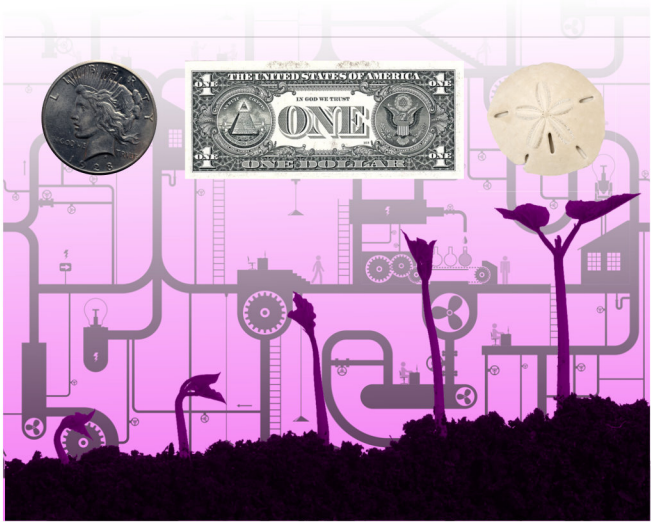
NorthEast Area Study

Market Assessment | Summary Report | January 2014



A technical report that describes the market forces and trends that will shape development in the Northeast Area

Capital Area Metropolitan Planning Organization

prepared by Stantec Consulting Services and J S Lane Company

Table of Contents

Executive Summary

The Northeast Study Area, encompassing all or part of nine communities and spanning across the border of two counties, is a rapidly developing area within the Raleigh-Cary Metropolitan Statistical Area. With a growth rate of 58% between 2000 and 2010, the area has developed at a surprising rate, leading to large changes in land use patterns, demographics, and employment.

Specifically, the area has seen a great deal of single family subdivision development and is transitioning from a rural and pastoral area to a bedroom community for the major job centers of Raleigh and the Research Triangle Park, at least on the western edge of the study area. This transition has led to a shift in demographics with more minorities, particularly Hispanics, moving to the area to take advantage of the relatively inexpensive housing and proximity to jobs. Incomes increased substantially from 2000 to 2010, though this statistic is skewed by the influx of higher-earning residents. The percentage of people over the age of 45 has increased during the same time period, while the percentage of younger adults (aged 25 to 45) has decreased.

In terms of industry, the Northeast Study Area produces more building materials than are locally demanded, but does not have a surplus of note in any other industry sectors. In particular, the lack of non-store retailers, electronics and appliance stores, and furniture and home furnishing stores in the area is particularly acute.

While the housing stock is gradually increasing and the housing prices continue to rise, employment in the area is still rooted in a more rural economy with manufacturing and construction jobs still comprising more than one quarter of all jobs in the area. However, educational services, health care and social assistance, accommodation and food service, and retail trade represent substantial percentages of all jobs, indicating a shift toward more suburban employment types. While areas on the western side of the study area are increasingly suburban, large swaths of the study area on the eastern side are predominantly rural, with more typical rural land uses.

Overall, the Northeast Study Area has a net outflow of 35,519 jobs, as many people choose to live there, but work elsewhere. As this area continues to develop and continues to place increasing strain on the transportation system, creating a publicly supported land use and transportation plan will be fundamental to ensuring the area remains prosperous, vibrant, and economically competitive.

Introduction

The Northeast Area of the Capital Area Metropolitan Planning Organization (CAMPO) contains all or part of nine municipalities and spans two counties.

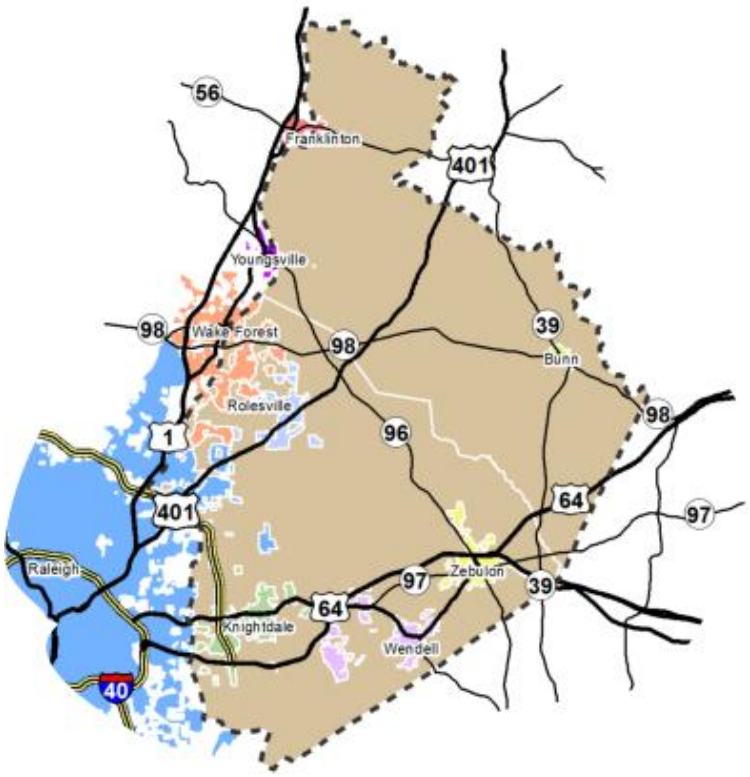


Figure 1: Northeast Study Area

The municipalities include Bunn, Franklinton, Knightdale, Raleigh, Rolesville, Wake Forest, Wendell, Youngsville, and Zebulon; this area also includes unincorporated areas of Wake and Franklin Counties. See Figure 1 for more information. Due to high rates of growth and development in the area, significant effects to the transportation network are anticipated. In addition, a unified development strategy is needed by the relevant jurisdictions as investment continues in the area. Considering regional mobility, multi-modal transportation needs, regional land use planning, and the public vision for the area, the Northeast Area Study will evaluate future growth scenarios to create a preferred multi-modal transportation plan for implementation by local governments, the North Carolina Department of Transportation (NCDOT), CAMPO, transit providers, and other regional land use and transportation players. Most importantly, the products of this study will represent the public's vision and ideas for this area.

This market assessment technical memorandum will provide the basis for understanding what types of amenities are lacking in the study area and where this area is succeeding in providing a strong retail base. Additionally, this memorandum will illustrate regional trends and estimate future trends in population, demographics, and employment as well as address commuting pattern trends and analyze location quotients for the Northeast Area versus Wake and Franklin Counties.

Regional Trends

As a whole, North Carolina grew rapidly between 1980 and 2010, a trend which is also reflected in Wake and Franklin Counties as well as in the Northeast Study Area. The population of the state was 5,880,095 in 1980 and grew to 9,535,483 in 2010, reflecting a growth rate of between 12 percent and 22 percent every ten years.[1] The following section elaborates on population trends in Wake and Franklin Counties.

County-wide Population Trends

Wake and Franklin Counties differ substantially. Wake County is predominantly urban and suburban and contains the Capital of North Carolina, Raleigh, as well as other communities including Cary, Apex, and Garner among others. The Wake County communities of Wake Forest, Rolesville, Knightdale, Wendell, and Zebulon are located in the NEAS Study Area. Franklin County, on the other hand, is primarily rural in character, though it also contains some larger communities, such as Louisburg. The Franklin County communities of Youngsville, Franklinton, and Bunn are within the NEAS Study Area. Both counties have grown in the past 30+ years, with Franklin County sustaining a growth rate of over 20 percent for each decade. Wake County has grown at a staggering 40+ percent per decade since 1980.

Table 1 presents this information in tabular form, while Figure 2 illustrates this information graphically.

	Franklin County	% Change	Wake County	% Change	North Carolina	% Change
1980	30,055	-	301,327	-	5,880,095	-
1990	36,414	21.2%	423,380	40.5%	6,632,448	12.8%
2000	47,260	29.8%	627,846	48.3%	8,046,668	21.3%
2010	60,619	28.3%	900,993	43.5%	9,535,483	18.5%

Table 1: Population Growth in Wake and Franklin Counties

[1] County/State Population Projections, Office of State Budget and Management http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm

Both of these counties are likely to continue to grow at a rapid pace. Indeed, Wake County is expected to reach a population of more than one million by 2014, according to the NC Demographics Certified Population and Population Projections from 2010.[2] Population density is also forecast to increase over time in both counties, with Franklin County and Wake County increasing population density by 30.7 and 28.8 percent, respectively.[3] Overall, these two counties are experiencing substantial growth and development at a particularly fast pace.

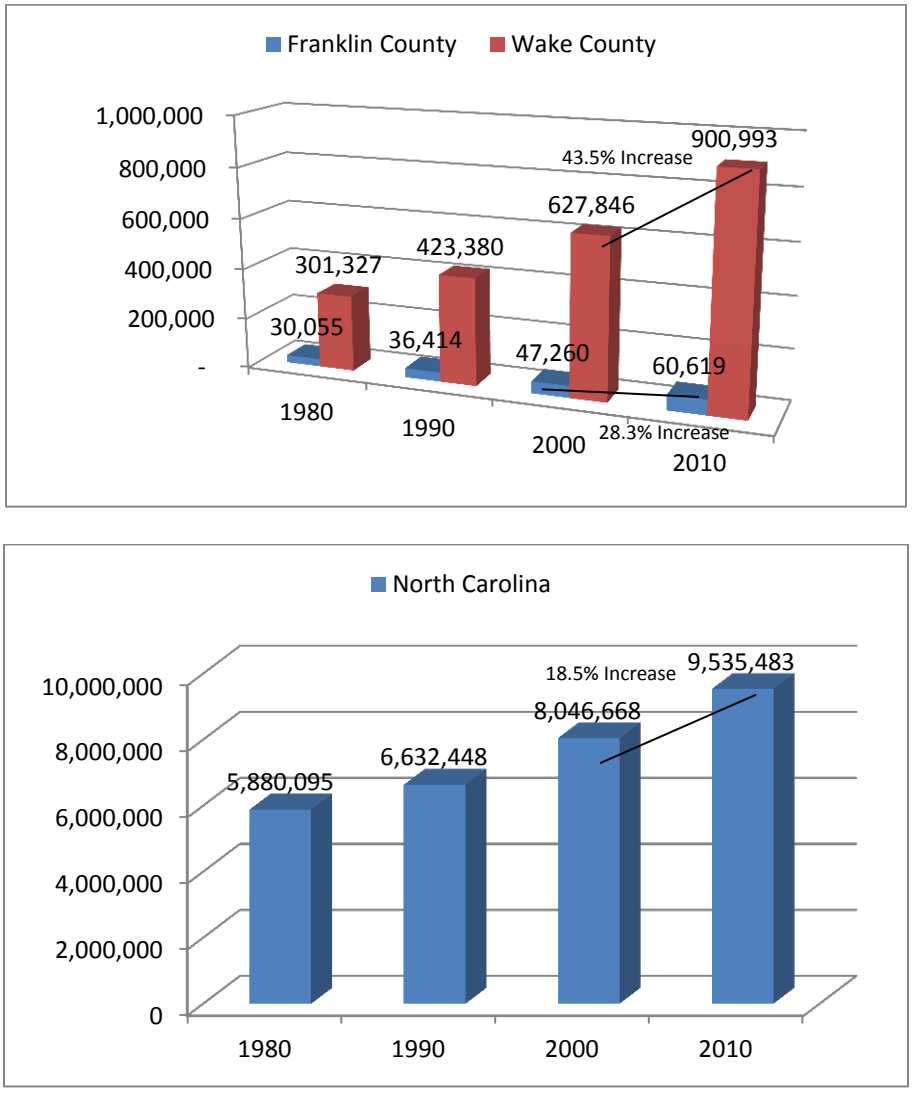


Figure 2: Population Growth in Wake and Franklin Counties and North Carolina[4]

County Demographic Changes

With the rapid increase in population in Wake and Franklin Counties over the last 40 years, the demographic composition of the two counties has also changed substantially. Examining the changes in racial makeup between 2000 and 2010, Wake County has experienced more pronounced changes versus

[2] http://www.wakegov.com/planning/demographic/documents/trends2012.pdf
[3] County/State Population Projections, Office of State Budget and Management (http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates.shtm)
[4] US Census Bureau; NC Digital Collections (http://statelibrary.ncdcr.gov/digital/census/index.html)

Franklin County, especially in terms of the decrease and increase of the White and Asian populations, respectively. Both counties, however, have experienced a substantial increase in Hispanic population between 2000 and 2010. Table 2 summarizes this information in detail.

Year	White	African American	Hispanic	Asian	American Indian	Other	Total
Franklin County							
2000	31,190 (**66%**)	14,193 (**30%**)	2,100 (**4.4%**)	140 (**0.3%**)	208 (**0.4%**)	1,529 (**3.2%**)	47,260
2010	40,003 (**66%**)	16,212 (**26.7%**)	4,776 (**7.9%**)	288 (**0.5%**)	329 (**0.5%**)	3,787 (**6.2%**)	60,619
Wake County							
2000	454,544 (**72.4%**)	123,820 (**19.7%**)	33,985 (**5.4%**)	21,249 (**3.4%**)	2,152 (**0.3%**)	26,081 (**4.2%**)	627,846
2010	597,546 (**66.3%**)	186,510 (**20.7%**)	87,922 (**9.8%**)	48,553 (**5.4%**)	4,503 (**0.5%**)	63,881 (**7.1%**)	900,993

Table 2: Racial Composition and Change in Wake and Franklin Counties, 2000 to 2010

Figure 3 illustrates this information graphically, with the blue representing population percentages in 2000 and red representing population percentages in 2010. While the trends clearly indicate that minority populations are growing at a faster rate than Whites in Wake County, the opposite is true in Franklin County, at least with respect to the African American population. As mentioned, the Hispanic populations in both counties more than doubled between 2000 and 2010.

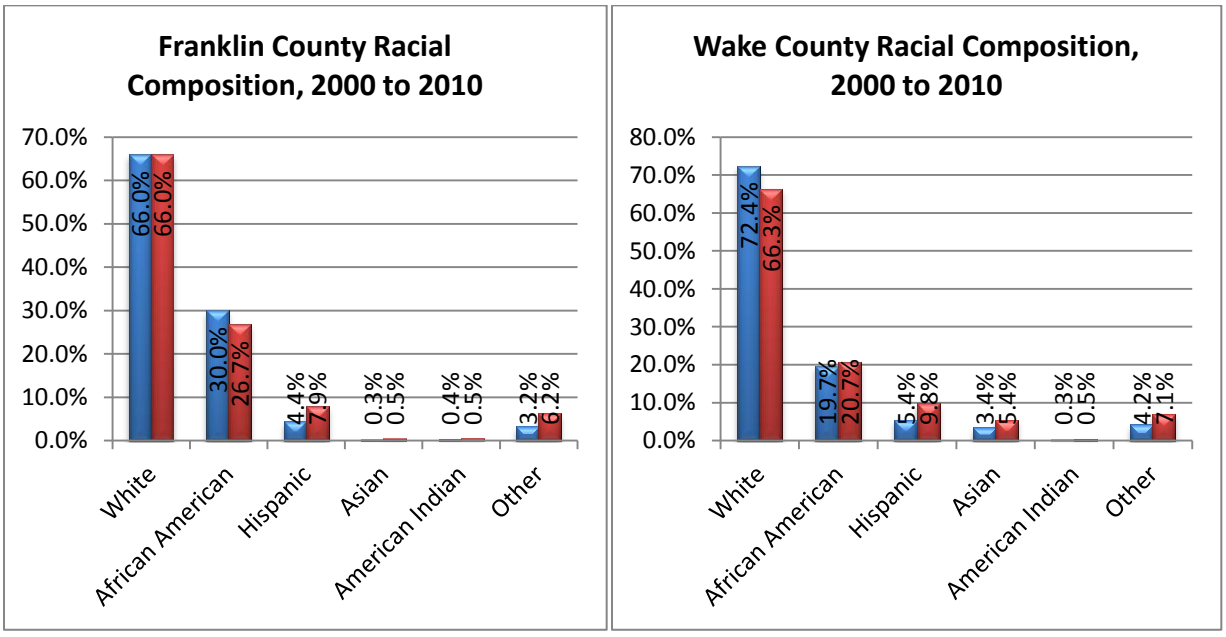


Figure 3: Racial Composition and Change in Wake and Franklin Counties, 2000 to 2010

The following section is a discussion of employment trends comparing Wake and Franklin Counties.

