

Shelby County Demographic and Economic Profile



Quantitative Methods Spring 2017

Felix Huang

Indrani Das

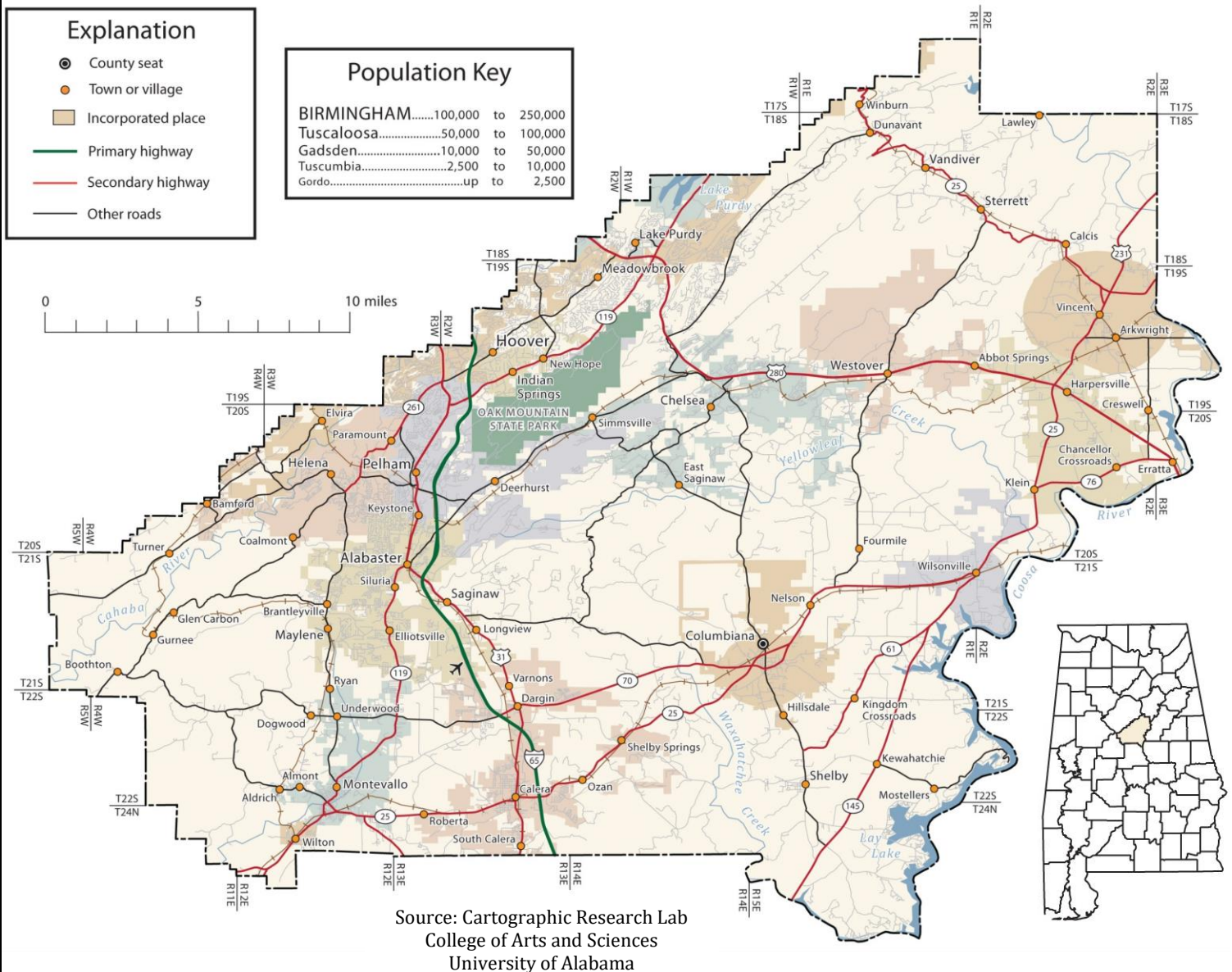
Mohamed Khalafalla

Table of Contents

Introduction.....	3
History	4
Population	
Population Trends.....	5
Housing.....	8
Education.....	10
Race and Demographics.....	11
Population Projections	13
Economy	
Economic Statistics	18
Labor Force.....	20
Housing.....	21
Unemployment.....	22
Industry.....	23
Conclusion.....	29

Introduction

This report examines the demographic and economic profile of Shelby County. Data was taken from the US Census Bureau, the Bureau of Labor Statistics, and other sources. This data was used to conduct statistical analyses using planning methodology, including shift-share analysis and other analysis. From these calculations, our group analyzed the data to determine current and developing trends in Shelby County, its strengths and weaknesses, and other things.



History

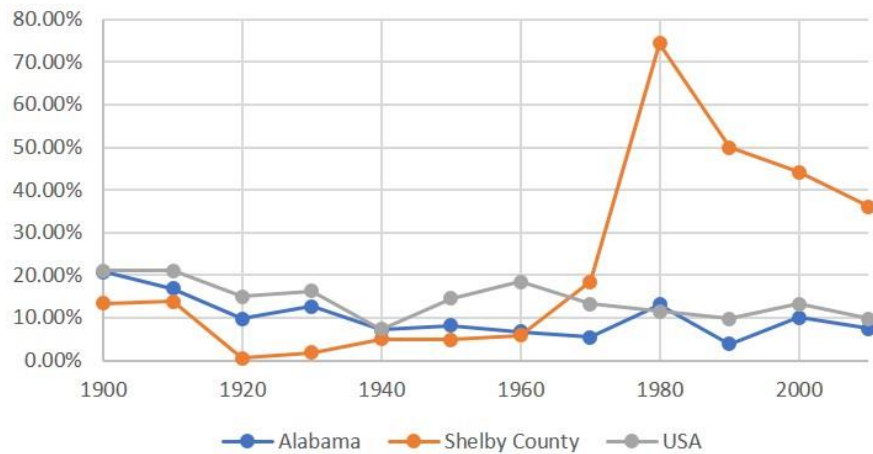
Shelby County's history dates to the early 19th century soon after the War of 1812. Soldiers mostly hailing from Kentucky, South Carolina, and Tennessee arrived in what is now Central Alabama to fight in Battle of Horseshoe Bend in 1814. Instead of returning to their hometowns, they instead decided to bring their families to settle in the area. Shelby County was established on February 7, 1818, named after the Revolutionary War hero and the first Governor of Kentucky, Isaac Shelby.

According to its first census, taken in 1820, the county had 2492 people; 2044 were white and 448 were black. The first courthouse was in Shelbyville, or the modern-day Pelham, in 1820. In 1826, it moved to Columbia, or modern-day Columbiana, where it now remains. It became an ideal location for agriculture, with cotton being its biggest crop until 1990 when it was overtaken by soybeans.

With its easy access to highways US 31, US 65, US 231, and US 280, the Coosa River, and railroad networks, the county's infrastructure helped support the massive growth that it had since experienced since the 1970s. Shelby County had a population of just 38,037 in 1970, which has since grown to 195,085 by 2010, which one of the fastest growth rates in the United States. Its median household income of \$70,187 also ranks it among the highest in the United States. As of the 2015 US Census, the county now has 208,713 residents on 810 square miles. With this sustained and rapid economic and residential growth, it has catapulted Shelby County as one of the leading areas in Alabama.

Shelby County is bordered by Jefferson County to the northwest, St. Clair County to the northeast, Talladega County to the east, Coosa County to the southeast, Chilton County to the south, and Bibb County to the southwest. It shares multiple cities with Jefferson County, cutting directly through Birmingham, Helena, Hoover, Leeds, and Vestavia Hills, largely among racial lines.

