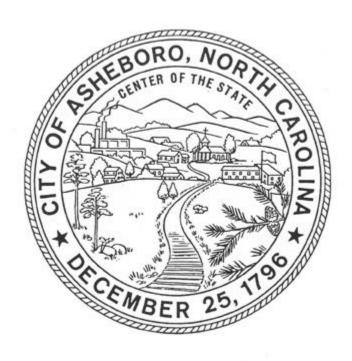
City of Asheboro

Solid Waste Management Plan



July1, 2010 – June 30, 2020

INTRODUCTION

This plan, which is being submitted, to the Solid Waste Section of the N.C. Department of Environment and Natural Resources, as required by N.C. General Statute 130A-309.09A. The City of Asheboro adopted the plan on June 10, 2010. This plan will be followed by a three-year update, as required by law, in June of 2013.

The purpose of this plan is to allow the City of Asheboro to continue to develop local solid waste needs as well as protecting both public health and the environment.

Through implementation of this solid waste management plan and updates, the City of Asheboro Sanitation Department provides for the management of solid waste and hopes for its reduction in the future.

City of Asheboro Sanitation Department plans for an integrated solid waste management program. This type of approach is beneficial to all citizens of the City. This program will provide disposal capacity, waste collection services, waste reduction and recycling programs to all members of the City and possibly areas outside the City at a reasonable price. This plan includes the reduction of improper disposal of waste, expanded waste reduction efforts and improved recycling opportunities that will be convenient for it's citizens. The City foresees some financial expenditure; however, all efforts will be maintained to keep these expenditures at a reasonable level. Asheboro's vision of the integrated solid waste management program is translated into five long-range planning goals listed below.

Planning Goals

Goal 1.	To see that everyone in the coverage area has access to waste collection or
	disposal services, waste reduction and recycling opportunities, and to ensure
	adequate waste disposal capacity.

Goal 2. To maximize the efficiency and cost-effectiveness of the solid waste program.

Goal 3. To decrease improper waste disposal.

Goal 4. To meet the established local waste reduction goals.

Goal 5. To protect public health and the environment.

Waste Stream Evaluation

In this plan, residential waste refers to waste generated by households (individuals and multifamily dwellings). The term "non-residential" refers to waste generated from commercial/industrial, and institutional activities, construction and demolition waste is generated from construction activities and is separated from non-residential in this plan because it is disposed in a different facility than most non-residential waste.

The term "disposed" refers to placing materials in a municipal solid waste landfill, LCID landfill, construction and demolition landfill, monofill, incinerating without energy recovery, or incinerating with energy recovery.

The City of Asheboro disposed of approximately 67.38 tons per. day of waste in FY 2008-2009. An estimate of the waste disposed by sector is shown in Table A. These calculations are based on reports generated by our solid waste software package summarizing waste disposal operations and estimates made by Sanitation Department staff.

TABLE A. ESTIMATED WASTE DISPOSAL BY SECTOR (FY 2008-2009)

TYPE OF WASTE	TONS	PERCENT OF WASTE STREAM
RESIDENTIAL	10,191.18	58%
NON-RESIDENTIAL	7082.02	41%
CONSTRUCTION & DEMOLITION	247.01	1%
TOTAL	17,520.21	100%

The Sanitation Department staff estimates that 58% of the waste disposed is residential waste, 41% is non-residential (commercial and institutional), and 1% is construction and demolition waste.

Land Clearing and inert debris (LCID) disposed is not shown on the table, but it is estimated that 1,380.78 tons of the debris was disposed of in FY 2008-2009 in Gold Hill Road LCID landfill.

The City has not performed a current study, at this time, of it's own residential waste. Therefore, the percentages in Table B and C are taken from Volume 1 of the North Carolina Recycling and Solid Waste Management Plan. This State study shows that the most prevalent materials in the residential waste stream are paper, plastics, and organics. Using the 39.19 TPD of residential waste that the City of Asheboro estimated were disposed in FY 2008-2009. The amounts of different materials in the local waste stream can be calculated as follows:

TABLE B. ESTIMATE OF RESIDENTIAL WASTE COMPOSITION

MATERIAL	STATE ESTIMATE (PERCENT)	ESTIMATED 2008-2009 CITY TONS DISPOSED
PAPER	31%	3,159.27
CARDBOARD	6%	611.48
PLASTICS	10%	1,019.11
YARD WASTE	5%	509.56
ORGANICS	19%	1,936.33
TEXTILES	4%	407.64
GLASS	8%	815.29
ALUMINUM	1%	101.91
FERROUS METAL	6%	611.48
NON-FERROUS METAL	1%	101.91
MISCELLANEOUS	9%	917.20
TOTAL	100%	10,191.18

TABLE C. COMPOSITION OF NON-RESIDENTIAL WASTE STREAM

MATERIAL	ESTIMATED %	ESTIMATED TONS
PAPER	39%	2,761.98
YARD WASTE	14%	991.48
PLASTICS	10%	708.20
METALS	7%	495.74
WOOD	8%	566.58
FOOD WASTE	11%	779.02
GLASS	5%	354.10
OTHER	6%	424.92
TOTAL	100	7,082.02

Part II. Local Waste Reduction Goals

The City of Asheboro established a goal of 5% waste reduction from the base year (1991-1992) to be reached by June 2002 and maintain this goal through 2020. This goal was chosen because of the City's already low per capita disposal rate. These goals will be re-evaluated at the three-year update to see if they can be increased.

