



Amended November 6, 2017

# Durham Comprehensive Plan

## Chapter 13 Solid Waste Element

Durham City-County Planning Department

# The Durham Comprehensive Plan

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# Chapter 13, Solid Waste Element

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# Solid Waste Element

The Solid Waste Element is intended to integrate Durham’s solid waste collection and disposal goals with the Durham Comprehensive Plan. The Element is consistent with the Solid Waste Management Plan prepared by the City of Durham in accordance with NC General Statute 130A-309.09A(b), the purpose of which is to meet solid waste needs and to protect public health and the environment.



*Summary of Issues  
Goal 1, Solid Waste  
Collection and Disposal  
Goal 2, Waste Reduction*

## Summary of Issues

**Solid Waste Disposal Capacity.** As Durham’s population increases over the next decades, so will the amount of solid waste the community generates. Durham does not operate any solid waste landfill facilities in the area, so solid waste is collected, compacted, and transferred to a landfill outside of Durham. Durham will need to monitor the capacity of this facility and undertake alternative waste disposal methods, such as recycling, to increase this facility’s time horizon.

## Goal 13.1, Solid Waste Collection and Disposal

Provide a comprehensive, responsive, environmentally safe, efficient, and cost-effective solid waste collection program for residents, businesses and industries.

### Solid Waste Level of Service Standards, City

Provide residential solid waste collection services in an efficient and cost-effective manner, and limited commercial and industrial services. Establish level of service standards for solid waste collection and disposal in the City.

**Policy 13.1.1a. Level of Service for Solid Waste.** The solid waste disposal level of service shall be of sufficient capacity to meet the City’s needs.

**Policy 13.1.1b. Residential Collection.** The residential collection level of service shall be weekly, curbside collection of household garbage, non-recyclable packaging and other materials.

**Waste Reduction** in Durham is measured using FY 1988-1989 as a base year because waste reduction efforts that began in 1988. During that year, Durham County disposed of 224,196 tons of waste and had a population of 171,483, resulting in a base per capita disposal rate of 7.18 pounds per person per day, or 1.31 tons per person per year.

**Policy 13.1.1c. Yard Waste Collection.** The yard waste collection level of service shall be weekly, curbside collection of yard waste from subscribing residences, consisting of leaves, grass and shrub clippings garden residue, twigs, limbs and small branches.

**Policy 13.1.1d. Bulky Item Collection.** The bulky items collection level of service shall be weekly for a limited number of items.

**Policy 13.1.1e. Household Hazardous Wastes.** The City shall actively promote and continue to provide for drop off of household hazardous wastes, including electronic waste, for citizens of Durham and surrounding areas.

**Policy 13.1.1f. Multi-Family Waste Collection.** The City Solid Waste Management Department shall evaluate and propose standards for curbside collection of solid waste from multi-family ownership residential units on public streets.

### Solid Waste Level of Service Standards, County

Establish level of service standards for solid waste collection in the County.

**Policy 13.1.1g. County Convenience Centers.** Durham County shall operate and maintain solid waste Convenience Centers to provide County residents a place to dispose of residential solid waste, major appliances, and yard waste.

### Solid Waste Disposal

Provide solid waste disposal services in an efficient and cost-effective manner.

**Policy 13.1.1h. Disposal Contract.** The City Solid Waste Management Department shall contract for transfer and disposal of solid waste in an approved Subtitle D sanitary landfill.

**Policy 13.1.1i. Transfer Station.** The City Solid Waste Management Department shall upgrade the transfer station facility at 2115 East Club Boulevard to allow for expected growth during the next ten years.

**Policy 13.1.1j. Solid Waste Disposal Alternatives.** The City Solid Waste Management Department shall investigate, alone or with other jurisdictions in the Region, alternatives for solid waste disposal.

### Goal 13.2, Waste Reduction

Reduce the amount of waste that Durham produces and disposes.

### Objective 13.2.1. Waste Reduction

Establish targets for waste reduction.

**Policy 13.2.1a. Waste Reduction Targets.** Durham shall reduce its waste disposal by 21 percent by FY 2012-2013 (to 5.70 pounds per person per day), in accordance with Table 13-1. Waste Reduction Targets.

<b>Table 13-1, Waste Reduction Targets</b>	
<b>Ten Year Target FY 2012-2013</b>	
Waste Reduction Goal	21 Percent
Target Disposal Rate	5.70 Pounds per Person per Day
Projected Waste Disposed	233,232 Tons
Waste Reduction Amount	60,551 Tons
<p>Note: Waste reduction is relative to the FY 1988-1989 rate of 7.18 pounds per person per day (1.31 tons per person per year).</p>	

### Objective 13.2.2. Recycling

Require the recycling of steel cans, aluminum cans, glass bottles and jars, newspaper, and corrugated cardboard.

**Policy 13.2.2a. Collection of Recyclable Materials.** The City of Durham shall provide curbside collection of recyclable materials.

**Policy 13.2.1b. County Recycling Convenience Centers.** Durham County shall operate and maintain solid waste Convenience Centers to provide County residents a place to dispose of recyclable materials.

**Policy 13.2.1c. Composting.** The City Solid Waste Management Department shall continue to operate a Type I yard waste processing facility.

