

City of Alpharetta

Solid Waste Management Plan

2010-2021

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Section 1 Introduction

1.1 Planning Area

The planning area includes the City of Alpharetta. Alpharetta is located in the North Atlanta Metro area approximately 28 miles north of downtown Atlanta and is one of five cities incorporated within North Fulton County. It is comprised of 27.27 square miles. This document will serve as a local plan for the City. The Atlanta metro area is located in the Piedmont region of Georgia and there are no significant topographical features that significantly affect solid waste management activities. A topographic map is attached as Appendix A.

The Standards and Procedures provided herein are for the implementation of the Georgia Comprehensive Solid Waste Management Act, O.C.G.A. § 12-8-20 *et seq.*, and are intended to provide comprehensive solid waste management planning for the City of Alpharetta. As the Act also established an integral relationship between solid waste planning, reporting, and permitting, the Minimum Standards and Procedures are designed to promote and reinforce the link between solid waste plans, the Solid Waste Annual Survey and Full -Cost Report, and facility permits.

The Solid Waste Management Act requires that each plan:

- Provide for the assurance of adequate solid waste planning capability and disposal capacity within the planning area for at least ten (10) years from the date of plan completion.
- Promote a program to reduce the per capita rate of municipal waste disposed in solid waste facilities.
- Identify solid waste handling facilities within the plans area as to size and type.
- Identify land areas in the planning area unsuitable for solid waste handling facilities based on environmental and land use factors.

This plan represents the 10-year Plan update for the planning period from 2011 to 2021. The previous plan was adopted in 2005. The original plan was adopted in 1993.

1.2 Population

Alpharetta's population increased from 30,511 in 2000 to an estimated 52,558 in 2010 which represented a 72% increase. The City's growth rate outpaced that of the Fulton County (county), Atlanta Regional Commission counties (region), Atlanta-Sandy Springs- Marietta Metropolitan Statistical Area (MSA) and the State of Georgia (state). Population increases occurred due to greenfield suburban development, as well as, annexation. The latest year for which comparable data is available for adjacent communities is 2009. Alpharetta was the fourth largest city in North Fulton County behind Roswell, Sandy Springs and Johns Creek. Alpharetta is projected to grow to a population of 61,661 by 2021. The existing City limits must accommodate population

growth since annexation is no longer possible. Table 1-1 indicates the anticipated population projections for the City of Alpharetta to 2021. Alpharetta experienced a 54% increase in housing units growing from 13,894 in 2000 to 20,894 in 2009 as a direct consequence. Some of this increase is a result of recent annexations. This rate of growth is not expected to continue. Table 1-2 shows the 2010 breakdown of single-family and multi-family households.

Table 1-1 Population

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
52,558	53,345	54,132	54,919	55,706	56,494	57,355	58,216	59,077	59,938	60,800	61,661

Source: City of Alpharetta Community Development 2011

**Table 1-2
Number of Single and Multi-Family Households**

Single-Family	Multi-Family
15,535	5,396

Source: City of Alpharetta Community Development Department June 2010

1.3 Economic Activity

The City of Alpharetta 2030 Comprehensive Plan offers an overview of the City's economic status and goals for future development. Alpharetta is committed to retaining our existing quality businesses and to further strengthening the economic base. Recent trends include the redevelopment of vacant retail centers and revitalization of the downtown area. Despite losses during the economic downturn, Alpharetta remains a strong employment center for office and retail.

**Table 1-4
Employment**

Number of Businesses	Number of Employees
4,079	69,698

Source: City of Alpharetta Community Development Department June 2010

Section 2 Waste Disposal Stream Analysis

2.1 Inventory of Waste Disposed

Alpharetta's solid waste stream is comprised of residential, commercial, light industrial, and construction and demolition (C&D) materials. Since no detailed waste stream characterization data is available for Alpharetta or Fulton County, the *Georgia Statewide Waste Characterization Study (2005)* has the best information available. Alpharetta is in the Atlanta Regional Commission Regional Development Center (RDC) which was studied in detail. The waste characterization percentages for the RDC are in Table 2-1. These results reflect an aggregate of the Municipal Solid Waste (MSW) waste stream of both commercial and residential contributions. Paper is by far the largest sector of the waste stream followed by organics and plastics. Private haulers report tonnages to the City; however, the break out of waste composition by sector is not available. The *Georgia Statewide Waste Characterization Study (2005)* contains this information. A copy of the Composition Element from this report for Atlanta Regional Commission Regional Development Center is found as Appendix B. Analysis from the study also reports that more than 25% of all disposed waste is commonly paper that could be recycled. This is very similar to the state as a whole.

Table 2-1
Estimated Waste Amounts and Composition

Atlanta Regional Development Center
Paper (40%)
Plastic (16%)
Glass (4%)
Metal (6%)
Organic (26%)
C&D (5%)
Inorganic (3%)
<i>Source: Georgia Statewide Waste Characterization Study, 2005. Atlanta Regional Commission (ARC) averages</i>

2.2 Seasonal Variations

Alpharetta does not experience any significant seasonal changes in population that would affect the amount of Municipal Solid Waste (MSW). Yard waste fluctuations vary seasonally from the disposal of grass clippings and leaves during the summer and fall.