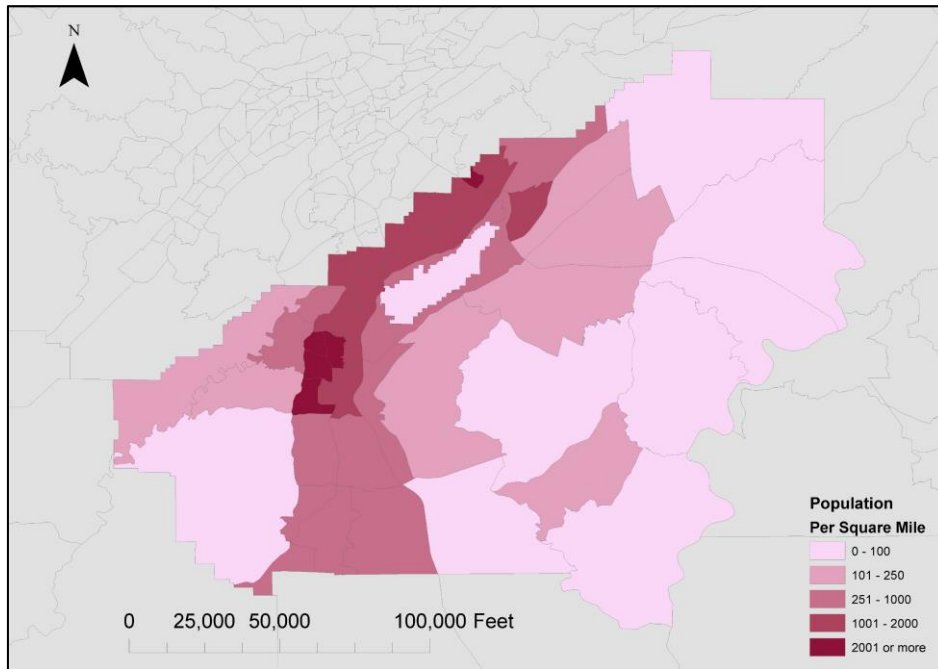
Population Trends



Shelby County currently has an estimated population of 208,713 (2015 US Census) on 810 square miles of land for a density of 263 residents per square mile. The region saw tremendous growth during the 1970s, peaking in 1980 with a 74% growth rate. In comparison, Alabama's and the United States' growth rate was a modest 13% and 11%, respectively. While Shelby County's growth rate dropped since 1980, it remains among the highest in the country, hitting 36% in 2010. The county is one of the most desirable places for Alabama residents to live.

The rapid growth that Shelby County experienced since 1970 could possibly be attributed to the aftermath of the Civil Rights Movement that took place in the previous decade. Jefferson County, which neighbors Shelby County and governs the larger part of Birmingham, faced an exodus of white people around the same time. Birmingham was at the forefront of racial issues at that time. Shelby County became a prime destination for affluent white people who might have wanted to leave the racially divided Jefferson County.

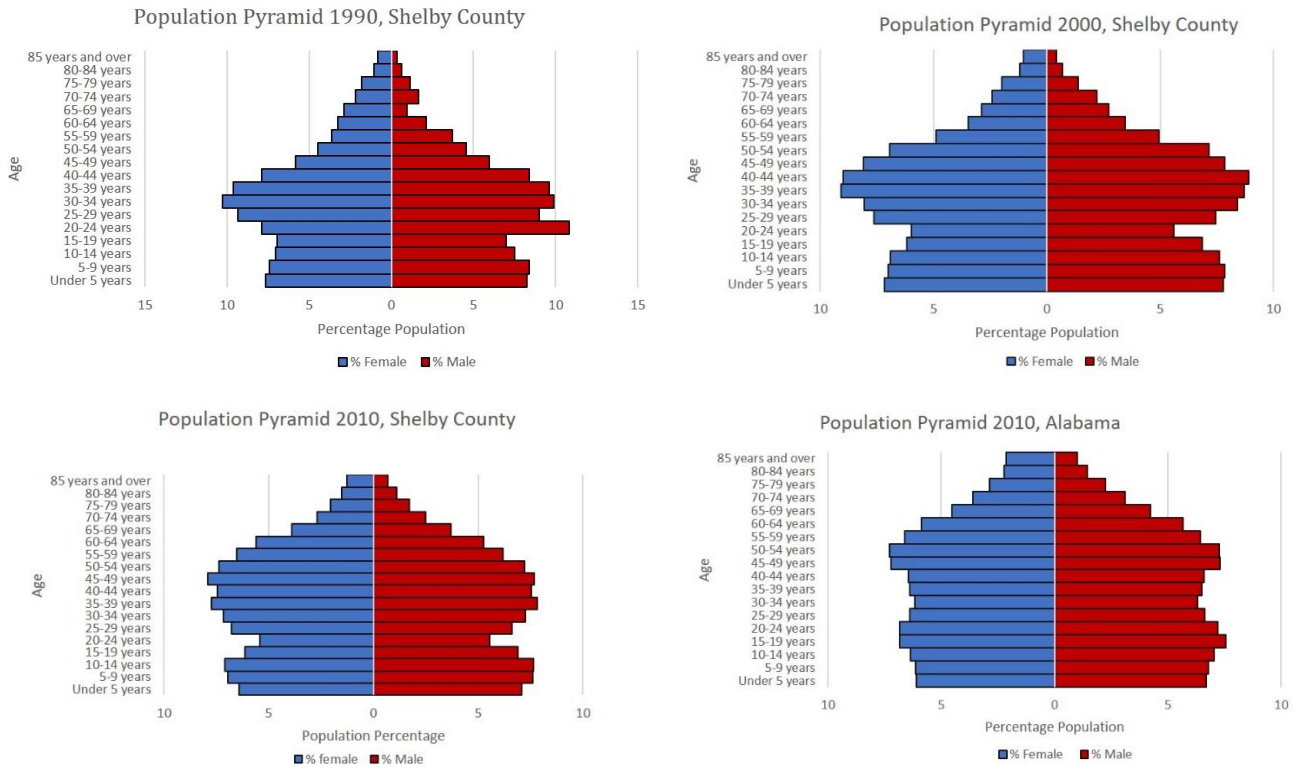
Density



Shelby County's largest concentration of residents is along the major highways (US 65 and US 119), which goes from the southern edge near the center, up towards the northern border, before riding parallel to the Shelby-Jefferson border. The entire eastern area is sparsely populated. The low-density area that is surrounded by higher density zones is the Oak Mountain State Park.

Like the rest of Alabama, Shelby County is mostly rural, low population areas with a few larger cities. However, even these still typically are very sprawled and have a lot of spare land that can be used. The densest areas have just over 2,000 residents per square mile, which still considerably less than many other metro and urban areas. There is still a lot of land that is available for development and expansion.

Population Pyramid



Source: US Census Bureau

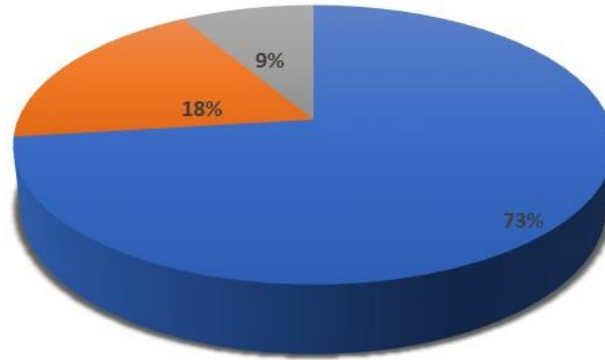
In 1990, men aged 20-24 are disproportionately higher than any other group; in addition, the low numbers of children and elderly compared to the middle-aged group show that Shelby County saw considerable growth during that time, likely due to in-migration from Jefferson County and other parts of Alabama. The populations in 2000 and 2010 show largely the same population trends, only with more people and an older generation. The growing number of youth in 2000 and 2010 is likely because the adult generation began having children.

In 2010, population trends for both Alabama and Shelby County appear to have stabilized. Alabama has a slightly older population, but Shelby County still follows a similar trend. Although Shelby County experienced extremely rapid growth in previous years, it has since leveled off.

The 20-24-year age group has a noticeable decrease in both 2000 and 2010, but this difference does not exist for 1990 or for Alabama. This likely means that teens began attending college elsewhere more often after 1990 in Shelby County, then returned post-graduation.

Housing Statistics

Occupied and Vacant Housing, 2010



■ Owner Occupied ■ Renter Occupied ■ Vacant

Year of structure built	Units	Percentage
Built 2005 or later	7,236	9%
Built 2000 to 2004	13,039	17%
Built 1990 to 1999	23,903	30%
Built 1980 to 1989	16,136	20%
Built 1970 to 1979	10,852	14%
Built 1960 to 1969	3,257	4%
Built 1950 to 1959	2,128	3%
Built 1940 to 1949	883	1%
Built 1939 or earlier	1,326	2%

Source: US Census Bureau

Shelby County has a total of 80,970 housing units. According to 2010 census, 73% are owner-occupied and 18% are renter-occupied. About 6,898 units were vacant, which accounts for just 8% of the total housing units. Housing substantially increased since 1970, with the largest number of the houses in Shelby County being built between 1980 and 1999. This trend correlates with the increase in population around the same time, and this means that most of the housing is in good condition. It also shows that the county's development has been a relatively new movement.

