

BURLINGTON, NC COMMUNITY ASSESSMENT REPORT

Acknowledgements

City of Burlington Staff

Amy Nelson, AICP, Director of Planning & Community Development
David Beal, Assistant Director for Planning Services
Rachel Hawley Kelly, Public Information Officer
Joey Lea, Zoning Administrator
Mike Nunn, Burlington-Graham MPO
David Sanchez, Minimum Housing Inspector
Daniel Shoffner, Planner
Andrew Shore, GIS Administrator
Shawna Tillery, Community Development Administrator

Destination Burlington Steering Committee

Gary Aherron, LabCorp
Dr. Angela Bost, Alamance Burlington School System
Mary Carter, Senior Center of Burlington
Kathy Colville, Alamance Regional Hospital
Emma Curry, Burlington Community Work Group
Dan Danieley, Burlington-Alamance Airport Authority
April Durr, Healthy Alamance
Sandy Graves, Burlington-Alamance County Asst. of Realtors
Brian Ireland, Burlington Minimum Housing Commission
Ryan Kirk, Burlington Planning & Zoning Comm.
Ernest Mangum, Burlington Housing Authority
Kelly May, Glen Raven
Cindy Montgomery, Alamance Chamber of Commerce
Anne Morris, Downtown Burlington Corp.
Mark Newsome, Alamance Community College
Jeff Parsons, Burlington Tree & Appearance Comm.
Coleman Rich, Burlington Traffic Commission
Molly Whitlatch, Burlington Historic Preservation Comm.
Ed Wilson III, Burlington Board of Adjustment Comm.

This Report Was Prepared By:

RATIO Architects, Inc.
RKG Associates, Inc.
Stewart Engineering, Inc.

Additional thanks to:

All participants in the Community Survey, Community Visioning Workshop, Stakeholder Interviews, MindMixer website, and other community engagement efforts throughout the Destination Burlington planning process.

Table of Contents

| | |
|---|-----------|
| 00 Introduction | 1 |
| 01 Community Engagement | 5 |
| Overview | |
| City-led Preliminary Outreach | |
| Staff-Consultant Partnership | |
| Steering Committee | |
| Promotional Materials & Branding | |
| Community Surveys | |
| Stakeholder Interviews | |
| Community Visioning Workshop | |
| Community Planning Kits | |
| MindMixer | |
| Community Input Summary Map | |
| 02 Socioeconomic Analysis | 19 |
| Demographic Trends | |
| Economic Base Analysis | |
| 03 Residential Conditions | 29 |
| Housing Inventory | |
| Distressed Block Group Map | |
| 04 Non-Residential Conditions..... | 35 |
| Retail | |
| Industrial/Office | |
| 05 Health and Wellness | 39 |
| Overview | |
| Health Indicators | |
| Food and Nutrition | |
| Active Living | |
| Healthcare Access | |
| Aging | |
| Environmental Pollution | |
| Social Health | |
| The Role of Comprehensive Planning | |
| Identified Issues and Needs | |
| Community Health Summary Map | |

| | | | |
|---|-----------|---|------------|
| 06 Quality of Life..... | 53 | 10 Land Use | 91 |
| Overview | | Overview | |
| Crime | | Livable Community Land Use Philosophy | |
| Healthcare Facilities | | Current Zoning and Zoning Map | |
| Housing Costs and Availability | | Future Development Areas | |
| Ratings of Public Schools | | 2000 Future Land Use Maps | |
| Recreational Opportunities | | Existing Land Use and Land Use Map | |
| Colleges and Universities | | Redevelopment | |
| Climate | | Identified Issues and Needs | |
| Cultural Opportunities | | 11 Open Space | 103 |
| Qualitative Assessment | | Overview | |
| Identified Issues and Needs | | Recreation and Parks | |
| 07 Education and Workforce Development | 61 | Connectivity: Greenways, Trails, Sidewalks & Bike Paths | |
| Overview | | Natural Resource Conservation and Preservation | |
| Education Snapshot | | Identified Issues and Needs | |
| Burlington-Alamance School System | | Open Space Summary Map | |
| Private and Charter Schools | | 12 Transportation | 113 |
| Home Schooling | | Overview | |
| Other Educational Programs | | Existing Conditions | |
| Higher Education | | Transportation Map | |
| Workforce Development Programs | | Thoroughfare Plan Functional Classifications | |
| Preliminary Goals | | Pedestrian/Bicycle Network | |
| Schools Map | | Railroad Transportation | |
| Identified Issues and Needs | | Highway Freight Transportation | |
| 08 Character & Identity | 71 | Public Transit | |
| Overview | | Parking | |
| History | | Identified Issues and Needs | |
| Historic Resources: Districts and Landmarks | | 13 Infrastructure and Public Services | 129 |
| Historic Preservation | | Wastewater and Potable Water Services | |
| Downtown | | Water Infrastructure Summary Map | |
| Gateways and Corridors | | Stormwater | |
| Qualitative Assessment | | Electrical Network | |
| The Carolina Corridor | | Natural Gas Network | |
| Identified Issues and Needs | | Telecommunications and Data Networks | |
| Community Character Summary Map | | Public Safety and Emergency Response | |
| 09 Regional Issues | 83 | Identified Issues and Needs | |
| Annexation | | Infrastructure and Services Summary Map | |
| Extra-territorial Jurisdiction (ETJ) | | Appendix A..... | A1 |
| Alamance County | | Water and Sewer Maps | |
| Regional Government | | | |
| Regional Context Map | | | |

INTRODUCTION

00

INTRODUCTION

In the process of comprehensive planning, the community:

1. establishes goals and visions
2. identifies strategies to realize the goals
3. proposes actions to implement the strategies

In order to start this process, though, there must be a baseline understanding of the current conditions in the city and how issues have been identified and addressed by past planning studies. This is especially important in the city of Burlington because one of our key objectives is to tie together existing plans into one cohesive document. The intent of this report is to express several months of community engagement, document review, analysis, and research into a document that can be cited as the planning process continues. The report is a reflection of the most important issues and needs as expressed by the community through the interpretation of City staff and the consultant team guiding the planning process.

This report covers thirteen topic areas that are most important to Burlington today. Each topic area chapter is accompanied by photographs, graphs, tables, and summary maps that illustrate the important points discussed in the text. The conclusion of most chapters is a list of identified issues and needs—the handful of items that have risen to the forefront as most significant to address through the planning process. These issues and needs will become the focus as Destination Burlington continues into 2015.

COMMUNITY ENGAGEMENT

01

01 COMMUNITY ENGAGEMENT

OVERVIEW

Community engagement is one of the hallmarks of successful comprehensive planning. With a well-designed strategy of reaching out to the public, the plan is better informed throughout the process and better received when drafted as a guiding document. The community engagement strategy developed for Destination Burlington is diverse and multi-faceted—relying on both traditional and Internet-based methods and suited to a number of different personal approaches to interaction. The intent with this strategy is to rise above the limited models of merely informing, consulting, and placating the public and actively engage them as partners in the process.

Community engagement is not an end unto itself, but rather a crucial means of obtaining, deciphering, and prioritizing information that statistics and studies alone cannot reveal. Through the input and feedback of the community, the planning process is focused onto those issues that are most in need of attention—those that are summarized throughout this assessment report. Each section of the report will briefly summarize the significant public input derived from the processes described below.

The City of Burlington staff has worked with the RATIO team to develop an integrated strategy which included the following methods of engagement:

- City-led Preliminary Outreach: Kickoff and promotion efforts before consultant selection.
- Staff-Consultant Partnership: City staff and consultants share planning responsibilities.
- Steering Committee: A group of Burlington citizens guides the efforts of the process.
- Promotional Materials & Branding: The planning process is given a public identity.
- Community Surveys: All citizens are invited to give their feedback and share their ideas.
- Stakeholder Interviews: Focused groups provide insight into Burlington’s many facets.
- Community Visioning Workshop: Citizens have a venue for prioritizing issues and ideas.
- Community Planning Kits: Community groups can assemble at their convenience to participate.
- MindMixer: Tech-savvy citizens can interact with the process on an ongoing basis through this online platform.

Each portion of the engagement strategy is described in the sections below.

CITY-LED PRELIMINARY OUTREACH

Before the consultant team was commissioned to support the planning process, the City’s Planning and Community Development Department was already actively engaged in outreach efforts for the Comprehensive Plan. This included activities with local high school classes to brainstorm names for the effort, which led to a community-wide vote that put forth “Destination Burlington” as the plan’s name. City staff also conducted surveys and informal group sessions in the months leading up to the formal planning process.

STAFF-CONSULTANT PARTNERSHIP

The Planning and Community Development Department always had the intent of the City’s staff being integrally involved in the Comprehensive Plan, even describing those opportunities for staff involvement while selecting a consultant team. As the City’s staff are perhaps most familiar with the planning issues at play in the community, they are an important part of the initial and ongoing public input in the process. Recognizing that, the kickoff event for the formal planning process was a workshop meeting for the City staff and RATIO team during which the staff discussed priority planning issues and mapped successes and challenges throughout

the City. The partnership of City staff and RATIO team personnel will continue throughout the process and result in a carefully-tailored plan owned by the City of Burlington.

STEERING COMMITTEE

A Steering Committee composed of City residents, leaders of community institutions, representatives of Burlington and Alamance County commissions, and members of the business community was assembled by the City early in the planning process. Committee members were selected to represent a diversity of interests and backgrounds, and to bring energy to the behind-the-scenes work of crafting the Plan. The charge of the Steering Committee was to assemble on a periodic basis to inform the RATIO team and City staff of significant issues, concerns, and priorities of the community, to provide feedback on the products of the planning process, and to guide and refocus the efforts of the RATIO team as the process continued. To date, the Steering Committee has met three times, and they are slated to convene another four times before the plan is adopted in 2015.

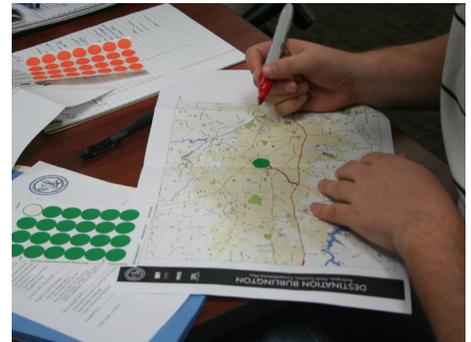
PROMOTIONAL MATERIALS & BRANDING

Having a clear and consistent public identity is crucial to the success of every plan, even back to Daniel Burnham's 1909 Plan of Chicago, one of the earliest comprehensive planning efforts. Promotion and branding is not just about giving the planning effort a pretty face, however. It is a means to increasing the involvement of citizens and continually informing the community of the plan's progress and significant milestones. The RATIO team worked with the City to develop a logo and graphic vocabulary that embraced the Destination Burlington title while also tying back to the City's own logo and branding. Promotional materials including postcards, flyers, and posters were distributed to increase awareness and encourage participation in the Community Visioning Workshop. Radio segments and press coverage were an important part of media outreach.

COMMUNITY SURVEYS

In addition to the surveys produced and distributed by the City early in the planning process, the RATIO team developed a survey for the community that was accessible both online and in a traditional paper format. The survey was designed to establish community priorities on a number of significant planning issues—areas for development, environmental protection, development regulations, city services, and community health. The paper survey responses were consolidated with the online responses at SurveyMonkey.com, and the resulting data as of September 1, 2014, is summarized in the sidebar on page 9. Notable conclusions of the survey inform every section of this Assessment Report, but include the following:

- The public is strongly in favor of development in Downtown and the east side of the City in comparison to other areas
- Strong development regulations are favored by the majority of respondents
- Survey participants lean only slightly toward redevelopment of former industrial sites over development that strengthens



City Staff Kickoff, 3/13/2014



Destination Burlington logo



Steering Committee Kickoff, 4/4/2014



Economy Stakeholder Session

neighborhoods

- There is overwhelming belief that development regulations should include strong environmental protection
- Of the natural features that could be protected by such regulation, the public believes that creeks and waterways are most important, followed by wooded areas
- Participants see the community's education system as the most significant public service, followed by parks and recreation
- Four aspects of the City are considered most important: entertainment activities; provision of quality streets, sidewalks, and utilities; redevelopment of vacant sites; and services and activities that serve the daily needs of residents
- The public sees obesity as the most significant health issue in the City, followed by the lack of facilities encouraging fit lifestyles, including sidewalks, bicycle paths, and parks

STAKEHOLDER INTERVIEWS

With the assistance of the consultant team, City staff assembled six stakeholder groups representing focused interests important to the future of Burlington. The six stakeholder groups represented the following interests:

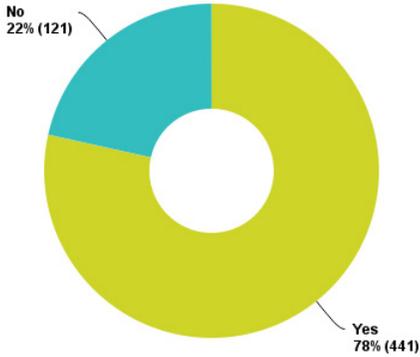
- **Economy:** representation of large employers, real estate interests, the Chamber of Commerce, and the Convention & Visitor's Bureau.
- **Education:** representation of the public school system, Elon University, The Burlington School, the home schooling community, and Alamance County Public Libraries.
- **Community:** representation of local faith-based groups, the elderly and youth communities, the ethnic and racial communities, and the Burlington Community Work Group.
- **Health & Wellness:** representation of the Parks & Recreation Department, Healthy Alamance, services for the homeless, public housing, police and emergency management, and Alamance County Department of Social Services.
- **City Design:** representation of Downtown interests, transportation planning, the City's Public Works Department, the local design community, historic preservationists, and the New Leaf Society.
- **Infrastructure:** representation of utility companies and several City Departments that deal with the infrastructure and services of the City.

Stakeholders were encouraged to be candid during their hour-long interviews with the City and RATIO team, as the transcripts of the interviews were intended to inform the planning process and not be part of the public record of the planning process. In this way, the stakeholders were afforded the chance to give the consultants the "inside scoop" on the issues most important to them.

There were **564** respondents to the Community Visioning Survey with the following statistics:

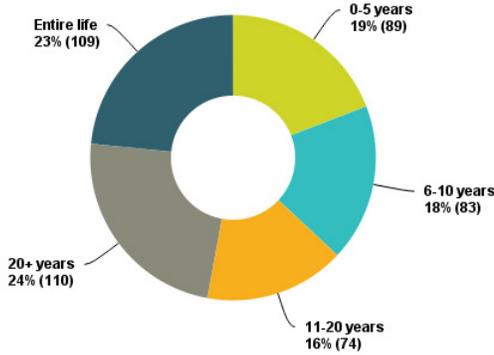
Q1 Are you a resident of Burlington?

Answered: 562 Skipped: 2



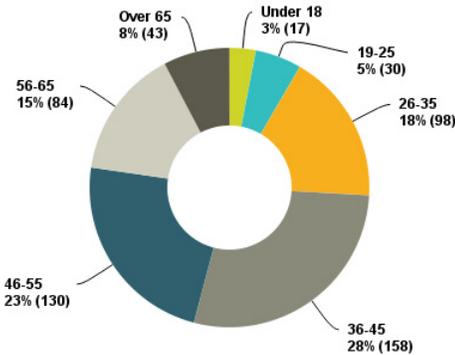
Q2 If you are a resident of Burlington, how long have you lived in the area?

Answered: 465 Skipped: 99



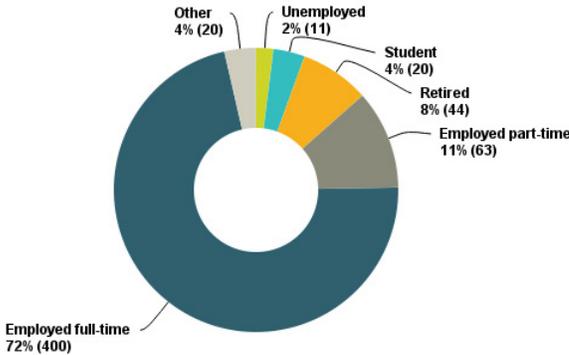
Q3 What is your age?

Answered: 560 Skipped: 4



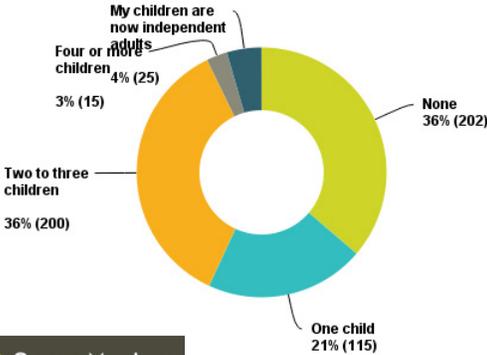
Q4 What is your employment status?

Answered: 558 Skipped: 6



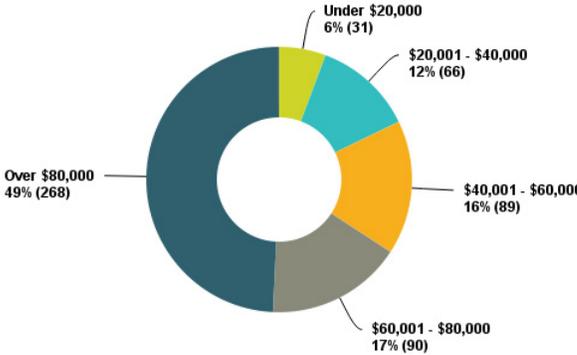
Q5 How many children live in your household?

Answered: 557 Skipped: 7



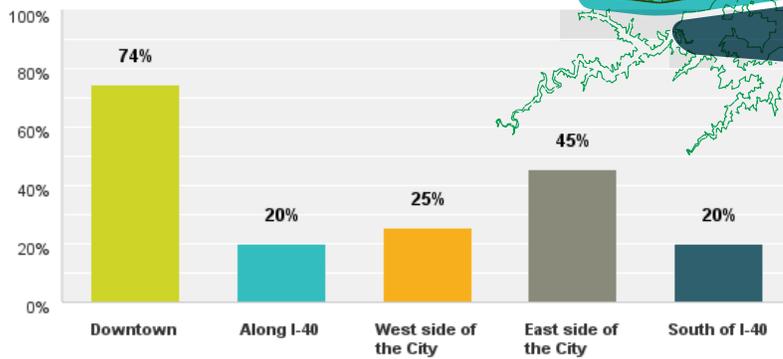
Q6 Estimate your household income in 2013?

Answered: 544 Skipped: 20



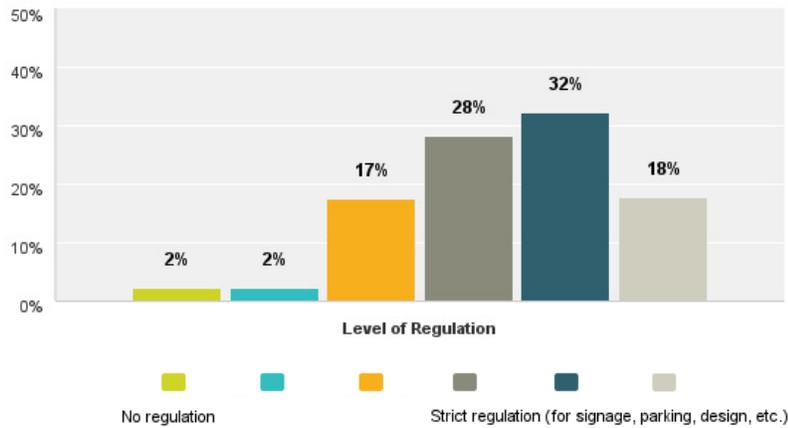
Q7 Where could development/redevelopment occur in and around the City of Burlington? Please choose general locations that corresponds with the above question.

Answered: 496 Skipped: 68



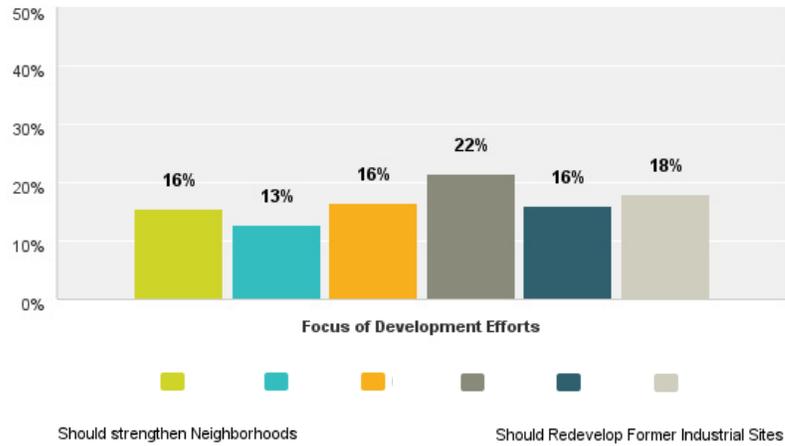
Q8 Development in Burlington should be guided by...

Answered: 550 Skipped: 14



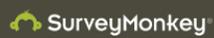
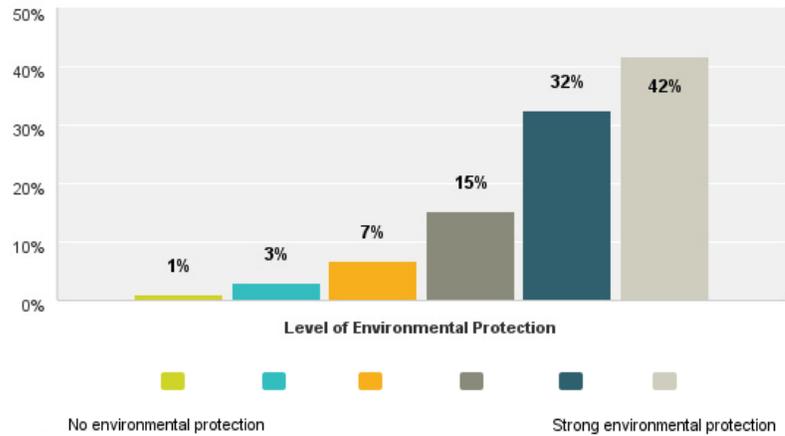
Q9 New development in Burlington...

Answered: 548 Skipped: 16



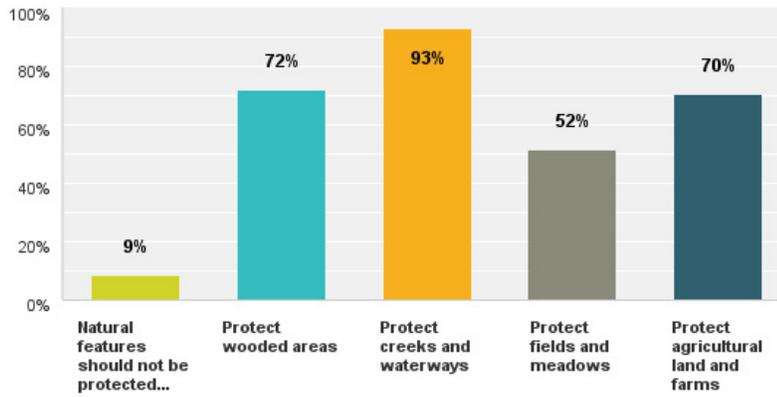
Q10 Development regulations in Burlington should include...

Answered: 552 Skipped: 12



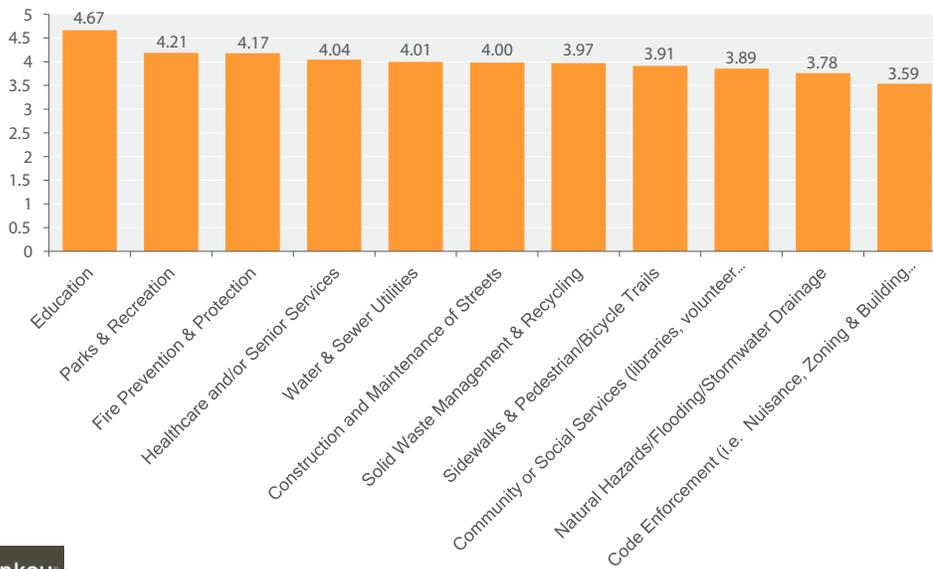
Q11 Should natural features be protected from development? If yes, check all that should be protected.

Answered: 547 Skipped: 17



Q12

Please indicate which public services are most important to you. 5 = Highest Priority : 1 = Lowest Priority





Downtown: Company Shops Market



Open Space: Community Activity



Transportation: Complete Streets

Visual Preference Survey: Favorite Images

COMMUNITY VISIONING WORKSHOP

On the evening of May 8th, 2014, the City of Burlington hosted a Community Visioning Workshop at the Kernodle Senior Center near Downtown. The purpose of the event was multi-faceted—it served to educate the community about the planning process underway, to elicit participant feedback on issues identified with help from City staff and the plan’s Steering Committee, and publicly promote the effort to encourage sustained interest, feedback, and ownership for the resultant comprehensive plan. The entire community—those that live, work, and visit the City—was invited to attend, and the Workshop was an open and casual venue for participants to express their feelings. The bulk of the Workshop event was reserved for four “Planning Activities” that were designed to engage the participants in a number of ways—as “voters” milling around and interacting with a crowd, as quiet judges of scenes of their City, as groups engaged in debate on health issues, and as introspective thinkers of a better future. With a diversity of activities, the belief was that everyone in the room could find a way to connect with the issues on their preferred terms, resulting in thorough and accurate feedback from the event overall. A summary of the event is available on the City’s website and Mindmixer online platform.

Five main issues or topic areas rose to the surface as most significant to the community:

- **Geographic Equity:** whether or not some areas of the City are historically underserved in fact or in perception, it is clear that the community wants there to be equitable treatment of all areas of Burlington.
- **Connectivity of Transportation Options:** The community sees the City as not offering enough fully-connected alternatives to automobile transportation.
- **Downtown as a Community Focus:** Downtown is seen as the true heart of the City, filled with potential and opportunity that must be realized.
- **Economic Improvement:** Redevelopment is seen as the principle path forward for economic improvement, especially redevelopment of older industrial areas near the City’s core.
- **Environmental Stewardship:** the community recognizes the many unique environmental features of the City and wants to see those protected and celebrated as amenities.

There were thirty-seven participating attendees at the Workshop, ranging from children accompanying their parents to representatives of the elderly community, with individuals from the whole spectrum of this diverse community. The event was broadcast on community radio and a member of the local press media attended to cover the details of the Workshop.



Community
Visioning
Workshop

Housing & Neighborhoods



| IF YOU THINK THIS IS THE MOST IMPORTANT ISSUE ON THIS POSTER... | PLEASE PUT A STICKER NEXT TO IT, HERE |
|--|---------------------------------------|
| Preservation of historic neighborhoods and homes | 2 |
| Revitalization of "East Side" neighborhoods | 17 |
| Affordability of housing options | 4 |
| Definition and recognition of different neighborhoods and gateways | 3 |
| Equal provision of City services and facilities throughout all neighborhoods | 2 |
| Promotion of more interaction through neighborhood events and work groups | |
| Focusing on neighborhood commercial streets or "village centers" | 9 |



MY ONE GOAL FOR DESTINATION BURLINGTON IS...

Greenways - Connecting neighborhoods Elon & Downtown Burlington

PLEASE ANSWER HERE

Samie Smedsno

PLEASE GIVE US YOUR NAME HERE, IF YOU WOULD LIKE!



MY ONE GOAL FOR DESTINATION BURLINGTON IS...

OPEN MAIN ST.

PLEASE ANSWER HERE

PLEASE GIVE US YOUR NAME HERE, IF YOU WOULD LIKE!



MY ONE GOAL FOR DESTINATION BURLINGTON IS...

free Destination for families downtown - water/splash fountain/creek. More people living + playing there will mean more business support.

PLEASE ANSWER HERE

Serena Gammon

PLEASE GIVE US YOUR NAME HERE, IF YOU WOULD LIKE!



MY ONE GOAL FOR DESTINATION BURLINGTON IS...

Economic Development (in area of empty space buildings)

PLEASE ANSWER HERE

Tammy Cobb

PLEASE GIVE US YOUR NAME HERE, IF YOU WOULD LIKE!



MY ONE GOAL FOR DESTINATION BURLINGTON IS...

Strengthen the look of Burlington by using the Arts

PLEASE ANSWER HERE

PLEASE GIVE US YOUR NAME HERE, IF YOU WOULD LIKE!





Community Planning Kit used at follow-up community workshop

COMMUNITY PLANNING KITS

The RATIO team has developed a “Community Planning Kit” for Destination Burlington that allows groups of citizens to engage in the activities of the Community Visioning Workshop if they were unable to attend the May 8th event. The kit is designed to take a group of 12-15 participants through the four planning activities, with instructions and all the stickers, photographs, scorecards, and maps from the Workshop included. The Community Planning Kits were also translated into Spanish to facilitate input from local Hispanic community groups.

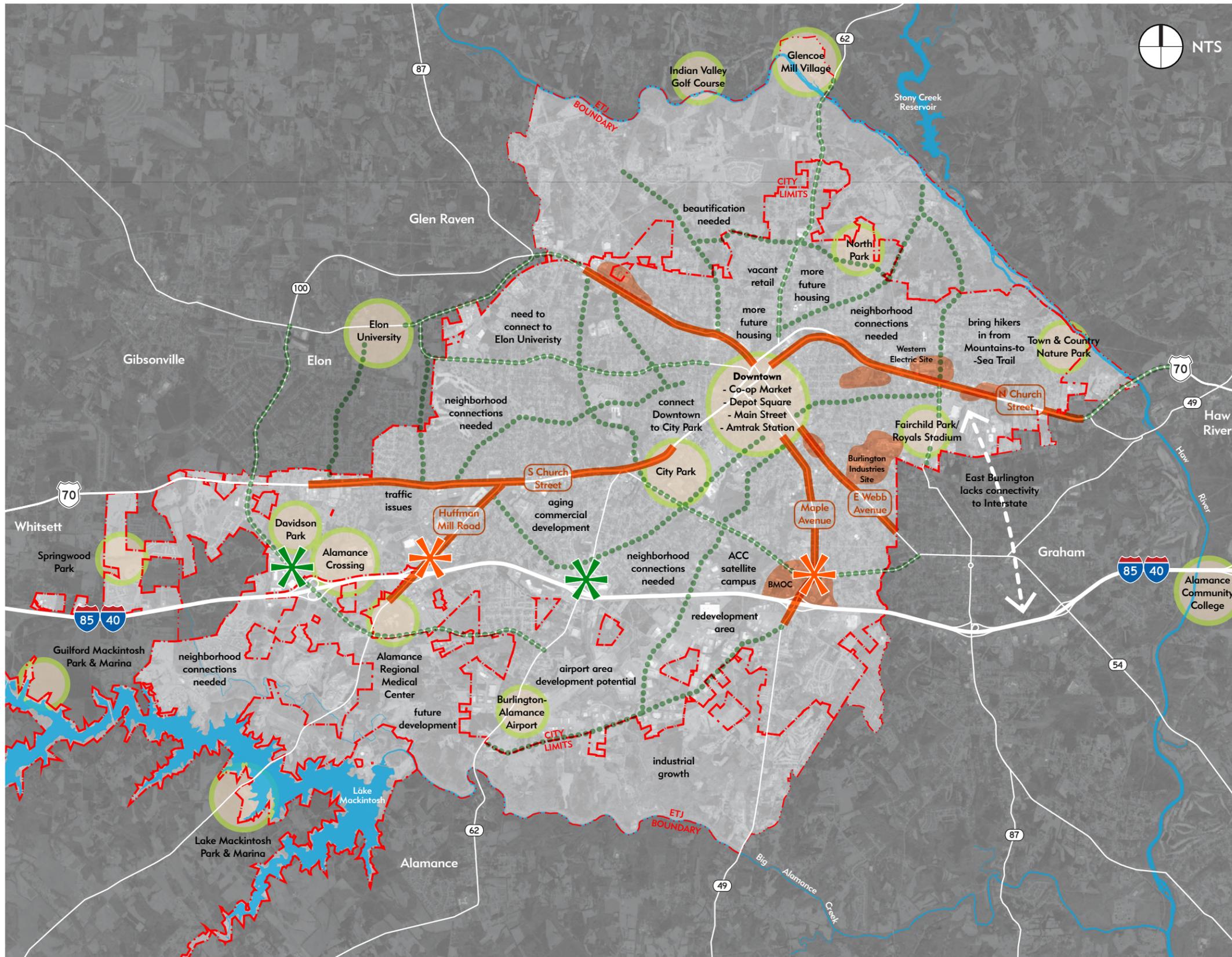
MINDMIXER

Mindmixer.com is an online “platform” for community engagement that is growing in popularity amongst planners, civic leaders, and community members. It has been designed to be user-friendly, accessible, fun, interactive, and democratic. Participants can respond to questions, post ideas, answer surveys, map the City’s issues and successes, post photographs, and trumpet the good ideas of their neighbors. Although generally considered attractive to younger, more web-savvy participants, Burlington’s MindMixer site is most actively used by a 35-44 age group and predominantly by citizens of the 27215 ZIP code area. There are 85 active participants in Burlington’s MindMixer site, but there have been over 750 unique visitors to the site since it launched in mid-April 2014.



COMMUNITY INPUT SUMMARY MAP

As explained above, the issues and needs expressed by the community through the Destination Burlington community engagement strategy are described in the topics throughout this report. The following map, however, coalesces some of the most important—and most repeated—issues outlined by community participants in the process along with other significant elements of the City’s character.



Community Input Summary Map

| | | |
|---|--------------------------------|-------------------------|
|  | community "favorite place" | Important Places |
|  | positive gateway | |
|  | negative gateway | |
|  | Extra-territorial Jurisdiction | Areas |
|  | Burlington city limits | |
|  | distressed area | |
|  | distressed corridor | Corridors |
|  | potential positive corridors | |

SOCIOECONOMIC ANALYSIS

02

02 SOCIOECONOMIC ANALYSIS

DEMOGRAPHIC TRENDS

Population Trends and Projections

Information from the U.S. Census indicates that Burlington’s population has steadily increased since 1990, but at a slower rate than Alamance County (the Burlington MSA) and the State of North Carolina. From 1990 to 2000, Burlington’s population grew from approximately 39,500 to 46,000, an increase of 6,500 or 16.5%. During the same period of time, the Burlington MSA’s population grew 19%, compared to 21% for the state. The slower rate of growth in the city may be attributed to diminishing development sites compared to the outlying areas in the county. Between 2000 and 2013, Burlington’s annual population growth rate halved to 0.8% with the addition of 4,640 new residents. In the three years from 2000 to 2013, however, the rate of population growth picked up for Burlington, increasing to an annual rate of 10.1%. Burlington’s population is projected to increase at a rate of 1% annually.

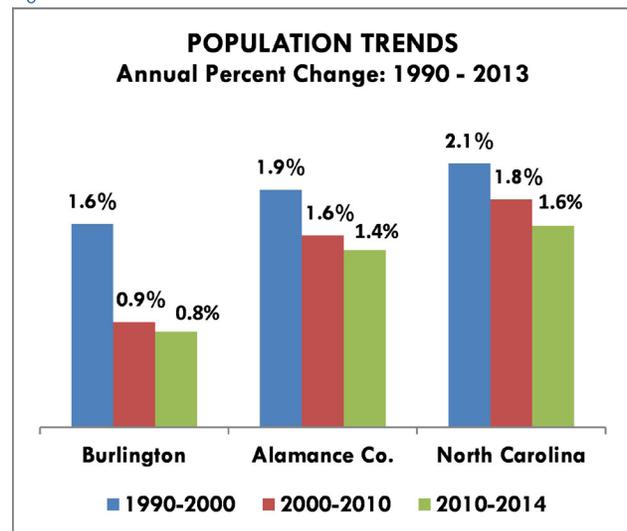
Table 2-1

| Population Trends 1990-2018 | | | | | |
|--|----------------|----------------|----------------|-------------------|-------------------|
| | 1990 Census | 2000 Census | 2010 Census | 2013 Estimated | 2018 Projected |
| POPULATION COUNT | | | | | |
| Burlington | 39,498 | 46,001 | 49,919 | 50,638 | 52,369 |
| Alamance County | 109,695 | 130,803 | 151,131 | 155,238 | 163,098 |
| State | 6,632,448 | 8,049,313 | 9,535,483 | 9,759,332 | 10,477,485 |
| PERCENT CHANGE IN POPULATION | | | | | |
| Burlington | — | 16.5% | 8.5% | 10.1% | 4.9% |
| Alamance County | — | 19.2% | 15.5% | 18.7% | 7.9% |
| State | — | 21.4% | 18.5% | 21.2% | 9.9% |
| ANNUAL PERCENT CHANGE IN POPULATION | | | | | |
| Burlington | — | 1.6% | 0.9% | 0.8% | 1.0% |
| Alamance County | — | 1.9% | 1.6% | 1.4% | 1.6% |
| State | — | 2.1% | 1.8% | 1.6% | 2.0% |

Source: Demographics Now; RKG Associates 2014

Like many southern and Sunbelt states, North Carolina has experienced strong population growth in recent decades. The Triangle, Charlotte, Asheville, and counties along the coast near Fort Bragg currently lead the state in population growth. The fastest growing counties are near major metropolitan areas such as Charlotte (Mecklenburg County) and Raleigh-Durham (Wake, Durham, and Harnett Counties), the coastal area (Brunswick County), and the Southern Pines/Pinehurst area (Hoke County). Nevertheless, of the state’s 100 counties, 49 have lost population since 2010. It can be concluded, therefore, that both the county and city have experienced moderate growth in the past thirteen years.

Figure 2-1



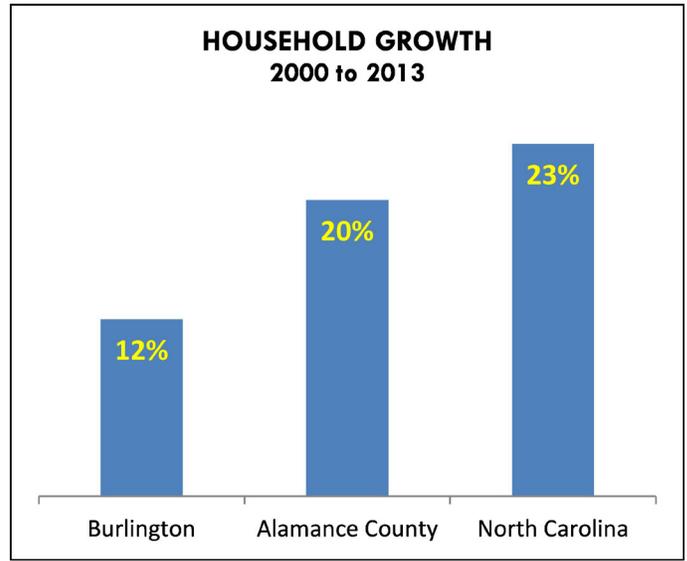
Source: ESRI and RKG Associates, Inc., 2014

Household Trends

Household growth trends typically parallel population trends. In 2000, Burlington had approximately 18,840 total households, growing to 21,054 in 2013, an increase of 12%. During the same period, The Burlington MSA's population increased by 20%, from 51,590 in 2000 to 61,730 in 2013. The rate of household growth in the state was 20% from 2000 to 2013 (Figure 2-2).

A general decline in average household size has been observed nationally, as there are increasing numbers of single-adult households, one-parent households, and generally lower fertility rates than in the past. Household sizes in both Burlington and the Burlington MSA have remained surprisingly consistent, however. Burlington's average household size has held steady at 2.37 and the county's has remained at 2.45 since 2000.

Figure 2-2



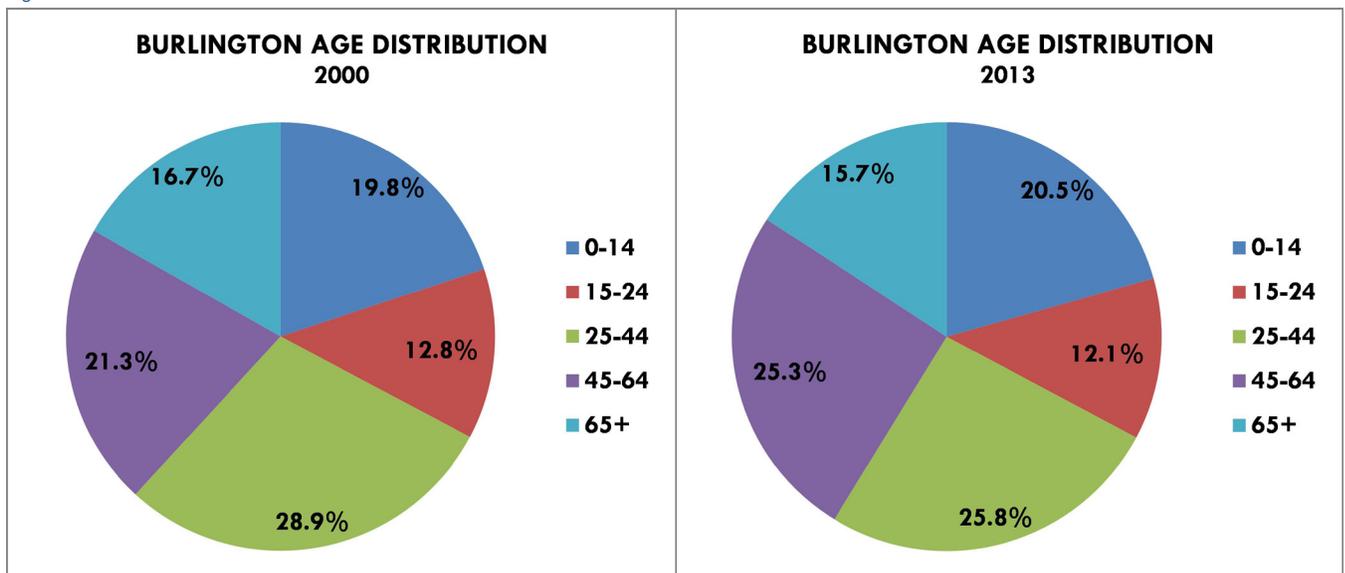
Source: ESRI and RKG Associates, Inc., 2014

Population by Age

Burlington's age distribution has shifted somewhat since 2000. The younger, working age 25-44 cohort actually decreased by 230 persons, from 13,355 in 2000 to 13,125 in 2013, and their overall proportion decreased from approximately 29% in 2000 to 26% in 2013. The older, working age 45-64 cohort increased in population by approximately 31%, from 9,850 in 2000 to 12,850 in 2013. The over-65 age group increased from 7,710 to 8,035, accounting for nearly 16% of the population in 2013.

The population loss in the 25-44 age cohort is most likely related to the net decline in employment in the city and county in the past ten years. Between 2004 and 2013, The Burlington MSA lost a net 2,135 jobs. The manufacturing sector was hardest hit, losing over 5,200 jobs. Losses in this and other sectors were somewhat offset by employment increases in health care, retail, restaurants and hotels.

