Appendix

Think CLAYTON

State of the Town

The Town of Clayton has grown from a population of 3,103 in 1970 to an estimated 26,307 in 2020. People continue to move to Clayton for a variety of reasons. Families choose Clayton because of its housing affordability, high quality schools, and abundant recreational activities. Retirees choose Clayton because of its safe, small-town charm and urban amenities. Employers choose Clayton because of its business-friendly environment and convenient access to Raleigh, I-40, and I-95. Clayton's arts-centric community and vibrant downtown also contribute to the Town being an area of choice for residents and businesses alike.

Overview

The Clayton 2045 Comprehensive Growth Plan is updating and replacing the 2040 Clayton Comprehensive Plan adopted in 2015. The process to develop the this plan was designed to provide opportunities for residents, elected officials, town staff, civic groups and other entities to come together to discuss community issues and values. The planning process resulted in a community-led vision and strategic direction for the Town to ensure that Clayton remains a community of choice for future generations.

Study Area

Clayton is located southeast of Raleigh on the western edge of Johnston County, North Carolina. The study area is 46 square miles (29,455 acres) which includes the Town's current corporate limits (13.8 square miles / 8,822 acres) and extraterritorial jurisdiction (ETJ). While residents and businesses located in the ETJ do not play taxes to the Town of Clayton, the Town is responsible for land use decisions (zoning approvals and building permits) within their extraterritorial jurisdiction.

Purpose of this Report

The purpose of this report is to document and analyze the existing characteristics of Clayton to gain an understanding of the current issues that the Town is facing and potential impacts on future growth and development in the Town.
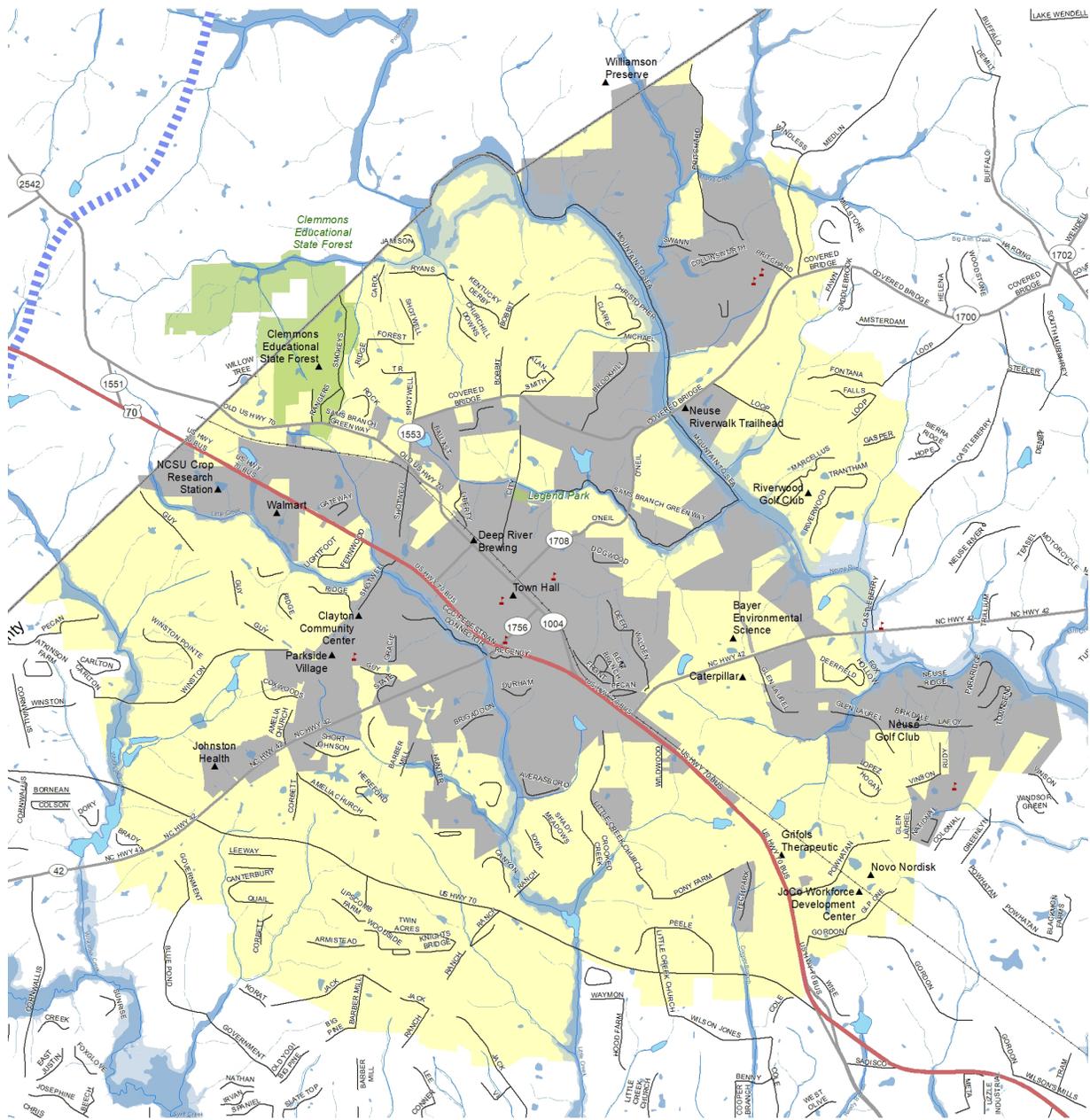
Major themes of this report include:

- » Clayton's population is growing rapidly
- » Growth is projected to continue
- » Minority populations and "young families" (age cohorts 0-19 and 35-44) are increasing
- » Infrastructure and public services need to be expanded to keep pace with increasing demand

Data Collection and Research

The Clayton 2045 Comprehensive Growth Plan is informed by existing plans, reports, policies and regulations. In addition, the project team analyzed data and created maps to further examine existing conditions in the study area. Much of the information is based on 2019 data, which was the most recent available data. The following topics are included in the analysis: demographics, housing and economic conditions, Downtown, land use, environment and natural resources, transportation, utilities, and community facilities, services, and parks.

In addition to data collected for mapping purposes, the team also gathered information through reviewing relevant documents, interviewing key stakeholders, touring the study area, conducting a town-wide survey, and conversing with Town staff.

STUDY AREA

Legend:

- Clayton Limits (gray)
- Clayton ETJ (yellow)
- ▲ Points of Interest
- ⚑ Schools
- Interstate (purple)
- US Highways (red)
- Secondary Highway (gray)
- Future NC 540 (dotted blue)
- Roads
- Rail
- Lake/Pond (light blue)
- Stream/River (blue)
- Flood Zone (light blue-gray)
- Wetlands (blue-gray)
- Parks (green)

Clayton's Population

Population Growth

Historical Population Growth

The Town of Clayton has grown from a population of 3,103 in 1970 to an estimate of 26,307 in 2020. This represents an overall increase of 848% and translates to an average 4% annual growth rate in the last fifty years. The growth rate really picked up after 2000. Clayton grew faster than the rest of Johnston County in the past 20 years, growing 106% since 2000 compared to Johnston County's 75% according to the US Census. This is faster than the larger Raleigh-Cary MSA growth over the same two decades.

|	2000	2010	2020	Change
Clayton	6,973	18,118	26,307	106%
Johnston County	123,327	169,681	215,999	75%
Raleigh-Cary MSA	797,071	1,130,490	1,420,300 (est.)	78%

Source: Decennial Census

Population Projections

Clayton is located in the Piedmont Atlantic mega-region, defined as the urban area stretching from Birmingham, Alabama to Atlanta, Georgia then following the 85 corridor to Charlotte and Raleigh, NC. The relatively low cost of living and high quality of life in the Southeast is projected to continue leading to increases in population. According to projections by American City Business Journals, the Raleigh metro area is projected to be the third-fastest growing metro area over the next 25 years (Triangle Business Journal). The Capital Area MPO estimates that the population of the Research Triangle Region will grow by 1.2 million people in the next 30 years. Part of the comprehensive planning process includes an analysis of various demographic projections and the development of custom projections for the Town and its Study Area to be utilized for planning purposes moving forward.

The graph on the opposite page illustrates different population projections. It includes a projection based on the NC Office of State Budget and Management (OBSM) county projections and a linear growth projection based on a continuation of historic trends. The projections are very similar, both projecting the population of the town to exceed 50,000 by 2050. It is likely towards the end of the projection period the linear growth rate will diminish due to lack of land availability.

Historical Population Growth
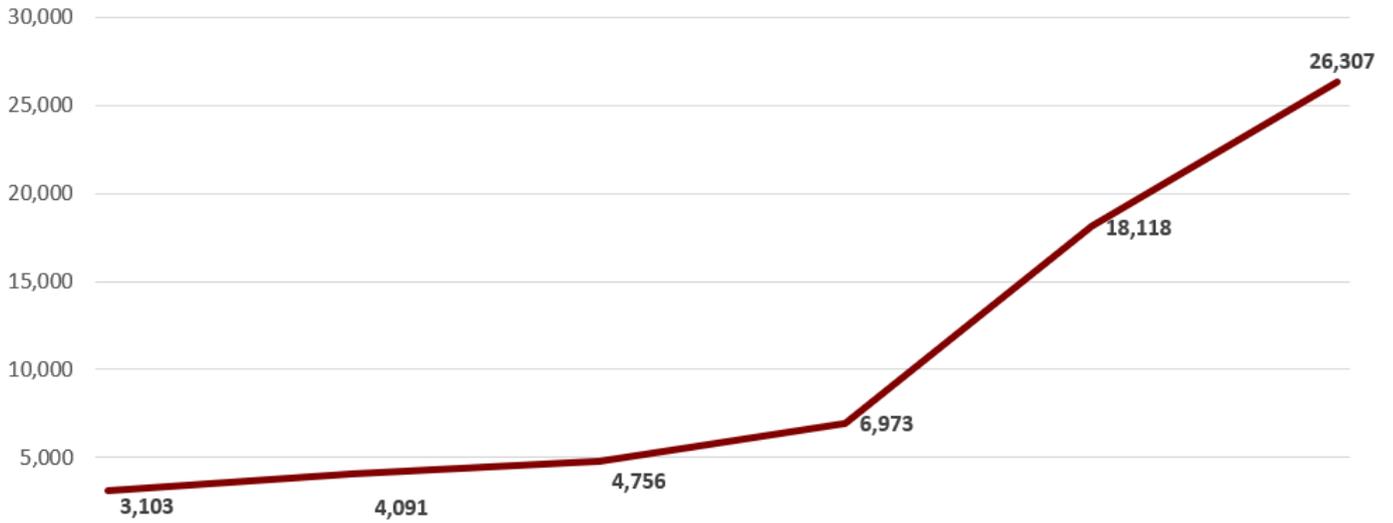
Historical Population Growth within municipal limits (Source: American Community Survey, Decennial Census)

Population Projections
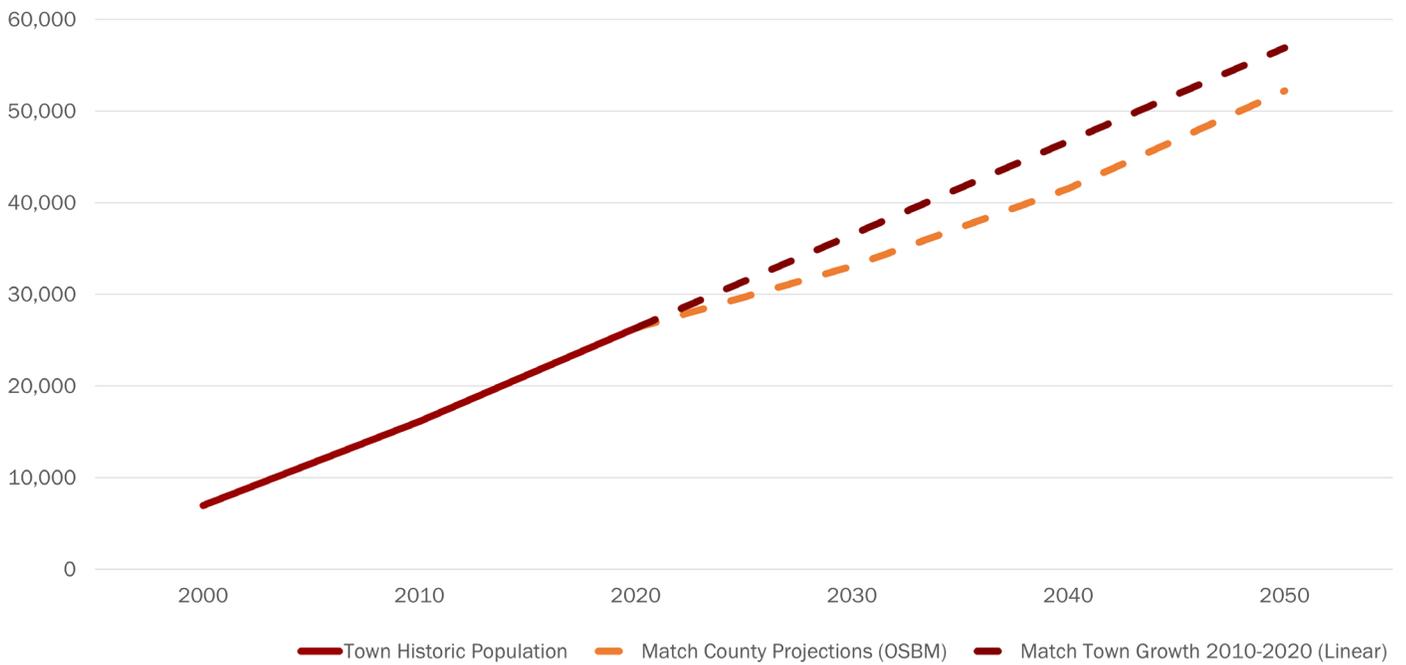
Sources: 2020 US Census, North Carolina Office of State Budget and Management (OSBM)

Race & Ethnicity

Clayton is becoming more racially diverse. As shown in the table, the share of residents identifying as White Alone dropped 8% since 2000, while the shares of residents who identify as Black or American Indian have increased.

Residents identifying as being of Hispanic origin has also increased significantly in the past decade, from 9.4% of the municipal population in 2010 to 14.3% in 2019. In the same time period, the Hispanic population in the Raleigh MSA has only grown from 9% to 10%.

	2000	2010	2019	Percent Change 2000-2019
White Alone	72%	69%	64%	-8%
Black or Aftrican American	20%	22%	26%	+6%
American Indian or Alaska Native	0%	0%	2%	+2%
Asian	1%	1%	1%	-
Native Hawaiian or Pacific Islander	0%	0%	0%	-

Age

Between 2010 and 220 the median age increased by two years from 35.6 to 37.2. Between 2010 and 2020 there has been an increase in most age brackets under 55 years, except for residents between 20-34. This Is indicative of Clayton's growth as a place for families with children of all ages.

Age Cohorts
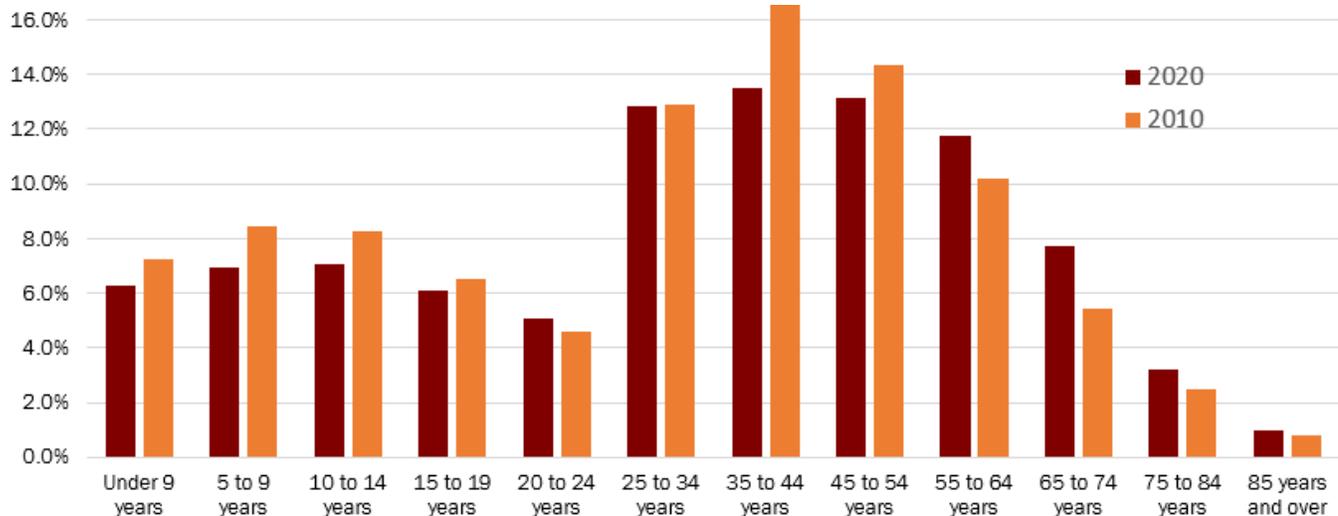
Source: American Community Survey, Decennial Census

Households

There are an estimated 13,796 households in the study area, an increase of 104% since 2000. The average household size in Clayton is 2.67, slightly lower than Johnston County (2.70) but higher than the North Carolina average (2.48). Clayton's trend of attracting young families with school-aged children is consistent with most neighboring suburban communities within the Raleigh metropolitan region, and the percentage of family households (two or more related householders) has held steady around 75% in the past two decades.

|	2000	2010	2019	2025*
Total Households	6,763	10,049	13,796	15,899
Family Households	75%	73%	72%	72%

*Data for Study Area, *Denotes Projection*

Source: American Community Survey, Decennial Census, Esri

Income & Poverty

The median household income in Clayton is $62,767 as of 2019, which is an increase from $58,837 in 2015. Clayton has a higher median household income than Johnston County ($50,132) and North Carolina ($46,450). Similarly, the poverty rate (persons living below poverty level) in Clayton (10.9%) is lower than both Johnston County (17.2%) and North Carolina (16.8%).
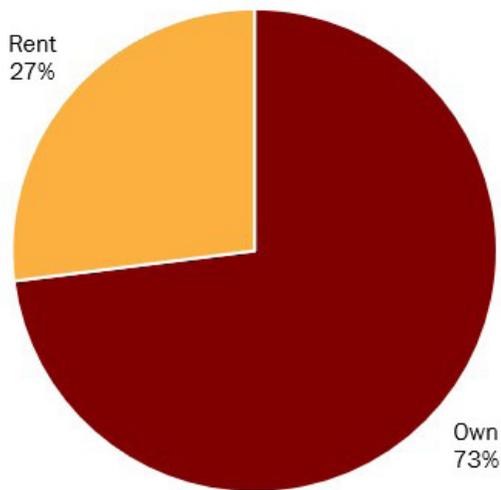
Median Household Income 2019
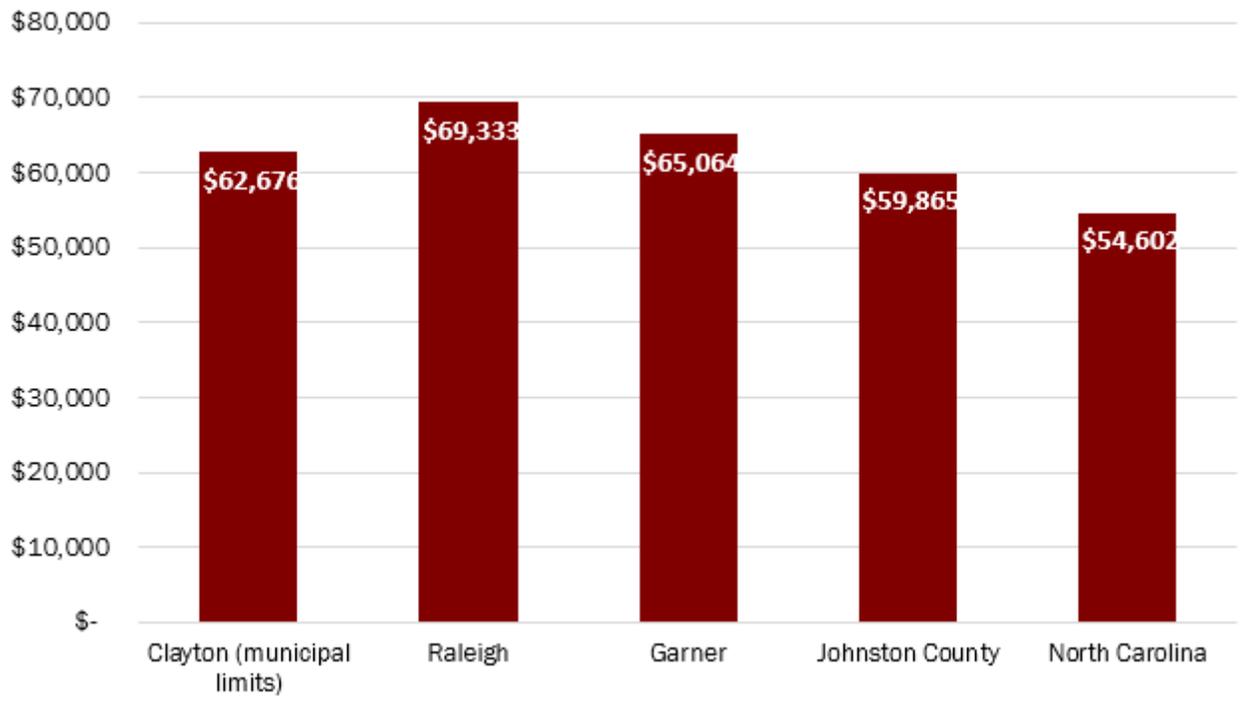
Source: 2019 ACS 5-year Estimates

Housing Units

Clayton has grown as a result of its reputation for a high quality of life and housing that is relatively affordable compared to the greater region. The number of housing units with Clayton's jurisdiction is 12,060, 7,352 of which are within the corporate limits. Clayton's housing unit vacancy rate is 7.7% compared to North Carolina's rate of 14.3%. Single-family detached homes remain the predominant housing type in Clayton, however attached housing, in the form of townhomes and other multi-unit structures, are increasingly becoming a part of the housing mix. Per Town data, there are over 6,000 approved housing units as of late 2020.

Clayton's median home values have historically been higher than than those in surrounding Johnston County. As Clayton grows, its median home value has risen more rapidly than Johnston County's. The median home value for Clayton was $192,200 in 2019. This is still lower than the median price of $249,000 in 2019 for the larger Raleigh MSA, which partially explains Clayton's popularity.