County-wide Employment

As evidenced in Figure 2, Franklin County is vastly exceeded by Wake County in terms of population. Logically, there are also much larger employers in Wake County, with more than 25 companies/entities employing over 1,000 people. The largest employers for both counties are provided in the table below

(Table 3).[5] For Wake County, education and health service businesses occupy four of the top six employers, while six of the top ten are or are related to public institutions. Notably, the Wake County Public School system and NC State University occupy the top spots in terms of employment numbers. In Franklin County, only three of its top ten employers are publicly funded. The only entity that employs more than 1,000 people in the county is the Franklin County School system.

Rank	Quarter Ending June 30, 2012	Type	Number	Quarter Ending June 30, 2012	Type	Number
	Wake County			**Franklin County**		
1	WAKE COUNTY PUBLIC SCHOOLS	Education and Health Services	1,000+	FRANKLIN COUNTY SCHOOLS	Education and Health Services	1,000+
2	N C STATE UNIVERSITY AT RALEIGH	Education and Health Services	1,000+	COUNTY OF FRANKLIN	Public Administration	500-999
3	WAKE MED	Education and Health Services	1,000+	NOVOZYMES NORTH AMERICA INC	Manufacturing	250-499
4	SAS INSTITUTE INC	Information	1,000+	STAFFMARK	Professional and Business Services	250-499
5	CITY OF RALEIGH	Public Administration	1,000+	GENERAL AMERICAN CONSULTEC LLC	Professional and Business Services	250-499
6	REX HEALTHCARE	Education and Health Services	1,000+	FRANKLIN REGIONAL MEDICAL CENTER	Education and Health Services	100-249
7	WAL-MART ASSOCIATES INC	Trade, Transportation, and Utilities	1,000+	WAL-MART ASSOCIATES INC	Trade, Transportation, and Utilities	100-249
8	COUNTY OF WAKE	Public Administration	1,000+	NC DEPT OF CORRECTION	Public Administration	100-249
9	STATE OF NC DEPT OF HEALTH & HUMAN	Public Administration	1,000+	CAPTIVE-AIRE SYSTEMS INC	Manufacturing	100-249
10	NC DEPT OF TRANSPORTATION	Public Administration	1,000+	FOOD LION LLC	Trade, Transportation, and Utilities	100-249
11	PROGRESS ENERGY SERVICE CO - PEB 18	Trade, Transportation, and Utilities	1,000+	AMCOR RIGID PLASTICS USA INC	Manufacturing	100-249
12	NC DEPT OF CORRECTION	Public Administration	1,000+	MAJESTIC MARBLE & GLASS CO (A CORP)	Manufacturing	100-249
13	HARRIS TEETER INC	Trade, Transportation, and Utilities	1,000+	K-FLEX USA LLC	Manufacturing	100-249
14	FOOD LION LLC	Trade, Transportation, and Utilities	1,000+	WELSH PAPER COMPANY	Trade, Transportation, and Utilities	100-249
15	U S POSTAL SERVICE	Trade, Transportation, and Utilities	1,000+	PRINCIPLE LONG TERM CARE INC	Professional and Business Services	100-249

[5] NC Department of Commerce (http://accessnc.commerce.state.nc.us/EDIS/business.html)

Rank	Quarter Ending June 30, 2012	Type	Number	Quarter Ending June 30, 2012	Type	Number
16	ACS COMMERCIAL SOLUTIONS INC	Professional and Business Services	1,000+	LOUISBURG COLLEGE	Education and Health Services	100-249
17	Y M C A	Leisure and Hospitality	1,000+	SIRCHIE FINGER PRINT LABORATORIES	Manufacturing	100-249
18	WELLS FARGO BANK NA (A CORP)	Financial Activities	1,000+	CLIFFORD R WHEELESS III MD PA	Education and Health Services	100-249
19	TIME WARNER ENTERTAINMENT ADVANCE	Information	1,000+	ARCH ALUMINUM & GLASS LLC	Manufacturing	50-99
20	TARGET STORES DIV	Trade, Transportation, and Utilities	1,000+	LOUISBURG NURSING CENTER INC	Education and Health Services	50-99
21	WAKE TECHNICAL COMMUNITY COLLEGE	Education and Health Services	1,000+	UNITED HOME CARE INC	Education and Health Services	50-99
22	STATE EMPLOYEES CREDIT UNION INC	Financial Activities	1,000+	MAXIM HEALTHCARE SERVICES INC	Professional and Business Services	50-99
23	FIRST CITIZENS BANK & TRUST CO	Financial Activities	1,000+	TOWN OF LOUISBURG	Public Administration	50-99
24	ONSITE COMPANIES INC	Professional and Business Services	1,000+	ROBLING MEDICAL INC	Manufacturing	50-99
25	TOWN OF CARY	Public Administration	1,000+	C & S FORDHAM RESTAURANTS LLC	Leisure and Hospitality	50-99

Table 3: Largest Employers by County

NEAS Study Area Location Information

As mentioned, the Northeast Study Area (NEAS Area) includes all or part of nine municipalities, Bunn, Franklinton, Knightdale, Raleigh, Rolesville, Wake Forest, Wendell, Youngsville, and Zebulon as well as unincorporated areas in two counties, Wake and Franklin. Overall, the study area encompasses 375.03 square miles and spans the Tar-Pamlico and the Neuse river basins.

The study area includes rural, suburban, and urban areas and many areas in transition. The trends in population, housing, and home values are presented in the next section.

Demographic Information Tabulations

Population, Age, and Housing in the Northeast Study Area

The information presented in Figure 2, which illustrates the rapid rate of growth in Wake and Franklin Counties, is also reflected in the population numbers for the NEAS Area and indeed for the State of North Carolina. Strikingly, this area grew at a faster pace at 58.3 percent than the City of Raleigh (43.5 percent) between 2000 and 2010, as indicated in Table 4. In comparison to other suburban communities around Raleigh, this increase is not out of the ordinary. The towns of Apex and Morrisville grew at truly incredible rates, 85.4 percent for Apex and 256.7 percent for Morrisville between 2000 and 2010, while Cary and Garner grew at lesser rates of 45 and 43.1 percent, respectively.[6]

As the Northeast Study Area has grown, the age distribution of the population has also changed. Trends in age distribution are reflected in the housing market, development decisions, and retail purchasing patterns.

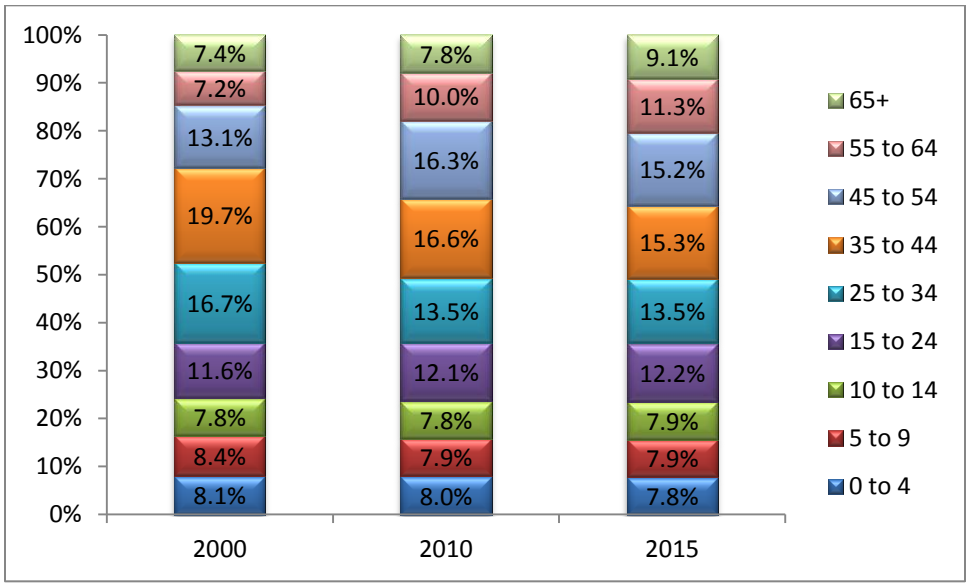


Figure 4: Age Distribution Changes in the Northeast Study Area, 2000 to 2015

In this area, the "Baby Boom" generation is beginning to reach retirement age, swelling the demand for single family housing and accounting for the increase in people over the age of 45 from 27.7 percent to 34.1 percent between 2000 and 2010. For people under the age of 45, the percentages in the Northeast

[6] United States Census Bureau, 2000 and 2010 Census Summary File 1, http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Study Area decreased between 2000 and 2010 and are forecast to continue to decrease into 2015, despite marginal increases in the percentage of the population aged 15 to 24. Figure 4 displays this information graphically. Notably, the trends indicate that the populations of people under the age of 24 are remaining relatively constant, while populations of older people over the age 44 are continuing to increase in the Northeast Study Area. The percentage of people between the ages of 25 and 44, or "Generation Y", contracted between 2000 and 2010 from 36.4 percent to 28.8 percent of the study area population, possibly a result of the desire of this generation to live and work in larger urban environments.

The increasing home values represent both the desirability of the area for new housing as well as the increasing shortage of available housing options in the NEAS Area and in the region as a whole.

The number of housing units in the Northeast Study Area, following the trend in population growth, also increased by a rate of more than 50 percent from 35,017 to 55,741. As Raleigh and particularly the Research Triangle Park continue to grow and create new jobs, nearby communities such as those within the Northeast Study Area will likely serve as bedroom communities. The increasing home values represent both the desirability of the area for new housing as well as the increasing shortage of available housing options in the NEAS Area and in the region as a whole. ESRI forecasts predict the population to reach 170,585, the number of housing units to reach 68,907, and the median home value to reach $173,060 by 2015.[7] These estimates reflect a continuing rapid growth rate in the area.

	Population	Housing Units	Households	Median Home Values
2000	88,274	35,017	32,271	$110,682
2010	139,736	55,741	50,924	$146,607
2015	170,585	68,907	62,151	$173,060
Percent Change, 2000 to 2010	58.30%	59.20%	57.80%	32.40%

Table 4: Population, Housing, and Median Home Value Trends in the Northeast Study Area

In terms of households, a similar trend is discernible between 2000 and 2010. The total in 2000, 32,271, increased to 50,924 in 2010, accounting for a 57.8 percent increase in households in the Northeast Study Area. Housing units are forecast to reach 68,907 in 2015.

Race in the Northeast Study Area

The racial composition of the Northeast Study Area is gradually becoming more diverse. Most notably, the Hispanic population has increased in the study area and the population identified as "Other" has also increased. In this case, "Other" refers to American Indians and Asian or Pacific Islanders, other races alone, or people of two or more races. Table 5 and Figure 5 provide more information.

	White Alone	Black Alone	Hispanic Origin	Other
2000	69.4%	25%	**5.4%**	**5.7%**
2010	65.5%	25.1%	**10%**	**9.5%**

Table 5: Racial Demographics of the Northeast Study Area

[7] ESRI Business Analyst, http://bao.esri.com/

In comparison to Wake and Franklin Counties, the NEAS Area has experienced an equivalent increase in terms of Hispanic population. For Franklin County, the Hispanic population increased from 4.4 percent to 7.9 percent of the total population, while the Wake County Hispanic population increased from 5.4 percent to 9.8 percent between 2000 and 2010. The Hispanic population has increased in the Northeast Study Area from 5.4 percent to 10 percent between 2000 and 2010.

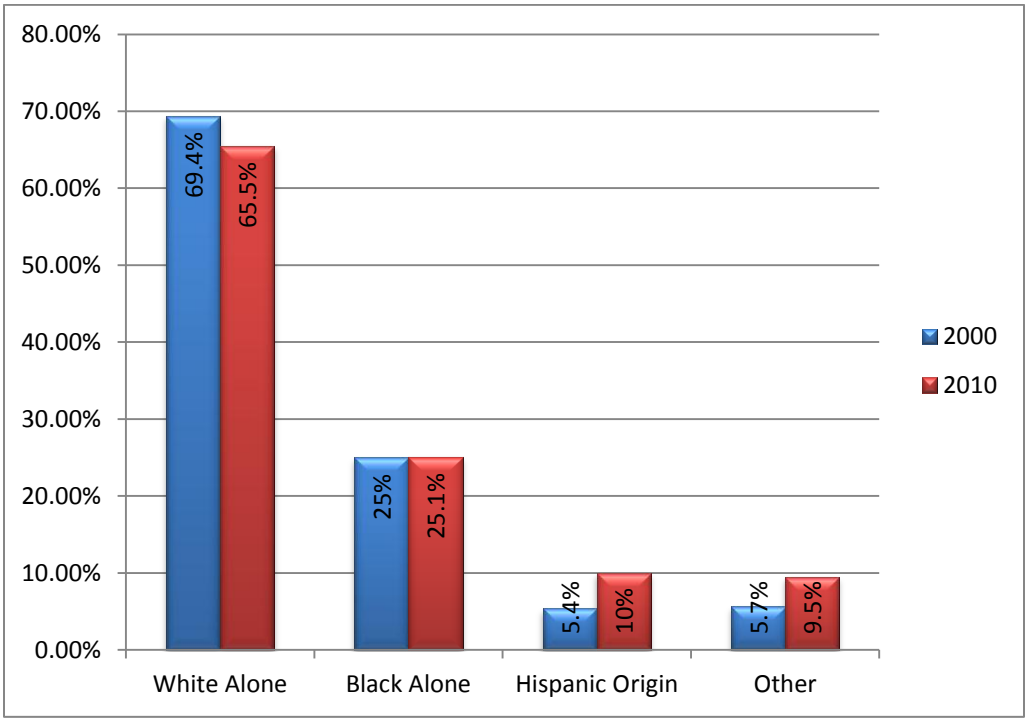


Figure 5: Racial Demographics of the Northeast Study Area, 2000 to 2010

Income in the Northeast Study Area

Income levels in the Northeast Study Area have also increased, likely as a function of the transition in resident employment from blue collar rural and industrial employment in/around the area to high-tech and business employment outside the area. As indicated earlier in this memorandum, the population in the Northeast Study Area has increased substantially, mainly through the construction of single-family housing subdivisions. As "bedroom communities" for Raleigh, many of the people living in the area work outside the area, a trend that is verified by the travel patterns diagrams presented later in this document. Table 6 and Figure 6 provide more detail about the differences in median and average household incomes in the area between 2000 and 2010.

