

SHELBY COUNTY COMMISSION

SOLID WASTE MANAGEMENT PLAN



ADOPTED BY THE SHELBY COUNTY COMMISSION

04-13-2015

Table of Contents

1.0	County Statistics.....	2
2.0	Solid Waste Generation.....	5
2.1	Projected Future Waste Generation.....	9
3.0	Collection Summary.....	11
4.0	Existing Disposal Facilities.....	13
4.1	Highway 70 Landfill.....	13
4.1.1	General.....	13
4.1.2	Highway 70 Projected Life.....	14
4.1.3	Future Expansions.....	19
5.0	Governmental Disposal Contracts.....	20
6.0	Recycling.....	21
7.0	Subtitle D.....	22
8.0	Unauthorized Dumps.....	23
9.0	Joint Use Agreements.....	23
10.0	Regional Needs Assessment.....	23
11.0	Summary and Conclusions.....	24

Figures

Figure 1	Shelby County Municipalities.....	3
Figure 2	2013 Estimated MSW Generated.....	8
Figure 3	Projected Countywide Waste Generations Through 2035.....	10
Figure 4	Historical Tonnages Disposed of in Shelby County.....	16
Figure 5	Projected Highway 70 Landfill MSW Cells Life	18

Tables

Table 1	Population Statistics.....	4
Table 2	2013 Estimated MSW Waste Generation.....	7
Table 3	Projected Shelby County Waste Generation 2010-2035.....	9
Table 4	Collection Summary.....	12
Table 5	Highway 70 Landfill Cell Capacity.....	14
Table 6	Highway 70 Landfill Tipping Fees.....	14
Table 7	Projected Tonnages Generated in Shelby County.....	17
Table 8	Recyclables.....	22

APPENDICES

APPENDIX A	Code of Alabama 1975, §22-27-47 (b)
APPENDIX B	Executive Summary, Municipal Solid Waste in the United States, 2011 Facts and Figures
APPENDIX C	Highway 70 Landfill ADEM Permit
APPENDIX D	Summary ADEM permit information, landfills operating in Shelby County
APPENDIX E	Summary ADEM permit information, C & D landfills operating in Shelby County
APPENDIX F	Shelby County Commission Resolution Regarding Illegal Dumping
APPENDIX G	Plan Adoption Resolution, Public Hearing Documents, Proof of Advertisement, etc.
APPENDIX H	Municipalities Included in Plan
APPENDIX I	Regional Assessment and Consistency

INTRODUCTION

In 1989, the Alabama Legislature enacted Alabama Act Number 89-824 (ACT). The ACT requires the Alabama Department of Environmental Management (ADEM), the state's Regional Planning Commissions and units of local government (counties and municipalities) to plan for the orderly management of solid waste generated in the state.

Shelby County (County) completed its first 10-year solid waste management plan in 1990 with a subsequent first update in 2004. The updated solid waste management plan 2004 was intended to serve Shelby County for 20 years; however, since the plan update, there have been a number of changes in the way solid waste is handled in the County. This plan will serve to update elements of the 2004 plan to reflect current activities associated with solid waste in the County. The plan includes updated waste production estimates, collection and hauling information, a summary of existing and future disposal facilities, and a summary of recycling operations in the County. The format of this plan follows the guidance stated in Code of Alabama 1975, §22-27-47. A copy of the Code is included as Appendix A.

The goal of the Shelby County Solid Waste Management Plan is to provide for the orderly management of solid waste generated within the boundaries of the County. Specific goals of solid waste management plan include:

- Citizens and commercial enterprises in the County having access to waste collection services either through the County's collection contract, through the respective municipalities, or through private contract with any of several waste haulers operating in the County.
- Providing adequate waste disposal capacity for Shelby County. Landfills that are or will provide this capacity should be properly managed, self-supporting, and financially viable.
- Continuing to identify, halt, and clean up illegal dumping.
- Encourage recycling and the availability of recycling collection either through curbside pickup in the various municipalities or through County sponsored collection bins so long as economically feasible.

The information within this plan is intended to serve Shelby County for ten years from the date of adoption. This plan will expire on October 1, 2024. An update to the solid waste management plan will occur, at minimum, on a ten year cycle as required by the Alabama Department of Environmental Management or as deemed necessary by the County to continue to achieve its goal.

This plan includes all municipalities in Shelby County that choose to be a part of this plan. Appendix H summarizes the municipalities that have elected to be a part of this plan. If a municipality is not part of this plan, the municipality will be responsible for their own solid waste management plan.

The resolution adopted by the Shelby County Commission, affidavit of advertisement of public notice, attendee list from the public hearing, any comments from the public hearing, responses to these comments, and etc., are included as Appendix G.

Various jurisdictions throughout the County utilize different methods of solid waste management. Some cities utilize their own personnel for collection and hauling, while others contract with private collectors. Some cities and haulers choose to utilize the County's Highway 70 Landfill, while others haul the waste collected to landfills outside the County. This is pointed out to emphasize the complexities and variations that can arise in developing this report. To the extent practical, the information presented has been obtained directly from haulers, landfill scales, municipalities, etc. Where the varied nature of waste generation and collection throughout the County makes direct determination of certain waste characteristics difficult or a "reasonableness" standard is required, reference materials such as the *EPA's Municipal Solid Waste in the United States, 2011 Facts and Figures* have been used.

Certain waste streams generated in the County are considered negligible to the extent that their quantity is difficult to predict. These include hazardous wastes, waste oils, waste from spills, and industrial wastes. Management of these wastes is therefore not addressed by this document.