Housing Tenure

Rent
27%

Own
73%

Source: 2019 ACS 5-year Estimates

Housing by Type

12%
4%
5%
2%
2%
3%
72%

- 1 unit - detached
- Townhome
- Duplex
- 3 or 4 units
- 5 to 19 units
- 20 or more units
- Mobile Home
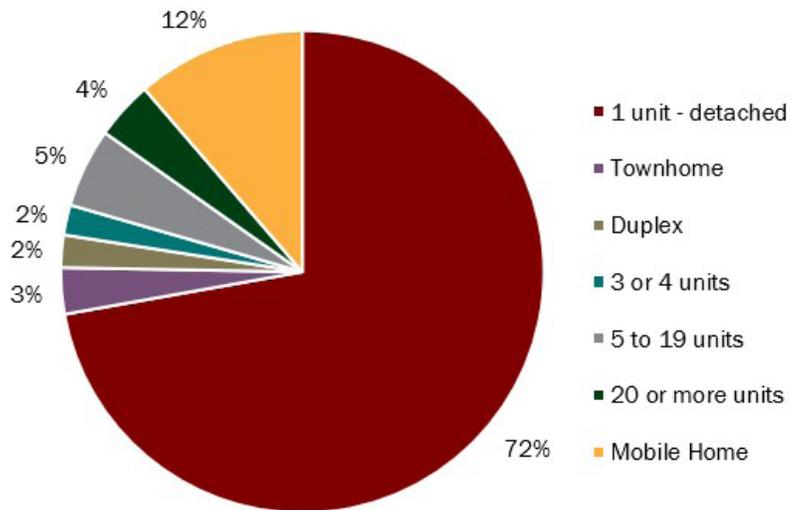
Source: 2019 ACS 5-year Estimates

Median Home Value

	2000	2010	2019
Clayton	$119,100	$177,038	$192,900
Johnston County	$108,800	$159,000	$165,100
Raleigh MSA	not available	$231,439	$249,800

Source: 2010, 2019 ACS 5-year Estimates, 2000 Decennial Census. Adjusted for inflation.
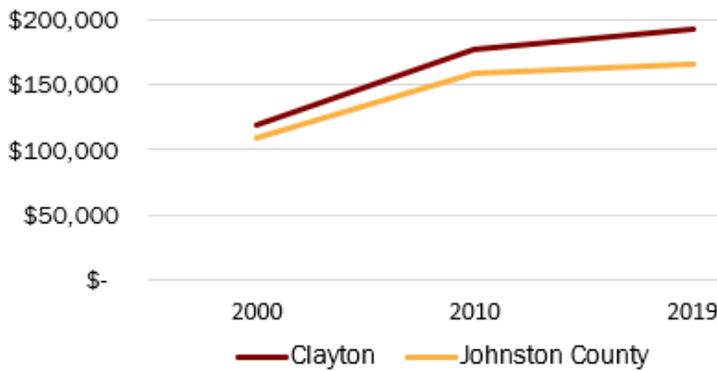
Housing by Year Built
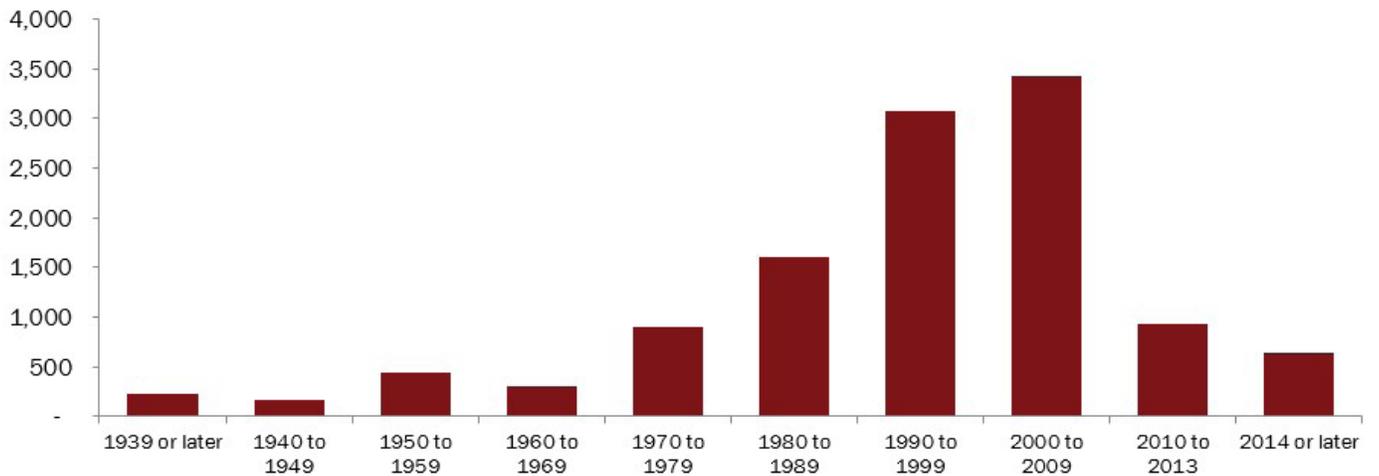
Source: 2019 ACS 5-year Estimates

Clayton's Economy

The Town of Clayton is prospering with lower poverty rates and higher income levels compared to Johnston County and State averages. Compared to neighboring jurisdictions Clayton offers a high-quality, yet affordable, living option, whilch in part contributed to the 48% population increase from 2010-2020. The following figure compares Clayton's competitive position in the Raleigh area to other area and peer jurisdictions.

Demographic Comparison to Peer Jurisdictions

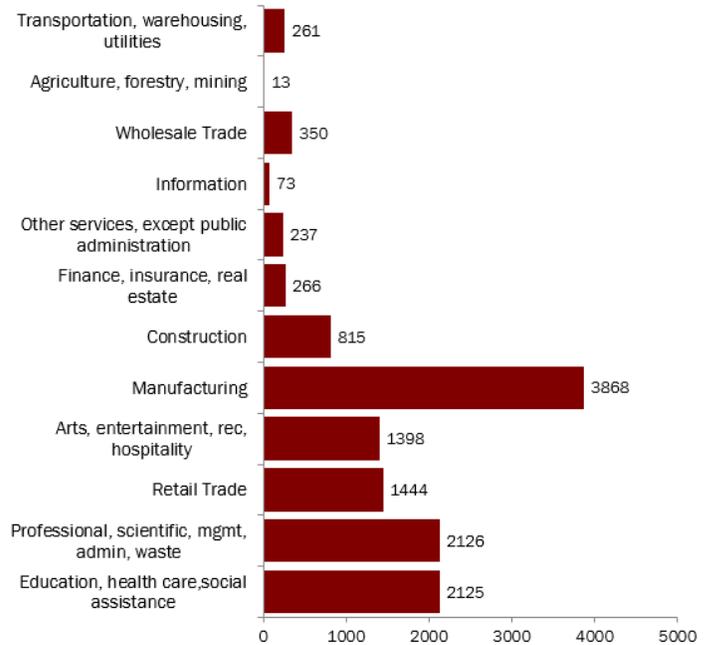| Jurisdiction	Population 2010	Population 2019	Total pop.increase	% pop. increase	Housing Units	Vacant Units	Median Home Value	Poverty Rate	2010 Median HHI	2019 Median HHI	% HHI change	Pop. with a Bachelors Degree
Clayton	**16,116**	**24,887**	**8,771**	**54%**	**7,352**	**7%**	**$192,900**	**9%**	**$50,282**	**$62,059**	**23%**	**8.4%**
Fuquay-Varina	17,937	28,109	10,172	57%	9,157	4%	$232,100	8%	$59,423	$74,618	26%	7.8%
Garner	25,745	32,213	6,468	25%	12,074	6%	$175,400	11%	$60,366	$61,873	2%	13.1%
Holly Springs	24,661	34,874	10,213	41%	10,964	3.3%	$283,700	4%	$85,000	$104,822	23%	22.7%
Knightdale	11,401	17,264	5,863	51%	5,966	4.5%	$183,000	3%	$71,922	$70,376	-2%	24.4%
Smithfield	10,966	11,619	653	6%	5,341	11.9%	$140,700	21%	$35,867	$51,326	43%	9.0%
Apex	37,476	61,212	23,736	63%	17,816	4.0%	$307,800	5%	$90,709	$105,404	16%	18%
Matthews	27,198	31,071	3,873	14%	12,265	4.0%	$249,200	6%	$70,742	$78,971	12%	19.3%
Wake Forest	30,117	37,641	7,524	25%	14,605	5.0%	$285,000	6%	$69,222	$88,394	28%	19.6%
Johnston County	168,878	209,339	40,461	24%	79,849	7.9%	$165,100	12.5%	$49,745	$59,865	20%	22.9%
NC	9,271,178	10,264,876	993,698	11%	4747943	14.3%	$165,900	14%	$45,570	$53,855	18%	10.3%

Employment

According to the U.S. Census Bureau, there were over 12,976 estimated jobs in the Study Area in 2018 (Census on the Map). As noted below manufacturing constituted the greatest share of jobs in Clayton.

Major Employers

According to the North Carolina Department of Commerce, three of Johnston County's largest private-sector employers are located in Clayton's jurisdiction: Novo Nordisk, Grifols Therapeutics, Inc., and Caterpillar, Inc.

Employment by Sector

Sector	Value
Transportation, warehousing, utilities	261
Agriculture, forestry, mining	13
Wholesale Trade	350
Information	73
Other services, except public administration	237
Finance, insurance, real estate	266
Construction	815
Manufacturing	3868
Arts, entertainment, rec, hospitality	1398
Retail Trade	1444
Professional, scientific, mgmt, admin, waste	2126
Education, health care, social assistance	2125

Source: 2018 Census on the Map

Johnston County Top Employers

Rank	Company	Industry	Employees
1	Johnston County Public Schools	Education	1000+
2	Johnston Health	Health care and Social Services	1000+
3	Grifols Theraputics Inc	Manufacturing	1000+
4	County of Johnston	Public Administration	1000+
5	Novo Nordisk Pharmaceutical	Manufacturing	1000+
6	Asplundh Tree Expert Co Inc	Administrative and Support and Waste Management and Remediation Services	1000+
7	Food Lion	Retail	500-999
8	Wal-Mart Inc	Retail	500-999
9	Caterpillar Inc	Manufacturing	500-999
10	Johnston Technical Institute	Education	500-999

Source: NC Commerce, 2019

Employment Inflow/Outflow

According to 2018 Census data, there are an estimated 12,976 total jobs at places of employment within Clayton's ETJ. 11,566 of these positions are filled by in-commuters and the remaining 1,110 jobs are held by residents. Over 14,415 residents of Clayton commute outside of the Town limits for employment. A large number of these commuters are traveling to areas just outside the town limits, including the employment area southeast of Clayton near the intersection of US 70 and US 70 Business. Others are traveling to Garner, Smithfield, Raleigh and the Research Triangle Park. The median commute time in 2019 was 30.4 minutes, which is just slightly higher than the average commute time of 29 minutes in 2015. More insight into traffic patterns can be found in the Transportation section of this report.

Inflow/Outflow

11,566 Commute into Clayton

1,410 Live and work in Clayton

14,415 Commute out of Clayton

Source: 2018 Census on the Map, Statistics for ETJ (Study Area)

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Clayton's Character

Clayton's character is changing. While the small-town charm of Clayton will always be reflected in the historic Downtown, periods of unprecedented growth have noticeably altered the Town's landscape. But with this growth comes new energy and the opportunity to continue to reinforce Clayton as a welcoming and unique destination in the greater Raleigh region.

Downtown

The heart of Clayton's character is found in its Downtown. The small-town appeal and southern hospitality is captured in its historic storefronts along Main Street. Since the mid 2000s, the Town has made a concerted effort to revitalize and reinvigorate Downtown through a variety of strategic investments and initiatives. These efforts include the Downtown Façade Grant program, Clayton Downtown Redevelopment Incentive Grant, and a variety of public sector infrastructure improvements Horne Plaza and the Clayton Center Parking Lot renovation. Private investment in Downtown has grown from a few offerings to include over a dozen bars and restaurants including Jones Lunch, Clayton Steakhouse, Deep River Brewing Company, Manning's Restaurant and new arrivals including Boulevard West, First Street Tavern and Revival 1869.

Key to a successful Downtown is having residents living within walking distance of Downtown services and amenities. New residential developments including the Arbors at East Village, the Walk at East Village, and Academy Pointe along with recent and ongoing renovations of upper floors are increasing the number of people that live proximate to Downtown. Front Street Extension and multi-purpose trail along with Sam's Branch Greenway and various sidewalk installations are increasing walking and biking access to Main Street.

Events

From the Clayton Music and Harvest Festival to the Main Street Community Garden, Downtown Clayton is the center of community events and a major part of the Town's identity. Thousands of attendees participate in Downtown events throughout the year. The following list details the largest of the reoccuring events with

5k in Downtown Clayton

attendance estimates:

» Clayton Music & Harvest Festival – 20,000
» Christmas Parade – 8,000 – 10,000
» Town Square Concert Series – average of 1,100 per concert (5,500 per year)
» Christmas Village & Tree Lighting – has increased each year since moved to Main Street – now exceeds 5,500
» Clayton Shindig – 1,000

Arts Community

Another key aspect of Clayton's character is its focus on the arts. In 2006, the old Clayton Elementary and Clayton High schools was renovated into a state-of-the-art performance and conference center. The Clayton Center, which currently houses Town Hall, the Cultural Arts Center, and the Conference Center, is a popular destination for both locals and visitors alike. On average, over 120,000 people visited the Clayton Center to attend concerts and events per year. The historic auditorium presents a diverse array of nationally touring performances. The common spaces double as a gallery that hosts rotating art shows. In addition, the Public Art Advisory Board and Clayton Visual Arts, Inc. actively support public art and programming in the Town. Among their most noteworthy accomplishments are the following:

Public Art Advisory Board:
» Clayton Center Mural by Dorothy Dembosk
» Annual Downtown Sculpture Trail
» Sam's Branch Greenway Butterfly Garden

Clayton Visual Arts:
» Rotating Art Displays at the Clayton Center
» Annual Clayton Sculpture Trail
» Christmas in Clayton
» Art After Dark

Mural, via Town of Clayton

Clayton Center Mural

A Downtown concert, via Town of Clayton.

Clayton's Built Environment

The Town of Clayton is well positioned to attract quality growth and development over the coming decades. Moving forward, it will be necessary for the Town to make land use decisions that continue to maintain and improve the quality of life for all residents. Although the Town has invested heavily in the infrastructure necessary to support additional growth, the location and land use mix of future growth will determine whether or not the Town receives a return on these infrastructure investments. Recent studies on costs of services indicate that certain land uses, particularly some types of residential uses, consume more government services (schools, emergency services, parks and recreation, etc.) than they provide in revenue via taxes. Non-residential land uses, including commercial, industrial, and agricultural land uses result in a net surplus in revenue when compared to the cost of services they consume. Accordingly, balancing residential growth with non-residential growth will be important to maintaining a healthy tax base and providing services. Likewise, managing the pace of growth and its intensity in some areas, while promoting
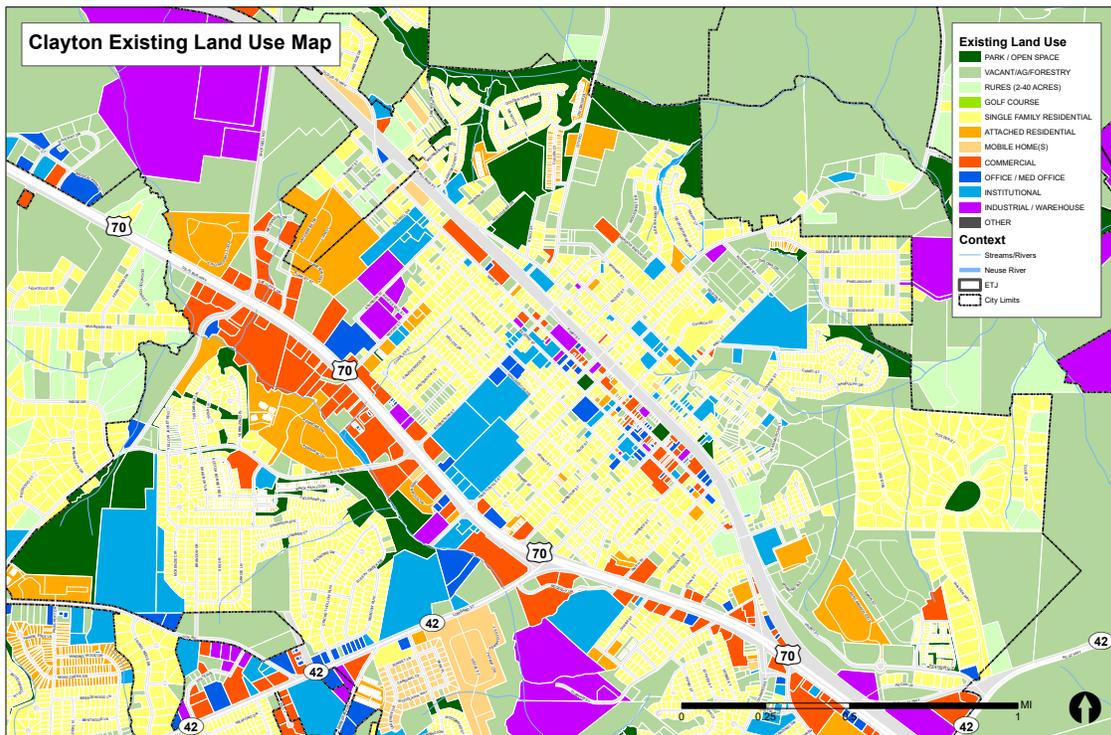
Cost of Services

Many non-residential land uses, including commercial, industrial, and agricultural land uses result in a net surplus in revenue when compared to the cost of services they consume.

density and a mix of uses in others, will be essential to protecting the Town's character and increasing the livability and attractiveness of the Town to potential residents and employers.
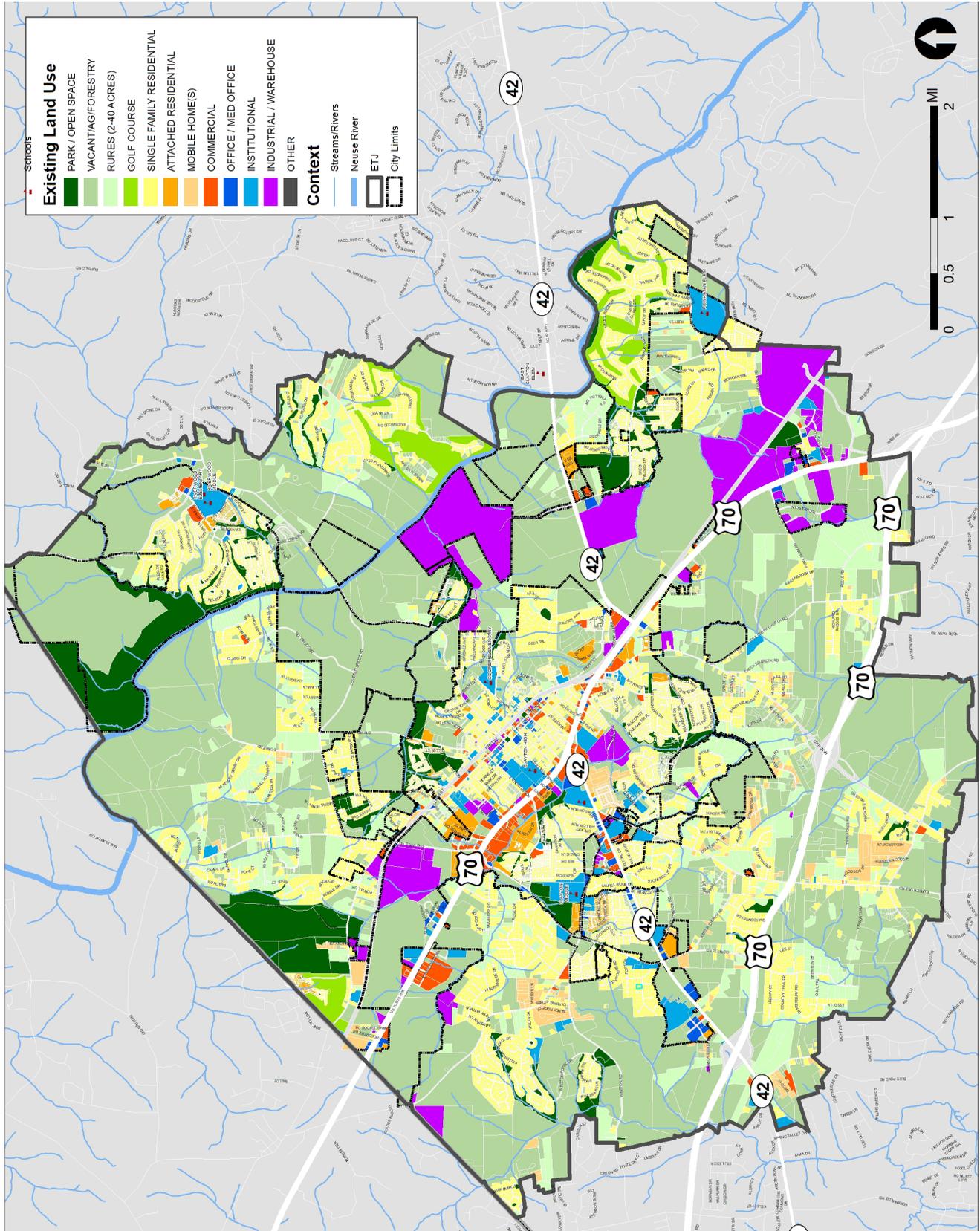
Existing Land Use

The map on the opposite page shows existing Land Use. This inventory was derived from Johnston County 2020 Tax Data. Trends are described on page 18.

Existing Land Use Map - Downtown Detail View

Existing Land Use Map

Existing Land Use

- PARK / OPEN SPACE
- VACANT/AG/FORESTRY
- RURES (2-40 ACRES)
- GOLF COURSE
- SINGLE FAMILY RESIDENTIAL
- ATTACHED RESIDENTIAL
- MOBILE HOME(S)
- COMMERCIAL
- OFFICE / MED OFFICE
- INSTITUTIONAL
- INDUSTRIAL / WAREHOUSE
- OTHER

Context

- Streams/Rivers
- Neuse River
- ETJ
- City Limits

Schools

Residential Land Uses

Residential land uses occupy approximately 31% of land area and 61% of market value within the study area. Single-family homes are the most significant residential land use, occupying 19% of the total land area within the study area, yet representing 49% of total market value of real estate in the study area. Attached residential (duplexes, apartments, townhomes) represent 6% of land area.

