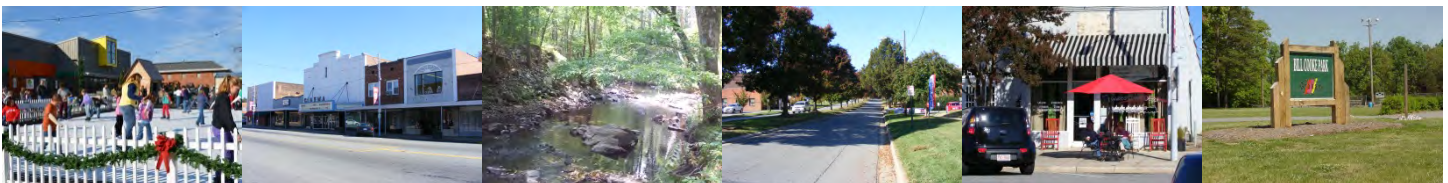


City of Graham, North Carolina
Community Profile



February 2013



People

Built Environment

Natural Environment

Transportation

Economy

*Public Services
and Infrastructure*

Prepared by Melissa Guilbeau, City Planner, City of Graham
with the invaluable assistance of

Anne Edwards, Information & Data Services Manager, Piedmont Triad Regional Council

Charles Monroe, Assistant Superintendent, Alamance-Burlington School System

Frankie Maness, City Manager, City of Graham

John Andrews, Fire Chief, City of Graham

Josh Johnson, PE, Engineer, Alley, Williams, Carmen and King, Inc.

Kelly MacDonell, Mapping & Land Records Supervisor, Alamance County Tax Office

Malinda Ford, GIS Manager, Piedmont Triad Regional Council

Martha Johnson, Inspections Technician, City of Graham

Melody Wiggins, Recreation and Parks Director, City of Graham

Mike Nunn, Burlington-Graham Metropolitan Planning Organization

Terry Worth, Public Works Director, City of Graham

Trish Patterson, GIS Specialist, Burlington Regional GIS Partnership

Victor Quick, Utilities Director, City of Graham

Table of Contents

Introduction & Overview.....	1
The Beginning of Graham	1
Graham Today.....	2
Governance.....	3
Ordinances & Plans	3
Purpose of this Profile.....	4
People.....	5
Overall Population	5
Race and Ethnicity.....	6
Age	8
Education	10
Income and Poverty	10
Built Environment	12
Land Area and Density	12
Land Uses	13
Housing	15
Growth and Opportunity	16
Natural Environment.....	23
Land Cover	23
Waterways	25
Stormwater	26
Natural Heritage.....	26
Transportation.....	27
Driving.....	27
Walking	30
Bicycling	31
Transit	32
Rail.....	32
Air.....	32
Economy	33
Workforce and Jobs	33
Tax Base	33
Public Services and Infrastructure	36
Public Services.....	36
Water	41
Wastewater.....	43



List of Figures

Figure 1. Urban Areas and Counties in the Triad and Triangle Region	1
Figure 2. Map of Graham city limits, ETJ, major roads and waterways, with neighboring city limits, ETJs and unincorporated Alamance County	2
Figure 3. Graham Population as a percent of Alamance County Population, 1950-2010	5
Figure 4. Population by Race or Ethnicity, 1980-2010.....	6
Figure 5. Map showing percent Hispanic or Latino of census blocks in the Graham area (Census 2010) ...	7
Figure 6. Population by Age, 1980-2010.....	8
Figure 7. Map of median age of residents in census blocks in the Graham area (Census 2010)	9
Figure 8. Educational attainment of the population 25 years and over in Graham, Alamance County and North Carolina, 1990-2010	10
Figure 9. Median Household Income in Graham, Alamance County and North Carolina, 1989-2011.....	10
Figure 10. Per Capita Income in Graham, Alamance County and North Carolina, 1989-2011.....	11
Figure 11. Graham’s land area (square miles), 1985-2011	12
Figure 12. Map of density of census blocks in the Graham area (Census 2010)	12
Figure 13. Map of land uses, as of December 31, 2012.....	14
Figure 14. Distinct areas in Graham.....	14
Figure 15. Percent of housing units in single family, multi-family and mobile home structures, 1990-2010	15
Figure 16. Median house value, 1990-2010	15
Figure 17. Number of housing structures in Graham, by year the structure was built.....	15
Figure 18. Map showing percent of housing units that were vacant in census blocks in the Graham area (Census 2010).....	16
Figure 19. Estimated construction value of building permits issued, 1994 to 2012	17
Figure 20. Map of unimproved, underimproved and improved parcels, as of December 31, 2012	20
Figure 21. Map of zoning of unimproved and under-improved parcels, as of December 31, 2012.....	22
Figure 22. NLCD land cover classifications, 2006.....	23
Figure 23. NLCD land cover classifications, 1992.....	24
Figure 24. Map of waterways, impaired waterways and floodzones.....	25
Figure 25. Map of 2011 average annual daily traffic (AADT).....	27
Figure 26. Map of size of street blocks and vacant apparent public right-of-way	28
Figure 27. Map of proposed road projects	29
Figure 28. Map of existing and recommended pedestrian facilities	30
Figure 29. Map of existing bicycling facilities	31
Figure 30. Where Graham’s workforce works	33
Figure 31. Place of residence for persons who work in Graham	33



Figure 32. Map of 2012 property tax collected per acre of land	34
Figure 33. 2012 property tax collected per acre of land for representative properties	35
Figure 34. Annual sales in Graham and the remainder of Alamance County, 1992-2009	35
Figure 35. Map of public services	36
Figure 36. Tons of residential waste collected per year per household, 2000-2012	38
Figure 37. Projected demand for water through 2060.....	41
Figure 38. Map of water lines, Graham-Mebane Lake and water treatment plant	42
Figure 39. Map of wastewater lines, pump stations, wastewater treatment plant and the Burlington-Graham sewer drainage boundary line	43

List of Tables

Table 1. Population Growth and Rate of Change, 1950-2010.	5
Table 2. Population Projections through 2032.	5
Table 3. Population by Race or Ethnicity and as percent of total, 1980-2010.	6
Table 4. Population by Age and as percent of total, 1980-2010.	8
Table 5. Percent of population in poverty in Graham, Alamance County and North Carolina, 1989-2011	11
Table 6. Land use of parcels, as of December 31, 2012.....	13
Table 7. Number and estimated construction value (\$000) of building permits issued, 1994-2012.	18
Table 8. Unimproved, under-improved and improved parcels, as of December 31, 2012.	20
Table 9. Zoning of unimproved and under-improved parcels, as of December 31, 2012.	21
Table 10. Enrollment and capacity of public schools that serve Graham residents, 2012-13.....	40



Introduction & Overview

The City of Graham is located near the center of the State of North Carolina, along the I-40/85 corridor, midway between the Triad and Triangle regions. This location has contributed to steady growth for several decades, changing the land around the city from rural to suburban and urban.

Graham is the county seat of Alamance County, which has an estimated population of 153,291 (2011 ACS). It shares borders with the City of Burlington (pop. 50,925) and the Town of Haw River (pop. 2,012).

QUICK FACTS

Population	14,357
Land Area	9.62 mi ²
Growth since 2000	13.2%
Median Household Income	\$39,300
Property Tax Base	\$997,500,000
Retail Sales (2007)	\$234,814,000



Figure 1. Urban Areas and Counties in the Triad and Triangle Region

The Beginning of Graham

In the early 1800s, present-day Alamance and Orange Counties were one large county. When the county was split into two, Alamance County was created, and in the summer of 1849 a county seat was designated at the center of the county. The land for the county seat included 75 acres purchased for \$603, which was laid out with a courthouse square at its center. In 1851, the county seat was named “Graham” for the outgoing governor, William A. Graham, and was incorporated as a town.

Construction had begun in Graham even before it was incorporated. A courthouse was completed in 1851, and the lots around the courthouse were sold at auction and soon developed. One of the first commercial buildings to be constructed was the Nicks Store on the south side of Court Square. Residents from throughout the county came to Graham to conduct business, and at one time, there was a campground on the southeast side of town for those staying for an extended period of time.

Not long after the town incorporated, the North Carolina Railroad planned to construct a track with repair and maintenance shops just one block north of the courthouse. The railroad chose the location since it was near the center of the Goldsboro-Charlotte line, but the residents of Graham did not like the idea of the noise, smoke and activity that the railroad would create. The Town Commissioners passed a law that prohibited railroad tracks within one mile of the courthouse. The railroad track was constructed north of town with the shops two miles to the west, which was the beginning of Burlington.



As Graham grew, services soon followed. A telephone exchange was opened in 1888 and the first streets were paved in 1892. With the railroad firmly established, a stagecoach initially carried passengers from the depot to town, followed by streetcars. In 1911, the first municipal building – the Firemen’s Building – was constructed on W Elm St. In 1914, the town scales, which had been located on the north side of the Courthouse, were replaced by a monument honoring the Soldiers of the Confederacy.

In the decades following World War II, Graham population doubled in size. In 1961, Graham became known as the “City of Graham.”

Graham Today

Today, Graham is a city with approximately 14,500 residents living in an area of nearly 10 square miles. The City also has zoning authority in its extraterritorial jurisdiction (ETJ) which covers approximately 7.2 square miles.

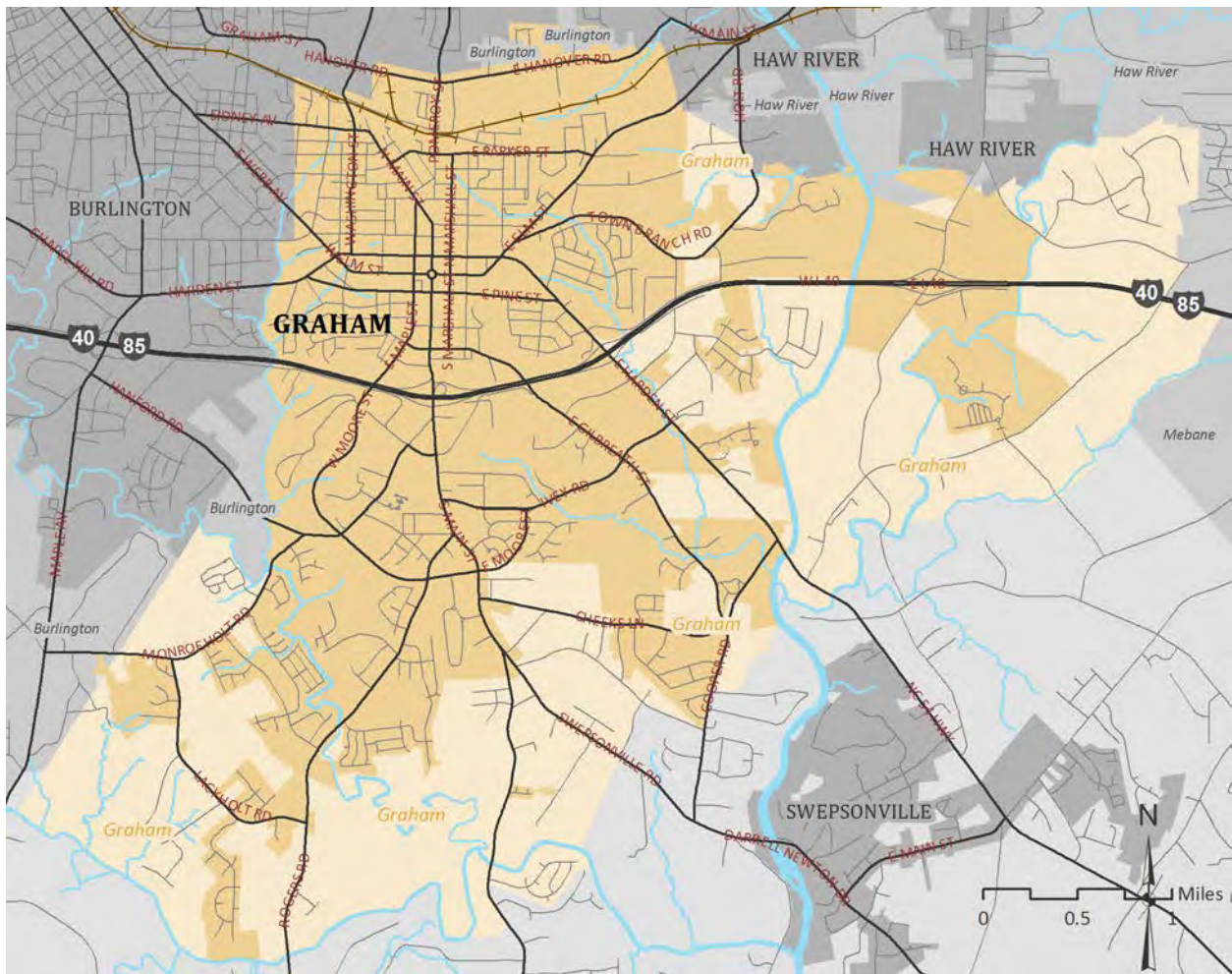


Figure 2. Map of Graham city limits, ETJ, major roads and waterways, with neighboring city limits, ETJs and unincorporated Alamance County



Governance

Graham is governed by a five-member City Council, including a mayor, and managed by a City Manager. Mayoral elections are held every two years and Council members serve staggered four-year terms. Elections are non-partisan and all candidates run at large. The Council meets monthly.

There are also eight boards and commissions that guide the City. Some meet regularly, while others meet on an as-needed basis.

- BOARDS & COMMISSIONS**
- Planning Board
 - Board of Adjustment
 - Recreation Commission
 - Tree Board
 - Historical Museum Board of Directors
 - Appearance Commission
 - Sports Hall of Fame Selection Committee
 - Historic District Commission

Ordinances & Plans

Development in the city limits and ETJ is governed by the *City of Graham Development Ordinance*. In 1999, what had been standalone ordinances for zoning, subdivision and other regulations were combined into one unified development ordinance. The *Development Ordinance* includes 13 articles that together regulate permitted uses, setbacks and height, off-street parking, landscaping, signs, subdivision, flood damage prevention, stormwater, and riparian buffer protection. There are also two highway overlay districts that place additional regulations on signage and building standards, and a historic district that is regulated by the Historic District Commission. New public infrastructure must adhere to the City's *Standard Specifications and Details*, adopted in 2007.

The City has also adopted or endorsed the following plans to help guide development, including:

- **Growth Management Plan 2000-2020.** Adopted in 2000, the plan outlines overall goals for future development, as well as specific strategies and future development types in each of four planning districts. The goals and strategies address issues related to the environment, urban services and land use. A “development toolkit” characterizes each of the 15 different types of land uses, providing a description, appropriate uses, and recommended location and size.
- **Pedestrian Transportation Plan.** Adopted in 2006, this plan includes recommendations for specific pedestrian infrastructure projects and policy changes.
- **Recreation & Parks Master Plan.** Adopted in 2008, this plan includes recommendations for improvements to existing recreation and related facilities and for investment in new facilities. It also includes recommendations for improvements to recreation programs and administration. It was an update to the 1998 recreation and parks plan.
- **Hazard Mitigation Plan.** Adopted in 2002, and revised in 2004, the plan serves as a guide to provide for growth that is resilient to natural hazards. It includes specific strategies to prevent future vulnerability to hazards, protecting existing property from hazardous events, reduce the impacts of natural hazards through natural resource protection, and provide information to the public about hazards, hazardous areas and mitigation techniques.
- **Local Water Supply Plan.** This plan, updated annually, reports a number of metrics related to water and wastewater use and supply, and provides projections for future demand and supply. It is



required by the Division of Water Resources of the North Carolina Department of Environment and Natural Resources.

- **Comprehensive Stormwater Management Plan.** This plan, updated annually since 2005, addresses the requirements of the City’s NPDES Phase II Stormwater permit and includes six elements: public education, public participation, illicit discharge detection and elimination, construction site runoff control, post-construction stormwater management, and good housekeeping in municipal operations.
- **Burlington-Graham Metropolitan Planning Organization (BGMPO) Comprehensive Transportation Plan.** This plan, adopted by the BGMPO in 2010, provides recommendations for transportation projects for the next thirty years in the BGMPO’s planning area, which includes Graham. It includes recommendations for highway, bicycle, public transportation and rail projects.

Purpose of this Profile

This Community Profile serves as a snapshot of Graham today. It provides information to guide decisions about the future of Graham and a point-of-reference to track changes in the community over the years to come. It does not attempt to recommend any particular policy or strategy, and tries to avoid making any assumptions or broad statements that cannot be supported by data.



People

This chapter profiles the people of Graham – past, present and future.

- Topics in this Chapter**
- Overall Population
 - Race and Ethnicity
 - Age
 - Education
 - Income and Poverty

Overall Population

In 2011, Graham had an estimated total population of 14,357 people. This is an increase of 13.2% since 2000, when the city’s population was 12,683.

Graham has continued to grow over the past several decades, with the periods from 1950 to 1960 and from 1980 to 2000 seeing the most growth. The table below shows the population of Graham at each decennial census since 1950 and compares the rate of population growth to that of Alamance County, North Carolina and the United States.

Table 1. Population Growth and Rate of Change, 1950-2010.

	1950	1960	1970	1980	1990	2000	2010
Graham	5,043	7,723	8,172	8,674	10,426	12,683	14,153
		+53.1%	+5.8%	+6.1%	+20.2%	+21.6%	+11.6%
Alamance County	71,220	85,674	96,362	99,319	108,213	130,800	151,131
		+20.3%	+12.5%	+3.1%	+9.0%	+20.9%	+15.5%
North Carolina	4,061,929	4,556,155	5,082,059	5,881,766	6,628,637	8,049,313	9,535,483
		+12.2%	+11.5%	+15.7%	+12.7%	+21.4%	+18.5%
United States	151,325,798	179,323,175	203,211,926	226,545,805	248,709,873	281,421,906	308,745,538
		+18.5%	+13.3%	+11.5%	+9.8%	+13.2%	+9.7%

The percentage of Alamance County’s residents living in Graham has remained steady at around 9 to 10% over the past several decades, as shown in the graph at right.

The State Demographers branch of the Office of State Budget and Management produces population projections for each county. Projections are a best educated guess based on past observations and what we think may happen in the future. If we assume that Graham will continue to grow at the same rate as Alamance County (and thus continue to account for 9.4% of the county’s population), it is estimated that the population of Graham will be about 16,137 in the year 2032, as shown in the table below.

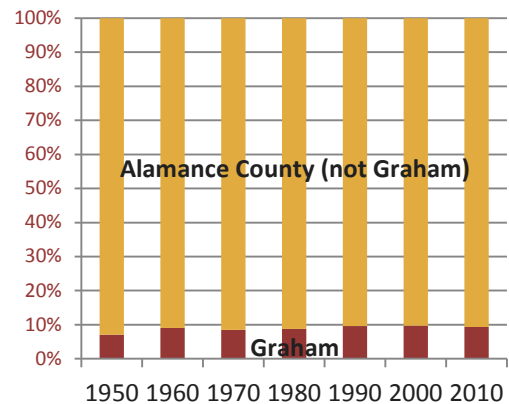


Figure 3. Graham Population as a percent of Alamance County Population, 1950-2010

Table 2. Population Projections through 2032.