TABLE D. FIVE AND TEN YEAR WASTE AND POPULATION PROJECTIONS

YEAR	POPULATION	WASTE DISPOSAL	PER CAPITA DISPOSAL RATE
BASELINE YEAR 1991-1992	16,362	14,312	0.87
YEAR			
FY 2008-2009	24,418	17,520.21	0.72
FY 2013-2014	26,380	22,953	0.87
FY 2019-2020	29,595	25,747	0.87

The waste reduction goals can be converted from percents to tons diverted by examining population estimates and past waste disposal figures. The base line year (FY 1991-1992) disposal rate was .87 tons per capita (figures provided by North Carolina Solid Waste Section). At this per capita disposal rate, The Sanitation Department should dispose of 21,243 tons in FY 2008-2009 and maintain this percentage through FY 2019-2020. Asheboro must reduce its per capita disposal rate to .83. Using the new per capita rates, the target annual tonnage remaining for disposal by Asheboro Department of Sanitation would be 20,266 tons in FY 2008-2009. In other words, 977 tons of future annual waste must be diverted from landfills in FY 2008-2009, 1058 tons in FY 2013-2014, and 1,183 in FY 2019-2020. It should be noted that in FY 2008-2009 2377.86 tons of recyclables were diverted from the landfill, 627.34 tons from the curbside program,1750.52 tons from drop sites and other programs, which is above the targeted amount of 977 tons.

TABLE E. TARGETED WASTE REDUCTION (FY'S 2008-09 AND 2013-14 AND 2019-20)

CALCULATIONS	FY 2008-2009	FY 2013-2014	FY 2019-20
BASELINE YEAR PER CAPITA DISPOSAL RATE	0.87	0.87	0.87
TARGETED PER CAPITA DISPOSAL RATE	0.83	0.83	0.83
POPULATION PROJECTIONS FOR JULY 2008-09, 2013-04 AND 2019-20	24,418	26,380	29,595
PROJECTED TONNAGES AT BASELINE DISPOSAL RATES	21,243	22,953	25,747
PROJECTED TONNAGES AT GOAL DISPOSAL RATES	20,266	21,895	24,564
TARGETED ANNUAL TONNAGE REDUCTIIONS (subtract line 5 from line 4)	977	1,058	1,183

Part III. The Planning Process and Public Participation

This plan will be submitted to the Asheboro City Council for a public hearing on May 6, 2010. The hearing will be advertised and copies of the plan will be made available at the Public Works building located at 1312 N. Fayetteville St. Asheboro N.C. The hearing will be held during the regular City Council meeting, which begins at 7:00 PM on May 6, 2010. Once review and comments have been considered a resolution approving the plan will be adopted at the June 10, 2010 meeting and be included with the plan that is submitted to the NCDENR.

Part IV. Solid Waste Management Methods

This portion of the report is the main focus of the City's ten-year plan. In preparing this plan, it was decided to describe the current program, intended action for FY 2008-2009, followed by the intended actions for FY 2013-2014 thru FY 2019-2020.

a. Collection of Solid Waste

Current Program: The City operates a fleet of trucks charged with waste collection throughout our coverage area. The City's municipal solid waste is currently hauled to a transfer station owned and operated by the City.

FY 2010-2011 Intended Actions: The City will continue to haul its municipal solid waste to the City owned and operated transfer station.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City will continue to haul its municipal solid waste to the City owned and operated transfer station. The City will continue to review contracts with haulers and with landfills to get the most competitive rates and tipping fees possible.

b. Disposal of Solid Waste

1. Incineration with Energy Recovery

Current Program: Incineration with energy recovery is not part of the City's current program. The City considers it an inappropriate waste management option due to the local waste flow, capital/operating costs, and transfer costs.

FY 2010-2011 Intended Actions: The City does not plan to use incineration with energy recovery.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City does not plan to use incineration with energy recovery.

2. <u>Incineration without Energy Recovery</u>

Current Program: Incineration without energy recovery is not part of the City's current program. The City considers it an inappropriate waste management option due to the local waste flow, capital/operating costs, and transfer costs.

FY 2010-2011 Intended Actions: The City does not plan to use incineration without energy recovery.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City does not plan to use incineration without energy recovery.

