

Chapter 2

EXISTING CONDITIONS

2.1 General Overview

The Town of Wake Forest is situated among gently rolling hills and moderately forested land, just north of Raleigh, the state capital of North Carolina. Wake Forest encompasses approximately 12 square miles, extending from the Neuse River north to Franklin County and generally from US-1 east to the Rolesville Urban Services Area. Wake Forest first developed around Wake Forest College, the current home of the Southeast Baptist Theological Seminary and linearly along the railroad rights-of-way. This generally linear development continues along US-1 and along transportation corridors linking Wake Forest to Raleigh. The pedestrian system study area is comprised of the extra territorial jurisdiction (ETJ), the urban service area (USA) and the geographical area of Wake Forest. Pedestrian facilities within this study area include sidewalks, greenway trails and crossings.

With the Town's close proximity to Raleigh and with the expansion of Interstate 540 to Capital Boulevard, Wake Forest has experienced rapid growth over the last few years. Most residents enjoy the small town quality of life that Wake Forest offers, while still having convenient access to downtown Raleigh and the Research Triangle Park. The central core of Wake Forest is the downtown business district, which contains an array of local businesses, homes and the campus of the Southeastern Baptist Theological Seminary. This quaint area of town is filled with tree-lined streets, historical residences and businesses dating back to the 19th century, producing the small town feel to which most of Wake Forest's residents are drawn.

However, moving away from the central core of the Town, rapid suburban growth has created numerous distinct subdivisions that isolate pedestrians from downtown Wake Forest. Examples include Fair Lake and Country Club Downs to the north, west of US-1; Crenshaw Hall Plantation, Prestwicke, and St.Ives, also west of US-1; Caddell Woods, Moss Creek, Summerwoods, Carriage Run, St. Andrews Plantation, Parkside at St. Andrews, and Stonegate on the southern edge of the USA; and Bowling



Figure 2(a):
*Unsuitable Pedestrian Facilities along
Durham Road at US 1*



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Figure 2(c):
Inconsistent sidewalk
along Stadium Drive

Green, Austin Creek, and Bishops Grant east of downtown (See *Map 1: Existing Pedestrian Facilities*). One significant goal of the Wake Forest Pedestrian Plan is to modify and provide pedestrian facilities in order to link these subdivisions to one another and to Downtown, providing greater overall pedestrian connectivity.

Numerous efforts by the Town of Wake Forest have already contributed to this goal. For example, the Town proactively planned and helped to pay for two pedestrian underpasses to be built with the NC 98 Bypass, to keep it from cutting off the north to south flow of pedestrian travel. Also, newer neighborhoods, such as Heritage in the southeastern edge of Town, offer places to live, work, shop, and play, as opposed to strictly residential subdivisions that often require automobiles for fulfilling daily needs. Furthermore, efforts such as the Renaissance Plan for the Heart of Wake Forest (see *Chapter 3: Existing Plans, Programs, and Policies*) will ensure the continued development of a strong core destination for users of the future pedestrian network.

2.2 User Demographics/Current Usage

Wake Forest's rapidly growing population is primarily working, middle-upper class and young (with a town average age of 33). According to the Capitol Area Metropolitan Planning Organization (CAMPO), population projections for the Town of Wake Forest are as follows:

Population Totals: Town vs. County

	2002	2010	2020	2030
Wake Forest	17,642	25,922	35,393	37,543
Wake Co. Total	735,243	880,865	1,168,295	1,381,645

Source: CAMPO (2004). 2030 Long Range Transportation Plan: Socioeconomic Data.



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Pedestrians in Wake Forest range from children to seminary students to individuals who do not have access to a motorized vehicle. Additionally there is a significant portion of the Town's population that engages in walking for recreation. This is based largely on consultant fieldwork, public input and steering committee input.

These projections suggest that the percent change in population from 2002 to 2030 for the Town of Wake forest will be 112.8%, compared to 87.9% for the County as a whole. The Town's projected growth is primarily attributed to the close proximity of Raleigh and the Research Triangle Park, making it an ideal location for families to enjoy the benefits of being near a city while living in a small town.

The growing population will add to the many pedestrians already relying on existing facilities in the Town of Wake Forest. A pedestrian traveling any substantial distance will frequently encounter obstacles such as sidewalk gaps or inadequate crossings (missing ramps and lights without



*Figure 2(d):
Unsuitable Pedestrian Facilities along
Durham Road at US 1*



*Figure 2(e):
Smith Creek Greenway access
at Burlington Mills Road*



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pedestrian signalization). Well-worn footpaths indicate that able walkers overcome some obstacles, but when accessibility is limited, those people who are dependant on walking as a means of transportation and those with limited mobility are most greatly affected. It is clear that improvements are needed to bring existing facilities up to a level of accessibility, and that new facilities are needed to make important connections.