	2010	2015	2020	2025	2030	2032
Graham	14,153	14,677	15,106	15,536	15,965	16,137
Alamance County	151,533	156,135	160,706	165,274	169,844	171,671



Race and Ethnicity

Over the last few decades, Graham’s population has become more diverse. Whereas in 1980 87% of the population was white, today that percentage is 63%, with nearly a quarter of the population being black or African American and roughly 10% being some other race. Additionally, 16% of the population today is of Hispanic or Latino origin, compared to only 1% of the population in 1990.

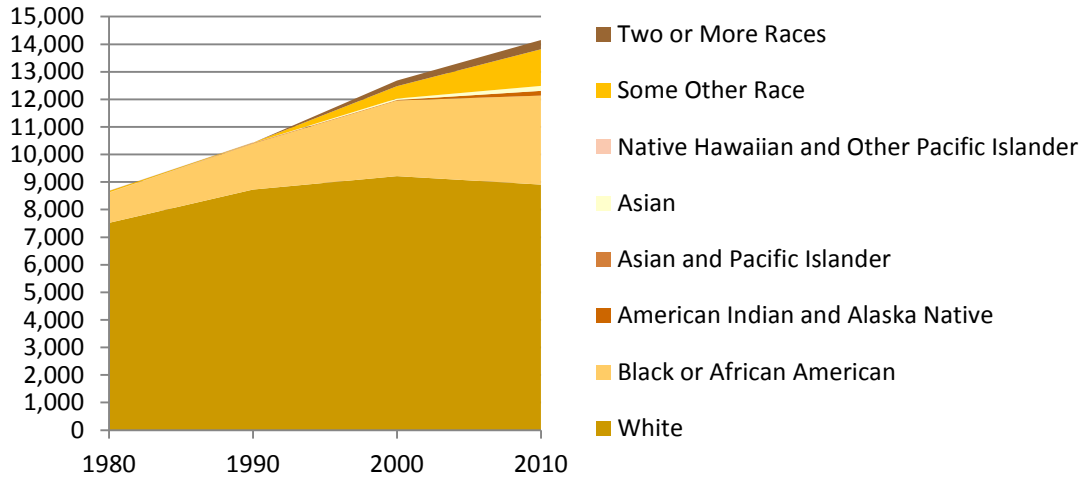


Figure 4. Population by Race or Ethnicity, 1980-2010

Table 3. Population by Race or Ethnicity and as percent of total, 1980-2010.

Race or Ethnicity	Population				as a percent of total		
	1980	1990	2000	2010	1980	2010	Change
White	7,520	8,728	9,215	8,908	86.7%	62.9%	-23.8%
Black or African American	1,102	1,668	2,744	3,229	12.7%	22.8%	+10.1%
American Indian and Alaska Native	NA	14	18	172	NA	1.2%	+1.2%
Asian and Pacific Islander	NA	10	0	0	NA	0%	NA
Asian	NA	0	51	179	NA	1.3%	+1.3%
Native Hawaiian and Other Pacific Islander	NA	0	0	1	NA	0%	NA
Some Other Race	52	6	451	1,329	0.6%	9.4%	+8.8%
Two or More Races	NA	0	204	335	NA	2.4%	NA
TOTAL	8,674	10,426	12,683	14,153	100%	100%	0%

NA: The following were not options in the 1980 Census: American Indian and Alaska Native, Asian and Pacific Islander, Asian, Native Hawaiian and Other Pacific Islander, and Two or More Races.

In 2011, 22.4% of the population over the age of 5 spoke a language other than English at home, with most speaking Spanish. Nearly half of those who speak Spanish at home speak English less than “very well.”

The map on the next page shows areas of the city where individuals who are Hispanic or Latino live.

1 of every 10
Graham residents
of speaking age

speaks Spanish
at home and
speaks English less
than “very well”



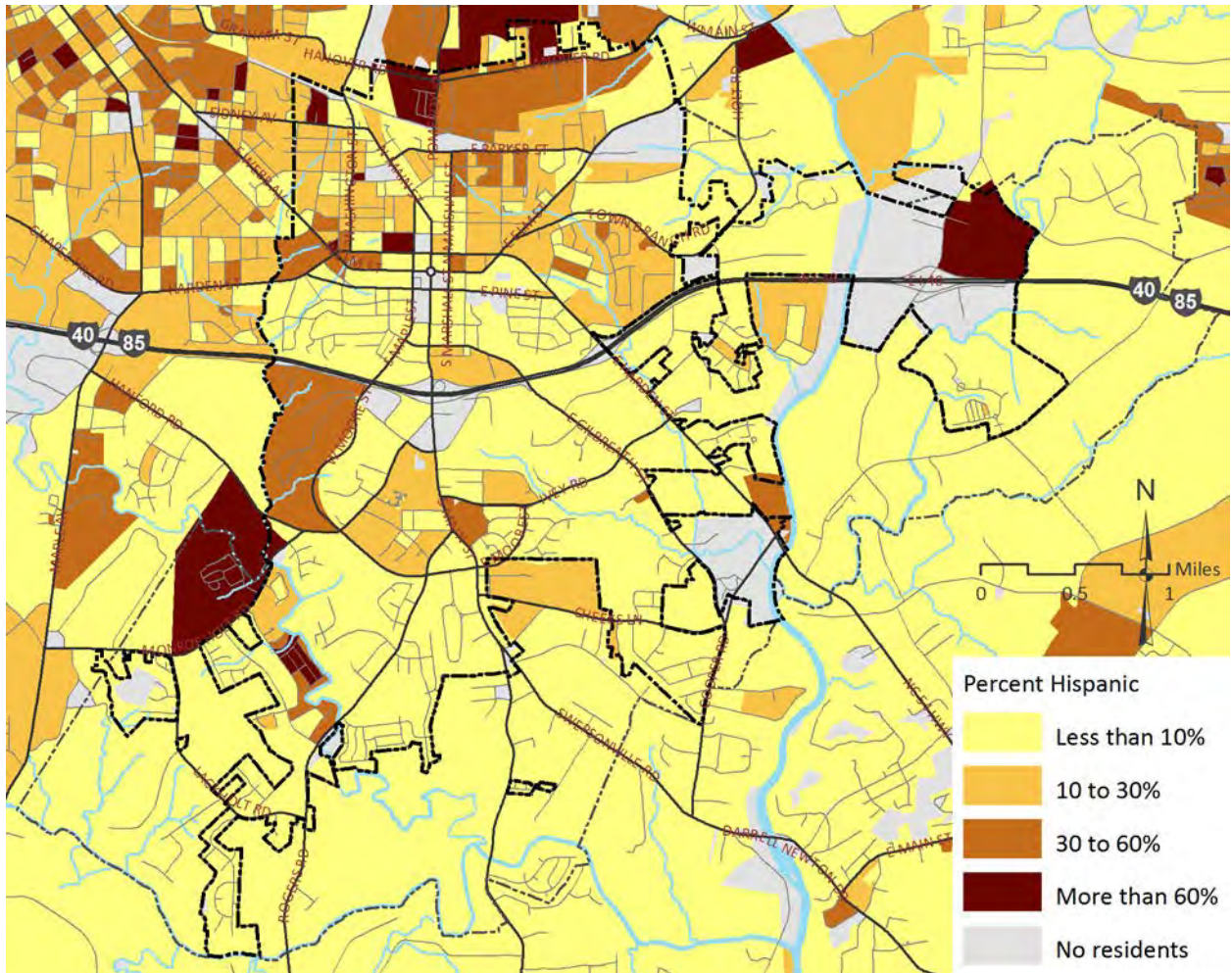
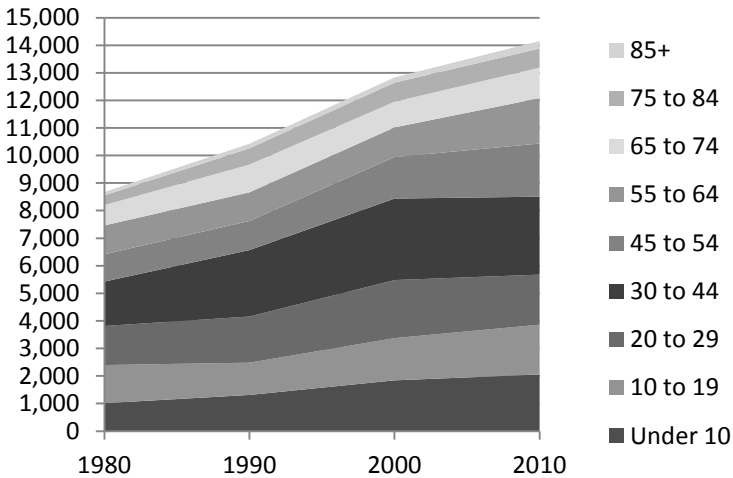


Figure 5. Map showing percent Hispanic or Latino of census blocks in the Graham area (Census 2010)



Age

The largest age groups in Graham today are the Baby Boomers and the Millennials, who each account for just over a quarter of the population. This includes individuals approximately 10 to 30 years old and 48 to 66 years old, respectively.



Generation	2010 Population & as % of total*	
Generation Z <i>born 2001-present</i>	2,056	15%
Millennials <i>born 1982-2000</i>	3,623	26%
Generation X <i>born 1965-1981</i>	2,827	20%
Baby Boomers <i>born 1946-1964</i>	3,576	25%
Silent Generation <i>born 1925-1945</i>	1,797	13%
Greatest Generation <i>born 1901-1924</i>	274	2%

**Values are an approximation and represent the best fit with the available data.*

Figure 6. Population by Age, 1980-2010

The median age in 2010 was 37.5 years, which is higher than the previous decade, when the median age was 34.4 years. The map on the next page shows the median age in 2010 of Census blocks in the Graham area.

Over the past three decades, the age composition of Graham’s population has changed slightly. As shown in the table below, the total population of all age groups has increased, but the 10 to 29 year old group is now a smaller portion of the total population, while the under 10 and 45 to 54 year old groups are each a larger portion of the total population.

Table 4. Population by Age and as percent of total, 1980-2010.

Age (years)	Population				as a percent of total		
	1980	1990	2000	2010	1980	2010	Change
Under 10	1,014	1,313	1,842	2,056	11.7%	14.5%	+2.8%
10 to 19	1,384	1,171	1,533	1,806	16.0%	12.8%	-3.2%
20 to 29	1,417	1,674	2,106	1,817	16.3%	12.8%	-3.5%
30 to 44	1,610	2,410	2,956	2,827	18.6%	20.0%	+1.4%
45 to 54	992	1,057	1,506	1,929	11.4%	13.6%	+2.2%
55 to 64	1,045	1,039	1,076	1,647	12.0%	11.6%	-0.4%
65 to 74	739	1,006	931	1,107	8.5%	7.8%	-0.7%
75 to 84	354	590	694	690	4.1%	4.9%	+0.8%
85+	119	166	189	274	1.4%	1.9%	+0.6%
TOTAL	8,674	10,426	12,833	14,153	100%	100%	0%



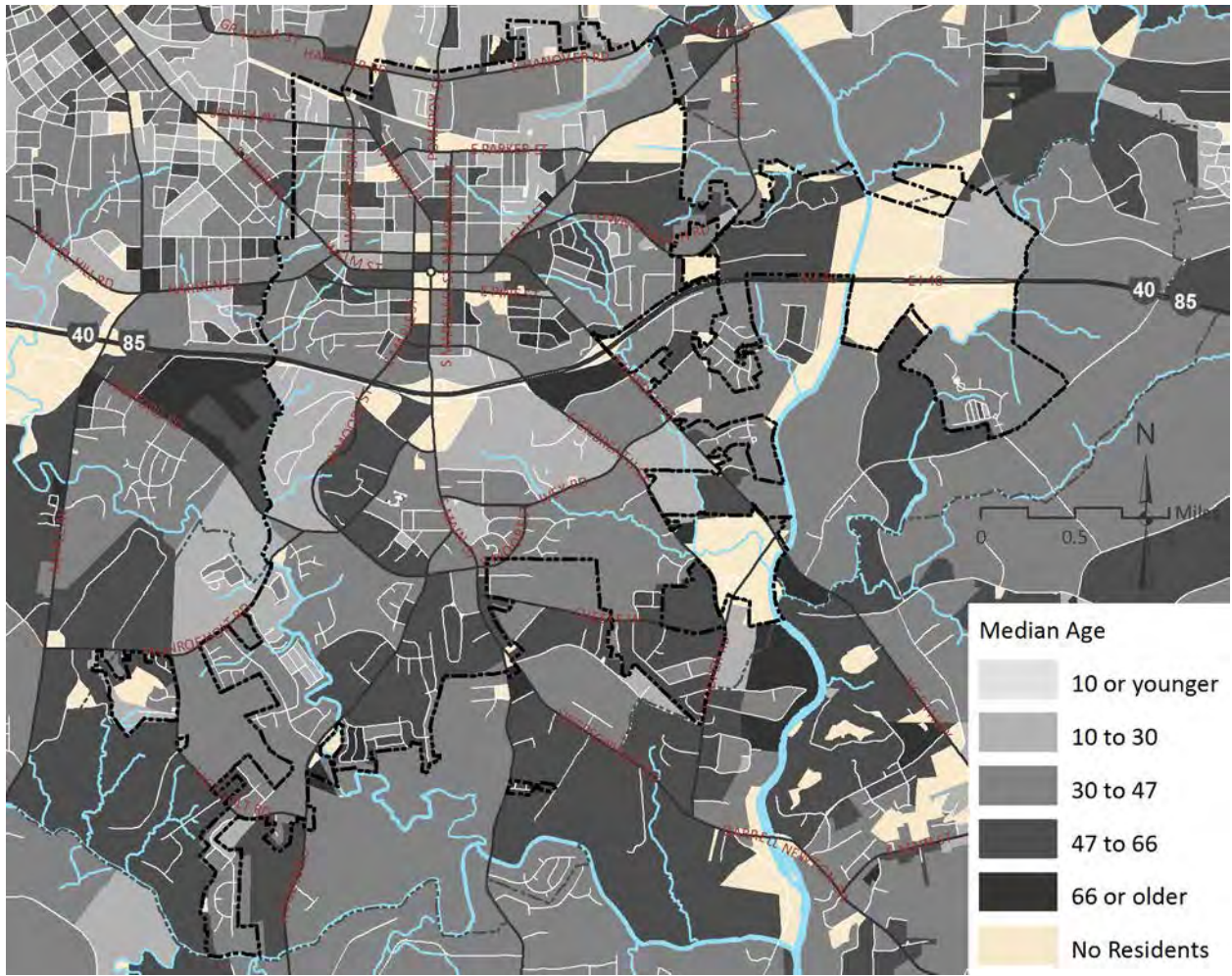


Figure 7. Map of median age of residents in census blocks in the Graham area (Census 2010)



Education

Over the past two decades, Graham’s population has become more educated. In 1990, a third of the population had no high school diploma and only 13% had a four-year degree or more. In 2010, the percent of the population without a high school diploma dropped to a quarter and those with a four-year degree or more increased to 18%. And yet Graham is relatively less educated than the county as a whole or the state. In the county and state in 2010, those without a high school diploma comprised only 19% and 16%, respectively, and those with a four-year degree or more 21% and 26%.

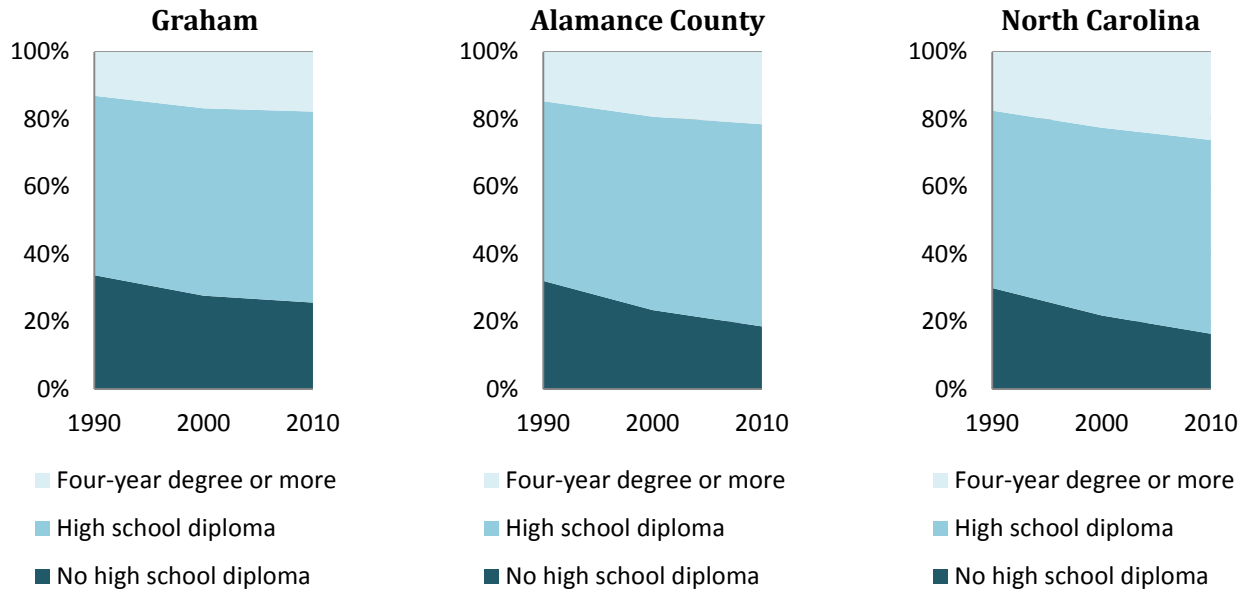


Figure 8. Educational attainment of the population 25 years and over in Graham, Alamance County and North Carolina, 1990-2010

Income and Poverty

Median household income in Graham was \$39,300 in 2011. While median household income has risen over the past two decades in Graham, Alamance County and the state, Graham’s continues to be lower, by \$5,130 and \$6,991 in 2011, respectively.

Per capita income in Graham is also lower than the county and state, by \$2,767 and \$4,546 in 2011, respectively. It was \$20,710 in 2011.

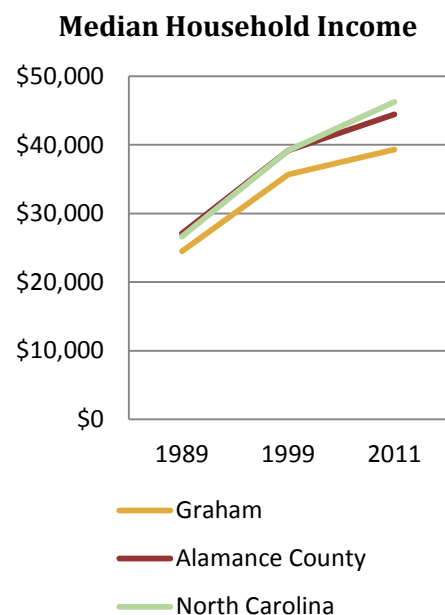


Figure 9. Median Household Income in Graham, Alamance County and North Carolina, 1989-2011



Graham’s poverty rate is also higher than the county and state, with 19.3% of Graham’s population in poverty compared to 16.1% in both the county and state. Graham has followed the same trend over the past two decades, with poverty rates increasing among the general population and children, and decreasing among the elderly. In 2011, one in three children lived in poverty in Graham.