Figure 2-3



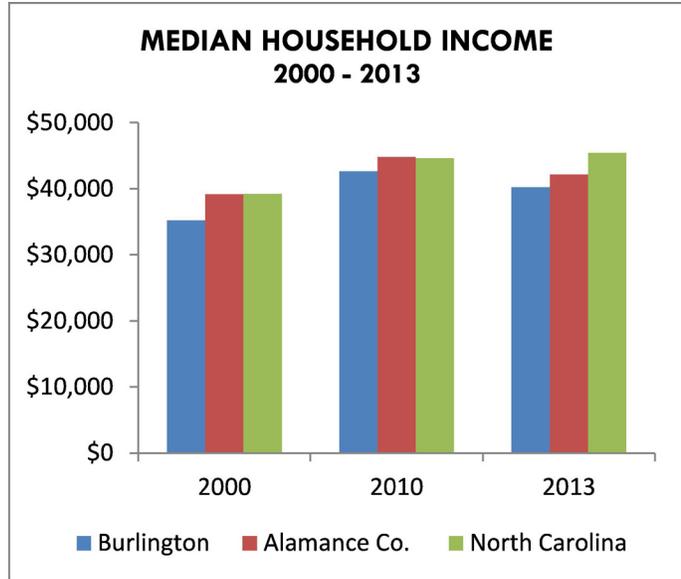
Source: ESRI and RKG Associates, Inc., 2014

Household Income

In 2013, median household income in Burlington was \$40,263 compared to \$42,153 in Alamance County and \$45,442 in the State of North Carolina. Burlington's median household income increased from \$35,222 in 2000 to \$42,671 in 2010, then fell to \$40,263 in 2013. Likewise, household income in the Burlington MSA increased from \$39,192 in 2000 to \$44,812 in 2010, then fell to \$42,153 in 2013. Median household income has increased steadily in the state, from \$39,249 in 2000 to \$44,812 in 2010, to \$45,442 in 2013 (Figure 2-4).

The decline in median household incomes is most likely related to the losses of relatively high paying jobs in the manufacturing, management of companies & enterprises, and construction industry sectors since 2000.

Figure 2-4

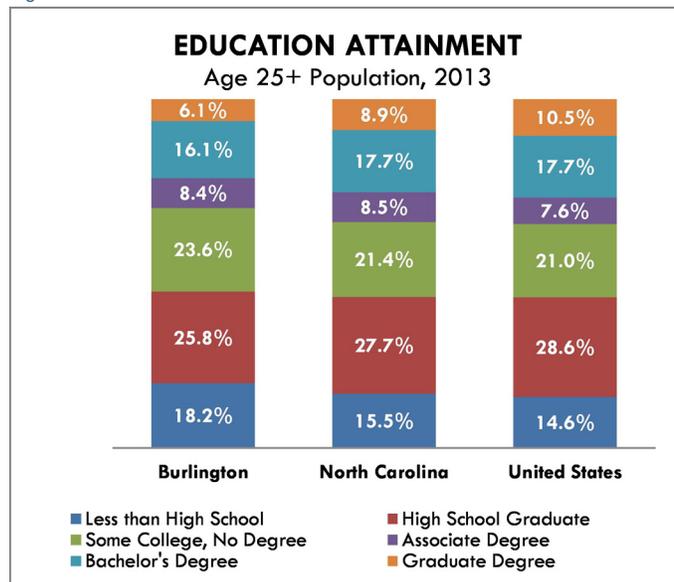


Source: ESRI and RKG Associates, Inc., 2014

Education Attainment

The education attainment of the local and regional labor force is a significant factor in supporting efforts to expand economic development and attract new employers. Figure 2-5 illustrates the educational attainment levels of the population 25 years and older for Burlington, North Carolina and the nation as of 2013. Burlington has lower proportions of bachelor and graduate degree holders than the state and nation. The proportion of high school graduates is also lower in Burlington at 25.8%, compared to 27.7% in the state and 28.6% in the nation.

Figure 2-5



Source: ESRI and RKG Associates, Inc., 2014

ECONOMIC BASE ANALYSIS

The economic base analysis examines changes in the labor force and business characteristics of the greater study area. This analysis includes data on employment, major employers, labor force and unemployment trends, occupational skills and commuting patterns, which will help to establish a context for economic development planning.

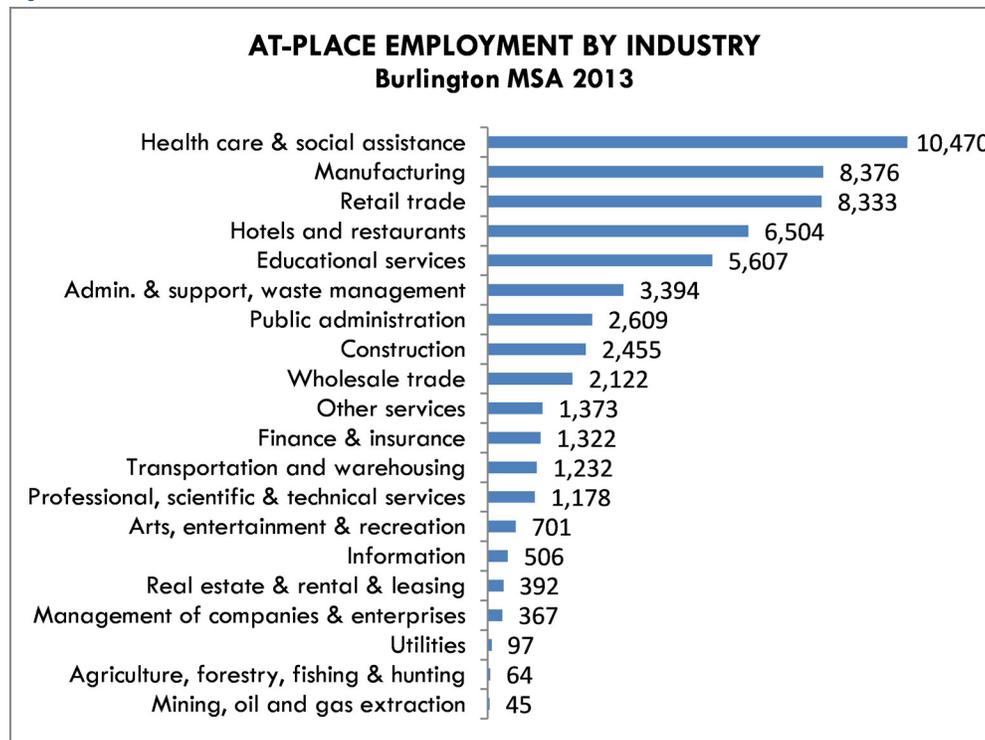
Employment Trends

At-place employment measures the number of workers within a specific geography, without regard to place of residence. For example, in 2011 Burlington had approximately 33,000 people who worked in the city, which included 26,000 in-commuters and 7,000 residents. At-place employment does not include working residents who commute to jobs outside of their county or city of residence.

Employment by major industry sectors is shown for the Burlington MSA in 2013 (Figure 2-6), for which the most recent employment data is available. The top five industries include health care and social assistance (10,470), manufacturing (8,376), retail (8,333), hotels and restaurants (6,504) and educational services (5,607).

Industry trend data from the North Carolina Department of Commerce show fairly substantial gains in employment from 2004 to 2013 in the following industry sectors: health care and social assistance (4,031), hotels and restaurants (1,654), retail (1,528) and educational services (733). Substantial declines in employment occurred in the following industry sectors: manufacturing (5,214), management of companies & enterprises (2,264), construction (1,174), and administration and support (787). The net loss of jobs in the county during this period was 2,135.

Figure 2-6



Source: North Carolina Department of Commerce; RKG Associates 2014

What is significant for the local economy is that declines occurred in higher paying industry sectors and gains occurred in lower paying industry sectors. The top five high paying sectors (\$866 to \$1,744 average weekly wage) lost a net 3,906 jobs, while the five lowest paying industry sectors (\$263 to \$485 average weekly wage) added a net 2,550 jobs (Table 2-2).

Table 2-2

| Industry Trends Burlington MSA | | | | |
|---|---------------|--------------------|---------------|----------------|
| Industry Sector | 2013 | Weekly Wage | 2004 | Change |
| TOTAL | 57,147 | | 59,282 | (2,135) |
| Agriculture, forestry, fishing & hunting | 64 | \$485 | 50 | 14 |
| Mining, oil and gas extraction | 45 | \$687 | 40 | 5 |
| Utilities | 97 | N/A | 131 | (34) |
| Construction | 2,455 | \$725 | 3,629 | (1,174) |
| Manufacturing | 8,376 | \$866 | 13,590 | (5,214) |
| Wholesale trade | 2,122 | \$935 | 2,171 | (49) |
| Retail trade | 8,333 | \$427 | 6,805 | 1,528 |
| Transportation and warehousing | 1,232 | \$804 | 1,252 | (20) |
| Information | 506 | \$719 | 417 | 89 |
| Finance & insurance | 1,322 | \$1,066 | 1,732 | (410) |
| Real estate & rental & leasing | 392 | \$581 | 543 | (151) |
| Professional, scientific & technical services | 1,178 | \$965 | 1,294 | (116) |
| Management of companies & enterprises | 367 | \$1,744 | 2,631 | (2,264) |
| Admin. & support, waste management | 3,394 | \$485 | 4,181 | (787) |
| Educational services | 5,607 | \$751 | 4,874 | 733 |
| Health care & social assistance | 10,470 | \$924 | 6,439 | 4,031 |
| Arts, entertainment & recreation | 701 | \$292 | 560 | 141 |
| Hotels & restaurants | 6,504 | \$263 | 4,850 | 1,654 |
| Other services | 1,373 | \$540 | 1,558 | (185) |
| Public administration | 2,609 | \$687 | 2,535 | 74 |

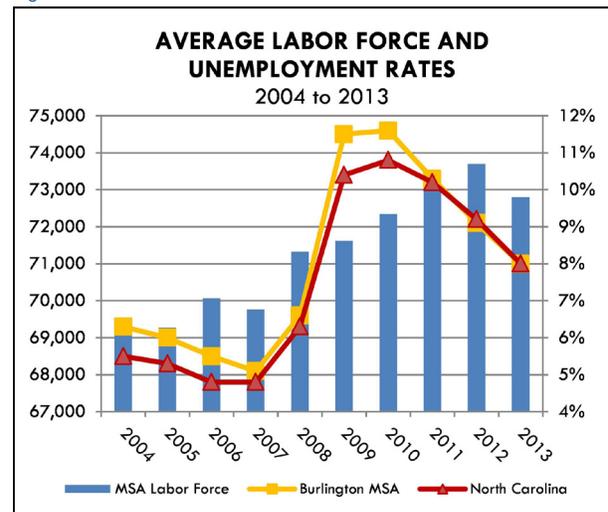
Source: North Carolina Department of Commerce; RKG Associates 2014

Labor Force and Unemployment Trends

The labor force and unemployment rate are measures of the size of an area’s active, resident worker base, as well as their current employment status. The labor force includes workers who are currently employed, unemployed, or actively looking for work. The labor force of the Burlington MSA stood at 69,458 in 2004, peaked at 73,702 in 2012, and declined to 72,806 in 2013.

Unemployment rates in the Burlington MSA have trended higher than the state since 2004, when the county’s unemployment rate stood at 6.3% compared to 5.5% statewide. The MSA’s lowest unemployment rate during this period was 4.8% in 2006 and 2007. The rate peaked at 10.8% in 2010 and dropped over two percentages point to 8.0% in 2013. Of course, the county lost just over 1% of its labor force in 2013 (Figure 2-7).

Figure 2-7



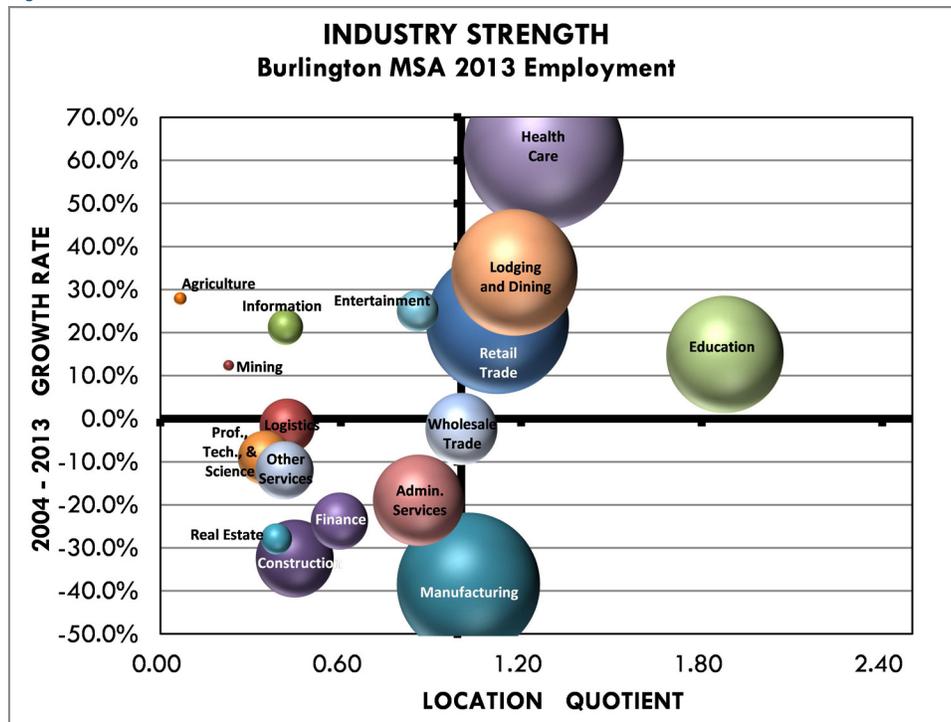
Source: U.S. Bureau of Labor Statistics; RKG Associates, 2014

Industry Clusters

A relative measure of how a local economy is performing can be estimated by quantifying employment in specific industry sectors and their growth over time (Table 2-2), and comparing current employment for specific industry sectors to that of a larger economy. This last measurement, which is represented as a ratio, is referred to as a Location Quotient (LQ). If the LQ is near 1.0, it indicates that the MSA has a comparable proportion of its employment base in a given sector to that of the larger area, which in this case, is the United States as a whole. If the ratio is less than 1.0, then the MSA is under-performing in that industry sector relative to the country. An LQ greater than 1.0 indicates a stronger performance by the MSA overall. In this analysis, the LQ's and their respective growth rates were developed based on employment changes between 2004 and 2013.

The relative size of the industry sector “bubble” in the diagram is indicative of the employment in that sector. In the case of the Burlington MSA, the highest numbers of persons are employed in the health care and social services sector (10,470), so its representative bubble is the largest of the group. The mining sector has the smallest number of employees (45), so its representative bubble is the smallest of the group. The relative position of a bubble above or below the horizontal axis indicates that industry sector’s growth rate, positive or negative. The relative position of a bubble to the right or left of the vertical axis indicates its location quotient as described above. For example, the relatively high number of employees in the manufacturing sector (8,376) are represented by a bubble of comparable size, while declines in employment place it well below the horizontal axis, and its relative proportion of its employment base is equivalent to the U.S. as a whole (Figure 2-8).

Figure 2-8



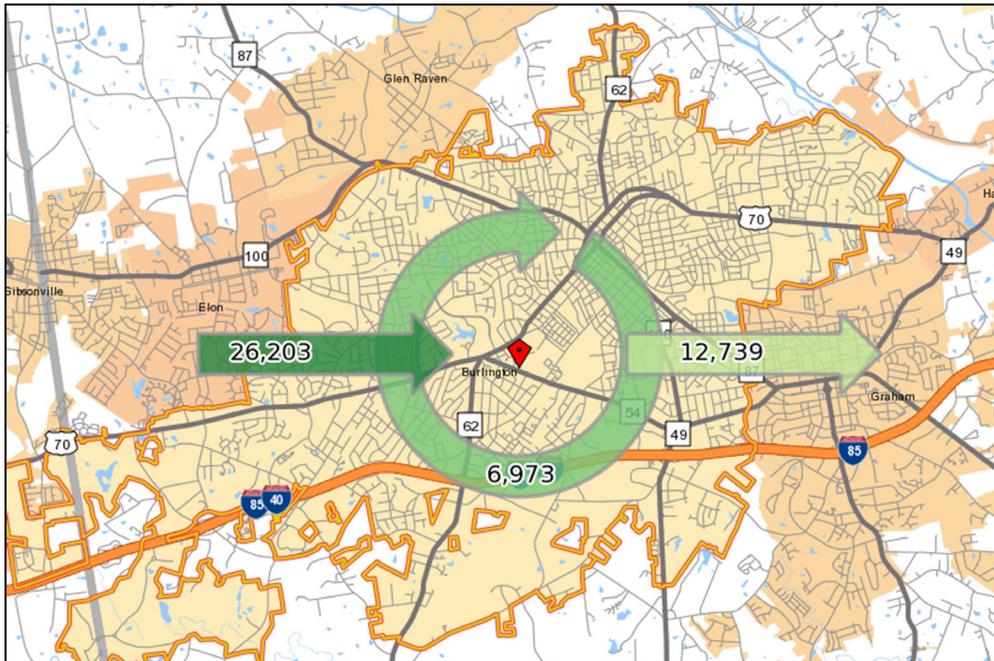
Source: U.S. Bureau of Labor Statistics; RKG Associates, 2014

Commuting Patterns

Understanding commuting patterns can provide useful insight into evaluating potential actions with regard to creating and retaining jobs. Commuting patterns highlight the flow of workers into and out of a given labor market area and as such, can help to indicate where there may be potential to capture additional jobs that are “leaking” from the local economic base.

Figures 2-9 illustrates the 2011 commuting pattern for at-place workers and residents of Burlington. Of the 33,176 persons employed in Burlington in that year, 6,973 (21%) were city residents, and 26,203 (79%) lived outside the city. Commuters who left the city to work elsewhere numbered 12,739. Of this number, 13% commuted to Graham, 12% commuted to Greensboro, 7% commuted to Elon, and 6% commuted to Mebane.

Figure 2-9: Burlington Commuting Pattern



Source: U.S. Bureau of Labor Statistics; RKG Associates, 2014

RESIDENTIAL CONDITIONS

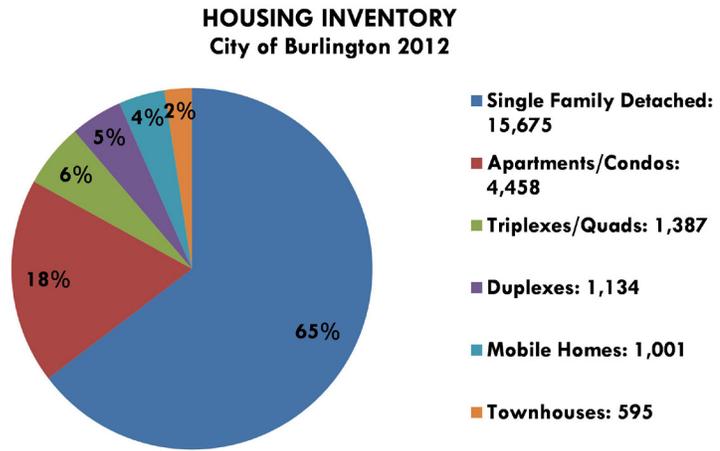
03

03 RESIDENTIAL CONDITIONS

HOUSING INVENTORY

Figure 2-10

An estimate of Burlington's housing inventory is derived from the U.S. Census Bureau 2008-2012 American Community Survey 5-Year Estimates. In 2012, Burlington's housing inventory comprised approximately 24,250 total dwelling units, 21,654 (89%) of which were occupied, and 2,605 (11%) of which were vacant. The breakdown of housing typologies is as follows, by order of magnitude: single family detached, 65%; apartments/condos, 18%; triplexes/quads, 6%; duplexes, 5%; mobile homes, 4%; townhouses, 2% (Figure 2-10).



Source: US Census 2008-2012 ACS 5-Year Estimates; RKG Associates, 2014

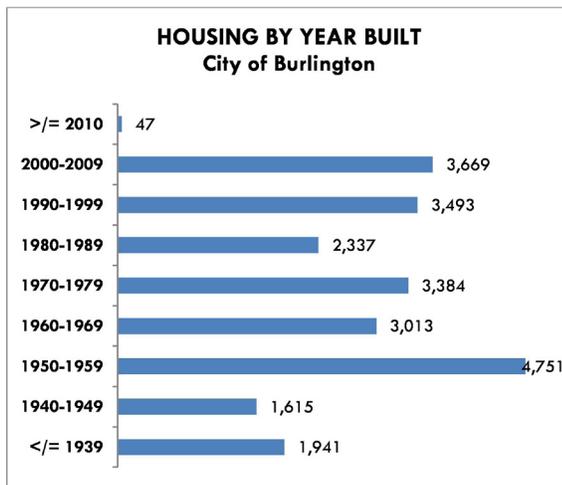
Housing by Year Built

Burlington's housing inventory has developed at a remarkably steady rate since 1960, some of which was a result of annexation. With the exception of the decade of the 1980s, the city has added between 3,000 and 3,700 new units each decade. From 2000 to 2009, 3,669 new housing units were added to the inventory. The most prolific decade for residential construction was the 1950s, when 4,751 new units were added, followed by the 2000s (Figure 2-11).

Housing Value

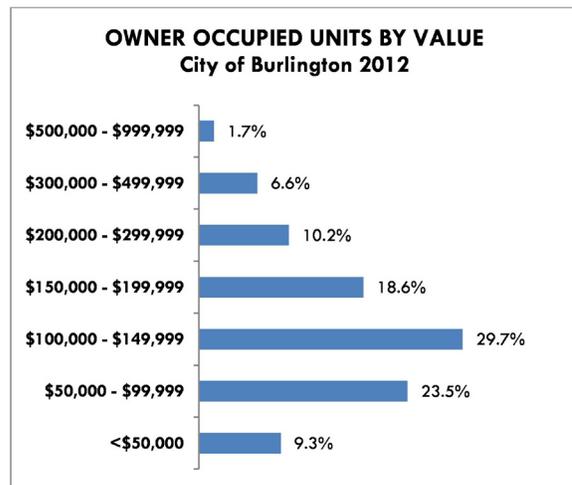
In terms of the value of owner occupied housing, the single largest proportion of Burlington's housing values fall into the \$100,000 to \$150,000 range at 29.7%, followed by the \$50,000 to \$99,999 range at 23.5%, the \$150,000 to \$199,999 range at 18.6%, the \$200,000 to \$299,999 range at 10.2%, the \$300,000 to \$499,999 range at 6.6%, and over \$500,000 at 1.6% (Figure 2-12). Over 60% of Burlington's owner occupied housing units are valued below \$150,000 as of 2012.

Figure 2-11



Source: US Census 2008-2012 ACS 5-Year Estimates; RKG Associates, 2014

Figure 2-12



Source: US Census 2008-2012 ACS 5-Year Estimates; RKG Associates, 2014

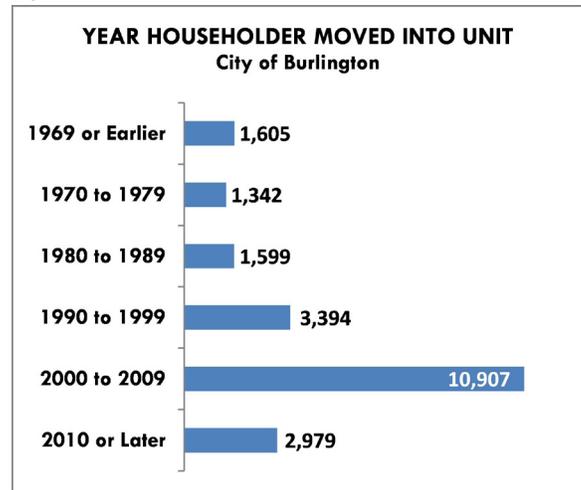
Housing Turnover

The decade from 2000 through 2009 was not only notable for the 3,669 new residential units added to Burlington’s inventory, but the number of units in the marketplace that turned over as well. In the three decades preceding the 1990s, there were between 1,300 and 1,600 move-ins per decade. In the 1990s, there were nearly 3,400 move-ins, and in the 2000s, there were just over 10,900 move-ins. This activity was concurrent with the major shifts in employment from the manufacturing, company management and construction sectors into the health care and service sectors that now dominate the local economy. It can be reasonably assumed that a great many workers followed jobs both out of and into the Burlington MSA during this period. (Figure 2-13)

Residential Building Permit Activity

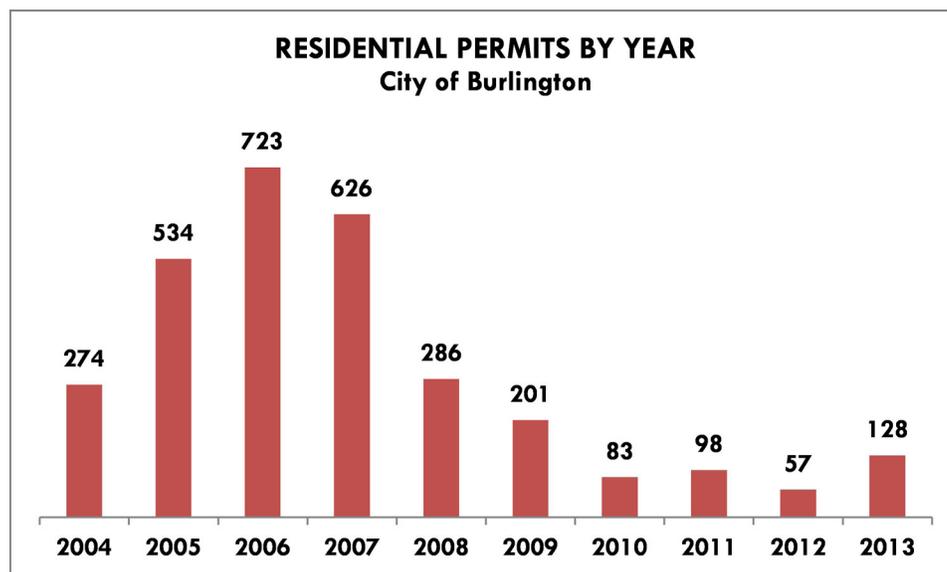
The number of residential building permits issued is a fairly reliable indicator of residential construction activity over a period of years. During the ten year period from 2004 through 2013, Burlington saw the highest number of residential building permits in 2006 with 723, declining to 57 annual permits in 2012, after which more than twice the number of residential building permits were issued in 2013 at 128 (Figure 2-14).

Figure 2-13



Source: US Census 2008-2012 ACS 5-Year Estimates; RKG Associates, 2014

Figure 2-14



| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|------------|
| Single Family | 220 | 534 | 723 | 626 | 238 | 81 | 83 | 98 | 57 | 128 |
| Multi-Family | 54 | 0 | 0 | 0 | 48 | 120 | 0 | 0 | 0 | 0 |
| Total Units | 274 | 534 | 723 | 626 | 286 | 201 | 83 | 98 | 57 | 128 |

Source: US Census; RKG Associates, 2014

Housing Characteristics by Census Block Groups

Burlington's proportion of renter occupied housing is 39%, compared to 33% in the state overall. In and of itself, Burlington's rental rate is not alarmingly high, particularly for an urban/suburban environment. Approximately 29% of its housing inventory could be generally classified as purpose-built for rental (apartments, quads, triplexes and duplexes), leaving approximately 2,480 single family detached dwellings as rentals. However, as single family neighborhoods transition from predominantly homeownership to higher proportions of renter occupied units, changes can occur that affect the character of the neighborhood. Renters may only perform the minimal amount of maintenance to keep the house livable, and absentee owners may not feel compelled to maintain the property to homeownership standards. If too many properties fall into disrepair on one block or within a concentrated area, blight could take hold and impact property values, creating a less stable neighborhood environment. These issues can be exacerbated when combined with low housing values and high concentrations of vacant housing.

Looking to the future, Burlington may have need to confront the declining conditions of some of its older housing stock, particularly in neighborhoods with low housing values, high proportions of rentals of detached dwellings, and high vacancy rates. The city should monitor at-risk neighborhoods to determine whether any public intervention may be called for in the future. By monitoring this situation, at risk neighborhoods can be identified and intervention strategies can be formulated that mitigate the impact of high concentrations of absentee ownership, vacancies, and lower valued properties.

The following table and map were prepared in order to delineate census block groups that exhibit the following conditions: median house values under \$110,000, more than 40% renter occupied, and/or a 15% or higher vacant housing rate. These criteria were selected to identify sections of the city that may be most subject to the risk of decline and warrant monitoring in the future. The census block groups analyzed correspond to those of which are largely contained in the city limits. The tabular data includes population, the number of housing units, population density per square mile, median household income, median house price, percentage of owner occupied, percentage of renter occupied, and percentage of vacant. Census block groups that fall under the selection criteria

Table 2-3

City of Burlington, 2012
MEDIAN HOUSE VALUE <\$110,000, >40% RENTER OCCUPIED, 15%+ VACANCY

| Census Block Group | Population | Housing Units | Population Density/SM | Median HH Income | Median House Price | Owner Occupied | Renter Occupied | Vacant |
|--------------------|------------|---------------|-----------------------|------------------|--------------------|----------------|-----------------|--------|
| 21703-2 | 2,406 | 1,194 | 975 | \$63,452 | \$193,100 | 48% | 44% | 8% |
| 21703-1 | 2,460 | 1,242 | 330 | \$65,464 | \$190,600 | 40% | 50% | 10% |
| 21702-2 | 2,149 | 800 | 2,083 | \$106,932 | \$346,200 | 83% | 13% | 4% |
| 20601-2 | 908 | 403 | 1,189 | \$113,875 | \$402,800 | 90% | 4% | 6% |
| 20701-1 | 896 | 684 | 1,882 | \$34,273 | \$99,500 | 28% | 54% | 18% |
| 20701-3 | 1,214 | 616 | 2,315 | \$32,873 | \$139,800 | 37% | 49% | 14% |
| 20701-4 | 1,222 | 580 | 1,178 | \$74,231 | \$209,800 | 80% | 9% | 11% |
| 20601-1 | 921 | 426 | 1,369 | \$68,309 | \$191,000 | 87% | 9% | 4% |
| 20601-3 | 1,405 | 599 | 1,905 | \$72,708 | \$196,100 | 86% | 10% | 4% |
| 20701-2 | 1,187 | 656 | 1,996 | \$58,675 | \$151,000 | 66% | 26% | 8% |
| 20702-4 | 976 | 447 | 511 | \$55,385 | \$133,100 | 56% | 35% | 9% |
| 20501-2 | 1,429 | 626 | 1,702 | \$50,500 | \$167,000 | 73% | 18% | 9% |
| 20602-2 | 1,791 | 954 | 1,982 | \$56,276 | \$157,300 | 65% | 24% | 11% |
| 20702-1 | 1,352 | 672 | 2,557 | \$39,146 | \$130,900 | 43% | 50% | 7% |
| 20702-3 | 1,314 | 733 | 6,097 | \$54,155 | \$110,200 | 63% | 15% | 22% |
| 20502-3 | 649 | 284 | 1,276 | \$33,219 | \$92,000 | 48% | 41% | 11% |
| 20602-1 | 623 | 331 | 3,419 | \$33,112 | \$81,700 | 50% | 37% | 13% |
| 20100-1 | 1,360 | 704 | 3,582 | \$37,875 | \$123,300 | 46% | 44% | 10% |
| 20100-2 | 1,210 | 621 | 2,619 | \$56,163 | \$161,000 | 64% | 25% | 11% |
| 20100-3 | 825 | 378 | 1,580 | \$13,958 | \$70,400 | 15% | 74% | 11% |
| 20702-2 | 1,100 | 603 | 3,981 | \$52,988 | \$111,400 | 44% | 44% | 12% |
| 20502-1 | 2,281 | 907 | 1,682 | \$32,136 | \$51,800 | 52% | 38% | 10% |
| 20502-2 | 852 | 311 | 3,435 | \$45,281 | \$127,000 | 35% | 45% | 20% |
| 20100-4 | 513 | 330 | 1,357 | \$20,852 | N/A | 12% | 73% | 15% |
| 20802-2 | 1,154 | 477 | 4,652 | \$27,939 | \$95,600 | 32% | 50% | 18% |
| 20802-3 | 1,284 | 546 | 2,490 | \$33,560 | \$111,000 | 53% | 39% | 8% |
| 20801-1 | 739 | 330 | 1,013 | \$31,154 | \$112,700 | 44% | 48% | 8% |
| 20901-3 | 1,496 | 547 | 899 | \$34,764 | \$95,000 | 77% | 18% | 5% |
| 20802-1 | 725 | 399 | 3,989 | \$16,268 | \$82,100 | 17% | 66% | 17% |
| 20400-5 | 1,022 | 493 | 2,781 | \$26,681 | \$90,300 | 50% | 34% | 16% |
| 20400-3 | 729 | 335 | 2,943 | \$9,665 | \$99,300 | 40% | 43% | 17% |
| 20400-4 | 796 | 405 | 3,024 | \$24,236 | \$93,400 | 39% | 44% | 17% |
| 20200-2 | 670 | 393 | 4,150 | \$20,804 | \$108,400 | 27% | 50% | 23% |
| 20200-4 | 1,557 | 637 | 3,793 | \$27,019 | \$80,300 | 35% | 50% | 15% |
| 20200-3 | 969 | 412 | 2,626 | \$17,328 | \$77,200 | 41% | 15% | 44% |
| 20802-5 | 674 | 332 | 2,628 | \$21,429 | \$71,500 | 32% | 55% | 13% |
| 20802-4 | 929 | 401 | 3,464 | \$16,450 | \$78,600 | 33% | 55% | 12% |
| 20802-6 | 1,091 | 541 | 2,926 | \$31,492 | \$82,800 | 41% | 49% | 10% |
| 20901-3 | 1,496 | 547 | 899 | \$34,764 | \$95,000 | 77% | 18% | 5% |
| 20400-2 | 1,501 | 563 | 1,638 | \$13,261 | \$90,600 | 54% | 37% | 9% |
| 20300-2 | 1,231 | 535 | 2,339 | \$20,865 | \$106,900 | 25% | 63% | 12% |
| 20200-1 | 956 | 425 | 2,432 | \$31,108 | \$79,200 | 48% | 37% | 15% |
| 20300-3 | 1,978 | 742 | 4,083 | \$29,519 | \$92,900 | 52% | 38% | 10% |
| 20300-4 | 1,580 | 591 | 2,436 | \$48,244 | \$109,300 | 71% | 22% | 7% |
| 20300-5 | 2,300 | 818 | 1,273 | \$26,343 | \$17,100 | 60% | 30% | 10% |
| 20400-1 | 2,011 | 844 | 721 | \$48,253 | \$136,300 | 60% | 30% | 10% |
| 20801-2 | 711 | 386 | 181 | \$42,024 | \$126,100 | 66% | 23% | 12% |

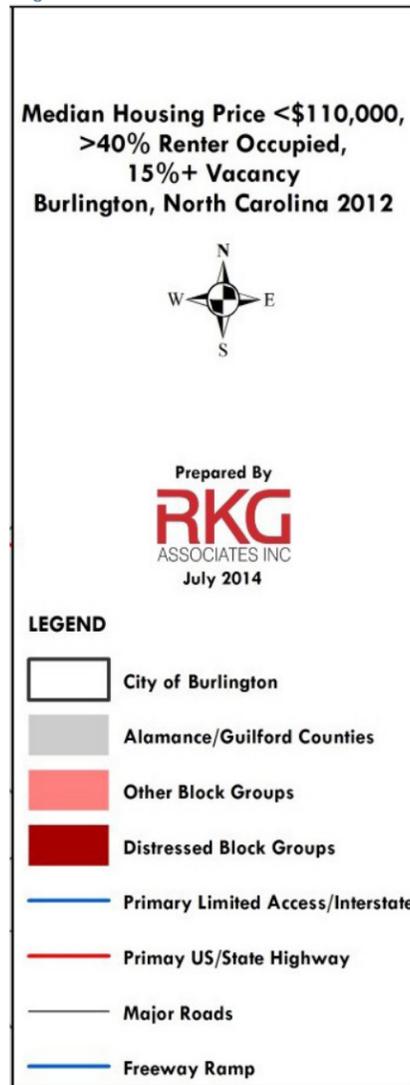
Source: US Census 2008-2012 ACS 5-Year Estimates; RKG Associates, 2014

(continued from previous page)

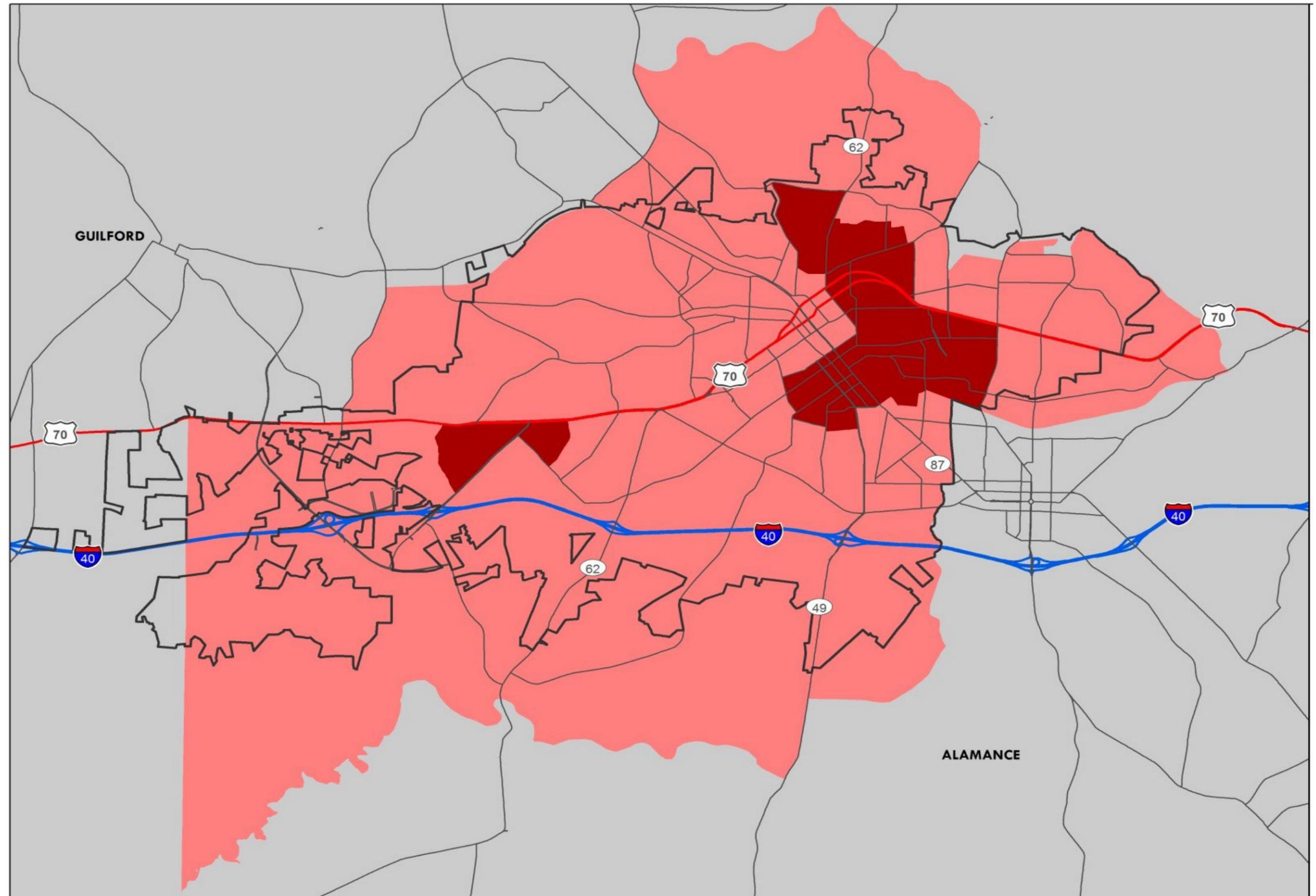
described above are shaded in red in the Table 2-3 and shaded in dark red in Figure 2-15.

Under this analysis, two contiguous geographic areas are clearly identified as challenged. The largest is located on the east side of the city, generally occupying the northeast, southeast, and southwest quadrants of North Church Street and East Webb Avenue. The other, smaller area is situated south of South Church Street, and north of Huffman Mill Road to the west and South Mebane Street to the east.

Figure 2-15



I.S. Census, 2010, ACS 2008 - 2012, RKG Associates, Inc., 2014



NON-RESIDENTIAL CONDITIONS

04

04 NON-RESIDENTIAL CONDITIONS

Burlington’s non-residential (retail, office, industrial) markets do not operate within the trade area of a larger metropolitan area such as Raleigh-Durham or Charlotte. As such, large national brokerage firms such as Cassidy-Turley or CB Richard Ellis do not collect and report real estate market data and trends in Burlington. Therefore, the data informing the following sector-based analyses was obtained through other means, such as the ESRI retail leakage analysis and office and industrial property listings on LoopNet, an internet-based real estate listing service.

RETAIL

A widely accepted measure of retail characteristics is the Retail Market Potential, a comparison of supply and demand to determine retail growth potential at any standard or user defined geographic level. An opportunity gap, otherwise referred to as leakage, appears when household expenditure levels for a specific geography are higher than the corresponding retail sales estimates. This difference signifies that resident households are meeting the available supply and supplementing their additional demand potential by going outside of their own geography. The opposite is true in the event of an opportunity surplus. That is, when the levels of household expenditures are lower than the retail sales estimates. In this case, local retailers are attracting residents of other areas into their stores.

Burlington is home to various destination retailers, regional malls, community and neighborhood shopping centers, and free standing stores, but is also located in a very competitive retail environment with nearby destination centers competing for consumers. The data in Table 2-4 reflect the capacity of Burlington’s retail enterprises to serve the residents within the subject trade area, the Burlington city limits. The surpluses in most retail categories show that Burlington’s retail inventory serves a much larger trade area than that within the city limits. Although opportunity surpluses do not preclude the development of new retail, particularly in growth areas, it is usually at the expense of older, less desirable shopping centers, which must either reposition in the marketplace or redevelop to other uses. Of course, the competitive retail inventory outside of the city limits also heavily influences consumers’ shopping patterns as well as retailer’s location decisions.

Table 2-4

| Retail Market Potential | | |
|---|-----------------------|-----------------------------|
| City of Burlington 2013 | | |
| Category | Gap/Surplus | Number of Businesses |
| DAILY NEEDS | | |
| Supermarkets | \$11 Million Gap | 52 |
| Specialty food stores | \$710,000 Gap | 4 |
| Pharmacies & drug stores | \$7 Million Surplus | 32 |
| GENERAL MERCHANDISE, APPAREL, FURNITURE, OFFICE (GAFO) | | |
| General Merchandise | \$118 Million Surplus | 29 |
| Clothing and clothing accessories | \$26 Million Surplus | 77 |
| Furniture and home furnishing stores | \$16 Million Surplus | 37 |
| Electronic and appliance stores | \$6 Million Gap | 21 |
| Sporting goods, hobby, book, and music stores | \$10 Million Surplus | 32 |
| Office supplies, stationary, gift stores | \$4 Million Surplus | 20 |
| Bldg materials, garden equip & supply stores | \$16 Million Surplus | 22 |
| FOOD SERVICE | | |
| Full-service restaurants | \$35 Million Surplus | 50 |
| Limited service eating places | \$15 Million Surplus | 46 |

Source: ESRI Business Information Solutions; RKG Associates

INDUSTRIAL/OFFICE

The impact of the closing of textile mills in Burlington and other cities and towns in the Carolinas is well documented. In the Burlington MSA, over 5,300 textile industry jobs were lost from 2004 to 2014 resulting in the abandonment of large, obsolete industrial buildings, many of which are not suited for smaller manufacturing operations.

