South West Raleigh

An Economic Assessment for Creative District Development Strategies

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I. STUDY CONTEXT

Successful creative districts throughout the United States have a number of things in common. Creative districts tend to have a diverse population, both in race and ethnicity, as well as economic status, age, and national origins. Creative districts tend to form around universities, where industries can benefit from research, new patents, and knowledge exchange. Creative districts promote entrepreneurial start-ups, and therefore must have adequate infrastructure, including a diverse housing and commercial stock to meet the needs of younger entrepreneurs. To make these districts attractive to creative individuals, they need a variety of recreational and lifestyle amenities, including easy access to museums, performing arts, sports, parks, restaurants, and shopping. In short, creative districts are places where creative people can live, learn, work and play.

Often economists and planners think of human capital as a stock or endowment, which belongs to a place in the same way as a natural resource (Florida, 2002). In reality human capital is a highly mobile development factor that can and does relocate. Proponents of nurturing a creative class, such as Richard Florida, argue that while traditional economic development strategies are flawed because they are driven by a “demand-side” strategy – attract jobs to get the people. Instead, what is required to succeed in the 21st century economy is a “supply-side” strategy. Cities and companies must make places attractive, by meeting the demands of their customers if they want these people to move to a given area.

This report is part of a broader study being conducted by North Carolina State University to identify economic development and marketing strategies for South West Raleigh, which has been deemed the “Capital City’s Creative District.” This report looks at a wide range of economic, social, and industrial indicators to begin to paint a picture of the South West District for use in the broader study.

II. METHODOLOGY

The purpose of this report is to provide a demographic and economic assessment of South West Raleigh, as well as a more in-depth market analysis of the area, to determine its strengths and weaknesses in attracting creative people and businesses to the area. For the economic and demographic analysis, the data used includes GeoLytics Neighborhood Change Database, decennial Census data, and the American Community Survey data from 2006-2010. A number of web services were also accessed to provide demographic and market information, including ESRI's Business Analyst and Social Explorer. For the industry and market analysis, the National Establishment Time Series (NETS) Database[1] and ReferenceUSA's Business Database[2] were used to calculate economic trends and industry composition and to complete an up-to-date business inventory for the South West District. Various analytical tools were used throughout this study, which are described in their relevant sections.

III. DEMOGRAPHIC & ECONOMIC FUNDAMENTALS

The following section looks at a number of socioeconomic indicators for the South West District. Due to the size of the South West District, we will provide general summary data, compare the district to the rest of Raleigh, as well as provide maps outlining the census tracts and block groups to provide a more detailed assessment of the area.

For historical demographic trends, GeoLytics Neighborhood Change Database was used to get data on population, race, and housing units at the census block level from 1970-2000. Since this database does not include 2010 data, Census 2010 block-level data was used (acquired through the National Historical Geographic Information System website). Since a number of changes were made to the 2010 Census geographies (i.e. census tracts and block groups), the 2010 census data was joined to the 2000 census tracts. These procedures allow direct comparisons to be made over time for the same geographic areas. A picture of the 2000 census tracts is provided in Appendix 1.

[1] For more information on NETS database, see: http://www.scribd.com/doc/23407282/Dun-Brad-Street-National-Establishment-Database

[2] For more information on ReferenceUSA Business Database, see: http://www.referenceusa.com/

For more current and detailed demographic and economic data, the five-year 2006-2010 American Community Survey (ACS) data was used at the block group level. A picture of the 2010 block groups is provided in Appendix 2. The ACS survey is significantly different from the Census survey in sample size and margin of error, and this report does not make any direct comparison between the two data sources. Therefore, the report has general demographic trends from 1970-2010 at the census tract level, and we present more detailed socio-economic information about the District at the block group level using 2010 ACS data.

Figure 1 provides a map of the South West District, as well as the Census tracts and block groups encompassing the District that were used in the following analysis. The map also highlights three key corridors within the district that are referred to throughout the report. These areas are important because of population changes that have taken place since 2000, as well as their relevance to the District's economy. The boundary for the District was chosen based on stakeholder input and restricted to Raleigh's city limit. A total of 70 pre-defined U.S. Census block groups were selected to comprise South West Raleigh, which is also comprised of parts from 29 census tracts. The South West district is an estimated 33.5 square miles, which is roughly 23 percent of the City's total area of 144.2 square miles.

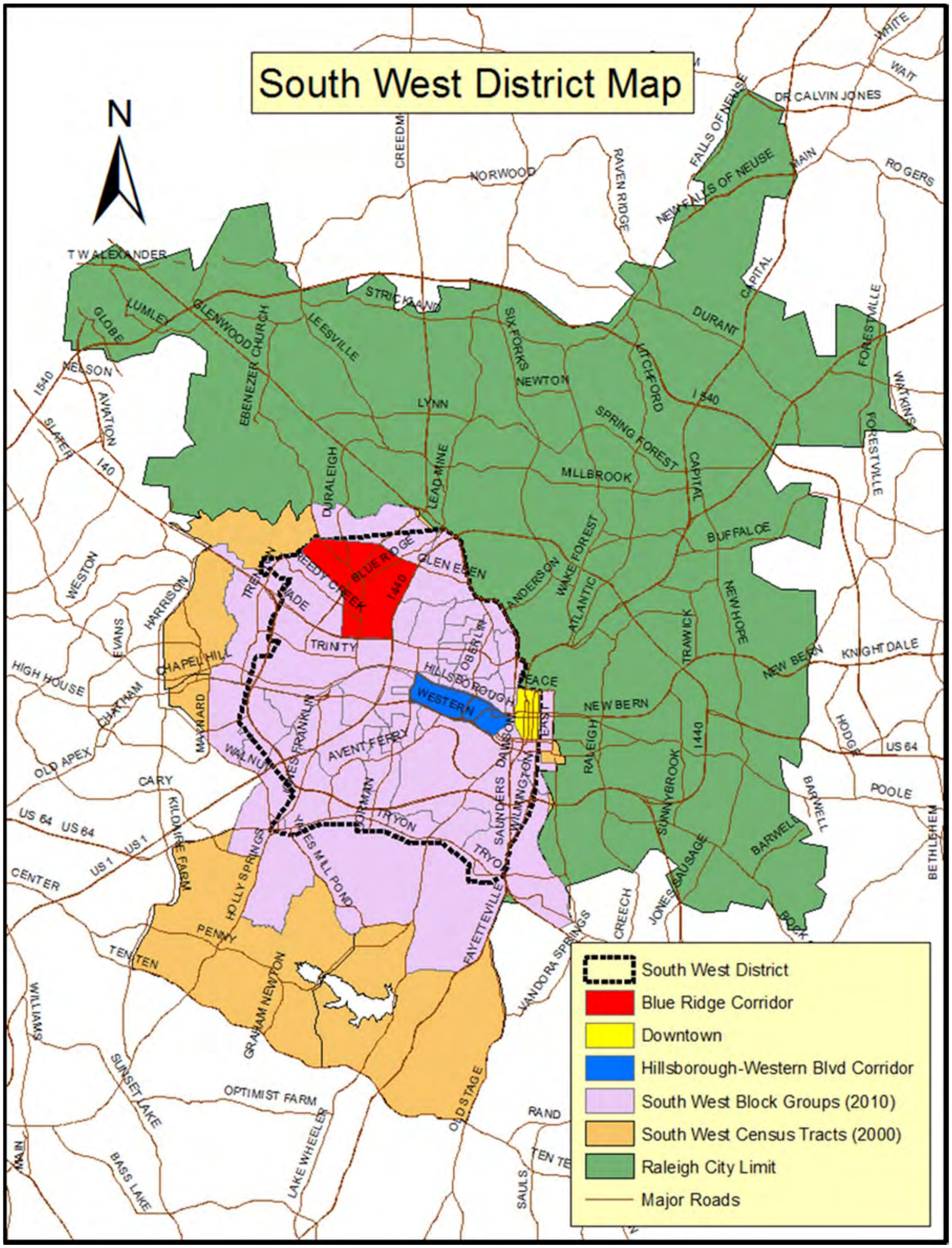


Figure 1: SW Raleigh District

1. Population Shift

The population in the census tracts overlapping the South West District has roughly doubled over the last 40 years, increasing from 73,310 in 1970, to 147,453 in 2010. Between 2000 and 2010, the population increased from 123,719 to 147,453, representing a 19 percent increase, which is significantly lower than the City's 46 percent growth during the same period.

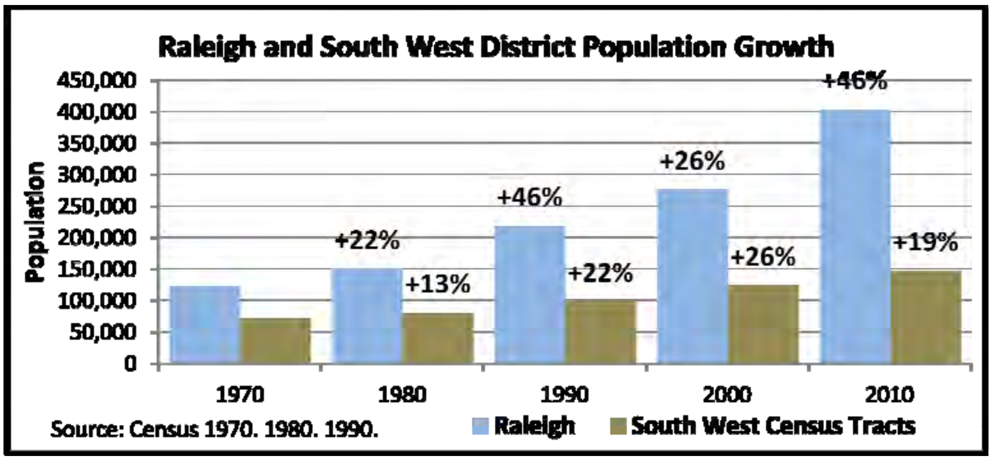


Figure 1: Raleigh and South West District Population Growth

However, population change varied significantly between census tracts, as shown in Figure 2. Five census tracts witnessed a significant population decline between 2000 and 2010, with three of these surrounding Downtown. However, Downtown, the Hillsborough-Western Boulevard Corridor, and the southern census tracts all had population growth of over 25 percent. A number of the central northern tracts also saw significant growth, while the remaining tracts saw minor increases in population between 2000 and 2010.