A substantial number (72.54%) of homes belong to single family households. Roughly half of these households have children while a minority live on their own or with friends. This is not surprising, considering more affluent neighborhoods tends to draw mostly single-family households.

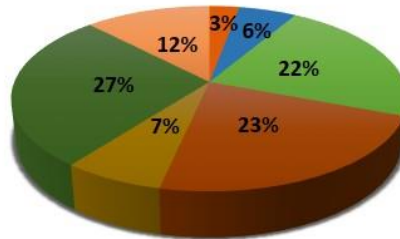
Households	Number	Percentage
Total households	74,072	100.00%
Family households:	53,733	72.54%
With own children under 18 years	25,403	34.30%
Husband-wife family	44,236	59.72%
With own children under 18 years	20,494	27.67%
Male householder, no wife present	2,569	3.47%
With own children under 18 years	1,175	1.59%
Female householder, no husband present	6,928	9.35%
With own children under 18 years	3,734	5.04%
Nonfamily households:	20,339	27.46%
Householder living alone	17,168	23.18%
Male	7,198	9.72%
65 years and over	1,216	1.64%
Female	9,970	13.46%
65 years and over	3,405	4.60%
Households with individuals under 18 years	27,577	37.23%
Households with individuals 65 years and older	14,667	19.80%

Source: US Census Bureau

Relationships	Number	Percentage
Total Population	195,085	100.00%
In Households	192,511	98.68%
Householder	74,072	37.97%
Spouse	44,236	22.68%
Child:	58,321	29.90%
Own child under 18 years	45,729	23.44%
Other relatives:	9,295	4.76%
Under 18 years	3,568	1.83%
65 years and over	1,498	0.77%
Nonrelatives:	6,587	3.38%
Under 18 years	542	0.28%
65 years and over	216	0.11%
Unmarried partner	2,640	1.35%
In group quarters	2,574	1.32%
Institutionalized population:	1,415	0.73%
Male	943	0.48%
Female	472	0.24%
Noninstitutionalized population:	1,159	0.59%
Male	412	0.21%
Female	747	0.38%

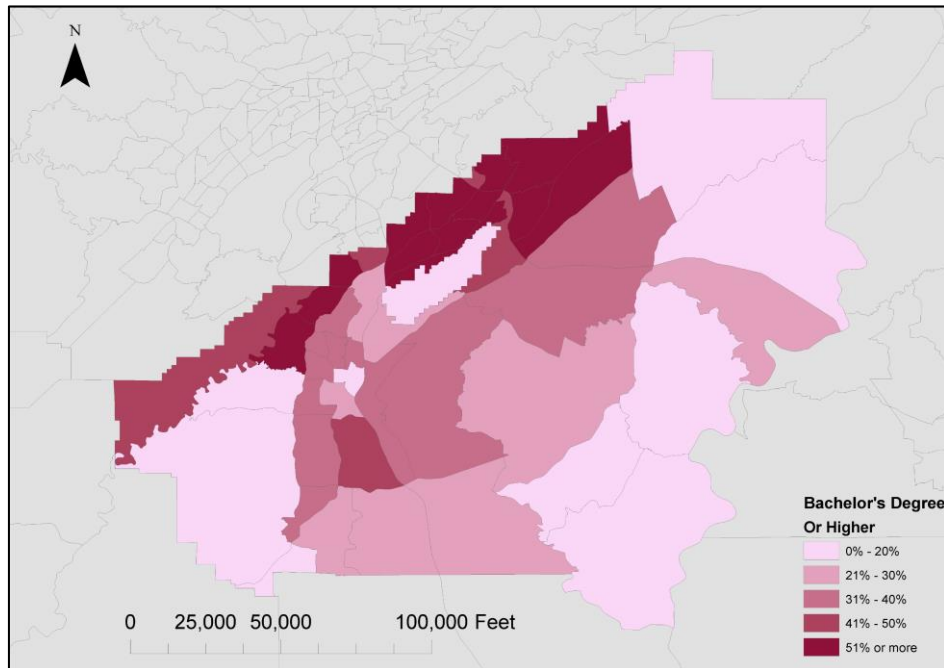
Education

Educational Attainment (25 years and over)



- Less than 9th grade
- 9th to 12th grade, no diploma
- High school graduate
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree

Percentage of College Graduates



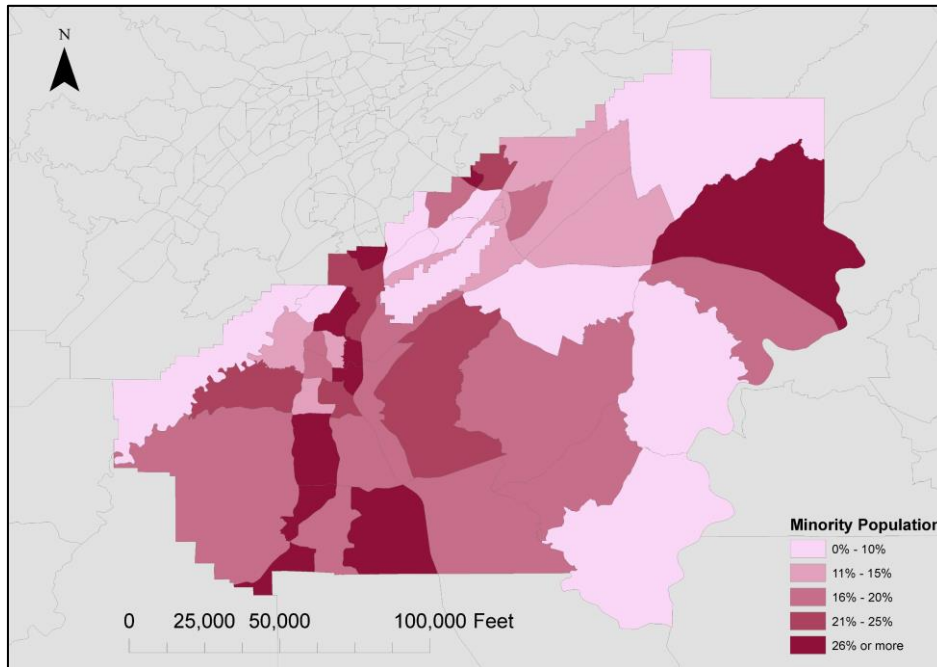
Shelby County is extremely well educated. 39% of residents have at least a bachelor's degree and 91% finish at least high school. This can be attributed to the large amount of affluent families that live in the area. Most of the college graduates are clustered along the northern border, where Hoover, Birmingham, and Meadowbrook are located.

Race & Ethnicity

Race	Year 1990	Year 2000	Year 2010
White	90242	128,671	161,943
Black or African American	7718	10,606	20,732
American Ind. and Alaska Native	264	473	553
Asian and Pacific Islander	575	1503	3,800
Hispanic or Latino	525	2,910	11,567
Others	34	1,013	5,373

Source: US Census Bureau

Minority Percentage



The largest Shelby County racial/ethnic groups are White (78.8%), followed by Black (11.7%), and Hispanic (5.8%). The area has been able to consistently maintain a much higher proportion of whites to other minority groups, which follows previous trends and explanations that many white people left other nearby counties to settle in Shelby County.

Because of the lack of minorities in the area, the entire minority population was looked at instead of each minority group. Although minority representation is low in all areas, the largest representation is in the southwest region. Although there is a small inverse correlation with the areas for educational attainment, there must be many other factors as well.

Population Projection

Simple growth model

Year	Population	Total Absolute Growth	Total Percent Growth	AAAC	AAPC
1990	99358	43935	44.22	4394	3.729483025
2000	143293	51792	36.14	5179	3.133531774
2010	195085				

Year	AAAC projection	AAPC projection
2011	200264	201198
2012	205443	207503
2013	210623	214005
2014	215802	220711
2015	220981	227627
2016	226160	234760
2017	231339	242116
2018	236519	249703
2019	241698	257527
2020	246877	265597

Linear Growth Model

Index Number	Year	Population
1	1990	99358
2	2000	143293
3	2010	195085
3.1	2011	198563.4
3.2	2012	203349.8
3.3	2013	208136.2
3.4	2014	212922.6
3.5	2015	217709
3.6	2016	222495.4
3.7	2017	227281.8
3.8	2018	232068.2
3.9	2019	236854.6
4	2020	241641

Alpha 50185

Beta 47864

The population projection is important for determining future planning needs, goals, and expectations. This can be accomplished through population models. The Simple Growth Model and the Linear Growth Model both take previous and current populations to develop an equation to estimate future population. The Cohort Component Projection is a much more detailed calculation that uses more statistics, including age groups, birth & death rates, and migration rates.