Table 5. Percent of population in poverty in Graham, Alamance County and North Carolina, 1989-2011

	1989	1999	2011
ALL PERSONS			
Graham	11.8%	14.9%	19.3%
Alamance County	8.9%	11.1%	16.1%
North Carolina	13.0%	12.3%	16.1%
CHILDREN (0-17)			
Graham	15.5%	20.8%	32.3%
Alamance County	11.3%	13.6%	25.0%
North Carolina	16.9%	16.1%	22.6%
ELDERLY (65+)			
Graham	20.9%	14.9%	10.9%
Alamance County	15.9%	12.9%	8.7%
North Carolina	19.5%	13.2%	10.3%

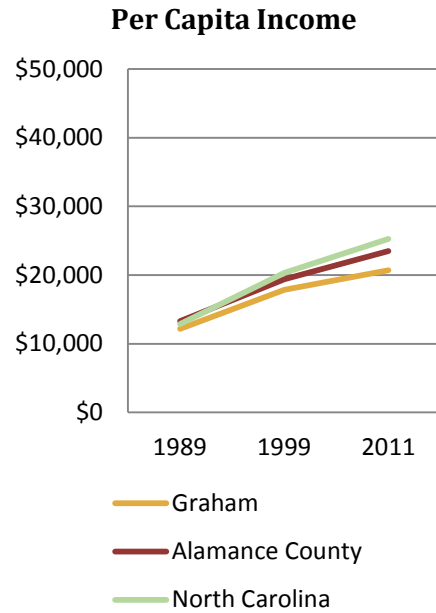


Figure 10. Per Capita Income in Graham, Alamance County and North Carolina, 1989-2011



Built Environment

This chapter explores Graham’s built environment, which includes buildings, neighborhoods and lands that are or can be built upon. Other aspects of the built environment, such as roads and parks, are addressed in other chapters.

Topics in this Chapter

- Land Area and Density
- Land Uses
- Housing
- Growth and Opportunity

Land Area and Density

Over the past three decades, Graham’s land area has more than doubled, from 4.3 mi² in 1985 to 9.6 mi² today. Since the population has not also doubled, that means that the overall population density has decreased. Today, Graham’s population density is 1,492 persons per square mile. This is lower than Burlington’s 1,985 and higher than Mebane’s 1,363. The map below shows the density of census tracts in the Graham area. The areas with the highest densities are to the north of Graham’s downtown area.

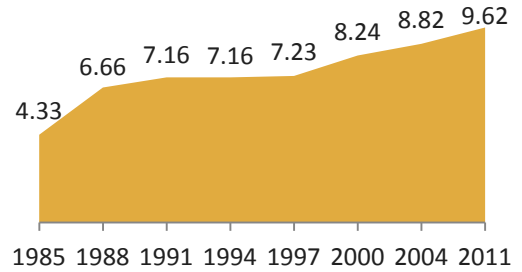


Figure 11. Graham’s land area (square miles), 1985-2011

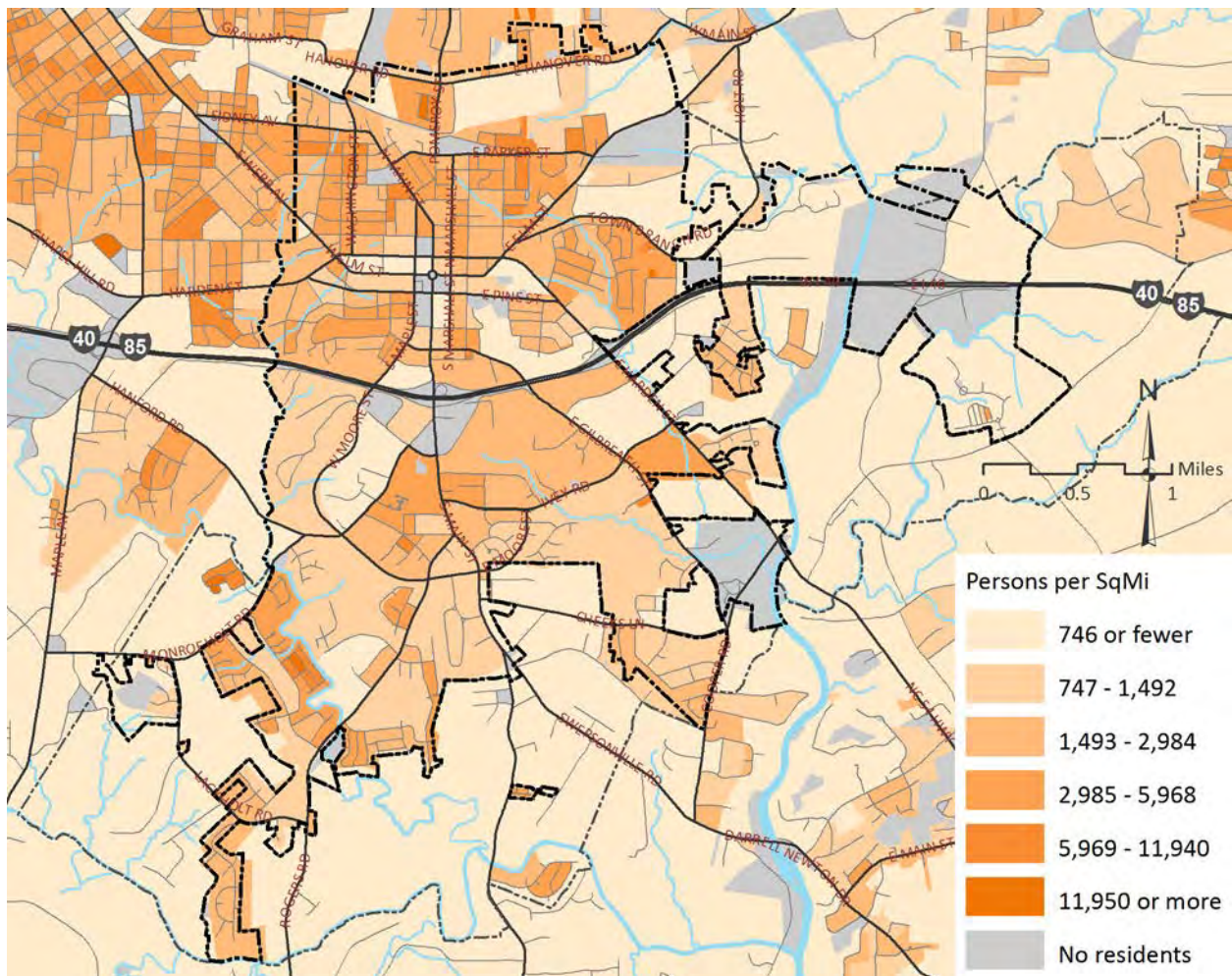


Figure 12. Map of density of census blocks in the Graham area (Census 2010)



Land Uses

Most of the land in Graham’s jurisdiction is currently residential. Inside the city limits, 46% is residential, with 42% residential in the ETJ. Most of the commercial, industrial and institutional land is inside the city limits. A quarter of the land in the ETJ is agricultural, with none inside the city limits. A quarter of the land in both the city limits and ETJ is vacant. The table below and the map on the next page each provide additional details.

As of the end of 2012, the total estimated market value of property (land and structures) inside the city limits was \$959,583,054, with an average market value of \$159,108. In the ETJ, the total estimated market value of property was \$159,287,970, with an average market value of \$135,449.

Table 6. Land use of parcels, as of December 31, 2012.

<i>quantity and as percent of total</i>	Inside City Limits		In ETJ		All Graham jurisdiction	
	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>
Residential	4,597 76.2%	2,388 46.0%	833 70.8%	1,893 41.7%	5,430 75.3%	4,282 44.0%
Mixed Use	28 0.5%	49 0.9%	5 0.4%	24 0.5%	33 0.5%	72 0.7%
Commercial	282 4.7%	285 5.5%	8 0.7%	44 1.0%	290 4.0%	330 3.4%
Industrial	78 1.3%	332 6.4%	2 0.2%	4 0.1%	80 1.1%	336 3.5%
Institutional	143 2.4%	681 13.1%	5 0.4%	13 0.3%	148 2.1%	694 7.1%
Recreation	1 0.0%	86 1.7%	0	0	1 0.0%	86 0.9%
Agricultural	0	0	26 2.2%	1,183 26.0%	26 0.4%	1,183 12.2%
Trans/Utility	5 0.1%	9 0.2%	1 0.1%	1 0.0%	6 0.1%	10 0.1%
Vacant	853 14.1%	1,304 25.1%	270 23.0%	1,227 27.0%	1,123 15.6%	2,531 26.0%
Unknown*	44 0.7%	59 1.1%	26 2.2%	155 3.4%	70 1.0%	214 2.2%
TOTAL	6,031	5,194	1,176	4,543	7,207	9,737

*Current land use is unknown with available data sources.



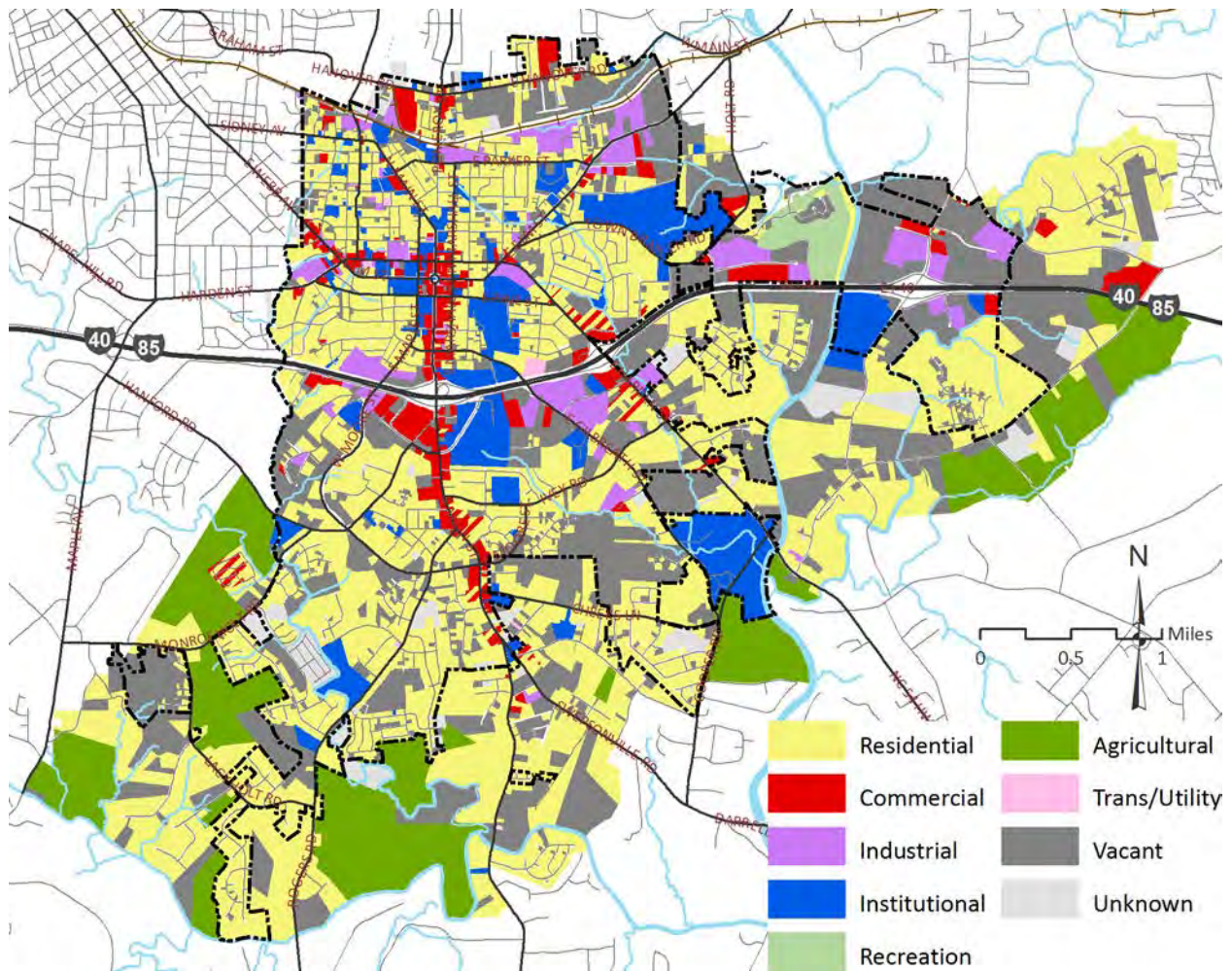


Figure 13. Map of land uses, as of December 31, 2012

There are four distinct areas in Graham:

- The **Courthouse Square Historic District** is the historic center of Graham. There are additional regulations on development in this district which is reviewed by the Historic District Commission.
- The **North Main Street Historic District** is on the National Register of Historic Places. There are no additional regulations in this district at this time.
- The **S Main St/Hwy 87 Corridor** is a commercial corridor that connects downtown with the interstate and areas to the south. There are additional regulations on development in this corridor.
- The **E Harden St/Hwy 54 Corridor** is an emerging commercial corridor. Development in this corridor has additional regulations.

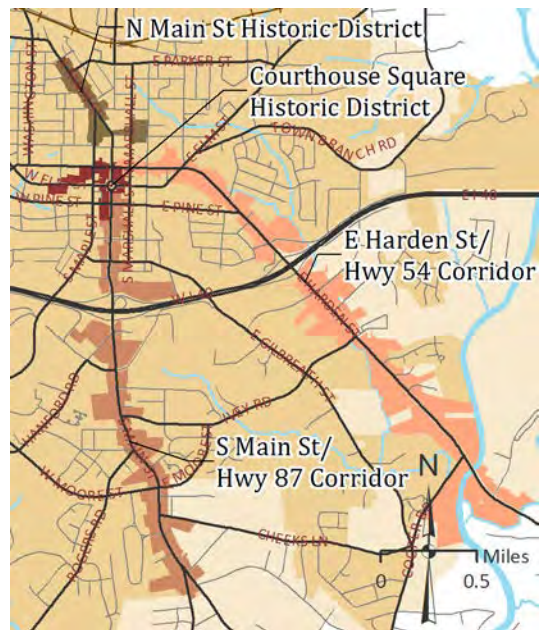


Figure 14. Distinct areas in Graham



Housing

Most of Graham’s housing is in single family and owner-occupied structures. The percent of housing units in single family structures has remained fairly constant over the past two decades, at roughly 66%. Similarly, the percent of owner-occupied housing units has remained steady at about 60%.

In 2011, about 11% of housing units in Graham were vacant, an increase from a 5% vacancy rate in 1990 and 8% in 2000. This, along with a significant decrease in the number of new residential building permits issued (as described in the next section), may suggest an oversupply of housing. The map on the next page shows the percent of housing units that were vacant in 2010.

The median value of owner-occupied housing has doubled in the past two decades, from \$62,100 in 1990 to \$123,000 in 2010. Yet this is not as much of an increase as seen in the county as a whole or in the state, which both more than doubled.

In 2010, the average number of persons per household was 2.43, a slight increase from 2.33 in 1990 and 2.37 in 2000. This is roughly the same as the county’s 2.42 persons per household and lower than the state’s 2.5 persons per household. In 2011, about a third of households in Graham were an individual living alone.

Most of the houses in Graham were built in the 1990s. About 6% are less than eight years old while about 8% are more than 73 years old. Over a quarter of Graham’s housing structures could be historic, as they are more than 50 years old. These numbers are very similar for Alamance County as a whole.

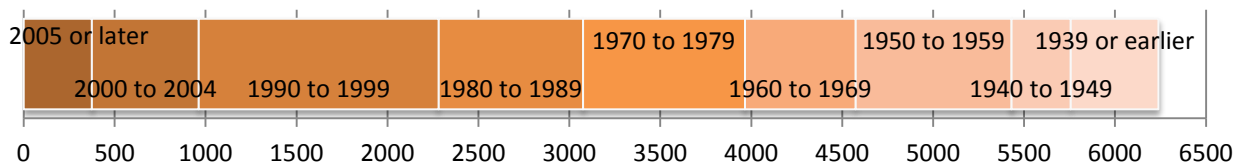


Figure 17. Number of housing structures in Graham, by year the structure was built

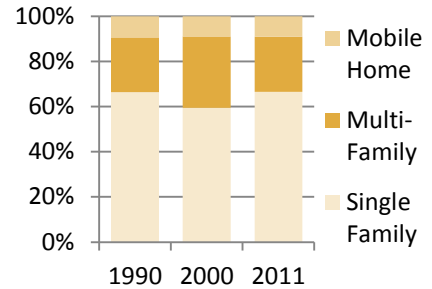


Figure 15. Percent of housing units in single family, multi-family and mobile home structures, 1990-2010

Median House Value

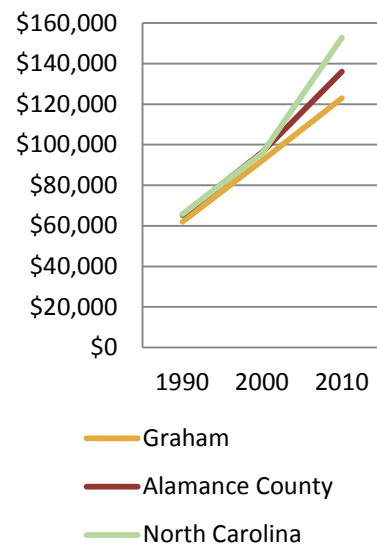


Figure 16. Median house value, 1990-2010



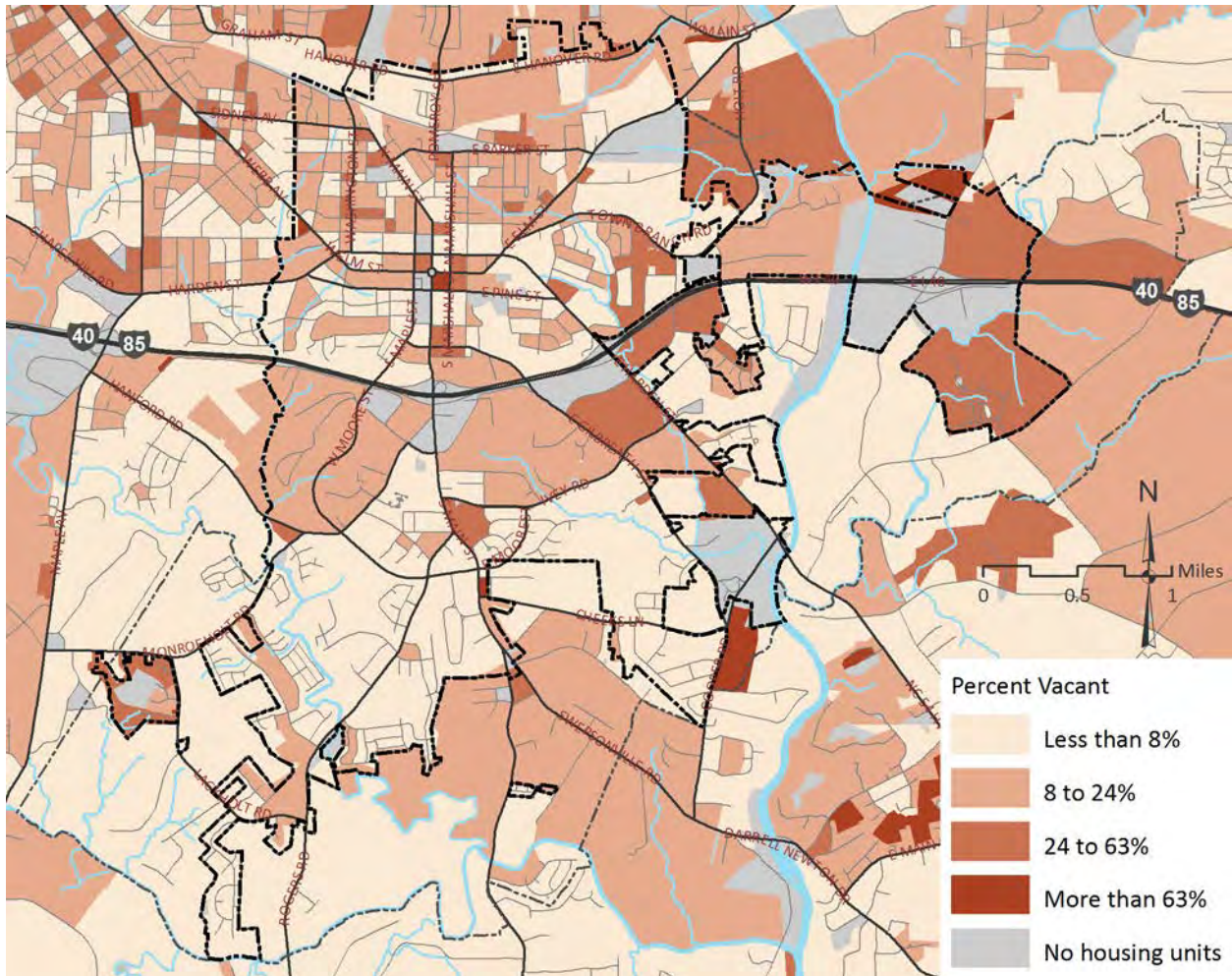


Figure 18. Map showing percent of housing units that were vacant in census blocks in the Graham area (Census 2010)

Growth and Opportunity

This section looks at past growth and future opportunity specifically related to the buildings and structures in Graham.

