are below:

- More and Better C&D Recycling
- Regional recycling centers (MRFs) up and running using co-mingled stream
- 60%-80% of our waste being recycled
- More producer responsibility - work with manufacturers about regulation of non recyclable materials (electronics, bottle bill, packaging)
- Curbside recycling where it is feasible in more developed areas, but not necessarily in rural areas
- Recycling fees visible to households – so they have more incentive to recycle
- Mandatory recycling for Governments, households and businesses.
- More and better education programs
- "One size will not fit all" – solutions to increase recycling may vary widely across the region
- More accountability /monitoring to meet goals – goals need to be about recycling not about waste reduction

Recommendations for Improving Recycling in our Region

The recycling and solid waste professionals in our region had many ideas for improving the recycling efforts in our region. Below are some of their ideas in priority order:

The following ideas had the most support:

- Educate policy makers and decision makers about recycling
- Conduct “sub” regional meetings of solid waste and recycling staff and possibly elected officials to discuss collaborations and efficiencies.
- Conduct regular meetings of solid waste and recycling professionals in the region to share knowledge and information
- Coordinate the sale of recycled materials by developing a region wide RFP for the sale of recycled goods
 - If we work together we might get better / more consistent prices, and might have enough volume to attract better buyers
 - Include all recycled materials including white goods, scrap metal, paper, etc.
- Collaborate on education efforts
- Create regional recycling centers (MRFs) that can accept co-mingled / single stream materials

The following ideas were also suggested:

- Expand C&D recycling
- Work to increase accountability locally
- Work together on grant writing – some are more experienced than others and could assist.
- Begin to investigate the possibility of creating a facility that could handle food waste/ composting
- Mandatory recycling for governments
- Increase multifamily recycling
- Create a regional center for hard to recycle products
- Reduce tipping fees for separated items
- Increase reuse infrastructure (incentivize people to recycle and dispose of good (Good will not enough))
- Work on formula for calculating cost benefits for jurisdictions

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¹ Office of Solid Waste and Emergency Response, Recycling is Working in the United States, EPA530-F-02-005, January 2002: http://www.epa.gov/epawaste/conserves/rrr/rmd/rei-rw/pdf/factsheet_nat.pdf.

²Institute for Local Self Reliance, Waste to Wealth – Recycling means Business <http://www.ilsr.org/recycling/recyclingmeansbusiness>

³ DHEC Office of Solid Waste Reduction and Recycling, “Economic Impact of the Recycling,” Study commissioned in 2006 by the S.C. Department of Health and Environmental Control (DHEC). OR-05913/08 http://www.scdhec.net/environment/lwm/recycle/pubs/economic_benefits_of_recycling.pdf

⁴ Recycling Means Business, N.C. Department of Environment and Natural Resources March 2005, Page 3, <http://www.p2pays.org/ref/34/33912.pdf>

⁵ Made in North Carolina, NC Department of Environment and Natural Resources, January 2007 N.C. Recycling Business Assistance Center, a program of the Division of Pollution Prevention and Environmental Assistance of the N.C. Department of Environment and Natural Resources, page 11, <http://www.p2pays.org/ref/41/40994.pdf>

⁶ NC DENR, Division of Pollution Prevention and Environmental Assistance Recycling Markets Directory, <http://www.p2pays.org/dmrm/start.aspx>

⁷ 2008 Employment Trends in NC’s Recycling Industry, NC Recycling Business Assistance Center, NCDENR Division of Pollution Prevention and Environmental Assistance www.p2pays.org/ref/46/45998.pdf

⁸ Information supplied by Matt Todd , NC DENR, Division of Pollution Prevention Environmental Assistance

⁹ National Association for PET Container Resources, 2006 Report on Post Consumer PET Container Recycling Activity, Final Report. http://www.napcor.com/pdf/2006PET_Report.pdf

¹⁰ State of North Carolina, Department of Environmental and Natural Resources, 2006-07 Solid Waste, Reduce, Reuse, Recycle, page 21 http://www.wastenotnc.org/swhome/AR06_07/AR06-07.pdf

¹¹ State of North Carolina, Department of Environmental and Natural Resources, 2006-07 Solid Waste, Reduce, Reuse, Recycle, page 21 http://www.wastenotnc.org/swhome/AR06_07/AR06-07.pdf

¹² FEDERAL REGISTER 28314-28328 (May 26, 1981). *See, also*, Commission of the European Community, *Management and Composition of Leachate from Landfills: Final Report* (1994), at p. 7, TABLE 1.2. H. Belevi and P. Baccini, “Long Term Behavior of Municipal Solid Waste Landfills,” *Waste Management and Research* (1989), at p. 43.

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²⁵ State of North Carolina, Department of Environmental and Natural Resources, 2006-07 Solid Waste, Reduce, Reuse, Recycle, page 4 http://ww.wastenotnc.org/swhome/AR06_07/AR06-07.pdf

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³⁰ Scott Mouw NC DENR

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Recycling Companies in Centralina Region from NC Recycling markets Directory