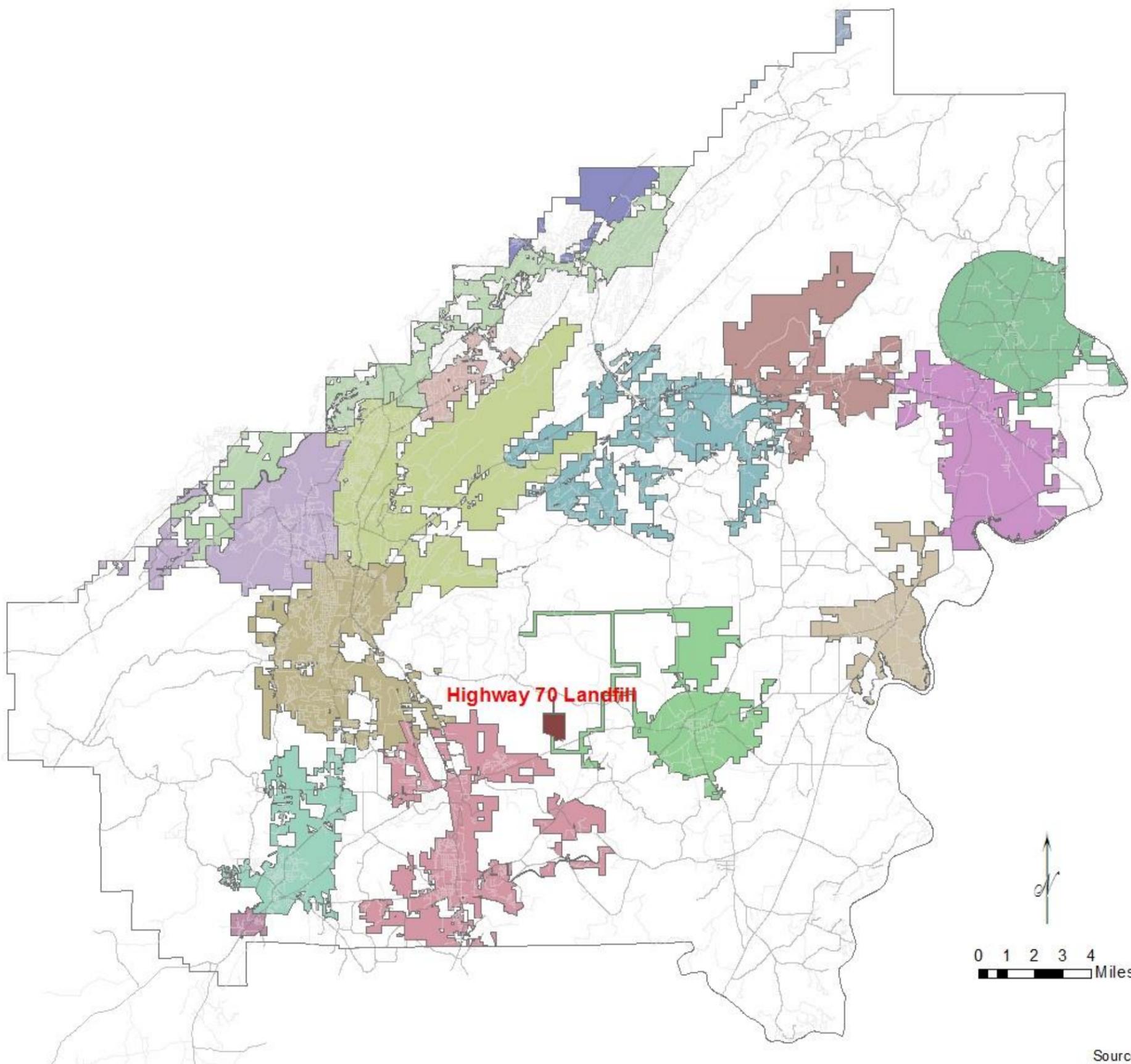
1.0 COUNTY STATISTICS

Figure 1 shows the municipal boundaries within Shelby County. There are 17 municipalities either completely or partially within Shelby County. Over the last decade, Shelby County's population has increased by more than 4,000 people every year, making it Alabama's fastest-growing county and among the fastest growing in the United States. According to the 2010 Census, Shelby County had a population of 195,085. In 2013 it was estimated the population had grown to 204,180. Shelby County's estimated population increased almost five percent between 2010 and 2013. Shelby County continues to rank as one of the top five fast growing counties in Alabama and the fastest growing county in the state with a population of 200,000 or more. Table 1 presents the population information for Shelby County and the municipalities within the County.

Despite its overall growth, population density within the County remains low. The average density is approximately 252 persons per square mile. This shows an increase of 4.7 percent from the 2010 Census density with the more dense areas still located in the northern areas of the County.

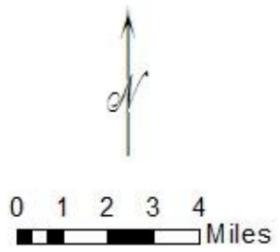
The County experienced a decrease in the number of new residential construction permits issued between 2009 and 2012 along with a slowing of the rapid population growth to approximately 3,000 new people each year.

Severe weather events in 2007 accounted for a temporary increase in construction. In 2013 and 2014 home construction levels began to return to a more consistent rate similar to the rates in 2007 and 2008. This accounts for a variation in collected municipal wastes for those years.



Legend

- Alabaster
- Birmingham
- Calera
- Chelsea
- Columbiana
- Harpersville
- Helena
- Hoover
- Indian Springs Village
- Leeds
- Montevallo
- Pelham
- Vestavia Hills
- Vincent
- Westover
- Wilsonville
- Wilton
- Highway 70 Landfill



Source: Shelby County Department of Development Services

**Shelby County Commission
Solid Waste Management Plan**

**Figure 1:
Shelby County Municipalities**

Table 1		
Population Statistics		
Populations in Shelby County	2010 Population	2013 Estimated Population
1. Alabaster	30,352	31,342
2. Birmingham (part)	1,628	1,743
3. Calera (part)	11,524	12,652
4. Chelsea	10,183	11,277
5. Columbiana	4,197	4,208
6. Harpersville	1,637	1,676
7. Helena (part)	14,568	15,337
8. Hoover (part)	23,037	24,020
9. Indian Springs Village	2,363	2,499
10. Leeds (part)	106	109
11. Montevallo	6,323	6,575
12. Pelham	21,352	22,289
13. Vestavia Hills (part)	14	12
14. Vincent	2,003	2,082
15. Westover	1,275	1,387
16. Wilsonville	1,827	1,939
17. Wilton	687	698
18. Unincorporated Shelby County	62,009	64,335
Total Shelby County	195,085	204,180

Source: U.S. Census Bureau

2.0 SOLID WASTE GENERATION

A direct measurement of the solid waste generated in the County at any point in time can be difficult. Waste disposal locations utilized by private collection companies operating in the County are economically driven. Depending on the lowest overall cost, these companies may utilize Shelby County's Highway 70 Landfill, their own Municipal Solid Waste (MSW) landfill, or another, privately owned landfill. For this plan, per capita waste generation is based on in county MSW tonnages received at the County's Highway 70 Landfill from July of 2013 to July of 2014; referred to in this plan as the calendar year. Population data is based on the 2013 Population Estimates for Places released by the U.S. Census Bureau in May of 2014. The City of Hoover municipal waste is divided between the Highway 70 Landfill and being transported out of county for disposal and only a portion of their total population is represented in the counts as noted. During the calendar year 144,904.28 tons of in county municipal solid waste was received from a population estimate of 180,160. This equates to a per capita waste generation rate of 3.8 pounds per day. This is an increase from the 3.15 pounds of per capita waste generated in 2010. Curbside recycling was offered at an additional cost for unincorporated County residents in 2010. Approximately 2,700 customers included in the Shelby County waste contract participated in the initial recycling option. Municipalities including Alabaster (2007) and Pelham (2007) previously offered and continue to offer curbside recycling pickup as part of their waste service contracts. The City of Helena added curbside recycling to their waste pickup service in 2012. The County entered into a new solid waste contract in 2013, with a new waste service provider that included recycling at no additional cost to the customer for residential curbside pick-up. This service is expected to decrease the overall pounds per capital at the end of the 2014 calendar year. The City of Chelsea entered into an individual contract with the County's waste service provider, including curbside recycling in summer, 2014.