	Median Household Income	Average Household Income
2000	$48,428	$55,752
2010	$63,578	$73,832
Percent Change	**31.3%**	**32.4%**

Table 6: Median and Average Household Income Changes in the Northeast Study Area, 2000 – 2010

As the Northeast Study Area transitions away from an agricultural and rural based economy towards a suburban "bedroom-community" economy, incomes are continuing to increase. The percent of households with incomes less than $35,000 has decreased from 33.7 percent to 21.8 percent, though

the absolute numbers have increased slightly from 10,980 to 11,100, while the percent of households making more than $75,000 has increased substantially, as indicated in Table 7.

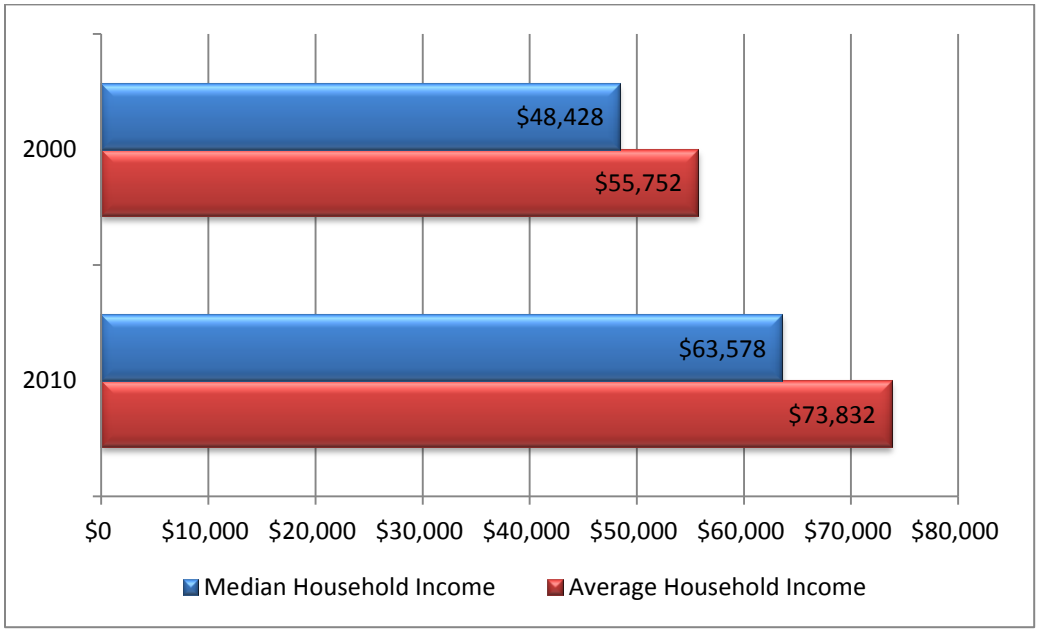


Figure 6: Median and Average Household Income Changes, 2000 to 2010

Figure 7 sheds further light on the transition of the NEAS Study Area from a rural/agricultural area to burgeoning suburban community, as people move to the area to take advantage of more affordable housing options, but continue to work in the larger urban centers of Raleigh, the Research Triangle Park, and even Durham or Cary. As the population increases, it is clear that substantial economic, demographic, and cultural changes are afoot in the NEAS Study Area.

	Percent of Households with Income less than $35,000	Percent of Households with Income greater than $75,000
2000	33.7% (10,890)	23.2% (7,497)
2010	21.8% (11,100)	40.9% (20,827)

Table 7: Income Percentage Changes in the NEAS Study Area, 2000 to 2010

While the population overall has increased at a rapid rate, the percentage of households that make more than $100,000 per year has more than doubled, from 10.3% in 2000 to 23% in 2010. The inverse of this trend is observable on the other end of the spectrum. The percentage of those households making less than $34,999 has decreased from 33.7% to 21.8% of all households between 2000 and 2010. Naturally, this does not equate to a reduction in the absolute number of people making less than $34,999, but rather speaks volumes about the influx of people making greater than $100,000 per year to the Northeast Study Area. Figure 7 presents this information graphically.

The 2010 employment statistics support this conclusion. Overall, 62.5 percent of people are employed in white collar jobs, with “professional” positions accounting for 23.4 percent of all employment. Service jobs accounted for 14.2 percent of all employment in this area, while blue collar jobs represent 23.3 percent. While data for 2000 is not available for comparison for this specific area, it is likely that the

percentage of people working in white-collar jobs has increased to a large degree, while the percentage of blue-collar employment has decreased.

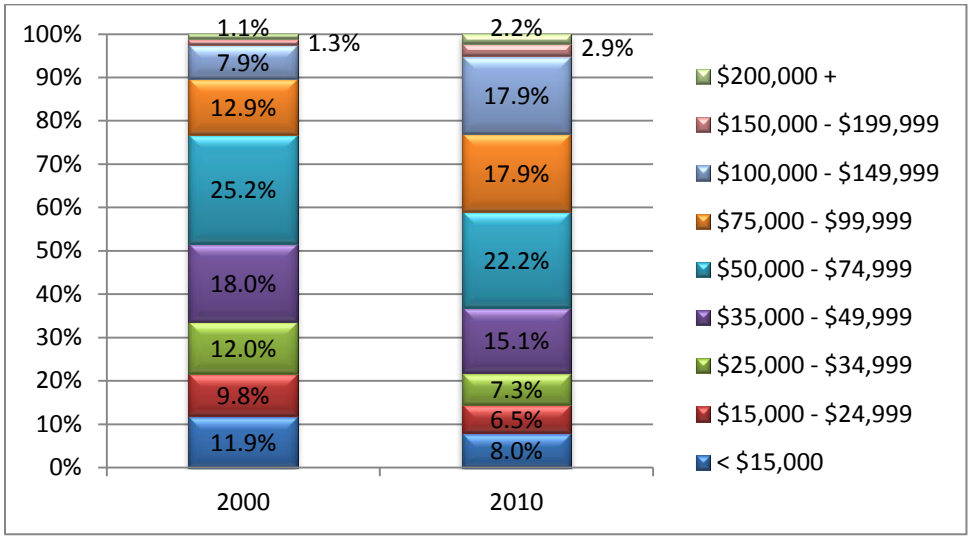


Figure 7: Income Bracket Differences in the NEAS Study Area Households, 2000 to 2010

This trend in incomes is a clear symbol of the Northeast Study Area's transition from rural and agricultural lands to suburban communities.

Location Quotients

Location quotients are defined by the United States Bureau of Labor Statistics as "ratios that allow an area's distribution of employment by industry to be compared to a reference or base area's distribution."[8] Specifically, these statistics are helpful in understanding how industry in a certain area is meeting local demand, often using the national economy for a frame of reference.

For example, a location quotient that is less than 1 for a specific area suggests that local employment is not satisfying the demand for a specific good or service, and that that those goods and services are being imported into the area . If, however, the location quotient is more than 1, a reasonable conclusion would be that local employment is providing more of a specific good or service than is demanded in a local area and some of these goods or services are being exported to other areas. A location quotient of exactly 1 would indicate that local employment is meeting local demand without imports or exports.

Using the Location Quotient Calculator on the Bureau of Labor Statistics website, which draws on data from the Quarterly Census of Employment and Wages[9], location quotients for specific industries were calculated for Wake and Franklin Counties and are presented in Table 9.

For reference, Table 8 provides data for the percentage of employment by industry for these counties as well as the United States total. Please note that some of the data is missing for Franklin County. These fields are denoted by the following abbreviations, NC, for Non Calculable, and ND, for Non Disclosable.

[8] US Bureau of Labor Statistics, http://www.bls.gov/cew/cewfaq.htm#Q19
[9] US Bureau of Labor Statistics Location Quotient Calculator, http://data.bls.gov/location_quotient/ControllerServlet

The Bureau of Labor Statistics explains the missing data as either unavailable (no reported economic activity) or suppressed in order to protect the identity, or identifiable information, or cooperating employers. Particularly in a county such as Franklin County with a small total working population, some data could be attributed to or provided by a single employer. Various statistical techniques are employed by the Bureau of Labor Statistics to avoid the possibility of data yielding identifiable information about employers. However, in some cases, the data cannot be disclosed without the possibility of sensitive information loss.[10]

Percentage of Employment calculated from Quarterly Census of Employment and Wages Data			
Industry	**U.S.**	**Franklin County, NC**	**Wake County, NC**
Base Industry: Total, all industries	100.00%	100.00%	100.00%
NAICS 11 Agriculture, forestry, fishing and hunting	1.08%	ND	0.22%
NAICS 21 Mining, quarrying, and oil and gas extraction	0.61%	ND	0.07%
NAICS 22 Utilities	0.52%	ND	0.39%
NAICS 23 Construction	5.17%	9.66%	6.79%
NAICS 31-33 Manufacturing	10.82%	21.64%	5.37%
NAICS 42 Wholesale trade	5.15%	4.60%	5.13%
NAICS 44-45 Retail trade	13.64%	12.79%	13.99%
NAICS 54 Professional and technical services	7.02%	5.46%	10.44%
NAICS 55 Management of companies and enterprises	1.75%	NC	2.71%
NAICS 56 Administrative and waste services	6.97%	9.74%	9.68%
NAICS 61 Educational services	2.32%	1.60%	2.10%
NAICS 62 Health care and social assistance	15.25%	16.44%	12.80%
NAICS 48-49 Transportation and warehousing	3.71%	ND	2.25%
NAICS 51 Information	2.55%	0.71%	4.58%
NAICS 52 Finance and insurance	5.17%	1.37%	4.77%
NAICS 53 Real estate and rental and leasing	1.80%	0.60%	2.17%
NAICS 71 Arts, entertainment, and recreation	1.79%	0.83%	2.44%
NAICS 72 Accommodation and food services	10.45%	7.01%	10.40%
NAICS 81 Other services, except public administration	4.10%	2.46%	3.68%
NAICS 99 Unclassified	0.14%	0.03%	0.03%
Footnotes: (ND) Not Disclosable (NC) Not Calculable, the data does not exist or it is zero			
Percentage of Employment: Ratio of industry employment to base-industry employment times 100.			

Table 8: Wake and Franklin Counties Percentage of Employment by Industry, 2010

This data highlights the differences between the two counties and refines the image of employment in Wake and Franklin Counties. While Table 3 provides the largest employers by county, this information illustrates the state of employment for all workers in each county comprehensively. A large percentage of employment in both counties is focused on health care and social assistance, with Franklin County

[10] Bureau of Labor Statistics, Quarterly Census of Employment and Wages Frequently Asked Questions: http://www.bls.gov/cew/cewfaq.htm#Q19

(16.4%) employing a larger percent of people in healthcare compared to Wake County (12.8%). Indeed, the percentage of employment for health care and social assistance in Franklin County is higher than the national average. Industry in Wake County is focused on high-tech and professional services (10.4%), accommodation and food service (10.4%), and retail trade (14%), while industry in Franklin County is primarily focused on construction (9.7%) and manufacturing (21.6%). These industry percentages reflect the character and demographics of the respective counties.

Location Quotients calculated from Quarterly Census of Employment and Wages Data

Industry	Franklin County, NC	Wake County, NC
Base Industry: Total, all industries	1.00	1.00
NAICS 11 Agriculture, forestry, fishing and hunting	ND	0.20
NAICS 21 Mining, quarrying, and oil and gas extraction	ND	0.12
NAICS 22 Utilities	ND	0.76
NAICS 23 Construction	**1.87**	**1.31**
NAICS 31-33 Manufacturing	**2.00**	0.50
NAICS 42 Wholesale trade	0.89	1.00
NAICS 44-45 Retail trade	0.94	1.03
NAICS 54 Professional and technical services	0.78	**1.49**
NAICS 55 Management of companies and enterprises	NC	**1.55**
NAICS 56 Administrative and waste services	**1.40**	1.39
NAICS 61 Educational services	0.69	0.90
NAICS 62 Health care and social assistance	1.08	0.84
NAICS 48-49 Transportation and warehousing	ND	0.60
NAICS 51 Information	0.28	**1.80**
NAICS 52 Finance and insurance	0.26	0.92
NAICS 53 Real estate and rental and leasing	0.33	1.20
NAICS 71 Arts, entertainment, and recreation	0.46	1.36
NAICS 72 Accommodation and food services	0.67	1.00
NAICS 81 Other services, except public administration	0.60	0.90
NAICS 99 Unclassified	0.23	0.22

Footnotes:
(ND) Not Disclosable
(NC) Not Calculable, the data does not exist or it is zero

Location Quotient: Ratio of analysis-industry employment in the analysis area (Northeast Study Area) to base-industry employment in the analysis area divided by the ratio of analysis-industry employment in the base area to base-industry employment in the base area (U.S. as a whole).

Table 9: Location Quotients for Wake and Franklin Counties

Some of these employment percentages (Table 8) also reflect the fast pace of growth that Wake and surrounding counties have been undergoing over the past decade. Most notably, construction and administrative and waste services are higher than the national average in both counties, while the Real Estate and rental and leasing category is also above the national average for Wake County. Wake County

has also recently been listed in the list of top 25 counties in the U.S. for job growth.[11] With these employment figures as a backdrop, the location quotients for specific industries in Wake and Franklin Counties are presented in Table 9 above.

Wake County

As expected for an urban county, Wake County does not have particularly high location quotients for the categories of agriculture, forestry, fishing and hunting; mining, quarrying, and oil and gas extraction; utilities; and manufacturing. However, what is surprising about the overall location quotient figures is the low location quotient for finance and insurance. With the rapid growth of the professional services sector economy in Wake County, it is odd that the location quotient for finance and insurance indicates that the demand for these services is not being met.

Franklin County

While Wake County exports much of its capacity in professional and technical services and information, but has a high demand for manufacturing that is not met by local employment, Franklin County is much the opposite, with manufacturing representing the highest location quotient. Both counties have high location quotients for administrative and waste services, which are produced to a much higher degree than demanded on the local level in both counties. Construction and manufacturing have particularly high location quotients at 1.87 and 2 in Franklin County, respectively, while the health care and social assistance industry also has a location quotient greater than 1.

For other industries, such as information; finance and insurance; arts, entertainment, and recreation; and accommodation and food service, much less of these services are produced than are demanded in Franklin County. Overall, Franklin County is very different than Wake County and is characterized by a manufacturing dominated economy, while Wake County focuses on professional services and retail trade. The following section provides a more detailed analysis of industry in the Northeast Study Area, specifically.

Industry Group Comparisons

With an understanding of the location quotients for Wake and Franklin Counties, this section reveals further detail about the retail market within the specific Northeast Study Area, using Wake County and Franklin Counties as comparison areas.

The propensity for people to travel outside of the Northeast Study Area for a particular good or service or for other people from outside the area to travel into the area for a specific good or service is demonstrated in the following tables using negative and positive values, denoted in this instance as surplus and leakage.