COMPANY	COUNTY	CITY	ADDRSS_ST	Number Employees
ABC Recycling	Lincoln	Stanley	1477 Woodbend Ct	0
AEIPLUS Inc.	Mecklenburg	Charlotte	2128 Eastway Drive	0
Alba Polymers	Mecklenburg	Charlotte	1200 Kingscross Dr.	10
Amity Metals Intl. LLC	Mecklenburg	Charlotte	2915 Providence Rd	0
An American Recycling Company of North Carolina	Union	Waxhaw	1128 Waynewood Drive	4
Antron Reclamation Program	Union	Kennesaw	175 Town Park Drive Suite 200	20
Atlantic Scrap and Processing	Mecklenburg	Charlotte	419 Atando Avenue	0
Bakery Feeds/Griffin Industries	Union	Marshville	5805 Highway 74 East	20
Belmont Wiping Cloth Company, Inc.	Mecklenburg	Charlotte	429 Belmont Ave.	8
Blue Ridge Recycling, Inc.	Mecklenburg	Charlotte	3811 North Davidson Street	0
Bollag International Corporation	Mecklenburg	Charlotte	6924 Orr Road	120
Boral Brick and Tile	Rowan	East Spencer	700 South Long Street	0
Bowers Fibers, Inc.	Mecklenburg	Charlotte	4001 Yancey Road	36
Bruce's Iron & Metal, Inc.	Gaston	Gastonia	4604 S. York Road	16
C&D Salvage, Inc.	Rowan	China Grove	645 Lance Rd	0
Cansorb Industries Corporation	Rowan	Cleveland	555 Kesler Road	6
Caraustar (Carolina Paperboard)	Mecklenburg	Charlotte	443 S. Gardner Ave.	108
Caraustar (Carolina Recycling)	Mecklenburg	Charlotte	2426 Chamberlain Ave.	20
Carolina By-Products	Anson	Wadesboro	656 Little Duncan Road	0
Carolina By-Products	Gaston	Gastonia	5533 South York Road	0
Castle Rock Rubber Recycling, LLC	Rowan	Salisbury	900 N Long St	0
Cathy's Yarn, Inc.	Gaston	Stanley	7511 Sifford Road	2
CBC Concrete Crushing & Recycling	Iredell	Mooresville	628 Oak Ridge Farm Hwy	10
Chemical Specialties	Mecklenburg	Charlotte	200 E. Woodlawn Road, Suite 250	0
Clement Industries	Mecklenburg	Matthews	2415 Winterbrooke Drive	0
CompuTel IG	Mecklenburg	Charlotte	1500 N Graham Street	5
Computer Disposal Services	Cabarrus	Concord	2788 Golf Ball Cir	1
Consolidated Alloys, Inc.	Mecklenburg	Charlotte	2214 N. Graham St.	0
Cool Springs Mulch & Stone	Iredell	Statesville	130 Marshall Forest Ln.	3
Custom Pallet & Crating	Mecklenburg	Charlotte	5104 N. Graham St.	100
Custom Polymers, Inc.	Mecklenburg	Charlotte	700 Tuchaseegee Rd.	22
East Coast Container Corp.	Mecklenburg	Matthews	3212 Campus Ridge Rd.	40
Ecotech, Inc.	Lincoln	Denver	336 Hwy 16 N, Ste B	0
Edwards Custom Sawmilling and Lumber	Mecklenburg	Huntersville	107 Huntersridge Rd	2
Engineered Recycling Company	Mecklenburg	Charlotte	1011 Woodward Avenue	10
ENVIROPLAST INC	Union	Monroe	2501 Ashcraft	0

Exide Battery Corporation	Mecklenburg	Charlotte	648-G Griffith Road	5
Ferguson Supply and Box	Mecklenburg	Charlotte	4227 North Graham Street	65
First Alliance Logistics Management	Mecklenburg	Charlotte	200 East Woodlawn Suite 250	6
FOIL'S, Inc.	Cabarrus	Harrisburg	2283 Highway 49	0
Friendship Helping Ministries	Mecklenburg	Charlotte	3925 Morris Field Dr.	2
Gamble Pallet	Mecklenburg	Charlotte	701 Johnson Road	0
Genwove Us Ltd	Union	Indian Trail	100 Plyler Rd	200
Gladden Tire Disposal	Mecklenburg	Charlotte	2929 Rozzells Ferry Road	0
Goodwill Industries of the Southern Piedmont	Mecklenburg	Charlotte	2122 Freedom Drive	15
Gordon Iron & Metal Company	Iredell	Statesville	1300 Salisbury Road	80
Habitat Charlotte ReStore - Wendover Rd.	Mecklenburg	Charlotte	1133 N Wendover Rd	8
Habitat Charlotte ReStore - Wilkinson Blvd.	Mecklenburg	Charlotte	3326 Wilkinson Blvd	3
Habitat for Humanity of Matthews	Mecklenburg	Matthews	136 E Charles Street	2
Harry J. Price Textile Company, Inc.	Gaston	Gastonia	4902 Wilkinson Blvd.	0
HAZ Mat Transportation & Disposal, Inc	Mecklenburg	Charlotte	221 Dalton Av	16
Heritage Environmental Services, Inc.	Mecklenburg	Charlotte	4132 Pompano Road	950
Heritage-Crystal Clean, LLC	Mecklenburg	Charlotte	2115 Dunavent Street	300
Highway 49 C&D Landfill and Reprocessing Center	Cabarrus	Concord	2105 Speedrail Ct.	0
Holmes Iron & Metal, Inc.	Rowan	East Spencer	629 N. Long St.	18
IFCO Systems	Mecklenburg	Charlotte	4101 S - I 85 Service Road	60
Industrial Container Services	Mecklenburg	Charlotte	2900 West Trade Street	45
Iredell Fibers	Iredell	Statesville	124 Fanjoy Rd	0
Iron Mountain Confidential Destruction	Mecklenburg	Charlotte	3007 Asbury Ave	350
Keeter Dixon Pearre	Mecklenburg	Charlotte	6924 Orr Rd.	19
Kemp Services Inc.	Union	Indian Trail	225 Garmon Road	3
Looks Great Services	Gaston	Gastonia	1232 Bicycle Ct	0
Luxury Waste Services	Mecklenburg	Charlotte	5043 Gibbons Link Road	2
MAR'S Recycling and Shredding, Inc	Mecklenburg	Charlotte	2425 Radrick Lane	3
Maslo Company	Mecklenburg	Charlotte	1200-B Tar Heel Rd	15
McGraw, Inc.	Mecklenburg	Charlotte	11205 Reames Road	32
McManus and Son Drum Co Inc	Mecklenburg	Charlotte	5631 Racine Avenue	7
Mecklenburg County Recycling, Inc. - FCR	Mecklenburg	Charlotte	1007 Amble Drive	32
Metal Recycling Services, Inc.	Union	Monroe	150 S. Bivins Rd	42
Milanco	Mecklenburg	Charlotte	635F Pressley Road	0
Millennium Metals	Cabarrus	Concord	598 Cabarras St.	0
Miller C&D Recycling	Rowan	Salisbury	131 Rowan St. GQ	5
Modern Polymers, Inc.	Gaston	Cherryville	P.O. Box 398	80
Neal's Pallet Co., Inc.	Mecklenburg	Charlotte	8808 Wilkinson Blvd.	42
NuStar Business Solutions	Iredell	Mooresville	142-C So. Cardigan Way	0
Pace Recycling, Inc.	Gaston	Mount Holly	1947 Charles Raper Jonas Hwy	4