As of summer 2014, the real estate listing service, LoopNet, showed three (3) industrial properties for lease, totaling 284,510 square feet, and eight (8) industrial properties for sale, totaling over 421,000 square feet, for total available space of just over 700,000 square feet. Properties for lease ranged in floor area size from 22,000 square feet to 228,000 square feet, and properties for sale ranged in floor area size from 4,700 to 160,000 square feet. The 2008 Institute of Transportation Engineers Trip Generation Manual estimates manufacturing uses support one employee per 558 square feet of floor space. Based on that parameter, 700,000 square feet of manufacturing space could support 1,190 jobs.

Under summer 2014 LoopNet office listings, there were seventeen (17) office properties for lease, totaling just over 97,000 square feet, and averaging 11,400 square feet. There were seven (7) office properties for sale, totaling just over 52,000 square feet, for total available space of nearly 150,000 square feet. Office space for sale and lease ranged from 1,300 to 40,000 square feet. The 2008 Institute of Transportation Engineers Trip Generation Manual estimates office uses support one employee per 223 square feet of floor space. Based on that parameter, 150,000 square feet of office space could support 672 jobs.

The amount of space for lease is not necessarily indicative of the amount of space that is vacant, particularly in the manufacturing sector. Many former textile buildings and complexes are too big, too old and often too costly to renovate. In many cases, these buildings are demolished and the materials are salvaged or disposed of to sell the land underneath.

HEALTH AND WELLNESS

05

05 HEALTH AND WELLNESS

OVERVIEW

In 2011, Alamance Regional Medical Center, United Way, Alamance County Health Department, Healthy Alamance, and other local partners conducted the Alamance County Community Assessment—a snapshot of the health and well-being of the citizens of Alamance County. Pulling from community input and data resources gathered during the Great Recession, the Community Assessment identified four priority health issues and four priority social issues in Alamance County:

Priority Health Issues:

- Healthcare Access
- Obesity
- Mental Health
- Substance Abuse

Priority Social Issues:

- Education
- Poverty
- Homelessness
- Domestic Violence

The Community Survey and other venues for community input to the Destination Burlington process echoed a number of those concerns in 2014. The top seven categories of survey responses to “the single most significant community health concern in Burlington” were, in descending order:

1. Obesity
2. Lack of facilities promoting active lifestyles (sidewalks, bicycle paths/lanes, fitness facilities)
3. Poor nutrition or lack of access to healthy food
4. Healthcare access
5. Water quality
6. Education
7. Environmental Pollution

All of these issues are interrelated—obesity, for example, can have as much to do with a lack of fitness opportunities as with lack of access to healthy food, or poor nutritional education, or lack of access to healthcare centers. In the following sections, these community health issues will be explored and the role of Comprehensive Planning in addressing them is described.

HEALTH INDICATORS

A health indicator is some characteristic of a population that can be used to support conclusions about the health of that population—for example, smoking habits or life expectancy. There are thousands of health indicators available to researchers at all ranges of scale from the local level to an international level. Most health data relevant to Burlington’s comprehensive planning efforts, though, are available at the county level. As Burlington represents a full third of the population of Alamance County, this health indicator data is relevant for analysis.

County Health Rankings & Roadmaps, a program of the Robert Wood Johnson Foundation, lists 48 different health indicators and outcomes for each county in North Carolina, establishing an overall rank for each county. Out of North Carolina’s 100 counties, Alamance County ranks as the 29th overall for “outcomes”—quality and length of life—and 41st overall for “factors”—characteristics that influence health. While this puts Alamance County in the top half of the state’s counties for public health, there are still a number of health indicators for which Alamance underperforms the state average. The data for these indicators is summarized in Table 5-1; these indicators include the following:

- Adult smoking
- Adult obesity
- Food environment index (a measure that includes limited access to healthy food and food insecurity)
- Limited access to healthy food
- Physical inactivity
- Availability of primary care physicians
- Availability of dentists
- Availability of mental health providers
- Availability of other primary care providers
- Uninsured population under age 65

Comparing this list to the Community Survey shows that the citizens of Burlington are very cognizant of the health issues that exist in their County. Many of the issues that have emerged as most significant in Burlington are discussed below.

| Table 5-1 | | | |
|--|-----------------|----------------|---------------------|
| Alamance County Health Indicators | | | |
| County Health Rankings & Roadmaps | | | |
| | Alamance County | North Carolina | Top U.S. Performers |
| HEALTH INDICATORS | | | |
| Adult Smoking | 24% | 20% | 14% |
| Adult Obesity | 34% | 29% | 25% |
| Food Environment Index | 6.5 | 8.7 | 6.9 |
| Limited Access to Healthy Food | 11% | 7% | n/a |
| Physical Inactivity | 27% | 25% | 21% |
| Access to Exercise Opportunities | 77% | 65% | 85% |
| Primary Care Physicians | 1,825 : 1 | 1,462 : 1 | 1,051 : 1 |
| Dentists | 2,260 : 1 | 2,075 : 1 | 1,439 : 1 |
| Mental Health Providers | 1,307 : 1 | 715 : 1 | 536 : 1 |
| Other Primary Care Providers | 2,168 : 1 | 1,331 : 1 | n/a |
| Uninsured | 21% | 19% | 11% |

Source: www.countyhealthrankings.org, 2014

FOOD AND NUTRITION

Taken together, issues of obesity, food availability, and nutrition were by far the most pressing health concerns on the minds of Community Survey participants.

Obesity

The issue of obesity sits at the nexus of several health concerns—physical inactivity, unhealthy foods, poor education and lifestyle choices about nutrition, chronic diseases like diabetes and coronary heart disease, among others. More than a quarter of Community Survey respondents indicated that obesity was the most significant community health concern in Burlington. This is supported by both the 2011 Alamance County Community Assessment and the health indicators described above. Rates of adult obesity in Alamance County in 2010 were higher than all bordering counties, while rates of low-income pre-school students in 2009-2011 were higher than all neighboring counties except Chatham County. As the causes of obesity are many and varied, so will need to be the methods of combating obesity—promoting a physical setting that encourages activity, an economy that supports healthy food options, and an education context that teaches citizens how to make healthy lifestyle choices.

Food Deserts

At the Community Visioning Workshop in May, 2014, participants were asked to map areas that they perceived to qualify as “food deserts”—areas where healthy food was not easily available, either due to scarcity of stores, limited access, or high cost. The compiled “dot map” of the participant groups is shown on the adjacent page.

The US Department of Agriculture defines food deserts through a number of factors, including location of stores selling healthy food (usually as indicated by the availability of produce), available access via walking and public transportation versus personal vehicles, and affordability of food in comparison to local income levels. The USDA produces a map called the Food Access Research Atlas that tracks Census tracts it qualifies as having low access to healthy food. The community’s perception of food deserts in Burlington is very much consistent with the USDA’s map—significant areas in the central, eastern, northern, and southern parts of the City do not have adequate access to healthy food. Another map, available from the ArcGIS web site, shows supermarket access within a one-mile walk—a common measure of access for the USDA. While some inaccuracies exist due to dated information, layering this supermarket access map onto the Community Health Summary Map on page 51 shows the specific neighborhoods of Burlington most affected by a lack of access to supermarkets. Again, it is consistent with and supportive of the community’s perceptions of food deserts in their community.

Healthy Eating and Nutrition

Community Survey respondents did not just note the lack of healthy food options as discussed above, but made a point to note the prevalence of fast food establishments in the community. According to a study by the NC State University Institute for Emerging Issues, 64% of Alamance County residents consume fast food each week—more than the nearby counties of Guilford, Orange, or Durham as well as the Central North Carolina average. Strategic Alliance, an initiative of the Prevention Institute, notes that the ubiquity of fast food restaurants in an area leads to greater consumption of soda and fewer servings of fruits and vegetables, and that the lack of supermarkets drives individuals towards greater consumption of fast food. Chronic health issues are also a result of an imbalance of access between supermarkets and fast food. (source: <http://preventioninstitute.org/action-center-sa/>)

Fast food as a nutritional health hazard in a community is a land use and zoning policy issue as much as a public health and education issue. A research brief by Bridging the Gap (<http://www.bridgingthegapresearch.org>) studied the zoning codes of 175 communities nationwide and found that 93% of the codes permitted the establishment of fast food restaurants, while only 76% permitted grocery stores, 40% permitted farmers’ markets, and 12% permitted urban agriculture. In 2008, the City of Los Angeles



Community Visioning Workshop Map: Food Deserts



Many citizens appreciate the new co-op Market with fresh, local, healthy foods, but recognize that cost is part of food access

passed an Interim Control Ordinance to put a two-year moratorium on new stand-alone fast food restaurants in order to develop new regulations of fast food establishments, recognizing that their land use regulations were having an adverse impact on community health.

ACTIVE LIVING

Active Transportation

In the Community Survey, participants ranked a lack of fitness facilities and opportunities as the second most pressing community health issue in Burlington, behind the related issue of obesity. Based on survey comments, it is clear that the issue is not simply about formal recreational opportunities—running tracks, sports fields, and recreation centers—as most members of the community have strong positive feelings about the City’s Recreation and Parks Department facilities. In fact, Alamance County compares quite favorably to the North Carolina average when it comes to access to exercise opportunities as defined by proximity to both public and private parks and recreation facilities—77% of the population as compared to the State average of 65%. And yet the County underperforms the State in terms of adult physical inactivity, as shown in Table 5-1.

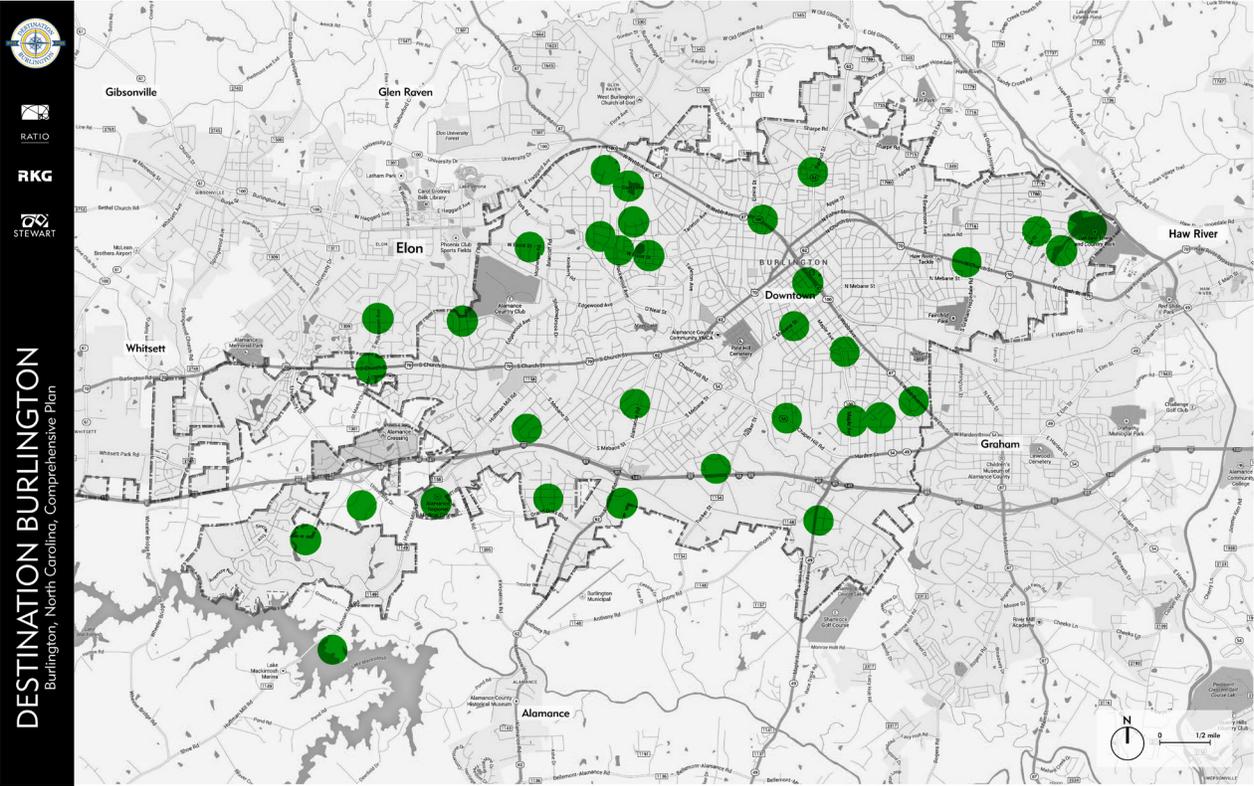
Survey respondents are instead reacting to the City’s lack of a physical infrastructure that supports an active lifestyle; in short, the City’s sidewalk and bicycle path networks are not sufficiently connected to encourage their use. There is an emerging trend in cities called “Active Transportation”—viewing walking and cycling as transportation modes along with transit and carpooling that are deserving of the kind of comprehensive networks we usually afford only to personal motor vehicles, and recognizing that these transportation modes are beneficial to the community in terms of health of the populace and health of the environment. A key component of Active Transportation is one of the fundamental building blocks of the urban public realm: sidewalks. In Chapter 11 in this report, the City’s 2012 Pedestrian Master Plan is discussed as a recent effort to make the City’s pedestrian network safer and more connected to all areas of the City.

Perception of Safety

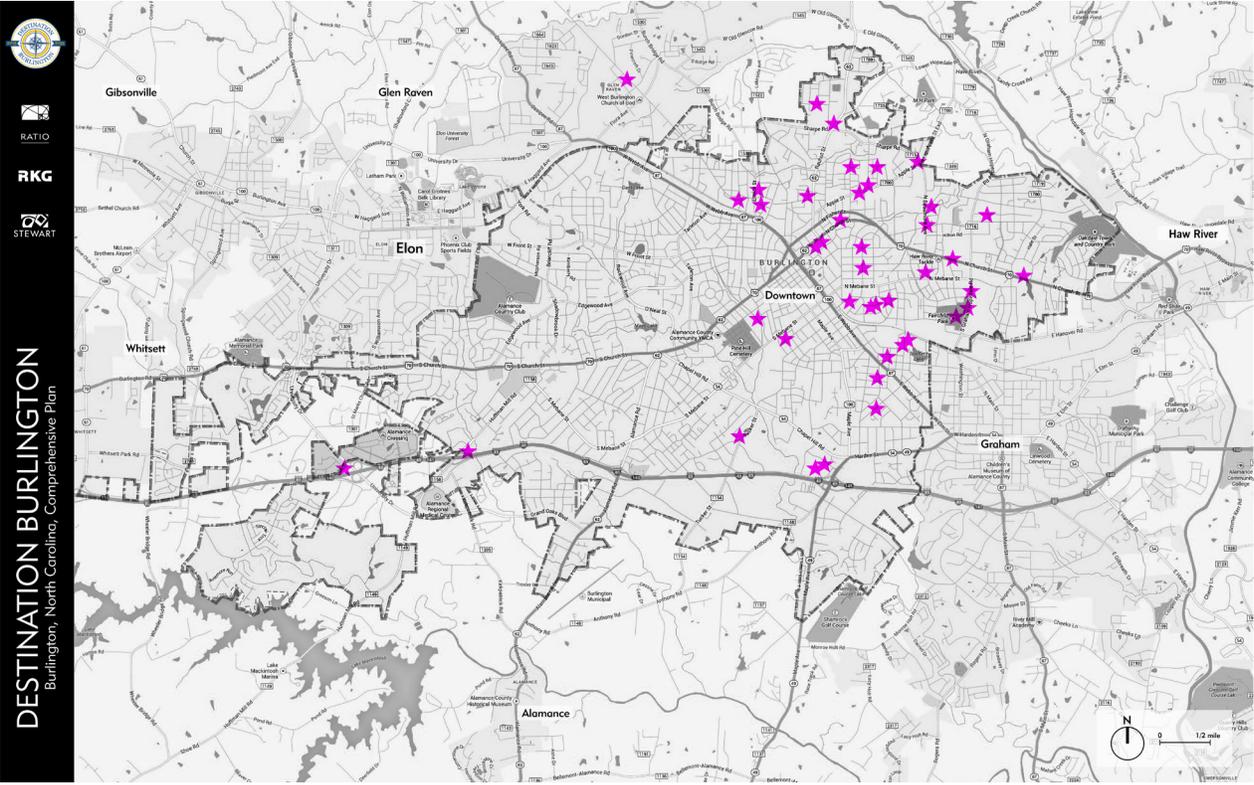
Safety of the pedestrian and bicycle networks are not the only safety concerns that can limit active living—general perceptions of the safety of a neighborhood have an effect, too. When playgrounds, schoolyards, and residential streets are not hospital environments for children’s play or adult recreation because of crime or fear of crime, proximity to recreational opportunities is no longer relevant. The crime mapping activity during the Community Visioning Workshop underscored that areas north of Webb Avenue are considered particularly unsafe environments, despite being near some significant and appreciated public parks. Refer to the compiled group “star” maps of crime on the adjacent page.

Education

As will be noted below and in other sections in this report, education is key when it comes to healthy lifestyles. It is not simply about creating safe walking and biking routes to school, though this is incredibly important; an educational system that puts emphasis on active living through physical education classes, recess, organized youth sports, and after-school programs is imperative. The Alamance-Burlington School System has a long-standing School Health Advisory Council (SHAC) that guides the school system on maintaining the health of students. The school system mandates a 30-minute recess period for grades K-8 exclusive of physical education classes and promotes the integration of physical activity across the curricula.



Community Visioning Workshop Map: Lack of Walking, Biking, Fitness Facilities



Community Visioning Workshop Map: Crime

HEALTHCARE ACCESS

Healthcare facilities are a significant component of determining the quality of life in communities, as will be discussed in Chapter 06. Burlington is relatively well-served, with the full-service Alamance Regional Medical Center as the area’s flagship healthcare facility. The number of hospitals or available beds, however, does not fully describe the state of healthcare access in the City. Community input has raised other significant aspects of access: a lack of smaller neighborhood clinics and urgent care centers, inadequate transportation system to facilities, scarcity of medical professionals, and the general unaffordability of healthcare and health insurance. The health indicators noted above support these common healthcare access concerns.

The Community Health Summary Map on page 51 shows the locations of Burlington’s hospital, urgent care centers/clinics, and pharmacies. It is clear that there are vast swaths of Burlington that lack ready access to the kind of day-to-day health services that smaller clinics and urgent care centers provide (individual private practice offices, chiropractors, and dialysis centers are widespread throughout the City and are not charted on this summary map). Pharmacies are more commonplace but still are lacking in central, northern, and southern parts of the City’s jurisdiction. Furthermore, without a fixed-route transit service or a comprehensive pedestrian and bicycle network, citizens without cars are unable to reach the few clinics, hospitals, and pharmacies that exist outside of their neighborhoods. Some community members expressed that even if they are able to get to these facilities, they do not feel welcome as customers.

Both anecdotal and statistical evidence also suggest that scarcity of medical professionals—and particularly scarcity of those professionals in certain parts of the City—hinders healthcare access. Stakeholders indicate that the widespread national shortage of nurses is less evident in Burlington than a shortage of physicians. This is seen by the community as an issue of talent attraction and retention; the City’s educational system is seen as not supporting the creation and retention of professionals, and the City’s reputation and quality of life fail to attract doctors, nurses, and dentists from outside the City. Whether those conjectures are true, there is no mistaking that Burlington is underserved from the standpoint of professional staffing.

The affordability of health insurance—uninsured care, as well, where it is available—is another major hurdle for access to healthcare. While the Affordable Care Act is attempting to address this issue on the federal and state levels, the community still sees large gaps between income and the cost of healthcare. Alamance County ranks as the 32nd most uninsured population in the state and is notably worse than both its urban neighbors of Guilford and Durham Counties and its rural neighbors of Caswell and Chatham Counties.

AGING

While aging did not come up often as a health or demographic concern in community feedback, it is a common refrain that the retirement of the Baby Boomer generation is quickly changing the face of communities across the country. It is an important demographic and community health trend that must be factored into planning for the future. One comment regarding Burlington’s sense of community during a stakeholder interview was that there needs to be a realization that everyone is together in taking care of the elderly.

Senior Living and Healthcare Options

The City of Burlington is served by all tiers of senior living facilities, from age-restricted and independent living housing communities, to assisted living facilities, to nursing homes and memory care facilities. The Piedmont Triad Regional Council on Aging lists 13 adult care homes (also known as assisted living facilities) and 6 nursing homes in Burlington. Two of these facilities are Continuing Care Retirement Communities that offer every level of senior care during retirement. All of these facilities house from 12 to over 100 individuals; there are an additional 35 smaller family care homes that house 6 individuals or fewer.



Community Visioning Workshop Map: Lack of Healthcare Access

The Burlington Housing Authority owns, manages, and maintains two public housing communities dedicated to elderly residents and manages another 40-unit complex intended for elderly and disabled residents.

The geographic distribution of nursing homes in the City follows the same general pattern as other healthcare facilities—most are located on the west side of the City or close to the County’s health facilities on the east side of the City. During a stakeholder interview, one participant noted that skilled nursing is not easy to find in Burlington; there are a lot of individuals “aging in the home” in the City, and supportive programs and services for those individuals and their caretakers is an important need.

Senior Services

The City of Burlington serves its elderly population primarily through the Recreation and Parks Department’s programming related to Kernodle Senior Center, a relatively recent addition to the Department’s inventory of non-park offerings. Alamance County is the principal provider of social services on the local level through the State’s Department of Health and Human Services. Specific to elderly adults, Alamance County Department of Social Services administers Medicaid and special assistance programs related to care for adults and disabled persons. Through their Aging Planning Committee, Alamance County guides the local work of the region’s Area Agency on Aging (AAA), which is housed in the Piedmont Triad Regional Council. The AAA is the primary coordinator and administrator of aging-related federal, state, and local funding for programs for Burlington. Services administered by the AAA include meals, transportation, in-home aid, adult day care, and family caregiver support. Stakeholders noted that Alamance Eldercare, Hospice, and Meals on Wheels are non-profit providers of senior services.

ENVIRONMENTAL POLLUTION

Respondents to the Community Survey and participants in the Destination Burlington engagement efforts consistently brought up concerns about environmental pollution.

Brownfields

The Environmental Protection Agency (EPA) does not list any Superfund sites in or near the City. The North Carolina Department of Environment and Natural Resources (DENR) lists just one property in Burlington’s planning jurisdiction as a known brownfield—Glencoe Mill on the Haw River. As one of the community’s favorite locations in the area, however, few are likely to suspect any pollution issues related to the site. Other former industrial properties in the City, however, are perceived to have the potential for untreated ground pollution, including many in the northern and eastern areas of the City. Citizens also pointed to a gravel mine close to Lake Mackintosh and a site close to Sellars Mill Road as potential concerns. While perception is important, no information exists that proves any additional brownfields in the City.

Air Pollution

Survey respondents did list air pollution as a health concern for Burlington, and Community Visioning Workshop participants identified the Interstate highway as a source of air quality concerns. A medical waste incinerator close to Alamance Community College east of the City’s jurisdiction was also cited as an air quality concern. Sperling’s Best Places produces an Air Quality Index from EPA data that incorporates ozone alert days and measured levels of seven air pollutants, and the US average score is 93.9, with 100 being the best quality possible. Burlington’s index is 95.1, indicating that the City has relatively clean air.

Water Quality and Water Pollution

The community identified water quality and water pollution as the most significant environmental pollution concerns in the City, making a distinction between the quality of water in the City utility infrastructure and the quality of water as a natural feature. Media reports in early 2014 about alleged spills at one of the City’s wastewater treatment plants into the adjacent Haw River have done much to push the public’s perception that both the City’s drinking water quality and surface water quality are compromised. Quality of the City’s water supply was most suspected in the Downtown area due to aging infrastructure, while there was consensus that the City’s many minor waterbodies—creeks and streams, mostly, but also ponds—are in poor shape. In fact, Little Alamance Creek, which runs across the middle of Burlington, is considered an “impaired” water body by DENR, and plans are underway to address the entire watershed. Similar to air quality, Sperling’s Best Places reports a Water Quality Index based on EPA data that measure 15 indicators in local watersheds. With 100 being the best possible score, Burlington has a score of 80 in relation to a US average of 55.

SOCIAL HEALTH

Education

As noted above, the 2011 Alamance County Community Assessment identified four Priority Social Issues relative to community health:

- Education
- Poverty
- Homelessness
- Domestic Violence



Community Visioning Workshop Map: Water and Environmental Pollution

Some portion of Community Survey respondents agreed with the significance of each of these four issues, but by far education is seen as the principal social health issue in the community. Below is a sampling of Survey answers to the question, “What do you feel is the single most significant community health concern in Burlington?”:

- “poor education resulting in citizens making poor costly decisions”
- “Lack of awareness of need to address health issues while a student”
- “Poorly educated people tend to have poorer health for a variety of reasons. Improve the education system and other issues will be ameliorated via better health choices, etc.”
- “Shamefully low resources devoted to education”

In the Community Survey, education far outranked all other public service offerings of the City in terms of importance to the public. The issue of education is more than just better education about health choices or awareness of healthcare opportunities, although both are significant. This issue seems to be about creating a better educational setting in which students can develop the critical faculties to learn about and improve the myriad problems that cause and result from poor community health—poverty, homelessness, obesity, social injustice, pollution, disease, etc. Because it is such a significant issue, education is discussed further in Chapters 06 and 07.

THE ROLE OF COMPREHENSIVE PLANNING

The Center for Disease Control and Prevention (CDC) Community Transformation Grant program has recognized that thoughtful, creative planning strategies have a direct effect on the health and wellness of our communities' citizens. The City of Burlington has been awarded such a grant to integrate community health and wellness as a significant focus of the Destination Burlington comprehensive planning effort. An article in the October 2013 issue of Planning Magazine notes the impact planning can have on our health:

Recent research shows that policies making healthy foods more affordable; improving sidewalk, street, and land-use design to encourage physical activity; and banning public, workplace, or residence smoking are among the most effective public health strategies.

The CDC has outlined five "Strategic Directions" towards which each Community Transformation Grant (CTG) should assist in community health:

1. tobacco-free living
2. active living and healthy eating
3. high impact evidence-based clinical and other preventive services
4. social and emotional wellness
5. healthy and safe physical environment

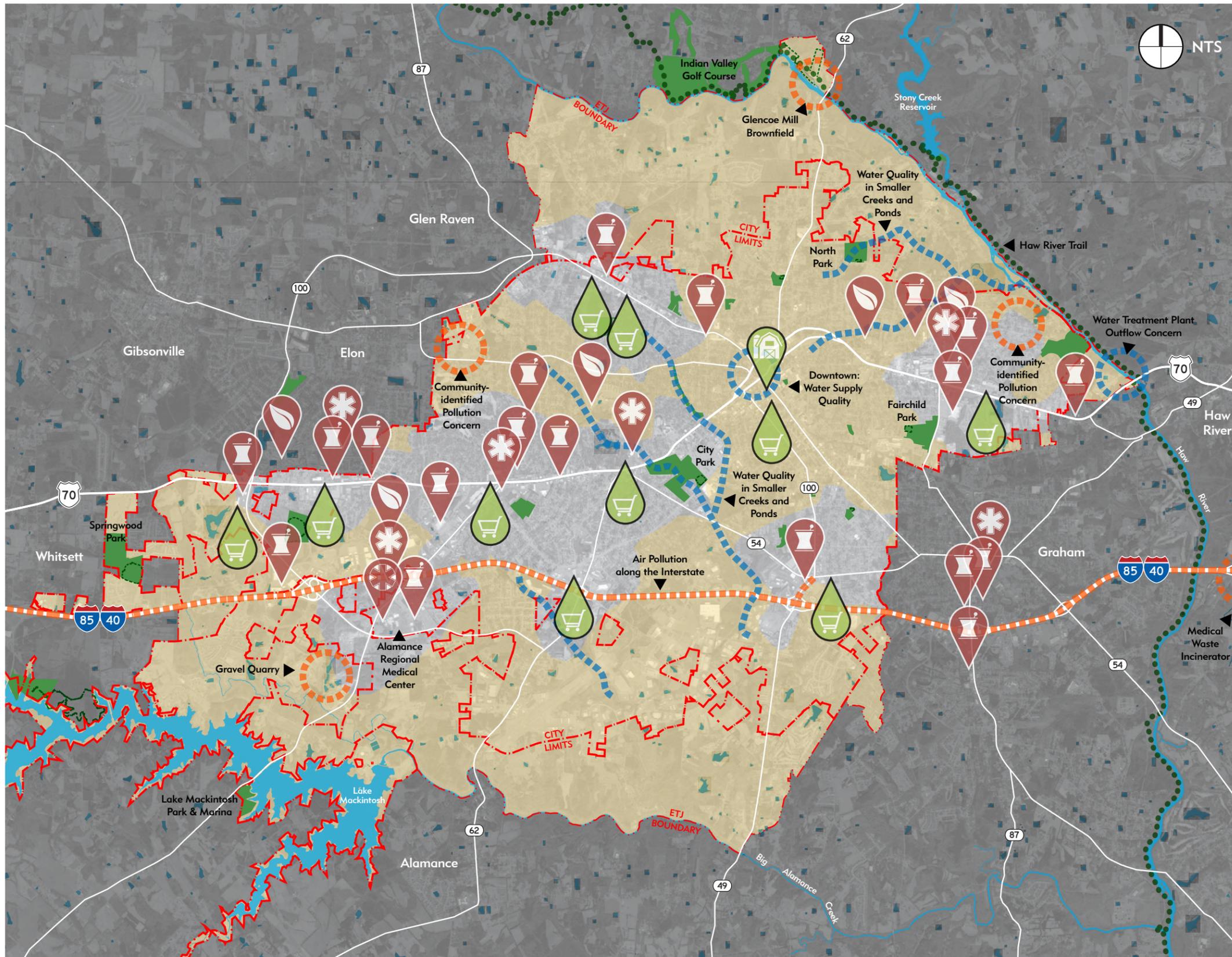
The CTG anticipates the following performance measures for success in these Strategic Directions:

- changes in weight
- changes in proper nutrition
- changes in physical activity
- changes in tobacco use prevalence
- changes in emotional well-being and overall mental health

During the upcoming planning process, as Destination Burlington transitions from analysis and issue identification to defining goals and strategies, it is vital that recommendations can be viewed through these strategic directions and performance measures to assure that the final Comprehensive Plan meets the community health goals of the CTG.

IDENTIFIED ISSUES AND NEEDS

- Physical environment that supports active living: sidewalks, bike paths, recreation opportunities.
- Improved means of physical access to healthcare and healthy food options.
- Land use policy that encourages purveyors of healthy food and discourages the establishment of fast food restaurants.
- Educational resources for promoting healthy lifestyle choices.
- Economic state that supports an active and efficient health marketplace (professionals, facilities) and reduces poverty, homelessness, and crime.
- Better environmental stewardship.



Community Health Summary Map

| | | |
|--|------------------------------------|-----------------------------------|
| | major medical center | Healthcare Facilities |
| | clinic or urgent care | |
| | pharmacy | |
| | nursing home | |
| | supermarket | Food Access |
| | farmer's market | |
| | area of low access to healthy food | |
| | water quality concern | Environmental Pollution |
| | air or ground pollution concern | |
| | trail or greenway | Recreational Opportunities |
| | city park (with recreation trail) | |

QUALITY
OF LIFE

06

06 QUALITY OF LIFE

OVERVIEW

The consultant obtained site selection data from the 27th annual survey of site selection decision makers published by Area Development Magazine, a site and facilities planning publication. The information in Table 6-1 shows a score-based ranking of the quality of life factors that influence business location for the years 2009 through 2013 as identified by a sampling of America's corporate executives. Although not specific to any one area, the results of this effort indicate those quality of life factors that are most important when a company is considering relocation/expansion.

The quality of life analysis examines the qualitative aspects of economic development. This analysis focuses on the top five quality of life factors reported in the annual survey of site selection decision makers by Area Development Magazine.

Table 6-1

| Top Quality of Life Criteria | | | | | | |
|-------------------------------------|-----------------------------------|------|------|------|------|-------------|
| Area Development Magazine | | | | | | |
| Rank | Criterion | 2009 | 2010 | 2011 | 2012 | 2013 |
| QUALITY-OF-LIFE-FACTORS | | | | | | |
| 1 | Low Crime Rate | 79.0 | 86.4 | 82.0 | 79.3 | 80.9 |
| 2 | Healthcare Facilities | 68.4 | 72.2 | 71.0 | 69.8 | 79.7 |
| 3 | Housing Costs | 61.5 | 68.4 | 69.0 | 66.9 | 75.3 |
| 4 | Ratings of Public Schools | 61.4 | 61.2 | 68.8 | 63.3 | 73.0 |
| 5 | Housing Availability | 62.4 | 66.4 | 64.1 | 69.8 | 71.5 |
| 6 | Recreational Opportunities | 52.7 | 48.2 | 52.2 | 52.9 | 66.4 |
| 7 | Colleges and Universities in Area | 50.7 | 53.2 | 56.6 | 61.6 | 59.5 |
| 7T | Climate | 55.0 | 56.3 | 52.2 | 55.0 | 59.5 |
| 9 | Cultural Opportunities | 46.0 | 48.7 | 42.8 | 48.9 | 54.8 |

Source: Area Development Magazine, 2009-2013; RKG Associates 2014

CRIME

A low crime rate was ranked as the top quality of life criteria. As shown in Table 6-2, both Alamance County's violent crime and property crime rates are higher than the state. During the five-year analysis period, total crime in the county was highest in 2008 and steadily dropped to its lowest level in 2012, according to statistics compiled by the North Carolina Department of Justice. The recent decline is a positive indicator.

Table 6-2

| Crime Statistics 2008-2012 | | | | | | |
|-----------------------------------|---------|---------|---------|---------|------------|---------|
| Alamance County | | | | | | |
| | 2008 | 2009 | 2010 | 2011 | 2012 Rate* | |
| | | | | | County | State |
| Violent Crime | 490.7 | 466.4 | 429.8 | 433.7 | 453.0 | 358.6 |
| Property Crime | 4,162.0 | 3,956.7 | 4,010.9 | 4,017.4 | 3,480.5 | 3,408.6 |
| Total | 4,652.7 | 4,423.1 | 4,440.7 | 4,451.1 | 3,933.5 | 3,767.2 |

*Per 100,000 residents

Source: North Carolina Department of Justice; RKG Associates 2014

HEALTHCARE FACILITIES

Burlington is fairly well served from a healthcare perspective relative to the availability and accessibility of hospital facilities. As shown in Table 6-3, there are six acute care hospitals of 100 beds or more within a 45-minute drive time from Burlington. The six hospitals reportedly support nearly 3,500 staffed beds. Burlington’s primary facility is the Alamance Regional Medical Center (ARMC), a 238-bed full service hospital. The largest hospital in the Burlington region is Moses H. Cone Memorial Hospital in Greensboro. Given the availability of Alamance Regional Medical Center in Burlington, as well as major regional hospitals in Greensboro and Durham, Burlington should be considered as providing area businesses and residents with good access to quality healthcare, the second most important quality of life factor included in the site location factors survey.

Table 6-3

Regional Acute Care Hospital Facilities

| Hospital | County | City | Staffed Beds | Emergency Services |
|----------------------------------|----------|-------------|--------------|--------------------|
| Alamance Regional Medical Center | Alamance | Burlington | 238 | Yes |
| Moses H. Cone Memorial | Guilford | Greensboro | 1,232 | Yes |
| Duke University Hospital | Durham | Durham | 1,019 | Yes |
| UNC Hospital | Orange | Chapel Hill | 609 | Yes |
| Durham VA Medical Center | Durham | Durham | 469 | Yes |
| Durham Regional Hospital | Durham | Durham | 391 | Yes |

Source: Hospitals-Data.com, RKG Associates 2014

HOUSING COSTS AND AVAILABILITY

Housing costs and housing availability were ranked as the second and third most important quality of life criteria in the site selection survey as shown in Table 6-1. From a statewide perspective Burlington’s housing prices are relatively affordable with a 2010 median rent of \$526 and a 2010 median owner occupied home value of approximately \$122,020 compared to \$744 and \$152,700 in the state, respectively.

RATINGS OF PUBLIC SCHOOLS

A good public school system can play a significant role in providing a solid foundation for a community’s economic development program. The K-12 education is important for training students in the basic skill sets required by employers for entry-level and semi-skilled positions. Maintaining high academic standards and rankings for the county’s school district are also important as a community attribute since they are likely to be a job-acceptance factor for potential employees considering relocation from outside the county.

There are many factors that contribute to achieving good school system results which are difficult to capture in a single metric. One indicator that is often used is standardized test scores since they allow comparability with other school districts. Table 6-4 illustrates a comparison of recent Scholastic Aptitude Test (SAT) results for public schools in Alamance-Burlington School System, North Carolina, and the country as a whole.

A graphic illustration of how the Alamance-Burlington school system compares to the State of North Carolina and the U.S. is shown in Figure 6-A. Refer to Chapter 07 for additional information.

Figure 6-A

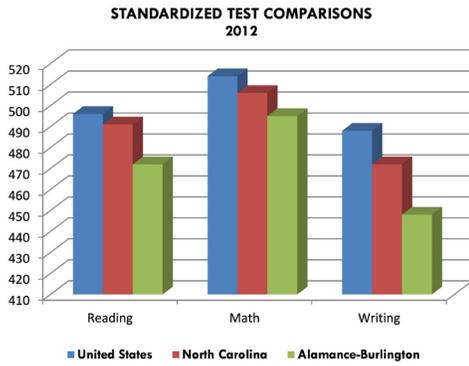


Table 6-4

Mean SAT Scores for Graduating Seniors 2012 with Comparison to 2011 Results
Alamance-Burlington, North Carolina and the United States

| Public Schools | % Tested | 2012 | | | Average Composite Scores | | |
|----------------------|----------|---------|------|---------|--------------------------|-------|------------|
| | | Reading | Math | Writing | 2011 | 2012 | Difference |
| United States | 52% | 496 | 514 | 488 | 1,500 | 1,498 | -2 |
| North Carolina | 68% | 491 | 506 | 472 | 1,475 | 1,469 | -6 |
| Alamance-Burlington | 65% | 472 | 495 | 448 | 1,418 | 1,415 | -3 |
| System as % of US | — | 95% | 96% | 92% | 95% | 94% | — |
| System as % of State | — | 96% | 98% | 95% | 96% | 96% | — |

Source: North Carolina 2012 SAT Report, RKG Associates 2014



RECREATIONAL OPPORTUNITIES

According to Burlington’s 2012 Recreation & Parks Comprehensive Master Plan, the City’s Recreation & Parks Department is “recognized as being one of the strongest and most respected Recreation & Parks Departments in North Carolina.” The Recreation & Parks system is not solely focused on athletic facilities and passive green spaces, but also includes an Amusement Park, a City-owned golf course, an Aquatic Center, several marinas, and the renovated Paramount Theater downtown. A state-of-the-art Tennis Center and a dedicated Senior Activities Center are also under the Recreation & Parks umbrella. The Department’s 2012 master plan identified a need for smaller and local parks in the system. This is consistent with community feedback for the Destination Burlington Comprehensive Plan—recreational amenities promoting active lifestyles are not spread evenly throughout the community. Adjacent Table 3-2 is extracted from the 2012 master plan and indicates Recreation & Parks current and future needs.

| PARK TYPE | Population | 2010 | 2012 | 2017 | 2022 | Existing | 2022 Need |
|---|---------------|--------|--------|--------|--------|----------|-----------|
| Regional Parks ** (10 Ac/1000) +1000 Acre Parks | 0.01000 | 505 | 519 | 550 | 581 | 10,000 + | 0 |
| Sites | | 1 | 1 | 1 | 1 | 4 | 0 |
| District Parks ** (5 Ac/1000) +/-200 Acre Parks | 0.00500 | 252 | 260 | 275 | 291 | 671 | 0 |
| Sites | | 1 | | 1 | 1-2 | 4 | 0 |
| Community Parks (5.0 Ac/1000) 45-75 Acre Parks (75ac) | 0.00500 | 252 | 260 | 275 | 291 | 177 | 114 |
| Sites | | 3 | 3 | 4 | 4 | 4 | 1-2 |
| Neighborhood Parks (1.0 Ac/1000) +/-4-10 Acre Parks (7 ac avg.) | 0.00100 | 50 | 52 | 55 | 58 | 38 | 20 |
| Sites | | 7 | 7 | 8 | 8 | 6 | 2 |
| Mini-Parks (.25 Ac/1000) .5 -1.0 Acre Parks (.1 ac avg) | 0.00025 | 13 | 13 | 14 | 15 | 6 | 9 |
| Sites | | 13 | 13 | 14 | 15 | 8 | 8 |
| Special Use Parks (no std. Acreage) | | Varies | Varies | Varies | Varies | Varies | n/a |
| Linear Parks / Greenway Trails (.4 mile/1000) | Miles 0.00040 | 20 | 21 | 22 | 23 | 8.0 | 15 |

** The acreage shown for Regional & District parks denotes Burlington's share for this type of park whether provided by municipal, county, state or other governmental body

Regional Parks: (4- sites) = Uwharrie National Forest (+50,000 ac.), Morrow Mountain State Park (+4,600 ac.) NC-Zoological Park (+500 ac.), Lake Jordan (+2,500 ac.).

District Parks: (3 sites) = Cedarock Park (+461 ac.), Shallows Ford (190 ac.) Great Bend/Glencoe (20 ac)

Community Parks: (sites) = City Park (76 ac.), Joe Davidson Park (42.5 ac.), Fairchild Park (30.5 ac.), North Park (27.4ac)

Neighborhood Parks: (Elmira (5.3 ac.), Forest Hills (5.0 ac.) Northwestern Park (8.2 ac.), Robinson Park 4.1 ac.), Southern Neighborhood Park (8.5 ac.) Willowbrook Park (6.5 ac.).

Mini-Parks Sites: (-6 sites) Dolhan Park, Daphne's Fragrance Garden, Depot/sitting space, Downtown/main street seating areas, Eva Barker Park, Petersburg Park

Special Use Sites: (-sites) =BMX Bicycle Track (Fairchild), Broad Street Gym, Burlington Tennis Center (City Park), Daphne's Fragrance Garden (Kernode Cr.), Jiggs Askew Dog Park (City Park), Lake Cammack Marina, Lake Mackintosh Marina (Burlington), Lake Mackintosh Marina (Guilford), Kernode Senior Activities Center, Mayco Bigelow Center (North Park)Maynard Aquatic Center (City Park), Paramount Theater, Springwood Park(76ac), Stony Creek Marina, Thataways Youth Center (City Park), Town & Country Nature Park,

Linear Parks /Greenways Trails: Haw River Blue Trail (Glencoe/Great Bend), Town & Country, Lake Mackintosh, Lake Cammack, Walking Tracks/paths = CityPark, Davidson, Elmira, Fairchild, Forest Hills, North Park.

Note: Acreage shown for Regional & District Parks are based on the population of Burlington and their "share" of access to these type of parks regardless of the provider

COLLEGES AND UNIVERSITIES

Burlington is well-served by quality higher education opportunities. Bigfuture.collegeboard.org lists thirty nonprofit colleges and universities within 50 miles of Downtown Burlington, including some of the most prestigious institutions in North Carolina: Duke University, Elon University, North Carolina State University, University of North Carolina (Chapel Hill and Greensboro campuses), and Wake Forest University. Six of these thirty colleges are within 20 miles of Downtown Burlington, but perhaps two of these have the greatest impact on the City of Burlington: Elon University in neighboring Elon, and Alamance Community College in neighboring Graham. Both have programs and services that operate within the City of Burlington.

Elon University was ranked by US News and Work Report as the #1 Regional University in the South in 2014, and has received plaudits from Newsweek-Kaplan, Princeton Review, Kiplinger’s Personal Finance, and the Fiske Guide to Colleges. Elon enrolled 6,305 students in six Schools covering a full range of liberal arts disciplines. Elon operates a Downtown Center for Community Engagement in Burlington.

Alamance Community College (ACC) is part of North Carolina’s 58-institution Community College System and regularly exceeds the System’s performance standards. The institution has grown 21% over the past five years and had an enrollment of 4,677 full-time equivalent student enrollment in 2011-2012. The College has 35 academic programs in four divisions and houses Cosmetology and Continuing Education courses at The Dillingham Center in the Burlington Outlet Village. The Dillingham Center also houses ACC’s Small Business Center for entrepreneurial support.