3. Transfer of Solid Waste Outside of Geographic Area

Current Program: The City of Asheboro has constructed a Transfer Station to serve the citizens of Asheboro and possibly the surrounding community. Asheboro went through the appropriate bidding, design, and construction process to ensure an adequate building to serve the City's needs. Not only currently, but also into the foreseeable future as well as the possibility of opening up the geographic acceptance region to allow even more municipal solid waste into the facility.

FY 2010-2011 Intended Actions: The City of Asheboro will continue to use the City Transfer Station and the City will haul all of the City's solid waste to this facility. The City will ensure, through the bidding process, that reliable, quality-hauling service is provided at a reasonable cost.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City of Asheboro will continue to review options as to hauling its waste. These options will be reviewed if it becomes more economical and advantageous to the City as a whole.

4. Disposal of Municipal Solid Waste

Current Program: The City of Asheboro is currently disposing of all its municipal solid waste at the Uwharrie Environmental Landfill in Mt. Gilead N.C. Our goal is to ensure we deal with a facility that is in full compliance with regulatory controls required of any Subtitle D Sanitary Landfill as well as maintaining competitive tipping fees.

FY 2010-2011 Intended Actions: The City will consider whether we can accept solid waste from the surrounding areas and still remain competent in the delivery of our services. The City of Asheboro will continue to properly dispose its municipal solid waste at the Uwharrie Environmental landfill in Mt. Gilead N.C.

FY 2011-2012 thru FY 2019-2020 Intended Actions: We would anticipate these operations to maintain for the next several years. The City will consider whether we can accept solid waste from the surrounding areas and still remain competent in the delivery of our services. We will be continuously searching for ways to maintain the most cost effective services for all City citizens.

5. <u>Disposal of Land Clearing and Inert Debris</u>

Current Program: At this time the City is disposing of it LCID materials at the Gold Hill Road Landscape Supplies LCID landfill. The City had worked with the private facility in assisting in the permitting and steps in the approval process to again ensure the most cost-effective disposal options for all members of the City.

2010-2011 Intended Actions: The City is charging for the collection of yard waste. There will be a charge if the amount collected exceeds 2 scoops at the rate of \$12.00 per. scoop. Material that does not meet City regulation will be charged \$24.00 per. scoop. After hours collection of items that are causing a traffic hazard will be charged \$50.00 per. scoop. The City will continue to use the Gold Hill Road Landscape Supply LCID landfill. The City will encourage permitting of local, private LCID landfills, and assist in generating awareness of the locations of such private landfills in the region.

FY 2011-2012 thru FY 2019-2020 Intended Actions: Asheboro will continue to work with the private Gold Hill Road Landscape Supply LCID landfill and any potential additional private LCID landfills that may be proposed. However, the economics of multiple facilities does not seem reasonable for a City of our size, but the City will be willing to work with any new potential private LCID's and work with the existing private LCID to ensure that the needs of the citizens are met.

6. <u>Disposal of Construction and Demolition Waste</u>

Current Program: The City of Asheboro Sanitation Department is currently disposing of the C & D waste at the Gold Hill Road Landscape Supply C & D Landfill. This facility is permitted by the State to take these materials and is also located next to the City Transfer Station.

FY 2010-2011 Intended Actions: The City is charging for the collection of C & D waste. There will be a charge of \$20.00 per. scoop. The City will continue to use the Gold Hill Road Landscape Supply C & D Landfill. The City will encourage permitting of local, private C & D landfills, and assist in generating awareness of the locations of such private landfills in the region.

FY 2011-2012 thru FY 2019-2020 Intended Actions: Asheboro will continue to work with the private Gold Hill Road Landscape Supply C &D landfill and any potential additional private C & D landfill that may be proposed. However, the economics of multiple facilities does not seem reasonable for a City of our size, but the City will be willing to work with any new potential private C & D Landfill to ensure that the needs of the citizens are met.

7. Disposal of Special Wastes

a. Tires

Current Program: City collection vehicles currently pickup tires on a specific schedule there is a charge of \$5.00 per tire for collection. The tires are then delivered to the City of Asheboro Public Works Facility for storage are then hauled to the Randolph County Landfill Facility for disposal as the County receives the tire tax.

FY 2010-2011 Intended Actions: The City plans to continue its current program and charging for collection at a rate of \$5.00 per. tire. The disposal of tires will be left to the Randolph County Transfer Station Operations in as much as they receive State funding generated from the tax charged on new tires sold.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City currently has no plans for deviating from the current program in place. The City would, however, be open minded to consider its options with regard to tire collection and disposal if the tax structure favored such action.

b. White Goods and Metal

Current Program: City collection vehicles currently pickup white goods on a specific schedule. The white goods are then delivered to the City of Asheboro Recycle & Transfer Station and items that do not contain CFC's are placed in a trailer. The trailer is then hauled to market. Items that contain CFC's are taken to the County holding area for processing. Processing of items containing CFC's is left to the County in as much as the County receives the white goods tax.