The above approach is based on the following assumptions:

1. The amount of MSW generated by those citizens not participating in a curbside collection program is negligible or is hauled to the Highway 70 facility.
2. MSW from Cities with small populations in the County, i.e. Leeds, Birmingham, Vestavia Hills, and Childersburg is negligible.
3. MSW from the City of Hoover will continue to be shared with an out of county landfill.
4. The calendar year was a "typical" year for MSW generation.

A broad "check" of this approach was performed using numbers from the United States Environmental Protection Agency's *EPA's Municipal Solid Waste in the United States, 2011 Facts and Figures*. EPA estimates a gross MSW generation rate at 4.4 pounds per person per day. This includes yard trimmings (13.5%) and wood (6.4%), both of which are typically found in a construction and demolition waste stream. Also included is 1.28 pounds per person per day recovery for recycling. Yard trimmings and wood are subtracted from the gross generation rate resulting in a net MSW generation rate of 3.52 pounds per person per day.

After allowing for recycling, this number is further reduced to 2.36 pounds per day per person. A copy of the executive summary from this EPA report is included in Appendix B. A complete copy of the document can be downloaded from the EPA's website at:

http://www.epa.gov/epawaste/nonhaz/municipal/pubs/MSWcharacterization_fnl_060713_2_rpt.pdf.

The Regional Planning Commission of Greater Birmingham's "2035 Demographic Projections" lists a 2010 household size of 2.65 persons per household. This equates to a MSW waste rate to the landfill of 2.75 pounds per person per day.

Construction and Demolition wastes (C&D) estimations assume that tonnages received at the County's Highway 70 landfill represent the total amount of C&D waste generated in the County.

From 2010 to 2013, an average of 32,757 tons of C&D waste was received annually at the Highway 70 landfill. In 2010-2013 the average County population for the same period was estimated by the US Census to be 199,580. This equates to an average C&D generation rate of 0.90 pounds per day per capita. This figure will be used in the estimation of future C&D generation presented later in the report.

Wood waste debris is received at the Highway 70 Landfill. In the calendar year 6,820.83 tons of wood waste debris was received with an average of 568 tons per month. This wood waste debris is recycled and chipped for erosion control materials collected at the landfill and not placed in the cells for disposal.

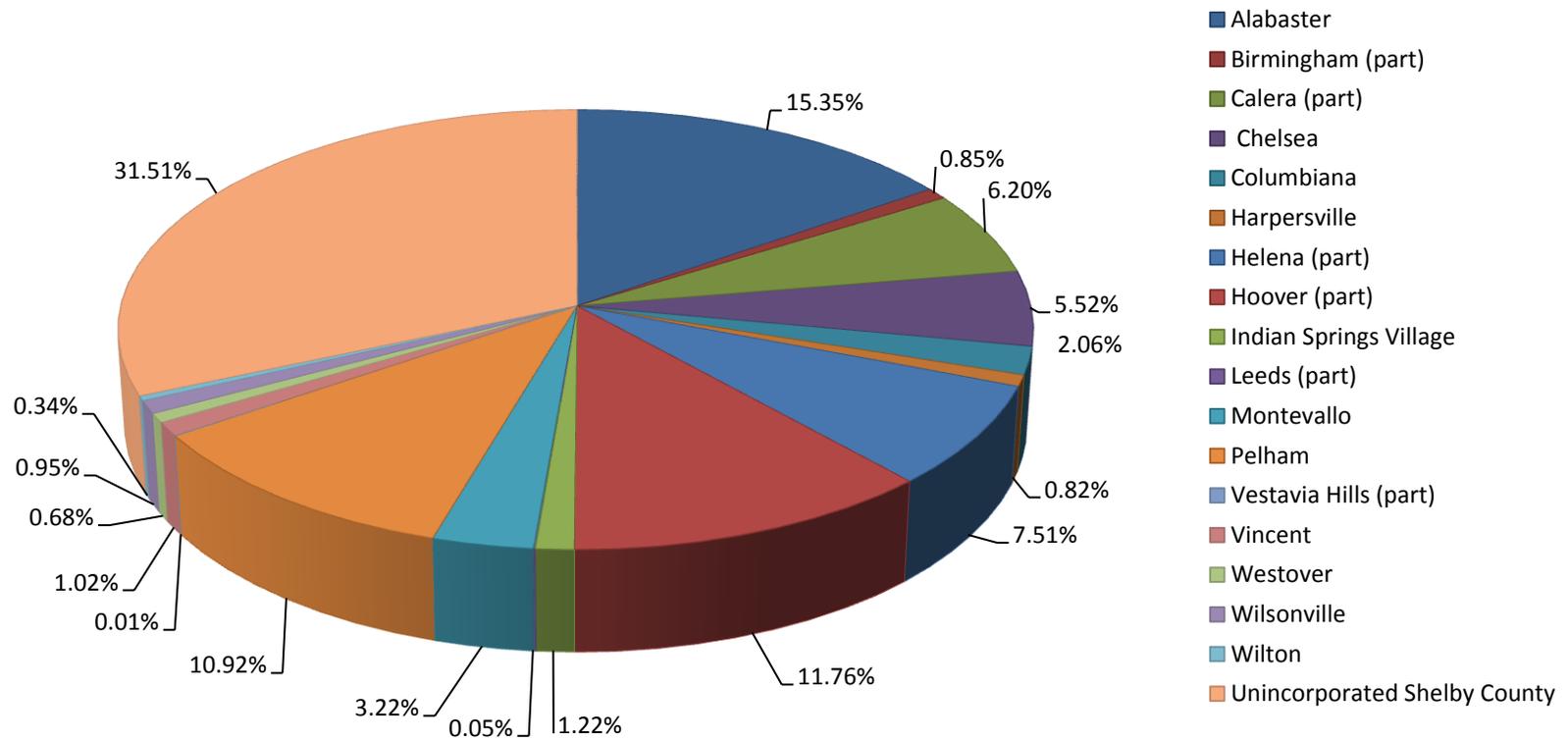
Commercial waste is included as part of the per capita waste generation rate that was used for future waste generation projections. Additionally, as noted previously, industrial waste, for the most part, is non-existent in Shelby County. Industrial waste that is generated in county is either disposed of at two private industrial landfills in the County or is occasionally delivered to the MSW cell at the Highway 70 Landfill. However, there is not enough industrial tonnage disposed of at the Highway 70 Landfill to affect the waste disposal rates at this landfill.