2.3 Community Concerns, Needs and Priorities

Greenways Incorporated gathered public concerns, needs, and priorities through the process of public meetings, steering committee meetings and walkability survey responses. These are the major concerns culled from the public involvement process:



*Figure 2(f):
Accessibility issues in
Downtown Wake Forest*

1. Connectivity and Convenience
 - a. Connect subdivisions to areas of interest (shopping, schools, recreational areas, transit hubs, other neighborhoods, downtown for cultural events)
 - b. Connect parks and recreation areas
 - c. Ease of access to facilities
 - d. Connect Town system to other transportation systems and modes
 - e. Make regional connections to Rolesville and Raleigh
2. Design Parameters
 - a. Require sidewalks on both sides of streets unless circumstances deem otherwise
 - b. Require sidewalks to be built with road so they connect people with destinations earlier than later



3. Pedestrian Facilities as Amenities
 - a. Create points of interest, such as resting places with benches or performance stations
 - b. Multipurpose trails for jogging, walking, bicycling, roller blading, horseback riding, etc.

2.4 Pedestrian Friendliness of Local Transportation System

The existing pedestrian system is sometimes a hostile environment with significant gaps, lack of proper separation from vehicular traffic, and poor accessibility. Although downtown sidewalks are in poor condition, this is currently the most pedestrian friendly area of town. The downtown was developed under a pedestrian oriented design model, resulting in an abundance of sidewalks, a concentration of local businesses, and slow traffic speeds.

1. Positives
 - a. Ample sidewalks inside neighborhoods
 - b. Picturesque historic downtown
 - c. Long term policy of requiring sidewalks with new development
 - d. Open space and greenway planning and development
 - e. Public investment and grantsmanship
2. Negatives
 - a. Lack of connectivity between communities, due to railroad tracks, highways, insufficient connecting sidewalks, creek crossings, and undeveloped areas
 - b. Poor sidewalk conditions
 - c. Non-compliant ADA pedestrian facilities
 - d. Crossings at street intersections
 - e. Lack of “buffer zones”



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2.5 Street and Highway System Access

Pedestrians interact with vehicular traffic at street intersections and mid-block crossings. These areas should provide for safe crossing with good visibility, clear crosswalk delineation, ramps, refuge islands, and signs and signals where appropriate to alert drivers to the presence of pedestrians. In Wake Forest, some existing intersections at thoroughfares have ample signage and pedestrian signaling, however, some crossings can be very difficult for children, the elderly, and the disabled. Capital Boulevard, a primary-major thoroughfare, is an excellent example of this condition and is lacking in all necessities of safe crossing.

2.6 Pedestrian System Access

Since the pedestrian system is designed to provide a transportation option for people, it should conveniently connect commuters and short-trip users to their destinations. Similarly, pedestrian commuters and recreational users are more likely to use the greenways and off-road trails if they are conveniently connected to work and recreation destinations.

In Wake Forest, it is fairly easy to access sidewalks within the confines of new residential developments, however, these subdivision systems do not connect with other subdivision systems nor do they join to a larger network in most cases. In some cases, there are minimal gaps between subdivision systems and greenway trails, offering opportunities for relatively simple and inexpensive fixes.

Citizens have stressed the desire to have convenient connections to key destinations such as the downtown area. For cultural events many would prefer to walk from their homes, rather than drive downtown and find parking. Stronger connections to downtown could boost business simply by improving pedestrian traffic.



Figure 2(g):
*Problematic pedestrian crossing at
US 1 and South Main Street*



2.7 Inventory and Assessment of Existing Facilities

The Town of Wake Forest has a significant inventory of existing pedestrian facilities, as shown in *Map 1: Existing Pedestrian Facilities*. Though Wake Forest currently has over 60 miles of sidewalks, there are many gaps that reduce overall efficiency as a network. The central business district is well connected by sidewalks, though some of the facilities are not ADA compliant and some are in poor condition due to lack of maintenance. Conversely, sidewalks in newer developments are in good condition due to their recent construction, but are poorly connected to the community at large. Finally, greenway trails are a critical component in the pedestrian system. Linkages are needed between greenways and nearby subdivisions to provide access to the larger community system.

Brief descriptions of some specific gaps, hazards, and other deficiencies in key areas of town are identified below. These specific areas were identified during the September 2005 Steering Committee meeting and were then investigated in more detail by Greenways Incorporated. The findings are as follows:

Capital Boulevard Area

Capital Boulevard runs south to north through the western side of Wake Forest. This major highway acts as a man-made barrier and hazard to pedestrians. It is flanked by intermittent shopping centers, auto dealerships and major intersections leading into Wake Forest. Two intersections on this road were investigated for their pedestrian accessibility: Capital Boulevard at South Main Street, and Capital Boulevard at Durham Road.

