City of Asheboro Comprehensive Pedestrian Transportation Plan

A Vision for 2025

PTCOG

CITY OF ASHEBORO, NORTH CAROLINA
DECEMBER 25, 1796

Division of Bicycle & Pedestrian Transportation

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

January 2008

City of Asheboro Comprehensive Pedestrian Transportation Plan

Adopted by the Asheboro City Council May 30, 2008

City Council

Talmadge Baker
Eddie Burks
Linda Carter
Keith Crisco
Mayor David Jarrell
Walker Moffitt
Archie "Mack" Priest
Mayor Pro Tem - David Smith

Planning Board

Ernest Confer
Chris Corsbie
Frank Havens
D. Luther Hollingsworth
Darrell Lewis
James Lindsey
Jimi Luther
Charles Swiers
Van Rich
Tom White

Comprehensive Pedestrian Transportation Plan Steering Committee

John Evans (staff)
Foster Hughes (staff)
George Gusler
Martin Kearns
Robert Kivett (staff)
Tom Lemonds
Jimi Luther
Mike Mize
Ben Morgan (co-chair)
Tammy O'Kelley
Lynn Priest (staff)
Mary Joan Pugh (co-chair)
Brad Rice
Candie Rudzinski
April Thornton
Barney Trogdon
Mark Trollinger
John Vine-Hodge (NCDOT Advisor)
Janet Williams
Cpt. Rickey Wilson
Tim Womick

City Staff

Dumont Bunker	City Engineer
John Evans	City Planner (Project Manager)
Foster Hughes	Parks & Recreation Director
Robert Kivett	Public Works Director
Reynolds Neely	Planning Director
John Ogburn	City Manager
Lynn Priest	Community Development Director
Cpt. Rickey Wilson	Asheboro Police Department

Piedmont Triad Council of Governments

Hanna Cockburn, AICP	Senior Planner
Jesse Day	Regional Planner (Project Lead)
Anita Henderson	GIS Intern
Paul M. Kron, ASLA, AICP	Regional Planning Director
Kristen Selikoff	GIS Planner

TABLE OF CONTENTS

TABLE OF FIGURES

TABLE OF FIGURES

TABLE OF FIGURES - APPENDICES

TABLE OF FIGURES - APPENDICES

CHAPTER 1: INTRODUCTION

1.1 SCOPE AND PURPOSE

This plan provides both a broad vision and a more specific set of goals and strategies to improve the City of Asheboro's pedestrian transportation system. Proposed projects are prioritized strategically by small area plans to ensure the most critical projects are constructed first, while phasing in lower-priority projects based on cost and feasibility. The plan also provides a set of recommended policies and programs to encourage, educate and promote increased use of a more accessible and walkable environment. Implementation of the plan's recommended projects, policies and programs will strengthen the City's on-going efforts to develop a comprehensive and user-friendly pedestrian transportation system in Asheboro.

1.2 BACKGROUND

The way people move around in their local communities has dramatically changed in recent years. Our lives have become increasingly dominated by the automobile and marked by a distinct pattern of physical inactivity. Though Asheboro does not suffer from ongoing traffic congestion and severe air quality problems, citizens can benefit greatly from a more walkable and pedestrian-friendly environment. Providing safe and accessible places to walk and bicycle can help communities reduce automobile trips and traffic congestion, and in turn, reduce air pollutants and increase the overall health of the community. In addition, providing a wider mix of land uses in close proximity to each other can reduce travel distances, encourage more foot traffic and reduce car trips. Well-designed neighborhoods with ample opportunities for walking and biking can increase our quality of life and foster a greater sense of community.

The three key elements of a well-designed "walkable community" include:

- Safety – (e.g. issues of traffic, crime, buffering, lighting)
- Access – (e.g. curb ramps, crossing treatments, connected streets)
- Comfort – (e.g. lighting, sidewalk width, compatible land uses, shade)

Design characteristics that serve as some of the basic building blocks of walkable communities include:

- Connectivity (close sidewalk gaps, build cul-de-sac paths and connections between different land use e.g. residential and commercial);
- Separation from traffic (bike-lanes, planting strips, landscaping, bulb-outs);
- Pedestrian supportive land-use patterns (mixed use, higher density, design for the pedestrian);
- Designated space (5ft+ sidewalks in residential areas and 8-12ft sidewalks in downtown and around schools);
- Accessibility (ADA ramps, crosswalks, ped-head signals);
- Street furniture (places to sit, drinking fountains, trash receptacles); and
- Security and visibility (lighting, landscaping and site distance).

1.2 HISTORY

A significant number of Asheboro citizens use walking as a form of transportation and recreation. However, walking is not as prevalent as it once was in our country. In 1969, an average of 42% of school children walked or bicycled to school nationwide. By 2001 only 16% of school children walked or bicycled to school (CDC, 2005). This is partly due to a change in where families choose to live, but also is influenced by the built environment that tends to under serve multi-modal transportation needs. Requirements within the City's development ordinances and subdivision regulations have helped to build a moderately good network of sidewalks in Asheboro. However, there are important connections needed to enhance the City's existing pedestrian network.

Safe and inviting places to walk are important for neighborhoods, schools, senior centers, downtown, shopping areas, hospitals and everywhere people go. At some point in our journey to work, school or shopping, everyone is a pedestrian. Whether walking is our mode of travel for the entire journey or only for the portion of our trip from the car to the front door, a walking environment that provides a safe, accessible and comfortable journey is important.

The City of Asheboro has never developed a comprehensive pedestrian transportation plan. Consequently, this planning effort is a major step forward for walking in Asheboro. The City has completed a few planning efforts since 2000 that have included references or action items addressing walkablility, pedestrian friendliness, bikeablity, connectivity, trail development and quality of life. These past planning efforts include the City's Land Development Plan (2000), Strategic Plan (2007) and a Parks and Recreation Plan (2004). Each of these plans recommend action items concerning a more pedestrian-friendly environment in Asheboro. More detail on each of these plans is provided in Chapter 2.6.

1.3 VISION AND GOALS

The Asheboro Pedestrian Plan Steering Committee established a vision statement and set of four key goals for the City's pedestrian transportation system, to serve as the foundation for developing the Plan. The vision statement and goals were refined using extensive feedback from public meetings and a community survey. Recommended programs, policies and pilot projects were also drafted by the steering committee, public comments and consultant recommendations. These recommendations provide specific strategies for achieving the goals and vision and are found in Chapter 3 and the Executive Summary.

Vision Statement

In the year 2025, Asheboro will provide a safe and pleasant pedestrian experience and be accessible to all people. Asheboro will achieve this by establishing innovative programs, projects and policies designed to create a unique experience for City residents and visitors. Asheboro pedestrians will be a well organized community fostering a culture of walkability through awareness and education, while striving to encourage a healthier and more active lifestyle for everyone.

Goals

1. *Provide a safe, pleasant and accessible pedestrian experience for all ages.*
2. *Create an attractive, unique pedestrian experience for residents and visitors.*
3. *Foster a strong awareness, expectation and culture of walkability in Asheboro.*
4. *Encourage healthier, more active lifestyles.*

CHAPTER 2: EXISTING CONDITIONS

2.1 OVERVIEW

Important to the Asheboro planning process is the assessment of existing conditions, which lays the foundation for what future planning is required. The existing conditions includes an assessment of many different facts, issues and input such as community outreach, surveys, demographics, evaluation of crash data, the location and function of the pedestrian network and how people use facilities, a maintenance inventory of existing sidewalks, ordinances, statutes and existing plans and programs.

N. Fayetteville Street at Presnell Street

Creating a balance between *community concerns* and the analysis of *data* provides a framework of Asheboro's existing conditions. This framework is the foundation from which the Pedestrian Transportation Plan recommendations are developed. Extensive analysis of community concerns and review of existing data and plans can be found in this chapter.

2.2 DEMOGRAPHICS AND CRASH DATA

A statistical profile of Asheboro, NC was compiled by the Piedmont Triad Council of Governments for the City's Strategic Plan as a tool for examining Asheboro's position in a number of key areas. The statistical profile is designed to provide a wide-brush view of Asheboro and issues of significance within Asheboro. Important population, social, housing and other statistics are included from the Strategic Plan summarized in Chapter 2.6. The full analysis of demographics including a comparison City analysis can be found in Appendix D of this report. There are some important implications for a number of the demographic statistics listed below:

1. Asheboro is growing at a faster rate than North Carolina.
2. Asheboro has a high percentage of households without access to a vehicle (9%), when compared to the rest of the State. Some census tracts of Asheboro have over 15% of households without a vehicle.
3. Asheboro has a growing Hispanic population.
4. Nearly 25% of households reported some type of disability, which makes accessibility and mobility important features of the pedestrian transportation system.

Asheboro Population Quick Facts

Population – 23,213 (2005)
Population growth since 2000 – 4.5%
Population annexed since 2000 – <1%
Labor Force: 10,875
Land Area – 16.17 square miles
Persons per square mile – 1,404.4
Median Household Income - $31,676
Walk or bike to work – 3.3%
Households with one or few vehicles – 41%
Households without a vehicle – 9%
Poverty rate – 16%

Population Facts

- Asheboro's population is just over 23,000. The city is the 33rd largest municipality in NC.
- A quarter of a million people live within 20 miles of Asheboro.
- The population density is just over 1400 people per square mile.
- Population growth over the past 50 years has been 181%. The long-term growth rate is almost twice as high as the growth rate of the US and of NC overall.
- Population growth rates in the 1990's averaged 3.25% per year. The state average was 2% per year.
- The city is expected to grow by about 2,000 people in the next five years. By 2020, the city's population is projected to be just under 30,000 people.
- The city's non-minority (white, non-Hispanic) population represents 66% of

residents, down from 85% in 1990.
- The Hispanic/Latino population has been the fastest growing segment, accounting for 78% of all growth seen in the 1990's. During the 1990's, the Hispanic population in Asheboro grew by 2300%, compared to growth rates of 2% for whites, and 20% for blacks.

Housing Facts

- During the 1990's, the city added about 200 new residential housing units, on average, per year. So far this decade, new housing starts have been lower, averaging 130 new units per year.
- Persons per household increased during the 1990's and the proportion of residents living alone decreased. Both of these statistics are opposite of national, state, and county level trends.
- One of every three housing units in Asheboro is a multi-family structure – up from 13% twenty years ago. Asheboro has the highest proportion of multi-family dwelling units among similar sized cities in the Piedmont Triad region.

Social Characteristics and Economic Facts

- Twenty five percent of Asheboro residents report some type of disability.
- Forty-one percent of households have access to only one vehicle. Nine percent of households do not own a vehicle.
- Three percent of individuals walk or bicycle to work.
- The median household income in Asheboro is $31,676 – almost twenty percent lower than the county median. Asheboro's median income is similar to the comparison cities, however.
- The poverty rate in Asheboro is rising, particularly among children. The 2000 overall poverty rate was 15.8% compared to 12.8% in 1990. Among children, the poverty rate rose from 17% to 24%.
- Spanish is the primary language spoken in 14% of Asheboro households. Eleven percent of residents age five and over do not speak English well.

Crash Data

The City of Asheboro Police Department compiles crash reports and enters this information into a local database. The information is then sent to the Department of Motor Vehicles for input into the State database. Only incidents that cause injury or greater than $1,000 in property damage are reported to the State. In addition only crashes that occur on public roadways are reported to the State. The North Carolina Highway Safety Research Center reports the following pedestrian crash totals from 1997-2004 in Figure 2.1 below. The population figures are from 2005 Census estimates.

Figure 2.1 - Crash Data Comparison to Other Similar Sized Cities

City	Crashes 1997-2004	Population
Statesville*	100	25,344
Sanford *	96	25,864
Asheboro	90	23,213
Albemarle	56	15,645
Lexington *	54	20,918
Salisbury	47	29,058
Thomasville	27	26,084
Graham	14	14,025

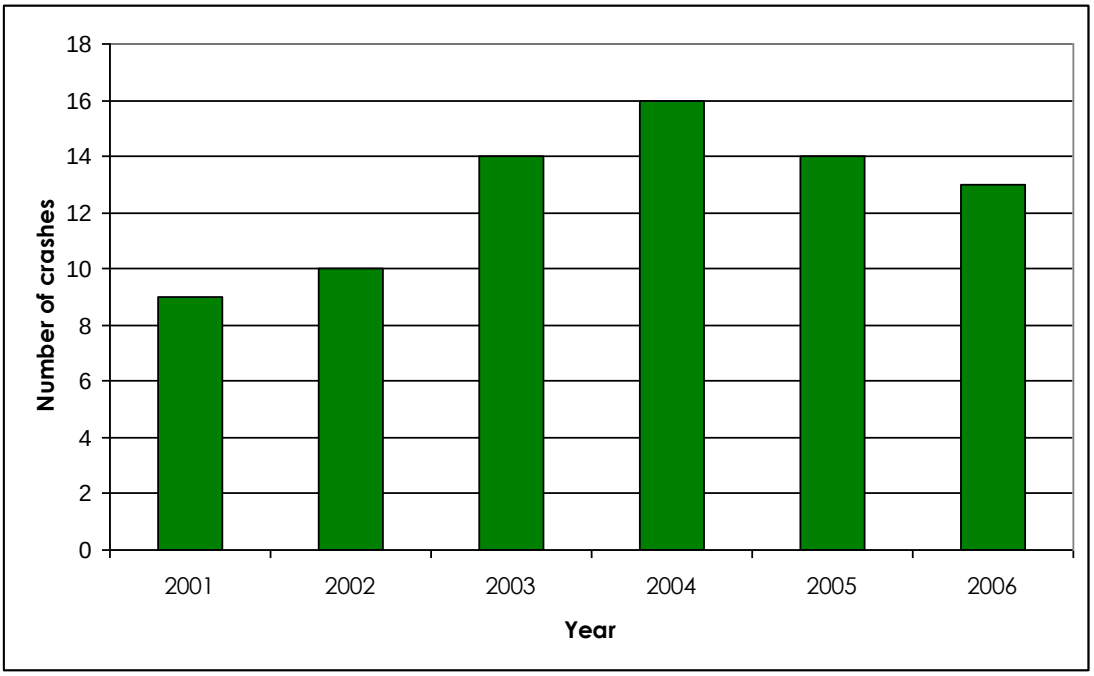
Source: NC Highway Safety Research Center

For this planning study, the Asheboro Police Department (APD) provided local data on crashes both on the public roadways and private vehicle areas (PVAs) such as parking lots or driveways. The data from the APD is from 2001-2005 and is also supplemented by data on crashes for 2006 provided by the NCDOT Division of Bicycle and Pedestrian Transportation.

Figure 2.2 shows the total number of pedestrian crashes by year in the City of Asheboro. After rising from 2001-2004, pedestrian crashes declined in 2005 and 2006. In 2001 there were 9 pedestrian to car crashes, 10 in 2002, 14 in 2003, 16 in 2004, 14 in 2005 and 13 in 2006.

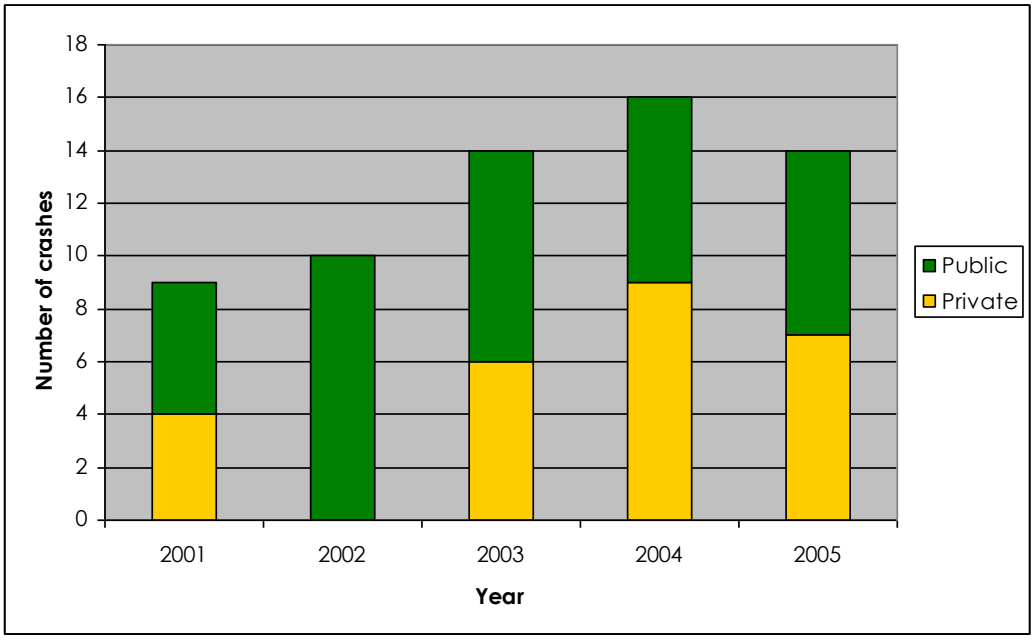
* See Appendix D for more demographic comparisons of these cities with Asheboro

Figure 2.2 - Pedestrian Crashes 2001-2006



The following figure shows the split of crashes for the City of Asheboro between public and private right of ways. This information is only available from the Asheboro Police Department records (2001-2005); the NCDOT crash data does not report crashes occurring on private right of ways, therefore 2006 data is not included. Over the five year period from 2001-2005, 41% of crashes occurred in private rights of way.

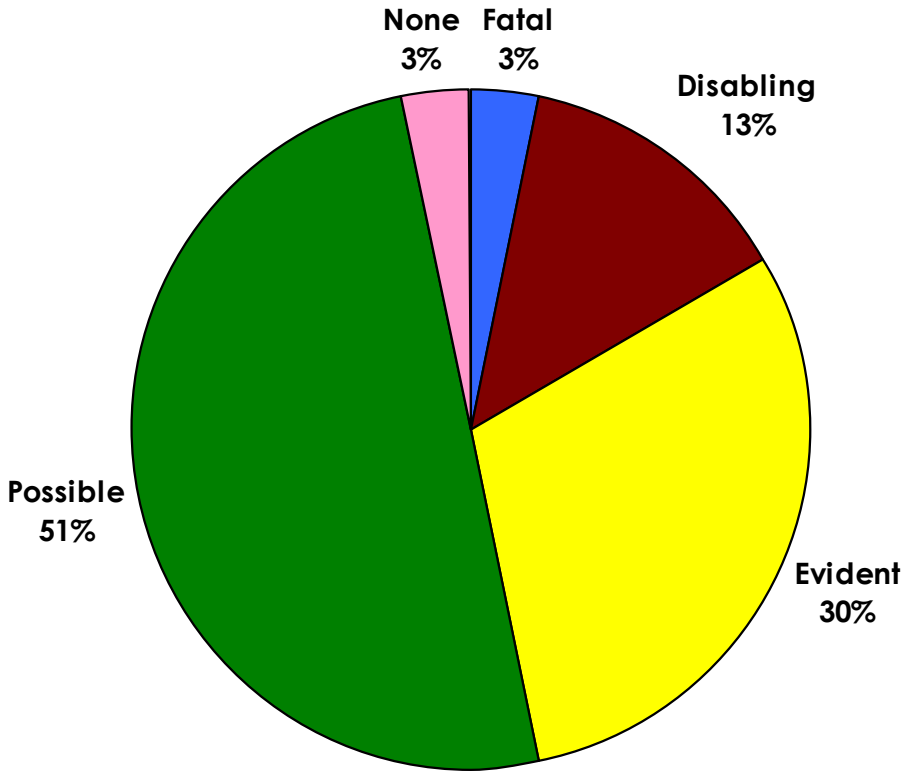
Figure 2.3 - Public and Private Right of Way Crashes 2001-2005*



**2006 NCDOT Crash Data Contains Only Public Right of Way Crashes*

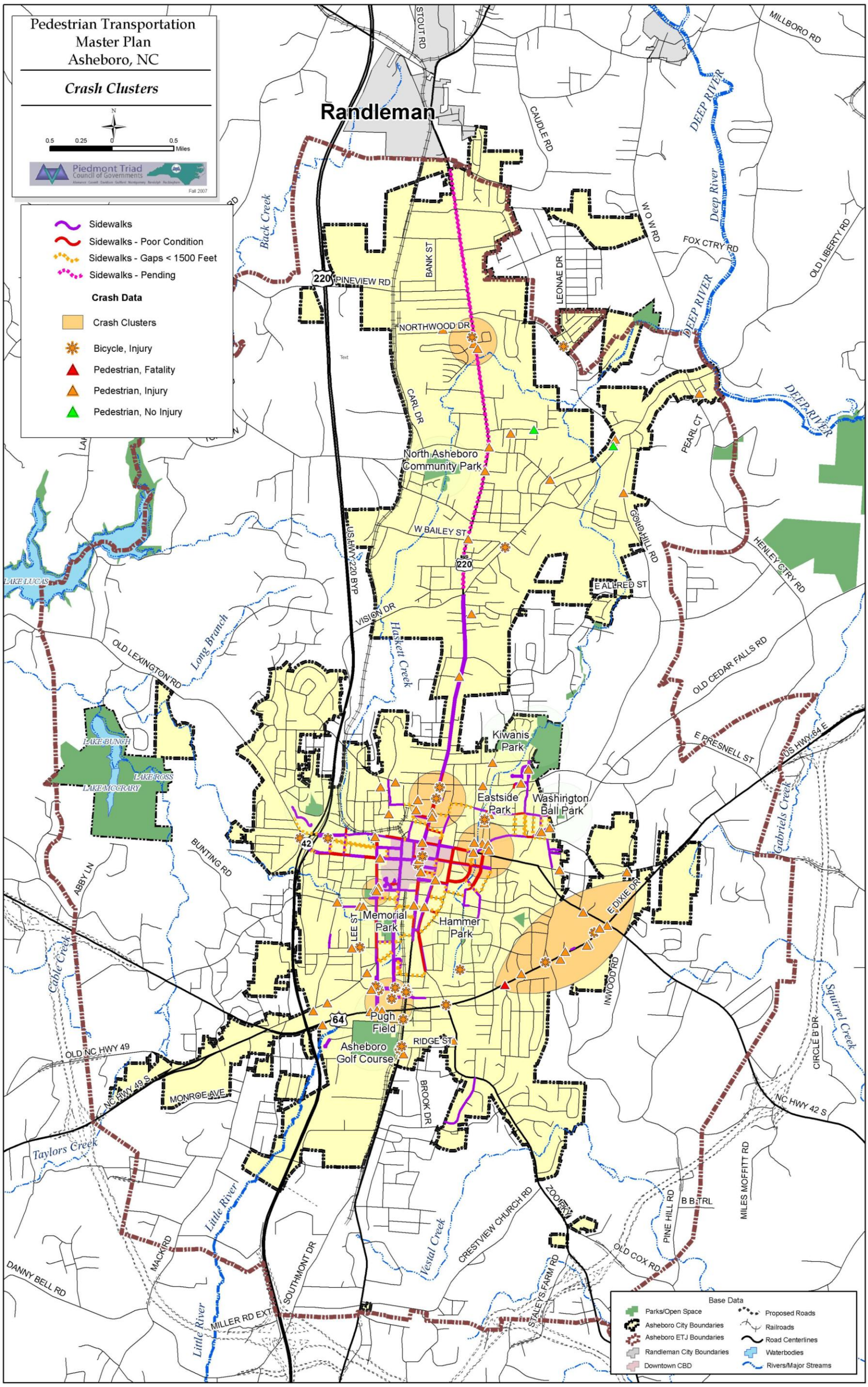
In Figure 2.4, derived from the NCDOT Division of Bicycle and Pedestrian Data, the crash severity percentage for 2004-2006 is reported. Three percent of crashes involved no injury, 51% involved possible injury, 30% involved evident injury, 13% involved a disabling injury and 3% were fatal.

Figure 2.4 - Pedestrian Crash Injury Severity City of Asheboro 2004-2006



The crash data from 2001-2006 contains information on the specific location where crashes occurred. This detail allowed mapping of crash location, a key factor in determining corridors and intersections for improvement. The following map, Figure 2.5 illustrates the location of both bicycle and pedestrian crashes, bicycle crashes are shown with an asterisk and pedestrian crashes with a triangle; different colors show the severity of the crash. The location of pedestrian and bicycle crashes are important indicators as to where improvements to intersections and corridors should be made. Figure 2.5 also highlights *crash clusters* or areas with multiple crash occurrences. The crash location information is important to developing priorities for intersection and corridor improvement and is factored into the prioritization score for projects (see Chapter 3.2 for more detail). Five of the 6 crash clusters (shown in the map as large orange polygons) are located in five different small area plans described in Chapter 3.4 where proposed corridor and intersection projects will improve safety. Also found in Figure 2.5 are the existing sidewalks, shown in red or purple (red=poor condition, purple=fair or good condition) and curb ramp locations in green or red depending on whether they are ADA accessible or non-ADA accessible respectively. In addition, small sidewalk gaps of less than 1500 feet are shown to begin identifying low cost sidewalk connection projects. The N. Fayetteville Street sidewalk is shown as pending, because it is planned as part of an existing NCDOT project.

Figure 2.5 - Crash Data



Origins and Destination

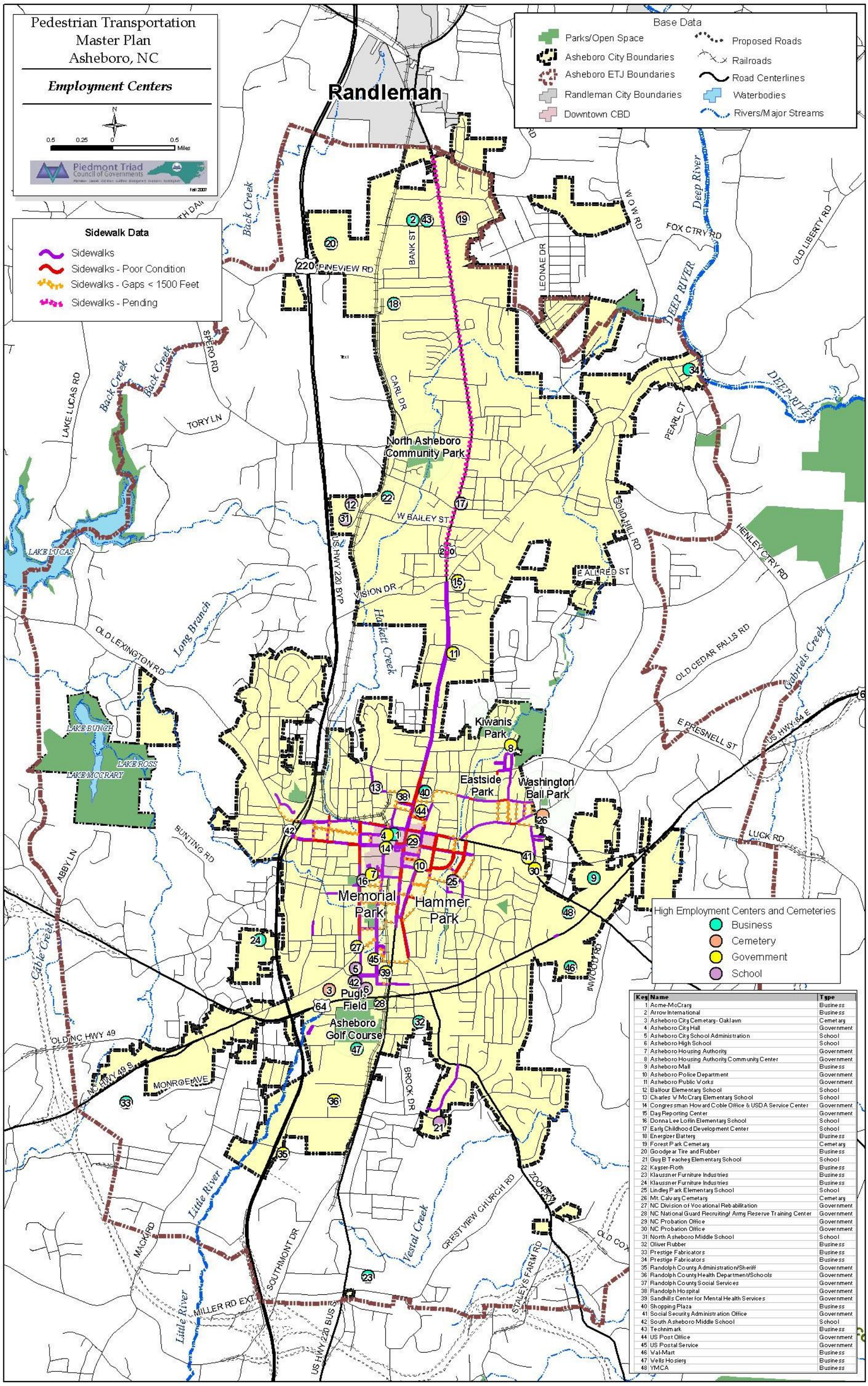
The recognition of Asheboro's parks, schools and commercial areas as community trip generators or places where people will walk is important for pedestrian planning. These community facilities are the origins or destination of many shorter trips by Asheboro citizens. Twenty-five percent all trips – social, recreational, work - under a mile nationwide are taken on foot, while the automobile is used for 75 percent of one mile trips or less[1],. Approximately forty percent of trips to visit friends and relatives and for other *social* and *recreational* purposes (e.g., to go to the gym, attend a movie, visit a park, or visit a library) totaling a mile or less are accomplished by walking. It is important to provide opportunities to safely walk to parks, schools, restaurants and shops. This plan is working to reduce that number, providing a strategy to create safe opportunities to walk to destinations.

The following maps – Figures 2.6 and 2.7 illustrate the location employment centers and the location parks, schools respectively in the City of Asheboro. The location of what are called origin and destination points are important to understanding where pedestrians will travel. Schools and parks are the destination of many trips and can often be replaced by foot. Employment centers are the destination and origin of a number of trips and in some cases can be made by foot, especially when considering the lunch hour. The buffers drawn around each of the parks and schools indicate a ½ mile or 10 minute walk radius from the park or school, which is typically the longest distance most individuals feel comfortable walking when there is a safe and secure pedestrian environment. Obstacles to walking, which can shorten the comfortable walking distance threshold include unsafe intersections, dead-end streets without pedestrian connections, heavy vehicular traffic and lack of walking facilities. The proximity of proposed projects to schools and parks does factor into the ranking of projects, which will be described in Chapter 3.2.

The following maps give a sense of where trip generators and origin and destination points exist throughout the City of Asheboro. The parks and school buffer maps are zoomed in to capture existing parks and schools at a larger scale for easier reference. Figure 2.7 shows three classes of sidewalk condition (poor = red, yellow=fair and green=good). The school buffers are shown in two shades of brown and the park buffers are shown in two shades of green.

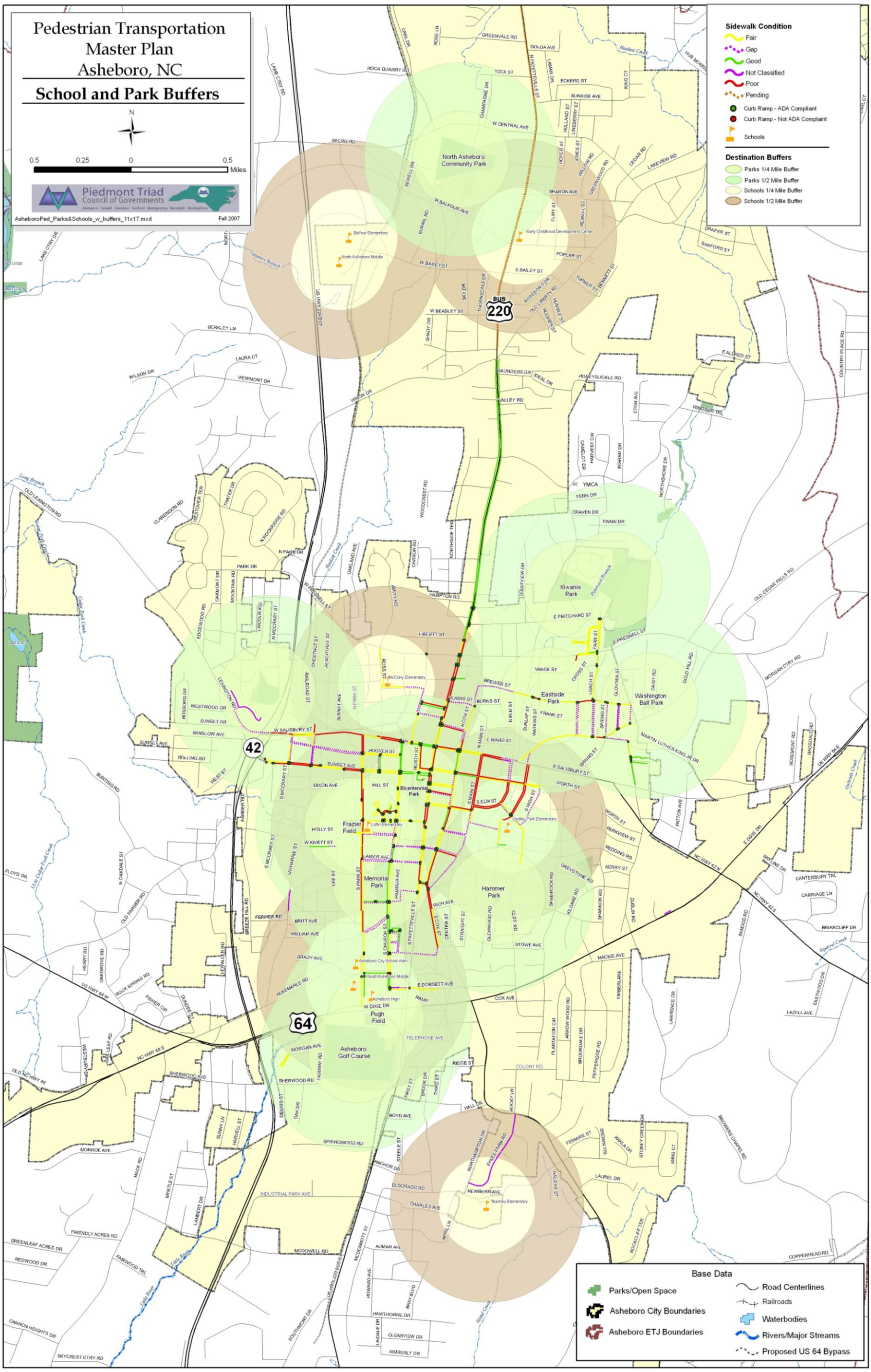
[1] U.S. Department of Transportation, Bureau of Transportation Statistics, Federal Highway Administration, 2001 National Household Travel Survey, January 2004 dataset, https://www.bts.gov/pdc/index.xml

Figure 2.6 - Sidewalk System and Employment Centers



Key	Name	Type
1	Acme-McCrary	Business
2	Arrow International	Business
3	Asheboro City Cemetary - Oaklawn	Cemetary
4	Asheboro City Hall	Government
5	Asheboro City School Administration	School
6	Asheboro High School	School
7	Asheboro Housing Authority	Government
8	Asheboro Housing Authority Community Center	Government
9	Asheboro Mall	Business
10	Asheboro Police Department	Government
11	Asheboro Public Works	Government
12	Balfour Elementary School	School
13	Charles W McCrary Elementary School	School
14	Congressman Howard Coble Office & USDA Service Center	Government
15	Day Reporting Center	Government
16	Donna Lee Loflin Elementary School	School
17	Early Childhood Development Center	School
18	Energizer Battery	Business
19	Forest Park Cemetary	Cemetary
20	Goodyear Tire and Rubber	Business
21	Guy B Teachey Elementary School	School
22	Kayser-Roth	Business
23	Klaussner Furniture Industries	Business
24	Klaussner Furniture Industries	Business
25	Lindley Park Elementary School	School
26	Mt. Calvary Cemetary	Cemetary
27	NC Division of Vocational Rebabilitation	Government
28	NC National Guard Recruiting/ Army Reserve Training Center	Government
29	NC Probation Office	Government
30	NC Probation Office	Government
31	North Asheboro Middle School	School
32	Oliver Rubber	Business
33	Prestige Fabricators	Business
34	Prestige Fabricators	Business
35	Randolph County Administration/Sheriff	Government
36	Randolph County Health Department/Schools	Government
37	Randolph County Social Services	Government
38	Randolph Hospital	Government
39	Sandhills Center for Mental Health Services	Government
40	Shopping Plaza	Business
41	Social Security Administration Office	Government
42	South Asheboro Middle School	School
43	Technimark	Business
44	US Post Office	Government
45	US Postal Service	Government
46	Wal-Mart	Business
47	Wells Hosiery	Business
48	YMCA	Business

Figure 2.7 - Sidewalk System, Schools and Parks with ½ Mile Buffers



2.3 COMMUNITY ISSUES

In addition to a five meetings with the Comprehensive Pedestrian Plan Steering Committee, there was significant outreach to the Asheboro community as a whole. To assess community concerns about the walking environment in Asheboro, a number of outreach efforts were conducted. These outreach efforts supplemented the knowledge and expertise on local issues provided by the steering committee. In addition, the April 3rd and June 25th public meetings included a notice in the Asheboro's local newspaper, the *Courier Tribune*. The *Fox 8 News* provided television coverage of the pedestrian planning process in March of 2007 as well. Figure 2.6 shows the list of outreach efforts conducted by the City staff and consultants. Media stories can be found in Appendix E.

Figure 2.6 - Community Outreach for the Asheboro Pedestrian Plan

Type of Outreach	Description	Date
Focus Groups	1. Downtown Redevelopment Commission (~15 participants) 2. Senior Adult Housing (~10) 3. Asheboro High School Students (~30) 4. Rotary Club (~25)	March, 2007 April, 2007
Pedestrian User Survey	Distributed to churches and civic groups, e-mail lists and the City employee newsletter. Online and paper format with a Spanish translation. (332 responses)	February-April 2007
Public Meetings	Asheboro Public Library (14 participants) N. Asheboro Middle School (5) Sunset Theatre (15)	April 3, 2007 June 25, 2007 September 13, 2007

Focus Groups

Most of the focus group agendas consisted of a brief presentation on what elements and characteristics make up walkable communities followed by a walking audit using a Walkability Checklist. The Walkability Checklist was used to assess specific neighborhoods for walkability. The Checklist has a scoring system that rates how your neighborhood is or is not "walkable". After the walking audit, concerns, barriers and issues were discussed to see how improvements to the built environment could help increase walking by improving safety, accessibility and comfort. These concerns, barriers and issues are folded into the Plan recommendations in Chapter 3.

Downtown Redevelopment Commission

This group was primarily interested in providing better pedestrian access in the downtown area. Places of concern were a lack of access on Academy Street, which links Bicentennial Park with Fayetteville and Park Street; conditions of some sidewalk on Fayetteville Street and creating a marked walking trail for visitors and residents to use for fitness and 'way finding'.

Senior Adult Housing
This group consisted of senior citizens, primarily residents of the Asheboro Housing Authority complex on Park Street. Discussion and concern focused around access across the railroad tracks on Wainman Avenue and crossing Park Street. In addition, there was a concern for the overall condition of existing sidewalks and curb ramps, which in some cases makes it difficult to navigate in wheelchairs and walkers.

Asheboro High School Students
This group consisted of a physical education class from Asheboro High School. The students were given a talk on what the concept of walkability means, with a discussion of the obesity epidemic and the role that physical activity plays in the epidemic. Using the walkability checklist, three groups looked at intersections and walkability near the school: Park Street and Walker Avenue, Church Street and Walker Avenue; and Dixie Drive and Walker Avenue. The group of students who observed Park Street and Dixie Drive quickly discovered that the pedestrian has a difficult time crossing Dixie Drive given the length of the crossing and the lack of sidewalk leading to the intersection from the High School. The students learned an important lesson on how the pedestrian transportation system influences walkability and physical activity.

Rotary Club
This group received a short lunch presentation with a question and answer period. There was no walking audit and walkability checklist, but each participant received the pedestrian user survey in order to give feedback on pedestrian conditions in Asheboro.

Pedestrian User Survey

The Asheboro Pedestrian Planning Process involved a survey of pedestrian issues for City residents. The survey was conducted between February and April of 2007. The survey was mailed to churches and civic organizations, City employees, distributed via email and available in both paper and electronic format at key locations in both English and Spanish. There were 332 responses collected when the survey closed on April 20th, 2007. Disappointingly, none of the responses were from the Spanish survey. The pedestrian user survey consisted of 8 questions on community pedestrian issues from personal behavior to physical environment. The full report of the survey is included with this report as Appendix B. Some of the survey highlights are shown here:

Survey Highlights

- Walkable Community Importance: 81% of respondents thought that creating a walkable community was important or very important.
- Top three choices for people who walk ½ mile or less: for 1) social visits - 26%, 2) transportation – 24% (including walking for work, shopping or school) or 3) fitness or recreation – 16%.
- Top three choices for people who walk ½ mile or more: for 1) fitness or recreation – 55%, 2) the dog – 14% or 3) pushing a stroller and social visits – 8% each
- Destination preference: 38% would like to get to trails and greenways and 18% to Parks when walking.
- Barriers to walking: 31% said that a lack of sidewalks and trails is the biggest

factor discouraging them from walking, traffic ranked 2nd with 12%
- What will increase walking: 29% mentioned improved greenway and trail systems 19% said new sidewalks, while16% reported more pedestrian friendly land uses.
- Top 5 streets needing improvement: Dixie Drive – 16%, Fayetteville Street – 16%, Salisbury Street – 11%, Church Street – 7% and Park Street – 7%.

To summarize the survey results further, a lack of facilities, both sidewalks in good condition and multi-use pathways, prevent citizens from walking. The difference in walking preferences between distances of over than ½ mile and less than ½ mile is striking. When the distance is less than ½ mile around 24% of people will walk for transportation. Nearly 40% of people surveyed desire to be able to walk to the most common places typically accessed by the vehicle including (shopping, restaurants, libraries, places of work, entertainment and school) while the remaining population prefer walking for fitness, relaxation and social reasons.

Public Meetings

Public Meeting #1 & 2

The first two public meetings (April 3, 2007 and June 25, 2007) sought input on what residents would like to see improved in Asheboro's walking environment. The meetings were held in different parts of Asheboro to provide residents in North and South Asheboro an opportunity for input. The participants were provided base maps and informational maps on pedestrian facilities and resources to mark where they 1) currently walk; 2) would like to walk or 3) are fearful of walking because of safety concerns. A PowerPoint presentation on walkable communities based on the Federal Highway Administration and NCDOT's Pedestrian Safety Roadshow was given as an overview at the beginning of the meeting. The information from the mapping exercise and comments were used in developing a list of possible sidewalk and trail projects for the City of Asheboro to consider.

The public meeting comments called for *installing and improving curb ramps, a number of new sidewalks, intersection crossing treatments, signage and trail connections to nearby parks and schools*. Public meeting participants were also asked to provide input on suggested policies or programs that would encourage walking in Asheboro. Recommendations for programs and policies included: *sidewalk repair, tree and landscape buffering, closing sidewalk gaps, require sidewalks and landscaping in new development, park connections and development, higher density housing construction, greenway awareness, sidewalk maintenance and walking encouragement programs.* If a corridor project received public comments or survey responses from 3 or more people, it received additional weight in determining the ranking of projects. See section 3.2 for more detail on project prioritization and ranking.

Public Meeting #3
Draft recommendations for corridor and intersection improvements, as well as policy and program recommendations were compiled and shared at the September 13, 2007 meeting. All of the pedestrian crash data, origins and destinations, proposed projects, small area maps and other information were shared in an open house format at the City of Asheboro Sunset Theatre. Comments from participants recommended the following:

- *Construct a highly visible downtown walking trail with an animal theme linking to the NC Zoo*
- *Ensure street tree, shrubbery plantings along corridor improvement projects*
- *Build the Asheboro Zoo Greenway*
- *Construct priority projects within 6 months of adopting the plan; and*
- *Implement intersection treatments at dangerous intersections*

Other comments reinforced the priorities called for in the plan. The suggested improvements are prioritized for improvement in Chapter 3.4 and are split into small area plans. In addition to projects, see Chapter 3 for more detail on recommended programs and policies resulting from the public meetings, survey, steering committee and focus groups.

2.4 INVENTORY AND ASSESSMENT OF EXISTING FACILITIES

Pedestrian Friendliness of Local Transportation System

The City of Asheboro has some neighborhoods that are very walkable and pedestrian friendly. The older downtown has a well connected system of sidewalks, with curb ramps, benches and buffered sidewalks. In addition, the Asheboro Parks and Recreation program in conjunction with Randolph Hospital promotes walking in downtown Asheboro with a regular route established and regular walking programs weekly.

In some neighborhoods walking can be difficult with a lack of sidewalks or ADA (Americans with Disabilities Act) curb ramps. In addition high volume roadways do not allow safe or accessible crossings without crossing treatments for the pedestrian. North Asheboro neighborhoods, which were annexed in 1970 upon joining the Central Falls Sanitary District, are noticeably lacking in sidewalks. The additional 5 square miles and 5,000 residents added increased the population and physical size of the City by about 50% at the time.

A compounding factor to the lack of sidewalks in North Asheboro and other neighborhoods outside the City core is the lack of curb and gutter, making the construction of sidewalks with associated curb and gutter more expensive. An alternate option to constructing curb and gutter is to install a sidewalk or trail beyond the ditch and swale, but this requires additional right of way or easements which in many cases is not easily available or acquired. In some newer developments, sidewalks have been included when encouraged or required by City ordinance, but much of the residential development that has occurred over the last 30 – 50 years is without sidewalks and not conducive to walking. Longer distances to work, school or shopping further discourage walking as a form of transportation. There are currently no sidewalks required for new residential subdivisions. However, sidewalks are required for commercial development. There are two greenways in the City of Asheboro, one in N. Asheboro Community Park and another at the Lake McCrary Park. These greenways do not serve a transportation purpose however and are used for recreation and fitness.

Sidewalk Inventories

Piedmont Triad RPO Sidewalk Inventory

The Piedmont Triad Rural Planning Organization conducted a sidewalk inventory for the City of Asheboro in 2006. The project included collecting information on the existence of sidewalks and their 1) width, 2) condition (poor, fair and good) and 3) curb ramps (ADA accessible or non-accessible). The study reports that there are 144,136 feet of sidewalk, equating to 27.3 miles. The City also has 255 curb ramps, with only 9 of them non-compliant with ADA guidelines. Sidewalk width ranges from 4 to 12 feet, with an average width of 5.1 feet. See Figure 2.7 for a map of the sidewalks and their condition.

City of Asheboro Maintenance Inventory

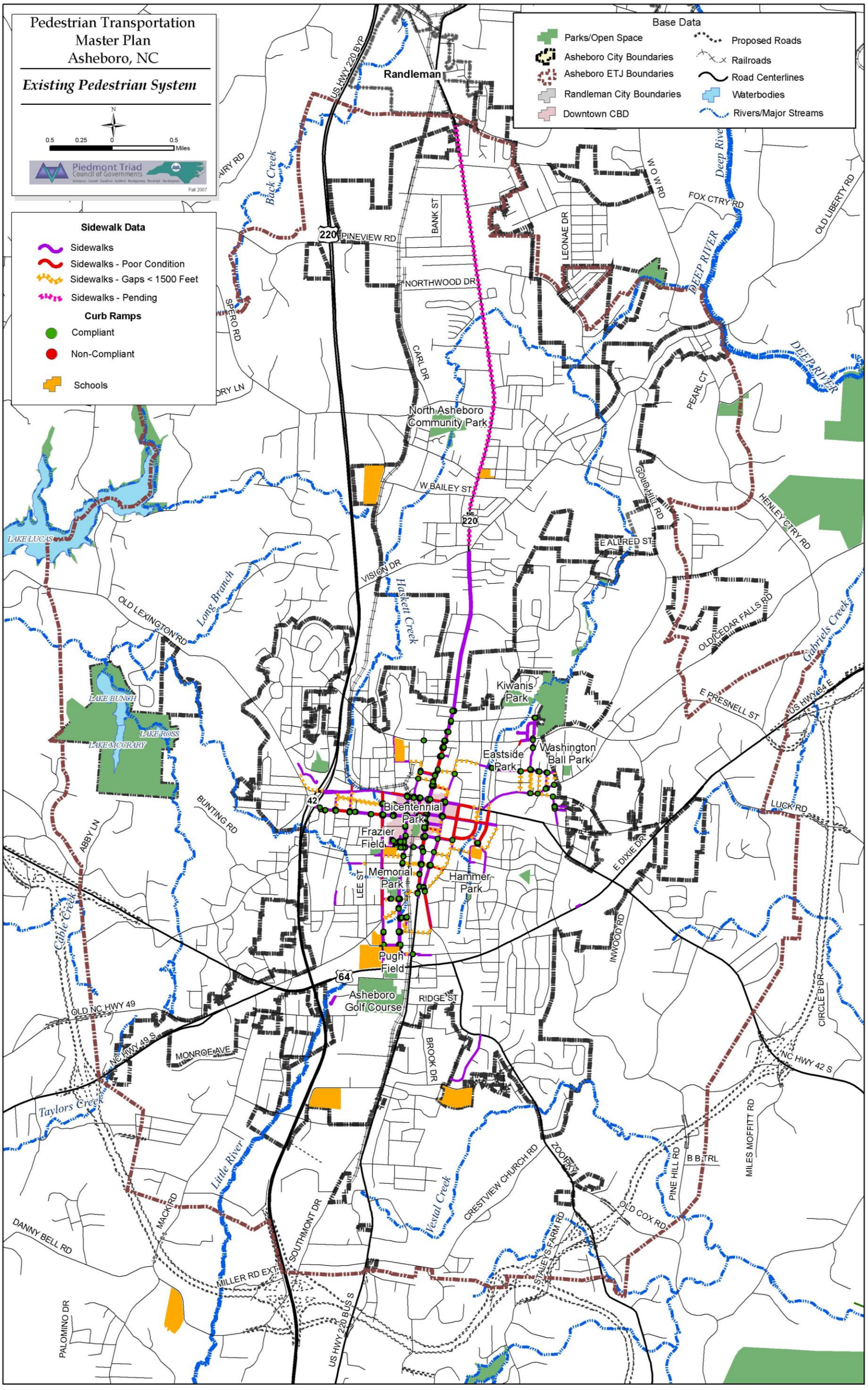
In addition to the PTRPO study, John Evans with the City of Asheboro completed a

detailed study of the condition of existing sidewalks. A total of 25.5 miles of sidewalk were physically inspected block by block for physical deficiencies in the summer of 2005. This survey was conducted on all public sidewalks that were at least three (3) years old at the time of the survey. The survey examined maintenance issues such as vegetation growing on and around sidewalks and minor surface cracking (deterioration that is less severe and can be remedied by patching). In addition, the survey examined structural problems requiring replacement of a sidewalk section in cases too severe to be remedied by maintenance work. Examples of such problems include vertical displacement (change in elevation between sidewalk sections) and surface deterioration. Both maintenance and structural problems were classified based on their severity as having either a moderate or significant level of deterioration. This classification was based on the practical difficulty a pedestrian would likely encounter in walking and the cost to remedy a problem.

Overall, 16.9% (4.3 miles) of sidewalks had deterioration that would likely require replacement, and 11.2% (2.9 miles) of sidewalks had deterioration that would likely require maintenance to remedy the problem. These findings are helpful to pinpoint the location and severity of problems and can complement public input in prioritizing and budgeting for maintenance needs and assist in measuring tangible results (both in the long-term and short-term) of a sidewalk maintenance plan. See Appendix A.3 Maintenance Inventory for a list of sidewalk segments and their condition.

In the following map, red shows sidewalks that are not in good condition and purple shows sidewalks in fair or good condition. According to the maintenance study by John Evans, 27% of existing sidewalks are impaired and need replacing or repair, which is confirmed in the PTRPO study. The map also shows ADA accessible ramps or non-accessible ramps where they exist. These two inventories serve as useful starting points in planning for improvements to the pedestrian transportation system.

Figure 2.9 - Existing Sidewalk System Map



2.5 PEDESTRIAN STATUTES AND LOCAL ORDINANCES

The Zoning and Subdivision Ordinance are the two primary documents regulating development in Asheboro. A number of the Ordinance sections do not pertain to the pedestrian transportation environment directly, however City of Asheboro zoning requirements in the parking, landscaping, road frontage, setback and buffer sections have significant influence on the walkability of adjacent streets. The City of Asheboro Charter Article XI pertains to Street and Sidewalk Improvements and what the cost sharing agreement will be for constructing sidewalks in existing development, for example. Figure 2.8 below summarizes pedestrian issues, existing ordinances that relate to the pedestrian environment along streets and roadways and where the Ordinance can be found if available. These issues will be revisited, with recommendations for improvement in Chapter 3.5.