CLIMATE

While central North Carolina is often cited as having climate conditions preferable to a number of highly-populated areas of the country, climate comfort is largely subjective. Available climate data as reported by Sperling’s Best Places shows that Burlington has, compared to the United States average, more days of precipitation and greater rainfall amounts over the course of a year. Burlington also has more sunny days, though, with the downside of a greater UV index than the entire country, on average. Winter low temperatures are far higher than the US average, while summer high temperatures are only slightly higher. Snowfall is minimal, but as recent experience has reinforced, ice storms have caused significant property damage in Burlington. Burlington’s comfort index—derived from summer high temperatures and humidity levels—is quite low compared to the US overall.



Elon University



Alamance Community College (from www.stateuniversity.com)



Burlington’s March 2014 ice storm (from www.erh.noaa.gov)



Paramount Theater in Downtown Burlington



Public sculpture at Depot Square

CULTURAL OPPORTUNITIES

Burlington and Alamance County have an abundance of cultural opportunities, as described below:

- The Burlington/Alamance County Convention & Visitor’s Bureau lists over 25 unique non-recreation cultural activities and sites in Burlington and the immediate area, ranging from vineyards to historic sites to galleries and museums.
- The Visitor’s Bureau also lists over 200 churches of varying Christian denominational, non-denominational, and Mormon faiths. Places of worship for Jewish, Islamic, Buddhist, Hindu, and other major faiths are located in larger nearby communities.
- The City of Burlington lists 22 special events and festivals occurring over the course of 2014.
- The Paramount Theater in downtown hosts 8 different acting companies and in 2013 was the venue for over 40 theater events.
- According to the Alamance County Arts Council’s 2012-2013 Annual Report:
 - » There are 14 member organizations of the Arts Council
 - » 25 exhibits were staged at Arts Council venues.
 - » 11 permanent sculptures and one on-loan sculpture were placed as public art in Burlington.
 - » The Arts Council’s facility welcomed 8,000 visitors.

QUALITATIVE ASSESSMENT

As noted above, there are several quantifiable factors that influence quality of life in Burlington and Alamance County. There are also factors, however, that are influenced by residents’ perceptions, a “sense of place,” and more qualitative aspects of the physical environment. Analyzing these factors requires studying feedback from the community through surveys and interviews, as summarized below.

Small Town Feel

Comments from residents regarding their perception of Burlington generally fall into two camps: positive comments focused on the hominess of the City, and negative or neutral comments on its provincial and “sleepy” character. Hominess is conveyed with terms like “friendly, nice, convenient, quaint, comfortable” while provinciality is conveyed with “mediocre, boring, lost, ignorant, quiet, conflicted.” In terms of quality of life, both the positive and negative comments are reflective of what could be called “small town feel”—that Burlington is a place set apart from the larger metropolitan regions to the east and west, where things are slower to change. Burlington’s small town feel can boost or detract from quality of life depending on individual perceptions.

Physical Environment

The quality of the physical environment can have a profound effect on how residents perceive their own quality of life. Evidence of disinvestment and abandonment—vacant or dilapidated buildings, overgrown lots—can create discouraged feelings, while signs of vitality and investment—new roadway landscaping, a fresh coat of paint—can bolster hope. Evidence of desirable features successfully preserved can also give a lasting feeling of pride in community. Citizen comments have suggested the following about the physical environment of the City:

- Some of the most desirable neighborhoods in the City are those that combine attractive older architecture with a preserved or rehabilitated public realm, including Downtown, Glencoe Mill, Circle Drive, and other neighborhoods west of Downtown.
- The aesthetics of the City’s commercial corridors have been identified as diminishing the quality of life in the City, most notably Maple Avenue, North and South Church Street, East and West Webb Avenue, and Huffman Mill Road. Negative features include commercial signage, overhead utilities, “unfriendly” architecture, vacant or abandoned buildings, and perceptually hostile pedestrian environments.
- There is widespread appreciation for the types of beautification efforts made by the New Leaf Society for median plantings, streetscape enhancements, street trees, and public art installations.
- Blighted industrial properties are not just negative in the sense of general disinvestment, but speak to larger issues of the community’s historic loss of economic base and the perception of pollution and lack of safety. Properties along East Webb Avenue, North Church Street, and Graham Street, including Western Electric and Burlington Industries, are notable examples.

A Sense of Community

Citizens communicated a desire for a strong “sense of community.” This is often a vague notion, but important to quality of life. Participants in surveys and discussions noted that a “sense of community” is built on further success in several areas:

- Communication: an active exchange of information from different parts of the City and the City government itself about the general goings-on about town.
- Friendliness: respect and outward pleasantness amongst all the diverse populations of the City.
- Equity: the perception that all parts of the community are treated equally and fairly.
- Shared activity: events and community spaces that encourage citizens to come together, either formally or informally.
- Focus on youth: recognition that the tightness of the community can be greatly impacted by how the next generations interact with their peers.

IDENTIFIED ISSUES AND NEEDS

- Better control of crime—both actual crime and perceived lack of safety.
- Improvement to the quality and reputation of the local educational system.
- Maintenance and enhancement of the City’s recreational and cultural offerings to provide shared activities for the entire community.
- Creation of better connections—physical connections as well as outreach efforts—to Elon University and Alamance Community College.
- Preservation and promotion of the positive qualitative aspects of the community—a consistent message of Burlington’s attractive characteristics.

EDUCATION AND WORKFORCE DEVELOPMENT

07

07 EDUCATION & WORKFORCE DEVELOPMENT

OVERVIEW

The City of Burlington has ample access to public, private, charter, parochial, pre-school and higher educational institutions. That said, the City falls slightly under the state average for high school graduation (80% Burlington, 84% North Carolina) and bachelor's degree attainment (24% Burlington and 26% North Carolina). The Alamance-Burlington School District also spends considerably less than the state average on public education which presents a challenge from an educational and workforce development aspect as the City of Burlington seeks to retain residents and employers.

There are 18 K-12 schools in the City of Burlington including 15 public schools and 3 private schools. Burlington public schools belong to the Alamance-Burlington School District. There are also three charter schools operating in Alamance County.

There are 14 elementary schools, 7 middle schools, 5 high schools and 49 preschool. Burlington also has two institutes of higher education located nearby. Those are Elon University, located in neighboring in Elon, and Alamance Community College, located in neighboring Graham. Public and private schools as well as institutes of public education are active within the community. These schools and their respective locations are included within the Educational Resources Map (on page 67) at the end of this section.

EDUCATION SNAPSHOT

- Population: 49,963; 20,632 households;
- Makeup: 57.6% White, 28% African American, 0.7% Native American, 2.1% Asian, 0.1% Pacific Islander. Hispanic or Latino of any race were 16% of the population;
- Burlington Enrolled Students - 12,153 (579 Nursery School/Preschool, 777 Kindergarten, 5,296 Grades 1-8, 2,798 High School, 2,703 College/Grad School);
- Burlington Residents with a High School Degree 80%;
- Burlington Residents with a Bachelors Degree or Higher 24%.

source: 2010 US Census, 2012 ACS Community Survey

While the majority of students in the City of Burlington and ETJ attend public schools, a growing number of parents within the Burlington community are choosing private and charter schools as well as home schooling as an option. All four types of education as well as higher education, workforce development, and training are covered within this section.

ALAMANCE-BURLINGTON SCHOOL SYSTEM

School System Mission Statement:

Providing engaging work for our students will enable the Alamance-Burlington School System (ABSS) to educate all students to meet high academic standards and become responsible citizens in a rapidly changing world. Our mission statement comes alive in each of the departments that comprise our school system.

System Overview

The Alamance-Burlington School System serves 22,331 students (not all of whom are located in Burlington). Approximately half of the school population is White, and 21% is African American which has remained steady across the system. The Hispanic school population is at 22% and increasing. Another challenge within the system is the lingering issues stemming from the Great Recession. While the county's unemployment rate has dropped from a recession peak of 13.9% to 5.7% (April 2014) family income has not improved and despite the system's best efforts it remains a challenge to reach underserved populations within the community. Approximately 55% of students within the system receive free or reduced price lunches.

Poverty and increases in students with a limited proficiency in English create challenges instructionally, programmatically, and financially for the system. This is not unlike many inner-city school districts nationally.

Alamance County Commissioners control the district's education budget per NC state statute. As such, Alamance County spends \$500 less per student (\$8,524) than the state average of \$9,024—an extra \$500 per student would only bring students to an average education. This is compounded with the fact that Alamance County is bordered by higher wealth counties (Guilford to the west, and Orange, Durham and Wake to the east). While the Burlington-Alamance school system has an experienced and dedicated workforce, the disparity in salaries is a significant factor in the district's slightly higher rates of turnover and over-representation of less experienced teachers.

One thing that almost everyone agrees on is that a great public school system is a boon to quality of life, economic development, and the long-term sustainability of a community.

Success Stories

While the ABSS faces significant challenges it also has some important success stories that have been possible due to the efforts of dedicated educators and citizens alike.

- One of the greatest success stories of ABSS is that despite financial and demographic challenges, they have been able to retain effective leaders despite real and perceived barriers and have recently had increased support from key leaders in the community. Moreover, many of the schools within the district retain a good reputation and overall the educators in the district are highly regarded.
- Successful efforts to provide equity for all students in ABSS schools, some for the first time in the system's history, included Spanish courses offered in every middle school which is of the utmost importance in the new and diverse world of the 21st century.
- Art, music, and intervention teachers are in every elementary school and academic coaches are in all 36 schools.
- Over thirty Alamance-Burlington teachers received training and earned certification to teach Advanced Placement courses.
- A newly-expanded partnership between Alamance-Burlington Schools and Elon University will create more opportunities for high school seniors to earn college-level course credit while still enrolled as high school students.
- Since 2012, 100 teachers across our district have worked to develop resources for their colleagues for the new statewide curriculum—Common Core—that all schools implemented in the 2012-13 school year. Teacher leaders across all grade levels and subject areas developed pacing guides and unit plans for this major change in all classrooms, for every student. (Common Core has since been repealed by the State of North Carolina legislature and governor.)
- All principals participated in leadership development led by district administrators as ABSS continued its focus on “growing our own” leaders.
- Based upon 2012-13 results, 25 of 28 areas showed progress, thanks to targeted efforts. With all results combined, ABSS met nearly 90% of its Annual Measurable Objective (AMO) targets, or 593 of 679. Our schools met 60 of 72 total district targets, or 83.3%—a strong 16.6 percentage point increase from 2010-2011 results, with fifteen schools meeting 100% of

their targets.

- Twenty-nine of thirty-five ABSS schools earned Expected Growth status in school proficiency with 15 of those schools earning High Growth status. Eleven district schools earned School of Distinction honors, indicating that 80% or more students in these schools are proficient and the school met at least Expected Growth status benchmarks.
- For the first time, the system met or exceeded Annual Measurable Achievement Objectives (AMAOs) for English Language Learners and has exited district improvement sanctions.

source: 2013, Burlington-Alamance School System Executive Summary

PRIVATE AND CHARTER SCHOOLS

Private and Charter Schools are growing in popularity within the community. Currently there are three private schools within Burlington. Public input and research shows that these schools are good quality but are expensive, which puts them out of reach for many families. There are also three charter schools operating within Alamance County—Hawbridge School, River Mill Academy, and Clover Garden School—but none of the three are located within Burlington’s jurisdiction.

The Burlington School

One school in particular that is garnering local attention and national results is The Burlington School which was created in 2013 with the merger of the Burlington Day School and The Elon School. The Burlington School, with approximately 270 students, is an independent, nonsectarian, coeducational school. The Burlington School seeks to maintain a relaxed small school atmosphere in which each student can develop individually in an academically challenging, safe, and secure learning environment providing kindergarten to 12th grade college preparatory education.

HOME SCHOOLING

Home schooling is increasing in popularity in the Burlington community. The homeschooling population is relatively small in comparison to the entire school-aged population—only 5% (approximately 900 students).

OTHER EDUCATIONAL PROGRAMS

The Alamance County Public Libraries central library hosts a program in Downtown Burlington called “It Takes A Village.” This program is a partnership with Elon to tutor underserved students by using Elon students as tutors. Parents must be present and engaged throughout the process. To date, this program is wildly popular, serving over 300 students. In addition, the Alamance County Public Libraries staff are certified in Mother Read and the library is certified STEM Library. Mobile laptop labs, partnerships with a local wrestling group, museums, a zoo, and a planetarium, workforce classes, and a focus on underserved adults and children are all special services provided by the library system.

HIGHER EDUCATION

Alamance Community College

Alamance Community College has over 5,000 students and is located in neighboring Graham. Alamance Community College provides educational and workforce developmental opportunities to the greater community with a focus on the development, planning, and delivery of quality educational and technical programs, and services and training to Alamance County business and industry. The program's main purpose is to provide training services to local business and industry through two unique avenues, the Customized Training Program and Open Enrollment Courses classroom training activities. Alamance Community College continues to be an asset for the community and provides an important opportunity center for education and training.

Elon University

Elon University has approximately 6,305 students and is located in the neighboring Town of Elon. Elon is a well-known and high-ranking private liberal arts university known for its pharmacy, law, business, arts and sciences, and communications programs. Elon continues to partner with organizations within the Burlington community and downtown and seeks to continue growing its presence in the community.

WORKFORCE DEVELOPMENT PROGRAMS

Current programs include the workforce development program at Alamance Community College, the Alamance Regional Partnership Workforce Development Board, C-Tech Center, Career Centers, and North Carolina Workforce Development Training Center. These programs provide valuable workforce education and training within the community. Workforce development programs should be informed by needs shown by employment data and economic development.

Analysis of the Economic Base Analysis (page 23) and Industry Cluster Analysis (page 25) suggests workforce development training/programs should keep pace with growing sectors within the Burlington area.

Growing Economic Sectors

- Health Care and Social Services (training includes: Nursing/CNA, Social Work, Law Enforcement, etc.);
- Manufacturing (Digital Fabrication, Machine Tech, Supply Chain Management, etc.);
- Retail and Hospitality (Hospitality and Food Management, Retail Management, Accounting, etc.);
- Education (teachers and teaching assistance, etc.)

While other sectors are of importance, economic and employment analysis suggests these areas are to increase in jobs within the future. Workforce development is important to every community and is a direct factor on the health and quality of life exhibited by a community. Workforce development also directly effects educational attainment for dependents.

PRELIMINARY GOALS

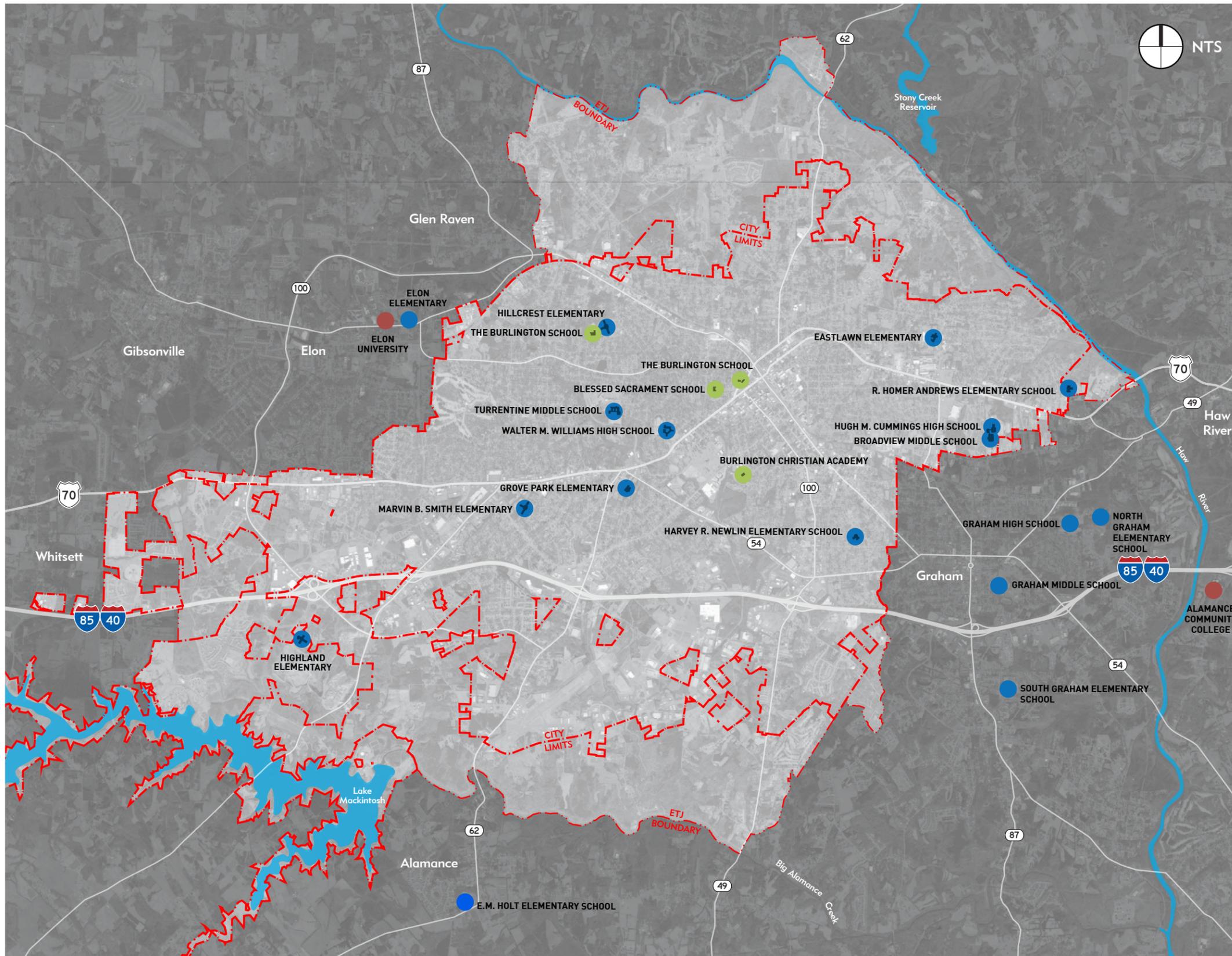
- Improve education and workforce development options within the community through supporting initiatives by K-12 schools to address student needs, increase graduation rates, and ensure that each student has the basic skills to successfully enter the workforce.
- Work in partnership with the local workforce development programs through the public school system and Alamance Community College to address the education and training needs of the local workforce and employers.
- Improve communication between educational institutions, vocational training providers, and economic development groups across the region.

Local elected officials should:

- Provide leadership in making appointments to the Workforce Development Board and in setting workforce area strategies and goals. Communicate regularly with and hold accountable Workforce Development Board representatives.
- Participate in and promote meetings with local employers to discuss workforce needs.
- Support economic innovation.
- Organize and nurture regional industry clusters. This organization can strategically target investment decisions and reduce duplication of efforts.
- Provide leadership and support funding an economic development strategy with a regional industrial/business cluster analysis and retention and expansion of current and new businesses.
- Support a regional economic development listserv so efforts can be coordinated between multiple groups to reduce duplication.
- Support the experimentation and creativity that is needed to produce commercial innovations. Success stories should be publicized to help educate the region and potential investors about the value of innovation.
- Expand and link innovation-related training.
- Reorient philanthropic giving toward innovation.



Engaging with students during the process of identifying the name Destination Burlington,



Educational Resources Summary Map

| | | |
|---|-----------------------------------|---------|
| ● | Burlington-Alamance School System | Schools |
| ● | private and parochial schools | |
| ● | higher education institutions | |
| <hr/> | | Areas |
| | Extra-territorial Jurisdiction | |
| | Burlington city limits | |

IDENTIFIED ISSUES AND NEEDS

Public schools:

- Financial motivation for qualified teachers leaving city schools for other school systems.
- Libraries: limits of funding and staffing—five branches, two of which are in rural areas and not open full time.
- County Commission has a “good enough” attitude—not enough for successful education. The Commission wants buildings maintained, but without budgeting money to do so—no progressive facilities, technology. Public school staff, Board, and the County Commission need to work together. It’s Hard to have a “looking forward” approach with a “looking backward” leadership.
- Jobs moving away from downtown a problem.
- Disparity in regard to equal educational access and quality.

Relation with Business Community:

- Economic stakeholders are very important—currently people they want to hire are from outside the area. The state of the education system is very important in recruiting.
- Need to keep the workforce from drying up and becoming unqualified.
- Need to capitalize on the local entrepreneurship presence.
- Business leaders supportive of C-Tech program in East Burlington.
- Departure of LabCorp from downtown a huge opportunity to use downtown space for Elon programs.

Investment in Education:

- Peer communities doing it right: Chapel Hill schools have more money.
- Burlington spends \$500 less per student than the state average of \$9,024—an extra \$500 per student would only get them to an average education.
- Almost everyone wants a great public school system.

CHARACTER
AND IDENTITY

08

08 CHARACTER AND IDENTITY

OVERVIEW

The history of Burlington is a narrative straight out of the Industrial Revolution—built by railroads and made rich by textile mills. This industrial narrative continues into the 20th century in a way similar to centers of industry in the North and Midwest: a double-edged legacy of industrial heritage with underutilized mills and aging neighborhoods but also attractive historic districts and a strong, enduring Downtown. Like the early cities of the Industrial Revolution, Burlington has been blessed by an attractive agricultural hinterland with the Haw River and Great Alamance Creek punctuating the landscape. The City's central location is an advantage that was just as significant to the railroad in the 19th century as it is in the diversified economy of the 21st century.

HISTORY

The original community now known as Burlington was founded as a railroad repair and maintenance site: In 1856, the North Carolina Railroad established "Company Shops" two miles west of Graham (the county seat, which declined to be home to the railroad). Roughly the geographical center of the rail line, Company Shops included the railroad's maintenance and repair shops and its central headquarters. Company Shops was incorporated as a town in 1866, consisting of industrial-style shops, a round house, freight station, passenger depot, worker housing, and railroad office buildings. Fancier housing for railroad officials and a grand hotel were also constructed. In time, the community became a market center for local agriculture, with the railroad selling land to people to set up market enterprises.

The community of Company Shops diversified with new industries: shoes, chairs, wheels and guns. In 1886, the railroad—now Norfolk Southern Railroad—moved its repair and maintenance shops to Virginia and railroading no longer employed area residents. The name "Company Shops" was obsolete, "and so, for no apparent reason other than it was euphonious, a group of town fathers met the following year and changed its name to Burlington." (source: quote from National Register listing for Downtown historic district)

Burlington's reign as a national leader in the textile industry began in 1880, when the first charter to operate a cotton mill in the town was obtained by Peter F Holt. Three more Holt cotton mills later, the transition from Company Shops to the textile capital of Burlington was complete, around 1890. Three years later, Burlington incorporated as a city. In 1896, the first hosiery mill was founded; the "Burlington Mills" produced knitwear, sheet goods and yarn. Meanwhile, the city's population increased 110% between 1890 and 1900. A commercial building boom occurred when professionals, tradesmen, merchants, and clergymen flocked to the area. The civic motto was "Bigger, Better Burlington," and Burlington became a major contributor to North Carolina's cotton economy for half a century. By the 1920s, 18 hosiery and finishing mills and 7 cotton mills existed in Burlington. The biggest venture began in 1924 with the founding of Burlington Mills—now Burlington Industries—and took advantage of the development of synthetic fiber. Burlington Mills became the largest weaver of rayon in the US, and produced more than 50 products for the government during WWII. By 1971 Burlington Mills had 132 plants in 92 countries, putting Burlington on the world map. Textiles still prevailed until the early 1980s, when a severe recession struck. Burlington continued to hold a significant place in the textile world as outlet shopping became a major retail trend, but that too has waned as outlet stores have decamped to newer facilities.

HISTORIC RESOURCES: DISTRICTS AND LANDMARKS

The City of Burlington has the following registered or identified national and local historic resources:

- 7 National Register of Historic Places Districts, 2 of which are also locally-designated districts
- 14 National Register Landmarks, 2 of which are also local landmarks

- 1 additional local landmark that is not nationally registered

The Districts and Landmarks have been identified in the following sections.

Districts

- | | |
|--|-----------------------------|
| • Glencoe Mill & Village | Listed locally & nationally |
| • West Davis / West Front / Fountain Place | Listed locally & nationally |
| • Downtown Burlington | Listed nationally only |
| • East Davis Street | Listed nationally only |
| • Lakeside Mill & Village | Listed nationally only |
| • Beverly Hills | Listed nationally only |
| • South Broad-East Fifth Streets | Listed nationally only |

Landmarks

- | | |
|---|-----------------------------|
| • Alamance Hotel | Listed nationally only |
| • Atlantic Bank & Trust Co. Building | Listed nationally only |
| • Dentzel Menagerie Carousel | Listed locally & nationally |
| • Efird Building | Listed nationally only |
| • First Baptist Church | Listed nationally only |
| • First Christian Church | Listed nationally only |
| • Holt-Frost House | Listed nationally only |
| • Charles M Horner House | Listed nationally only |
| • Mayor Earl B Horner House | Listed nationally only |
| • Southern Railway Depot | Listed locally & nationally |
| • St. Athanasius & Church of the Holy Comforter | Listed nationally only |
| • Stagg House | Listed nationally only |
| • US Post Office (former) | Listed nationally only |
| • Windsor Cotton Mill Office | Listed nationally only |
| • Minter Coble House | Listed locally only |



Glencoe Mill Village, a locally and nationally designated historic district



Fountain Place, from a historic postcard (from www.cardcow.com)



Alamance Hotel, one of Burlington's many nationally-designated historic landmarks (from www.cardcow.com)

The Burlington Historic Preservation Commission (BHPC) has the authority to review architectural changes for only the locally designated districts and landmarks. This is an important distinction to note, as so many of Burlington's historic assets are only listed on the national level. The North Carolina State Historic Preservation Office states that:

[Local] Historic district designation is a type of zoning that applies to entire neighborhoods or other areas that include many historic properties. The zoning provides controls on the appearance of existing and proposed buildings. Designation is an honor, meaning the community believes the architecture, history, and character of the area are worthy of recognition and protection. Historic district zoning can help to improve property values by stabilizing and enhancing the neighborhood's character, and it benefits property owners by protecting them from inappropriate changes by other owners that might destroy the special qualities of the neighborhood.

By not locally listing these historic assets, the City loses an opportunity to guide redevelopment and rehabilitation with strong design regulations, as preferred by the vast majority of Community Survey respondents. It also leaves the City essentially powerless to prevent radical changes to or demolition of these historic resources.

HISTORIC PRESERVATION

The 1991 Burlington 2000 Comprehensive Plan outlined the early timeline of historic preservation in the City, starting in 1980 with the formation of a Historic District Commission, the first local listing of a historic district in 1987—West Davis-West Front-Fountain Place Historic District—to the assumption of regulating duties by the Commission in 1988. The Plan discussed the following needs regarding historic preservation:

- Older residential buildings are located in declining neighborhoods. Need protection to stabilize neighborhoods like East Davis Street, Plaid Mill Village, Rainey Street, Tucker Street/Cameron Street.
- Historic buildings in commercial and industrial areas need to be preserved and restored, like North Main Street Company Shops Business District.
- Increase community awareness about social and economic benefits generated by preservation, like tax incentives, tourism, and local pride.

Strategies offered for dealing with these needs included approving designation of appropriate historic districts and properties, promoting adaptive reuse of buildings, encouraging compatible infill development, and financing eligible rehabilitation through a Community Development program. Early preservation focus was on central and eastern Burlington—no historic preservation targets were noted in the south or west areas of Burlington (acknowledging that these areas were more recently developed). The follow-up 1996 Southwest Area Plan noted that 85 of 92 archeological sites found during a Wake Forest University survey in the City in 1975 are now under the impounded Lake Mackintosh.

It is important to note that the needs discussed in the 1991 Plan have seen progress in the twenty-three years since it was published. East Davis Street Historic District and Beverly Hills Historic District have both been added to the National Register of Historic Districts (Beverly Hills includes Rainey Street). National designation of the Lakeside Mill & Village Historic District sought the preservation of part of EM Holt's large Plaid Mill operations. The Tucker Street/Cameron Street area does not currently have a district, but nearby, the South Broad-East Fifth Street Historic District has been established. While North Main Street has still been largely unrecognized as a district, the historic Company Shops has been adapted for use as Burlington's Amtrak station. In regards to awareness, social and economic benefits, and local pride, Burlington needs look no further than the preservation efforts at Glencoe Mill Village to understand the impact historic preservation can have—the complete rebirth of a historic neighborhood into a cultural center and recreational hub for the Haw River Trail, all with new property owners contributing to the local economy. Glencoe Mill Village has become one of the most sought after attractions of the region.

Stakeholders have noted that the rehabilitation of other former industrial properties like Glencoe Mill is difficult. The development community sees Glencoe Mill Village as a success in large part due to its isolation—it has a very identifiable, singular character set apart from its leafy surroundings. Other mill areas in the City, though, do not have the same kind of singular identity—they are an integrated part of the surrounding urban fabric. Company villages that used to surround the mills lost their distinct identities once the mills closed, and now the neighborhoods falter. Mill renovations cannot alone be given the responsibility of lifting up a neighborhood—there must be more widespread investment and growth of economic health in an area in order for large mill rehabilitations to be sustainable. Also, there are simple technical problems with many of Burlington's former industrial properties—their condition and geometry often do not lend them to easy rehabilitation for alternative uses.

DOWNTOWN

The community engagement program for Destination Burlington has revealed a community with a very complex relationship with its Downtown. There is widespread agreement that Downtown is the symbolic heart of the City and deserving of exceptional focus, but there are mixed feelings on how successful Downtown is and can be in the future. Downtown is the location of many citizens' favorite places, including Main Street, Depot Square, Company Shops Market, Company Shops train station, Front Street, and the Paramount Theater. Many also find it frustrating, though—a perception of too little parking, too few restaurants and attractions, not enough vibrant activity. While many are appreciative of LabCorp's investment in Downtown, there is also some reservation about how the company uses ground-floor storefronts as offices. With LabCorp also drawing down its workforce in Downtown, there is concern about the future of the district. And yet 74% of respondents of the Community Survey see Downtown as the greatest opportunity for development and redevelopment in the City—Downtown is seen as an area of great, though currently unrealized, potential.

In 2008, the Burlington Downtown Corporation produced the Downtown Burlington Master Plan to visualize the future of the City's core—a Municipal Service District with additional levied taxes to provide specific services. Goals of the Plan included:

- Continue to leverage position between Triad and Triangle to attract diverse economic development activity and investors in downtown.
- Reinvigorate downtown.
- Generate renewed pride and vitality in downtown.
- Reconnect local residents and regional investors with opportunities in downtown.
- Brand Burlington as "A Downtown that Works."
- Expand residential, office and retail success in downtown.

The study looked at roadway and sidewalk sections, parking issues, public realm improvements, public art programming, appropriate redevelopment and infill sites, and potential zoning obstacles. Strategies for the future included:

- Develop special financing for purchase and rehabilitation of structures.
- Raise awareness about tax credit opportunities in national historic districts.
- Develop info sheets for each vacant/underutilized property in downtown
- Identify and appropriately develop infill sites.
- Enhance visibility and use of land around the Depot building, like a dining plaza and a festival lawn.
- Adopt regulations that restrict demolition downtown.



Depot Square at the foot of Main Street



LabCorp properties along Main Street



Company Shops Market Co-op on Front Street



There is some multi-family apartment housing already in Downtown



The Company Shops Station, with Amtrak service, is one Downtown highlight



LabCorp's Downtown headquarters represented a huge investment in Downtown's future

- City code officials should familiarize themselves with the state rehab code to better guide development of existing buildings.

A slew of studies and plans have followed, including a streetscape plan, parking plan, public art program, wayfinding strategy, and branding strategy. Burlington's Downtown is well served by planning consideration.

At the Community Visioning Workshop, attendees identified two major Downtown issues they wanted to see addressed by the Comprehensive Plan. The first is linking North Main Street back into the core of Downtown. In fact, there seems to be a great deal of love for the historic depot at the foot of Main Street—an image of it ranked quite highly in the Visual Preference Survey—but widespread dissatisfaction at its relocation to its current site, segmenting Main Street and isolating the area around the Amtrak station from the rest of Downtown. Second, the community wants to encourage more housing in Downtown, including apartments above businesses. That creates the mixed-use environment that supports the kinds of restaurants and cultural opportunities the community wants to see, including the Company Shops Market Co-op, which happened to be the overall highest-rated image in the Visual Preference Survey.

Much has been said about Downtown during the Community Engagement efforts of Destination Burlington. These comments include the following:

- Returning youth are blown away by Downtown's character.
- Elon University has aspirations for a larger presence downtown—this could be a catalyst for revitalization.
- More downtown housing is needed.
- Live, work, and play need to be emphasized and embodied downtown to increase the draw to the core and surrounding neighborhoods.
- Downtown redevelopment is a huge opportunity given the exodus and reduced role of LabCorp downtown over the next year.
- The health of the neighborhoods around the inner ring of Downtown is very important.
- Downtown only seems active during occasional events and festivals; compared to more vibrant cities worldwide, Burlington has a "dead" Downtown.
- Anticipate some residential rehab development in Downtown, and also new building on parking lots; some conversion of retail to housing is already occurring.

GATEWAYS AND CORRIDORS

Few physical features have as great an impact of the perception of a city's identity as the gateways that mark its significant entrance points and the corridors that lead you from the gateways into and through the city.

Gateways

Interstate 40/85 has been a mixed blessing to Burlington—it is simultaneously one of the City’s greatest regional economic assets and yet one of its biggest aesthetic detractors. The type of development most readily attracted to Interstate highway exits—auto-centric, generic, placeless—undermines the potential benefit of these ready-made, high-impact gateways. City staff, Steering Committee members, and the wider community of Burlington all identified the Interstate highway exits into Burlington as the most significant—and most potentially deleterious—points of entry into the City. In particular, the Maple Avenue exit, which current highway signage indicates is the preferred route to Downtown, was regarded as the least preferable gateway to represent the character of Burlington. Unattractive and dingy buildings—particularly the Burlington Outlet Village—traffic congestion, a disorienting intersection geometry, and wide expanses of surface parking combine to create a hostile environment for visitors entering the City. The Huffman Mill Road exit is also cited as giving the City a negative impression to visitors. Both the University Drive and Alamance Road gateways are, in contrast, considered much more positive entry points to the City, University Drive because of its relatively fresh retail environment and new roadways, and Alamance Road because the extent of highway-oriented development has not yet caught up with the highway exits to either side. Members of the community have advocated Alamance Road—or even a possible new exit on Tucker Street—become the signage-directed route to Downtown from the highway.

Many other gateways exist on major routes leading into the City, and some are notable for a very distinct landmark or environmental transition. The gateway on Webb Avenue from Elon is one such example—the railroad bridge over Webb Avenue coincides with the City limits and a significant grade change so that a visitor “arrives” in Burlington after experiencing part of its historic, railroad-dominated heritage. The railroad serves as a similar but less emphatic threshold at Front Street from Elon and Graham Hopedale Road from Graham. Haw River marks a major transition into the City from the east on Church Street, especially because the land around the Route 70 bridge into the town of Haw River remains largely undeveloped up to the City limits. The gateway on Church Street on the western edge of the City lacks the major threshold of a river, but development intensity leading up to the intersection with Williamson Avenue changes quite abruptly, signifying a point of arrival.

Burlington’s other gateways are less conspicuous, particularly those from the north and from Graham. The urbanized areas of Burlington and Graham are contiguous, and the boundary between the communities along a number of minor streets is often imperceptible. There is an opportunity, however, to formalize a gateway at the East Webb Avenue border between the two cities so there is a distinct transition from one city to the other on a major route. To the north of the City limits, there is little acknowledgement of Burlington’s boundary—the sparse



Gateways into the City from the Interstate are seen as very significant in communicating Burlington’s character



Maple Avenue and its gateway from I-40/85 is a particularly unattractive City entrance



The railroad bridge on West Webb Avenue presents a great gateway opportunity (from Google Maps)



Huffman Mill Road is a quintessential suburban commercial strip



The Webb Avenue corridor suffers from disinvestment and resultant blight



Streets like Grand Oaks Boulevard present new opportunities for attractive corridors (from www.newleafsociety.org)

suburban nature of development inside the City and outside in Burlington's ETJ is seamless. In these areas, opportunities for enhanced gateways exist at significant intersections or stream crossings. These intersections may be well within the City limits, but represent the best locations to use public realm improvements and new development to create a sense of entry into the City.

Distressed Corridors

There is a direct relationship between the character of the City's gateways and the corridors that connect them to other areas of the City. Distressed corridors are those that the public has identified as projecting a negative character of the City, either due to the type, character, or age of development along the corridor, the design of signage, the condition of the roadway, the lack of public realm amenities, or some combination thereof. Community feedback identified the City's most distressed corridors as follows:

- **Maple Avenue:** The negative perception of this corridor goes hand-in-hand with its principal gateway at the Interstate. Where not plagued by the aesthetic chaos of overhead utilities and huge commercial signage, the roadway is a bleak and uninviting entryway to Downtown.
- **North Church Street:** US Route 70 heading east of Downtown best underscores the difficulties Burlington has with aging commercial and industrial land uses along this auto-dominated strip.
- **East Webb Avenue:** In many ways, East Webb Avenue is the North Church Street of an earlier generation—narrower, with smaller and less intense development, but still projecting a bleak image of the neighborhood.
- **West Webb Avenue:** The west end of Webb Avenue is quite a unique corridor due to the presence of the rail line, its pairing with Park Avenue, and the radical differences in character from Downtown to the border of Elon.
- **South Church Street:** One staff member noted that South Church Street could become the next North Church Street within a decade or so—its development is more recent, but it exhibits many of the hallmarks of imminent disinvestment, including low-rent retail.
- **Huffman Mill Road:** This corridor is the quintessential suburban commercial strip, complete with an aging shopping mall, big box retailers, car dealerships, fast food chains, motels, and tucked-away garden townhouse apartments.

Opportunity Corridors

Opportunity corridors are connections through the community that are generally underutilized or have not been considered as significant contributors to the City's character, but have great potential to serve in a positive role if design standards

can be employed and enforced. Community input has indicated a number of Burlington corridors that should be considered in this way, including but not limited to:

- Mebane Street: Graciously designed but underutilized, this thoroughfare was noted as an attractive corridor into Downtown and an unleveraged asset.
- Front Street: The community sees Front Street as the most desirable link to Elon University, with great potential as a major bicycle connection.
- Chapel Hill Road: NC Route 54 cuts across a number of southern Burlington’s different urban landscapes, and because it does not connect directly to the Interstate, it is less at risk for rampant auto-dominated development.
- Rauhut Street: NC Route 62 is the primary connection to the popular attraction of Glencoe Mill Village and has a distinctly rural character that can be preserved as an attraction in its own right.
- Graham Hopedale Road: A primary route across the eastern neighborhoods of Burlington, Graham Hopedale Road is marked by a number of potential redevelopment opportunities that can dramatically improve the character of the corridor.
- University Drive/Grand Oaks Boulevard: In terms of roadway design and attraction of new development, this corridor is largely seen as a success story. Reinforcing development design standards is important for the continued success of the corridor.

QUALITATIVE ASSESSMENT

Throughout the course of the Community Engagement program for Destination Burlington, members of the community have had much to say about their perception of the City’s character and identity. Here are some of the most common notions of Burlington:

- Family-oriented: parks, trails, playgrounds, schools—a great place to raise kids. Some would call it a bedroom community in between the Triangle and Triad—a nice place with low taxes, good schools, low crime, and a good quality of life.
- Small-town atmosphere.
- Exemplifies “Southern”: trees, parks, flowers, and architectural style.
- A balanced community—a mix of old and established with new and forward-thinking; a balance between rural and commercial; a blend of lifestyles.
- A well-positioned community from a workforce, higher education, employment, and logistics standpoint.
- Lacking in character. With no more train or textiles focus, some wonder what is Burlington’s “brand.”
- The City is often seen as a blue collar mill town—“Durham’s little sister.”
- City seems non-progressive and not youth-friendly.
- It’s a fragmented community—there are pockets of community but not an overall sense of community. There is not a place for everyone. Burlington is friendly, but has noticed a big divide between west (with progress and revitalization) versus east (where there is little attention). The difference between East and West is a real issue. East Burlington seemed “left behind” when other areas of the City were progressing.

Please refer to Chapter 06 for further assessment of Burlington’s character by the community.

THE CAROLINA CORRIDOR

The Alamance County Chamber of Commerce has taken a step towards defining a new role for Burlington and the rest of the County in the regional picture. Called “The Carolina Corridor,” this role takes advantage of Alamance County’s domination of the stretch of

Interstate highway where two of the most significant Southeast economic corridors—I-85 from Richmond to Montgomery and I-40 from Wilmington to Memphis—combine between the Research Triangle and Piedmont Triad. Similar to the time of railroads, this centrality positions Burlington well for commerce. This can be more than just an economic repositioning, however—this can be a way that Burlington distinguishes itself from its neighboring metropolitan centers. Burlington, which anchors its own Metropolitan Statistical Area, can be seen as both conveniently close to the assets of those other cities and also a world apart—where a small-town, family-oriented, distinctly Southern city-state steeped in industrial history has a desirable allure all its own.

Please refer to Chapter 09 for more discussion of Burlington’s regional identity.

IDENTIFIED ISSUES AND NEEDS

- Continue to promote historic preservation as a way of celebrating Burlington’s heritage. Consider local historic district designation as a tool for greater public control of the City’s built environment.
- Use historic rehabilitation as one element of a more integrated approach to neighborhood redevelopment.
- Reinforce the significance of Downtown by making it a focused area for redevelopment, including residential opportunities along with commercial and civic uses.
- Better define gateways into the City and manage their character to reflect positively on the City.
- Address the negative character of distressed corridors and take advantage of the opportunities offered by underutilized corridors.
- Put forward Burlington’s advantageous regional location and singularity as a significant force in shaping its identity.

REGIONAL
ISSUES

09

09 REGIONAL ISSUES

ANNEXATION

Burlington's Annexation History

Burlington's municipal boundary did not change significantly for the first seven decades after its incorporation as Company Shops in 1866. What started as a 1.5-mile square in the 19th century expanded concentrically through the middle of the 20th century, reaching the boundaries of Graham in the east quite quickly but continuing to push outward in the west, south, and north. The construction of Interstate 85 in 1960 gave the City a new edge condition with economic potential to aim for, and quickly the city limits had extended to the northern edge of the highway. This era also began a more westward focus of acquisition. From the 1980s through to the new millennium, the City continued a southwestern trajectory with the acquisition of the southern edges of Interstate 85 and large—but fragmented—parcels in the area between the Interstate and US Route 70. Burlington also annexed land from Guilford County during the first decade of the 21st century, including the area around Springwood Park and the large Mackintosh on the Lake residential development. Acquisitions by the City in the last several years—especially since the change of annexation laws in the state—have been strategic, including the protection of important assets like Lake Mackintosh, Burlington-Alamance Regional Airport, and Alamance Regional Medical Center.

Economic stakeholders in the City indicated that annexation was not an immediate concern—new development often led annexation and utility extension, and the City simply acted in response. Others have suggested that a number of autonomous municipalities in the region are too small to operate their own city services and should be absorbed by the City. As indicated by the current Extra-territorial Jurisdiction areas of the City, further annexations outward are largely limited to the north and south edges of the current City boundary; Haw River and Graham in the east and Elon in the west present relatively fixed obstacles to movement in those directions. Many “islands” of un-annexed property still exist within the City, however.

The Annexation Reform Act of 2011

In June of 2011, the North Carolina State Legislature markedly changed the way that the State's municipalities could annex property into their municipal boundaries. From 1959 until the law passed, municipalities could initiate involuntary annexation of adjacent properties if the property met certain criteria regarding logical extension of municipal boundaries, ability of the city to provide municipal services to the area efficiently and cost-effectively, and level of existing or proposed urbanization. Voluntary annexation was initiated by petition of local landowners that was approved—or not—by the city.