Building Permits

From 1994 to 2012, 3,415 building permits were issued, with a total construction value of \$282,544,495 (not adjusted for inflation). Most of this development activity has been the construction of single family homes, which accounted for 51% of the total value of construction. New commercial or industrial buildings and the renovation of commercial or industrial buildings each accounted for 14% of the total construction value, and renovations to public buildings accounted for 10%. The construction of new multi-family buildings was only 5% of the total value of construction during this period.

2006 was the peak year for new home construction, with 144 permits issued. That number dropped by half in the following year, to 77 permits, and has continued to decrease, with only 15 issued in 2012. Construction of new commercial or industrial buildings has been steadier, with an average of 5 permits



issued each year (with the exception of 1998, during which 21 permits were issued). Renovations have also been steady over the years, with an average of 63 residential renovations and 28 commercial or industrial renovations each year. The last time a permit was issued for construction of a multi-family building was in 2003.

The chart below and table on the next page provide more detailed information.

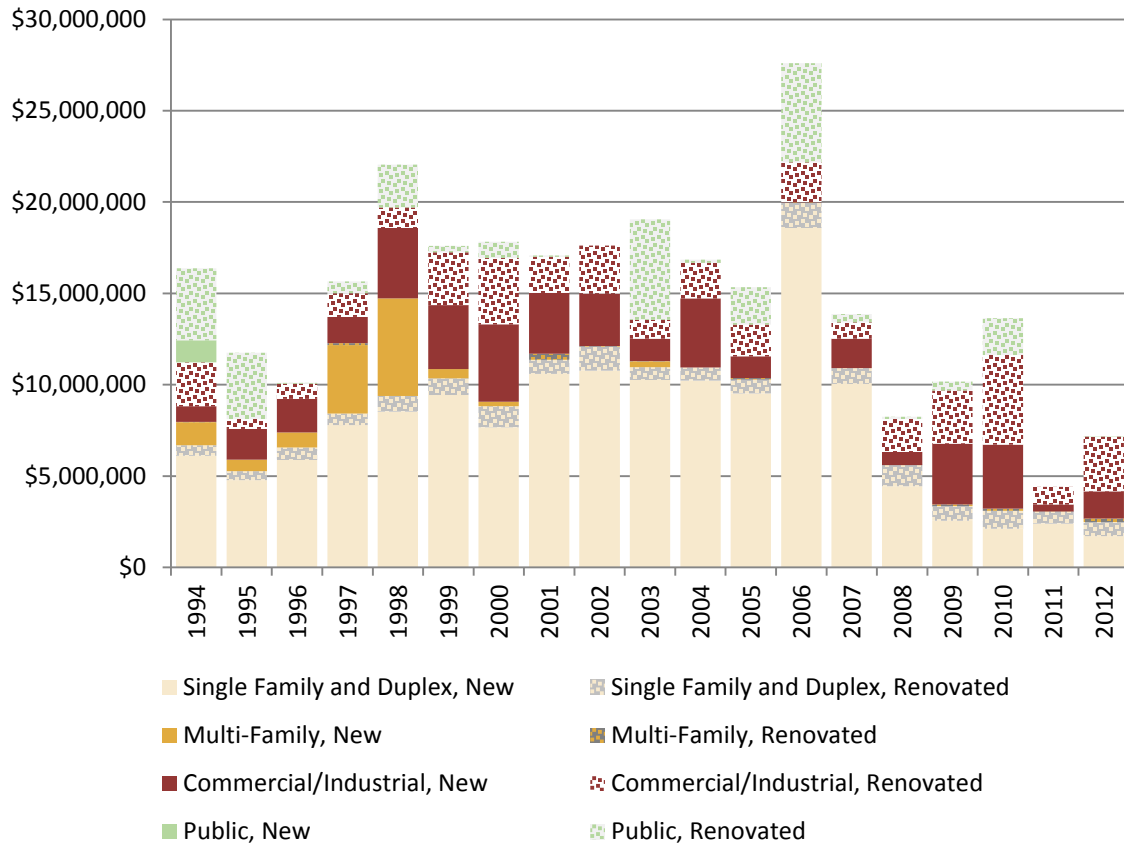


Figure 19. Estimated construction value of building permits issued, 1994 to 2012

Note: Values are not adjusted for inflation.



Table 7. Number and estimated construction value (\$000) of building permits issued, 1994-2012.

	Single Family and Duplex		Multi-Family		Commercial/Industrial		Public		TOTAL
	New	Renovated	New	Renovated	New	Renovated	New	Renovated	
1994	67 \$6,114	69 \$581	10 \$1,250	1 \$30	6 \$861	25 \$2,400	1 \$1,205	5 \$3,946	184 \$16,387
1995	52 \$4,791	58 \$485	3 \$624	0	6 \$1,694	19 \$542	0	3 \$3,623	141 \$11,760
1996	63 \$5,885	57 \$684	2 \$820	0	8 \$1,850	20 \$825	0	3 \$37	153 \$10,101
1997	88 \$7,802	46 \$627	15 \$3,740	2 \$115	10 \$1,441	16 \$1,290	0	7 \$644	184 \$15,658
1998	86 \$8,533	57 \$864	19 \$5,330	0	21 \$3,852	36 \$1,125	0	7 \$2,358	226 \$22,062
1999	102 \$9,436	65 \$917	2 \$500	0	10 \$3,511	33 \$2,896	0	5 341	217 \$17,600
2000	80 \$7,680	60 \$1,142	1 \$250	0	6 \$4,239	27 \$3,630	0	6 \$889	180 \$17,829
2001	109 \$10,600	71 \$766	0	1 \$338	4 \$3,336	27 \$1,978	0	4 \$66	216 \$17,082
2002	113 \$10,782	83 \$1,298	0	2 \$51	8 \$2,856	37 \$2,643	0	0	243 \$17,630
2003	103 \$10,273	59 \$686	1 \$325	2 \$13	3 \$1,230	24 \$1,033	0	7 \$5,493	199 \$19,052
2004	110 \$10,228	60 \$718	0	0	5 \$3,780	38 \$1,945	0	4 \$174	217 \$16,845
2005	89 \$9,525	58 \$756	0	2 \$90	3 \$1,192	27 \$1,734	0	5 \$2,056	184 \$15,354
2006	144 \$18,590	68 \$1,361	0	2 \$35	1 \$24	31 \$2,167	0	3 \$5,436	249 \$27,612
2007	77 \$10,061	67 \$858	0	0	5 \$1,601	24 \$892	0	3 \$469	176 \$13,881
2008	39 \$4,449	73 \$1,154	0	1 \$4	3 \$710	33 \$1,818	0	3 \$112	152 \$8,247
2009	23 \$2,558	67 \$803	0	2 \$99	9 \$3,319	20 \$2,912	0	4 \$494	125 \$10,186
2010	24 \$2,114	70 \$990	0	2 \$111	3 \$3,510	33 \$4,899	0	5 \$2,024	137 \$13,649
2011	23 \$2,395	56 \$667	0	1 \$1	2 \$381	31 \$975	0	0	113 \$4,419
2012	15 \$1,720	59 \$767	0	1 \$200	6 \$1,488	37 \$2,995	1 \$20	0	119 \$7,189



Buildable Lands Analysis

A buildable lands analysis is an assessment of how much buildable land is available in a community and its capacity for growth – that is, how much land could potentially be developed and how much growth could that land accommodate. This section includes a very basic buildable lands analysis that identifies which parcels could potentially be developed and the characteristics of those parcels, including current zoning designation and average parcel size. It does not remove environmental constraints, such as wetlands or stream buffers, from the amount of buildable lands, nor does it take the next step of assessing how much growth could be accommodated on the identified buildable lands.

To identify which parcels could potentially be developed, the assessed value of each parcel’s land and buildings was analyzed. Parcels were grouped into the following categories:

- **Unimproved** parcels with building value of zero. These are parcels that are vacant or have no structures of value (such as surface parking lots) that could potentially be developed.
- **Under-improved** parcels with an assessed building value equal to or less than the assessed value of the land. These parcels are developed, but the value of the structures is low relative to the value of the land, suggesting that there may be opportunity to increase or improve the structures or type of development on the land.
- **Improved** parcels with an assessed building value that is more than the assessed value of the land. These parcels are developed, with the value of the structures being high relative to the value of the land.
- **Other** parcels. These include known parks, cemeteries, schools or other similar public purposes, since these may or may not have any buildings with assessed values, but should be considered “improved” for purposes of this analysis.

The table on the next page shows the number of parcels and acreage for each of these four categories, both within the city limits and in the ETJ area. Overall, almost half of the land in Graham’s jurisdiction is improved or developed, while nearly a third is unimproved or vacant and roughly 21% is under-improved. These figures differ between the city limits and the ETJ, with the city being relatively more developed. In the city, 55% of land is improved, whereas in the ETJ, only 33% is developed. In both the city limits and the ETJ, the fact that the unimproved parcels are a smaller percent of the total than the unimproved acreage suggests that unimproved parcels tend to be larger, and thus fewer in quantity, than improved parcels. This makes sense, since developed land is usually subdivided with unimproved land remaining in large tracts.

there is roughly
5,065
acres
OF BUILDABLE LAND
in Graham’s jurisdiction

The map on the next page shows where these parcels are located. Most of the unimproved and under-improved land is in the ETJ, though there is still about 2,000 acres of buildable land in the city limits.



Table 8. Unimproved, under-improved and improved parcels, as of December 31, 2012.

<i>quantity and as percent of total</i>	Inside City Limits		In ETJ		All Graham jurisdiction	
	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>
Unimproved	979 16.2%	1,231 23.7%	276 23.5%	1,771 39.0%	1,255 17.4%	3,001 30.8%
Under-improved	349 5.8%	769 14.8%	107 9.1%	1,295 28.5%	456 6.3%	2,064 21.2%
Improved	4,683 77.6%	2,868 55.2%	793 67.4%	1,478 32.5%	5,476 76.0%	4,345 44.6%
Others	20 0.3%	327 6.3%	0	0	20 0.3%	327 3.4%
TOTAL	6,031	5,194	1,176	4,543	7,207	9,737

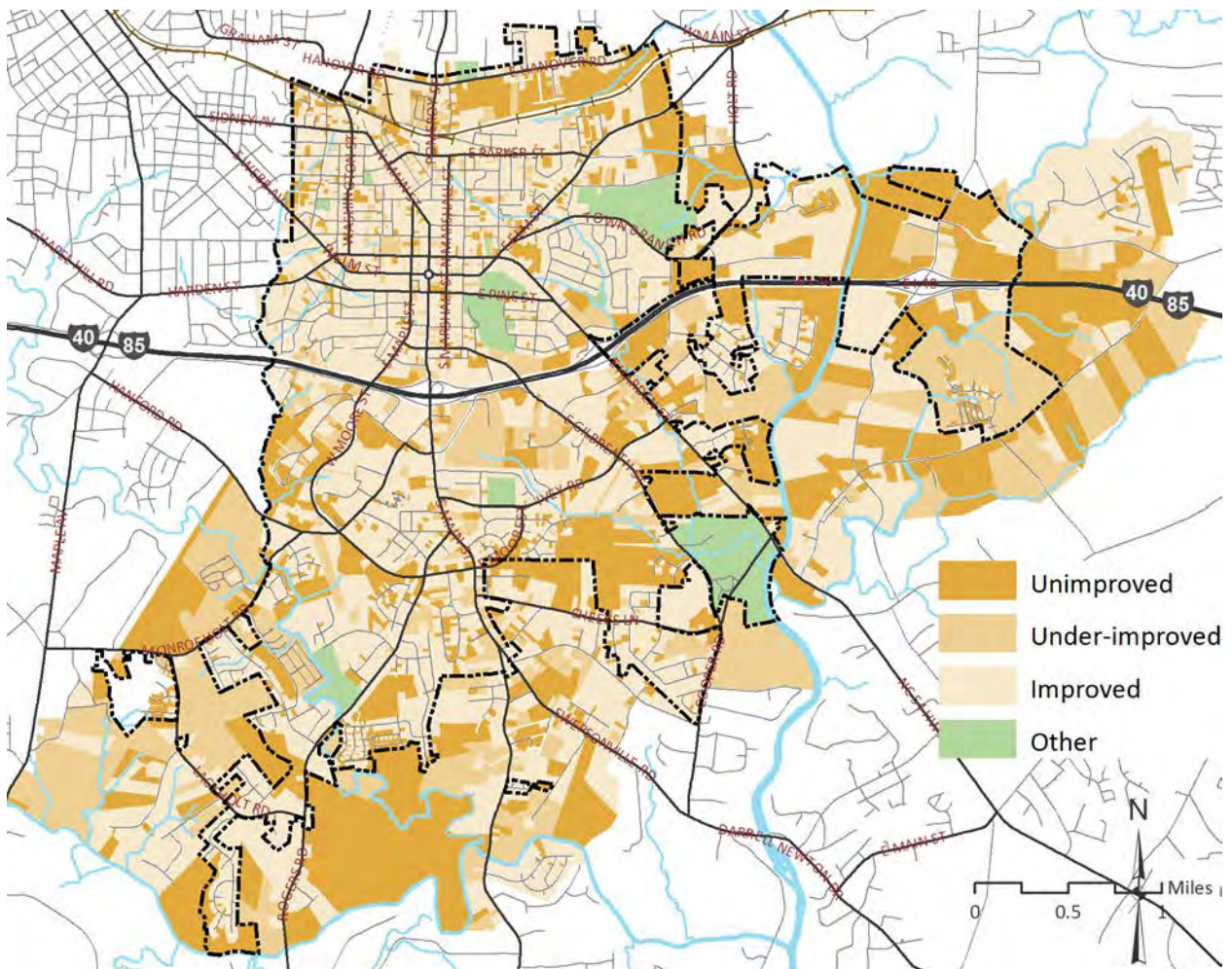


Figure 20. Map of unimproved, underimproved and improved parcels, as of December 31, 2012



Of the unimproved and under-improved parcels, the majority are currently zoned as residential, as shown in the table on the following page. Overall, about 20% of developable acreage is zoned industrial, 5% commercial and less than 1% office-institutional. There are major differences between the city limits and ETJ, though: In the city limits, the developable acreage is 60% residential, 8% commercial and 29% industrial, whereas in the ETJ, it is 85%, 2% and 14%, respectively.

74%
of buildable land
is zoned
RESIDENTIAL

Of the buildable lands in the city limits, the average parcel size is 1.5 acres, with the smallest parcel only 0.015 acres and the largest 169 acres. In the ETJ, the average parcel size of buildable lands is much larger than in the city limits – 8.0 acres – with the smallest 0.078 acres and the largest 111 acres.

Table 9. Zoning of unimproved and under-improved parcels, as of December 31, 2012.

<i>quantity and as percent of total</i>	Inside City Limits		In ETJ		All Graham jurisdiction	
	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>	<i>parcels</i>	<i>acres</i>
Residential	1,059 79.4%	1,283 59.9%	348 90.4%	2,621 84.5%	1,407 81.9%	3,905 74.4%
Commercial	173 13.0%	173 8.1%	9 2.3%	62 2.0%	182 10.6%	235 4.5%
Commercial and Industrial	1 0.1%	52 2.4%	0	0	1 0.1%	52 1.0%
Industrial	86 6.5%	627 29.3%	28 7.3%	418 13.5%	114 6.6%	1,045 19.9%
Office- Institutional	14 1.1%	9 0.4%	0	0	14 0.8%	9 0.2%
TOTAL	1,333	2,144	385	3,102	1,718	5,246



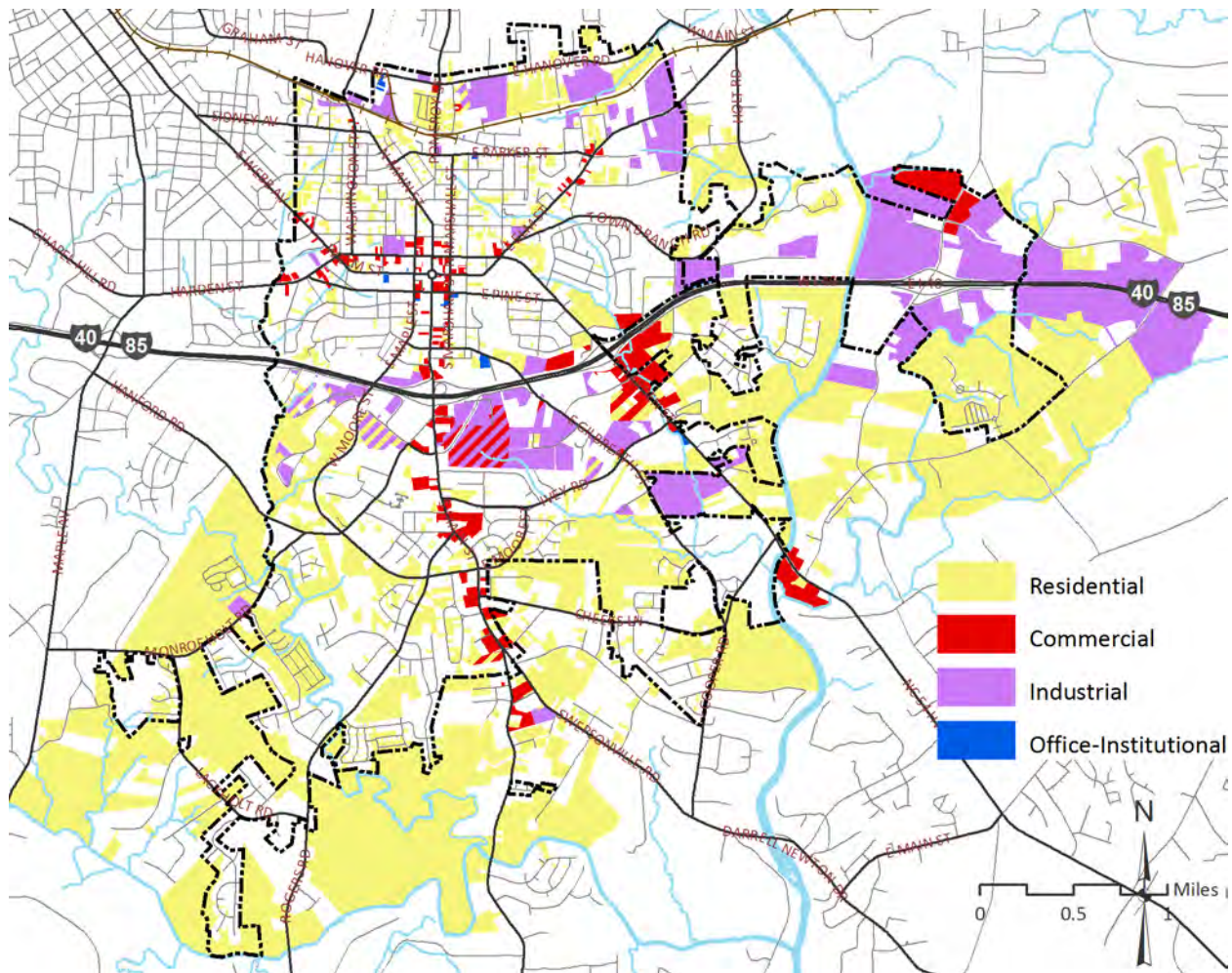


Figure 21. Map of zoning of unimproved and under-improved parcels, as of December 31, 2012

Note: This map does not show zoning district boundaries. While many parcels are within only one zoning district, some parcels cross zoning districts. This map shows the zoning district that covers the majority of each parcel.