The propensity for people to travel outside of the Northeast Study Area for a particular good or service or for other people from outside the area to travel into the area for a specific good or service is demonstrated in the following tables using negative and positive values, denoted in this instance as surplus (negative) and leakage (positive). Surplus and leakage illustrate the status of retail opportunity at a specific moment. Surplus, identified as a negative value, indicates that customers are drawn into the study area to access retail outlets, while leakage, defined in positive values, indicates that people are leaving the study area to access retail amenities.[12] Basically, surplus and leakage are

[11] http://www.thrivenc.com/newsandevents/wake-county-ranked-among-top-areas-job-growth-us
[12] http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf

measures of the volume of supply (retail sales) and demand (retail potential). For instance, if retailers are fulfilling the demand for goods outside of the area (local demand is greater than supply), then demand is said to be "leaking" out of the area. If retailers are attracting shoppers from outside the area (supply is greater than local demand), then there is a surplus in supply. The retail gap is the difference between demand (retail potential) and supply (retail sales). If the retail gap is positive, then demand is outstripping supply, while a negative retail gap indicates the exact opposite.

Figure 8 presents the location of those areas identified on a parcel level as containing industrial, commercial, and office uses in the inventory of current land uses. As expected, those areas around major transportation routes and near city centers are more likely to contain industrial, commercial, and office uses. Generally, it is assumed that more industry exists in the larger areas of Wake and Franklin Counties than in the NEAS Study Area. It is also assumed that some "leakage" will occur naturally, particularly for specialty industries, which may only have regional locations outside of either area.

Total Retail Trade and Food and Drink

As expected, people leave the Northeast Study Area to a larger degree than in Wake County and to a slightly larger degree than in Franklin County to go out to eat or go shopping, likely based on either the dearth of options in the area or the natural desire to eat a specific type of food or try a change of venue. This trend is displayed in Table 10.

	Number of Establishments	Retail Gap	Leakage/Surplus Factor
NEAS Study Area	613	$589,573,883	**26.4**
Wake County	6,870	$1,912,403,968	**8.7**
Franklin County	309	$184,185,659	**22.3**

Table 10: Total Retail Trade and Food and Drink

Overall, the NEAS area has a leakage factor of slightly more than three times that of Wake County, but only slightly more than Franklin County, which reflects both the lack of shopping/eating amenities in some retail sectors and the development character of the area. In particular, the difference in the leakage factors between the two counties also puts the disparate nature of development in both areas into perspective. To contrast the two counties, Wake County has more than 22 times the number of retail establishments as Franklin County and more than 11 times the number of retail establishments as in the Northeast Study Area. Normalizing by area, the Northeast Study Area has roughly 1.6 restaurants per square mile, while Wake County has more than eight per square mile and Franklin County less than one per square mile. Using the 2010 population as a basis for comparison, there are 228 people per restaurant in the Northeast Study Area, 197 people per restaurant in Franklin County, and 135 people per restaurant in Wake County. Based on these statistics, the difference in development intensity is clear between the counties. The following sections will elaborate on specific categories of retail amenities in the Northeast Study Area versus Wake and Franklin Counties.

Normalizing by area, both the Northeast Study Area and Franklin County have roughly 1.6 restaurants per square mile, while Wake County has more than eight per square mile.

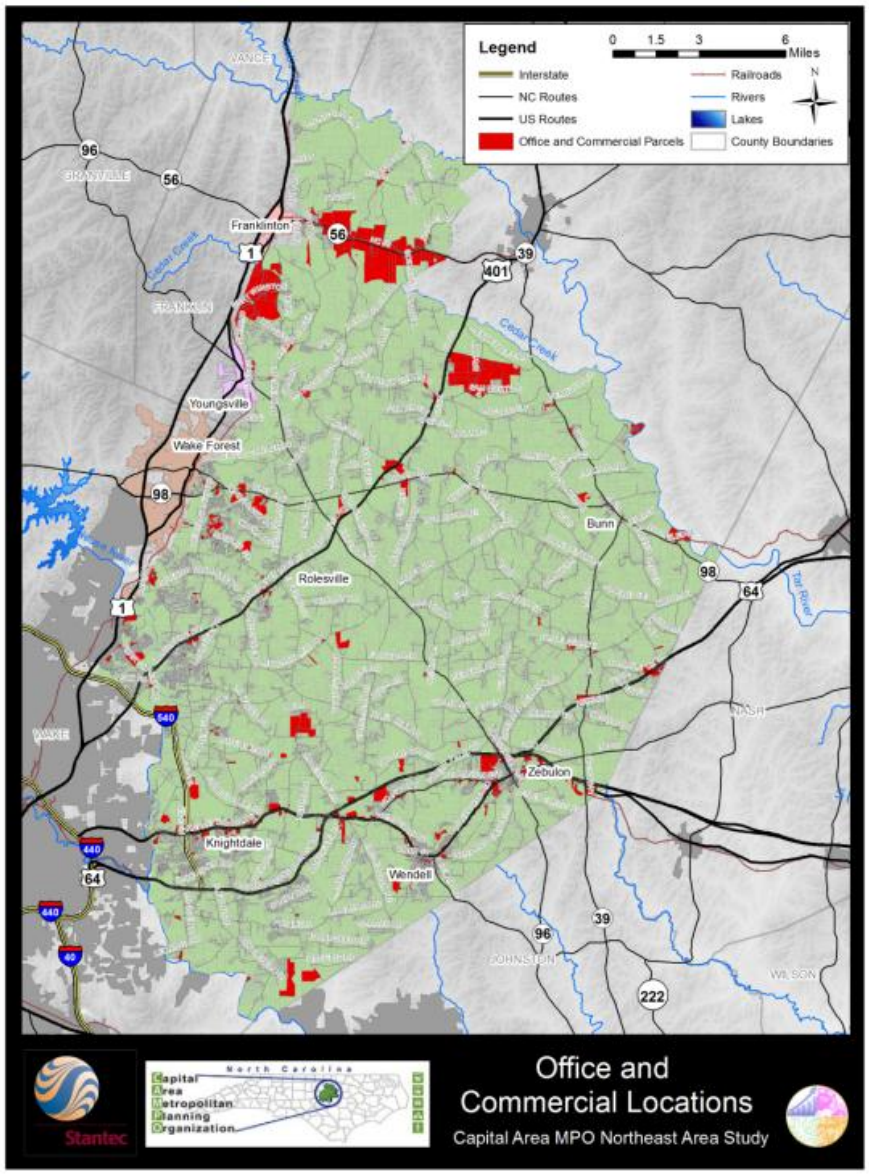


Figure 8: NEAS Study Area Office and Commercial Locations

Furniture and Home Furnishings Stores

In terms of furniture and home furnishings stores, the Northeast Study Area lacks these amenities to a larger degree than most other shopping outlets with only 27 of such establishments existing in the area. Wake County also has a leakage factor for this type of shopping amenity, albeit somewhat smaller, based on the fact that it has more than 13 times as many furniture and home furnishing stores. Franklin County only has 12 furniture and home furnishings stores.

	Number of Establishments	Retail Gap	Leakage/Surplus Factor
NEAS Study Area	27	$23,592,685	**52.6**
Wake County	357	$103,959,715	**19.7**
Franklin County	12	$4,984,854	**51.4**

Table 11: Furniture and Home Furnishings Stores

Normalizing by area, the Northeast Study Area has 7.2 furniture or home furnishing stores in every 100 square miles, while Wake County has more than 42 and Franklin County has slightly more than two. Using population, there are 5,175 people per furniture and home furnishings store in the Northeast Study Area, 2,597 in Wake County, and 5,066 in Franklin County. With these types of large shopping outlets more likely to locate in major urban areas, many people in the Northeast Study Area probably travel to Raleigh to access these amenities.

Normalizing by area, the Northeast Study Area has 7.2 furniture or home furnishing stores in every 100 square miles, while Wake County has more than 42 and Franklin County has slightly more than two.

Only Building Materials and Supplies Dealers

The Northeast Study Area does have a surplus factor for some types of retail, namely building materials and supplies dealers, which provides further insight into the character of the region as a manufacturing and construction hub. Also, the Northeast Study Area's location in the transitional area between intensely urban and rural likely contributes to the surplus factor for building materials and supplies dealers, as these types of establishments are more likely to locate in areas with plenty of inexpensive retail space (i.e. closer to the source of the materials), but also close enough to town and city centers (close to the customer base).

	Number of Establishments	Retail Gap	Leakage/Surplus Factor
NEAS Study Area	45	-$7,814,911	**-7.4**
Wake County	317	$3,868,475	**0.5**
Franklin County	22	$6,336,758	**20.8**

Table 12: Only Building Materials

The negative Leakage/Surplus Factor indicates that the Northeast Study Area has a slight surplus in retail sales for building materials. Wake County only has a small leakage in this category, while Franklin County has a much more substantial leakage. The Northeast Study Area has slightly more than one store every 10 square miles and one store per 3,105 people, while Wake County has nearly four stores for every 10 square miles and one store per 2,925 people. Franklin County has less than one store every 10 square miles and one store per 2,763 people.

Food Services and Drinking Places

In the category of food services and drinking establishments specifically, the NEAS Area has a leakage/surplus factor of 32.1, much higher than the 6.0 for Wake County, but not nearly as high as the 51.9 for Franklin County. As mentioned earlier, the NEAS Study Area includes some rural areas, making it likely that there are fewer restaurant choices in the area.

	Number of Establishments	Retail Gap	Leakage/Surplus Factor
NEAS Study Area	148	$99,234,456	**32.1**
Wake County	1,968	$203,699,832	**6**
Franklin County	61	$44,988,537	**51.9**

Table 13: Food Services and Drinking Places

The following chart displays the leakage/surplus factors for the NEAS Study Area and Wake and Franklin Counties by category. As surmised, Wake County has more amenities (both in absolute terms and in terms of leakage/surplus) than the NEAS Study Area and Franklin County based on its lower overall leakage factor of 8.7. The differences between Franklin County and the Northeast Study Area, on one hand, and Wake County, on the other, for the industry group categories for non-store retailers, food

services and drinking places, electronics and appliance stores, motor vehicle and parts dealers, and furniture and home furnishings stores are particularly stark.

Overall, it is clear that certain retail industry groups are likely to have "leakage" no matter the diversity of options available to consumers, based on the nature of the industry. In this case, it is unlikely that the Northeast Study Area, Wake County, or Franklin County will have a surplus in such categories as non-store retailers, as these are geographically unconstrained. It can also be expected that people will likely travel to the closest store that has the items they need/want, so people will travel out of either the Northeast Study Area or Wake or Franklin County if the closest store to their location is located outside of the area.

These surplus/leakage factors also clearly showcase the differences between the two counties. The leakage factors are relatively low for Wake County and relatively high for Franklin County, highlighting the urban/developed character of Wake County and the more rural/agricultural character of Franklin County. For the Northeast Study Area, the leakage factors are particularly high in certain cases (electronics & appliance stores, furniture & home furnishings store), but often fall between Wake and Franklin Counties, further demonstrating the transitional nature of area in terms of land use, retail amenities, and industry. Figure 9 (on page 20) illustrates a sampling of all surplus and leakage factors graphically. All surplus and leakage factors are summarized in Appendix A.

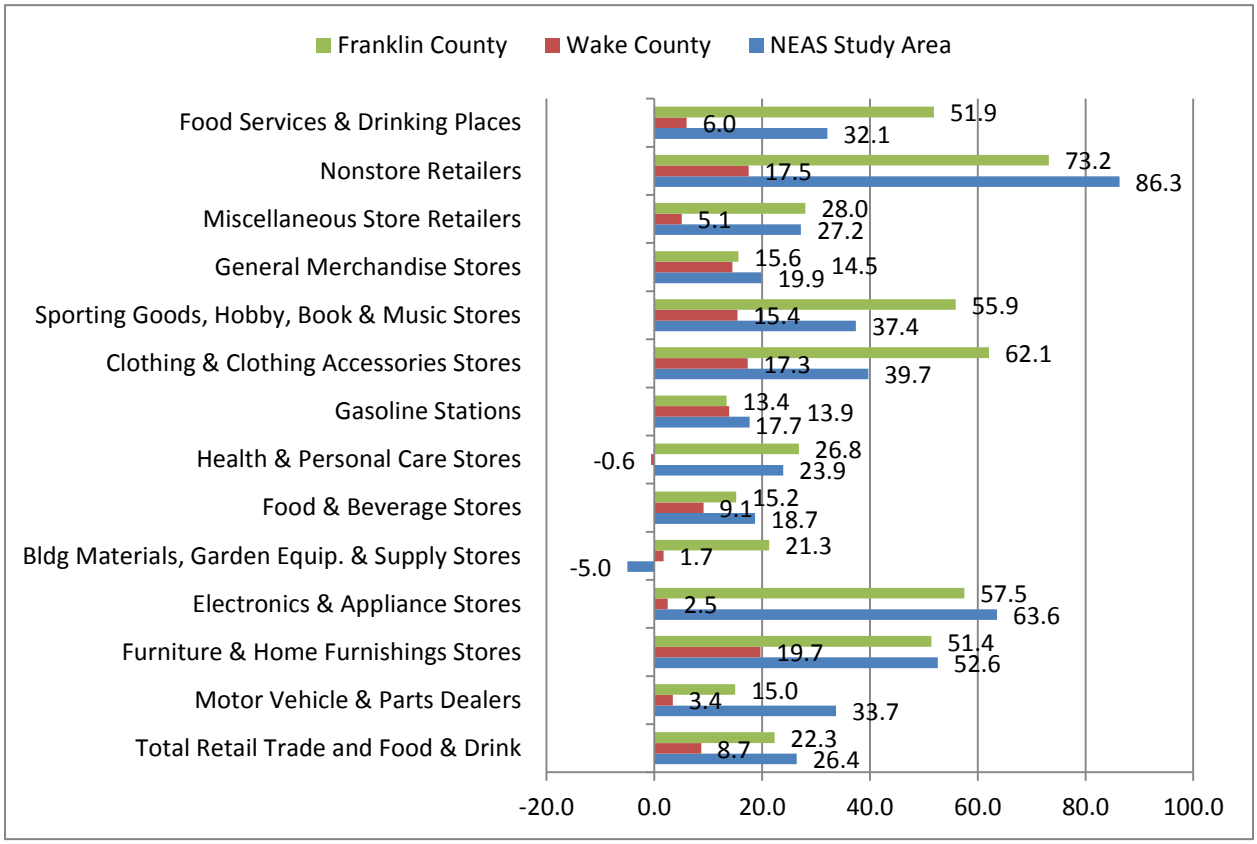


Figure 9: Surplus and Leakage Factors – Comparison of the NEAS Study Area, Wake County, and Franklin County

Additionally, the Northeast Study Area and indeed Franklin County are unlikely to have a large number of specialty stores within any one category when compared to Wake County, particularly for industry groups such as electronics and appliance stores, furniture and home furnishings stores, and clothing and clothing accessories stores. As such, the leakage is particularly high in these categories. Also, since the Northeast Study Area is growing so rapidly, retail amenities have likely struggled to keep up with population growth. The large numbers of people per restaurant, people per furniture and home furnishings store, and people per food service and drinking establishments in the Northeast Study Area would support this conclusion. Based on these figures, there is a large market for providing any one of the aforementioned establishments in the Northeast Study Area. The complete Marketplace Profile Reports are provided in Appendix A.