From the Simplistic Growth Calculations and Linear Population model, Shelby County's population will steadily grow to approximately 250,000 by 2020. This is because the county experienced extremely high growth rates over the past few decades, and these models assume that these trends will remain the same.

Meanwhile, the Cohort Component Projection, shown on the next pages, show a different story. It predicts the female population to be 99,850 in 2020 and the male population to be 95,638, for a total projected population of 195,488. This shows almost no growth over a ten-year period, which is a substantial contrast from the previous models. The reason for this difference is that Shelby County is expected to lose a lot of residents to migration and its birth rate won't keep up with this trend. What this means is that although Shelby County experienced considerable growth in the past, it has now leveled off to a stable number.

	A	B	C	D	E	F	G	H	I	J	K	L	M
			Survival	Net Migration	Fertility	Adjusted	Survive	Deaths	Migrate	At Risk	Births	Projected	
		Female Pop.	Rates	Rates	Rates	ertility Rate	to 2015	10 to 15	10 to 15	Female Pop.	10 to 15	Female Pop.	
	Age in 2010	F _{x,2010}	⁵ SR ₂₀₁₀	⁵ nmr ₂₀₁₀	⁵ ASBR ₂₀₁₀	⁵ afr ₂₀₁₀	SF ₂₀₁₅	DF ₁₀₋₁₅	MF ₁₀₋₁₅	ARF ₁₀	B ₁₀₋₁₅	F _{x,2015}	Age in 2015
	1	2	3	4	5	6	7	8	9	10	11	12	13
	0 - 4	6,391	0.9914	-0.0025	-	-	6,336	55	-16	-	-	6,320	5 - 9
	5 - 9	6,936	0.9997	-0.0059	-	-	6,934	2	-41	-	-	6,893	10 - 14
	10 - 14	7,051	0.9998	-0.0060	0.0007	0.0222	7,050	1	-42	7,008	155	7,007	15 - 19
Projection for 2015	15 - 19	6,113	0.9998	-0.0048	0.0436	0.0746	6,112	1	-29	6,083	454	6,082	20 - 24
	20 - 24	5,404	0.9994	0.0016	0.1056	0.1089	5,401	3	9	5,411	589	5,409	25 - 29
	25 - 29	6,738	0.9989	0.0103	0.1122	0.0943	6,731	7	69	6,804	642	6,800	30 - 34
	30 - 34	7,131	0.9983	0.0001	0.0764	0.0528	7,119	12	1	7,126	376	7,120	35 - 39
	35 - 39	7,697	0.9983	-0.0090	0.0291	0.0176	7,684	13	-69	7,621	134	7,615	40 - 44
	40 - 44	7,411	0.9974	-0.0078	0.0060	0.0031	7,392	19	-58	7,344	23	7,334	45 - 49
	45 - 49	7,857	0.9974	-0.0053	0.0002	0.0001	7,837	20	-42	7,805	1	7,795	50 - 54
	50 - 54	7,341	0.9942	-0.0042	0.0000	-	7,298	43	-31	-	-	7,268	55 - 59
	55 - 59	6,505	0.9942	-0.0051	-	-	6,467	38	-33	-	-	6,434	60 - 64
	60 - 64	5,579	0.9885	-0.0039	-	-	5,515	64	-22	-	-	5,493	65 - 69
	65 - 69	3,893	0.9885	-0.0040	-	-	3,848	45	-16	-	-	3,833	70 - 74
	70 - 74	2,682	0.9760	-0.0040	-	-	2,618	64	-11	-	-	2,607	75 - 79
	75 - 79	2,025	0.9760	-0.0057	-	-	1,976	49	-12	-	-	1,965	80 - 84
	80 - 84	1,518	0.9720	-0.0057	-	-	1,475	43	-9	-	-	1,467	85 - 89
	85+	1,256	0.9420	-0.0057	-	-	1,183	73	-7	-	-	1,176	90+
	Total:	99,528					98,975	553	-358	55,201	2,373	98,617	

This is not the total 2010 female population we need to add the new female babies born

Total babies born

			Live Births	Survival	Projected	Total	
	Age in 2015		2010 - 2015	Rates**	Population	Projected	Female Pop.
		by Sex*	⁵ SF ₂₀₁₀	by Sex	Child Deaths	Female Pop.	F ₂₀₁₅
					10 to 15		
	0 - 4	Male	1,215	0.9924	1,206	9	
	0 - 4	Female	1,158	0.9934	1,150	8	99,767
		Total:	2,373		2,356	17	

* Male: Female birth ratio 1.05

Meaning, for every 100 female babies born, there are 105 male babies born

**Survival Rates for live births

	A	B	C	D	E	F	G	H	I	J	K	L	M			
		Female Pop.	Survival Rates	Net Migration Rates	Fertility Rates	Adjusted Fertility Rate	Survive to 2020	Deaths 15 to 20	Migrate 15 to 20	At Risk Female Pop.	Births 15 to 20	Projected Female Pop.	Age 2020			
	Age in 2015	F _{x,2015}	⁵ SF ₂₀₁₅	⁵ nmr ₂₀₁₅	⁵ ASBR ₂₀₁₅	⁵ afr ₂₀₁₅	SF ₂₀₂₀	DF ₁₅₋₂₀	MF ₁₅₋₂₀	ARF ₂₀	B ₁₅₋₂₀	F _{x,2020}				
	1	2	3	4	5	6	7	8	9	10	11	12	13			
	0 - 4	1,150	0.9914	-0.0025	-	-	1,140	10	-3	-	-	1,137	5 - 9			
	5 - 9	6,320	0.9997	-0.0059	-	-	6,318	2	-37	-	-	6,281	10 - 14			
	10 - 14	6,893	0.9998	-0.0060	0.0007	0.0222	6,892	1	-41	6,851	152	6,850	15 - 19			
	15 - 19	7,007	0.9998	-0.0048	0.0436	0.0746	7,006	1	-34	6,973	520	6,972	20 - 24			
	20 - 24	6,082	0.9994	0.0016	0.1056	0.1089	6,079	4	10	6,090	663	6,089	25 - 29			
	25 - 29	5,409	0.9989	0.0103	0.1122	0.0943	5,403	6	56	5,462	515	5,459	30 - 34			
	30 - 34	6,800	0.9983	0.0001	0.0764	0.0528	6,788	12	1	6,795	358	6,789	35 - 39			
	35 - 39	7,120	0.9983	-0.0090	0.0291	0.0176	7,107	12	-64	7,049	124	7,043	40 - 44			
	40 - 44	7,615	0.9974	-0.0078	0.0060	0.0031	7,595	20	-59	7,545	23	7,535	45 - 49			
	45 - 49	7,334	0.9974	-0.0053	0.0002	0.0001	7,315	19	-39	7,286	1	7,276	50 - 54			
	50 - 54	7,795	0.9942	-0.0042	0.0000	-	7,750	45	-33	-	-	7,717	55 - 59			
	55 - 59	7,268	0.9942	-0.0051	-	-	7,225	42	-37	-	-	7,188	60 - 64			
	60 - 64	6,434	0.9885	-0.0039	-	-	6,360	74	-25	-	-	6,335	65 - 69			
	65 - 69	5,493	0.9885	-0.0040	-	-	5,430	63	-22	-	-	5,408	70 - 74			
	70 - 74	3,833	0.9760	-0.0040	-	-	3,741	92	-15	-	-	3,725	75 - 79			
	75 - 79	2,607	0.9760	-0.0057	-	-	2,544	63	-15	-	-	2,529	80 - 84			
	80 - 84	1,965	0.9720	-0.0057	-	-	1,910	55	-11	-	-	1,899	85 - 89			
	85+	2,643	0.9420	-0.0057	-	-	2,490	153	-15	-	-	2,474	90+			
	Total	99,767					99,093	674	-385	54,052	2,357	98,708				

Projection for 2020

Total babies born
This is not the total 2020 femal population we need to add the new female babies born