Natural Environment

This chapter describes select aspects of Graham’s natural environment and special rules that govern it.

- Topics in this Chapter**
- Land Cover
 - Waterways
 - Stormwater
 - Natural Heritage

Land Cover

The National Land Cover Database (NLCD) is a land cover classification scheme that has been applied consistently across the United States at a spatial resolution of 30 meters. The map below shows the types of land cover in the Graham area in 2006 and the map on the next page shows the land cover in 1992. Note that the legends for each are different, but in general, shades of red indicate developed land.

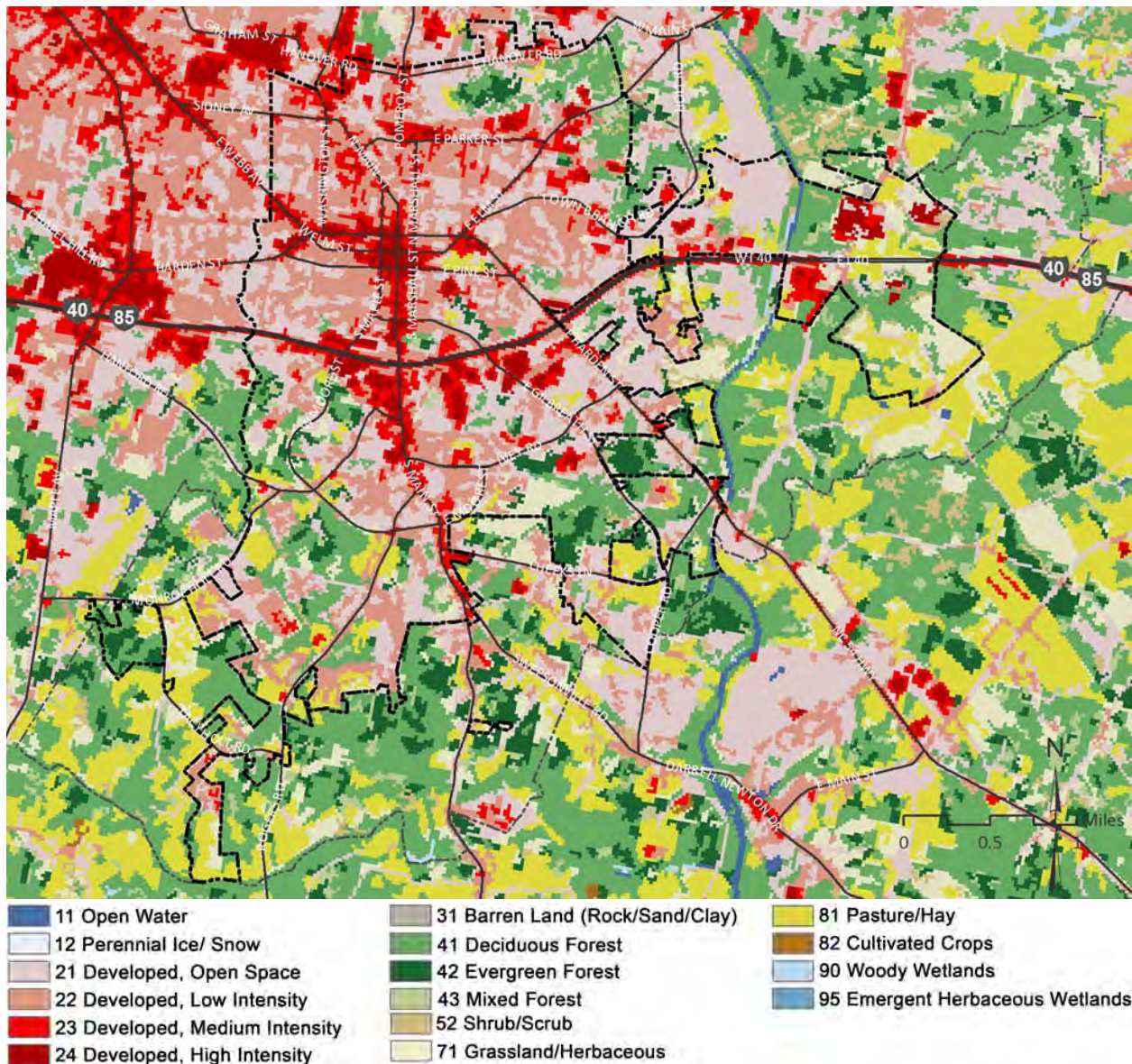
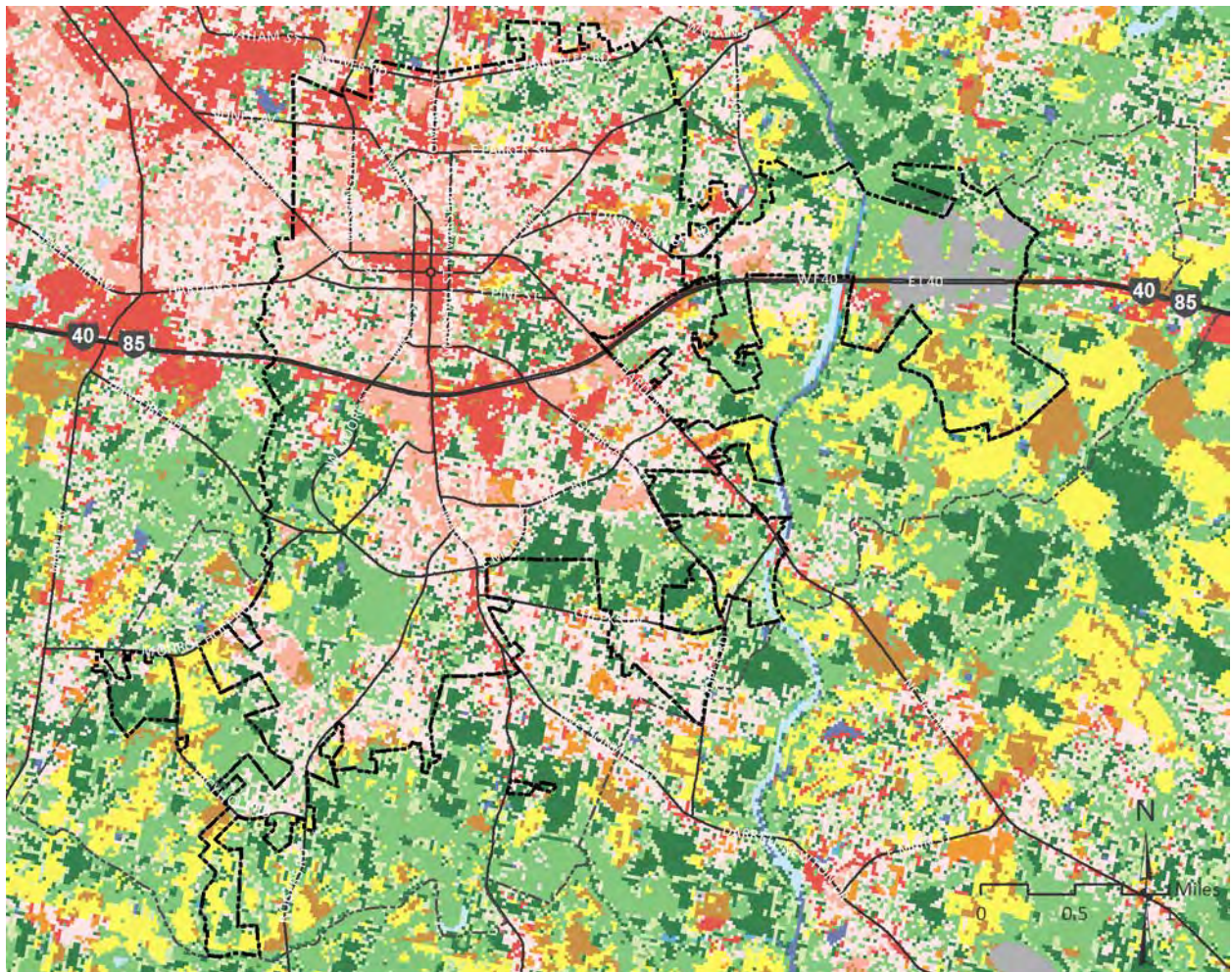


Figure 22. NLCD land cover classifications, 2006



For the “developed” land cover classifications of 2006, the following definitions are used:

- **Developed, Open Space** includes some constructed materials but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20% of total cover.
- **Developed, Low Intensity** includes constructed materials and vegetation. Impervious surfaces account for 20% to 49% percent of total cover.
- **Developed, Medium Intensity** includes constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover.
- **Developed High Intensity** includes highly developed areas where people reside or work in high numbers. Impervious surfaces account for 80% to 100% of the total cover.



11 Open Water	33 Transitional Barren	81 Pasture/Hay
12 Perennial Ice/Snow	41 Deciduous Forest	82 Row Crops
21 Low Intensity Residential	42 Evergreen Forest	83 Small Grains
22 High Intensity Residential	43 Mixed Forest	84 Fallow
23 Commercial/Industrial/Transportation	51 Shrubland	91 Woody Wetlands
31 Bare Rock/Sand/Clay	61 Orchards/Vineyards/Other	92 Emergent Herbaceous Wetlands
32 Quarries/Strip Mines/Gravel Pits	71 Grassland/Herbaceous	

Figure 23. NLCD land cover classifications, 1992



Waterways

There are several named freshwater streams running through Graham, the Haw River being the largest. Graham's waterways are part of the Cape Fear River Basin.

The map below shows named waterways and the FEMA flood zone designations that were adopted in 2006. Certain types of development are allowed in the AE zone with an approved Floodplain Development Permit. It also shows impaired waterways, which include Town Branch, Little Alamance Creek and a section of Big Alamance Creek.

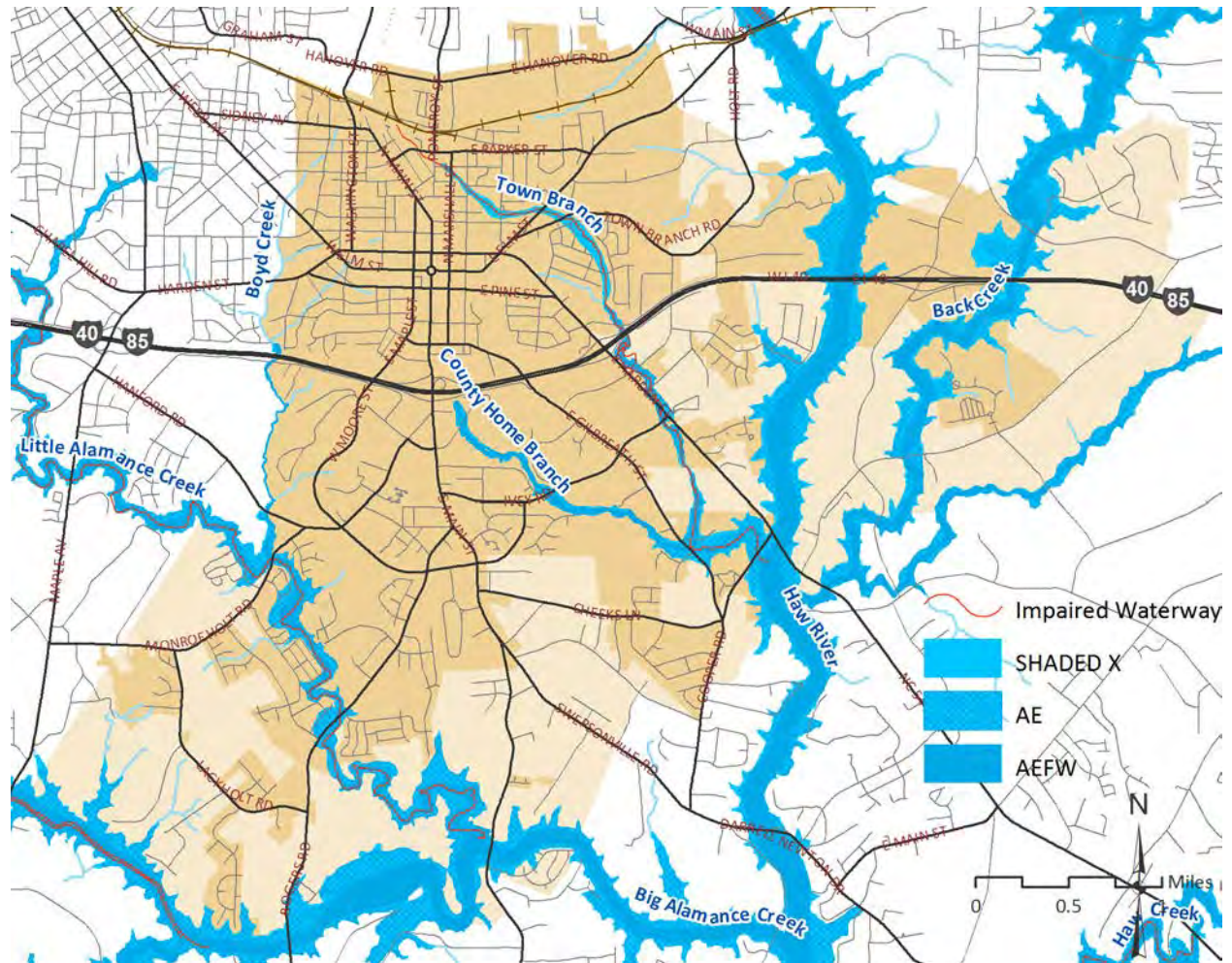


Figure 24. Map of waterways, impaired waterways and floodzones

Stormwater

Graham's stormwater system consists of a combination of storm drainage piping, roadside ditches and sheet flow. New developments are required to have curb and gutter drainage systems and high density developments are required to treat the first 1" of runoff from the developed property.

Graham has a NPDES Phase II Stormwater Permit, issued on July 1, 2005, that makes the City responsible for the quality of the stormwater that drains from property and flows into the storm sewer system and discharges to state waters. To address these requirements, Graham has developed a comprehensive stormwater management program that addresses public education, public participation, illicit discharge detection and elimination, construction site runoff control, post construction stormwater management, and good housekeeping in municipal operations.

Additionally, Graham operates a Stage 1 Adaptive Management Program for Existing Development in the Jordan Lake Basin. This program is very similar to the NPDES Phase II program and is part of a Jordan Lake Watershed Nutrient Sensitive Waters Strategy.

Natural Heritage

According to data from the North Carolina Heritage Program, there are no significant natural heritage areas or occurrences of natural heritage elements, such as rare plants and animals, in Graham, its ETJ or nearby.



Transportation

This chapter provides details on the modes of transportation that serve Graham and the surrounding region, and includes planned projects.

Driving

There are roughly 112 miles of roads in Graham and 36 miles in Graham's ETJ. The City is responsible for the maintenance of 69.49 miles of roadway and received \$393,814 in FY12-13 from the State Street-Aid Program (Powell Bill) for this purpose.

Traffic

The most heavily traveled roads in Graham are I-40/85, NC 87/Main St, NC 54/Harden St, NC 49/Elm St, and Washington St. The map below shows the average annual daily traffic (AADT) in 2011, with thicker lines indicating more traffic.

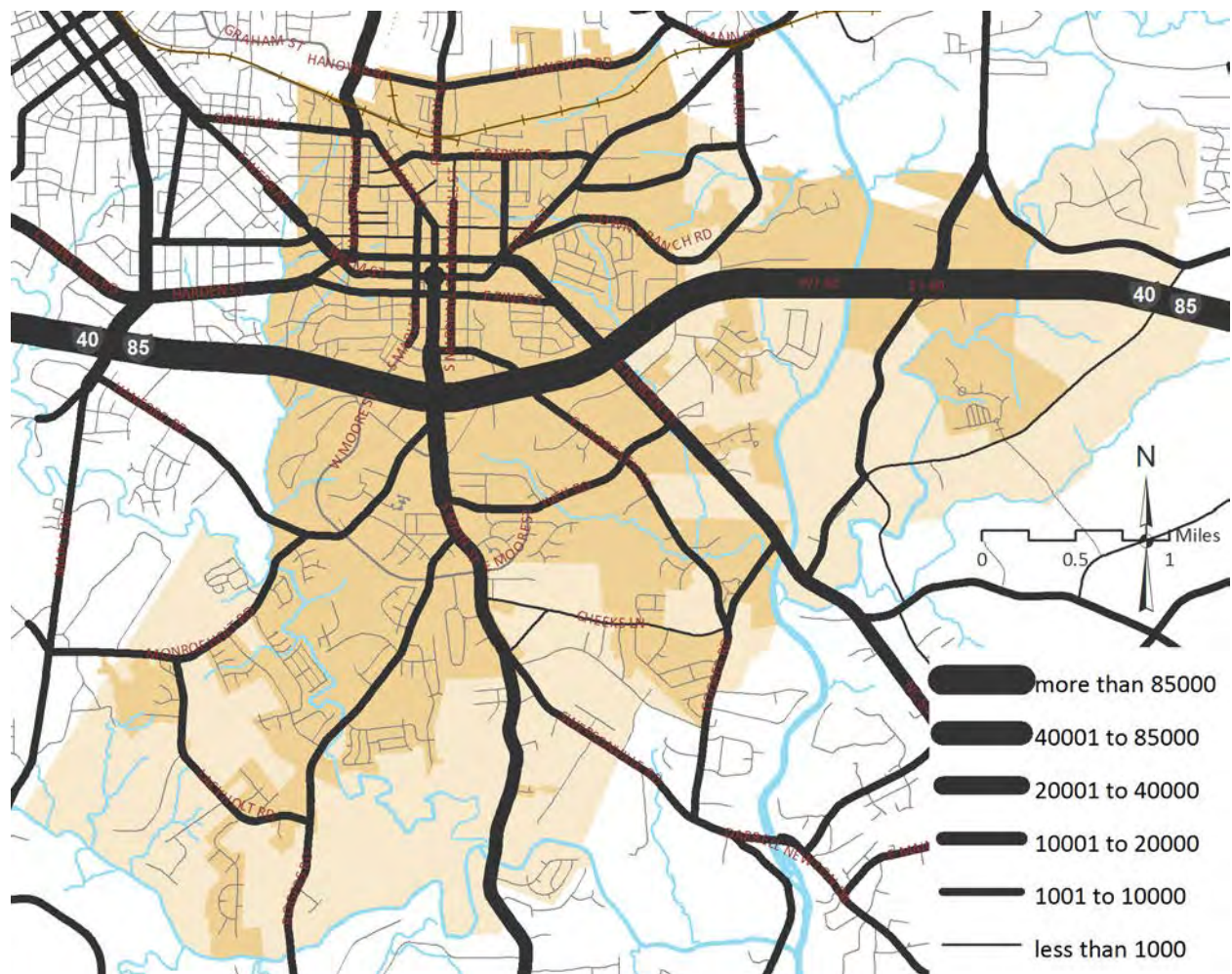


Figure 25. Map of 2011 average annual daily traffic (AADT)

Note: AADT data is not collected on every road. Roads with no AADT data are shown in light grey.