Figure 2.10 - Summary of Ordinance and Statutes Relating to Sidewalk and Trails

Type of Issue	Existing Ordinance(s)/Process
1. Sidewalk construction and maintenance along existing development	Equal cost sharing for maintenance, repair and construction. Process initiated by adjacent landowner. (Asheboro City Charter Article XI and Council Resolution 08/02)
2. Sidewalk requirements for multi-family, commercial and light industrial development	Sidewalk construction is required for new development where curb and gutter exists in the following zoning districts: RA6, OA6, B1, B2 and B3. Required for I1, I2 and I3 on major and minor thoroughfares where curb and gutter exists. (Zoning Ord. 322A)
3. Sidewalk requirements for single family or duplex residential development	No requirements in the Subdivision Ordinance or Zoning Ordinance
4. Site design for residential, commercial and light industrial development (R6, RA6, R7.5, OA6, B1, B2, B3, I1 and I2)	Setback and buffer requirements (Article 300A-Supplemental Regulations)
	Road frontage and density (Article 300A-Supplemental Regulations)
	Maximum Floor Area Ratio (FAR) (Article 300A - Supplemental Regulations)
	Parking requirements (Article 400 - Off Street Parking and Loading)
	Landscaping regulations (Article 409 – Off Street Parking and Loading)
	Zoning Compliance Permit (Article 1000 – Contents of Application for Zoning Compliance Permit)
5. Public access easements	Do not acquire multi-use path, trail or other public access easements with sewer and water easements as lines are extended.
6. Mixed land uses	Center City Overlay district allows live/work units. Does not exist in other parts of Asheboro.
7. Flexibility in site design, parking and landscaping when requiring sidewalks	No current flexibility in the requirement for landscaping, parking, setbacks and buffers when sidewalks are required.
8. Sidewalk requirements for change of use – all zoning districts	No requirements for sidewalk construction with change of use.
9. Cul-de-sac connections	No requirements for pathway connections in cul-de-sac subdivision developments.
10. Lack of curb and gutter on existing streets	No consistent supplemental funding source to construct curb and gutter on existing street.
11. Pedestrian access on bridges	No requirement for pedestrian access.
12. Sidewalk design for new construction	Sidewalk design guidelines, Asheboro Engineering Department. Construct 2'-5' minimum planting strip. Sidewalk width is 5'-8' or 7'-8' without a planting strip.

2.6 REVIEW RELEVANT LOCAL, REGIONAL AND STATE PLANS AND GUIDELINES

The City of Asheboro has never had a Comprehensive Pedestrian Transportation Plan. However, the concept of walkability and pedestrian infrastructure and facilities has been incorporated into a number of recent planning efforts within Asheboro, in addition to various regional and statewide planning initiatives.

NCDOT Long Range Statewide Multi-Modal Transportation Plan

Completed in 2004, this plan calls for an increase in bicycle and pedestrian funding from an annual average of $6 million/year to $12 million/year over the next 25 years. The plan also emphasizes the need for training and mainstreaming bicycle and pedestrian planning and design so that these facilities are included earlier on in the process of roadway design. The plan recognizes that the construction of sidewalks places an undue burden on local government for the cost of including sidewalks in road projects. The recognition of this problem and a call for increasing funding is a positive step forward for pedestrian needs as it relates to NCDOT funding and NCDOT priorities.

Bicycling and Walking in North Carolina: A Long-Range Transportation Plan

This long range plan was completed in 1996 and has laid the groundwork for a number of bicycle and walking initiatives across the state. The plan provides 5 goals and 21 focus areas with the overarching vision to provide "All citizens of North Carolina and visitors to the State [the ability to] walk and bicycle safely and conveniently to their desired destinations with reasonable access to all roadways."

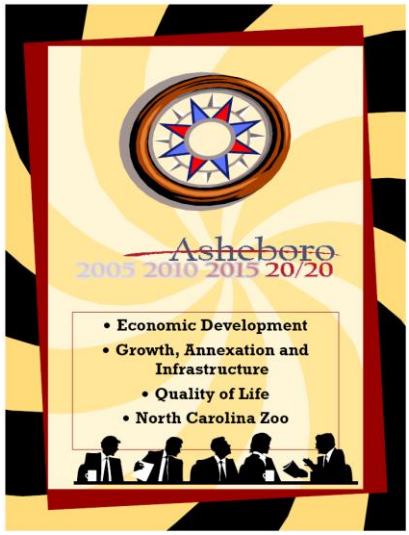
Asheboro Strategic Plan

The City of Asheboro completed a strategic plan Asheboro 20/20 in the Spring of 2007. The plan employed task forces to develop strategies addressing the following issues a) Economic Development, b) Growth, Annexation and Infrastructure, c) Quality of Life and d) the North Carolina Zoo. Several strategies from different task forces were established relating to pedestrian transportation. Some of the strategies mentioned here will improve aesthetics and the enjoyment of walking in Asheboro and others work to improve safety and access. The following strategies developed by the task force and which goals the strategies will achieve are as follows:

Task Force*: Growth, Annexation and Infrastructure*
Goal 4: Preserve and develop a visually appealing community:
Strategy 4 Construct and maintain city streets to meet safe and high quality standards.

A. Improve maintenance of city streets and pavement.
B. Raise the city's minimum subdivision road construction standards.

C. Investigate and determine feasibility of the city's take-over of specified state roads within the city limits. Implement if feasible



Strategy 6 Adopt a citywide sidewalk plan and budget annually for improvements to existing sidewalks and construction of new sidewalks according to the plan. Seek state grants to supplement local funds.

Task Force*: Quality of Life*

Goal 3: Provide parks, recreation and open space facilities for the entire community:

Strategy 2 Create a comprehensive greenways system that links recreation and parks sites to each other throughout Asheboro.

Strategy 3 Implement the adopted Parks and Recreation Master Plan.

Strategy 4 Link areas in the center of Asheboro through the use of green space, public art, and architecture *(e.g. connect Farmers Market to Surrounding Neighborhood).*

Goal 4. Develop funding options, partnerships, and ways to garner community support for parks, recreation, and open space issues.

Strategy 1 Identify private and non-profit partners that can work with the City and benefit from expanded parks, recreation, and open space facilities.

Strategy 2 Improve the walkability of Asheboro.

Strategy 5 Partner with the Piedmont Land Conservancy to preserve open space throughout Asheboro through the use of permanent easements.

Goal 5. Enrich the civic and cultural life of Asheboro's residents.

Strategy 4 Eliminate visual clutter within downtown through the removal of power poles and lines.

Strategy 6 Implement Asheboro's existing planning documents that provide a blueprint for growth (e.g. Land Use Plan, Greenway Plan, etc.).

Strategy 8 Amend Asheboro's existing development ordinances to integrate "better" design and public art into future projects (e.g. screening around dumpsters, public art in front of buildings, etc.).

Task Force*: North Carolina Zoo*

Goal 2. Create an aesthetic quality in and around the City of Asheboro that reflects the connection to the Zoo.

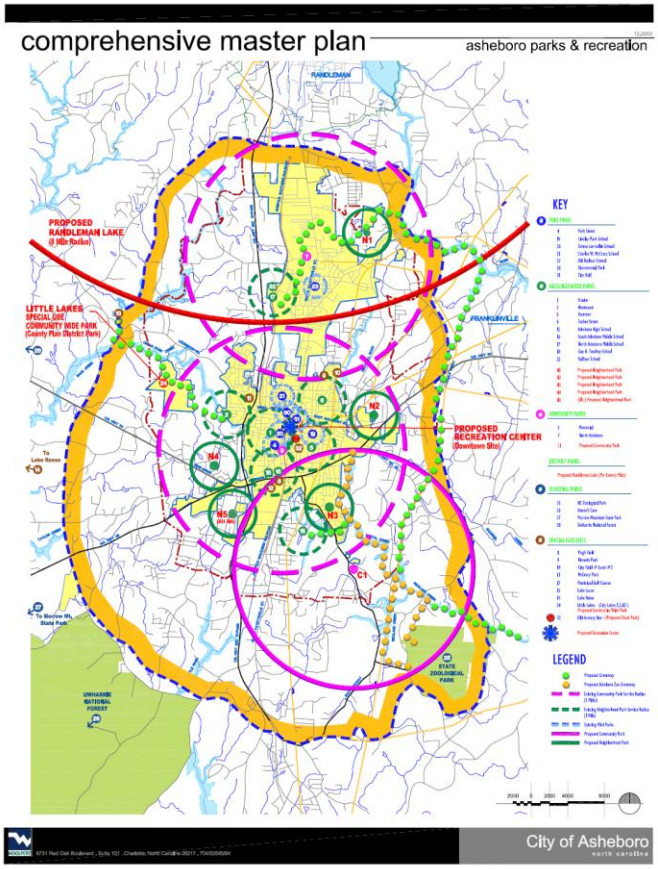
Strategy 4 Create a physical link to the Zoo through the development of a greenway for pedestrian and cycling opportunities.

Zoo Greenway Feasibility Study

The Piedmont Triad Council of Governments is conducting a feasibility study for a proposed multi-use path connecting the City of Asheboro to the North Carolina Zoo. The proposed multi-use path alignment is still being developed. This multi-use path

would provide an important alternative transportation link between the City and the Zoo.

Asheboro Parks and Recreation Master Plan – 2004 Update



The 1997 Park and Recreation Master Plan was developed to plan for the following specific areas:

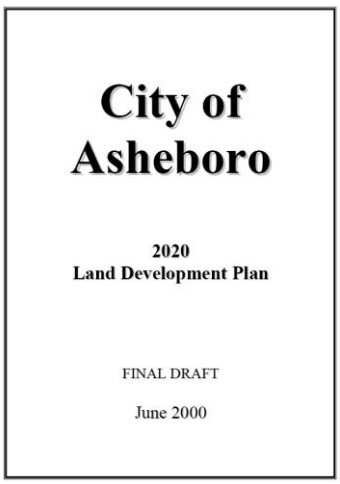
- Community Centers and public meeting space and
- Open space and greenways.

Comments from the public meetings identified wants and needs of park patrons in the Asheboro community. The comments here provide a good starting point for identifying facility needs for the system and individual park sites. Overall the most commonly mentioned wants or needs are as follows:

- Provide Interconnected Greenway/Trails for walking, hiking, biking, running, and horseback riding and
- Provide Access to Open Spaces/Natural Areas.

Access to the Little Lakes from Asheboro to the west and a greenway along the Deep River corridor to the east and northeast of Asheboro was suggested in a number of public meetings for the Parks and Recreation Master Plan. In all, 5 to 7 miles of greenways are proposed in 4 different corridors.

2020 Land Development Plan



The City of Asheboro underwent a Land Development Planning process from 1999-2000. The planning process explored growth trends in population and land use and weighed them against citizen input to develop a strategy for land use and development in and around the City of Asheboro. The Growth Strategy chapter of the Land Development Plan, Chapter 5 illustrates a number of community driven goals and policies to shape quality growth. The following are goals and policies that relate directly to improving pedestrian transportation for City of Asheboro residents:

Growth Management

Policy 2.8: The City will encourage a mix of compatible uses (residential, commercial, office, institutional) and housing types to foster attractive, safe, pedestrian-friendly neighborhoods.

Community Appearance

Goal B: Use a variety of tools to improve the beauty and appearance of our community, including streetscape, landscape, and buffer requirements, street trees, sign controls, architectural and site design review, underground utility wires and development standards to encourage preservation of natural, cultural and historic resources and enhancement of the built environment.

Policy 3.10: The City will encourage pedestrian-friendly neighborhoods with narrow streets, curb and gutter, and abundant street trees, sidewalks, greenways, neighborhood parks and open spaces.

Environmental Stewardship

Goal F: Implement the City's Parks and Recreation Master Plan, establishing and preserving abundant parks, recreational opportunities, open space and natural areas and connecting them with sidewalks, greenways, jogging trails and bike lanes.

Policy 4.2: The City will carefully control land development activities in sensitive areas…encouraging low-intensity uses such as open space, recreation and trails.

Transportation System

Goal B: Reduce traffic congestion and improve the accessibility & mobility for people and goods.

Goal D: Locate commercial, office and residential uses closer to one another & connect them with sidewalks.

Goal F: Include alternative transportation modes (sidewalks, greenways, bikepaths) in all new developments.

Policy 6.4: The City will require the inclusion of pedestrian amenities (such as sidewalks with curb and gutter, bikeways and greenways) in all new urban and suburban land development projects and will strongly encourage these pedestrian-oriented alternatives be added to existing land development throughout the City.

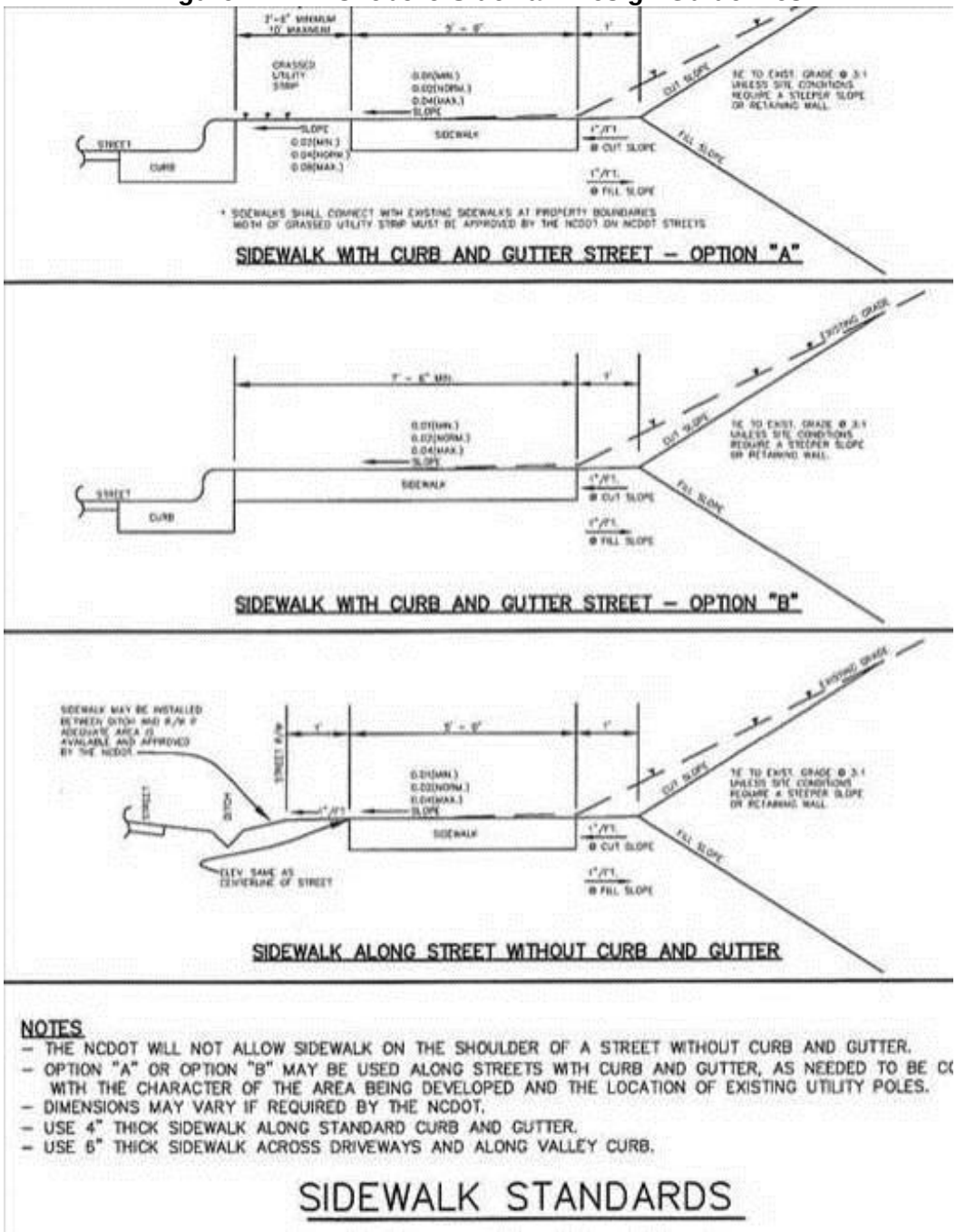
Comprehensive Transportation Plan

The City of Asheboro began a Comprehensive Transportation Planning process in 2007 through the RPO and NCDOT. This process will update the 1999 Thoroughfare Plan conducted by NCDOT. The focus of the current CTP process will cover all modes of transportation for Asheboro and the surrounding areas, including pedestrian improvements.

Existing Sidewalk Design Guidelines

The following figure shows three different design guidelines for sidewalk construction in Asheboro. Option A calls for a minimum planting strip of 2'-5' and a maximum planting strip of 10'. The sidewalk width is recommended to be 5'-8'. Option B, shows a sidewalk without a planting strip and calls for a 7'-8' minimum width of sidewalk. These two options include roads with curb and gutter. Option C, shows sidewalk design guidelines without curb and gutter and calls for a 5'-8' wide sidewalk on the far side of the ditch.

Figure 2.11 - Asheboro Sidewalk Design Guidelines



2.7 OTHER PROGRAMS AND INITIATIVES

Enforcement Programs

The Asheboro Police Department employs a number of crossing guards to be stationed at the Asheboro City Schools. These crossing guards ensure children's safety as they cross the street to school. They also will enforce parking restrictions so that traffic can safely turn and sight obstructions do not occur at intersections.

John Hunt, Asheboro Middle and High School Crossing Guard.

There are five crossing guards employed by the Asheboro Police Department. There are two at Loughlin Elementary, one at Lindley Elementary, one at Asheboro High and South Asheboro Middle School and one at McCrary Elementary. The crossing guards are assisted by officers in the first three months of employment of being a crossing guard and is considered on the job training. The crossing guard program has been in operation for over thirty years. The guards are paid employees of the Asheboro Police Department.

Figure 2.9 Downtown Walk/Run Map

Encouragement and Promotions

The City of Asheboro Parks and Recreation Department conducts a weekly walking program in the downtown area. In cooperation with the Randolph Hospital and the County Health department, the downtown Walk/Run trail leading from Memorial Park has four different route lengths for pedestrians or fitness runners. Continued education about the benefits of walking and promotion of new walking routes is a goal of the County Health department.

Traffic Calming

There is no current traffic calming program in the City of Asheboro. However, Asheboro completed a streetscape project along Sunset Avenue in downtown using bulb-outs, street trees and pavement treatments in

late 2004. The NCDOT Transportation Enhancements project funding was used to complete this project. Previous plans have discussed traffic calming in neighborhoods as an improvement to quality of life.

Maintenance Programs

The Public Works department replaces sidewalks as major issues are reported. Public Works has been reviewing the report of sidewalk condition completed by John Evans and intends to incorporate the inventory into their regular capital program. See Chapter 3.5 for more details on the maintenance plan. There is currently an insufficient level of funding available to repair, replace and maintain the existing sidewalks existing in Asheboro. Increase funding for a program of sidewalk repair and replacement will be important for maintaining existing sidewalk as well as any future installation of sidewalk and trail.

Trees Asheboro

A tree board composed of 4 individuals (3 city staff and one resident) is advising the Asheboro Beautification Committee on tree issues in the City of Asheboro. The board has secured a grant from the NC Urban Forest Council to complete a two year inventory of the Asheboro tree canopy. The inventory is being conducted by the Davie Resource Group and work will be completed in 2008. The tree board has also participated in National Arbor Day and applied for designation by Tree City USA.

CHAPTER 3: PEDESTRIAN SYSTEM PLAN

3.1 CURRENT PEDESTRIAN TRANSPORTATION SYSTEM OVERVIEW

Fayetteville Street Looking South at Sunset Avenue

The City of Asheboro has a number of visitors pass through the town on their way to and from the North Carolina Zoo. The proximity of Asheboro to the Zoo draws visitors to Asheboro's downtown, which provides a number of opportunities for pleasant walks to shops, the Bicentennial Park, the farmers market or historic residential neighborhoods just on the outskirts of downtown. The construction of the proposed Zoo greenway, a priority project in the 2004 Asheboro Parks and Recreation Plan and this Plan, will strengthen the connection of Asheboro to the North Carolina Zoo. Continued development of the pedestrian transportation system will encourage more visitors and residents alike to spend time walking around Asheboro.

The automobile oriented development of Dixie Drive and North Fayetteville Street provides a more difficult challenge for inviting and accommodating pedestrian transportation. The crux of creating a walkable community goes beyond mere accommodations through the construction of sidewalks; land use, setbacks, buffering, safety and lighting all come together to either invite walking when present or discourage it when lacking. A combination of pedestrian corridor enhancement projects and improvements to intersection and crossing safety for pedestrians are the first steps to improving the pedestrian transportation system in these high traffic, automobile oriented corridors. However, adopting good policies and programs will also help assure future growth will be more than merely accommodating pedestrians.

3.2 PEDESTRIAN TRANSPORTATION SYSTEM PROJECT RECOMMENDATIONS

The Asheboro Comprehensive Transportation Plan System includes a series of projects, programs and policy recommendations. This section pertains to *project* recommendations, which will require the most amount of resources to complete. Projects are grouped by a) corridors, b) intersections and c) multi-use paths, the latter of which create new corridor connections to parks, schools and shopping. The intersection and corridor projects are prioritized based upon a number of factors, which are explained in the methodology on the following page. Chapter *3.4 Small Area Plans* provides more detail about the project recommendations found in this section.

Corridor and intersection improvements are considered on-road improvements, which offer safe pedestrian transportation options in existing street corridors. Multi-use path and trail improvements are considered off-road improvements and will provide important long-term non-motorized connections near streams, sewer lines or other corridors. Improvements have been identified from the following sources:

a) public comments (survey, public meeting maps or questionnaire);
b) higher traffic volume streets and intersections with observed high levels of walking behavior;
c) safety concerns resulting from crash data and demographic analysis;
d) proximity to trip generators (parks, schools, shopping, Downtown);
e) steering committee recommendations
f) previous plan recommendations (e.g. Land Development Plan, Parks and Recreation Plan, Strategic Plan); and
g) project staff field analysis.

The corridor improvement recommendations are for construction of *new* sidewalks. In some cases, the corridor already has sidewalks on one side. There are some areas in Asheboro that have existing sidewalk in poor condition as shown in the Chapter 2 existing condition maps. Please see Appendix A.3 for detailed maintenance recommendations on the specific sections of *existing* sidewalk that are in need of replacement and/or repair.

The prioritization process used for corridor and intersection improvements combines factors used in the Graham, NC Pedestrian Transportation Plan (2006), the Durham, NC Pedestrian Transportation Plan (2006) and the Portland, OR Pedestrian Plan (1998). Additional factors were included based on feedback from Asheboro City staff and Pedestrian Plan Steering Committee discussions.

A wide breadth of factors was used for project prioritization and no projects received the maximum possible score. The scoring system used to rate each project will serve as a guide to programming resources for projects. However, opportunities for improvement to certain corridors may arise (i.e. unplanned road projects, repaving projects, utility installation or specific funding opportunities) permitting the construction of projects that may not be a top priority. See Figure 3.8 for a map of proposed improvements.

Corridor Prioritization Methodology

The following prioritization factors have been weighted and are used to determine the prioritization of **corridor** projects. The total maximum score possible from the following factors is 30. Most corridor project factors receives the full score or none at all, except for the 'crashes' factor, which receives a partial score.

Figure 3.1 - Sample Corridor Improvement Prioritization

Corridor Improvements			One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from proposed greenway in 2004 plan	Score Total	
Street	*From*	*To*		*3*	*4*	*3*	*4*	*2*	*3*	*3*	*2*	*3*	*2*	*1*	30	
White Oak	Presnell Street	MacArthur Street		3	4	3	4	0	3	3	2	3	2	0	27	

Corridor Priority Rankings and Recommendations

The recommendations in Figure 3.2 are the top two-thirds of prioritized projects. This priority ranking allowed the number of projects to be narrowed down. The highest ranking projects are not necessarily the easiest projects to complete, with costs that may be prohibitive without additional funding from grant sources or other revenue. Recommendations are for the construction of sidewalk on both sides of the street, with the understanding resources are limited and in order to stretch resources further, sidewalk may be constructed on only one side. In some proposed project locations, there is existing sidewalk on one side of the street, or a section of the project length contains a sidewalk. The design of the sidewalk should follow suggested design standards consistent with recommended design guidelines in Chapter 5.1, which calls for 5ft minimum sidewalk width and consist of a six foot vegetated buffer. However in cases of higher pedestrian traffic areas, near schools or in downtown areas, sidewalks should be 8-10 ft in width, not including planting strips. See Chapter 5.1 for detail on improving sidewalk design and guidelines. The cost of each sidewalk project is based on an average cost. More detail on the costing of projects can be found in Chapter 3.3.

Top priority projects as determined by prioritization, steering committee input, cost feasibility, public comments and other constraints are shaded in grey in figure 3.2 and 3.4 below and other references in Chapter 3.4. Multi-use path projects are prioritized separately from the sidewalk projects. The multi-use path projects are found at the end of Chapter 3.2.

Figure 3.2 - Recommended Corridor Improvement Projects and Specifications with Priority Score

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Side-walk	Priority Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
MARTIN LUTHER KING JR DR (D1)	E. Salisbury to E. Salisbury Street	6109	10219	NORTH	26	0	$916,000	$1,533,000
S CHURCH ST(A1)	Wainman to Lanier Street	1095	1095	EAST	25	1095	$110,00	$110,000
WHITE OAK ST (G1)	Foust to W. Ward	700	1400		25	302	$70,000	$140,000
W DIXIE DR (F2)	Park Street to US 220	3076	6153		24	3076	$308,000	$616,000
S PARK ST (B1)	Cooper to Walker Avenue	1131	1131	EAST	24	1131	$113,000	$113,000
W WAINMAN AVE (A2)	Park to Church Street	924	924	SOUTH	24	924	$92,000	$92,000
S FAYETTEVILLE ST (B3)	Walker to Dixie Drive	915	1829		24	915	$91,000	$183,000
W DIXIE DR (F3)	S. Fayetteville to Park Street	1166	2331		22	1166	$117,000	$234,000
WHITE OAK ST (G2)	Presnell to Foust Street	985	1970		22	985	$98,500	$197,000
E WAINMAN AVE (A3)	S. Fayetteville to Cox Street	501	1002		22	0	$100,000	$200,000
W WAINMAN AVE (A4)	Church to S. Fayetteville Street	799	799	NORTH	22	799	$80,000	$80,000
ALBEMARLE RD (B4)	Park to Uwharrie Street	3319	6638		22	0	$498,000	$996,000
S FAYETTEVILLE ST (I1)	Ridge to City Limits	822	1644		22	0	$123,000	$247,000
DUNLAP ST (E2)	Brewer to MLK Drive	1542	3084		22	0	$308,000	$616,000
N CHERRY ST (A5)	Salisbury to Sunset Avenue	863	863	WEST	22	0	$173,000	$173,000
W WALKER AVE (B5)	Park to Albemarle Road	891	1782		21	891	$89,000	$178,000
W WALKER AVE (B6)	Church to S. Fayetteville Street	571	1143		21	0	$114,000	$228,000
S FAYETTEVILLE ST (B7)	Birkhead to Walker Avenue	1691	3383		20	1691	$169,000	$338,000
ROSS ST (G3)	Foust to W. Salisbury Street	1346	2693		20	0	$269,000	$538,000
W PRESNELL ST (G4)	Fayetteville to Ross Street	2208	4416		20	1230	$270,000	$540,000
S CHERRY ST (A6)	Sunset to Dixon Avenue	646	1291		20	646	$65,000	$130,000
UWHARRIE ST (A9)	Kivett to Spencer Avenue	1824	3099	EAST	20	615	$243,000	$403,000
W ACADEMY ST (A7)	Church to S. Fayetteville Street	819	1638		20	819	$82,000	$164,000
N ELM ST (E3)	Brewer to Salisbury Street	1890	3779		20	1890	$189,000	$378,000
FOUST STREET (G5)	White Oak to N Church Street	532	1064		19	532	$53,200	$106,400

*These corridor projects fall outside of the small area plans, but are still considered a priority.

Figure 3.2 – (Continued) Recommended Corridor Improvement Projects and Specifications with Priority Score

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Priority Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
E DIXIE DR (F1)	NC 42 to Dublin Road	2949	5897		19	2949	$295,000	$590,000
N COX ST* (I3)	Burns to Salisbury Street	543	1087		19	543	$54,000	$108,000
E DIXIE DR (F4)	NC 42 to Randolph Mall	1227	2453		19	1227	$123,000	$246,000
E SALISBURY ST (D2)	NC 42 to Randolph Mall	2819	5639		19	0	$423,000	$846,000
E DIXIE DR (F5)	Dublin to Cox Street	4774	9548		18	4774	$477,000	$954,000
E DIXIE DR (F6)	Cox to S. Fayetteville Street	1773	3546		18	1773	$177,000	$354,000
E SALISBURY ST (E4)	Elm Street to NC 42	2814	5628		18	0	$422,000	$844,000
S FAYETTEVILLE ST (F7)	Dixie to Ridge Street	1588	3176		18	500	$213,000	$426,000
UWHARRIE ST (A9)	Dixon to Kivett Street	1598	3195		18	1598	$160,000	$320,000
WATKINS ST (E5)	Brewer to MLK Drive	1295	2590		18	0	$259,000	$518,000
NC HWY 42 N (D3)	Salisbury Street to East Dixie Drive	3950	7900		18	0	$592,000	$1,184,000
LANIER AVENUE (B2)	Park to Church Street	775	1550		17	0	$155,000	$310,000
W WAINMAN AVE (A10)	Uwharrie to Park Street	1551	3102		17	1551	$155,000	$310,000
N COX ST* (I3)	Burns to Ward Street	755	755	EAST	17	755	$75,000	$75,000
W KIVETT ST (B9)	Park to Uwharrie Street	2551	4573	SOUTH	17	2551	$255,000	$457,000
HILL ST (A11)	Park to Church Street	997	1994		17	0	$199,000	$398,000
W BALFOUR AVE (H1)	Canoy to N. Fayetteville Street	2484	4968		17	0	$373,000	$746,000
S COX ST (B8)	Stowe to Dixie Drive	1776	3552		17	1776	$178,000	$356,000
REDDING RD (C3)	Glenwood to Cliff Road	689	1377	NORTH	16	689	$69,000	$138,000
E DORSETT AVE (B10)	S. Fayetteville to Cox Street	1549	2198	NORTH & SOUTH	16	1549	$155,000	$220,000
LEXINGTON RD* (I5)	Sunset to Westwood Drive	467	935		16	0	$70,000	$140,000
W TAFT AVE (B11)	Park to Church Street	728	1456		16	728	$73,000	$146,000
W BAILEY ST (H2)	N. Asheboro Middle to N. Fayetteville Street	4003	8005		16	4003	$400,000	$800,000
ROSS ST (G6)	Presnell to Foust Street	1125	1125	EAST	15	1125	$112,000	$112,000
CITY VIEW ST (G7)	Ross to Peachtree Street	1387	2774		15	1387	$139,000	$278,000
ZOO PKWY* (I6)	Dixie to Sykes Farm Road	3717	7435		15	0	$558,000	$1,116,000
CLIFF RD (C1)	E. Kivett to Dixie Drive	3453	6907		15	3453	$345,000	$690,000
DUBLIN RD (D4)	NC 42 to E. Dixie Drive	2983	5966		15	0	$447,000	$894,000
SHAMROCK RD (C2)	Worth to Dixie Drive	5254	10508		14	5254	$11,000	$22,000
OLD LIBERTY RD* (I4)	N. Fayetteville to City Limits	14972	29945		14	0	$2,245,000	$4,490,000
GLENWOOD RD (C4)	Redding to Hillcrest Circle	1683	3365		14	1683	$168,000	$336,000

*These corridor projects fall outside of the small area plans, but are still considered a priority.

Intersection Priority Rankings and Recommendations

Intersection improvements should be addressed in the short term or less than 5 years. Many improvements are low cost, easy to implement solutions (e.g. pavement markings and signs). However, some improvements will require more resources (e.g. crossing islands, pedestrian signals or intersection re-alignment) and may take longer than 5 years to budget resources. The factors shown in Figure 3.3 were used to determine which intersections to prioritize for improvement. See Appendix A.2 for more detail on how these factors influence the prioritization score. The number under each factor represents the highest possible score for that factor in Figure 3.3.

Figure 3.3 - Sample Intersection Improvement Prioritization

Intersection Improvements	Crashes (1 crash or >=2 pedestrian or bicycle crashes between 2001-2006 within 100 yards of the intersection)	ADA non-compliant	Presence of sidewalk (1 point for each corner)	Condition of sidewalk (poor)	Road type (major road with high vehicle or pedestrian traffic)	Proximity to school (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile or a park)	Compatible land use (multi-family residential, commercial and central business)	Score Total	
Project Location	*4*	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*27*	
N. Fayetteville Street & MacArthur Avenue	4	3	4	3	3	4	3	3	27	

The intersection improvements will require further study by a traffic engineer to determine the best solutions for improving safety at intersections and to also determine the cost of improvements. Case studies of intersections requiring improvement are found in Chapter 3.4 *Small Area Plans*, where specific improvements are clustered into different sections of Asheboro. The following table shows the highest priority intersections for improvement. The following intersections should be reviewed for safety effectiveness. The Federal Highway Administrations "PEDSAFE: Pedestrian Guide and Countermeasure Selection System" found at: http://www.walkinginfo.org/pedsafe/ is a useful tool in determining appropriate measures to improve intersection safety.

Figure 3.4 - Recommended Intersection Improvement Projects with Priority Score

Project Location	*Priority Score*
N. Fayetteville Street & MacArthur Avenue	27
Park Street & Wainman Avenue	24
E. Kivett Street & S. Cox Street*	23
Sunset Avenue & Park Street	22
Sunset Avenue & Fayetteville Street	21
Park Street & Lanier Avenue	21
Park Street & Walker Avenue	21
Foust Street & White Oak Street	20
W. Salisbury & Church Street	19
W. Salisbury & Park Street	18
E. Salisbury Street & MLK Drive	18
E. Salisbury Street & Elm Street	18
Kivett Street & S. Fayetteville Street	17
Park Street & Dixie Drive	17
Church Street & Wainman Avenue	17
N. Fayetteville Street & Presnell Street	17
W. Salisbury/Lexington Road & US 220 Bypass*	16
N. Fayetteville Street & W. Strider Street	15
W. Ward Street & Ross Street	15

Project Location	*Priority Score*
S. Cox/Zoo Parkway & Dixie Drive	15
E. Salisbury Street & Coleridge Road	14
W. Kivett Street & Lee Street	14
NC 42 & Dixie Drive	13
Dublin Road/Browers Chapel Road & Dixie Drive	13
Presnell Street & White Oak Street	13
N. Fayetteville Street & Bailey Street	12
Spencer Avenue & Macon Street*	12
Old Cedar Falls Road & Glovinia Street	12
E. Salisbury Street & Rock Crusher Road*	11
E. Dorsett Avenue & Cox Street	10
N. Fayetteville Street & Forestbrook Circle*	10
Cliff Road & Dixie Drive	9
Old Cedar Falls Road & Woodlawn Street	9
Arrow Wood Road & Dixie Drive	8
E. Pritchard Street & Meadowbrook Road	8
Park Road/Presnell Street & US 220 Bypass*	6
Hub Morris Road & Old Liberty Road*	5

*These intersection projects fall outside of the small area plans, but are still considered a priority.

Multi-use Path Projects

Multi-use path and trail projects from the 2004 Parks and Recreation Master Plan have been incorporated into this Comprehensive Pedestrian Plan, additional projects are included in Figure 3.5 below. It is recommended that these proposed multi-use paths projects be completed in 6 to 15 years. Trail development in most cases requires land acquisition and can take several years. The Zoo Greenway has a feasibility study that is being completed currently, which is one of the recommended multi-use path projects in Figure 3.5. The Zoo Greenway project is considered a top priority project given efforts completed on the feasibility study and the comments received during this planning process.

Figure 3.5 - Top Multi-use Path Improvement Projects

Multi-use path Project	Description	Estimated Cost*
N. Asheboro Middle School to N. Asheboro Community Park	Multi-use path connection from the N. Asheboro Middle School to the N. Asheboro Community Park. Possible routes include following the rail line north and connecting to the Park from the rail line. The alternate route would follow Bailey Street east and then follow a stream alignment north from Bailey Street into the park. Parts of this multi-use path are included in the 2004 Parks and Recreation Master Plan. **Estimated Length: 0.8 miles (4,175 feet)**	$370,000
Teachey School to Zoo Greenway	Multi-use path connection from the Teachey School to the proposed Zoo Greenway. This would give an opportunity for Teachey School children to ride safely to and from school and connect with the proposed Zoo Greenway. This multi-use path connection was included in the 2004 Parks and Recreation Master Plan. **Estimated Length: 1.4 miles (7,450 feet)**	$595,000
Zoo Greenway	Multi-use path connection from the Asheboro YMCA to the Zoo. There is a feasibility study being conducted by the Piedmont Triad Rural Planning Organization to determine proposed alignments that best suit the community needs and interests. Phase 1 would be a connection from the new Zoo City Park to the Zoo. This path is included in the 2004 Parks and Recreation Master Plan. **Estimated Length: 6.5 miles (34,320 feet)**	$2,420,000
Lake McCrary Greenway	Multi-use path connection from Rolling Road and Sunset Ave (west of the 220 Bypass) to Lake McCrary. This multi-use path connection was included in the 2004 Parks and Recreation Master Plan. **Estimated Length: 3.2 miles (16,690 feet)**	$1,220,000

3.3 COST ESTIMATES FOR TYPICAL SIDEWALK AND MULTI-USE PATH IMPROVEMENTS

Sidewalk Cost Estimates

Depending on whether sidewalk improvements occur on streets with or without curb and gutter can have a significant influence on the cost of sidewalk installation. It is recommended in most cases to build curb and gutter with any sidewalk installation.

The City of Asheboro sidewalk design schematic shown in Figure 2.9 on p. 23 includes a cross section of sidewalk along streets without curb and gutter (ditch and swale). Sidewalk design without curb and gutter can be difficult to construct for a couple of different reasons; (1) right of way acquisition costs and delays and (2) difficulty linking with the existing pedestrian transportation network. In some cases where an entire road segment is being improved and neighboring property owners are willing to supply right-of-way at no cost, construction of a sidewalk or path without curb and gutter can be built with success, but connectivity to the network must be considered and accommodated at the end points of the project.

The City of Asheboro Public Works department constructs on average 300-400 feet of sidewalk every year, which may include up to 3 different sidewalk projects. The cost to the Public Works department of installing sidewalks is significantly lower (>50%) than working through an outside contractor. Unfortunately Asheboro Public Works cannot meet the demand for new sidewalks, while maintaining existing infrastructure and therefore must use outside contractors to complete the work proposed in this Plan.

When using an outside contractor, the following range and average costs are used to estimate costs of constructing pedestrian facilities. The average cost of various 5ft sidewalk installations include curb and gutter as part of the finished product. Factors that significantly influence the cost of sidewalk installation in addition to curb and gutter include: grading or filling requirements, replacement or installation of stormwater and other utilities. These additional costs are included in the averages below. Right-of-way acquisition can also influence cost, but are not included in Figure 3.6.

Figure 3.6 – Cost of Sidewalk Construction for Various Street Types

Type of Street Cross-section	Cost
Neighborhood or thoroughfare with existing curb and gutter	$50-200 /linear foot $100/linear foot average
Thoroughfare street with no existing curb and gutter	$100-300 /linear foot $150/linear foot average
Neighborhood street with no existing curb and gutter	$150-400 /linear foot $200/linear foot average

Source: Asheboro Engineering Department

The three different street cross sections above in Figure 3.6 were used to estimate the resources needed to build the priority projects called for in this plan. Thoroughfare streets primarily run through commercial areas and have higher speeds and traffic. Examples of thoroughfares without curb and gutter include E. Salisbury Street (east of Elm Street), Albemarle Road, MLK Drive or N. Fayetteville Street (north of Old Liberty Road). These thoroughfare streets usually cost less than neighborhood streets to upgrade to curb and gutter because there are fewer utility needs on thoroughfares than neighborhood streets.

Multi-Use Path Cost Estimates

The following cost estimates for multi-use path elements are based on estimates from the Eden Greenway Master Plan compiled by WK Dickson consulting. The estimates do not include professional services such as design and administration or the acquisition of easements, land and legal fees.

Figure 3.7 – Multi-Use Path Elements and Cost

Description	Unit Cost
10-foot wide Asphalt Paved Trail	$70/linear foot
10-foot wide Boardwalk	$250/linear foot
Permanent Culvert	$3,500/each
12-foot wide bridge	$1,710/linear foot
Bicycle Rack	$300/each
Benches	$800/each
Trash Cans	$400/each
Landscaping/Erosion Control	$5/linear foot
Annual Maintenance Cost	$1.60/linear foot annually
Light and Pole	$7,500/each
Trailhead Shelter	$25,000/each
Landscaping and Pavers at Trailhead	$17,500/each
Trail Signs	$1,000/each
Mile Marker	$150/each

These estimates are used to determine the cost of constructing the four proposed multi-use path projects. The cost of some elements may vary due to differing requirements for grading, erosion control, culvert installations and stream crossings. The City will need to conduct a more thorough analysis of facility costs prior to design and construction.

3.4 SMALL AREA PLANS

Small area plans were developed using input from staff and the steering committee. These small area plans are considered a priority for sidewalk and intersection safety improvements and are a focus for City investment in pedestrian infrastructure. The small area plans give an opportunity for residents and the City staff to manage, prioritize, plan and implement proposed project improvements that benefit pedestrians in different neighborhoods throughout the City.

The following eight (8) small areas have been defined for the Comprehensive Pedestrian Transportation Plan:

A. Downtown and Frasier Park Area

B. Asheboro High, S. Asheboro Middle School and Memorial Park Area

C. Lindley Park School and Greystone Neighborhood Area

D. Randolph Mall, YMCA and NC42 Area

E. Eastside Park and Kiwanis Park Area

F. East Dixie Drive Corridor

G. Randolph Hospital Area

H. North Asheboro Park and Schools Area

An additional set of projects outside of the small area plans have been identified as **I. Outlying Areas Plan.** Each small area plan includes proposed *corridor* and *intersection* improvements and some include *other* pedestrian infrastructure improvements. Proposed corridor improvements are primarily for sidewalks unless otherwise noted. The intersections receiving higher priority scores have suggested short and long-term improvements; some intersection improvements may involve construction of both long and short term recommendations at the same time, as part of one project. Intersection improvement recommendations should be reviewed by a traffic operations engineer. Local resources for implementation of *intersection* and *corridor* improvements should be established in the short-term to effectively plan for improvements. The *other* recommendations include special pilot projects that are beyond basic sidewalk and intersection improvements. The Proposed Improvements and Small Area Plans Map in Figure 3.8 shows the proposed improvements for the entire City, with each small area boundary defined. Chapter 3.2 provides the priority ranking of all proposed projects city-wide.

Priority Projects

Top priority projects as determined by prioritization, steering committee input, cost feasibility, public comments and other constraints are included below and should be completed before other projects. See each individual small area plan and the associated map for more detail about each project.

A. Downtown and Frasier Park Area
Corridor: New sidewalks on North side of Academy Street
Intersection: Park St and Wainman Ave; Lexington Road/W. Salisbury and US 220 Bypass intersection improvement
Other: Downtown animal walking trail and Wainman Ave intersection with railroad

B. Asheboro High, S. Asheboro Middle School and Memorial Park Area
Corridor: New sidewalks on West side of South Park Street from Cooper to Walker and Lanier Avenue from Park to Church Street.
Other: Repair and replace existing sidewalk along Park Street.

C. Lindley Park School and Greystone Neighborhood Area
Corridor: Edge lines painted on Shamrock Road.

D. Randolph Mall, YMCA and NC42 Area
Corridor: Zoo Greenway and new sidewalk on the South side of NC 42 from Salisbury Street to E. Dixie Drive.
Intersection: Coleridge and Salisbury Street intersection improvement.

E. Eastside Park and Kiwanis Park Area
Corridor: New sidewalk on the South side of Salisbury Street from Elm Street to NC 42 and Watkins Street from Brewer Street to MLK Drive.
Intersection: Elm and Salisbury Street intersection improvement.

F. Dixie Drive Corridor
Corridor: New sidewalk on the North side of East Dixie Drive from NC 42 to Dublin Road.
Intersection: Park Street and Dixie Drive intersection improvement.

G. Randolph Hospital Area

Corridor: New sidewalk on both sides of White Oak from Foust to W. Ward Street and Foust from White Oak to N. Church Street
Intersection: MacArthur and N. Fayetteville intersection improvement.

H. North Asheboro Park and Schools Area
Corridor: New trail connection between the N. Asheboro Community Park and the N. Asheboro Middle School

I. Outlying Areas Plan
Corridor: Zoo Greenway, Teachey School to Zoo Greenway Trail and the Lake McCrary Greenway Trail
Intersection: S. Cox and Kivett Street intersection improvement

Priority projects or projects that should be built or engineered in the first 2 years of plan implementation have the project names shaded in grey. Each small area plan includes details in the following format.

Title

This section provides a short description of the project area.

Priority Projects*

A short list of corridor, intersection and other projects that should be constructed first and are high priority.

Corridor Improvements

This section includes the following details of each corridor project organized into a table with a short description of the projects.

Road Name (Project #)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Priority	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides

Intersection Improvements

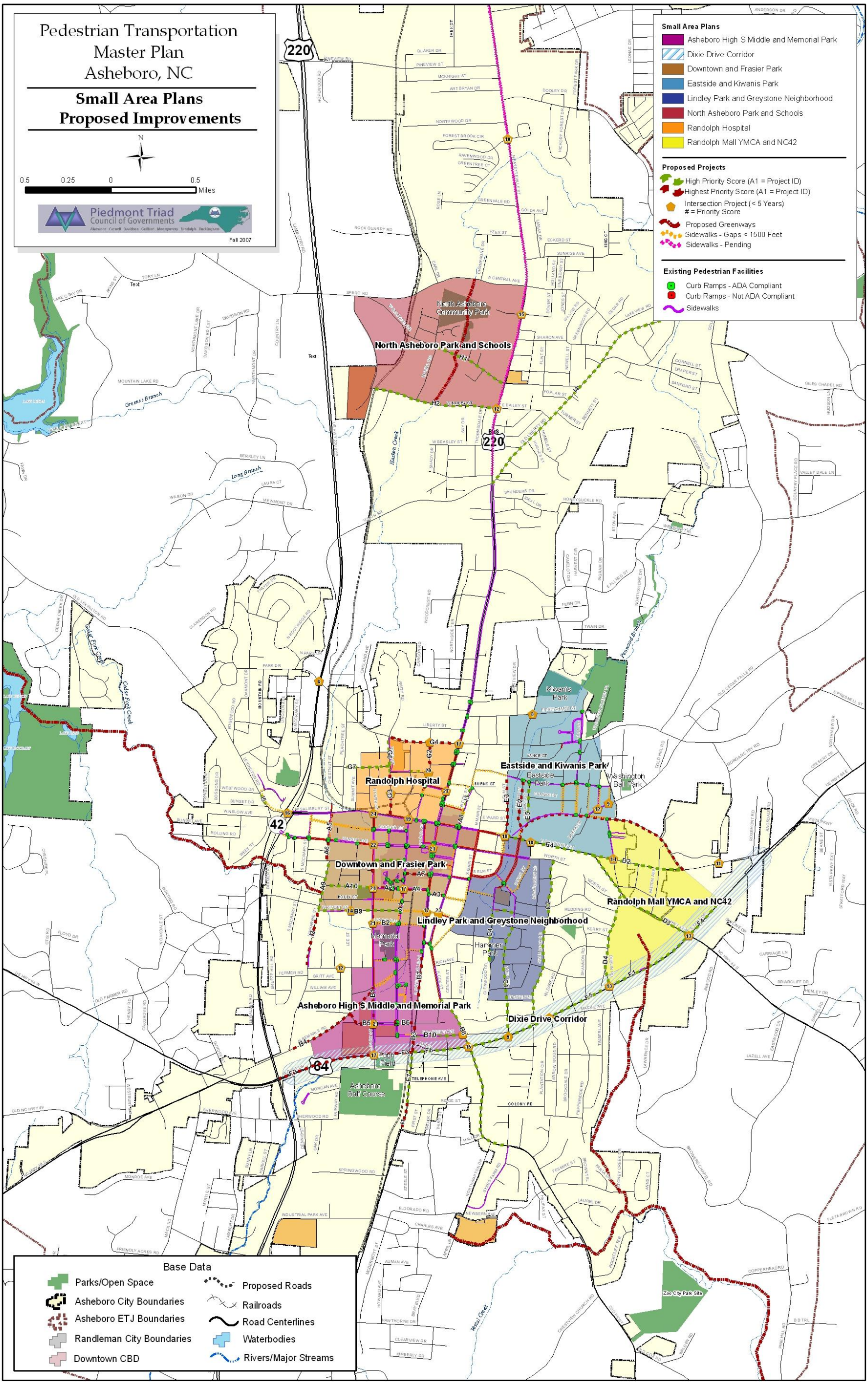
This section includes detail of intersection improvements.

Other

This section includes detail on any special projects that do not fit into existing corridors or that are special programs or projects.

Figure 3.8 below shows the location of the eight different small area plans shaded with different colors. Similar base map information of roads, water bodies, parks and city limits are shown. The proposed sidewalk projects are the green dotted lines, where the number on each project corresponds to the number shown in the project description. The yellow dotted lines indicate small gaps of <1500 ft which. These projects have not been prioritized in the format shown here, unless the project was raised as a potential priority through public comment, steering committee or other means. The small gaps of <1500 ft are relatively inexpensive to complete and should be considered for improvement when adjacent road improvement projects or sidewalk improvement projects are being implemented. The pentagon symbols show where intersection improvements are needed. Additionally, proposed multi-use paths are shown in red dotted lines. The map legend provides detail about map contents as well.

Figure 3.8 - Proposed Improvements and Small Area Plans Map



A. Downtown and Frasier Park

The Asheboro Downtown has a unique mixture of land uses and plentiful historic structures. The varying land uses include quaint retail shops, restaurants, offices, industrial warehouses, manufacturing, civic and government buildings. Given the unique pedestrian experience and attractions downtown Asheboro offers, particular creativity and attention to sidewalk and building design should be applied downtown. The neighborhoods surrounding downtown to the South, East and West have a strong connection to downtown and are included in the small area plan.

Priority Projects*

Corridor: New sidewalks on north side of Academy Street
Intersection: Park St and Wainman Ave; Lexington Road/W. Salisbury and US 220 Bypass intersection improvement
Other: Downtown animal walking trail and Wainman Ave intersection with railroad
*see the project detail below

Corridor Improvements

There are a number of existing sidewalks in this area that need to be improved. Not only are the sidewalks along Park Street old and in disrepair, but the curb ramps need to be installed or replaced at nearly all the intersections South of Sunset Avenue. The Downtown and Frasier Park area has the most number of proposed individual sidewalk corridor projects for all small area plans (see figure 3.9), but many are shorter connections, allowing important connections at a lower cost. The Hill Street sidewalk will be an important connection to the Asheboro Farmer's Market. Academy Street is another important sidewalk connection to the Bicentennial Park.

Figure 3.9 – Downtown and Frasier Park Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Priority	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
S CHURCH ST (A1)	Wainman to Lanier Street	1095	1095	EAST	25	1095	$110,00	$110,000
W WAINMAN AVE (A2)	Park to Church Street	924	924	SOUTH	24	924	$92,000	$92,000
E WAINMAN AVE (A3)	S. Fayetteville to Cox Street	501	1002		22	0	$100,000	$200,000
W WAINMAN AVE (A4)	Church to S. Fayetteville Street	799	799	NORTH	22	799	$80,000	$80,000
N CHERRY ST (A5)	Salisbury to Sunset Avenue	863	863	WEST	22	0	$173,000	$173,000
S CHERRY ST (A6)	Sunset to Dixon Avenue	646	1291		20	646	$65,000	$130,000
W ACADEMY ST (A7)	Church to S. Fayetteville Street	819	1638		20	819	$82,000	$164,000
N COX ST (A8)	Ward to Salisbury Street	543	1087		19	543	$54,000	$108,000
UWHARRIE ST (A9)	Dixon to Kivett Street	1598	3195		18	1598	$160,000	$320,000
W WAINMAN AVE (A10)	Uwharrie to Park Street	1551	3102		17	1551	$155,000	$310,000
HILL ST (A11)	Park to Church Street	997	1994		17	0	$199,000	$398,000

On Wainman Avenue an improved crossing over the railroad tracks is needed immediately. It is very difficult for individuals in wheel chairs or are disabled to negotiate the railroad tracks. These tracks are on the route between senior housing and the Senior Center on Wainman, where a number of daytime and evening activities are held for senior citizens.

Intersection Improvements

Park & Wainman Avenue

This intersection receives a significant level of foot traffic and is a first priority proejct. Park Street has a high level of traffic with an estimated AADT of 5200. Limited sight distance at this intersection creates a safety concern for crossing pedestrians. The intersection received the second highest score for safety improvements across the City of Asheboro.

Short Term Recommendations

- Improve curb ramps and install missing ramp on northwest corner
- Install pedestrian right-of-way bollard in advance of crosswalk
- Improve crosswalk markings

Long Term Recommendations

- Install "pedestrian in roadway" flashing light on Park Street with a sensor or push button for the crosswalk to activate a flashing light
- Explore traffic calming solutions to slow approaching vehicles to the intersection

W. Salisbury & Park Street

The existing sidewalks and curb ramps were replaced in 2007 at this intersection in conjunction with a repaving project of Salisbury Street, improving the safety and access of this intersection. There are some recommended improvement projects below, however. Salisbury Street and Park Street have a high level of traffic with an AADT of 9500 and 5200 respectively. The intersection is signalized, which allows for more vehicle and pedestrian traffic control. The land use north or Salisbury Street is industrial and residential.

Short Term Recommendations

- Install centerline yield to pedestrian sign and bollard in advance of crosswalk
- Install curb ramps and crosswalks across Salisbury Street

Long Term Recommendations

- Install pedestrian signal heads to cross Park and Salisbury Street

Salisbury Street Facing West at Park Street

Lexington Road/W. Salisbury Street and US 220 Bypass

The existing intersection consists of multiple intersections of Lexington Rd./W. Salisbury Street and ramps for US 220 Bypass. Sidewalk access to the bridge overpass is poor and needs improvement. Additional improvements for crossing the on and off ramps to US 220 Bypass need consideration.