Non-Residential Land Uses

Non-residential land uses, such as commercial, office, or industrial land, account for 9.2% of land within the study area. Industrial land has grown from 3.7% to 5% of the land area since the 2015 Comprehensive Plan was completed. Nonresidential land uses remain concentrated along US 70, Downtown, Us 42 East, and US 42 West.

Commercial land uses make up about 7% of the property value in the Study Area. This includes active retail uses, restaurants, and services but not industrial or office. The amount of land devoted to commercial
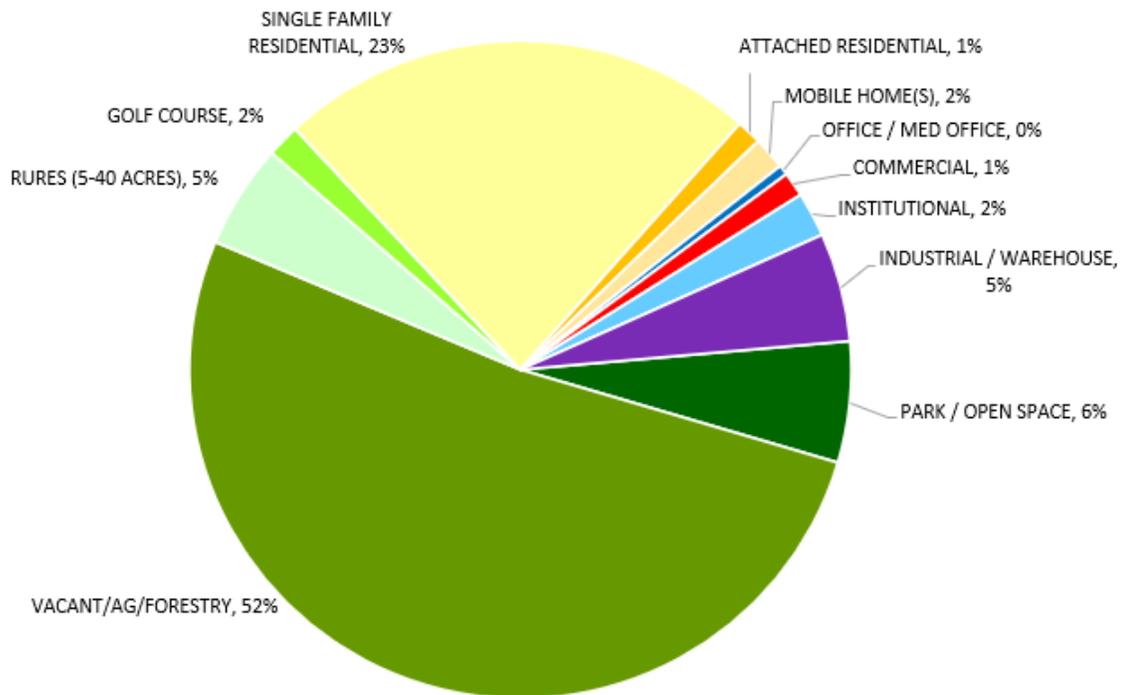
uses has grown significantly since 2015.

Major industrial land uses in the study area include the Carolina Distribution Center on Shotwell Road, the Caterpillar plant and testing facility on NC 42 east, and the bio-tech hub anchored by Novo Nordisk and Grifols, as well as other significant manufacturing facilities in the vicinity of Powhatan Road and US 70, including Automatic Rolls, which produces over 2 million buns a day for companies like McDonald's. Bayer Crop Science also has a presence on NC 42 East, to the northeast of Downtown.
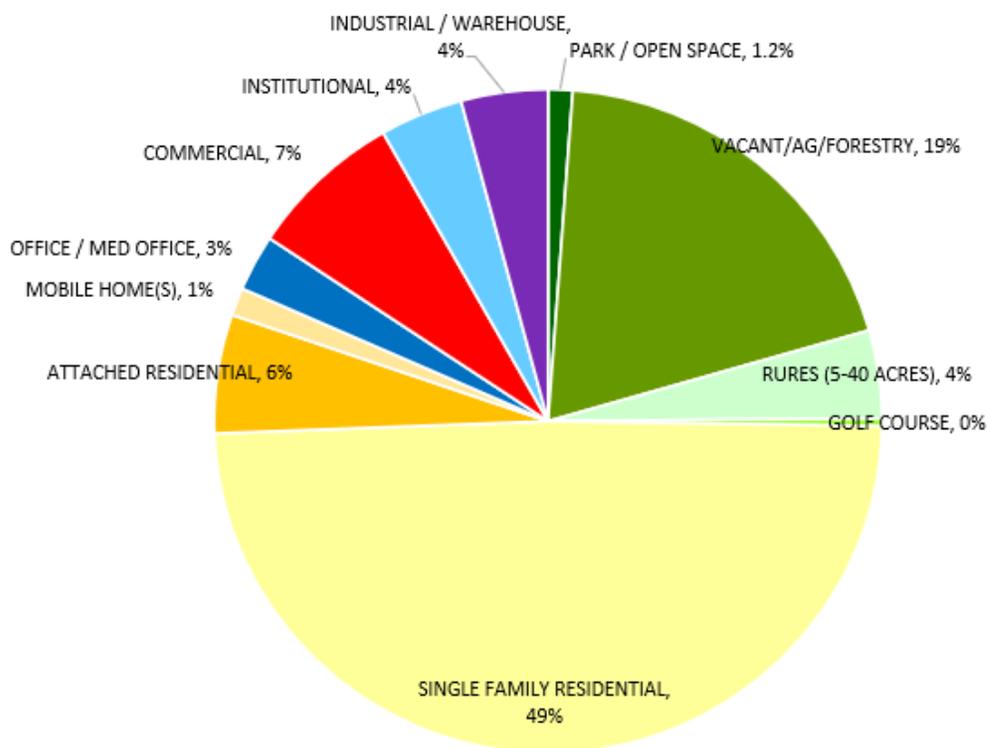

Grifols Therapeutics is located along US 70 Business in the southeast corner of Clayton's Planning Area

Existing Land Use by Land Area

SINGLE FAMILY RESIDENTIAL, 23%

ATTACHED RESIDENTIAL, 1%

MOBILE HOME(S), 2%

OFFICE / MED OFFICE, 0%

COMMERCIAL, 1%

GOLF COURSE, 2%

INSTITUTIONAL, 2%

RURES (5-40 ACRES), 5%

INDUSTRIAL / WAREHOUSE, 5%

PARK / OPEN SPACE, 6%

VACANT/AG/FORESTRY, 52%

Existing Land Use by Value

INDUSTRIAL / WAREHOUSE, 4%

PARK / OPEN SPACE, 1.2%

INSTITUTIONAL, 4%

VACANT/AG/FORESTRY, 19%

COMMERCIAL, 7%

OFFICE / MED OFFICE, 3%

MOBILE HOME(S), 1%

ATTACHED RESIDENTIAL, 6%

RURES (5-40 ACRES), 4%

GOLF COURSE, 0%

SINGLE FAMILY RESIDENTIAL, 49%

Zoning

The Town of Clayton's Unified Development Code (UDC) includes a description of zoning districts and overlay districts that regulate the use of property for the purposes of protecting public health, safety, and the general welfare of the community. Every district has standards that specify development density, building height, and dimensional requirements. The majority of land (60%) in the Study Area is located in the Residential Estate (RE) zoning district. This district allows residential uses with minimum lot size requirements of 20,000 square feet (with public water and sewer), 30,000 square feet (with public water and septic), and 40,000 square feet (with well water and septic). The UDC also allows Open Space Subdivisions that permit smaller lot sizes if a portion of the site is reserved for recreation and open space.

Higher-density residential zoning districts and planned mixed-use zoning districts constitute the second largest percentage of land area. Single-Family Residential districts (R-10, R-8, and R-6) are located adjacent to Downtown, along Covered Bridge Road, along Glen Laurel Road, in the Riverwood area, and southwest of Downtown along NC 42, Barber Mill Road and Amelia Church Road.
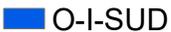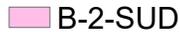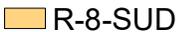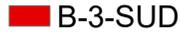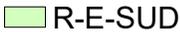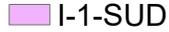
Zoning districts that allow commercial uses are primarily concentrated along US 70 Business, Downtown, and NC 42. Industrial zoning districts are primarily located along NC 42 East and in the Powhatan Road area in the vicinity of US 70 Business and US 70 bypass.
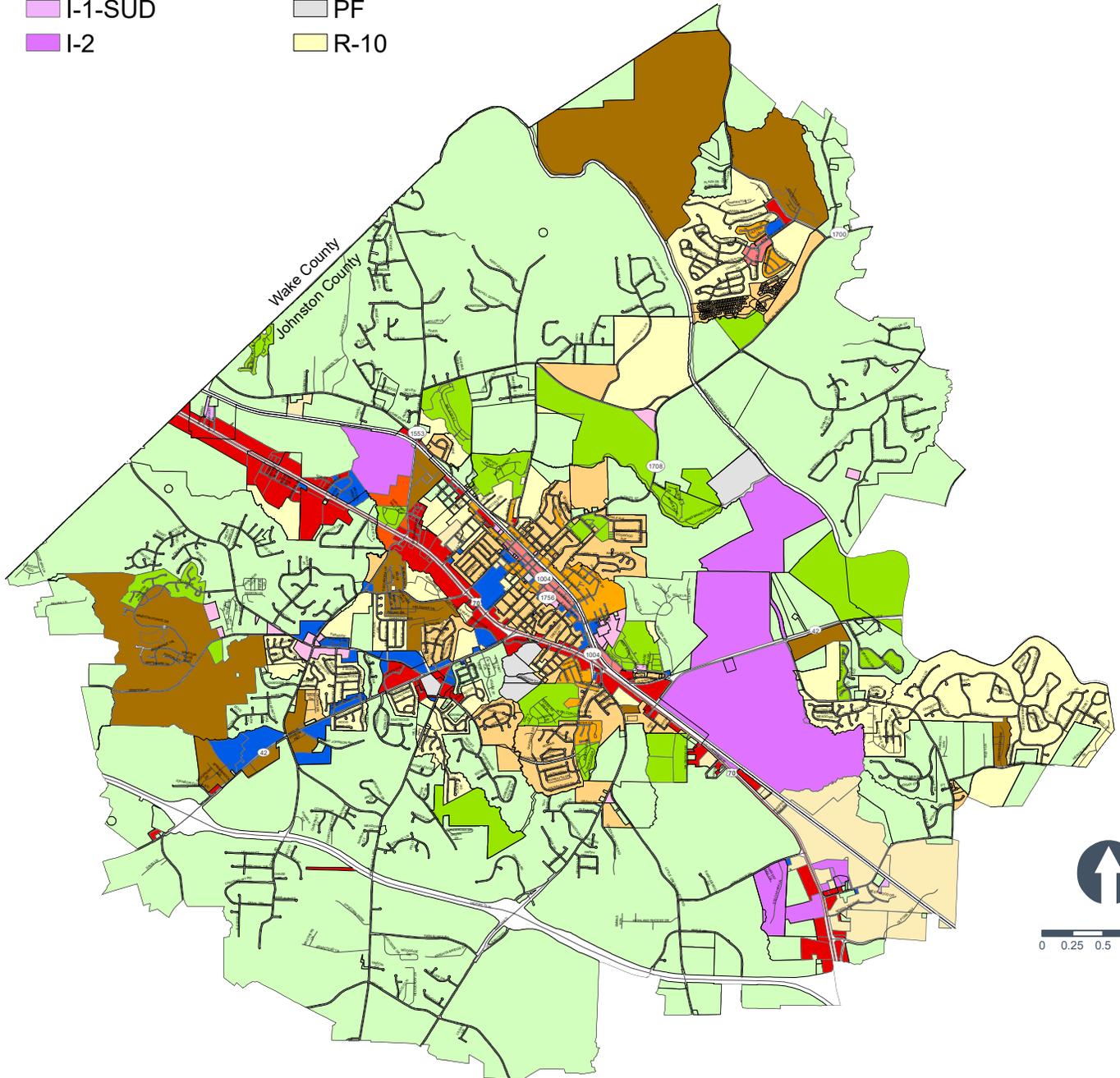
The table below includes a breakdown of zoning categories and the land area associated with each.

Zoning District	Description	Acres 2020	Percentage 2011	Percentage 2020	Change Since 2011
R-E	Residential Estate	16,480	62.49%	60%	-2.5%
R-10	Single-Family Residential-10	2,375	9.45%	9%	-0.5%
R-8	Single-Family Residential -8	1,101	4.04%	4%	-
R-6	Single-Family Residential-6	220	0.82%	1%	-
O-R	Office-Residential	.4	0.00%	<1%	-
O-I	Office-Institutional	327	0.89%	1.2%	-
B-1	Central Business	60	0.23%	<1%	-
B-2	Neighborhood Business	115	0.42%	<0.5%	-
B-3	Highway Business	335	2.41%	2.5%	-
I-1	Industrial-Light	713	1.51%	2.6%	+1%
I-2	Industrial-Heavy	1,517	5.68%	5.5%	-
PD-R	Planned Development-Residential	1,431	2.95%	5.21%	+2.3%
PD-C	Planned Development-Commercial	45	0.16%	<0.5%	-
PD-MU	Planned Development-Mixed Use	2,244	8.94%	8.2%	-0.7%
Total		27,457			

Clayton Zoning Map (2020)

Zoning Districts

- B-1
- B-2
- B-2-SUD
- B-3
- B-3-SUD
- I-1
- I-1-SUD
- I-2

- O-I
- O-I-SUD
- O-R
- O-R-SUD
- PD-C
- PD-MU
- PD-R
- PF
- R-10

- R-6
- R-8
- R-8-SUD
- R-E
- R-E-SUD
- Corporate Limits
- ETJ

Wake County
Johnston County

Land Supply & Approved Development

To better understand the potential for future growth in the Town of Clayton study area, the project team developed an inventory of available and underutilized land based on 2019 tax parcel data. It is based on the ratio of buildings value to land value to estimate which parcels are likely to be considered for redevelopment. This inventory is collectively known as the land supply.

As a component of this effort, the team also collected information on protected land—areas permanently protected for recreation or conservation purposes; built land—areas not likely to experience any additional development; and pending developments—developments that have been proposed or approved and are in different stages of the permitting or construction process.

- Available land refers to land without significant structures that is currently undeveloped or used for forestry or agriculture. This accounts for 38% of the study area.

- Underutilized land refers to land that is likely to redevelop based on the ratio of building value to land value (less than 0.75.) Underutilized parcels are more likely to redevelop or accommodate additional development. It includes large parcels with one home that could be subdivided in the future and parcels that have older structures of low value on lots with high value that may lead to redevelopment opportunities. Underutilized land accounts for 16% of the study area.

- Utilized land is land unlikely to develop based on the ratio of building to land value. These parcels are unlikely to experience redevelopment and account for 40% of the land in the study area.

In total, 53% of land in the study area is classified as available or underutilized. Currently this land may be used for agricultural purposes, but could be developed under current regulations. Also, a portion could be difficult to develop due to required setbacks and environmental constraints (i.e., regulated stream buffers and wetlands), but the remainder could develop or redevelop in the next few decades.

In total, 6% of the total land area is part of approved or pending developments. There are roughly 6,000 housing units approved but not yet built on these properties.

Land Supply

40% 38% 6% 16%

■ Available   ■ Approved Residential   ■ Underutilized   ■ Utilized
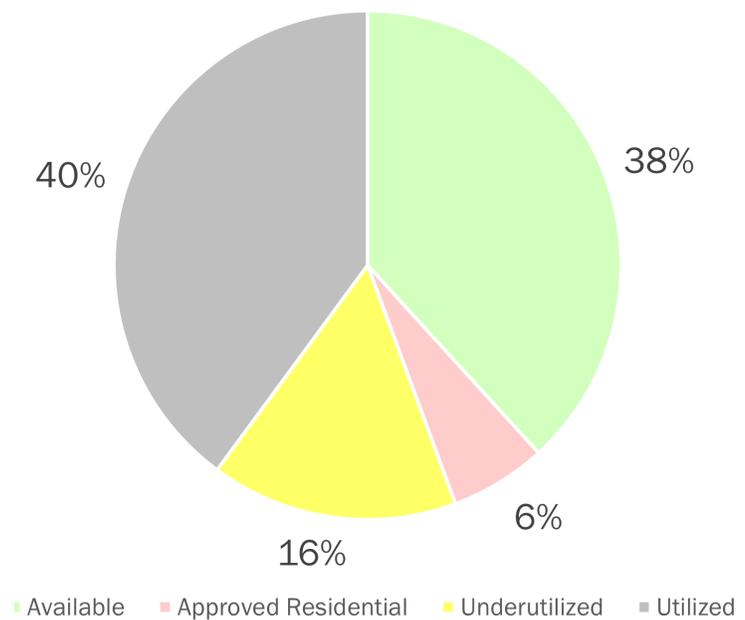
Land Supply Map
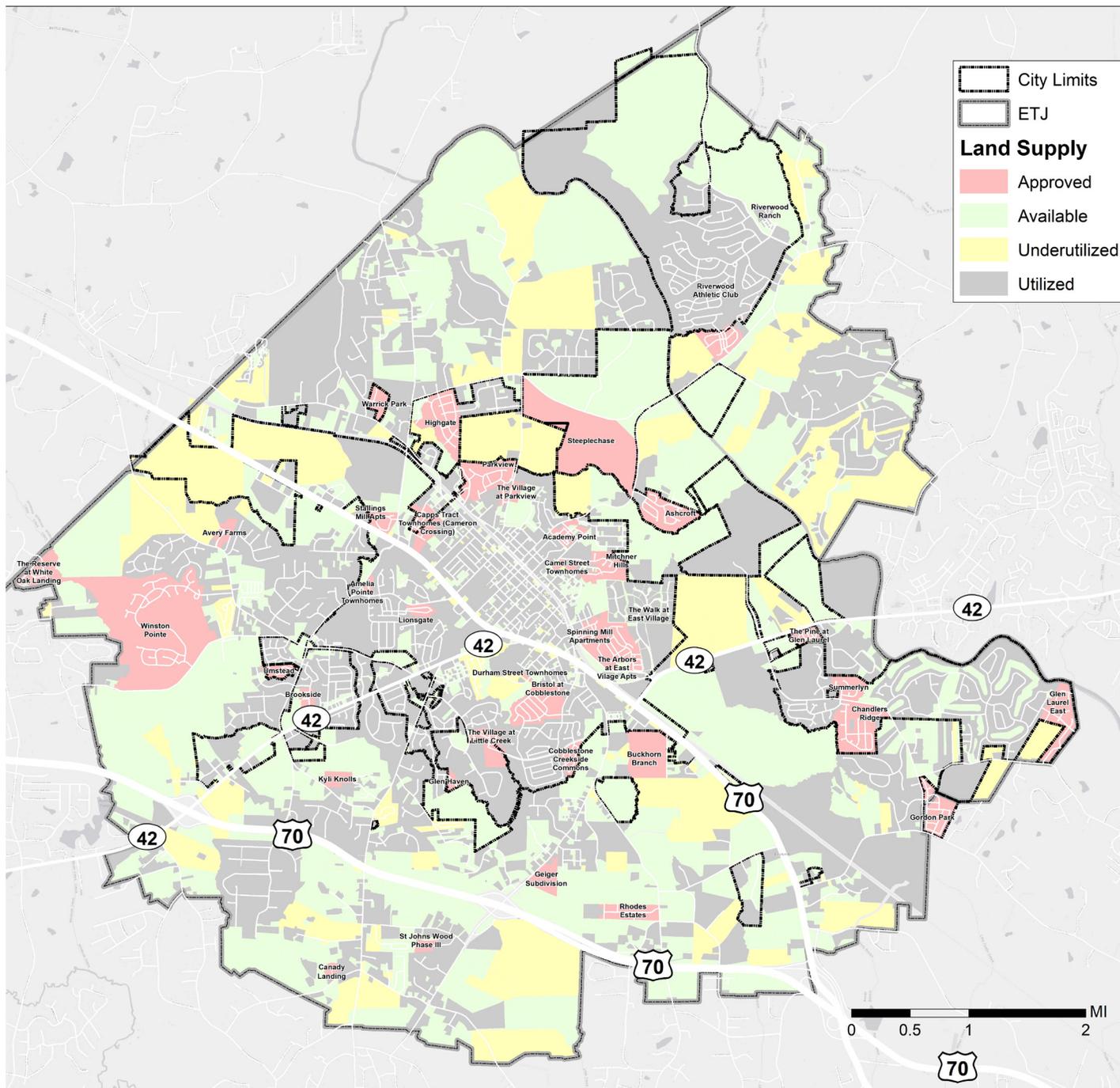
Source: Tax parcel data and Town of Clayton

Clayton's Natural Environment

The Town of Clayton is located on the eastern edge of the Northern Outer Piedmont and the western edge of the Rolling Coastal Plain. The fall line, which passes through the Study Area (Clayton's ETJ), is the gradual transition between the low hills and ridges of the Piedmont and the gentler slopes of the Coastal Plain. West of this fall line streams with moderate gradients and gravel bottoms are predominate, whereas streams with sandy bottoms are more common east of the fall line. This is due to the underlying geology of the region. In the Piedmont the geology is comprised of older metamorphic and igneous rocks, whereas the Coastal Plain geology is comprised of younger sedimentary rocks deposited when the ocean floor covered this area three million years ago.

Land Cover

Land Cover can be defined as the "physical state of the land" and includes categories that describe "the quantity and type of surface vegetation, water and earth materials". Categories include forest, pasture, wetlands or developed. Whereas the existing land use discussion in previous sections of this report documents how people are using the land. Note that a one to one comparison of land use and land cover categories is problematic, as even though a parcel with a predominant land use of residential may have multiple land cover types on the parcel (i.e. a large parcel with a developed portion, a forested portion and an agricultural portion).