FY 2010-2011 Intended Actions: The City plans to continue with the current program and is charging for collection at a rate of \$10.00 per. white good.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City currently has no plans for deviating from the current program in place. The City would, however, be open minded to consider its options with regard to white goods if the tax structure favored such action.

c. Household Hazardous Waste

Current Program: Unfortunately, as with all solid waste programs state wide, funding is becoming more of a critical issue. Asheboro does not currently have a household hazardous waste program and finds the cost prohibitive for establishing a permanent facility for household hazardous waste.

FY 2010-2011 Intended Actions: The City will not receive Household Hazardous Waste.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City will work with the N.C. Department of Agriculture in considering a household hazardous waste program. Again, it has been determined that it is cost prohibitive for Asheboro to do a program by itself. If we can work with either the Department of Agriculture and or perhaps the County, we would gladly consider those options.

d. Reduction, Reuse, and Recycling - Meeting the Waste Reduction Goals

1. Residential

a. Source Reduction

Current Program: Education is very important to the City's source reduction program. The City's two recycling facilities are maintained in very public areas to promote their use.

FY 2010-2011 Intended Actions: The City will maintain the current program and we are working on adding source reduction "quick tips" on water bills and other mailings.

Backyard Composting and Grasscycling: This is a program that the City enthusiastically supports and to educate the public as to the benefits of this practice.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City will continue "Quick Tips" and also work with the local newspapers to determine the possibility of running short feature stories on ways individuals can reduce municipal solid waste and benefit them in the process.

b. Reuse

Current Program: The Sanitation Department staff will continue to educate residents as to their options for reuse. Four nonprofit reuse programs exist in the City (none sponsored by the Sanitation Department). The Salvation Army, Goodwill Industries, Habitat for Humanity Restore and the Christians United Outreach Center all accept used furniture, clothing, appliances, dishes, books, toys, and more for distribution to the needy and for sale to others. Family Circle Consignments accepts used clothing on consignment for sale to the public. The Sports Attic will buy, sell, trade, or consign used sporting equipment.

FY 2010-2011 Intended Actions: With all the associated fees involved in landfill disposal, economics alone should drive more people to view these programs and shops as an alternative to landfill disposal of reusable items. Increased attention to reuse can be given during presentations to schools and civic groups.

FY 2011-2012 thru FY 2019-2020 Intended Actions: We will continue to discuss with the citizens about the availability of reuse options for continuing the education purposes to our citizens. We will also consider creating a directory for all City citizens on the City web site.

c. Recycling

Current Program: Asheboro considers its residential recycling program to be its primary focus. Through various articles in the local papers, other mailings and starting the curbside recycling program in late 2007 we feel our recycling program has increased at an excellent rate. In FY 2008-2009 2377.86 tons of recyclables were diverted from the landfill, 627.34 tons from the curbside program,1750.52 tons from drop sites and other programs, which is above the targeted amount of 977 tons.

There are two drop off sites currently maintained by the City of Asheboro. All recycling drop off sites accept:

- PETE #1 plastic bottles, soft drink bottles. HDPE #2 plastic bottles and milk jugs.
- Clear, green, and brown glass bottles and jars
- Mixed paper (magazines, phone books, junk mail)
- Newspaper
- Aluminum cans
- Steel cans
- Corrugated cardboard and boxboard

City recyclable's are handled in various ways, depending on the current market value. Plastic bottles and other materials are shipped out to a MRF operated by Uwharrie Environmental for processing. Other materials are shipped out "as is" in trucks. Glass bottles and jars are currently crushed and mixed with Solid Waste for disposal, as the current market value will not allow us to deliver glass to a recycling center in a cost effective manner. The City is looking at some other uses for glass. Asheboro Recycling Company receives the curbside, cardboard and aluminum cans. All of this depends on market value and economic common sense.

In late 2007 the City started a curbside recycling program. The City has been placing a 90 gallon Gray can at each home that is picked up once per week. The City then takes the collected recyclables to Asheboro Recycling of processing. There are 8 automated routes in the City.

FY 2010-2011 Intended Actions: The City of Asheboro will be expanding the curbside recycling program to the last two automated routes this year. Asheboro feels that it has a good residential recycling program and it will only get better by making it easy for the citizens to recycle by adding the curbside program. The City's recycling program currently accepts ten different materials at its drop off sites, and that is close to the maximum that (1) site can contain and, (2) can be accepted with minimal confusion. The curbside recycling program will be offering the same materials to be recycled as in the old program, which will make it very easy for all citizens to recycle.