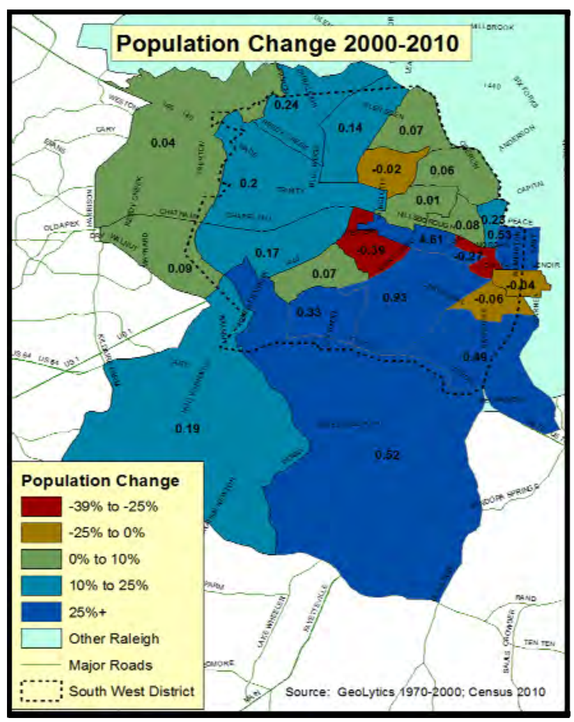


Figure 2: Population Change 2000 - 2010

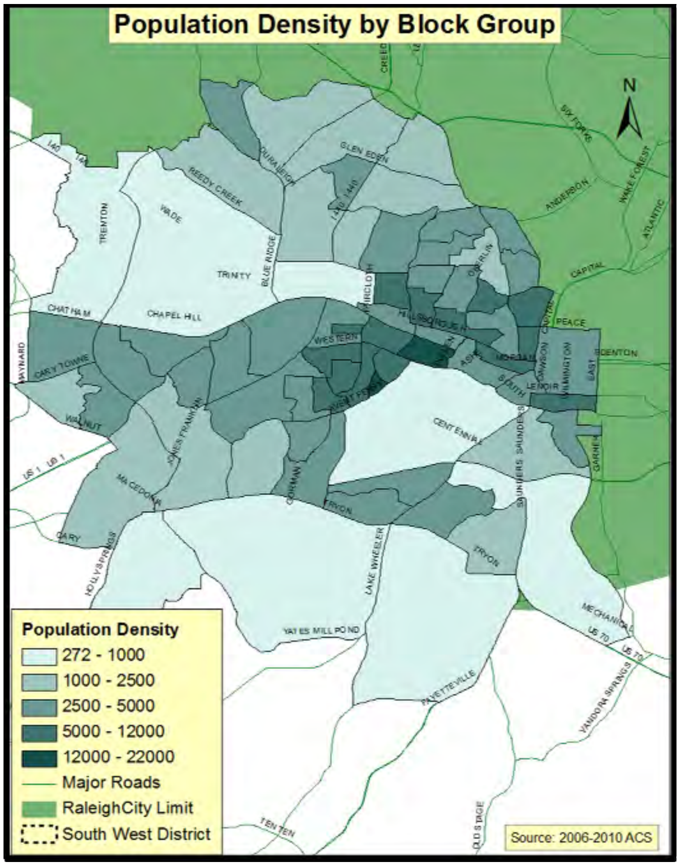


Figure 3: Population Density by Block Group

Using 2006-2010 ACS block group data, we are able to make a better estimate of the population within the South West District. According to this data, there are an estimated 109,664 people living in the 70 block groups that encompass the District. This represents roughly 25 percent of the City's total population, which is estimated at just over 400,000 according to the 2010 Census.

Figure 4 shows the population density within the South West District by block group. The southern and northwestern block groups have relatively low density, with the majority of the central and northern block groups ranging from 1,000 to 12,000 people per square mile. Block groups surrounding the North Carolina State University have higher population densities, as well as block groups next to Downtown.

2. Diverse Population

A key characteristic of successful creative districts is a diverse population. Creative districts thrive in diversity, partly because diversity leads to new ideas, but also because creative people are attracted to places that embrace tolerance. Many thought leaders maintain that cities and companies must increase efforts to connect minorities to the New Economy in order to contribute and reap its benefits (Florida, 2002; Shapiro, 2006).

The South West District's racial composition has been shifting slightly over the years, though this change has not been as extreme as in other urban areas throughout North Carolina or the United States. Figure 5 displays the historical change in racial composition.

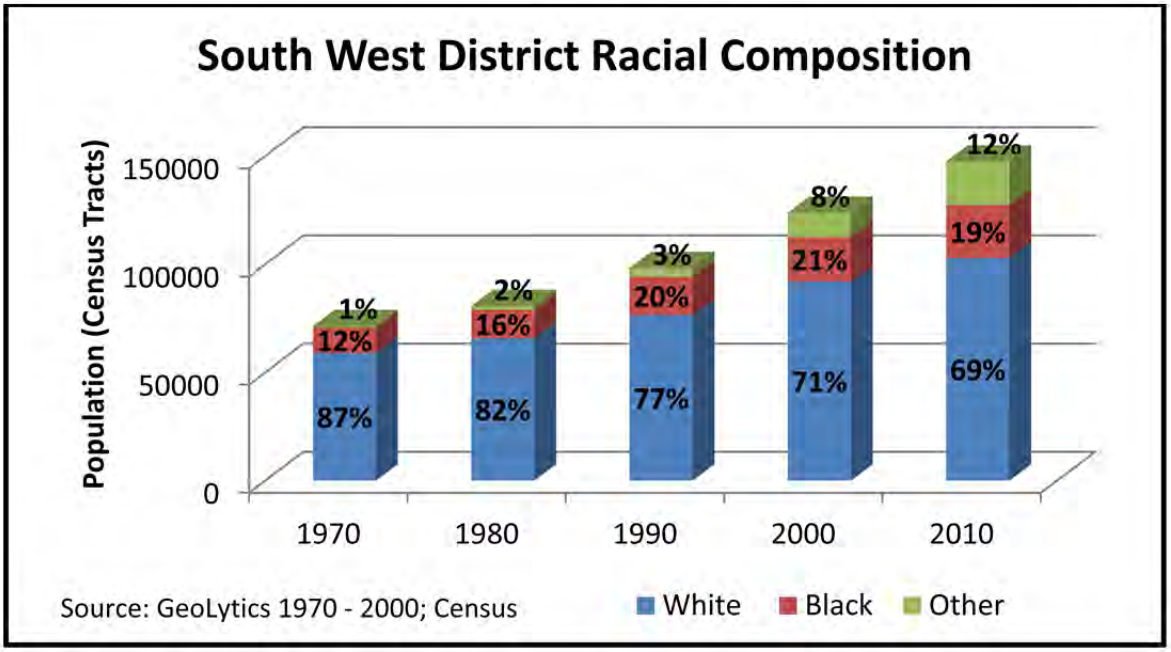


Figure 4: South West District Racial Composition

Over the years, the population has increased similarly to the rest of Raleigh. However, due to an increase in other racial and ethnic groups, both black and white populations have decreased in percentage terms. Between 2000 and 2010, the white population declined by 2 percent of the overall population within the District. The black population also increased, but as a proportion of the overall population the black population declined from 21 percent to 19 percent. The greatest shift within the district came from an increase in persons, predominantly Hispanic, who do not identify themselves with either group, and who now represent an estimated 12 percent of the population within the District. This is slightly higher than the City's overall percentage of Hispanic people at roughly 10 percent.

3. Age

Median ages for the South West census tracts in the District do not appear to have changed significantly between 2000 and 2010, although a direct comparison between most census tracts is

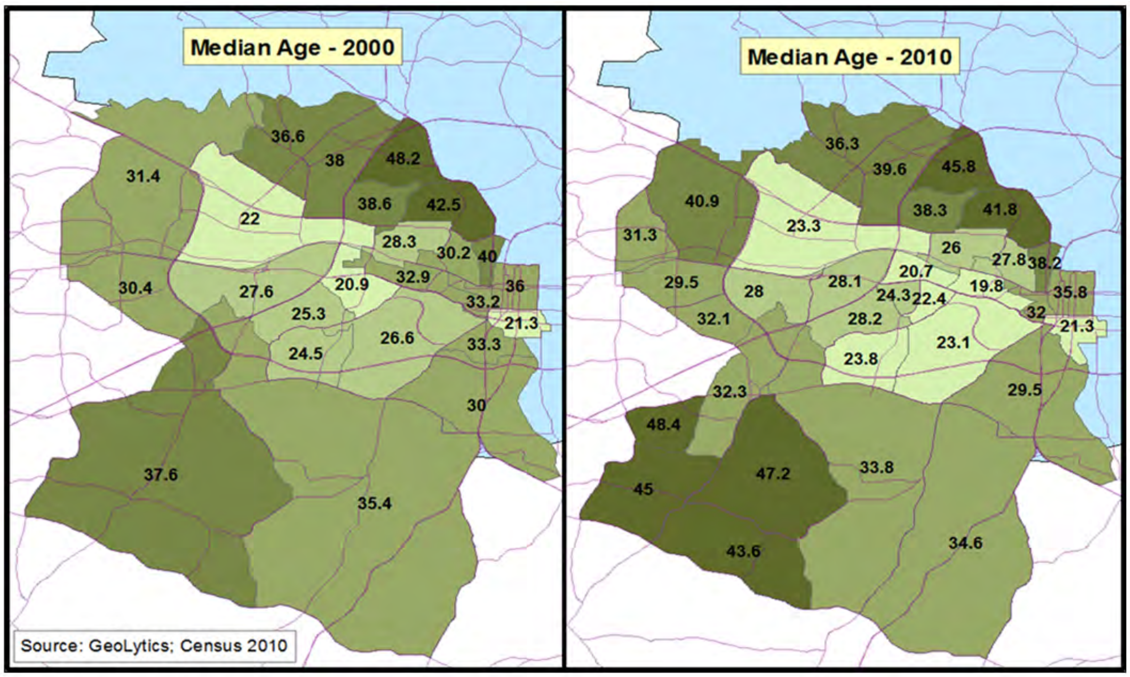


Figure 6: Median Age Trends

not possible due to changes in the 2010 census geography. Generally, the population in the northern census tracts is older, ranging between mid-30s and mid-40s. Also, census tracts to the southeast have higher median ages, though these tracts mostly fall outside of the city limits. As one might expect, the census tracts with lower median ages surround the university and include the Hillsborough-Western Boulevard Corridor. This can be seen in Figure 6.

4. Diverse Income Levels

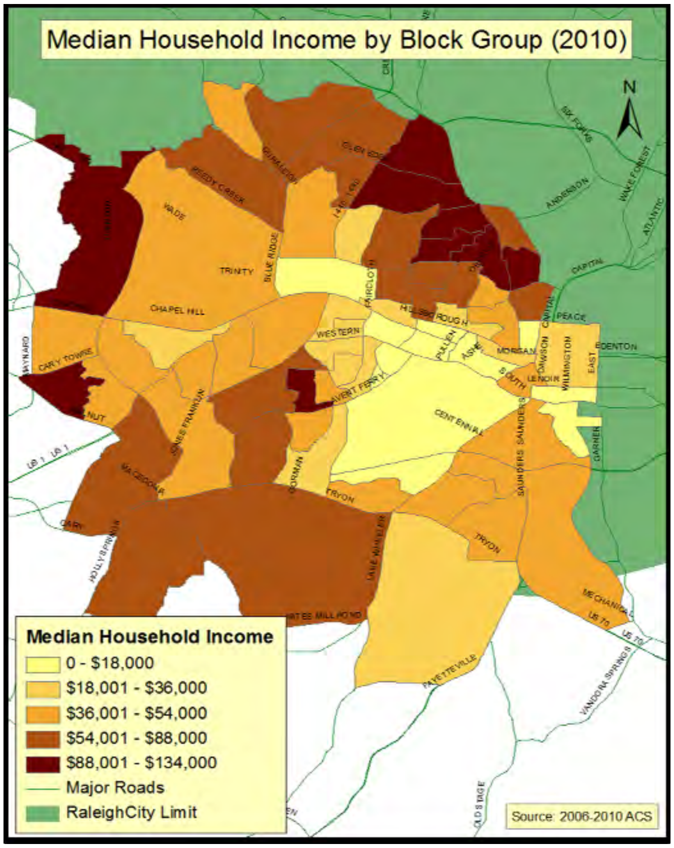


Figure 7: Median Household Income by Census Block Group

Median household income for the City of Raleigh in 2010 was $52,219. As shown in Figure 7, median household income varies significantly within the District, ranging from $11,094 to over $133,000. In total, 26 census block groups within the district have median incomes higher than the City's median household income. The census block groups with lower median household incomes are surrounding the university (i.e. students) and adjacent to Downtown. Higher income levels are in the northern and southwestern block groups.