Age in 2020	Live Births 2015 - 2020 by Sex*		Survival Rates**	Projected Population by Sex	Total Projected Female Pop. F ₂₀₂₀
	Male	Female	⁵ SF ₂₀₁₅	Child Deaths 15 to 20	
0 - 4	1,207	1,150	0.9924	1,198	9
0 - 4	1,150	1,142	0.9934	1,142	8
Total:	2,357			2,340	17

99,850

Projection for 2015 for Males

Projection for 2015 for Males								
		Survival	Net Migration				Projected	
	Male Pop.	Rates	Rates	Survive	Deaths	Migrate	Male Pop.	
Age in 2010	M ₂₀₁₀	₅ SR ₂₀₁₀	₅ n _{mr} ₂₀₁₀	to 2015	10 to 15	10 to 15	M ₂₀₁₅	Age in 2015
1	2	3	4	5	6	7	8	9
0 - 4	6,745	0.9914	-0.0025	6,687	58	-17	6,670	5 - 9
5 - 9	7,266	0.9997	-0.0059	7,264	2	-43	7,221	10 - 14
10 - 14	7,318	0.9998	-0.0060	7,317	1	-44	7,273	15 - 19
15 - 19	6,575	0.9998	-0.0048	6,574	1	-32	6,542	20 - 24
20 - 24	5,293	0.9994	0.0016	5,290	3	8	5,298	25 - 29
25 - 29	6,322	0.9989	0.0103	6,315	7	65	6,380	30 - 34
30 - 34	6,934	0.9983	0.0001	6,922	12	1	6,923	35 - 39
35 - 39	7,477	0.9983	-0.0090	7,464	13	-67	7,397	40 - 44
40 - 44	7,187	0.9974	-0.0078	7,168	19	-56	7,112	45 - 49
45 - 49	7,326	0.9974	-0.0053	7,307	19	-39	7,268	50 - 54
50 - 54	6,909	0.9942	-0.0042	6,869	40	-29	6,840	55 - 59
55 - 59	5,924	0.9942	-0.0051	5,890	34	-30	5,859	60 - 64
60 - 64	5,028	0.9885	-0.0039	4,970	58	-20	4,951	65 - 69
65 - 69	3,533	0.9885	-0.0040	3,492	41	-14	3,478	70 - 74
70 - 74	2,380	0.9760	-0.0040	2,323	57	-10	2,313	75 - 79
75 - 79	1,637	0.9760	-0.0057	1,598	39	-9	1,588	80 - 84
80 - 84	1,052	0.9720	-0.0057	1,023	29	-6	1,017	85 - 89
85+	651	0.9420	-0.0057	613	38	-4	610	90+
	95,559						94,741	
Total:								
							Total	
	Live Births	Survival	Projected				Projected	
	2010 - 2015	Rates	Male Pop.	Child Deaths			Male Pop.	
Age in 2005	MB₁₀₋₁₅	₅SR₂₀₁₀	M₂₀₁₅	10 to 15	Age in 2015		M₂₀₁₅	
0 - 4	1,215	0.9924	1,206	9	0 - 4		95,947	

Projection for 2020 for males								
		Survival	Net Migration				Projected	
	Male Pop.	Rates	Rates	Survive	Deaths	Migrate	Male Pop.	
Age in 2010	F _{x,2015}	₅ Sr ₂₀₁₅	₅ n _{mr} ₂₀₁₅	SF ₂₀₂₀	DF ₁₅₋₂₀	MF ₁₅₋₂₀	M ₂₀₂₀	Age in 2020
1	2	3	4	5	6	7	8	9
0 - 4	1,206	0.9914	-0.0025	1,196	10	-3	1,193	5 - 9
5 - 9	6,670	0.9997	-0.0059	6,668	2	-39	6,629	10 - 14
10 - 14	7,221	0.9998	-0.0060	7,220	1	-43	7,176	15 - 19
15 - 19	7,273	0.9998	-0.0048	7,271	1	-35	7,236	20 - 24
20 - 24	6,542	0.9994	0.0016	6,538	4	10	6,549	25 - 29
25 - 29	5,298	0.9989	0.0103	5,292	6	55	5,347	30 - 34
30 - 34	6,380	0.9983	0.0001	6,369	11	1	6,370	35 - 39
35 - 39	6,923	0.9983	-0.0090	6,911	12	-62	6,849	40 - 44
40 - 44	7,397	0.9974	-0.0078	7,378	19	-58	7,320	45 - 49
45 - 49	7,112	0.9974	-0.0053	7,094	18	-38	7,056	50 - 54
50 - 54	7,268	0.9942	-0.0042	7,226	42	-31	7,195	55 - 59
55 - 59	6,840	0.9942	-0.0051	6,800	40	-35	6,765	60 - 64
60 - 64	5,859	0.9885	-0.0039	5,792	67	-23	5,769	65 - 69
65 - 69	4,951	0.9885	-0.0040	4,894	57	-20	4,874	70 - 74
70 - 74	3,478	0.9760	-0.0040	3,395	83	-14	3,381	75 - 79
75 - 79	2,313	0.9760	-0.0057	2,258	56	-13	2,245	80 - 84
80 - 84	1,588	0.9720	-0.0057	1,544	44	-9	1,535	85 - 89
85+	1,017	0.9420	-0.0057	958	59	-6	952	90+
	95,339					-363	94,441	
Total:								
							Total	
	Live Births	Survival	Projected				Projected	
	2010 - 2015	Rates	Male Pop.	Child Deaths			Male Pop.	
Age in 2015	MB₁₀₋₁₅	₅Sr₂₀₁₀	M₂₀₂₀	15 to 20	Age in 2020		M₂₀₂₀	
0 - 4	1,207	0.9924	1,198	9	0 - 4		95,638	

Economic Statistics

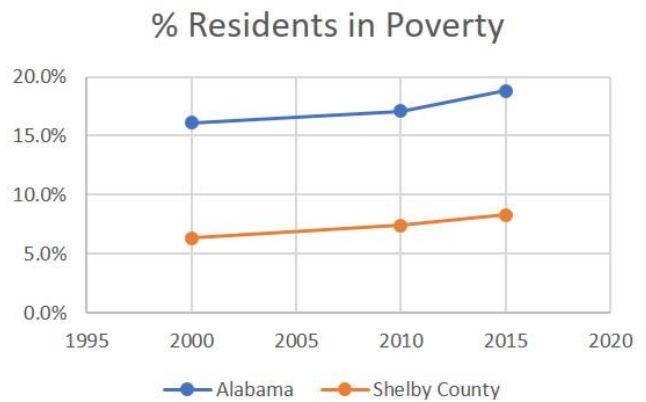
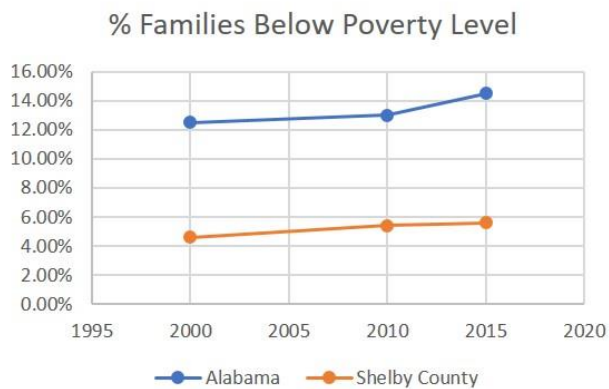
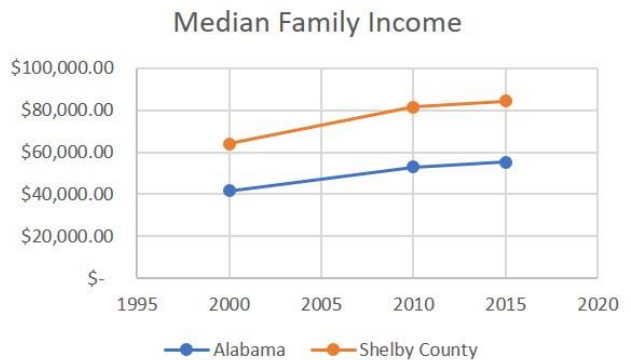
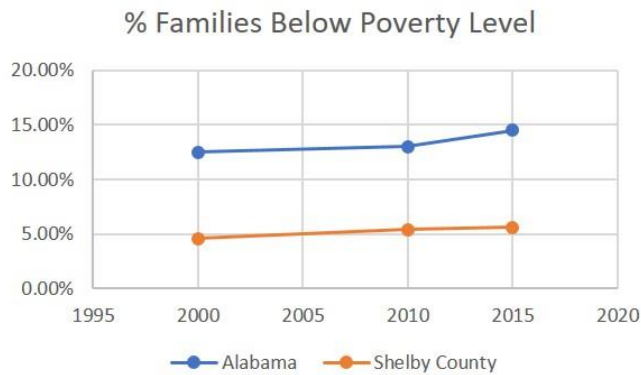
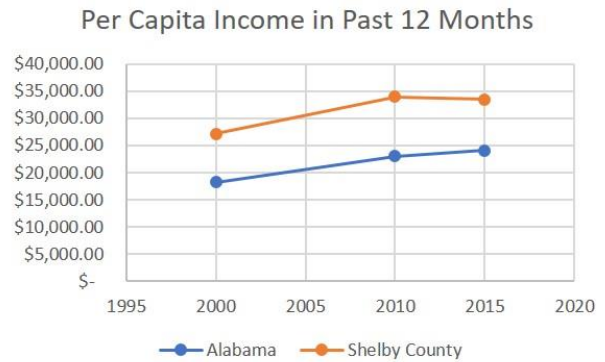
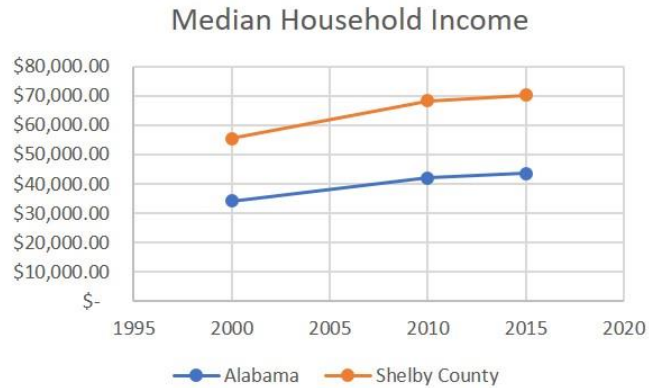
Shelby County is much more affluent than the rest of Alabama. While the median household income in Alabama is just \$43,623, it is \$70,187 in Shelby County which makes it one of the highest in the nation. Shelby County also ranks high in education and employment rate compared to Alabama. These numbers show that Shelby County does exceptionally well economically, helping to drive the overall economy and education in Alabama. In addition, there is very little poverty in Shelby County, especially when compared to Alabama, most likely because poor people cannot afford to live in the county.