An analysis of land cover was conducted for the Comprehensive Growth Plan. As of that analysis 43% of the study area was forested, with large portions either developed or in agriculture. The majority of forested areas were located in riparian areas, with large patches located along Whiteoak Creek, Little Creek, the Neuse River, and along unnamed tributaries that drain to these larger streams. Clemmons Education State Forest, along Garner Road, near the Wake/Johnston County line is also part of a large swath of forest that stretches northeast to the Neuse River and beyond. This area includes a large floodplain along Beddingfield Creek near the river and also a few large conservation easements managed by the Triangle Land Conservancy.
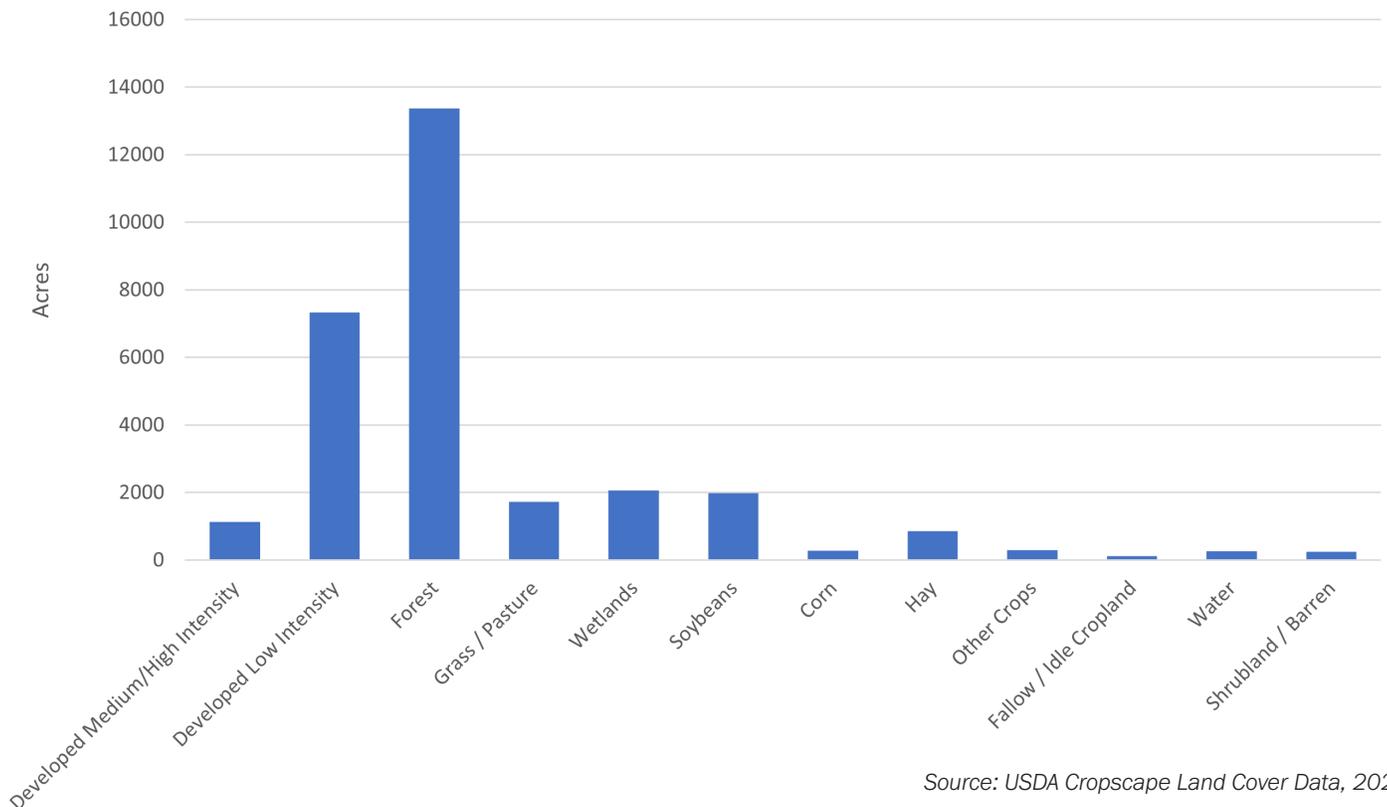
Source: USDA Cropscape Land Cover Data, 2020

Significant Features and Endangered Species

Clayton's close proximity to the Neuse River and location in the transition zone between the piedmont and the coastal plain have led to some areas in the Study Area to be high in biodiversity and home to unique natural communities (collections of plant and animal species). Important habitats include bottomland forests near the river, heath bluffs, riparian areas and streams.

Part of the forest along the Neuse River from Covered Bridge Road to the Wake County line has been designated as a Significant Natural Area by the North Carolina Natural Heritage Program (NCNHP). This area, called the Neuse River (Clayton) Forests site, is composed of Dry-Mesic Oak-Hickory Forest and Mesic-Mixed Hardwood Forest (Piedmont Subtype). This area includes rare, high-quality, sizable stands of these natural communities.

It is likely that there are examples of Piedmont/Coastal Plain Heath Bluff along the Neuse in the study area. This natural community is found on steep, north facing slopes and bluffs, and is marked by flora, such as Catawba rhododendron, mountain laurel and galax, which are common to higher elevation ecosystems. Other important natural communities, including Pine Flatwoods, Longleaf pine forests, and Carolina bays, may also occur in the study area.

Based on a review of the Biodiversity/Wildlife Habitat assessment conducted by the NCNHP, areas with the highest biodiversity include the forests adjacent to the Neuse River as well as the tributaries to Little Creek and Whiteoak Creek south and west of US 70 Business. Areas with the highest biodiversity near Downtown include the areas adjacent to Sam's Branch and the unnamed tributary that drains most of Downtown and travels northeast to Sam's Branch. The Parks and natural resources map shows areas with high biodiversity as well as Natural Heritage Program Natural Areas.

Many rare and endangered animals have been known to occur in Johnston County and could potentially occur in the Clayton study area. Rare aquatic species that have been documented in nearby watersheds include mussels: Dwarf wedgemussel (Federally listed as endangered), Roanoke slabshell, eastern

Neuse River Waterdog, via NCSU School of Natural Resources

lampmussel, and triangle floater; and fish: Least brook lamprey, Carolina madtom, Neuse River waterdog, pinewoods shiner, and Roanoke bass. Rare terrestrial species include the eastern fox squirrel, red-cockaded woodpecker, bald eagle, Swainson's warbler, Kentucky warbler, pine-barrens treefrog and the North Carolina spiny crayfish. Many other common species are present in larger patches of habitat, including game species such as wild turkey and white-tailed deer, and non-game species such as bobcat, gray fox, blue heron and osprey. In addition, two anadromous game fish have spawning areas in the study area. Every spring, American Shad and Striped Bass migrate from the Atlantic Ocean up the Neuse River and its tributaries to spawn.

Previous Plans

Watershed Planning

The Wake-Johnston Collaborative Local Watershed Plan, and the subsequent Neuse 01 Regional Watershed Plan conducted by the NC Ecosystem Enhancement Program (EEP) in cooperation with Wake and Johnston Counties assessed the health of watersheds in the area and recommended steps to preserve and restore water quality. Included in the studies were the subwatersheds that cover the Town of Clayton. Key findings included the following:

Subwatersheds in Clayton are below the 10% impervious surface threshold (Little Creek= 6.9%, Mill Creek-Neuse River = 2.1%, Poplar Creek-Neuse River = 2.5%, Whiteoak Creek = 5.3 %), beyond which leads to significantly degraded water quality.

Subwatershed findings and recommendations include:

- » Poplar Creek-Neuse River:
  - Fish consumption advisory due to Polychlorinated Biphenyls (PCBs)
  - Impaired for aquatic life due to turbidity and tremendous amounts of sedimentation
  - Need for better stormwater controls/ BMPs to offset impacts of development
  - Little Creek:
    - Impaired for aquatic life
    - Under high development pressure
    - Erosion & Sedimentation prevention should be strictly enforced
    - Need for WWTP reroute to Neuse
    - Non-point source stormwater runoff is likely cause of impairment.
  - Mill Creek-Neuse River:
    - Impaired for aquatic life due to turbidity and tremendous amounts of sedimentation
    - Need for better stormwater controls/ BMPs to offset impacts of development
  - Whiteoak Creek:
  - Supporting uses
  - 15% of streams have minimal or no forested riparian buffer.
    - All watersheds have lost forest cover between 1992 and 2006 (Little Creek = -20.7%, Mill Creek-Neuse River = - 19.2%, Poplar Creek-Neuse River = -16.6%, Whiteoak Creek = -17.7%) and have increased in impervious surface.
    - Many streams have inadequate forest cover in riparian areas (within 50 feet of streams)
    - Development effects from I-540 extension may further impact water quality
    - Buffer, stream, fish passage, as well wetland preservation, restoration, and enhancement opportunities exist in the Study area

Johnston County Natural Resource Initiative

The Johnston County Natural Resource Initiative was a collaborative effort to assess the state of Johnston County's natural resources and provide direction on how to protect key features and work toward a network of green infrastructure. The effort was funded by a grant from the U.S. Department of Agriculture Forest Service (USFS) and participants included county and municipal governments, non-profits and state agencies. Key findings included:

- » Population growth is a primary driver of land use change in the County.
- » Water quality is declining due to increases in impervious surface and reductions in tree canopy.
- » Urban forests and tree canopy provide many ecological services including filtering air pollutants, reducing stormwater runoff and erosion, improving water quality, creating wildlife habitat and increasing property values.
- » Maintaining or increasing the Town of Clayton's and the Town of Smithfield's urban tree canopy and limiting impervious surface coverage (ISC) would have significant monetary benefits.

Summary of Natural Resource Issues

Overarching natural resource issues for the Town of Clayton are similar to those in growing counties around the Triangle Region. Maintaining water quality, tree canopy, and a system of open space that provides recreational opportunities while protecting biodiversity, is critical to quality of life, environmental health, and economic health. Many people move to Clayton because it has the amenities of a growing Downtown as well as a development pattern that provides more "elbow" room than other competing towns. The Town is blessed by its proximity to the Neuse River and has potential to leverage the river as an amenity for local residents, as well as for recreational tourism. The Mountains to Sea trail and East Coast Greenway along the Neuse River could be complimented by connections to Downtown and natural areas and draw visitors from near and far. Maintaining the distinction between a "town" atmosphere in Downtown Clayton and other more developed centers of activity, while preserving open space and healthy interconnected ecosystems, through well- designed development in more suburban and rural areas, will be important to maintaining the qualities that attract new residents and visitors.

Parks and Natural Resources Map
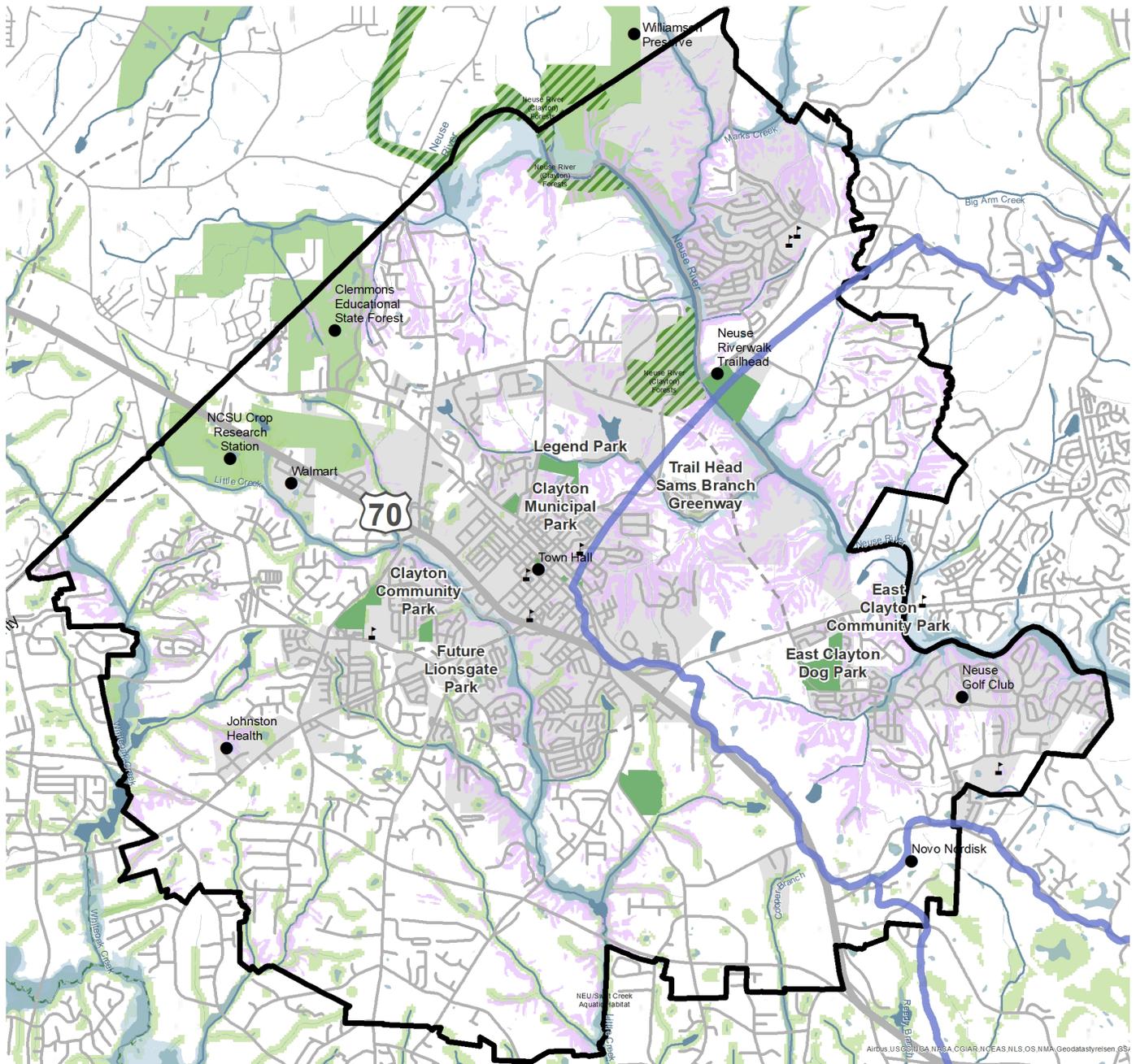
Context
- Town Limits
- Clayton ETJ

Parks & Natural Resources
- Park Land
- Slope >= 10 %
- Wetlands
- Floodplain
- Floodplain
- Areas Important to Biodiversity
- Managed Areas
- NHP Natural Area
- Water Supply Watershed

Clayton's Transportation System

Since completion of the 2008 Strategic Growth Plan, a number of improvements have been made to Clayton's transportation network. This includes the completion of the US 70 Bypass; the widening of NC 42 East from US 70 Business to Glen Laurel Road; and the construction of the Front Street Extension. In addition the Clayton Riverwalk and Sam's Branch Greenway have added 6.8 miles of greenway. Additional multi-use trails along Front Street and in private developments have added 2 miles of trails to the network.

As Clayton continues to grow, the Town will need to continue to pursue funding for transportation projects in order to address congestion issues at key intersections, improve connectivity and mobility issues, and provide options for multiple modes of travel.

Major Roadways

Clayton is bisected by US 70 Business. This four-lane, divided facility is the work horse of Clayton's roadway network. US 70 Business carries 37,500 cars per day (down from 45,000 in 2008). The US 70 Bypass, also known as the Clayton Bypass, is a four-lane freeway south of the Town that was constructed in 2008 and draws regional travel (on the order of 35,500 cars per day). Other major roadways include NC 42, which connects the US 70 Bypass to Downtown, US 70, and continues to the City of Wilson, NC; Main Street/Old Garner Road, which parallels US 70 and connects Downtown Clayton to Garner; Guy Road, which serves as a primary east-west arterial on the south side of Clayton; Shotwell Road, which serves as a major route into Wake County; Amelia Church Road, which connects US 70 Business to Shotwell Road and NC 42; Covered Bridge Road, which connects Riverwood, Prichard Road and Archer's Lodge to O'Neil Street and Downtown Clayton; and Pritchard Road, which turns into Smithfield Road in Wake County and provides a route from North Clayton to the US 64 Bypass. Key statistics for these and other major roadways are included in the table below.

Commuting Patterns

Building on the data in the Employment Inflow/Outflow section, a look at changes in commute patterns indicate that there are more people that are employed in the study area and live elsewhere than in 2014. A reduction in those outcommuting has occurred. Many workers commute to Raleigh. Other major commuting destinations include Smithfield, Cary, RTP, Garner, Wilson, Rocky Mount, and Goldsboro.

Commuting Patterns 2014

- » 9,059 employed in Clayton area, live outside
- » 17,488 live in Clayton area, employed outside
  - • 2,125 employed in Clayton area, live in Clayton area

Commuting Patterns 2018

- » 11,566 employed in Clayton area, live outside
- » 14,415 live in Clayton area, employed outside
  - • 1,410 employed in Clayton area, live in Clayton area

Planned Projects

Roadways

Transportation planning in Clayton is conducted by the Town in cooperation with the Capital Area Metropolitan Planning Organization (CAMPO) and the North Carolina Department of Transportation's (NCDOT) Transportation Planning Branch. In the past few years there have been a number of planning efforts that have sought to improve mobility in the Town of Clayton. The Comprehensive Transportation Plan (CTP) serves as the regional multi-modal transportation vision plan. CAMPO produces a Metropolitan Transportation Plan (MTP) that identifies funded projects with a 30 year time horizon. Projects that score well in a statewide prioritization process get funded in the State Transportation Improvement Program (STIP).

Average Daily Traffic Map
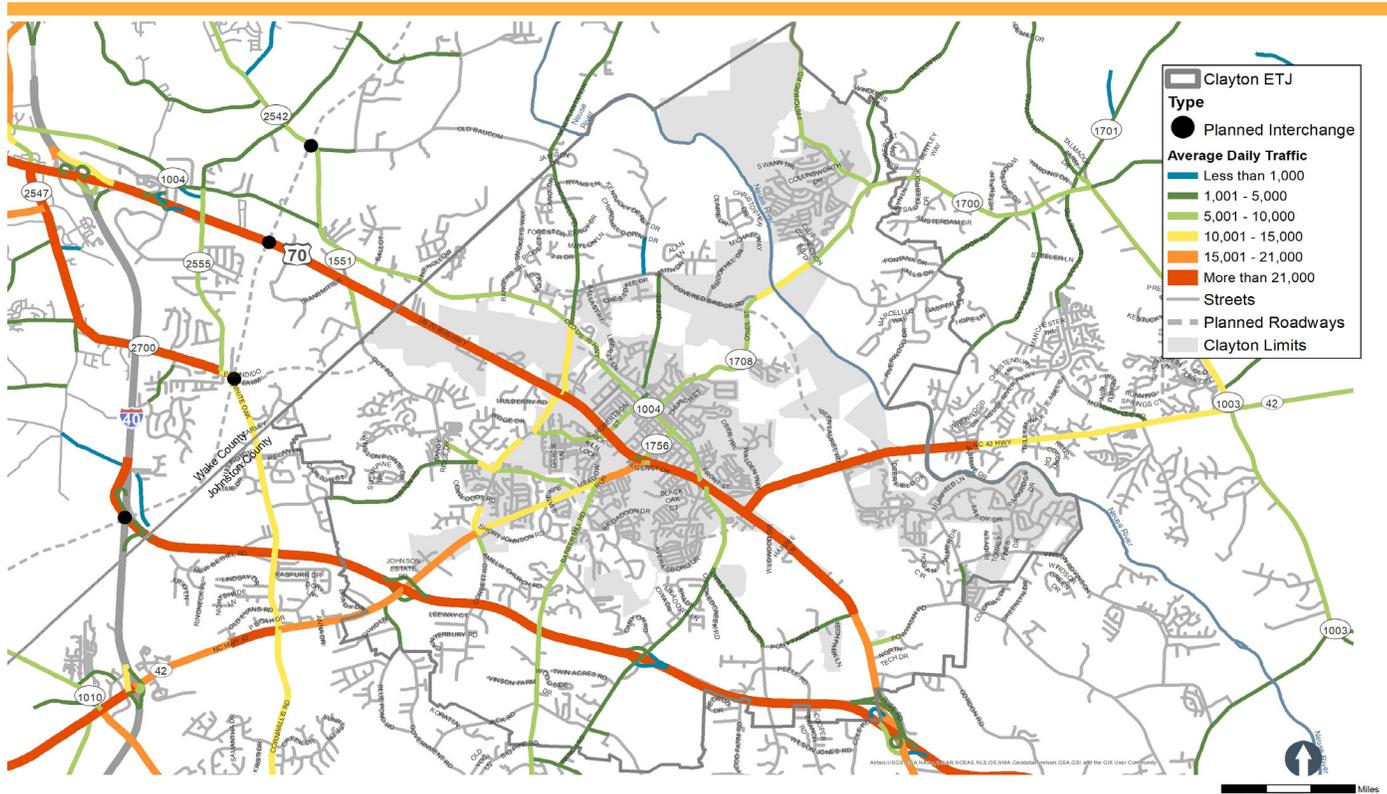
Draft State Transportation Improvement Program (STIP) 2020-2029

The Capital Area MPO 2045 Metropolitan Transportation Plan (MTP) includes a number of roadway improvements, off-road bicycle projects and on-road bicycle improvements in the study area. There are a number of projects funded in the 2025, 2035 and 2045 horizon years. Note that these horizon years are not reflective of demand, but an anticipated time frame when funds would be available. Many of these project are funded in the most recent draft STIP. Projects considered funded in the CAMPO 2045 MTP in 2025 and 2035 include the following highway projects:

» 2025
  • NC 42 East Widening, 2-4 lanes (Glen Laurel Rd to Buffalo Rd)
  • Ranch Road Extension (New Location South of US 70 Business to Ranch Road)
  • NC 540 (west of I-40)
» 2035
  • NC 42 West Widening, 2-4 lanes (Amelia Church Rd to I-40)
  • NC 540 (I-40 South to US 64 Bypass)
  • I-40 Managed Lanes and Widening
  • Shortwell Road Widening (Main Street to Old Baucom Rd)
  • East Garner Road Widening, 2-4 lanes (Rock Quarry Rd to Shotwell Rd)
  • US 70 Widening, 4-6 lanes (I-40 to NC 42)
  • NC 42 Widening, 2-4 lanes (John Adams Rd to I-40)
  • White Oak-Guy Rd Connector (White Oak Rd to Guy Rd)
  • North Connector (2 lanes, NC 42 East to Covered Bridge Road)

Draft State Transportation Improvement Program (STIP) 2015-2025

TIP ID	PROJECT NAME	DESCRIPTION	COST (MILLIONS)	RIGHT OF WAY YEAR	CONSTRUCT. YEAR
R-3825B	NC 42 EAST WIDENING	GLEN LAUREL ROAD TO BUFFALOE RD	$44,400	COMPLETE	UNDER CONSTRUCTION
R-3410	NC 42 WEST WIDENING	NC 50 TO US 70 BUSINESS WIDENING	$76,059	2027	2029
U-6223	EXTENSION OF RANCH RD	US 70 BUSINESS/NC 42 TO RANCH RD	$8,419	2021	2022
U-5943	CLAYTON SIGNAL SYSTEM	UPGRADE SIGNAL SYSTEM	$2,205	2023	2025
R-2829	FUTURE NC-540	EASTERN WAKE FREEWAY / TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION (RALEIGH OUTER LOOP), I-40 TO US 64 / US 264 BYPASS. FREEWAY ON NEW LOCATION.	$652,900	2025	2026
EB-6016	NC 42 GREENWAY	FROM EAST FRONT STREET TO GLEN LAUREL RD	$1,510	2027	2028
EB-6017	NC 42 GREENWAY FROM FOX RIDGE RD TO NEUSE RIVER BRIDGE	FROM FOX RIDGE RD TO NEUSE RIVER BRIDGE	$497		2028
P-5743	NS/NCRR RAIL LINE	CONSTRUCT GRADE SEPARATION AT SR 1553 (SHOTWELL ROAD). CLOSE EXISTING AT-GRADE CROSSING IN CLAYTON.	$14,100	2027	2029
TO-6166	BUS RAPID TRANSIT SERVICE	BUS RAPID TRANSIT SERVICE, MORRISVILLE TO CLAYTON. CONSTRUCT INFRASTRUCTURE, PURCHASE VEHICLES, AND ESTABLISH SERVICE.	$115,001	2025	2028

CAMPO 2040 Metropolitan Transportation Plan Roadway Projects

The current Johnston County Comprehensive Transportation Plan (CTP) which includes the study area was adopted by the Town on October 3, 2011 and subsequently by CAMPO and NCDOT. It includes long-term highway, transit, bicycle and pedestrian recommendations. These recommendations are mostly unfunded and are limited to major facilities.