In her February 2012 white paper “What North Carolina's Annexation Law Reforms mean to You,” Jeanette Doran outlines the major changes enacted by the 2011 law, paraphrased below:

- Procedural obstacles and disincentives were included into the process of involuntary annexation.
- The criteria for determining level of urbanization of the annexed area were made stricter.
- Certain time limits apply for providing municipal services to the annexed areas.
- Property owners in the areas to be annexed not only have an appeal process, but can stop annexation for three years through petition.
- The approval of some voluntary annexations may be made mandatory for the city; others may be initiated by non-owning property residents.
- Annexation of property with bona fide farm uses are precluded without property owner approval.

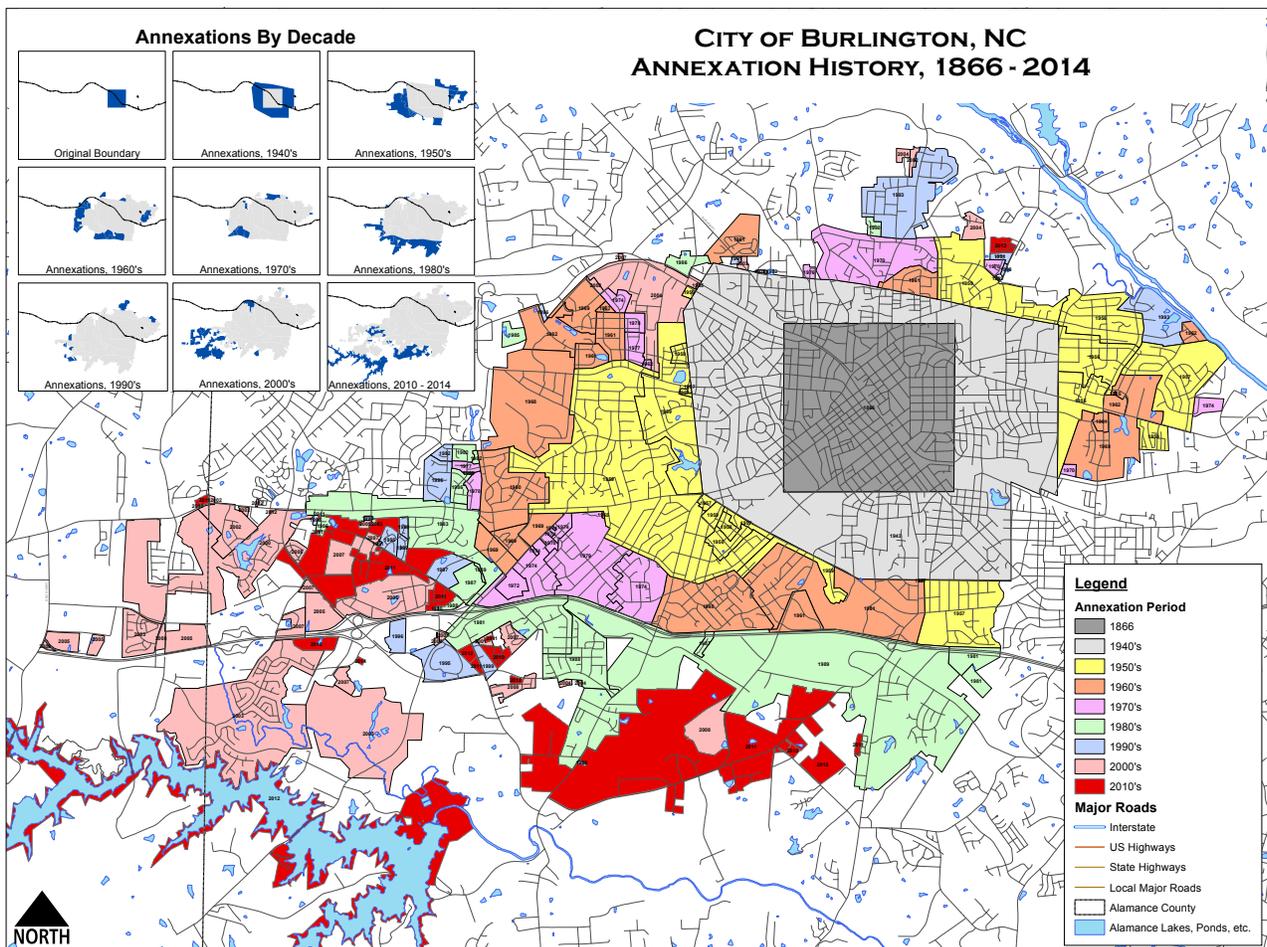
The 2011 law has resulted in a regulatory environment in which North Carolina cities must be evermore deliberate and shrewd in their annexation efforts. Extensions of the City limits to protect special assets of the City—the Lake Mackintosh water supply, for example—represent such targeted, strategic moves.

Annexation Agreements

Burlington currently holds annexation lines of agreement with the neighboring municipalities of Elon and Greensboro. These negotiated agreements typically set a defined line over which neither neighboring municipality can annex land; this gives each community a level of certainty while planning future extensions of services for the period of time set forth in the agreement. Burlington’s agreements with both Elon and Greensboro are long-standing and have been renewed in recent years.

EXTRA-TERRITORIAL JURISDICTION (ETJ)

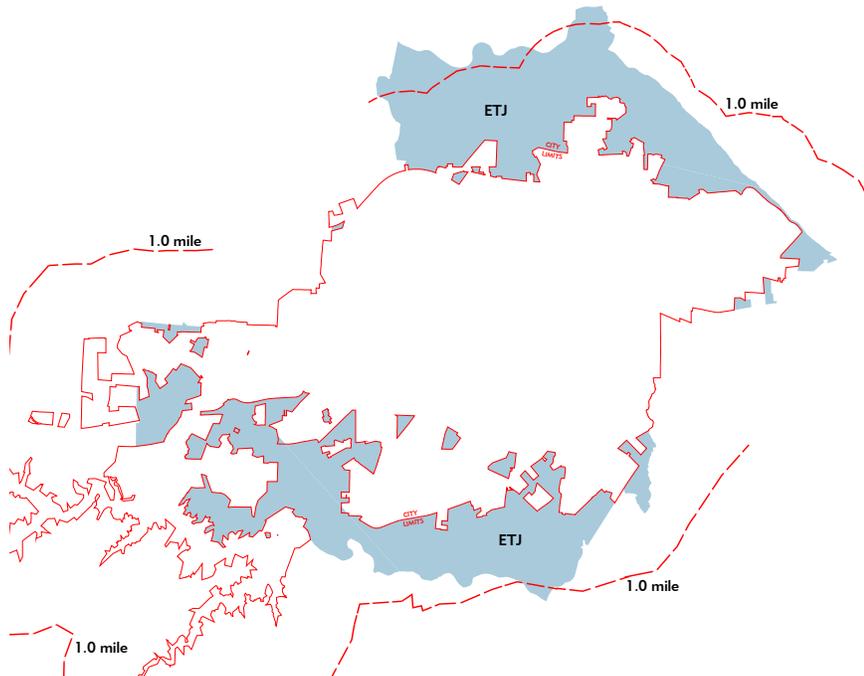
Extra-territorial Jurisdiction is an area outside the incorporated city limits of a municipality that is subject to that municipality’s land use and development regulations. By regulating within the ETJ, a city can control the development of areas that are liable to require municipal services and be annexed voluntarily or involuntarily into the city. This can also smooth the transition between county and municipal services. In North Carolina, incorporated municipalities may exercise ETJ authority up to one mile from



their corporate boundaries; with approval of the county, a city of Burlington’s size could extend its ETJ up to three miles from the corporate limits.

Currently, Burlington’s ETJ boundary is over 1.5 miles from its corporate boundary in some locations. Where not defined by the edge of an adjacent city or its ETJ, Burlington’s ETJ is largely defined by Big Alamance Creek to the south and Haw River to the north. This is generally consistent with the recommendations of the Burlington 2000 Comprehensive Plan. The inclusion of Lake Mackintosh and other nearby Guilford County properties into the corporate boundaries has disrupted the clarity of the Burlington 2000 recommendations but also opened up new territory for possible ETJ extension south and west of the lake.

The City of Burlington shares a municipal boundary with six other incorporated communities: the Village of Alamance, Town of Elon, Town of Gibsonville, City of Graham, Town of Haw River, and Town of Whitsett. Of those six communities, all but Whitsett also have their own Extra-territorial Jurisdictions which border on Burlington’s municipal boundaries or ETJ. Burlington also touches Greensboro’s ETJ along the western fingers of Lake Mackintosh. As noted above, Burlington currently has annexation lines of agreement with only Greensboro and Elon. The recommendations to form agreements with Haw River and Graham outlined in the Burlington 2000 Comprehensive Plan appear to not have been executed.



Burlington ETJ expands beyond 1-mile buffer in select areas

ALAMANCE COUNTY

Alamance County provides many important services to Burlington and other County communities and establishes a level of connection between these communities and the adjacent rural areas. Although Graham is the official County seat, Burlington is the County’s leading presence and the partnership between the City and County is very important.

County Government

County governments in North Carolina are a way to ensure that citizens living outside municipal boundaries and ETJs still have access to standard services from the government. These services include:

- a court system and public safety protection through a sheriff's department and county jail
- a registry of deeds, licenses, and certificates
- building and health inspections
- a board of elections
- medical and social services
- solid waste disposal
- funding for public schools

Counties have the power to own property, levy taxes, and enter into contracts in order to support these services mandated by the State. Counties often will provide additional services above those mandated. Alamance County, for example, operates its own recreation and parks system, library system, planning department, and Geographic Information System (GIS). Some services the county will only provide in unincorporated areas to prevent duplication of services with municipalities. One stakeholder comment during the Community Engagement process suggested the consolidation of duplicated or regional services provided by the County—parks, transportation, and education.

Alamance County Planning

Alamance County's Planning Department, like Burlington's, has also been active in producing plans and studies in the 21st century, including the 2007 Recreation and Parks Comprehensive Master Plan, 2007 Alamance County Land Development Plan, and 2003 Destination 2020 Strategic Plan. These plans recognize that the larger municipalities in the County—particularly Burlington, Graham, and the other urbanized areas along I-40—have the resources and local knowledge to conduct planning activities on their own. Alamance County's role, then, has been the support of more regional assets, like the Haw River Trail and District Parks, while setting overall policy goals and strategies that tie together the plans of County communities.

Alamance-Burlington School System

The public school system is a vital service provided by the County. Community Survey respondents suggested that the educational system was the most valuable public service in their community, and education in general was indicated as one of the significant issues related to community health. Because of the importance of the education system, a separate chapter of this report has been devoted to it—please refer to Chapter 07.

Alamance County Transportation Authority (ACTA)

ACTA was established by the County in 2002 to provide transportation services for the elderly, disabled, and general public of the County. ACTA does not operate a fixed-route bus system; it provides scheduled trips by request during the workweek for a flat fee. Recognizing that much of Alamance County is a dispersed, rural population, this type of public transportation may be fitting for the majority of the County. For Burlington, Graham, and nearby municipalities, however, ACTA is unable to provide the type of service most useful for a concentrated urban population. For this reason, Burlington has recently approved the creation of a new fixed-route transit system.

Chamber of Commerce and Regional Identity

The Alamance County Chamber of Commerce (and the Convention and Visitor's Bureau as a division therein) operates on the County-wide level to provide resources and support for business growth, industry attraction and retention, and promoting the growth of tourism in the area. The Chamber of Commerce is responsible for re-casting the economic identity of the County as "The

Carolina Corridor,” a region well-connected by Interstate highways, airports, and railroads and advantageously situated between the Piedmont Triad and Research Triangle metropolitan groups, but offering distinct amenities, resources, and community character. The Carolina Corridor positioning stresses the diversity of the local economy—gone are the days when only the railroads or textile industry dominated. Refer to Chapter 08 for more discussion on The Carolina Corridor.

REGIONAL GOVERNMENT

Piedmont Triad Regional Council

Burlington and Alamance County are part of the Piedmont Triad Regional Council (PTRC), one of North Carolina’s 16 regional councils of government. The PTRC has 72 member governments and spans 12 counties surrounding the Piedmont Triad cities of Greensboro, Winston-Salem, and High Point. Regional Councils are regarded as local governments, but without taxing or police authority. PTRC is funded by 75% federal funds, 17% state funds, and 8% local funds through dues and service fees. As one of the major cities of the region, Burlington is guaranteed a seat on the Council’s Executive Committee.

As noted in Chapter 05, PTRC serves as the region’s Area Agency on Aging, which coordinates the assignment of federal and state funding for aging-related services on the local level, provides advocacy services, and serves as an information clearinghouse. In addition to this role, PTRC has the following departments that offer services to Alamance County or Burlington:

Criminal Justice

- Pretrial release services
- Treatment for effective community supervision
- Pre-release and post-release services

Management & Member Services

- Piedmont Triad Regional Development Corporation
- Management services for member organization personnel

Regional Planning Services

- GIS mapping & analysis services
- Environmental justice scan
- Clean cities coalition
- Planning studies and programs related to energy, annexation, open space, infrastructure, development ordinances and plans, alternate transportation, recreation, design, strategic planning, tourism, outreach, watersheds, zoning

PTRC Planning

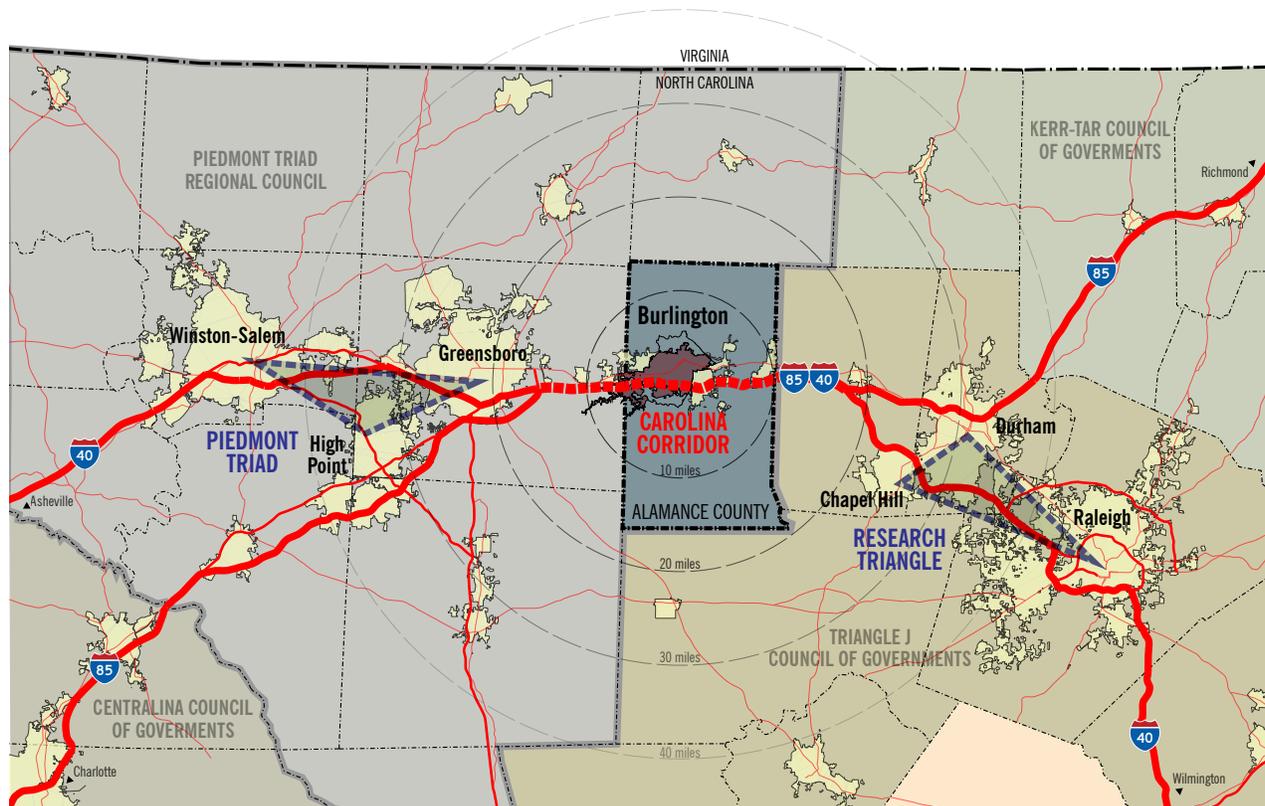
In the last three years, PTRC has produced a number of planning studies relevant to Burlington’s own planning efforts. They include:

- Piedmont Together Comprehensive Regional Plan (2014)
- Triad Tomorrow Piedmont Triad Comprehensive Economic Development Strategy (2014)
- Piedmont Triad Market Trends, Preferences, and Opportunities to 2025 and 2040 (2012)
- Piedmont Triad Land Supply Analysis (2011)
- Piedmont Regional Trail Plan (2011)

These studies are thorough and informative, but they are by no means intended to be prescriptive—their objective is not to become the template for every Piedmont Triad community’s comprehensive plan. As such, they illustrate the broad goals and solutions of the region, giving the Piedmont Triad an opportunity to distinguish its future from that of the Triangle, or Charlotte, or any other major urban region. The utility of these plans for Destination Burlington will be as a tuning instrument and a “check and balance.” As the Destination Burlington process continues, the emerging goals and strategies should be brought back to and compared with these regional plans. Has Burlington’s process understated a need that is more in focus on the regional scale? Is Destination Burlington contributing to or undermining the bigger regional picture? Is there an emerging regional direction of which Burlington should be aware?

IDENTIFIED ISSUES AND NEEDS

- Define strategic assets for future annexation
- Attempt to clarify the corporate boundaries and eliminate “island” properties
- Forge and renew annexation agreements with neighboring communities
- Build upon the “Carolina Corridor” regional identity
- Use regional planning initiatives from the County and PTRC to align local initiatives with regional goals.



LAND USE

10

10 LAND USE

OVERVIEW

The Future Land Use Map which will be created during the drafting of the Comprehensive Plan is the primary tool for the implementation of land use related goals and objectives. The land use map was last updated as part of the 1991 Comprehensive Plan. This means that while we will reference the land uses contained within those maps as part of our analysis, we have also analyzed the current Zoning Map and recent development trends. Typically, the intensity of land uses decreases as it radiates from the center of the city. Within the City of Burlington it is important to note that new development has recently trended towards the south and west sides of the city and near the airport. Also important to mention is, with the forthcoming availability of downtown properties due to LabCorp's planned restructuring of its offices, there will be significant redevelopment opportunity downtown, albeit infill type development which will not change the land use. The east side of the City needs considerable attention from a redevelopment perspective and land use and zoning will need to support opportunities to catalyze a revitalization of that area of town. Another major factor that will change land use over the life of this plan is a new fixed-route bus system (see Chapter 12).

LIVABLE COMMUNITY LAND USE PHILOSOPHY

What is a livable community?

A livable community promotes a cohesive, connected community where people know their neighbors, support local businesses, and embrace pride in their community. A livable community promotes civic engagement and opportunities for all ages to achieve success and to make safe, sustainable choices for a variety of elements that include housing, transportation, education, cultural diversity and enrichment, and recreation.

CURRENT ZONING

The City of Burlington's existing Zoning Map and Ordinance specifies 24 different zoning districts within the City and ETJ. These 21 districts are organized into residential, multi-family, office-institutional, commercial, and industrial zoning districts.

Residential Districts

- R-30 - Single Family
- R-15, R-12, R-9, R-6 - Other Residential Districts
- R-M - Mobile Home Residential

Multi-Family

- MF - A, MF - B - Multi-Family Districts

Office- Institutional Districts

- O-I - Office Institutional District
- R-OI - Restricted Office Institutional District

Commercial Districts

- B-1 - Neighborhood Business District
- B-2 - General Business District
- B-3 - Central Business District

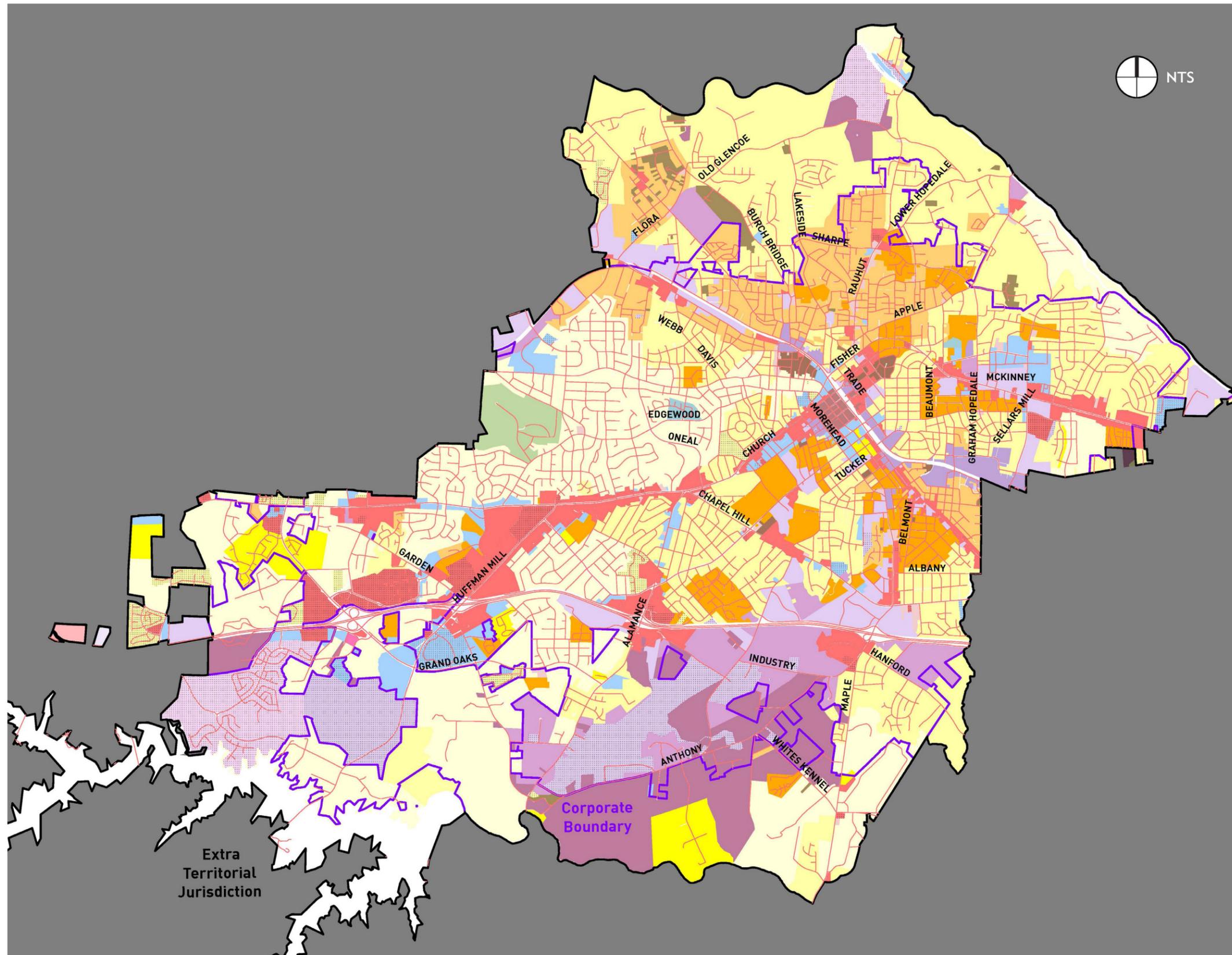
Industrial Districts

- I-1 - Planned Industrial
- I-1A - Planned Industrial-Residential
- I-2 - Light Industrial
- I-3 - Heavy Industrial Districts

Conditional Zoning

- CR - Conditional Residential
- CO-I - Conditional Office Institutional
- CB - Conditional Business
- CI - Conditional Institutional
- CMX-R Conditional Mixed Residential
- CMX-C Conditional Mixed Use Commercial
- CPEC - Conditional Employment Center

For purposes of analysis we have broken down the zoning districts into generalized land use categories that will ultimately help inform future zoning map updates.



Existing Zoning Map

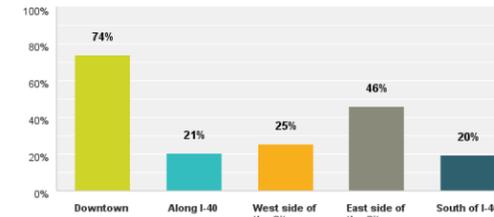
- street centerlines
- Extra-territorial Jurisdiction
- Burlington city limits

Zoning ID

| | | | |
|--|-------|--|------|
| | B-1 | | R-6 |
| | B-2 | | R-9 |
| | B-3 | | R-12 |
| | CB | | R-15 |
| | CI | | R-30 |
| | CMX-C | | R-M |
| | CMX-R | | |
| | CO-I | | |
| | CR | | |
| | I-1 | | |
| | I-1A | | |
| | I-2 | | |
| | I-3 | | |
| | MF-A | | |
| | MF-B | | |
| | O-I | | |
| | RO-I | | |
| | CPEC | | |

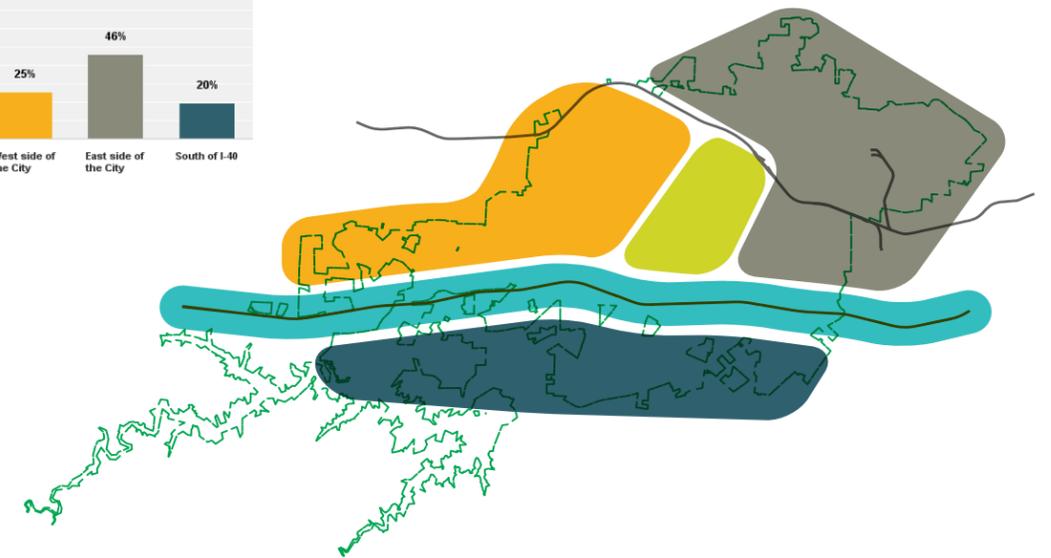
Q7 Where could development/redevelopment occur in and around the City of Burlington? Please choose general locations that corresponds with the above question.

Answered: 434 Skipped: 36



FUTURE DEVELOPMENT AREAS

The survey and public input suggests that citizens foresee development occurring Downtown and on the east side of the city. The future land use map will take into account development trends and public input regarding new development and redevelopment opportunities within the City of Burlington.



2000 FUTURE LAND USE MAPS

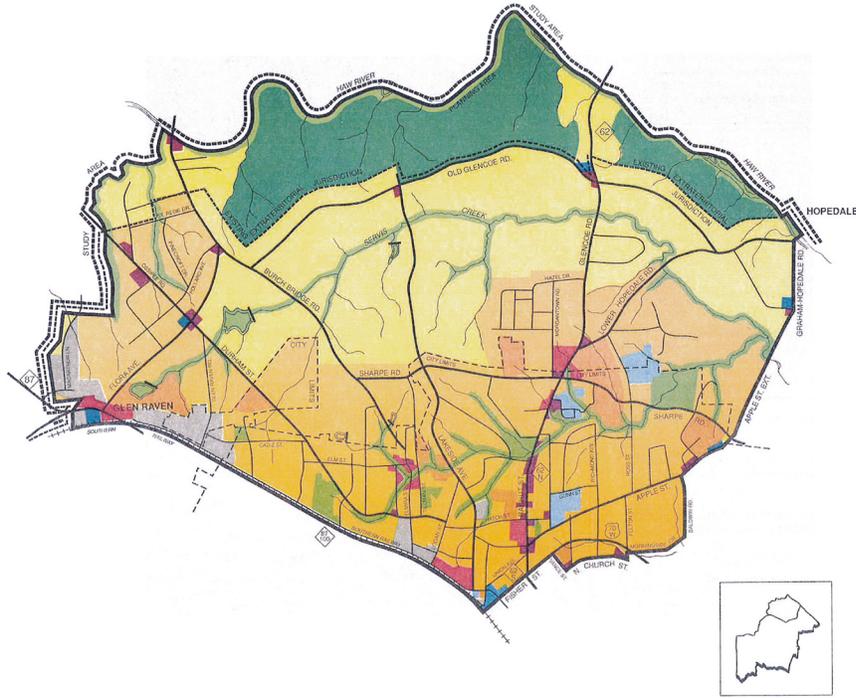
The Burlington 2000 Comprehensive Plan included recommendations for future land use which were analyzed as part of this Community Assessment Report. While much has changed since this report was created in 1991, this stands as an important moment in time for what was planned. When this plan was created in 2000 the City was broken into 5 areas:

- North
- Southwest
- South
- Central
- East

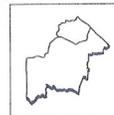
A new future land use map will be created as part of this comprehensive planning process and synthesize all existing conditions and factors.

North Burlington Planning Area

FUTURE LAND USE MAP

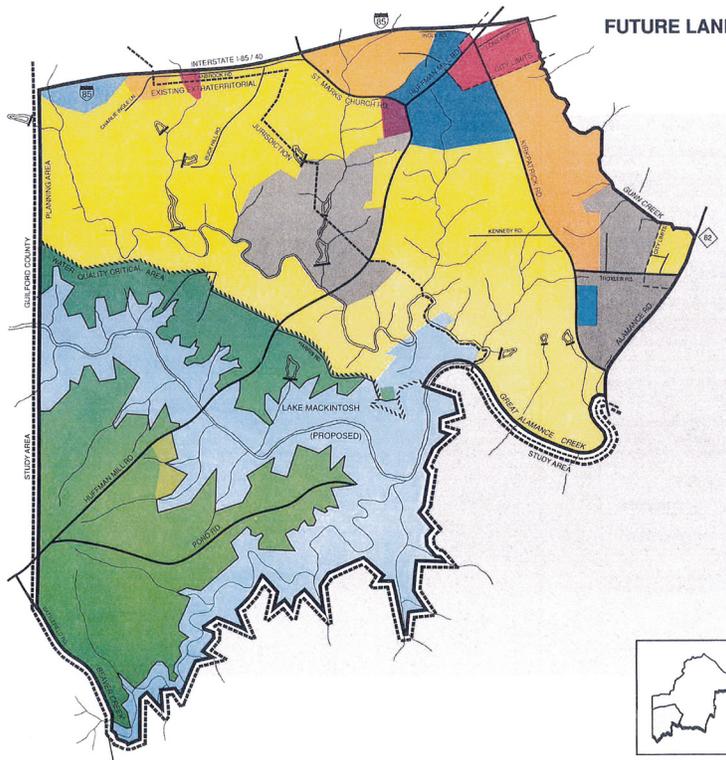


- LOW DENSITY RESIDENTIAL
1-2 DU / ACRE
- MEDIUM DENSITY RESIDENTIAL
3-9 DU / ACRE
- HIGH DENSITY RESIDENTIAL
>10 DU / ACRE
- OFFICE - INSTITUTIONAL
- COMMERCIAL
- NEIGHBORHOOD COMMERCIAL
- INDUSTRIAL
- PUBLIC / SCHOOLS
- PARKS / OPEN SPACE
- RURAL / AGRICULTURAL
- STUDY AREA
- PLANNING AREA
- - - - EXTRATERRITORIAL JURISDICTION



Southwest Burlington Planning Area

FUTURE LAND USE MAP

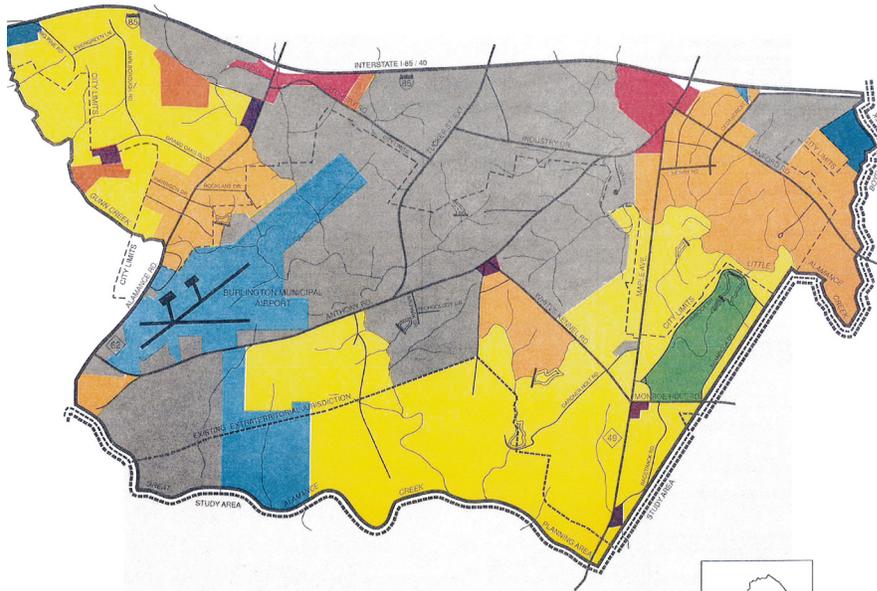


- LOW DENSITY RESIDENTIAL
1-2 DU / ACRE
- MEDIUM DENSITY RESIDENTIAL
3-9 DU / ACRE
- OFFICE - INSTITUTIONAL
- COMMERCIAL
- NEIGHBORHOOD COMMERCIAL
- INDUSTRIAL
- PUBLIC
- RECREATION
- RURAL / AGRICULTURAL
- STUDY AREA
- PLANNING AREA
- - - - EXTRATERRITORIAL JURISDICTION



South Burlington Planning Area

FUTURE LAND USE MAP

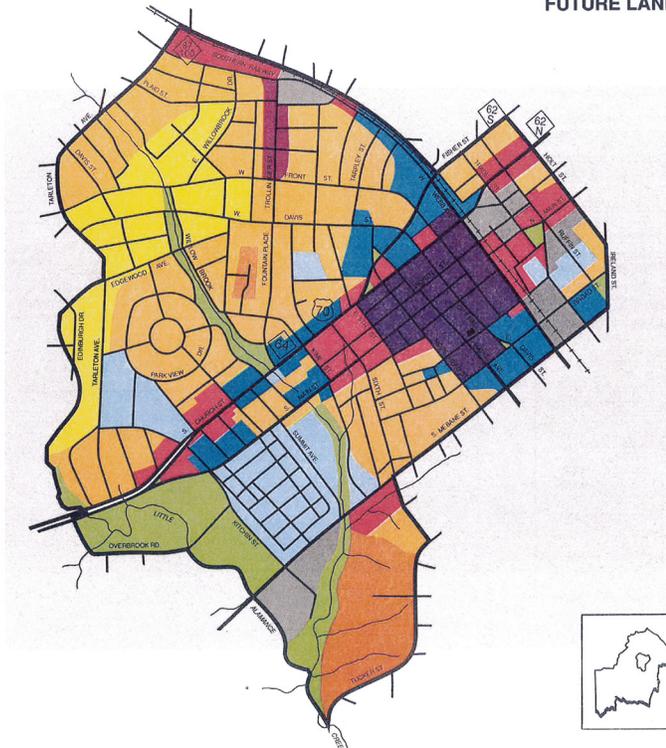


- LOW DENSITY RESIDENTIAL
1 - 2 DU / ACRE
- MEDIUM DENSITY RESIDENTIAL
3 - 9 DU / ACRE
- HIGH DENSITY RESIDENTIAL
> 10 DU / ACRE
- OFFICE - INSTITUTIONAL
- COMMERCIAL
- NEIGHBORHOOD COMMERCIAL
- INDUSTRIAL
- PUBLIC / SCHOOLS
- RECREATION
- STUDY AREA
- PLANNING AREA
- EXTRATERRITORIAL JURISDICTION



Central Burlington Planning Area

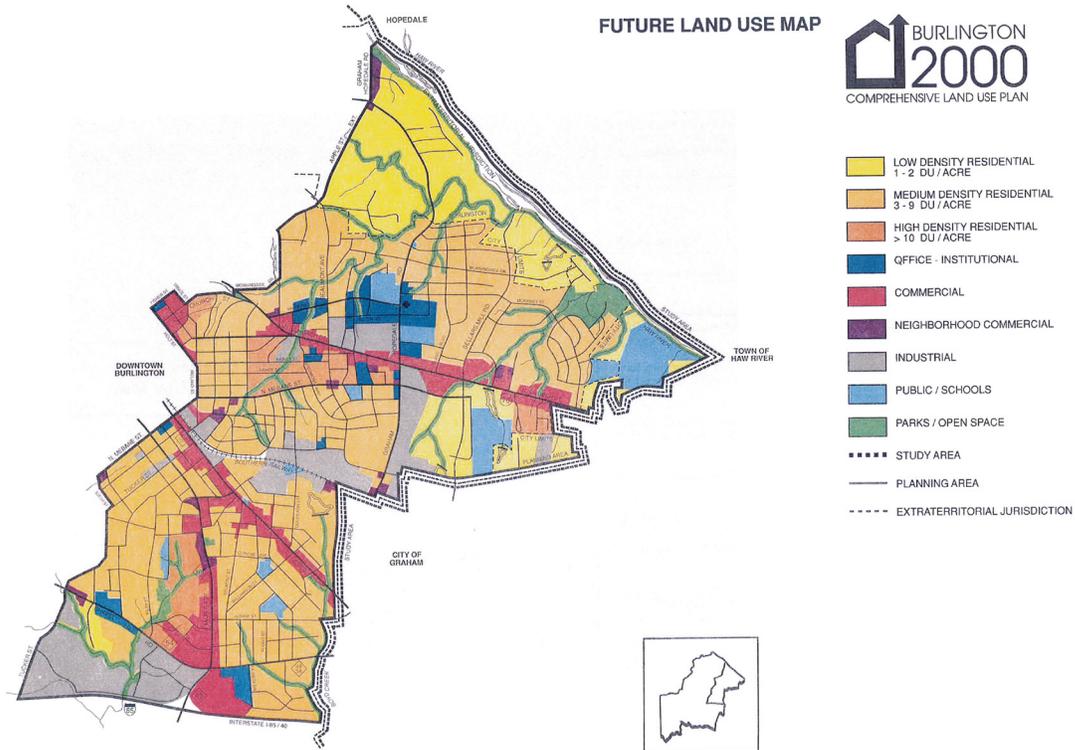
FUTURE LAND USE MAP



- LOW DENSITY RESIDENTIAL
1 - 2 DU / ACRE
- MEDIUM DENSITY RESIDENTIAL
3 - 9 DU / ACRE
- HIGH DENSITY RESIDENTIAL
> 10 DU / ACRE
- CBD MIXED - USE
- OFFICE - INSTITUTIONAL
- COMMERCIAL
- NEIGHBORHOOD COMMERCIAL
- INDUSTRIAL
- PUBLIC / SCHOOLS
- PARKS / OPEN SPACE
- PLANNING AREA



East Burlington Planning Area



EXISTING LAND USE

The analysis of current land use and annexation throughout the years suggests a growth pattern outward from the center. As this occurred, the neighborhoods surrounding the core transitioned from mixed-use, typically mill-centric villages to purely residential neighborhoods. The exception to this is Downtown, which has remained commercial in land use, and major corridors throughout the City, which despite some disinvestment, have remained commercial in nature. There are some remaining pockets of industry throughout the city, but those are concentrated in small areas throughout the city and to the south side of the city. Based on our analysis we have created a current land use map in order to describe these areas (see page 99).

Residential (Rural, Urban and Suburban)

Rural Residential areas have been used traditionally for farming, and fall within the Extra Territorial Jurisdiction (ETJ) area. Appropriate uses are low density residential development and traditional agriculture.

Urban Residential areas are typically adjacent to the Downtown area in a city's core, have moderate to high density, are mixed-use in nature, and are walkable. Schools, parks, small-scale churches, neighborhood-scale retail and services, and multifamily residences that respect the scale and character are appropriate. This area contains vacant and underutilized land that should develop in a manner compatible with the community's unique character and sense of place.

Suburban Residential areas are typically found in neighborhoods that developed after World War II. This development pattern should provide a connected street network to adjoining neighborhoods with pedestrian and bicycle facilities. Cul-de-sac streets, which do not encourage connectivity, should be minimized. New development should always be required to connect to utility services. Conservation subdivisions are an alternative type of land development tool for use when desired suburban residential is adjacent to areas desired for conservation of sensitive habitats including wetlands and riparian areas.

Downtown Mixed-Use

This designation represents small to medium-scale mixed-use development within Burlington's Downtown and core surrounding neighborhoods with an emphasis on serving surrounding residences as well as the entire community. The "mix of use" can be vertical—in the same structure with retail below and residential or office above—or horizontal with retail, office, residential and institutional uses adjacent to each other.

Any site development should maintain a grid-street network with alleys and garages in the rear of lots similar to the existing homes, should have a high level of connectivity to adjacent uses, and should be served by utilities.

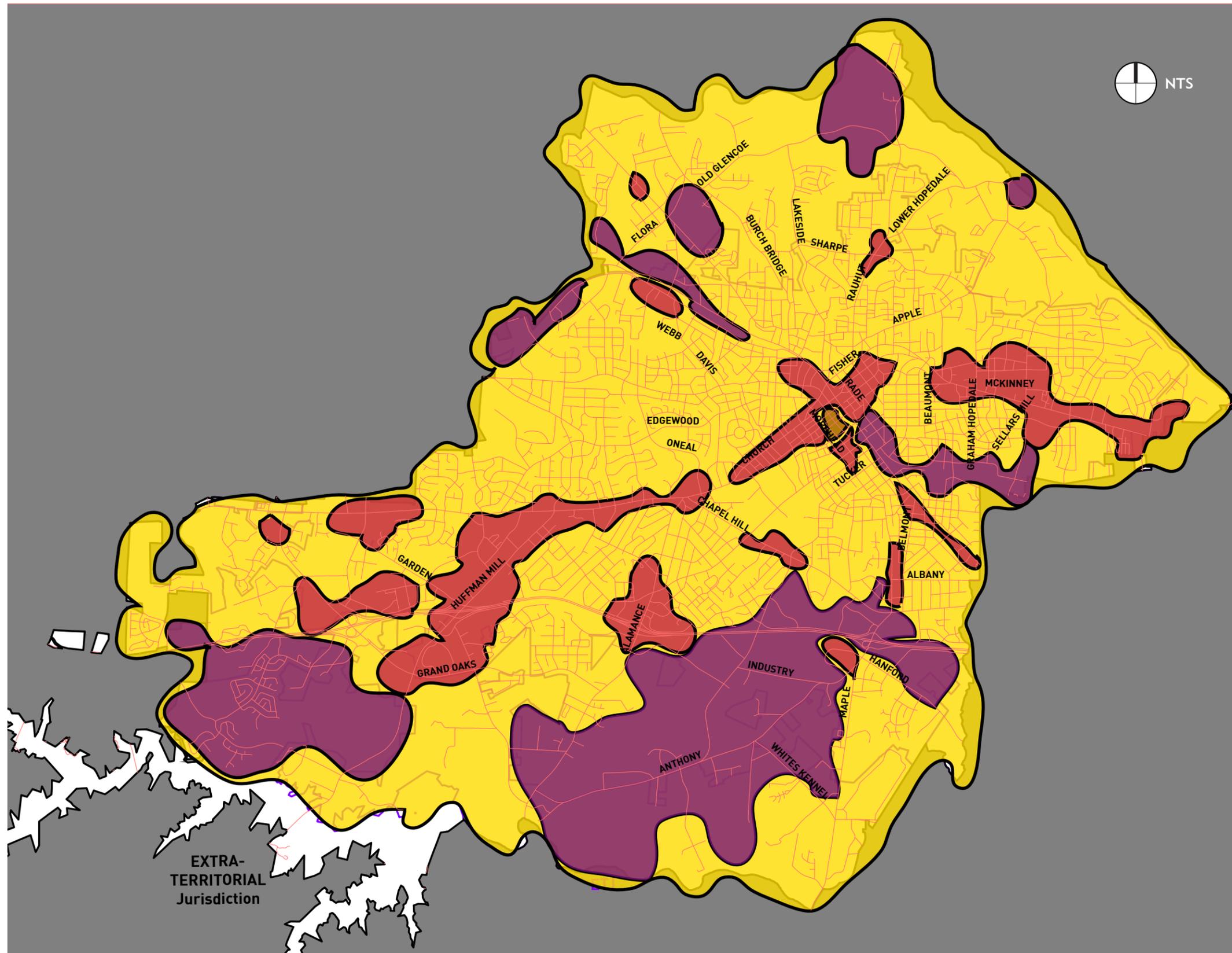
Commercial/Business

Commercial areas have some similarities to the Downtown Mixed-use designation (retail, service, office and municipal) that serve the needs of the overall community but do not typically contain residential uses. These types of land uses typically are auto-oriented and located along the major arterials and at intersections. This development should still strive for pedestrian and bicycle connectivity to surrounding areas.