2.3 Waste Generating Disasters

The City of Alpharetta cannot predict amounts of additional waste that might be generated by an unanticipated disaster. Strong storms in 2009 resulted in large amounts of fallen trees and property damage. City employees and private contractors worked with Republic/BFI to collect and dispose of large amounts of debris. Emergency preparedness plans are in place for the City to coordinate with the respective level of need in accordance with FEMA regulations. Republic Services DBA BFI Waste Services, LLC DBA Allied Waste Services of Lawrenceville, GA a Delaware limited liability company authorized to do business in the State of Georgia (herein referred to as "BFI") has submitted an Emergency Response and Contingency Plan dated August 31, 2011. This Plan is attached as Appendix B.

2.4 Projections of Waste to be Disposed

Alpharetta's Municipal Solid Waste (MSW) waste stream is comprised of landfilled MSW from residences and businesses and yard wastes. Yard wastes are disposed in inert facilities and are not landfilled at a municipal solid waste facility. Yard waste tonnages are included in the tonnages of waste disposed. Projections of anticipated waste to be disposed is calculated using 2010 tonnage reports from haulers, a 2010 per capita disposal rate and projected population. The 2010 per capita disposal rate for Alpharetta is 4.7 pounds per capita per day or 0.858 tons per person per year. Table 2-4 A represents the projected waste to be disposed within the planning period if further waste reduction and recycling do not occur. Table 2-4 B represents a projected representation of the waste characterization.

**Table 2-4 A
Waste Disposed Targets for Planning Period
City of Alpharetta**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected Population	52,558	53,345	54,132	54,919	55,706	56,494	57,355	58,216	59,077	59,938	60,800	61,661
Tons Disposed	45,094.76	45,770.01	46,445.26	47,120.50	47,795.75	48,471.85	49,210.59	49,949.33	50,688.07	51,426.80	52,166.40	52,905.14
Per Capita Tons Disposed	0.858	0.858	0.858	0.858	0.858	0.858	0.858	0.858	0.858	0.858	0.858	0.858

Source: City of Alpharetta

Table 2-4 B
Waste Characterization Disposal Projections
City of Alpharetta

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<i>Paper (40%)</i>	18,308.00	18,578.10	18,848.20	19,118.30	19,388.74	19,684.24	19,979.73	20,275.23	20,570.72	20,866.56	21,162.06
<i>Plastic (16%)</i>	7,323.20	7,431.24	7,539.28	7,647.32	7,755.50	7,873.69	7,991.89	8,110.09	8,228.29	8,346.62	8,464.82
<i>Glass (4%)</i>	1,830.80	1,857.81	1,884.82	1,911.83	1,938.87	1,968.42	1,997.97	2,027.52	2,057.07	2,086.66	2,116.21
<i>Metal (6%)</i>	2,746.20	2,786.72	2,827.23	2,867.75	2,908.31	2,952.64	2,996.96	3,041.28	3,085.61	3,129.98	3,174.31
<i>Organic (26%)</i>	11,900.20	12,075.77	12,251.33	12,426.90	12,602.68	12,794.75	12,986.83	13,178.90	13,370.97	13,563.26	13,755.34
<i>C&D (5%)</i>	2,288.50	2,322.26	2,356.03	2,389.79	2,423.59	2,460.53	2,497.47	2,534.40	2,571.34	2,608.32	2,645.26
<i>Inorganic (3%)</i>	1,373.10	1,393.36	1,413.62	1,433.87	1,454.16	1,476.32	1,498.48	1,520.64	1,542.80	1,564.99	1,587.15
<i>Totals</i>											
<i>Tons/year</i>	45,770.01	46,445.26	47,120.5	47,795.75	48,471.85	49,210.59	49,949.33	50,688.07	51,426.80	52,166.4	52,905.14
<i>Tons/day</i>	125.40	127.25	129.10	130.95	132.80	134.82	136.85	138.87	140.90	142.92	144.95

The methodology used to determine disposal rate is based on known determinants of tons of waste disposed and population. The formulae used are as follows:

$$\frac{\text{Annual tons disposed (land filled + yard waste)}}{\text{Population}} = \text{tons per capita per year}$$

$$\text{Tons per capita per year} \times 2000 \text{ pounds} = \text{pounds per capita per year}$$

$$\frac{\text{Pounds per capita per year}}{365 \text{ days per year}} = \text{pounds per capita per day}$$

2010 calculations are:

$$\frac{45,124.23 \text{ tons disposed}}{52,558 \text{ population}} = 0.858 \text{ tons per capita per year}$$

$$0.858 \text{ tons per capita per year} \times 2000 \text{ pounds} = 1,716 \text{ pounds per capita per year}$$

$$\frac{1,716 \text{ pounds per capita per year}}{365 \text{ days per year}} = 4.7 \text{ pounds per capita per day}$$

Forty percent of the waste stream is comprised of paper, much of which is typically recyclable if given the option. Analysis of Alpharetta's waste stream reports indicate that 63% of the solid waste landfilled in 2010 was generated by the commercial sector; whereas, 37% is generated by residential customers. Additional efforts are needed to target paper recycling and source reduction by area businesses as well as by residents.