5. Diverse Housing Stock

In order to support a diverse population, creative districts need to have a broad range of housing options. The South West District meets this qualification. Median home values vary significantly through the district, as shown in Figure 8. Lower housing values are found in the southeastern block groups, as well as around the university. However, it should be noted that data was missing for a number of the block groups.

Figure 9 shows the median housing age throughout the district, with older homes in the eastern block groups, closer to Downtown, and newer housing units to the west and south. Comparing this map to Figure 8, it is apparent that much of the older housing stock is more expensive, while the newer stock in most areas appears to be cheaper. There are some exceptions to this general notion, including housing in the southwestern block groups, which is newer (i.e. 0-28 years), yet in the higher range of $250,000 - $399,999. Due to the tremendous growth Raleigh has witnessed during the past decade, estimated at 46% between 2000 and 2010, much of the City's housing stock is fairly new. The City's median home age in 2010 was 22 years.

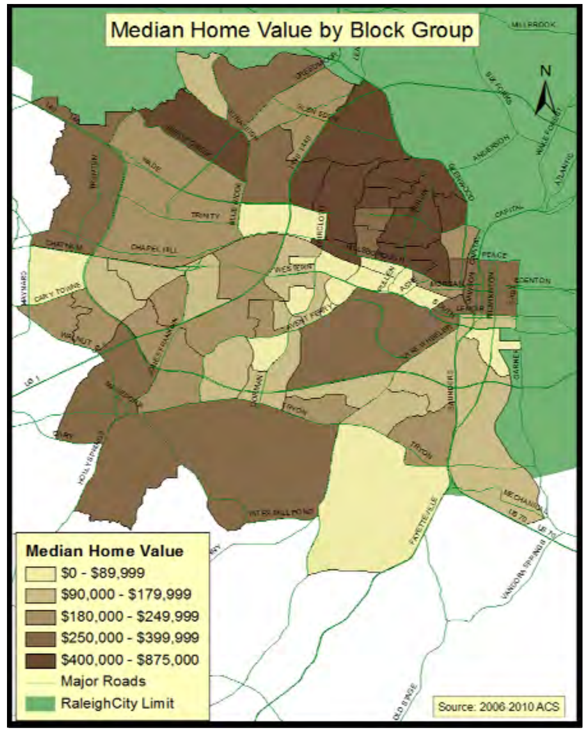


Figure 8: Median Home Value by Block Group

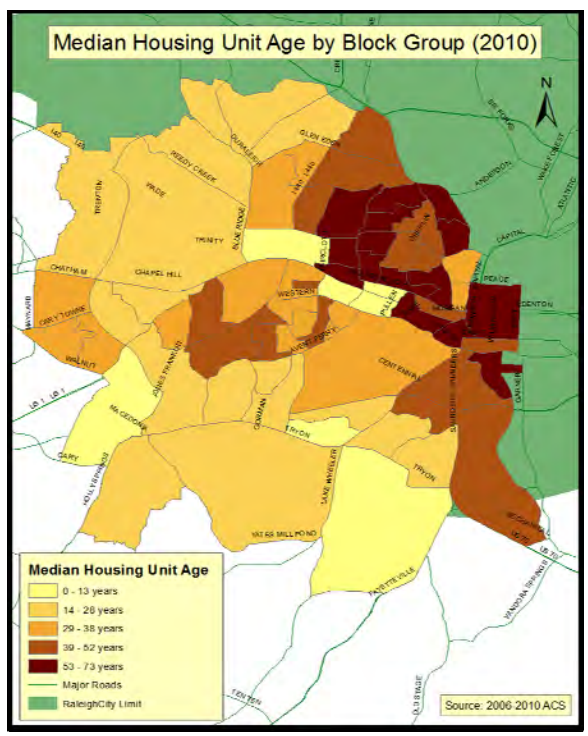


Figure 9: Median Housing Age

6. **Diverse Occupations**

A conventional measure of human capital is educational attainment – frequently reported as the share of the population with a bachelor's degree and above. This metric is used to approximate the level of labor productivity, increasing with years of education. Based on the 2006-2010 ACS survey, as displayed in Table 1, the South West District distinguishes itself somewhat from the rest of Raleigh based on education attainment. It has a higher percentage of the population with Master's and Doctorate degrees.

Educational Attainment (People over 25 years)		
Level of Education	**Raleigh**	**South West District**
Less than High School Degree	10%	11%
High School Degree	17%	16%
Some College	27%	22%
Baccalaureate Degree	31%	30%
Master's Degree	11%	14%
Professional Degree	3%	3%
Doctorate	2%	4%

Source: ACS 2006-2010

Table 1: Educational Attainment

As suggested by Richard Florida, occupations provide a theoretically more robust measure of human capital capable of capturing how human potential and talent, created by education, is absorbed or used by the economy. Table 2 shows the major occupation groups for the South West District compared to Raleigh as a whole. Using this measure, the District does not differ significantly from the overall city. It has a slightly smaller proportion of workers in management, business, and finance. All other proportions are essentially identical to the City at large. Because the District's population is roughly 25 percent of the population the City, significant findings at this high level of analysis would be unlikely. A

Occupation of Employed (People over 16 years)		
Occupation	**Raleigh**	**South West District**
Management, business, finance	17%	13%
Professional	28%	29%
Healthcare support	2%	1%
Food preparation	5%	6%
Personal care	3%	3%
Sales	13%	11%
Office and administrative support	13%	10%
Construction, maintenance	7%	6%
Production	3%	3%
Transportation	4%	3%

Source: ACS 2006 - 2010

Table 2: Occupation of Employed

more localized assessment is needed to determine concentrations of specific occupations throughout the district.

Figure 10 shows the percent of the population within the District by block group that work in professional and management occupations. This map provides a more detailed picture of the South West District, showing where higher concentrations of skilled labor live.

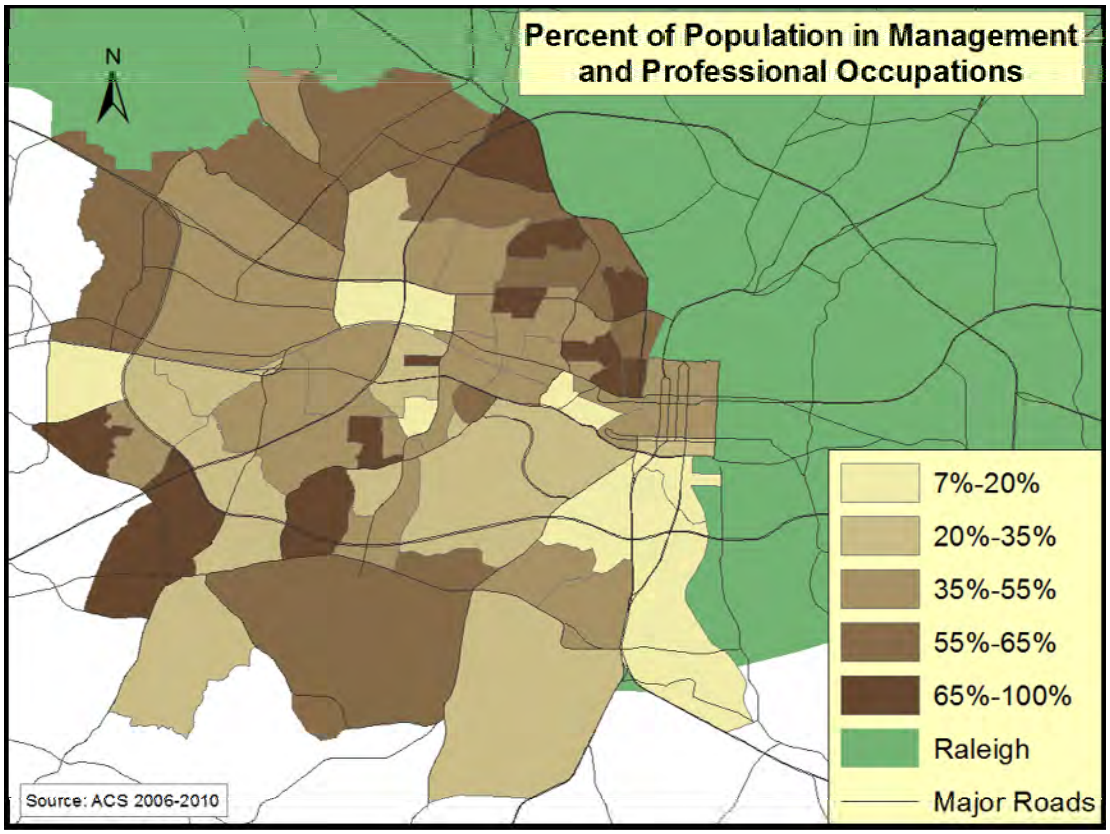


Figure 10: Percent of Population in Management and Professional Occupations

The map shows significant heterogeneity throughout the district related to occupation. However, a total of 32 of the 70 block groups represented in the District have 50 percent or more of their populations working in Management or Professional occupations. A large number of the block groups with higher density populations (See Figure 4) and large percentages of people working in management and professional occupations are located in the northeast.

IV. INDUSTRY COMPOSITION

This study uses a number of methods to measure industry specialization and the growth and decline of key sectors within the South West District. Due to the limitations of any one analytical tool and the availability of reliable business data, our study has employed two different techniques and data sources to capture historical trends and present industry composition for the South West District. Thus, we are able to compare results from each analysis and paint a more accurate picture of the local economy.

1. Industry Trends in South West District

To understand the historical trends of the economy of the South West district, a shift-share analysis was conducted. Shift-share analysis is primarily used to assess employment changes within an economy over a specific period of time, and it paints a picture of how well an area's industries are performing. In this analysis, employment change within industries is measured over a period of time to calculate the local change or shift in employment in each of these industries. The analysis then identifies what proportion of the change in employment is due to the national share, the industry mix, and the local competitive component.

The national share represents the percentage of local employment that can be attributed to fluctuations in the national economy over the given period of time. The industry mix share represents the percentage of employment that can be explained by national growth or decline within the specific industries. The local share, or competitive component, represents the share of job growth that is attributed to some local comparative advantage such as linked or clustered industries, university influences, local consumption patterns, or favorable local labor markets.