This type of development contributes strongly to the community's image and sense of prosperity, and requires high-quality development standards. The standards should be applicable to the site design, building materials, architectural features, pedestrian access, landscaping and signage. Controlled access (limiting curb cuts) and cross-access easements between businesses should be considered to mitigate potential traffic congestion.

Industrial/Business Park/Airport

This designation includes professional and business services, light assembly plants, flex-tenant type facilities, and research and development businesses. These business facilities should have good access and connectivity to rail, highways and main thoroughfares, as well as good internal circulation. This use also tends to act as a buffer between industrial and commercial uses. The tendency for these developments to serve as major employers warrants a need to consider connectivity to nearby neighborhoods (potential resident workforce). This land use also includes the Burlington-Alamance Regional Airport. Attention should be paid to architecture, building orientation, landscaping, and signage to ensure cohesive design that will attract future investors.



Existing Land Use Map

| | | |
|---|--------------------------------------|------------------|
|  | Residential (rural, urban, suburban) | Land Uses |
|  | Downtown Mixed-Use | |
|  | Commercial / Business | |
|  | Industrial / Business Park / Airport | |

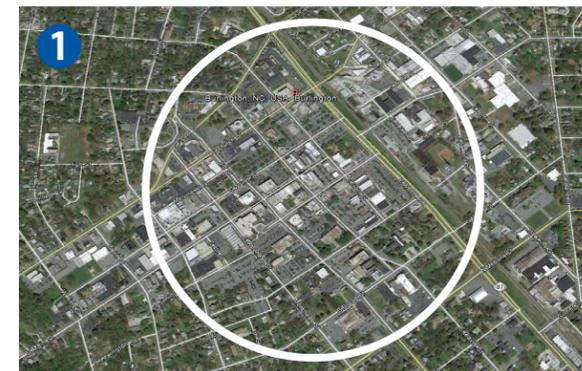
| | | |
|---|--------------------------------|--------------|
|  | Extra-territorial Jurisdiction | Areas |
|  | Burlington city limits | |

REDEVELOPMENT

Identifying redevelopment and development opportunities is an important component of creating a livable and economically sustainable community. Several redevelopment areas have been identified throughout Burlington and its ETJ. These areas will play an important role in the comprehensive planning process as redevelopment scenarios are identified and further defined.

Redevelopment Areas

- Downtown Burlington **1**
 - » Downtown Burlington continues to be one of the prime sites for redevelopment and revitalization in the community. With the forthcoming restructuring of LabCorp's facilities downtown comes a once in a lifetime opportunity to redevelop portions of Downtown Burlington. This is the time for a bold effort with a focus on revitalizing Downtown Burlington as a place with renewed vitality, economic sustainability and a mixed-use live, work, play community that will help attract investment and employers into the community. This includes providing more opportunity for ground floor retail (currently occupied by offices), and upper floor residential. This may involve assembly of property and selecting a master developer to ensure the redevelopment of the LabCorp sites and integration of transit into Downtown. Downtown Burlington is in a transformational time in its history. This site was identified by the public as a redevelopment site.



- Western Electric **2**
 - » The former Western Electric factory site has been vacant for a number of years. The 22-acre site was sold in 2013 to a private developer and is a prime redevelopment site within the City. This site is located at North Church Street and Graham-Hopedale Road. This site was identified by the public as a redevelopment site.
- BMOC (Burlington Outlet Village/ Formerly Burlington Manufacturers Outlet Center) **3**
 - » The BMOC site is a large shopping center off of I-40 on the eastern gateway into Burlington. This site and the buildings within are ripe for redevelopment. The buildings were constructed mostly in the 1970's-80's and as retail preferences have changed and newer, more modern centers have opened this center has continued to struggle. This is a major gateway into the community and a major anchor on the east side of the City so this is a top redevelopment opportunity. This site was identified by the public as a redevelopment site.
- Cum Park Plaza (CPP) **4**
 - » The CPP site is a shopping center that is in a prominent location off of North Church Street on the east side of town. This shopping center has a large parking lot, several anchors, and outparcels ripe for redevelopment. This site was identified by the public as a redevelopment site.



- West End Cinemas **5**
 - » The West End Cinemas Site located on South Church Street and South Williamson Avenue on the west side of town is a theatre site at a main intersection ripe for redevelopment. This site was identified by the public as a redevelopment site.
- Gilmer and East Market Street Industrial Site **6**
 - » The formerly industrial site located at Gilmer Street and East Market Street provides ample opportunity for redevelopment within the City which will be studied in more detail as the plan progresses. This site was identified by the public as a redevelopment site.



IDENTIFIED ISSUES AND NEEDS

- Future Land Use to support development and redevelopment
- Old/obsolete land uses vs. more modern uses should be addressed within this plan
- Zoning Map does not support/drive development and redevelopment
- Mixed-use and downtown land use flexibility needed
- Support development sites such as the airport and east side commercial
- Infill land use is an issue because of uncomplimentary uses
- Land use within the corporate boundary vs. the ETJ

OPEN SPACE

11

11 OPEN SPACE

OVERVIEW

Burlington's open space—those areas that are not developed nor slated for immediate development—can be studied in three general categories: open space used for parks and recreation facilities, open space used as trails, greenways, and other connections, and open space used for the protection or conservation of natural resources. All three are significant parts of Burlington's character, civic amenities, and physical beauty. A study of existing local plans, available external resources, and community input indicate that Burlington can improve its use of open space resources through focus on the issues and needs identified in the section below.

RECREATION AND PARKS

2012 Burlington Recreation and Parks Comprehensive Master Plan

In December of 2012, the City of Burlington's Recreation and Parks Department completed a comprehensive master plan for the future of the department and its facilities through the year 2022. The plan provided a good road map for gradual acquisition of new property, investment in existing facilities, and setting priorities for funding and meeting the anticipated demand for parks and recreation during the plan's time horizon. Through the planning process, the 2012 plan collected and analyzed data and community input at a level of detail that is not within the traditional scope of an overall Comprehensive Plan process; therefore, the 2012 plan is an indispensable resource for the Destination Burlington effort and most of its recommendations should be carried forward through the Comprehensive Plan.

That said, the 2012 plan does leave some room for additional study and recommendations. Connectivity—pedestrian linkages to park sites to create connections with adjacent neighborhoods or the surrounding community—is one area that could benefit by additional recommendations in the Destination Burlington Comprehensive Plan. Developing greenways and improved modes of pedestrian travel from parks to communities was overwhelmingly noted by community survey and workshop respondents as very important.

The 2012 Recreation and Parks Plan addresses the need for 'Mini-Parks' (1-2 acres, mostly playgrounds/picnic facilities) on a neighborhood level but does not recommend investment in new sites based on the assumption that new developments will provide these types of amenities. The findings in that plan's surveys regarding current use and demand for facilities on the local level and addressing existing under-served neighborhoods seem to suggest that this assumption will not meet all the community's needs.

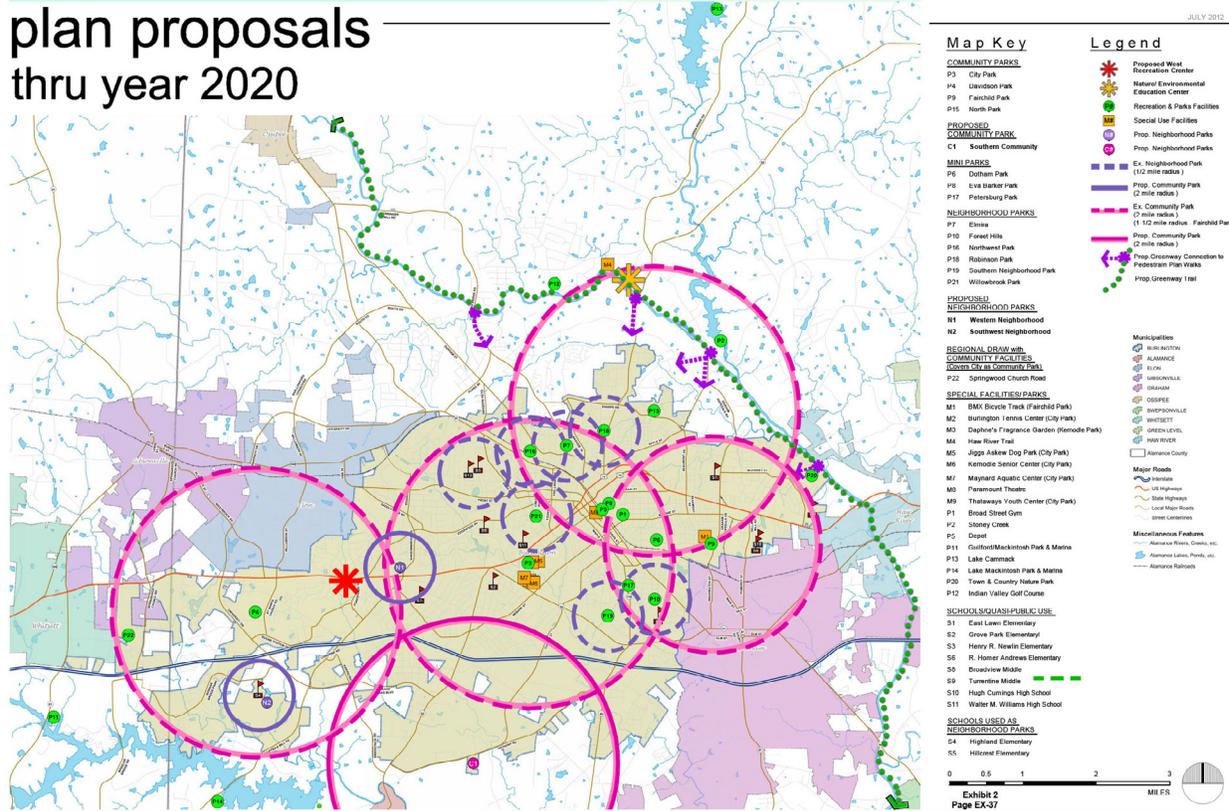
Neighborhoods on the west side of Burlington still seem underserved in the 2012 plan. Community input during the Comprehensive Planning process has suggested that the perception amongst many citizens is just the opposite—that the east side of the City is largely underserved by public amenities. This may be in part due to the relatively recent development of additional parks on the western edge of the City. That said, these neighborhoods are still lacking the smaller-scale parks prevalent in the central and eastern sides of the City. Also, it is noted that the 2012 plan sees a proposed Community Park on the southern edge of Burlington's city limits as one of the few new investments to serve the developing areas of the community.

Forecasting new types of recreation opportunities and trends now and in 2022 is important but not addressed in the 2012 plan. For example, natural playscapes, community garden facilities to promote healthy lifestyle and address food deserts, fitness trails, spray parks, amenities geared towards senior living—all are current trends that must be anticipated in the development and enhancement of the parks system. Many resources exist to identify emerging trends in outdoor recreation, including the following:

- Parks and Recreation National Database Annual Report; National Parks & Recreation Association
- Worldwide Survey of Fitness Trends; American College of Sports Medicine

plan proposals thru year 2020

JULY 2012



8733 RED OAK BLVD. | SUITE 101 | CHARLOTTE, NC | 28227 | 704.525.6284

Burlington Recreation & Parks
2012 Master Plan Update
burlington, north carolina

- The Journey of Sports Participation in America: 2012; Sports & Fitness Industry Association

Further recommendations for improvements to the City's parks and recreational offerings should include a review of these and similar resources.

CONNECTIVITY: GREENWAYS, TRAILS, SIDEWALKS & BIKE PATHS

Of all the community input related to Burlington's open space, two significant needs continue to rise to the surface: a desire for a formal greenway system linking the City's many assets and resources, and a need for better pedestrian and bicycle infrastructure and amenities. Open space as a means of connectivity throughout the City—as landscape amenities like trails and greenbelts, but also "hardscape" infrastructure like sidewalks, paths, and bike lanes—cannot be left underemphasized. The City of Burlington has studied opportunities for open space connectivity both in the past through the Burlington 2000 Comprehensive Land Use Plan from 1991, and the more recently in the 2012 Pedestrian Master Plan. Significant points from both plans are summarized below.

Burlington 2000 Comprehensive Land Use Plan

Open space as a connective system factored in significantly to the Recreation and Open Space Element of the 1991 Comprehensive Plan for the City, in which five of the twelve stated policies pertained to greenways, trails, and provisions for bicycle use. The development of the Haw River Trail was also a major recommendation of the plan, as were plans for greenways related to Great Alamance Creek, Lake Mackintosh, Little Alamance Creek, and the smaller waterways of Burlington's northern and western neighborhoods. Willowbrook Park was seen as the beginning of a greenway through the central part of the City. Small area maps delineated corridors of opportunity for greenways, usually along the edges of the City's significant natural features. The corridors identified by the 1991 plan are, largely, still plausible opportunities that can be augmented by new opportunities that have arisen in the past twenty-three years.

2012 Pedestrian Master Plan

The recent Pedestrian Master Plan provided a comprehensive guide to developing an overall network of sidewalks on major routes to improve connectivity. It was inclusive of different districts around town and studied Downtown as well as residential and business areas, distinguishing varying levels of service by context. It took a pragmatic approach to policy in creating regulatory guidelines that would support the vision of a pedestrian network. Greenway corridors and trails, while mentioned by the plan, seemed missing from the bricks-and-mortar, immediate implementation actions. A significant opportunity still exists to incorporate another layer of pedestrian connectivity on the community level throughout the City by identifying and preserving greenway corridors and trails in floodplain areas—not all pedestrian connectivity needs to happen along roadway corridors. There also may be an advantage in specifically planning for a biking network in conjunction with new pedestrian improvements and multi-use trails.



GROWTH STRATEGY MAP

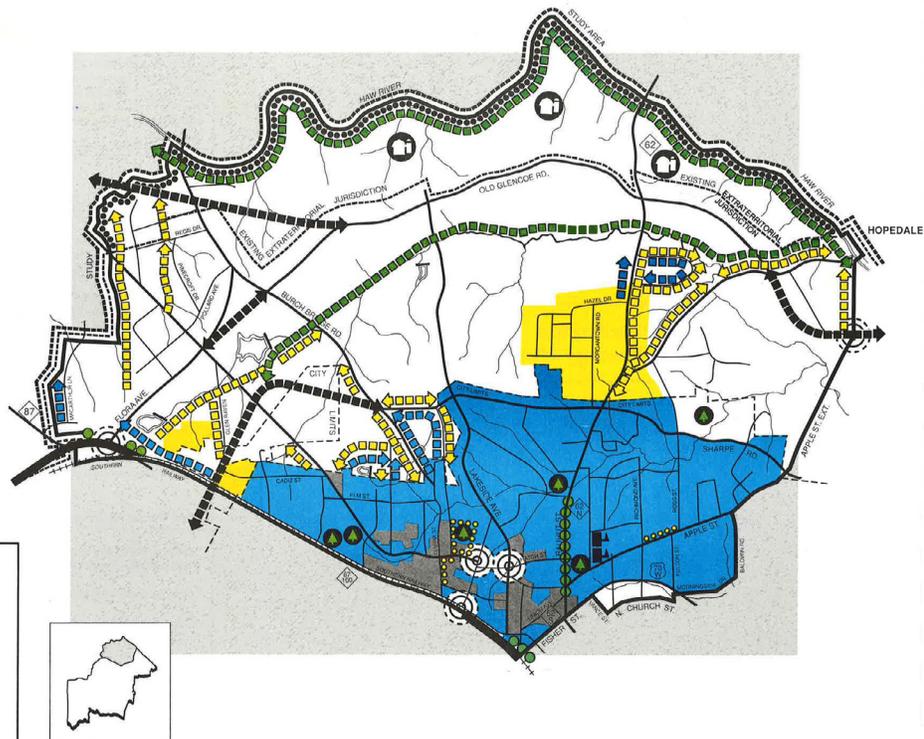
- PROPOSED ROAD IMPROVEMENTS
- POSSIBLE GREENWAY
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED NEW ROAD
- PROPOSED SIDEWALKS
- POSSIBLE STREETSCAPE IMPROVEMENTS
- FUTURE EXTRATERRITORIAL JURISDICTION
- POSSIBLE FUTURE ANNEXATION AREAS
- HOUSING REHABILITATION AREAS
- HISTORIC PRESERVATION AREAS
- STUDY AREA
- PLANNING AREA
- EXTRATERRITORIAL JURISDICTION
- INTERSECTION IMPROVEMENTS
- EXISTING SCHOOL
- FARM PRESERVATION AREA
- PARKS AND RECREATION FACILITY

0 1000 2000 4000

SCALE: 1" = 2000'

NORTH
BURLINGTON PLANNING AREA

This map is a GUIDE only and should not be used solely as justification for a request or change in land use. Justification for or against a specific request or change in land use should be based upon the application and use of the general GOALS and POLICIES of the City's Comprehensive Land Use Plan.



Burlington 2000 Comprehensive Plan included recommendations for greenway corridors

Regional Plans: Haw River Trail and Mountains-to-Sea Trail

Regional trails and greenways factor strongly in both the 2007 Alamance County Recreation and Parks Comprehensive Master Plan and the 2003 Piedmont Triad Regional Open Space Strategy. In particular, the Haw River Trail, as a segment of the state-spanning Mountains-to-Sea Trail, is seen as a spine of smaller regional trails along Great Alamance Creek and Lake Mackintosh, Little Alamance Creek, and Gunn Creek, with extensions to Lake Cammack and Graham-Mebane Lake, as well. The Haw River Trail is an excellent example of a partnership of local governments aligned toward the goal of establishing a regional greenway. Through the Conceptual Greenway Master Plan of 2007, this partnership created a design template that is being deployed throughout the corridor.

The Benefit of Greenways

A greenway can serve many functions: recreation/health amenity, transportation mode, infrastructure system, environmental protector, and economic driver. In “Economic benefits of trails” in the Summer 2011 issue of American Trails Magazine, Stuart

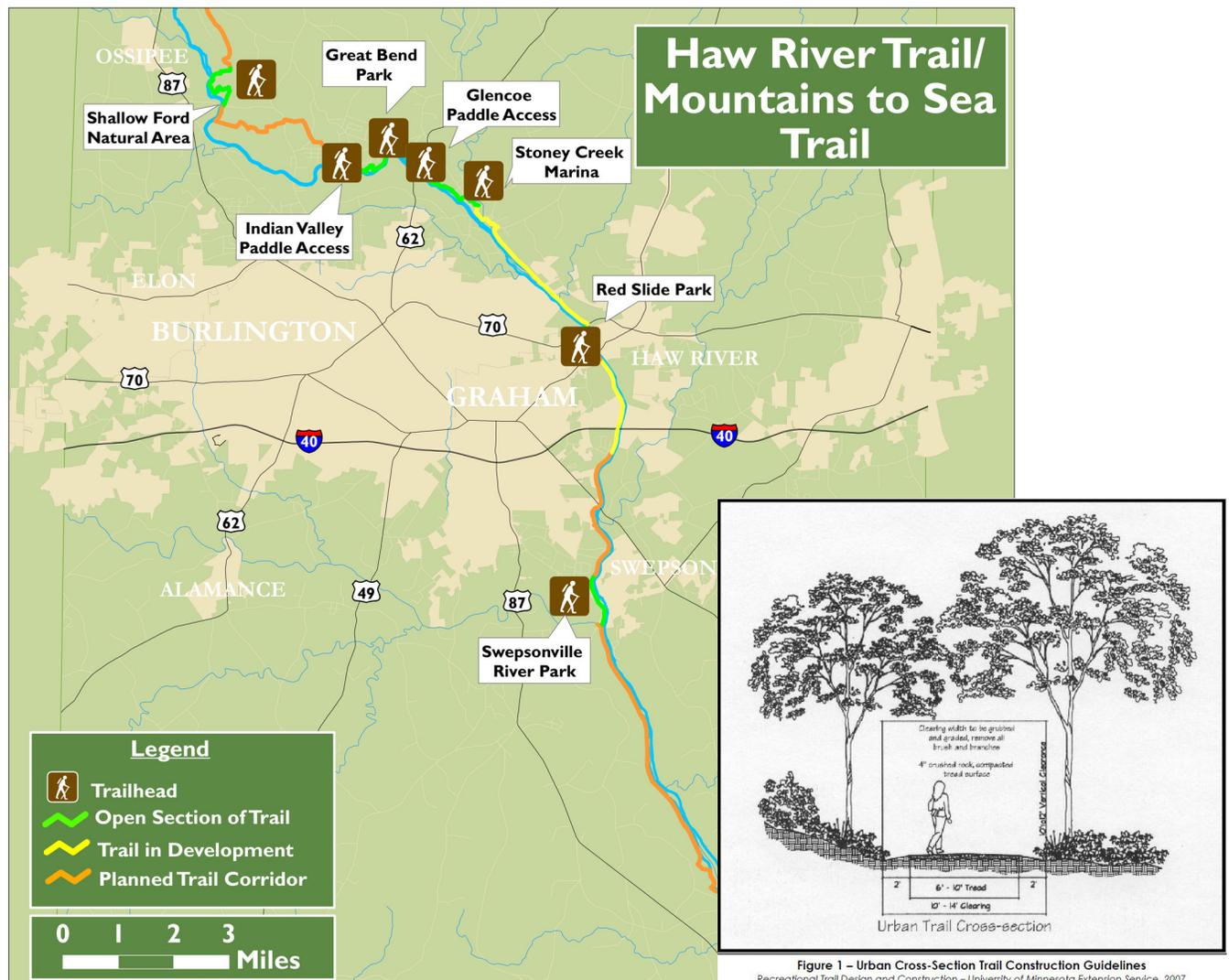


Figure 1 – Urban Cross-Section Trail Construction Guidelines
 Recreational Trail Design and Construction – University of Minnesota Extension Service, 2007

The Haw River Trail is a regional greenway already underway adjacent to Burlington, with its own trail design standards (from www.thehaw.org)



Burlington is crossed by a number of small creeks and streams that are both greenway opportunities and great natural resources



Burlington's edges reflect the largely agricultural heritage of Alamance County

Macdonald outlines the many economic benefits of trails through increased tourism, attracted redevelopment, higher property values, reduced health care costs, job growth, and increased consumer spending. In each case, millions of dollars of value are either created or saved as evidenced in case studies from New York, Miami, Wyoming, Arizona, and several other locations throughout the country. Water trails, much like the Haw River Paddle Trail, are also cited as having significant recreational tourism benefit on the Chattanooga River in Georgia, South Carolina, and North Carolina. Another article in the same issue, "Trail Towns benefit from visitor spending," outlines the case for trail tourism through a case study of the Great Allegheny Passage in Maryland and Pennsylvania. In 2008, this trail generated over \$40 million in direct annual spending and \$7.5 million in attributed wages. Burlington, situated right on the Haw River Paddle and Land Trails, could see an economic benefit from becoming a "Trail Town," plugged into the Haw River Trail with its own greenway network.

NATURAL RESOURCE CONSERVATION AND PRESERVATION

Consideration of open space is not just for those areas that can be used for recreation, movement, and passive enjoyment. Open space in the form of waterways, woodlands, meadows, and farmland contribute significantly to the health of the natural environment, local ecology, and character of the landscape. Community survey results indicate that participants find strong environmental protection very important, particularly in regards to waterways, woodlands, and farmland. It is important to note that the current Burlington Recreation and Parks inventory has only one park that could be better described as a conservation area—Town and Country Nature Park—as it has limited park improvements but many natural resources; the City's lake marinas also have natural environments and trails accompanying their other park improvements.

North Carolina Natural Heritage Program

The North Carolina Natural Heritage Program is housed within the NC Department of Environment & Natural Resources (DENR) Office of Land and Water Stewardship. The program serves as a database for conserving the rarest and most outstanding elements of natural diversity in the state including rare plant and animal species and natural communities. About twelve years ago, a survey of Alamance County's natural features was conducted and a Natural Heritage Inventory was produced for the County. The extensive survey and report and subsequent updates have identified a number of areas that have been listed as Natural Heritage Element Occurrences, Significant Natural Heritage Areas, and Natural Heritage Managed Areas. These areas are shown on the summary map for this report section. In essence, these areas contain natural communities of plants and animals which are so rare or so significant that they warrant special consideration in land-use decision-making.

Agricultural Lands

The rural character of the outer edges of Burlington are an important part of its physical identity and aesthetic beauty. As in many growing, urbanizing areas across the country, though, agricultural lands are at risk of disappearing due to development pressures. In 2007, Alamance County produced an Agricultural Land Use Plan and an Agricultural Development Plan that was folded into an overall Farmland Protection Plan. Currently, the County uses a Voluntary Farmland Preservation Program Ordinance under which landowners can petition the county for inclusion in the Farmland Preservation District. As a voluntary program, landowners are free to end their participation at any time. There are currently no farm preservation districts within Burlington’s city limits, but there are three parcels within the City’s Extra-Territorial Jurisdiction (ETJ) that are part of the district program, and another three immediately adjacent to the ETJ.

The City of Burlington Zoning Code has no formal zoning category or overlay district specific to agricultural uses or protection of farmland. Agricultural uses are permitted in most zoning districts of the City. Aerial photographs indicate that agricultural activities occur at a limited scale on certain parcels both inside Burlington’s city limits and in the ETJ.

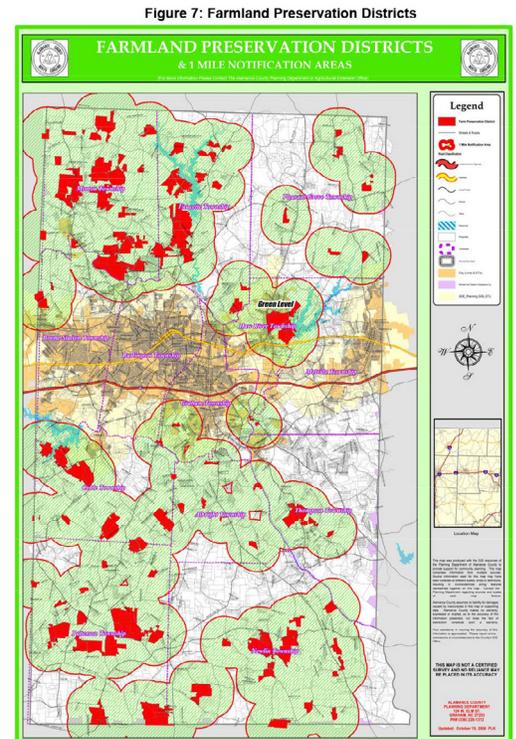
Conservation Efforts

There have been a number of efforts in conservation of waterways and natural areas in recent years. Some of these efforts are described below:

- **Piedmont Triad Regional Council (PTRC):** through PTRC’s Water Resources efforts, a number of planning efforts have been undertaken for Burlington-area watersheds including Little Alamance Creek and Travis/Trickle Creek as well as the Haw River watershed overall. In 2005, Piedmont Triad Council of Governments (now PTRC) prepared The Haw River Riparian Corridor Conservation Plan, which outlines conservation recommendations for seven sections of the Haw River north of Interstate 40. Through this plan, the PTRC identified individual land parcels and potential conservation projects fitting for each parcel. Following that, in 2008, PTRC drafted the Little Alamance & Travis/Tickle Creek Watershed Restoration Plan to offer best-practices efforts to restore the health of this impaired waterbody.
- **Piedmont Land Conservancy:** this non-profit organization engages in regional conservation planning but also protects specific sites through land acquisition or purchase of development rights from willing landowners. Most of the Land Conservancy’s efforts in Alamance County have been focused on agricultural areas southeast of Burlington’s planning jurisdiction.
- **Haw River Assembly:** this non-profit group monitors the condition of the Haw River, supports community education about the watershed, organizes cleanup efforts, and works with state and federal agencies and land conservation groups to identify and preserve ecosystems and significant land parcels.
- **Haw River Trail:** beyond its role coordinating the ongoing construction of the Haw River Trail, this organization also works to conserve land along the trail by facilitating conservation and trail easements and transfer of property rights.

It is important to note that most land conservation and water restoration relies on voluntary efforts of willing landowners to allow conservation and access easements, transfer land, or be better stewards of the natural resources on their property. Continued incentivizing of private landowners and a coordinated policy on land acquisition for conservation will be important for Burlington’s future.

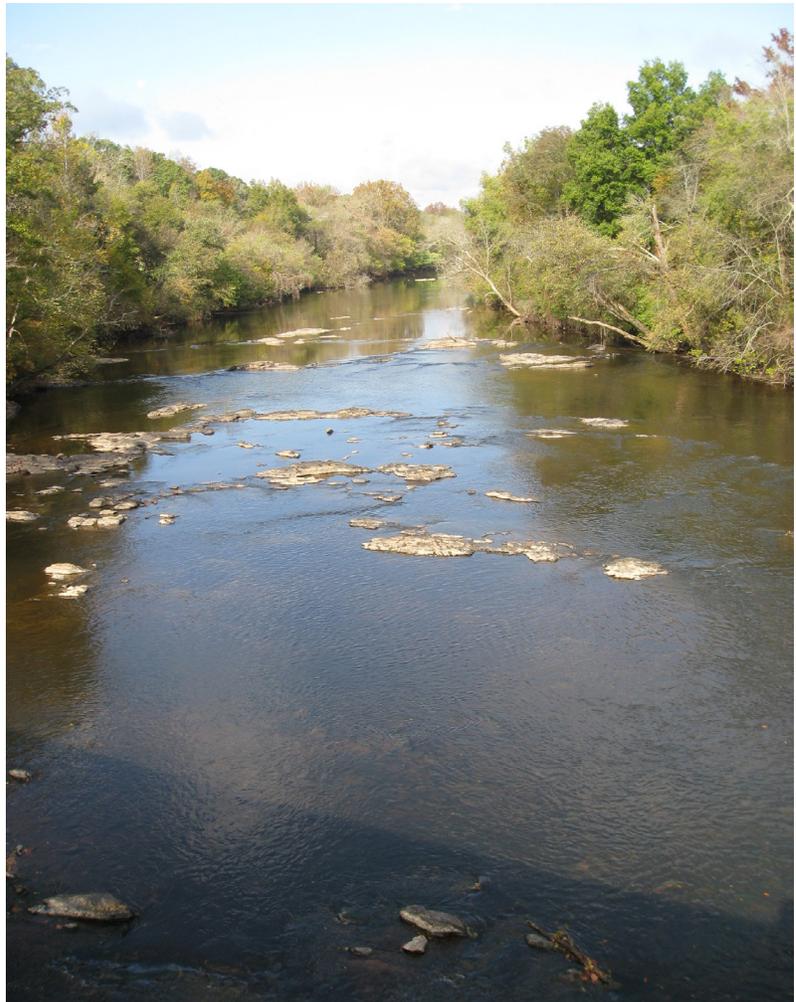
Alamance County: Agricultural Land Use Plan



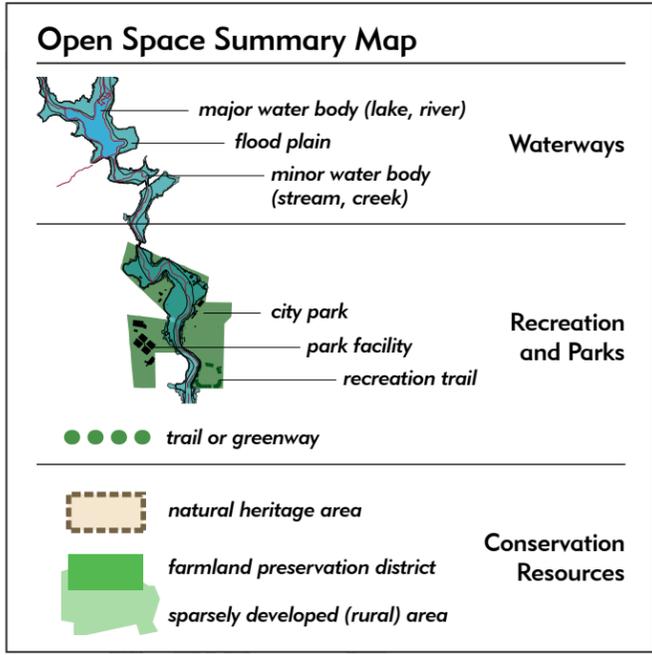
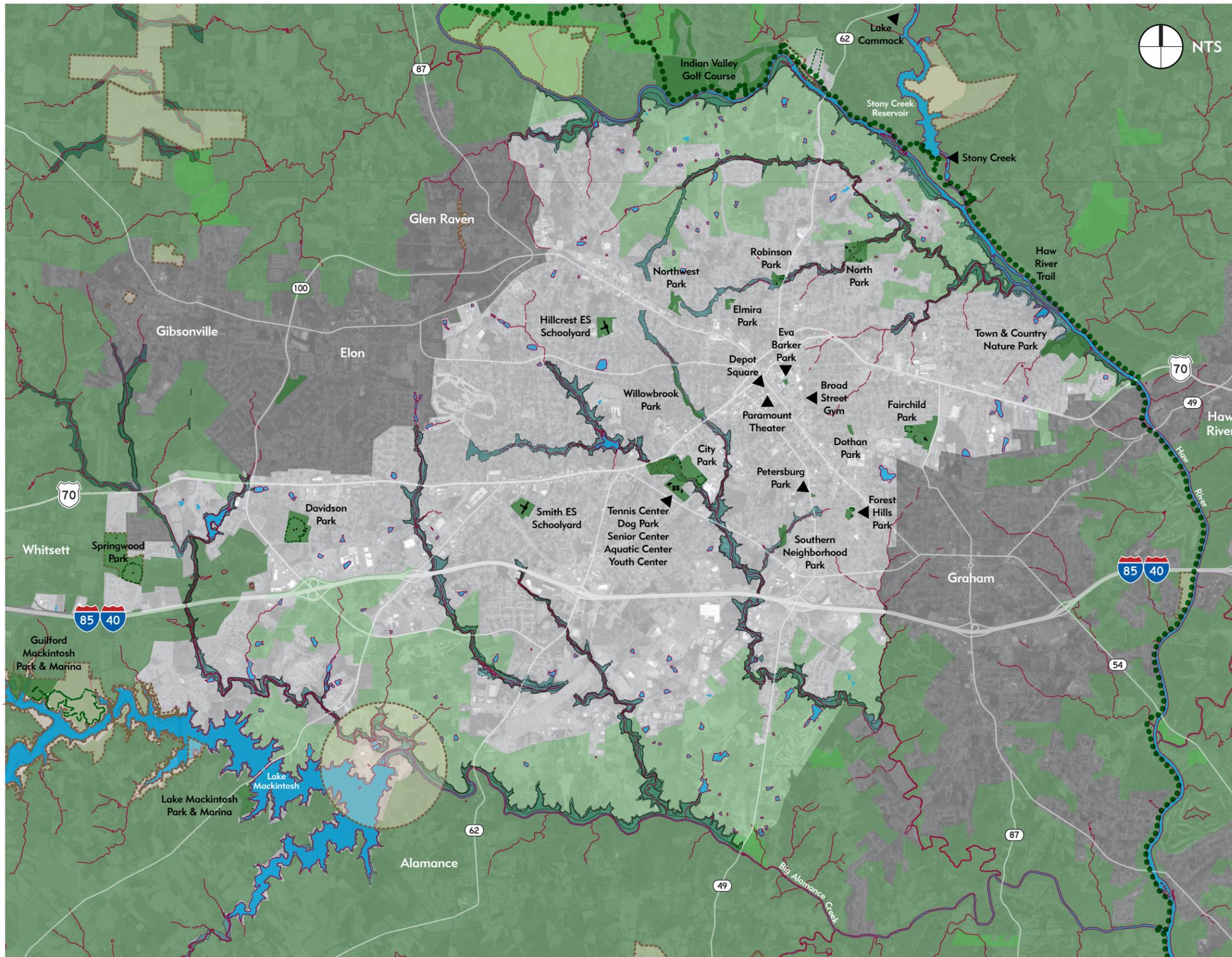
ACDS, LLC

IDENTIFIED ISSUES AND NEEDS

- Improve connectivity through greenways, trails, bicycle lanes and paths, and sidewalks. Consider greenways as recreational amenities, transportation, infrastructure, environmental protectors, and economic drivers.
- Provide more small-scale parks and recreational opportunities.
- Maintain and enhance existing recreation facilities—forecast future trends and opportunities in recreation.
- Give special consideration to significant habitat and plant communities in land-use decision-making and focused open space preservation.
- Develop a coordinated plan for preserving and conserving existing agricultural lands and parcels with significant natural resources within City's jurisdictions.



The Haw River is one of Alamance County's most significant natural resources



TRANSPORTATION

12

12 TRANSPORTATION

OVERVIEW

This transportation analysis establishes where connectivity needs and opportunities may affect future land use and redevelopment/revitalization potential. It contains pertinent information from the Burlington-Graham 2035 Long Range Transportation Plan, which was prepared by the Burlington-Graham MPO and supplemented by the State of North Carolina Department of Transportation, which identifies current transportation capacity.

This analysis also reviewed pertinent transportation studies including the following:

- Alamance County Bicycle Routes
- Application Procedure for Traffic Calming Devices
- Burlington-Graham MPO 2030 Thoroughfare Plan
- Burlington-Graham MPO 2035 Long Range Transportation Plan Update
- Burlington-Graham MPO Comprehensive Transportation Plan Map, Bicycle Map, and Highway Map
- Burlington-Graham MPO Bike Routes
- Burlington Park Way Bicycle Route
- City of Burlington Traffic Calming Policy
- Complete Streets in the Southeast: A tool kit
- Downtown/East Burlington Elon Biobus Ridership Report
- FTA Research Planning for Transit-Supportive Development: A Practitioner's Guide
- Intersection Improvement Considerations
- NCDOT Functional Classifications Map
- Public Transportation System (Initial Documentation)
- Burlington-Graham MPO Public Transit Feasibility Study
- Resolution of Support for the Eastern Piedmont Trails Plan
- Various Construction Plans and Transportation Documents provided by the City of Burlington

Once completed, the transportation systems section will contain recommendations for a multi-modal network of roadways, bus, rail, greenways, and trails accommodating all uses including pedestrians, bicycles, public transit and vehicles. Multi-modal options can contribute to enhanced economic development within the City of Burlington, strengthen its image and identity, and help avoid uncontrolled growth and traffic-related congestion that may detract from the community's quality of life.

Generally the Transportation Systems section of a Comprehensive Plan is intended to accomplish the following transportation goals:

- Development Support
 - » Road connections, configurations, and other improvements should support economic development, future development patterns, redevelopment opportunities, and other development that will be highlighted in the Future Land Use Plan.
- Travel Options and Equitable Accessibility
 - » Provisions should be made for multiple transportation options with a focus on equitable accessibility throughout the entire city, including vehicular, public transit, passenger rail, bicycling and walking
- Safety and Efficiency
 - » Adequate transportation capacity should be provided in a way that allows efficient travel within the community, but also ensures the safety of users.

The above over-arching goals and objectives are complementary to the below goals and objectives from the Burlington-Graham MPO 2035 Transportation Plan update, prepared in 2012. Together these goals will continue to help shape the framework for the City of Burlington's Comprehensive Plan and the forthcoming goals and recommendations that came out of this process.

Street System

- Goal – Develop an efficient street and highway network for the Burlington-Graham Urban Area
 - » Objective – Enhance mobility by improving the connectivity of the existing street network.
 - » Objective – Explore improvement to the street network that will most effectively handle capacity deficiencies.
 - » Objective – Support a safe transportation system by utilizing efforts to reduce vehicular and pedestrian crashes and points of conflict between modes of transportation.

Congestion Management

- Goal – Develop a local thoroughfare system that minimize traffic congestion
 - » Objective – Improve traffic signal timing and coordination through intelligent transportation system measures.
 - » Objective – Develop streets and highways with the intent of minimizing travel times and distances.
 - » Objective – Research and explore funding that preserves and modernizes the existing systems of streets and highways.

Title VI and Environmental Justice

- Goal - Plan and promote a transportation system that does not disproportionately impact minority and low income populations
 - » Objective – Assess and identify the transportation needs of the minority and low income populations.
 - » Objective – Evaluate the benefits and burdens of the transportation investments to achieve fair distribution among all populations.

Bicycle and Pedestrian

- Goal – Promote development of an integrated bicycle and pedestrian network
 - » Objective – Pursue funding for a coordinated and comprehensive network of sidewalks and bicycle routes throughout the Urban Area.
 - » Objective – Improve the transportation system with accommodations to bicycle and pedestrian access.

Public Transportation

- Goal – Support efforts to improve mobility for Urban Area residents
 - » Objective – Increase awareness of public transportation services provided by the Alamance County Transportation Authority (ACTA), Piedmont Authority for Regional Transportation (PART), Triangle Transit (TT) and future public transportation services in the area. Evaluate the potential of fixed-route transit service in the urban core.
 - » Objective – Support expansion plans for ACTA, PART, Triangle Transit and other public transportation options that will improve the mobility for all residents within the Urban Area. Conduct transit planning studies to evaluate the need and benefit of public transportation.
 - » Objective – Support the efforts of PART concerning possible public transit options that would connect the Burlington-Graham Urban Area to the Piedmont Triad region.