2.5 Per Capita MSW Disposal Reduction Goal

A disposal rate of 5.91 pounds per capita per day was calculated in 2005. Results from 2010 show that the disposal rate has dropped 20% to 4.70 pounds per capita per day in 2010. Alpharetta provides recycling incentives, community collections and outreach programs to encourage overall waste reduction and recycling. Further reductions can be accomplished through the programs that are already in place. The City has set a 10% per capita reduction goal over the next ten years. Table 2-5 A reflects a reduction from 0.849 tons per capita per year in 2011 to 0.764 per capita per year in 2021. Accomplishing this goal will reduce the amount of MSW being landfilled by 32,995.76 tons within this planning period.

Table 2-5 A
Waste Disposed Targets for Planning Period
City of Alpharetta

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Projected Population	52,558	53,345	54,132	54,919	55,706	56,494	57,355	58,216	59,077	59,938	60,800	61,661
Tons Disposed	45,094.76	45,289.91	45,525.01	45,747.53	45,901.74	46,099.10	46,285.49	46,514.58	46,670.83	46,811.58	46,998.40	47,109.77
Per Capita Tons Disposed	0.858	0.849	0.841	0.833	0.824	0.816	0.807	0.799	0.790	0.781	0.773	0.764

Source: City of Alpharetta

Section 3 Waste Reduction Element

3.1 Source Reduction

Source reduction is any action taken to prevent the generation of waste in the first place. It can include reducing the amount of solid wastes generated at the source; redesigning of products or packaging so that less material is used, resulting in fewer discarded materials; voluntary or imposed behavioral changes in the use of materials which results in the selection of products and materials which last longer, or reduce the amount of materials discarded; or increasing the durability and reusability of materials to result in longer lasting products.

Workshops are offered each year by the City that emphasize water-wise practices and composting. Landscaping to reduce turf areas, grasscycling and composting can be effective ways to reduce the amounts of yard wastes; this is the second largest type of wastes being disposed. The City participates in the EverGreen Schools program which offers the "Waste in Place" curriculum lesson plans that focus on waster management including source reductions. Additionally, all City offices recycle and have a mandatory "Buy Recycled" purchasing policy. .

3.2 Recycling

Commercial

As a strategy for managing commercial waste, the City of Alpharetta requires that all new commercial developments include a waste generation analysis (WGA) on their civil plans which demonstrates a 25% minimum solid waste reduction. The construction plans must demonstrate that there is a dedicated location for recycling which is large enough to accommodate the recyclables as calculated in the WGA. Prior to obtaining an annual business license, applicants must sign an affidavit stating that they are aware of the City's commercial recycling requirement and that they are in compliance. Commercial sites are audited on a random basis for compliance. City businesses may choose any of the permitted companies to provide their services with varying fees charged based on the company providing the service. Different landfills may also be used.

Residential Curbside

The City of Alpharetta provides weekly curbside collection of garbage, recycling and yard waste to all residents. A Utility Brochure explaining these services is attached as Appendix C. The curbside service is accomplished through a third-party contract with BFI. There is one fee for all curbside services. Alpharetta implements a "Pay-As-You-Throw" fee structure as a financial incentive for source reduction of solid waste. "Pay-As-You-Throw" directly supports waste prevention and recycling because residents pay for whatever they throw out. A staged pricing system is in place where customers may use one of two sizes of collection carts that are provided by the City. Should the customer wish to dispose of more garbage than will fit into their waste receptacle, they may purchase bag tags for those items through the City as needed. Conversely, additional recycling is accepted at no additional cost.

Alpharetta accepts an extensive list of recyclable items in its curbside single stream collection program. These include aluminum and metal food & beverage cans, foil & pie tins, glass, food/beverage containers, clean newspaper, catalogs, all #1 through #7 plastic containers, magazines, phone books, white or colored paper, chipboard boxes (cereal, soda, cracker, detergent boxes), and corrugated cardboard (broken down to 2 x 2 size in order to fit into the recycling bin). A breakout by item is not currently available.

A new recycling incentive program was launched in April 2010 that rewards residents based on the amount they recycle. RecycleBank is a rewards program that motivates participants to recycle by offering points for recycling efforts. A large rolling 68-gallon recycling cart is provided to each home. A tracking chip in the container enables the measurable component which tracks recycle material weight. Recycling results in points and points can be used for rewards from local and national businesses or to donate to local schools and charities. Data generated through this system is useful in solid waste management planning. Tonnage reports show an approximate 19% increase for residential recycling between Apr-Dec 2009 and Apr-Dec 2010.

Additional recyclables can be brought to two area recycle centers that are located nearby. The Roswell Recycle Center is located between the Cities of Alpharetta and Roswell at 11570 Maxwell Road in Alpharetta. The R. V. Dick Schmaltz Recycling Center is located at 470 Morgan Falls Road in Sandy Springs. Although neither recycling center is located within the City limits, both accept recyclable items from Alpharetta citizens, as well as, surrounding Metro-Atlanta suburban areas. All City offices have recycling bins for office paper, plastic and aluminum cans. Additional items recycled are bulbs, aluminum signs and posts, and electronics.

A Christmas tree recycling collection is offered as part of the Keep Georgia Beautiful "Bring One for the Chipper" Program. Approximately 3,000 trees are diverted from the Alpharetta waste stream and recycled by chipping them into free mulch. Two community shredding events are held annually for residents to safely shred sensitive documents resulting in the recycling of approximately 8,000 pounds of paper per event.