Table 2 presents the 2013 estimated MSW waste generated in Shelby County by jurisdiction. Figure 2 presents the information from Table 2.

Table 2			
2013 Estimated MSW Generated by Jurisdiction (tons)			
Municipalities in Shelby County	2013 Population Estimate	MSW Generated by Day	MSW Generated by Year
1. Alabaster	31,342	68.95	25,168
2. Birmingham (part)	1,743	3.83	1,400
3. Calera (part)	12,652	27.83	10,160
4. Chelsea	11,277	24.81	9,055
5. Columbiana	4,208	9.26	3,379
6. Harpersville	1,676	3.69	1,346
7. Helena (part)	15,337	33.74	12,316
8. Hoover (part)	24,020	52.84	19,288
9. Indian Springs Village	2,499	5.50	2,007
10. Leeds (part)	109	0.24	88
11. Montevallo	6,575	14.47	5,280
12. Pelham	22,289	49.04	17,898
13. Vestavia Hills (part)	12	0.03	10
14. Vincent	2,082	4.58	1,672
15. Westover	1,387	3.05	1,114
16. Wilsonville	1,939	4.27	1,557
17. Wilton	698	1.54	560
18. Unincorporated Shelby County	64,335	141.54	51,661
Total Shelby County	204, 180	449.20	163.957

Note: MSW estimates based on 4.4 pounds per capita per day generated July 2013-July 2014.

Figure 2
2013 Estimated MSW Generated

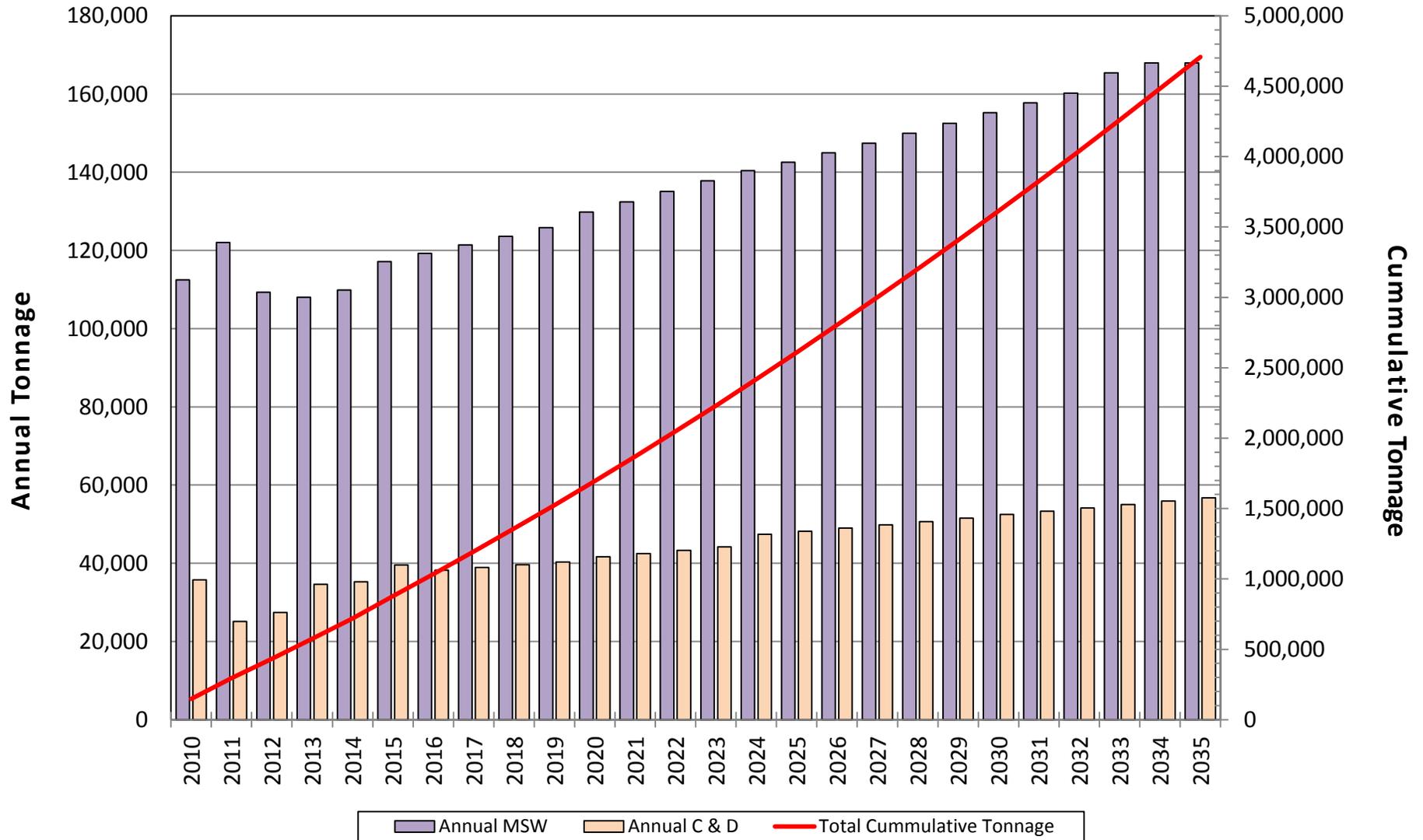


2.1 PROJECTED FUTURE WASTE GENERATION

Shelby County’s current rate of growth is expected to continue for the next decade. Table 3 presents the Regional Planning Commission of Greater Birmingham’s population projections through 2035. Also shown is the projected waste generation based on the per capita rates presented. Figure 3 presents the projected MSW and C&D generation through 2034. It is important to note that this is a long term approach based on Shelby County only and that annual tonnage amounts can vary significantly. Where short term estimates are required, this approach should be considered in conjunction with recent tonnage receipts and local market conditions that may affect private haulers.

Table 3 Shelby County Projected Waste Generation (tons)						
Year	2010	2015	2020	2025	2030	2035
Population	195,085	221,369	245,362	269,355	293,348	317,341
MSW Generated	112,449	117,160	129,858	142,556	155,254	167,953
C & D Generated	35,784	39,592	43,883	48,174	52,465	56,756
Yearly Total	148,233	156,751	173,741	190,730	207,720	224,709
Cumulative Total		914,391	1,534,354	2,222,696	2,972,823	3,787,031

Figure 3
Projected Shelby County Waste Generation 2010-2035
(Tons)



3.0 COLLECTION SUMMARY

Curbside MSW collection is presently available to all of Shelby County; however, collection by jurisdiction within the County varies. Each municipality within the County has the option to establish its own waste collection service. The County has voluntary MSW curbside collection available within unincorporated areas and in the municipalities that have chosen not to provide their own collection service. For example, the City of Alabaster contracts with BFI for curbside MSW collection and curbside recycling, the City of Columbiana uses city personnel and equipment for curbside MSW collection, and the Town of Wilton is serviced under the County's curbside MSW collection. On the following page, Table 4 breaks down the collection services available by jurisdiction.