The roadway element recommends a number of roads to be improved to a boulevard section, which typically includes a four-lane, median-divided facility. These recommendations suggest improvements to the following:

» Garner Road (Wake County line to Shotwell Road)
» Portions of Covered Bridge Road

» Lombard Street (south of US 70 Business)
» Guy Road (Wake County line to realignment near South Lombard Street)
» NC 42 (Throughout Clayton's Study area)
» Amelia Church Road (US 70 Business to South Lombard Street)
» Shotwell Road (US 70 Business to Wake County line)

The following are new location roadways that are also included in the plan:

» Clayton Northern Connector (Covered Bridge Road to NC 42 East)
» Clayton Industrial Connector (NC 42 East to Powhatan Road)
» Clayton Southern Connector (Guy Road Realignment to US 70 Business/NC 42)
» White Oak Road Connector (White Oak Road in Wake County to Guy Road)
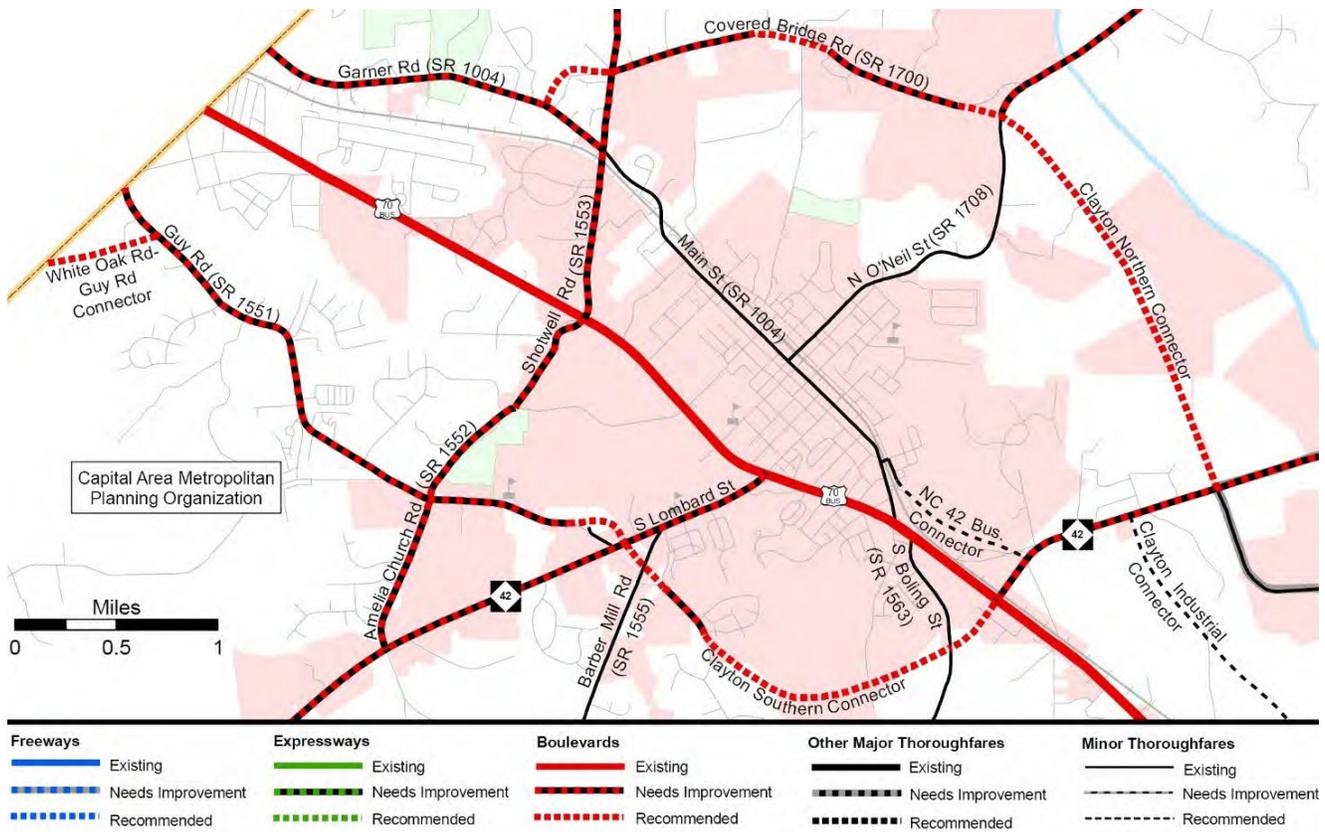
Public Transportation and Rail

Long range plans envision a graduated approach to transit service in the Town. The first phase would include an express bus route from Downtown Raleigh to Downtown Clayton. This express bus service would likely be similar to the express route on the US 64 corridor north of the study area that currently serves Knightdale, Wendell, and Zebulon. There are also plans in the 2045 Metropolitan Transportation Plan (MTP) from the Capital Area MPO for Bus Rapid Transit and Commuter Rail Transit to Clayton.

Fixed guideway (rail) service between Raleigh and Clayton would utilize the rail corridor currently owned by North Carolina Railroad and operated by Norfolk Southern. Freight trains utilize the rail corridor daily.

This commuter rail service was first examined during the EastTrans study, undertaken by the CAMPO. This effort considered the feasibility of commuter rail between Raleigh and towns along the Norfolk Southern rail line to the east. Knightdale, Wendell, and Zebulon, and along the North Carolina Railroad rail line to the southeast, including Garner, Clayton, Smithfield, Selma, and Goldsboro. Details for this service are still being studied, but if supported locally and planned for, future service could provide additional commuting and travel options for residents as well as have a potential impact on the type of development possible near Downtown areas and other stations along the corridor. The map below shows the potential transit service.

Adopted Transit Routes from the CAMPO 2045 MTP
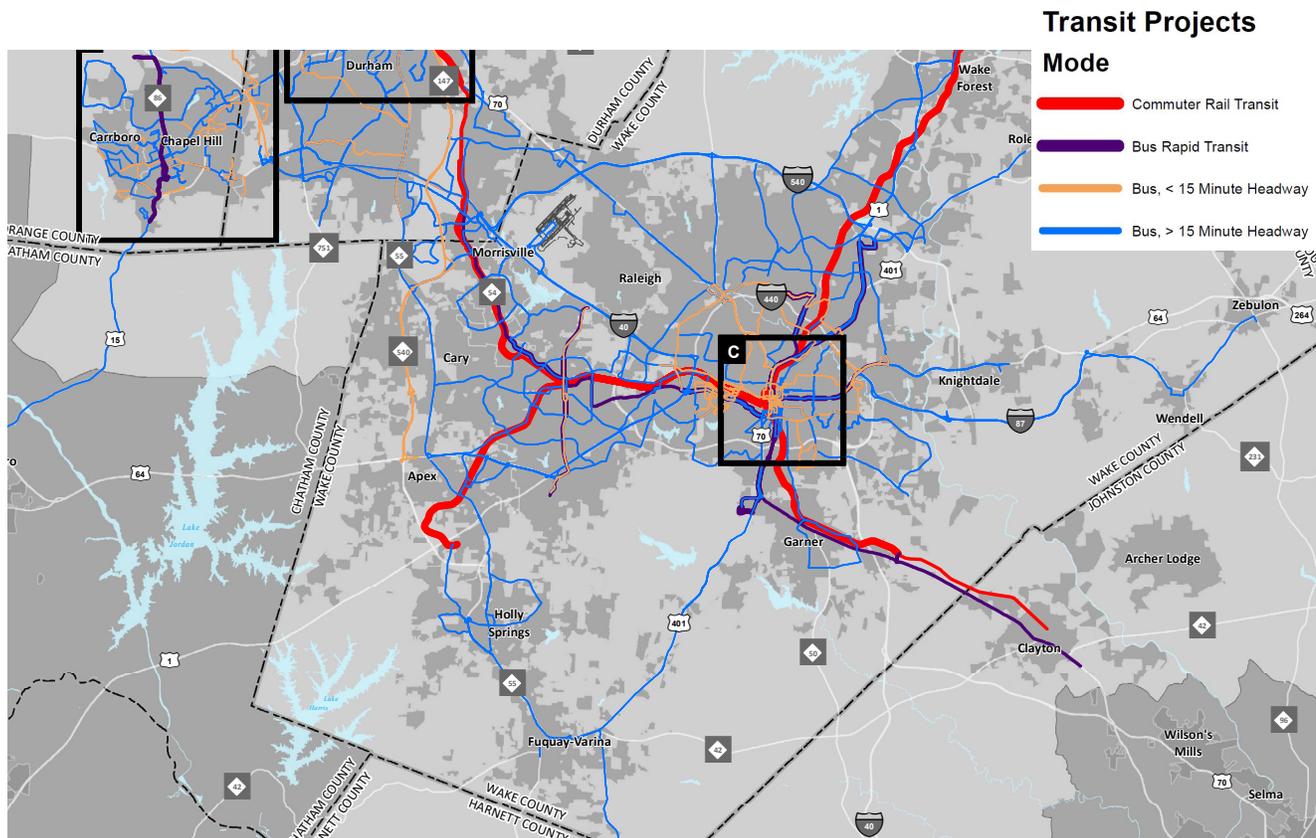
Planned Connections

Long range improvements are outlined in the 2013 Parks and Recreation Plan, the Johnston County Comprehensive Transportation Plan, the Town of Clayton Comprehensive Bicycle Plan and the 2040 Growth Plan. The 2013 Parks and Recreation Plan outlines proposed greenways. The CTP recommends improving on-road conditions for cyclists on a number of major roads through the Town. It also includes multi-use path recommendations that mirror those included in other Town planning documents. A pedestrian plan for the town is currently underway. Recent accomplishments include the completion of the Sam's Branch Greenway into Downtown from the Neuse River Greenway. The Town of Clayton is one of the few towns that lie along the East Coast Greenway and the Mountains to Sea Trail. This presents an opportunity for the town to be a hub for outdoor recreation and take advantage of regional tourism.

Planned route for the Mountains to Sea Trail and East Coast Greenway
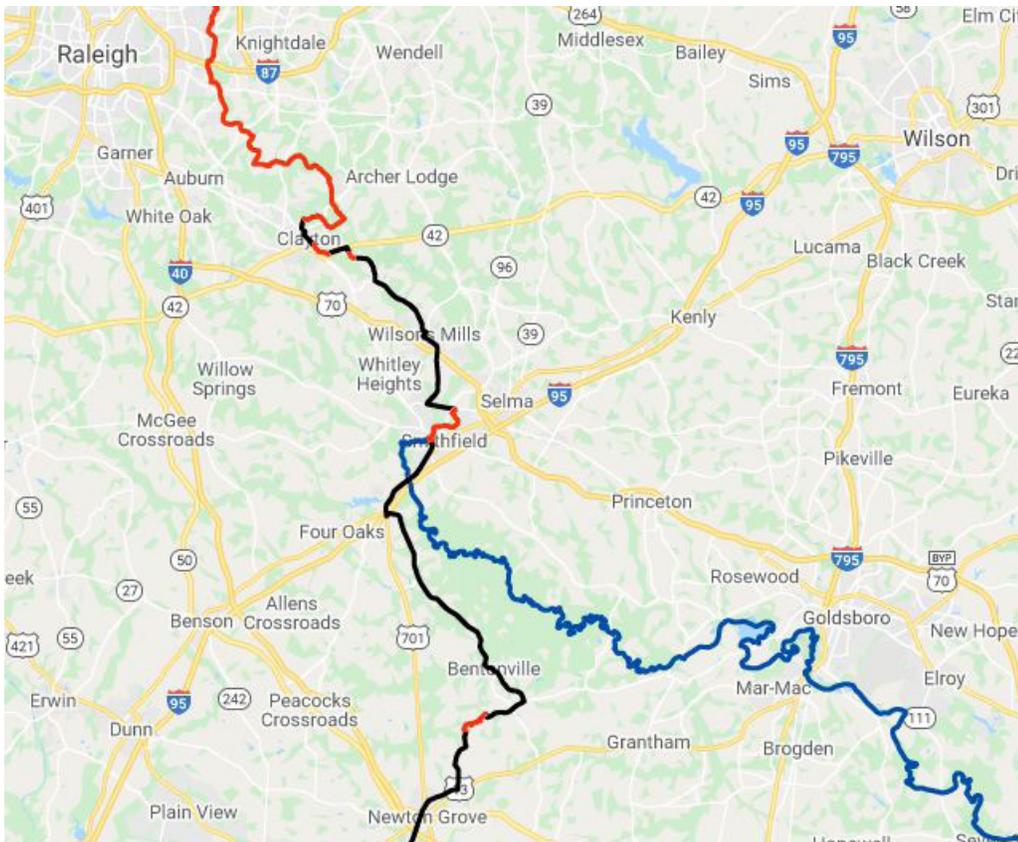
Clayton's Parks System

Clayton aims to be the "The Premier Community for Activie Families". Previous planning efforts emphasize parks and recreation as an integral asset to the town. The Parks and Recreation Comprehensive Plan Update from 2013 inventories existing facilities and identifies improvements for access, accessibility, economic functions, and awareness of the parks and recreation offerings of the town. It also contained an ambitious catalogue of desired land acquisitions for parks space and greenway connections. Recent accomplishments and projects underway include:

- $18 Million Parks Bond passed in 2019. Funds have been earmarked for improvements to a number of parks including Municipal Park, East Clayton Community Park (including the new Harmony Playground), Clayton Community Park, the Community Center, All-Star Park, Town Square and Horne Square. The bond also includes funds for mountain bike trails.

- The Sam's Branch Greenway Extension was recently completed. This section of greenway connects the Sam's Branch Greenway Trailhead near O'Neil Street with Legend Park and eventually will connect to Municipal Park and Downtown Clayton.

- The newly opened Williamson Preserve, a Triangle Land Conservancy property, along the Neuse River north of town is a great amenity and town owned land nearby is planned to have hiking and biking trails

- Harmoney playground is now open. It is one of the first universal access playgrounds in the areas.

There are 145 acres of town owned land in existing parks and 10 miles of greenway in the study area. A parks and greenways level of service analysis was conducted to determine areas served by existing parks and those areas that are underserved. The analysis showed that 39% of the population in the Clayton ETJ has access to a park or public greenway trailhead within 1/2 mile. This analysis was utilized to develop park search areas shown in the Parks and Natural Resources chapter of the Growth Plan.

Parks Access Analysis

	Population 2020	Median HHI 2020	Minority Population	Median Age	Poverty Rate	Population over 65 years
Clayton Study Area	36,923	$66,173	36.0%	34.4	8.5%	12.6%
Parks Access Analysis Area	14,457	$61,503	39.1%	37.8	9.9%	13.5%

Parks and Greenways Level of Service
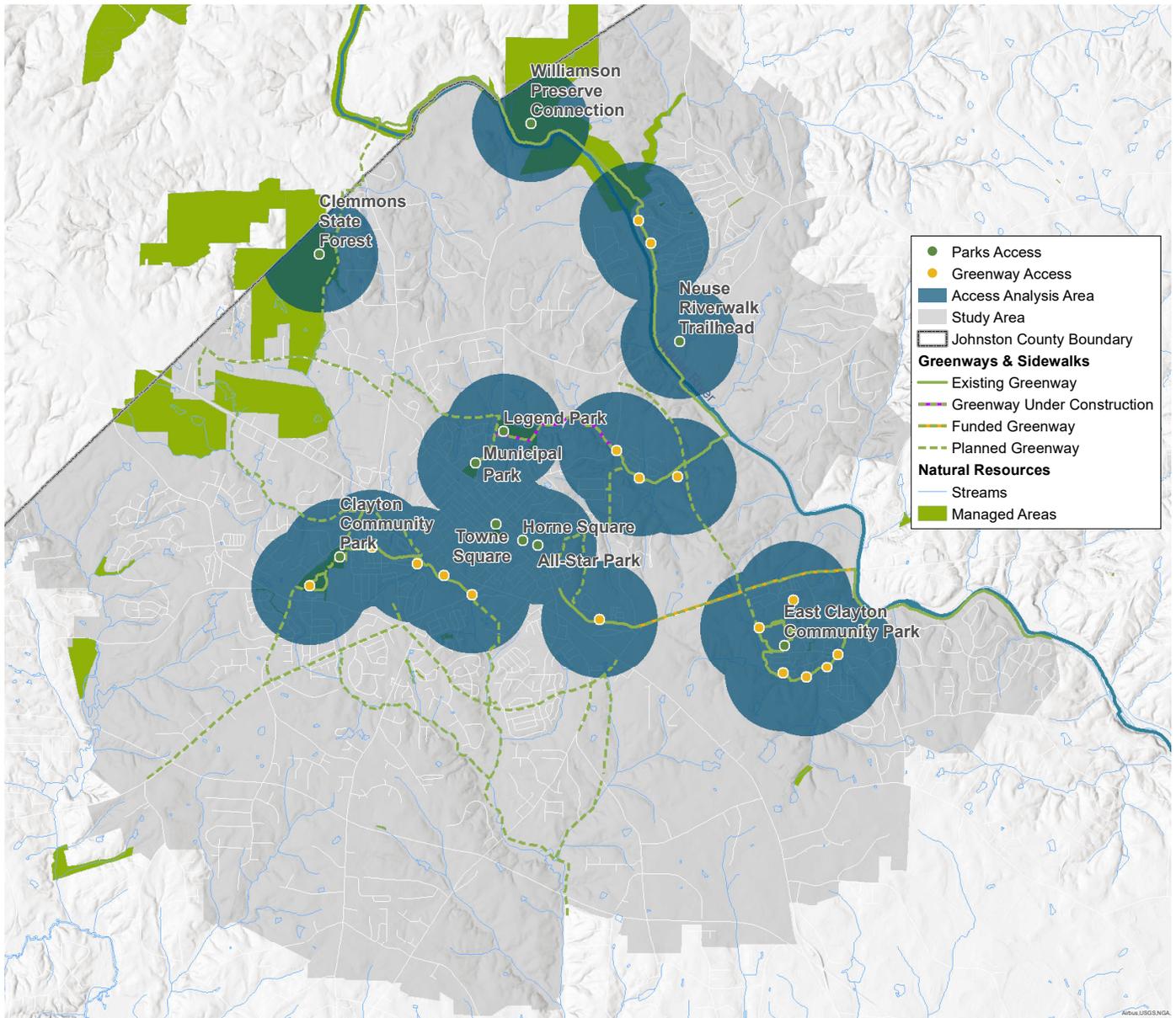
Clayton's Utilities, Services, and Facilities

The Town owns and operates an electric distribution system, a water distribution system, and a wastewater treatment facility, in addition to providing solid waste service to single-family residents. In recent years, significant investments have been made to ensure that infrastructure keeps pace with growth. Growth projections indicate that additional planning and capital investments will be necessary to continue to adequately serve current and future residents and businesses. Recent development of significant areas on the north side of Town have led to the construction of a new North side electric substation, recent interconnects with the City of Raleigh sewer system and investment in a new wastewater treatment plant. Additionally, as the utility demand expands it will be essential to continue to work with Johnston County to ensure adequate water supply and maintain adequate water storage. Consolidating pump stations to maximize efficiency and identifying opportunities for water reuse will also be important to the future of Clayton's utility systems.

Water and Sewer System Statistics

STATISTIC	2008	2013	2020
Population Served (Water)	16,096	17,635	27,495
Water Meter Connections	5,693	6,275	9,224
Length of Water Distribution Lines (Miles)	104	112	142
Water Storage Capacity (MGD)	0.8	1.8	1.8
Average Daily Water Use (MGD)	2.298	2.229	3.43
Average Annual Daily Wastewater Discharge (MGD)	1.504	1.721	1.635

Electric

The Town of Clayton is a Public Power Community. As a member of the North Carolina Eastern Municipal Power Agency (NCEMPA), the Town owns a portion of power generating units operated Duke Energy and provides electricity to citizens in the Town's service area. Duke Power also provides power and maintains street lights in a portion of the Study area. Operators estimate 80% of the Town is served by Clayton Public Power, with Duke serving the rest. The Town added a major substation in 2016 with a 50 MW capacity to serve new growth on the north side of Town.

Water

The Town's water system includes 136 miles of distribution lines and currently serves 23,229 people. A third water tank was constructed in October of 2013, raising the Town's storage capacity to 1.8 million gallons. Average daily water use fluctuates based on seasonal variations, but ranges from 3.3 MGD in December to 4.8 MGD in March. Industrial land uses constitute the largest consumers of water in the Town, followed by residential.

Water is purchased from Johnston County Utilities; however, there are additional connections to Smithfield, Harnett County and the City of Raleigh water systems that can be activated if demand exceeds capacity of the Johnston County water treatment plant, located on the Neuse River in Wilson Mills. The Town also has an agreement with Johnston County that will enable the purchase of additional water as needed.

Interviews during the project showed that water and sewer facilities would need improvements in order to support significant growth in different areas of town, including downtown.

Wastewater

The Town's primary wastewater treatment has undergone two expansions, but is nearly at capacity and cannot be expanded. Currently the Little Creek Water Reclamation Facility is permitted to accept up to 2.5 MGD. The Town is currently in the process of building a new wastewater treatment plant along the Neuse River. The facility will have a

capacity of 6 MGD.