The intersection of Capital Boulevard and South Main Street was investigated for pedestrian access between the large commercial and retail center on the southwest corner and

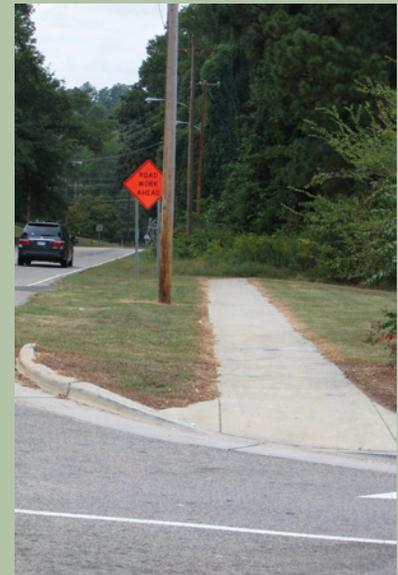


Figure 2(h):
Insufficient sidewalk bordering
Wake Forest-Rolesville High School



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Figure 2(i):
Worn footpath through J.L. Warren Park
in Cimarron

South Main Street, which leads to downtown. Currently there are sidewalks leading to the intersection on both sides of New Falls of Neuse and on the south side of South Main Street, each of which terminates shortly before the intersection. With inadequate pedestrian facilities, the four-lane divided highway presents a highly dangerous area for pedestrian crossing. Providing safe pedestrian crossing at this intersection will require installation of multiple crosswalk facilities, such as pedestrian signalization, refuge islands, ramps, linkages, signage, and buffer zones.

The intersection of Capital Boulevard at Durham Road was investigated for pedestrian access across US-1. The Durham Road underpass creates a series of intersections at each exit ramp. At present, pedestrians are forced into the travel lane beside guardrail where barriers line the underpass. Access at this point would link non-residential development areas located at three of the four quadrants of the intersection and has the potential of connecting with Raleigh's facilities when Falls of Neuse Road intersects with Durham Road.

School Areas

Currently nine schools and one proposed school site lie within the ETJ of Wake Forest. These schools include the following:

- **Southeastern Baptist Theological Seminary**, 120 South Wingate St.
- **Forest Pines Elementary at the Dubois Center**, 530 E. Perry Ave. (temporary commuter school).
- **Heritage Elementary School**, 3500 Rogers Rd.
- **Heritage Middle School**, 3400 Rogers Rd.
- **Heritage High School**, Forestville Rd (proposed).
- **Jones Dairy Elementary**, 1100 Jones Dairy Rd.
- **Wake Forest Elementary Magnet**, 136 W. Sycamore Ave.
- **Wake Forest-Rolesville High School**, 420 W. Stadium Dr.
- **Wake Forest-Rolesville Middle School**, 1800 S. Main St.
- **Franklin Academy Elementary**, 604 S. Franklin St.
- **Franklin Academy Middle & High School**, 1127 Chalk Rd.



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Most of the schools in the ETJ have sufficient sidewalks servicing their immediate areas, with Wake Forest-Rolesville High School, on Stadium Drive and Franklin Academy on Chalk Road as exceptions.

Wake Forest-Rolesville High School is lined by Stadium Drive, which possesses short and disconnected stretches of sidewalks between Rock Spring Road and US 1. The high school backs up to an older residential subdivision without curb, gutter and sidewalk and was developed prior to adoption of current requirements for pedestrian facilities. While sidewalks generally border the other schools, their deficiencies lie in the fact that they are isolated from nearby subdivisions by a lack of connectivity. Ensuring safe routes to schools for children from nearby subdivisions is a top priority of the Wake Forest Pedestrian Plan.

Isolated Peripheral Areas

A large percentage of the subdivisions in Wake Forest have sidewalks on both sides of collector streets and on one side of local streets. However, in many instances these subdivisions are not linked to other subdivisions or other nearby destinations. This isolation discourages pedestrian travel from one place to another. One of the primary goals of the Wake Forest Pedestrian Plan is to develop a program to connect these isolated subdivisions by creating pedestrian corridors.

Cimarron is a subdivision with sidewalks on one side of most streets except for the southern length of Cimarron Parkway from Amherst Creek Drive to South Main Street. This disconnect in the pedestrian system makes it difficult for hundreds of residents to walk safely through the subdivision.