**Policy 13.2.1d. Construction and Demolition Waste Recycling.** The City Solid Waste Management Department and the County General Services Department shall consider establishing a recycling program for construction and demolition waste.

**Policy 13.2.1e. Public Education About Recycling.** The City Solid Waste Management Department, the County General Services Department and the City and County Public Information Offices shall continue efforts to promote recycling and shall propose new public education programs related to recycling.

### Objective 13.2.3. Methane Gas Utilization

Utilize the large energy resource in the methane that is being released from the closed landfill and from the anaerobic digesters at the North Durham Water Reclamation Facility.

**Policy 13.2.3a. Methane Gas Monitoring and Utilization.** The City Water Management Department shall continue to utilize methane gas produced from the Durham Water Reclamation Facilities. The City Water Management Department shall conduct a feasibility study to evaluate the potential utilization options more closely.

## Amendment History

### Amended – June 26, 2006

**Policy 13.1.3c. Debris Landfill.** The City Solid Waste Management Department shall continue to own and operate the Land Clearing and Inert Debris (LCID) Landfill.

### Amended - October 26, 2009

**Policy 13.1.1a. Stationary Container Collection.** The stationary container (dumpster) collection level of service standard shall be weekly collection to subscribing businesses or multi-family residential complexes.

### Amended – May 14, 2012

#### Summary of Issues

**Solid Waste Disposal Capacity.** As Durham’s population increases over the next decades, so will the amount of solid waste the community generates. Durham does not operate ~~no~~ solid waste landfill facilities in the area, so solid waste is ~~presently~~ collected, compacted, and transferred to rail cars, and sent to a sanitary landfill in Virginia. landfill outside of Durham, currently in Mt Gilead, NC. The contract for landfill disposal fees expire in July 2012. Durham will need to monitor the capacity of this facility and undertake alternative waste disposal methods, such as recycling, to increase this facility’s time horizon. Will that landfill facility continue to provide solid waste disposal for Durham? Will the transfer facility be sufficient to handle future volumes of waste? To what degree can recycling reduce Durham’s waste stream?

**Objective 13.1.1. Solid Waste Level of Service, City.** Provide residential, ~~commercial and industrial~~ solid waste collection services in an efficient and cost-effective manner, and limited commercial and industrial services. Establish level of service standards for solid waste collection and disposal in the City.

**Policy 13.1.1a. Level of Service for Solid Waste.** The solid waste disposal level of service shall be disposal capacity of sufficient capacity to meet the City’s needs. ~~to accommodate per capita solid waste generation of 6.3 pounds per person per day (or 1.15 tons per person per year).~~

**Policy 13.1.1d. Bulky Item Collection.** The bulky items collection level of service shall be ~~collection services on demand for a fee weekly for a limited number of items.~~ Roll-off container rentals will be made available for larger amounts of bulk waste.

**Policy 13.2.1a. Waste Reduction Targets.** Durham shall reduce its waste disposal ~~by 13 percent by FY 2005-2006 (to 6.30 pounds per person per day) and by 21 percent by FY 2012-2013 (to 5.70 pounds per person per day),~~ in accordance with Table 13-1. Waste Reduction Targets.

<b>Table 13-1, Waste Reduction Targets</b>		
	<b>Three Year Target FY 2005-2006</b>	<b>Ten Year Target FY 2012-2013</b>
Waste Reduction Goal	13 Percent	21 Percent
Target Disposal Rate	6.30 Pounds per Person per Day	5.70 Pounds per Person per Day
Projected Waste Disposed	234,954 Tons	233,232 Tons
Waste Reduction Amount	<del>32,689 Tons</del>	60,551 Tons
<small>Note: Waste reduction is relative to the FY 1988-1989 rate of 7.18 pounds per person per day (1.31 tons per person per year).</small>		

~~**Policy 13.2.2b. City Recycling Drop-off Centers.** The City of Durham shall continue to provide recycling drop off centers, with 24 hour access, at convenient locations scattered around the community.~~

~~**Policy 13.2.2c. Composting.** The City Solid Waste Management Department and the County General Services Department shall explore programs to encourage composting of some portion of Durham’s solid waste stream shall continue to operate a Type I yard waste processing facility.~~

~~**Policy 13.2.3a. Methane Gas Monitoring and Utilization.** The City Water Management Department shall continue to monitor the quality and quantity of methane gas produced from the North Durham Water Reclamation Facility to evaluate the feasibility of utilize methane gas produced from the utilization options produced from the North Durham Water Reclamation Facilities. The City Water Management Department shall conduct a feasibility study to evaluate the potential utilization options more closely.~~

**Amended - August 17, 2015**

~~**Policy 13.1.1d. Bulky Item Collection.** The bulky items collection level of service shall be weekly for a limited number of items. Roll-off container rentals will be made available for larger amounts of bulk waste.~~

~~**Policy 13.1.1e. Household Hazardous Wastes.** The City shall actively promote and continue to provide, at least monthly, for drop-off of household hazardous wastes, including electronic waste, for citizens of Durham and surrounding areas.~~

~~**Policy 13.1.3b. Transfer Station.** The City Solid Waste Management Department shall upgrade the transfer station facility at 2115 East Camden Avenue Club Boulevard to allow for expected growth during the next ten years.~~