Several commercial haulers operate in Shelby County and provide service for commercial companies in the County. Most haulers dispose of the waste in county, but this could not be verified due to the availability of other landfills that are more economical for some haulers. In addition to the commercial and C&D waste haulers, the general public and some private companies dispose of C&D waste at the Highway 70 Landfill. It is assumed that all of C&D waste generated in Shelby County is disposed of in county.

Table 4
2013 Collection Summary

	Jurisdiction	Accounts	MSW Collections	Monthly Charges	Curbside Recycling
1	Alabaster	10,760	BFI/Republic	\$8.69	Yes
2	Birmingham (part)	N/A	City	N.C.	Yes
3	Calera (part)	4,912	City	\$12.00	No
4	Chelsea**	3,578	Allied Waste	\$9.43	Yes
5	Columbiana	1,035	City	\$16.88	No-drop off only
6	Harpersville*				
7	Helena (part)	6,114	Republic Services	\$12.99	Yes
8	Hoover (part)	24,160	Allied Waste	N.C.	Yes
9	Indian Springs Village*				
10	Leeds (part)	N/A	Advance Disposal	N/A	No-drop off only
11	Montevallo	1,511	Waste Pro	\$11.98	Yes
12	Pelham	7,952	Trash Taxi	\$9.61	Yes
13	Vestavia Hills (part)	N/A	City	N/A	Yes
14	Vincent	1050	City	\$9.00	No
15	Westover*				
16	Wilsonville*				
17	Wilton	279	Waste Pro	\$11.98	Yes
18	Shelby County	16,321	WastePro	\$11.65	Yes ¹

*Included in the County collection service

**New Contract in 2014 with Waste Pro

¹Also maintains community recycling bins

4.0 EXISTING DISPOSAL FACILITIES

There is currently one municipal solid waste and construction and demolition landfill permitted in the County. This is the Shelby County Highway 70 MSW and C&D Landfill. The Highway 70 Landfill is open to the public. Appendix C is a copy of the County's current permit for its Highway 70 Landfill. Appendix D contains permit information for this facility and other landfills in the state as published by the Alabama Department of Environmental Management.

Most private haulers dispose of waste collected in Shelby County at the Highway 70 landfill. Some waste may be back hauled to an out of county landfill such as the case with some waste collected in the City of Hoover at the time of this plan. All recycling collected in Shelby County goes to Birmingham Recycling and Recovery, a recycling facility located in the city limits of Birmingham. The contracted County waste hauler is currently constructing a new recycling facility in Tarrant, AL also located outside of Shelby County.

4.1 HIGHWAY 70 LANDFILL

4.1.1 GENERAL

The Shelby County Commission owns and operates the Highway 70 MSW and C&D Landfill. The landfill is located off Shelby County Highway 70 in Sections 19 and 30, Township 21 South, Range 1 West and Sections 24 and 25, Township 21 South, Range 2 West (see figure 1). The landfill is located immediately adjacent to the closed SHEALA landfill. The SHEALA landfill was operated until the first subtitle D MSW cell went into operation in 1997. This 360.05-acre site now consists of 57.6 acres of active MSW disposal area and 53.3 acres of construction and demolition disposal area.

There is also a designated area utilized for storing wood debris. The wood debris is chipped periodically and stored as mulch for sediment and erosion control material. Use of the mulch is limited to the landfill facility and is not made available. In addition to the cells, there are nine stormwater detention ponds, two installed storage tanks with a capacity of 90,000 gallons, a scale house, and an equipment maintenance facility.

Through its life, the landfill has been expanded through the construction of additional cells. There are currently four MSW cells, one IC&D cell (closed in 2003) and one C&D cell. The MSW cells are constructed in a linear design to maximize airspace between each cell. The current C&D cell includes the area over the top of the now closed IC&D cell and additional acreage to the South. Table 5 lists each landfill cell and its respective capacity.

Table 5 Shelby County Highway 70 Landfill Landfill Cell Capacity		
IC & D Cell (now closed)	640,000	Cubic Yards
C & D Cell	435,000	Cubic Yards
MSW Cells	4,600,000	Cubic Yards Total*
Cells #1 and #2	1,100,000	Cubic Yards
Cell #3 and #4	3,500,000	Cubic Yards
Future Cells #5 and #6	TBD	Cubic Yards

*total capacity of cells 1-4

A copy of the landfill permit is contained in Appendix C. The Highway 70 landfill is currently permitted to receive waste only from Bibb, Calhoun, Cherokee, Chilton, Clay, Cleburne, Coosa, Etowah, Jefferson, Randolph, St. Clair, Shelby, Talladega, Tallapoosa, and Tuscaloosa Counties. A summary of tipping fees charged at the landfill is shown in Table 6. Additional information can be obtained from the County’s website, www.shelbyal.com under the heading *Environmental Services*.

Table 6 Shelby County Highway Landfill Tipping Fees December 2013	
Out of County MSW and C & D	\$30.00* per ton
In County MSW and C & D	\$22.00* per ton
Pickup Load or Small Trailer	\$10.00* per ton
Cars/Van/SUV	\$6.00

* Includes a \$1.00 per ton ADEM Fee

4.1.2 HIGHWAY 70 PROJECTED LIFE

Figure 6 shows the historical solid waste tonnages received at the Highway 70 Landfill. With the introduction of countywide curbside recycling the overall tonnage has shown a slight decrease. This decrease is expected to continue with an increased number of recycling customers under the 2013 waste contract that includes curbside recycling at no additional cost to residential customers. The tonnage received from outside counties remains sporadic, but is only a small percentage of the total landfill tonnages. In county tonnage has demonstrated a direct relationship to the population growth of Shelby County. As noted previously, all MSW waste generated in Shelby County has not

historically been disposed of at the Highway 70 facility. Private haulers operating within the County (BFI, Advance Disposal, etc.) haul to the landfill that allows them to operate the most cost effectively. This could be due to lower disposal costs, hauling costs or a combination of the two.

Irregularities in the tonnages received complicate projections of remaining cell life. Depending on the assumptions made, estimated available life can vary significantly. Therefore, the worst-case scenario was used to project the life of the Highway 70 Landfill. This scenario consists of all waste generated in Shelby County being disposed of at this landfill. Projected MSW tonnages for the Highway 70 facility have been estimated through 2025 under the following assumptions:

1. The amount of out of county waste received stays at 2013 levels.
2. The amount of in county waste received increases at the rate of population growth within the County.
3. All in county MSW generated is disposed of at the Highway 70 facility.