Pallet Pro's, Inc.	Gaston	Gastonia	1801 Bradbury Court	16
Parts Cleaning Technologies	Mecklenburg	Charlotte	3114 Cullman Ave.	7
Pickett Up Recycling	Mecklenburg	Charlotte	9101 Fairbridge Rd	2
Planet Recycling, Inc.	Mecklenburg	Matthews	PO Box 3484	3
Plyler Paper Stock Company, Inc.	Mecklenburg	Charlotte	800 Gesco Street	19
Polymer Recovery Corporation	Mecklenburg	Charlotte	1127 Tarheel Road	20
Polyreps	Union	Monroe	2501 Ashcraft Ave	20
PRO-pHx Inc.	Mecklenburg	Cornelius	19722 One Norman Blvd #220 Ste 166	40
Regal Asset Recovery	Mecklenburg	Matthews	12777 A East Independence Blvd	4
Republic Waste Services	Mecklenburg	Charlotte	5516 Rozelles Ferry Road	0
Reuse It Plastics Inc	Iredell	Mooresville	119 Emerald Point Ln	1
RJ Brewer Grinding Services	Mecklenburg	Charlotte	3733 Kidd Lane	0
RSM Company	Mecklenburg	Charlotte	811 Pressley Road	65
Safety-Kleen	Mecklenburg	Charlotte	2320 Yadkin Ave	0
Scantec Distribution Inc.	Mecklenburg	Charlotte	2233-A Interstate North Dr.	6
Second Harvest Food Bank of Metrolina, Inc.	Mecklenburg	Charlotte	500-B Spratt Street	23
Shredding Solutions	Mecklenburg	Charlotte	7715 Taymouth	2
Shred-South	Iredell	Statesville	126 N. Elm Street	0
Siemens Water Technologies	Cabarrus	Concord	2115 Speedrail Ct.	42
Simpson Wood Products, Inc.	Mecklenburg	Charlotte	524 Atando Avenue	14
Simputer (USA)	Mecklenburg	Charlotte	6630 East Harris Blvd, Suite J	0
Sky Recycling, LLC	Mecklenburg	Charlotte	715 Seaboard St. Unit #A	3
Sonoco Recycling	Mecklenburg	Charlotte	3901 Barringer Drive	10
Sonoco Recycling	Rowan	Salisbury	300 E. Henderson Street	8
Southern Metals Company, Inc.	Mecklenburg	Charlotte	2200 Donald Ross Road	60
Southern Resources, Inc.	Mecklenburg	Charlotte	3826 Raleigh St.	24
Southern Shavings Company, Inc.	Gaston	Cherryville	254 Tot Dellinger Rd.	16
Starnes Pallet Service	Mecklenburg	Charlotte	4000 N-I-85 Service Rd.	50
Statesville Brick Company	Iredell	Statesville	P.O. BOX 471	65
Students in Training (SIT)	Rowan	Salisbury	112B South Main Street	1
SynCot Plastics	Gaston	Cramerton	305 Eastwood Dr.	0
The Upside Down Turtle	Mecklenburg	Charlotte	6008-A Old Pineville Road	2
Think Green Recycle Service of Mooresville	Iredell	Mooresville	185 Poplar Grove Rd	2
Toter, Inc.	Iredell	Statesville	841 Mecham Road	0
Tree Brand Packaging	Lincoln	Denver	7971 Graham Road	8
Tri County Environmental, LLC	Gaston	Stanley	131 Maraposa Rd.	0
U.S. GreenFiber	Mecklenburg	Charlotte	1007 Amble Drive	28
U.S. Tire Recycling, L.P.	Cabarrus	Concord	6322 Poplar Tent Road	55
Union Gypsum	Union	Marshville	7323 Old Gold Mine Rd	12
United Scrap, Inc.	Mecklenburg	Charlotte	3600 Primrose Avenue	13

US Recycling	Mecklenburg	Charlotte	344 Springhill Farm Road	6
US Soft Wiping Cloth	Gaston	Gastonia	1920 Industrial Pike	19
Waste Management, Inc	Gaston	Gastonia	2712 Lowell Road	0
We Recycle Tires	Rowan	Salisbury	112 Halifax Circle	0
Webb Metals, LTD.	Gaston	Dallas	1305 Philadelphia Church Road	13
West Drum Company	Cabarrus	Concord	6949 Gold Hill Road	0
Westinghouse Materials	Mecklenburg	Charlotte	911 East Westinghouse Blvd.	0
Weyerhaeuser (Recycling)	Mecklenburg	Charlotte	201 East 28th Street	15
Wise Recycling	Mecklenburg	Charlotte	4933 Brookshire Blvd	6
Total				3674