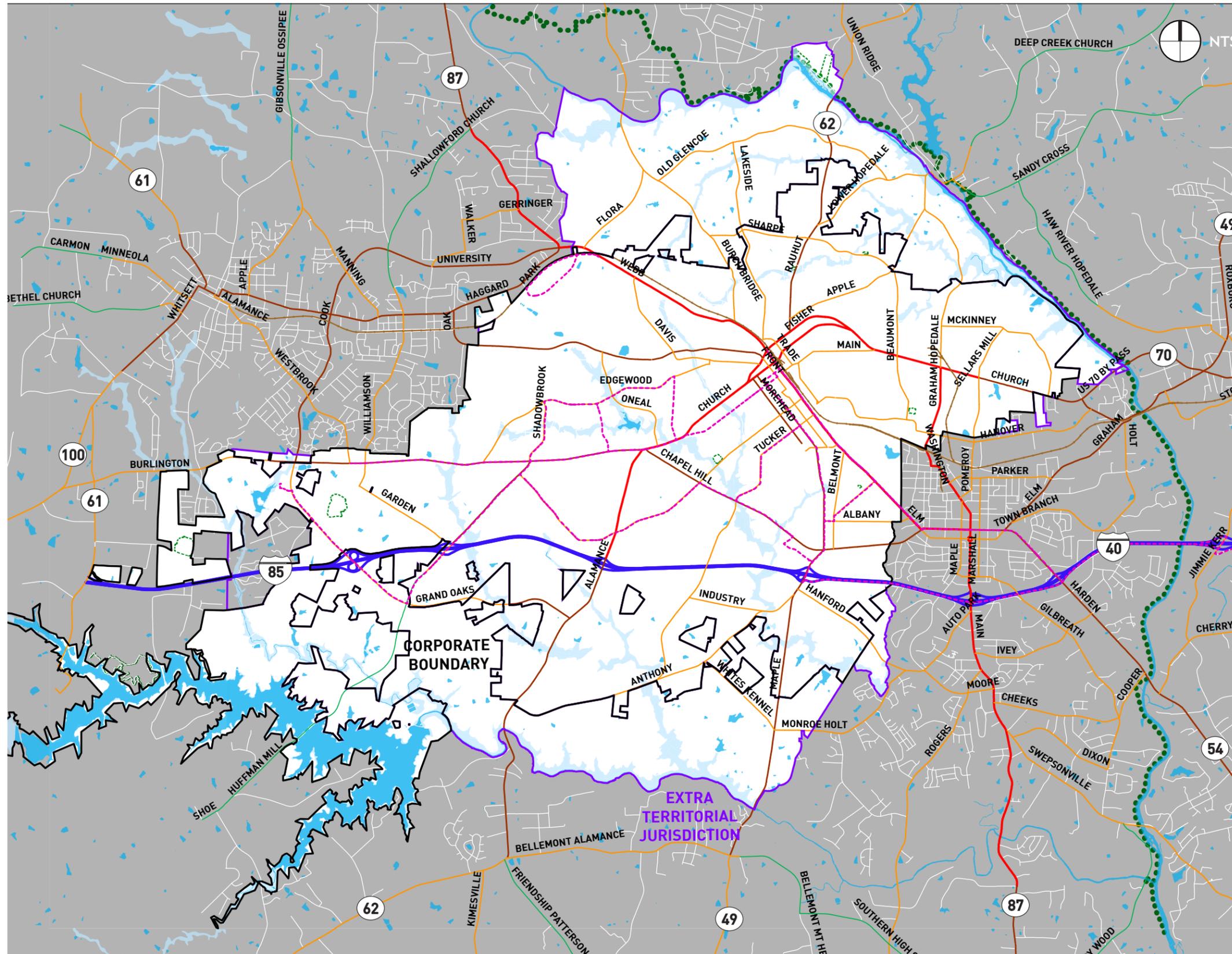
EXISTING CONDITIONS

The 2012 Long Range Transportation Plan includes much information about existing conditions. The following information summarizes the results of that study:

Ranking of All Transportation Issues

| | <i>Very Important</i> | <i>Somewhat Important</i> | <i>No Opinion</i> | <i>Somewhat Unimportant</i> | <i>Not Important</i> |
|--|-----------------------|---------------------------|-------------------|-----------------------------|----------------------|
| Improving traffic signal timing and coordination | 70% | 30% | 0% | 0% | 0% |
| Reducing or managing traffic congestion | 75% | 25% | 0% | 0% | 0% |
| Preserving natural areas, open space or farmland | 45% | 10% | 45% | 0% | 0% |
| Improving air quality by reducing traffic congestion | 65% | 20% | 10% | 5% | 0% |
| Walking and biking safely | 85% | 15% | 0% | 0% | 0% |
| Providing transit services for the urban area | 90% | 10% | 0% | 0% | 0% |
| Improving conditions of railroad crossings | 50% | 30% | 20% | 0% | 0% |
| Providing transit services for the disabled | 80% | 20% | 0% | 0% | 0% |
| Preserving existing homes and businesses | 70% | 15% | 15% | 0% | 0% |
| Widening existing streets | 10% | 60% | 25% | 5% | 0% |
| Reducing personal transportation expenses | 75% | 15% | 5% | 5% | 0% |
| Building sidewalks, crosswalks and greenways | 85% | 15% | 0% | 0% | 0% |
| Creating new funding sources for local projects | 80% | 20% | 0% | 0% | 0% |
| Preserving historic buildings | 60% | 30% | 10% | 0% | 0% |
| Reducing travel time | 15% | 60% | 20% | 5% | 0% |
| Building new roads | 35% | 25% | 35% | 5% | 0% |

2012 Long Range Transportation Plan

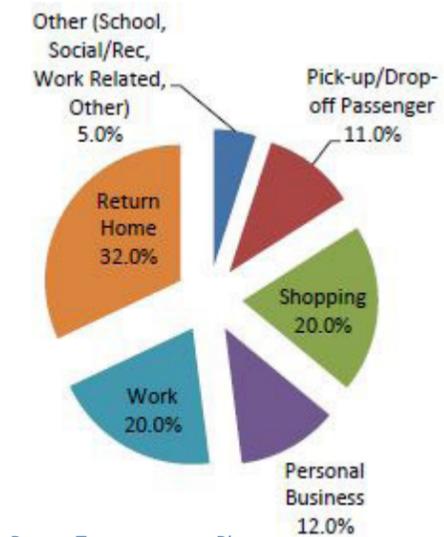


Transportation Summary Map

| | | |
|--|-----------------------------------|--|
| | rail corridor | |
| | interstate highway | |
| | principal arterial | |
| | minor arterial | |
| | major collector | |
| | minor collector | |
| | trail | |
| | bus routes (City proposed routes) | |

| | | |
|--|--------------------------------|-------|
| | Extra-territorial Jurisdiction | Areas |
| | Burlington city limits | |

Trips by Destination Purpose



source: 2012 Long Range Transportation Plan

Vehicular Transportation

The City of Burlington has excellent transportation access within the North Carolina piedmont. Specifically, access to Interstate 40/85 through the City's four interchanges and other highways such as US 70, NC 61 and NC 62 connect the City to the region and provide access for commerce. Approximately 115,000 vehicles per day went through the Urban Area in 2009. Much of the traffic is due to the influence of the transportation network system that allows for commuting to the Research Triangle and Piedmont Triad employment centers. Higher interstate speeds have attracted some travel from competing roads such as NC 62, US 70, and NC 54 resulting in safer travel and a larger travel demand on the Interstate System. The City also has a robust road system that provides connectivity within the City's corporate boundary and ETJ. According to the studies completed by the Burlington-Graham MPO, 96% of travel within the Urbanized Area is conducted by automobile with 52% of trips with the destination of either to work, or home from work.

Congestion

According to the Burlington-Graham MPO, congestion continues to be an issue especially during peak hours with roads accessing Interstate 40/85. The City has identified a plan to provide improvements to several of these streets and the addition of multi-modal transportation options such as a bus system to mitigate congestion issues.

Planned Improvements

The Burlington-Graham MPO has identified transportation improvements for the 2035 planning horizon as described in the map on the adjacent page.

THOROUGHFARE PLAN FUNCTIONAL CLASSIFICATIONS

Roadways can fall into several classifications and within those are generally two types: urban and rural. Many of the roads in the Burlington corporate limits would be classified as urban treatment (curbs, gutters, and pedestrian amenities) and some are rural (open drainage in side ditch).

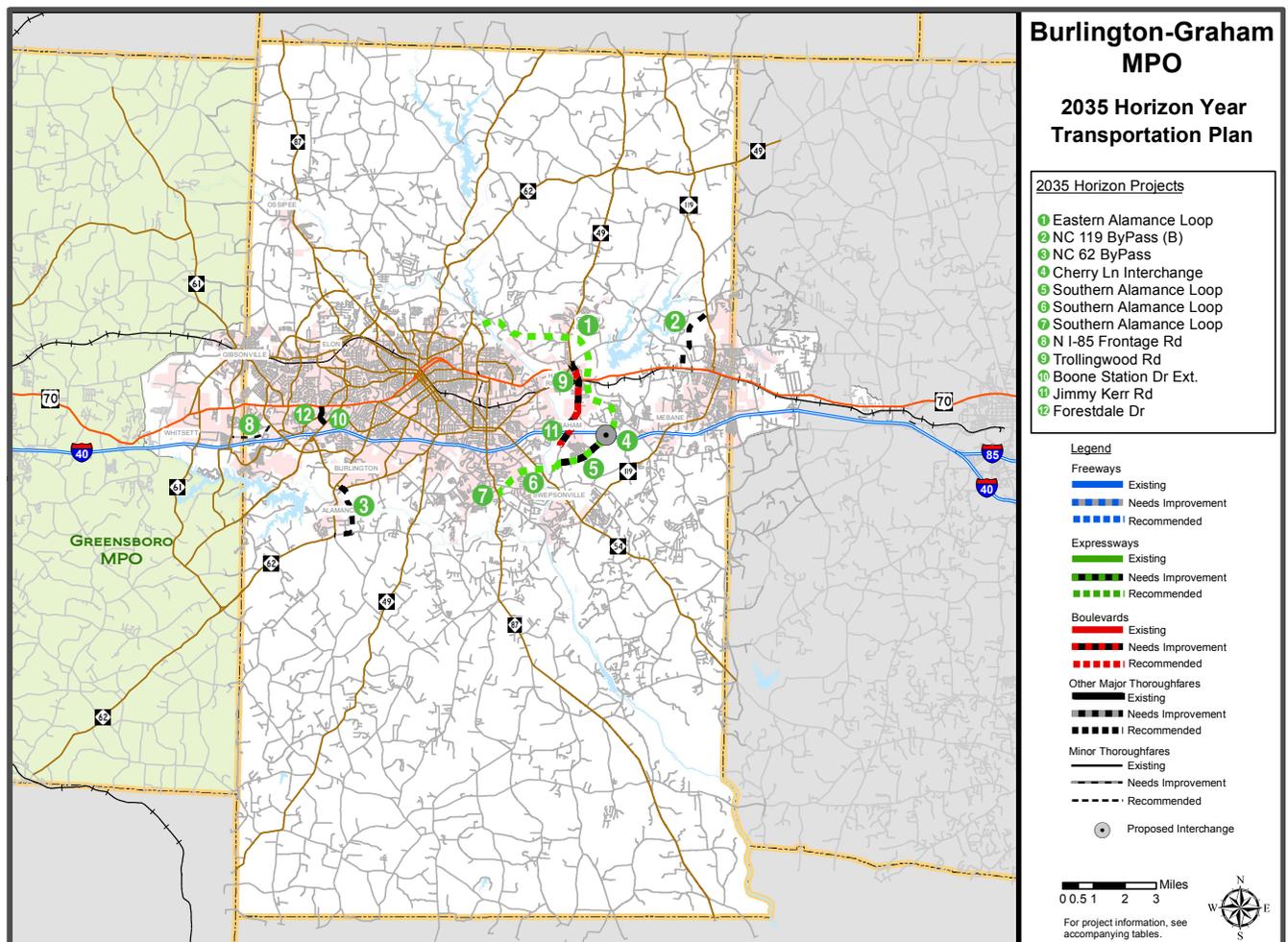
Street classifications include:

Interstate and Other Freeway (Controlled by NCDOT)

These roads have strict controls on allowing direct access. Access is limited to interchanges with major cross streets. Controlled access highways are designed to move people, both inter- and intra-regionally. Local examples of controlled access highways include Interstate 40/85.

Principal and Minor Arterials

Provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.



Major and Minor Collectors

Provide a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

Local

Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

Downtown

Downtown Streets are a special street typology. Access to and from a downtown street should be regulated to the established pattern of side streets and alleys. New buildings should abut the edge of the ROW to match existing and historic development patterns. On-street parking also provides traffic calming, increasing safety and enhancing economic development.

Minimum Street Right-Of-Way (ROW)

| <u>Type of Street:</u> | <u>Minimum ROW</u> |
|---|--------------------|
| Major Thoroughfare (Principal, or Minor Arterial) | 80-100 Feet |
| Minor Thoroughfare (Major, or Minor Collector) | 70 Feet |
| Local Street | 60 Feet |

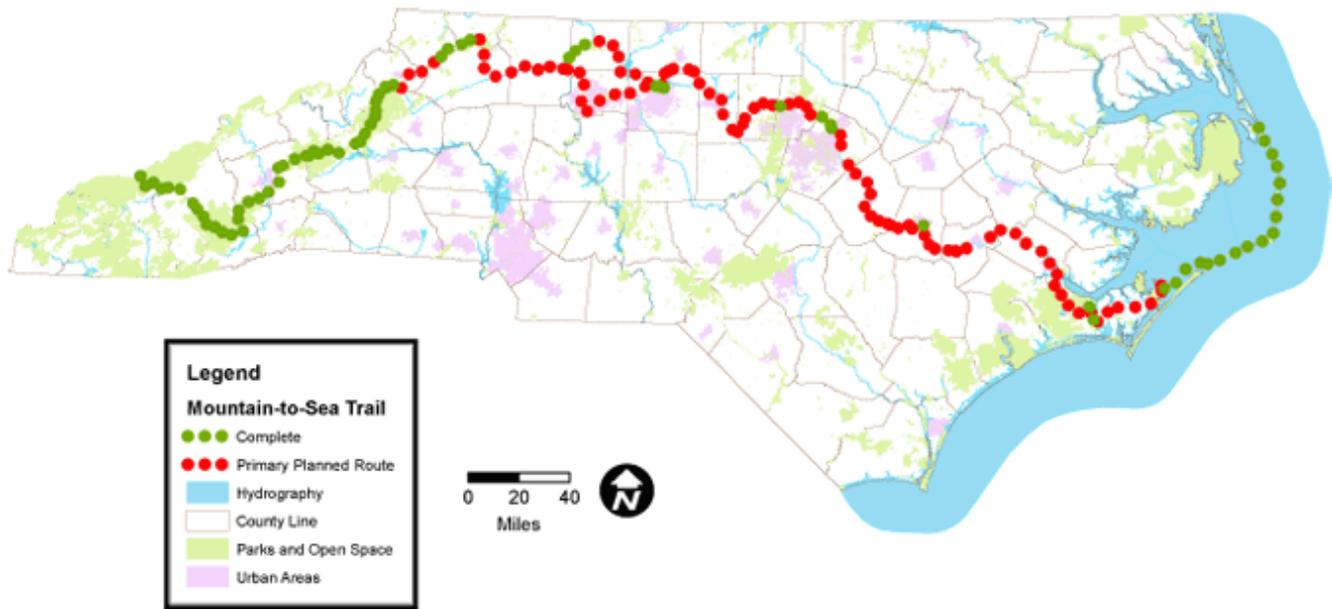
PEDESTRIAN/BICYCLE NETWORK

Bicycle and pedestrian mobility is of particular importance to the City of Burlington and its residents. From a quality of life and level of service perspective, the City is providing amenities to that end, and the Burlington-Graham MPO has spelled out a plan for potential improvements and enhancements going forward. The city also should continue to work with neighboring Graham, Elon, and Alamance County to continue to support a regional pedestrian and bicycle network, provide programming and education, and to apply for federal and state funds to implement planned amenities. Moreover, as the City updates its Unified Development Ordinance, attention should be paid towards further integrating sidewalk, multi-use path, and bike lane requirements into development standards.

Alamance County has over 110 miles of bike routes along state maintained facilities. North Carolina Bike Route #2 is located in the southern portion of the county. The Mountains to Sea Bicycle Route travels 19 miles across the county from Kimesville to Snow Camp. There are also six other state-recognized bicycle routes in the county including NC Bike Routes 70, 71, 72, 73, 74 and 6.

Two projects that include both bicycle and pedestrian elements are described below:

- **Lake Mackintosh Greenway:** the project would link Davidson Park to Lake Mackintosh Park and Marina. A key element of this project was included in TIP project U-2905 that includes accommodation for bike traffic from US 70 to Kirkpatrick Road; the remaining link will be the construction of the greenway from Alamance Regional Medical Center to the Lake Mackintosh Water Plant and eventually connect to the Lake Mackintosh Marina.
- **Haw River Greenway:** this project would be constructed adjacent to the Haw River and travel from the historic Glencoe Mill community to the Town and Country Park in Burlington. This project includes canoe access along the Haw River where feasible.



RAILROAD TRANSPORTATION

Passenger Rail

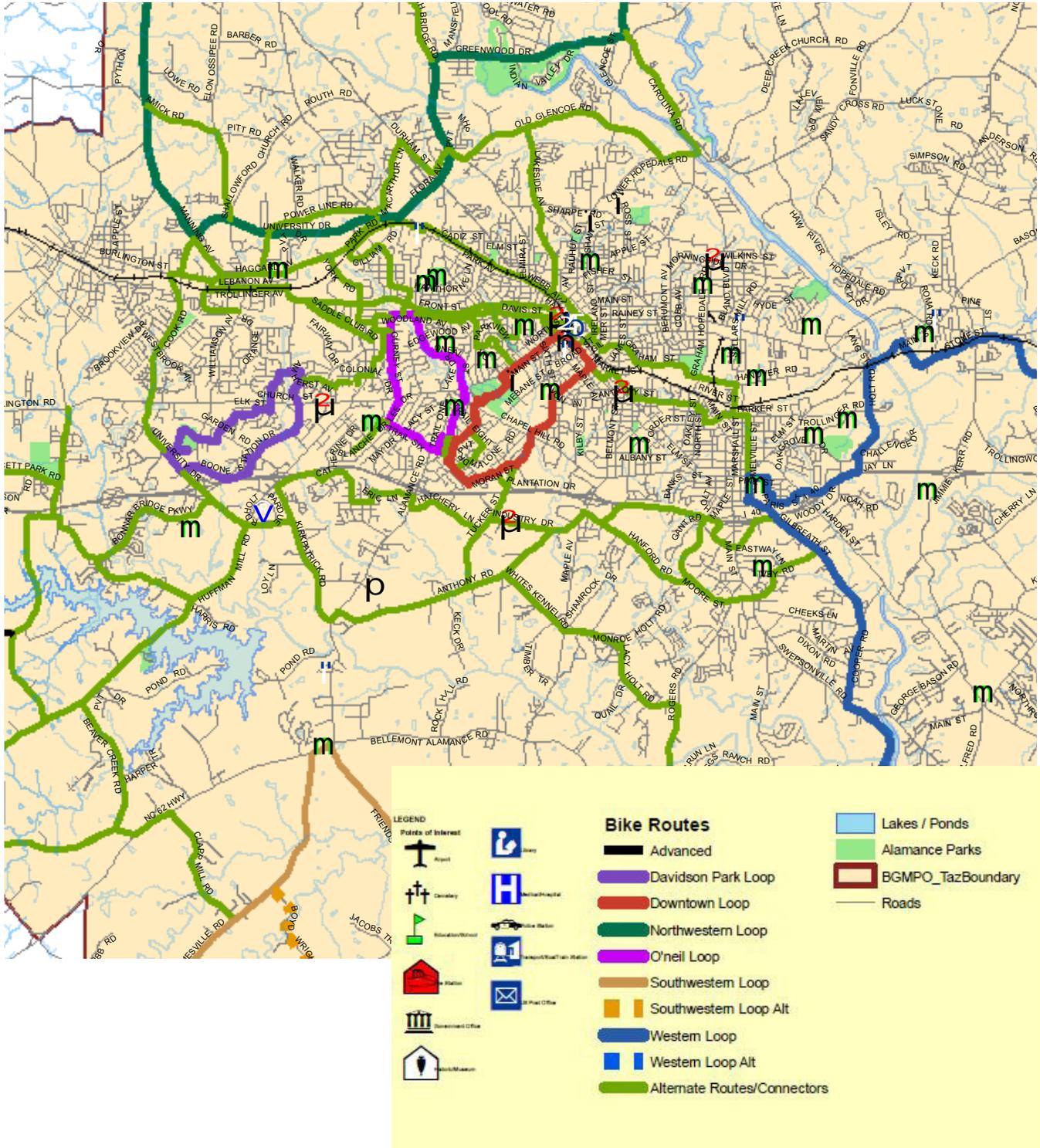
The State of North Carolina sponsors two Amtrak-operated passenger trains: the Piedmont and the Carolinian. The Piedmont makes a daily round trip between Raleigh and Charlotte by way of Burlington. The State owns the equipment for the Piedmont and contracts with Amtrak for maintenance and operations of the train. The Carolinian makes daily trips each way between Charlotte and New York City by way of the Burlington depot. The Carolinian uses Amtrak equipment and is Amtrak-maintained.

Future rail connections such as the Piedmont High Speed Corridor between Washington DC and Atlanta GA, when implemented, will stop in Burlington. This is a federally-designated high speed corridor. A recent study on the corridor indicated that the potential for ridership and revenue along the passenger rail line would be greater than any other high-speed route in the United States.

Potential North Carolina commuter rail service may eventually provide service to Burlington. One of the corridors identified is the Burlington-to-Greensboro link. This 23-mile commuter corridor extends westward from Burlington along I-40/85. Travel time between the two cities is approximately 25 to 30 minutes by automobile, given the 65-mph speed limit along much of I-40/85. The speed for Amtrak has recently been increased to reduce the train travel time to be more competitive, if not the same as, an automobile trip. NCDOT estimates at least 43,000 potential commuters can be served by this rail service.



Burlington - Graham MPO Bike Map



Freight Rail

NCDOT has a historic link to freight and freight movements. This linkage dates to the early days of Departments of Transportation, when their primary focus tended to be on creating “farm to market” roads to meet basic societal needs—bringing food from the point of production (the farm) to where people live (cities and towns).

Compared to the historic role of freight in DOT activities and planning, recent efforts to incorporate freight considerations into the transportation planning process tend to be reflective of shifts toward the use of global rather than national or regional supply chains.

In North Carolina, freight and logistics have emerged as a state priority that can help underpin economic development and economic competitiveness. In North Carolina, this topic then relates to the movement of raw goods and materials as well as finished goods and products, between their origins and ultimate destinations including in-state distribution to businesses and consumers and out-of-state markets. As a result, freight and logistics touch all key aspects of the state’s multifaceted economic development targets including agriculture, bio-medical, tourism, education, military, and manufacturing. This ties to Burlington as rail continues to be important in many aspects of the supply chain economy.



HIGHWAY FREIGHT TRANSPORTATION

Freight mobility through North Carolina’s highway network will rely on improvements that provide direct and timely access for trucks to port facilities from inland freight nodes and facilities, including rail intermodal facilities, manufacturing, agricultural production, warehousing and distribution centers.

Based on the maritime market opportunities identified for North Carolina, investment in the US 70, I-73/I-74, and I-40 highway corridors will have the greatest effect in reducing trucking travel times within the state.

PUBLIC TRANSIT

Public transportation within Burlington is currently very limited in capacity and consists of a bus provided by Elon University (called the Elon Bio-Bus) providing services to Elon, Downtown, and East Burlington. This bus system is wildly popular by the public and students of Elon University. This route is limited in hours Monday-Friday 2:30-6:30 and follows the academic year. That said, in 2013-2014, total ridership was 3,894 of which 1,582 were students (41%) and 2,312 (59%) public riders. The popularity and use of such a limited system easily starts to make the case for why a fixed route bus system makes sense within Burlington. Arranged transit is provided by the Alamance County Transportation Authority and focuses on providing services to the human services organizations and agencies within the county.

Public Transportation Approved

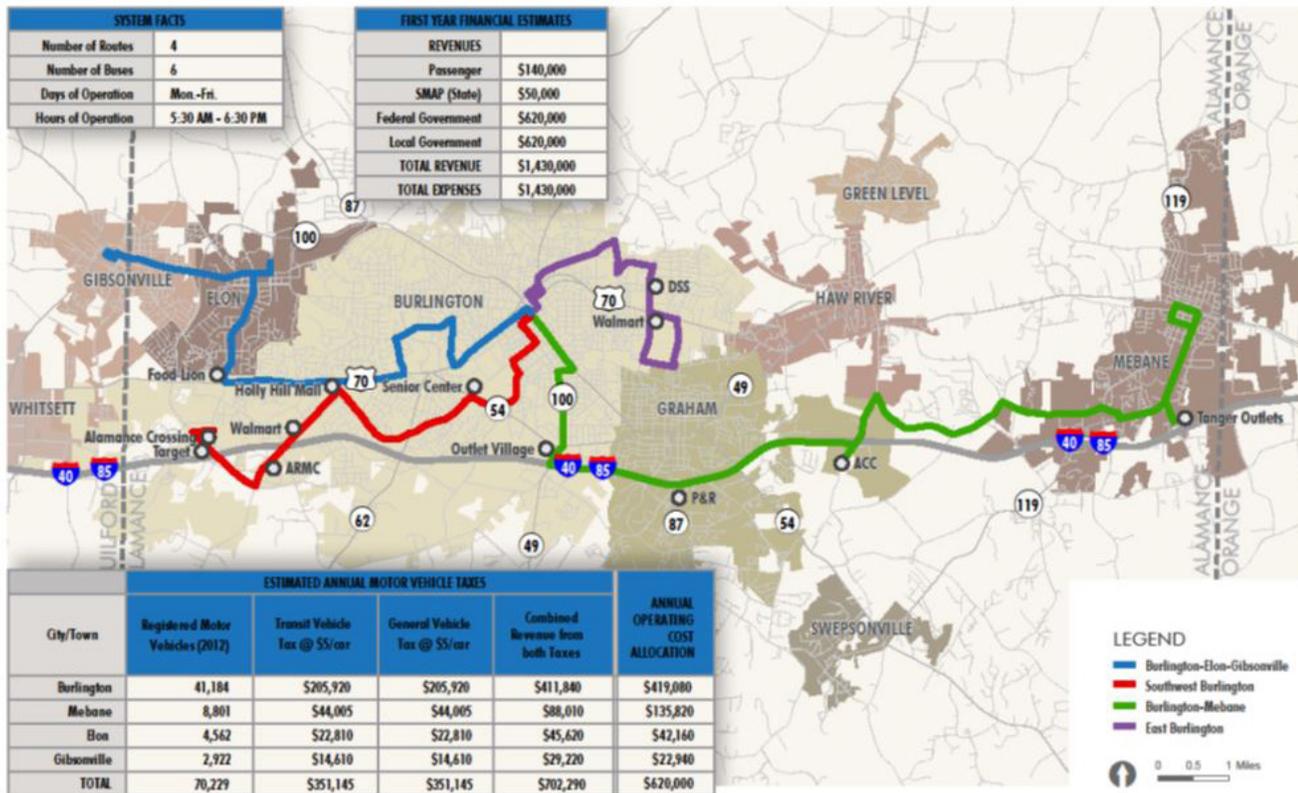
The City of Burlington does not, but will soon have, fixed-route transit service which will consist of a bus system. During the summer of 2014, the Burlington City Council voted to support a fixed-route transit system that will serve the City of Burlington. This system has been supported by numerous studies including the 2006 Public Transit Feasibility Study, which established preliminary

needs and services, service capacity, and routing. This system may also service neighboring communities. Some initial studies have already been done and preliminary routes are included in the map below. Funding sources and a timeline have yet to be determined, but the system will be moving ahead over the coming months. What is known is that this fixed-route system will consist of a hub and spoke design. The system will rely on Downtown Burlington as its transfer point and hub. The location of the Downtown transfer spot may become an important catalyst for redevelopment within the Downtown and will be studied further. This system will operate with the goal of an average 30-minute headway which will allow it to provide an equitable option for transportation access for all members of the Burlington community. Transit service would operate from 5:30am to 6:30pm, Monday to Friday. These operating hours are typical for transit systems in small to medium-sized cities in North Carolina. Weekday service only is generally the preferred manner for starting transit service in a new location and is supported by survey responses from residents in Burlington.

According to the 2006 study, the preliminary six routes for the urban area (including neighboring communities) are:

- A route connecting downtown Gibsonville with Downtown Burlington that also serves new shopping destinations located at Exit 140 on I-40 and commercial developments along Huffman Mill Road such as Wal-Mart and Holly Hill Mall. This route serves the Twin Lakes Retirement Community off of Church Street in Elon and key passenger generators such as the Employment Security Commission and the Senior Center. The route also operates to Alamance Regional Medical Center, a location often cited by survey respondents and stakeholders.
- A route which could be interconnected with the aforementioned Burlington to Gibsonville route, operating between Downtown Burlington and downtown Mebane, with a connection to Alamance County government facilities located in

preliminary transit system routing map



downtown Graham. Direct service is provided between the Burlington campus of ACC and the community college's main campus in Graham. The route also serves Burlington Outlet Village located near Chapel Hill Road in Burlington.

- A route operating primarily in Burlington which is designed to serve commercial developments along South Church Street such as Holly Hill Mall and Koury Centre. Transit service is operated to Williams High School and the Brookwood Retirement Community. The end of the line for the route is Twin Lakes, providing a second transit route for this major retirement center.
- A route serving the eastern portion of Burlington which could be interconnected with the previously mentioned route operating along South Church Street to provide direct service for passengers traveling from one side of Burlington to the other. The route serves residential areas along Rauhut Street and Alamance County offices on Graham-Hopedale Road, including the Department of Social Services. Transit service is provided to Cummings High School and to commercial areas located along North Church Street.
- A route connecting Downtown Burlington with Elon University. Transit service is operated to Glen Raven Mills, Carolina Biological and Labcorp, three major Burlington employers. The route loops through the Elon campus by traveling along Lebanon and Haggard Avenues. The Vocational Trades Center on West Webb Avenue in Burlington is also served by this route.

During discussions with Elon University officials, frequent, direct bus service between the campus and the new businesses at Exit 140 surfaced as a transit need from the University's perspective. The route loops around the Elon campus and travels along Williamson Avenue and Saint Marks Church Road to access Target and other retailers at Exit 140. Service would operate every 30 minutes.

PARKING

Downtown Burlington is considered a healthy business environment with a concentration of area governmental offices, the central location of area banking institutions and the headquarters of LabCorp, a national medical testing services company founded in Burlington. Retail businesses in Downtown Burlington are an eclectic mix of specialty shops and eating establishments. A significant portion of Downtown shops are antique stores, general consignment shops, and antique furniture stores that are concentrated along Front Street, with some extension into the Main Street and Spring Street corridors. Those businesses draw customers from the greater Burlington area and other nearby communities. Although there is a significant amount of vacant or underutilized retail and office space in the downtown core, recent development activity such as the renovated Paramount Theater and the Company Shops Market Co-op have generated new interest in bringing additional businesses and housing Downtown. Due to the forthcoming vacating of buildings in Downtown Burlington by LabCorp, further parking analysis may need to be conducted as this occurs, but case studies suggest that parking may become available within Downtown in the coming years that would be supportive of parking required for redevelopment efforts.

Parking Capacity

The parking system within Downtown Burlington consists of 495 on-street spaces and 2,746 off-street spaces (public and private). These totals include 906 spaces that are provided in the City's Municipal Parking Lots. Parking is well-distributed across the Downtown area, including well positioned City lots.

Parking Utilization

A survey of parking occupancy in both public and private parking facilities was conducted on Thursday, October 13, 2011. A peak of 1,686 vehicles were found within the survey area for an overall occupancy of 52% of available capacity. Occupancy in off-street parking facilities was 51% and 56% in on-street spaces. Applying a standard "Search Margin" of 15%, the effective occupancy level was 61%, with a surplus of 1,257 spaces. Much of this surplus was located in City lots, but a significant amount was found in company parking lots that appeared to be underutilized.

An initial turnover survey was conducted of on-street occupancy and length-of-stay patterns but the results were flawed by the fact that the survey process did not capture relocating parkers (to avoid ticketing) that may have moved just around the corner—considered a valid move under current enforcement policy. (reference: 2012 Downtown Parking Plan)

Key Concerns

The most consistent concern was voiced by Downtown business owners who are concerned that Downtown employees take up valuable on-street parking that is needed for customers and it is generally agreed that a large number of employees use on-street parking all day, moving their vehicles periodically to avoid ticketing. Responses received from the web survey indicated that the availability of close, convenient parking was a major factor in decisions to shop or do business Downtown.

IDENTIFIED ISSUES AND NEEDS

- Better pedestrian, bicycle, and public transit connectivity
- As growth occurs, a focus on multi-modal connectivity is important and integration into open space and other available properties/easements/rights-of-way is key.
- Future transportation investments should support development/redevelopment. How does development/redevelopment support transportation improvements financially?
- Focus on complete streets.
- Leverage private/public partnerships to support improvements to transportation infrastructure.
- Equitable transportation access throughout all of Burlington is crucial.

INFRASTRUCTURE AND PUBLIC SERVICES

13

13 INFRASTRUCTURE AND PUBLIC SERVICES

WASTEWATER AND POTABLE WATER SERVICES

Burlington's wastewater collection system consists of approximately 18,500 connections serving homes, businesses and industry, 426 miles of gravity sewer lines, 4 sewer lift stations and 6,500 feet of pressurized forcemain. Every day an estimated 11.9 million gallons are transported through the collection system to the East Burlington and South Burlington wastewater treatment facilities. The collection system has both gravity lines and forcemains. For the purpose of this analysis, we are dividing the study area into areas similar to those used in the 1991 Burlington 2000 Comprehensive Plan: Central, North, West, West Central, East, Southwest, and South.

The City's water supply system has ample volume and capacity to accommodate the future growth of the urban areas well into the 21st century. The Lake Mackintosh reservoir has added 7.5 billion gallons of water to the City's water supply system. The City's existing sewage collection system can only accommodate minor future sewer line extensions within the immediate drainage basins surrounding the City. Future expansion beyond these areas will require lift station improvement and/or the construction of new sewer outfall lines.

Please refer to Appendix A for plan drawings related to the following areas of the City.

North Burlington

The North Burlington area generally extends North of Fisher Street/North Church Street and the railroad tracks that run parallel to NC Highway 100 to the Haw River. It stretches from the Elon University and Burlington extraterritorial boundaries in the West to the Apple Street Extension and Graham-Hopedale Road corridor in the East. The North Burlington area is mostly rural/residential in character with large vacant acreages and farmland. Population and housing growth in the past has been limited. Poor transportation and lack of public water and sewer services in areas outside the City greatly affect the area's future growth potential.

North Burlington Utility Issues & Needs

- Prepare a Water and Sewer Service Area Plan for future extension of water and sewer service to unserved areas within Burlington's extraterritorial jurisdiction.
- Provide public sewer service in the Westmoreland Heights and Glen Raven Road area.
- Prepare a plan for the Haw River Interceptor rehab.

East Burlington

The East Burlington planning area is bordered on the east by the Town of Haw River and the City of Graham. It basically includes the land area between the Haw River and Interstate 40/85 that lies southeast of Mebane Street, Tucker Street and the east of Apple Street Extension. East Burlington is an area containing older developed areas of both residential and commercial development. In between these developed areas is a high percentage of vacant developable land. The area has experienced a declining population and a low production of new housing. While commercial activity has expanded along the area's major thoroughfares, the largest employers and industries in the area now plan to move or relocate elsewhere within or outside the City.

East Burlington Utility Issues & Needs

- Prepare a Water and Sewer Service Area Plan for future extension of water and sewer service to unserved areas within Burlington's extraterritorial jurisdiction.
- Extend sewer lines along North Sellars Mill Road to provide service to unserved residential neighborhoods.

- Prepare a plan for the Haw River Interceptor rehab.

South Burlington

The South Burlington planning area is located between the Interstate 40/85 corridor and Great Alamance Creek and between the Burlington/Graham Extraterritorial boundary to the east and Alamance Road and Gunn Creek to the west. South Burlington currently is mostly residential in character, but commercial and industrial development continues to expand in the area. Over 50% of South Burlington is zoned for future industrial growth. Moderate increases in population and housing are expected but continued industrial growth within the I-40/85 corridor and near the airport will substantially change the land development patterns in the area.

South Burlington Utility Issues & Needs

- Prepare a Water and Sewer Service Area Plan for future extension of water and sewer service to unserved areas within Burlington's extraterritorial jurisdiction.
- Extend sewer along Maple Avenue from south of Bayview Drive to south of Race Track Road.
- Extend sewer along Whites Kennel Road between Anthony Road and Ample Avenue.
- Extend sewer to east of Old Trail Road that will flow toward Great Alamance Creek outfall.
- Extend sewer along Anthony Road from Alamance Road to the northeast.
- Extend water and sewer to the Shamrock Golf Course area.

Southwest Burlington

Southwest Burlington includes the land area located south of Interstate 40/85 to Beaver Creek. The area is bordered by the Guilford County/Alamance County Line to the west and Gunn Creek and Alamance Road to the east. Southwest Burlington contains large acreage of public land, farmland and residential dwellings. This rural landscape is changing as development pressures intensify. The focal points for this new growth are the construction of Lake Mackintosh and the expanding ARMC. In 2002, the City of Burlington and the City of Greensboro entered into a water and sewer agreement and an annexation agreement in Eastern Guilford County.

Southwest Burlington Utility Issues & Needs

- Prepare a Water and Sewer Service Area Plan for future extension of water and sewer service to unserved areas within Burlington's extraterritorial jurisdiction.
- Extend sewer along Kirkpatrick Road from Grand Oaks Blvd to Alamance Road



One of Burlington's many water towers rises above Webb Avenue west of Downtown



J.D. Mackintosh, Jr. Water Treatment Plant in the Southwest Burlington district

West Central Burlington

The West Central Burlington planning area is bounded by Guilford County and the Town of Elon to the west and by Tucker Street, Little Alamance Creek, Overbrook Drive, and Tarleton Avenue to the east. West Central Burlington is the fastest growing area within the City. Population and housing growth has been strong, and there is currently a good balance in both residential and non-residential development.

West Central Burlington Utility Issues & Needs

- Prepare a Water and Sewer Service Area Plan for future extension of water and sewer service to unserved areas within Burlington's extraterritorial jurisdiction.
- Extend public water to the Fairview Drive residential area.
- Extend public water to the St. Marks Church Road area North of Boone Station Drive.

West Burlington

The West Burlington planning area is bounded by Rock Creek on the west, Carmen Road to the north, Lake Mackintosh to the south and the drainage divide to the east of Rock Creek. In 2002, the City of Burlington and the City of Greensboro entered into a water and sewer agreement and annexation agreement which set forth service areas and limits of future annexation in proximity to Rock Creek in Eastern Guilford County. AWCK prepared a report and master plan that showed how the "Western Sewer Service Area" could be served. In 2012, this report was updated. Recommendations noted in the report are acknowledged.

West Burlington Utility Issues & Needs

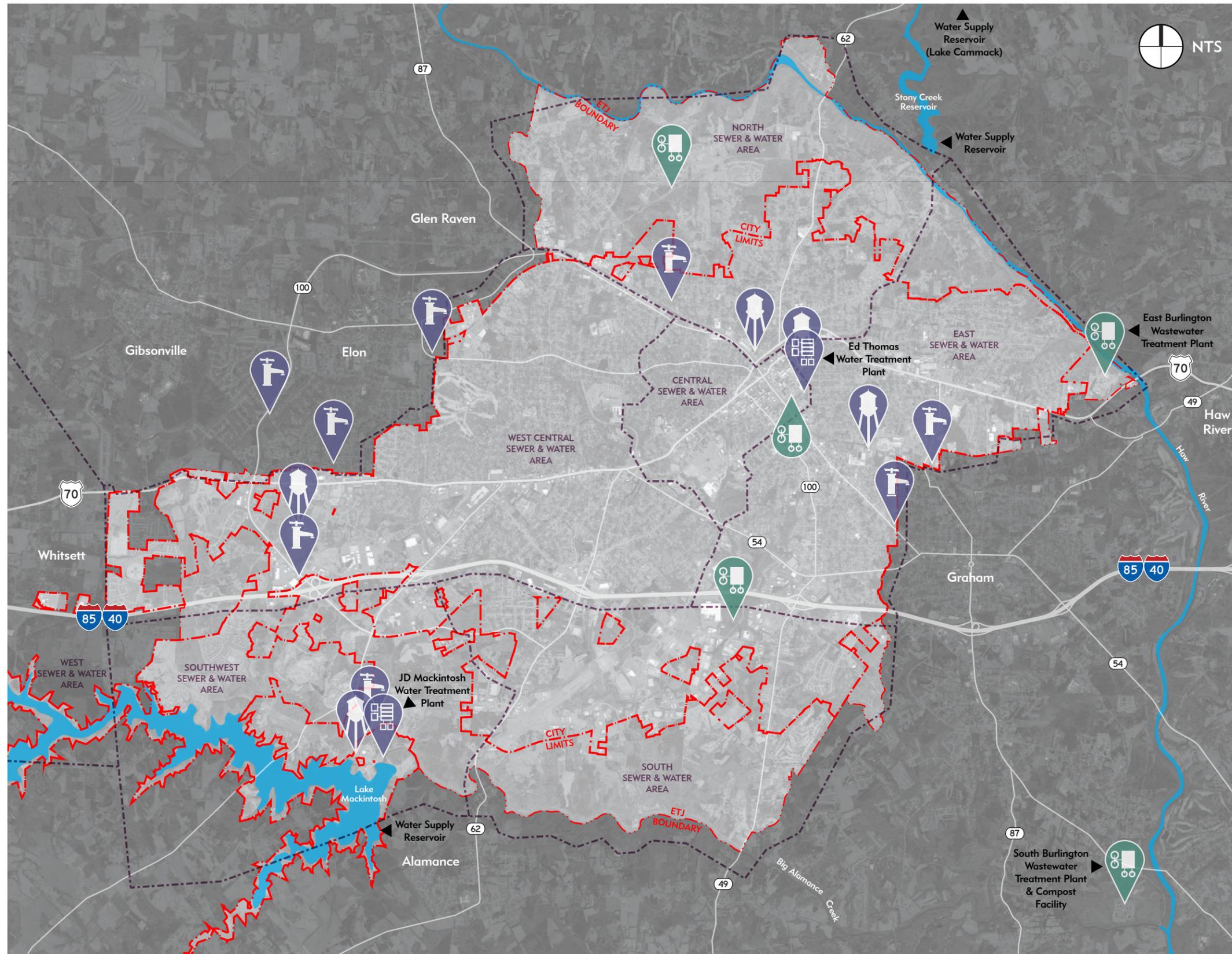
- Extension of the Rock Creek Outfall, the regional pump station and forcemain.
- Sewer improvements include installation of outfalls to serve the sub areas of the balance of the western service area.
- Change discharge of forcemain from Springwood Park Outfall to Garden Road Outfall.

Central Burlington

The Central Burlington planning area generally is defined by the Southern Railway line parallel to Webb Avenue to the north, Fisher Street, Holt Street and Ireland Street to the east, Mebane Street and Tucker Street to the south, and Alamance Creek, Edgewood and Tarleton Avenues to the west. Central Burlington contains the City's central business district and a diversity of older surrounding residential neighborhoods. The area has experienced a decline in population and a myriad of redevelopment and urban renewal efforts.

Central Burlington Utility Issues & Needs

- No new extensions of utilities are needed in this area since it is fully developed.
- Inflow/Infiltration reduction planning should be planned as the area redevelops.
- Creative solutions should be looked at as the area transitions from mills to residential. Backflow preventers for fire protection will be needed and the best solution would be to have them inside the buildings.



Water Infrastructure Summary Map

- water tower/tank
- water pumping station
- water treatment plant
- wastewater treatment plant

Water Utility Facilities

WEST CENTRAL SEWER & WATER AREA

refer to Small Area Plans for additional information

Water & Sewer Study Areas

STORMWATER

Burlington has three watersheds that have been studied and evaluated. They are the Haw River, Little Alamance Creek, and Travis and Tickle Creek watersheds, with the latter watersheds flowing into the Haw River basin.

River Basin Context

North Carolina contains 17 major river basins. The Haw River basin is located in the upper portion of the Cape Fear River Basin. The headwaters of the Haw River are located in the northeast quadrant of Forsyth County. From there, the river flows through the northwest corner of Guilford County, the southern portion of Rockingham County, back down through the northeast corner of Guilford County, and then from the northwest to the southeast corner of Alamance County. Between the Interstate 40/85 corridor and NC87, the Haw River is included on the State's 303d list of impaired waterways.