	Shelby County, AL	Alabama
Median household income	\$ 70,187	\$ 43,623
Housing	82,850 units	2,199,329 units
Education	91.4%	84.3%
Number of companies	18,665	374,153
Unemployment Rate	4.2%	5.8%

2015: Bureau of Labor Statistics

Income and Poverty	2015		2010		2000	
	Alabama	Shelby County, Alabama	Alabama	Shelby County, Alabama	Alabama	Shelby County, Alabama
Median household income	\$43,623.00	\$70,187.00	\$42,081.00	\$68,380.00	\$34,135.00	\$55,440.00
Per capita income in past 12 months	\$24,091.00	\$33,494.00	\$22,984.00	\$33,978.00	\$18,189.00	\$27,176.00
Median Family Income	\$55,341.00	\$84,311.00	\$52,863.00	\$81,406.00	\$41,657.00	\$64,105.00
Families below Poverty Level	14.50%	5.6%	13%	5.40%	12.50%	4.60%
Persons in poverty, percent	18.8%	8.30%	17.10%	7.40%	16.10%	6.30%

2015: Bureau of Labor Statistics



These charts show the large gap between the income of Shelby County residents and the rest of Alabama using different data types. While Shelby County is very affluent even when comparing it to the rest of the United States, Alabama ranks among the poorest states in the country. The difference will continue to be explored on the following pages.

LABOR FORCE STATISTICS	2000		2010		2015	
	Number	Percent	Number	Percent	Number	Percent
Population 16 years and over	109,617	100.0%	144,864	100.0%	159,063	100.0%
In labor force	77,111	70.3%	101,237	69.9%	107,374	67.5%
Civilian labor force	76,879	70.1%	101,072	69.8%	107,205	67.4%
Employed	74,604	68.1%	95,469	65.9%	101,343	63.7%
Unemployed	2,275	2.1%	5,603	3.9%	5,862	3.7%
Armed Forces	232	0.2%	165	0.1%	169	0.1%
Not in labor force	32,506	29.7%	43,627	30.1%	51,689	32.5%
Females 16 years and over	56,713	100.0%	74,820	100.0%	82,580	100.0%
In labor force	34,330	60.5%	46,192	61.7%	50,224	60.8%
Civilian labor force	34,276	60.4%	46,182	61.7%	50,224	60.8%
Employed	33,189	58.5%	43,302	57.9%	47,612	57.7%
Own children under 6 years	12,667	100.0%	15,350	100.0%	14,881	100.0%
All parents in family in labor force	6,633	52.4%	9,756	63.6%	9,372	63.0%
COMMUTING TO WORK						
Workers 16 years and over	73,773	100.0%	93,843	100.0%	99,521	100.0%
Car, truck, or van -- drove alone	63,620	86.2%	78,960	84.1%	85,119	85.5%
Car, truck, or van -- carpooled	6,647	9.0%	8,394	8.9%	8,035	8.1%
Public transportation (including taxicab)	108	0.1%	202	0.2%	179	0.2%
Walked	702	1.0%	958	1.0%	555	0.6%
Other means	315	0.4%	735	0.8%	796	0.8%
Worked at home	2,381	3.2%	4,594	4.9%	4,837	4.9%
Mean travel time to work (minutes)	28.6		29.0		28.5	

US Census Bureau

INCOME CLASSIFICATION	2000		2010		2015	
	Number	Percent	Number	Percent	Number	Percent
Total households	54,601	100.0%	71,759	100.0%	75,534	100.0%
With earnings	47,621	87.2%	61,553	85.8%	62,492	82.7%
Mean earnings	\$ 70,046.00		\$ 85,468.00		\$ 87,732.00	
With Social Security	9,973	18.3%	15,804	22.0%	20,062	26.6%
Mean Social Security income	\$ 11,712.00		\$ 17,613.00		\$ 19,748.00	
With retirement income	7,507	13.7%	11,753	16.4%	13,611	18.0%
Mean retirement income	\$ 18,545.00		\$ 23,789.00		\$ 25,668.00	
With Supplemental Security Income	1,496	2.7%	1,779	2.5%	2,227	2.9%
Mean Supplemental Security Income	\$ 5,627.00		\$ 8,505.00		\$ 9,353.00	
With cash public assistance income	N/A	N/A	687	1.0%	749	1.0%
Mean cash public assistance income	N/A	N/A	\$ 3,191.00		\$ 3,165.00	
With Food Stamp/SNAP benefits in the past 12 months	N/A	N/A	2,886	4.0%	4,669	6.2%