Topics in this Chapter

- Driving
- Walking
- Bicycling
- Transit
- Rail
- Air



The average annual daily traffic on the roads in Graham has remained fairly constant over the past decade. I-40/85 has seen the largest increase in traffic – about 10%. Traffic on portions of N Main St, Washington St, Parker St, Poplar St, Trollinger Rd and Market St have seen an increase in traffic of over 20%. At the same time, there are several sections of road that have seen a decrease in traffic of 20% or more, including sections of Hanford Rd, Town Branch Rd, Hanover Rd, Elm St and Parker St.

7.8%
of households
have
**No
Vehicles
Available**

Road Connectivity

Road connectivity is important for drivers to easily be able to get from point A to point B. It also is a factor for quicker response times for emergency responders and in providing more direct access for pedestrians and bicyclists. While there are a number of ways to measure road connectivity, one simple method is to look at the size of street blocks – the area bounded by a continuous loop of streets. In general, areas with smaller street blocks have higher degrees of road connectivity (as shown in lighter orange on the map below), and areas with larger street blocks have lower degrees of street connectivity (as shown in darker orange).

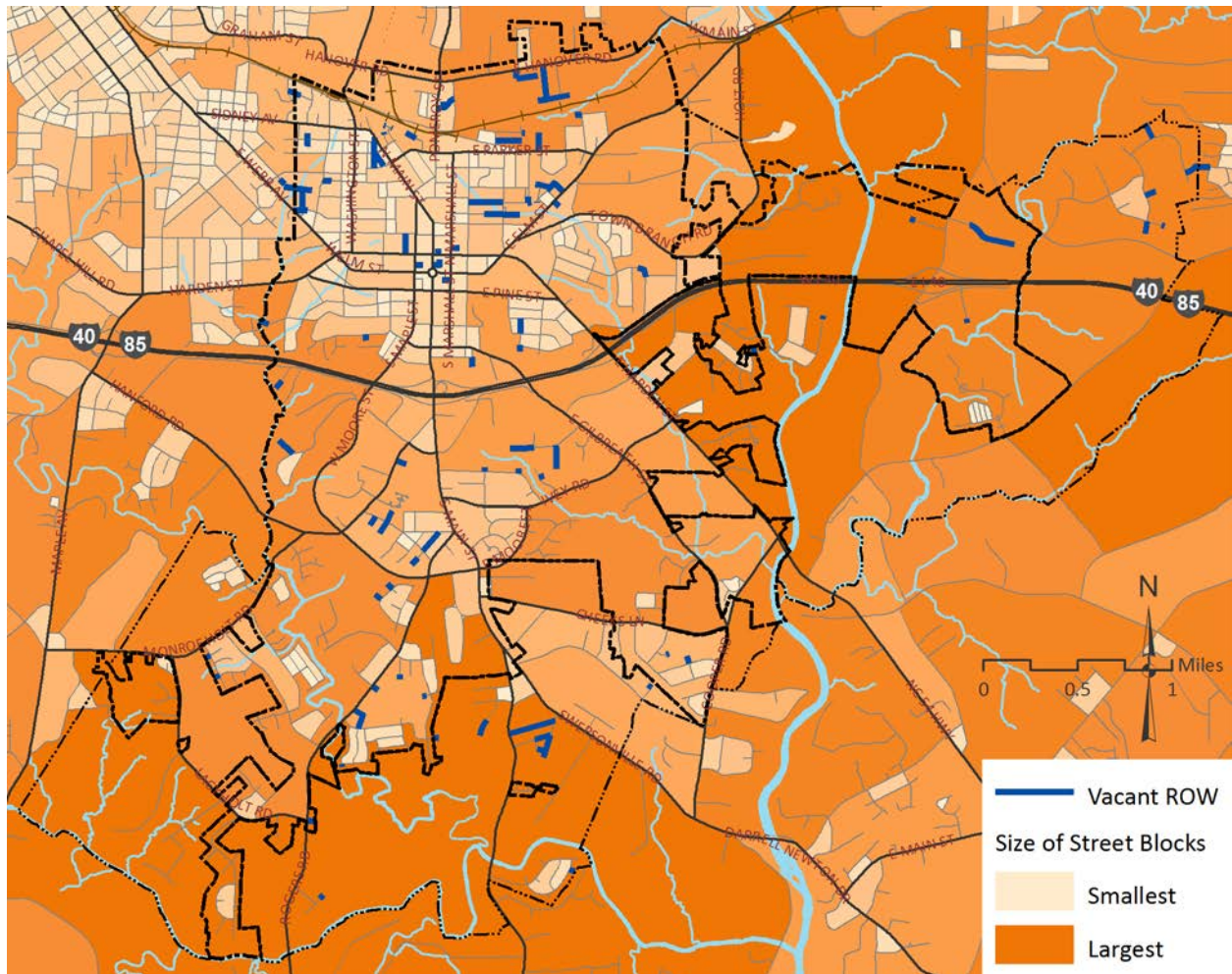


Figure 26. Map of size of street blocks and vacant apparent public right-of-way



As shown on the map on the previous page, there are several locations in the city and ETJ where there appears to be public right-of-way that is vacant, meaning there is no existing road or path. These unimproved rights-of-way must be looked at on a case-by-case basis, but generally they are opportunities for:

- Street connections for future development
- Increased road connectivity in existing areas
- Active public use, such as for a neighborhood pocket park or community garden
- Increased tax revenue, by deeding all or a portion of unneeded right-of-way to adjacent property owners and presumably increasing the assessed value of their land

Proposed Projects

The map below shows proposed road projects from the BGMPPO’s Comprehensive Transportation Plan. These are proposed sometime within the next thirty years. There are currently no road projects programmed for construction.

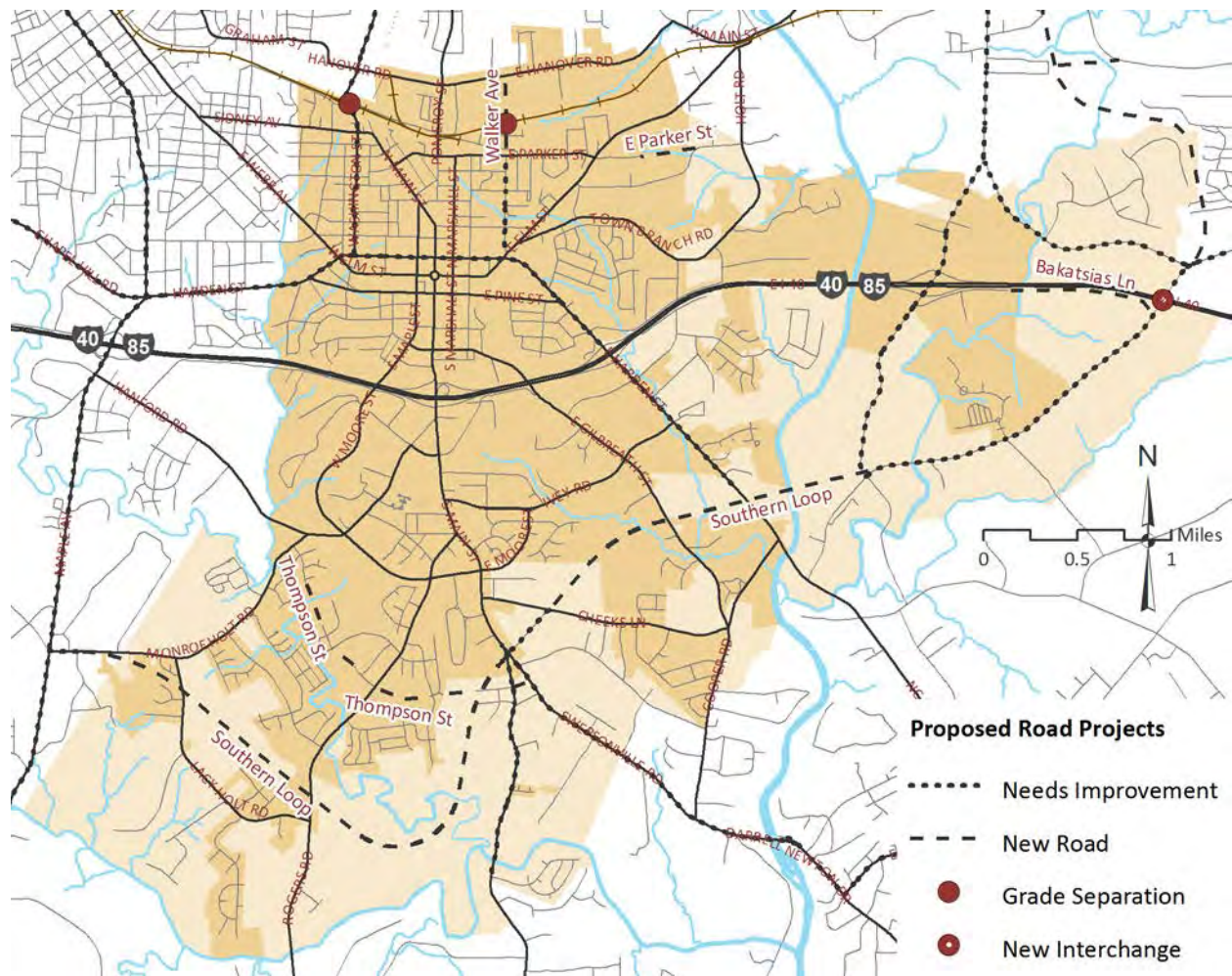


Figure 27. Map of proposed road projects



Walking

There are approximately 13 miles of sidewalks in Graham. There are marked, unsignalized crosswalks in the downtown area, but there are no intersections equipped with pedestrian signal heads anywhere in the city.

Graham's *Pedestrian Transportation Plan*, adopted in 2006, calls for 29 miles of new sidewalks at a cost of \$7.7 million, 14.4 miles of new greenways at a cost of \$6.9 million, and 25 pedestrian crossing improvement projects. The map below shows existing and proposed sidewalks and improved pedestrian crossings.

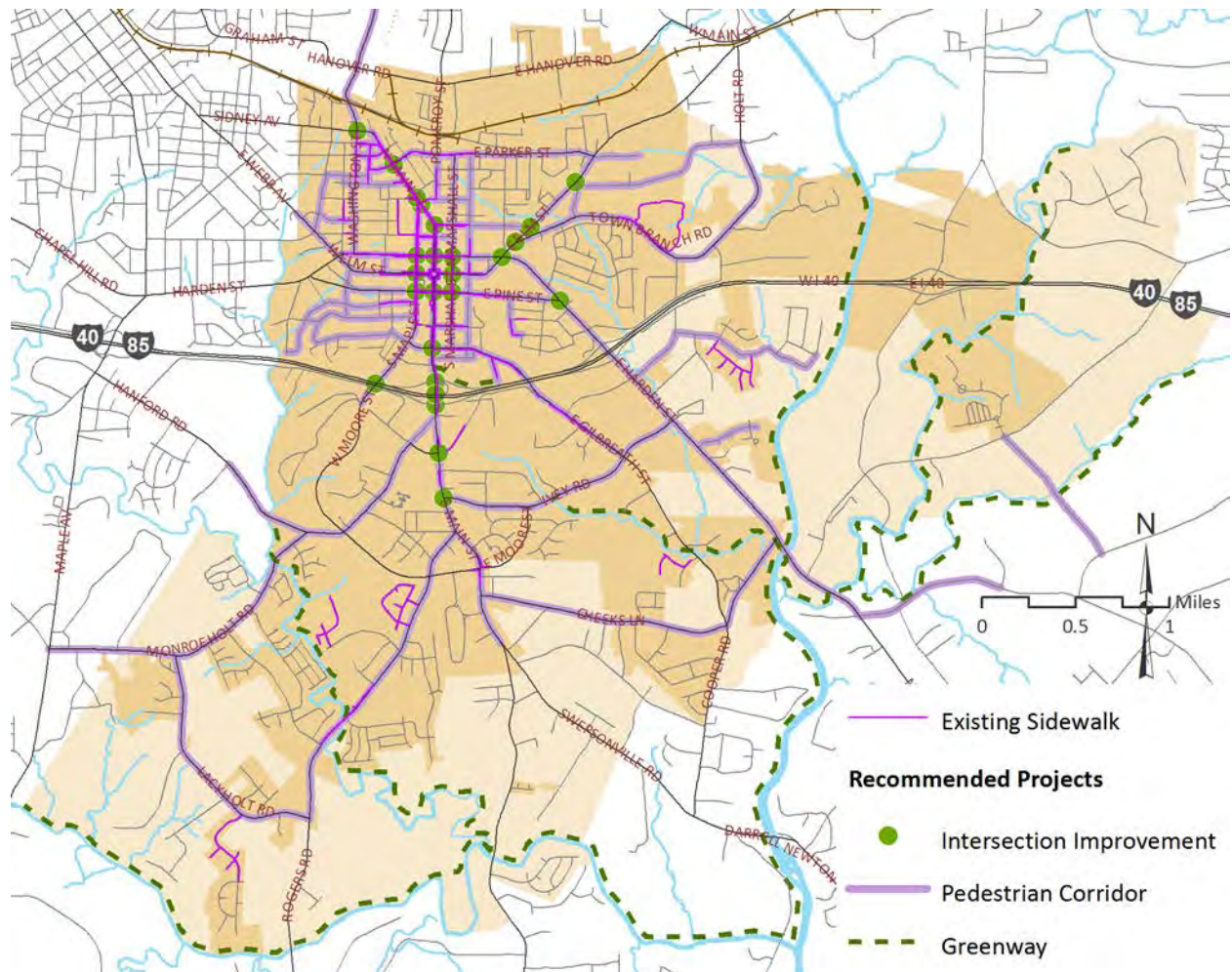


Figure 28. Map of existing and recommended pedestrian facilities



Bicycling

There are no dedicated, marked bicycle facilities in Graham. Two numbered state bicycle routes – 70 and 71 – pass through the city. W Moore St, from just south of Ingold Dr to just west of Rogers Rd, has wide shoulders that were included in the road project as a recommendation of the *Pedestrian Transportation Plan*. These facilities are shown on the map on the next page.

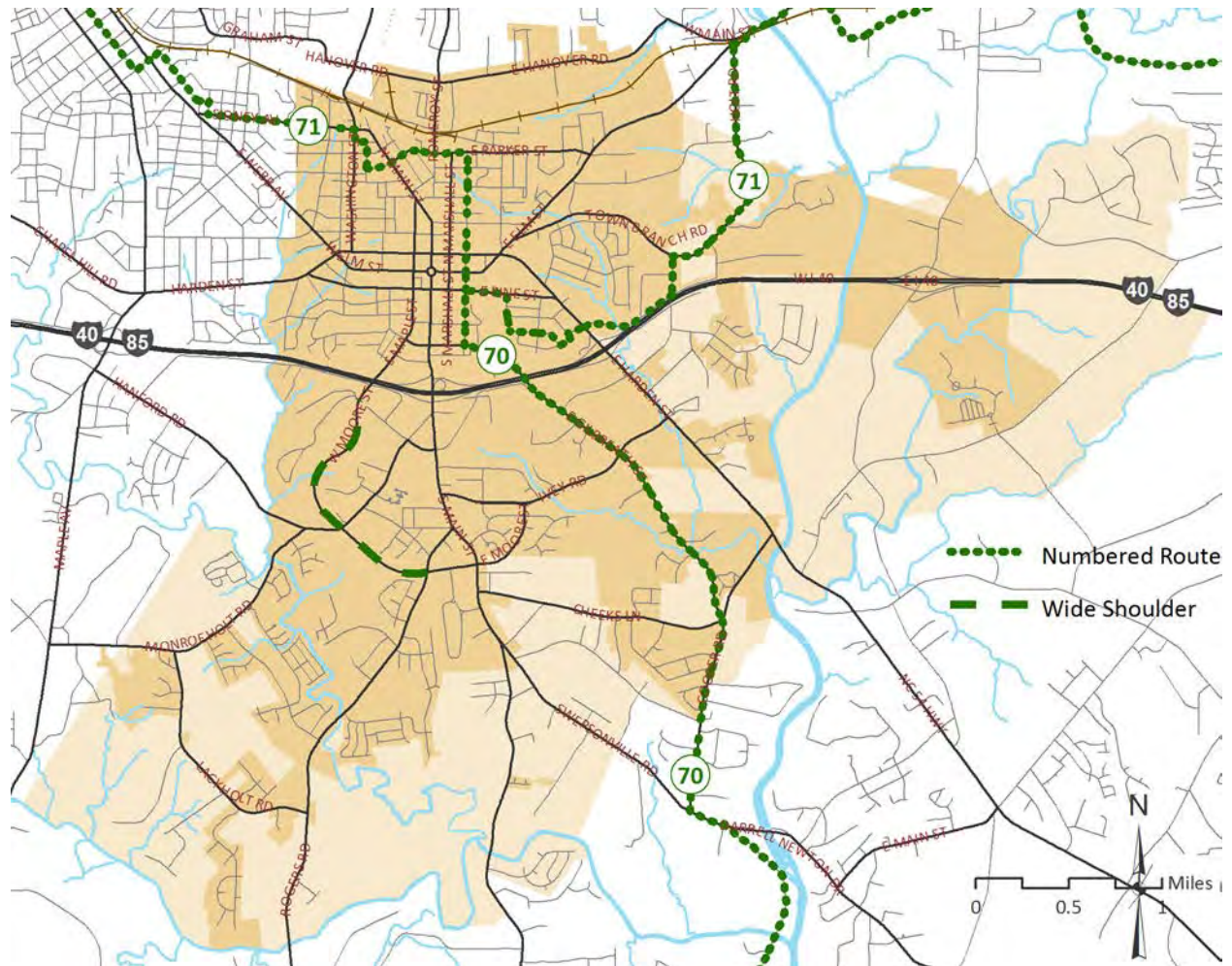


Figure 29. Map of existing bicycling facilities

Transit

Local transit service is provided the Alamance County Transportation Authority (ACTA). ACTA provides demand-response service to the general public and to human service agencies and organizations.