FY 2011-2012 thru FY 2019-2020 Intended Actions: Again, with all of our citizens working together with this plan, we will continue to look at expanding the recycling program as new markets and materials allow. Curbside recycling has dramatically increased the amount of material captured in the recycling program. Communications with the local newspapers will be continued, as there is a good working relationship between the City and the local papers. The City is always looking at increasing any other types of materials other than the number we already collect. As the State and everyone is well aware that the recycling revenues are unfortunately very limited and increasing other recyclable materials are not intended at this time. However, the City does keep an open mind. If new materials would come up with a reasonable revenue source, the City would pursue it and continue to consider additional materials if it became economically advantageous. In the future educational programs about recycling will be presented in schools and to youth groups by Sanitation Department staff.

2. Commercial/Industrial

a. Source Reduction

Current Program: Education is very important to the City's source reduction program. The City's two recycling facilities are maintained in very public areas to promote their use.

FY 2010-2011 Intended Actions: The City will maintain the current program and we are working on adding source reduction "quick tips" on water bills and other mailings and the City web site.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The Sanitation Department has plans to contact various other cities and counties to possibly review their solid waste ordinances in preparation of revising the City's own ordinance. The timing of the revised ordinance should be accomplished within the next three years, but the actual approval rate is unknown. The original ordinance was written, as many were in other municipalities, in very generic form in the early 1990's. One recommended action is to require companies (that employ over 50 members) to submit an annual report to the City, listing characteristics of wastes by estimated volume, tonnage of wastes, and cost of waste disposal. This would ensure that, at least once a year, management would look at the amounts and costs of waste disposal. A summary of waste reduction programs in place and recycling tonnages could also be requested. Reminders of City assistance with waste reduction programs could be included on the report form. The City will look at the addition of a publication of a quarterly waste reduction newsletter for business and industry, targeting the importance of waste reduction. Drawing attention to the increased costs of disposal as opposed to the increased savings in waste reduction should provide the financial incentives for many companies to begin waste reduction programs. The newsletter can also be used to measure effectiveness of waste reduction awareness by incorporating a survey to be returned to a waste management specialist. The newsletter can recognize companies with successful waste reduction programs. Other industry representatives will ask larger businesses and industries with successful waste reduction programs to host site visits.

b. Reuse

Current Program: The City does work with industries when requested to increase the waste exchange programs. Local newspapers have published a couple of articles concerning this matter. Schools have not been surveyed at this time to determine the type of scrap materials that could be reused.

FY 2010-2011 Intended Actions: To increase awareness, the City will work with the local newspapers and the Chamber of Commerce to see if additional supporting articles can be included in their publications.

Schools should be surveyed to find out what sort of scrap materials can be utilized. The survey results should be passed on to industries interested in donating materials.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City will continue to be available for both communications with the local papers and the Chamber of Commerce as it relates to support of a reuse program within the businesses and industries. Identifying scrap materials that have a reusable value will be pursued with other industries and businesses, as they become available.

c. Recycling

Current Program: Asheboro has utilized the State <u>Directory of Markets for Recyclable Materials</u>. We have used the booklet for finding various recyclable vendors throughout the State. The actual revenues generated by these markets have made the hauling become more critical and a more important cost of the entire recycling program. The City has continued to be available to companies requesting us to come to their site and review their recycling operations. The utilization of our Transfer Station will allow us to provide random inspections for loads coming into the solid waste facility. Surcharges could occur when the banned materials are located.

Asheboro is very proud of the many companies that have excellent comprehensive recycling programs. However, it is difficult to determine types and tonnages of materials that are being recycled, as most commercial/industrial recycling is contracted privately between the company and the market.

Asheboro could assist commercial/industrial-recycling efforts through a waste reduction newsletter. Successful recycling efforts would be highlighted, local markets listed, and tips on beginning a recycling program could be included. Companies are invited to bring corrugated cardboard and office paper to the City's Recycling Centers, but most contracts for recycling themselves.

FY 2011-2012 Intended Actions: To continue the current program.

FY 2011-2012 thru FY 2019-2020 Intended Actions: For the next few years, the real true challenge for Asheboro is to try to find better markets for our recyclable materials. To accomplish this, we will use all means possible with existing City programs, directory of which the State has produced and provided for us. Because the recycling markets are so flat, we will contact any and everybody we can find to get the best markets. The City will continue to maintain its availability to the local companies requesting our services for recycling operations as well as inspection of our existing ordinance, which does have banned materials. Banned materials are no liquid or semi-liquid matter.

The Sanitation Department staff also plans to visit companies upon request to conduct waste assessments and advice, on an individual basis, on how to begin a recycling program and find markets for materials. The waste management specialist will also act as a liaison between the company and the NCDPPEA, if more information or technical assistance is needed than can be obtained on a local level. Strategies for increasing recycling is similar to those used for source reduction of the commercial/industrial waste stream. Considering the publication of a waste reduction newsletter, focusing on economic advantages of waste reduction and recycling programs. Establishing "Recycling Teams" and the importance of management commitment to recycling programs can be highlighted. More attention can be called to local recycling markets, and a concerted effort made to remind companies that the <u>State Directory of Markets for Recyclable Materials</u> can be mailed to them on request. Information on tax credits for companies who buy equipment or vehicles, or use space specifically for recycling

activities can be repeated periodically. Special articles can generate awareness of the Southeast Waste Exchange, which is a valuable resource for marketing those harder-to-recycle materials.