Short Term Recommendations

- Improve sidewalk access on US 220 Bridge overpass that is ADA accessible
- Install curb ramps and crosswalks across on an off ramps for highway ramps

Long Term Recommendations

- Install pedestrian signal heads to cross on and off ramps after installation of sidewalk and ramp improvements.

These seven intersections are also considered a priority for improvement in the Downtown & Frasier Park Area. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

Sunset & Park Street
Sunset & Fayetteville Street
Park & Lanier Avenue
W. Salisbury & Church Street
Kivett & S. Fayetteville Street
Church & Wainman Avenue
W. Kivett & Lee Street

Other

Walking Program

Expand City Parks and Recreation and County Health Department walking program.

Business Sidewalk Enhancement Program

Offer creative use of public sidewalk for private business (i.e. ability to set up chairs, apply for art enhancements on the sidewalk, etc.).

Benches and Plantings

Provide more sidewalk space and plantings around benches along Sunset Avenue and Church Street where space allows. Consider sidewalk width expansion in key locations. Consider adding more benches as well.

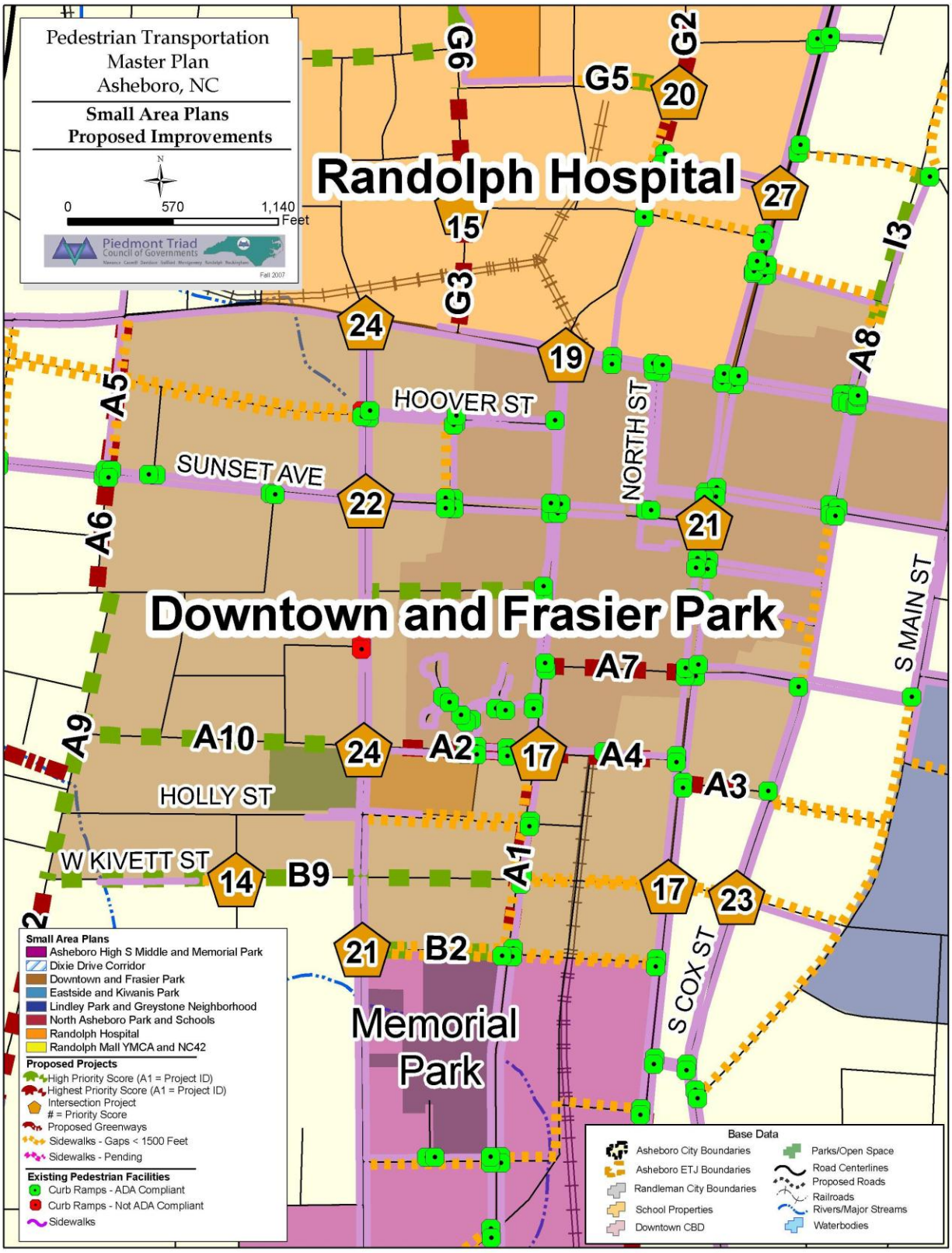
Downtown Walking Trails

Add textual pavement and signage to mark a downtown walking trail based on existing City walk/run trail to Memorial Park. See Chapter 2.7 above for details of various routes from Sunset Avenue to Memorial Park. The walk and run trail should utilize sidewalk art with an animal theme to enhance connections between Downtown Asheboro and the Zoo.

Wainman Avenue Railroad Track Ramps

Crossing the railroad tracks is extremely difficult for seniors in wheelchairs or otherwise. These tracks are between the Senior Center and senior housing. This project will require negotiation with Norfolk Southern to allow a handicap accessible ramp and crossing of the railroad.

Figure 3.10 – Downtown and Frasier Park Small Area Plan Map



B. Asheboro High, S. Asheboro Middle School and Memorial Park Area

The area around the schools and Memorial Park is characterized by older neighborhoods with significant existing sidewalk infrastructure. The Asheboro High School and South Asheboro Middle School are major trip generators. Many of the trips to the schools cannot be made on foot alone, but some of the daytime walking trips (e.g. after school activities) and trips made during special events could be made safer and more enjoyable by filling gaps in the existing sidewalk system. Memorial Park is another trip generator and will benefit from improved maintenance of sidewalks and new sidewalk connections. A number of sidewalks have not been improved for a generation or more in this area.

Tunnel under Dixie Drive that connects with the Asheboro High School

Priority Projects*

Corridor: New sidewalks on South Park Street from Cooper to Walker and Lanier Avenue from Park to Church Street.

Other: Repair and replace existing sidewalk along Park Street.

*see each project detail below

Corridor Improvements

Major priorities in this area include the repair of existing sidewalks along Park Street and new sidewalk on S. Park St. and Lanier Avenue. In addition, a pedestrian connection from the school area to the Cemetery on Albemarle Road is important. Lanier Avenue sidewalk along Memorial Park is an important connection to make, to provide safe pedestrian access to Memorial Park. Figure 3.12 shows 11 different corridor improvement projects, creating important connections to key destinations near the schools and other land uses in the small area. This area has a decent sidewalk system compared to other parts of Asheboro and will benefit significantly from making important new pedestrian connections.

Figure 3.11 – Asheboro High, S. Asheboro Middle School and Memorial Park Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Priority	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
S PARK ST (B1)	Cooper to Walker Avenue	1131	1131	EAST	24	1131	$113,000	$113,000
LANIER AVENUE (B2)	Park to Church Street	775	1550		17	0	$155,000	$310,000
S FAYETTEVILLE ST (B3)	Walker to Dixie Drive	915	1829		24	915	$91,000	$183,000
ALBEMARLE RD (B4)	Park to Uwharrie Street	3319	6638		22	0	$498,000	$996,000
W WALKER AVE (B5)	Park to Albemarle Road	891	1782		21	891	$89,000	$178,000
W WALKER AVE (B6)	Church to S. Fayetteville Street	571	1143		21	0	$114,000	$228,000
S FAYETTEVILLE ST (B7)	Birkhead to Walker Avenue	1691	3383		20	1691	$169,000	$338,000
S COX ST (B8)	Stowe to Dixie Drive	1776	3552		17	1776	$178,000	$356,000
W KIVETT ST (B9)	Park to Uwharrie Street	2551	4573	SOUTH	17	2551	$255,000	$457,000
E DORSETT AVE (B10)	S. Fayetteville to Cox Street	1549	2198	NORTH & SOUTH	16	1549	$155,000	$220,000
W TAFT AVE (B11)	Park to Church Street	728	1456		16	728	$73,000	$146,000

Intersection Improvements

There are two intersections in this small area identified as in need of improvement. The intersections along East Dixie Drive, which are on the border of the Asheboro High, South Asheboro Middle School and Memorial Park small area are included in the Dixie Drive Corridor small area plan.

Crossing Guard John Hunt Assists Students across Park Street

Park & Walker Avenue

This intersection has a high volume of vehicle and pedestrian traffic, especially before and after school. A crossing guard is present at the intersection during the school drop off and pick up. The intersection is signalized and has pedestrian signal heads for crossing the street. The intersection is directly adjacent to both the Asheboro High School and S. Asheboro Middle School.

Short Term Recommendations

- Install centerline yield to pedestrian sign and bollard in advance of all crosswalks
- Provide police staffing to enforce parking restrictions during school pick-up and drop-off to discourage parents parking in the crosswalk or otherwise illegally parking

Long Term Recommendations

- Install crossing island on Park Street on the south side of the intersection

E. Dorsett Avenue & Cox Street

This intersection is also considered a priority for improvement. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

Other

School Connections

- Explore opportunities to better connect Park Street sidewalks with the pedestrian tunnel under Dixie Drive adjacent to the school property between Fayetteville Street and Park Street. This will require cooperation with the Asheboro City Schools, City of Asheboro and the NC Department of Transportation.
- Build sidewalk or trail connections to the cemetery on Albemarle Road via the South Asheboro Middle School campus. This requires further investigation for routing and cooperation with Asheboro City Schools, City of Asheboro and the NC Department of Transportation.

Figure 3.12 - High, S. Asheboro Middle School and Memorial Park Small Area Plan Map

C. Lindley Park School and Greystone Neighborhood Area

This area is composed primarily of single family residential homes. There are some multi-family homes close to Lindley Park School. Hammer Park is a small passive park, with a playground that can be accessed from Glenwood Road and is less than ½ mile from Lindley Park School. This area of Asheboro has very few existing sidewalks except for those close to Lindley Park School along Cliff Rd, Redding Rd, Elm St and Randolph Ave. There are a number of hills and curved streets meandering through this area of Asheboro.

Priority Projects*

Corridor: Edge lines painted on Shamrock Road.
*see the project detail below

Corridor Improvements

Many of the streets in the Greystone neighborhood have lane widths approaching or exceeding 20 feet. The additional right-of-way allows for creative use of the roadway space. A proposed pilot project is to create an edgeline along Shamrock Road for the benefit of pedestrians who may be walking along the roadway. In addition sidewalks are recommended on Glenwood, Redding and Cliff Road. The proposed corridor improvements to this small area are included in Figure 3.11.

Figure 3.13 – Lindley Park School and Greystone Neighborhood Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
CLIFF RD (C1)	E. Kivett to Dixie Drive	3453	6907		15	3453	$345,349	$690,698
SHAMROCK RD* (C2)	Worth to Dixie Drive	5254	10508		14	5254	$10,508	$21,015
REDDING RD (C3)	Glenwood to Cliff Road	689	1377	NORTH	16	689	$68,857	$137,714
GLENWOOD RD (C4)	Redding to Hillcrest Circle	1683	3365		14	1683	$168,263	$336,526

* Edgeline to slow traffic and protect pedestrians walking along roadway, cost is for painting lines.

Intersection Improvements

Many of the intersections in the Lindley Park and Greystone Neighborhood do not have signalized intersections and relatively low automobile traffic volume. Pedestrian activity and automobile traffic increases closer to Salisbury Street. The pedestrian safety of the street crossings on Salisbury Street is of concern. There are two intersections of Salisbury Street that have been profiled for improvement.

E. Salisbury & MLK Drive & E. Salisbury & Elm Street
[see Eastside Park and Kiwanis Park small area plan for intersection improvement recommendations]

Other

Edge Lines
An edge line project is proposed on Shamrock Road. The project is included in the corridor improvements section above. The edge line should include a 5ft space

between the outside of each travel lane and the curb. This project should be evaluated for safety, effectiveness and usefulness at 6 months after installation. If the project proves effective, other edge line projects can be installed on different streets that have a large existing right of way.

Figure 3.14 – Lindley Park School and Greystone Neighborhood Small Area Plan Map

D. Randolph Mall, YMCA and NC42 Area

This area is mostly composed of large retail, auto-oriented businesses. However, the Eastside and Kiwanis Park area is within ¾ mile from the Randolph Mall and YMCA. The YMCA owns a large parcel of land accessed from NC 42 near the mall. Between the different land uses, a number of trips are generated. Replacing automobile trips with pedestrian trips will be difficult to achieve in this area because the distances of trips are usually more than ½ mile. However, encouraging people to walk between retail destinations or between the YMCA and the Randolph Mall, for example, is important to consider when considering transportation infrastructure improvements.

Randolph-Asheboro YMCA Looking West on NC 42

Part of this small area plan lies outside of the City Limits, which presents a problem when looking to finance improvements along E. Salisbury Street from NC 42 to the Randolph Mall. Eventually this area may be annexed, which would make pedestrian infrastructure investments easier to complete politically.

Priority Projects*

Corridor: Zoo Greenway and New sidewalk on the South side of NC 42 from Salisbury Street to E. Dixie Drive.
Intersection: Coleridge and Salisbury Street intersection improvement.
*see the project detail below

Corridor Improvements

The sidewalk projects proposed for this small area include some larger connection projects totaling over 10,000ft for both sides of the street. These projects, although a top priority, will take time and investment to build and should be incorporated into a long-term capital improvement program if no local funding is available. Proposed sidewalk projects along Dublin Road and NC 42 should be programmed in conjunction with the proposed Zoo Greenway, which would begin at the YMCA and head south under Dixie Drive, to increase the connectivity of this multi-use path with adjoining neighborhoods.

Figure 3.15 – Randolph Mall, YMCA and NC42 Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
MARTIN LUTHER KING JR DR (D1)	E. Salisbury to E. Salisbury Street	6109	10219	NORTH	26	0	$916,420	$1,532,841
E SALISBURY ST (D2)	NC 42 to Randolph Mall	2819	5639		19	0	$422,913	$845,825
NC HWY 42 N (D3)	Salisbury to E. Dixie Drive	3950	7900		18	0	$592,475	$1,184,950
DUBLIN RD (D4)	NC 42 to E. Dixie Drive	2983	5966		15	0	$447,441	$894,882

Zoo Greenway

Multi-use path connection from the Asheboro YMCA to the Zoo. There is a feasibility study being conducted by the NCDOT with the assistance of the Piedmont Triad Rural Planning Organization to determine proposed alignments that best suit the community needs and interests. Phase 1 would be a connection from the new Zoo City Park to the Zoo. This path is included in the 2004 Parks and Recreation Master Plan.

The Zoo Greenway will create an important connection not only to the Zoo for residents of Asheboro, but will also encourage Zoo visitors to bicycle to Asheboro. It may be possible to use the existing tunnel under Dixie Drive (near the YMCA) which will make an important and safe pedestrian connection between neighborhoods south and north of Dixie Drive. The use of the tunnel will require further investigation.

Estimated Length: 6.5 miles (34,320 feet); Estimated Cost: $2,420,000

This double barreled stream tunnel under Dixie Drive may be able to accommodate pedestrian travel along the proposed Zoo Greenway

Intersection Improvements

E. Salisbury & Coleridge Road

The intersection of E. Salisbury Street and Coleridge Road is unsignalized, but receives a moderate level of pedestrian traffic. This part of E. Salisbury Street has much less than the 14,000 AADT of E. Salisbury to the west of the NC 42 split. Exact numbers are unavailable, but are estimated at 6,000 AADT.

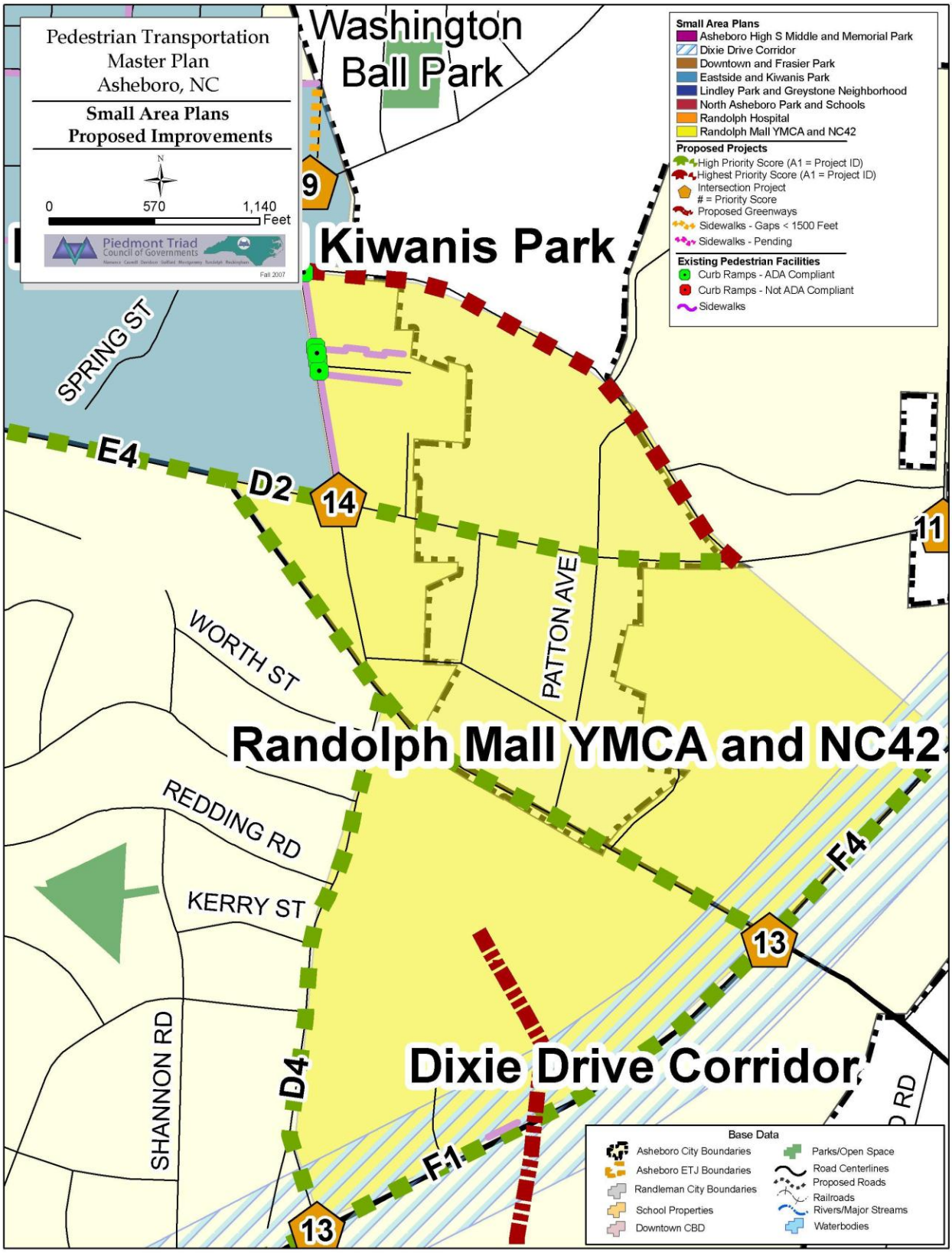
Short Term Recommendations

- Install crosswalks at the intersection
- Install centerline yield to pedestrian sign and bollard in advance of crosswalks on Salisbury Street

Long Term Recommendations

- Install sidewalks and curb ramps along Coleridge on the south side of Salisbury Street leading up to the intersection
- Install crossing island and expand lane widths if necessary to accommodate the crossing island on E. Salisbury Street

Figure 3.16 - Randolph Mall, YMCA and NC42 Small Area Plan Map



E. Eastside Park and Kiwanis Park Area

The Eastside Park and Kiwanis Park Area is primarily residential with a mixture of small single family, multi-family and apartments. There is a Boys and Girls Club and other civic buildings in the heart of this small area. A high level of pedestrian activity has been observed in and around Eastside Park and also along Martin Luther King Drive as it approaches Salisbury Street. The per capita income is predominantly lower in this part of Asheboro and households without vehicles total over 10%.

Priority Projects*

Corridor: New sidewalk on the South side of Salisbury Street from Elm Street to NC 42 and Watkins Street from Brewer Street to MLK Drive.
Intersection: Elm and Salisbury Street intersection improvement.
*see the project detail below

Corridor Improvements

The improvements proposed in this area primarily include sidewalks along Elm, Dunlap, Watkins, Martin Luther King and Salisbury Street. There are a few small gap projects as well. Sidewalks along Dunlap and Watkins Street are proposed as pilot projects to be completed within a year.

Figure 3.17 – Eastside Park and Kiwanis Park Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
MLK JR DR (E1)	E. Salisbury to E. Salisbury Street	6109	10219	NORTH	26	0	$916,420	$1,532,841
DUNLAP ST (E2)	Brewer to MLK Drive	1542	3084		22	0	$308,373	$616,745
N ELM ST (E3)	Brewer to Salisbury Street	1890	3779		20	1890	$188,958	$377,916
E SALISBURY ST (E4)	Elm Street to NC 42	2814	5628		18	0	$422,102	$844,205
WATKINS ST (E5)	Brewer to MLK Drive	1295	2590		18	0	$259,012	$518,024

Intersection Improvements

E. Salisbury & MLK Drive

The intersection of Martin Luther King Drive and Salisbury Street has a high level of vehicle and pedestrian traffic. This section of East Salisbury Street carries an AADT of nearly 14,000 vehicles. The intersection has existing traffic signals and should have a pedestrian activated signal to allow for safe pedestrian crossings. There is a convenience store and gas station on the south side of Salisbury Street at the intersection of MLK Drive and Salisbury Street, which generates a number of walking trips from adjoining neighborhoods.

Short Term Recommendations

- Install crosswalks across Salisbury Street
- Install centerline yield to pedestrian sign and bollard in advance of crosswalks on Salisbury Street

Long Term Recommendations

- Install pedestrian signal heads to cross Salisbury Street
- Install sidewalks and curb ramps along Salisbury Street (north and south side) leading up to this intersection

East Salisbury at Elm Street

E. Salisbury & Elm Street

The intersection of Elm Street and Salisbury Street face similarly high pedestrian and automobile traffic levels to the intersection with MLK Drive. This intersection has a traffic signal, but no pedestrian crossing signal or crosswalk. The recommendations below are similar to the MLK Drive intersection.

Short Term Recommendations

- Install crosswalks across Salisbury Street
- Install centerline yield to pedestrian sign and bollard in advance of crosswalks on Salisbury Street

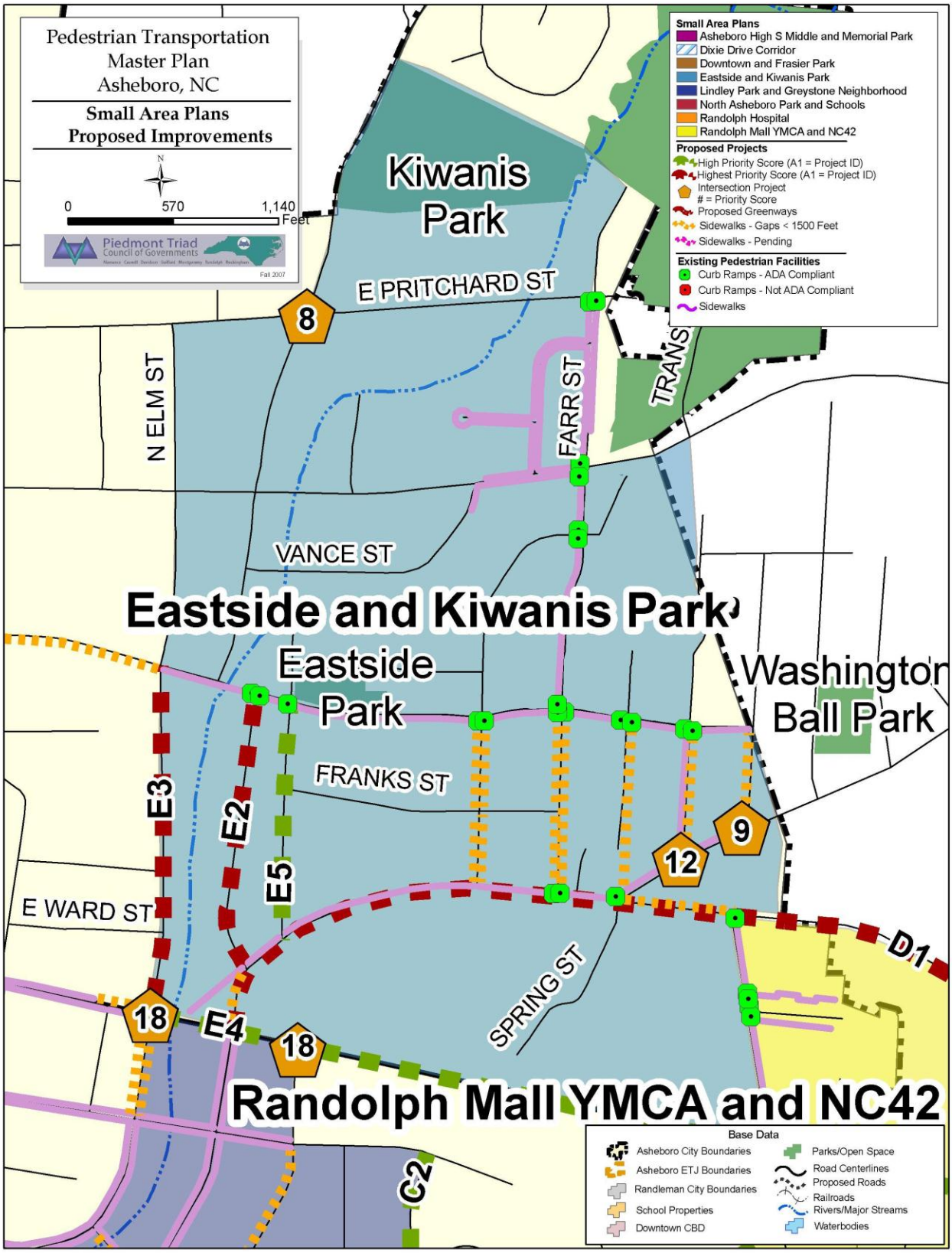
Long Term Recommendations

- Install pedestrian signal heads to cross Salisbury Street
- Install sidewalks and curb ramps along Salisbury Street (North and South side) and Elm Street (East and West side) leading up to this intersection

Old Cedar Falls & Glovenia Street; Old Cedar Falls & Woodlawn Street; E. Pritchard & Meadowbrook Road

These three intersections are also considered a priority for improvement. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

Figure 3.18 - Eastside Park and Kiwanis Park Small Area Plan Map



F. Dixie Drive Corridor

East Dixie Drive facing West near the NC 42 intersection

The automobile oriented development of Dixie Drive provides a more difficult challenge for accommodating pedestrian transportation. A combination of pedestrian corridor enhancement projects and improvements to intersection and crossing safety for pedestrians will be the first steps to improving the pedestrian transportation system in this automobile oriented corridor. Incrementally, these changes will help foster a friendlier pedestrian transportation environment. The width of this seven lane roadway is an obstacle to safe pedestrian crossings. Median treatments, crossing islands, pedestrian signal heads and other improvements should be considered where existing pedestrian traffic and latent pedestrian traffic demand occurs. Further recommendations for ordinance revisions, recommended in Chapter 3.5, to help pedestrian transportation will incrementally make walking along Dixie Drive a more pleasurable experience as businesses change use and new development occurs.

Priority Projects*

Corridor: New sidewalk on the North side of East Dixie Drive from NC 42 to Dublin Road.
Intersection: Park Street and Dixie Drive intersection improvement.
*see the project detail below

Corridor Improvements

Proposed sidewalk improvements span the entire length of Dixie Drive between the US 220 Bypass and Randolph Mall. The cost of these improvements is significant given the distance of this corridor, but as this road is repaved and rebuilt, sidewalk projects should be included in the overall construction budget. Each segment of Dixie Drive has been prioritized in Figure 3.14. In addition a section of S. Fayetteville Street has a proposed sidewalk included as part of this small area plan.

Figure 3.19 – Dixie Drive Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
E DIXIE DR (F1)	NC 42 to Dublin Road	2949	5897	NORTH	19	2949	$294,858	$589,715
W DIXIE DR (F2)	Park Street to US 220	3076	6153		24	3076	$307,626	$615,251
W DIXIE DR (F3)	S. Fayetteville to Park Street	1166	2331		22	1166	$116,570	$233,140
E DIXIE DR (F4)	NC 42 to Randolph Mall	1227	2453		19	1227	$122,658	$245,316
E DIXIE DR (F5)	Dublin to Cox Street	4774	9548		18	4774	$477,389	$954,779
E DIXIE DR (F6)	Cox to S. Fayetteville Street	1773	3546		18	1773	$177,284	$354,567
S FAYETTEVILLE ST (F7)	Dixie to Ridge Street	1588	3176		18	500	$213,197	$426,393

Intersection Improvements

Park & Dixie Drive

The intersection of Park and Dixie Drive is directly adjacent to the S. Asheboro Middle School and High School. There are existing pedestrian crossing signals with a countdown timer to cross Park Street and Dixie Drive. Right turns on red are allowed at this intersection, which can make it difficult to cross either Park Street or Dixie Drive during high traffic periods. Dixie Drive has an AADT of approximately 31,000 and Park Street has an AADT of 8,700. This is one of the busiest intersections in Asheboro for automobiles, but is also an important pedestrian crossing. As indicated in the Asheboro High, S. Asheboro Middle School and Memorial Park small area plan above, public pedestrian connections to the tunnel under Dixie Drive just to the east of this intersection should be explored as well as intersection treatments such as crossing islands.

Intersection of Park and Dixie Drive Facing South

Short Term Recommendations

- Install sidewalks on the east side of Park Street leading up to the intersection
- Install centerline yield to pedestrian sign and bollard in advance of crosswalks on Park Street

Long Term Recommendations

- Install a crossing island to aid pedestrians in crossing Dixie Drive
- Install a changeable no right turn sign to prohibit right turns when a pedestrian is in the roadway or during certain hours.

NC 42 & Dixie Drive

This intersection is being improved and re-aligned in the summer and fall of 2007 with the installation of curb ramps and sidewalks extending from the intersection. These improvements are part of a larger TIP project U-3401 (see Chapter 3.4 Current Project Opportunities for more detail on this project). The sidewalk and curb ramp installations will be included on all legs of the intersection along NC 42 & Dixie Drive. The project does not include any crossing treatments for pedestrians who may want to cross Dixie Drive, but these improvements should be provided to enhance pedestrian safety.

Short Term Recommendations

- Install crosswalks at the intersection
- Install pedestrian crossing signal head so pedestrians may have enough time to cross Dixie Drive and NC 42

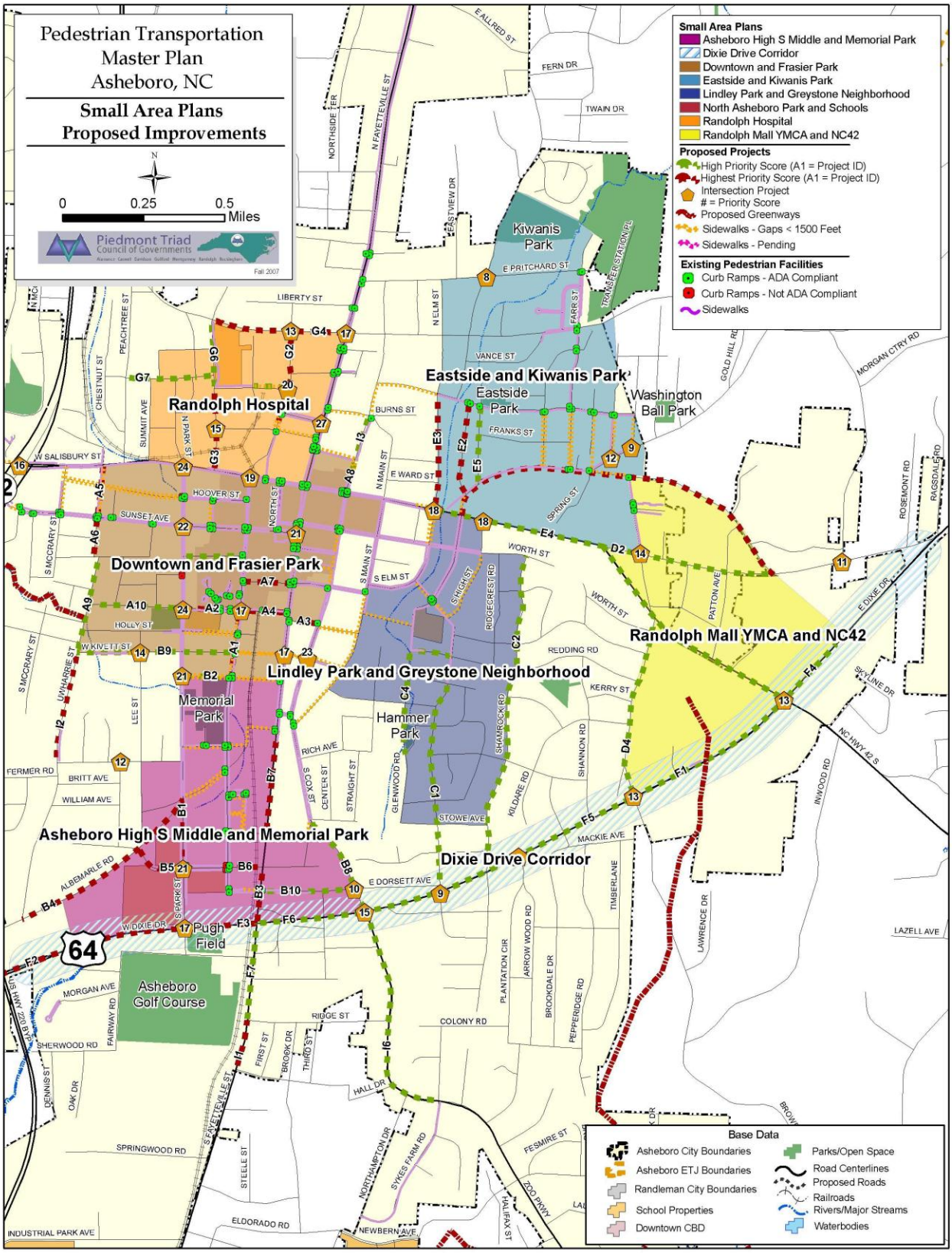
Long Term Recommendations

- Install crossing island on Dixie Drive and expand lane widths if necessary to accommodate the crossing island

S. Cox/Zoo Parkway & Dixie Drive; Dublin/Browers Chapel & Dixie Drive; Cliff & Dixie Drive; and Arrow Wood & Dixie Drive

These four intersections are also considered a priority for improvement. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

Figure 3.20 –Dixie Drive Corridor Small Area Plan



G. Randolph Hospital Area

Woman crossing White Oak Street behind Randolph Hospital

The Randolph Hospital area has a mixture of land uses which includes institutional, office, retail, residential and some light industrial. The largest single trip generators in the area are the Randolph Hospital and the McCrary School. The Fayetteville Street corridor has a number of retail destinations, which also generate trips. The quality of the existing sidewalk on N. Fayetteville Street is extremely poor and should be improved. The residential area surrounding the McCrary School has some of the lowest vehicle ownership rates in Asheboro. Sidewalk improvements to these neighborhoods will provide pedestrian connections to Fayetteville Street, the McCrary school, downtown and the Hospital.

Priority Projects*

Corridor: New sidewalk on both sides of White Oak from Foust to W. Ward Street and Foust from White Oak to N. Church Street
Intersection: MacArthur and N. Fayetteville intersection improvement.
*see the project detail below

Corridor Improvements

This small area has one of the highest priority sidewalks, White Oak Street from Presnell to Ward Street. This proposed sidewalk would connect the Randolph Hospital with a pharmacy, additional outpatient offices and residential neighborhoods. In addition a small gaps project on Foust Street would provide connections to McCrary Elementary School. Many of the proposed corridor projects in this area are less than 1500 feet on one side of the street, making important and cost effective pedestrian connections between land uses.

Figure 3.21 – Randolph Hospital Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
WHITE OAK ST (G1)	Foust to W. Ward	700	1400		25	302	$70,000	$140,000
WHITE OAK ST (G2)	Presnell to Foust Street	985	1970		22	985	$98,500	$197,000
ROSS ST (G3)	Foust to W. Salisbury Street	1346	2693		20	0	$269,291	$538,583
W PRESNELL ST (G4)	Fayetteville to Ross Street	2208	4416		20	1230	$269,663	$539,327
FOUST STREET (G5)	White Oak to N Church Street	532	1064		19	532	$53,200	$106,400
ROSS ST (G6)	Presnell to Foust Street	1125	1125	EAST	15	1125	$112,459	$112,460
CITY VIEW ST (G7)	Ross to Peachtree Street	1387	2774		15	1387	$138,714	$277,428

Intersection Improvements

N. Fayetteville & MacArthur Avenue

This intersection is technically a three way intersection as MacArthur Street "T's" into N. Fayetteville Street. But the shopping center driveway across from MacArthur Street generates enough traffic that it functions like a 4-way intersection. A significant level of pedestrian traffic has been observed at this intersection, as some hospital goers will park in the largely underutilized parking lot of the shopping center and cross at this intersection. In addition there are lunch destinations utlilized by hospital workers and visitors across N. Fayetteville Street from the hospital. The level of automobile traffic on N. Fayetteville Street (AADT of 14,000) combined with high levels of pedestrian traffic and unsignalized intersection creates a safety hazard for pedestrians crossing N. Fayetteville Street.

N. Fayetteville and MacArthur Streets Facing South on N. Fayetteville Street

Short Term Recommendations

- Install a crosswalk and crossing island on N. Fayetteville Street and re-align the travel lanes using the existing 8' curb lane right of way on N. Fayetteville Street
- Repaint crosswalk on MacArthur Street
- Install centerline yield to pedestrian sign and bollard in advance of crosswalk on N. Fayetteville Street
- Improve curb ramp ADA accessibility with truncated domes

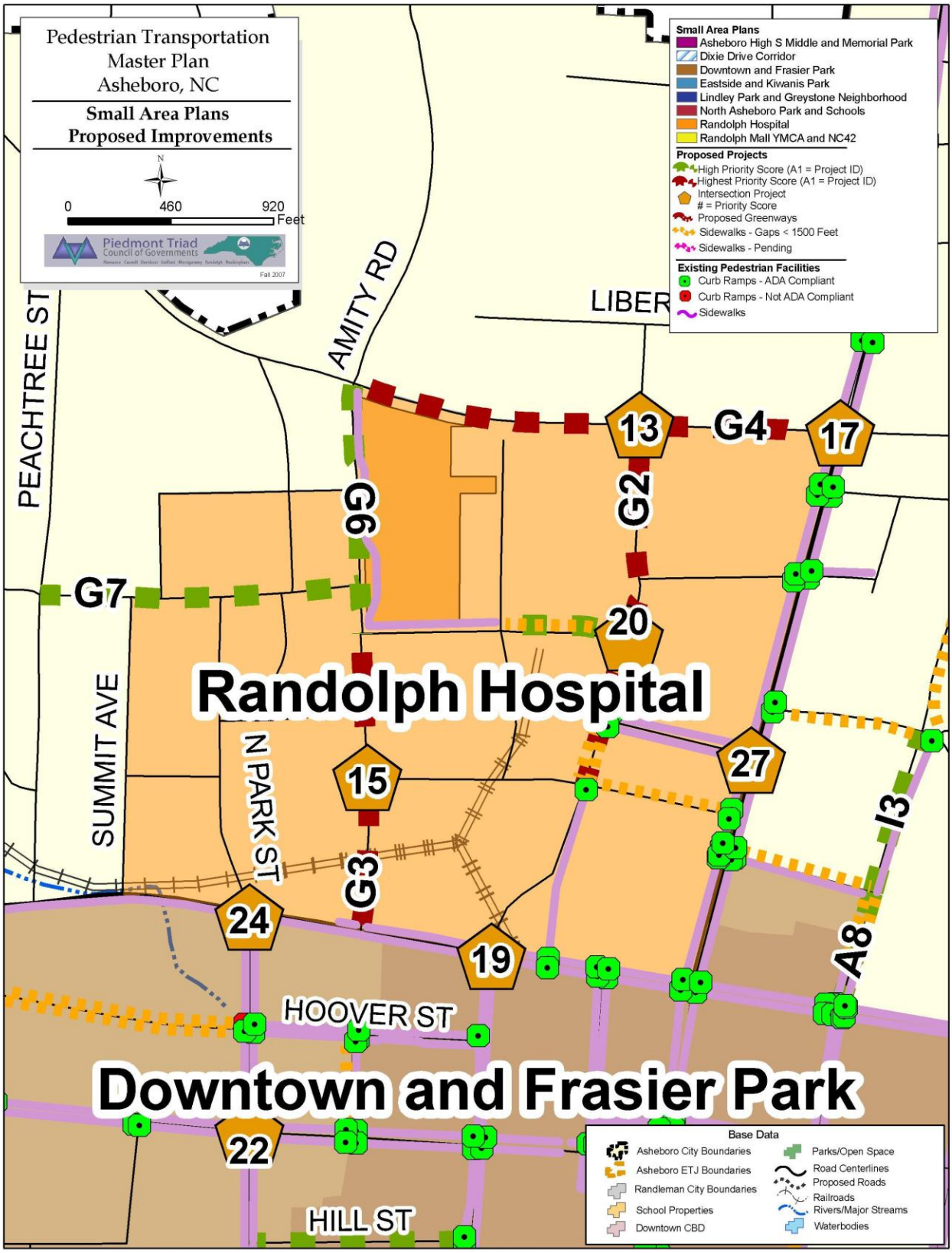
Long Term Recommendations

- Install a traffic signal and pedestrian countdown signal to help pedestrians across N. Fayetteville Street and vehicles making a left turn from MacArthur Street onto N. Fayetteville Street

Foust & White Oak Street; N. Fayetteville & Presnell Street; W. Ward Street & Ross Street; White Oak & Presnell Street

These four intersections are also considered a priority for improvement. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

Figure 3.22 – Randolph Hospital Small Area Plan Map



H. North Asheboro Park and Schools Area

The only small area plan for North Asheboro is focused around the North Asheboro Community Park and the N. Asheboro Middle and Balfour Elementary School. There are no existing sidewalks in North Asheboro except on N. Fayetteville Street south of Vision Drive/Old Liberty Road. Sidewalks are planned under the TIP project #U-3600 for the N. Fayetteville Street corridor from Vision Drive/Old Liberty Road to the City Line. Upon completion there will be a continuous sidewalk from Downtown Asheboro to the Randleman City Line. The land uses around the two schools are primarily residential or industrial. There is large potential for infill development in this area as some industrial properties sit vacant and relatively large tracts of open space exist.

Priority Projects*

Corridor: New trail connection between the N. Asheboro Community Park and the N. Asheboro Middle School

*see the project detail below

Corridor Improvements

There are two primary corridor improvements called for in this small area plan. Bailey Street and Balfour Avenue are the two major east to west roadways accessing the Schools and the Park. The completion of the N. Fayetteville sidewalk combined with the proposed projects will strengthen the pedestrian connectivity to these trip attractors.

Figure 3.23 – North Asheboro Park and Schools Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
W BALFOUR AVE (H1)	Canoy to N. Fayetteville Street	2484	4968		17	0	$372,599	$745,197
W BAILEY ST (H2)	N. Asheboro Middle to N. Fayetteville Street	4003	8005		16	4003	$400,266	$800,531

Intersection Improvements

N. Fayetteville & Bailey Street

This intersection will be an important N. Fayetteville crossing when sidewalks are installed on N. Fayetteville Street and W. Bailey Street. Although it is about ¾ of a mile to the N. Asheboro Middle and Balfour Elementary Schools from N. Fayetteville Street, some school children may want to cross at this location if walking or bicycling to school. Depending on the final design of the N. Fayetteville widening project, the recommendations for this intersection may vary.

N. Fayetteville Street & W. Strider Street

For citizens living to the east of N. Fayetteville Street, this intersection is the closest intersection to the N. Asheboro Community Park. Providing safe crossing access for pedestrians will be important here, especially following the N. Fayetteville Street widening and sidewalk project completion, which is scheduled to begin in 2009.

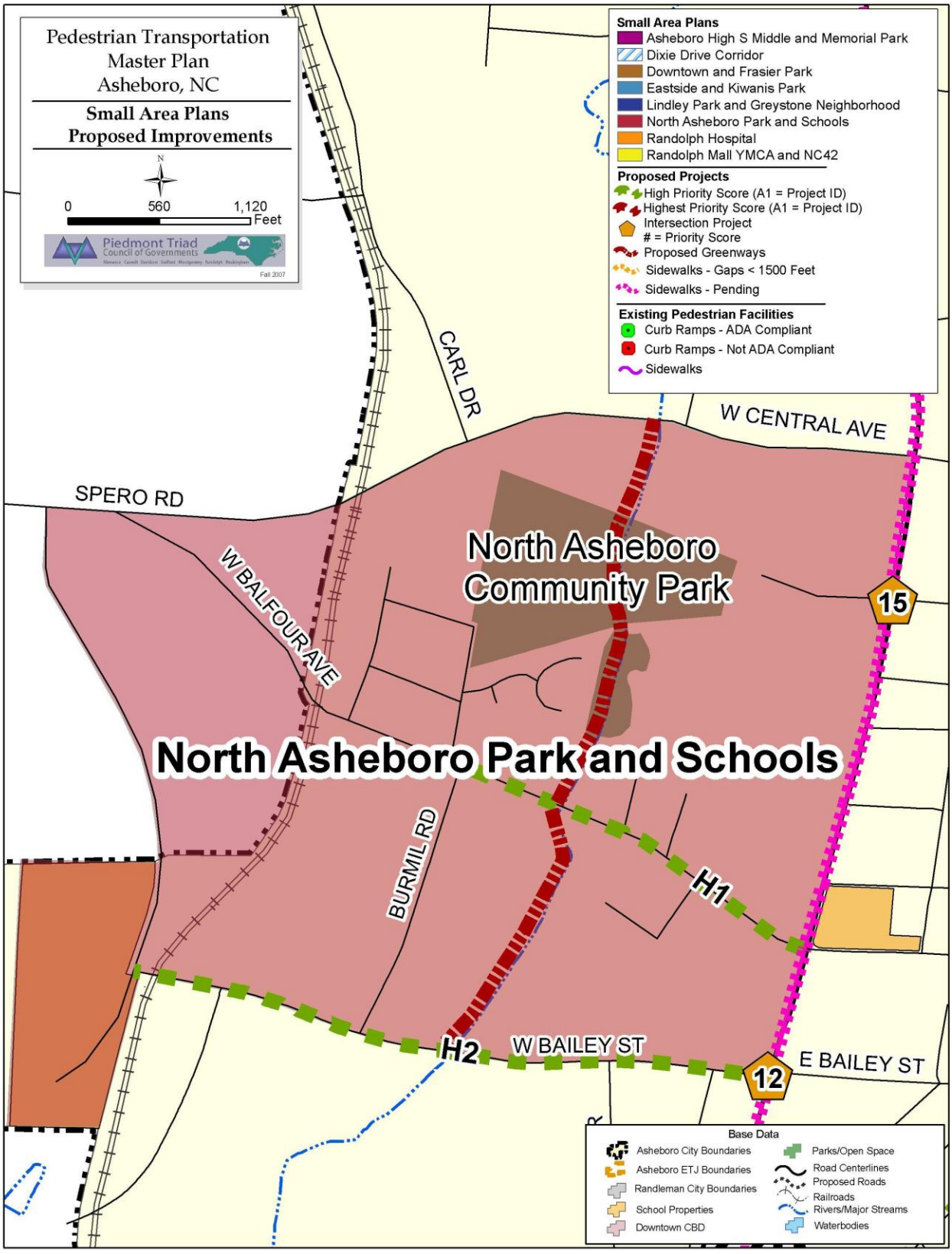
Other

North Asheboro Schools to North Asheboro Community Park Multi-use path

A multi-use path connection from the two schools (Balfour Elementary and N. Asheboro Middle) to the North Asheboro Community Park is proposed, following the proposed Bailey Street sidewalk until Haskett Creek. The Balfour Avenue bridge over Haskett Creek appears to have enough height and width to accommodate a trail underneath the bridge deck. There is little development along the creek, with an existing sewer line running the length of the proposed multi-use path. The existing sewer line easement may make new public access easements for a multi-use path less expensive and easier to obtain.

Balfour Avenue Bridge over Haskett Creek along the Proposed Multi-use path Facing North to the N. Asheboro Community Park

Figure 3.24 – North Asheboro Park and Schools Small Area Plan Map



I. Projects in Outlying areas

Some projects fall outside the small area plan limits. Figure 3.8 above shows all of the proposed improvements for the entire City of Asheboro. The project details not within small area plans are described below.

Priority Projects*

Corridor: Zoo Greenway, Teachey School to Zoo Greenway Trail and the Lake McCrary Greenway Trail
Intersection: S. Cox and Kivett Street
*see the project detail below

Figure 3.25 – Outlying Area Corridor Project Details

Road Name (Project ID)	From/To	Length One Side (ft)	Length Both Sides (ft)	Existing Sidewalk	Score	Length Curb Gutter (ft)	Cost One Side	Cost Both Sides
S FAYETTEVILLE ST (I1)	Ridge to City Limits	822	1644		22	0	$123,295	$246,589
UWHARRIE ST (I2)	Kivett to Spencer Avenue	1824	3099	EAST	20	615	$242,890	$403,281
N COX ST (I3)	Burns to Ward Street	755	755	EAST	17	755	$75,457	$75,460
OLD LIBERTY RD (I4)	N. Fayetteville to City Limits	14972	29945		14	0	$2,245,854	$4,491,707
LEXINGTON RD (I5)	Sunset to Westwood Drive	467	935		16	0	$70,118	$140,236
ZOO PARKWAY (I6)	Dixie Drive to Sykes Farm Road	3717	7435		15	0	$558,000	$1,116,000

The following greenway or multi-use trail projects primarily fall outside the small area plans.

Teachey School to Zoo Greenway Multi-use path connection from the Teachey School to the proposed Zoo Greenway. This would give an opportunity for Teachey School children to ride safely to and from school and connect with the proposed Zoo Greenway. This multi-use path connection was included in the 2004 Parks and Recreation Master Plan.
Estimated Length: 1.4 miles (7,450 feet); Estimate Cost: $595,000

Zoo Greenway

Multi-use path connection from the Asheboro YMCA to the Zoo. There is a feasibility study being conducted by the NCDOT with the assistance of the Piedmont Triad Rural Planning Organization to determine proposed alignments that best suit the community needs and interests. Phase 1 would be a connection from the new Zoo City Park to the Zoo. This path is included in the 2004 Parks and Recreation Master Plan.
Estimated Length: 6.5 miles (34,320 feet); Estimated Cost: $2,420,000

Lake McCrary Greenway Multi-use path connection from Rolling Road and Sunset Ave (west of the 220 Bypass) to Lake McCrary. This multi-use path connection was included in the 2004 Parks and Recreation Master Plan.
Estimated Length: 3.2 miles (16,690 feet); Estimated Cost: $1,220,000

In addition to the corridor projects, the following intersections are prioritized for improvement.

E. Kivett & S. Cox Street

Cox Street has sidewalks at this intersection and it is signalized. The crosswalks here are not completely marked due to a pavement patch and should be marked properly. Pedestrians and bicyclists were observed at this intersection during field work. The southbound lane on Cox Street and the eastbound lane on Kivett Street are both very wide lanes approximately 18ft in width. Crossing distance could be reduced by providing bulb-outs at this intersection, while still providing enough width for the travel lanes. The curb bulb-outs would also help to calm traffic moving through this intersection.

Cox Street looking North at Kivett Street

Short Term Recommendations

- Repair crosswalk markings
- Repair curb ramps and provide ADA accessible truncated domes

Long Term Recommendations

- Install bulb-outs at each corner of the intersection to reduce crossing distance

W. Salisbury/Lexington & US 220 Bypass; Spencer & Macon Street; E. Salisbury & Rock Crusher Road; N. Fayetteville & Forestbrook Circle; Park/Presnell & US 220 Bypass; Hub Morris & Old Liberty Road

These six intersections are considered a priority for improvement. Basic improvements to curb ramps and crosswalks should be considered in the short term. In addition treatments such as traffic calming (i.e. bulbouts, pavement markings), crossing islands and additional features should be investigated to provide safety and comfort to the pedestrian in the long term. More investigation is needed before recommending any specific improvements.

3.5 CURRENT PROJECT OPPORTUNITIES

There are three major road improvement projects being considered by the NCDOT in and around the City of Asheboro. These three projects all have differing elements of pedestrian transportation incorporated into the project.