In the category of food services and drinking establishments specifically, the NEAS Area has a leakage/surplus factor of 32.1, much higher than the 6.0 for Wake County, but not nearly as high as the 51.9 for Franklin County.

Primary Job by Industry Sector

Judging by the Location Quotients and Industry Group comparisons, it is clear that Franklin County specializes in certain areas, such as construction and manufacturing, while Wake County specializes in others, such as professional and technical services and management. The Northeast Study Area has a surplus in terms of providing building supplies, but not a great deal else. On an individual level, these trends are verified for primary jobs in the Northeast Study Area.

There are 19,871 primary jobs in the Northeast Study Area, of which 4,710 (23.7%) pay $1,250 per month or less, 8,230 (59%) pay between $1,251 and $3,333, and 6,931 (34.9%) pay more than $3,333 per month.

There are 19,871 primary jobs in the Northeast Study Area, of which 4,710 (23.7%) pay $1,250 per month or less, 8,230 (59%) pay between $1,251 and $3,333, and 6,931 (34.9%) pay more than $3,333 per month. Looking at the percentages of primary jobs in the Northeast Study Area in Table 14, the transitional nature of the Northeast Study Area is again verified. The employment types most represented in predominantly rural Franklin County, namely construction, manufacturing, and administration & support, waste management, and remediation, are represented well. However, those employment types that were also well-represented in Wake County, such as healthcare and social assistance, accommodation and food services, and professional and technical services, are also accounted for in the Northeast Study Area. Retail trade is represented highly in both Wake and Franklin Counties as well as in the Northeast Study Area, as is the educational services sector.

Jobs by NAICS Industry Sector	Count	Share
Agriculture, Forestry, Fishing and Hunting	102	0.5%
Mining, Quarrying, and Oil and Gas Extraction	79	0.4%
Utilities	1	0.0%
Construction	1,570	7.9%
Manufacturing	3,448	17.4%
Wholesale Trade	1,261	6.3%
Retail Trade	3,274	16.5%

Jobs by NAICS Industry Sector	Count	Share
Transportation and Warehousing	218	1.1%
Information	141	0.7%
Finance and Insurance	314	1.6%
Real Estate and Rental and Leasing	138	0.7%
Professional, Scientific, and Technical Services	864	4.3%
Management of Companies and Enterprises	152	0.8%
Administration & Support, Waste Management and Remediation	1,116	5.6%
Educational Services	2,669	13.4%
Health Care and Social Assistance	1,839	9.3%
Arts, Entertainment, and Recreation	185	0.9%
Accommodation and Food Services	1,590	8.0%
Other Services (excluding Public Administration)	371	1.9%
Public Administration	539	2.7%
Total	19,871	100.0%

Table 14: Jobs by NAICS Industry Sector in the Northeast Study Area[13]

As this area continues to become more urbanized, it would not be surprising to see a shift away from the more rural job sectors towards professional services, information, finance and insurance, health care and social assistance, and education.

Electronics and Internet Market Potential

Using Wake and Franklin Counties as comparison areas, the Northeast Study Area is evaluated for trends in electronics and internet market potential in this section. This metric is helpful in understanding the trends in income, age, and race, assuming that people with higher incomes, younger people, and people with higher educational attainment are likely to have a higher potential for owning a computer or other advanced technological device, while those people with lower incomes, older people, or people with lower educational attainment are assumed to be more likely to spend their money on purchases other than technology or internet service. [14]

Some of the data presented here is in the format of a Market Potential Index *(MPI), which indicates the relative likelihood of adults to exhibit purchasing patterns versus the US average of 100.*

Some of the data presented here is in the format of a *Market Potential Index* (MPI), which indicates the relative likelihood of adults to exhibit purchasing patterns versus the US average of 100. As such, any value above 100 indicates a willingness to exhibit certain types of consumer behavior more than the US average, while anything less than 100 displays less willingness to exhibit certain types of consumer behavior versus the US average.

[13] U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2010).

[14] Pew Internet and American Life Project, http://www.pewinternet.org/Reports/2012/Digital-differences/Main-Report/Internet-adoption-over-time.aspx

Household Owns a Personal Computer

Of the 50,821 households in the Northeast Study Area in 2011, 41,287, or roughly 81.2 percent, have a personal computer, while 84.5 percent of households in Wake County and 67.4 percent of households in Franklin County have a personal computer. Table 15 provides more detail.

	Expected Number	Percent	Market Potential Index
NEAS Study Area	41,287	81.2%	**109**
Wake County	299,715	84.5%	**114**
Franklin County	15,791	67.4%	**91**

Table 15: Household Owns a Personal Computer

The MPI indicates that people in the NEAS Study Area may be less inclined to have a personal computer in the household than in Wake County, though not by a hugely significant margin. Overall, households in both areas are more likely to have a personal computer than the U.S. average, while households in Franklin County are less likely to have a personal computer.

People Have Access to the Internet

Access to the internet is another metric that sheds light on the demographic makeup of the Northeast Study Area. As mentioned earlier, younger people, people with higher incomes, and people with higher levels of educational attainment are more likely to have internet access, while people with lower incomes, lower levels of educational attainment, and older people are less likely to use the internet. Interestingly, race, ethnicity, and gender are becoming increasingly less predictive in terms of likelihood to have access to the internet, though the language spoken at home (if not English) does have a significant effect on the likelihood of having internet access.[15] With this in mind, the increase in the Hispanic population in the Northeast Study Area may be affecting these statistics.

	Expected Number	Percent	Market Potential Index
NEAS Study Area	90,060	89.1%	**105**
Wake County	623,584	91%	**108**
Franklin County	36,553	78.4%	**93**

Table 16: Adults with Access to the Internet

The Northeast Study Area, as opposed to Wake County, has a slightly smaller percentage of adults that have access to the internet, though both areas have a higher market potential index than the U.S. average. Franklin County has a much lower MPI for access to the internet than both the Northeast Study Area and Wake County.

People Have Access to the Internet at Home

In terms of access to the internet at home, a similar narrative is revealed in Table 17 to the preceding tables. Franklin County has the smallest percentage of people that have access to the internet at home, while the Northeast Study Area has a smaller percentage of people with access to the internet at home than Wake County. These figures suggest that the demographics in Franklin County are skewed toward older individuals, people with lower educational attainment, and people with lower incomes as opposed to Wake County and the Northeast Study Area. The presence of increasing numbers of Hispanic people in both Wake County, Franklin County, and in the Northeast Study Area does not seem to have any tangible effect on the likelihood to have access to the internet at home.

[15] Ibid.

	Expected Number	Percent	Market Potential Index
NEAS Study Area	77,235	76.4%	**108**
Wake County	552,997	80.7%	**115**
Franklin County	28,343	60.8%	**86**

Table 17: Adults with Access to the Internet at Home

These electronics and internet market potential calculations indicate that people in Wake County place a higher premium on owning a computer and having a reliable internet connection as opposed to the Franklin County. The Northeast Study Area falls between the two counties, but has similar MPIs to Wake County for ownership of a personal computer and access to the internet. Following up on this conclusion, these statistics suggest that Franklin County includes a larger percentage of the population with either a lower level of educational attainment and/or lower incomes than Wake County on average. This would suggest that the Northeast Study Area is closer in demographic makeup to Wake County rather than Franklin County. Again, this is not hugely surprising based on the rural character of Franklin County versus the more urban fabric of Wake County.

Market Tapestry

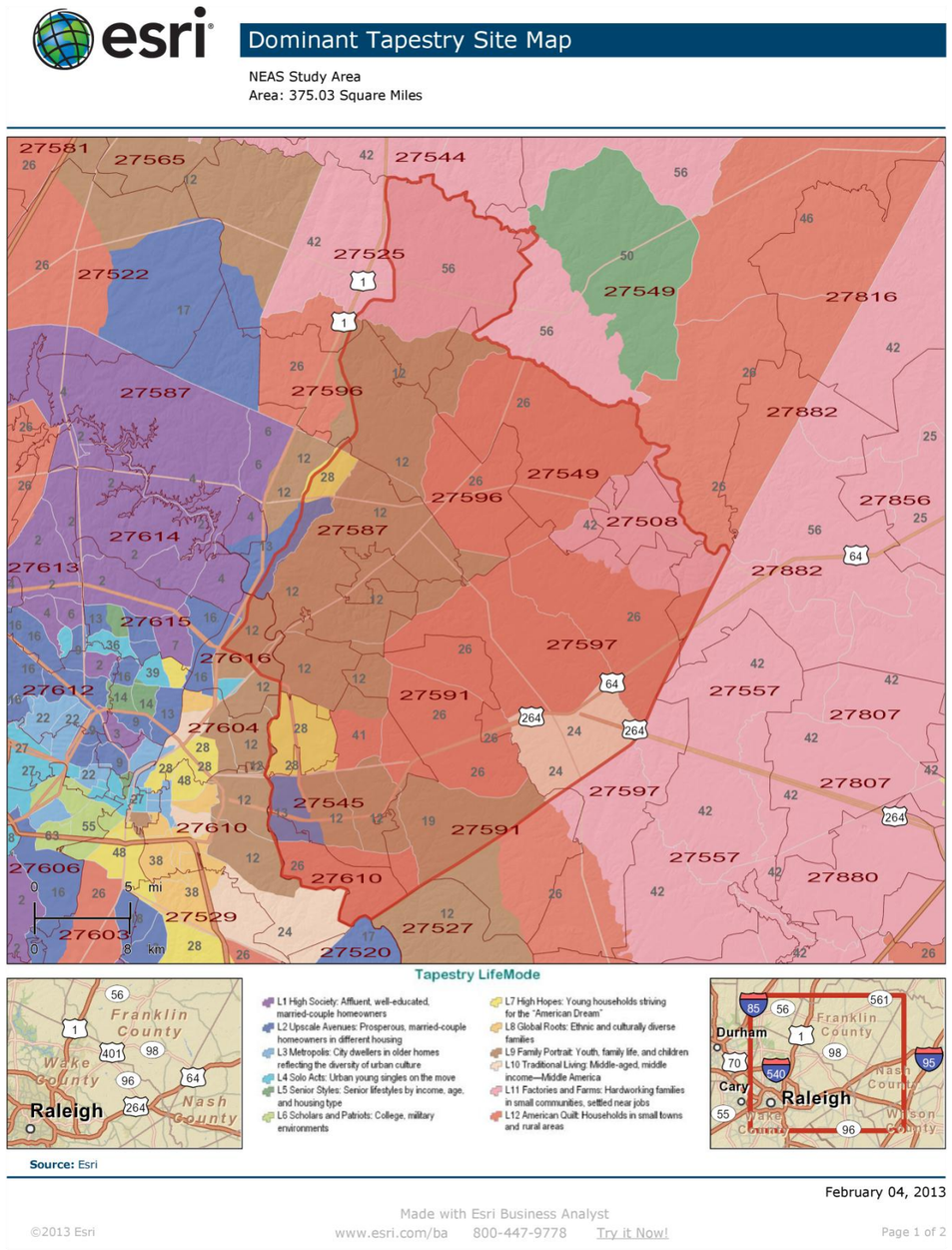
The market tapestry provides a quilt or tapestry of neighborhoods over an entire study area, classifying these areas based on socioeconomic and demographic information. A complete list of neighborhood types is provided following the attached maps in Appendix B.

This type of categorization is useful, based on the assumption that people are likely to live and work in areas with people of with similar lifestyles, tastes, and behaviors. Using Census data, including population by age and sex, household data, housing characteristics, economic metrics, employment, education, income, and mobility patterns among others, areas were grouped into 65 consumer market segments and further distilled into twelve LifeMode Summary Groups[16]. For this analysis, Wake County was used as a comparison for the Northeast Study Area.

The market tapestry provides a quilt or tapestry of neighborhoods over an entire study area, classifying these areas based on socioeconomic and demographic information.

Wake County, as a whole, has a wide variety of "Tapestry LifeModes", from High Society (Affluent) to Traditional Family Living (Middle-aged, middle income) to Global Roots (Ethnically Diverse). While the NEAS Study Area does have some areas classified as Upscale Avenues, they are primarily in the areas close to or within the City of Raleigh. The east side of the study area is characterized as primarily rural, falling into the categories of Traditional Living, American Quilt, or Factories and Farms. The remainder of the Study Area is designated as Family Portrait, signifying the presence of youth, family life, and children. See Figure 10 for more information.

[16] Tapestry Segmentation Reference Guide, ESRI, http://www.esri.com/library/brochures/pdfs/tapestry-segmentation.pdf.



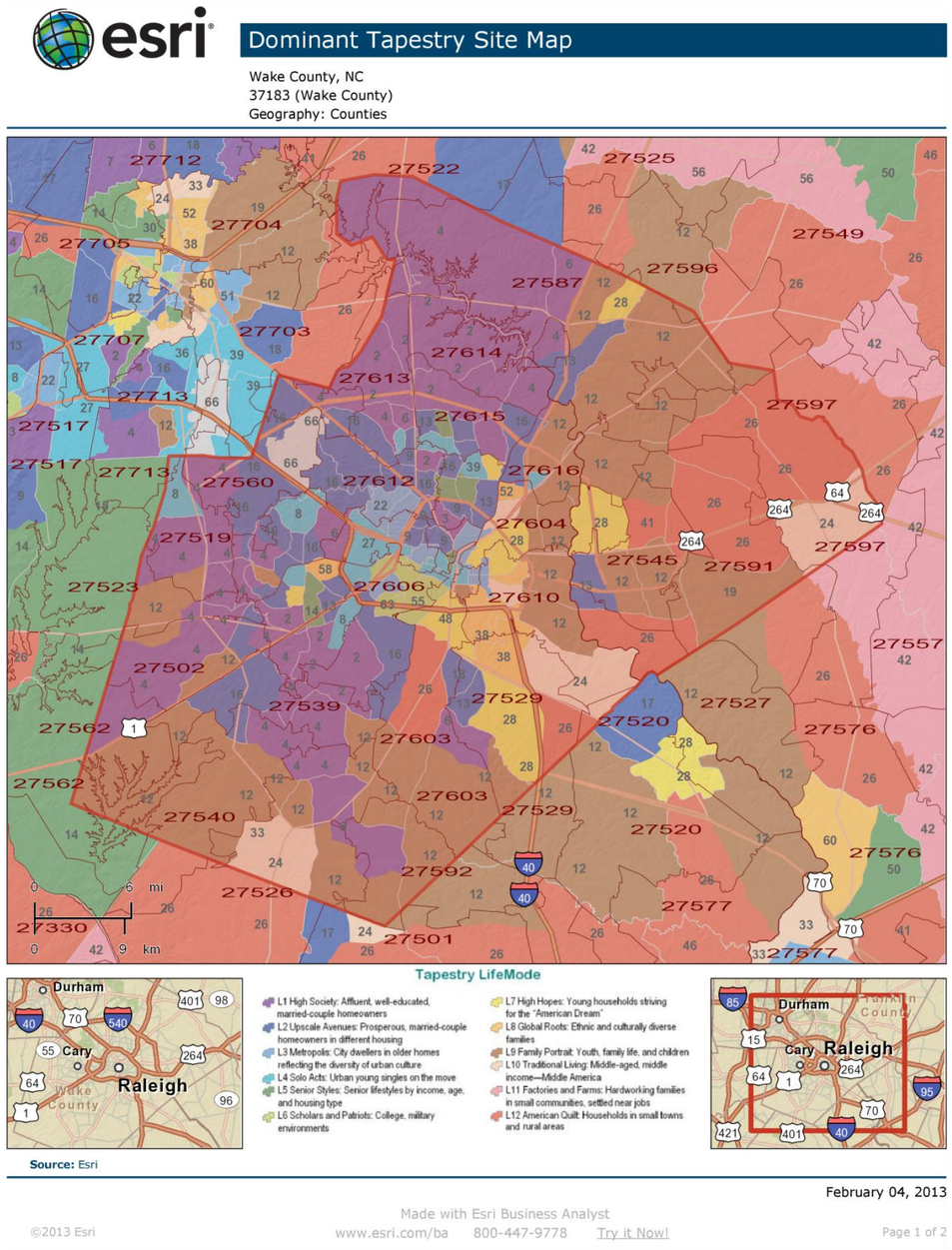


Figure 10: Market Tapestry, Northeast Study Area and Wake County

In examining the "Tapestry LifeModes" in the Northeast Study Area, it is useful to provide a more detailed definition of the predominant categories. A large portion of the study area is comprised of two distinct market segments, the "Up and Coming Families" (12) and the "Midland Crowd" (26), which are further summarized in the categories of "Family Portrait" and "American Quilt", respectively. The numbers refer to the tapestry segments (see Appendix B: MarketPlace Tapestry Maps), while the colors reference the categories in the legend.