Additional recycling opportunities are offered through local businesses and schools. There are currently no programs for tracking these activities. The City's EverGreen Schools Program works with private and public schools to implement environmental programs. Many of our schools have established recycling programs for paper, cell phones, eyeglasses, printer cartridges, athletic shoes and other items. Schools conduct ongoing programs including recycling collections for Earth Day and America Recycles Month.

Special Events

Alpharetta was awarded one of the "Away From Home Recycling" turn-key kits from the Georgia Department of Community Affairs in 2008. The trailer contains 100 event recycling bins that are used for City special events. The resources are available for loan to area businesses to encourage more events recycling. One City event that uses these

recycling capabilities is Taste of Alpharetta. Taste of Alpharetta is one of the largest events of its kind on the east coast and attracts an estimated 70,000 people each year. These recycling bins have made recycling at this event possible since 2008.

Local businesses also offer recycling and waste reduction opportunities. Reusable bags are available and encouraged by local grocers, some of which also offer plastic bag collection containers. Office retail stores such as Staples and Best Buy offer electronics recycling options. A recycling option for energy efficient bulbs is offered by The Home Depot.

Residents with questions or inquiries may be directed to the City Finance Department or to the Republic customer service line. Schedules and applicable information are available through the City web site, bill inserts, and letter correspondence if necessary.

Waste reduction is directly linked to community education and will continue to be an important component of waste management in Alpharetta. The City of Alpharetta will continue to provide quality and cost effective service to Alpharetta customers; to continually evaluate solid waste service and identify areas where beneficial changes can be made.

There is an abundance of opportunities for residents to recycle many items whether curbside, at a recycle center or at a special community collection. Adding the RecycleBank program and its incentives has already resulted in an increase in the amount of recycled materials collected in the first year. We expect to see a continued increase in residential recycling.

A review of FY2010 tonnage reports indicates that residents generate 37% of the trash and account for 73% of the recycling tonnages. Consequently, businesses generate 63% of the trash and 27% of the recycling tonnages. It is possible that all of the recycling records from haulers may not have been submitted; however, there is a need to work with businesses to improve their ability to recycle as much as possible. Additional opportunities for adding new beneficial programs and incentives will be evaluated for both residents and businesses as they become available.

3.3 Yard Trimmings Programs and Facilities

Alpharetta provides weekly curbside pick up of residential yard wastes with ultimate disposal at the Chadwick landfill in the permitted area for yard wastes. Currently, there is no way to track the amount of yard wastes form within City limits going to inert landfills by every private landscape and tree company for wastes. The City promotes composting to reduce yard wastes and other organics. Composting workshops and truck load sales of composting bins have placed approximately 450 units in 2010 and 2011 to North Fulton residents.

**Table 3-3 A
Yard Trimmings Programs
(2011)**

Program	Owner/Operator	Jurisdictions Served	Sector Served*	Materials Accepted	Quantity	Program Maximum Capacity	Final Disposition
Municipal curbside yard trimmings	City of Alpharetta	City residents	R	Brushy waste (less than 4" in diameter?)		N/A	Inert landfill
Home composting educational program	City of Alpharetta and North Fulton Partners	North Fulton	R	Vegetative food, yard trimmings	Distributed 450 bins in 2010 & 2011	Truck load sale of composters and rain barrels	Residents make and use compost
		North Fulton	R	Vegetative food, yard trimmings	One workshop annually	Workshops	
Private tree/landscaping entities	Private	All	R, C, I, CD	Grass, leaves, trees and brush			On-site mulching/grinding for retail sale or inert landfilling

1 R= Residential, I=Industrial, C=Commercial, CD=C&D
Source: City of Alpharetta

3.4 Items Requiring Special Handling

Some materials require special management. These include household hazardous wastes (HHW), paint, electronics, white goods, batteries, mercury and other materials. Residents can arrange for curbside pick up of white goods, bulky items and tires. Special community collections are offered for HHW, paint and electronics. Lead acid batteries and tires may be taken to either recycle center or to service centers where new replacements are purchased.

Residential Special Collections

Alpharetta offers community collections for household hazardous waste (HHW), paint and paint-related substances. A full range of products are collected including; but not

limited to, pesticides and other yard chemicals, poisons, paint, pool chemicals, mercury, flammables, solvents, bulbs batteries, etc. To date, four collections have been offered. Two collections will occur in FY2011.

Electronics Collections

Outdated and unusable computer and electronic equipment are an increasing concern. These products contain toxic chemicals that can be reclaimed and reused rather than disposal in a landfill. Alpharetta began offering community electronics recycling collections in 2003. Since then, two to three collections have been conducted annually.

All North Fulton Residents are welcome at these collections that are made possible through community partnerships. Permanent drop off locations are available at City offices for cell phones and ink jet cartridges. Both area recycling centers accept electronics for recycling.