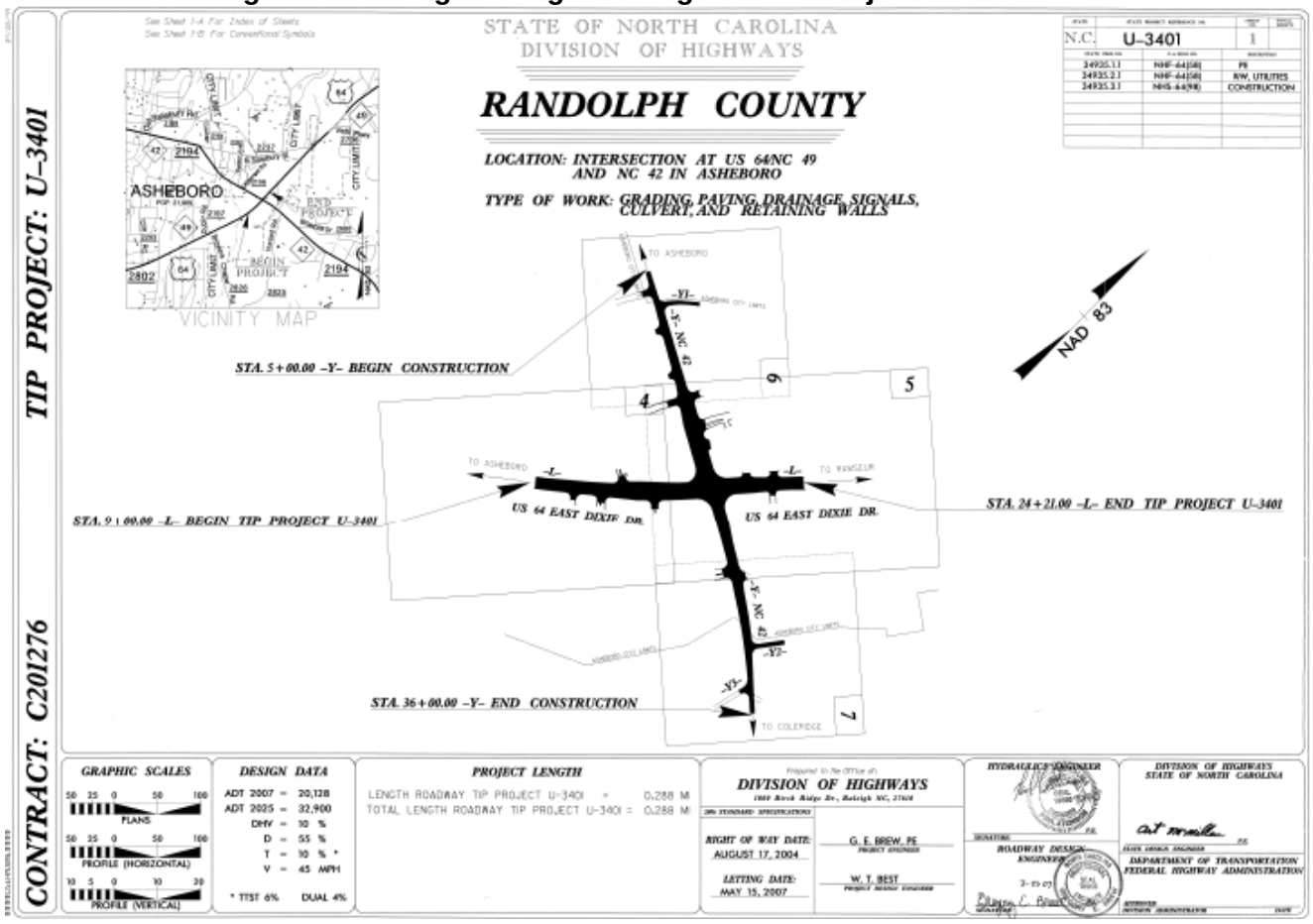
North Fayetteville Street Widening Project (TIP # U-3600)

The widening project impacts U.S. 220 Business from the North Fayetteville Street intersection at Vision Drive and Old Liberty Drive in Asheboro north to the U.S. 311 interchange in Randleman. The project will include a 4 lane highway cross section with a median, curb and gutter and a sidewalk on both sides of the street. Construction is scheduled to begin in 2009.

NC 42/US 64 Intersection Re-Alignment project (TIP # U-3401)

The following figure shows the engineering document title page of the NC42/US 64 intersection re-alignment project. The project construction was begun in the summer of 2007 and construction is planned to be completed in 2008.

Figure 3.26 - Engineering Title Page for TIP Project: U-3401

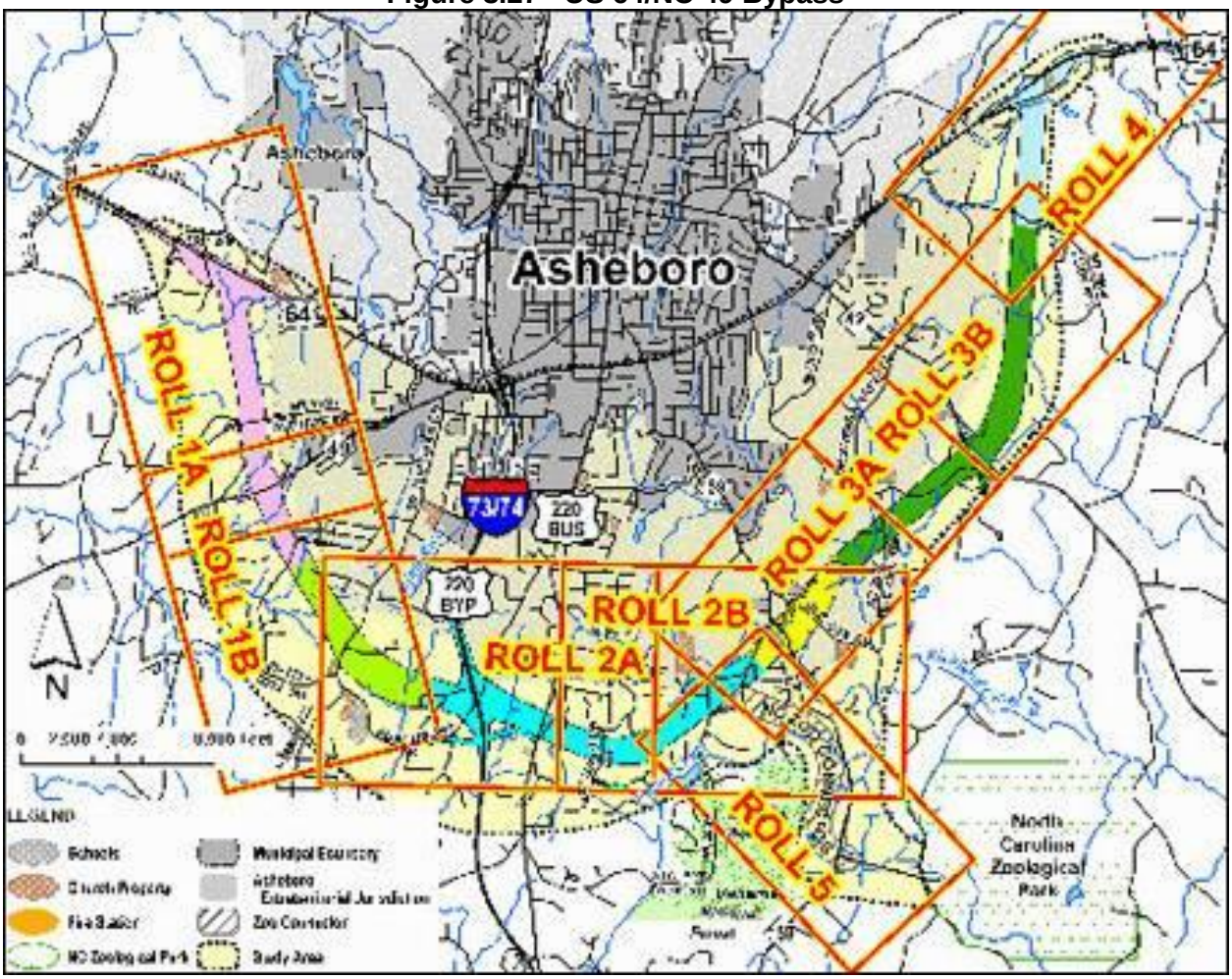


The project includes sidewalks as part of the project and will provide pedestrian access between commercial destinations at this intersection.

US 64/NC 49 Bypass (TIP # R-2536)

The US-64/NC 49 project is a proposed bypass loop south of Asheboro. As part of this project, the NCDOT will improve access to the North Carolina Zoological Park (NC Zoo). The project is currently in the final document (FEIS) phase. The following Figure shows the limits of the proposed bypass. Some parts of construction schedules for this project is currently unfunded in the latest TIP.

Figure 3.27 - US 64/NC 49 Bypass



This project occurs outside the Asheboro City Limits in Randolph County with some parts of the project within the ETJ of Asheboro, but the project would likely reduce through traffic along Dixie Drive and create a safer and more pleasant environment for pedestrians. The proposed project does not include sidewalks and will be a limited access highway; however, bridges will include accommodation over proposed greenways by providing additional clearance under the bridge decks. Interchanges are included at both ends of the project on US 64, and at NC 49, I-73/74 (US 220 Bypass), the new NC Zoo Connector, NC 159, and NC 42.

3.5 POLICY AND PROGRAM RECOMMENDATIONS

Zoning and Subdivision Ordinance Recommendations

Asheboro presently operates under a general use district type of zoning ordinance, commonly referred to as a conventional zoning ordinance. Conventional ordinances were first established in the early 20th century to divide land into districts (or zones) for the purpose of separating uses. The rationale for this separation of uses was to protect public health and safety by providing minimum distances between noxious uses (e.g. polluting smokestacks, coal-burning factories, offensive odors of slaughter houses) and high-density residential areas. Over time, jurisdictions established specific zoning districts (residential, commercial, industrial, etc.) and a list of permitted uses within each district.

The basic authority to protect public health and safety has evolved from increasing the distance between polluting factories and houses, to dividing housing types by size and cost, and separating residential areas from daily shopping and services. As zoning categories became more exclusive, fewer provisions were made for walking and bicycling to "other use" districts and eventually the car became the only viable mechanism to cross zoning district boundaries regardless of the actual distance.

By design, a conventional ordinance is limiting in two ways. First, it works on the basis of separation, not on compatibility, which undermines the function of a traditional neighborhood and often leads to sprawl. Secondly, a conventional ordinance applies blanket regulations to all parcels within a district, often ignoring the individual natural characteristics of each parcel, and thereby reducing the opportunities for creative site design solutions. After nearly a century of developing and operating under conventional zoning schemes, communities around the country are beginning to realize their displeasure with new land development resulting from their own zoning regulations.

Alternatives To Conventional Zoning Ordinances

Conventional zoning regulations are only indirectly concerned with achieving aesthetic ends. However, because many communities have realized the effect and potential that these regulations have in shaping their landscapes and townscapes, there is a trend toward acceptance of aesthetic control as a proper function of zoning ordinances, based on interpretation of statutory intent to protect the public's general health and welfare.

Most conventional zoning ordinances do not regulate the design of streets, the installation of utilities, or the reservation or dedication of parks, street rights-of-way, or school sites. However, communities around the country, including several in North Carolina (e.g. Davidson, Huntersville, Mocksville, Elon, Lexington, Franklinville) have adopted development ordinances based on new urbanism and smart growth principles. Design-based ordinances combine zoning and subdivision rules to encourage pedestrian-friendly, traditional neighborhood development. Proposed developments are then reviewed holistically to evaluate how the existing site features, proposed land use, infrastructure, and site design will function together. Greater emphasis is placed on design guidelines to achieve a vibrant mixture of compatible uses and housing types, instead of strictly separating uses and housing types.

Recommended Ordinance Changes

The following ordinance changes build upon policies developed in the City's 2020 Land Development Plan and were suggested by the steering committee and project staff. The City of Asheboro is working on an ordinance amendment in 2007 and 2008 and these suggested changes should be incorporated into that process.

Issue 1: Sidewalk construction and maintenance along existing development

Current Policy: Equal cost sharing for maintenance, repair and construction between the City and adjacent landowner. Process initiated by adjacent landowner (Asheboro City Charter Article XI and Council Resolution 08/02).

Recommended Policy: Sidewalk construction and repair should be proactively initiated by the City of Asheboro utilizing the maintenance plan recommendations found in Appendix A.3 and the sidewalk project recommendations found in Appendix A.1. The City should fund 100% of the cost of sidewalk repairs to maintain a consistent and accessible sidewalk system.

Issue 2: Sidewalk requirements for new multi-family, commercial and light industrial development

Current Policy: Sidewalk construction is required for new development where curb and gutter exists in the following zoning districts: RA6, OA6, B1, B2 and B3. Required for I1, I2 and I3 on major and minor thoroughfares where curb and gutter exists. (Zoning Ordinance 322A). Streets without curb and gutter are exempt and do not require sidewalks.

Recommended Policy: Include sidewalk construction requirements for new construction *and change of use* for the above districts where curb and gutter exists in the City Limits. In addition, require sidewalk construction for the following residential districts R-6, R-7.5. If adjoining properties have sidewalk facilities and no curb and gutter exists, ensure a connection is made with the adjoining sidewalk facility.

Issue 3: Sidewalk requirements for new single family or duplex residential development

Current Policy: No requirements in the Subdivision or Zoning Ordinance

Recommended Policy: Update the subdivision ordinance to require sidewalk construction for new residential developments for all residential zoning districts. Curb and gutter is already required.

Issue 4: Site design for residential, commercial and light industrial development (R6, RA6, R7.5, OA6, B1, B2, B3, I1 and I2)

A. Current Policy: Inflexible *setback* and *buffer* requirements (Article 300A-Supplemental Regulations).

Recommended Policy: Update Article 300A to provide flexible setback requirements with the installation of sidewalks. Continue to encourage buildings to be placed closer to the street and in line with other buildings on the same block.

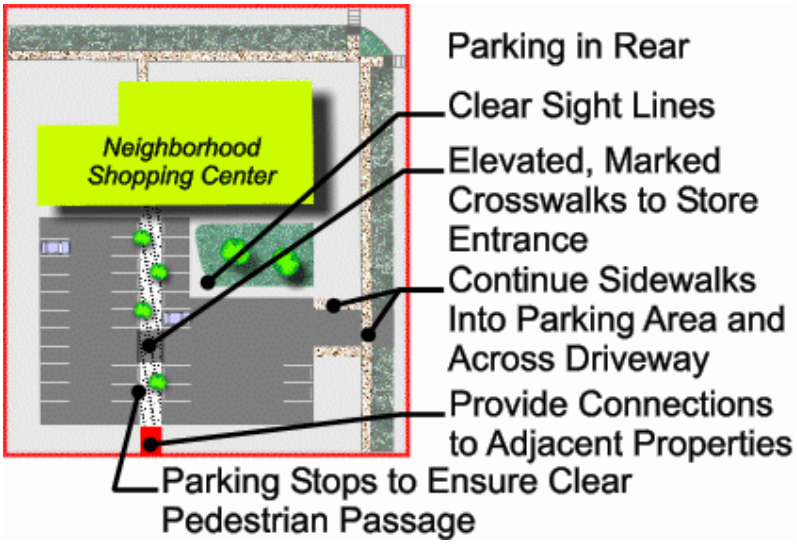
B. Current Policy: Inflexible *road frontage* and *density* requirements (Article 300A-Supplemental Regulations).

Recommended Policy: Update Article 300A to provide flexible density requirements with the installation of sidewalks. Limit the density bonuses so that the character of the development fits in with the neighborhood.

C. Current Policy: Inflexible *Maximum Floor Area Ratio (FAR)* (Article 300A – Supplemental Regulations).

Recommended Policy: Update Article 300 A to provide flexible FAR requirements with the installation of sidewalks.

Figure 3.28 - Pedestrian Connection through Parking Lot (Louis Berger, Inc.)



D. Current Policy: List of varying *parking requirements* for different land uses and *landscaping* regulations (Article 400 – Off Street Parking and Loading).

Recommended Policy: (1) Place parking behind or beside buildings and reduce requirements for parking if on street parking is available. Explore shared parking areas between adjoining parcels. (2) Review recommended landscaping and tree requirements for placement of landscaping along streets and at intersections. Ensure that provision for the visibility of pedestrians at intersections. (3) Require the screening of parking lots with landscaping requirements for new development and change of use. (4) Require pedestrian connections through parking lots with 20 or more spaces. See Figure 3.18 above and the enhanced photo.

E. Current Policy: Contents of Application for Zoning Compliance Permit (Article 1005 – Contents of Application for Zoning Compliance Permit) calls for a number of different ordinance requirements to be shown in site plans.

Recommended Policy: This permit requirement will need to be updated as site design requirements are amended to include new changes and how to regulate any incentives.

Source: Colorado Springs Comprehensive Plan

Issue 5: Public access easements

Current Policy: Do not acquire multi-use path, trail or other public access easements with sewer and water easements as lines are extended.

Recommended Policy: As new sewer lines are extended along existing proposed greenway corridors in this plan and the Parks and Recreation Plan, acquire public access easements for both sewer line use and future trail use. Include a requirement in the subdivision ordinance that requires public access easements along proposed greenways when land is subdivided within the City Limits and ETJ.

Issue 6: Mixed use districts

Current Policy: Center City Planning Area allows live/work units. This does not exist in other parts of Asheboro.

Recommended Policy: Explore the possibility of developing mixed use districts in other parts of Asheboro. North Asheboro and the Randolph Mall/YMCA area may be some of the first locations to research for feasibility. Creating mixed use districts will allow new development to have a range of uses thereby allowing shorter trips that can be made by foot or bicycle.

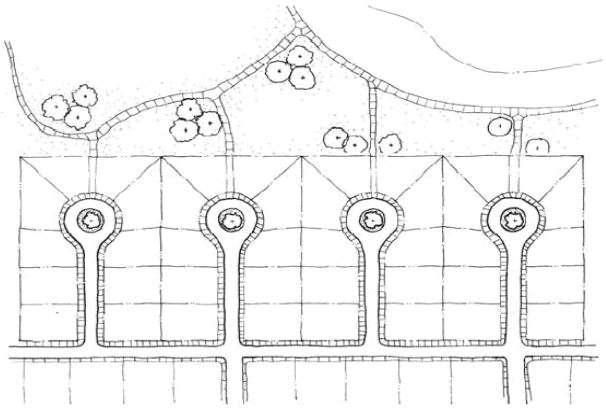
Issue 7: Sidewalk requirements for change of use – all zoning districts

Current Policy: No requirements for sidewalk construction with change of use.

Recommended Policy: Require sidewalk installation with a change of use. See Issue 2 recommendation above.

Issue 8: Cul-de-sac connections

Figure 3.29 - Cul-de-Sac and Multi-Use Path/Street Connection (Nashville, TN)



Current Policy: No requirements for pathway connections in cul-de-sac subdivision developments.

Recommended Policy: Provide requirements for cul-de-sac development to accommodate pedestrians by connecting cul-de-sacs with the nearest neighboring street or parks. In Figure 3.21 the cul-de-sacs are connected by pathway to an adjacent trail. The photo on the following page shows an example of the cul-de-sac connection. In cases where there are no pathways or streets to connect to behind the cul-de-sac, appropriate right-of-way should be set aside to connect with future cul-de-sacs, streets or pathways during the subdivision process.

Issue 9: Pedestrian access on bridges

Current Policy: No requirements for pedestrian access on bridges.

Recommended Policy: Require all bridges within City limits to be equipped with sidewalks or an offset that provides space for future sidewalks due to the City's desire to have an interconnected pedestrian friendly community. This will ensure pedestrian access as bridges are replaced by the State.

Cul-de-sac Connector - Canby, Oregon

Issue 10: Lack of curb and gutter streets

Current Policy: No requirement for construction of curb and gutter for change of use or new construction (subdivisions exempted).

Recommended Policy: Explore the need for establishing an impact fee on development along non-curb and gutter streets. The impact fee could be used to fund future installation of curb and gutter on non-curb and gutter streets. The rate of installation of curb and gutter by the City of Asheboro would increase under this policy. The existence of curb and gutter makes sidewalk installation less expensive for the landholder and would ensure a more connected sidewalk network.

Issue 11: Sidewalk design for new construction

Current Policy: The sidewalk design guidelines call for 5'-8' sidewalk width with a minimum of a 2' planting strip or a 7'-8' minimum sidewalk width with no planting strip.

Recommended Policy: Require a planting strip of at least 6' in residential areas with a 5'-8' sidewalk. Require 11'-16' of combined sidewalk and planting area for commercial and school areas. The 11'-16' area can be used for plantings, benches, sidewalk art or bicycle parking. A clear path of at least 8' should be required between the building and the planting/seating area for clear pedestrian travel in the central business district and schools and at least 7' in other commercial areas.

Program Recommendations

Establish Comprehensive Maintenance Plan

The Public Works Department should create a sidewalk replacement and repair program based on the inventory completed in 2005 and found in Appendix A.3. The

City currently replaces sidewalks as major issues are reported. There will likely continue to be citizens who report sidewalk disrepair outside the disrepair reported in the maintenance inventory. Thus, resources should be set aside to accommodate existing needs and emergency repairs of sidewalk not identified in this Plan. The following recommendations are suggested for maintaining the existing sidewalks to improve condition and accessibility.

- Use factors such as the severity of the problem, proximity to parks, schools, senior centers and shopping to determine what sidewalks are completed first.
- Update inventory of sidewalks after each sidewalk repair or replacement project using a shared database of sidewalks between planning and public works.
- Set a goal of <2% or 0.5 miles or less of sidewalk in disrepair by 2025. (based on approximately 28 miles of sidewalk currently)
- Fund the *replacement* of 0.5 miles of sidewalk each year for the next 8 years. (4.3 miles need replacement as of 2005)
- Fund the *repair* of 0.5 miles of sidewalk every year for the next 6 years. (2.9 miles need repair as of 2005)
- Use materials that reduce maintenance needs when constructing new sidewalk or during repair or replacement and study cost-effectiveness (e.g. root barriers, rubber sidewalks)
- Consider utility maintenance plans when repairing or replacing sidewalk and attempt to coordinate with scheduled electric, natural gas, water and sewer repairs.
- Conduct an update to the maintenance inventory in 2010 and every 5 years thereafter.

There will continue to be citizens who report sidewalk disrepair outside the disrepair reported in the maintenance inventory from 2005. Resources devoted to replacing sidewalk not included in the plan should be set aside to accommodate emergency repairs and regular wear and tear.

Business Sidewalk Enhancement Program

Offer creative use of public sidewalk for private business (i.e. ability to set up chairs, apply for art enhancements on the sidewalk, etc.). The first promotion should be with downtown businesses. A priority project for the small area plan for Downtown and Frasier Park includes a walking trail through downtown incorporating animal art into the sidewalk, enhancing the connection to the Zoo.

Benches and Plantings

Provide more sidewalk space and plantings around benches along Sunset Avenue and Church Street where space allows. Consider sidewalk width expansion in key locations. Consider adding more benches as well.

Enforcement in School Zones

Provide police staffing to enforce parking restrictions during school pick-up and drop-off to discourage parents parking in the crosswalk or otherwise illegally parking.

Establish a Walkable Business and Neighborhood Promotion Program
A pedestrian transportation working group will lead an effort with employers and neighborhoods in Asheboro to establish walking programs for neighborhoods, business and organization employees. The programs can be organized by individual employers/employees or among different employers and employees. The program will benefit the health of Asheboro citizens by increasing daytime and evening physical activity, while reducing health care costs, making workers more productive and reducing stress. Partners in launching and promoting the program include Asheboro Police, Parks and Recreation, Randolph Hospital, Churches, Chamber of Commerce and Homeowners Associations. In the first year, a pilot program that approaches a few businesses and one neighborhood is appropriate. The program should then be evaluated for effectiveness, improved and adjusted and then expanded to neighborhoods and businesses across Asheboro.

Establish a School and Church Walking Encouragement Program
A pedestrian transportation working group composed of School Administration employees, Randolph Hospital, Churches, Chamber of Commerce, Asheboro Police, Parks and Recreation and parents should work to incorporate the benefits of walking and physical activity into school curriculum and services. Additional workshops and activities can be offered outside of regular classroom or church service times. In the first year, a pilot program that approaches a few churches and one school is appropriate. The program should then be evaluated for effectiveness, improved and adjusted and then expanded to all schools and churches across Asheboro. Each school or church will be encouraged to begin their own walking club involving parents and children to benefit physical activity.

Pedestrian Laws Training Program
This program is designed for children, adults or police. The program should cover the following topics: Right-of-way at crosswalks, right turn on red, yielding to vehicles, walking on roadways without sidewalks, railroad crossings and more. More information about North Carolina pedestrian laws can be found here: http://www.ncdot.org/transit/bicycle/laws/resources/lawsguidebook.html .

Adopt a Road / Adopt a Sidewalk Programs
Adopt a Road programs are seen in many communities across North Carolina. The program provides resources to the community to sponsor and help to clean up road litter. The City of Asheboro can begin a similar program for its sidewalks and (future) multi-use paths. This program could also be used as a means for the community to alert the city when there is a maintenance issue with a sidewalk, or as a means for a sidewalk to get special attention, funding, and improvements because of the dedication of its community sponsor. If effective, the quality of the sidewalk system will increase significantly.

Safe Routes to School Programs (SRTS)
The Safe Routes to School program is a national and international movement to enable

and encourage children, including those with disabilities, to walk and bicycle to school. Safe Routes to School programs are comprehensive efforts that look at ways to make walking and bicycling to school a safer and more appealing transportation alternative, thus encouraging a healthy and active lifestyle from an early age. The North Carolina SRTS program www.ncdot.org/programs/safeRoutes/ is administered by the North Carolina Department of Transportation. There is funding available for a broad spectrum of initiatives including, but not limited to:

- Walking school bus programs (i.e. groups of students and parents/teachers walking to school) www.walkingschoolbus.org;
- Crossing guard training;
- One-time walking and bicycling safety events (i.e. bicycle rodeos, safety and health awareness fairs, walk to school day - www.walktoschool.org);
- Safety curriculum (i.e. printing safety curriculum and training for teachers);
- Bicycling and walking improvements (i.e. sidewalks, paths, bike parking, bike lanes, crossing treatments); and
- Weekly walking or bicycling programs (i.e. walking Wednesdays, Walk across America).

Many of the SRTS programs take few resources to get started (aside from bicycling and walking facility improvements), however a "local champion" will be needed to start and implement Safe Routes to School programs. The "local champion" will likely be a parent or teacher who can lead the effort on Safe Routes to School. This is a significant opportunity to fund programs educating and encouraging both students and parents about the benefits of walking or bicycling to school.

Special Running/Walking and Bicycling Events

The City of Asheboro should continue to promote walking, running and bicycling events to raise awareness of the need for increased physical activity through fun activities. The Health Run & Smile Mile and Fall Festival both have a walking or running activity during the event. The City should encourage organizations and businesses to hold other walking or running events. The events can raise money for diseases, community or civic organizations or fund the construction of a multi-use greenway.

Tree Programs

Establish a tree ordinance working group. The working group will explore tree planting and preservation programs for the City of Asheboro. The ordinance will work to build a quality tree cover in the developed and developing residential areas. Basic requirements of the ordinance should include:

- Trees 10 inches or larger in diameter would need approval for cutting;
- If trees are cut down, replacement trees should be of equal or greater than the diameter of the trees cut, multiple trees can be planted where the sum of the diameters are equal to the diameter of the trees cut down;
- Provide more detailed guidance on the types of trees and landscaping for commercial and retail areas; and
- Provide a certified ISA arborist to educate and enforce the ordinance.

Some cities have worked with the utility company to provide free saplings and trees to customers. In addition education for citizens, businesses and developers about affordable and quality trees can be beneficial to improve the tree canopy, property aesthetics and the pedestrian experience.

CHAPTER 4: IMPLEMENTATION

In order to effectively implement the projects, programs and policies outlined in this plan, the City Council with the assistance of the City administration should adhere to the development of proposed projects. To achieve success with completing projects outlined in this plan, it will take a willful effort by City leaders and expenditure of resources. The schedule of action items in Chapter 4.1 suggests how this process can work and who will be responsible.

As mentioned before, unplanned road projects or other opportunities may take the place of scheduled pedestrian improvement projects. The City of Asheboro should capitalize on these opportunities. The list of projects should be reviewed and evaluated by City staff to reprioritize every 3 to 5 years. Continual monitoring of the plan development by City staff, citizen groups and other individuals will be important to seeing the plan elements completed.

Conduct yearly audits of sidewalks and focus resources on the areas in need of most repairs. These areas will likely deteriorate first and deteriorate quickly. There needs to be cooperation between the public works, planning department and elected officials.

4.1 IMPLEMENTATION PROCESS AND STEPS

A step-by-step implementation process is detailed for the next 3 years. The action items are grouped by year and in most cases are not in sequential order. The appropriate section to find more information on how to complete each action step is included. In addition the suggested party or parties who need to complete each action step is also included. Opportunities to implement certain action items may arise before others and these opportunities should be pursued. The action items below are a menu of options for the City of Asheboro to pursue as time, resources and political will allow.

One of the *most important* action items is the formation of a pedestrian transportation working group **(2008.4)**. The working group will carry on the work of the pedestrian plan steering committee; acting as advocates for implementing the plan, assisting in public outreach, grant writing, City staff communication and other duties. The working group will be implicitly or explicitly involved with each of the action items for the next three years. The working group will need new people to help with implementing action items as time passes. Working group members should recruit other members to serve on the working group when exiting members become inactive or leave.

If there are budgetary implications for the action item, the budget amount is indicated. There are budgetary implications for completing projects totaling $800,000/year over the next three years. Each new project or program and policy change should be evaluated for effectiveness as needed. In 2013, a broader assessment and evaluation of efforts should be performed to both look at proposed changes and their progress, but also to look at new ideas and new challenges.

2008 Action Items	Chapter Reference for More Detail	Who Completes Action Item
2008.1 Implement maintenance plan 2008.1.1 Establish benchmarks for the next five years (0.5 mile of repair and 0.5 mile of replacement) **BUDGET: $100,000**	**Chapter 2.7 and Appendix A.3**	**Asheboro Planning & Community Development, Public Works**
2008.2 Complete *13,000 ft* of sidewalk* from priority projects and *5 intersection improvement projects*; **BUDGET: $700,000**	**Chapter 3.4**	**Asheboro Planning & Community Development, Public Works, Sub-contractor**
2008.3 Work to update subdivision and zoning ordinance to aid in pedestrian transportation;	**Chapter 3.5**	**City of Asheboro Planning, Zoning Board**
2008.4 Establish pedestrian transportation working group to implement "Other" projects for small area plans, establish pedestrian programs and policies outlined in Chapter 3.5 and facilitate funding for project development;	**Chapter 3.5**	**Ped Plan Steering Committee**
2008.5 Seek funding sources needed to build pedestrian projects;	**Chapter 4.2 and Figure 4.1**	**City of Asheboro Planning & Community Development, Public Works, Intern**
2008.5.1 Survey key stakeholders about a preferences for funding sidewalks, including a General Bond Referendum; Sales Tax; Property Assessments, and others;		
2008.5.2 Establish grant writing schedule and seek grants for specific projects to achieve 2008.5 benchmarks;		**City of Asheboro Planning, Public Works, Asheboro Parks and Recreation Department, Intern, NCDOT, Ped Plan Steering Committee, Non-Profit Partner**
2008.5.3 Provide matching money for grant applications;		
2008.5.4 Establish Asheboro Greenway Trust Fund;		
2008.5.5 Safe Routes to School Funding;		
2008.5.6 Increase Capital Program funding for sidewalks;		
2008.5.7 Other funding sources;		
2008.6 Finalize draft alignment of Zoo Greenway and begin acquiring right-of-way.	**Chapter 3.2**	**Asheboro Planning & Community Development, Parks and Recreation, Chamber of Commerce, Landowners**

*Average number of feet to complete priority corridor projects by 2025

2009 Action Items	Chapter Reference for More Detail	Who Completes Action Item
2009.1 Continue implementation of maintenance plan (0.5 mile of repair and 0.5 mile of replacement). **BUDGET: $100,000**	**Chapter 2.7 and Appendix A.3**	**Asheboro Planning & Community Development, Public Works**
2009.2 Complete *13,000 ft* of sidewalk* from priority projects and *5 intersection improvement projects*; **BUDGET: $700,000**	**Chapter 3.4**	**Asheboro Planning & Community Development, Public Works, Sub-contractor**
2009.3 Work to update remaining subdivision and zoning ordinance changes to aid in pedestrian transportation;	**Chapter 3.5**	**City of Asheboro Planning, Zoning Board**
2009.4 Recruit new members to pedestrian transportation working group to achieve pedestrian transportation goals;	**N/A**	**Pedestrian Transportation Working Group**
2009.5 Continue to expand existing and seek new funding sources; 2009.5.1 Transportation Enhancements Funding; 2009.5.2 Establish grant writing schedule and seek grants for specific projects to achieve 2009.5 benchmark; 2009.5.3 Provide matching money for grant applications; 2009.5.4 Asheboro Greenway Trust Fund; 2009.5.5 Safe Routes to School Funding; 2009.5.6 Continue Capital Program funding for sidewalks to meet needs; 2009.5.7 Authorize funding source bases on survey results from Action Item 2008.3.1 2009.5.8 Other funding sources;	**Chapter 4.2 and Figure 4.1**	**City of Asheboro Planning, Public Works, Asheboro Parks and Recreation Department, Intern, NCDOT, Ped Plan Steering Committee, Non-Profit Partner**
2009.6 Continue acquiring right of way for the Zoo Greenway.	**Chapter 3.2**	**Asheboro Planning & Community Development, Parks and Recreation, Chamber of Commerce, Landowners**

2010 Action Items	Chapter Reference for More Detail	Who Completes Action Item
2010.1 Continue implementation of maintenance plan (0.5 mile of repair and 0.5 mile of replacement). **BUDGET: $100,000**	**Chapter 2.7 and Appendix A.3**	**Asheboro Planning & Community Development, Public Works**
2010.2 Complete *13,000 ft* of sidewalk* from priority projects and *5 intersection improvement projects*; **BUDGET: $700,000**	**Chapter 3.4**	**Asheboro Planning & Community Development, Public Works, Sub-contractor**
2010.3 Recruit new members to pedestrian transportation working group to achieve pedestrian transportation goals;	**N/A**	**Pedestrian Transportation Working Group**
2010.4 Continue to expand existing and seek new funding sources; 2010.4.1 Transportation Enhancements Funding; 2010.4.2 Establish grant writing schedule and seek grants for specific projects to achieve 2010.4 benchmark; 2010.4.3 Provide matching money for grant applications; 2010.4.4 Establish Asheboro Greenway Trust Fund for private donations to develop Asheboro's greenway system; 2010.4.5 Safe Routes to School Funding; 2010.4.6 Continue Capital Program funding for sidewalks to meet needs; 2010.4.7 Other funding sources;	**Chapter 4.2 and Figure 4.1**	**City of Asheboro Planning, Public Works, Asheboro Parks and Recreation Department, Intern, NCDOT, Ped Plan Steering Committee, Non-Profit Partner**
2010.5 Continue acquiring right of way for the Zoo Greenway.	**Chapter 3.2**	**Asheboro Planning & Community Development, Parks and Recreation, Chamber of Commerce, Landowners**

4.2 REVIEW OF FUNDING OPPORTUNITIES

There are a number of different funding sources that the City of Asheboro can use to develop the resources needed to complete the construction of projects and implement proposed programs. Figure 4.1 below provides suggested multi-use path funding sources, a short description of the source and in many cases a hyperlink to more information and application guidelines. Some funding is available on the local level; other sources are at the state and federal level. Many of the funding opportunities will require additional organizational capacity to what already now exists in Asheboro. The needs and projects outlined in this plan should be used as a reference in the application of grant monies to build new sidewalks, multi-use paths and other pedestrian amenity improvements.

Figure 4.1 – Funding Sources for Pedestrian Facilities in Asheboro

Funding Name and Description	For Sidewalks or Multi-use paths	Source
Asheboro Greenways Trust Fund A local trust fund could be set up and administered by a new advocacy group or an existing non-profit organization. A governing board could work with citizens to set priorities and raise funds for multi-use path and trail construction.	Multi-use paths	Local
Capital Improvements Program The City of Asheboro can appropriate annual funding for the construction of sidewalks and multi-use paths. Similar to program improvements to roads, water and sewer services, sidewalks and multi-use paths can be programmed into the long term capital improvements program.	Sidewalks, Multi-use paths	Local
Community Development Block Grants (CDBG) In North Carolina the Division of Community Assistance (DCA) is charged with administering this federally funded program. The US Department of Housing and Urban Development (HUD) provides the NC DCA with funding to expand affordable housing, improve communities and provide economic development opportunities to disadvantaged neighborhoods. The City of Asheboro has used these funds for sidewalk development in the past. www.nccommerce.com/en/CommunityServices/	Sidewalks	Federal State
Design Awards Program The National Endowment for the Arts provides grants for projects incorporating architecture, landscape architecture, planning and urban design. Grants require a 50% match by a local organization or governmental agency and awards are up to $50,000. www.nea.gov/grants/apply/Design.html	Sidewalks, Multi-use paths	Federal
Economic Development Grants for Public Works and Development of Facilities The Economic Development Administration (EDA), part of the US Department of Commerce provides grants for public works projects in designated redevelopment areas. The typical local match is 30%, but may be as low as 20%.	Sidewalks, Multi-use paths	Federal State
Estate Donations Usually in conjunction with a proposed project, the dedication of wills, trusts and estates to agencies working to develop multi-use paths and trails can be a source of funding or land donations.	Multi-use paths	Local
General Obligation Bond Referendum The City of Asheboro may choose to draft a bond referendum to be voted on by the citizens of Asheboro for the construction of a sidewalk or multi-use path project(s). Many communities across North Carolina have successfully passed bonds for multi-use path and trail development.	Sidewalks, Multi-use paths	Local
National Park Service – River, Trails and Conservation Assistance Program The regional offices of the National Park Service provide technical assistance to the development of trail plans and construction. There is no funding for construction, but time and expertise is included in their services. Applications are due August 1 and are for 1 year of assistance, with an optional renewal year. http://www.nps.gov/ncrc/programs/rtca/index.htm	Multi-use paths	Federal
National Recreational Trails Fund Act (NRTFA) The NRTFA provides resources to communities for the development of both motorized and non-motorized trails. NRFTA has provided 100% funding for projects historically, but local matches of 20% may be required in the future.	Multi-use paths	Federal State

Figure 4.1 – (Continued) Funding Sources for Pedestrian Facilities in Asheboro

Funding Name and Description	For Sidewalks or Multi-use paths	Source
National Resource Conservation Service *Conservation Reserve Program* The US Department of Agriculture provides payments to farm owners to place environmentally sensitive land into a conservation contract for a period of 10-15 years. www.nc.nrcs.usda.gov/ *Wetland Reserve Program* This program provides payments to landowners who agree to preserve sensitive wetlands through permanent easements. This can be used in the stream and river corridors in Asheboro. www.nc.nrcs.usda.gov/	Multi-use paths	Federal
North Carolina Department of Transportation *Independent Projects (Sidewalk and Spot Improvement Program)* This funding at $6 million annually in North Carolina goes to a variety of projects, including spot improvements such as signage, grates, hazard remediation and other small scale improvements. The sidewalk program is funded at $1.4 million and divided among each division to build sidewalks and improve pedestrian safety. The majority of the $6 million for independent projects is included under the Transportation Improvement Program (TIP) – see more detail below. http://www.ncdot.org/transit/bicycle/funding/funding_categories.html *Governor's Highway Safety Program (GHSP) Safety 402 Funds* The Governor's Highway Safety Program (GHSP) funding provides for the administration of a highway safety program designed to reduce traffic crashes and the resulting deaths, injuries and property damage. The GHSP is under the supervision, guidance and support of the Secretary of Transportation. Funding for the GHSP projects and activities is provided through federal traffic safety grants. www.ncdot.org/planning/development/TIP/TIP/ghs/ghsp.pdf *Transportation Enhancements* The Transportation Enhancements Program provides funding for projects that improve the quality of life, transportation systems, and the environment and are multi-modal or demonstrate connectivity, sustainability and/or long-term worth. A 20% local match is required. www.ncdot.org/financial/fiscal/enhancement/ *Safe Routes to School* Program is designed to enable and encourage children to walk and bike to school. The program is designed to make biking and walking a safer and more appealing transportation alternative and to help encourage healthy, active lifestyles from an early age. Grants are provided to local communities with no local match. www.ncdot.org/programs/saferoutes/ *Transportation Improvement Program (TIP)* The NCDOT plans transportation improvements and updates their TIP in consultation with the Piedmont Triad Rural Planning Organization. Sidewalk and multi-use path projects can be programmed into the TIP, which uses funds from the Surface Transportation Program and the Highway Trust Fund www.ncdot.org/planning/development/TIP/TIP/	Sidewalks, Multi-use paths	Federal State

Figure 4.1 – (Continued) Funding Sources for Pedestrian Facilities in Asheboro

Funding Name and Description	For Sidewalks or Multi-use paths	Source
North Carolina Department of Environment and Natural Resources *Land and Water Conservation Fund (LWCF) Grants* The LWCF was established with Federal funds from the lease or sale of nonrenewable resources and surplus federal lands. Funds are distributed to states annually and administered through the Department of Environment and Natural Resources. The local match required is 50%. www.ils.unc.edu/parkproject/lwcf/home1.html *North Carolina Clean Water Management Trust Fund* The North Carolina Clean Water Management Trust Fund was established to protect or improve water quality and may be used for multi-use path or trail projects if there is a link to water quality. This fund is useful for land purchase. www.cwmtf.net/ **Division of Parks and Recreation** *Adopt – A – Trail Program* These programs are usually small grants to fund specific amenities or segments of trails and multi-use paths. Some grants are used for maps, brochures and other marketing materials. http://ils.unc.edu/parkproject/trails/grant.html *Parks and Recreation Trust Fund (PARTF)* The PARTF program provides dollar-for-dollar grants to local governments. Recipients use the grants to acquire land and/or to develop parks and recreational projects that serve the general public. http://www.partf.net/ *Recreational Trails Program* The Recreational Trails Program (RTP) is a $1.3 million grant program funded by Congress with money from federal gas taxes paid on fuel used by off-highway vehicles. The intent of this program is to meet the trail and trail-related recreational needs identified by the Statewide Comprehensive Outdoor Recreation Plan. Grant applicants must be able to contribute 20% of the project cost with cash or in-kind contributions. http://ils.unc.edu/parkproject/trails/grant.html#b	Multi-use paths	State and Federal
North Carolina Department of Health and Human Services The NC DHHS provides programming support for a number of health initiatives related to improving physical activity and health. www.dhhs.state.nc.us/	Multi-use paths, Sidewalks	State
North Carolina Humanities Council The Humanities Council provides grants to cultural and educational organizations to conduct public humanities programs. This support allows community groups and nonprofits to provide free programs that bring people together to explore the history, traditions, and stories of North Carolina. The downtown walking tour of Asheboro could be enhanced with this grant. There is an in-kind or cash match required for these grants. www.nchumanities.org/	Multi-use paths, Sidewalks	State

Figure 4.1 – (Continued) Funding Sources for Pedestrian Facilities in Asheboro

Funding Name and Description	For Sidewalks or Multi-use paths	Source
Private – Sector Funding This support can come in a variety of ways for either multi-use paths or sidewalk improvements. Donations can be in the form of cash, services, equipment or labor. There will need to be effort put forth by Asheboro staff or citizens to gather support for a multi-use path or sidewalk improvement initiative.	Sidewalks, Multi-use paths	Local
Private Foundations and Corporations *Coors Pure Water 2000 Grants* Coors Brewing Company and its affiliated distributors provide funding and in-kind services to grassroots organizations that are working to solve local, regional and national water-related problems. Coors provides grants, ranging from a few hundred dollars to $50,000, for projects such as river cleanups, aquatic habitat improvements, water quality monitoring, wetlands protection, pollution prevention, water education efforts, groundwater protection, water conservation and fisheries. www.coors.com/community/philanthropy.asp *Kodak American Multi-use paths Awards Program* Small grants of $250-$2,000 are awarded to stimulate the planning, design and development of multi-use paths. www.conservationfund.org/node/245 *Recreational Equipment Incorporated (REI) Grants* REI awards grants to organizations and projects that further the mission of the company, including outdoor recreation and the protection and enhancement of natural resources. The awards range from $500-$20,000. www.rei.com/reigives *Wal-Mart Foundation* This foundation supports local community and environmental activities and educational programs for children (among other things). An organization needs to work with the local store manager to discuss an application. Wal-Mart Foundation only funds 501(c)3 organizations. www.walmartfoundation.org/	Multi-use paths	Local, State, Federal
Urban and Community Forestry Assistance These are small grants provided by the USDA for the purchase of trees to plant along parks and multi-use paths. The awards are less than $10,000. To qualify for the program Asheboro must have a street tree inventory, tree commission, an urban forestry management plan and a municipal tree ordinance to qualify. www.dfr.state.nc.us/urban/urban_grantprogram.htm	Sidewalks, Multi-use paths	State, Federal

BICYCLE AND PEDESTRIAN INDEPENDENT PROJECTS FUNDED THROUGH THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

In North Carolina, the Department of Transportation, Division of Bicycle and Pedestrian Transportation (DBPT) manages the Transportation Improvement Program (TIP) selection process for bicycle and pedestrian projects.

Projects programmed into the TIP are independent projects – those which are not related to a scheduled highway project. Incidental projects – those related to a scheduled highway project – are handled through other funding sources described in this section.

A total of $6 million is annually set aside for the construction of bicycle improvements that are independent of scheduled highway projects in communities throughout the state. Eighty percent of these funds are from STP-Enhancement funds, while the State Highway Trust provides the remaining 20 percent of the funding.

Each year, the DBPT regularly sets aside TIP funding for two initiatives. One of these is the *Spot Improvement Program*, funded at a level of $500,000. This funding is available to make spot safety improvements throughout the state. These improvements might include signing, grate replacement, bike rack installations, hazard remediation at skewed RR crossings and other small-scale improvements. Proposals for spot improvements should be submitted directly to the DBPT. The Spot Improvement Program should not be viewed as a priority source for funding identified projects. It is typically used for projects that are not of a large enough scale to merit being placed in the TIP. Potential applicants should contact the DBPT to apply for this funding source.

Second, a total of $200,000 of TIP funding is set aside annually for the department to fund projects such as *training workshops, pedestrian safety and research projects, and other pedestrian needs statewide*. Those interested in learning about training workshops, research and other opportunities should contact the DBPT for information.

The remaining $5.3 million dollars of TIP funding is available for funding various bicycle and pedestrian independent projects, including the construction of multi-use trails, the striping of bicycle lanes, and the construction of paved shoulders, among other facilities. Prospective applicants are encouraged to contact the DBPT regarding funding assistance for bicycle and pedestrian projects. For a detailed description of the TIP project selection process, visit: http://www.ncdot.org/transit/bicycle/funding/funding_TIP.html .

Incidental Projects – Bicycle and pedestrian accommodations such as bike lanes, widened paved shoulders, sidewalks and bicycle-safe bridge design are frequently included as incidental features of highway projects. In addition, bicycle-safe drainage grates are a standard feature of all highway construction. Most bicycle and pedestrian safety accommodations built by NCDOT are included as part of scheduled highway

improvement projects funded with a combination of National Highway System funds and State Highway Trust Funds.

Sidewalk Program – Each year, a total of $1.4 million in STP-Enhancement funding is set aside for sidewalk construction, maintenance and repair. Each of the 14 highway divisions across the state receives $100,000 annually for this purpose. Funding decisions are made by the district engineer. Prospective applicants are encouraged to contact their district engineer for information on how to apply for funding. The majority of these funding sources are compliments of Projects for Public Spaces.

4.3 PLAN APPROVAL PROCESS

A working session with the City Council was completed January 22, 2008 where issues and concerns by City Council were discussed. The Plan was adopted by the Asheboro City Council on May 30, 2008.

CHAPTER 5: PEDESTRIAN FACILITY GUIDELINES

The placement and design of new pedestrian facilities should vary somewhat depending on the make-up of the adjoining land uses. This is referred to as context sensitive-design, building facilities based on the existing environment. The following overall guidelines for facility development are highlighted here[2]:

- Give transportation priority to the completion of pedestrian routes to schools, neighborhood shopping areas and parks.
- Incorporate the natural and historical linear aspects of the City into pedestrian projects.
- Ensure that the safety and convenience of pedestrians are not compromised by transportation improvements aimed at motor vehicle traffic.
- Ensure that the pedestrian circulation system is safe and accessible to children, seniors and the disabled.
- Require storefront commercial development to be oriented to pedestrians.
- Street furniture, vendors, water fountains, bicycle racks, lighting, and other pedestrian necessities should be welcomed, but also be placed out of the immediate pedestrian travel area.
- Establish links between sidewalks, trails, parks, and the rest of the community.
- Retain public pedestrian access when considering private right-of-way requests.
- Support changes to existing policies that would enhance pedestrian travel.
- The pedestrian system should connect to residential, commercial, industrial, educational, and recreational areas.
- Off-site street improvements or enhanced multi-use path facilities may be required as a condition of approval for land divisions or other development permits.
- Aesthetics and landscaping shall be a part of the transportation system.
- Coordinate transportation planning and efforts with neighboring municipalities.

The basic principals of walkable communities should guide the development of new facilities. These new facilities may be built by the City of Asheboro or built as new development occurs by private contractors and individual property owners. The three principals of a walkable community are: 1) Safety, 2) Comfort and 3) Access. The following characteristics, if built into the design of the streets will create a walkable Asheboro:

- Connectivity (close sidewalk gaps, build cul-de-sac paths and connections between different land use; e.g. residential and commercial);
- Separation from traffic (bike-lanes, planting strips, landscaping, bulb-outs);
- Pedestrian supportive land-use patterns (mixed use, higher density, design for the pedestrian);
- Designated space (5ft+ sidewalks in residential areas and 8-12ft sidewalks in downtown and around schools);
- Accessibility (ADA ramps, crosswalks, ped-head signals);
- Street furniture (places to sit, drinking fountains, trash receptacles); and
- Security and visibility (lighting, landscaping and site distance).

[2] Source: Mooresville, NC Comprehensive Pedestrian Plan 2005

5.1 FACILITY DESIGN GUIDELINES

There are a number of ways to build the facilities called for in this plan. Many of the facility improvement recommendations will need further investigation before improvements and design are finalized. The designs and improvements shown in the figures below are from the Federal Highway Administration or the Manual of Uniform Traffic Control Devices (MUTCD). The NCDOT adheres to the design guidelines provided in the American Association of State Highway and Transportation Officials' Guide for the Planning, Design, and Operation of Pedestrian Facilities (AASHTO, 2004) and Manual on Uniform Traffic Control Devices (MUTCD)

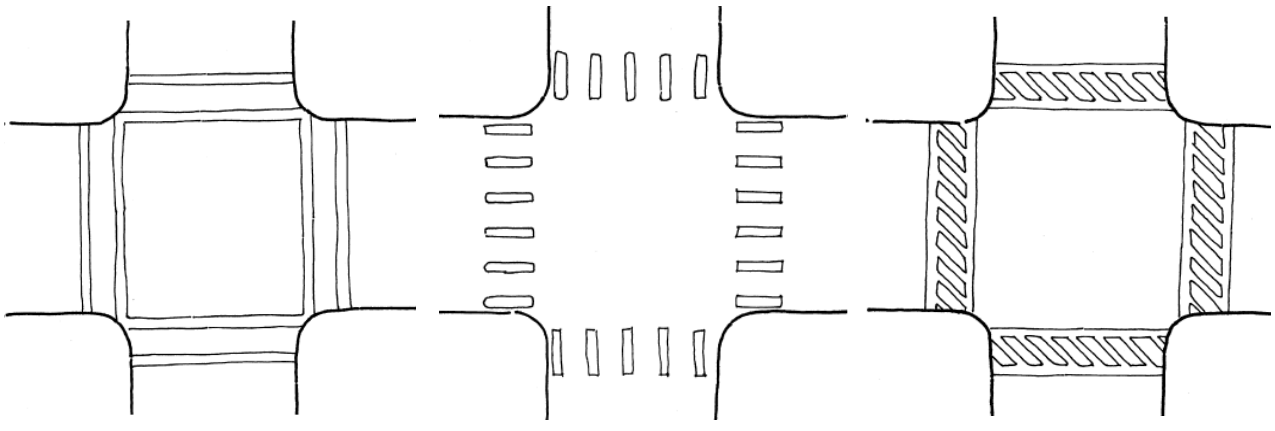
Intersections

Pedestrian-vehicular conflict occurs primarily at intersections. As shown by the intersection project recommendations found in the above small area plans, features that help pedestrians include: crosswalks, curb ramps, refuge islands, signals, signs and other treatments. Some of the most important treatments for improving pedestrian intersection crossings are included below, but there are many other treatments to consider. The *PEDSAFE: Pedestrian Safety Guide and Countermeasures Selection System* should also be consulted in addition to a number of the other resources found in the References section of this Plan in deciding improvements to intersections.

Crosswalks

Crosswalks direct pedestrians to the best places to cross the street. Curb ramps should be aligned with crosswalks. Crosswalks do not always provide the needed safety to cross a street safely, for example on higher speed arterial streets, additional treatments are needed to make it safe for pedestrians to cross, including medians, crossing islands and other treatments.

Figure 5.1 – Crosswalk Design



Horizontal Line (most common *Ladder Style (high vis., low maintenance)* *Diagonal (high vis., and maintenance)*

Courtesy: ITE

The crosswalk designs shown in Figure 5.1 are approved by the MUTCD. The horizontal line crosswalk is common in Asheboro. The ladder and diagonal style are the most visible design. When installed correctly, the ladder style requires less maintenance as the hash marks can be aligned so that motor vehicle wheels will not track over them, reducing wear and tear.