Recycling Companies in our Region - (Information from Harris Directory re NC Businesses)

Company Name	Sales Amount	Employees	County	City	LineOfBusiness
Amware Pallet Service LLC	\$1,310,190	15	Mecklenburg	Charlotte	Mfg Wood Pallets/Skids
B R Jenkins Inc	\$1,800,000	16	Gaston	Cramerton	Whol Scrap/Waste Material
Bearcat Holdco LLC	\$15,100,000	75	Anson	Polkton	Holding Company
Bollag Associates Inc	\$28,500,000	123	Mecklenburg	Charlotte	Whol Scrap/Waste Material
Bollag International Corp	\$28,000,000	130	Mecklenburg	Newell	Whol Scrap/Waste Material
Bowers Fibers Inc	\$15,200,000	35	Mecklenburg	Charlotte	Whol Textile Bi-Products
Bruce's Iron & Metal Inc	\$1,500,000	15	Gaston	Gastonia	Scrap Metal Processing And Recycling
C & C Metals Inc	\$2,000,000	16	Union	Marshville	Whol Scrap/Waste Material
Callbackcross Woodworking Inc	\$480,000	8	Gaston	Bessemer City	Mfg Wood Pallets/Skids
Carolina Wood Products of	\$2,800,000	65	Union	Marshville	Manufactures wooden pallets; manufactures nailed wood boxes & shook; manufactures wooden containers
Carolina Yarns & Fibers Inc	\$1,700,000	1	Mecklenburg	Huntersville	Whol Scrap/Waste Material
Consolidated Fibers Inc	\$1,500,000	15	Mecklenburg	Charlotte	Whol Scrap/Waste Material
Continental Container Repair	\$890,000	17	Mecklenburg	Charlotte	Repair Chassis Containers & Trailers
County of Rowan	\$3,808,710	30	Rowan	Salisbury	Refuse System
Custom Pallet & Crating Inc	\$4,400,000	85	Mecklenburg	Charlotte	Manufactures wooden pallets
Custom Polymers Inc	\$3,500,000	10	Mecklenburg	Charlotte	Refuse System
Dewey C McDaniel	\$100,000	2	Rowan	Barber	Mfg Wood Pallets/Skids
Edwards Wood Products Inc	\$56,577,000	250	Union	Marshville	Manufactures wooden pallets; hardwood dimension & flooring mill; manufactures chipboard; sawing & planing mill
Edwards Wood Products Inc	\$3,100,000	65	Union	Marshville	Manufactures wooden pallets
Elan Trading Inc	\$2,000,000	28	Mecklenburg	Charlotte	Wholesales ferrous metal scrap & waste; waste material recycling services; manufactures secondary nonferrous metals
Fcr Inc	\$119,999,999	30	Mecklenburg	Charlotte	Refuse System Business Services
Fcr Inc	\$3,173,925	25	Mecklenburg	Charlotte	Provides Refuse Services Specializing In Waste Materials Recycling
Foil's Inc	\$3,600,000	30	Cabarrus	Harrisburg	Wholesales metal scrap & waste materials; manufactures secondary nonferrous metals
Gateway Recovery Inc	\$1,500,000	13	Iredell	Statesville	Scrap Metal Brokers
Gordon Recyclers Inc	\$96,565,537	70	Iredell	Statesville	Refuse System Whol Scrap/Waste Material
Hawk Sanitation & Recycling	\$3,000,000	12	Lincoln	Iron Station	Refuse System
Hildreth Wood Products Inc	\$730,000	15	Anson	Wadesboro	Mfg Wood Pallets/Skids Mfg Wood Containers
Holmes Iron & Metal Co Inc	\$1,500,000	15	Rowan	East Spencer	Wholesales Scrap Metal

Recycling Companies in our Region - (Information from Harris Directory re NC Businesses)