US Census Bureau

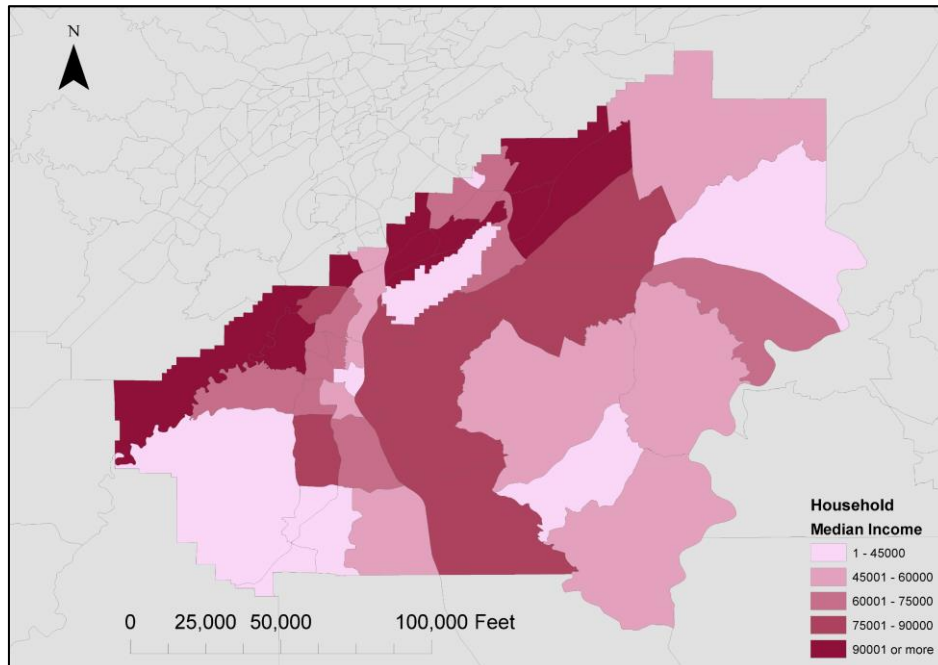
2000 Household Income



2010 Household Income

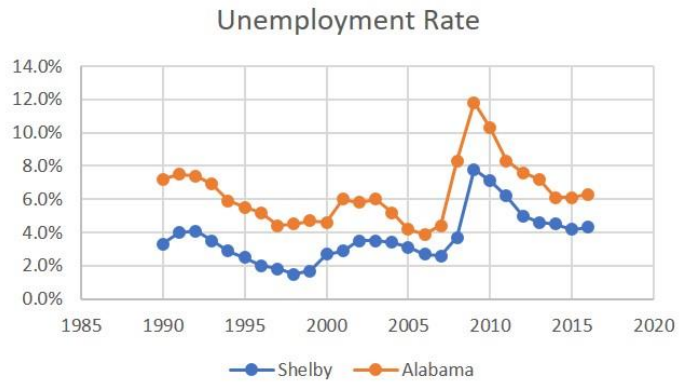


Median Household Income



Unemployment statistics

Unemployment Rate	Shelby	Alabama
1990	3.3%	7.2%
1991	4.0%	7.5%
1992	4.1%	7.4%
1993	3.5%	6.9%
1994	2.9%	5.9%
1995	2.5%	5.5%
1996	2.0%	5.2%
1997	1.8%	4.4%
1998	1.5%	4.5%
1999	1.7%	4.7%
2000	2.7%	4.6%
2001	2.9%	6.0%
2002	3.5%	5.8%
2003	3.5%	6.0%
2004	3.4%	5.2%
2005	3.1%	4.2%
2006	2.7%	3.9%
2007	2.6%	4.4%
2008	3.7%	8.3%
2009	7.8%	11.8%
2010	7.1%	10.3%
2011	6.2%	8.3%
2012	5.0%	7.6%
2013	4.6%	7.2%
2014	4.5%	6.1%
2015	4.2%	6.1%
2016	4.3%	6.3%



Source: Alabama Department of Labor

The proportion of household income shows a large proportion of high earners. In 2000, most household income was between \$50,000 and \$74,999, but this grew in 2010 in which most household income was between \$50,000 and \$149,999. Meanwhile, poverty levels went down, which shows that other people are likely driven out of the county due to rising costs.

Shelby unemployment rate was always less than Alabama unemployment rate. From 1992 until 1998 Both Alabama and Shelby county unemployment rate were in continues decline (Shelby from 4.1% to 1.5%) then started to rise 1.5% in 1998 to 7.8% in 2009. The sudden increase in the unemployment rate in year 2008 was due to the financial crisis effect that took place at the time. But clearly Shelby County has an unemployment rate that is lower than the state of Alabama.

Industry/occupational pattern analysis

NAICS Industry Sector	2000		2010		2015	
	Number	Percent	Number	Percent	Number	Percent
Civilian employed population 16 years and over	74,604.0	100.0%	95,469	100.0%	101,343	100.0%
Agriculture, forestry, fishing and hunting, and mining	732.0	1.0%	1,073	1.1%	679	0.7%
Construction	6,415.0	8.6%	7,965	8.3%	6,179	6.1%
Manufacturing	7,639.0	10.2%	7,107	7.4%	8,258	8.1%
Wholesale trade	3,914.0	5.2%	5,097	5.3%	3,081	3.0%
Retail trade	8,454.0	11.3%	11,671	12.2%	12,130	12.0%
Transportation and warehousing, and utilities	3,718.0	5.0%	4,184	4.4%	5,081	5.0%
Information	3,672.0	4.9%	3,615	3.8%	3,555	3.5%
Finance and insurance, and real estate and rental and leasing	8,145.0	10.9%	10,352	10.8%	11,027	10.9%
Professional, scientific, and management, and administrative and waste management services	8,281.0	11.1%	11,427	12.0%	12,378	12.2%
Educational services, and health care and social assistance	13,537.0	18.1%	18,159	19.0%	21,586	21.3%
Arts, entertainment, and recreation, and accommodation and food services	4,226.0	5.7%	6,929	7.3%	7,569	7.5%
Other services, except public administration	3,660.0	4.9%	4,772	5.0%	5,632	5.6%
Public administration	2,211.0	3.0%	3,118	3.3%	4,188	4.1%

US Census Bureau

The largest industries by size are in government and social services. The next largest industry is in professional white collar jobs, followed by retail and finances. The vast majority of these jobs are white collar fields, which follows Shelby County's education, income, and demographic trends. There has not been much change in industries since 2000, with the main drops occurring in construction and manufacturing. Again, this is not surprising, as people are shifting away from blue collar jobs to white collar jobs in this area, and construction will go down after most of the growth has already happened.

Economic base analysis

Total All Jobs	Alabama		Shelby					
Jobs by NAICS Industry Sector	Count	Share	Count	Share	LQ	LQ-1	(LQ-1)/LQ	Basic Employment
Agriculture, Forestry, Fishing and Hunting	11,837	0.6%	186	0.2%	0.336024	-0.66398		
Mining, Quarrying, and Oil and Gas Extraction	7,304	0.4%	426	0.5%	1.247233	0.247233	0.198225	84.44382712
Utilities	21,160	1.2%	2,260	2.6%	2.283975	1.283975	0.562167	1270.497177
Construction	80,328	4.4%	4,843	5.6%	1.289277	0.289277	0.224371	1086.630305
Manufacturing	256,704	14.0%	5,360	6.2%	0.44651	-0.55349		
Wholesale Trade	73,924	4.0%	5,976	7.0%	1.728716	0.728716	0.421536	2519.099873
Retail Trade	231,549	12.6%	11,000	12.8%	1.015894	0.015894	0.015645	172.0988124
Transportation and Warehousing	59,589	3.2%	1,429	1.7%	0.51282	-0.48718		
Information	23,725	1.3%	1,338	1.6%	1.206003	0.206003	0.170815	228.5503557
Finance and Insurance	72,065	3.9%	11,508	13.4%	3.414869	2.414869	0.707163	8138.032092
Real Estate and Rental and Leasing	24,093	1.3%	1,200	1.4%	1.065097	0.065097	0.061118	73.341611
Professional, Scientific, and Technical Services	96,628	5.3%	5,928	6.9%	1.311909	0.311909	0.237752	1409.395143
Management of Companies and Enterprises	16,321	0.9%	2,143	2.5%	2.807851	1.807851	0.643856	1379.782818
Administration & Support, Waste Management and Remediation	110,838	6.0%	4,790	5.6%	0.924156	-0.07584		
Educational Services	167,917	9.1%	6,422	7.5%	0.817851	-0.18215		
Health Care and Social Assistance	249,616	13.6%	7,343	8.5%	0.629071	-0.37093		
Arts, Entertainment, and Recreation	18,750	1.0%	1,645	1.9%	1.876131	0.876131	0.466988	768.1957501
Accommodation and Food Services	169,246	9.2%	7,448	8.7%	0.941066	-0.05893		
Other Services (excluding Public Administration)	46,127	2.5%	2,261	2.6%	1.0482	0.0482	0.045983	103.9680194
Public Administration	99,954	5.4%	2,429	2.8%	0.519668	-0.48033		
Total	1,837,675	100.00%	85,935	100.00%	1	0	0	17234.03578
Economic Base Multiplier = Total/Basic								4.98635381

Source: LEHD (2004 and 2014 most current)

Location Quotients and Economic Base Multiplier

Location quotients for county as compared to the state, identify export sectors, and calculate economic base multiplier. Shares are shown in the table above. Finance and Insurance employs the largest share in Shelby County with a percentage of 13.4% of the total jobs. Finance and Insurance (LQ=3.41) is clearly the highest contributor to the economic base in Shelby County, Utilities (2.28) and Management of companies and enterprises (2.81) are also contributing to some degree to the economy base.