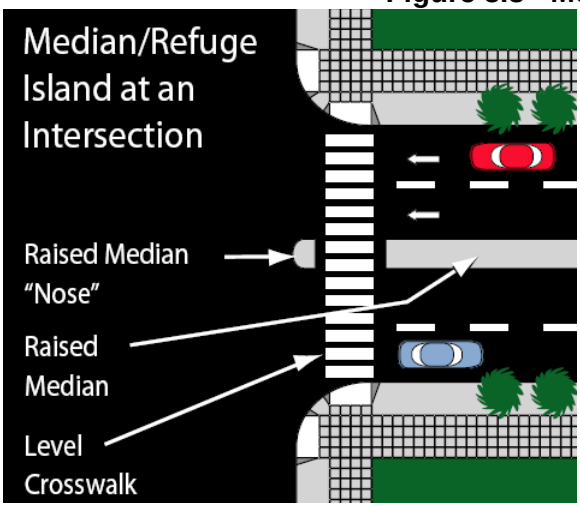
It is important to study the best crosswalk locations before installation. The vehicles need to be able to see the pedestrians and the pedestrians need to be able to see the vehicles. In addition, there must be ample room for wheelchair landings where the curb ramp meets the sidewalk. Figure 5.2 shows the sign design from the MUTCD which can be placed on plastic bollards in advance of the crosswalk as shown in the photo. These improvements are recommended in a number of intersections for Asheboro.

Figure 5.2 - In-Pavement Yield to Pedestrian Sign R1-6 MUTCD 2003 (Chapter 2B)

Refuge Islands

The design and installation of a refuge island (or crossing island) at an intersection is shown in Figure 5.3 on the left. The installation of a crossing island increases the safety of pedestrians allowing refuge when a complete crossing is interrupted by speeding or turning vehicles. The refuge or crossing island is especially helpful to pedestrians on major thoroughfares with 3 or more lanes. The figure on the right shows how a median can help pedestrians across the street where there is no intersection.

Figure 5.3 - Median/Refuge Islands

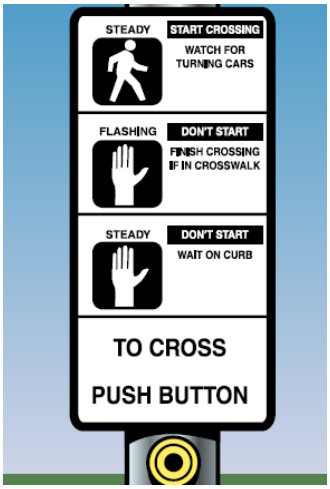


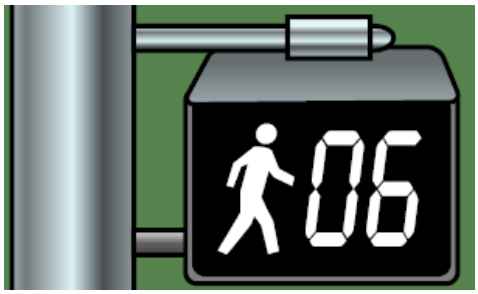
This installation would be appropriate on long blocks where pedestrians are observed crossing mid-block and it is a far distance to nearest intersection. There are no specific recommendations for a mid-block crossing with a median in this Plan, but there may be an opportunity to install this treatment in the future on some of the major thoroughfares or in the Central City Planning area.

In Pavement Yield to Pedestrian Sign - Greensboro, NC

Pedestrian Signalization

Figure 5.4 - Pedestrian Signal





The push button and sign is associated with the pedestrian signal or "ped-head" to indicate the different phases of the pedestrian signal. The signal shows the amount of time the pedestrian has to cross the street and counts down to show how much time is left. These signals can be equipped with audible signals to help people with visual impairment know when to cross safely. There is additional information on accessible pedestrian signals regarding types and placement guidelines at the Pedestrian and Bicycling Information Center website: www.walkinginfo.org/aps.

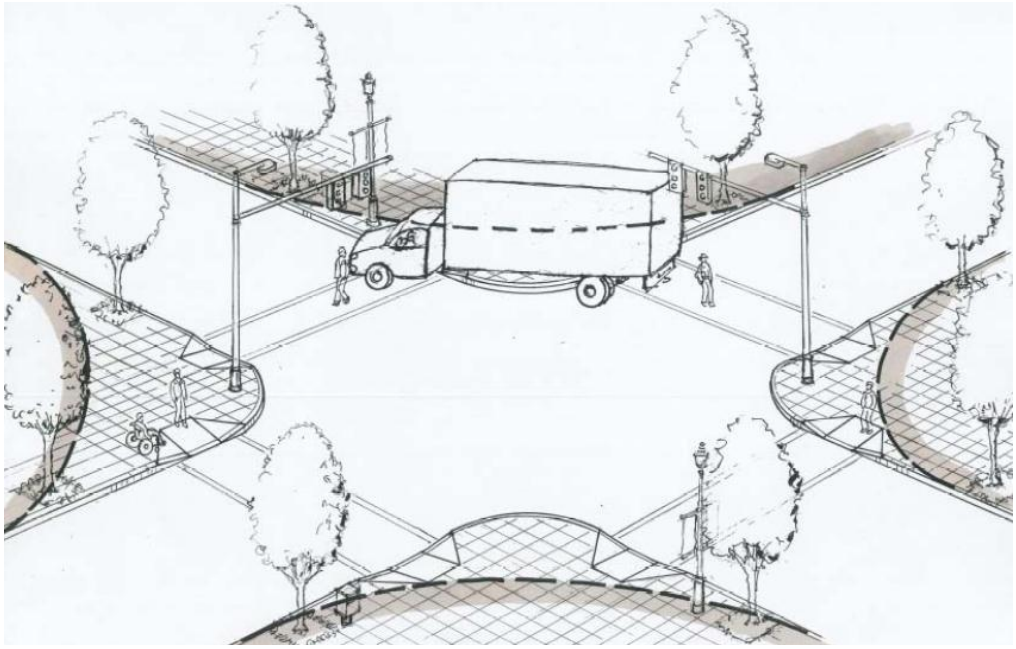
Figure 5.5 - Pedestrian in Roadway Light

The pedestrian in roadway light and sign shown in Figure 5.5 provides automobile traffic a warning signal that pedestrians are in the roadway. The light can be activated either by a sensor or by push-button activation for pedestrians using a designated crosswalk across the street. This application is particularly useful for mid-block crossings or crosswalks with poor sight distance. The sign used with the flashing light is from the MUTCD Chapter 2C and is coded W11-2.

Bulb-outs or Curb Radii

The curb radii of an intersection influences not only crossing distance, but also the speed of vehicles traveling through the intersection. Decreasing the crossing distance by reducing the curb radius can help pedestrian safety and comfort and shorten street crossing times. Large trucks can maneuver through the intersections by traveling slower or encroaching slightly into the other travel lanes as necessary

Figure 5.6 - Reduction in Curb Radii



Source: Kimley-Horn Associates

Curb Ramps

There are many locations along existing sidewalks where the installation of curb ramps will enhance the walking environment. The design shown here follows the guidelines of the ADA. Each four-way intersection should have eight (8) ramps or two (2) to a corner. The width of the ramp should be at least 4' and a detectable warning (truncated domes) should extend 24" from the bottom of the ramp.

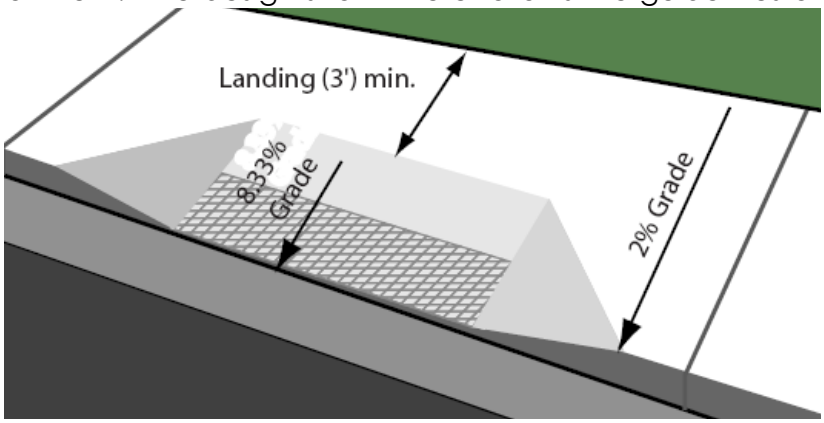


Figure 5.7 - Curb Ramp Specifications

Sidewalks

The most important feature of the pedestrian transportation system is the sidewalk. Without a sidewalk, many people will not or cannot walk safely along streets and roads. Many of the recommendations for improvement in Chapter 3 have suggested closing sidewalk gaps, improving handicap accessibility, and making neighborhood connections with schools and parks.

The following recommendations for sidewalk construction and design are from the Institute for Transportation Engineers:

- Central Business District: Wide enough to accommodate users. Minimum 8 feet (not including the planting strip or street furniture).
- Commercial area outside the central business district: 7 feet wide if no planting strip is possible, or 5 feet wide with a 2-8 foot planting strip (Wider planting strips accommodate greater buffers from traffic and the opportunity to plant large shade trees).
- 4 to 8 foot wide planting strips are recommended along all sidewalks to provide separation from vehicles. This space is useful for landscaping, lighting, trash receptacles, water fountains, benches, temporary storage of weather debris and the room to accommodate driveway ramping while maintaining a level or near level (<2%) sidewalk cross slope.
- Crosswalks should have direct alignment with curb ramps at intersections.
- Sidewalks should be clear of obstructions such as utility poles, sign posts, fire hydrants, etc.
- Vertical clearance should be at least 7 feet from ground level to the bottoms of signs or the lowest tree branches.
- Increasing sidewalk widths by 2-3 feet would accommodate shoulder-high intrusions like building walls, bridge railings, and fences.
- Maximum cross-slope of 1:50 (2%). Limit running slope to 5% (1:20), or no greater than 8.33% (1:12) where topography requires it. Building access ramps with landings and handrails would help users.

The existing sidewalk standards for the City of Asheboro require a minimum planting strip of 2-5ft and a maximum planting strip of 10ft in residential areas. The sidewalk width is recommended to be 5'-8'. The design of sidewalks in residential areas should be 5ft in width, with a minimum 6 ft planting strip.

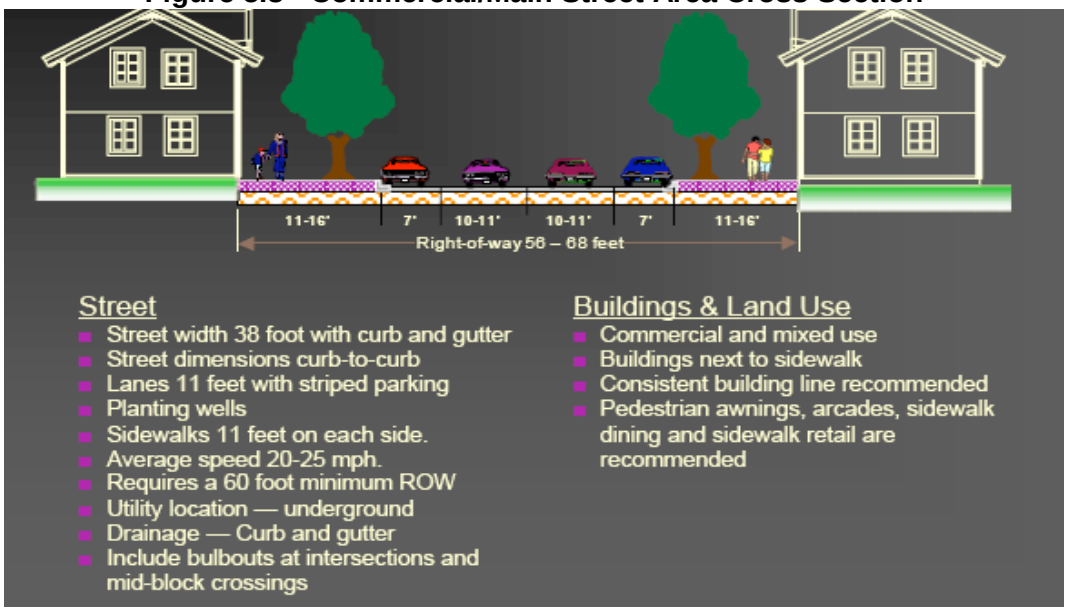
It is important to design sidewalks to be level across driveways, including both the cross and running slope. The picture shows an example of how a continuous sidewalk grade looks in practice. This design helps people in wheelchairs negotiate driveways and driveway aprons with more ease.

The street cross sections that follow are part of "Street Designs that Support Walkable, Livable Communities" by Paul Zykofsky and Dan Burden. The street cross section shown in Figure 5.7 is appropriate for residential neighborhoods in the City of Asheboro. A minimum 5' sidewalk is recommended with a minimum 6' of planting/utility strip.

Figure 5.7 - Residential Street Cross Section

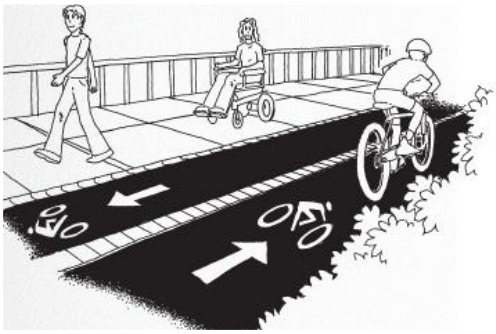
Sidewalk design guidelines should be established for downtown, commercial areas and adjacent to schools that require 11-16ft wide sidewalks with some of that width used for planting wells, street furniture, art or bicycle parking. The planting strips should not encroach on the travel way of the sidewalk, which should be at least 8' in width between the building and the planting wells or street furniture in the central business district and at least 7' in width in other commercial areas. The street cross section shown in Figure 5.8 is appropriate for commercial and downtown areas.

Figure 5.8 - Commercial/Main Street Area Cross Section



Multi-Use Paths

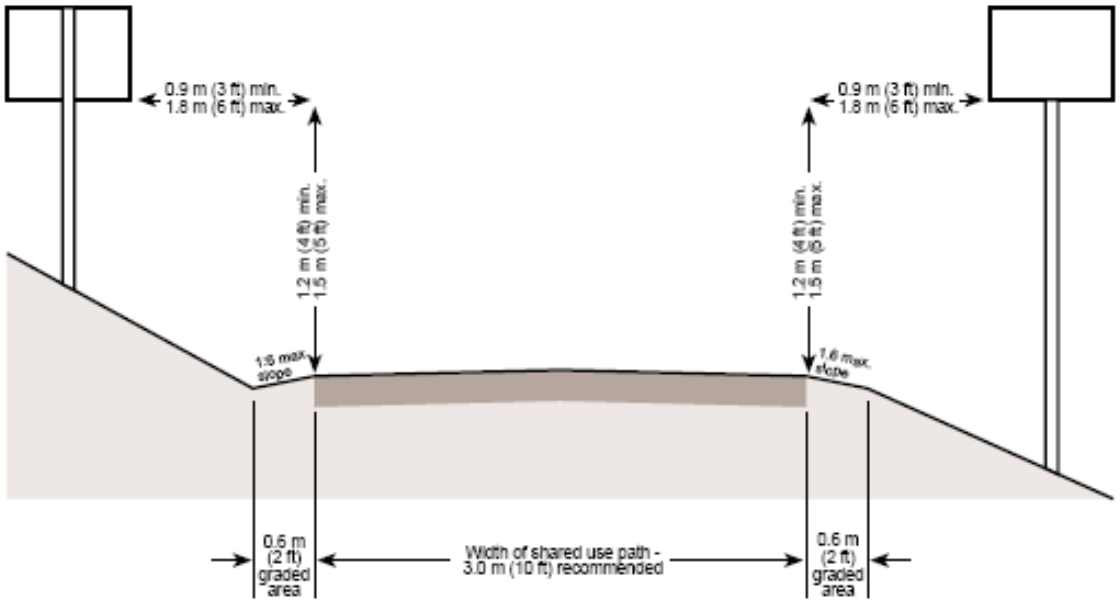
Multi-use paths benefit, pedestrians, bicyclists, in-line skaters and other non-motorized vehicle users. These facilities are extremely popular when designed and built correctly.



Multi-use paths can serve as transportation or recreation and provide a motor-vehicle free walking or bicycling experience. These pathways may run along streams, abandoned railroads or major corridors. The establishment of greenways serve a transportation purpose, but are also linear park systems. The construction of multi-use paths creates an opportunity to preserve environmentally sensitive lands and wildlife, while serving recreation or transportation needs.

There are a few proposed multi-use paths included in this Plan. The AASHTO design guidelines provided in the American Association of State Highway and Transportation Officials' Guide for the Planning, Design, and Operation of Pedestrian Facilities (AASHTO, 2004) and the AASHTO Guide for the Development of Bicycle Facilities (AASHTO. 1999) recommends width of multi-use paths 10ft minimum and 2ft shoulders for two-directional traffic. A yellow line should separate the pathway into two lanes and at least 8ft of vertical clearance is required. The right-of-way including the trail, shoulders, drainage and signage placement will need to be at least 20' in width depending on design. Figure 5.9 below shows an elevation view of a multi-use path cross section.

Figure 5.9 Multi-Use Path Cross-section and Overhead View



From the Guide for the Development of Bicycle Facilities, Copyright 1999 by AASHTO. Used by permission.

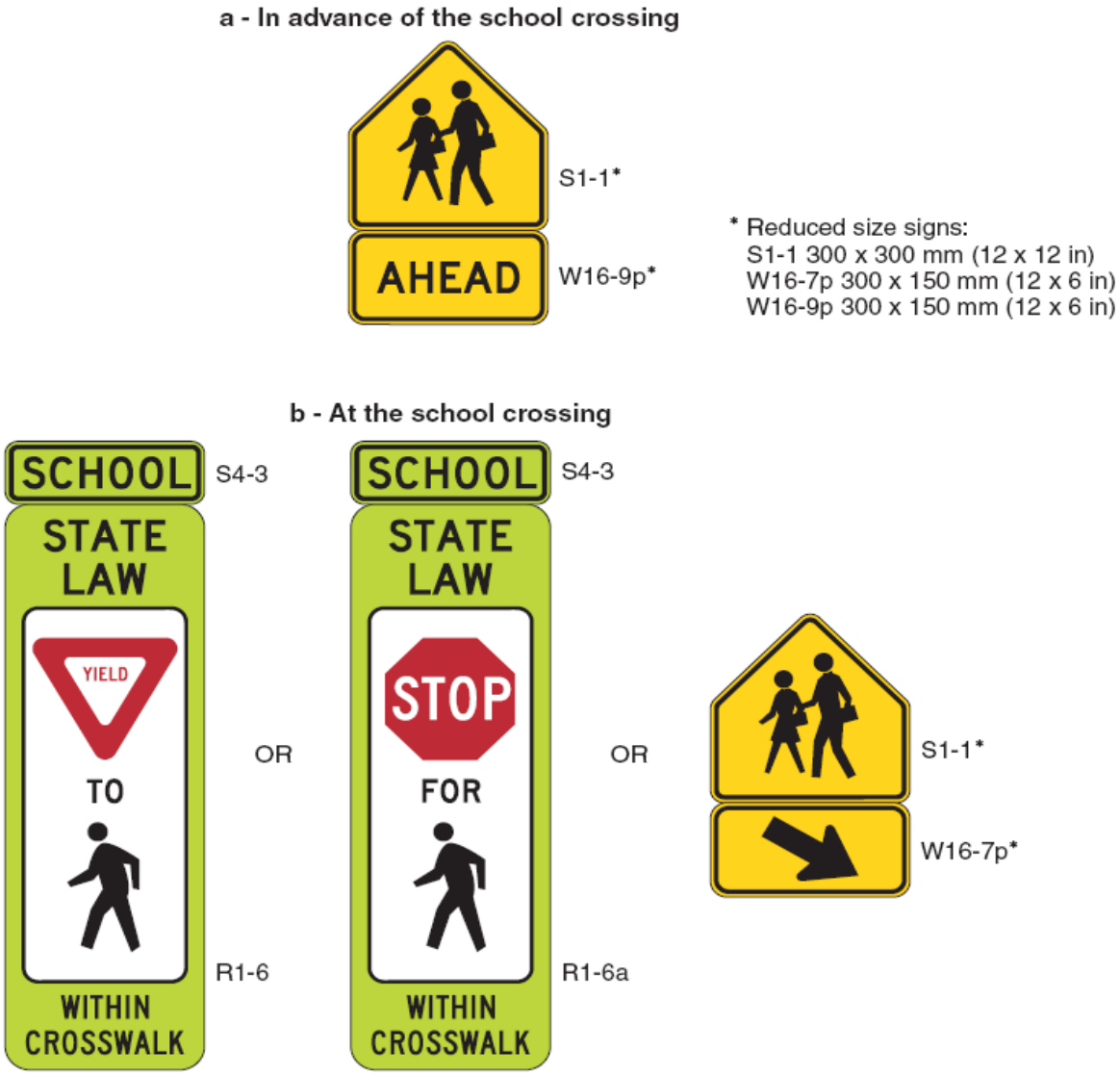
Additional guidance and standards on multi-use paths can be found at the North Carolina Dept. of Transportation Division of Bicycle and Pedestrian Transportation: http://www.ncdot.org/transit/bicycle/projects/project_types/Multi_Use_Pathways2.pdf .

Pedestrian Related Signage

There are a number of warning signs to aid drivers in observing traffic laws and to avoid problems with pedestrians. Figure 5.10 shows examples of pedestrian signage from the MUTCD. The majority of pedestrian signs can be found in Chapter 2B and 2C. School safety signage is found in Chapter 7 of the MUTCD and examples are shown in Figure 5.11. The number below each sign indicates the code for the design of the traffic control device.

Figure 5.10 - MUTCD Pedestrian Related Signage

Figure 5.11 - MUTCD School Zone Pedestrian Related Signage



The MUTCD can be found online at

5.2 CREATIVE MATERIALS

This section provides information on additional materials to consider when building new or repairing existing sidewalk infrastructure.

Rubber Sidewalk (Source: Rubber Sidewalks, Inc.)

Rubber Sidewalk

The rubber sidewalk shown here reduces maintenance costs when compared to concrete sidewalks. According to Rubber Sidewalks, Inc. the average cost per square foot, including break out and installation is $15.00. The cost for a linear foot of rubber sidewalk (5' width) is approximately $75. When including the cost of grading for new installations, the cost is competitive with concrete installation. The rubber sections of sidewalk are large tiles that can be removed for tree root maintenance as well. In most cases, concrete sidewalk must be replaced after tree root maintenance.

Root Barriers

There are a number of different vendors that supply root barriers for street tree plantings. The root barriers should be installed when a street tree is first planted, but can also be installed around mature trees. The root barrier should surround the tree root ball in a circle for newly planted trees. Mature trees will need to have the roots trimmed and a barrier installed between the tree and sidewalk or path. If installed correctly, the root barrier forces tree roots downward away from the sidewalk, path, building or utilities.

Root Barrier (Source: Vespro, Inc).

Root barriers can be made with any impermeable durable material that can withstand burial in soil for an extended period of time. Root barriers are recommended to be installed to a depth of 30 inches minimum and they must extend above the surface of the soil enough to prevent roots from growing over the top. There are root barrier materials that are permeable to moisture but will not allow roots to grow through, but may be more expensive.

APPENDIX A: PRIORITY PROJECTS

A.1 SIDEWALK CORRIDORS

Corridor Prioritization Methodology

The following prioritization factors have been weighted and are used to determine the prioritization of **corridor** projects. The total maximum score possible from the following factors is 30. Most corridor project factors receives the full score or none at all, except for the 'crashes' factor, which receives a partial score.

Public comments (number of comments for each project)

- The projects that received a total of 3 or more comments from the April 3rd and June 25th public meeting and from the community survey will receive a score of 3 points.

Proximity to schools (within ½ mile of an elementary, middle or high school)

- The improvement receives a score of 4 points if a portion of the project lies within ½ mile of a school. The projects that provide a direct connection to school also receive this 4 point score.

Proximity to parks and recreation (within ½ mile of a park)

- The improvement receives a score of 3 points if a portion of the project lies within ½ mile of a park or recreation facility. These facilities include all City parks, the YMCA, the Boys and Girls Club, the skate park and cemeteries.

Crashes (2 crashes or >=3 crashes between 2001-2006)

- The improvement receives a score of 4 points if 3 or more pedestrian/vehicle or bicycle/vehicle crashes occurred along the corridor and a score of 2 if there were 2 pedestrian/vehicle or bicycle/vehicle crashes. The crashes are based on the Asheboro Police Department records for 2001-2005 and the NCDOT Bicycle and Pedestrian Program for 2006.

Small gaps (less than 1,000 ft)

- Those projects that are less than 1,000 ft in length of sidewalk and are joined by existing sidewalk on both ends of the project will receive a score of 2 points.

Road type (arterial or collector)

- Those projects that are along roadways that carry more than 3,000 average annual daily traffic (AADT) will receive a score of 3 points – primarily arterial and collector streets. There are some streets that may be considered local, but carry more than 3,000 AADT and will also receive a score of 3 points.

Compatible land use (residential, commercial, downtown)

- Projects that are along roadways abutting zoning that is either central business, commercial, multi-family residential or office/multi-family receive a score of 3 points.

Curb and gutter existing

- Projects along roadways that already have curb and gutter existing receive a score of 2 points. Streets with curb and gutter are less expensive to retrofit with sidewalk. If there are road projects that include curb and gutter, the option of installing a sidewalk while construction occurs should be explored for future cost savings.

Census block with >15% of households without vehicles

- Projects that connect with census tract block groups that have > 15% of households without vehicles will receive a score of 3 points. There are currently 3 block groups that have such vehicle ownership rates.

Connectivity to existing sidewalk

- If the project connects to an existing sidewalk, that project will receive 2 points. The project does not need to connect to a sidewalk on both ends, just one.

Direct access to/from a proposed greenway

- If the project intersects with a proposed multi-use path as described in the City's 2003 Parks and Recreation Master Plan, the project receives a score of 1 point.

Figure A.1 - Corridor Improvement Priority Matrix

Corridor Improvements			One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
Street	*From*	*To*		*3*	*4*	*3*	*4*	*2*	*3*	*3*	*2*	*3*	*2*	*1*	30
MLK Drive	E. Salisbury	E. Salisbury	North	3	4	3	4	2	0	3	2	3	2	0	26
Church Street	Wainman Avenue	Lanier Street	East	3	4	3	0	2	3	3	2	3	2	0	25
White Oak	Foust Street	W. Ward Street		3	4	3	0	2	3	3	2	3	2	0	25
W. Dixie Drive	Park Street	US 220 Bypass		3	4	3	4	0	3	3	2	0	2	0	24
S. Park Street	Cooper Street	Walker Avenue		3	4	3	2	2	3	3	2	0	2	0	24
Wainman Avenue	Park Street	Church Street	South	3	4	3	2	2	0	3	2	3	2	0	24
S. Fayetteville Street	Walker Avenue	Dixie Drive		3	4	3	4	0	3	3	2	0	2	0	24
White Oak	Presnell Street	Foust Street		3	4	0	0	2	3	3	2	3	2	0	22
W. Dixie Drive	S. Fayetteville	Park Street		3	4	3	2	0	3	3	2	0	2	0	22
Cherry Street	Salisbury Street	Sunset Avenue	West	3	4	3	0	2	0	3	2	3	2	0	22

Street	*From*	*To*	One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
Wainman Avenue	S. Fayetteville Street	Cox Street		3	4	3	0	2	0	3	2	3	2	0	22
Wainman Avenue	Church Street	S. Fayettevill e Street	North	3	4	3	0	2	0	3	2	3	2	0	22
Albemarle Road	Park Street	Uwharrie Street		3	4	3	2	0	3	3	2	0	2	0	22
S. Fayetteville Street	Ridge Street	City Limits		3	4	3	4	0	3	3	2	0	0	0	22
Dunlap Street	Brewer Street	MLK Drive		3	4	3	4	0	0	3	0	3	2	0	22
Walker Avenue	Park Street	Albemarle Road		3	4	3	4	0	0	3	2	0	2	0	21
Walker Avenue	Church Street	S. Fayettevill e Street		3	4	3	4	0	0	3	2	0	2	0	21
S. Fayetteville Street	Birkhead Street	Walker Avenue		3	4	3	0	0	3	3	2	0	2	0	20
Ross Street	Foust Street	W. Salisbury Street		3	4	3	0	0	0	3	2	3	2	0	20
N. Fayetteville Street	Central Avenue	Bailey Street		3	4	3	2	0	3	3	2	0	0	0	20
W. Presnell Street	Fayetteville Street	Ross Street		3	4	0	0	0	3	3	2	3	2	0	20
Uwharrie Street	Sunset Avenue	Dixon Avenue		3	4	3	0	0	0	3	2	3	2	0	20
Uwharrie Street	Kivett Street	Spencer Avenue	East	3	4	3	0	0	0	3	2	3	2	0	20
Academy	Church Street	Cox Street		3	4	3	0	2	0	3	0	3	2	0	20

Street	*From*	*To*	One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
Elm Street	Brewer Street	Salisbury Street		3	4	3	2	0	0	3	0	3	2	0	20
Foust Street	White Oak	Ross Street		0	4	3	0	2	0	3	2	3	2	0	19
E. Dixie Drive	Highway 42	Dublin Road		3	0	3	4	0	3	3	2	0	0	1	19
N. Cox Street	Ward Street	Salisbury Street		0	4	3	0	2	0	3	2	3	2	0	19
E. Salisbury Street	NC 42	Randolph Mall		3	0	3	2	0	3	3	0	3	2	0	19
N. Fayetteville Street	Forest Brook Circle	Central Avenue		3	0	3	4	0	3	3	2	0	0	1	19
E. Dixie Drive	Dublin Road	Cox Street		3	0	3	4	0	3	3	2	0	0	0	18
E. Dixie Drive	Cox Street	S. Fayetteville		3	4	3	0	0	3	3	2	0	0	0	18
E. Salisbury Street	Elm Street	NC 42		3	4	3	0	0	3	0	0	3	2	0	18
S. Fayetteville Street	Dixie Drive	Ridge Street		3	4	3	0	0	3	3	2	0	0	0	18
Uwharrie Street	Dixon Avenue	Kivett Street		3	4	3	0	0	0	3	2	3	0	0	18
Watkins Street	Brewer Street	MLK Drive		3	4	3	0	0	0	3	0	3	2	0	18
Highway 42	Salisbury Street	E. Dixie Drive		3	0	3	2	0	3	3	0	3	0	1	18
Lanier Ave	Church Street	Park Street		3	4	3	0	2	0	3	0	0	2	0	17
Wainman Avenue	Uwharrie Street	Park Street		0	4	3	0	0	0	3	2	3	2	0	17

Street	*From*	*To*	One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
N. Cox Street	Burns Street	Ward Street	East	0	4	3	0	0	0	3	2	3	2	0	17
S. Cox Street	Stowe Avenue	Dixie Drive		3	4	3	0	0	0	3	2	0	2	0	17
Kivett Street	Park Street	Uwharrie Street	South	3	4	3	0	0	0	0	2	3	2	0	17
Hill Street	Park Street	Church Street		0	4	3	0	2	0	3	0	3	2	0	17
Redding Road	Glenwood Road	Cliff Road	North	0	4	3	0	2	0	0	2	3	2	0	16
E. Dorsett	Church Street	Cox Street	North & South	0	4	3	0	2	0	3	2	0	2	0	16
Lexington Road	Sunset Avenue	Westwood Drive		3	0	3	0	0	3	3	2	0	2	0	16
Taft Street	Park Street	Church Street		0	4	3	0	2	0	3	2	0	2	0	16
Ross Street	Presnell Street	Foust Street	East	3	4	0	0	0	0	3	0	3	2	0	15
City View Street	Ross Street	Peachtree Street		0	4	3	0	0	0	3	0	3	2	0	15
N. Fayetteville Street	Bailey Street	Vision Drive		3	4	0	0	0	3	3	2	0	0	0	15
Zoo Parkway	Dixie Drive	Sykes Farm Road		3	4	0	0	0	3	3	0	0	2	0	15
Cliff Road	E. Kivett Street	Dixie Drive		3	4	3	0	0	0	3	0	0	2	0	15
Dublin Road	NC 42	Dixie Drive		3	0	3	0	0	3	3	2	0	0	1	15

Street	*From*	*To*	One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
Old Liberty Road	N. Fayettevill e Street	City Limits		3	0	3	2	0	3	3	0	0	0	0	14
Balfour Avenue	Canoy Drive	N.Fayetteville Street		0	4	3	0	0	0	3	0	3	0	1	14
Allred Street	N. Fayettevill e Street	Meadowbroo k Road (City Limits)		3	0	3	0	0	3	3	0	0	2	0	14
Shamrock Road	Worth Street	Dixie Drive		3	4	3	0	0	0	0	2	0	2	0	14
Glenwood Road	Redding Road	Hillcrest Circle		3	4	3	0	0	0	0	2	0	2	0	14
Zoo Parkway	Sykes Farm Road	Rockcliff Terrace		3	4	0	0	0	3	0	0	0	2	1	13
High Street				0	4	3	0	0	0	0	0	3	2	0	12
W. Presnell Street	Ross Street	N. McCrary Street		3	4	0	0	0	3	0	2	0	0	0	12
Uwharrie Street	Spencer Avenue	Albemarle Road		3	4	0	0	0	0	3	2	0	0	0	12
Peachtree Street	Salisbury Street	Oakland Avenue		0	4	3	0	0	0	0	0	3	2	0	12
N. Fayetteville Street	City Limits	ForeStreet Brook Circle		3	0	0	2	0	3	3	0	0	0	0	11
Elm Street	E. Pritchard Street	Brewer Street		3	0	3	0	0	0	0	0	3	2	0	11
Brewer Street	Greensbo ro Street	N Elm Street		0	0	3	0	0	0	3	0	3	2	0	11
Meadowbrook Road	E. Pritchard Street	Brewer Street		0	0	3	0	0	0	3	0	3	2	0	11
Greensboro	Burns Street	Pritchard Street		0	0	3	0	0	0	3	0	3	2	0	11

Street	*From*	*To*	One Side Existing	Public Comments	Proximity to school zones (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Crashes (2 crashes or >=3 crashes 2001-2006)	Small gaps (<1,000 ft)	Road type (arterial or collector)	Compatible land use (multi-family residential, commercial, downtown)	Curb and gutter existing	Census block with >15% of households without vehicles	Connectivity to existing sidewalk	Direct access to/from a proposed greenway	Score Total
Spero Road/W. Central Avenue	Fayettevill e Street	City Limits		0	0	3	0	0	3	3	0	0	0	1	10
Frank Street	Watkins Street	Loach Street		0	0	3	0	0	0	3	0	3	0	0	9
Lexington Road	Westwoo d Drive	City Limits		0	0	3	0	0	3	0	2	0	0	0	8
E. Pritchard Street	N. Fayettevill e Street	City Limits		0	0	3	0	0	0	0	0	3	2	0	8
New Bern Avenue	Zoo Parkway	Northhampt on Drive		3	4	0	0	0	0	0	0	0	0	0	7
Meadowbrook Road	Allred Street	E. Pritchard Street		3	0	3	0	0	0	0	0	0	0	0	6
E. Central Avenue	N. Fayettevill e Street	Old Liberty Road		0	0	3	0	0	0	3	0	0	0	0	6
Dublin Road	E. Dixie Drive	NC 42		3	0	3	0	0	0	0	0	0	0	0	6
W. Presnell Street	N. McCrary Street	Oakmont Drive		3	0	0	0	0	0	0	0	0	0	0	3
Shannon Road	Redding Road	E. Dixie Drive		0	0	3	0	0	0	0	0	0	0	0	3
Oakmont Drive	Edgewoo d Road	City Limits		0	0	0	0	0	0	0	0	0	0	0	0

A.2 INTERSECTIONS

Intersection Project Prioritization

The following suggested prioritization factors have been weighted and will influence the prioritization of **intersection** projects. The combined factors below can total a maximum of 27 points. Some factors have partial scoring, which is indicated in the descriptions.

Crashes (1 or >=2 pedestrian/vehicle or bicycle/vehicle crashes between 2001-2006 within 100 yards of the intersection)

- If the intersection has had 2 or more bicycle or pedestrian crashes between 2001-2006 within 200 yards of the intersection, the project will receive a score of 4 points. If there has been one crash in the same time period and distance, the project will receive a score of 2 points. The data is based on Asheboro Police Department records for 2001-2005 and the NCDOT Bicycle and Pedestrian Program for 2006.

ADA non-compliance

- If the intersection does not have any curb ramps or the existing curb ramps are not ADA compliant, the project receives a score of 3 points. If there is only one ramp that is non-ADA compliant, the project still receives a score of 3 points.

Presence of sidewalk (1 point for each corner of intersection)

- If the intersection has a sidewalk approaching from all four directions on both sides of the street, the project will receive a score of 4 points. In the case where a sidewalk approaches the intersection on one side of street B and on one side of street A and the sidewalk ends at the intersection, the project receives 2 points. If the sidewalk approaches the intersection on both sides of street B and both sides of street A and ends at the intersection, the project still receives only 2 points. If both sides of street B or street A have sidewalks through the intersection, then the project receives 2 points.

Condition of sidewalk

- If the intersection has a sidewalk and any of the sidewalks leading into the intersection are in poor condition, the project will receive a score of 3 points.

Road type (arterial or collector)

- Those projects that are at the intersection(s) of a roadway(s) that carries more than 3,000 average annual daily traffic (AADT), it will receive a score of 3 points – primarily arterial and collector streets. There are some streets that may be considered local, but carry more than 3,000 vehicles a day and will also receive a score of 3 points.

Proximity to school zones (within ½ mile of an elementary, middle or high school)

- The improvement receives a score of 4 points if the project lies within ½ mile of a school.

Proximity to parks and recreation (within ½ mile of a park)

- The improvement receives a score of 3 points if a portion of the project lies within ½ mile of a park or recreation facility. These facilities include all City parks, the YMCA, the Boys and Girls Club, the skate park and cemeteries.

Compatible land use (multi-family residential, commercial and central business)

- Projects that are along roadways abutting zoning that is either central business, commercial, multi-family residential or office/multi-family receive a score of 3 points.

Figure A.2 – Intersection Improvement Priority Matrix

Intersection Improvements	Crashes (1 crash or >=2 pedestrian or bicycle crashes between 2001-2006 within 100 yards of the intersection)	ADA non-compliant	Presence of sidewalk (1 point for each corner)	Condition of sidewalk (poor)	Road type (major road with high vehicle or pedestrian traffic)	Proximity to school (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Compatible land use (multi-family residential, commercial and central business)	Score Total
Project Location	*4*	*3*	*4*	*3*	*3*	*4*	*3*	*3*	*27*
N. Fayetteville Street & MacArthur Avenue	4	3	4	3	3	4	3	3	27
Park Street & Wainman Avenue	4	0	4	3	3	4	3	3	24
E. Kivett Street & S. Cox Street	4	0	3	3	3	4	3	3	23
Sunset Avenue & Park Street	2	0	4	3	3	4	3	3	22
Sunset Avenue & Fayetteville Street	4	0	4	0	3	4	3	3	21
Park Street & Lanier Avenue	0	3	2	3	3	4	3	3	21
Park Street & Walker Avenue	4	0	3	0	3	4	4	3	21
Foust Street & White Oak Street	4	3	0	0	3	4	3	3	20
W. Salisbury & Church Street	0	0	3	3	3	4	3	3	19
W. Salisbury & Park Street	2	0	3	0	3	4	3	3	18
E. Salisbury Street & High Street	2	3	0	0	3	4	3	3	18
E. Salisbury Street & Elm Street	2	3	0	0	3	4	3	3	18
Kivett Street & S. Fayetteville Street	2	0	2	0	3	4	3	3	17
Park Street & Dixie Drive	4	0	0	0	3	4	3	3	17
Church Street & Wainman Avenue	0	0	4	0	3	4	3	3	17
N. Fayetteville Street & Presnell Street	2	0	2	3	3	4	0	3	17
W. Salisbury/Lexington Road & US 220 Bypass	0	3	1	3	3	0	3	3	16
N. Fayetteville Street & W. Strider Street	2	0	0	0	3	4	3	3	15
W. Ward Street & Ross Street	2	3	0	0	0	4	3	3	15

Project Location	Crashes (1 crash or >=2 pedestrian or bicycle crashes between 2001-2006 within 100 yards of the intersection)	ADA non-compliant	Presence of sidewalk (1 point for each corner)	Condition of sidewalk (poor)	Road type (major road with high vehicle or pedestrian traffic)	Proximity to school (within ½ mile of an elementary, middle or high school)	Proximity to parks and recreation (within ½ mile of a park)	Compatible land use (multi-family residential, commercial and central business)	Score Total
S. Cox/Zoo Parkway & Dixie Drive	0	3	0	0	3	3	3	3	15
E. Salisbury Street & Coleridge Street	2	3	0	0	3	0	3	3	14
W. Kivett Street & Lee Street	4	3	0	0	0	4	3	0	14
NC 42 & Dixie Drive	4	0	0	0	3	0	3	3	13
Dublin Road/Browers Chapel Road & Dixie Drive	4	0	0	0	3	0	3	3	13
Presnell Street & White Oak Street	0	0	0	0	3	4	3	3	13
N. Fayetteville Street & Bailey Street	2	0	0	0	3	4	0	3	12
Spencer Avenue & Macon Street	2	3	0	0	0	4	3	0	12
Old Cedar Falls Road & Glovinia Street	4	0	2	0	0	0	3	3	12
E. Salisbury Street & Rock Crusher Road	2	3	0	0	3	0	0	3	11
E. Dorsett Avenue & Cox Street	0	0	0	0	0	4	3	3	10
N. Fayetteville Street & Forestbrook Circle	4	0	0	0	3	0	0	3	10
Cliff Road & Dixie Drive	0	0	0	0	3	0	3	3	9
Old Cedar Falls Road & Woodlawn Street	2	0	1	0	0	0	3	3	9
Arrow Wood Road & Dixie Drive	2	0	0	0	3	0	0	3	8
E. Pritchard Street & Meadowbrook Road	2	3	0	0	0	0	3	0	8
Park Road/Presnell Street & US 220 Bypass	0	3	0	0	3	0	0	0	6
Hub Morris Road & Old Liberty Road	2	3	0	0	0	0	0	0	5

A.3 MAINTENANCE INVENTORY

The following maintenance inventory was completed in the summer of 2005. Sidewalk sections that are highlighted are in the bottom 25% for sidewalk condition.

Street	Direction	Start	End	Linear Feet	Replace/Maint (ft)	Total Impaired (%)
S. Park	east	Hill	Sunset	501	115	23
S. Park	east	Wainman	Hill	848	375	44.2
S. Park	east	Holly	Wainman	374	175	46.8
S. Park	east	Holly	Kivett	337	155	46
S. Park	east	Kivett	Lanier	390	165	42.3
S. Park	east	Lanier	Armfield	1177	630	53.5
S. Park	east	Cooper	Armfield	830	365	44
S. Park	east	Taft	Cooper	580	165	28.4
S. Park	east	Walker	Taft	569	120	21.1
S. Park	east	Walker	Dixie	592	0	0
S. Park	west	Sunset	Home	805	315	39.1
S. Park	west	Home	Wainman	536	175	32.6
S. Park	west	Wainman	Holly	375	110	29.3
S. Park	west	Holly	Kivett	337	75	22.2
S. Park	west	Kivett	Spencer	1791	550	30.7
S. Park	west	Cooper	Spencer	631	160	25.4
S. Park	west	Walker	S. of LGCU	522	60	11.5
S. Park	west	Walker	Dixie	835	50	6
N. Park	east	Hoover	Sunset	469	50	10.7
N. Park	east	W. Salisbury	Hoover	526	240	45.6
N. Park	west	Sunset	Hoover	465	65	14
N. Park	west	Hoover	Salisbury	528	200	37.9
W. Walker	south	S. Park	S. Church	725	20	2.8
W. Walker	north	S. Church	S. Park	725	40	5.5
Holly	north	S. Park St.	Driveway	249	45	18.1
Holly	north	S. Park St.	End (west)	188	30	16
Holly	south	sidewalk end	E. of S. Park	138	30	21.7
Armfield	north	Bryan	S. Park	380	30	7.9
Kivett	south	S. Park St.	end	289	60	20.8
W. Kivett	south	E. Hanover	end	519	145	27.9
Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**
N. Church	west	Hoover	W. Salisbury	413	45	10.9
N. Church	west	Sunset	Hoover	452	10	22.1
N. Church	east	W. Salisbury	Sunset	845	205	24.3
S. Church	east	Sunset	W. Academy	863	250	29
S. Church	east	W. Academy	W. Wainman	471	75	15.9
S. Church	east	Holly	W. Wainman	391	70	17.9
S. Church	east	Kivett	Holly	305	40	13.1

S. Church	east	Lanier	Kivett	404	35	8.7
S. Church	east	Armfield	Lanier	1133	155	13.7
S. Church	east	Cooper	Armfield	349	50	14.3
S. Church	east	Caspn	Cooper	468	40	8.5
S. Church	east	Taft	Caspn	592	170	28.7
S. Church	east	W. Walker	Taft	580	60	10.3
S. Church	west	Hill	Sunset	450	50	11.1
S. Church	west	Freedom	Hill	632	165	26.1
S. Church	west	W. Wainman	Freedom	263	45	17.1
S. Church	west	Lanier	Armfield	1132	0	0
S. Church	west	Armfield	Cooper	404	30	7.4
S. Church	west	Cooper	Taft	1000	60	6
S. Church	west	Taft	W. Walker	575	100	17.4
S. Church	west	W. Walker	W. Dorsett	235	65	27.7
Armfield	north	S. Church	Bryan	345	0	0
Hammer	west	Caspn	end	342	30	8.8
Caspn	north	S. Church	Hammer	298	25	8.4
W. Dorsett	south	S. Church	S. Fayett.	460	75	16.3
E. Dorsett	north	S. Fayette.	End (East)	353	50	14.2
Wainman	north	S. Church	S. Fayette.	794	140	17.6
Wainman	south	S. Park	S. Church	927	145	15.6
Wainman	north	S. Church	Independ.	342	80	23.4
Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**
Freedom	south	Independ.	S. Church	303	35	11.6
Freedom	north	Wesley	Independ.	266	75	28.2
Freedom	north	S. Church	Wesley	236	40	16.9
Wesley	east	Freedom	end	180	10	5.6
Wesley	west	Freedom	end	213	30	14.1
Starr	Start north	Independ.	Loops to W.	481	55	11.4
Independ.	west	Freedom	Starr	656	105	16
Independ.	east	Freedom	Starr	764	10	1.3
Independ.	east	Wainman	Freedom	192	30	15.6
Independ.	west	Starr	Wainman	333	20	6
S. Fayette.	west	W. Academy	Sunset	831	220	26.5
S. Fayette.	west	W. Academy	W. Wainman	480	170	35.4
S. Fayette.	west	W. Wainman	W. Kivett	690	190	27.5
S. Fayette.	west	Kivett	Lanier	422	105	24.9
S. Fayette.	west	Lanier	Birkhead	814	185	22.7
S. Fayette.	east	Worth	Scarboro	394	180	45.7
S. Fayette.	east	Scarboro	Cranford	214	50	23.4

S. Fayette.	east	Cranford	E. Academy	376	55	14.6
S. Fayette.	east	E. Academy	E. Wainman	613	235	38.3
S. Fayette.	east	E. Kivett	E. Wainman	560	95	17
S. Fayette.	east	Bulla	E. Kivett	955	365	38.2
S. Fayette.	east	Bulla	End (T. Tire)	475	145	30.5
Scarboro	north	S. Cox	S. Fayette.	651	125	19.2
Scarboro	south	S. Fayette.	S. Cox	364	95	26.1
Cranford	north	S. Fayette.	end	122	50	41
MacArthur	north	N. Fayette.	White Oak	690	40	5.8
MacArthur	south	White Oak	N. Fayette.	697	320	45.9
Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**
Bulla	south	S. Fayette.	S. Cox	226	226	100
Bulla	north	S. Cox	S. Fayette.	226	5	2.2
N. Fayette.	west	Sunset	Trade	145	35	24.1
N. Fayette.	west	Trade	W. Salisbury	640	220	34.4
N. Fayette.	west	W. Ward	W. Salisbury	795	180	22.6
N. Fayette.	west	W. Ward	MacArthur	288	145	50.3
N. Fayette.	west	MacArthur	Miller	824	330	40
N. Fayette.	west	Miller	W. Presnell	682	360	52.8
N. Fayette.	west	Liberty	W. Presnell	447	315	70.5
N. Fayette.	east	E. Salisbury	Worth	618	145	23.5
N. Fayette.	east	E. Salisbury	E. Ward	635	190	29.9
N. Fayette.	east	E. Ward	Burns	680	345	50.7
N. Fayette.	east	Miller	Burns	622	220	35.4
N. Fayette.	east	Betts	Miller	384	155	40.4
N. Fayette.	east	E. Presnell	Betts	277	10	3.6
N. Fayette.	east	E.Presnell	Pritchard	879	255	29
North St.	east	Trade	W. Salisbury	658	305	46.4
North St.	west	W. Salisbury	Sunset	805	230	28.6
North St.	east	Sunset	Trade	148	15	10.1
Trade	north	North St.	N. Fayette.	335	95	28.4
Trade	south	N. Fayette.	North St.	342	165	48.2
Miller	south	White Oak	N. Fayette.	538	20	3.7
E. Ward	south	N. Fayette.	end	272	95	34.9
White Oak	east	W. Salisbury	W. Ward	837	115	13.7
Ross	east	Foust	W. Presnell	1133	170	15
Foust	north	N. Church	Ross	622	75	12.1
Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**

W. Salisbury	north	N. Fayette.	RR Track	711	55	7.7
W. Salisbury	north	White Oak	Ross	600	225	37.5
W. Salisbury	north	Ross	Endpoint	105	25	23.8
W. Salisbury	north	N. Cherry	US 220	717	195	27.2
W. Salisbury	south	North	N. Fayette.	396	15	3.8
W. Salisbury	south	N. Church	North St.	517	125	24.2
W. Salisbury	south	N. Park	N. Church	1092	485	44.4
W. Salisbury	south	N. Park	N. Cherry	1330	625	47
W. Salisbury	south	McCrary	N. Cherry	606	355	58.6
W. Salisbury	south	McCrary (S.)	McCrary (N.)	88	0	0
McCrary	west	Sunset	end (Hoover)	514	80	15.6
Sunset	south	S. Park	S. Church	1030	345	33.5
Sunset	south	Dixon	S. Park	508	215	42.3
Sunset	south	Cherry	Dixon	921	205	22.2
Sunset	south	S. McCrary	Cherry	603	375	62.2
Sunset	south	Spring Gdn.	McCrary	440	255	58
Sunset	south	Farmer	Spring Gdn.	221	50	22.6
Sunset	north	S. Church	Davis	575	75	13
Sunset	north	Davis	N. Park	460	105	22.8
Sunset	north	N. Park	Memorial	1174	425	36.2
Sunset	north	Memorial	N. Cherry	239	155	64.9
Sunset	north	N. Cherry	N. McCrary	617	425	68.9
Sunset	north	N. McCrary	US 220	683	145	21.2
N. Cherry	west	W. Salisbury	end	875	395	45.1
Hoover	south	Davis	N. Church	600	170	28.3
Hoover	north	N. Church	N. Park	1064	355	33.4
Hoover	south	N. Park	Davis	459	90	19.6
Hoover	north	Wesleyan	End	458	170	37.1
Davis	east	Hoover	Sunset	462	0	0
Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**
E. Salisbury	north	N. Fayette.	N. Cox	684	215	31.4
E. Salisbury	north	N. Main	N. Cox	619	120	19.4
E. Salisbury	north	begin Nr Elm	N. Main	533	255	47.8
E. Salisbury	south	N. Fayette.	N. Cox	682	240	35.2
E. Salisbury	south	N. Cox	N. Main	630	140	22.2
E. Salisbury	south	N. Main	McAlister	603	220	36.5
E. Salisbury	south	McAlister	N.Elm	231	135	58.4
MLK Jr. Dr.	north	Dunlap	E. Salisbury	401	65	16.2
MLK Jr. Dr.	north	Watkins	Dunlap	267	45	17
MLK Jr. Dr.	north	Cross	Watkins	1110	265	23.9
MLK Jr. Dr.	north	Loach	Cross	447	110	24.6
MLK Jr. Dr.	north	Harrison	Loach	110	30	27.3

MLK Jr. Dr.	north	Cedar Falls	Harrison	242	85	35.1
Cedar Falls	north	Glovinia	MLK Jr. Dr.	398	115	28.9
Cedar Falls	north	Glovinia	Woodlawn	388	75	19.3
Glovinia	north	Brewer	Cedar Falls	736	175	23.8
Loach	west	Cross	Brewer	955	185	19.4
Loach	west	Presnell	Cross	325	40	12.3
Brewer	south	Dunlap	N. Elm	545	170	31.2
Brewer	south	Watkins	Dunlap	200	80	40
Brewer	south	Watkins	Cross	1044	315	30.2
Brewer	south	Cross	Loach	443	245	55.3
Brewer	south	Loach	Spring	370	60	16.2
Brewer	south	Spring	Glovinia	338	90	26.6
Brewer	south	Glovinia	Woodlawn	343	75	21.9
Brookside	north	N. Main	N. Elm	918	520	56.6

Street	**Direction**	**Start**	**End**	**Linear Feet**	**Replace/Maint (ft)**	**Total Impaired (%)**
E. Presnell	south	Vance	Loach	617	120	19.4
E. Presnell	north	Tipton	end	274	60	21.9
E. Presnell	north	Farr	Tipton	283	15	5.3
Vance	east	Presnell	End	156	70	44.9
Farr	west	Presnell	Tipton	683	85	12.4
Farr	east	Pritchard	Tipton	751	80	10.7
Farr	west	Tipton	Pritchard	265	30	11.3
Tipton	west	E. Presnell	Tabor	295	80	27.1
Tipton	east	Farr	E. Presnell	906	160	17.7
Tipton	west	Tabor	Farr	683	125	18.3
Tabor	Starts north	Tipton	end (south)	961	250	26
Kemp	south	Coleridge	end	460	20	4.3
Kemp	north	Coleridge	end	560	30	5.4
Coleridge	east	E. Salisbury	Kemp	788	65	8.2
Coleridge	east	Kemp	MLK Jr. Dr.	505	60	11.9
E. Academy	north	S. Fayette.	S. Cox	632	210	33.2
E. Academy	north	S. Cox	S. Main	610	205	33.6
E. Academy	south	S. Cox	S. Fayette.	625	120	19.2
E. Academy	south	S. Main	S. Cox	617	280	45.4
N. Main	west	E. Salisbury	Worth	618	295	47.7

N. Main	west	Worth	E. Academy	947	635	67.1
S. Main	west	E. Academy	end	507	55	10.8
N. Main	east	E. Salisbury	Worth	610	455	74.6
S. Main	east	Worth	Marmaduke	370	200	54
S. Main	east	S. Elm	Marmaduke	430	255	59.3
S. Main	east	S. Elm	end	173	70	40.5

Street	Direction	Start	End	Linear Feet	Replace/Maint (ft)	Total Impaired (%)
S. Elm	west	Worth	S. Main	1397	780	55.8
S. Elm	east	Cliff	Worth	668	415	62.1
S. Elm	east	S. Main	Cliff	808	405	50.1
N. Randolph	west	Worth	E. Salisbury	555	195	35.1
N. Randolph	west	Cliff	Worth	924	465	50.3
S. Randolph	west	Cliff	End (go S.)	287	145	50.5
S. Randolph	east	E. Salisbury	Worth	552	240	43.5
S. Randolph	east	Worth	Cliff	955	495	51.8
S. Randolph	east	Cliff	Redding	1015	180	17.7
Cliff	west	S. Elm	S. Randolph	429	125	29.12
Cliff	west	Redding	S. Randolph	1034	270	26.1
Cliff	west	Kivett	Redding	456	130	28.5
Redding	north	Glenwood	End(nr Cliff)	295	25	8.5
Worth	north	N. Cox	N. Fayette.	671	105	15.6
Worth	north	N. Main	N. Cox	622	55	8.8
Worth	north	McAlister	N. Main	608	110	18.1
Worth	north	Elm	McAlister	250	40	16
Worth	north	Randolph	Elm	455	80	17.6
Worth	north	Randolph	High	422	90	21.3
Worth	south	S. Fayette.	S. Cox	672	110	16.4
Worth	south	S. Cox	S. Main	620	290	46.8
Worth	south	S. Main	S. Elm	860	415	48.3
Worth	south	S. Elm	S. Randolph	452	160	35.4
Worth	south	S. Randolph	High	435	95	21.8

Street	Direction	Start	End	Linear Feet	Replace/Maint (ft)	Total Impaired (%)
N. Cox	east	N. Main	end @314	670	80	11.9
N. Cox	east	E. Salisbury	end	136	55	40.4
N. Cox	east	Worth	E. Salisbury	615	190	30.9
S. Cox	east	Worth	E. Academy	946	310	32.3
S. Cox	east	E. Wainman	E. Academy	678	305	45

S. Cox	east	E. Kivett	E. Wainman	542	145	26.8
S. Cox	east	E. Kivett	S. Main	1120	495	44.2
S. Cox	east	Rich	S. Main	560	280	50
S. Cox	east	Stowe	Rich	1015	245	24.1
N. Cox	west	E. Salisbury	end	208	50	24
N. Cox	west	E. Salisbury	Worth	640	20	3.1
S. Cox	west	Academy	E. Wainman	642	10	1.6
S. Cox	west	E. Wainman	E. Kivett	574	95	16.6
S. Cox	west	Bulla	E. Kivett	972	165	17
S. Cox	west	Bulla	Oakdale	1735	650	37.5
E. Kivett	south	S. Cox	S. Main	603	215	35.7
Morgan	begin west	west begin	east end	850	250	29.4
Newbern	north	Teachey	Bray	639	80	12.5

Statistics

Total Impaired (%)

N	Valid		235
	Missing		1
Mean			27.05
Median			24.1
Std. Deviation			16.783
Variance			281.682
Percentiles		25	15
		50	24.1
		75	37.5

APPENDIX B: PEDESTRIAN USER SURVEY RESULTS

The Asheboro Pedestrian Planning Process involved a survey of pedestrian issues for City residents. The survey was conducted between February and April of 2007. The survey was mailed to churches and civic organizations, City employees, distributed via email and available in both paper and electronic format at key locations. There were 332 responses collected when the survey closed on April 20th, 2007. The following responses will be incorporated into the Pedestrian Plan and will shape the priorities of recommended projects.