The "*Family Portrait*" category indicates a rapidly-expanding population, the presence of children, and ethnic diversity in areas of predominantly single-family housing developments. In short, these are young professionals that work outside of the Northeast Study Area, but choose to live in the area, in the prototypical "bedroom community". These people are likely to value the relatively inexpensive housing amenities, open space, and small-town character of the area, but also enjoy the proximity of shopping amenities and cultural and entertainment resources. This category is concentrated mostly in the more developed areas of the Study Area, around Zebulon, Wendell, Rolesville, Knightdale, and Wake Forest.

The "*American Quilt*" category is characterized by the presence of small towns and rural areas and relies on manufacturing and agriculture as the bastions of the local economy, though local government, service, construction, communication, and utilities jobs are also important economic components in these areas. Including a wide breadth of incomes, housing types vary from mobile homes to affluent rural subdivisions. Overall, the rural lifestyle, including a preference for pickup trucks, power boats, fishing, and hunting, predominates in this area, though other lifestyle choices are also evident. This category is represented in those areas farther from urban centers within the Northeast Study Area. Additionally, the categories of "Traditional Living" and "Factories and Farms" are also represented in the Northeast Study, categories which are defined by their settled and mostly rural character.[17]

Commuting Patterns

Using the Longitudinal Employer-Household Dynamics tool (or LEHD OnTheMap), the picture of the Northeast Study Area as an area transitioning from rural to urban land uses and from rural economy to bedroom community is reinforced. The following figure (Figure 11) and table (Table 18) illustrate the relationship between employment and residency in the area.

Employment and Home Location	Number
Employed in the Study Area	19,871
Living in the Study Area	55,390
Net Job Outflow	-35,519
Living and Employed in the Study Area	**5,296**
Living in the Study Area but Employed Outside	**50,094**
Employed in the Study Area but Living Outside	**14,575**

Table 18: Employment and Home Location

The Northeast Study Area is home to 55,390 people, but only 19,871 people are employed in the area. Of the 55,390 residents, only 5,296 live **and** work in the study area, while the remaining 50,094 residents are employed outside of the area. A large number of people, 14,575, also commute to the area, but live outside.

[17] Tapestry Segmentation Reference Guide, ESRI, http://www.esri.com/library/brochures/pdfs/tapestry-segmentation.pdf.

The difference between the number of residents in the area and the number of jobs in the area is 35,519, signifying that well over half of the people commute to jobs outside of the Northeast Area, likely in Raleigh and the Research Triangle Park, but also as far as Durham. A significant minority also commute to towns such as Rocky Mount and Wilson to the east. [18]

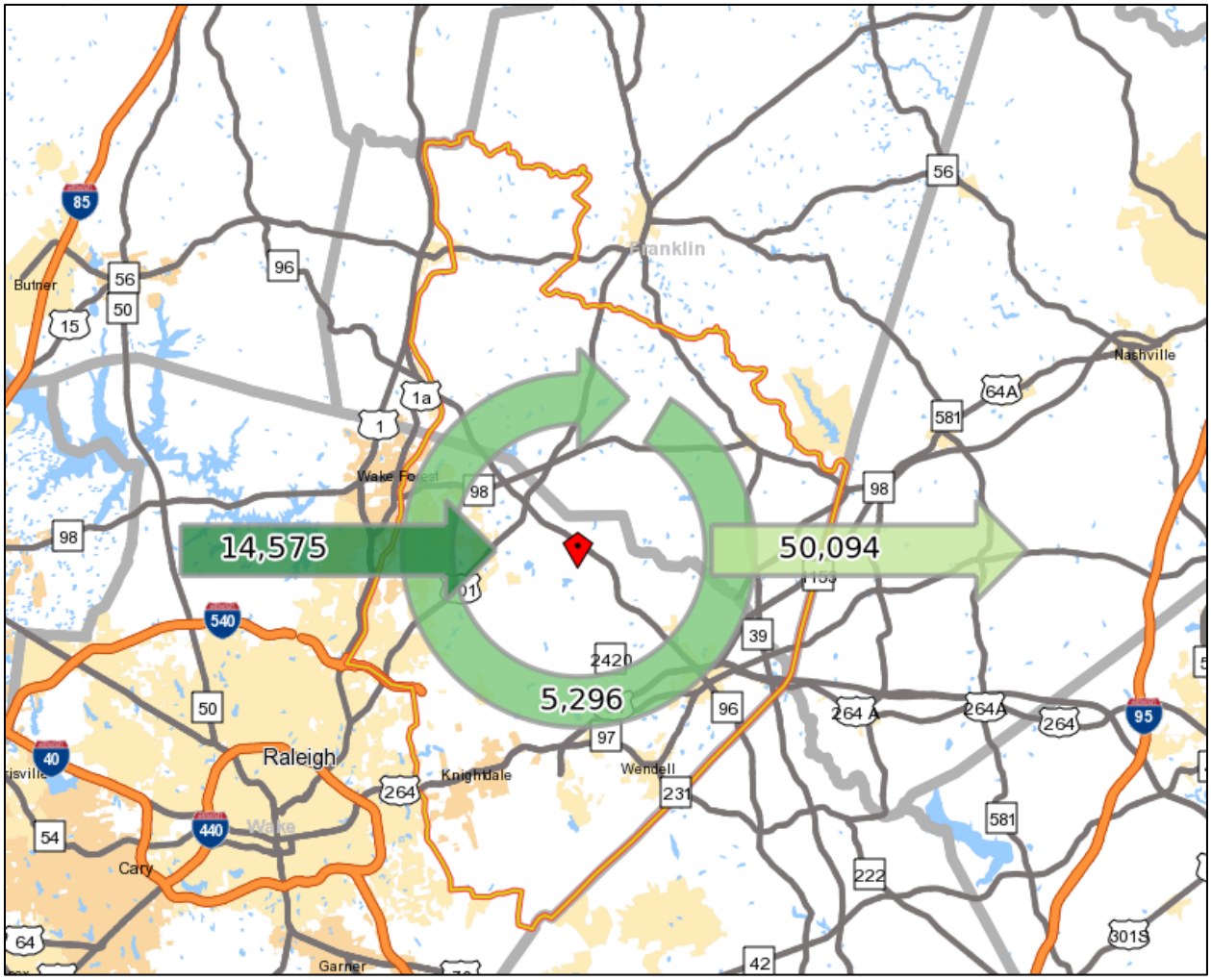


Figure 11: Inflow/Outflow from the Northeast Study Area

As the trends suggest, the number of residents is likely to grow even more as people continue move to this area, but continue to work in professional services and related employment sectors. With this in mind, examining the transportation network and land use patterns and planning for transportation improvements will become increasingly important as the Northeast Study Area continues to add residents who work outside the area.

Inferring from these numbers, a reasonable estimate of the jobs to housing balance in the Northeast Study Area would be roughly 1 to 3. While the jury is still out on if an evenly balanced jobs to housing ratio really equates to fewer car trips and vehicle miles traveled, the Northeast Study Area certainly has

[18] U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2010).

much more housing than jobs, placing the transportation network under strain. Reconsidering development type and encouraging localized job growth in the area may reduce the number of people leaving the area to commute to work.

Conclusion

Overall, North Carolina has grown substantially over the past decades, while both Wake and Franklin Counties have grown at an even greater rate. The massive gains in population in the Raleigh Metropolitan Area have had a profound influence on the Northeast Study Area, not only in terms of demographics, but also with respect to development patterns and industry. In particular, the Northeast Study Area has experienced an increase in the population of Hispanics as well as other minority groups and older individuals. As in many other rural and suburban areas, the population of younger adults ("Generation Y"), or those between the ages of 25 and 44 are moving away from the area, presumably to take up residence in major urban centers. Incomes are also increasing in the Northeast Study Area, with those households making more than $75,000 increasing by more than 17 percentage points.

Inferring from these numbers, a reasonable estimate of the jobs to housing balance in the Northeast Study Area would be roughly 1 to 3.

In terms of industry, the Northeast Study Area lacks certain retail sectors, such as nonstore retail (defined as establishments using methods such as broadcasting, publishing materials, solicitation, or using the internet, among others, to reach their clients), electronics and appliance stores, and furniture and home furnishings stores, and imports those goods and services from outside the area. In addition, the area lacks recreational amenities, including a diversity of restaurants, as well as cultural, entertainment, and arts outlets. As the area is still rural in large parts, though the transition to suburban bedroom communities is happening rapidly, certain types of industry typical of less urbanized areas still prevail in the Northeast Study Area, such as manufacturing. Other industry sectors, such as retail trade, educational services, accommodation and food services, and health care and social assistance, also occupy substantial percentages of the overall employment in the area.

The jobs to housing balance, however, would indicate that much more than half of the people living in the Northeast Study Area leave the area to work, likely in either Raleigh or the Research Triangle Park. With growth forecast to continue in this area unabated, this Northeast Area Study focusing on transportation and land use is timely. It will be absolutely crucial to grow and develop in such a way as to accommodate growth without placing undue strain on the transportation system. Additionally, the implementation of any land use and/or transportation plan must be accepted and indeed fully supported by all of the communities in the area to be successful. This market assessment provides the basis for understanding the trends in demographics and employment in the Northeast Study Area. In addition, much of this information will help target solutions to specific groups within the area.

Appendix A: Complete Retail MarketPlace Profile Reports

Northeast Study Area

esri

Retail MarketPlace Profile

NEAS Study Area
Area: 375.03 Square Miles

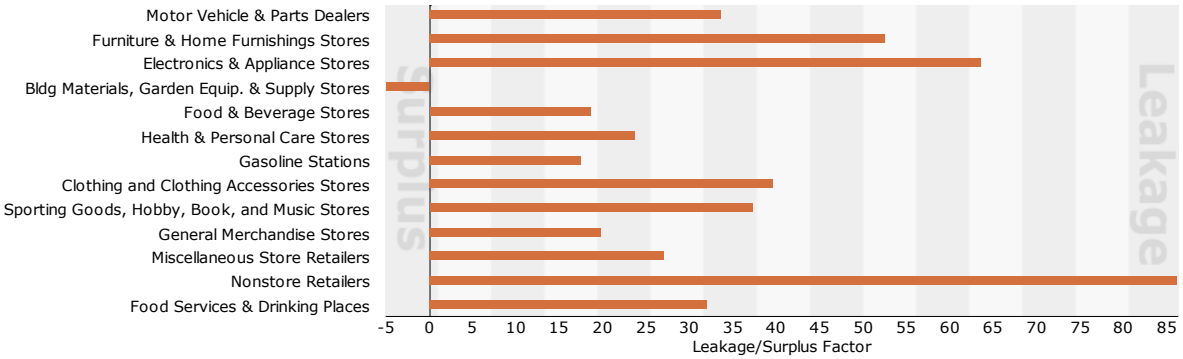
Summary Demographics	
2010 Population	139,736
2010 Households	50,924
2010 Median Disposable Income	$50,344
2010 Per Capita Income	$27,213

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of
Total Retail Trade and Food & Drink	44-45,722	$1,409,950,540	$820,376,657	$589,573,883	26.4	613
Total Retail Trade	44-45	$1,205,631,764	$715,292,336	$490,339,427	25.5	466
Total Food & Drink	722	$204,318,776	$105,084,320	$99,234,456	32.1	148