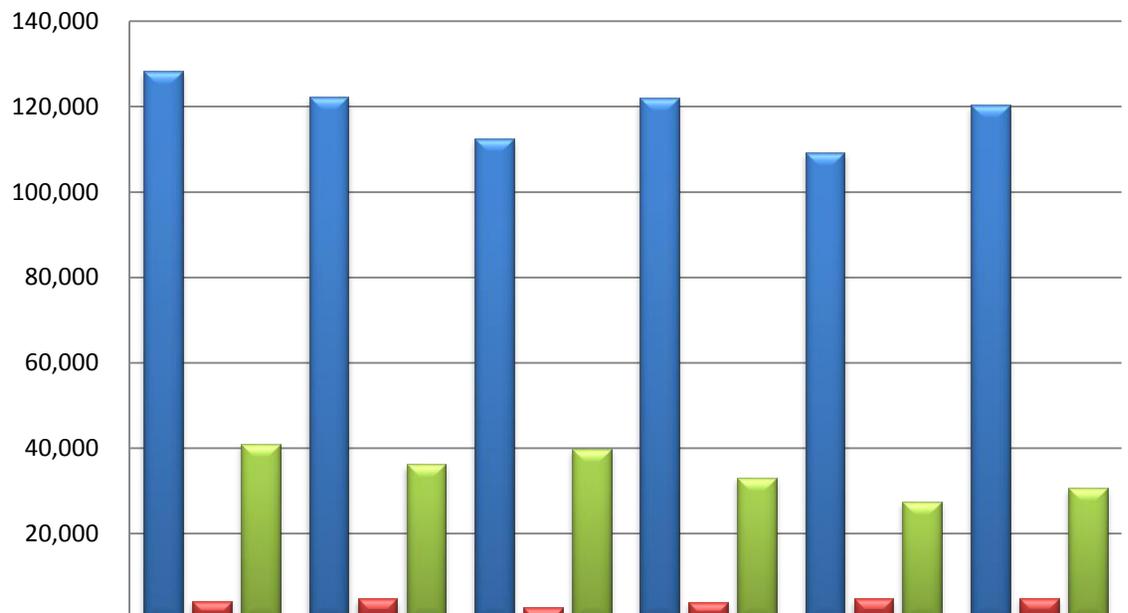
Projected tonnages for the Highway 70 site are shown in Table 7 and have been used to estimate the MSW cell life remaining at the existing site. This total airspace available for disposal has been reduced by 10 percent to account for daily cover. A “typical” compacted density of 1000 pounds per cubic yard has also been applied to account for the reduction in volume resulting from compaction activities.

It should be noted that this compaction density is considered conservative. Compaction rates achieved at the facility appear to be higher. Shelby County has upgraded its compactor equipment over the last several years to include much heavier machines. In its initial phases of operation, MSW waste was being compacted with 55,000 and 70,000 pound machines. These lighter machines have been phased out of operation over the last several years. Current, machines in operation weigh 110,000 and 120,000 pounds. These larger machines increase compaction rates, which will further extend the life of the MSW cells.

Results of this analysis are presented in Figure 7. Under these assumptions, the Highway 70 site is estimated that the capacity for the currently constructed MSW cells is 2025. As noted, this could change significantly depending on the volume of waste actually received.

The County is currently operating 42.3 acres of a 53.3 construction and demolition cell. Projected total C&D generation was presented in Table 3. An analysis similar to those performed for the MSW cells has not been performed on the C&D cells. It is estimated that the current C&D cell life could extend to 2033.

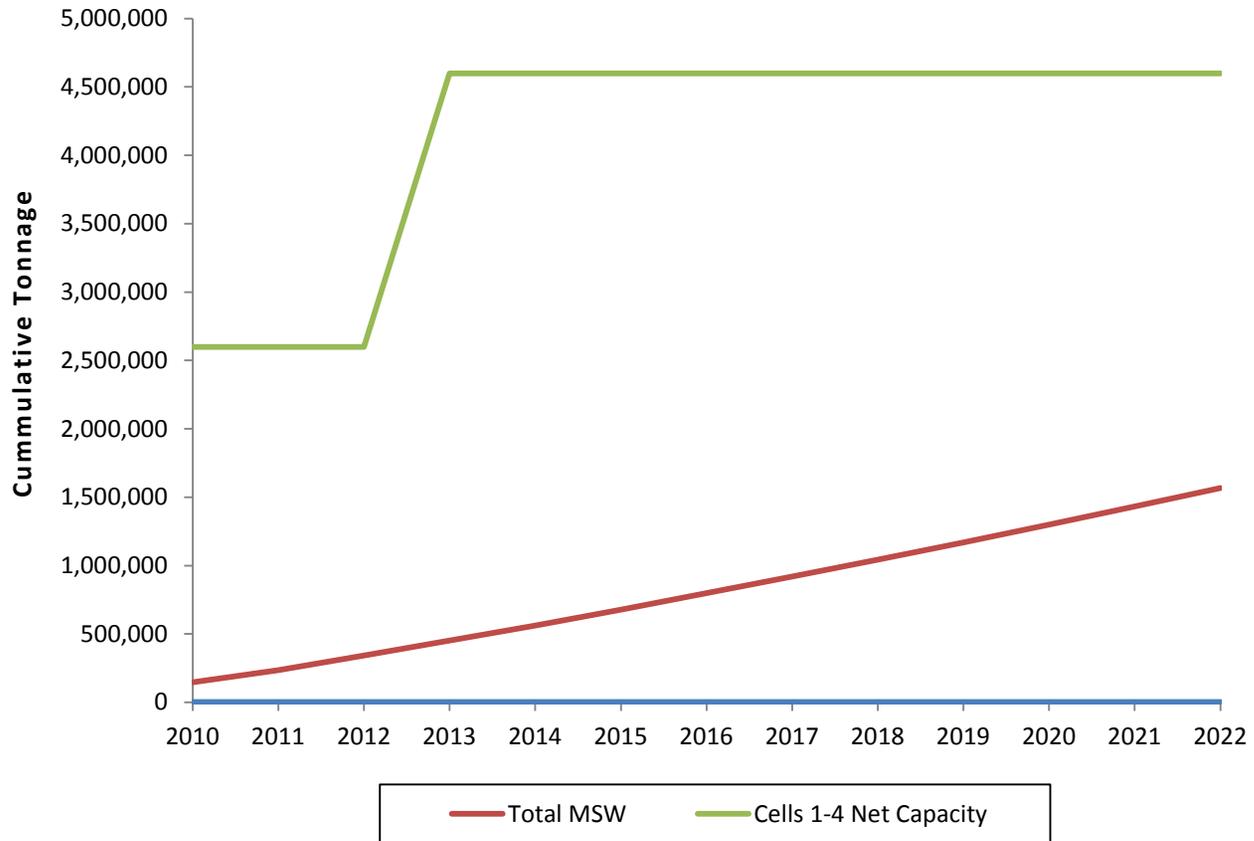
Figure 4
Historical Tonnages Disposed of in Shelby County