There is currently no fixed route public transit service in Graham or anywhere in the county. A Public Transit Feasibility Study was begun in 2006 but there are no firm plans to implement a fixed route service.

The Piedmont Authority for Regional Transportation (PART) opened a park-and-ride on S Main St in Graham in 2012. This park-and-ride provides a location for vanpools and is served by PART's Medical Connector Route, which provides weekday service to UNC Hospital and Duke Hospital, departing Graham at 7:45am and returning at 2:10pm. The park-and-ride also features electric car charging stations.

PART operates a regional vanpool program. Currently, there are seven vanpools that travel from Alamance to Orange County, one to Durham County and one to Wake County. There is one vanpool that travels from Lee County to Alamance County.

Commuter rail passenger service is available through Amtrak at the Burlington station, three miles from downtown Graham.

Rail

Both passenger and freight service run along the rail tracks through Graham, which are owned by the North Carolina Railroad Company. Passenger service is operated by Amtrak while freight service is operated by Norfolk Southern. Planned high-speed rail will pass through Graham, making future rail crossings grade-separated instead of at-grade.

Air

Graham is located midway between two international airports – Raleigh-Durham International Airport (RDU), a 45-minute drive, and Piedmont Triad International Airport (GSO), a 40-minute drive. Graham is also near the Burlington-Alamance Regional Airport, a public airport with a 6,400-foot runway that serves about 138 aircraft a day (2011).



Economy

This chapter explores various aspects of the economy in Graham, including its workforce, jobs and the tax base.

Topics in this Chapter
 Workforce and Jobs
 Tax Base

Workforce and Jobs

There were approximately 6,349 workers aged 16 years and over living in Graham in 2011. Most of those workers – 47% – work outside of the city in Alamance County. A third of workers travel to other counties, 17% work in Graham and 2% work outside of the state.

82% of workers living in Graham drive alone in their personal vehicle to work. About 14% carpool, 3% work at home and less than 1% walked or used other means to get to work. The average travel time to work was 20.5 minutes.

There were approximately 3,865 jobs in Graham in 2007. Most jobs were in manufacturing, followed by retail trade and accommodation and food services. These jobs represent an annual payroll of roughly \$68 million. From 2002 to 2007, roughly 46 jobs and \$10.5 million a year in payroll were added by employers in the city.

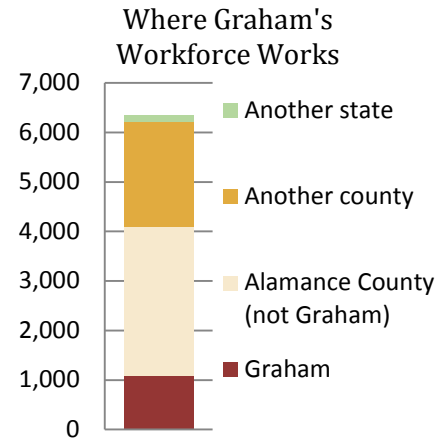


Figure 30. Where Graham's workforce works

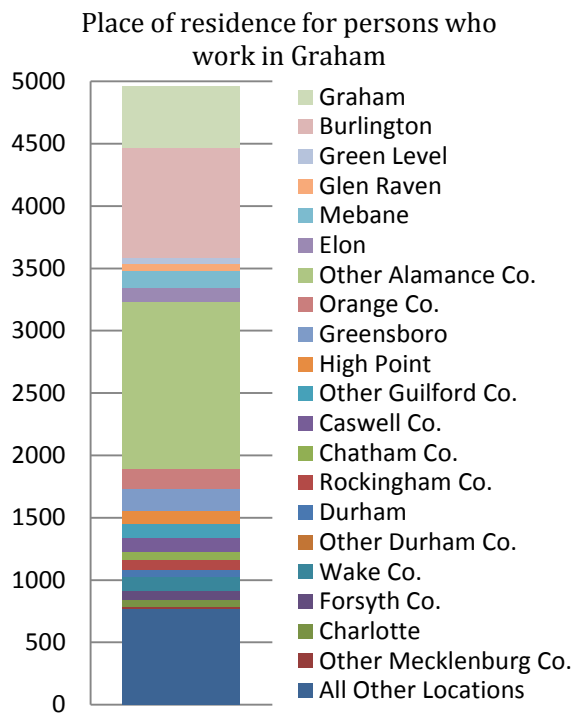


Figure 31. Place of residence for persons who work in Graham

In 2012, there were about 4,960 persons working in Graham. Nearly two-thirds of these workers live in Alamance County, with most coming from the non-urbanized areas of the county. Only 10% of those who work in Graham also live in Graham. About 4,464 people commute into Graham to work. The chart at left shows other locations where significant numbers of people come from, listed in order from closest commute (top) to longest (bottom).

Largest Employers in Graham
 Alamance County Government
 Alamance Community College
 Buckner Companies

Tax Base

The amount of property taxes collected per acre of land is an important consideration for the City because it is generally more expensive to provide services to a larger land area.



The map below shows property taxes collected per acre, with properties in the darkest green paying the most property tax per acre and the lightest green paying the least. Some properties, such as those owned by local, state or federal government, are exempt from paying property taxes and are shown on the map below in light red.

In general, commercial properties in the downtown area and S Main St corridor return the highest amount of revenue per acre to the city, and undeveloped or large tracts return the least. Looking at the single family residential areas, many of the newer subdivisions have a higher per acre return than the older neighborhoods, likely due to higher property values for new construction.

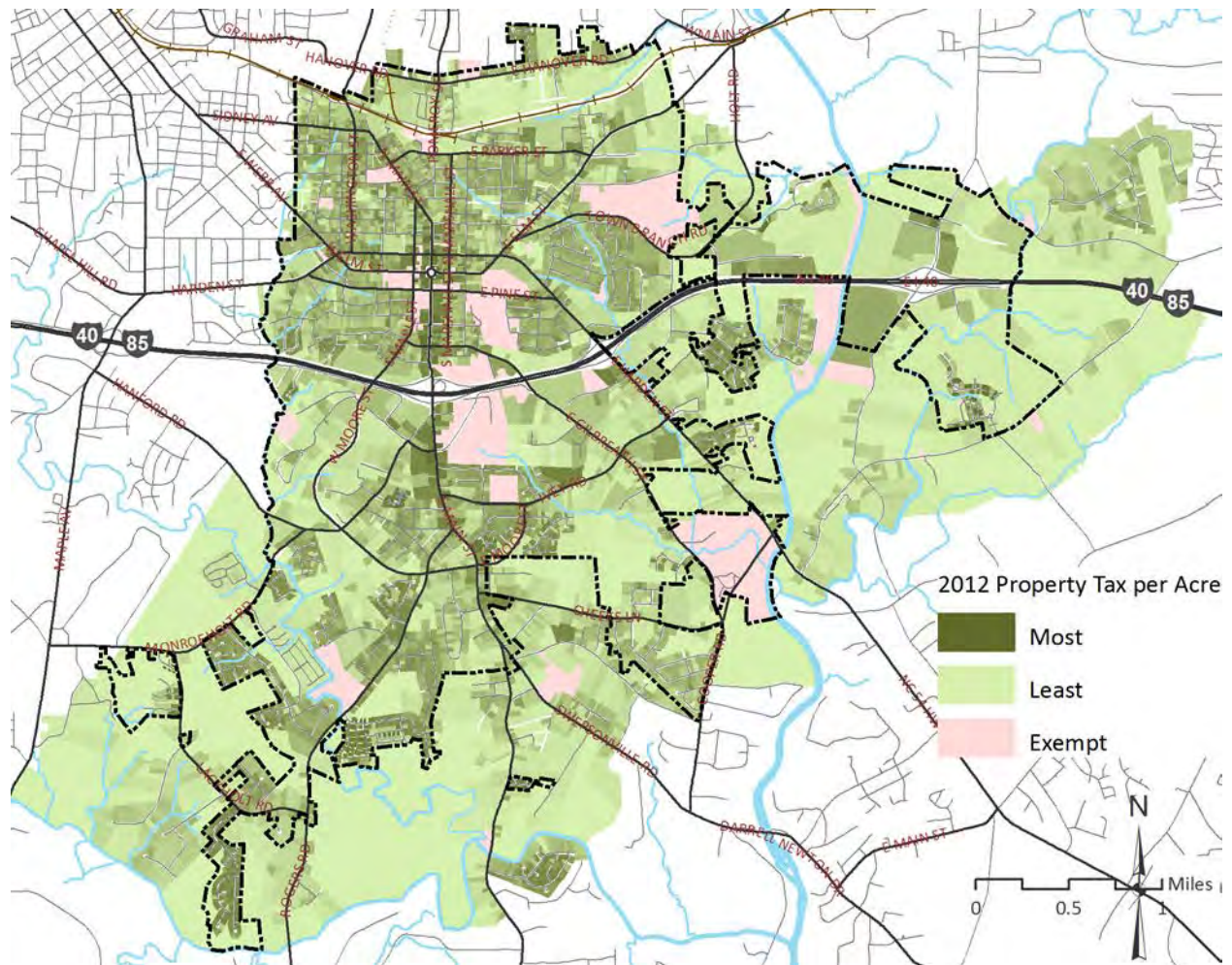


Figure 32. Map of 2012 property tax collected per acre of land

The graph on the following page shows the amount of property tax paid in 2012 per acre for representative properties in the city. Because there are many factors that are involved in the amount of property tax per acre (size of the parcel, quality/condition of the building, etc.), it is difficult to make a broad comparative statement. It is apparent, however, that the average single family home in Graham contributes substantially less in property taxes per acre of land than an occupied two-story building in Graham’s downtown area.



2012 Property Tax per Acre

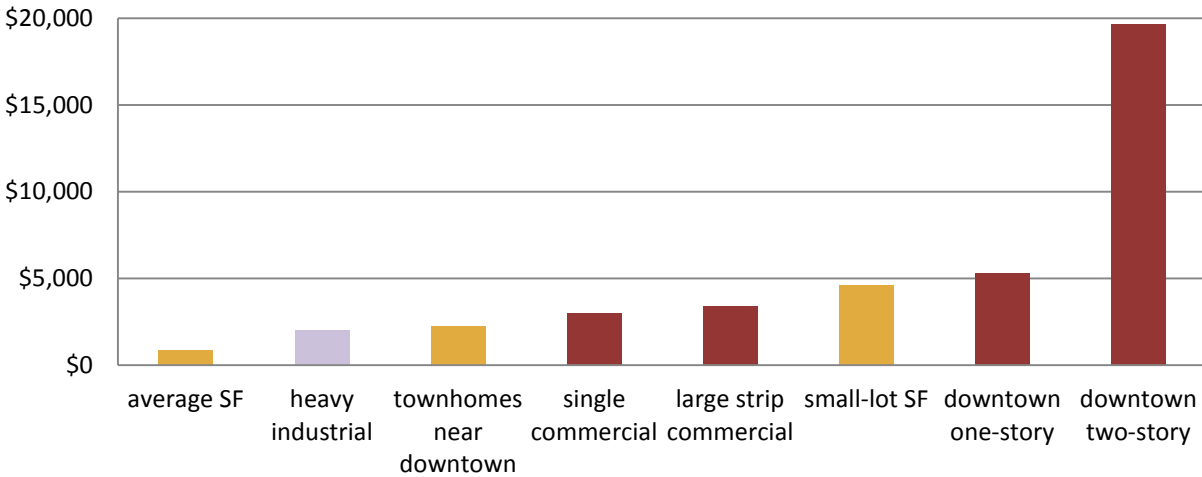


Figure 33. 2012 property tax collected per acre of land for representative properties

Retail sales can be an indicator of the local economy and whether durable goods are available locally. Because the State changed the way retail sales were reported, it is hard to compare data before FY05-06. Between July 2005 and June 2009, Graham's taxable sales remained steady, from \$90 to \$97 million a year. Graham's share of the retail sales in Alamance County have declined though, from 12% in 1992 to 6% in 2009.

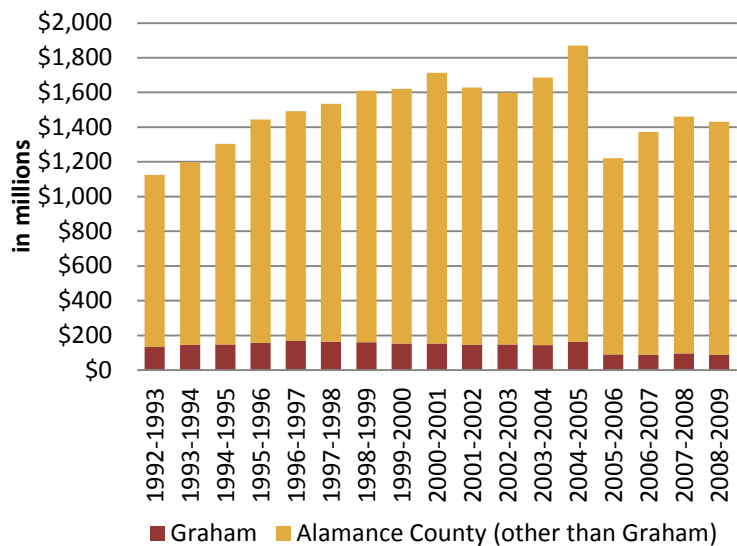


Figure 34. Annual sales in Graham and the remainder of Alamance County, 1992-2009

Note that, starting in FY05-06, the State changed from reporting Gross Retail Sales to Taxable Sales. That is why the total sales shown in the chart above appear to decline from 04-05 to 05-06.



Public Services and Infrastructure

Topics in this Chapter

Public Services

Water

Wastewater

This chapter describes the public services and infrastructure available to the residents and businesses in Graham.

Public Services

There are a number of public services available in Graham, including County government, health, libraries and museums, public safety, public works, recreation and parks, schools, and state government. These are described on the pages that follow and their locations shown on the map below.

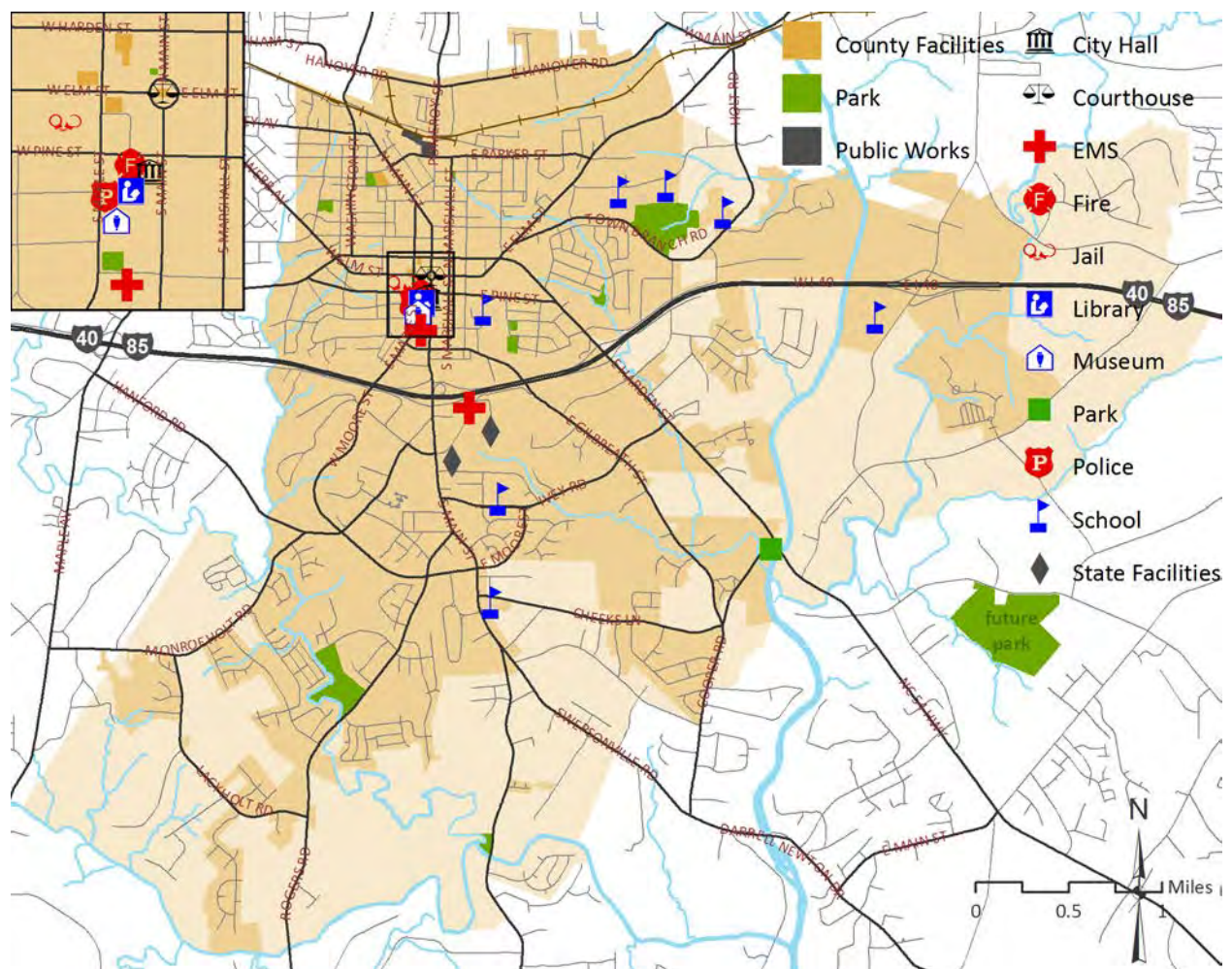


Figure 35. Map of public services

County Government

As the county seat, Graham hosts the offices of many Alamance County services, including the County Office Building, which houses the County Commissioners, County Manager, Central Communications (911), County Attorney, Finance, GIS, Human Resources, Management Information Systems, Purchasing



and Tax Administration; the County Office Annex, which houses Inspections, Planning, Veteran Services and Passport Services; the Sheriff's Office; Emergency Medical Services; Youth Services Center; Board of Elections; Register of Deeds; Judicial Services; and, Maintenance.

Health

There are a number of private clinics in Graham. The major hospital serving the region is Alamance Regional Medical Center (ARMC), which is located in Burlington on Huffman Mill Rd just off I-40/85. ARMC just opened a clinic in Graham at the corner of S Main St and Moore St.

Libraries & Museums

Alamance County Public Libraries operates five libraries in the county, including the **Graham Public Library**. The library system includes an online catalogue that allows holds to be placed on items and for items to be transferred between branches. There is also a selection of electronic materials, including books and magazines, which can be checked out.

The **Graham Historical Museum** is located on the square in the central city. It once housed city hall, police and fire. It is now a museum and is used as a place for meetings.