Average daily flow collected in the Town's system is 1.635 MGD. Inter-local agreements exist with Johnston County and the City of Raleigh for wastewater treatment that provide additional capacity. The Town has an agreement with Johnston County for 1.4 MGD of capacity at the Smithfield WWTP and with the City of Raleigh for 1 MGD of capacity at their WWTP northwest of Clayton in Wake County. The Town currently utilizes 0.951 MGD of the permitted capacity at the County-owned facility and 0.347 of the capacity at the City of Raleigh-owned treatment plant. This connection will be constructed in 2015 using USDA Rural Development Grant funds.

Currently the Town maintains 37 pump stations. The Town is currently studying the benefits of constructing regional pump stations that could result in a more efficient transmission system and open new areas for growth.

Emergency Management

Fire

The Fire Department currently serves 53+ square miles of the Town and those living in the Claytex Fire District from two stations, with a total population approaching 40,000. The Town has agreements with Archer's Lodge, Cleveland, Wilson Mills and Garner to assist in providing service to certain areas within Clayton's jurisdiction. The Department is on track to answer 3,000 calls in 2021, which is up from the 800 calls annually in the previous plan. The Clayton/Claytex Fire District has various vulnerabilities within it, including but not limited to industrial buildings, the Neuse River, train tracks, and continuous residential and commercial development. Each of these vulnerabilities require specialty rescue training and equipment in the event of an emergency.

Stakeholders representing the Fire Department discussed the need for additional personnel in the short-term, and additional stations and a training facility to keep up with increasing demand. Stakeholders noted that demand is increasing on 42 West near the hospital, on the north side near Riverwood, and the bypass area. Connector roads are needed to make these areas more accessible. The Department's insurance rating is affected by the response time it take to get to the outer limits of the service area. The distance is not particularly far, but traffic impedes the trucks during calls. Future growth in the north, south and west areas of town will significantly impact service demand.

Police

The Clayton Police Department operates out of one central facility, the Clayton Law Enforcement Center. The Department received approximately 28,653 calls in 2020; the majority of these calls were traffic-related incidents. According to the Clayton Police Department Annual Report:

- The number of violent crimes reported decreased by two from 2019. Robbery offenses decreased by 50% from 8 reported instances to 4.

- The number of Property Crimes increased by 100 incidents. This increase is primarily due to an increase in larceny from 431 incidents in 2019 to 516 incidents in 2020.

- In 2020, officers of the Clayton Police Department investigated 878 traffic accidents, which in an 11.85% decrease from 2019. During interviews, police representatives estimated that all of the top 10 crash sites in the Clayton are along 70 business.

During stakeholder interviews, police representatives mentioned that they will need to add personnel in the future to keep up with increasing demand. The department currently has the same number of patrol officers that they had 15 years ago despite a population increase of about 15,000 people during the same period. A study is

currently being done, and until official numbers are released, representatives estimated that the force could use an additional five to ten personnel.

Stormwater

Johnston County has implemented Stormwater and Erosion Control programs on behalf of the Town of Clayton since 2008 and 2014. With the tremendous amount of development occurring within the Town jurisdiction, the Town recognized the need for the Stormwater and Erosion Control programs to be administered by Town staff. The Town's Stormwater Ordinance and Soil Erosion and Sedimentation Control Ordinance became effective January 1, 2021.

The purpose of the Stormwater Program is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and nonpoint and point source pollution associated with new development and redevelopment. It has been determined that proper management of construction- related and post-development stormwater runoff will minimize damage to public and private property and infrastructure; safeguard the public health, safety, and general welfare; and protect water and aquatic resources.

The purpose of the Erosion Control Program is to regulate certain land-disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation.

Schools

The Johnston County School System operates 8 facilities in Clayton, accounting for approximately 20% of the 36,112 students in the Johnston County school system. The following table provides additional details on the type and enrollment statuses of these schools.
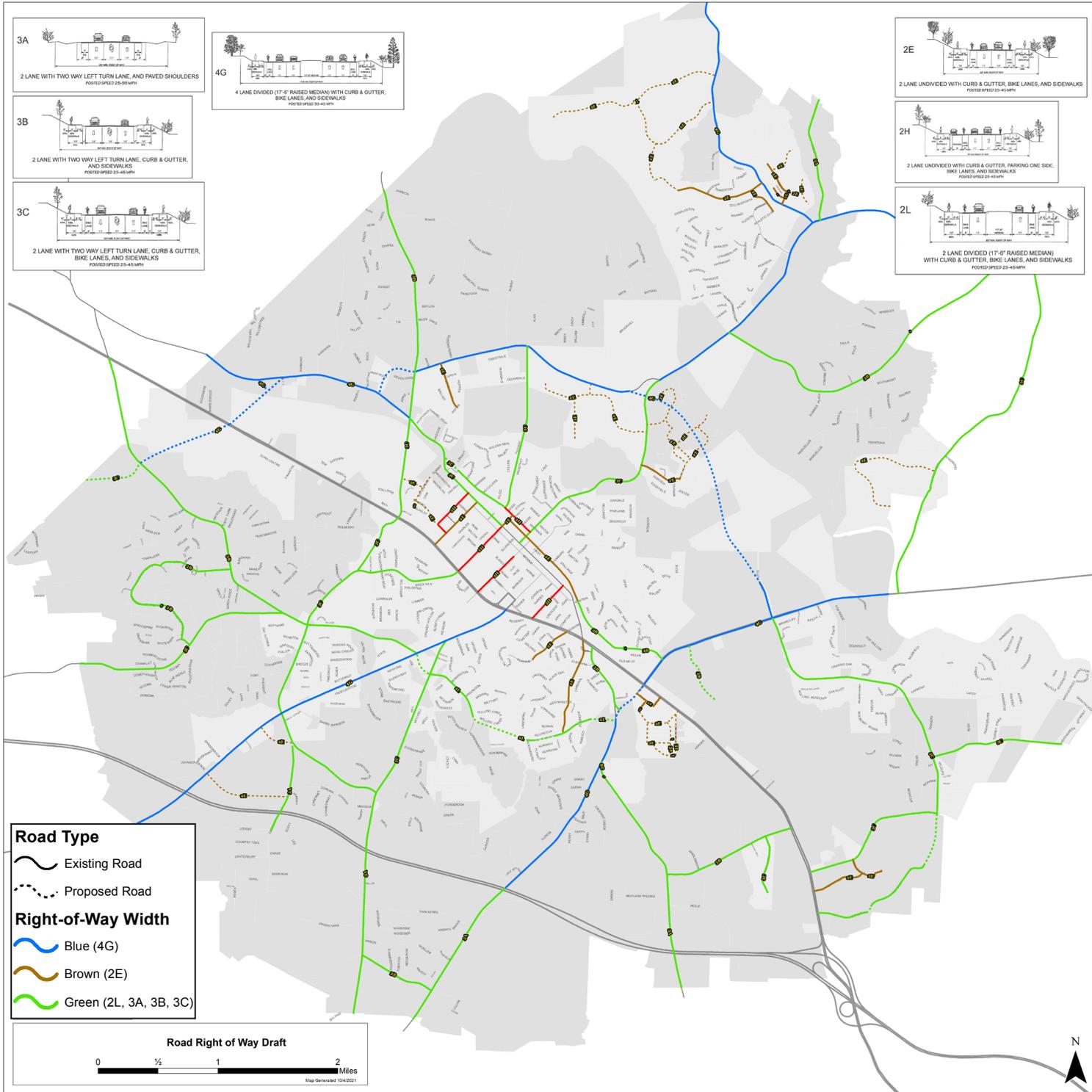
Clayton Existing School Facilities

School	2013-2014 Enrollment	2021-2022 Enrollment	Capacity
Cooper Academy	600	650	500
East Clayton Elementary	568	612	740
Powhatan Elementary	589	650	886
Riverwood Elementary	851	840	886
West Clayton Elementary	956	850	900
Clayton Middle	794	575	750
Riverwood Middle	1,164	1,270	1,186
Clayton High	1,500	2,050	2,000
Total:	7,022	7,497	

The Johnston County School System projects continued enrollment growth through 2028. To ensure quality instruction, this means that certain schools will be capped to prevent overcrowding. Capped schools will continue to enroll students who live within the attendance area, but may not accept students who live outside of the attendance area. In addition to the existing facilities, one middle school (Powhatan) is planned to accommodate existing and forecasted growth in the western part of Johnston County.

During interviews, school representatives expressed that school capacity is not keeping pace with demand, as evidenced by the enrollment numbers in the chart above.

Roadway System

Roadway System Map

3A
2 LANE WITH TWO WAY LEFT TURN LANE, AND PAVED SHOULDERS
POSTED SPEED 25-55 MPH

3B
2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, AND SIDEWALKS
POSTED SPEED 25-45 MPH

3C
2 LANE WITH TWO WAY LEFT TURN LANE, CURB & GUTTER, BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

4G
4 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS
POSTED SPEED 35-45 MPH

2E
2 LANE UNDIVIDED WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

2H
2 LANE UNDIVIDED WITH CURB & GUTTER, PARKING ONE SIDE, BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

2L
2 LANE DIVIDED (17'-6" RAISED MEDIAN) WITH CURB & GUTTER, BIKE LANES, AND SIDEWALKS
POSTED SPEED 25-45 MPH

Road Type
—— Existing Road
- - - Proposed Road

Right-of-Way Width
—— Blue (4G)
—— Brown (2E)
—— Green (2L, 3A, 3B, 3C)

Road Right of Way Draft

0   ½   1   2
Miles

Map Generated 10/4/2021

N

Future Right of Way and Cross Section Table (1 of 4)

Road Segment	Current condition	Current ROW	ROW	Preferred State	Cross section	Map color
Old US 70 - County line to Shotwell	2 lane (45 MPH)	60'	110'	4 lane median w/ bike, sidewalk, C&G	4G	Blue
Main St - Shotwell Rd to Robertson Rd	2 lane (35-45 MPH)	60', 50' after Moore St	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Stallings St - Main St (new extesion) to City Rd	Undeveloped/2 lane (35-45 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Stallings St - City Rd to O'Neil St	2 lane (25-35 MPH)	60'	75'	2 lane w/ parking (one-side), sidewalk, C&G	2H	Red
West Gateway (new) - Old US 70 to Guy Rd	Undeveloped	0'	110'	4 lane w/ bike, sidewalk, C&G	4G	Blue
White Oak Rd/Guy Rd Connector	Undeveloped	0'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Shotwell Rd - County line to Covered Bridge Rd	2 lane (45 MPH)	60'	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Shotwell Rd - Covered Bridge Rd to Amelia Church Rd	2 lane w/ various left/ right turns (35-45 MPH)	60-80'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
CBR Ext (new) - Shotwell to Old US 70	Undeveloped	0'	110'	4 lane median w/ bike, sidewalk, C&G	4G	Blue
City Rd - Covered Bridge Rd to Stallings	2 lane (45 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
S Moore St - Main St to BUS 70	2 lane (25 MPH)	42-60'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Atkinson St - Main St to S Moore St	2 lane (25 MPH)	50-60'	75'	2 lane w/ parking (one-side), sidewalk, C&G	2H	Red
Robertson St - Main St to BUS 70	2 lane (35 MPH)	50'	75'	2 lane w/ parking (one-side), sidewalk, C&G	2H	Red
Robertson St - Main St to Stallings St	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Fayetteville St - BUS 70 to Horne St	2 lane (25 MPH)	60'	75'	2 lane w/ parking (one-side), sidewalk, C&G	2H	Red
Front St - Central St to Robertson St	2 lane (25-35 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Front St Ext - Central St to NC 42 E	2 lane w/ some MUP (35 MPH)	60'	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Smith St - BUS 70 to Main St	2 lane (25 MPH)	50'	75'	2 lane w/ parking (one-side), sidewalk, C&G	2H	Red

Road Segment	Current condition	Current ROW	ROW	Preferred State	Cross section	Map color
Pritchard Rd - County line to Covered Bridge Rd	2-5 lanes w/ various left/ right turns (45 MPH)	60-100' (est)	110'	4 lane median w/ bike, sidewalk, C&G	4G	Blue
Loop Rd - CBR to CBR	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Medlin Rd - Country line to Covered Bridge Rd	2 lane (45 MPH)	60' (est)	80'	2 lane w/ center left	3A	Green
Covered Bridge Rd - Archer Lodge to Northern Connector	2 lane w/ various left/ right turns (45-55 MPH)	60-80'	110'	4 lane w/ bike, sidewalk, C&G	4G	Blue
Collinsworth Dr - Athletic Club Blvd to Waterfield Dr	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Waterfield Dr - Collingsworth Dr to Swann Trail	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Swann Trail - Pritchard Rd to Waterfield Dr (see note)	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Riverwood Ranch Blvd - Pritchard Rd to Stetson Ln/future RWR roads	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
N O'Neil Rd - Northern Connector to Main St	2 lane w/ various left/ right turns (25-55 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Northern Connector - Covered Bridge Rd to NC 42E	Undeveloped, 2 lane	0', 180' CAT to NC 42E	110'	4 lane median w/ bike, sidewalk, C&G	4G	Blue
Castleberry Rd - NC 42E to Covered Bridge Rd	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Glen Laurel Rd - NC 42E to Powhatan Rd	2-5 lanes w/ various left/ right turns (45 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Glen Laurel Rd Ext (new) - Powhatan Rd to GLP One/Gordon Rd/ BUS 70	2 lane w/ various left/ right turns (45-55 MPH)	0', 80-150' (est)	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Vinson Rd - Glen Laurel Rd to Heathgreen Dr/ ETJ boundary	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green

Future Right of Way and Cross Section Table (3 of 4)

| Road Segment	Current condition	Current ROW	ROW	Preferred State	Cross section	Map color
Powhatan Rd - BUS 70 to ETJ Boundary	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Pony Farm Rd - BUS 70 to Little Creek Church Rd	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Little Creek Church Rd - Ranch Rd to Pony Farm Rd	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Little Creek Chruch Rd - Pony Farm Rd to ETJ Boundary	2 lane (45 MPH)	60' (est)	80'	2 lane w/ center left	3A	Green
Ranch Rd - BUS 70 to US 70/I-42 interchange	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	110'	4 lane median w/ bike, sidewalk, C&G	4G	Blue
Ranch Rd - US 70/I-42 interchange to ETJ Boundary	2 lane w/ various left/ right turns (45-55 MPH)	60'	80'	2 lane w/ center left	3A	Green
Southern Connector (new) - Ranch Rd to Barber Mill Rd	Undeveloped, 2 lane w/ various left/right turns (25-45 MPH)	60' (Dairy Rd), 100'	80'	2 lane median w/ bike, sidewalk, C&G	2L	Green
Guy Rd - Barber Mill Rd (incl ext) to BUS 70	2 lane w/ various left/ right turns (45-55 MPH)	60'	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
NC42 W - BUS 70 to ETJ Boundary	2 lane (35-45 MPH)	100'	110'	4 lane w/ bike, sidewalk, C&G	4G	Blue
Amelia Church Rd - BUS 70 to Barbour Mill Rd	2-5 lanes w/ various left/ right turns (45 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Barbour Mill Rd - NC 42W to Amelia Church Rd	2-5 lanes w/ various left/ right turns (45 MPH)	60-90'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Barbour Mill Rd - Amelia Church Rd to ETJ Boundary	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left	3A	Green
Corbett Rd - Amelia Church Rd to Lee Way	2 lane w/ various left/ right turns (45-55 MPH)	60' (est)	80'	2 lane w/ center left	3A	Green

Future Right of Way and Cross Section Table (2 of 4)

Road Segment	Current condition	Current ROW	ROW	Preferred State	Cross section	Map color
Winston Rd - Guy Rd to ETJ Boundary	2 lane w/ various left/ right turns (45-55 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
Valley Dr/Winston Pointe Dr/Winston Pointe Club Blvd - Guy Rd to Winston Rd	2 lane (25-45 MPH)	50'	80'	2 lane w/ center left, sidewalk, C&G	3B	Green
Durham St - BUS 70 to Clayton Area Ministries	2 lane (25 MPH)	50-60'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Champion St - BUS 70 to Southern Connector	2 lanes (25-35 MPH)	60'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
South Tech Park Ln - Pony Farm Rd to end of road	2 lanes (25-35 MPH)	60'	80'	2 lane w/ center left, bike, sidewalk, C&G	3C	Green
North Tech Dr - BUS 70 to Best Wood Dr	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Best Wood Dr - Powhatan Rd to JCWDC	2 lane (25 MPH)	50'	60'	2 lane w/ bike, sidewalk, C&G	2E	Brown
Jack Rd - Government Rd to Ranch Rd	2 lane w/ various left/ right turns (45-55 MPH)	60'	80'	2 lane w/ center left, sidewalk, C&G	3B	Green

Community Survey

The following are the raw results of the survey, excluding the 100+ pages of open-ended responses. For complete results including the open-ended responses, contact Town of Clayton Planning Department.

Q1 How do you relate to Clayton? (choose all that apply)

Answered: 2,342   Skipped: 4
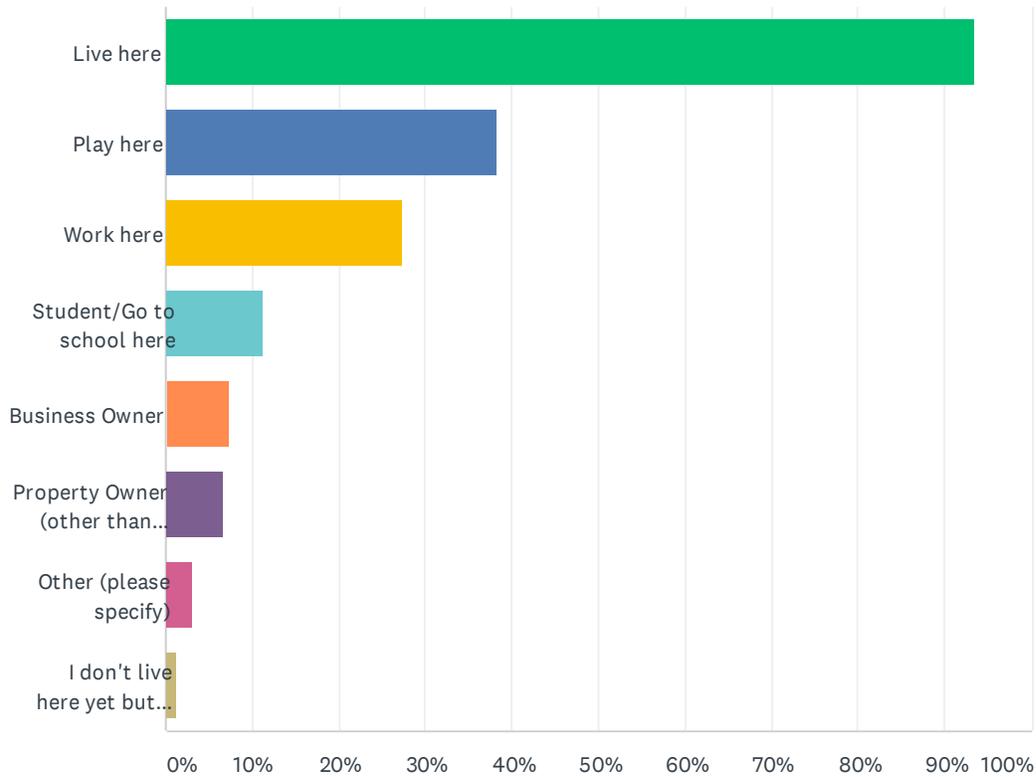
ANSWER CHOICES	RESPONSES	
Live here	93.47%	2,189
Play here	38.39%	899
Work here	27.41%	642
Student/Go to school here	11.36%	266
Business Owner	7.30%	171
Property Owner (other than your home)	6.70%	157
Other (please specify)	3.12%	73
I don't live here yet but would in the future	1.24%	29
Total Respondents: 2,342		

Q2 What are your top three reasons for being in Clayton? (choose up to three)

Answered: 2,346   Skipped: 0
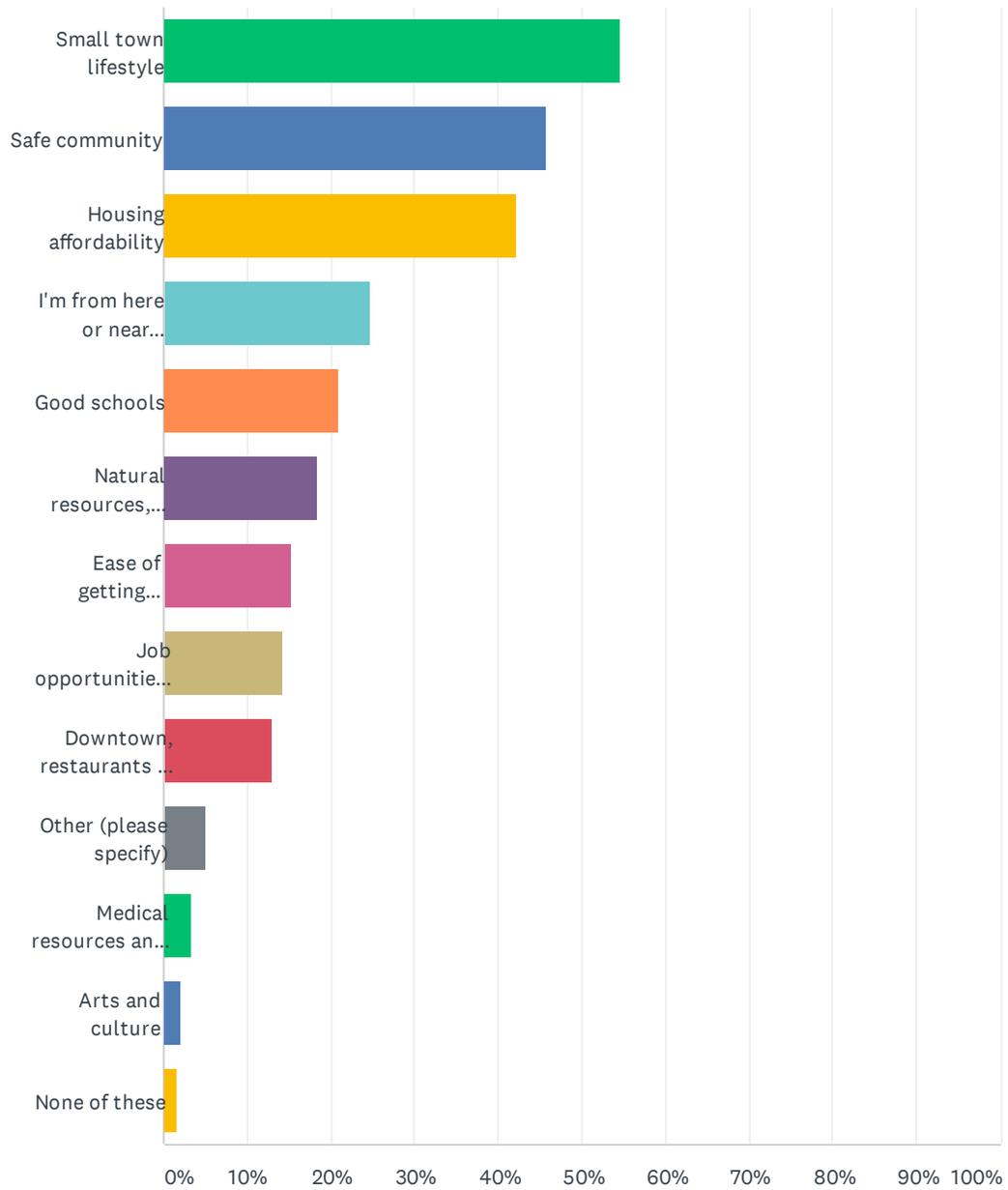
Clayton Community Survey

ANSWER CHOICES	RESPONSES	
Small town lifestyle	54.56%	1,280
Safe community	45.91%	1,077
Housing affordability	42.28%	992
I'm from here or near family/friends	24.77%	581
Good schools	20.93%	491
Natural resources, parks, and outdoor recreation/amenities	18.41%	432
Ease of getting around/accessibility	15.30%	359
Job opportunities (in Clayton or nearby town)	14.15%	332
Downtown, restaurants or shopping	12.87%	302
Other (please specify)	4.99%	117
Medical resources and care	3.28%	77
Arts and culture	2.17%	51
None of these	1.75%	41
Total Respondents: 2,346		

Q3 What are your top three concerns for the future of Clayton?