Results

1. How important to you is the goal of creating a walkable community? (select one)

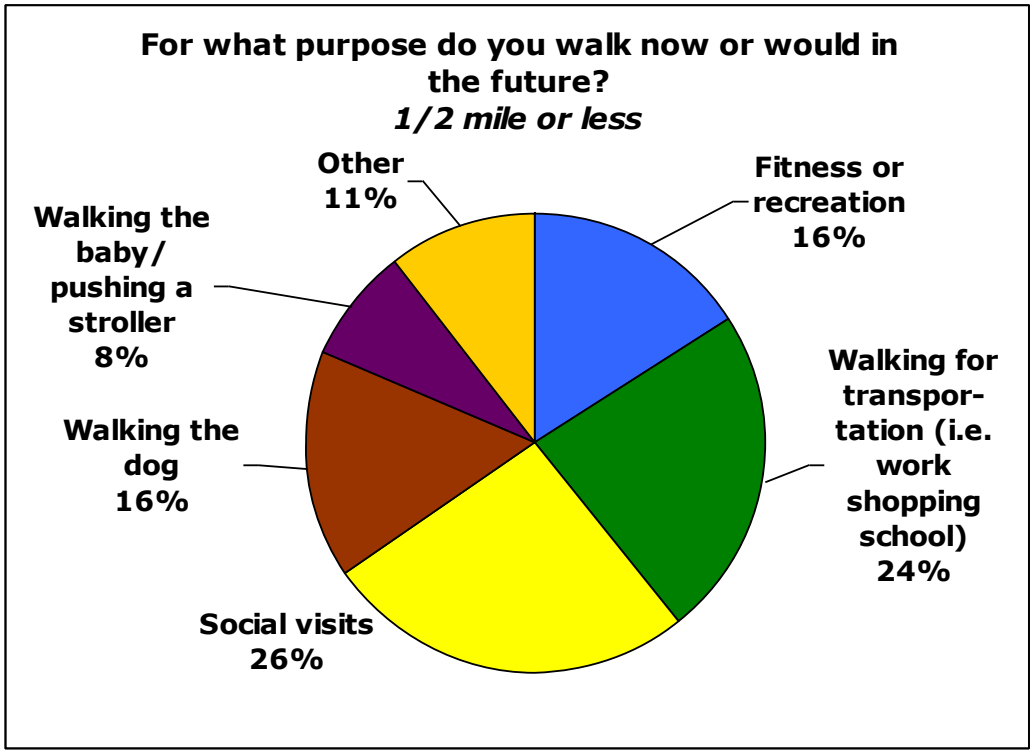
	Response Total
Very Important	154
Important	111
Somewhat Important	49
Not Important	14
Total Respondents	328
(skipped this question)	4

2. How often do you walk now? (select one)

	Response Total
5+ times per week	76
Few times per week	133
Few times per month	94
Never	23
Total Respondents	326
(skipped this question)	6

3. For what purpose do you walk now? If you do not walk now for what purpose would you walk in the future? Please also include the distance. (select all that apply)

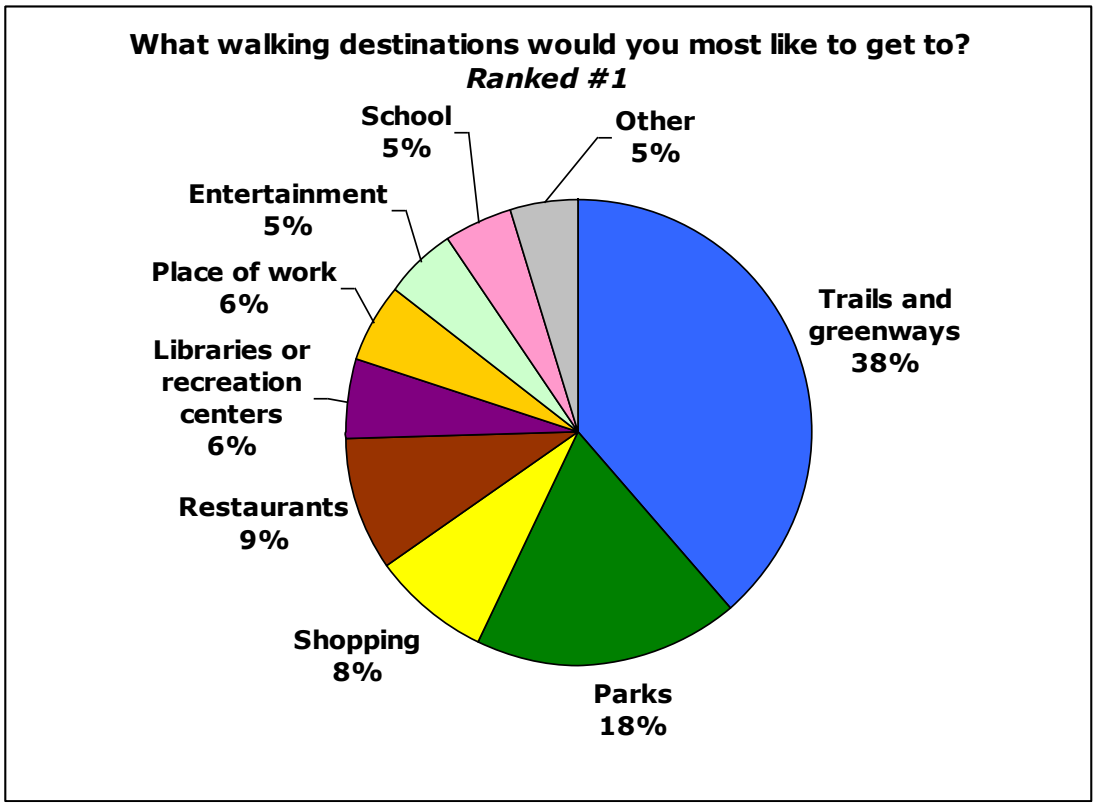
	< 1/4 mile	1/4 to 1/2 mile	1/2 to 1 mile	> 1 mile	Response Total
Fitness or recreation	22	28	61	165	275
Walking for transportation (i.e. work shopping school)	49	24	21	16	109
Social visits	44	37	19	12	111
Walking the dog	30	21	32	27	110
Walking the baby/pushing a stroller	16	9	14	13	52
Other	19	14	11	18	62
Total Respondents	314				
(skipped this question)	18				


For what purpose do you walk now or would in the future?
1/2 mile or less
Other 11%
Fitness or recreation 16%
Walking the baby/ pushing a stroller 8%
Walking for transpor-tation (i.e. work shopping school) 24%
Walking the dog 16%
Social visits 26%


For what purpose do you walk now or would in the future?
1/2 mile or more
Walking the baby/ pushing a stroller 8%
Other 7%
Walking the dog 14%
Social visits 8%
Fitness or recreation 55%
Walking for transpor-tation (i.e. work shopping school) 7%

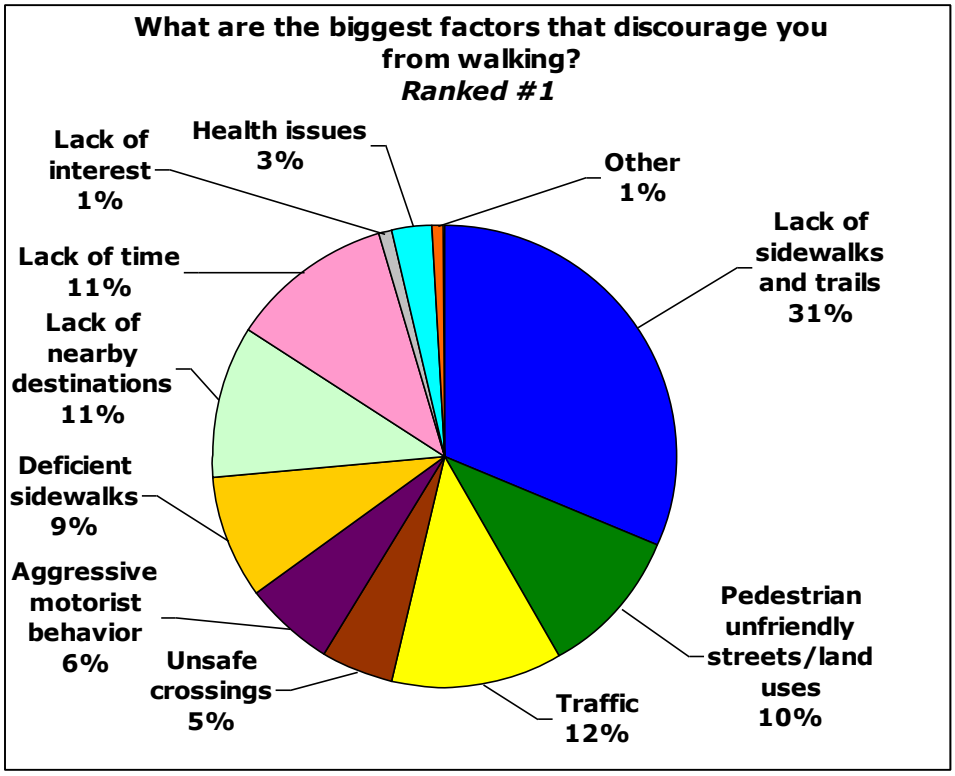
4. What walking destinations would you most like to get to? (Please rank your top 5 1 being most and 5 being least)

	1	2	3	4	5	Response Average
Trails and greenways	89	37	22	9	26	2.16
Parks	42	63	22	26	21	2.55
Shopping	19	26	31	34	32	3.24
Restaurants	21	30	32	35	27	3.12
Libraries or recreation centers	13	12	57	27	22	3.25
Place of work	13	13	6	15	21	3.26
Entertainment	11	20	32	35	27	3.38
School	11	12	6	12	20	3.3
Other	11	1	3	1	4	2.3
Total Respondents	254					
(skipped this question)	78					



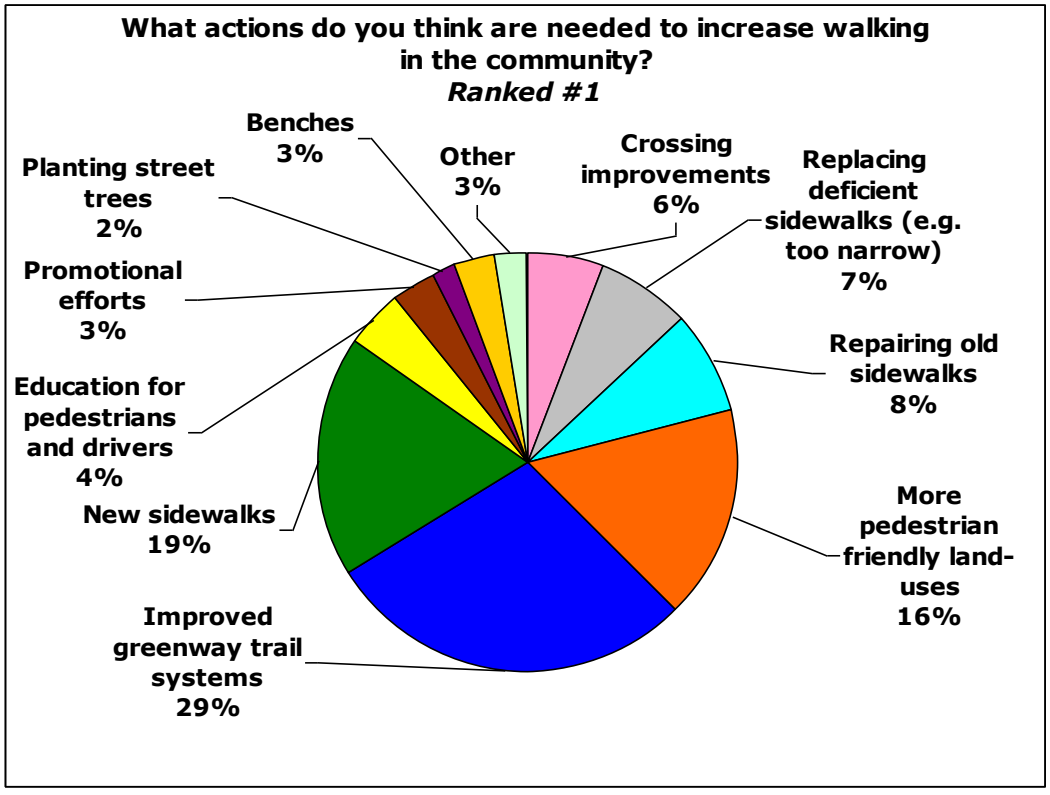
5. What are the biggest factors that discourage you from walking? (Please rank your top 5 1 most discouraging and 5 least discouraging)

	1	2	3	4	5	Response Average
Lack of sidewalks and trails	76	29	27	24	20	2.34
Pedestrian unfriendly streets/land uses	25	42	39	29	17	2.81
Traffic	29	31	39	19	22	2.81
Unsafe crossings	12	25	22	27	19	3.15
Aggressive motorist behavior	15	17	19	27	25	3.29
Deficient sidewalks	21	29	22	22	22	2.96
Lack of nearby destinations	26	16	24	31	24	3.09
Lack of time	27	16	9	9	21	2.77
Lack of interest	2	5	7	9	15	3.79
Health issues	7	1	3	3	9	3.26
Other	2	3	1	2	5	3.38
Total Respondents	256					
(skipped this question)	76					



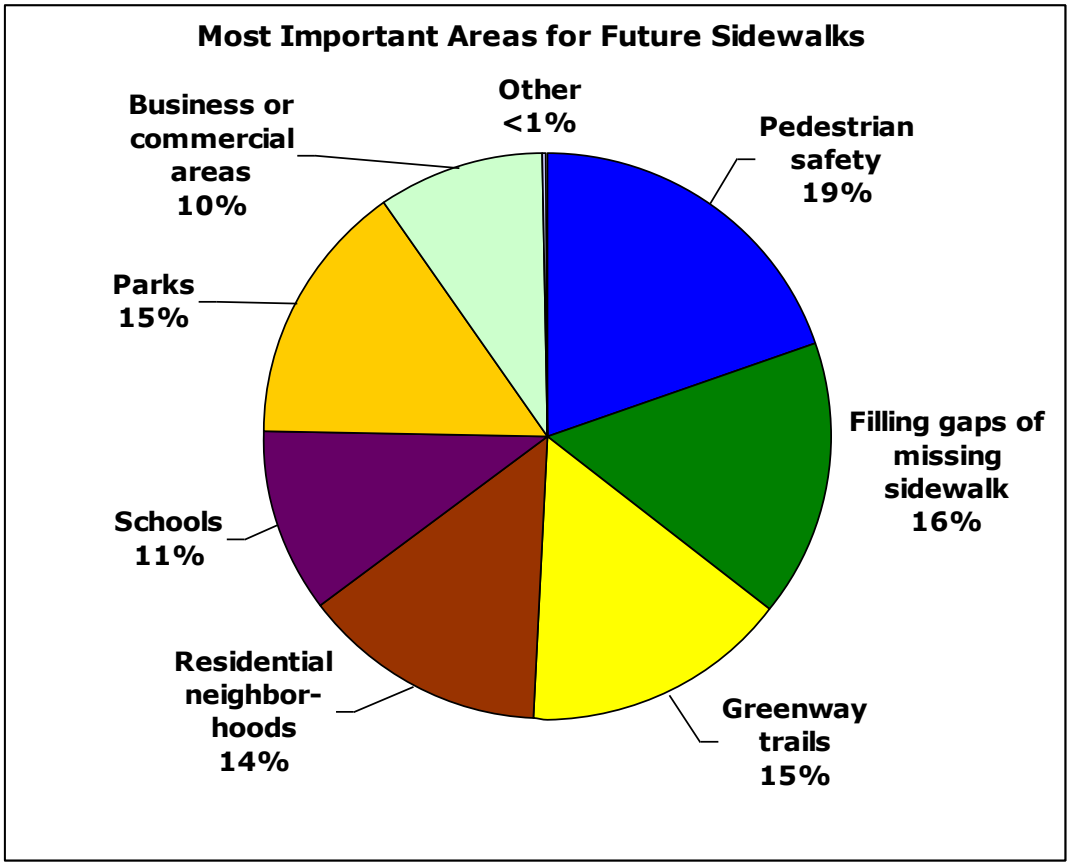
6. What actions do you think are the most needed to increase walking in the community? (Please rank your top 5 1 most needed and 5 least needed)

	1	2	3	4	5	Response Average
Crossing improvements	14	21	26	33	25	3.29
Replacing deficient sidewalks (e.g. too narrow)	17	30	26	25	26	3.1
Repairing old sidewalks	19	32	26	21	26	3.02
More pedestrian friendly land-uses	39	34	48	25	16	2.66
Improved greenway trail systems	68	29	20	17	18	2.26
New sidewalks	44	32	25	31	21	2.69
Education for pedestrians and drivers	10	9	12	15	14	3.23
Promotional efforts	8	8	14	16	16	3.39
Planting street trees	5	8	14	11	12	3.34
Benches	7	12	9	15	24	3.55
Other	6	3	1	1	7	3
Total Respondents	252					
(skipped this question)	80					



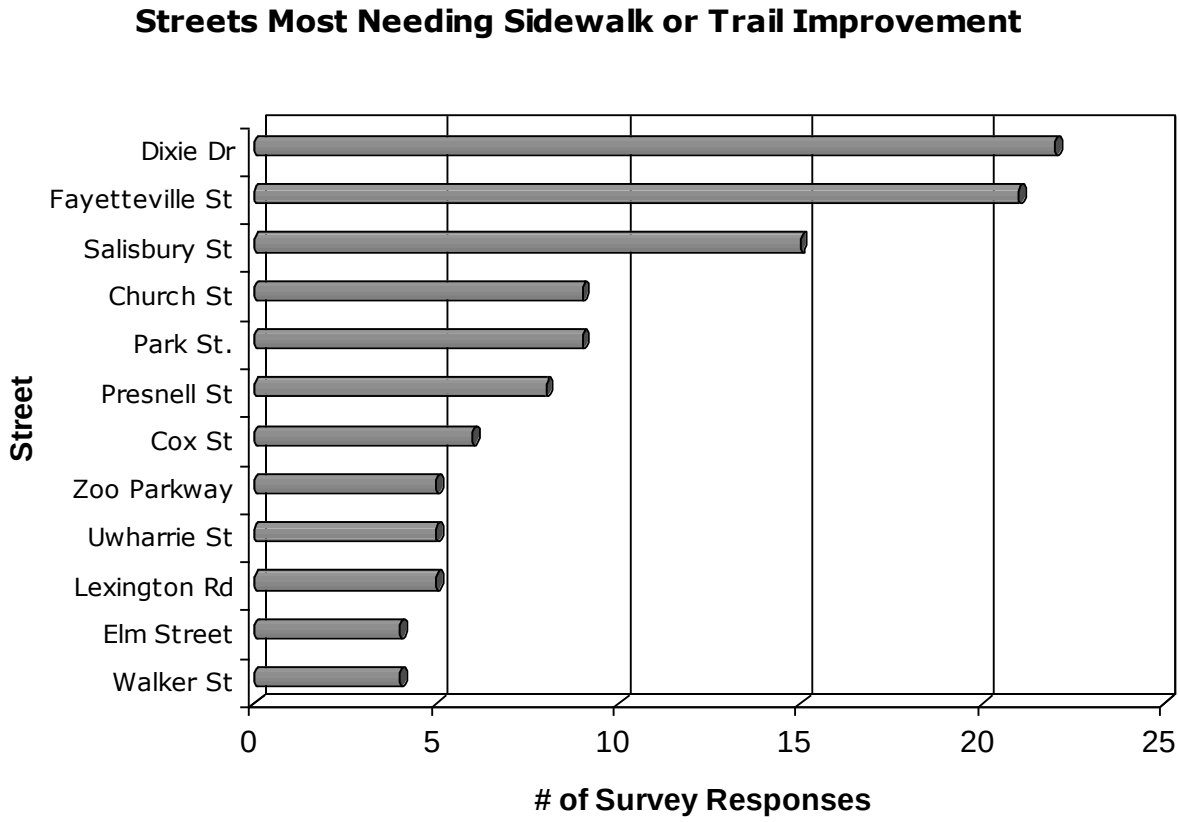
7. What should be the most important considerations in determining areas to develop future sidewalks? (select all that apply)

	Response Total
Pedestrian safety	174
Filling gaps of missing sidewalk	139
Greenway trails	135
Residential neighborhoods	123
Schools	93
Parks	132
Business or commercial areas	84
Other	3
Total Respondents	254
(skipped this question)	78



8. What do you think are the top roadway corridors most needing sidewalk or trail improvements? Please be specific include cross streets or landmarks where possible. *Example: Maple Street from the Community Center to the First Baptist Church just past Oak Street or Church Street from Main Street to Elm Street*

Total Respondents	134
(skipped this question)	198



9. To help us better understand the information we receive please include the neighborhood in which you live. If you do not know the neighborhood please tell us what street you live on.

	Response Total
Neighborhood	102
Street	132
Outside Asheboro	99
Total Respondents	250
(skipped this question)	82

Public Meeting Questionnaire

1. Do you support the use of the City's public money for expenditure on sidewalks?

9 - Yes 0 - No

2. What services should be a top priority for City expenditures? (rank for each, 1 highest and 4 lowest)

City Services	Rank and Number of Votes Per Rank			
	1	2	3	4
Economic Development (e.g. grants for business and Development)	2	2	3	3
Parks and Recreation (i.e. trails, greenways, recreation fields, etc.)	2	5	2	1
Public Infrastructure (i.e. street maintenance, sidewalks, water and sewer extensions)	4	4	1	1
Police and fire protection	3	4	2	1

3. Please list suggested PROGRAMS, POLICIES or PROJECTS you think should be instituted as a result of this Pedestrian Planning Process. Please be specific when possible. Use the space provided below to answer and continue on the back page if necessary.

PROGRAMS – (e.g. community education and awareness program, community volunteer & involvement program; awards program; business façade/streetscape grant &/or loan program; street tree planting program, sidewalk installation & repair program; etc.)

Sidewalk repair program (4x)
Trees (3x)
Big Sweep
Landscaping for commercial areas
Continued land acquisition for open space
Greenway awareness program
Walking encouragement programs

POLICIES – (e.g. ordinances with sidewalk & open space requirements, landscaping and street trees, outdoor storage, setbacks & buffers, signage, parking, etc; review & amend the development review process, establish community appearance guidelines &/or policies; etc.)

Trees and buffers (2x)
Require sidewalks in new development (2x)
Require landscaping and minimum trees for parking lots
Sidewalks and cluster development with higher density incentives
Maintenance

PROJECTS – What are the top 2 or 3 pedestrian related projects you would like to see built in Asheboro? (e.g. creative sidewalk patterns downtown, pedestrian connections to the neighborhood school, sidewalks on a specific street, etc.). Please provide specifics with

intersecting streets and landmarks.

Connections where sidewalks end & gaps
Connections to neighborhood streets in the downtown (x2)
Dixie Drive
Salisbury to Highway 64 East
Highway 42 to Dublin Road
Park connections
Walking trail around the Asheboro Golf Course
Improvements around schools
Asheboro to Zoo Greenway (2x)
Improvements around Senior Housing
Gap closure on park, Church, Salisbury and Walker
Improvements around schools, especially Lindley Park, McCrary, Teachey
Greenway connections to Lake McCrary and Lake Lucas
Sidewalks along W. Balfour Avenue

APPENDIX C: REFERENCES

Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials (AASHTO) 1999
http://bookstore.transportation.org

Americans with Disabilities - Department of Justice
http://www.ada.gov/srchfoia.htm

Asheboro Sidewalk Maintenance Report, Evans, John
http://www.uncg.edu/~kgdebbag/index_files/Teaching.htm

Designing Sidewalks and Trails for Access
http://www.fhwa.dot.gov/environment/sidewalk2/pdf.htm

Graham, NC Pedestrian Plan, 2006

Manual of Uniform Traffic Control Devices, FHWA, 2003
http://mutcd.fhwa.dot.gov/

Mooresville, NC Pedestrian Plan, 2005

North Carolina Department Division of Bicycle and Pedestrian Transportation – Helpful Links
http://www.ncdot.org/transit/bicycle/safety/safety_links.html

Pedestrian and Bicycling Information Center - Developing Pedestrian Plans and Policies
www.walkinginfo.org/develop/

PEDSAFE – Pedestrian and Bicycling Information Center
www.walkinginfo.org/pedsafe/

Portland, OR Pedestrian Plan, 2005

Project for Public Spaces
www.pps.org

Root Barriers March 2002 *Horticulture Update*, Dr. Welch, William Extension Horticulture, Texas Cooperative Extension, The Texas A&M University System, College Station, Texas.
http://aggie-horticulture.tamu.edu/extension/newsletters/hortupdate/mar02/art3mar.html

Scenic America's Model Tree Ordinance http://www.scenic.org/tree/model_ordinance

"Street Designs that Support Walkable, Livable Communities" Zykofsky, Paul and Burden, Dan

"Visions for a New American Dream" Nelessen, Anton Clarence, p. 155

Walkability Checklist
www.walkinginfo.org/

APPENDIX D: ASHEBORO DEMOGRAPHIC ANALYSIS

Comparison Areas

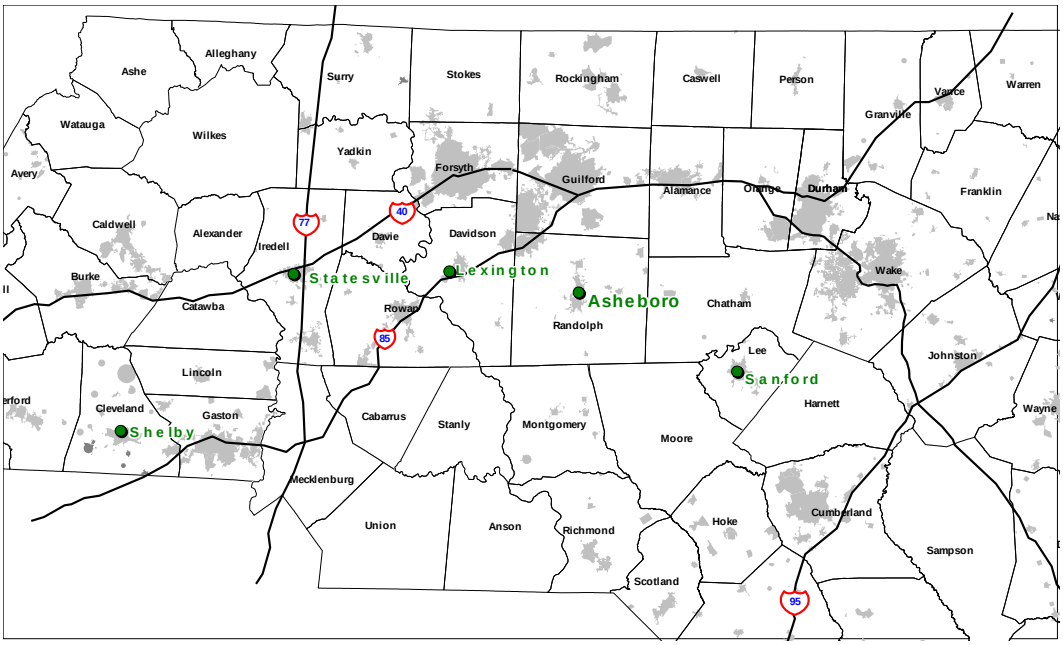
Four cities of similar size were selected as comparison areas to Asheboro. Sites were sought that would demonstrate contrast as well as similarities. The comparison cities selected include:

Lexington
Davidson County, NC
Population – 20,492
Approximate distance from Asheboro – 25 miles

Shelby
Cleveland County, NC
Population – 20,986
Approximate distance – 100 miles

Sanford
Lee County, NC
Population – 23,625
Approximate distance – 40 miles

Statesville
Iredell County, NC
Population –24,622
Approximate distance – 60 miles

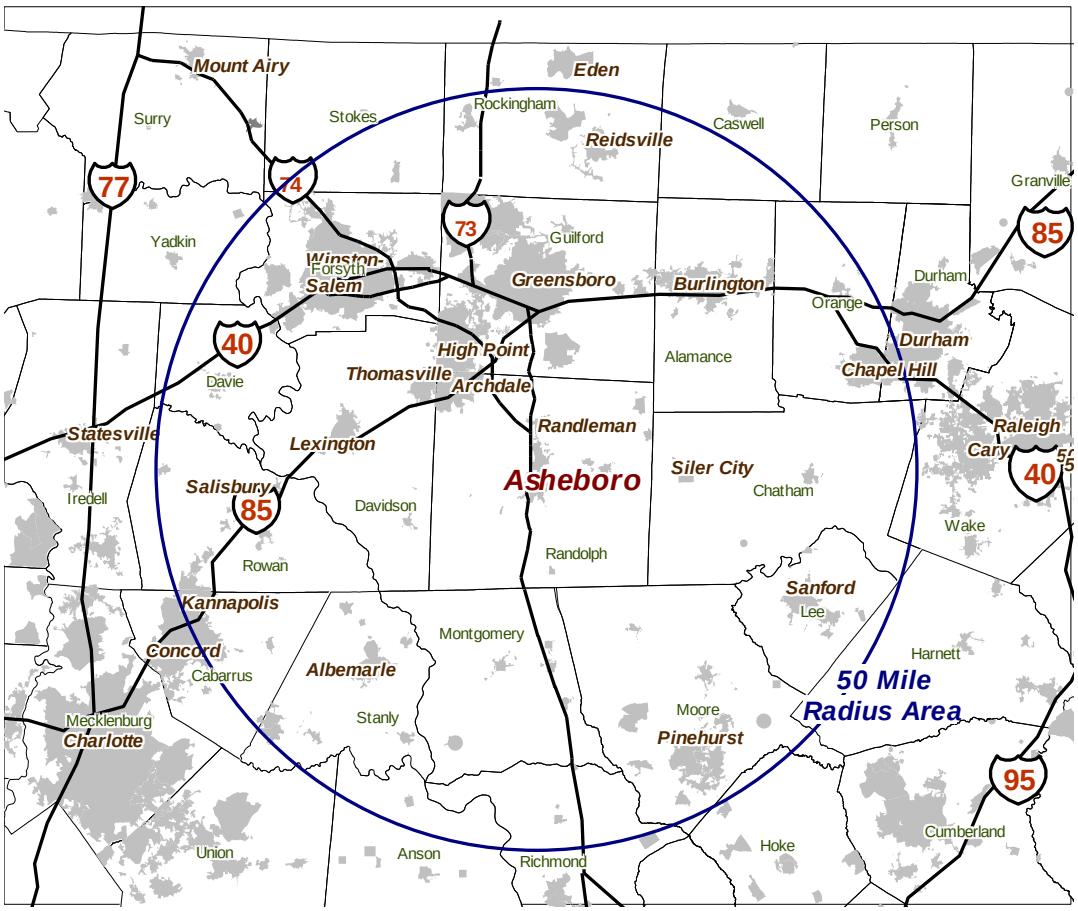


Population - General

Asheboro Population Quick Facts

Population – 23,213 (2005)
Population growth since 2000 – 1,037
Population annexed since 2000 – 169
Labor Force: 10,875
Growth rate this decade – 4.8%
Land Area – 16.17 square miles
Persons per square mile – 1,404.4
Median Household Income - $31,676

Asheboro is the 33rd largest city in NC with a population of 23,213 people. A quarter of a million people live within 20 miles of Asheboro, while 1.8 million people live within 50 miles of Asheboro.



Population - Area & Density

Figure D.1 - Population and Land Area

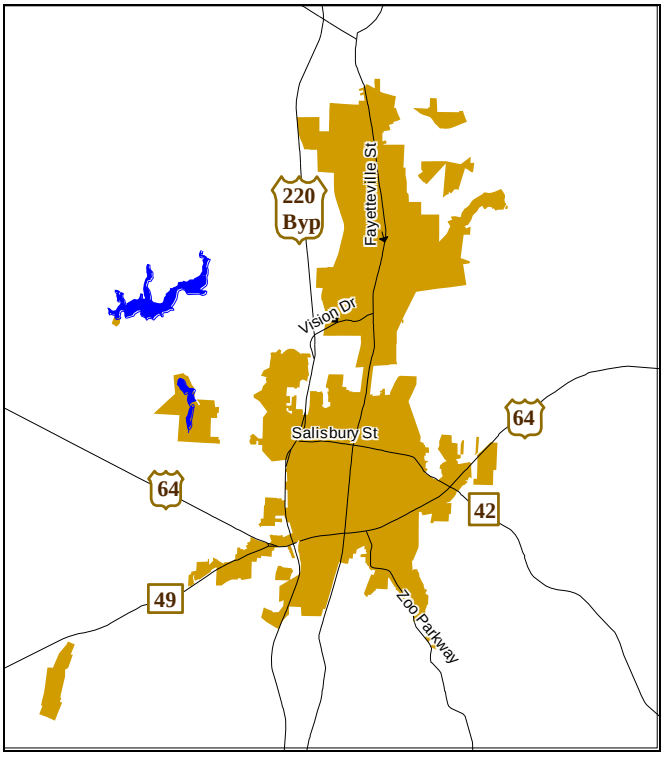
	Population	Land Area	Persons per Square Mile
Asheboro	22,709	16.170	1404.39
Lexington	20,492	17.716	1156.69
Sanford	23,625	24.771	953.74
Shelby	20,986	20.412	1028.12
Statesville	24,622	20.663	1191.60

Source: NC Office of State Planning, 2003 Estimates, released in the fall of 2004.

Although the comparison areas were chosen because each had similar population sizes, Asheboro has the smallest land area of the comparison areas. Asheboro has the highest population density among the comparison areas.

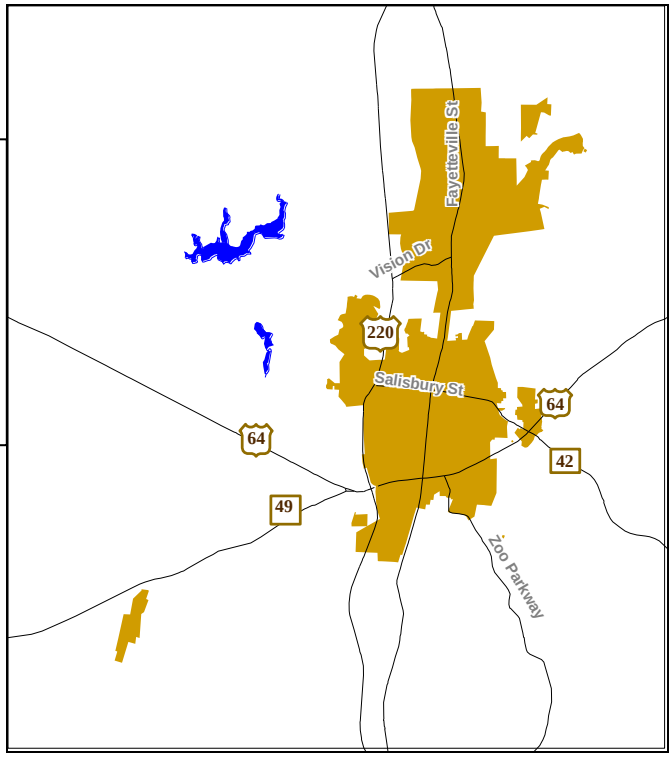
In terms of contiguous land area, Asheboro runs about 8½ miles north to south and about 3½ miles east to west at its widest point (not including several non-contiguous annexed areas). The city is strongly defined by US Highway 220 running north to south. However, since the early 1990's, the city has seen more growth in the areas immediately surrounding US Highway 64 and Highway 49 running from east to west within the city

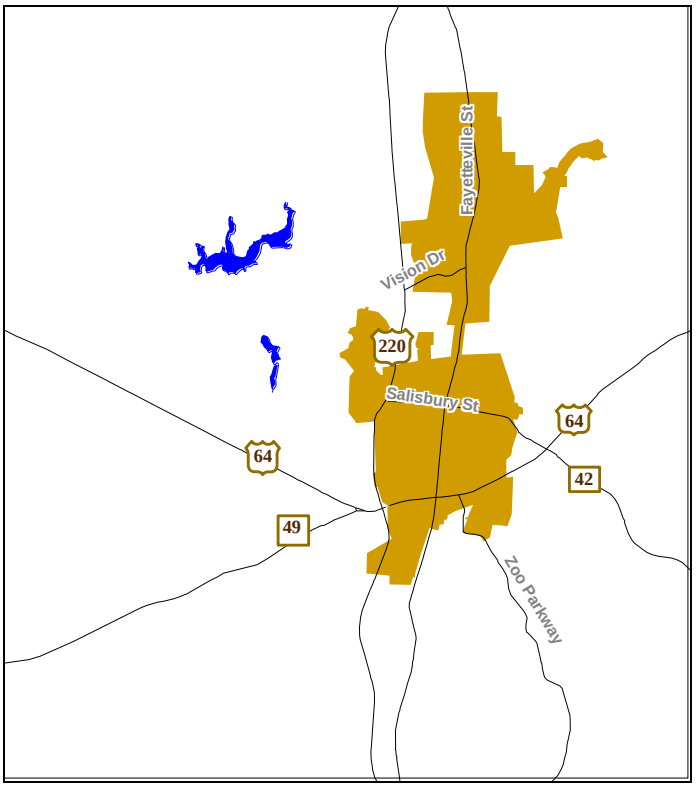
Figure D.2 - Maps showing changes in Asheboro's land area and density over the past 50 years



City Limits
2003
16.17 square miles
1404 people per square mile

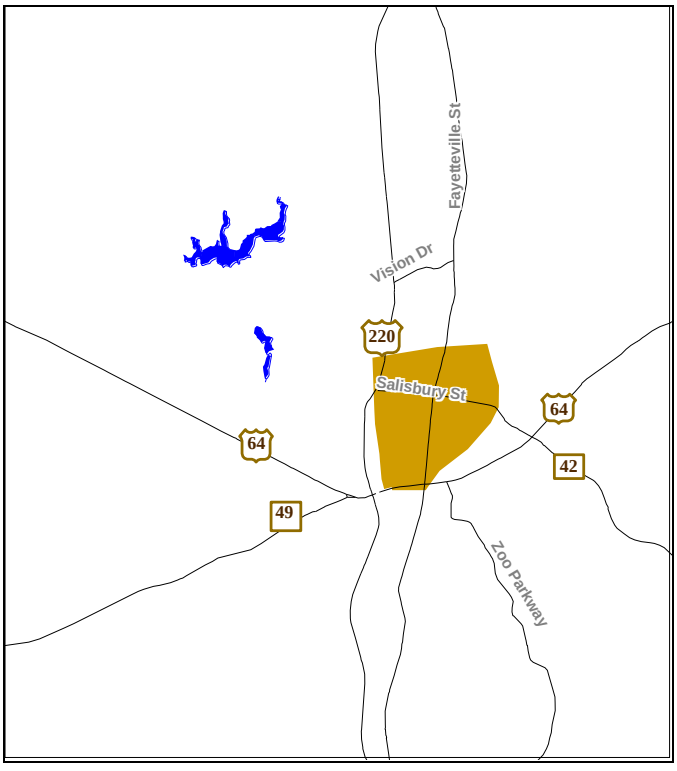
City Limits
1990
11.91 square miles
1374 people per square mile

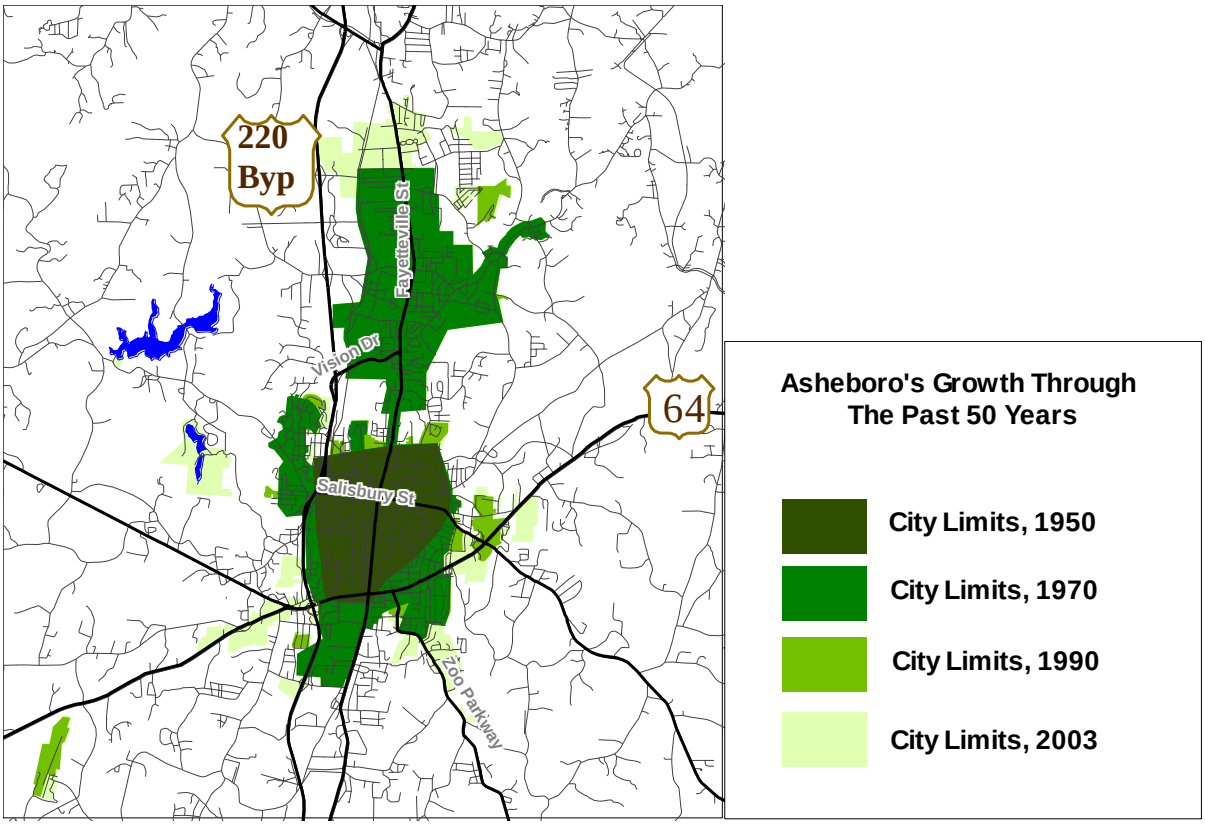




City Limits
1970
10.91 square miles
990 people per square mile

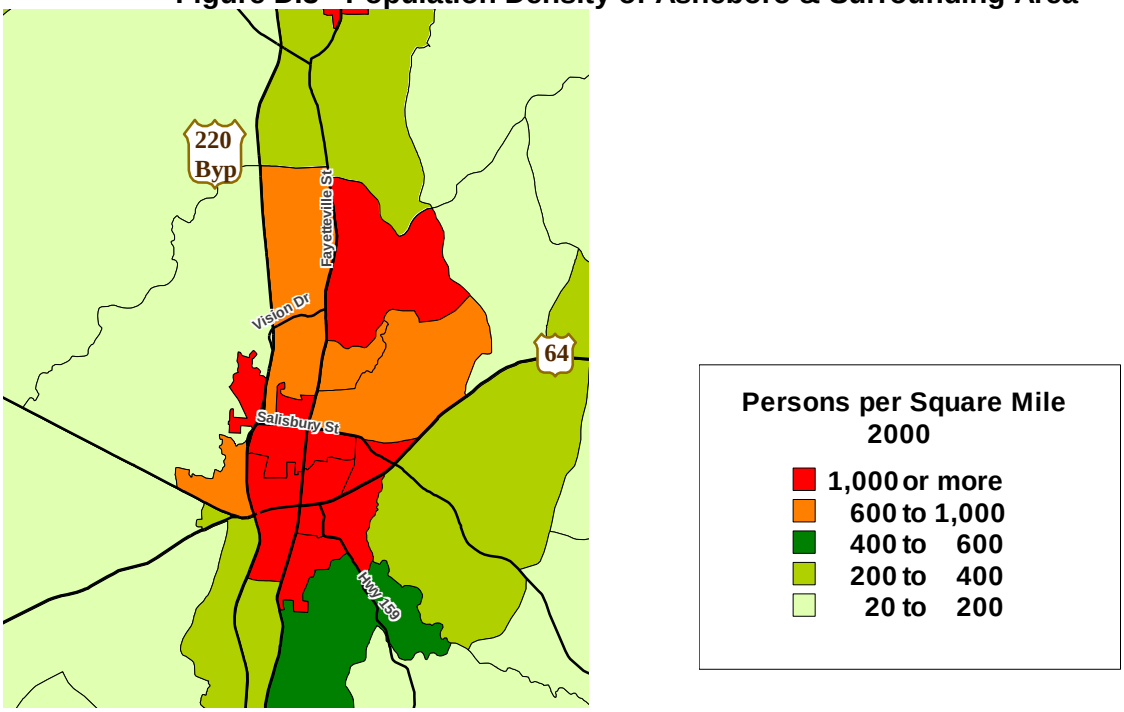
City Limits
1950
3.2 square miles
2406 people per square mile





Source: US Census Bureau TIGER line files, Mapped by the PTCOG Regional Data Center.

Figure D.3 - Population Density of Asheboro & Surrounding Area

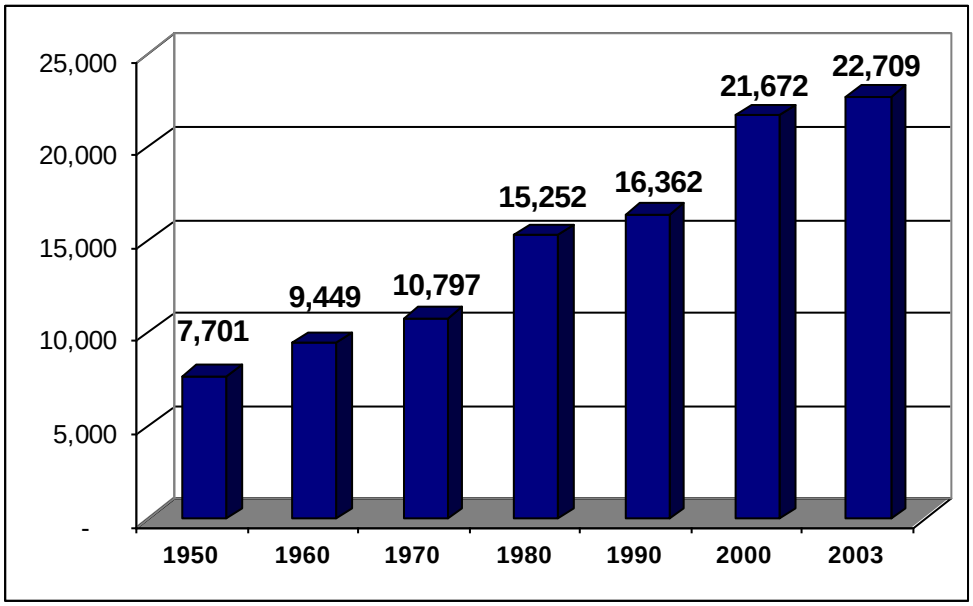


Source: 2000 Census; data mapped at the block group level.

Population Growth

Asheboro's population has doubled in the past 30 years. Since 1960, the city has added 9,450 residents with most of the growth occurring in the 1970's. Little growth and annexation occurred during the 1980's. However, since early in the 1990's, state officials estimate that the city has gained more than 6,000 new residents. Only about one third of those new residents were annexed into the city limits. Population growth in the 1990's was fueled by a large increase in the Hispanic population within Asheboro.

Figure D.4 - Population of Asheboro 1950 – 2003



Source: US Census Bureau and the NC Office of State Planning, 2003 estimates released in the fall of 2004.

Even though the Archdale-Trinity area in the northeast portion of the county appears to be one of the fastest growing areas in the region, Asheboro has maintained its role as the largest and most dominant city in Randolph County.