A Company may also request that one of its loads be inspected by contacting the Transfer Station. This would be very helpful in aiding a company in identifying the composition of its waste stream and possible recyclable materials.

After all curbside routes have been added into the recycling program the City will be looking at ways to add Commercial and Industrial customers to the program.

3. Construction/Demolition

Current Program: The City of Asheboro Sanitation Department is currently disposing of the C & D waste at the Gold Hill Road Landscape Supply C & D Landfill. This facility is permitted by the State to take these materials and is also located next to the City Transfer Station.

FY 2010-2011 Intended Actions: The City is charging for the collection of C & D waste. There will be a charge of \$20.00 per. scoop. The City will continue to use the Gold Hill Road Landscape Supply C & D Landfill. The City will encourage permitting of local, private C & D landfills, and assist in generating awareness of the locations of such private landfills in the region.

FY 2011-2012 thru FY 2019-2020 Intended Actions: Asheboro will continue to work with the private Gold Hill Road Landscape Supply C &D landfill and any potential additional private C & D landfill that may be proposed. However, the economics of multiple facilities does not seem reasonable for a City of our size, but the City will be willing to work with any new potential private C & D Landfill to ensure that the needs of the citizens are met.

4. Special Wastes

e. Tires

Current Program: City collection vehicles currently pickup tires on a specific schedule there is a charge of \$5.00 per tire for collection. The tires are then delivered to the City of Asheboro Public Works Facility for storage are then hauled to the Randolph County Landfill Facility for disposal as the County receives the tire tax.

FY 2010-2011 Intended Actions: The City plans to continue its current program and charging for collection at a rate of \$5.00 per. tire. The disposal of tires will be left to the Randolph County Transfer Station Operations in as much as they receive State funding generated from the tax charged on new tires sold.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City currently has no plans for deviating from the current program in place. The City would, however, be open minded to consider its options with regard to tire collection and disposal if the tax structure favored such action.

White Goods and Metal

Current Program: City collection vehicles currently pickup white goods on a specific schedule. The white goods are then delivered to the Cities Recycle & Transfer Station and items that do not contain CFC's are placed in a trailer. The trailer is then hauled to market. Items that contain CFC's are taken to the County holding area for processing. Processing of items containing CFC's is left to the County in as much as the County receives the white goods tax.

FY 2010-2011 Intended Actions: The City plans to continue with the current program and will begin charging for collection at a rate of \$10.00 per. white good.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City currently has no plans for deviating from the current program in place. The City would, however, be open minded to consider its options with regard to white goods if the tax structure favored such action.

f. Household Hazardous Waste

Current Program: Unfortunately, as with all solid waste programs state wide, funding is becoming more of a critical issue. Asheboro does not currently have a household hazardous waste program and finds the cost prohibitive for establishing a permanent facility for household hazardous waste.

FY 2010-2011 Intended Actions: The City will not receive Household Hazardous Waste.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City will work with the N.C. Department of Agriculture in considering a household hazardous waste program. Again, it has been determined that it is cost prohibitive for Asheboro to do a program by itself. If we can work with either the Department of Agriculture and or perhaps the County, we would gladly consider those options.

g. Yard Wastes

Current Program: The City operates a fleet of knuckleboom trucks for the purpose of collecting yard waste. This waste is delivered to a privately owned LCID facility at the Gold Hill Landscape Supply where it is ground into mulch and resold.

FY 2010-2011 Intended Actions: The City is charging for the collection of yard waste. There is a charge if the amount collected exceeds 2 scoops at the rate of \$12.00 per. scoop. Material that does not meet City regulation will be charged \$24.00 per. scoop. After hours collection of items that are causing a traffic hazard will be charged \$50.00 per. scoop. The City hauls its yard waste to the Gold Hill Road Landscape Supply LCID landfill.

FY 2011-2012 thru FY 2019-2020 Intended Actions: With the completion and opening of the Transfer Station, the City will consider all its options with regard to yard waste. If it is possible at some point in the future, the City will retain this waste and grind it into mulch for use around City government buildings and any surplus could be made available to the public.

h. Automotive Wastes

Current Program: The City of Asheboro has planned to not open the Transfer Station to the public. We are, and will always, be available to citizens to respond to any questions they have regarding automotive wastes. Automotive wastes and automotive recyclable's are currently directed to County convenience sites or automotive parts stores.