					Manufactures wood pallets & skids; manufactures nailed wood boxes & shook; manufactures wooden containers
IFCO Systems North America Inc	\$3,755,878	43	Randolph	Staley	
J E Herndon Co	\$5,735,281	27	Cleveland	Kings Mountain	Whol Scrap/Waste Material
Keywell LLC	\$1,785,930	5	Union	Monroe	Sales Office
Lee Kerlin Inc	\$200,000	5	Mecklenburg	Charlotte	Mfg Wood Containers
Melvin Simpson Wood Products	\$840,000	17	Mecklenburg	Charlotte	Mfg Wood Skids And Wood Pallets
Metal Recycling Services Inc	\$70,111,374	115	Union	Monroe	Whol Scrap/Waste Material
Millennium Metals Recycling	\$1,982,000	2	Cabarrus	Concord	Whol Metal Scrap & Waste Materials
Nationwide Recyclers Inc	\$5,800,000	65	Anson	Polkton	Refuse System
Neal S Pallet Co Inc	\$1,500,000	22	Gaston	Belmont	Manufactures wooden pallets; pallet repair service
Neal's Pallet Co Inc No 2	\$1,700,000	35	Mecklenburg	Charlotte	Manufactures pallets
Newco Fibre Co	\$9,141,436	32	Mecklenburg	Cornelius	Whol Scrap/Waste Material
Paper Stock Dealers Inc	\$2,857,488	8	Gaston	Gastonia	Whol Scrap/Waste Material Refuse System
Paper Stock Dealers Inc	\$1,071,558	3	Iredell	Statesville	Whol Scrap/Waste Material
Paper Stock Dealers Inc	\$5,000,604	14	Mecklenburg	Charlotte	Whol Scrap/Waste Material
Paper Stock Dealers Inc	\$2,500,302	7	Rowan	Salisbury	Whol Scrap/Waste Material
Piedmont Pallet & Container	\$320,000	6	Rowan	Woodleaf	Mfg Wood Pallets/Skids
Plyler Paper Stock Co Inc	\$3,500,000	19	Mecklenburg	Charlotte	Whol Scrap/Waste Material
Recall SDS	\$2,500,000	20	Mecklenburg	Charlotte	Whol Scrap/Waste Material Special Warehouse/Storage
Recycle South LLC	\$7,143,720	20	Mecklenburg	Charlotte	Whol Scrap/Waste Material
S & R Auto & Truck Service Inc	\$1,000,000	10	Mecklenburg	Charlotte	Auto & Small Truck Salvage
State Line Scrap Metal	\$3,000,000	22	Gaston	Gastonia	Whol Scrap/Waste Material
Syncot Fibers Inc	\$5,000,000	2	Gaston	Cramerton	Whol Scrap/Waste Material
Syncot Plastics Inc	\$35,000,000	79	Gaston	Cramerton	Refuse System
					Manufactures pallets; manufactures nailed wood boxes & shook; refuse systems services; wholesales packaging materials; manufactures wooden containers;
Tree Brand Packaging Inc	\$2,600,000	53	Lincoln	Denver	manufactures plastic foam products
United American Steel Co	\$35,000,000	48	Mecklenburg	Charlotte	Whol Scrap/Waste Material
United Scrap Inc	\$1,000,000	6	Mecklenburg	Charlotte	Whol Scrap Metals
Waste Industries LLC	\$7,617,420	60	Mecklenburg	Pineville	Refuse System
Webb Metals Ltd	\$3,600,000	30	Gaston	Dallas	Wholesales recyclable scrap & waste materials; manufactures secondary nonferrous metals
Western Piedmont Metal Inc	\$37,000,000	36	Mecklenburg	Charlotte	Whol Metal Scrap & Waste Materials
Wise Recycling LLC	\$2,143,116	6	Mecklenburg	Charlotte	Whol Scrap/Waste Material
	\$664,741,468	2028			

Landfill Fees								Attachment 3
	Allied Charlotte Speedway	Gaston	Iredell	Lincoln	Mecklenburg	Rowan	Union	Albermarle
Municipal Solid Waste		\$26/ton	\$35 /ton	\$32/ton	\$26.00/ton	\$32/ Ton	\$38/ton	\$30+\$2/ Ton
Commercial Solid Waste		\$32/ton	\$35/ ton					
Construction/Demolition Debris	\$29 per ton	\$24/ton	\$35 / ton	\$16/ton	\$35/ton	\$22/Ton	\$36 ton	\$25+\$2/ Ton
Yard Waste		\$20/ton					\$30/ton	
Wood Pallets		\$44/ton	\$30 / ton				\$30/ton	
Homogenous Wood Pallets		\$12/ton						
Shingles		\$26.50/ton	\$35 / ton					
Special Wastes/Sludges		\$52.00/ton						
Low Density Waste 20 yd container <1 ton		\$1.00/cubic yard for less than one ton						
Low Density Waste 20 yd container >1 ton		\$30.00/ton for more than one ton						
Single Wide Mobile Home		\$300						
Tires on Rim		\$3	\$75/ ton					
Yard Waste		\$4 for a small pick- up truckload /\$8 for a large truck. commercial yard waste disposal is \$20.00 per ton	\$35 /ton					
Clean Wood					\$19/ton			
Concrete and Brick					no charge			

Municipalities - Recycling Recovered		
	Total Recycled 2006-078 Per Year (Tons)	2006-07 Per Capita Recovery (Pounds)
Anson		
Morven		
Peachland		
Wadesboro		
Cabarrus		
Concord	4063	123
Harrisburg	247	87
Kannapolis	0	
Midland	5	3
Mount Pleasant	0	
Gaston		
Belmont		
Bessember City		
Cherryville	160	57
Cramerton	146	91
Dallas	23	12
Gastonia	428	12
High Shoals	0	0
Kings Mountain		
Lowell	20	15
McAdenville	0	0
Mount Holly	0	0
Ranlo	0	0
Spencer Mountain	0	0
Stanley	145	93
Iredell		
Harmony		
Mooreville		
Statesville	584	45
Troutman	202	195
Lincoln		
Lincolnton	282	52
Mecklenburg		
Charlotte	31989	98
Cornelius	1138	107
Davidson	2630	578
Huntersville	3715	216
Matthews	1186	89

	Total Recycled 2006-078 Per Year (Tons)	2006-07 Per Capita Recovery (Pounds)
Mint Hill	1134	118
Pineville	166	48
Rowan		
China Grove		
East Spencer		
Faith		
Granite Quarry	106	92
Landis	27	18
Rockwell	52	52
Salisbury	1532	104
Spencer Mountain	25	14
Stanly		
Albermarle		
Badin		
Locust		
New London		
Norwood		
Oakboro	5	9
Misenheimer		
Richfield		
Stanfield		
Union		
Fairview		
Hemby Bridge		
Indian trail	979	83
Marshville	135	93
Marvin		
Mineral Springs		
Monroe	973	57
Stallings	489	99
Unionville		
Weddington		
Wesley Chapel		
Waxhaw	289	164
Wingate	137	71
Totals	46,962	

Attachement 4

Solid Waste & Recycling Program Costs (Based on 2006-07 Solid Waste Annual Report to NCDENR) Attachement 5