**Table 3-4
Management of Special Materials**

Material	Targeted Sector(s)¹	Management Strategy	Final Disposition of Material(s)
Electronics	R	Annual community collections – 2 to 3 per year	Dismantled by private recycler and parts/metals sold.
Bulky Items	R	Weekly curbside collection	Inert landfill
Paint and Related Products	R	Weekly pick up of dried paint and jurisdiction sub-contracts management of materials, one event held per year at Engineering/Public Works Facility.	Some recycled
HHW	R	Jurisdiction sub-contracts management of materials, one event held per year at Engineering/Public Works Facility.	Some materials recycled, others disposed at special material landfills
Lead Acid Batteries	R, C	Area recycling facilities and battery retailers	Recycled
White Goods	R	Municipality collects, hires sub-contractor to manage.	Recycled
White Goods	CD, I, C	Generators hire private entities to manage scrap	Recycled
<small>¹ R= Residential, I=Industrial, C=Commercial, CD= C&D (construction/demolition) Source: City of Alpharetta</small>			

3.5 Assessment of Waste Reduction Programs

Alpharetta's waste reduction goal of a 10% reduction is based on the statewide goal to reduce by 25 percent the amount of waste disposed per capita. A 20% reduction has occurred from 2005 to 2010 so a further reduction by 2021 would be in line with this goal.

The Recyclebank Program brings awareness of the types and amounts of items being disposed. Additional materials will be developed to further promote participation as well as source reduction. Outreach will concurrently be developed for area businesses regarding waste reduction and recycling options.

Additional efforts will be made to educate residents about ways to reduce yard wastes and to encourage recycling practices. Yard wastes are currently diverted from municipal lined landfills by disposal at inert landfill facilities which is in accordance with state law.

The Georgia Statewide Waste Characterization Study (2005) evaluated the Atlanta Regional Commission Regional Development Center in detail. There are adequate recycling businesses to handle material collection in the area to collect and process materials so that they meet specifications of available markets. Development of area composting options for yard wastes would present other options for disposal.

Section 4 Collection Element

4.1 Existing Programs

Alpharetta has not directly provided garbage service since 1982, but does contract this service out. The City has no plans to change this policy and will continue to contract with a private vendor for residential services. The business sector contracts directly with a waste hauler from the City's approved vendor list. The City will continue to exercise due diligence in obtaining contracts which satisfy the economic considerations of citizens while assuring maximum service options in garbage pickup and curbside recycling. This service is managed by the City Finance Department. Currently, the contracted vendor is BFI. BFI collects trash weekly from 14,390 residential households. Businesses are served by five waste haulers licensed through the City for their garbage service. Copies of the existing contract and amendment service agreements with BFI are included in the Appendix D.

Alpharetta offers a curbside recycling program which is explained in more detail in Section 3. BFI provides this service for the City and reports the volumes recycled as well as the volumes landfilled. City offices recycle cardboard, plastics, mixed office paper and corrugated cardboard.

There are no staffed or un-staffed drop centers for recycling within the City limits. Many items which cannot be accepted curbside can be taken to either the Roswell Recycling Center or the R. V. Dick Schmaltz Recycling Center. Manned Goodwill drop-off trailers are available at both locations for items with re-use value. The Alpharetta branch library accepts used books for re-sale at their book fairs.

The City contracts with a private vendor for yard waste services. The current yard waste collection services are provided by BFI. The curbside collection of yard waste in the City began January 2, 1993. Items collected as part of this service include grass, leaves, pine straw, pinecones, garden debris, thatch, and tree limbs. All yard waste must be containerized with the exception of limbs. The program will continue to collect yard waste in the same manner with ultimate disposal at the Chadwick Landfill or another inert landfill and in accordance with current requirements. No yard waste will be disposed at a municipal landfill.

Collection service for bulky items changed in 2009. Historically, curbside pick up was arranged for a fee and two amnesty community collections were offered in conjunction with the City of Roswell. The City has discontinued the amnesty collections in favor of including curbside pick up of bulky items upon request as part of the normal service and at no additional cost to the residents.

Waste Management owns and operates a MSW transfer station which is located at 11465 Maxwell Road.

**Table 4-1
Haulers Operating in Alpharetta**

Hauler Name	Sector Served¹	Jurisdiction(s) Served	Arrangement²
BFI	R, C	City of Alpharetta	Operates under third party contract with the City of Alpharetta to provide all residences with weekly garbage, recycling, yard waste and bulky trash pick up.
Advanced Disposal Services	C	City of Alpharetta	Serves commercial sector
American Disposal Serv of GA	C	City of Alpharetta	Serves commercial sector
Waste Pro	C	City of Alpharetta	Serves commercial sector
Waste Management	C	City of Alpharetta	Serves commercial sector
¹ R= Residential, I=Institutional, C= Commercial, CD= Construction & Demolition (C&D) ² i.e., contract with local government, franchise agreement with local government, independent contract with generators, etc. Source:			

4.2 Contingency Strategy and Disaster Debris Management

A contingency strategy for the interim collection of solid waste generated within the jurisdiction in the event one or more of the primary collection options become interrupted is attached as Appendix E.

4.3 Assessment of Collection Programs

The current collection programs are adequately serving the present and future community needs and the City is meeting its waste reduction goals. The City will continue to maintain this service level as a part of the contract and bid review process for solid waste services. The City contract is currently in effect until 2020. The City will insure at each contract renewal that the service provider has developed a strategy for providing an effective and affordable collection system for the ten-year planning period. As part of the bid review process, the City evaluates each provider's ability to provide innovative waste reduction strategies to tour citizens. A contingency strategy for the interim

collection of solid waste in the event the primary collection option becomes interrupted is required.