For this analysis, data from the National Establishment Time Series (NETS) database was used to get business data for the City of Raleigh in 1998 and 2009. NETS is a 16-year national longitudinal source of data developed from Dun and Bradstreet (D&B) archival sources by Walls and Associates covering virtually all business establishments in the country. Unfortunately, data was only available up to 2009, so another data source was used in the next section to provide the current industry mix of Raleigh and the South West District.

Table 3 displays industries in the South West District that had a local share resulting in at least 250 new jobs between 1998 and 2009.

Shift Share Employment Analysis 1998-2009				
Industry Title	Local Shift	National Share	Industry Mix Share	Local Share
NAICS 541 Professional and Technical Services	6,082	144	1,635	4,302
NAICS 221 Utilities	3,148	40	(203)	3,312
NAICS 236 Construction of buildings	2,859	25	(118)	2,952
NAICS 312 Beverage and tobacco product manufacturing	2,452	18	(126)	2,560
NAICS 488 Support activities for transportation	1,600	54	218	1,328
NAICS 238 Specialty trade contractors	1,316	30	(22)	1,308
NAICS 523 Securities, commodity contracts, investments	968	9	72	887
NAICS 624 Social assistance	1,379	20	530	828
NAICS 524 Insurance carriers and related activities	857	34	15	808
NAICS 531 Real estate	934	25	128	781
NAICS 334 Computer and electronic product manufacturing	319	16	(339)	642
NAICS 522 Credit intermediation and related activities	558	45	9	504
NAICS 813 Membership associations and organizations	704	34	222	448
NAICS 443 Electronics and appliance stores	337	4	(18)	351
NAICS 532 Rental and leasing services	279	5	(45)	319
NAICS 711 Performing arts and spectator sports	683	62	344	277
NAICS 511 Publishing industries, except Internet	118	15	(166)	269
NAICS 517 Telecommunications	234	5	(38)	267
NAICS 237 Heavy and civil engineering construction	263	14	(12)	261
NAICS 423 Merchant wholesalers, durable goods	142	35	(146)	254
NAICS 518 Data processing, hosting and related services	(138)	19	(407)	250
Source: NETS Database; Author's Analysis				

Table 3: Shift Share Employment Analysis

a. Industries with the Greatest Likelihood for Potential Job Opportunities

From an industrial perspective, certain industries within the South West District exhibited high employment potential between 1998 and 2009. That is, from our analysis, these industries displayed both a positive industry mix and a positive local competitive component during this time period. These industries were both growing on a national scale, and they had a competitive advantage in the South West District. From an economic development standpoint, these industries have the greatest potential for ongoing growth.

Industries that show the greatest potential for job opportunities include the following:

- Professional and technical services
- Support activities for transportation
- Securities, commodity contracts, investments
- Social assistance
- Insurance carriers and related activities
- Real estate
- Credit intermediation and related activities
- Membership associations and organizations
- Performing arts and spectator sports

b. Potential Comparative Advantage

The second group of industries consists of those that had positive local growth, as seen through the local share, despite a national decline, as seen through the industry mix share. This is an indication that the South West District may have some comparative advantage in these industries, despite sub-par national performance.

Industries that showed a local comparative advantage include:

- Utilities
- Construction of buildings
- Beverage and tobacco product manufacturing
- Specialty trade contractors; Computer and electronic product manufacturing
- Electronic and appliance stores
- Rental and leasing services
- Publishing industries, except internet
- Heavy and civil engineering construction

2. Current Industry Mix of the South West District

While the shift-share analysis is used to identify historical trends for the South West District's economy and high-potential growth industries, it is also important to measure current employment levels in various sectors to provide a snapshot of the District's present industry mix and economic base. One common analytical tool to do this is the "location quotient" technique, which is used to calculate the ratio between the local economy and the national economy. By comparing the percentage of employment in each sector in the local economy to the national economy, we can identify the South West District's industry base and specializations. Industries with location quotients above 1.0 indicate a relatively high production of a particular good or service, and it is assumed some amount of this is being exported from the area (i.e. sold to people outside of the District). These industries are important to the local economy for job creation, but they are also critical to pulling in dollars from outside of the District and creating a "multiplier" effect as this money flows through the local economy. Industries with location quotients above 1.0 are considered to form the economic base of the South West District and support the City's economy as a whole. Conversely, industries with a location quotient less than 1.0 are assumed to be insufficient for "export" and therefore only serving the local population. These industries may represent growth opportunities for the area if goods and services from these industries are being imported from other areas (i.e. purchased outside of the District).

For this analysis, ReferenceUSA's 2011 Business Database was used to provide a more complete picture of the District's current industry composition. This data provides employment and sales estimates, as well as the geographic locations of businesses (See Figure 12). An important aspect of understanding the economy of the South West District is measuring how it fits within the City of Raleigh's overall economy. For this reason, we first provide an analysis of the City's current industry mix before looking more specifically at the South West District.

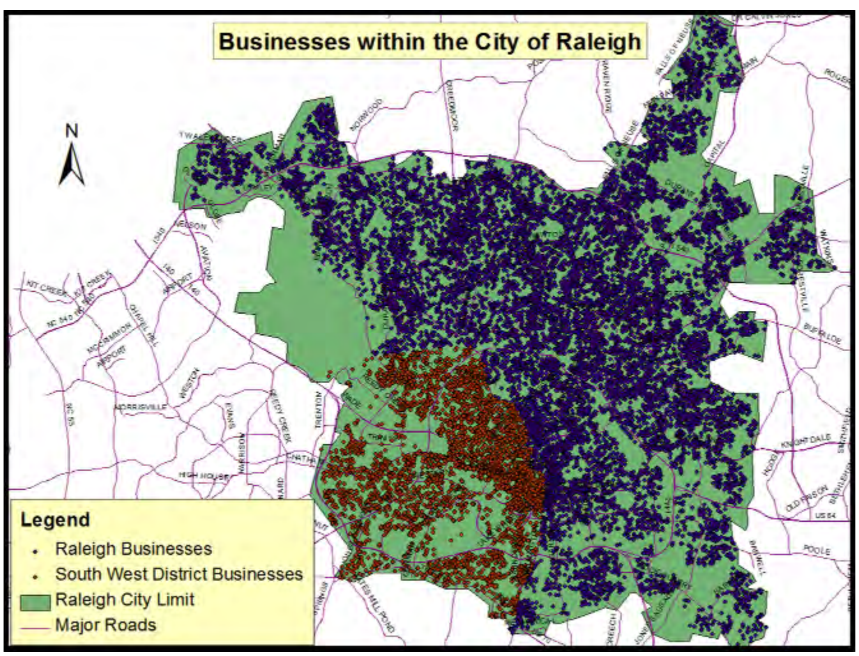


Figure 5: Businesses with the City of Raleigh

Figure 13 shows both the location quotient for all major industry sectors, as well as their employment share (in percentages) of Raleigh's economy. For the purpose of economic development planning, only results that deviate significantly from the national economy should be considered noteworthy. Industries were considered to have a low concentration if they had a location quotient below .80, and have a high concentration if they had a location quotient above 1.20.

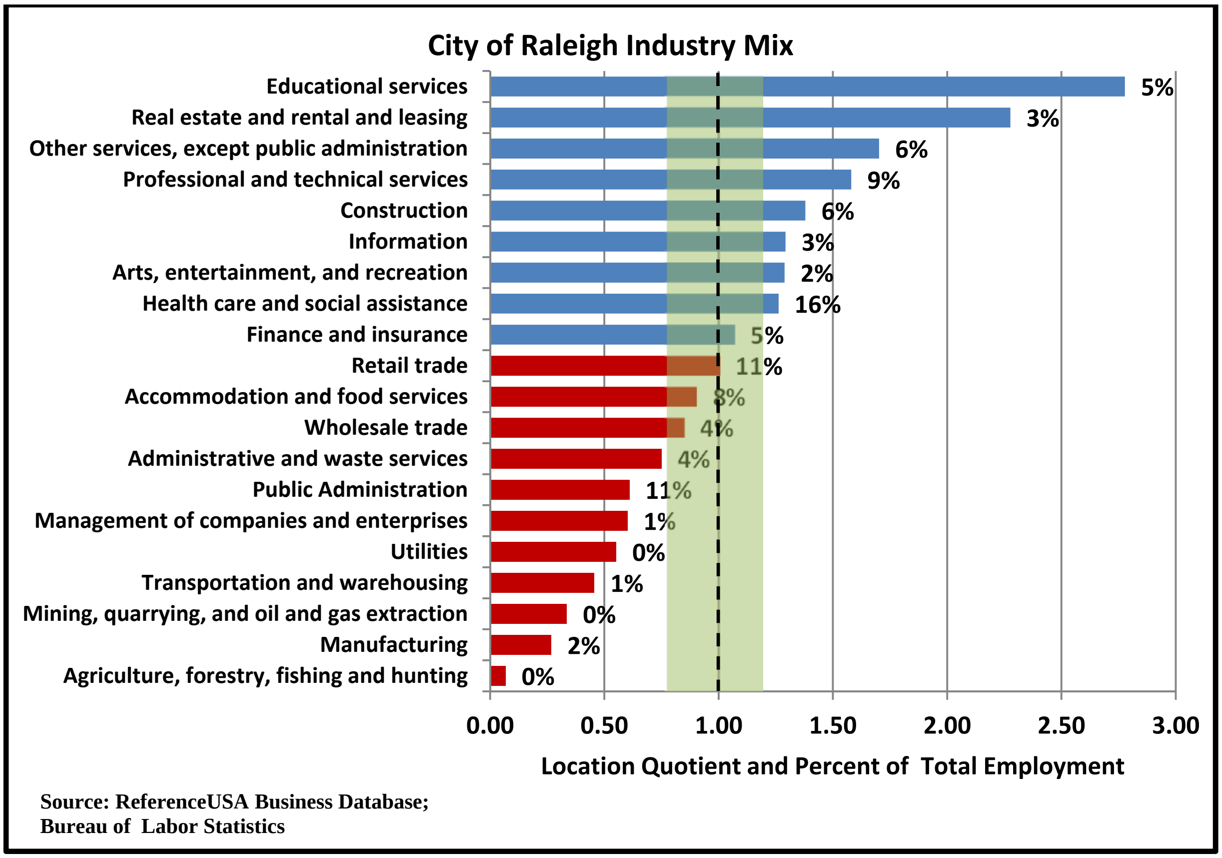


Figure 13: City of Raleigh Industry Mix

Highly concentrated industries in Raleigh that are assumed to be providing a portion of their goods and services to consumers outside the area are:

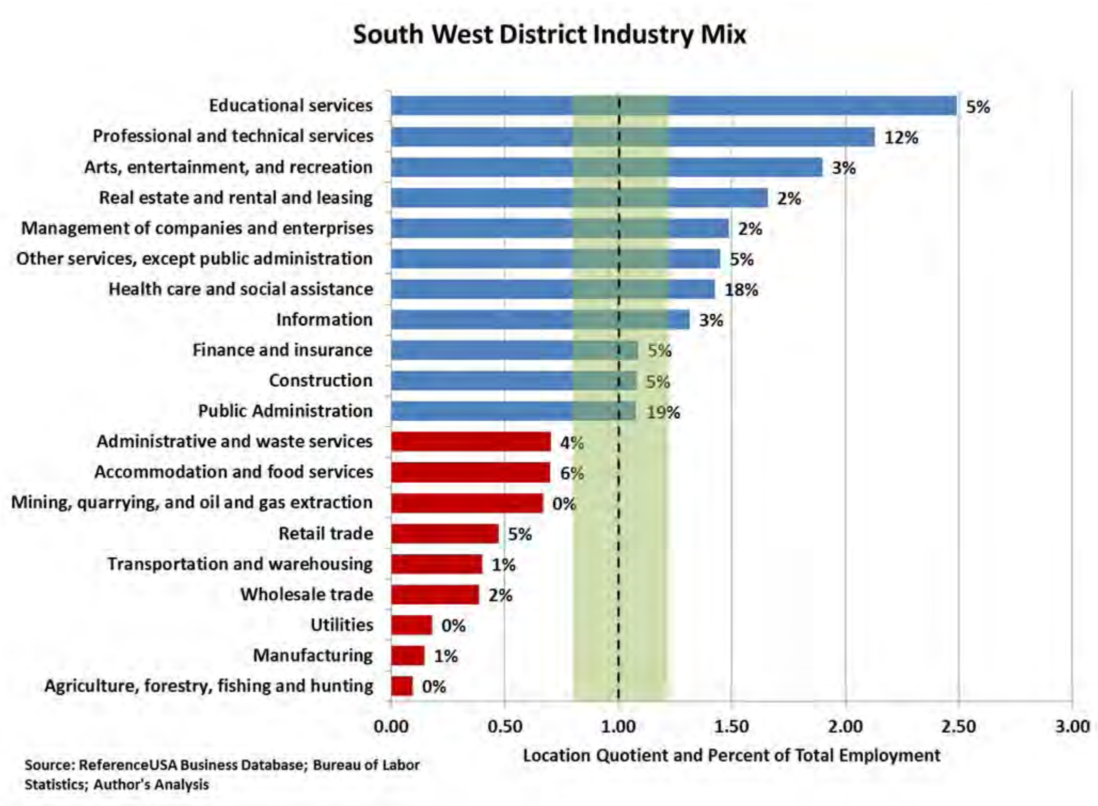
- Education services
- Real estate and rental and leasing
- Other service except public administration
- Professional and technical services
- Construction
- Information
- Arts, entertainment, and recreation
- Health care and social assistance.

It is worth noting that 50 percent of Raleigh's employment comes from the above mentioned highly concentrated base industries, and increases to 66 percent if we include all base industries (i.e. those that have a location quotient of at least 1.0). The Health Care and Social Assistance industry represents the largest share of Raleigh's employment, providing 16 percent of all jobs, followed by Retail Trade and Public Administration each providing 11 percent. The industry sectors that have low employment shares compared to the US and represent potential growth areas include:

- Management of companies and enterprises
- Transportation and warehousing
- Manufacturing[3].

Figure 14 shows the industry mix for South West District, which has a similar local economy to that of the City as a whole.

Figure 14: SW Raleigh Industry Mix



[3] The following industries were excluded as they typically have low growth potential as they are dependent on local natural resources, fixed population demand, and public expenditures: Administrative and waste services; Public administration; Utilities; Mining, quarrying, and oil and gas extraction; Agriculture, forestry, fishing, and hunting.

The South West district has a high concentration of the following industries:

- Educational services
- Professional and technical services
- Arts, entertainment, and recreation
- Real estate and rental and leasing
- Management of companies and enterprises
- Other services, except public administration
- Health care and social assistance
- Information

Similar to the city as a whole, 50 percent of the district's employment comes from these base industries, and this increases to 79 percent when including all base industries (i.e. those that have a location quotient of at least 1.0). Public administration provides the largest share of jobs, at 19 percent, followed by health and social services at 18 percent and professional and technical services at 12 percent. Health care and social assistance provides the second largest share of jobs due to the presence of the Rex Hospital and related health care businesses.

Industries that showed a low concentration and that may offer opportunities for growth include[4]:

- Accommodation and food services
- Retail trade
- Transportation and warehousing
- Wholesale trade
- Manufacturing

3. The South West District's Contribution to the City of Raleigh's Economy

In addition to understanding the District's industrial trends and current industrial composition, it is important to recognize the South West District's share of employment and sales compared to the rest of the city. For this analysis, ReferenceUSA's business database was used to measure what the proportion of Raleigh's employment and sales that come from the South West District. The tables below present the South West Districts share of the city's total employment and sales. According to ReferenceUSA, there are an estimated 349,000 jobs within

[4] The following industries were excluded as they typically have low growth potential as they are dependent on local natural resources, fixed population demand, and public expenditures: Administrative and waste services; Mining, quarrying, and oil and gas extraction; Utilities; Agriculture, forestry, fishing, and hunting.

the City of Raleigh, and there was $54.28 billion in sales in 2011. Last year, there were a total of 11,981 business establishments in South West Raleigh that provided employment to 122,873 people and had annual revenues totaling $15.05 billion.

Table 5 shows that, when including the Downtown in the analysis, an estimated 35 percent of the City's jobs and 28 percent of the City's sales comes from the South West District.

South West District Employment and Sales Contribution to the City (including Downtown)

Row Labels	Employment & Percent of Total		Sales & Percent of Total	
Southwest District	122,873	35%	$15,054,887,000	28%
Other Raleigh	227,030	65%	$39,229,779,000	72%
Grand Total	**349,903**	**100%**	**$54,284,666,000**	**100%**

Source: ReferenceUSA 2011

Table 4: Employment and Sales Contribution to the City (including Downtown)

When the Downtown area is excluded from the South West District, as shown in Table 6, employment and sales from the area decrease to roughly 26 percent and 24 percent respectively. This falls in line with our estimates that the District represents roughly one-fourth of the City's population and geographic area.

South West District Employment and Sales Contribution to the City (excluding Downtown)

Row Labels	Employment & Percent of Total		Sales & Percent of Total	
Southwest District	90,048	26%	$13,270,901,000	24%
Other Raleigh	259,855	74%	$41,013,765,000	76%
Grand Total	**349,903**	**100%**	**$54,284,666,000**	**100%**

Source: ReferenceUSA 2011

Table 5: Employment and Sales Contribution to the City (excluding Downtown)

A more detailed look at the types of industries within the South West District (excluding Downtown) is provided in Table 7. According to this analysis, the South West District provides a disproportionately high number of jobs and sales relative to the rest of Raleigh. Industries that provided more than 30 percent of the City's employment and/or sales and with a total employment base above 1,000 people were highlighted to signify the sectors highly concentrated within the South West District. This can be seen in Table 7.

South West Portion of Employment and Sales in Raleigh by NAICS (excluding Downtown)

NAICS	Description	Employment	Percent	Sales	Percent
11	Agriculture, forestry, fishing and hunting	45	20%	$12,454,000	37%
21	Mining, quarrying, and oil and gas extraction	508	70%	$32,039,000	27%
22	Utilities	61	6%	$55,405,000	5%
23	Construction	5,304	26%	$1,309,717,000	27%
31-33	Manufacturing	1,606	19%	$558,124,000	21%
42	Wholesale trade	2,023	16%	$1,255,935,000	14%
44-45	Retail trade	5,923	15%	$1,395,697,000	13%
48-49	**Transportation and warehousing**	**1,605**	**26%**	**$226,592,000**	**32%**
51	Information	2,489	26%	$565,434,000	21%
52	**Finance and insurance**	**4,958**	**32%**	**$1,005,573,000**	**29%**
53	Real estate and rental and leasing	2,824	17%	$422,629,000	16%
54	**Professional and technical services**	**10,851**	**36%**	**$1,655,901,000**	**38%**
55	**Management of companies and enterprises**	**569**	**32%**	**$559,839,000**	**75%**
56	Administrative and waste services	4,308	29%	$240,702,000	24%
61	**Educational services**	**5,927**	**31%**	**$89,640,000**	**40%**
62	**Health care and social assistance**	**21,366**	**38%**	**$2,893,009,000**	**42%**
71	**Arts, entertainment, and recreation**	**4,471**	**48%**	**$512,666,000**	**60%**
72	Accommodation and food services	4,699	18%	$234,275,000	19%
81	Other services, except public administration	3,916	11%	$243,094,000	29%
92	Public Administration	4,877	25%	$0	0%
99	Unclassified	1,718	21%	$2,176,000	11%
	Total	**90,048**	**26%**	**$13,270,901,000**	**24%**

Source: InfoGroup 2011

Table 7: South West Portion of Employment and Sales

Industries that are highly concentrated in the South West District include:

<u>**Transportation and warehousing**</u>: This sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. The District has an estimated 146 businesses in this sector, including USF Holland, Air Courier International, ABC Express Courier, and Amtrak.

Finance and insurance: This sector comprises of establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. The District has an estimated 585 businesses in this sector, including CIGNA, BB&T, Gateway Bank Mortgage Inc, and State Farm Insurance.

Professional, Scientific and technical services: This sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. There are an estimated 2,464 firms in this sector including Smith Anderson Blount Dorsett, CIBER Inc., Ernst & Young , Hazen & Sawyer, and Arcadis Us Inc.

Management of companies and enterprises: This sector comprises (1) establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) establishments (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise. There are an estimated 15 firms in this sector in the District, including Capital Bank Corp, Progress Energy Inc., Morganite Industries, Tidewater Holdings LLC, and Wesco Holdings LLC.

Education services: This sector comprises of establishments that provide instruction and training in a wide variety of subjects and includes schools, colleges, universities, and training centers. There are an estimated 283 establishments in this sector in the District, including the North Carolina State University (which includes many of these establishments), Meredith College, University Of Phoenix-Raleigh, and the Raleigh School of Ballet.

Health care and social assistance: This sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities. There are an estimated 1,839 establishments in this sector in the District, including Rex Hospital and Laboratory, Dorothea Dix Hospital, Raleigh Orthopedic Clinic, Blue Ridge Healthcare Center, Wake Gastroenterology, and Eldercare Convalescent Services.

Arts, entertainment, and recreation: This sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. This sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests. There are an estimated 128 establishments in this category, including the RBC Center, the Progress Energy Performing Arts Centers, North Carolina Museum of Art, and the Jellybeans Skating Center.

4. Key Business Corridors within South West Raleigh

There are a number of key business corridors that should be identified through this analysis based on their overall impact on employment and sales activity. These corridors also reflect concentrations of knowledge industries within the District. Figure 15 shows the three most important corridors; Downtown, the Hillsborough-Western Boulevard Corridor, and the Blue Ridge Corridor.