	2008	2009	2010	2011	2012	2013
■ In County MSW	128,291	122,196	112,449	122,072	109,293	120,326
■ Out of County MSW	4,209	4,732	2,694	4,010	4,730	4,911
■ C & D	41,029	36,277	39,908	33,043	27,431	30,646

Table 7												
Projected Tonnages for Disposal in Shelby County												
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Population	200,941	204,180	207,626	221,369	225,353	229,409	233,538	237,741	245,362	250,269	255,274	260,379
C & D	27,431	30,646	35,239	39,592	38,248	38,936	39,637	40,350	41,644	42,476	43,326	44,192
In County MSW	109,292	120,326	109,886	117,160	119,268	121,414	123,599	125,824	129,858	132,454	135,103	137,805
Out of County MSW	4,729	4,911	4,911	4,911	4,911	4,911	4,911	4,911	4,911	4,911	4,911	4,911
Total MSW	114,021	125,237	121,556	122,071	124,179	126,325	128,510	130,735	134,769	137,365	140,014	142,716

Figure 5
Projected Highway 70- MSW Cells 1-4 Life



4.1.3 FUTURE EXPANSIONS

As projected, the existing Highway 70 facility has MSW cell life remaining through 2025. Construction and demolition cell life is through 2033. In 2002 the County purchased an additional 250 acres of land adjacent to the existing 110 acre SHEALA site for the purpose of expanding the capacity of the Hwy 70 Landfill. Subtitle D, municipal solid waste cells three and four were constructed on this newly purchased property and are actively being utilized.

As the 250 acre site is consumed, and at a minimum of three years prior to the Highway 70 landfill reaching its projected capacity, the Shelby County Commission will pursue other viable landfill sites. In evaluating potential landfill locations, relevant sections of ADEM's regulations including *335-13-4-01; Landfill Unit Siting Standards* will be one criteria utilized. Potential sites will also be evaluated based on the criteria set forth in Code of Alabama 1975, §22-27-47. These two criteria along with the goals of the plan will be the minimum general outlines that a jurisdiction or private entity will use when siting a landfill facility and the governing jurisdiction will use this criteria when granting local approval.

The governing jurisdiction may also evaluate additional site specific considerations when considering local approval. Generally, it shall be the burden of the applicant seeking approval to provide the governing jurisdiction with sufficient information to consider local approval for proposed facilities.

Applicants for any new solid waste facility shall at a minimum provide the following information and satisfy the following minimum requirements to be considered for approval:

1. Demonstrate to the governing jurisdiction that a proposed facility is consistent with the needs and applicable goals of the plan.
2. Provide a site location map of reasonable detail and scale showing the proposed facility location with respect to planned or existing developments, major transportation arteries, and existing state primary and secondary roads.
3. Provide a sit location map of reasonable detail and scale showing the proposed facility location with respect to proposed or existing generators of large volumes of waste within the state or jurisdiction. Areas projected by the state or local regional planning and development commission to be large generators of waste shall also be included.
4. Provide a summary of the costs and availability of public services and facilities required to support the facility at its proposed location and to protect the public health, safety, and the environment.
5. Provide a summary of the potential impact the facility would have on public health and safety.
6. Provide a summary of the social and economic impacts that a facility at the proposed location would have on the affected community. The summary shall

- include projected changes in property value, community perception, and other costs or benefits the facility would have on the community.
7. Provide a statement from a registered qualified professional that based on a preliminary review of the site, the facility is expected to comply with ADEM's landfill siting standards.
 8. Provide additional facility specific information as may be requested by the governing jurisdiction to facilitate consideration of local approval.

This information shall be submitted to the governing jurisdiction for preliminary review. If information submitted is considered by the governing jurisdiction or its appointee to be sufficient to assist the governing jurisdiction in the granting or denial of local approval, the application shall proceed to public notice.

Public notice shall consist of, at a minimum, at least one public hearing regarding the proposed facility and notice of this hearing shall be given in a newspaper of general circulation in the municipality and in the official gazette of the jurisdiction. Notice shall be given at least 30 days but no more than 45 days prior to the hearing. Information submitted by applicant shall be made available during public comment period.

Following public notice and hearing, the governing jurisdiction shall consider the information submitted by the applicant and comments received during the public comment period. A determination to grant or deny public approval shall be made based on whether or not a proposed facility is in the public interest and whether it will be a benefit to the public welfare. The granting or denial of local approval shall be by a vote of the governing jurisdiction, i.e. County Commission, City Council, etc.

Contracts by local jurisdictions for solid waste services such as collection, transportation, disposal, recycling, etc. shall be conducted in accordance with the bid laws of the State of Alabama.

5.0 GOVERNMENTAL DISPOSAL CONTRACTS

The Highway 70 landfill is currently permitted to receive waste from Bibb, Calhoun, Cherokee, Chilton, Clay, Cleburne, Coosa, Etowah, Jefferson, Randolph, St. Clair, Shelby, Talladega, Tallapoosa, and Tuscaloosa Counties. Waste received from outside Shelby County is received on an 'as delivered' basis. There are currently no disposal contracts with other counties or municipalities though the County would remain open to contract discussions.

Currently, the County's contract for collection and hauling requires that the Highway 70 landfill be utilized for disposal. This requirement maintains stable operations at the Highway 70 facility. The municipalities' contracts are not required to dictate where the waste collected must be disposed.

6.0 RECYCLING

On average, an estimated 12,600 tons of waste, including wood waste, a year are recycled in Shelby County. Recycling prolongs the life of the landfill site by reducing the air space required, and avoids the costs associated landfilling waste.

Non-dimensional wood waste (trimmings, clearing waste, etc.) is recycled at the Highway 70 Landfill. Wood waste is temporarily stored in a dedicated area of the facility and periodically chipped. The resulting wood chips, or mulch, are then used throughout the facility for slope stabilization, daily cover, and overall aesthetic improvements at the facility.