The Little Alamance, Travis & Tickle (LATT) Creek Watershed occupies 52 square miles in western Alamance County and eastern Guilford County, just north of the USI-140 highway. The watersheds have two predominant land uses, rural and urban. Alamance County is historically an agrarian community, with Burlington providing an industrial center. The urban areas of Burlington have expanded and contributed low density impervious coverage to the watersheds. The urban area occupies 57% of the land in the LATT watershed. The LATT watershed is a sub basin to the Haw River Basin.

Basin Significance and Water Quality Issues

The Cape Fear River Basinwide Water Quality Plan (July 2000) classified the Haw River as a Class C-Nutrient Sensitive Water (NSW). The 2000 plan also classified the Haw River as partially supporting and impaired for fecal coli form bacteria, sediment and unknown biological causes. The Haw River sub-basin (03030002) was rated as a Category 1-calling for high-priority restoration by North Carolina. Little Alamance Creek (LA) is considered an impaired waterbody by the NC Division of Water Quality (DWQ). NC DWQ monitoring indicated the waters of the Little Alamance Creek violates the Clean Water Act for impaired biological integrity with the stresser being urban stormwater runoff. The Travis and Tickle Creeks (TT) are listed as impaired for biological integrity in the 303 (d) list of impaired waters for having "Fair" bio-classification.

Conservation and Retrofits

In rural conditions, a goal would be to assist landowners wishing to install conservation practices in a variety of conservation practices on cropland conversions to grass or trees, long term no-till planting, field borders, grassed waterways, strip cropping, streamside livestock fencing, stream crossings, water troughs, wells and spring developments. In the City's urban setting, it was noted that as the LA watershed has urbanized, both volume and rate of stormwater runoff have increased, resulting in stream instability, in-stream erosion, and increased pollution. Stormwater best management practices (BMP's) such as wetlands, rain gardens, or grass swales installed within the stream corridor or upland areas can capture and treat stormwater runoff before it reaches the streams. Most of the LA development predates stormwater regulation. Retrofitting existing sites is an expensive, but necessary, way to correct existing impacts. TT is experiencing stormwater impacts to its water quality from roads and smaller developed communities. Retrofits can be described as follows:

- Retrofit public sites as demonstration projects.
- Avoid, or minimize, impacts to existing forests and wetlands as filter areas.
- Address commercial areas' on-site stormwater needs through retrofitting highly impervious sites with stormwater and pollution source control measures, more commonly known as BMP's.
- Encourage planting of native trees and shrubs, particularly within the 30-ft riparian corridors.
- Use stream buffers and rain gardens in older neighborhoods.

- Convert existing dry ponds to improved stormwater treatment devices such as wet ponds or stormwater wetlands.
- Treat larger drainage areas on County and City-owned lands.

ELECTRICAL NETWORK

Duke Energy is the utility provider for electrical service in Burlington. The utility operates five power generation plants within an approximate 50-mile radius, including two coal-fired plants, two oil/gas powered plants, and one nuclear plant. Duke Energy owns and operates nine electrical substations within the City's jurisdiction and has several utility rights-of-way for overhead transmission, most notably along the northern, western, and southern edges of the city limits. Duke Energy has not reported any projects or planned projects that would impact the City of Burlington at this time.

Duke Energy has a number of requirements for public use of transmission rights-of-way over and above the private property rights of landowners granting the utility an easement. Any improvements like structures, paving, or fencing are subject to specific guidelines, as are plantings and drainage features. Shared-use paths and trails are allowed under certain conditions and within very specific dimensional parameters. The utility reserves the right, however, to close any portion of the trail for any length of time without notice.

Burlington currently has two public electric car charging stations. In 2012, the North Carolina Department of Transportation opened a charging station at both the northbound and southbound I-85 Alamance County rest stops in the southwest part of Burlington. These were dismantled in 2013 due to an issue with charging consumers for the electricity. That same year, electric vehicle manufacturer Tesla opened its first North Carolina high-speed charging station at Alamance Crossing. Carolina Nissan on Huffman Mill Road also operates a public charging station.

NATURAL GAS NETWORK

Piedmont Natural Gas is the utility provider for municipal gas service in Burlington. Two regional pipelines run through Burlington's planning jurisdiction—one along the Haw River and another that cuts across the center of the City roughly along the Little Alamance Creek corridor. Piedmont Natural Gas owns and operates three gate stations inside or proximate to the City along the Little Alamance Creek pipeline.

Because the utility infrastructure in natural gas rights-of-way are not exposed, the regulations of public use are less restrictive than electrical transmission rights-of-way. Piedmont Natural Gas allows hiking trails as an acceptable use and simply requires written permission for paving, fences, and grading activities. As gas rights-of-way are most often private property easements, however, private landowner rights are still applicable.

Piedmont Natural Gas reports that current projects and planned projects do not affect Burlington.

Piedmont Natural Gas operates a network of public natural gas filling stations, some of which are located in the cities of the Piedmont Triad.

TELECOMMUNICATIONS AND DATA NETWORKS

Cellular Network

All major cellular phone network operators provide service in Burlington. Based on information from opensignal.com and deadcellzones.com as well as stakeholder interviews, Sprint has the most reception trouble in City, particularly in Downtown.

There are no significant dead zones reported for other service providers. Cell towers and non-tower antennae appear densest in the southern and central areas of the City: along South Church Street, Downtown, towards Graham on East Webb Avenue, and along Interstate 40/85.

Fiber Network

Burlington operates its own fiber network for municipal functions. A 48-count fiber line runs east and west from Downtown along North and South Church Street. The western extension terminates at City Park. The fiber line runs east to terminate at the City's Animal Shelter and wastewater treatment facility on Stone Quarry Road. The City plans to run a 24-count fiber line out to University Drive then south to a new fire station within 18 months. Increasing fiber count is a goal of the City's Information Technology Department. There have been private requests for a public fiber infrastructure in the Downtown area of the City.

Television, Telephone, and High-Speed Internet Service

Time Warner Cable and AT&T provide television, telephone, and high-speed internet services in the City; Time Warner through a coaxial cable network using cable modems and AT&T through the standard telephone network using DSL. MegaPath also provides data and voice service over copper wireline in parts of the City.

Wireless Internet

Public wireless internet service is available in a 12-block area Downtown, primarily in the Municipal Service District. There are 10-12 access points outdoors with limited building penetration. Public internet access is also available at City Park, Springwood Park, and soon at Kernodle Senior Center. The City also has access points at Royals Stadium that are not available to the public, and provides wireless access to the police department at Church Street and Graham Hopedale Road.

PUBLIC SAFETY AND EMERGENCY RESPONSE

Police Department

In their 2012 Annual Report, the Burlington Police Department described several new initiatives for improving policing activity, including:

- Improvements in communications hardware including the City's fiber network and an enhanced Emergency Operations Center
- Seven new community watch groups
- A bicycle patrol
- New Downtown and parks patrols
- A redistricting study to create better zones

A 2014 Police Department Community revealed geographic variability in the public's perception of the department; community opinion on police trust, professionalism, proactiveness, access, and general safety vary from policing district to district. West and south areas of the City are generally more positive, while east, north, and central areas have more mixed opinions. Survey responses were highest in south and central areas, but low in north, west, and east districts.

Fire Department

In 2011, the Center for Public Safety Excellence, Inc. produced a Fire Station Distribution and Coverage Study for Burlington. This study noted the following:

- The distribution of forces was inadequate in some parts of the city—there were some gaps of coverage and long response times.
- The community has expressed concerns about the number of stations and adequate response times across geographic areas of the City.
- Siting of stations has been largely based on intuition and readily-available land or facilities, not necessarily for strategic fire response.
- The east side of Burlington is the predominant location of fire incidents but is not necessarily underserved—southwest and northwest of Downtown are most vulnerable, but also have the lowest incident rate.
- The study recommended either a new sixth fire station at Rockwood and Front streets combined with a new seventh fire station in southwest area of city, or a move of Station #4 northeast and the addition of a southwest station.

SOLID WASTE SERVICES

The City of Burlington is the largest of nine municipalities served by Alamance County’s Solid Waste Management system. In their 2012 Alamance County Solid Waste Management Plan update, the County described Burlington’s solid waste services:

- The City of Burlington Sanitation Division of the Department of Public Works conducts weekly curbside collection of household garbage, yard waste, and bulk waste. The City issues each residential customer a 95-gallon bin for collection.
- Burlington has bi-monthly curbside pickup for commingled recyclables, contracted directly with Waste Industries since 2012.
- The City operates a compost warehouse at South Burlington Wastewater Treatment Plant, within which yard waste is combined with treated sludge to produce compost.
- Burlington’s solid waste largely is deposited at Alamance County Landfill, located southeast of the City’s jurisdiction. The landfill has a special Construction & Demolition Waste Cell separate from Municipal Solid Waste. Future development at the landfill includes a potential gas extraction system; recent development includes the 2008 purchase of 115 acres of adjacent land for a buffer.
- There are no plans to transfer solid waste outside of the county, nor plans for mixed solid waste processing for material recovery or municipal waste composting.



Burlington’s Downtown Police Department Headquarters and Emergency Response Center



Burlington’s Downtown Fire Department Headquarters

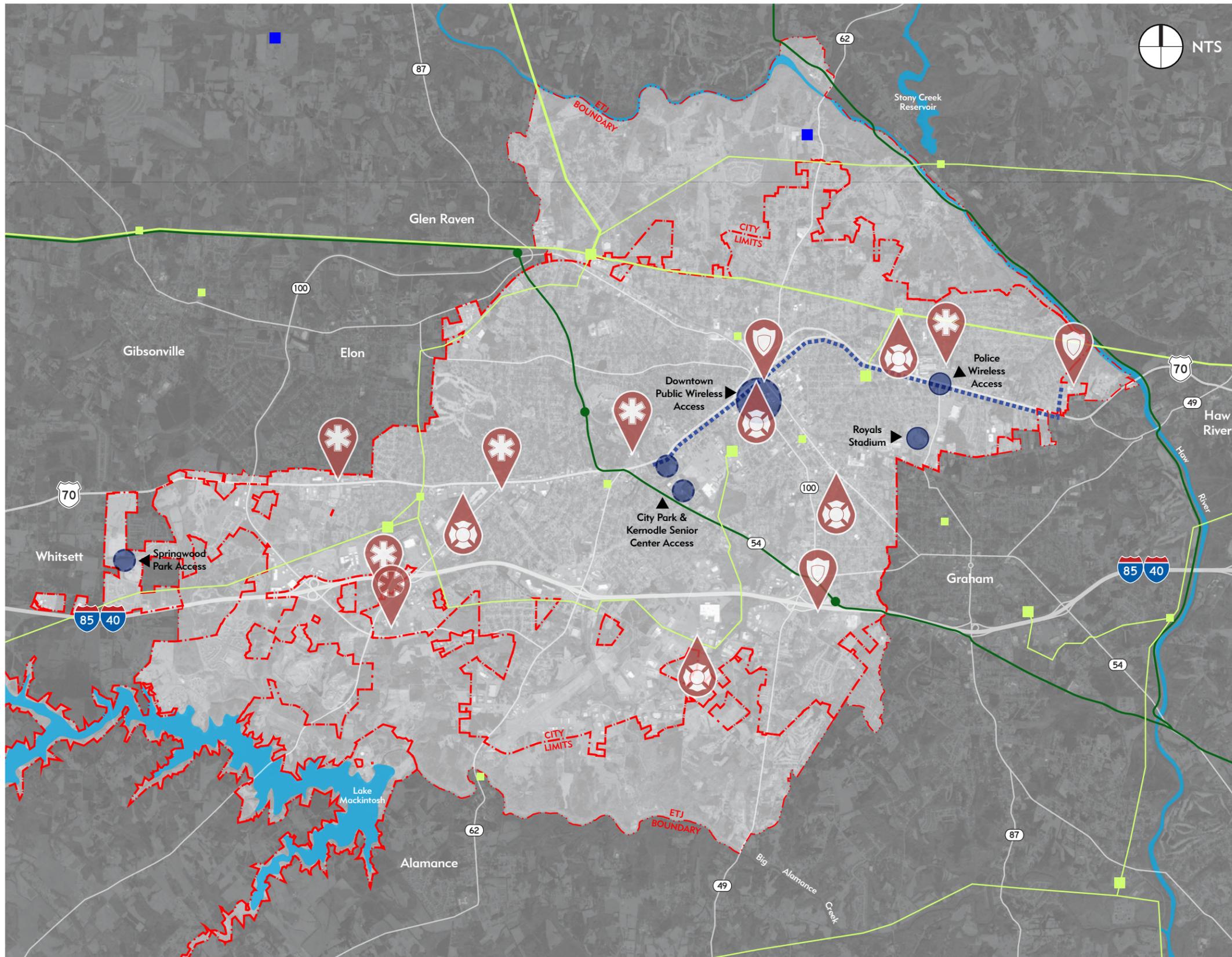


Alamance County Landfill (from www.thetimesnews.com)

- Alamance County is targeting a per capita disposal rate of 0.66 tons per person in fiscal year 2012-2022, as compared to a baseline in 1990-1991 of 1.10 tons per person.

IDENTIFIED ISSUES & NEEDS

- Address water and sewer utility issues and needs for each City district as listed above
- Identify conservation and retrofit project opportunities in the City's watersheds to prevent pollution of area creeks and ponds
- Explore opportunities for public use of utility rights-of-way for recreation and trails
- Maintain and enhance utility services—particularly data infrastructure—in Downtown and at underutilized industrial sites to attract start-up businesses
- Support equitable distribution of emergency services throughout the City

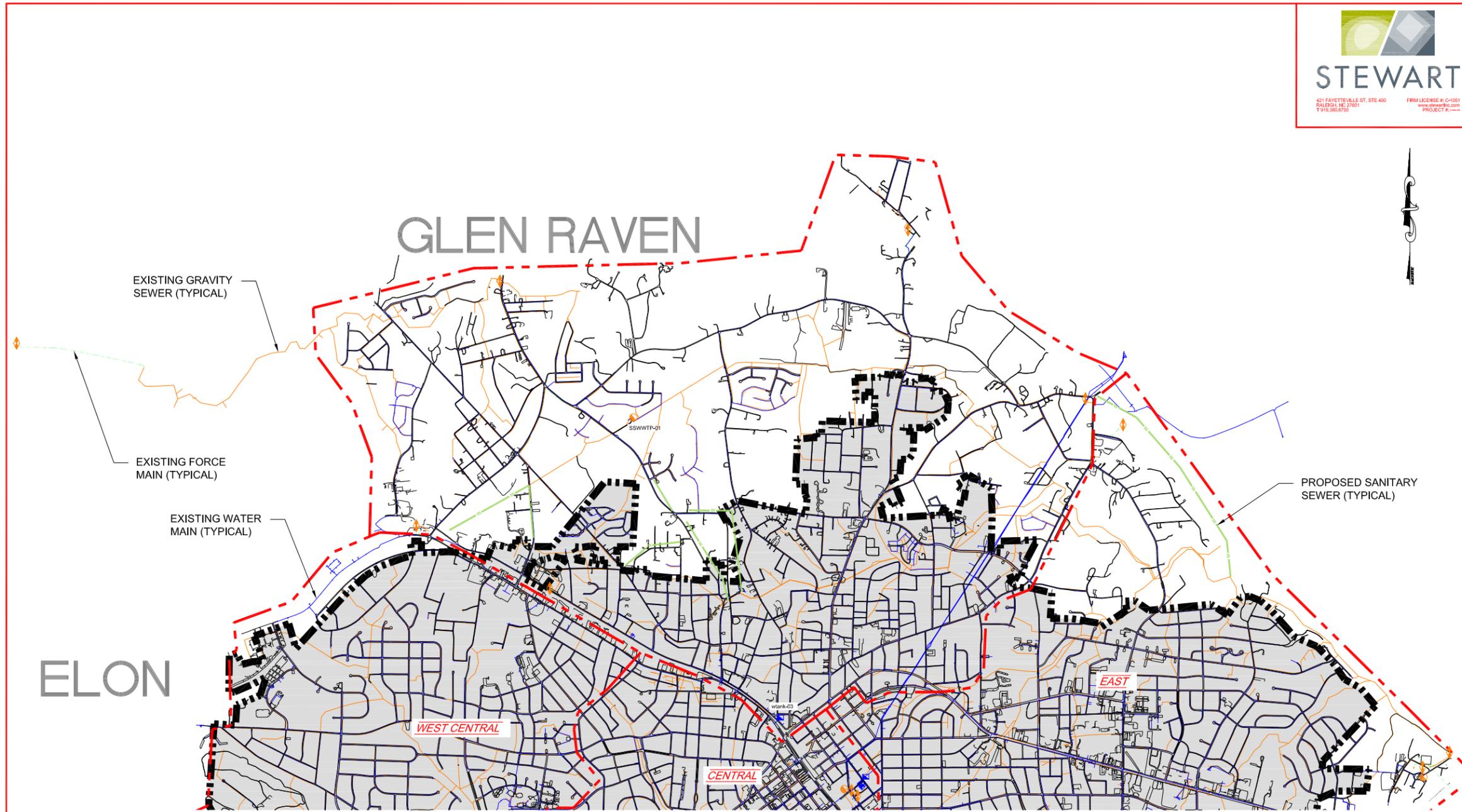


Infrastructure & Services Summary Map

| | | |
|--|--|----------------------------|
| | natural gas pipeline and gate station | Utility Corridors |
| | electrical transmission corridor and substation | |
| | fiber optic data line | |
| | public access to Internet (wireless or hardware) | Data Infrastructure |
| | municipal wireless (official use only) | |
| | private cable utility facility | Critical Facilities |
| | major medical center | |
| | clinic or urgent care | |
| | police/sheriff station | |
| | fire station | |

APPENDIX: WATER AND SEWER MAPS

A



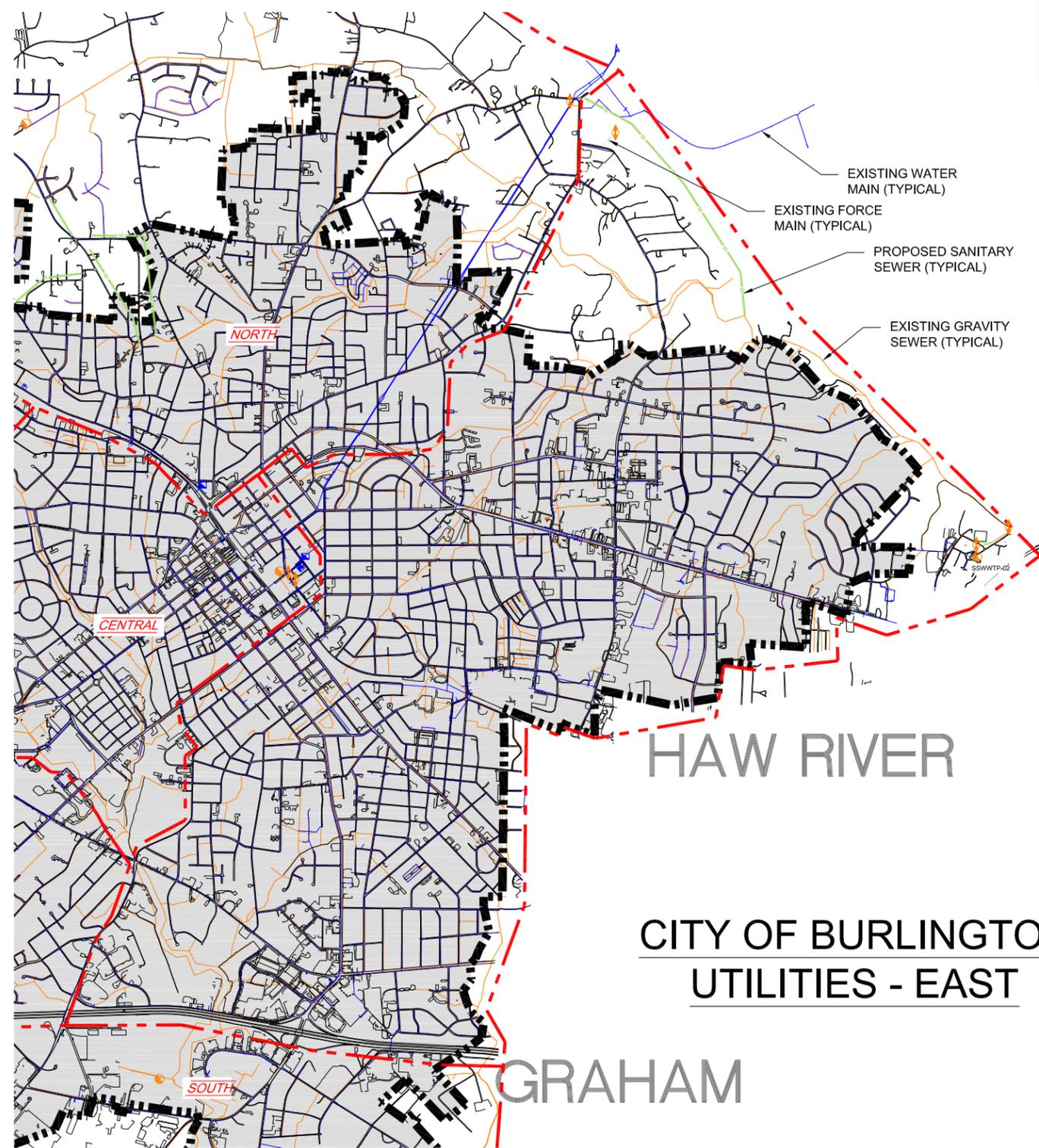
- WATER INFORMATION AVAILABLE:**
- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - TANKS (LOCATIONS, TYPE, CAPACITY) ▣
 - TREATMENT PLANTS (LOCATIONS) ⚡

- SANITARY SEWER INFORMATION AVAILABLE:**
- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
 - LIFT STATIONS (LOCATIONS) ⚡
 - TREATMENT PLANT (LOCATIONS) ⚡

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

CITY OF BURLINGTON UTILITIES - NORTH

NOT TO SCALE



- EXISTING WATER MAIN (TYPICAL)
- EXISTING FORCE MAIN (TYPICAL)
- PROPOSED SANITARY SEWER (TYPICAL)
- EXISTING GRAVITY SEWER (TYPICAL)

HAW RIVER

CITY OF BURLINGTON
UTILITIES - EAST

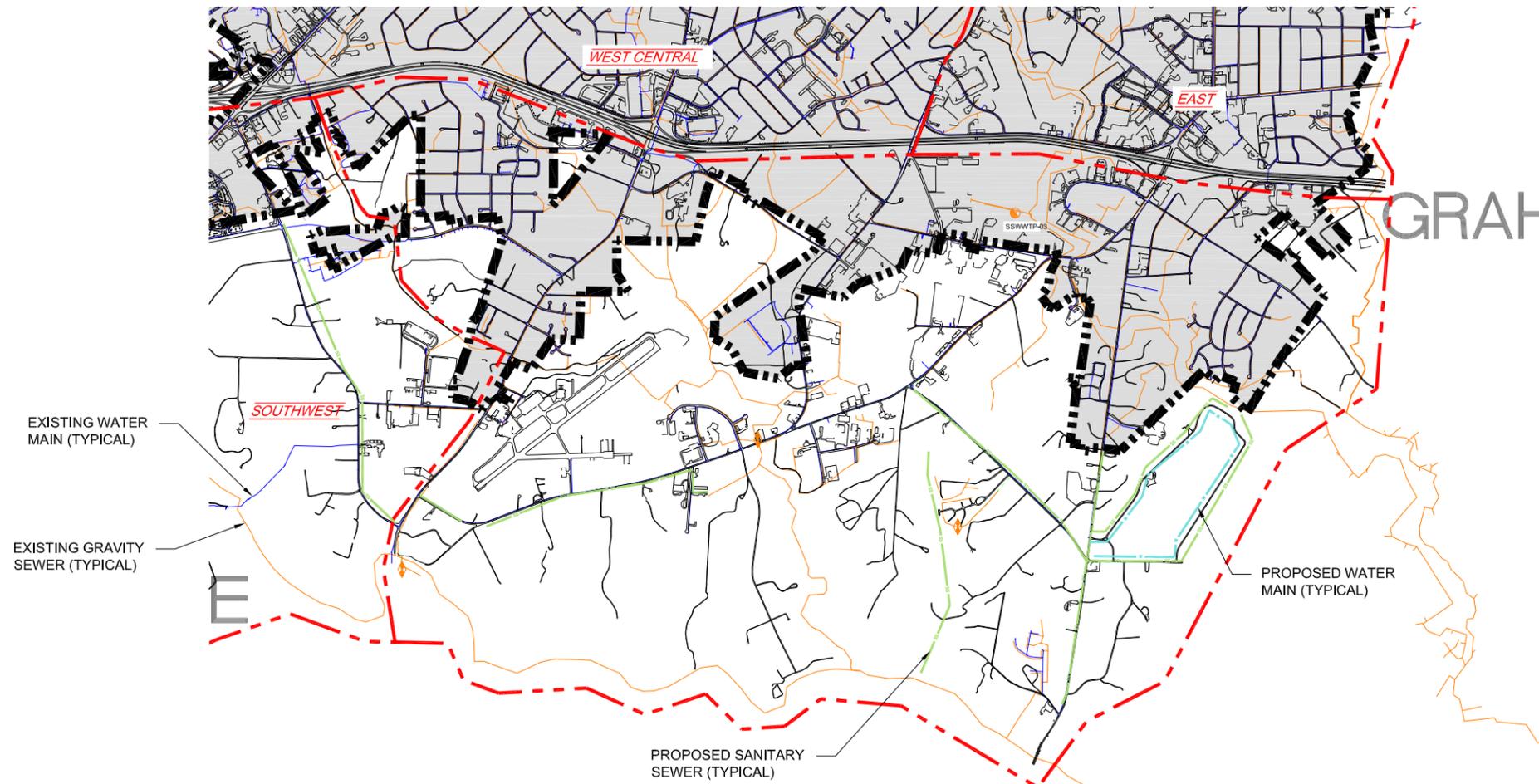
GRAHAM

- WATER INFORMATION AVAILABLE:**
- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - TANKS (LOCATIONS, TYPE, CAPACITY) ■
 - TREATMENT PLANTS (LOCATIONS) ◆

- SANITARY SEWER INFORMATION AVAILABLE:**
- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
 - LIFT STATIONS (LOCATIONS) ⚡
 - TREATMENT PLANT (LOCATIONS) ●

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

NOT TO SCALE



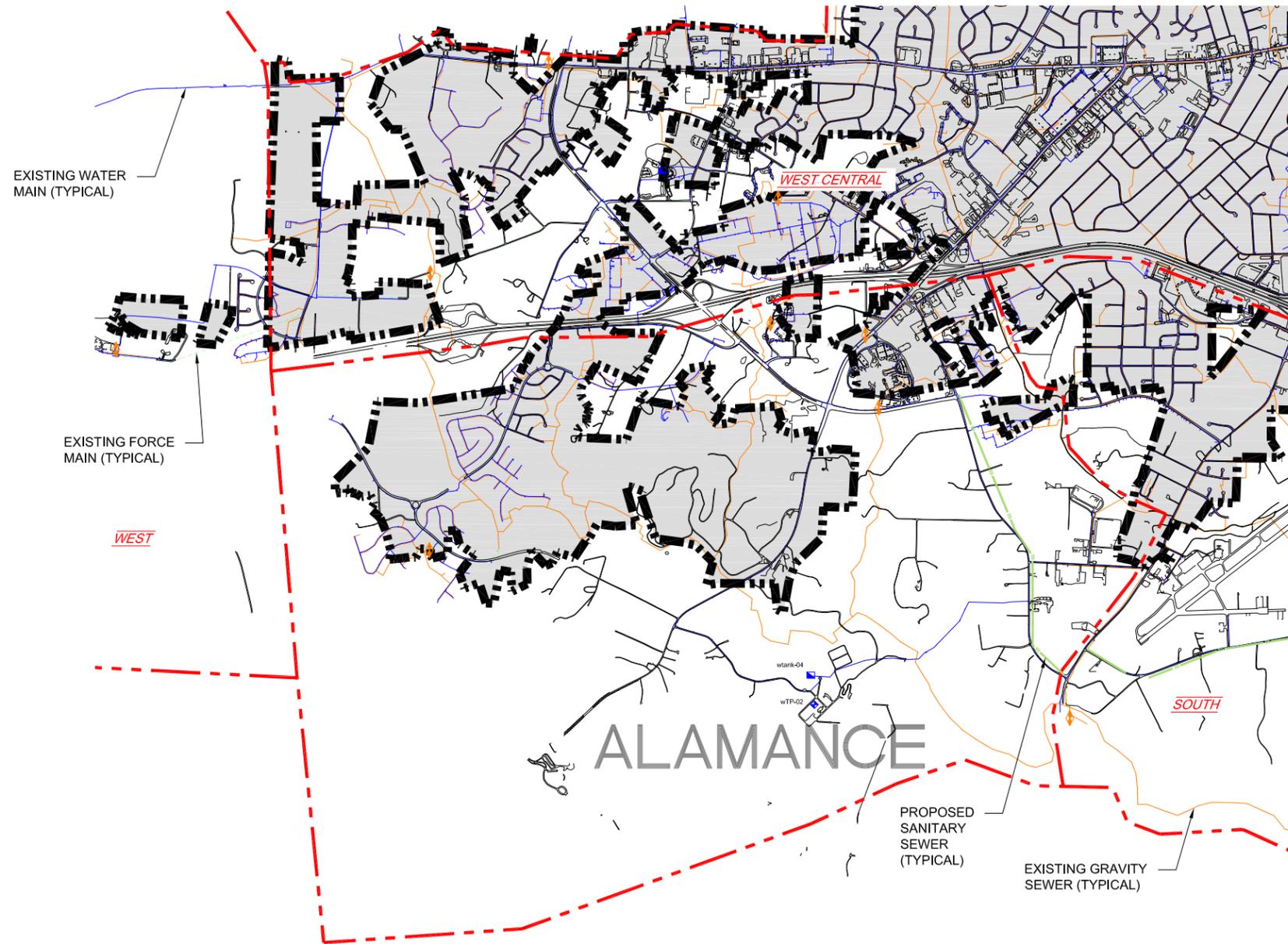
- WATER INFORMATION AVAILABLE:**
- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - TANKS (LOCATIONS, TYPE, CAPACITY) ▣
 - TREATMENT PLANTS (LOCATIONS) ⚡

- SANITARY SEWER INFORMATION AVAILABLE:**
- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
 - LIFT STATIONS (LOCATIONS) ⚡
 - TREATMENT PLANT (LOCATIONS) ⚡

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

CITY OF BURLINGTON UTILITIES - SOUTH

NOT TO SCALE



- WATER INFORMATION AVAILABLE:**
- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - TANKS (LOCATIONS, TYPE, CAPACITY) ■
 - TREATMENT PLANTS (LOCATIONS) ◆

- SANITARY SEWER INFORMATION AVAILABLE:**
- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
 - LIFT STATIONS (LOCATIONS) ◇
 - TREATMENT PLANT (LOCATIONS) ○

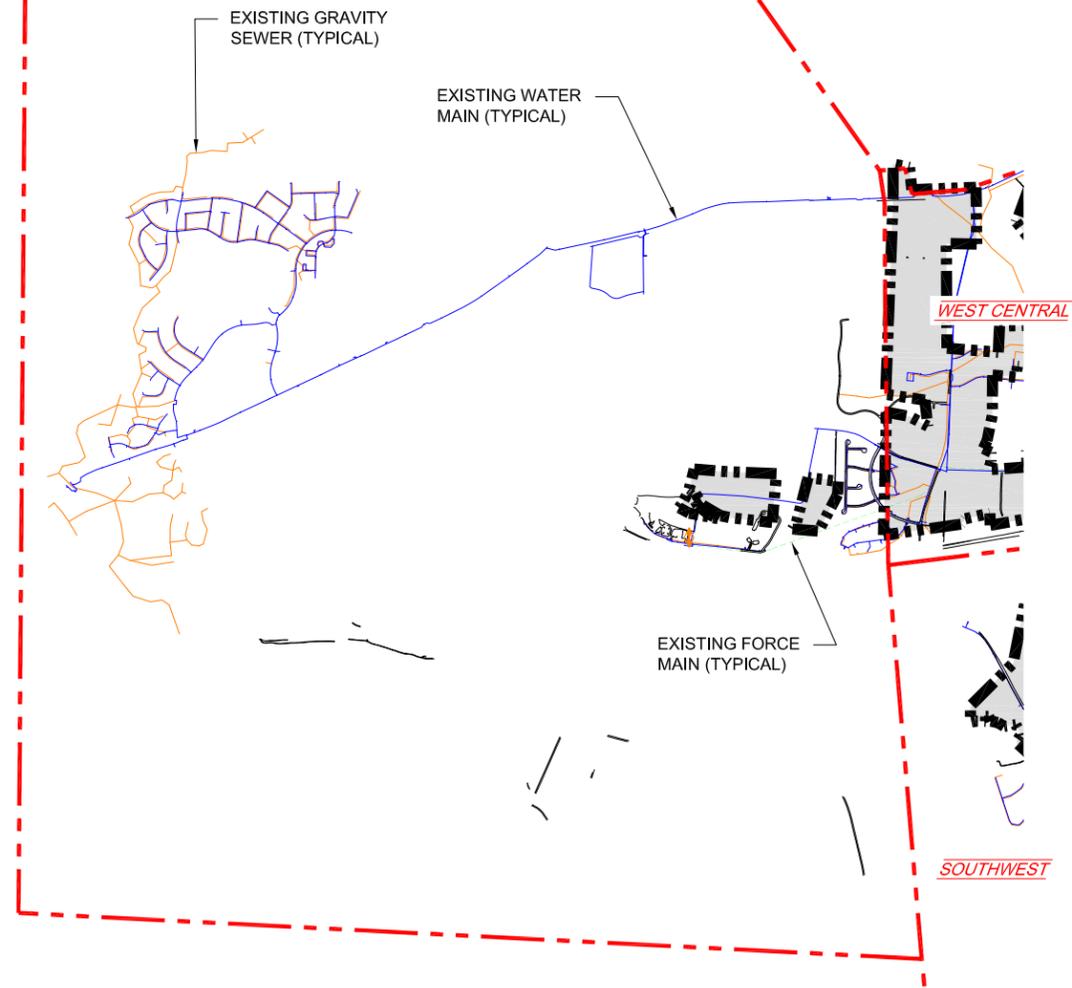
ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

CITY OF BURLINGTON UTILITIES - SOUTHWEST

NOT TO SCALE



GIBSON



WATER INFORMATION AVAILABLE:

- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
- TANKS (LOCATIONS, TYPE, CAPACITY)
- TREATMENT PLANTS (LOCATIONS)

SANITARY SEWER INFORMATION AVAILABLE:

- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
- FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
- LIFT STATIONS (LOCATIONS)
- TREATMENT PLANT (LOCATIONS)

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

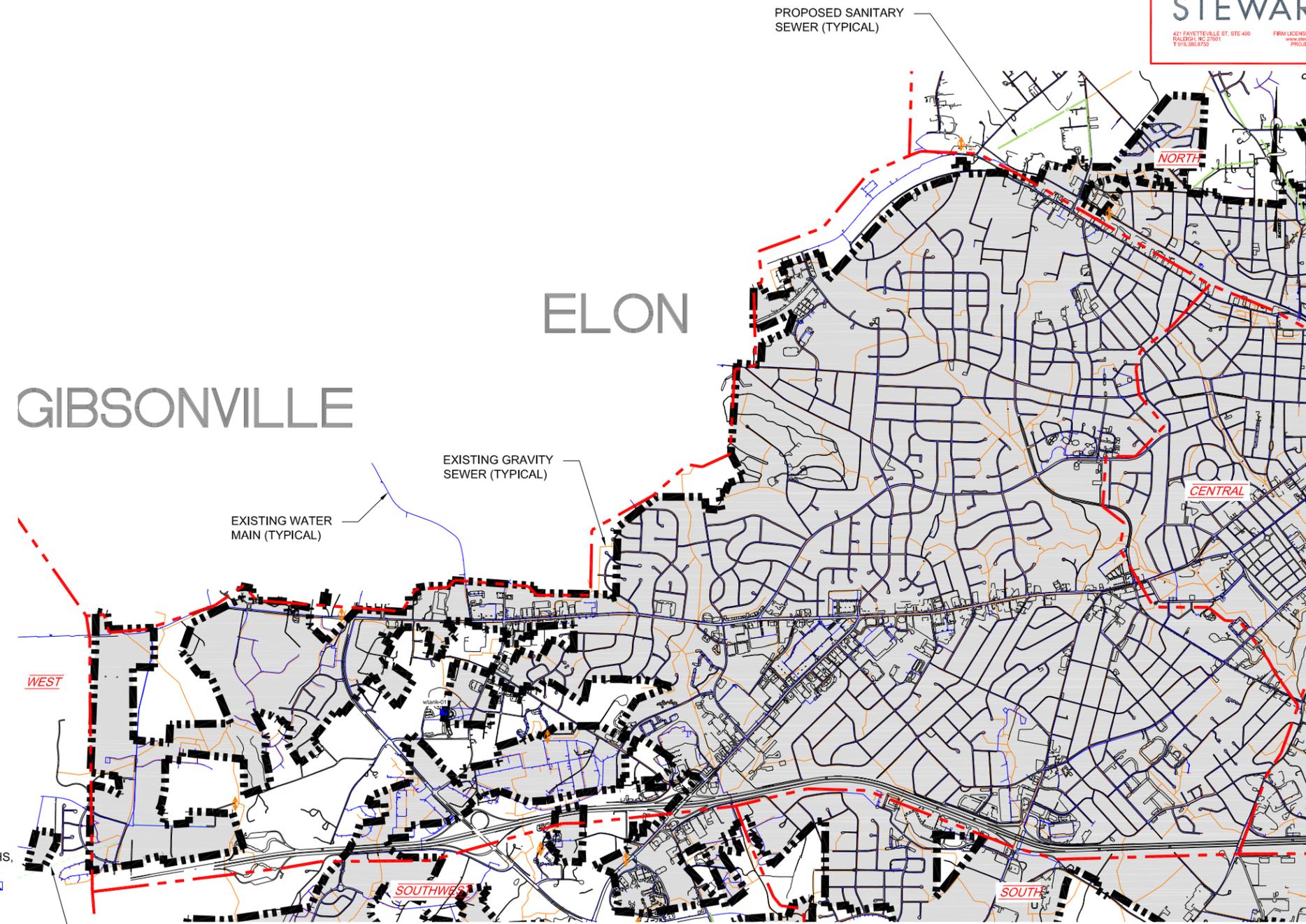
CITY OF BURLINGTON UTILITIES - WEST

NOT TO SCALE



STEWART

421 FAYETTEVILLE ST., STE. 400
RALEIGH, NC 27607
FIRM LICENSE # C-1015
www.stewartnc.com
PROJECT #



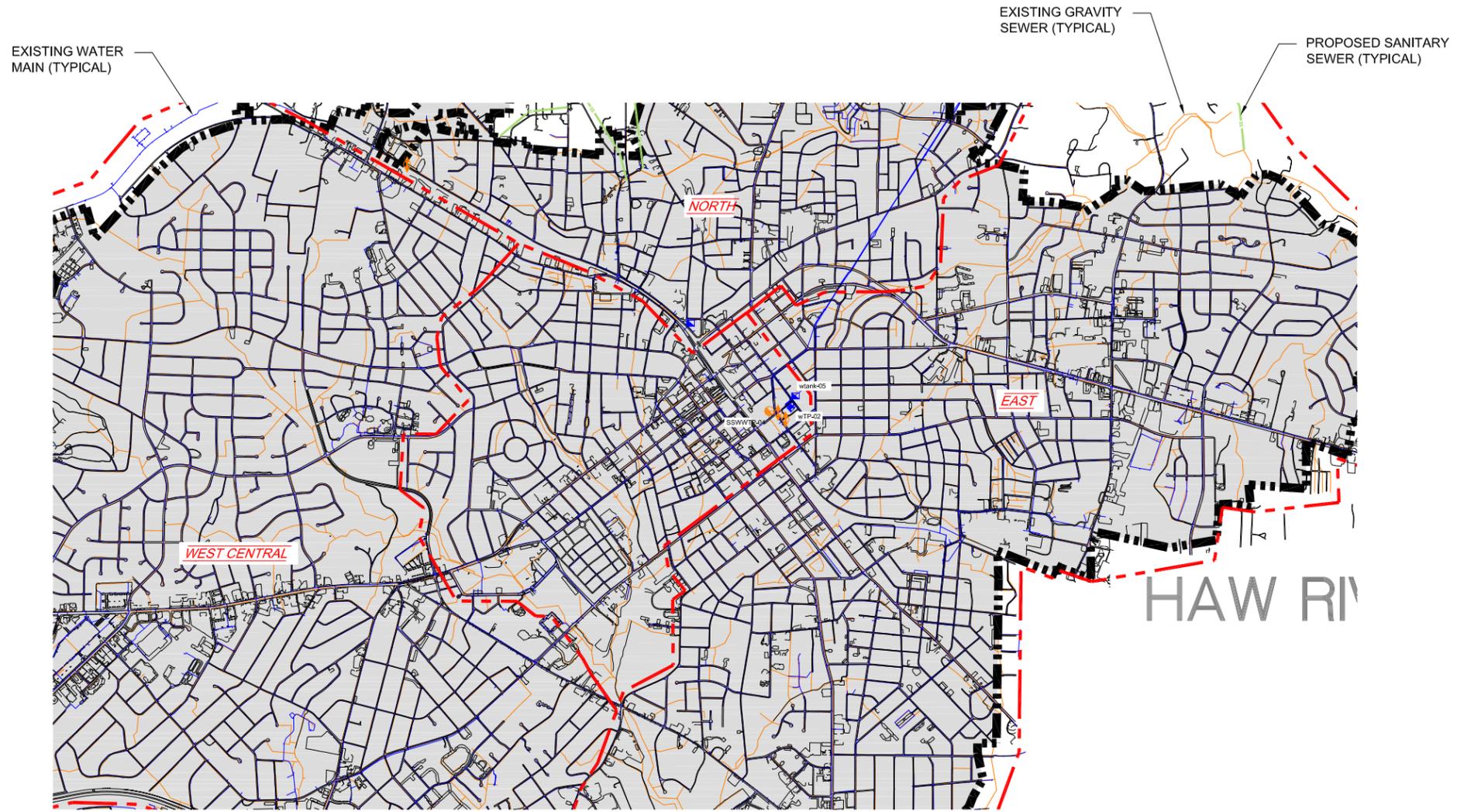
- WATER INFORMATION AVAILABLE:
- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - TANKS (LOCATIONS, TYPE, CAPACITY) ▣
 - TREATMENT PLANTS (LOCATIONS) ◆

- SANITARY SEWER INFORMATION AVAILABLE:
- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
 - FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
 - LIFT STATIONS (LOCATIONS) ⚡
 - TREATMENT PLANT (LOCATIONS) ○

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

CITY OF BURLINGTON UTILITIES - WEST CENTRAL

NOT TO SCALE



WATER INFORMATION AVAILABLE:

- PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
- TANKS (LOCATIONS, TYPE, CAPACITY) ▣
- TREATMENT PLANTS (LOCATIONS) ⚡

SANITARY SEWER INFORMATION AVAILABLE:

- GRAVITY PIPES (LOCATIONS, DIAMETERS, LENGTHS, MATERIALS)
- FORCEMAIN (LOCATIONS, DIAMETERS, LENGTHS)
- LIFT STATIONS (LOCATIONS) ⚡
- TREATMENT PLANT (LOCATIONS) ⚡

ALL UTILITY INFORMATION SHOWN WAS OBTAINED FROM THE CITY OF BURLINGTON GIS DEPARTMENT

CITY OF BURLINGTON UTILITIES - CENTRAL

NOT TO SCALE