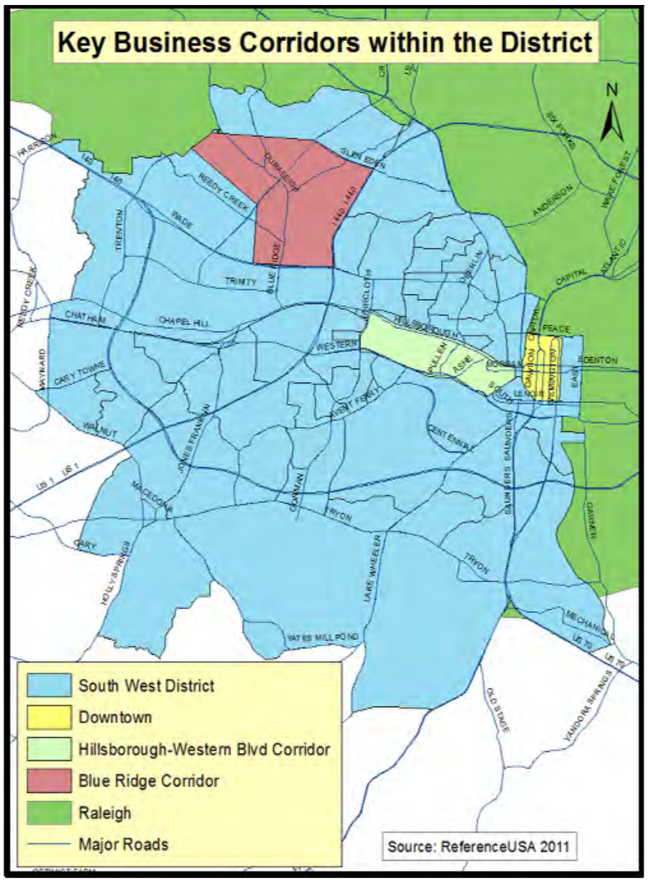


Figure 15: Key Business Corridors within the District

The Downtown provides a significant amount of employment within the District, estimated at 27 percent or 32,825 jobs[5]. The Downtown also provides an estimated 12 percent of the Districts overall sales revenues.

The Hillsborough-Western Blvd. Corridor provides a much smaller share of the District's employment and sales, estimated at 5 percent and 3 percent respectively.

The Blue Ridge Corridor contains a high concentration of health care related establishments, including Rex Hospital. This corridor provides an estimated 19 percent of the jobs and 22 percent of sales for the District.

[5] ReferenceUSA data counts all employees hired out of an establishment, even if they work elsewhere.

Table 8 provides a breakdown of each corridor's share in employment and sales within the District. Combined, these three corridors provide roughly 50 percent of the jobs in the district and 36% of its sales revenues. Appendices 3, 4, and 5 provide a detailed breakdown of the businesses in each corridor.

Southwest District by Corridors

Area	Number of Establishments	Number of Employees & Percent of Total		Sales & Percent of Total	
Downtown	2,201	32,825	27%	$1,783,986,000	12%
Hillsborough Corridor	494	6,400	5%	$419,203,000	3%
Blue Ridge Corridor	2,022	23,065	19%	$3,276,414,000	22%
Other areas	7,264	60,583	49%	$9,575,284,000	64%
Grand Total	**11,981**	**122,873**	**100%**	**$15,054,887,000**	**100%**

Source: ReferenceUSA 2011

Table 8: Southwest District by Corridors

V. MARKET ANALYSIS

Creative districts are made up of people, and one important characteristic of successful creative districts is the presence of higher-educational facilities. These provide an initial advantage in human capital, and become cumulative and self-reinforcing over time (Berry and Glaeser, 2005). Secondly, amenities play a key role in attracting and retaining highly skilled households (Glaeser, 1998; Glaeser et al, 2001; Shapiro, 2006; Clark, 2003). Lastly, tolerance and openness to diversity are important as talented people tend to avoid places that are close-minded (Florida, 2002).

As in any market analysis, it is important to define the customer. So what types of people does the District want to attract? Different segments of the creative class search for different types of environments. For this market analysis, we focus on three general groups that define many creative districts; creative professionals, artists, and students. Creative professionals such as scientists, engineers, software and graphic designers, are attracted to urban environments that are highly accessible, in proximity of high-quality universities and educational facilities, provide a variety of leisure and cultural activities, and offer higher quality housing. Artists, including performance artists and media professionals, are attracted to places with affordable housing, an existing creative milieu, urban diversity, and entertainment. Students, who often make up the latent knowledge workforce, are attracted to places that have prestigious universities, affordable housing, low cost of living, and access to entertainment.

Therefore, for this analysis, we look at a number of key characteristics found within successful creative districts that attract our defined customers.

These characteristics include:

- Accessibility
- High-quality universities and educational facilities
- Lifestyle and leisure activities
- Diverse housing stock

1. Accessibility

Accessibility is important for successful creative districts, as networking and interaction between creative professionals and businesses is critical to knowledge growth and innovation. Creative companies often work on a regional or national scale, and artistic businesses need to be easily accessible to the surrounding populations. As shown in Figure 15, the South West District is surrounded and traversed by a number of major highways. These include I-40 on the western and southern border, US Route 401 to the east, and US Route 1 through the center of the district. A number of additional major roads run through the district including Western Boulevard, Hillsborough Street, and Wade Avenue. These highways and thoroughfares allow for easy access in and out of the District, as well as within its perimeter.

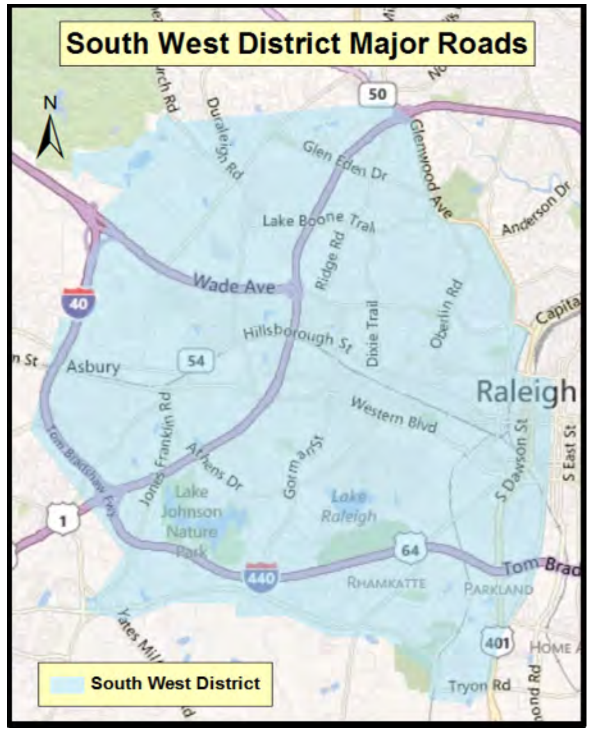


Figure 15: South West District Major Roads

Using ESRI's Business Analyst, we map estimated drive times from the center of the District, providing a visual assessment of the District's level of accessibility. Figure 16, presents this drive time map, showing that a person can cross the entire District within

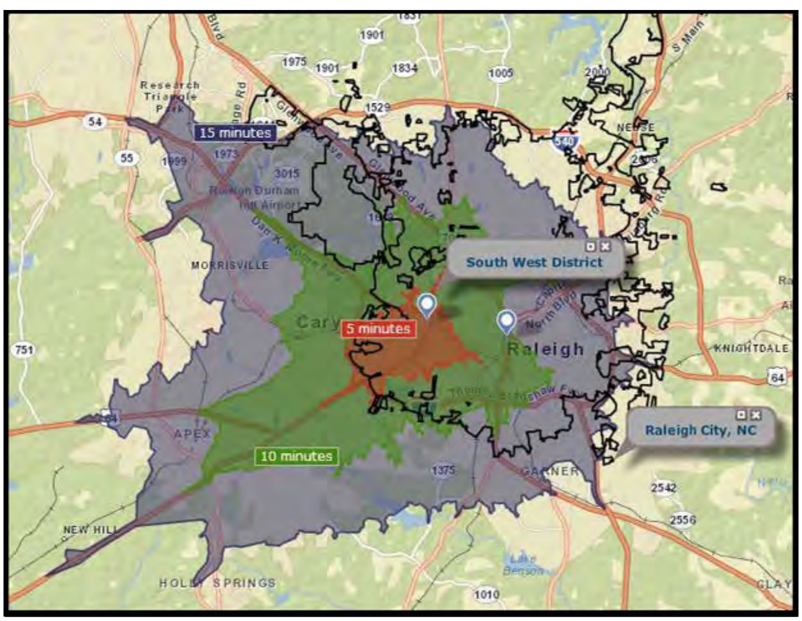


Figure 16: South West District Drive Time Map

ten minutes, and that within fifteen minutes, they can reach the northern and eastern edges of Raleigh. It should also be noted that the Raleigh International Airport is within fifteen minutes of the District.

2. High Quality Universities and Educational Facilities

A key component of successful creative districts is accessibility to educational institutions. Higher education facilities attracted talented people and produce a skilled labor force. These institutions also conduct research and develop new technologies that can be used by local knowledge industries. More generally, universities can create a clustering of creative artists and professionals that can increase innovation rates across industries. Figure 17 shows the location of the higher education facilities throughout Raleigh