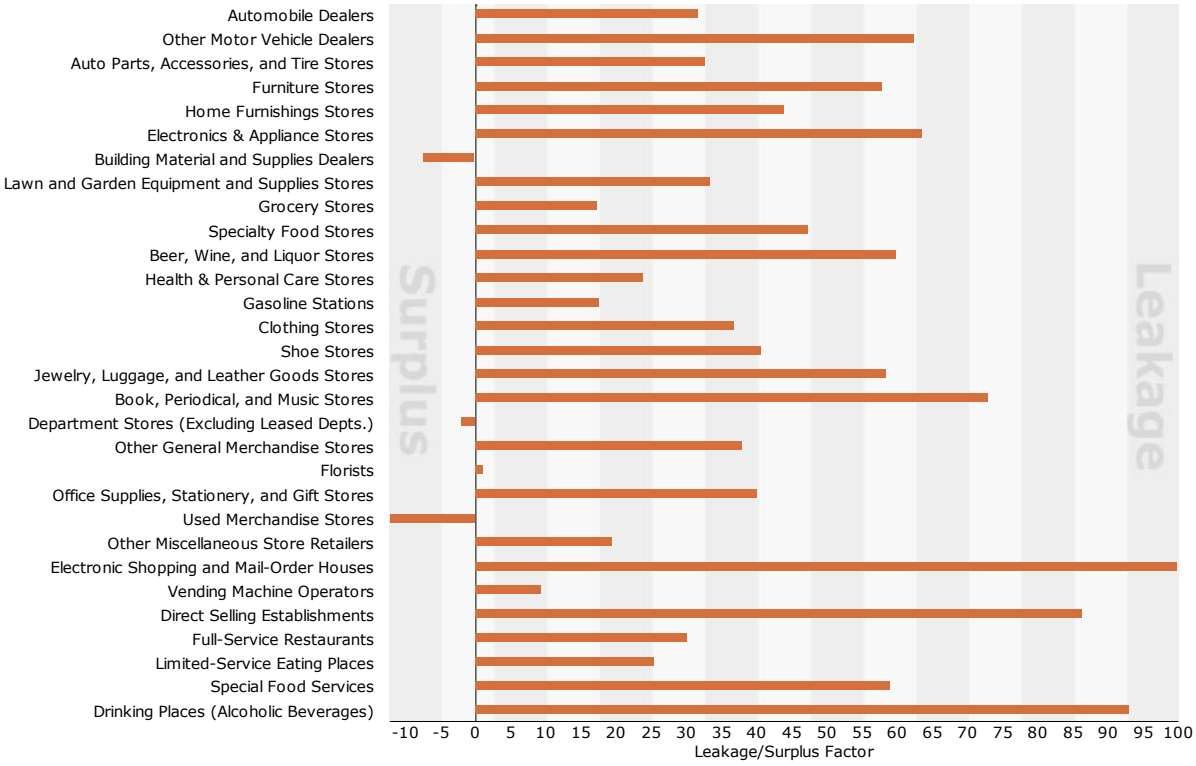
Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of
Motor Vehicle & Parts Dealers	441	$292,156,101	$144,984,496	$147,171,605	33.7	60
Automobile Dealers	4411	$251,621,213	$130,610,590	$121,010,622	31.7	35
Other Motor Vehicle Dealers	4412	$22,353,865	$5,159,213	$17,194,653	62.5	7
Auto Parts, Accessories & Tire Stores	4413	$18,181,023	$9,214,693	$8,966,330	32.7	17
Furniture & Home Furnishings Stores	442	$34,215,861	$10,623,175	$23,592,685	52.6	27
Furniture Stores	4421	$21,730,953	$5,779,738	$15,951,215	58.0	8
Home Furnishings Stores	4422	$12,484,907	$4,843,437	$7,641,470	44.1	19
Electronics & Appliance Stores	4431	$45,057,958	$10,014,925	$35,043,033	63.6	24
Bldg Materials, Garden Equip. & Supply Stores	444	$53,245,098	$58,832,758	-$5,587,659	-5.0	60
Bldg Material & Supplies Dealers	4441	$48,796,147	$56,611,057	-$7,814,911	-7.4	45
Lawn & Garden Equip & Supply Stores	4442	$4,448,951	$2,221,700	$2,227,251	33.4	15
Food & Beverage Stores	445	$195,794,323	$134,193,918	$61,600,405	18.7	60
Grocery Stores	4451	$187,370,333	$131,821,987	$55,548,346	17.4	48
Specialty Food Stores	4452	$2,488,176	$887,378	$1,600,799	47.4	8
Beer, Wine & Liquor Stores	4453	$5,935,814	$1,484,554	$4,451,260	60.0	4
Health & Personal Care Stores	446,4461	$47,823,888	$29,383,700	$18,440,187	23.9	25
Gasoline Stations	447,4471	$204,201,981	$142,758,667	$61,443,315	17.7	36
Clothing & Clothing Accessories Stores	448	$48,391,933	$20,867,555	$27,524,378	39.7	50
Clothing Stores	4481	$36,882,041	$16,983,493	$19,898,548	36.9	37
Shoe Stores	4482	$5,474,592	$2,309,715	$3,164,877	40.7	6
Jewelry, Luggage & Leather Goods Stores	4483	$6,035,300	$1,574,347	$4,460,953	58.6	7
Sporting Goods, Hobby, Book & Music Stores	451	$15,592,968	$7,096,479	$8,496,489	37.4	30
Sporting Goods/Hobby/Musical Instr Stores	4511	$8,215,554	$5,950,918	$2,264,637	16.0	27
Book, Periodical & Music Stores	4512	$7,377,414	$1,145,562	$6,231,852	73.1	3
General Merchandise Stores	452	$215,420,181	$143,978,734	$71,441,446	19.9	28
Department Stores Excluding Leased Depts.	4521	$80,069,052	$83,310,636	-$3,241,585	-2.0	12
Other General Merchandise Stores	4529	$135,351,129	$60,668,098	$74,683,031	38.1	16
Miscellaneous Store Retailers	453	$17,235,730	$9,870,874	$7,364,857	27.2	59
Florists	4531	$1,041,330	$1,018,331	$22,999	1.1	9
Office Supplies, Stationery & Gift Stores	4532	$9,460,379	$4,045,664	$5,414,715	40.1	17
Used Merchandise Stores	4533	$448,744	$572,886	-$124,142	-12.2	13
Other Miscellaneous Store Retailers	4539	$6,285,277	$4,233,992	$2,051,284	19.5	19
Nonstore Retailers	454	$36,495,742	$2,687,055	$33,808,687	86.3	7
Electronic Shopping & Mail-Order Houses	4541	$19,562,637	$0	$19,562,637	100.0	0
Vending Machine Operators	4542	$1,926,859	$1,594,361	$332,498	9.4	5
Direct Selling Establishments	4543	$15,006,246	$1,092,695	$13,913,552	86.4	1
Food Services & Drinking Places	722	$204,318,776	$105,084,320	$99,234,456	32.1	148
Full-Service Restaurants	7221	$74,930,322	$40,064,619	$34,865,703	30.3	84
Limited-Service Eating Places	7222	$102,411,868	$60,791,221	$41,620,647	25.5	56
Special Food Services	7223	$14,734,109	$3,782,891	$10,951,218	59.1	6
Drinking Places - Alcoholic Beverages	7224	$12,242,477	$445,589	$11,796,888	93.0	2

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Leakage/Surplus Factor by Industry Subsector



Leakage/Surplus Factor by Industry Group



Wake County

esri

Retail MarketPlace Profile

Wake County, NC
Wake County, NC (37183)
Geography: County

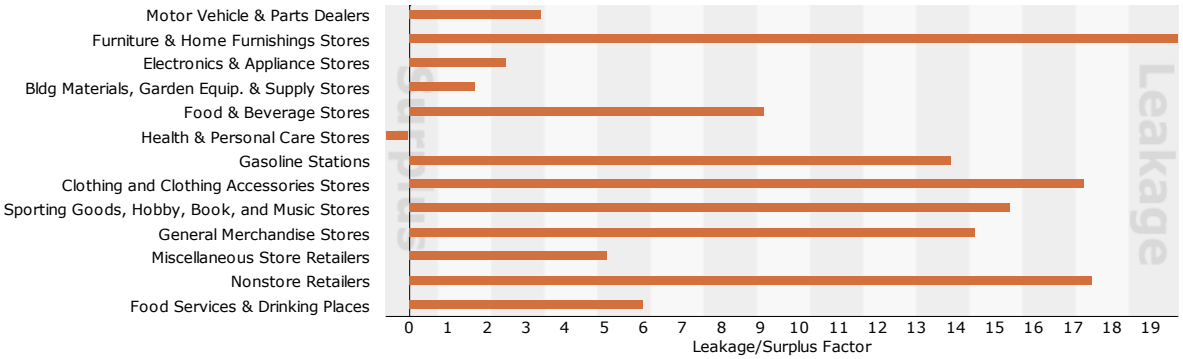
Summary Demographics	
2010 Population	927,140
2010 Households	356,793
2010 Median Disposable Income	$56,263
2010 Per Capita Income	$35,122

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of
Total Retail Trade and Food & Drink	44-45,722	$11,911,255,511	$9,998,851,543	$1,912,403,968	8.7	6,870
Total Retail Trade	44-45	$10,124,542,001	$8,415,837,865	$1,708,704,136	9.2	4,902
Total Food & Drink	722	$1,786,713,510	$1,583,013,678	$203,699,832	6.0	1,968

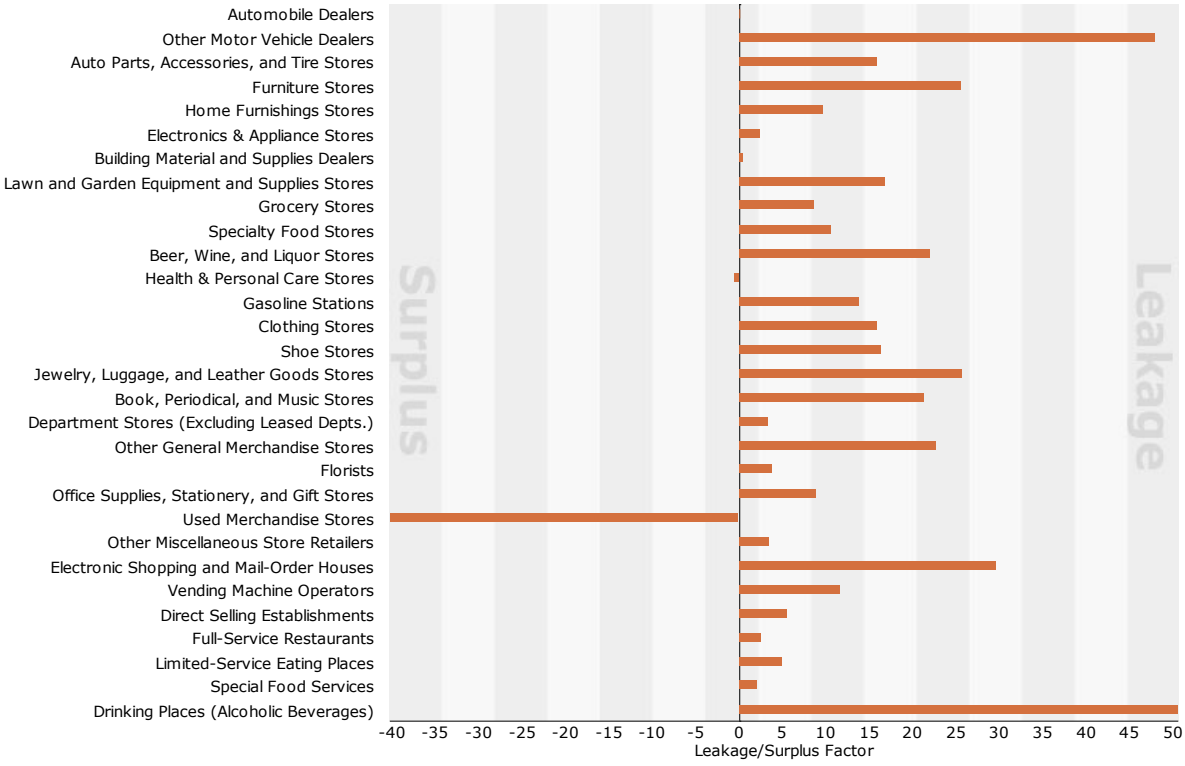
Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of
Motor Vehicle & Parts Dealers	441	$2,429,163,740	$2,269,602,990	$159,560,750	3.4	472
Automobile Dealers	4411	$2,099,305,111	$2,098,363,872	$941,239	0.0	226
Other Motor Vehicle Dealers	4412	$181,176,016	$63,627,318	$117,548,698	48.0	45
Auto Parts, Accessories & Tire Stores	4413	$148,682,613	$107,611,800	$41,070,813	16.0	201
Furniture & Home Furnishings Stores	442	$315,671,206	$211,711,491	$103,959,715	19.7	357
Furniture Stores	4421	$207,358,674	$122,727,266	$84,631,408	25.6	167
Home Furnishings Stores	4422	$108,312,532	$88,984,225	$19,328,307	9.8	190
Electronics & Appliance Stores	4431	$396,911,510	$377,774,910	$19,136,600	2.5	490
Bldg Materials, Garden Equip. & Supply Stores	444	$437,010,553	$422,527,719	$14,482,834	1.7	402
Bldg Material & Supplies Dealers	4441	$400,291,978	$396,423,503	$3,868,475	0.5	317
Lawn & Garden Equip & Supply Stores	4442	$36,718,575	$26,104,216	$10,614,359	16.9	85
Food & Beverage Stores	445	$1,656,054,031	$1,380,677,817	$275,376,214	9.1	501
Grocery Stores	4451	$1,578,090,630	$1,326,785,431	$251,305,199	8.7	361
Specialty Food Stores	4452	$24,402,339	$19,696,330	$4,706,009	10.7	94
Beer, Wine & Liquor Stores	4453	$53,561,062	$34,196,056	$19,365,006	22.1	46
Health & Personal Care Stores	446,4461	$384,568,148	$389,405,679	-$4,837,531	-0.6	364
Gasoline Stations	447,4471	$1,642,816,376	$1,240,789,922	$402,026,454	13.9	247
Clothing & Clothing Accessories Stores	448	$440,974,237	$310,677,906	$130,296,331	17.3	705
Clothing Stores	4481	$329,202,955	$238,312,210	$90,890,745	16.0	474
Shoe Stores	4482	$49,874,460	$35,756,240	$14,118,220	16.5	94
Jewelry, Luggage & Leather Goods Stores	4483	$61,896,822	$36,609,456	$25,287,366	25.7	137
Sporting Goods, Hobby, Book & Music Stores	451	$155,235,276	$113,886,387	$41,348,889	15.4	358
Sporting Goods/Hobby/Musical Instr Stores	4511	$81,813,268	$66,368,893	$15,444,375	10.4	274
Book, Periodical & Music Stores	4512	$73,422,008	$47,517,494	$25,904,514	21.4	84
General Merchandise Stores	452	$1,785,424,958	$1,333,467,551	$451,957,407	14.5	214
Department Stores Excluding Leased Depts.	4521	$687,901,026	$642,949,957	$44,951,069	3.4	91
Other General Merchandise Stores	4529	$1,097,523,932	$690,517,594	$407,006,338	22.8	123
Miscellaneous Store Retailers	453	$138,568,490	$125,194,579	$13,373,911	5.1	708
Florists	4531	$8,811,262	$8,145,826	$665,436	3.9	85
Office Supplies, Stationery & Gift Stores	4532	$81,030,275	$67,677,557	$13,352,718	9.0	193
Used Merchandise Stores	4533	$2,779,202	$6,511,012	-$3,731,810	-40.2	118
Other Miscellaneous Store Retailers	4539	$45,947,751	$42,860,184	$3,087,567	3.5	312
Nonstore Retailers	454	$342,143,476	$240,120,914	$102,022,562	17.5	84
Electronic Shopping & Mail-Order Houses	4541	$182,258,770	$98,737,315	$83,521,455	29.7	13
Vending Machine Operators	4542	$12,597,223	$9,928,892	$2,668,331	11.8	26
Direct Selling Establishments	4543	$147,287,483	$131,454,707	$15,832,776	5.7	45
Food Services & Drinking Places	722	$1,786,713,510	$1,583,013,678	$203,699,832	6.0	1,968
Full-Service Restaurants	7221	$633,868,996	$602,270,689	$31,598,307	2.6	1,077
Limited-Service Eating Places	7222	$901,815,512	$814,304,704	$87,510,808	5.1	700
Special Food Services	7223	$133,815,406	$128,002,405	$5,813,001	2.2	93
Drinking Places - Alcoholic Beverages	7224	$117,213,596	$38,435,880	$78,777,716	50.6	98

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Leakage/Surplus Factor by Industry Subsector