Jurisdiction	SW Collect Program Cost	SW Disposal Program Cost	Reduction, Reuse & Recycling Program Cost	Mulching, Compost & Other Program Cost	Total Program Cost	Private Contracts Portion of Total Costs
ANSON COUNTY	\$0	\$0	\$0	\$0	\$0	\$0
MORVEN	\$0	\$0	\$0	\$0	\$29,075	\$0
PEACHLAND	\$0	\$0	\$0	\$0	\$21,055	\$0
WADESBORO	\$590,000	\$65,000	\$14,000	\$42,000	\$711,000	\$0
CABARRUS COUNTY	\$0	\$3,252,291	\$235,439	\$1,500	\$3,491,230	\$0
CONCORD	\$2,432,350	\$0	\$912,130	\$1,443,860	\$4,788,340	\$3,284,430
HARRISBURG	\$356,535	\$0	\$74,242	\$0	\$430,777	\$430,776
KANNAPOLIS	\$1,232,200	\$550,000	\$0	\$628	\$2,410,200	\$1,232,200
MIDLAND	\$155,163	\$0	\$720	\$0	\$155,883	\$155,883
MOUNT PLEASANT	\$54,731	\$27,935	\$17,864	\$0	\$100,503	\$17,837
GASTON COUNTY	\$287,157	\$0	\$445,249	\$69,471	\$801,876	\$287,157
BELMONT	\$416,650	\$0	\$108,825	\$0	\$572,275	\$525,475
BESSEMER CITY	\$252,450	\$67,301	\$0	\$3,847	\$323,598	\$252,450
CHERRYVILLE	\$469,416	\$83,953	\$0	\$0	\$553,369	\$0
CRAMERTON	\$172,002	\$0	\$39,718	\$54,000	\$205,720	\$0
DALLAS	\$301,735	\$0	\$0	\$0	\$301,735	\$0
GASTONIA	\$3,138,311	\$1,763,836	\$91,045	\$96,070	\$5,089,262	\$1,549,889
HIGH SHOALS						
LOWELL	\$113,089	\$61,860	\$6,908	\$0	\$181,857	\$0
MCADENVILLE						
MOUNT HOLLY	\$666,500	\$133,250	\$0	included	\$799,750	\$0
RANLO	\$58,300	\$55,564	\$0	\$3,223	\$117,087	\$0
SPENCER MOUNTAIN						
STANLEY	\$0	\$0	\$0	\$0	\$0	\$0
IREDELL COUNTY	\$0	\$5,383,947	\$644,646	\$122,034	\$6,150,627	\$0
HARMONY						
MOORESVILLE	\$900,000	\$4,200,000	\$0	\$180,000	\$5,280,000	\$0
STATESVILLE	\$1,410,730	\$276,374	\$106,711	\$0	\$1,793,815	\$630
TROUTMAN	\$89,826	\$0	\$22,302	\$43,225	\$155,353	\$0
LINCOLN COUNTY	\$882,806	\$2,249,617	\$0	\$0	\$3,132,423	\$0
LINCOLNTON	\$626,413	\$0	\$0	\$123,071	\$749,484	\$123,071
MECKLENBURG COUNTY	\$0	\$9,703,705	\$1,188,952	\$1,521,673	\$12,414,400	\$0
CHARLOTTE	\$17,154,130	\$7,885,001	\$5,527,520	\$9,883,611	\$40,450,262	\$15,170,830
CORNELIUS	\$737,544	\$0	\$213,768	\$193,124	\$1,144,426	\$951,302
DAVIDSON	\$419,100	\$0	\$126,000	\$6,000	\$551,500	\$545,100

Jurisdiction	SW Collect Program Cost	SW Disposal Program Cost	Reduction, Reuse & Recycling Program Cost	Mulching, Compost & Other Program Cost	Total Program Cost		Private Contracts Portion of Total Costs
HUNTERSVILLE	\$1,747,724	\$0	\$298,830	\$420,070	\$2,128,182		\$1,747,724
MATTHEWS	\$0	\$0	\$0	\$398,737	\$1,519,535		\$1,120,798
MINT HILL	\$0	\$0	\$0	\$0	\$1,043,335		\$1,043,335
PINEVILLE	\$224,924	\$0	\$30,047	\$0	\$254,971		\$250,000
ROWAN COUNTY	\$248,067	\$1,004,451	\$615,172	\$0	\$1,867,690		\$0
CHINA GROVE	\$182,287	\$0	\$0	\$0	\$182,287		\$182,287
CLEVELAND	\$28,308	\$7,590	\$0	\$0	\$35,898		\$0
EAST SPENCER	\$77,000	\$0	\$0	\$0	\$77,000		\$77,000
FAITH	\$38,293	\$0	\$0	\$0	\$38,293		\$38,295
GRANITE QUARRY	\$0	\$0	\$1,994	\$0	\$138,664		\$138,664
LANDIS	\$150,620	\$41,649	\$44,605	\$0	\$236,874		\$0
ROCKWELL	\$0	\$0	\$0	\$0	\$90,000		\$85,000
SALISBURY	\$793,303	\$336,000	\$306,000	\$527,654	\$1,962,957		\$705,000
SPENCER	\$181,030	\$46,800	\$1,174	\$120,226	\$349,230		\$0
STANLY COUNTY	\$376,300	\$224,428	\$11,665	\$0	\$612,393		\$376,300
ALBEMARLE	\$1,000,634	\$247,000	\$0	\$25,000	\$1,247,634		\$1,000,634
BADIN							
LOCUST	\$105,400	\$0	\$0	\$0	\$105,400		\$105,400
MISENHEIMER	\$16,404	\$0	\$0	\$0	\$16,404		\$16,404
NEW LONDON	\$34,615	\$0	\$0	\$0	\$34,615		\$34,615
NORWOOD	\$263,000	\$12,990	\$0	\$78,194	\$354,184		\$263,000
OAKBORO	\$886,689	\$0	\$1,192	\$0	\$887,881		\$887,881
RICHFIELD	\$22,007	\$0	\$0	\$0	\$22,007		\$22,007
STANFIELD	\$43,411	\$0	\$0	\$0	\$43,411		\$43,411
UNION COUNTY	\$0	\$4,357,806	\$206,308	\$38,123	\$4,395,930		\$2,365,198
FAIRVIEW							
INDIAN TRAIL	\$868,750	\$464,514	\$296,212	\$0	\$1,629,476		\$10
MARSHVILLE	\$129,012	\$0	\$6,000	\$0	\$135,012		\$0
MARVIN							
MINERAL SPRINGS							
MONROE	\$0	\$0	\$0	\$0	\$2,445,141		\$2,445,141
STALLINGS	\$0	\$0	\$0	\$0	\$67,419		\$67,419
UNIONVILLE							
WAXHAW	\$0	\$0	\$0	\$0	\$363,244		\$0
WESLEY CHAPEL							
WEDDINGTON							
WINGATE	\$97,959	\$0	\$30,000	\$0	\$127,959		\$138,550
Total	\$40,432,875	\$42,502,862	\$11,625,237	\$15,395,342	\$115,319,909		\$37,681,102
Waste Management Total						19%	\$6,985,120
Republic/Allied Total						22%	\$8,383,327