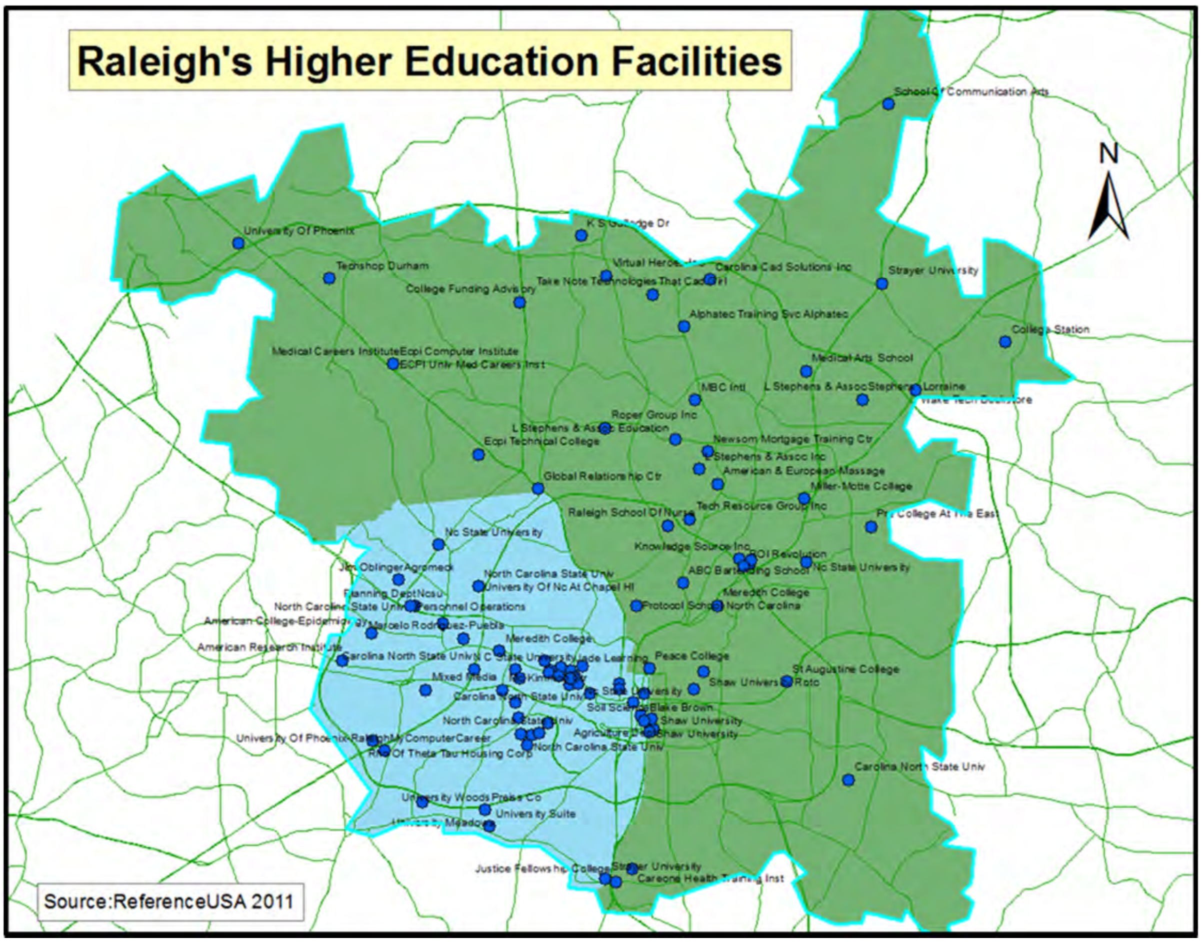


Figure 17: Raleigh's Higher Education Facilities

For this assessment, we included all colleges, universities, professional schools, and computer training institutes. Of the 184 that are registered in Raleigh, 133 are located in the South West District, representing roughly 72 percent. The high concentration is because many of these institutions are affiliated with the North Carolina State University. However, there are also other educational institutions within the District such as the University of Phoenix, Meredith College, and MyComputerCareer.com. In addition, there are a number of higher education institutions just outside the District, including Shaw University, Strayer University, ECPI Technical College and Medical Institute, and the Wake Technical Community College to the south on US Route 401.

3. Lifestyle and Leisure Activities

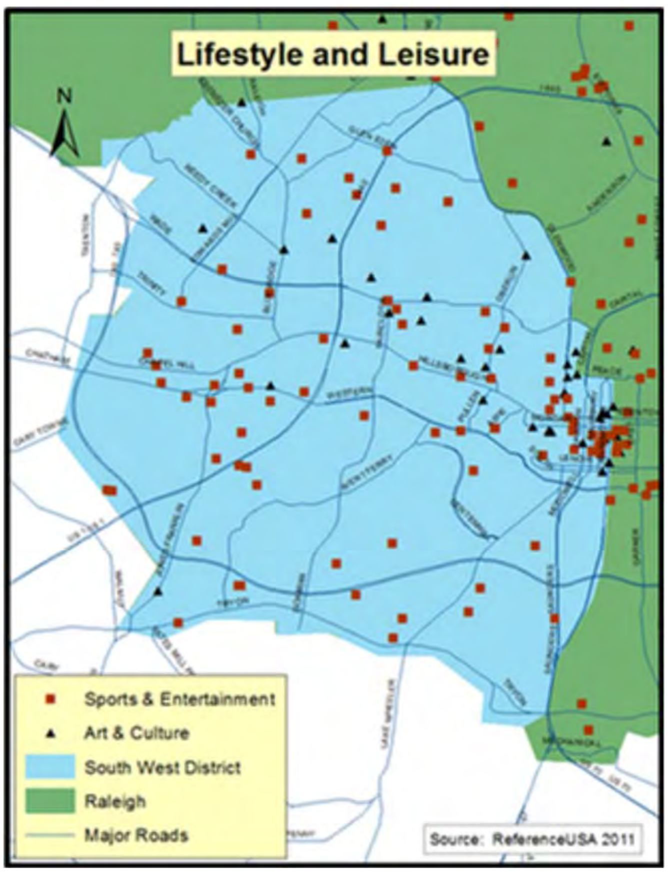


Figure 18: Lifestyle and Leisure

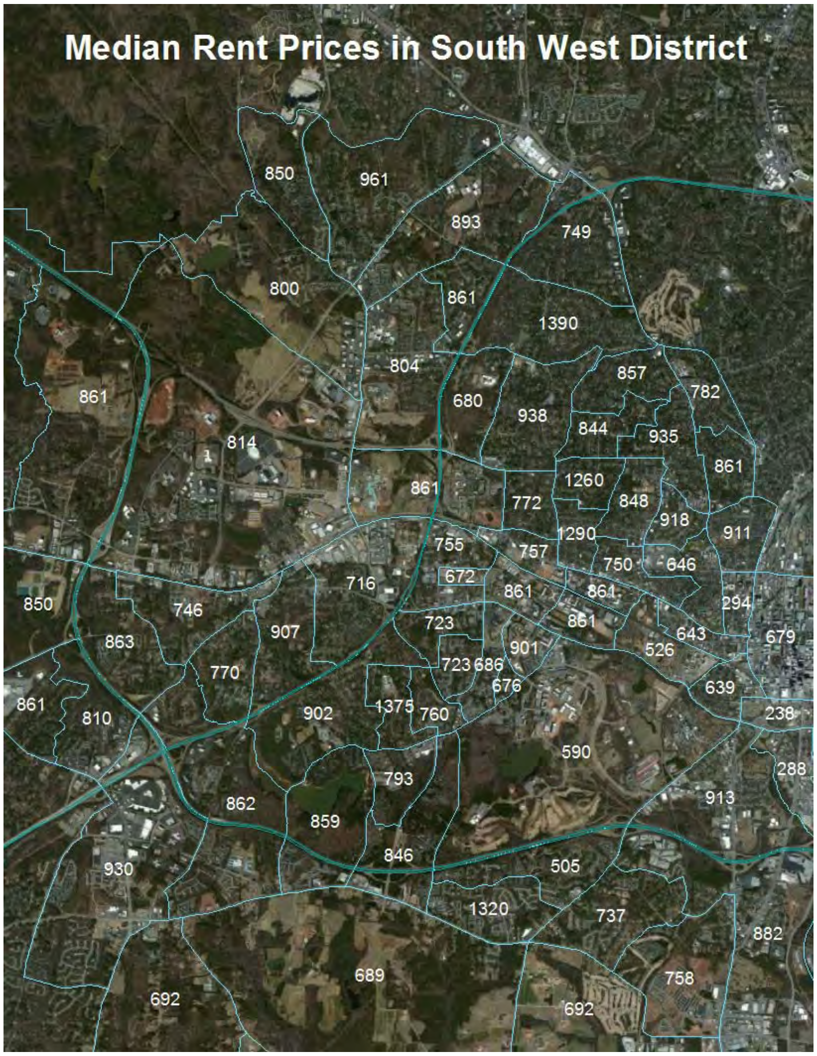
Another key component of successful creative districts are activities and amenities that enhance one's lifestyle and provide entertainment. For this analysis, we developed a number of categories to measure the presence of lifestyle and leisure activities within the District.

First, we identified all facilities providing activities related to sports and entertainment, including fitness, sports facilities, spectator sports, sports clubs, arcades, golf courses and other businesses providing lifestyle activities. In total, we identified 373 within the City, of which 90 (roughly 24 percent) were within the District. Second we identified facilities that provide activities related to creative arts and culture, such as museums, fine art schools, and theatre companies. A total of 128 were identified within Raleigh, with 44 (34 percent) located inside the District.

Housing Stock

Although this was briefly covered in section III, the importance of ensuring a diverse housing mix within creative districts should not be underestimated due to the wide variety of customer tastes involved. Therefore, we conducted a further analysis related to affordable rent prices throughout the area, which will be vital in ensuring affordable housing for students, new business owners, and artist professionals. Figure 19 is an aerial picture of the South West District, showing the delineations of the block groups with median rent.

Figure 19: Median Rent in South West Raleigh



Median rent throughout the district is quite varied, ranging from $238 to $1,390. Of the 70 census block groups, 36 are below the median for the City of $828, with the remaining 34 census blocks above the median. Lower rent is found around Downtown and near North Carolina State University. The majority of the northern block groups have higher rent. Southern block groups are quite mixed, having both areas of low rent and high rent. The District clearly provides a diverse housing stock, having both affordable and more costly housing options.

VI. GENERAL FINDINGS

This study looks at a wide variety of social, economic, and industrial indicators to provide a better understanding of the South West District, its strengths and uniqueness, as well as some of its challenges to develop as a successful creative district.

Major findings include:

1. The Challenges to the South West District

- The creative district is very large, over 30 square miles, which makes a general analysis of the area quite difficult. More localized assessments are needed to address priorities identified by localized community groups, residents, and business owners.

- Through the use of maps, it is clear that certain block groups are heavily burdened by numerous factors that may be stifling their economic growth. Block groups with concentrations of minority populations also tend to have the lowest income, fewest professional or management jobs, and the least expensive housing. Efforts will need to be made to ensure these areas are integrated into the district, both to enhance the District's development as well as to benefit from the District's growth.

- By assessing various socioeconomic characteristics along with the industrial analysis, some discrepancies have been noticed. While the industrial analysis shows the district has a high concentration of desirable industries, including professional services and health care, the ACS data shows that there is not a high concentration of people living in the district with these occupations. This suggests that a large number of these occupations are being filled by people commuting in to the District. Creative districts generally require a threshold level of creative people living and working within a given area thus an assessment should be made to identify who is moving in and out of the district, and an attempt to isolate key decision factors in these relocations should be undertaken.

2. The Strengths of the South West District

- Population growth and racial and ethnic shifts have not been as drastic throughout the District as they have been in other areas of Raleigh and other urban areas in North Carolina. This should be seen as a strength, as although diversity is necessary to successful creative districts, drastic changes in population can lead to social tensions between racial and ethnic groups, volatile housing prices, and economic uncertainty within urban environments. The South West Raleigh District has remained stable over the last decade.

- Median age has also remained fairly stable during the last decade. There exists a healthy mix of younger and older persons throughout the district, and this has not shifted significantly over time. Creative districts rely on both the young and the old.

- The historical industrial trends and the current business assessment show that the district has a comparative advantage and high concentrations of a number of key creative industries including:
  - Educational services
  - Professional and technical services
  - Arts, entertainment, and recreation
  - Management of companies and enterprises
  - Health care and social assistance
  - Information.

- The District, can generally be described as having many of the prerequisites of a successful creative district, including accessibility, universities and higher education facilities, lifestyle and leisure activities, and a diverse housing stock. However, concentration varies significantly throughout the District, and a more localized approach is needed to begin to identify and address constraints to further growth.

These strengths make a compelling argument for the existent of a highly creative milieu within the South West Raleigh District.