FY 2010-2011 Intended Actions: The City of Asheboro's Transfer Station will not be open to the public, therefore, citizens will be encouraged to utilize the facility operated by County at their Convenience Center or automotive parts stores.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City plans to continue its current program as it is. Should the County decide to discontinue its recycling program for automotive wastes, the City would remain open minded to the idea of giving citizens the opportunity to recycle these products. We feel education, again, is the most important factor in dealing with these special wastes. We will continue to be available to answer questions citizens may have.

Part V. Disaster Response

Current program: The City has an emergency operational plan that addresses debris removal and disposal during an emergency or disaster. Refuse collection and transfer station operations must be ready and able to go on 24-hour operations and ready to report to appropriate supervisors. Solid Waste forces are to be available to assist with debris removal and be prepared to receive and stage large quantities of debris. Staging areas can be quickly established in many locations throughout the City on city owned properties. Every effort will be made to localize staging areas to the area of the disaster as a matter of convenience to citizens as well as city clean-up crews. All debris will be dispersed to Gold Hill Rd. LCID/C & D Landfill.

FY 2010-2011 Intended Actions: The City Emergency Operations Plan will be maintained and updated as necessary.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City Emergency Operations Plan will be maintained and updated as necessary.

Part VI. Community, School and Public Education Program

Current Program: Providing "Quick Tips" for reuse and recycling on city mailings, such as water bills.

FY 2010-2011 Intended Actions: With the addition of the curbside recycling program the need to increase public awareness of the need to reduce and reuse waste while working out a set schedule of events that will take place of the next 10 yr. period with regard to revamping our current public education program.

FY 2011-2012 thru FY 2019-2020 Intended Actions: The City plans to improve it's web site to be more user friendly, add a kids page with tips on recycling materials and why doing so is important. Plans also include helping the community adopt a more proactive stance toward change by keeping it well informed about new developments in solid waste management. Working with school age children is critical to this program. It is our goal to ensure that all school children in our coverage area are exposed to a solid waste and waste reduction curriculum during at least one of their years in school. Developing an annual education schedule with schools before the school year begins will aid city staff in this effort. A member of the sanitation dept. staff is available visit schools in an effort to educate children in the importance of waste reduction and recycling.

Working more directly with businesses throughout our coverage area to support them in reducing waste will provide more opportunities for waste reduction and allow us a greater chance to meet our overall waste reduction goals. By providing businesses, industries and citizens with more assistance in finding ways to exchange or recycle valuable materials these goals can be more easily met. We will, also consider the development of incentives for businesses to promote and participate in quarterly forums.

Tours of our Transfer Station will be offered to schools and civic groups as part of our education program. Allowing people to see that waste doesn't end at the curbside will give many a better sense of the urgency we should all feel with regard to reduction and recycling. We will, also, seek invitations to meetings of public and private clubs and organizations locally to present the importance of reuse and recycling.

Educating the public/businesses on the **DISPOSAL BAN** will be a large part of this campaign. Keeping these items out of landfills is our goal of this section of our education program. We will work with the local newspaper to use waste reduction graphics, similar to the "Recycle this Paper" that the News and Observer currently uses.

Our comprehensive education plan is one of the more major parts of our goals for the next 10 years. We feel that only through the education of the public on the importance of reducing the amount of waste that is landfilled, can we reach and ultimately increase our goal of 5% reduction in overall waste disposed.

Part VII. Prevention of Illegal Disposal and Litter Management

Current Program: Illegal disposal and dumping are a concern to the community. As the cost of proper disposal continues to increase, the financial benefit of illegal disposal increases. A recent addition of a "code enforcement officer" to the City staff has helped a great deal in this area. The City of Asheboro has an ordinance in place that makes it illegal to dump waste in any unapproved site. When such a site located every effort is made to locate the individual(s) responsible for the illegal dumping. If identification of the responsible parties is not successful, then city sanitation crews are dispatched to clean up the site.

Crews from the city street department operate a fleet of street sweepers and a wash down truck in an effort to control litter on city streets in the downtown area. The Sanitation Dept. uses crews of community service workers to work up and down the sides of streets and highways in the city picking up litter. During FY 2008-09, community service workers picked up 3654 30-gallon bags of litter. This effort involved 6088 hours of service.

FY 2010-2011 Intended Actions: Our illegal disposal and dumping prevention campaign is undergoing many improvements due to the addition "code enforcement officer" to city staff. Currently when a site is located every effort is made to locate responsible parties to eliminate the site. With regard to litter control, we feel that we have a very effective program and expect it to continue for many years to come.

FY 2011-2012 thru FY 2019-2020 INTENDED ACTIONS: The following management options are recommended to continue to improve illegal dumping and disposal problems in the community. Work with "Crimestoppers" to develop an illegal dumping hotline. Provide training to all new employees to better enable them to spot illegal dumpsites. Develop and implement an effective illegal disposal prevention program. Continue to notify the code enforcement officer of all suspected illegal dumpsites.

With regard to litter control, we feel that we have a very effective program and expect it to continue for many years to come.