Type of Recycling Accepted	COUNTIES								Attachement 6 Union
	Anson	Cabarrus	Gaston	Iredell	Lincoln	Mecklenburg	Rowan	Stanly	
Household									
Plastic Bottles 1-7		Y		Y			Y		
Plastic 1&2	Y		Y		Y	Y			Y
Plastic Detergent Bottles			Y						Y
Plastics Bottles and Jugs Only			Y						
Aluminum Cans	Y	Y	Y	Y	Y	Y	Y	Y	Y
Steel Cans	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mixed Paper	Y	Y	Y	Y		Y	Y	Y	Y
Glass - Clear		Y	Y	Y	Y	Y	Y	Y	Y
Glass - Green		Y	Y	Y	Y	Y	Y		Y
Glass - Brown		Y	Y	Y	Y	Y	Y		Y
Corrugated Cardboard		Y	Y	Y	Y	Y	Y	Y	Y
Newspapers	Y	Y	Y		Y	Y	Y	Y	Y
Magazines	Y	Y	Y		Y	Y		Y	Y
Aluminum Foils & Trays			Y						
Junk Mail		Y	Y						Y
Gift Wrap			Y						
Other Household									
White goods (large appliances)	Y	Y	Y	Y	Y	Y	Y		Y
Scrap metal		Y	Y	Y		Y			Y
Motor Oil	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oil Filters		Y	Y					Y	SOON
Transmission Fluid			Y			Y			Y
Cooking Oil		Y	Y	Y					
Tires	Y	Y	Y	Y	Y	Y	Y		Y
Antifreeze		Y	Y	Y		Y	Y	Y	Y
Auto Batteries	Y	Y	Y	Y	Y	Y	Y		Y
Computer Equipment(not Monitors)		Y	Y	Y		Y			SOON
Computer Monitors		Y	Y	Y		Y			SOON
Toner Ink Jet Cartridges		Y	Y	Y					
Foam Rubber						Y			
Fire Extinguishers			Y			Y	Y		
Eye Glasses				Y			Y		
Hearing Aids				Y		Y	Y		
Cell Phones		Y	Y	Y					SOON
Printer Cartridges			Y	Y					
Latex paint		Y	Y	Y					
Propane/Helium Tanks		Y	Y	Y			Y		
Clothing /Home Textiles				Y			Y		
Toys				Y			Y		
Hard Back Books			Y	Y			Y		
Pesticide Containers	Y	Y		Y					Y
Household Hazardous Waste		Y	Y	Y					Y
Business									
Cardboard				Mandatory		Mandatory			
Office Paper						Mandatory			
C&D									
Aluminum doors and windows		Y		Y					
Brick						Y			
Scrap Metal			Y	Y		Y			Y
Gypsum		Y	Y						Y
Wood Pallets				Y		Y			Y
Concrete									Y
Yard Waste / Debris		Y	Y	Y	Y		Y		Y
Composting					N				

Household Waste and Recycling Collection			Recycling Collection			Attachement 8
Provider	Fees	Provider	Drop off- Curb	Recycling - Fee	Franchised ?	
Anson	Drop off -- free to Anson Residents		None			
Morven	Local Contractor	none				
Peachland	Local Contractor	none				
Wadesboro	City Operated	\$7/ month	none			
Cabarrus	Allied Waste		Curb	\$3.75	Yes	
Concord	Allied Waste	Included in Taxes	curb	Residential recycling is provided at no cost to City in landfill franchise agreement Included in Waste Fee	yes	
Harrisburg	Allied Waste	\$8.69/month				
Kannapolis	Waste Management	\$6.30 / month	Waste management	n/a		
Midland	Allied Waste	\$8.26/month	Allied Waste	Included in Waste Fee		
Mount Pleasant	Local Contractor	Included in Taxes	Allied Waste		\$2.25	
Gaston	Private Haulers	Varies by Hauler		Drop off		
Belmont	Waste Management	Total \$24.20/month, \$8.47 Waste, \$2.52 Recycle, \$6.65 Yard, \$6.65 Bulk	Waste Management	Curbside - hope to move to 40 gallon roll out carts in 2011 when contract is re- negotiated	\$2.43 per month - part of \$24.20 total monthly charge	
Bessemer City	City Operated	\$8.50 per month		None		
Cherryville	City Operated	\$12.00 per month		None		
Cramerton	Waste Management	Paid thru property taxes		Curbside		
Dallas	City Operated	\$9.50 per month		None		
Gastonia	City Operated	Paid thru property taxes	Republic	Curb side Pick Up	\$24 per year billed though Utility Billing	
High Shoals	City Operated	\$8.50 per month		none		
Kings Mountain	Majority in Cleveland County					
Lowell			Waste Management	Drop off center contract		
McAdenville				Newspaper only		
Mount Holly	City Operated	\$7.50 per month tipping fee only - per household, per month, collection paid thru taxes		none		
Ranlo	City Operated			?		
Spencer	City Operated	\$127.80/year				
Stanley				Curbside		
Iredell						
Harmony	GDS/Republic			Drop off Harmony Transfer Station on Highway 901		
Mooresville	City Operated	funded through GF	City Operated Pilot single stream curbside	Drop off Mooresville Transfer Station off Highway 150 curbside recycling		
Statesville	City Operated					
Troutman	Benfield Sanitation			Drop Off Town Hall recycling		
Lincoln	Various GDS/Republic	Fees vary by hauler. All residents are charged \$69 per year for disposal		Drop Off		
Lincolnton	GDS/Republic	funded through GF	GDS/Republic		funded through GF	
Mecklenburg	None					
Charlotte	3 city operated zones, 1 Inland Services	funded through GF		Voluntary Free Bin \$50 fine for leaving Bin out early or late		
Cornellus			Waste Management	Pick Up & Drop Off		
Davidson				Curb		
Huntersville	Waste Management	\$7.49/month	Waste Management	Curb \$2.88 per month		
Matthews				Curb		