The **Children's Museum of Alamance County** opened in 2012 to encourage children to exercise their curiosity, develop their imagination and discover their world through exploration. It is a 14,000sf facility featuring eight interactive exhibits.



Children's Museum of Alamance County

Public Safety

There are several agencies providing public safety services in Graham, including:

- The **City of Graham Fire Department** is located in one station next to City Hall and is staffed by nine full-time firefighters and 25 volunteers. The department has a class 4 insurance rating and operates a Level A HAZMAT unit. The department is equipped with four pumper trucks (the largest pumping 1,500 gallons per minute) and one ladder truck. In 2012, the average response time was five minutes.
- The **City of Graham Police Department** includes a Patrol Division, School Resource Officers, an Administrative Services Bureau and Criminal Investigations Division. It is housed next to City Hall.
- **Alamance County Emergency Medical Services** provides 24-hour emergency response in the county. They operate four shifts a day, with 18 paramedics and 7 Advanced Life Support units per shift.
- The **Alamance County Sheriff's Office**, which is responsible for the Alamance County Jail.
- The **Alamance County Rescue Unit**, which is a non-profit, all-volunteer organization providing emergency response and service 24 hours a day to all of the county. They are the only certified Heavy Rescue provider and serve as the primary back-up agency for Alamance County EMS. Specialty rescue teams include a Dive Team, Swift Water Team and K-9 Team.



Public Works

Graham's Public Works Department includes the following divisions:

- **Sanitation** provides for the weekly collection of residential solid waste, the curbside collection of yard waste and bulky items, and administers the City's curbside recycling contract.
- **Streets and Highways** provides for the general maintenance of over 58 miles of city streets. The department is also responsible for sidewalk maintenance, street sweeping, street signs, pavement markings, streetlights and storm sewer maintenance, as well as participating in the City's Stormwater Management Program.
- **Property Maintenance** beautifies the City through landscaping and maintenance of public grounds, such as cemeteries and parks, and administers the leaf collection program.
- **City Garage** provides overall maintenance of the City's vehicle and equipment fleet, and provides vehicle maintenance and fuel services for Alamance County, ACTA, Graham Housing Authority, and the ABC Board.

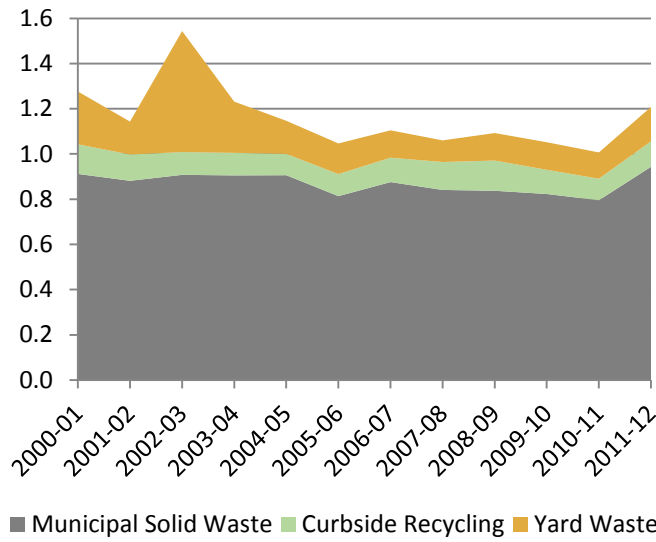


Figure 36. Tons of residential waste collected per year per household, 2000-2012

Recreation and Parks

The City's Recreation and Parks Department develops and manages park and recreation facilities and programs. This includes:

- **Bill Cooke Park.** The largest of the parks, it is located on approximately 43 acres in the northeast section of Graham. It is bordered by Graham High School and North Graham Elementary, which both make use of the park. The park includes three lighted multi-purpose fields, six lighted tennis courts, a playground, an outdoor basketball court, two covered picnic shelters with grills, horseshoe court, a 0.86 mile paved walking track, historic farmhouse structure and restroom facilities.
- **Greenway Park.** This park, in the Greenway Park neighborhood, includes a playground, benches and open space on nearly 5 acres.
- **Marshall Street Park.** This park, in the northern section of Graham, includes a playground, benches and open space on about a half-acre.
- **Oakley Street Park.** This park, in the northwest section of Graham, includes a walking track, recreational field and open space on approximately 3 acres.
- **South Graham Municipal Park.** This park is in the southern section of Graham. Only about a third of its 23 acres is improved. It includes two lighted tennis courts, a lighted walking track, equipped



playground, three covered picnic shelters, a wooded picnic area, two volleyball courts, an outdoor basketball court, hiking trail and restroom facilities.

- **Graham Middle School Complex.** This facility is operated and maintained by the City but is owned by the Alamance Burlington School System. It includes a lighted high school baseball field, a lighted baseball/softball field for youth competition, an unlighted practice baseball/ softball field for youth, a soccer/football field and a lighted walking track.
- **Graham Recreation Center.** Located in the northwest section of Graham, it is the largest recreation facility and the major focal point of the recreation program. It includes one and a half gyms with additional side goals, a fitness room with weight and cardiovascular fitness equipment, two meeting rooms, a small kitchen, two shuffleboard courts, two horseshoe courts, a playground, restrooms/locker rooms and offices.
- **Ray Street Gymnasium.** This facility is leased from the Alamance Burlington School System to provide additional space for basketball. It includes bleacher seating, locker rooms, a stage and a weight room.
- **Maple Street Center.** This building is used for classes such as dance, martial arts and crafts.
- **Sesquicentennial Park.** This park, just 3,318sf in area and located on court square, opened in 2001 to celebrate the City's 150th anniversary.
- **Graham Civic Center.** This building, originally constructed in 1956, was donated to the City, renovated and reopened in 2008. It hosts weekly meetings of the Graham Optimist Club and Graham Rotary Club, and also hosts community meetings, wedding receptions, birthday parties, voting and other events. It includes meeting space, a full kitchen, gazebo and playground.
- **Graham-Mebane Lake.** This 650 acre lake is the primary water source for the cities of Graham and Mebane. The lake also provides recreation, including a marina and boat ramps, fishing pier and picnic shelter. Power boating, fishing and canoeing/kayaking are permitted.
- **Haw River Access.** This facility provides an access point to the Haw River for canoes and kayaks, as well as a new restroom. It is open daily from dawn to dusk.
- **Future park on Jim Minor Rd.** In 2010, the City purchased 113 acres for a future park.



Sesquicentennial Park

Schools

Graham is in the Alamance Burlington School System. The following public schools are located in the city limits: North Graham Elementary, South Graham Elementary, Graham Middle and Graham High. Because school district boundaries don't always follow city boundaries, some residents of Graham attend public schools that are not in the city. The table on the next page shows the enrollment, building capacity and campus capacity (when temporary structures are used) for 2012-2013 for the schools that serve Graham residents.



Table 10. Enrollment and capacity of public schools that serve Graham residents, 2012-13.

	Enrollment 2003-04	Enrollment 2012-13	Building Capacity	Campus Capacity*
ELEMENTARY SCHOOLS				
E.M. Holt	n/a	660	data forthcoming	data forthcoming
Haw River	486	555	data forthcoming	data forthcoming
North Graham	386	380	data forthcoming	data forthcoming
South Graham	561	666	data forthcoming	data forthcoming
MIDDLE SCHOOLS				
Graham	712	635	data forthcoming	data forthcoming
Southern Alamance	756	858	data forthcoming	data forthcoming
HIGH SCHOOLS				
Graham	788	823	data forthcoming	data forthcoming
Southern Alamance	1,202	1,392	data forthcoming	data forthcoming

*Includes both permanent buildings and temporary buildings, if any.

There are also two private schools located in Graham:

- **River Mill Academy** is a tuition-free, K-12 public charter school. Any resident of North Carolina can apply for admission through the school’s lottery system. There are roughly 600 students enrolled.
- **Alamance Christian School** is an accredited, independent, non-denominational, non-profit, educational, state-chartered corporation, governed by a Board of Directors who come from several local, Bible-believing churches. It provides education for preschool to high school.

Alamance Community College provides traditional technical courses, as well as biotechnology, culinary technology, medical laboratory technology and other courses to more than 5,000 students. It was founded in 1958 as one of the first organized community colleges in North Carolina.

State Government

State offices located in Graham that are readily used by the public include:

- North Carolina's court system, called the General Court of Justice, is a unified statewide and state-operated system consisting of three divisions: the Appellate Division, the Superior Court and the District Court Division. The **Alamance County Courthouse** is the home of the state’s General Court of Justice in Alamance County. The original courthouse, opened in 1852, was demolished in 1923 when it was no longer large enough to serve its function. The existing courthouse was constructed in its place in 1924.
- The **Driver License Office** for Alamance County
- The North Carolina Department of Transportation **County Maintenance Yard** and **District Engineer’s Office**.



Alamance County Courthouse



Water

Graham’s water comes from Graham-Mebane Lake, located in Haw River’s ETJ approximately 4.5 miles from Graham’s court square. The lake is created by damming Back Creek. Before being pumped into the distribution system, the water goes through a series of treatment processes at the Graham-Mebane Water Treatment Plant, located on the southern tip of the lake. The treatment plant is owned and operated jointly by Graham (2/3) and the City of Mebane (1/3). Water is currently sold on a regular basis to Green Level and Swepsonville, and on an emergency basis to Burlington, Haw River and Orange-Alamance.

The permitted capacity of the treatment plant is 12 million gallons per day (MGD), and as 2/3 owner, Graham’s available capacity is 8 MGD. If available capacity remains the same, the 2011 update of the *Local Water Supply Plan* estimates that roughly 40% of available capacity will be used in 2060, with approximately 4.9 MGD available for use.

There are no current plans to increase capacity or extend new water lines.

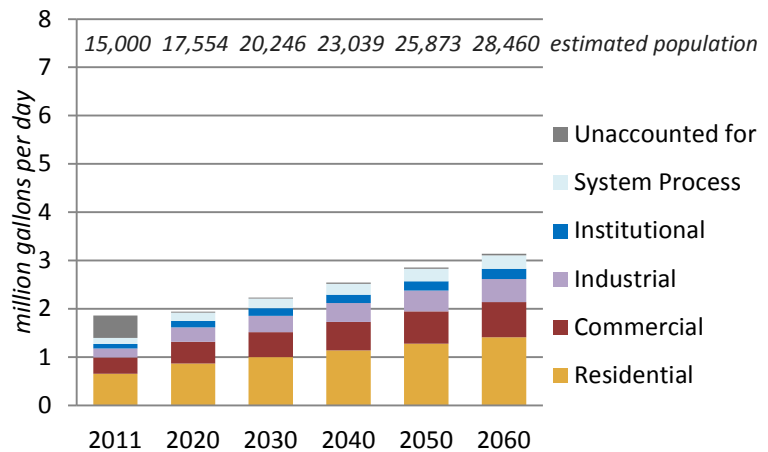


Figure 37. Projected demand for water through 2060



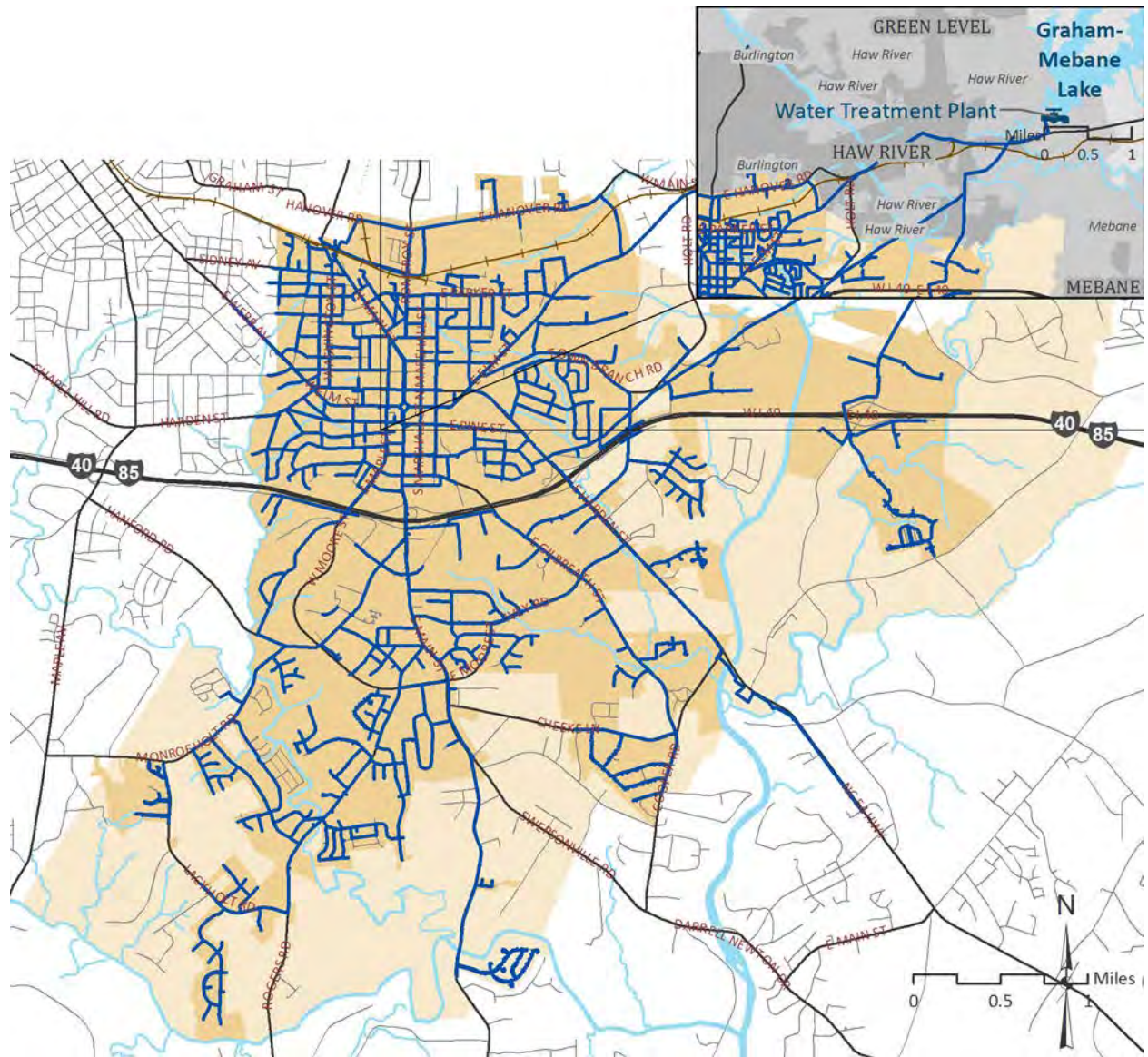


Figure 38. Map of water lines, Graham-Mebane Lake and water treatment plant



Wastewater

The City of Graham operates a Public Owned Treatment Works (POTW) consisting of a North Carolina Grade II Collection System and a North Carolina Grade IV Wastewater Treatment Plant. The collection system operates under a North Carolina Division of Water Quality Collection System Permit and includes approximately 89 miles of piping and seven lift stations. The wastewater treatment facility has a permitted flow of 3.5 MGD, with effluent discharged to the Haw River (designated as Nutrient Sensitive Waters). Average annual daily discharge in 2012 was 1.23 MGD, or 35% of capacity.

There are no plans to extend wastewater lines or expand treatment capacity at this time.

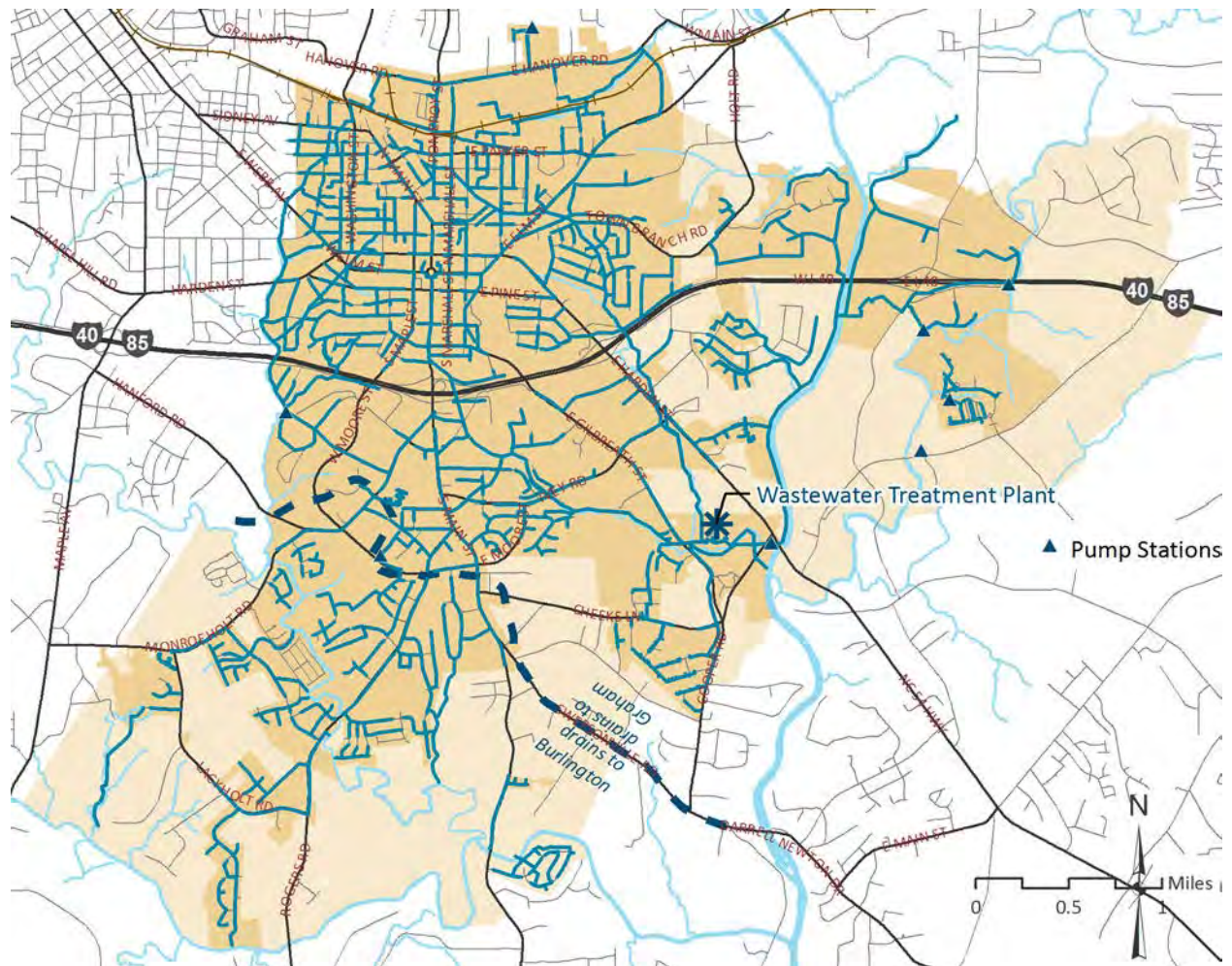


Figure 39. Map of wastewater lines, pump stations, wastewater treatment plant and the Burlington-Graham sewer drainage boundary line