4.4 Programs to Address Illegal Disposal / Dumping Code Enforcement

Alpharetta has four fulltime code enforcement officers within the Community Development Department, as well as, a Code Enforcement Board consisting of residents appointed by Mayor and Council. The code enforcement group enforces a wide range of City regulations, including environmental, health, safety and property maintenance codes. Code Enforcement ensures that residential and business properties are properly maintained, that trash and debris are removed, and that inoperative/junk vehicles are not illegally stored.

When code enforcement has a recurring problem with dumping, they work closely with the property owner to secure the site and prevent further access. They also work in conjunction with the Public Safety Department to patrol less visible locations on a 24-hour basis. As a result of these efforts, illegal dumping is not a significant problem in Alpharetta. The current staffing is adequate for serving present and future community needs and to facilitate progress towards the waste reduction goals

Section 5 Disposal Element

5.1 Inventory of Solid Waste Disposal Facilities

The Richland Creek Road Landfill, owned and operated by Allied Waste Management receives Alpharetta's municipal garbage. This landfill has a 164 acre landfill footprint with over 5 million tons of waste in place. Approximately 14,390 residential customers disposed an estimated 16,085.45 tons of landfilled MSW in FY11. Commercial customers disposed an additional 20,383.51 tons. Commercial solid waste is disposed at three additional area landfills as listed below. None of these landfills are located within the City limits. The analysis in Section 2.4 projects residential and commercial MSW equating to 52,905.14 tons for disposal in 2021.

**Table 5-1
Inventory of Disposal Facilities to Be Used During the Planning Period
(2010-2021)**

Facility Name	Jurisdiction(s) Using Facility	Permit Number	Owner/Operator	Facility Type	Types of Waste Accepted	Maximum Capacity (TPD)	Year Expected to Reach Capacity
BFI	Buford Gwinnett	067-032D(SL)	BFI- Richland Creek Rd (SL)	Municipal Solid Waste Landfill	MSW	23,609,066 (2010)	09/38
BFI - Yard Waste Community Waste - Yard Waste	Roswell/ Fulton	060-072D(L)	Chadwick Rd Landfill, Inc.	Construction and Demolition Landfill	C&D, Yard wastes	1,881,861 (2010)	8/20/2018
United Waste	Winder/ Barrow	007-020D (SL)	Republic Waste - Oak Grove SR 324	Municipal Solid Waste Landfill		9,498,252	9/5/2034

Source: Georgia Environmental Protection Division , http://www.gaepd.com/Files_XLS/regcomm/ob/swcapacity2010.xls

5.2 Assurance of 10-Year Capacity and Assessment of Disposal

As per the Georgia Comprehensive Solid Waste Management Act of 1990, the City contractor must provide capacity assurance for the length of the contract period. Richland Creek is the current landfill receiving MSW from City residents. Based upon a

projected waste to be disposed, Richland Creek Landfill has adequate capacity to serve the needs of Alpharetta for the 10-year planning period from 2011 to 2021. A capacity assurance letter from Republic Services of Georgia, Limited Partnership (BFI) verifies that the Richland Creek Facility has sufficient capacity to meet Alpharetta's MSW needs past 2021. This document is attached as Appendix F.

5.3 Thermal Treatment Facilities

There are no thermal treatment facilities within the City of Alpharetta, (including waste-to-energy, refuse-derived fuel, wood waste incinerator, tire-derived fuel, co-firing industrial boiler).

5.4 Assessment of Disposal

The current contract with BFI is in effect until March 31st 2017 with three (3) additional one (1) year renewal extension options. The City will continue to use contractors who are properly permitted with the state and who operate environmentally sound landfills. Included in the Appendices are copies of the current City contracts.

Alpharetta has received assurance that the current landfill receiving the residential MSW has adequate capacity for the projected amounts of waste through 2021. Any new contract will require that the City hauler provide adequate capacity assurance for MSW disposal and the contingency strategy for the interim disposal of the solid waste in the event the primary disposal option becomes interrupted.

Alpharetta's yard waste is disposed at the Chadwick Landfill sections appropriate for yard waste and in accordance with current requirements. Since this landfill will reach capacity in 2018, prior to 2021, Republic has access to other inert landfill options for disposal if necessary. There are several inert landfills within the vicinity that could accept these materials.

5.5 Statement of Needs and Goals

Alpharetta will evaluate the cost effectiveness and environmental impact of any new area options that provide for recycling of yard wastes.

Section 6 Land Limitation Element

6.1 Inventory Areas with Natural Environmental Limitations

Alpharetta has a number of land areas which, due to environmental limitations, are considered unsuitable for development of recycling, recovery, composting or solid waste disposal facilities (collectively known as solid waste management facilities). The City environmental ordinances include:

- Water supply watersheds;
- Groundwater recharge areas;
- Wetlands;
- River and stream corridors; and
- Floodplain and future floodplain.

These environmental ordinances can be found in the Unified Development Code Article 3, available on the City website at <http://www.alpharetta.ga.us/index.php?m=publications&id=17>

Fault Areas: Georgia Department of Natural Resources requires that new landfills and lateral expansions shall not be located within 200 feet of a fault that has had displacement in the Holocene Epoch unless the owner demonstrates to EPD that an alternate design is appropriate.

Seismic Impact Zones: Georgia Department of Natural Resources prohibits the construction of new landfills and lateral expansions in seismic impact zones unless the owner demonstrates to EPD that all containment structures (including liners, leachate collection systems and surface water control systems) are designed for the specific site conditions.