Answered: 2,346   Skipped: 0
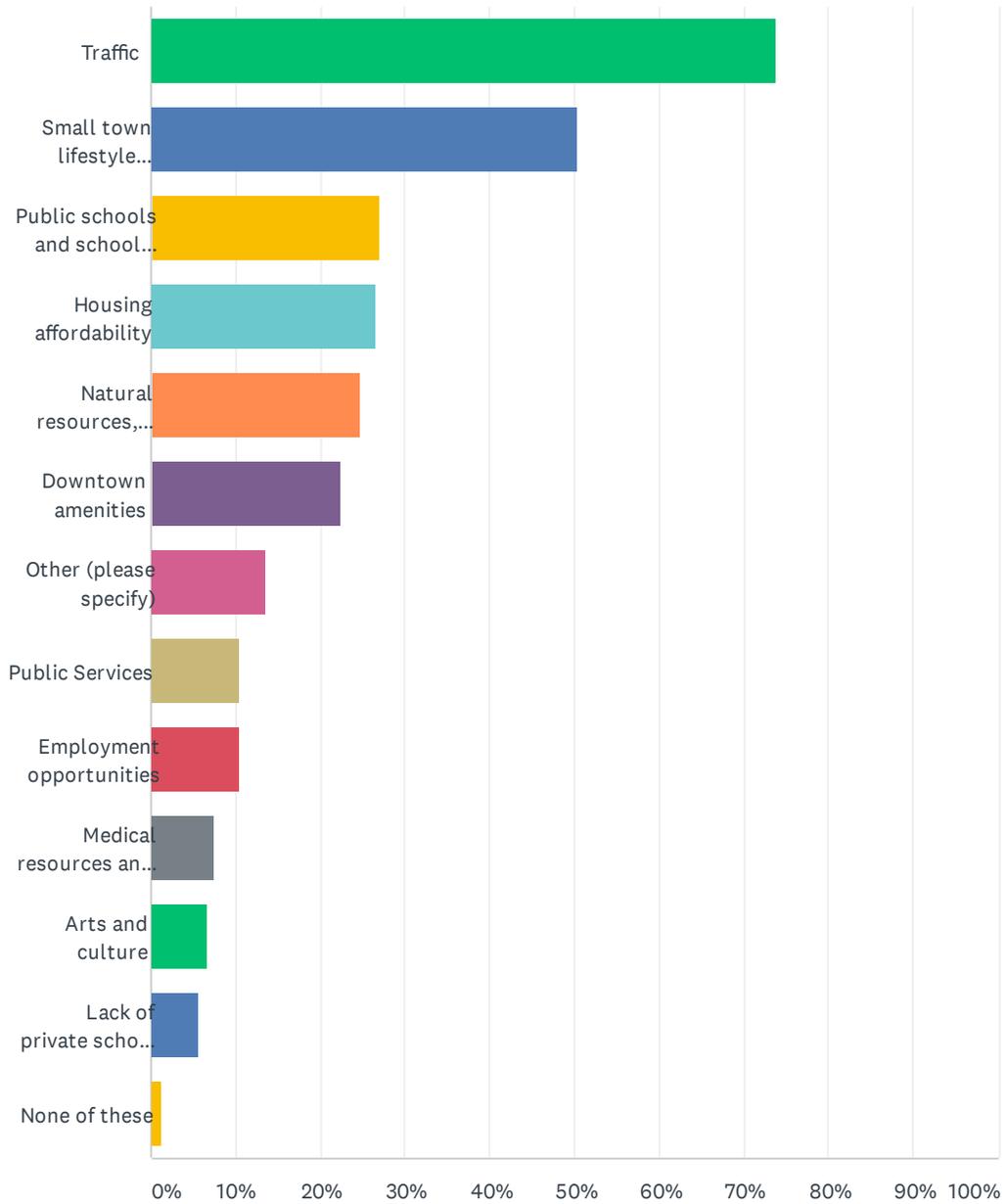
Clayton Community Survey

ANSWER CHOICES	RESPONSES	
Traffic	73.87%	1,733
Small town lifestyle changing	50.51%	1,185
Public schools and school options	27.07%	635
Housing affordability	26.56%	623
Natural resources, parks, and outdoor amenities	24.64%	578
Downtown amenities	22.38%	525
Other (please specify)	13.60%	319
Public Services	10.49%	246
Employment opportunities	10.44%	245
Medical resources and care	7.46%	175
Arts and culture	6.73%	158
Lack of private school options	5.58%	131
None of these	1.24%	29
Total Respondents: 2,346		

Q4 What type of development would you like to see more of in Clayton?

Answered: 2,285   Skipped: 61
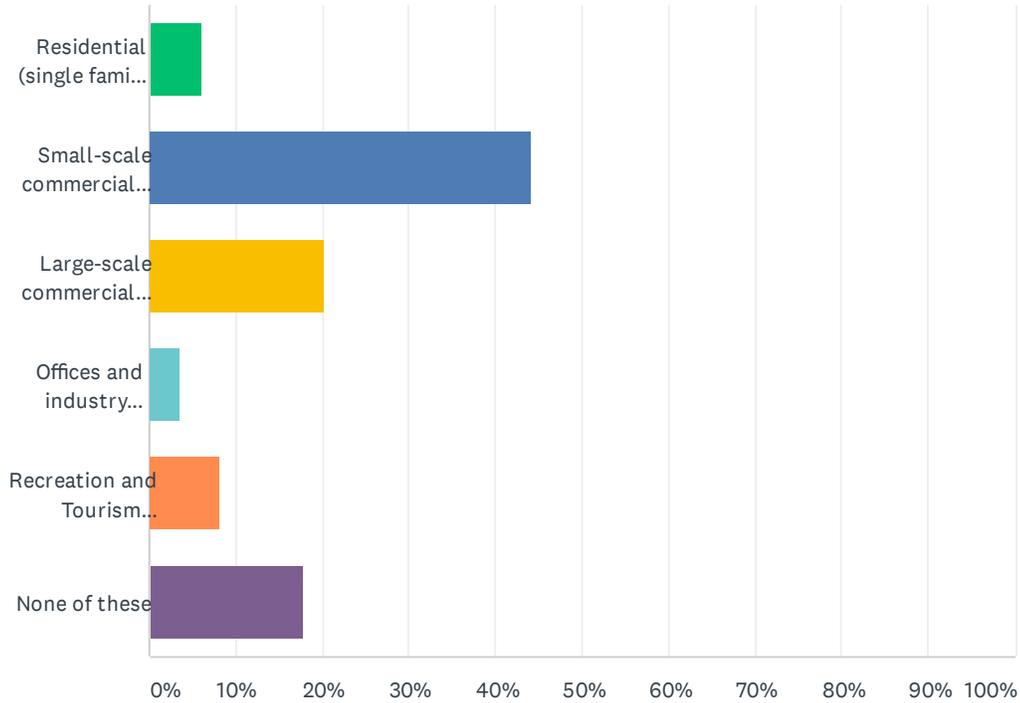
ANSWER CHOICES	RESPONSES	
Residential (single family and multi family homes)	6.08%	139
Small-scale commercial development (including boutique shops and restaurants, like in Downtown or downtown Riverwood)	44.11%	1,008
Large-scale commercial development (larger shopping centers, chain stores, hotels, etc)	20.22%	462
Offices and industry (manufacturing, employment, health offices)	3.54%	81
Recreation and Tourism (hotels, sports complexes, conference centers)	8.18%	187
None of these	17.86%	408
TOTAL		2,285

Q5 If you were looking to relocate in Clayton, what housing options would interest you? (Please select every option that applies)

Answered: 2,245   Skipped: 101
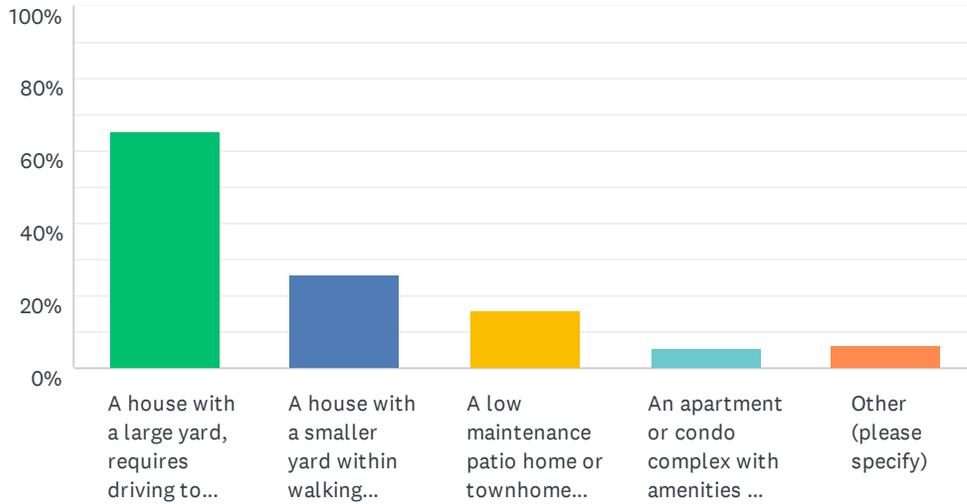
ANSWER CHOICES	RESPONSES	
A house with a large yard, requires driving to shopping, parks, and services	65.66%	1,474
A house with a smaller yard within walking distance of a park or school	26.15%	587
A low maintenance patio home or townhome within walking distance of shopping or services	16.08%	361
An apartment or condo complex with amenities or near shopping and services	5.43%	122
Other (please specify)	6.55%	147
Total Respondents: 2,245		

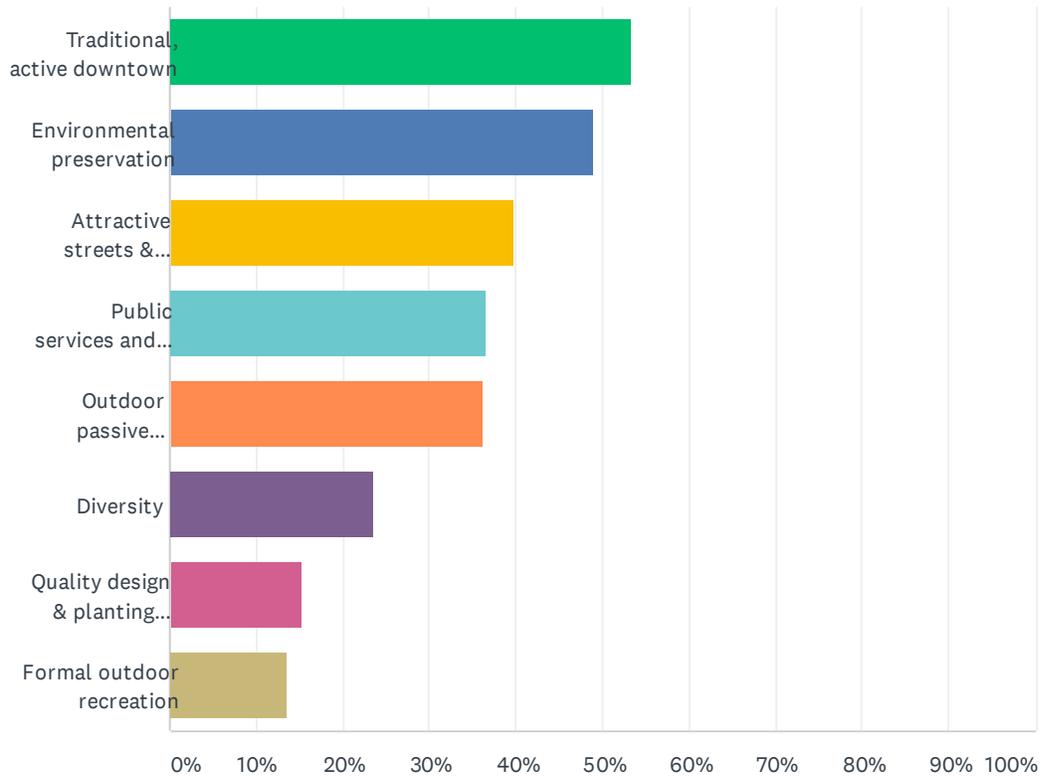# Q6 Based on the graphic above, I think the town should encourage...

Answered: 2,137   Skipped: 209
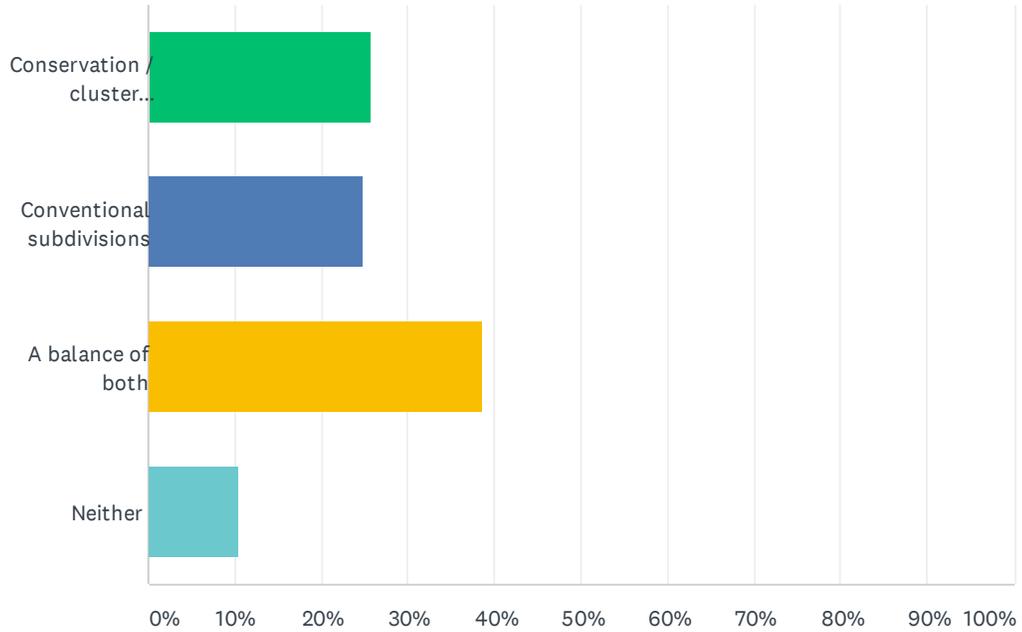
ANSWER CHOICES	RESPONSES	
Conservation / cluster subdivisions	25.74%	550
Conventional subdivisions	24.99%	534
A balance of both	38.79%	829
Neither	10.48%	224
TOTAL		2,137

Q7 What do you value most in a community? (choose three)

Answered: 2,146   Skipped: 200

ANSWER CHOICES	RESPONSES	
Traditional, active downtown	53.36%	1,145
Environmental preservation	49.02%	1,052
Attractive streets & public spaces	39.70%	852
Public services and schools	36.63%	786
Outdoor passive recreation	36.25%	778
Diversity	23.58%	506
Quality design & planting standards	15.33%	329
Formal outdoor recreation	13.56%	291
Total Respondents: 2,146		

Q8 Providing a range of housing types for various incomes and ages was a goal in the previous growth plan. A greater diversity of types can help increase housing availability and affordability. Select the two moderate density types below that most appeal to you.

Answered: 2,146   Skipped: 200
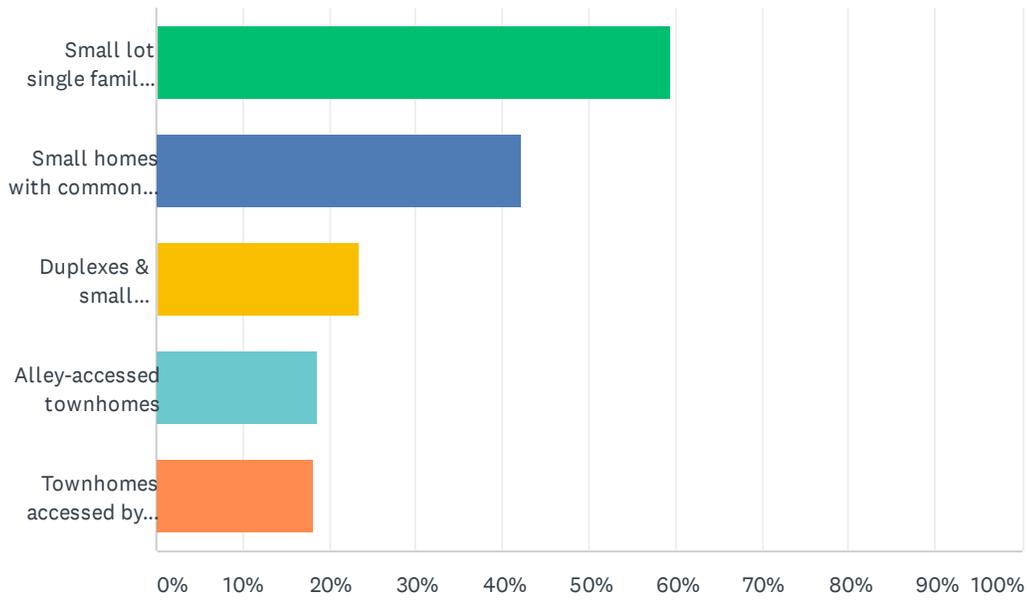
ANSWER CHOICES	RESPONSES	
Small lot single family homes	59.51%	1,277
Small homes with common yard	42.26%	907
Duplexes & small multifamily homes	23.39%	502
Alley-accessed townhomes	18.69%	401
Townhomes accessed by driveway	18.27%	392
Total Respondents: 2,146		

Q9 What is your overall vision for the Town of Clayton?

Answered: 1,513   Skipped: 833

Q10 Environmental Priorities: "I would be willing to dedicate more taxes and public fees to..." (choose up to 2)

Answered: 1,952   Skipped: 394
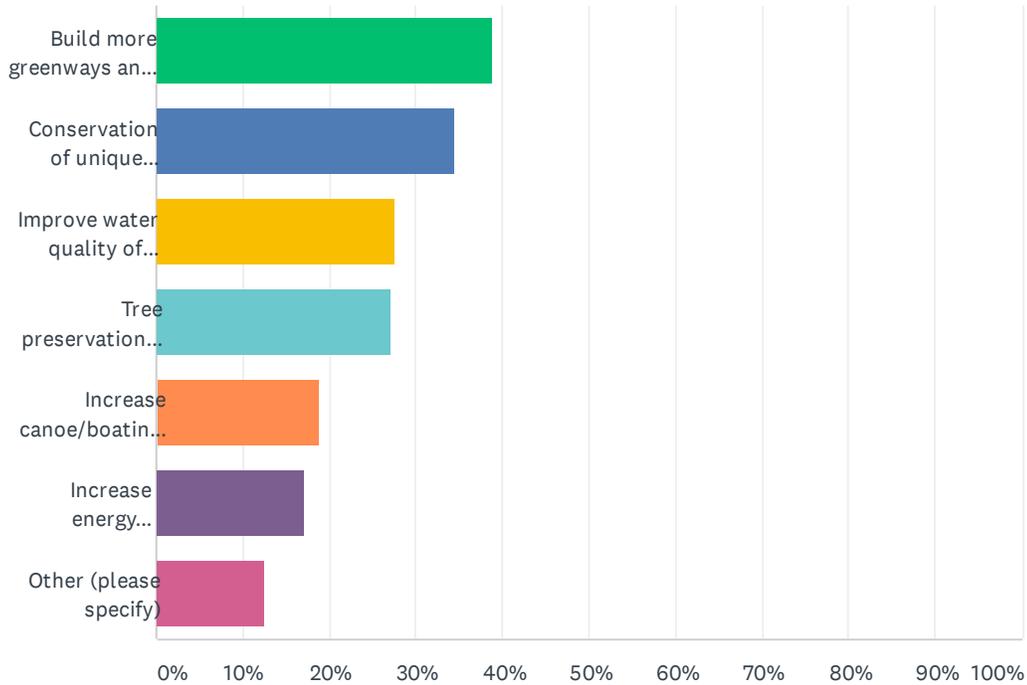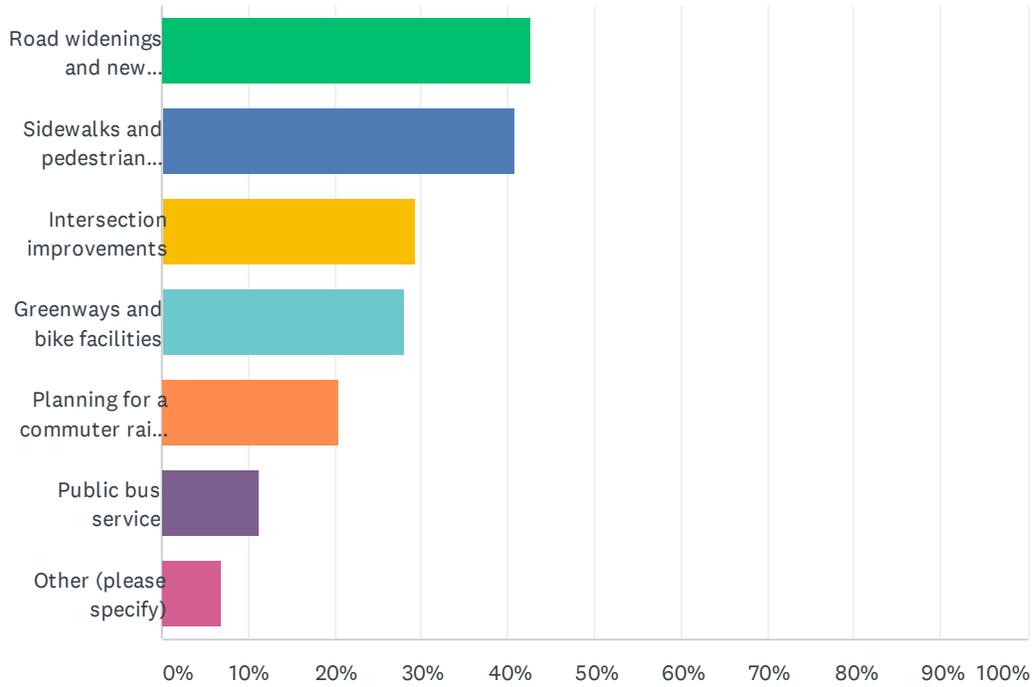

ANSWER CHOICES	RESPONSES	
Build more greenways and trails	38.83%	758
Conservation of unique natural areas	34.53%	674
Improve water quality of stormwater runoff along the Neuse River and tributaries	27.56%	538
Tree preservation/planting	27.15%	530
Increase canoe/boating/fishing access on the Neuse River	18.90%	369
Increase energy efficiency in development, buildings, and vehicles	17.06%	333
Other (please specify)	12.55%	245
Total Respondents: 1,952		

Q11 Transportation Priorities: "I would be willing to dedicate more taxes and public fees to..." (choose up to two)

Answered: 1,952   Skipped: 394

ANSWER CHOICES	RESPONSES	
Road widenings and new connections	42.73%	834
Sidewalks and pedestrian improvements	40.83%	797
Intersection improvements	29.35%	573
Greenways and bike facilities	28.07%	548
Planning for a commuter rail station	20.54%	401
Public bus service	11.32%	221
Other (please specify)	6.86%	134
Total Respondents: 1,952		

Q12 Is there a specific location that needs improvements or a transportation project that is a priority for you?