Land around Half Moon Pond was dedicated to the Town of Wake Forest in lieu of recreation facility fees when the Cimarron subdivision was approved. The Town does not plan to develop active recreation facilities at this site. The Cimarron and Forest Pointe Home Owners Associations own additional open space and common areas extending from



Figure 2(j):
Pedestrians navigating White Street

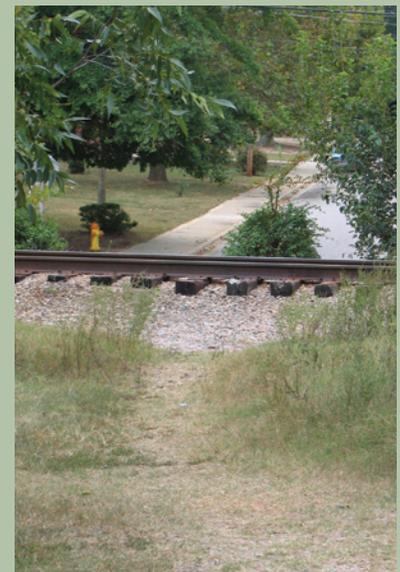


Figure 2(k):
Worn footpath over railroad tracks connecting White Street to Cedar Street



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Half Moon Pond south to South Main Street. Worn footpaths around the pond are an indication that this may be a good area to consider a public and private effort for developing connecting greenway trails to create a pedestrian corridor extending from South Main Street to NC 98 Bypass.

Another example of an isolated peripheral area is the subdivision of Crenshaw Hall Plantation. Crenshaw Hall borders the new Capital Plaza Shopping Center, however there are no established links for pedestrians to gain access from the residences to the shopping center. Crenshaw Hall Plantation is separated from Capital Plaza Shopping Center by steep slopes and a tributary creek of Richland Creek. Sidewalks along Durham Road and along the future alignment of Warmoven Street will be needed for safe pedestrian travel from Crenshaw Hall to the shops. Development currently under review includes extending Warmoven Street from the current end to Retail Drive with sidewalks on the north side of the street.



Figure 2(l):
Accessibility and safety issues in Downtown Wake Forest

The Market of Wake Forest is located on the north side of Durham road, north of Capital Plaza Shopping Center. St. Ives, Prestwicke, and Tarlton Park subdivisions are located on the north side of Wake Union Church Road in close proximity to the neighborhood shopping center. With only intermittent sidewalk sections along Wake Union Church Road and Kearny Road, and no signalized crossing, there is not an adequate pedestrian route from the residences to the shopping services.

A final example is the Dubois Center. A long, uninterrupted stretch of railroad tracks currently prevents a convenient pedestrian link between the Dubois Center and areas west of White Street. Pedestrians navigate White Street in this area in the absence of sidewalks with numerous footpaths indicating where they are crossing the railroad tracks.

Downtown

Wake Forest possesses a charming, small town feel in its downtown business district. More individuals can be drawn to the area for business and pleasure by expanding and improving the existing pedestrian facilities. Currently most of the central



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downtown business district's streets are lined with sidewalks, many of which have been painted to mimic brick walkways. The sidewalks along White Street are dramatically elevated above the street and intersected by numerous staircases. These staircases, high curbs, and lack of curb cuts pose severe accessibility problems for the mobility impaired. Careful attention needs to be taken when updating the sidewalks of downtown Wake Forest to honor the historical integrity of the area while providing access for all according to ADA guidelines and the principles of universal design.

Wake Forest is divided from north to south by a CSX railroad line. This railroad corridor has created a man-made barrier affecting pedestrian routes between the surrounding residences, the Southeast Baptist Theological Seminary and downtown Wake Forest. A precariously placed, steep and ill kept staircase rises to South Avenue from the railroad tracks adjacent to a municipal parking lot on White Street. In its current condition this staircase poses serious pedestrian safety and accessibility issues. This serves as an example of existing pedestrian railroad crossings that are in need of upgrading.

NC 98 bisects downtown Wake Forest, skimming the edge of the Southeastern Baptist Theological Seminary's campus, crossing under the CSX railroad line and exiting town along Roosevelt and Wait Avenue. This is a local-major thoroughfare that carries traffic from east to west across town and creates several dangerous pedestrian crossings near the seminary. The intersection of Durham Road and Wingate Street is especially deficient in effective pedestrian facilities. It lacks sidewalks on the northeastern corner and pedestrian signals at all corners. Crosswalks are painted to curbs with no connectivity to sidewalks, and there is a lack of ramps and curb cuts for accessibility. One block to the east, at the intersection of Durham Road and South Main Street, the Town of Wake Forest has constructed a roundabout with a full range of pedestrian facilities to address numerous safety issues and pedestrian crossing difficulties. Educating the local community on navigation through the roundabout will be undertaken upon completion of the project. Wake Forest



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can anticipate a learning curve as motorists and pedestrians learn to negotiate the new facilities.

Farther east on Front Street near the CSX railroad tracks, there are no pedestrian signals or crosswalks for pedestrians to cross Front Street when walking to and from the seminary campus and downtown. These three busy and confusing intersections pose some dangerous hurdles for pedestrians.



*Figure 2(l):
Insufficient existing pedestrian crosswalk near at the intersection of Wingate
Street and Durham Road*