The Economic Base Multiplier for Shelby County is = (Total local employment/Total basic employment) = $85,935/17,234 = 4.98$. An increase in basic employment due to an increase in export activities of 1 person will lead to a total increase in regional employment by 4.98. Finance and Insurance is the largest industry in Shelby because most of their companies are located in Birmingham city, which is the largest city in Alabama.

Shift Share Analysis

Economic base analysis using shift share method, taking the state of Alabama as the reference economy. To calculate the regional employment growth in Shelby County we need to use the following equation:

Regional employment growth = National share (NS) + Industry mix (IM) + Regional shift (RS)

$$NS_{ir}^t = E_{ir}^{t-1} \times \left(\frac{E_{US}^t}{E_{US}^{t-1}} - 1 \right)$$

$$IM_{ir}^t = E_{ir}^{t-1} \times \left[\left(\frac{E_{iUS}^t}{E_{iUS}^{t-1}} \right) - \left(\frac{E_{US}^t}{E_{US}^{t-1}} \right) \right]$$

$$RS_{ir}^t = E_{ir}^{t-1} \times \left[\left(\frac{E_{ir}^t}{E_{ir}^{t-1}} \right) - \left(\frac{E_{iUS}^t}{E_{iUS}^{t-1}} \right) \right]$$

Annual Average Employment, Shelby County 2014 & 2004 (Table #1)

2007 NAICS CODE	2007 NAICS TITLE	Shelby Emp 2004	Shelby Emp 2014	% change
11	Agriculture, Forestry, Fishing and Hunting	182	186	2.20%
21	Mining, Quarrying, and Oil and Gas Extraction	334	426	27.54%
22	Utilities	1,801	2,260	25.49%
23	Construction	6,829	4,843	-29.08%
31-33	Manufacturing	7,414	5,360	-27.70%
42	Wholesale Trade	5,608	5,976	6.56%
44-45	Retail Trade	8,764	11,000	25.51%
48-49	Transportation and Warehousing	740	1,429	93.11%
51	Information	1,630	1,338	-17.91%
52	Finance and Insurance	6,060	11,508	89.90%
53	Real Estate and Rental and Leasing	1,078	1,200	11.32%
54	Professional, Scientific, and Technical Services	4,410	5,928	34.42%
55	Management of Companies and Enterprises	796	2,143	169.22%
56	Administration & Support, Waste Mgmt and Remediation	4,452	4,790	7.59%
61	Educational Services	5,233	6,422	22.72%
62	Health Care and Social Assistance	4,905	7,343	49.70%
71	Arts, Entertainment, and Recreation	482	1,645	241.29%
72	Accommodation and Food Services	5,218	7,448	42.74%
81	Other Services (excluding Public Administration)	2,117	2,261	6.80%
92	Public Administration	1,750	2,429	38.80%
	Total Employment	69,803	85,935	23.11%

Source: LEHD

Annual Average Employment, Alabama 2014 & 2004 (Table #2)

2007 NAICS CODE	2007 NAICS TITLE	Alabama Emp 2004	Alabama Emp 2014	% change
11	Agriculture, Forestry, Fishing and Hunting	13,318	11,837	-11.12%
21	Mining, Quarrying, and Oil and Gas Extraction	7,317	7,304	-0.18%
22	Utilities	20,038	21,160	5.60%
23	Construction	97,005	80,328	-17.19%
31-33	Manufacturing	284,993	256,704	-9.93%
42	Wholesale Trade	77,708	73,924	-4.87%
44-45	Retail Trade	226,880	231,549	2.06%
48-49	Transportation and Warehousing	52,642	59,589	13.20%
51	Information	29,878	23,725	-20.59%
52	Finance and Insurance	72,308	72,065	-0.34%
53	Real Estate and Rental and Leasing	25,975	24,093	-7.25%
54	Professional, Scientific, and Technical Services	87,202	96,628	10.81%
55	Management of Companies and Enterprises	11,747	16,321	38.94%
56	Administration & Support, Waste Management and Remediation	93,551	110,838	18.48%
61	Educational Services	158,983	167,917	5.62%
62	Health Care and Social Assistance	207,917	249,616	20.06%
71	Arts, Entertainment, and Recreation	16,354	18,750	14.65%
72	Accommodation and Food Services	140,206	169,246	20.71%
81	Other Services (excluding Public Administration)	47,475	46,127	-2.84%
92	Public Administration	90,856	99,954	10.01%
	Total Employment	1,762,353	1,837,675	4.27%

Source: LEHD

2007 NAICS CODE	2007 NAICS TITLE	Shelby Employment 2004	Shelby Employment 2014	% change in Shelby Emp.	% change in AL Emp.	National Component (NS)	Industry mix share (IM)	Competitive effect (RS)	Total
11	Agriculture, Forestry, Fishing and Hunting	182	186	2.20%	-11.12%	7.78	(28.02)	24.24	4.00
21	Mining, Quarrying, and Oil and Gas Extraction	334	426	27.54%	-0.18%	14.27	(14.87)	92.59	92.00
22	Utilities	1,801	2,260	25.49%	5.60%	76.97	23.87	358.16	459.00
23	Construction	6,829	4,843	-29.08%	-17.19%	291.87	(1,465.90)	(811.97)	(1,986.00)
31-33	Manufacturing	7,414	5,360	-27.70%	-9.93%	316.87	(1,052.80)	(1,318.07)	(2,054.00)
42	Wholesale Trade	5,608	5,976	6.56%	-4.87%	239.68	(512.77)	641.08	368.00
44-45	Retail Trade	8,764	11,000	25.51%	2.06%	374.57	(194.21)	2,055.64	2,236.00
48-49	Transportation and Warehousing	740	1,429	93.11%	13.20%	31.63	66.03	591.34	689.00
51	Information	1,630	1,338	-17.91%	-20.59%	69.67	(405.34)	43.68	(292.00)
52	Finance and Insurance	6,060	11,508	89.90%	-0.34%	259.00	(279.37)	5,468.37	5,448.00
53	Real Estate and Rental and Leasing	1,078	1,200	11.32%	-7.25%	46.07	(124.18)	200.11	122.00
54	Professional, Scientific, and Technical Services	4,410	5,928	34.42%	10.81%	188.48	288.21	1,041.31	1,518.00
55	Management of Companies and Enterprises	796	2,143	169.22%	38.94%	34.02	275.92	1,037.06	1,347.00
56	Administration & Support, Waste Management and Remediation	4,452	4,790	7.59%	18.48%	190.28	632.40	(484.67)	338.00
61	Educational Services	5,233	6,422	22.72%	5.62%	223.66	70.41	894.93	1,189.00
62	Health Care and Social Assistance	4,905	7,343	49.70%	20.06%	209.64	774.09	1,454.27	2,438.00
71	Arts, Entertainment, and Recreation	482	1,645	241.29%	14.65%	20.60	50.02	1,092.38	1,163.00
72	Accommodation and Food Services	5,218	7,448	42.74%	20.71%	223.01	857.76	1,149.23	2,230.00
81	Other Services (excluding Public Administration)	2,117	2,261	6.80%	-2.84%	90.48	(150.59)	204.11	144.00
92	Public Administration	1,750	2,429	38.80%	10.01%	74.79	100.44	503.76	679.00
	Total Employment	69,803	85,935	23.11%	4.27%	2,983.34	(1,088.89)	14,237.55	16,132.00
	Percentages					18.49%	-6.75%	88.26%	100.00%

During 2004–2014 period, Shelby County increased its number of jobs by 23.11% vs 4.27% for Alabama. Shift-share analysis components of Shelby County’s employment gain include: 18.5% due to the national effect, -7% due to the industry mix effect, and 88% due to Shelby County’s competitive effect. During 2004–2014 period, Shelby County had a competitive advantage over Alabama in several sectors including Finance and Insurance. Overall, regional employment growth is 16,132 jobs.

Summary findings of economic analysis

Shelby County is a very affluent area with a very high median household income. It is a destination for the highest earners in Alabama to settle in, which is seen by the large amount of college-educated residents, the number of professional white-collar jobs, the number of single-family homes, and the strong education. The economy has mostly stabilized with the population.

Most of the affluent residents are concentrated near the highways and the major cities. The outskirts are very sparsely populated and earn less income on average. There is still a lot of potential for growth in this region.

Finances and management are the two biggest industries in Shelby County and act as the main economic drivers. Continued economic growth depends largely on these two industries, though the trends indicate that because their growth has stabilized, the area likely will not experience much change unless they plan differently.