Year	% of County's residents living in Asheboro
1950	15.2%
1960	15.4%
1970	14.1%
1980	16.7%
1990	15.4%
2000	16.6%
2003	16.8%

Source: US Census Bureau and the NC Office of State Planning, 2004

Over the past fifty years, Asheboro's growth has surpassed that of the rest of the comparison areas. In fact, Asheboro's growth rate has been about double that of the

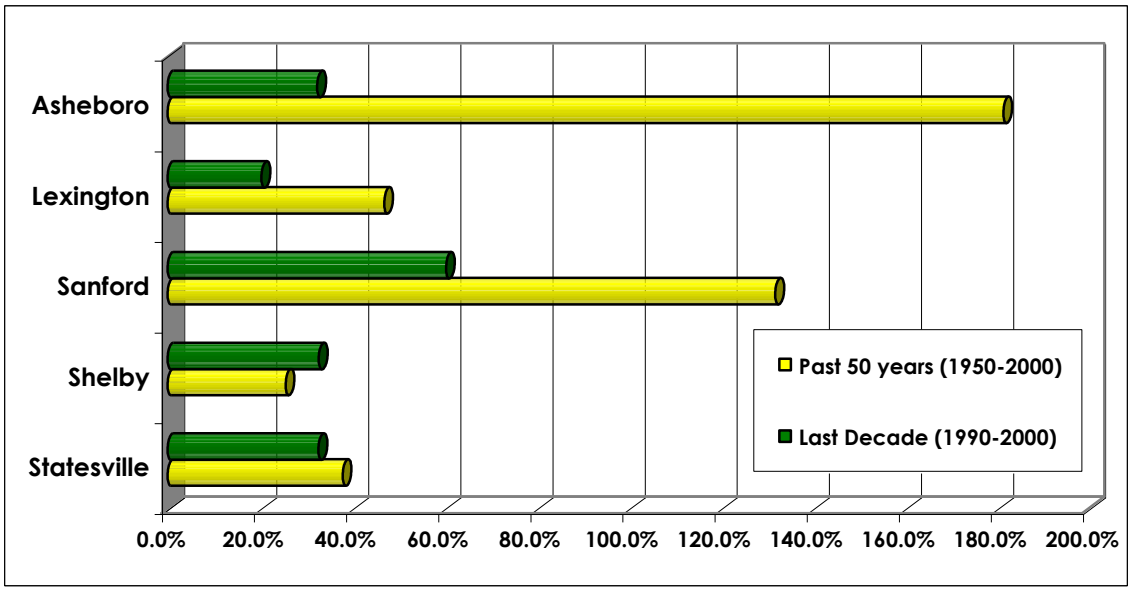
US overall, and more than five times higher than Shelby or Statesville. Growth rates so far in this decade have also surpassed the US and NC average.

Figure D.5 - Population Growth Comparison

	Past 50 years (1950-2000)	Last Decade (1990-2000)	This decade (2000-2003)
Asheboro	181.4%	32.5%	4.8%
Lexington	47.0%	20.3%	2.7%
Sanford	131.9%	60.4%	1.7%
Shelby	25.6%	32.8%	7.7%
Statesville	38.0%	32.7%	5.6%
NC	107.0%	21.3%	4.5%
US	92.3%	13.1%	3.4%

Source: US Census Bureau, decennial population counts and 2003 population estimates.

Figure D.6 - A Comparison of Population Growth
Long Term & Short Term Growth for Asheboro & comparison areas



Source: US Census Bureau, decennial population counts and 2003 population estimates.

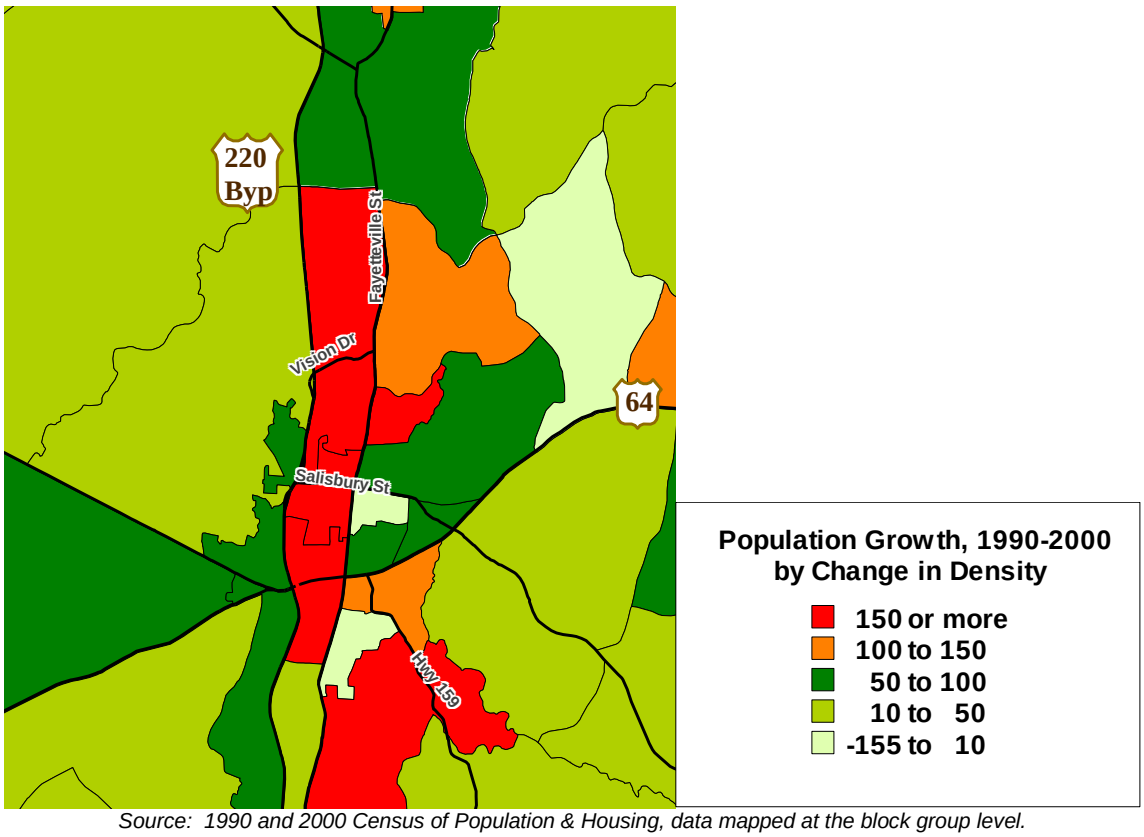
Figure D.7 - Components of Growth this Decade

	1990-1999		2000-2003	
	Annexed, 1990-1999	% Growth due to annexation	Annexed 2000-2003	% Growth due to annexation
Asheboro	1,101	34.6%	169	16.3%
Lexington	2,067	74.9%	none	0.0%
Sanford	5,580	73.9%	140	34.6%
Shelby	4,975	96.0%	1,353	89.7%
Statesville	3,637	68.9%	17	1.3%

Source: NC Office of Budget & Management, State Demographer and NC Vital Statistics, 1990-2003.

So far this decade (2000-2003), Asheboro's population growth has been just over 1,000 people. Fewer than twenty percent (or 169 people) have been annexed into the city. The natural increase in the population (births less deaths) accounted for another 462 new residents, leaving an estimated 406 people who moved into Asheboro so far this decade.

Figure D.8 - Population Growth from 1990-2000
Asheboro & Surrounding Area



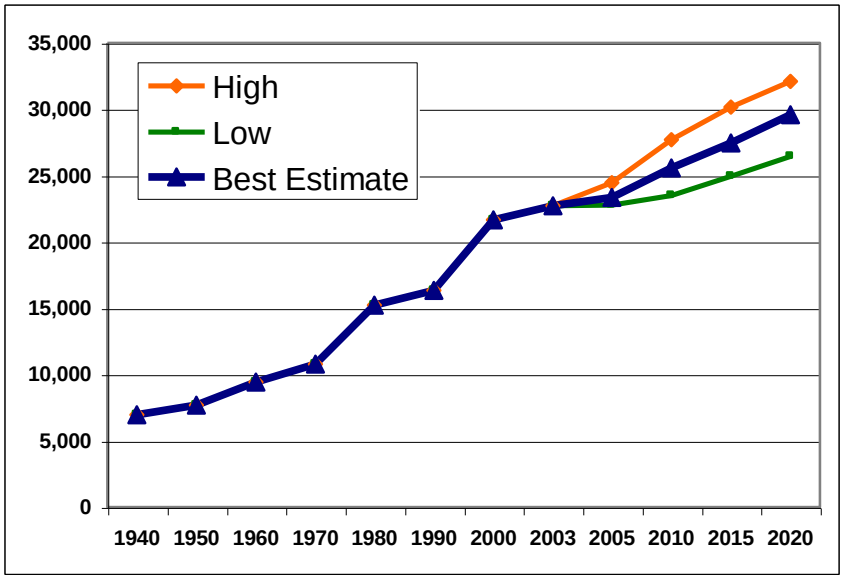
Source: 1990 and 2000 Census of Population & Housing, data mapped at the block group level.

Population Projections

It is difficult to project the population of any municipality due to the inability to predict growth from annexations. However, over the past 50 years, Asheboro's proportion of Randolph County's population has stayed relatively stable, averaging about 15.4%. Assuming that Asheboro's population growth continues to keep pace with the County overall, (i.e., status quo), it is estimated that the city's population will be just under 30,000 in the year 2020. However, cities have a relatively high degree of control over the types and amounts of growth they see.

Figure D.9 - Population Projections through 2020

	High	Low	Best Estimate
1940	6,981	6,981	6,981
1950	7,701	7,701	7,701
1960	9,449	9,449	9,449
1970	10,797	10,797	10,797
1980	15,252	15,252	15,252
1990	16,362	16,362	16,362
2000	21,672	21,672	21,672
2003	22,709	22,709	22,709
2005	24,450	22,750	***23,366***
2010	27,720	23,500	***25,595***
2015	30,150	24,950	***27,480***
2020	32,100	26,420	***29,595***



Source: US Census Bureau, NC Office of Budget & Management, 2003(projections for Randolph County) and the PTCOG Regional Data Center, 2005.

Race and Ethnic Origin

Non-Hispanic whites are still the largest racial/ethnic group in Asheboro accounting for 65.6% of residents, but the proportion of the population that is non-minority is on the decline. Hispanics now outnumber any other minority group within the city – including African Americans. Whites, Blacks, and Hispanics make up over 97% of Asheboro's population. The city has relatively few residents of other races.

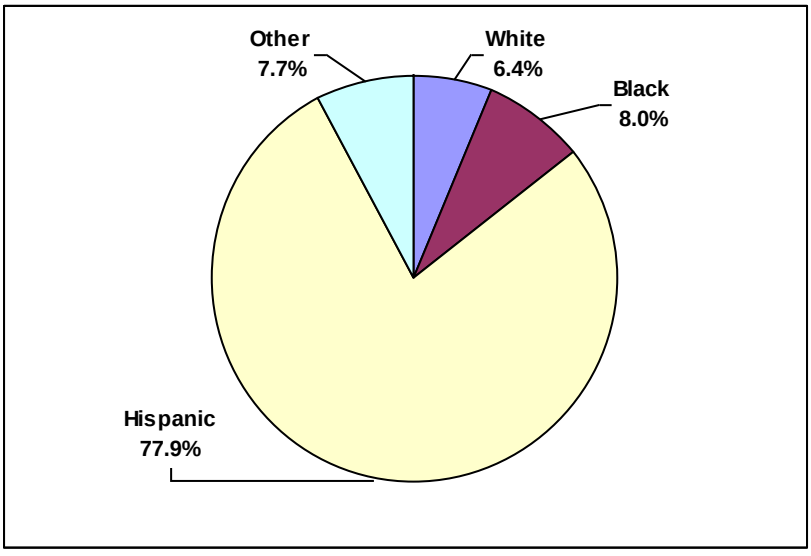
Figure D.10 - Asheboro Population by Race & Ethnic Origin

Non-Hispanic			
	White	14,219	65.6%
	Black/African American	2,564	11.8%
	American Indian/Alaska Native	85	0.4%
	Asian	294	1.4%
	Native Hawaiian/Pacific Islander	2	0.0%
	Some other race	21	0.1%
	Multi-racial	168	0.8%
Hispanic Origin (can be of any race)		4,319	19.9%

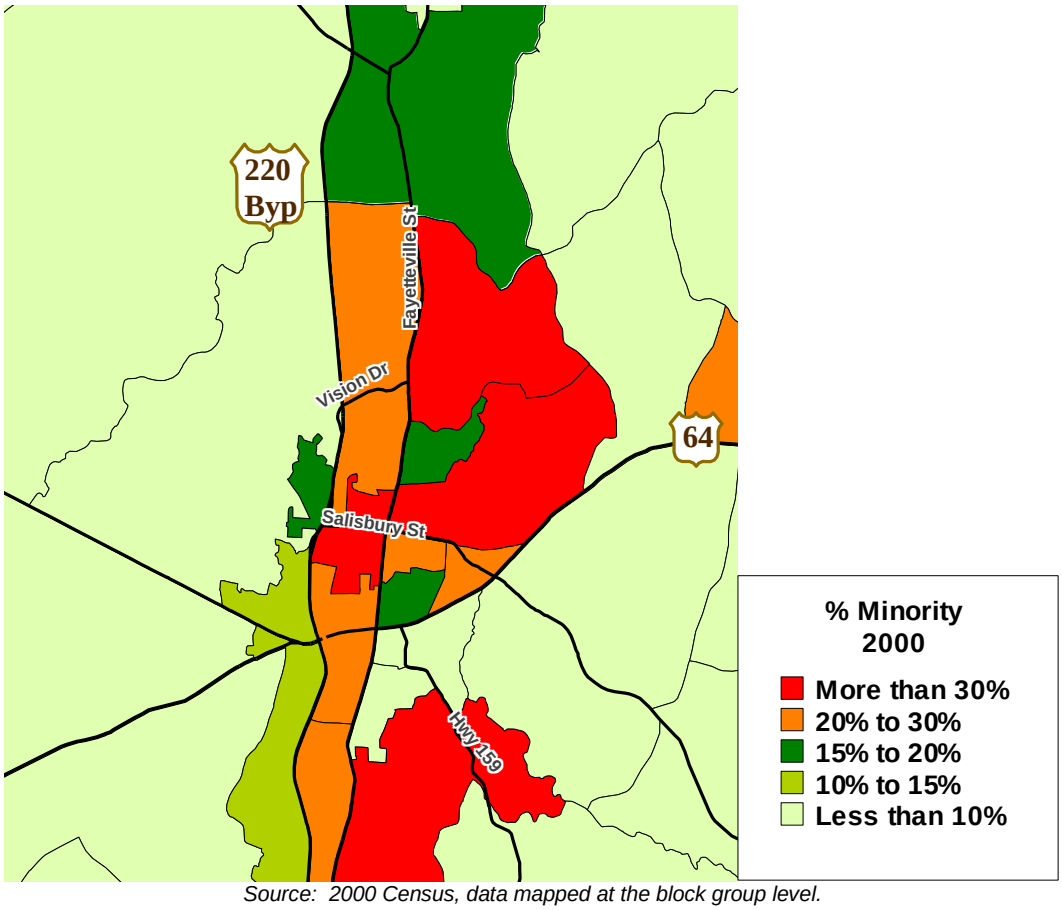
Source: 2000 Census of Population and Housing.

Although Asheboro's population grew by 32.5% between 1990 and 2000, a very large proportion of the city's growth can be attributed to an increase in the Hispanic/Latino population. While the white population grew by about 2%, the Hispanic population skyrocketed, growing by about 2300% in 10 years.

Figure D.11 - Growth, 1990-2000 by Race and Ethnic Origin



Source: 1990 & 2000 Census of Population & Housing.



Source: 2000 Census, data mapped at the block group level.

Figure D.12 - Growth rates of the population by race, 1990-2000	
Overall	32.5%
White	2.4%
Black	19.9%
Hispanic	2299.4%
Other	251.9%

Source: 1990 and 2000 Census of Population and Housing

Updated population statistics by race and ethnic origin are not available for cities, but data for the county since 2000 suggests that the growth rate of Hispanics has not abated. Statistics from the US Census Bureau show that Randolph County's Hispanic growth rate has been 29.3% from 2000-2003. The growth rate for the population overall is shown as 3.6% during the same time frame. Half of Randolph County's Hispanic/Latino population lives in Asheboro, so the estimates suggest that the number of Hispanics in Asheboro in 2003 is approximately 5,590. While the overall population growth rate in Asheboro this decade is estimated at just under 5%, the Hispanic growth rate is probably closer to 30%.

In 1990, Asheboro had the smallest proportion of minority residents of any of the comparison areas. However, by 2000, this was no longer true. Asheboro has the second lowest proportion of Blacks, but the highest proportion of Hispanics among the comparison areas.

Figure D.13 - Population Comparison by Race & Ethnic Origin

	% White	% Black	% Hispanic	% Other
Asheboro	65.6%	11.8%	19.9%	2.6%
Lexington	54.8%	29.8%	10.7%	4.7%
Sanford	49.6%	29.0%	19.0%	2.4%
Shelby	56.4%	40.7%	1.6%	1.4%
Statesville	57.4%	31.6%	7.1%	3.9%
Randolph County	86.0%	5.6%	6.6%	1.8%

Source: 2000 Census.

Foreign Born Residents

At the time of the 2000 Census, the City of Asheboro had 3,427 foreign born residents. Of those, more than 3,000 are not citizens of the US, meaning that approximately 14% of Asheboro residents are not US citizens. In 1990, less than 1% of residents were not US citizens. The city experienced a 3,150% increase in the number of non-US citizens in the past 10 years.

Asheboro also has the highest percentage of non-US citizens of the comparison areas

Figure D.14 - % of Residents that are not US Citizens

Asheboro	13.9%
Lexington	8.7%
Sanford	13.0%
Shelby	1.7%
Statesville	5.9%
Randolph County	4.8%

Source: 2000 Census of Population & Housing.

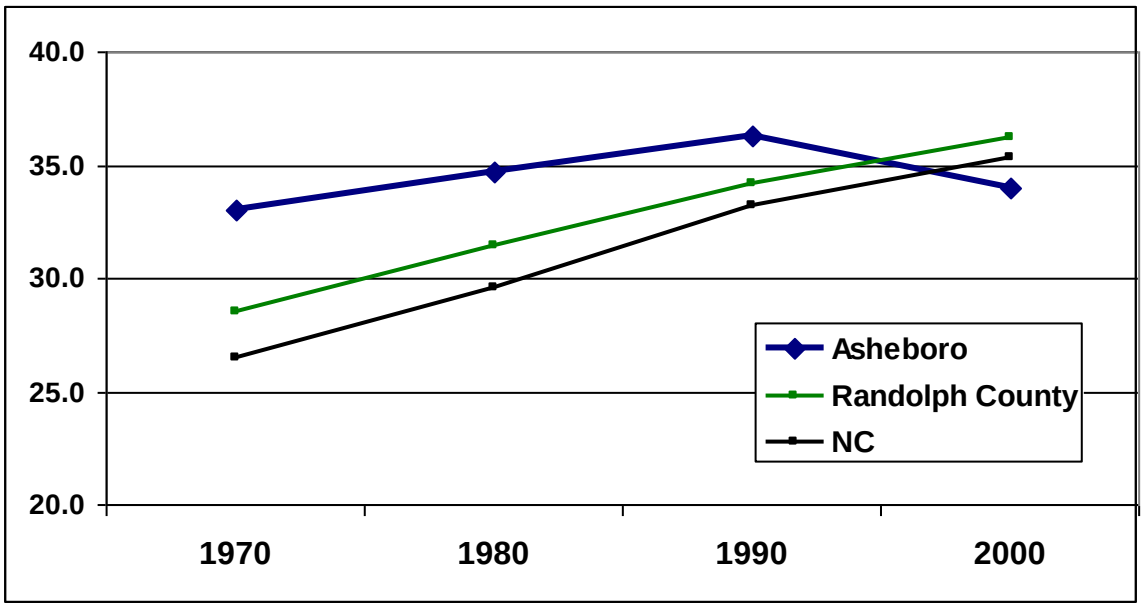
Population by Age Range

The median age in Asheboro as of 2000 was 34.0. While most other areas in the country and in NC experienced an increase in the median age of the population (due to an aging baby boomer segment of the population and to longer life expectancies), Asheboro's median age declined from 1990 to 2000. This is due to high in-migration of a younger overall population.

Median Age	
2000	34.0
1990	36.3
1980	34.7
1970	33.0

Source: US Census Bureau, decennial census.

Figure D.15 - Median Age Comparison



Source: US Census Bureau, decennial census of Population & Housing.

Figure D.16 - Population Comparison by Age Range

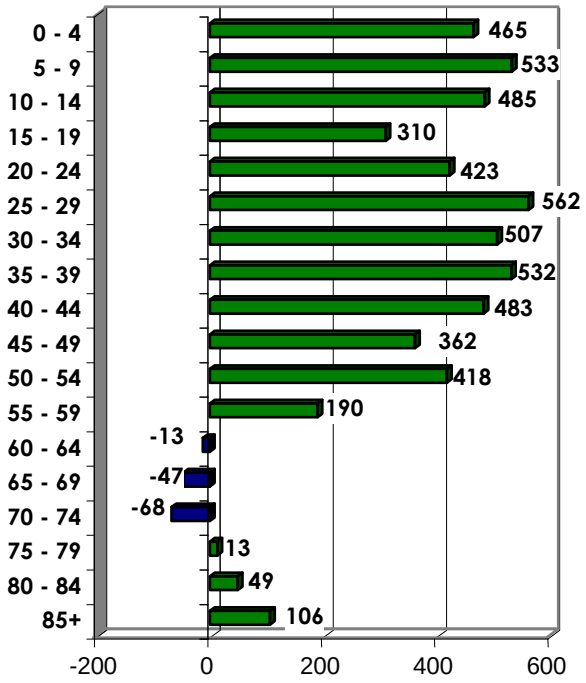
	0 - 17	18 - 34	35 - 64	65+	Median Age
Asheboro	24.1%	27.3%	33.5%	15.1%	34.0
Lexington	24.6%	24.4%	35.7%	15.3%	35.7
Sanford	27.1%	25.7%	35.0%	12.2%	33.1
Shelby	25.0%	19.7%	35.6%	19.7%	38.9
Statesville	24.4%	22.9%	35.3%	17.4%	37.1
Randolph County	25.0%	23.1%	39.8%	12.1%	36.2

Source: 2000 Census.

Asheboro has the highest proportion of persons age 18-34 of any of the comparison areas. Asheboro also has the lowest proportion of residents age 35-64.

Figure D.17 - Population Change by Age Range, 1990-2000

	1990	2000	Change	% Change
0 - 4	1,166	1,631	465	39.9%
5 - 9	987	1,520	533	54.0%
10 - 14	861	1,346	485	56.3%
15 - 19	976	1,286	310	31.8%
20 - 24	1,295	1,718	423	32.7%
25 - 29	1,342	1,904	562	41.9%
30 - 34	1,216	1,723	507	41.7%
35 - 39	1,046	1,578	532	50.9%
40 - 44	972	1,455	483	49.7%
45 - 49	876	1,238	362	41.3%
50 - 54	774	1,192	418	54.0%
55 - 59	792	982	190	24.0%
60 - 64	841	828	(13)	-1.5%
65 - 69	847	800	(47)	-5.5%
70 - 74	834	766	(68)	-8.2%
75 - 79	697	710	13	1.9%
80 - 84	475	524	49	10.3%
85+	365	471	106	29.0%
TOTAL	**16,362**	**21,672**	**5,310**	**32.5%**



Source: 1990 & 2000 Census of Population & Housing.

Between 1990 and 2000, the only age groups that lost population were those from 60-64, 65-69, and 70-74. The greatest number increase was seen in persons age 25-29 followed by those ages 5-9, then age 35-39.

While the overall growth rate in Asheboro was 32.5%, most age ranges younger than 54 saw higher percentage growth. Age groups of 55 and older saw lower percentage increases in population.

Housing - General

The City of Asheboro added 2,051 new housing units between 1990 and 2000 – or roughly 200 new units per year. Other highlights of housing changes within the city in the past decade include: 1) the vacancy rate increased slightly, 2) persons per household increased, 3) the proportion of people living alone declined, 4) homeownership rates declined, 5) the proportion of crowded housing units increased. Except for the decline in homeownership rates, these trends are the opposite of what is occurring elsewhere in the county and in the state.

	1990	2000
Housing Units	7,464	9,515
Vacant Houses	6.5%	8.0%
Persons per Household	2.25	2.40
% Persons living alone	32.3%	31.6%
% Households with Children	29.3%	33.4%
% Owner Occupied	57.6%	54.1%
Median Housing Value	$ 56,100	$ 87,900
Median Rent	$ 255	$ 377
% Single Family	64.3%	60.5%
% of crowded units	2.2%	7.9%

Source: US Census Bureau, 1990 & 2000 Census of Population & Housing.

Housing – Occupancy and Vacancy

Figure D.18 - Occupancy & Vacancy Rates

Asheboro has similar housing occupancy rates to the comparison areas studied. In 2000, just 8% of structures were vacant. This is a slight increase from 1990 and it is also just slightly higher than most of the other comparison areas.

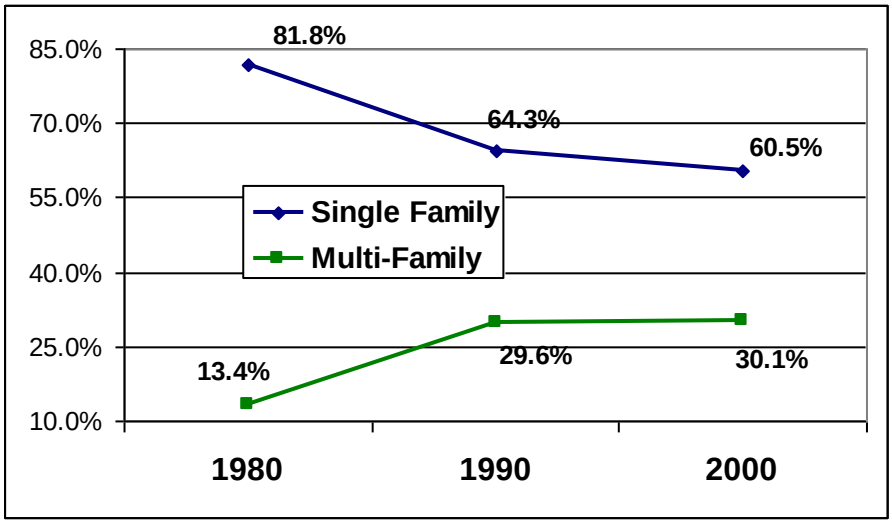
	Houses	% Occupied	% Vacant
Asheboro	9,515	92.0%	8.0%
Lexington	8,510	93.1%	6.9%
Sanford	9,223	92.7%	7.3%
Shelby	8,853	89.5%	10.5%
Statesville	10,041	93.0%	7.0%
Randolph County	54,422	93.1%	6.9%

Source: 2000 Census

Housing Units in Structure

The proportion of multi-family structures within Asheboro has risen significantly since 1980. Now, almost one of every three housing units in the city is a multi-family structure.

Figure D.19 - Units in Structure, 1980, 1990, 2000



Source: 1980, 1990, 2000 Census.

The housing mix in Asheboro differs from the other comparison areas. Asheboro has the smallest percentage of single-family structures, the largest percentage of multi-family structures, and the largest percentage of mobile homes (except for Randolph County) of the comparison areas.

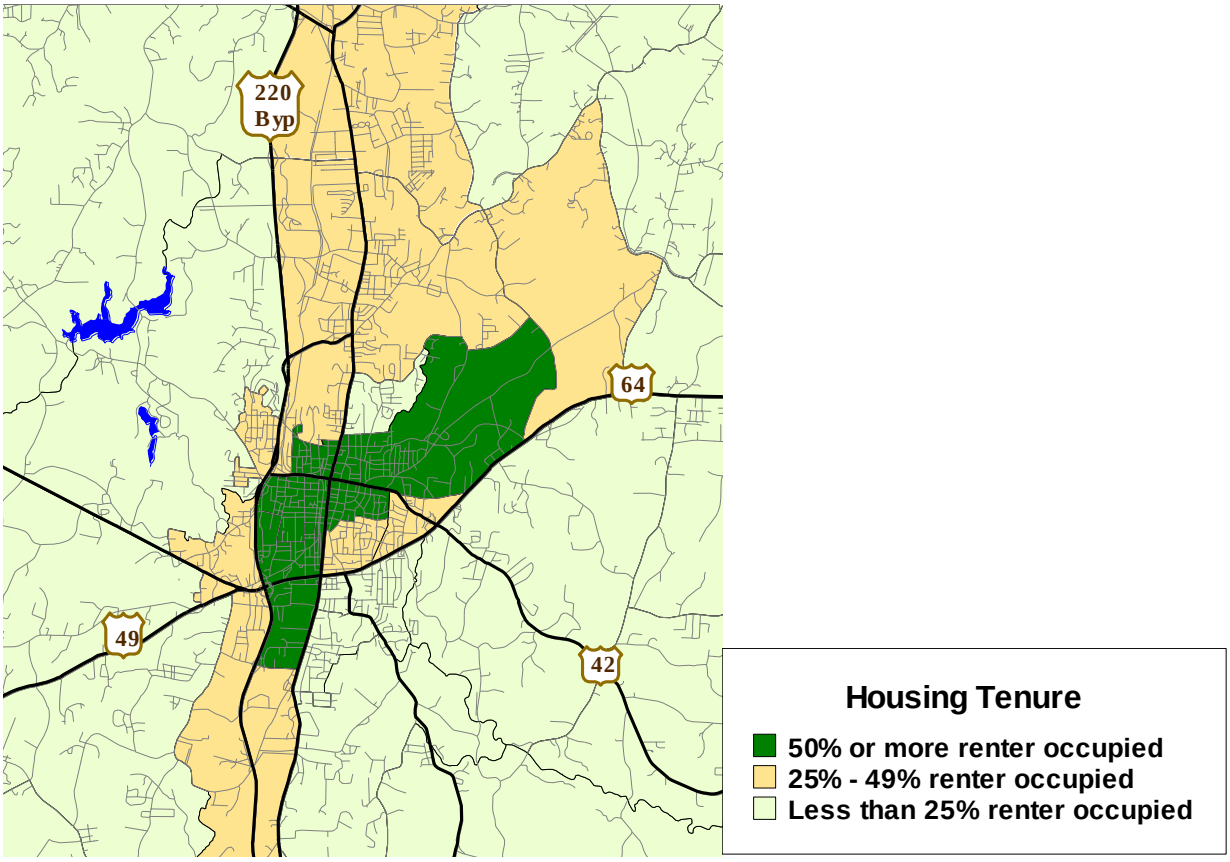
Figure D.20 - Housing Units in Structure Comparison Data

	Single Family	Multi-Family	Mobile Home/Other
Asheboro	60.5%	30.1%	9.4%
Lexington	72.4%	22.4%	5.2%
Sanford	68.4%	24.8%	6.8%
Shelby	76.4%	22.2%	1.4%
Statesville	72.4%	25.7%	1.9%
Randolph County	65.4%	9.3%	25.3%

Source: 2000 Census

Housing Tenure

Homeownership rates are on the decline in the city as more multi-family units are added to the city's housing stock. In 1980, 65% of homes were owner occupied dwellings. By 1990, the homeownership rate had dropped to 58%, and by 2000, it was shown at 54%. Between 1980 and 1990, the proportion of multi-family structures within Asheboro more than doubled from 13.4% of the housing stock to 29.6%. In 2000, just over 30% of the city's housing stock was in multi-family units.



Source: 2000 census, mapped at the block group level.

Figure D.21 - Homeownership Rate Comparison

	% of Owner Occupied Units
Asheboro	54.1%
Lexington	49.8%
Sanford	57.9%
Shelby	58.2%
Statesville	54.8%
Randolph County	76.6%

Source: 2000 Census

Housing Tenure by Race

Whites are twice as likely as Blacks to be homeowners. However, Blacks are twice as likely as Hispanics to be homeowners. Only about one of every ten Hispanic householders is a homeowner.

Figure D.22 - Homeownership rates by Race & Ethnic Origin

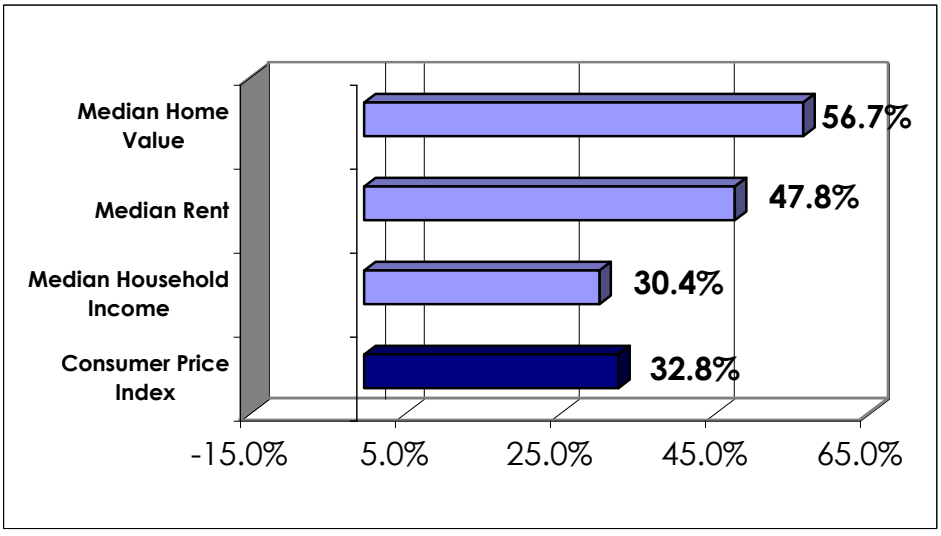
	2000	1990
White	60.1%	61.6%
Black/African American	33.0%	31.4%
Other race	16.6%	16.3%
Hispanic Origin (of any race)	14.4%	12.2%

Source: US Census Bureau, decennial census of Population & Housing.

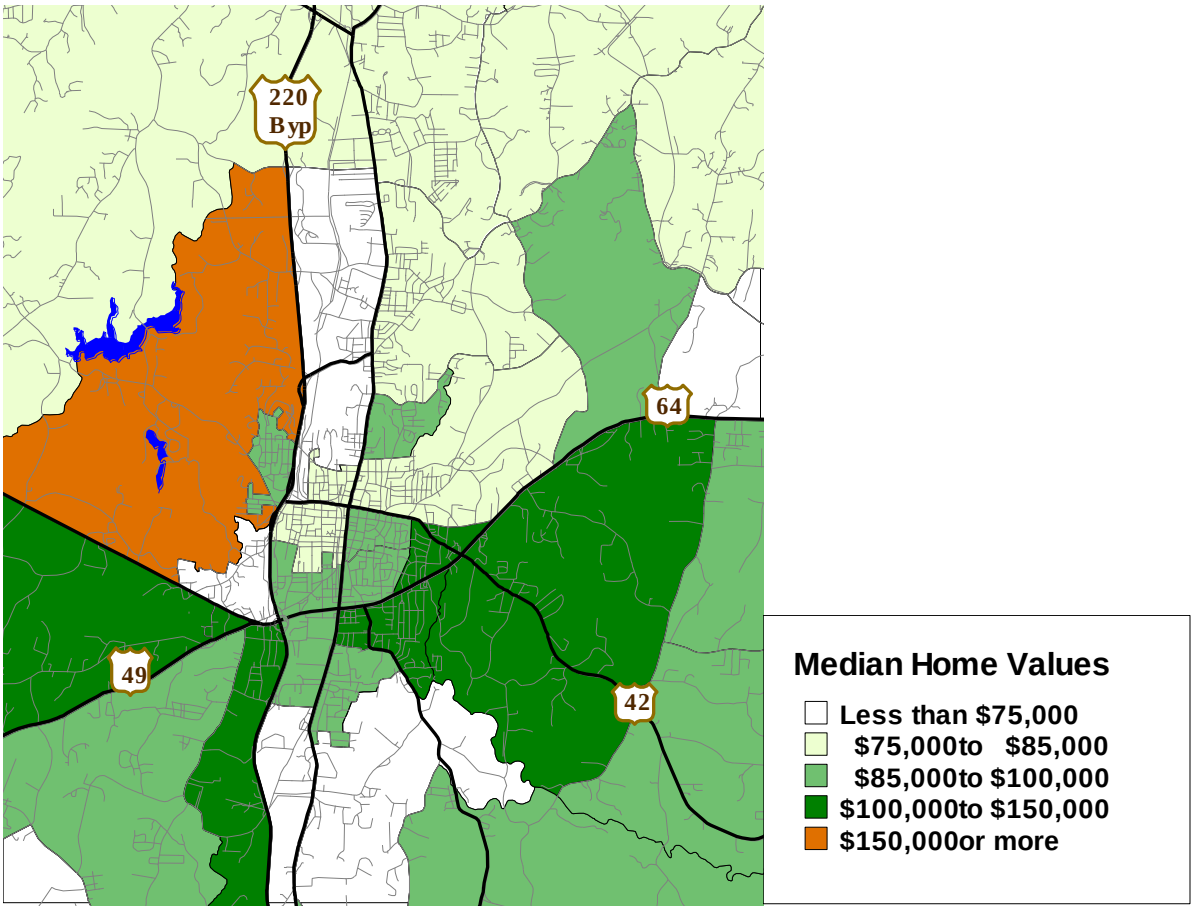
Housing Values

The median home value in Asheboro in 2000 was $87,900 – a 57% increase since 1990. This was significantly higher than the inflation rate (as measured by the consumer price index). Conversely, median household income did not keep pace with the inflation rate in Asheboro over the past 10 years.

Figure D.23 - Changes in Housing Costs and Income, 1990-2000



Source: 1990, 2000 Census, US Bureau of Labor Statistics, CPI-U.



Source: 2000 census, mapped at the block group level.

The median home value in Asheboro is lower than in the county, but similar to the other comparison areas.

Figure D.24 - Median Housing Values for Asheboro & Comparison Areas

	Median Value
Asheboro	$ 87,900
Lexington	$ 81,800
Sanford	$ 88,200
Shelby	$ 79,300
Statesville	$ 94,800
Randolph County	$ 94,700

Source: 2000 Census

Housing - Conditions

Five selected measures of housing conditions were analyzed: no telephone, no vehicle, crowded housing, and lack of plumbing and kitchen facilities. Based on data for these variables, substandard or inadequate housing does not appear to be a problem in Asheboro. However, the proportion of crowded housing units (defined by the Census Bureau and HUD as more than 1 person per room) tripled from 1990 to 2000.

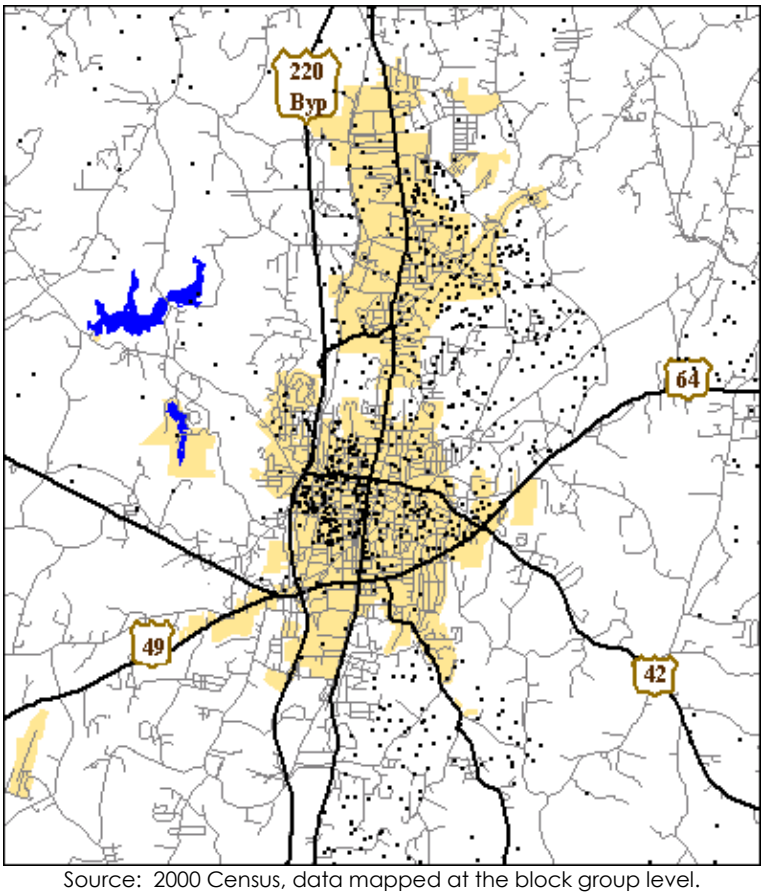
Figure D.25 - Selected Housing Conditions

	2000	1990
No Telephone	5.1%	6.8%
No Access to a Vehicle	8.9%	11.2%
Crowded Housing Conditions	7.9%	2.2%
Lack Complete Plumbing	1.0%	.2%
Lack Complete Kitchen	1.0%	.8%

Source: 1990 and 2000 Census of Population & Housing.

Figure D.26 - Crowded Housing Units

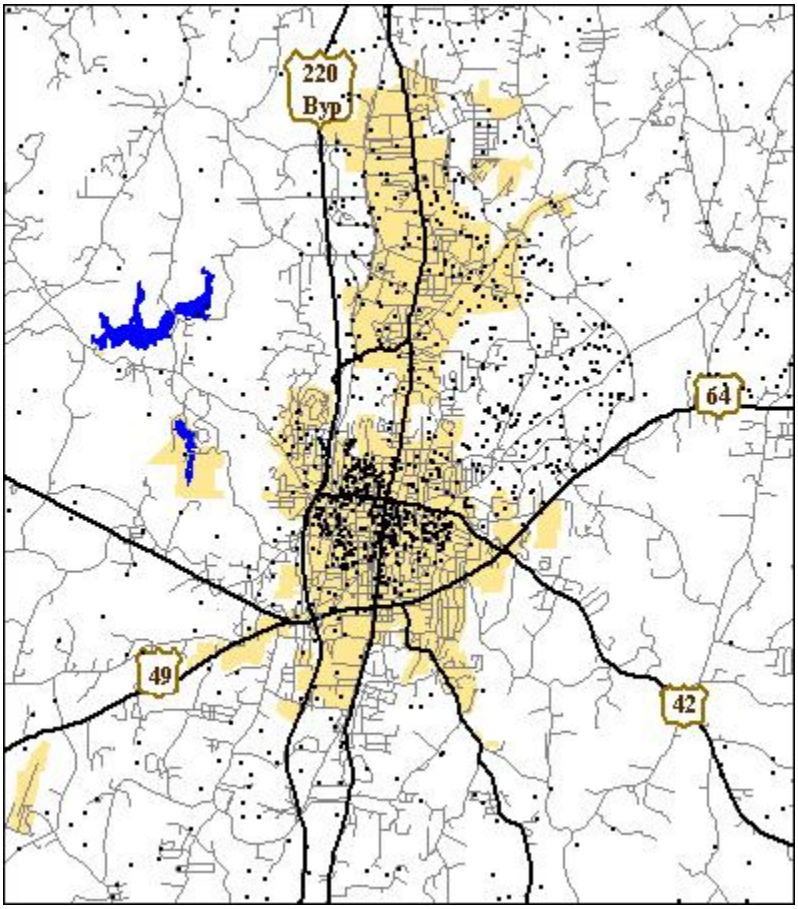
Each dot represents one crowded housing unit



Source: 2000 Census, data mapped at the block group level.

Figure D.27 - Households Without Access to a Vehicle

Each dot represents one household with no vehicle available within the household



Source: 2000 Census, data mapped at the block group level.

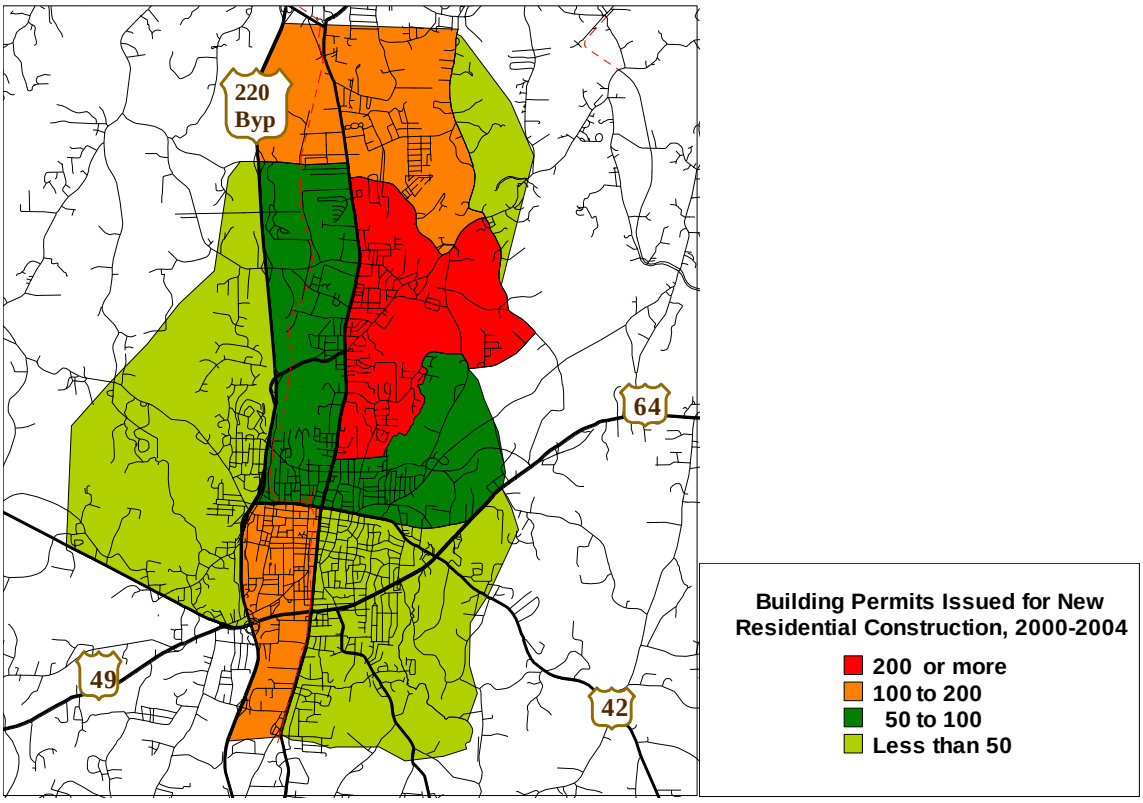
Housing – New Construction

From 2000 to 2004, another 884 new housing units were added to the city's housing stock, just slightly lower than the housing growth seen in the 1990's. The year 2000 saw the largest number of housing units added this decade with 352. Since then, housing growth has slowed, averaging about 130 new units per year since the recession.

Figure D.28 - New Residential Construction, 2000-2004

	Total	Single Family	Multi-Family
2000	352	54	298
2001	97	51	46
2002	119	103	16
2003	195	99	96
2004	121	88	33
Total for 2000-2004	884	395	489
Percentage of Total		44.7%	55.3%

Source: Building Inspections, City of Asheboro, 2000-2004



Source: Building Inspections Department, City of Asheboro. Data mapped at the census tract level.

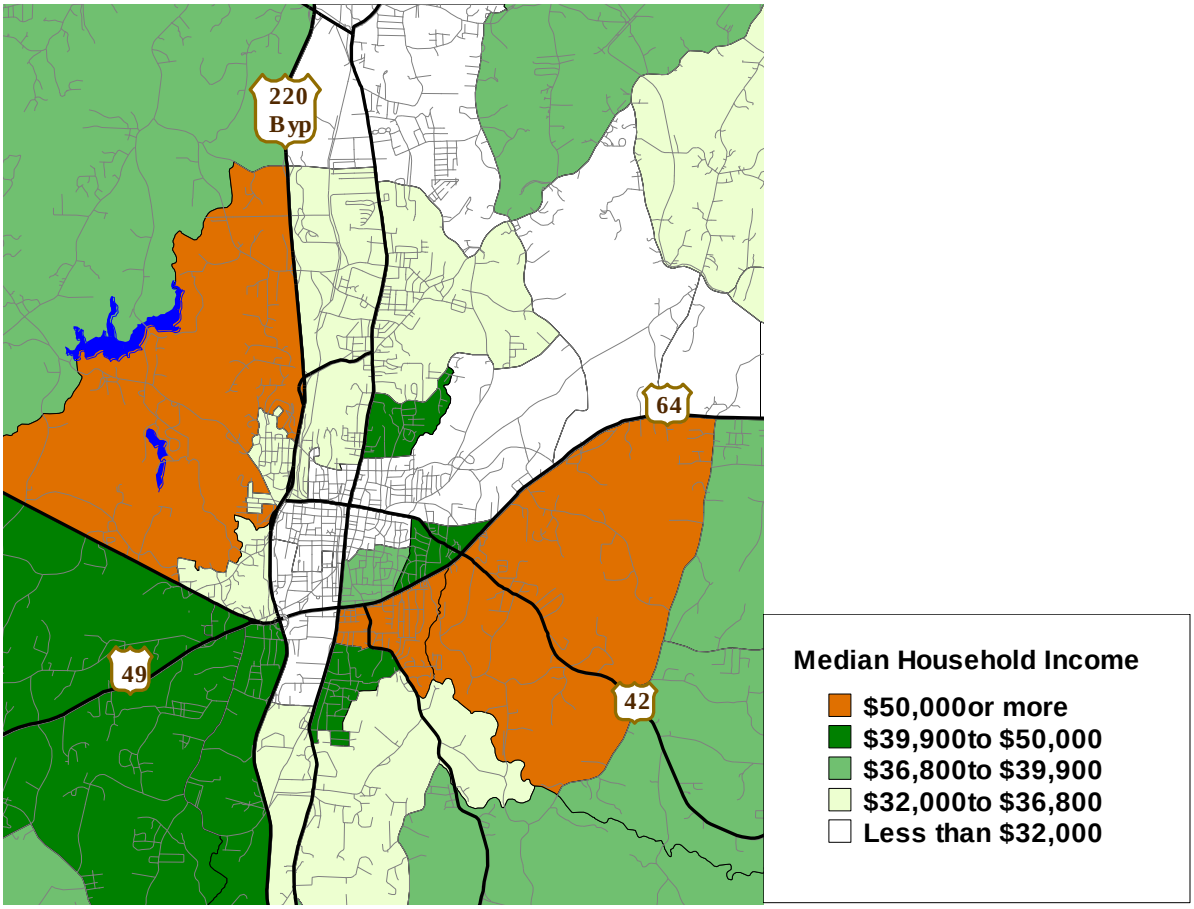
Social Characteristics - Income

The median household income in Asheboro is similar to the comparison cities, but it is 18% lower than the Randolph County average. Even though the median household and median family income don't differ significantly from the other comparison areas, the average earnings of each worker in Asheboro is the second lowest among the comparison areas.

Figure D.29 - Income and Earnings

	Median Household Income	Median Family Income	Average Earnings per Worker
Asheboro	$ 31,676	$ 39,397	$ 41,429
Lexington	$ 26,226	$ 32,339	$ 39,583
Sanford	$ 34,804	$ 39,447	$ 46,134
Shelby	$ 29,345	$ 38,603	$ 43,494
Statesville	$ 31,925	$ 41,694	$ 47,200
Randolph County	$ 38,348	$ 44,369	$ 46,221

Source: 2000 Census



Source: 2000 Census, data mapped at the block group level.

The median household income of minorities in Asheboro trails that of non-minority residents. Multi-racial and Black or African American households on average have the lowest incomes, while Asian and white households have the highest median incomes.

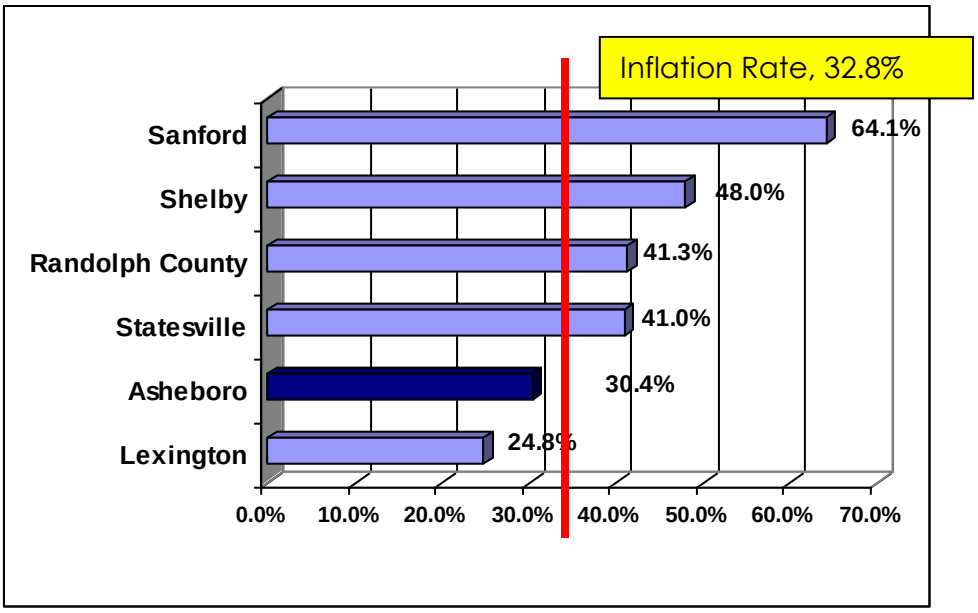
Figure D.30 - Median Household Income By Race / Ethnic Origin

Overall	**$ 31,676**
White	$ 32,674
Black / African American	$ 25,881
American Indian	$ 35,125
Asian	$ 51,375
Some other race	$ 26,402
Multi-racial	$ 20,714
Hispanic Origin *(of any race)*	$ 25,968

Source: 2000 Census.