Part VIII. Facilities available through Private Enterprise

CURRENT PROGRAM: City owned collection vehicles provide service to all citizens in our coverage area. Waste is then delivered to a transfer station operated by the City of Asheboro. We currently utilize no private industry for our service. Private companies currently handle industrial waste within the City's coverage area, as the city does not currently haul industrial waste. Private collection is available to customers for the pick-up of stationary containers. This is handled at the customer's own discretion as to whether they choose to obtain service from the city or a private enterprise.

FY 2010-2011 INTENDED ACTIONS: The City of Asheboro entered into the bidding process with carriers and landfill disposal. We will seek the best set of operations that will allow us to maintain our current standard of service at the most economically practical arrangement of public and private enterprise.

FY 2011-2012 thru FY 2019-2020 INTENDED ACTIONS: The City of Asheboro planning area considered the use of privately operated facilities and resources in developing this plan. The city will use private enterprise on a limited scale. We will continue to seek the best set of operations that will allow us to maintain our current standard of service at the most economically practical arrangement of public and private enterprise. City employees will perform transfer station operations as well as waste collection within our coverage area. We have determined that it would be cost prohibitive to do otherwise.

The City of Asheboro feels that it operates the waste management program through the most effective uses of public-private partnership.

Part VIIII. Solid Waste costs and financing methods

Description and Assessment of Costs:

City Description: The City of Asheboro provides programs for collection disposal and recycling. The solid waste costs shown below are separated by program category. The full cost analysis budget for the City's solid waste programs during FY 2008-09 was \$2,273,910.00. The cost of collection was \$1,334,615.00. Collection costs include the costs of residential, commercial, stationary container, yard waste and bulky item collection. Disposal costs were \$939,295.00. Costs for disposal are made up entirely from transfer station operations, tipping fees and hauling fees.

Description of Financing Methods:

The current solid waste program is funded by the General Fund.

Assessment of Financing Methods:

The city's current fees are limited to stationary container fees, yard waste fees, construction and demolition fees, tire fees and white goods hauling fee. As services and facilities are added to the City's program, creative sources of revenue and improved efficiencies will be necessary to maintain the current service levels.

Residential and Commercial Container Fees:

FY 2009-2010 fees for stationary container collection are \$27.00/pick-up. Fees for compaction dumpsters are \$41.00/pickup. Some commercial customers are provided with 95-gallon cans and are charged a fee of \$10.00/month for service. This service is provided on a schedule to customers throughout our coverage area. If a customer needs an additional pick-up during the same day the fee is \$37.00/pick-up and \$51.00 for compaction dumpsters.

Yard Waste Fee:

FY 2009-2010 there will be a charge if the amount collected exceeds 2 scoops at the rate of \$12.00 per. scoop. Material that does not meet City regulation will be charged \$24.00 per. scoop. After hours collection of items that are causing a traffic hazard will be charged \$50.00 per. scoop.

White Goods Fee:

FY 2009-2010 fees for collection of white goods at a rate of \$10.00 per. white good.

C & D Fee:

FY 2009-2010 fees for collection of c &d at a rate of \$20.00 per. scoop.

Tire Fee:

FY 2009-2010 fees for collection of tires at a rate of \$5.00 per. tire.

Bulky Item Fee:

FY 2009-2010 the city currently picks up bulky items (i.e. carpet, mattress', furniture) free of charge within our coverage area.

Options:

Household Fee: A flat fee per household for refuse collection is considered to be very unpopular with taxpayers and is not an incentive for waste reduction.

Volume or Weight-Based Fees: Variable rate fees for commercial collections have been suggested. Both volume based and weight-based fees have been considered as incentive for waste reduction.

Volume-based fees for residential collection that are dependent on the volume of the container at the curb are difficult to implement when households in the City have been provided a 90-gallon cart. A fee for each bag is simpler and could be considered as a potential method of user fee implementation. The required bag does contribute to the waste stream; however, there could be less litter along the street that results from loose waste being blown when the carts are emptied.

Weight-based fees for residential collection are an option that has been considered by many municipalities. The City of Durham conducted a study on this a few years ago. They found the complexities of the scales and recording systems operations proved to be unreliable in pilot programs in other cities around the country. Durham did pursue NTEP approval for a scale that took a three-year evaluation process. The mechanics of obtaining a data base and recording capability for the 57,000 households they service was difficult, time consuming and costly. In the trial program that the City conducted, there were problems with residents destroying barcodes that tied their roll-out cart to their address for billing purposes and there were concerns from the employees about reduced productivity that resulted in scanning the barcodes on each roll-out cart that was emptied. Further consideration of this type of residential user fee is not recommended.

Volume-based fees for stationary containers (Commercial collection) would be an option to promote waste reduction. Current fees are not connected to the size container, but only to frequency of service.

The opening of the City's transfer station has created a possibility for revenue through tipping fee charges. This seems the most likely candidate for the generation of funds.