Leakage/Surplus Factor by Industry Group

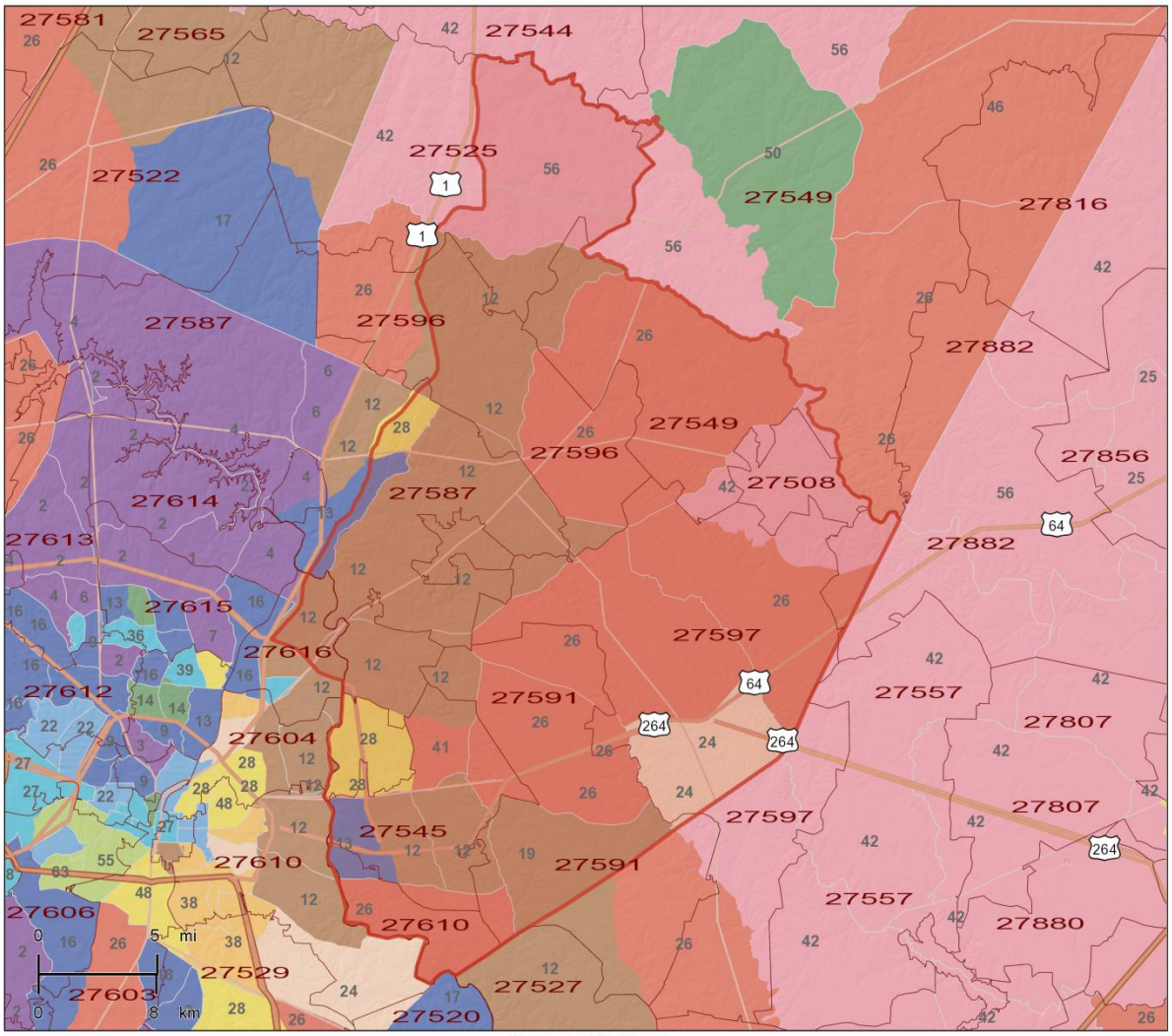


Appendix B: MarketPlace Tapestry Maps

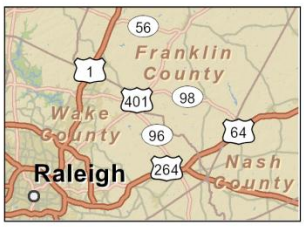
esri

Dominant Tapestry Site Map

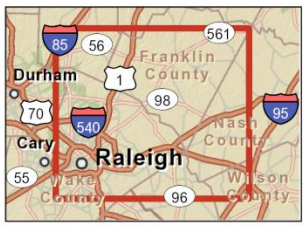
NEAS Study Area
Area: 375.03 Square Miles



Tapestry LifeMode



- L1 High Society: Affluent, well-educated, married-couple homeowners
- L2 Upscale Avenues: Prosperous, married-couple homeowners in different housing
- L3 Metropolis: City dwellers in older homes reflecting the diversity of urban culture
- L4 Solo Acts: Urban young singles on the move
- L5 Senior Styles: Senior lifestyles by income, age, and housing type
- L6 Scholars and Patriots: College, military environments
- L7 High Hopes: Young households striving for the "American Dream"
- L8 Global Roots: Ethnic and culturally diverse families
- L9 Family Portrait: Youth, family life, and children
- L10 Traditional Living: Middle-aged, middle income—Middle America
- L11 Factories and Farms: Hardworking families in small communities, settled near jobs
- L12 American Quilt: Households in small towns and rural areas



Source: Esri

February 04, 2013

Dominant Tapestry Site Map

NEAS Study Area
Area: 375.03 Square Miles

Tapestry Segmentation

Tapestry Segmentation represents the fourth generation of market segmentation systems that began 30 years ago. The 65-segment Tapestry Segmentation system classifies U.S. neighborhoods based on their socioeconomic and demographic composition. Each segment is identified by its two-digit Segment Code. Match the two-digit segment labels on the map to the list below. A longer description of each segment is available at:

http://www.esri.com/library/whitepapers/pdfs/community-tapestry.pdf

Segment 01: Top Rung
Segment 02: Suburban Splendor
Segment 03: Connoisseurs
Segment 04: Boomburbs
Segment 05: Wealthy Seaboard Suburbs
Segment 06: Sophisticated Squires
Segment 07: Exurbanites
Segment 08: Laptops and Lattes
Segment 09: Urban Chic
Segment 10: Pleasant-Ville
Segment 11: Pacific Heights
Segment 12: Up and Coming Families
Segment 13: In Style
Segment 14: Prosperous Empty Nesters
Segment 15: Silver and Gold
Segment 16: Enterprising Professionals
Segment 17: Green Acres
Segment 18: Cozy and Comfortable
Segment 19: Milk and Cookies
Segment 20: City Lights
Segment 21: Urban Villages
Segment 22: Metropolitans
Segment 23: Trendsetters
Segment 24: Main Street, USA
Segment 25: Salt of the Earth
Segment 26: Midland Crowd
Segment 27: Metro Renters
Segment 28: Aspiring Young Families
Segment 29: Rustbelt Retirees
Segment 30: Retirement Communities
Segment 31: Rural Resort Dwellers
Segment 32: Rustbelt Traditions
Segment 33: Midlife Junction
Segment 34: Family Foundations
Segment 35: International Marketplace
Segment 36: Old and Newcomers
Segment 37: Prairie Living
Segment 38: Industrious Urban Fringe
Segment 39: Young and Restless
Segment 40: Military Proximity
Segment 41: Crossroads
Segment 42: Southern Satellites
Segment 43: The Elders
Segment 44: Urban Melting Pot
Segment 45: City Strivers
Segment 46: Rooted Rural
Segment 47: Las Casas
Segment 48: Great Expectations
Segment 49: Senior Sun Seekers
Segment 50: Heartland Communities
Segment 51: Metro City Edge
Segment 52: Inner City Tenants
Segment 53: Home Town
Segment 54: Urban Rows
Segment 55: College Towns
Segment 56: Rural Bypasses
Segment 57: Simple Living
Segment 58: NeWest Residents
Segment 59: Southwestern Families
Segment 60: City Dimensions
Segment 61: High Rise Renters
Segment 62: Modest Income Homes
Segment 63: Dorms to Diplomas
Segment 64: City Commons
Segment 65: Social Security Set
Segment 66: Unclassified

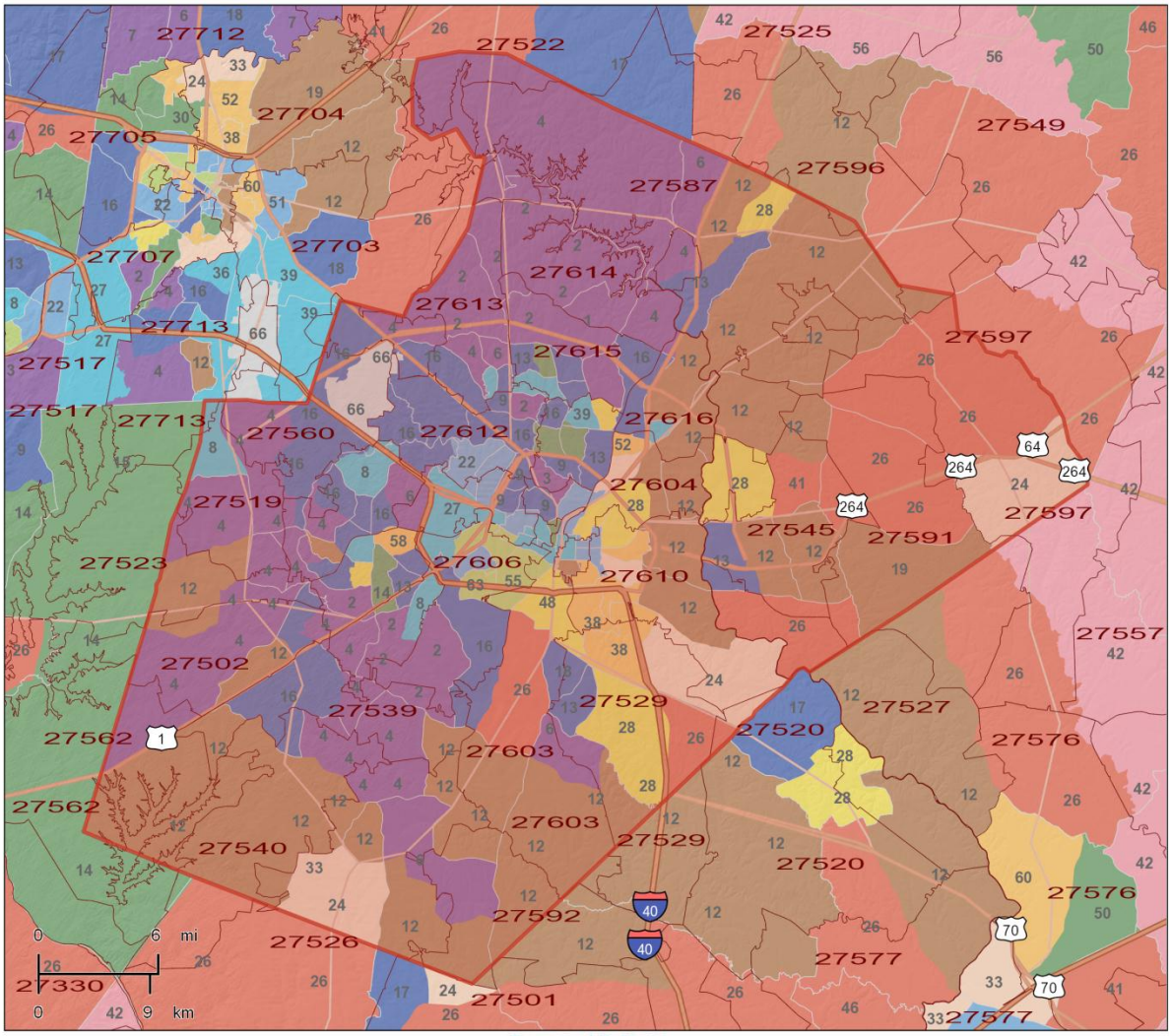
Source: Esri

February 04, 2013

esri

Dominant Tapestry Site Map

Wake County, NC
37183 (Wake County)
Geography: Counties



Tapestry LifeMode

- L1 High Society: Affluent, well-educated, married-couple homeowners
- L2 Upscale Avenues: Prosperous, married-couple homeowners in different housing
- L3 Metropolis: City dwellers in older homes reflecting the diversity of urban culture
- L4 Solo Acts: Urban young singles on the move
- L5 Senior Styles: Senior lifestyles by income, age, and housing type
- L6 Scholars and Patriots: College, military environments
- L7 High Hopes: Young households striving for the "American Dream"
- L8 Global Roots: Ethnic and culturally diverse families
- L9 Family Portrait: Youth, family life, and children
- L10 Traditional Living: Middle-aged, middle income—Middle America
- L11 Factories and Farms: Hardworking families in small communities, settled near jobs
- L12 American Quilt: Households in small towns and rural areas

Source: Esri

February 04, 2013

esri

Dominant Tapestry Site Map

Wake County, NC
37183 (Wake County)
Geography: Counties

Tapestry Segmentation

Tapestry Segmentation represents the fourth generation of market segmentation systems that began 30 years ago. The 65-segment Tapestry Segmentation system classifies U.S. neighborhoods based on their socioeconomic and demographic composition. Each segment is identified by its two-digit Segment Code. Match the two-digit segment labels on the map to the list below. A longer description of each segment is available at:

http://www.esri.com/library/whitepapers/pdfs/community-tapestry.pdf

Segment 01: Top Rung
Segment 02: Suburban Splendor
Segment 03: Connoisseurs
Segment 04: Boomburbs
Segment 05: Wealthy Seaboard Suburbs
Segment 06: Sophisticated Squires
Segment 07: Exurbanites
Segment 08: Laptops and Lattes
Segment 09: Urban Chic
Segment 10: Pleasant-Ville
Segment 11: Pacific Heights
Segment 12: Up and Coming Families
Segment 13: In Style
Segment 14: Prosperous Empty Nesters
Segment 15: Silver and Gold
Segment 16: Enterprising Professionals
Segment 17: Green Acres
Segment 18: Cozy and Comfortable
Segment 19: Milk and Cookies
Segment 20: City Lights
Segment 21: Urban Villages
Segment 22: Metropolitans
Segment 23: Trendsetters
Segment 24: Main Street, USA
Segment 25: Salt of the Earth
Segment 26: Midland Crowd
Segment 27: Metro Renters
Segment 28: Aspiring Young Families
Segment 29: Rustbelt Retirees
Segment 30: Retirement Communities
Segment 31: Rural Resort Dwellers
Segment 32: Rustbelt Traditions
Segment 33: Midlife Junction
Segment 34: Family Foundations
Segment 35: International Marketplace
Segment 36: Old and Newcomers
Segment 37: Prairie Living
Segment 38: Industrious Urban Fringe
Segment 39: Young and Restless
Segment 40: Military Proximity
Segment 41: Crossroads
Segment 42: Southern Satellites
Segment 43: The Elders
Segment 44: Urban Melting Pot
Segment 45: City Strivers
Segment 46: Rooted Rural
Segment 47: Las Casas
Segment 48: Great Expectations
Segment 49: Senior Sun Seekers
Segment 50: Heartland Communities
Segment 51: Metro City Edge
Segment 52: Inner City Tenants
Segment 53: Home Town
Segment 54: Urban Rows
Segment 55: College Towns
Segment 56: Rural Bypasses
Segment 57: Simple Living
Segment 58: NeWest Residents
Segment 59: Southwestern Families
Segment 60: City Dimensions
Segment 61: High Rise Renters
Segment 62: Modest Income Homes
Segment 63: Dorms to Diplomas
Segment 64: City Commons
Segment 65: Social Security Set
Segment 66: Unclassified

Source: Esri

February 04, 2013