Answered: 1,405   Skipped: 941

Q13 Parks & Amenities Priorities: "I would be willing to dedicate more taxes and public fees to.." (choose up to three)

Answered: 1,952   Skipped: 394
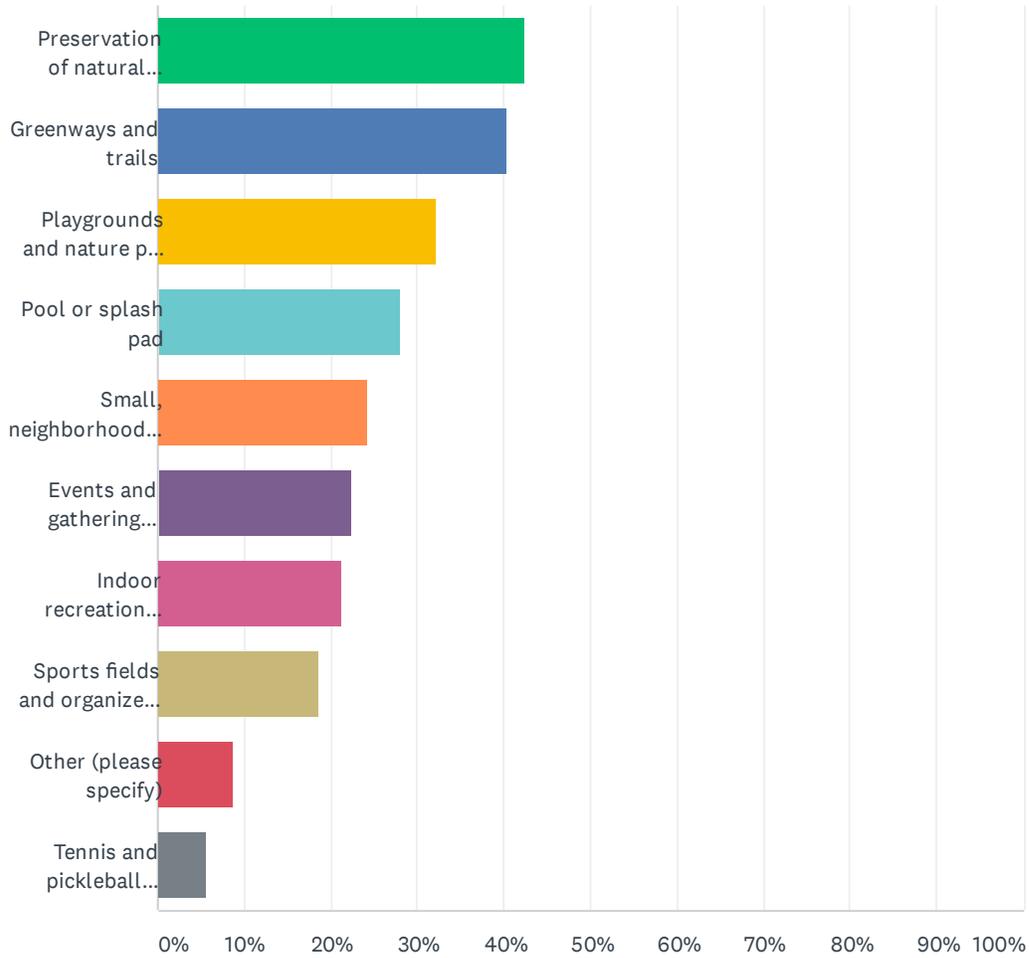
Clayton Community Survey

ANSWER CHOICES	RESPONSES	
Preservation of natural areas for passive recreation	42.52%	830
Greenways and trails	40.37%	788
Playgrounds and nature play areas	32.22%	629
Pool or splash pad	28.13%	549
Small, neighborhood parks	24.18%	472
Events and gathering spaces	22.28%	435
Indoor recreation space and programs	21.31%	416
Sports fields and organized recreational leagues	18.70%	365
Other (please specify)	8.81%	172
Tennis and pickleball courts	5.58%	109
Total Respondents: 1,952		

ANSWER CHOICES	RESPONSES

Q14 What are your top priorities for Downtown? (choose three)

Answered: 1,952   Skipped: 394
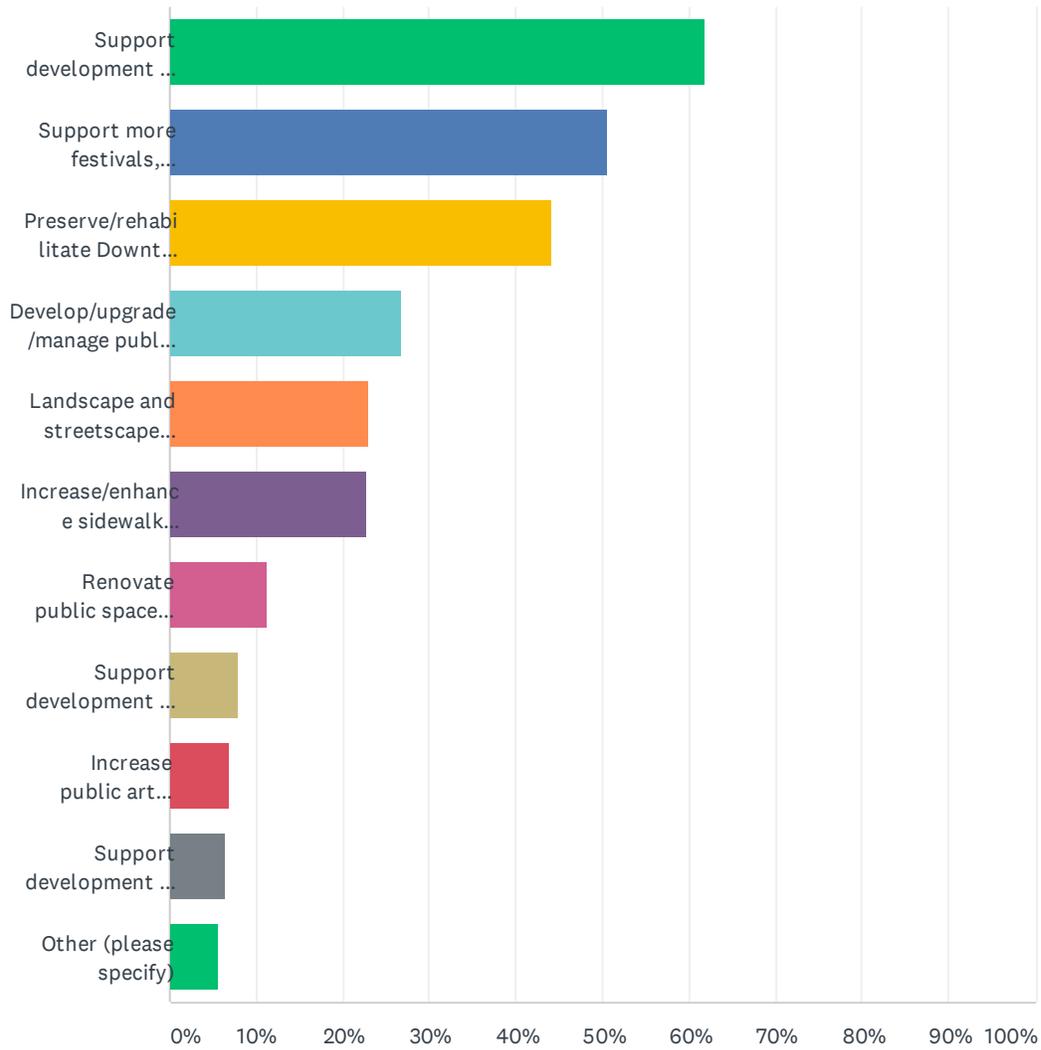
ANSWER CHOICES	RESPONSES	
Support development of more places to shop and/or dine Downtown	61.99%	1,210
Support more festivals, events, and programs Downtown	50.67%	989
Preserve/rehabilitate Downtown historic buildings and neighborhoods	44.21%	863
Develop/upgrade/manage public parking Downtown	26.69%	521
Landscape and streetscape improvements	23.00%	449
Increase/enhance sidewalk connectivity	22.75%	444
Renovate public spaces (Horne Square and Town Square)	11.32%	221
Support development of more housing and residential options Downtown	7.99%	156
Increase public art Downtown	6.92%	135
Support development of more professional offices Downtown	6.45%	126
Other (please specify)	5.69%	111
Total Respondents: 1,952		

ANSWER CHOICES	RESPONSES	

Q15 Did you participate in the planning process for the 2015 Growth Plan five years ago?

Answered: 1,927   Skipped: 419
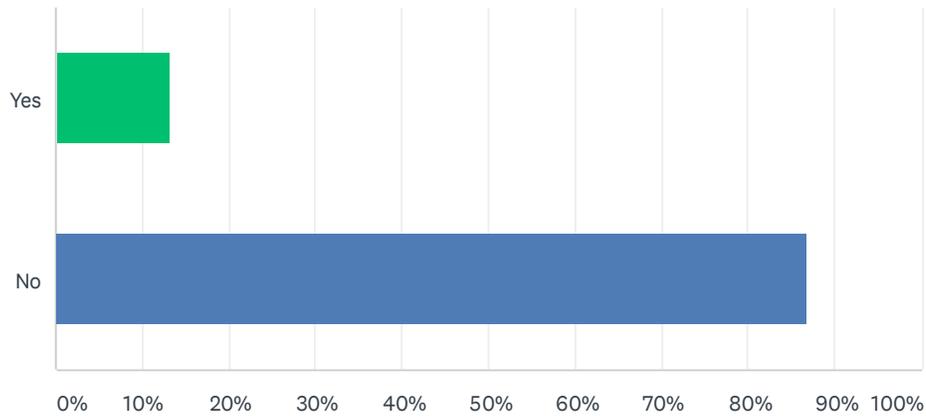
ANSWER CHOICES	RESPONSES	
Yes	13.18%	254
No	86.82%	1,673
TOTAL		1,927

Q16 How many years have you lived, worked or owned property in Clayton?

Answered: 1,936   Skipped: 410
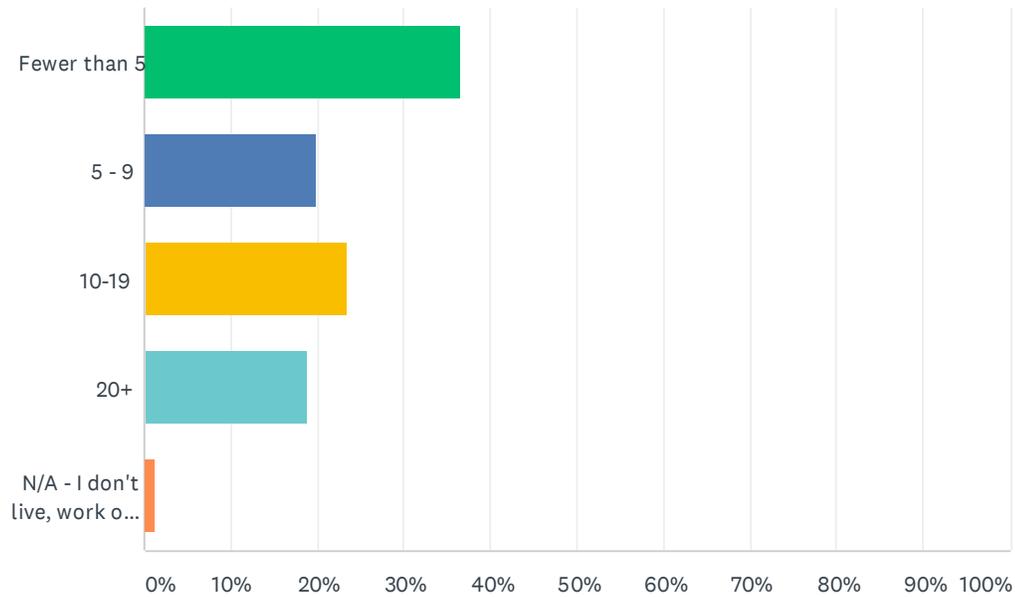
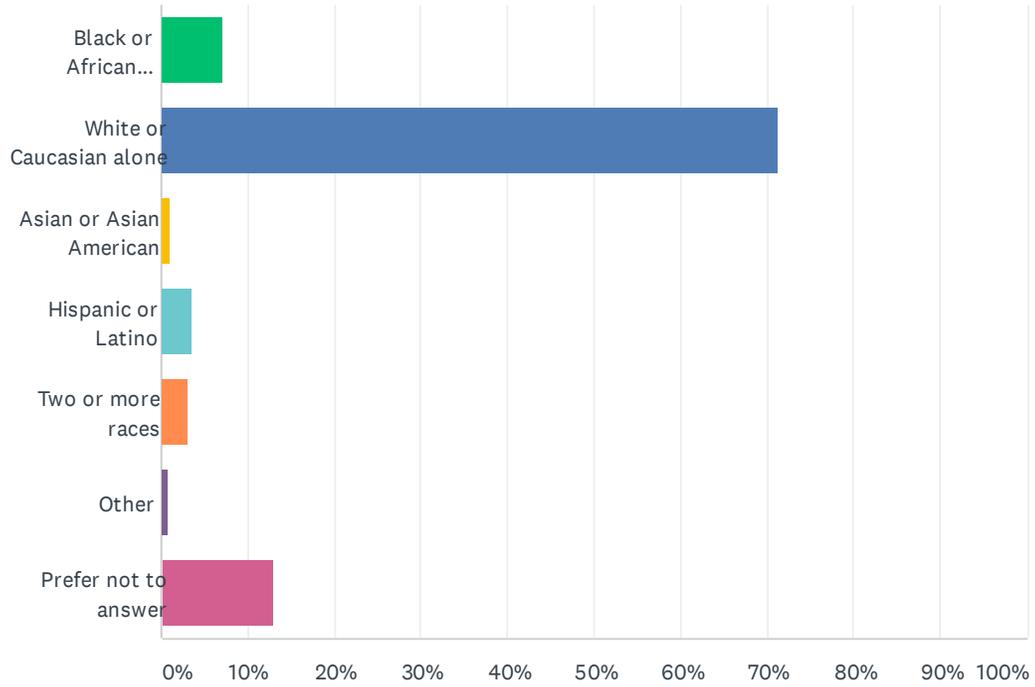| ANSWER CHOICES	RESPONSES	
Fewer than 5	36.57%	708
5 - 9	19.83%	384
10-19	23.45%	454
20+	18.90%	366
N/A - I don't live, work or own in Clayton right now, but may in the future	1.24%	24
TOTAL		1,936

Q17 How old are you?

Answered: 1,931   Skipped: 415
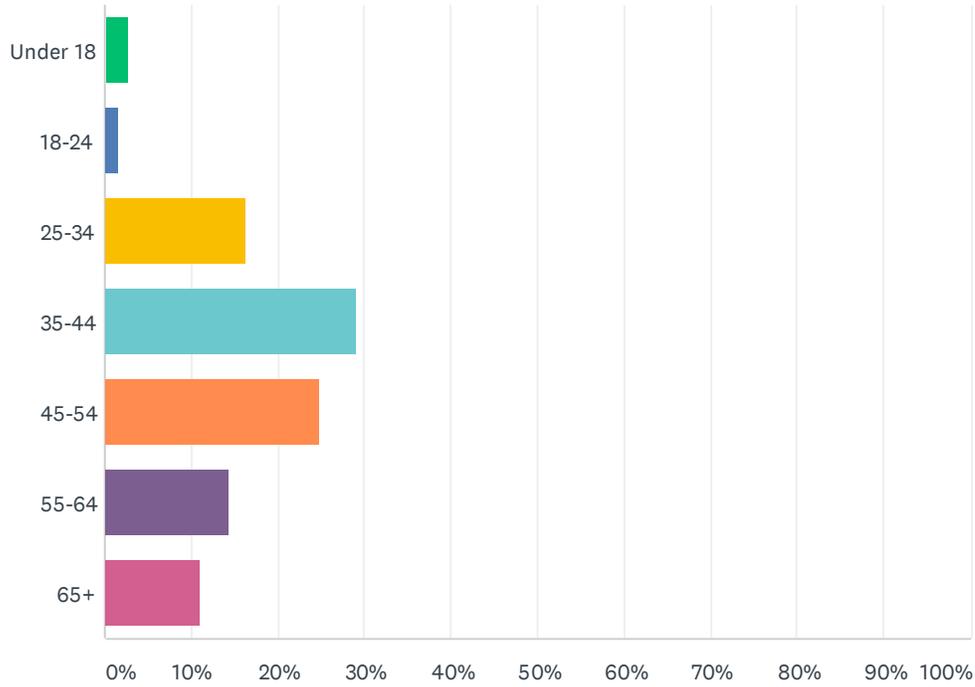
ANSWER CHOICES	RESPONSES	
Under 18	2.69%	52
18-24	1.66%	32
25-34	16.26%	314
35-44	29.05%	561
45-54	24.86%	480
55-64	14.34%	277
65+	11.13%	215
TOTAL		1,931

Q18 Please specify your race

Answered: 1,935   Skipped: 411

ANSWER CHOICES	RESPONSES	
Black or African American	7.18%	139
White or Caucasian alone	71.37%	1,381
Asian or Asian American	1.03%	20
Hispanic or Latino	3.51%	68
Two or more races	3.05%	59
Other	0.93%	18
Prefer not to answer	12.92%	250
TOTAL		1,935

Q19 Please indicate your total yearly household income

Answered: 1,874   Skipped: 472
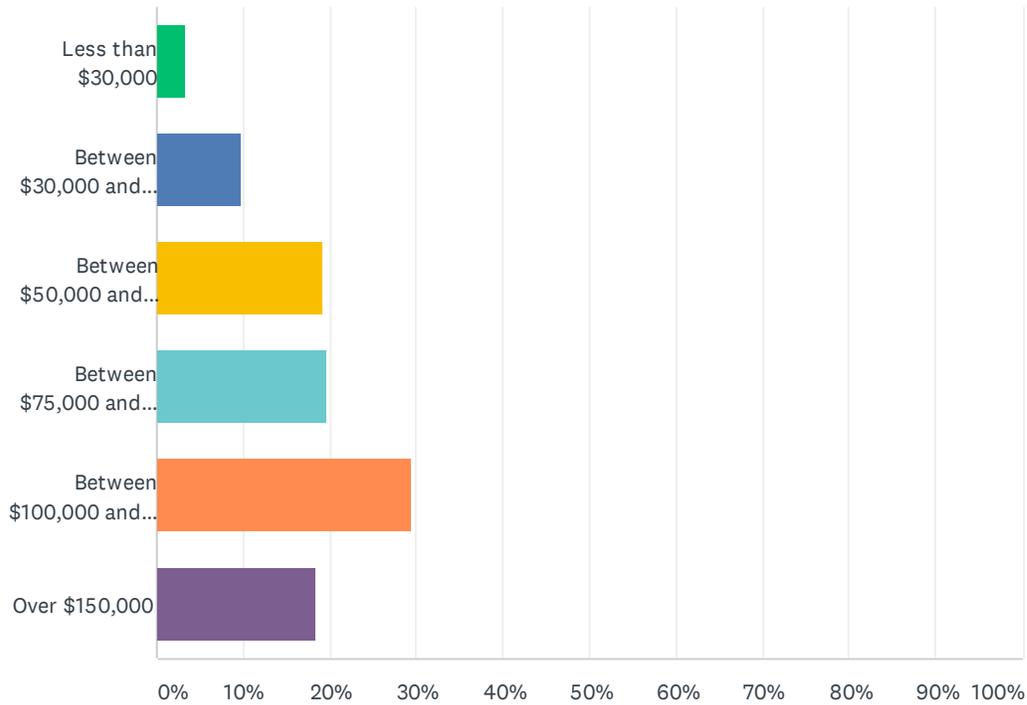
ANSWER CHOICES	RESPONSES	
Less than $30,000	3.31%	62
Between $30,000 and $49,999	9.82%	184
Between $50,000 and $74,999	19.26%	361
Between $75,000 and $99,999	19.69%	369
Between $100,000 and $150,000	29.56%	554
Over $150,000	18.36%	344
TOTAL		1,874

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2045 Comprehensive Growth Plan