VII. REFERENCES

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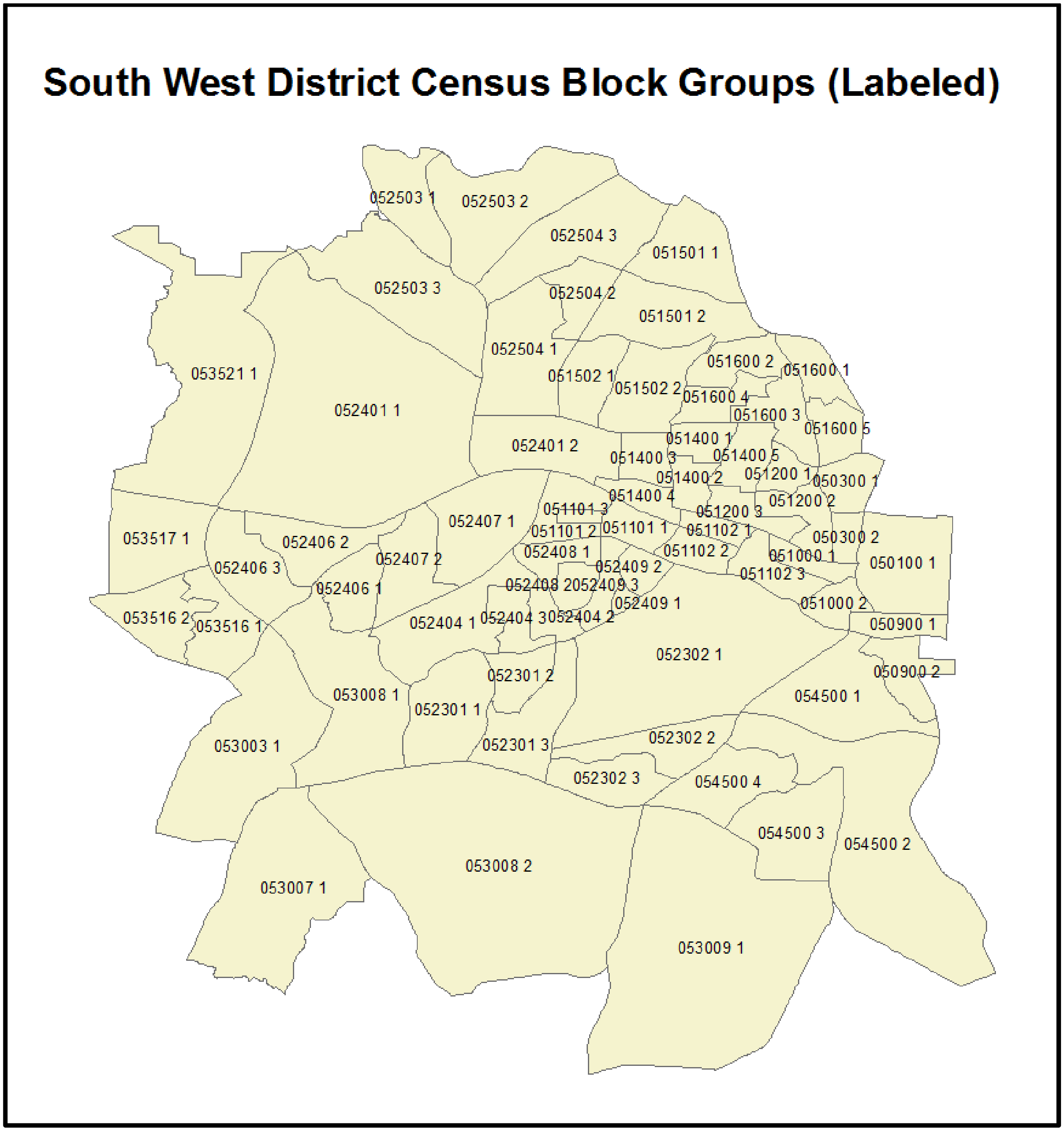
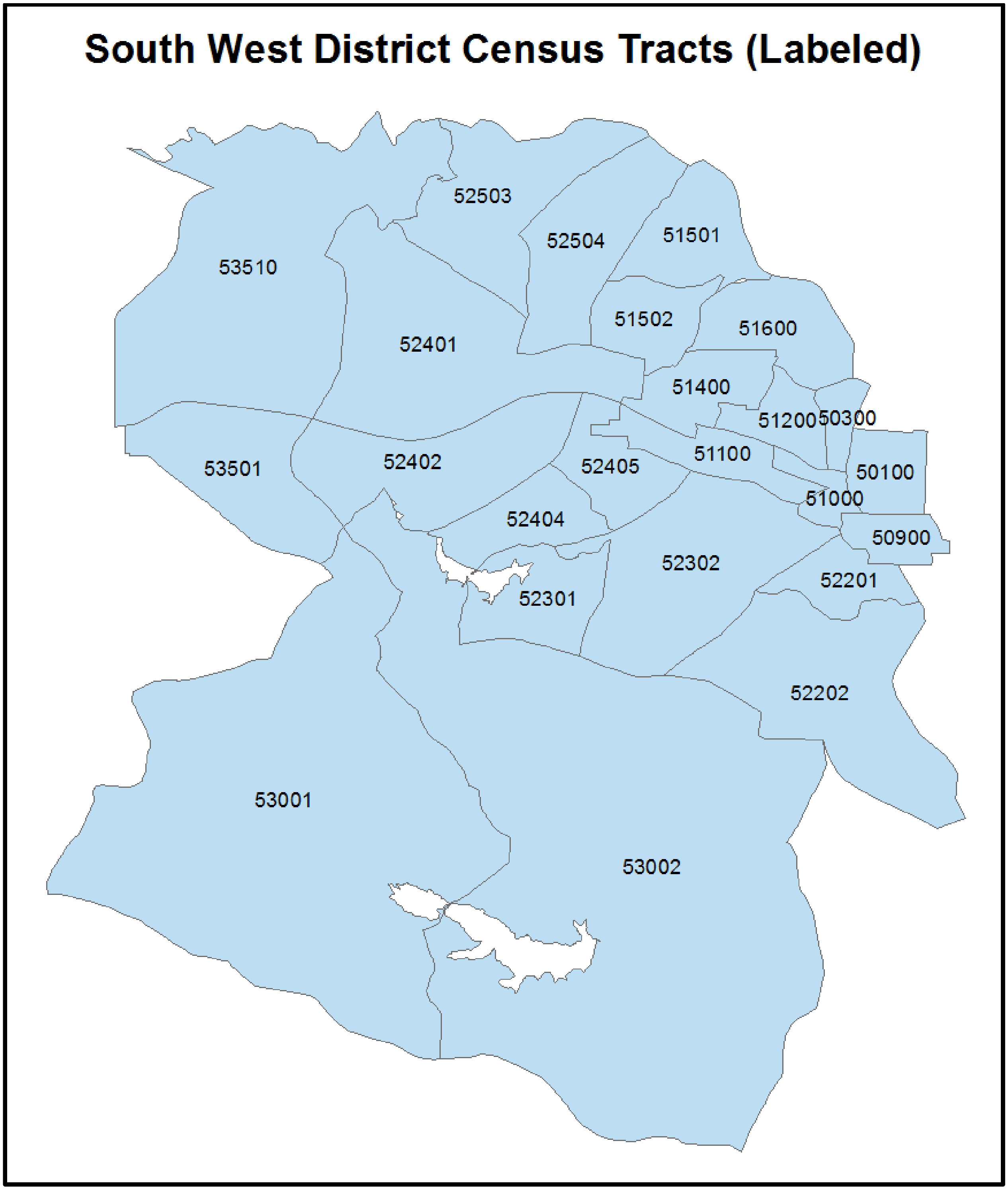
Appendix 1: South West District Census Block Groups (Labeled)



Appendix 2: South West District 2000 Census Tracts (Labeled)



Appendix 3: Hillsborough-Western Blvd. Corridor Business Composition

Hillsborough-Western Blvd. Corridor Business Composition			
Industry Type by NAICS Categories	**Count**	**Employees**	**Sales**
Accommodation and food services	75	1158	$69,780,000
Administrative and waste services	12	161	$9,807,000
Arts, entertainment, and recreation	9	268	$22,476,000
Construction	23	91	$25,025,000
Educational services	29	762	$1,053,000
Finance and insurance	14	199	$51,960,000
Health care and social assistance	39	516	$23,539,000
Information	10	69	$19,741,000
Manufacturing	8	35	$10,041,000
Other services, except public administration	59	352	$18,571,000
Professional and technical services	79	403	$74,749,000
Public Administration	15	1893	$0
Real estate and rental and leasing	17	158	$28,598,000
Retail trade	51	217	$47,404,000
Transportation and warehousing	11	27	$2,441,000
Unclassified	37	75	$0
Utilities	1	6	$5,430,000
Wholesale trade	5	10	$8,588,000
Grand Total	**494**	**6400**	**$419,203,000**

Source: ReferenceUSA 2011

Appendix 4: Downtown Business Composition

Downtown Business Composition			
Industry Type by NAICS Categories	**Count**	**Employees**	**Sales**
Accommodation and food services	102	1673	$77,294,000
Administrative and waste services	54	782	$46,588,000
Agriculture, forestry, fishing and hunting	3	64	$712,000
Arts, entertainment, and recreation	30	616	$42,812,000
Construction	64	302	$82,097,000
Educational services	22	341	$3,021,000
Finance and insurance	109	964	$251,042,000
Health care and social assistance	54	575	$33,952,000
Information	44	1008	$55,254,000
Management of companies and enterprises	3	2586	$4,836,000
Manufacturing	28	102	$53,287,000
Other services, except public administration	138	1766	$87,739,000
Professional and technical services	815	4719	$746,474,000
Public Administration	335	16082	$0
Real estate and rental and leasing	59	224	$35,913,000
Retail trade	88	432	$127,498,000
Transportation and warehousing	15	145	$14,568,000
Unclassified	217	310	$9,792,000
Utilities	4	32	$31,471,000
Wholesale trade	17	102	$79,636,000
Grand Total	**2201**	**32825**	**$1,783,986,000**

Source: ReferenceUSA 2011

Appendix 5: Blue Ridge Corridor Business Composition

Blue Ridge Corridor Business Composition			
Industry Type by NAICS Categories	**Count**	**Employees**	**Sales**
Accommodation and food services	33	435	19859000
Administrative and waste services	83	857	$44,533,000
Agriculture, forestry, fishing and hunting	1	4	$712,000
Arts, entertainment, and recreation	12	277	$7,562,000
Construction	78	378	$134,349,000
Educational services	12	101	$1,704,000
Finance and insurance	77	907	$135,128,000
Health care and social assistance	1070	14668	$2,295,281,000
Information	16	94	$23,532,000
Management of companies and enterprises	2	12	$9,672,000
Manufacturing	8	35	$11,999,000
Mining, quarrying, and oil and gas extraction	4	415	$4,260,000
Other services, except public administration	69	262	$9,266,000
Professional and technical services	284	1351	$224,981,000
Public Administration	21	1712	$0
Real estate and rental and leasing	53	208	$31,777,000
Retail trade	71	512	$103,781,000
Transportation and warehousing	8	519	$70,031,000
Unclassified	110	262	$0
Utilities	1	6	$5,430,000
Wholesale trade	9	50	$142,557,000
Grand Total	**2022**	**23065**	**$3,276,414,000**

Source: ReferenceUSA 2011