Unstable Areas: Georgia Department of Natural Resources and the City of Alpharetta require owners of new and existing landfills to demonstrate that engineering measures have been incorporated into the landfill design to ensure the integrity of the structural components.

Alpharetta has no protected mountains.

The City wetlands are delineated on a site specific basis prior to development. Our floodplain and future floodplain maps are currently being updated by our Stormwater Engineering Division and available by request to that division. The water supply watershed map is in the Appendix.

6.2 Inventory Areas with Land Use Limitations

National Historic Sites: Municipal landfills are not permitted within 5,707 yards of a National Historic site. Alpharetta currently has no properties listed on the National Historic Register. Any proposed facility would be required to demonstrate compliance with this requirement.

Archeological Sites: The Archeological Resources Protection Act of 1979 requires agencies using federal funds to conduct archeological investigations to determine the extent of any protected cultural resource. No solid waste handling facility should be located so as to negatively impact an area of known archeological sites on record with the Georgia Archeological Site File. Alpharetta currently has no properties listed in the Georgia Archeological Site File. Any proposed facility would be required to demonstrate compliance with this requirement.

Municipal Borders: The Georgia Comprehensive Solid Waste Management Act prohibits the construction of a municipal solid waste facility within one-half mile of a municipal border without the approval of that jurisdiction's governing authority.

Alpharetta has no airports or landfills.

Zoning: The Light Industrial Zoning District is the only district that allows solid waste facilities as a conditional use. The procedure for conditional use approval is described in 6.3 below. The City zoning map shows the Light Industrial Zoning District. This district is located within 7 miles of the Roswell Water Intake Supply overlay as shown on the Water Intake Plan. These maps may be found in Appendix G.

6.3 Local Procedures for Siting Solid Waste Facilities

A solid waste facility is only allowed in Light Industrial Zoning as a Conditional Use. Conditional Use approval would require site specific City Council approval thru the public hearing process, in accordance with the requirements for all zoning changes. Expansion of the only solid waste facility in the City (Maxwell Road Transfer Station) would require approval through a public hearing as well. Some projects would require prior approval as an Atlanta Regional Commission Development of Regional Impact prior to submittal to the City of Alpharetta.

The public hearing process requires a minimum of 90 days from the submittal date and includes notification to property owners within 500 feet of the property to be rezoned. In addition, the City posts a minimum of one sign on the site and places advertisements of the public meetings in the local newspaper. As part of the review process, staff from all departments evaluate the project for compliance with environmental regulations, land use compatibility, transportation impact, the Solid Waste Management Plan and other City codes.

Projects must demonstrate compliance with all Department of Natural Resources requirements. The project submittal must also include the following information: potential impact the proposed facility would have on current solid waste management infrastructure; potential impact proposed facility would have on collection capability and

disposal capacity; and potential impact the proposed facility would have on the state's 25 percent per capita waste disposal reduction goal.

6.4 Assessment of Land Limitation

Any proposed solid waste facility would be reviewed by the City Council, on a site specific basis, for compliance with all environmental ordinances in effect at the time of submittal; and, for suitability and compatibility with the surrounding land use. Alpharetta has no plans to operate a municipal solid waste facility. After decades of intensive building, the more developable properties have been taken. Properties remaining for a landfill would typically have streams, specimen trees, steep topography and other challenges. Alpharetta is a small community and the cost of vacant land is expensive, even after several years of declining prices. Most of the light industrial properties have been built as retail and office, with some abutting residential. These land uses are incompatible with a solid waste facility.

6.5 Needs and Goals

It is Alpharetta's goal to insure that any new or expanded solid waste facility is constructed in compliance with local codes, state environmental requirements, and in accordance with this management plan.

Section 7 Education and Public Involvement Element

7.1 Inventory Existing Public Education Programs and Public Involvement Opportunities

The Finance Department communicates information regarding solid waste services available via the City web page, brochures and written materials. Inquiries can be answered by Customer Service representatives from both Republic and the City's Finance Department. Information regarding waste generation and recycling requirements for new development is also available online through the Community Development Department.

Education and public involvement are key elements in any successful waste reduction program. Alpharetta implements an Environmental Education Program for adults and children with a variety of programs including the management of solid waste. Outreach is offered through written materials, community recycling collections, the Alpharetta EverGreen Schools Programs and through its affiliation with Keep America Beautiful (KAB) Programs and volunteers. The Alpharetta Natural Resource Commission (NRC) is the appointed body of community volunteers charged with the protection of Alpharetta's Natural Resources and the advisory commission for the local Keep America Beautiful Affiliate.

The NRC's purpose is aligned with the national Keep America Beautiful mission to involve volunteers in community action dedicated to litter and graffiti prevention, beautification, waste minimization and community improvement. NRC Outreach Programs involve hundreds of volunteers each year in hands-on community improvement activities where they learn how to take personal responsibility for improving their local community environments and their quality of life. Only those programs relating to solid waste are listed below. These programs include:

- Community household hazardous waste and paint recycling collections
- Bring One for the Chipper –Annual Christmas tree recycling collection
- The Great American Clean Up - Focuses on involving community volunteers in a variety of recycling, beautification and clean ups
- Computer and electronics recycling collections
- Community collections for paper and sensitive document shredding
- Truckload sales of composting units and rain barrels
- Community clean ups
- Workshops on composting, gardening and other topics as requested
- Adopt-A-Mile–Local businesses, service organizations, individuals and families volunteer to adopt a mile of City roadway and agree to conduct litter pick ups annually.