Recycling programs for household waste vary throughout the County. Table 4 lists those communities, including unincorporated Shelby County, that have curbside recycling as part of their collection program. Unincorporated Shelby County also includes five community recycling centers throughout the County. These centers are located at Heardmont Park off US 119; the Ray Building in Columbiana; Wilsonville traffic light at SR 25 and HWY 61; Harpersville City Hall; Saginaw Recycling LLC and the Montevallo Recycle Center-Spring creek Road (Old Alabama Power Complex). The County's current waste disposal contract includes curbside pick-up of recyclables. In addition, various tons of recyclables are recycled of at out-of-county facilities annually. The curbside pick-up and the recycle bins located around the County are processed by Recycle America located in Birmingham. The following items are recycled: paper, aluminum cans, cardboard, newspaper, and plastics. These materials produce recycled goods such as toilet paper, other aluminum cans, cardboard products; ceiling tiles, egg crates, and other plastics (see Table 8). The Montevallo Recycle Center previously accepted glass materials for recycling; however, currently no facility in Shelby County offers glass recycling. The option for glass recycling remains an open topic for current and future waste contracts.

Table 8 Recyclables					
	Affiliation	Customers	Material	Tons Monthly	Tons Annually
Shelby Co. (unincorporated)	County	16,815	mixed*	106.9	1,283.1
			Wood Waste	572.7	6,872.51
Chelsea	Municipal	3,720	mixed*	23.4	280.6
Saginaw Recycling	Private	unknown	ferrous metal	284.4	1,706.2
			non-ferrous	45.0	7.4
Montevallo	County	1,524	mixed*	9.7	116.1
Wilsonville	County	896	mixed*	5.7	68.5
Wilton	County	277	mixed*	1.7	20.8
Montevallo Recycle Center	Private	unknown	mixed-paper	15.0	105.8
			#1 & #2 plastic	1.1	7.7
			cardboard	11.7	81.6
Crest Recycling in Harpersville	Private	Unknown	Tin, scrap metal	40	2,080
Totals				1,117.3	12,630.31

* Mixed materials include cardboards, papers, plastics and metals sorted after collection.

There is a statewide goal of recycling 25% of all waste. Recently, the County has not met this goal and due to the current economics of MSW recycling, Shelby County will most likely not reach this goal. However, the County is taking steps to make the public more aware of recycling by providing literature for the public and by providing for the collection of recyclables as described above. The County and municipalities in the county have implemented curbside recycling except Leeds, Calera, Vincent and Columbiana. This includes 10 percent of the total Shelby County population. Approximately 16,815 Shelby County customers and 3,720 City of Chelsea customers have chosen to participate in curbside recycling. This is an increase of more than 250 percent of the previous recycle customers in 2010. Recycling programs will continue as long as the programs are economically feasible and supported by the citizens of the County.

7.0 SUBTITLE D

Since October 1997, the Highway 70 Landfill has been required to comply with part 258, Subtitle D of the Federal Resource Conservation and Recovery Act with regards to location restrictions, operating criteria, design criteria, and groundwater monitoring and corrective action. The last four MSW Cells to be constructed have been Subtitle D Cells built in accordance with the federal requirement referenced above the ADEM rules and

regulations. All gas and groundwater monitoring is performed as required by the permit with results submitted to ADEM. Any future MSW cells utilized for disposal will meet the Subtitle D requirements and regulations.

8.0 UNAUTHORIZED DUMPS

Unauthorized dumping occurs primarily in the unincorporated, rural areas of the County. These dumps create environmental concerns as well as landscape blemishes. To combat illegal dumping, the County Commission passed resolution 01-02-12-10. This resolution established County policy relating to illegal dumping. A copy of the resolution is contained in Appendix F.

The County also has a litter control service. The litter control service operates three crews responsible for cleaning up illegal dumpsites and providing roadside litter service throughout unincorporated Shelby County.

Unauthorized dump sites are located through citizen reporting, the County Sheriff's Department, or the litter control service. At the adoption of this plan, no known illegal dumps are located in Shelby County. When an illegal dump site is located, the County clears the site and takes steps to prevent further dumping. This may include barricading access to the site, posting property, etc.

The waste collection system, County Resolution 01-02-12-10 and the litter control service have helped to reduce unauthorized dumping, but the dumping has not been eliminated.

9.0 JOINT USE AGREEMENTS

The Highway 70 Landfill permit includes a service area of 14 counties other than Shelby County that may dispose of waste at the Highway 70 Landfill. Although Shelby County currently has no existing contracts with other governments or authorities for the joint use of disposal facilities the option to enter into an agreement will remain open for the duration of this plan.

At present, in-County tipping fees are set at a level (\$22 per ton) low enough to encourage private haulers operating in the County to utilize the landfill while generating sufficient revenue for operation. Provided this continues, joint use contracts will likely not be pursued by the County. The various municipalities throughout the County will continue to contract the collection of the waste unless they make a decision to perform the work themselves, or be included in the County's program.

10.0 REGIONAL NEEDS ASSESSMENT

The regional needs assessment prepared for Region III By the Regional Planning Commission of Greater Birmingham (RPCGB), dated November 16, 2003, states that there is a "need to plan for adequate landfill space given the explosive growth of Shelby

County.” Shelby County has made provisions to provide “adequate landfill space” as outlined in 4.1.3. This need was addressed by the County in the expansion of the Highway 70 Landfill. This 360.05-acre site consists of 57.6 acres of active MSW disposal area and 53.3 acres of construction and demolition disposal area at the adoption of this plan. A *Regional Solid Waste Needs Assessment* was completed in 2003 by the Regional Planning Commission of Greater Birmingham (RPCGB) that projected solid waste needs to 2010. A new regional assessment has not been completed at the time of this plan. The RPCGB was provided a copy of the enclosed document for review. The RPCGB has concurred with the assessment of this plan that no additional landfills are needed in Shelby County at the time of this plan. [*see Appendix I*].

11.0 SUMMARY AND CONCLUSIONS

In 1989, The Alabama Legislative enacted Alabama Act Number 89-824 requiring local governments, in this case, Shelby County, to plan for the orderly management of solid waste generated in the County.

Shelby County has experienced and should continue to experience growth in population. This growth requires the County to have the foresight to make provisions that plan for the orderly management of solid waste. This should include an annual review of the waste stream in order to update projections to more precisely estimate disposal rates and remaining life of existing cells.

Waste generation estimates have been made for the County through 2034 as well as estimates and projections of existing facilities and cells through 2025. The Highway 70 Landfill has constructed MSW capacity to 2025 and C&D capacity through 2033. As these cells reach capacity, new cells will be designated, permitted, and constructed. Of the 360.05 acres at the Highway 70 Landfill, there is additional land available for expansion within the site with only 57.6 acres being utilized for MSW. Planned future expansions will include additional cells at this facility. With a continued rate of growth in Shelby County, it is anticipated that landfill capacity in the County over the next 20 years is adequate. The capacity will be met by existing facilities and/or construction of additional Subtitle D disposal facilities.