Between 1990 and 2000, median household income growth in Asheboro did not keep pace with the inflation rate. Only Lexington saw lower household income growth during the 1990's than Asheboro.

Figure D.31 - Household Income Growth, 1990-2000



Source: 1990 and 2000 Census of Population & Housing, US Bureau of Labor Statistics, Consumer Price Index data.

Social Characteristics – Poverty

The poverty rate is increasing in the City of Asheboro. In 1990, one of every eight Asheboro residents was living below the federal poverty level. By 2000, the proportion was up to almost one of every six people. The proportion of persons living below the poverty level in Asheboro is about double that of the county overall.

Children in Asheboro are more likely to be living below poverty level than any other age group. In fact, children are twice as likely as the elderly to be living in poverty. Further, the number of children living in poverty more than doubled in the past 10 years.

Figure D.32 - Poverty – Numbers and Rates in Asheboro

	1990	2000
#	2,011	3,320
%	12.8%	15.8%
# Children (ages 0 – 17)	576	1,213
% Children (ages 0 – 17)	16.8%	23.8%
Elderly (Ages 65 and older)	18.6%	12.5%
White	10.8%	11.7%
Black	27.7%	31.7%
Other	3.7%	25.5%
Hispanic	30.2%	30.8%

Source: 1990 and 2000 Census.

Asheboro's poverty rates overall and poverty rates of children do not differ significantly from the comparison cities. The poverty rate among the elderly in Asheboro is the lowest among the comparison areas.

Figure D.33 - Poverty by Selected Age Groups

	All Persons	Children (0 - 17)	Elderly (65+)
Asheboro	15.8%	23.8%	12.5%
Lexington	21.2%	31.7%	18.0%
Sanford	17.1%	21.4%	13.0%
Shelby	17.8%	26.7%	13.7%
Statesville	16.1%	23.7%	13.8%
Randolph County	9.1%	11.6%	11.5%

Source: 2000 Census

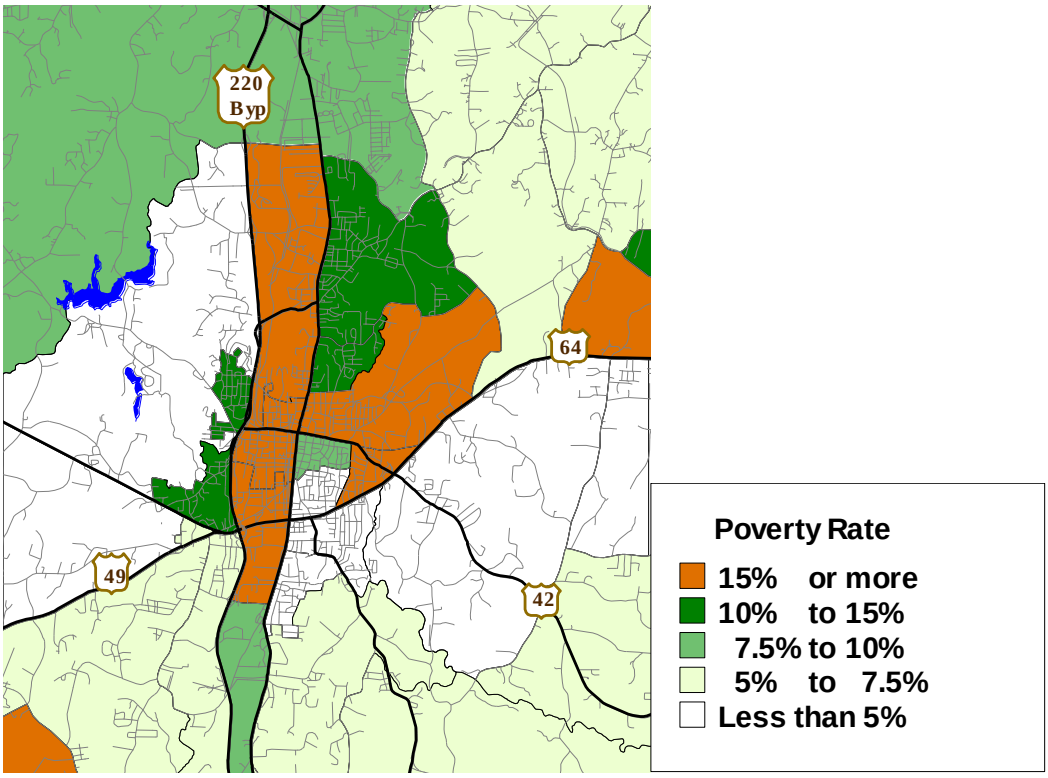
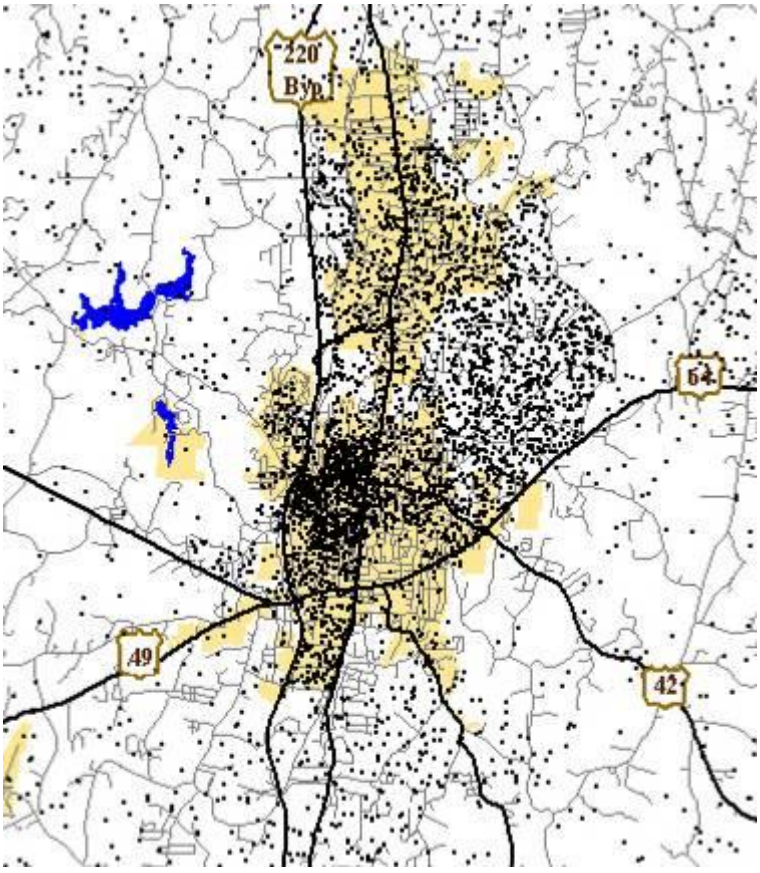


Figure D.34 - Persons living in Poverty

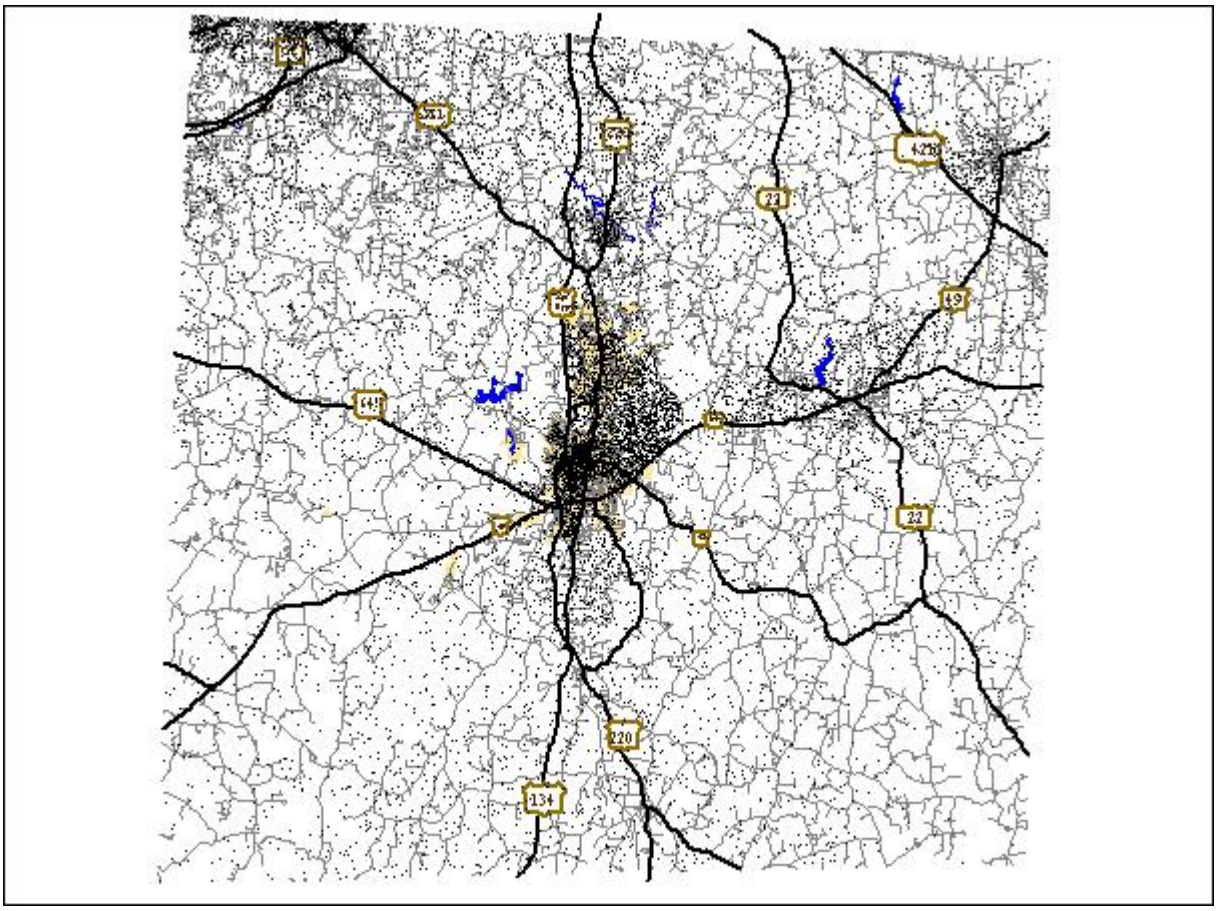
Each dot represents one resident living below the poverty level



Source: 2000 Census, data mapped at the block group level.

Figure D.35 - Poverty in Randolph County

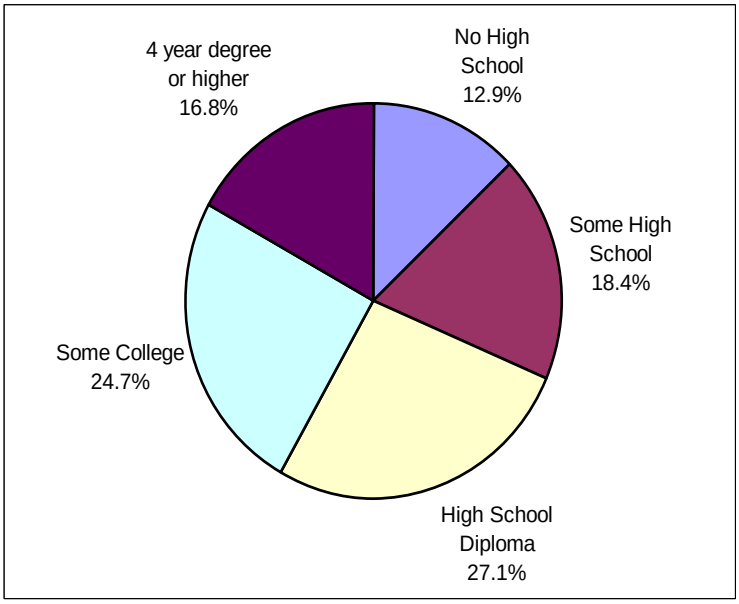
Each dot represents one Randolph County resident living below the poverty level



Source: 2000 Census, data mapped at the block group level.

Social Characteristics – Educational Attainment

Figure D.36 - Educational Attainment levels of Asheboro's Adult Population
(By highest level of education completed)



Approximately one in three Asheboro residents lacks a high school diploma. In the past 10 years, the proportion of the population without a high school diploma has declined, but not at the rate seen in most of the other comparison areas. And, while a significantly higher proportion of residents are reporting some college experience, the proportion of adults with a four-year college degree has risen only minimally since 1990.

Source: 2000 Census.

Figure D.37 - Educational Attainment Comparison 1990 and 2000

	2000	1990
Less than 9th grade	12.9%	16.4%
Not a High School Graduate	31.3%	34.5%
High School Graduate	68.6%	65.5%
Some College Courses	41.5%	34.9%
Bachelor's Degree or higher	16.8%	15.3%

Source: 2000 Census, 1990 Census

Asheboro's educational attainment levels do not compare favorably with most of the other comparison cities. Only Lexington has a higher proportion of residents without a high school diploma and a lower proportion of college graduates. In 1990, Randolph County had a higher proportion of residents without a high school diploma than Asheboro. By 2000, the positions were reversed: Asheboro now has a higher proportion of adults without a high school diploma than the county does.

Figure D.38 - Educational Comparison
(Persons 25 and older in Asheboro & comparison areas)

	% without a high school diploma	% with a 4 year degree or higher
Asheboro	31.3%	16.8%
Lexington	36.1%	14.0%
Sanford	27.8%	18.6%
Shelby	26.8%	18.0%
Statesville	25.1%	19.5%
Randolph County	30.0%	11.1%
NC	21.9%	22.5%

Source: 2000 Census

Figure D.39 - Proportion of the Adult Population without a High School Diploma

	1990	2000	Decline
Asheboro	34.5%	31.3%	3.2
Lexington	40.3%	36.1%	4.2
Sanford	29.5%	27.8%	1.7
Shelby	39.0%	26.8%	12.2
Statesville	35.0%	25.1%	9.9
Randolph County	38.0%	30.0%	8.0
NC	30.0%	21.9%	8.1

Source: 1990 & 2000 Census

Figure D.40 - % of Adults (Age 25+) without a High School Diploma By Race / Ethnic Origin

Overall	31.3%
White	29.2%
Black/African American	24.9%
Other Race	59.6%
Hispanic or Latino origin	71.1%

Almost three of every four Hispanic adults in Asheboro lack a high school diploma. That is more than double the rate of the population overall. Blacks were the most likely to have earned a high school diploma.

Source: 2000 Census

High School Dropouts

One in four young adults (age 16-19) living in Asheboro is a high school dropout. These are the residents who specified that they were not high school graduates and were not enrolled in school during the 2000 Census count. In 1990, the proportion of young high school dropouts was 22.9%. Asheboro has the highest proportion of young high school dropouts among the comparison areas:

	Age 16-19, not enrolled in school, no high school diploma
Asheboro	28.8%
Lexington	27.8%
Sanford	24.1%
Shelby	11.5%
Statesville	12.0%
Randolph County	19.5%
NC	12.6%

Source: 2000 Census

Language Spoken

In 84% of Asheboro households, English is the primary language spoken. Spanish is the primary language spoken in 14% of households, while some other language is spoken in 2% of households. This is a significant change from 1990 when English was the primary language spoken in 95% of households and Spanish was the primary language in only 2% of households.

Figure D.41 - Persons who do not speak English "well" by age range

Age range	**Number**	**Percentage**
Age 5 – 17	309	8.4%
Age 18 – 64	1,838	13.9%
Age 65+	29	0.9%

Source: 2000 Census

As of 2000, 2,176 residents (or 10.8%) in Asheboro did not speak English "well". Most of these non-English speakers tend to be in the young adult age range. Less than 1% is elderly. In fact, one of every eight people under the age of 65 does not speak English well. In 1990, only 85 Asheboro residents did not speak English well. Thus, between 1990 and 2000, there was a 2,460% increase in the non-English speaking population within Asheboro.

Asheboro has the highest proportion of residents that do not speak English well among any of the comparison areas. The proportion of children that do not speak English is also the highest of the comparisons. In fact, Asheboro's proportion of non-English speakers is about three times higher than the county percentage.

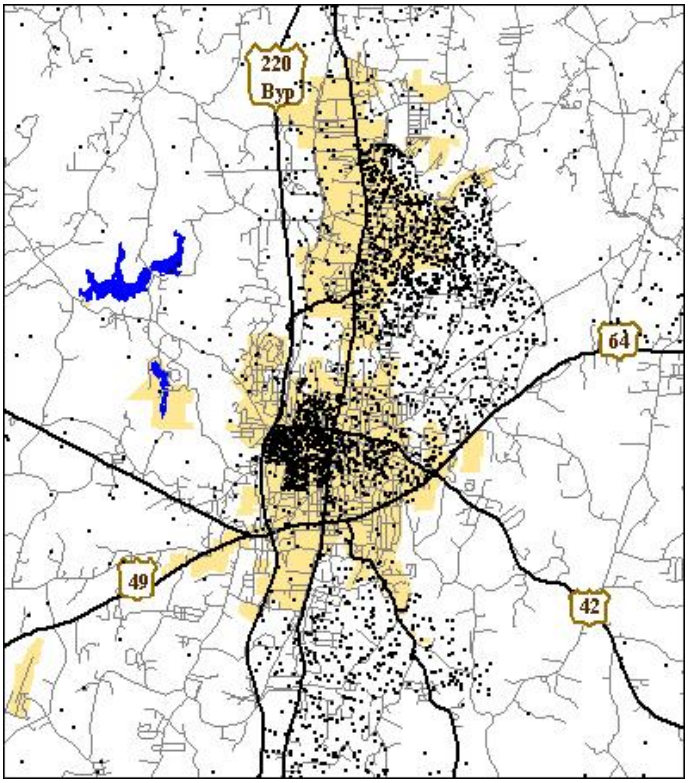
Figure D.42 - Persons who do not speak English "well" Asheboro & Comparison Areas

	All Persons	Age 5-17	Age 18-64	Age 65+
Asheboro	10.8%	8.4%	13.9%	.9%
Lexington	5.3%	3.5%	6.9%	1.1%
Sanford	9.5%	5.3%	12.8%	0
Shelby	1.4%	.8%	1.7%	1.3%
Statesville	3.8%	3.4%	4.9%	.3%
Randolph County	3.4%	2.9%	4.1%	.6%

Source: 2000 Census.

Figure D.43 - Persons who do not speak English "well"

Each dot represents one resident who does not speak English "well"



Source: 2000 Census, data mapped at the block group level.

Disability Status

One of every four Asheboro residents has a disability of some type. The most common type of disability shown among Asheboro residents was a work disability – impacting 32% of the population. Not surprisingly, the age range with the highest proportion of people disclosing a disability was the elderly – with almost half reporting some type of a disability. Asheboro has the highest proportion of residents with a disability among the comparison areas.

Figure D.44 - Disability Status by Age % Disabled

	All	Age 5-15	Age 16-20	Age 21-64	Age 65+
Asheboro	25.4%	7.0%	18.9%	26.4%	44.0%
Lexington	23.1%	4.7%	15.0%	22.5%	47.6%
Sanford	20.4%	4.8%	15.5%	20.4%	47.3%
Shelby	23.5%	3.0%	12.8%	23.0%	47.0%
Statesville	24.7%	6.2%	17.8%	25.0%	43.3%

Source: 2000 Census.

Figure D.45 - Disabilities Tallied by Type

Sensory	754	9.3%
Physical	1,647	20.2%
Mental	1,022	12.5%
Self Care	399	4.9%
Go Outside Home	1,714	21.0%
Employment	2,609	32.0%

Source: 2000 Census.

Economic Characteristics

Labor Force

Figure D.46 - A profile of the Asheboro Labor Force & Economy

	2000	1990
Total Labor Force	10,875	8,779
Male	54.5%	51.1%
Female	45.5%	48.9%
Proportion of adults in the labor force	63.6%	66.4%
Unemployed	522	343
Unemployment Rate	4.8%	3.9%
Children in two parent households Both parents in the workforce	60.9%	79.5%
Children in single parent households Parent in the workforce	76.5%	75.3%
Average travel time to work (minutes)	22.2	15.3
% Living and working in Asheboro	53.0%	64.6%
% Working in manufacturing	36.2%	40.6%

Source: 2000 Census.

The Asheboro labor force is increasing, but not as fast as the population overall. The proportion of adults in the labor force has declined slightly since 1990. The biggest decline has been in the proportion of two-income households with children. Of two-parent households with children, the proportion with both in the workplace declined from 80% in 1990 to 60% in 2000.

Other major changes in the labor force since 1990 include…

- a smaller proportion working in the City of Asheboro
- longer commute times
- a smaller proportion employed in manufacturing.

Employment by Industry

In 2002 (latest figures available), there were approximately 24,000 people employed in and around the City of Asheboro. The number of businesses has risen slightly from 1,243 in 1998 to 1,299 in 2000. However, there was a slight drop in estimated employment from 1998 to 2002. The largest single industry in Asheboro was manufacturing, employing approximately 9,000 people, followed by retail trade, which employed about 3,400 people.

Figure D.47 - 2002 Employment, Asheboro Zip Codes (27203, 27204, 27205)

	Establishments	Estimated Employment	% of total employment
Total	1,299	23,916	
Construction	129	2,084	8.7%
Manufacturing	121	8,906	37.2%
Wholesale Trade	57	520	2.2%
Retail Trade	267	3,411	14.3%
Transportation, Warehousing	32	249	1.0%
Information	20	304	1.3%
Finance & Insurance	81	634	2.7%
Real Estate, Rental, & Leasing	41	177	0.7%
Professional, Scientific, & Technical Services	92	481	2.0%
Administrative Support, Waste Management, Remediation Svcs.	51	1,112	4.6%
Educational Services	7	80	0.3%
Health Care & Social Assistance	136	2,855	11.9%
Arts, Entertainment, & Recreation	19	267	1.1%
Accommodation & Food Services	96	1,721	7.2%
Other Services	133	965	4.0%
All other industries	17	150	0.6%

In 1998, employment was estimated at 24,163 and 1,243 business establishments were counted.

Source: US Department of Commerce, County Business Patterns by Zip Code. 2002 data released in 2004.

Unemployment

Updated unemployment statistics are not compiled for cities of less than 25,000 people. Thus, the latest unemployment rates available specifically for Asheboro are from the 2000 Census – prior to the recession of 2001 that has resulting in numerous plant closing and industry downsizing.

In 2000, the unemployment rate in Asheboro was higher than Randolph County, but lower than any other comparison area including the state average.

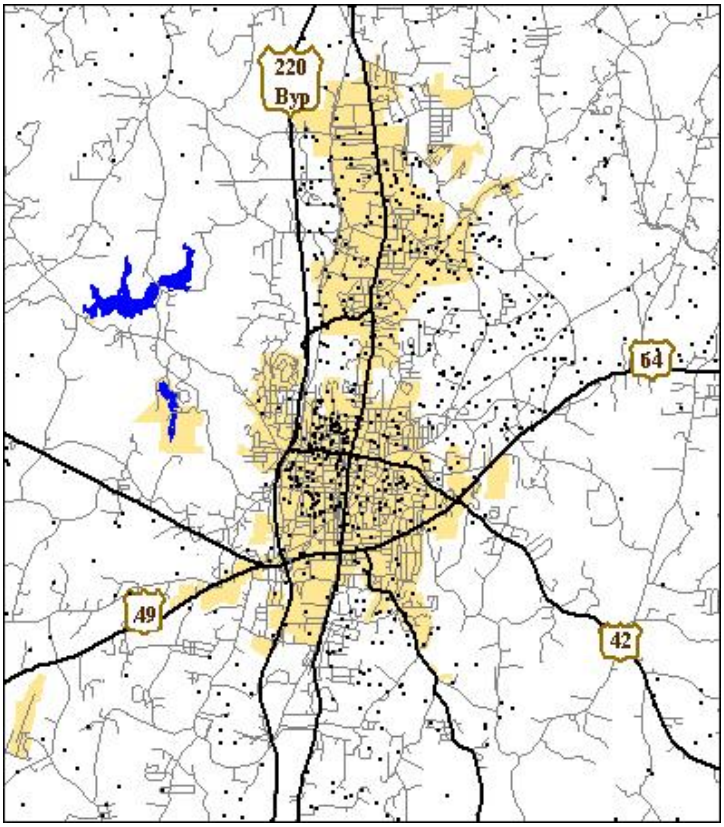
Figure D.48 - Unemployment Rate, 2000

Asheboro	4.8%
Lexington	7.9%
Sanford	5.7%
Shelby	8.0%
Statesville	7.8%
Randolph County	2.1%
NC	5.3%

Source: 2000 Census.

Figure D.49 - Unemployed Persons in Asheboro & surrounding area

Each dot represents one unemployed adult



Source: 2000 Census, data mapped at the block group level.

Layoffs and Downsizings

In the past 10 years, the Employment Security Commission estimates that just over 2,500 jobs have been lost in the Asheboro area. Over 90% of those layoffs impacted manufacturing industries. More specifically, most layoffs and plant closings were seen in the textile and apparel industry with almost 900 recent job losses.

Figure D.50 - Layoffs and Downsizings in the Asheboro area 1995-2005

Manufacturing	2,305
Textiles/Apparel	853
Furniture	437
Retail	160
Service	30
Government	24
Communications, Utilities	22
Total	**2,541**

Large industry downsizings in the past 10 years have included Black & Decker

(Windmere Holdings) with 840 job losses in 1998, Klaussner Furniture with 5 downsizings affecting 422 workers between 2000 and 2002, Rampon Products – plant closing impacting 300 workers in 1995, the Galey and Lord plant closing in 2001 that cost 215 jobs, and layoffs at Sara Lee Branded Apparel in 2004 that affected 200 people.

Place of Work

Just over half of Asheboro's workforce works within the city limits of Asheboro. Another 25% of Asheboro's workforce stays within Randolph County to work. The proportion of workers commuting out of the city to work is on the increase. In 1990, 64.6% of Asheboro's workforce worked within Asheboro. By 2000 it was down to 53%.

Figure D.51 - Workforce and Commuting Statistics for Asheboro, 2000

Total Asheboro labor force	10,875
Employed Asheboro residents	10,077
Asheboro labor force working in Asheboro	5,338
% of Asheboro workers working in Asheboro	53.0%
% of Asheboro workers working in Randolph County	79.5%

Source: 2000 Census

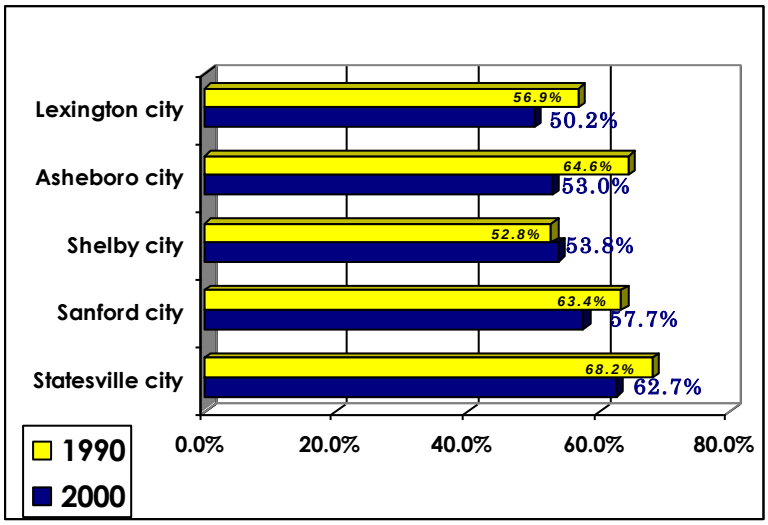
Figure D.52 - Place of Work Comparison

	% that work in city of residence	% that work elsewhere in co.	% work outside county
Asheboro	53.0%	26.5%	20.5%
Lexington	50.2%	30.2%	19.7%
Sanford	57.7%	15.5%	26.9%
Shelby	53.8%	25.0%	21.1%
Statesville	62.7%	20.8%	16.5%

Source: 2000 Census.

Figure D.53 - % Working in City of Residence

Of the comparison areas, only Lexington has a smaller proportion of its residents working in the city than Asheboro. In 1990, Asheboro had the second highest proportion of non-commuters.



Source: 1990 & 2000 Census, Journey to work data.

Figure D.54 - Means of transportation to work Asheboro workforce

Car or Motorcycle alone	76.6%
Carpool	18.4%
Public Transportation	0%
Bicycle or Walked	2.4%
Other means	1.7%
Worked at Home	1.0%

The average travel time to work is 22.2 minutes, up from 15.3 minutes in 1990.

Source: 1990 & 2000 Census.

APPENDIX E: MEDIA STORIES

Plan: Make Asheboro more 'walkable'

By Chip Womick -- Staff Writer, The Courier-Tribune
Posted: 05/11/07 - 12:38:05 am CDT

ASHEBORO — A group of concerned residents has been kicking around ideas of how to make Asheboro a more "walkable" community.

Mary Joan Pugh, who co-chairs a steering committee that has been working on a pedestrian master plan for Asheboro since December, gave members of the Asheboro City Council an update on the plan Thursday night.

"If you look around, you see there's not too many places to walk," said Pugh. "We'd like for Asheboro to be a walkable city."

The idea, she said, is to propose projects that can be completed in a couple of years.

"This is not rocket science," she said. "These are not real hard things. We're going to bring you things that are doable."

A couple of possible projects included in a packet of information given to council members were:

X Creating a multi-use greenway connection from North Asheboro Middle School to the North Asheboro Park. One possible route would follow a rail line; an alternate route would follow Bailey Street and then a stream.

X Using open space between Vision Drive and Presnell Street to build a walking trail and an arboretum, establishing a passive recreation park accessible to both North and South Asheboro residents.

Jesse Day, a regional planner with the Piedmont Triad Council of Governments, presented a brief overview of the result of a survey done between February and April. The survey was mailed to churches and civic organizations, city employees and distributed via email. It was available online and on paper. The 332 responses will help shape the plan, he said. Among the responses:

X Almost half of the respondents (154) said creating a walkable community was very important; 111 classified the issue as important.

X 76 respondents said they walk five or more times a week.

X 89 ranked trails and greenways as the number one destination they would most like to walk to; parks ranked second, then shopping and restaurants.

X The biggest factor discouraging people from walking: Lack of sidewalks and trails. Second was pedestrian unfriendly streets/land uses.

Pugh said committee members plan to develop a priority list for intersection and corridor improvements. They also plan to hold a meeting in North Asheboro to try to get input from residents there. Once a plan is finalized, it will be presented to council members, probably in October.

"This is wonderful," council member Keith Crisco said. "Thank you very, very much for this good work ... we need to not talk about it — we need to have it."

In other business, council members:

X Approved annexation of 64.94 acres of city-owned property on the east side of Zoo Parkway, which is the site for the proposed Zoo City Park.

X Approved — after nearly 90 minutes of discussion in a public hearing — the rezoning of a 2.1-acre tract owned by Matthew Ryan and Lisa Ann Salyer on Browers Chapel Road, about 700 feet from East Dixie Drive, from medium-density residential to conditional use general business. The tract is south of Golden Corral restaurant. The council also approved a conditional use permit to allow construction of a chiropractor's office on a portion of the property.

Requests to rezone the property to general business were denied in 2001 and in 2005. The city's land development plan land use map suggests preserving the residential zoning for the parcel and other tracts to the south of it.

During previous requests to rezone the land, residents who live nearby, particularly those in the Dixieland Acres subdivision behind it, have opposed the change, saying development would further compound water runoff problems that already exist from businesses in the area and from Dixie Drive itself.

The Salyers agreed to build a retention pond on the property to catch storm runoff. The pond will be designed so that the runoff from the property will be no greater after the office is built than it is now; they also promised to build the pond as large as they could to accomodate runoff from other nearby properties, including the restaurant.

Mayor David Jarrell and several members of the council acknowledged that there is a problem with stormwater control in the area. Jarrell appointed council members Crisco, Walker Moffitt and Mack Priest to study the situation to see if there is anything the city can do to improve the problem.

XXX

Contact staff writer Chip Womick at 626-6122 or email him at cwomick@courier-tribune.com.

Pedestrian plan eyes walking options

By Chip Womick -- Staff Writer, The Courier-Tribune
Posted: 06/25/07 - 10:13:41 pm CDT

ASHEBORO — Lynda Kirkman said when her north Asheboro neighborhood was annexed more than 30 years ago, residents were promised sidewalks and street lights.

Kirkman, who lives on Terry Avenue, said the city installed the lights, but not the sidewalks, which she said she would have put to good use during the years when her children were young and she walked them to and from Balfour School every day. Her four children are grown now.

"Maybe we can help out the next generation," she said.

"And that's important," added Brenda Fales, another north Asheboro resident who shared her thoughts during a public workshop at North Asheboro Middle School on Monday evening.

The meeting was held to gain public input about a pedestrian plan for the city. Only three city residents and one resident of a neighborhood that may be annexed attended the meeting, but each offered his or her thoughts.

The planning process began last fall and members of a steering committee have met four times since then to discuss the present and the future for pedestrians in Asheboro. The process is funded with a $21,000 grant from the N.C. Department of Transportation and $9,000 from the city.

City staff and PTCOG planners have gathered relevant facts and figures and have completed an inventory of the city's sidewalks, noting where repairs are needed and where gaps exist. They did a survey about pedestrian issues and received 332 responses.

Planners will use all of the information, including ideas from individuals, to help formulate a proposal for presentation to city council this fall, said Jesse Day, a regional planner with the Piedmont Triad Council of Governments.

Day noted that 9 percent of city residents do not have a vehicle. Those people must catch a ride with friends or relatives, call a taxi, ride a bike or walk wherever they go. Kirkman said she sees many people walking or riding bicycles to work at a meat packing facility near her home. Another noteworthy statistic is that 50 percent of accidents involving pedestrians and vehicles in Randolph County occur in Asheboro. A surprising fact, perhaps, is that only 14 percent of those accidents happen at intersections. Is that because there are too few sidewalks — or too many jaywalkers? The data does not answer that question.

Among other things, Day said, a pedestrian-friendly community offers connectivity (sidewalks and greenways joined to each other), separation from traffic (not sidewalks beginning at the curb), plenty of room (sidewalks at least five feet wide), accessibility and benches.

Survey respondents said the top reason they do (or would) walk a half mile or less was for social visits (26 percent); number two on the list was walking as a means of transportation (to work, school or shopping). The top reason (55 percent) respondents do (or would) walk more than a half mile is for fitness or recreation. The top destinations respondents would like to be able to walk to: Trails and greenways (38 percent), parks (18 percent), restaurants (9 percent) and shopping (8 percent).

Thirty-one percent said a lack of sidewalks and trails discouraged them from walking; 29 percent listed improved greenway trail systems as the top need to increase walking in the community. The top five streets identified as needing sidewalk or trail improvement: Dixie Drive, Fayetteville, Salisbury, Church and Park.

Fales, who lives off Allred Street, said walking in her quiet neighborhood is not a problem, but when she gets to Allred, it's a different story.

"There aren't any sidewalks and the cars drive like there isn't any speed limit," she said. "And it's a very curvy street."

Kirkman said she enjoys walking to North Asheboro Park off Balfour Avenue. She usually does not feel safe walking on the side of the street because of heavy traffic, she said. A sidewalk to the park would be a nice addition, she said. Fales pointed out that there are no sidewalks leading to busy Kiwanis Park off Meadowbrook Road, either.

Some of the proposals in a completed pedestrian plan would cost little or no money. But some would. Day said the costs of a mile of sidewalk is about $250,000. State and federal monies are available for many different transportation enhancement projects, he said.

He said planners will present city council members a long list of options and let them whittle the plan down to what's affordable — and to what their residents say they want.

xxx

Contact staff writer Chip Womick at 626-6122 or email him at cwomick@courier-tribune.com.

APPENDIX F: STEERING COMMITTEE NOTES

Asheboro Comprehensive Pedestrian Transportation Plan

Steering Committee Meeting #1
December 12th, 2006 @ 7pm

Meeting Notes

Trevor Nuttall, planner with the City of Asheboro opened the meeting and the steering committee introduced themselves. Mr. Nuttall went over previous planning efforts, highlighting the fact that a number of Asheboro planning efforts (i.e. Land Use Plan, Strategic Plan, Parks and Recreation Plan) in the past have highlighted walkability and connectivity between destinations by means other than the automobile. Mr. Nuttall also reviewed the planning process for the Comprehensive Pedestrian Transportation Plan.

Jesse Day, regional planner with the Piedmont Triad Council of Governments briefly discussed a couple of handouts on walkable communities as background material for initiating the pedestrian transportation planning process. Mr. Day then explained the first visioning exercise, which consisted of splitting into three small group discussions on the future of pedestrian transportation in Asheboro. The two questions asked about pedestrian transportation in Asheboro were:

- Our 2026 vision is…and
- As a result of this planning process, Asheboro will…

The results of each of the three group discussions are highlighted below.

Our 2026 vision is:	
Issue:	*# of times mentioned*
Safe sidewalks (smooth, good condition)	3
Accessibility for children and seniors	3
Connections between destinations (schools, businesses, neighborhoods, attractions)	2
Pleasant utilitarian pedestrian travel, beyond concrete	2
Unique facilities and visually appealing (automated walk spaces, talking sidewalks, themes)	2
Better signage for attractions	2
Multimodal connections	1
Provide bicycle facilities as well as pedestrian facilities	1
Growing network of pedestrian facilities	1
Added aesthetic value	1
Well lit sidewalks	1
Quality asset for tourism	1

As a result of this planning process Asheboro will [be/have]:	
Issue:	*# of times mentioned*
Become attractive to new residents and industry	2
Increased awareness of need for pedestrian friendly community	2
A healthier, active lifestyle and community	2
Better prepared for change and new ideas	1
Sustainable community	1
Appealing and progressive community	1
Adopted programs for policies and improvements	1
Attainable goals for walkability	1
Start to become a destination for young people	1
User-friendly city for all users	1
More of a sense of community	1

Following the small group discussions, a collection of *common themes* for the Asheboro Pedestrian Transportation Vision were recorded for use in developing the draft vision statement, which included:

- Safe
- Pleasant
- Culture
- Accessible to all
- Innovative infrastructure
- Connectivity
- Healthier
- Cost effective
- Unique
- Organized community
- Awareness and education

Following a break, the second small group exercise consisted of mapping desirable and undesirable destinations and corridors for walking. The base map consisted of an Asheboro area map with streets, existing sidewalks, employment centers, schools, parks, cemeteries, government buildings and water resources. A red dot was used to locate undesirable locations and a green dot located places people wanted to go. The results of this process showed that often times, the desired locations were also tough places to walk, many of these conflicting dot colors showed up along Dixie Drive, the proposed Zoo Greenway near the North Asheboro Middle School, areas off of North Fayetteville Street and at other locations throughout the City. A number of green dots were placed in parks, places of employment and schools. Many of the desirable locations do not have pedestrian facilities in place to provide safe access by foot. The meeting adjourned at 9pm. The next meeting is scheduled for January 22nd, 2007.

Asheboro Comprehensive Pedestrian Transportation Plan

Steering Committee Meeting #2
January 22, 2007 – 2:00 pm
Meeting Notes

Trevor Nuttall opened the meeting and welcomed two new steering committee members who could not make the first meeting: Ben Morgan and Captain Rickey Wilson. In addition Dumont Bunker, the City Engineer and Paul Kron, the Planning Director for the PTCOG were new attendees as well. Jesse Day, Regional Planner with the PTCOG reviewed the meeting notes from the first steering committee meeting and explained how the visioning exercise in the first meeting was used to develop a draft vision statement and four draft goals, which were handed out to committee members.

The mapping exercise from the first meeting, which included identifying dangerous intersections and desirable locations to walk were included in a new draft map showing desired locations surrounded by ¼ mile and ½ mile circular walk zones, crash data, dangerous intersections, employment centers, proposed greenways and baseline geographic data. Jesse discussed the results explaining how to read the map and fielded any questions. Analysis of dangerous intersections and crash data correlations is still forthcoming. Following the review of the crash data and desirable walk zones, Jesse presented a brief overview of demographic and crash data for the City of Asheboro. There is a discrepancy between the City and State data, which is still unexplained. For the purposes of this pedestrian plan, the City data is being used because it is more thorough. Content from the presentation is appended to these notes.

Dumont Bunker presented the City's ordinance on sidewalk construction and maintenance. In summary the Charter determines that it is the responsibility of the abutting property owner to maintain and construct sidewalks. Increasingly, the City has been paying for rehabilitation of sidewalk, but there is no formal program for maintenance. There has not been a petition for a sidewalk construction/maintenance payment from the City to a property owner since 1985. The City does require sidewalk on new building construction to be paid for by the property owner. There was a question of why the abutting property owner must pay for a sidewalk that may not be on his/her property. The best answer was that the City Charter has codified this requirement, but perhaps some clarification should be included in the Charter. There are some cases where sidewalks have easements through property and there are other cases where the sidewalk lies within the street right of way (owned by the City).

Hanna Cockburn, Senior Planner with the Piedmont Triad Rural Planning Organization gave a presentation about the State Transportation Improvement Program (STIP), describing how transportation projects go from an idea/need to a reality. There is a formal process based upon citizen input and traffic analysis that drives the STIP process. The presentation given by Hanna is appended to these notes.

Jesse presented an overview of walkable communities and showed images describing how connectivity, access, land-use, designated space, lighting, furnishings and access can encourage walking. In some cases the images show a lack of these characteristics. This presentation reinforced concepts reviewed in the first steering committee meeting.

Paul Kron with the PTCOG briefly discussed the draft vision statement and draft goals resulting from the first workshop and asked for feedback, changes or additions. There were no immediate changes or additions. The group then broke up into 3 small groups in advance of a tools and solutions workshop. Following a break, the 3 groups worked separately on 1) programs, 2) pilot projects and 3) policies that would make for a more walking friendly Asheboro. After working individually for a few minutes, each

person shared their ideas and recorded these ideas as a small group. The three groups then reported their top four or five ideas to the whole committee in the three areas described above. The results of this workshop are appended to these notes. The exercise served to identify tools, explain what goals are achieved by implementing the tools, how long it will take, what person(s) or agency(ies) are responsible and the resources needed to achieve the solution.

Following the tools and solutions workshop, there was a brief discussion of the public visioning workshop. A more detailed discussion of the agenda and content of the public workshop will be discussed at the third steering committee meeting February 26, 2007 @ 2pm.

The meeting was adjourned at 4:30pm.

Additional Notes and Appendices:

Draft Vision Statement:

In the year 2026, Asheboro will provide a safe and pleasant pedestrian experience and be accessible to people of all ages. Asheboro will achieve this by establishing innovative programs, projects and policies designed to create a unique experience for City residents and visitors. Asheboro pedestrians will be a well organized community fostering a culture of walkability through awareness and education, while striving to encourage a healthier and more active lifestyle for everyone.

Draft Goals:

5. Provide a safe, pleasant and accessible pedestrian experience for all ages.
6. Create an attractive, unique pedestrian experience for residents and visitors.
7. Foster a strong awareness, expectation and culture of walkability in Asheboro.
8. Encourage healthier, more active lifestyles.

Tools & Solutions (Action Planning) Workshop:

Purpose: To identify & prioritize strategies, tools & solutions to achieve key goals through 1) Programs, 2) Pilot Projects and 3) Policies.

Process:

- Review draft vision statement and draft goals
- Form three work groups
- Work individually on worksheets (what, why, where, when, who & how)
  [Note: focus on how to address & achieve key goals]
- Share, discuss & refine tools & solutions with fellow workgroup members
- Select & transfer top 1 or 2 strategies, tools & solutions to poster
- Present top tools & solutions to the full Steering Committee

Tools and Solutions Workshop – Meeting #2
GROUP 1 - PROGRAMS

Suggested Programs – Community Education & Awareness Program; Community Volunteer & Involvement Program; Awards Program; Business Façade/Streetscape Grant &/or Loan Program; CDBG Program, Urban Forestry Program (street tree planting program), Sidewalk Installation & Repair Program; Safe Routes To School Program, etc.

Tool / Solution (What)	Purpose & Place (Why & Where)	Timeframe / Priority (When)	Responsible Parties (Who)	Resources Needed (How)
Sidewalk program • Maintenance • New construction	To achieve goal 1, 2, 3 & 4 (see draft goals)	Tiered Timeframe Based on: • Conditions • Priorities • Connectivity	City Staff NCDOT Grantors	Education Branding Money Political Will Process
Walkable Business/Neighborhood • Commercial and Residential Focus • Urban theme trails • Discounts for participating businesses/people	To achieve goal 1, 2, 3 & 4	Short-range (next year) for pilot projects Long-range (3-5 years) for entire community	City Hospital Parks and Rec Police HOAS/Neighborhoods Churches Chamber	Volunteers Money Branding Willing pilot partners
Schools/churches walking encouragement program • Incorporate into curriculum • Workshops and education • Involve parents and kids	To achieve goal 1, 2, 3 & 4	Short-range (next year) for pilot projects Long-range (3-5 years) for every school/church	School Admin City Hospital Parks and Rec Police HOAS/Neighborhoods Churches Chamber	Publicity PTA/PTO leadership Political will
Partnership and coordinating group	To achieve goal 1, 2, 3 & 4	Mid-range (2-3 years)	School Admin City Hospital Parks and Rec Police HOAS/Neighborhoods Churches Chamber	Leadership Process Financial

Tools and Solutions Workshop – Meeting #2
GROUP 2 – PILOT PROJECTS

Suggested Pilot Projects – Streetscape Improvement Study; School Design Charrette (involve students, teachers & PTA); Downtown Improvements Projects (e.g. pedestrian access ways to downtown shops); implement top-priority sidewalk and greenway improvements identified in the Pedestrian Plan, etc.

Tool / Solution (What)	Purpose & Place (Why & Where)	Timeframe / Priority (When)	Responsible Parties (Who)	Resources Needed (How)
1. Asheboro high school/middle school area Sidewalk gap closure and connections to Church, Fayetteville, Walker, Park Streets and Dixie Drive	To achieve goal 1 & 3 (see draft goals)	Short-range (next year)	City staff Schools	NCDOT – Safe Routes to School Schools City Capital Improvement Program
2. Boys and Girls Club No sidewalks around Boys and Girls Club currently, need them installed on Brewer, Watkins, Frank Street and connection to East Side Park	To achieve goal 1 & 4	Short-range (next year)	City staff East Side Development (Addie Luther) High Point Boys and Girls Club	City NCDOT
3. Senior Centers (Summit, Capsan and AHA) Sidewalks and gap closure	To achieve goal 1 & 4	Mid-range (2-3 years)	City staff NCDOT Division on Aging Randolph County Hospital	City NCDOT Division on Aging Randolph County Hospital
4. Pedestrian lanes on wide roads Greystone neighborhood (Shannon, Cliff and Shamrock Streets)	To achieve goal 1 & 4	Short-range (next year)	City staff	City
5. Arboretum Presnell Street and Vision Drive near US 220	To achieve goal 2	Long-range (3-5 years)	City staff Private foundation Civic organizations	City

Tools and Solutions Workshop – Meeting #2
GROUP 3 – POLICIES

Suggested Policies, Guidelines & Regulations – Review & Amend Existing Zoning & Subdivision Regulations (sidewalk & open space requirements, landscaping and street trees, outdoor storage, setbacks & buffers, signage, parking, etc); Review & Amend Code Enforcement Policies & Practices; Review & Amend the Development Review Process (to help prevent future problems); Establish Community Appearance Guidelines &/or Policies; etc.

Tool / Solution (What)	Purpose & Place (Why & Where)	Timeframe / Priority (When)	Responsible Parties (Who)	Resources Needed (How)
Review and amend subdivision, sidewalk and zoning ordinances	To achieve the goal of: • Clarification/education and enforce standards	Mid-range (2-3 years)	Public works Planning Engineering Stakeholders	Time/commitment
Public private partnership for funding improvements	To achieve the goal of: • Reducing fees • Relaxation of some regulations: (road width, floor area ratio and lot size)	Short-range (next year)	Public works Planning Engineering Stakeholders Council	
Incentives/assistance for site design and walkability	To achieve the goal(s) of: • Lighting • Setbacks/buffer • Outline of expected changes with incentives to incorporate changes	Short-range (next year)	Public works Planning Engineering Stakeholders	Financial What to offer/incentives
Pedestrian maintenance/construction program (benchmark for linear feet per year of installation)		Mid-range (2-3 years)	Council Stakeholders Public works Planning Engineering	Priorities Gaps Comprehensive Pedestrian Plan

Asheboro Comprehensive Pedestrian Transportation Plan

Steering Committee Meeting #3
February 26, 2007 – 2:00 pm
Meeting Notes

Mary Joan Pugh opened the meeting and welcomed the steering committee. There were a number of committee members absent due to conflicts; nearly 1/3 of the committee was absent. Ms. Pugh emphasized the importance of the upcoming public meeting to be held April 3 at the Asheboro Library.

Jesse Day discussed the results from the January 22 meeting, where a number of draft policies, programs and pilot projects were discussed that would make Asheboro more walking friendly. This exercise and subsequent results had been reported by e-mail prior to this 3rd steering committee meeting. The matrix of policies, programs and pilot projects will be reported at the April 3rd public meeting as well. There were no changes or additions suggested.

The format for the April 3 public meeting was discussed, which will include two separate, but identical presentations consisting of the steering committee work to date and what comprises a walkable community. Following the presentations, there will be mapping stations set up so that participants can map their walking routes, areas of concern and desired destinations. There will be reference maps on the wall and on easels with crash data, ortho-photos, proposed project areas, etc., but the mapping stations will be base maps with existing sidewalks, parks, roads, and employment centers. There will be at least one City or PTCOG staff or steering committee volunteer at each mapping station to answer questions one on one with citizens of Asheboro. A flier for the public meeting is being developed.

A draft of the Pedestrian User Survey was shared with the steering committee. Candie Rudzinski suggested adding distance choices to question 3. Other minor changes in wording were completed at the meeting. A new draft will be sent to the group to review before launching the survey. There will be an opportunity to partially review results of the survey at the public meeting and the closing date for the survey will be sometime after the public meeting. The survey will be distributed electronically and available online and will also be sent via hardcopy to Churches and Civic groups across Asheboro. George Gusler offered to supply a list of names and contacts through the Asheboro Chamber of Commerce.

The work plan moving forward after the April 3 meeting was briefly discussed. There will be a lot of work to do compiling proposed projects, objectively ranking priorities and writing the plan. The follow-up public workshop, where a draft plan and map of improvements is to be presented, will be held at least three months after the 1st public meeting held on April 3.

The next steering committee meeting is scheduled for Tuesday, May 1 at 2pm in the Public Works Building. The meeting was adjourned at 2:50pm.

Asheboro Comprehensive Pedestrian Transportation Plan

Steering Committee Meeting #4
May 1, 2007 @ 2 pm
Meeting Notes

The meeting was opened by Mary Joan Pugh. There was discussion of the April 3rd public meeting. The Mayor and City Manager were in attendance, but there were not as many members of the public attending as anticipated. The feedback that was given however, was useful and incorporated into suggested improvements for the Pedestrian Plan.

Jesse Day then discussed **survey results** and handed around results. There were 332 responses to the English survey and none for the Spanish survey. More access to parks and greenways and a general lack of adequate sidewalks and trails top the list of survey responses. A full report of the survey will be included in the Pedestrian Plan.

Following the review of the survey data, a draft list of **new project needs** was passed around. These projects are broken down into intersection and corridor projects. The projects are the result of analyzing crash data and steering committee and public comments. A number of factors were used in the prioritization process (see attached scoring system and list of projects). A couple of examples were shown where different factors added up to a score, which ranked the project against other projects. Discussion of the prioritization factoring system took place and the issue was raised that undue weight was being given to projects near schools. The process being used incorporates factors from the Durham Pedestrian Plan (2005), Graham Pedestrian Plan (2005) and the Portland Pedestrian Plan (2005). When the list of projects is completed, Jesse will show a prioritized list of projects giving less weight to projects near schools.

John Evans then discussed his Master's Research paper which catalogued the condition and **maintenance needs** for all the existing sidewalks in Asheboro. It was decided that a separate prioritization process would be given to the existing sidewalk maintenance needs. His report and suggestions for how to improve maintenance of the sidewalk system will be incorporated into the Pedestrian Plan. The committee thanked John for all his work and welcomed him as the new planner replacing Trevor Nuttall.

Jesse handed around a table of **ordinances and regulations** that would help walkability in Asheboro. Some items have been tried before, but many have not (see attached table). Discussion of each item took place and the edits to the suggested improvements to the ordinance are included in the attached. *Further comments and suggestions were encouraged* and further discussion was postponed as the meeting adjourned at 3:30pm.

Asheboro Comprehensive Pedestrian Transportation Plan

Steering Committee Meeting #5
July 17, 2007 @ 2 pm

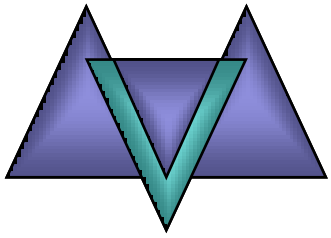
Discussion of June 25th Public Meeting

Review plan draft

Review corridor and project recommendations
- Identify projects missing from recommendations or projects to remove from recommendations
- Review small area pedestrian systems

Ordinance and program recommendations
- Modify ordinance and program recommendations

Next steps
- Public meeting
- Council working session



Piedmont Triad Council of Governments
(336) 294-4950
www.ptcog.org