- Clean is Cool–This campaign was launched in 2002 as a positive litter prevention program.
- Community Litter Index–An annual litter index is conducted as part of the Keep America Beautiful Program.
- Cell Phone Collection–Permanent drop-off locations are available for cell phones, ink cartridges and small electronics.
- EverGreen School Program - The City offers support and recognition for public and private City of Alpharetta schools that implement successful environmental education programs.
- Rivers Alive–Volunteers from North Fulton conduct one of the largest waterway and land clean ups in the state.
- School recycling programs – Most of the Alpharetta schools have effective recycling programs.

The City of Alpharetta will continue to promote environmental awareness through education and public outreach activities.

7.2 Assess Adequacy of Environmental Education Initiatives

The City will improve environmental education materials available through the City web site to be more user-friendly and effective for target audiences.

Implementing the RecycleBank Program in 2010 has resulted in improved residential recycling rates. Recyclebank has been received well by residents and it is anticipated that recycling volumes will continue to increase. Additional ways to promote this program will be implemented.

Alpharetta strongly supports the community recycling collections for HHW, paint, electronics and paper. The collection of bulky waste was changed in 2009. The popularity of the Bulky Trash Day Amnesty Collections led Alpharetta to consider a more effective curbside program because of the large volumes of items that were being collected. Curbside pick up of bulky trash is now a part of the standard service through the City at no additional cost to the residents. Collections for HHW, paint, paper, and electronics will continue as long as they are the most effective means to accomplish the service. Despite the close vicinity of two area recycling centers, the community collections are popular and meet the need at this time. Alpharetta is evaluating the possibility of adding a pharmaceutical take-back collection for residents. The purpose would be to educate the public regarding this threat to water quality and to create a local solution.

Information gathered in the Waste Stream Disposal Analysis indicates that the commercial sector is disposing more wastes than the residential population. Additionally, residents are contributing 73% of all recyclables in relation to a commercial amount of 27%. Corrugated cardboard, paper and plastics comprise the largest percentage

of commercial MSW. Additional outreach to target the business sector is expected to produce positive results.

7.3 Statement of Needs and Goals

There is a need to reevaluate the information on the City web site regarding environmental education. Additional outreach materials will be developed for use.

Section 8 Implementation Strategy and Short Term Work Plan

**Table 8-1
Implementation Schedule**

Activity	Element	Funding Source	Responsible Department	Year
All new business and commercial developments must provide a waste generation analysis for their project based on established waste generation criteria in order to establish the total amount of solid waste. A plan must be established to accomplish a minimum of 25% recycling based on the type of recyclables generated by that particular use. A site or building plan is required showing that sufficient area for recyclables has been provided.	Waste Reduction	General Budget	Community Development	Ongoing program. Adopted 1993, amended as needed.
Create and maintain an approved City vendor list for garbage and recycling within the City	Collection	General Budget	Finance	Ongoing
Conduct special recycling events for the local community such as for household hazardous waste, paint, electronics and sensitive documents (paper)	Waste Reduction	General Budget	Engineering	Ongoing
Host recycling workshops for the community such as for composting, xeriscaping, turf care, and other waste reduction topics.	Waste Reduction	General Budget	Engineering	Ongoing
Use outside contractors to provide reliable, cost-effective residential garbage and recycling options (including apartments and townhomes). Contracts must guarantee reliable, compliant landfill capacity for the City for the next 10 years. Contracts must also include contingency plans for capacity in the event of disaster or other unexpected emergency.	Collection & Disposal	General Budget plus utility fees collected from residents	Finance	Ongoing
Continue "Pay as you Throw" incentive program to reduce residential and business garbage.	Collection & Disposal	User pays cost	Finance	Ongoing
Provide 2 code enforcement officers to assist with illegal dumping enforcement	Land Limitation	General Budget	Community Development	Complete

Encourage and support innovative efforts to solve solid waste problems and create more efficient delivery.	Waste Reduction	General Budget	City Administrator	Ongoing
Implement recycling at City special events	Land Limitation	General Budget	Engineering/Public Works	Ongoing
Require commercial recyclers to register and report to the City.	Collection & Disposal	General Budget	Finance	Ongoing
Require City contractor to provide a minimum service strategy for the length of the contract in accordance with this document.	Education and Public Involvement	General Budget	Finance	Ongoing
Require City contractor to provide emergency interim collection strategy as part of bid process.	Collection & Disposal	General Budget	Finance	Ongoing
Increase recycling outreach to businesses	Education and Public Involvement	General Budget	Engineering/Public Works	2012
Reevaluate educational materials available on the City website	Education and Public Involvement	General Budget	Engineering/Public Works	2012
Explore economically viable options for recycling more yard wastes	Waste Reduction	Generate	Finance	2017

Section 9 Appendix

- A Topographic Map
- B Atlanta Regional Commission Regional Development Center Composition Element
- C Utility Brochure
- D Contract and Contract Amendment Landfill
- E Disaster Response and Contingency Plan
- F Capacity Letter
- G Land Limitation Maps
- H Public Hearing One
- I Public Hearing Two