Waste Collection			Recycling Collection			
	Provider	Fees	Provider	Drop off- Curb	Recycling - Fee	Franchised ?
Mint Hill				Curb		
Pineville				Curb		
Rowan	Private Haulers					
China Grove						
East Spencer						
Faith						
Granite Quarry Landis	Waste Management	\$8.85/ mo +fuel +tip fee				
Rockwell						
Salisbury	City Operated	\$4.09 per month	Allied Waste	Curb	\$3.36 per month	
Spencer Mountain						
Stanly	Republic	\$60 /year disposal Fee. County Paid Solid Waste Fee on Tax Bill	Republic	Drop Off	contract	
Albemarle	Waste Management	\$3.35 Pick up + 3.15 disposal= \$6.50 per month, No collection	N/A	N/A	N/A	
Badin		Uses County Sites	N/A	N/A	N/A	
Locust	Waste Management		N/A	N/A	N/A	
New London	Waste Management		N/A	N/A	N/A	
Norwood	Waste Management		N/A	N/A	N/A	
Oakboro	Waste Management		N/A	N/A	N/A	
Misenheimer	Waste Management		N/A	N/A	N/A	
Richfield	Waste Management		N/A	N/A	N/A	
Stanfield	Waste Management		N/A	N/A	N/A	
Union	No curbside waste		Collection Sites County Operated			
Fairview	Drop Off/Contract privately					
Hemby Bridge	Drop Off/Contract privately					
Indian trail	Action Garbage	\$14.10 / month +\$5 per household	Allied Waste			
Marshville	Allied Waste	\$12.00/ month	Drop Off			
Marvin	Drop Off/Contract privately					
Mineral Springs	Drop Off/Contract privately					
Monroe	Allied Waste	City Charges on Utility Bill \$15/month bulk, yard, appliance, household	Allied Waste	curb side	included in \$15 waste fee	
Stallings	Action Garbage	\$12.48/ mo - recovered through property taxes				
Unionville	Drop Off/Contract privately					
Weddington	Drop Off/Contract privately					
Wesley Chapel	Drop Off/Contract privately					
Waxhaw	Drop Off/Contract privately					
Wingate	Drop Off/Contract privately					

Recycling Education and Awareness Programs (Based on 2006-07 Solid Waste Annual Report to DENR)												Attachment 9		
AreaName	Education Program	Radio/TV Ads	Newspaper Ads	Mass Mail	Award Program	Take Home Items	Hotline	Website	"RE3" Campaign	"The Recycle Guys"	Workshops	School Programs	Special Events	Other Programs
ANSON COUNTY														
WADESBORO								y				y		
CABARRUS COUNTY	y	y	y	y		y	y	y	y	y	y	y	y	y
CONCORD	y		y	y		y	y	y	Y	y		y	Y	Y
KANNAPOLIS	y		y	y				y						
MOUNT PLEASANT	y			y										
GASTON COUNTY	y	y	y			y	y	y	y	y		y	y	Y
BELMONT	y	y		y			y	y			y	y		y
BESSEMER CITY	y		y	y										
CRAMERTON	y		y					y						
GASTONIA	y	y	y	y	Y	y		y	y	y	y	y	y	Y
LOWELL	y			y										
IREDELL COUNTY	y	y	y		y	y		y			y	y	y	y
STATESVILLE	y							y						
LINCOLN COUNTY	y		y				y	y				y		
LINCOLNTON	y		y	y			y							
MECKLENBURG COUNTY	y	y	y	y	y	y	y	y	y	y	y	y	y	
CHARLOTTE	y	y	y	y		y		y	Y			y	y	Y
CORNELIUS								y						
DAVIDSON	y	y	y					y			y	y		
HUNTERSVILLE	y							y						
MATTHEWS	y		y	y				y			y			
ROWAN COUNTY	y		y			y					y	y	y	
CHINA GROVE	y		y	y				y						
CLEVELAND	y			y										
GRANITE QUARRY	y			y								Y		y
EAST SPENCER	y						y							Y
SPENCER	y			y				y						
SALISBURY	y	y					y	y						
STANLY COUNTY														
ALBEMARLE	y			y				y				Y	Y	
UNION COUNTY	y					y	Y	y			Y	y	Y	
INDIAN TRAIL	y			y										
MONROE	y	y	y	y		y			y	y		y		y
WAXHAW	y		y											
*Note if jurisdiction is not listed it is because no education or awarenss program was reported in the 2006-07 Solid Waste Annual Report														