

## SECTION ONE: INTRODUCTION

### 1.1 VISION STATEMENT



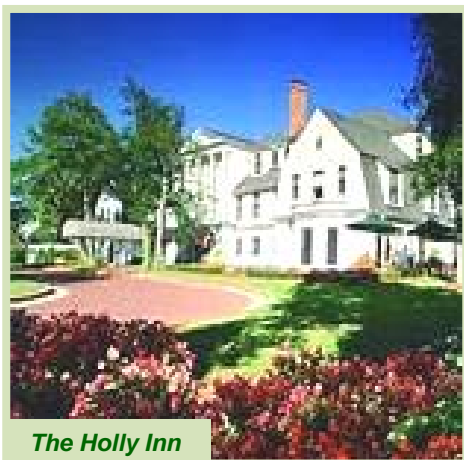
The Village of Pinehurst, North Carolina, is committed to providing its citizens with a safe community in which to live, work, and play. Part of this commitment includes the future improvement and/or construction of pedestrian-friendly transportation corridors throughout the Village. Consequently, the Village of Pinehurst hired McGill Associates to develop a Comprehensive Pedestrian Plan, and assist with these efforts.

On June 3rd 2014, McGill Associates held a “kick-off” meeting with members of the Pedestrian Plan Steering Committee to define their vision for the proposed Pinehurst pedestrian network. After a brief introduction, the Steering Committee participated in an exercise designed to elicit their perceptions of the needs and desires for a pedestrian system in the Village. Throughout the development of this plan, the Steering Committee provided valuable input and guidance to McGill Associates.

In addition, the production of this Comprehensive Pedestrian Plan was performed concurrently with a North Carolina Department of Transportation (NCDOT) funded Comprehensive Bicycle Plan. The project Steering Committee guided both efforts and established the vision for developing bicycle and pedestrian facilities within Pinehurst.

### 1.2 HISTORY

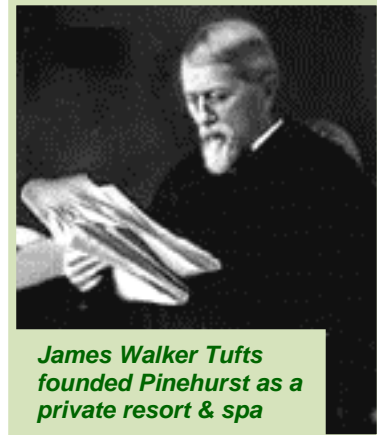
#### The History of the Village of Pinehurst



*The Holly Inn*

The Village of Pinehurst is situated in what is often referred to as the Sandhills of North Carolina. The Sandhills consist of a strip of ancient beach dunes in the interior of North and South Carolina (evidenced by a former coastline when the ocean level was higher, or the land was lower) and divides the “piedmont” and the “coastal plain”. Approximately 60 miles southwest of Raleigh, the state capitol, Pinehurst is also approximately 75 miles east of the Charlotte metro area. The Village spans approximately 14.9 square miles, having 14.3 square miles of land and 0.6 square miles of water. Major thoroughfares to Pinehurst include NC Highway 5, NC Highway 2, NC Highway 211, and US Highway 15-501.

The Village of Pinehurst is the largest municipality in Moore County and is regionally recognized as an outstanding residential community; and internationally, as a major golf resort. Incorporated in 1980, the Village was founded in 1895 by soda fountain magnate James Walker Tufts who purchased 598 acres of land for \$1.25 per acre to create a health resort in the Sandhills. Mr. Tufts wanted a first-rate, private resort; and thus, hired Frederick Law Olmsted (designer of Central Park in New York and the Biltmore Estate in Asheville) for the project dubbed "Tuftstown".



***James Walker Tufts  
founded Pinehurst as a  
private resort & spa***

Tuft dreamed of building a beautiful, healthful village – where those suffering from respiratory (and other) ailments could recuperate in the land of abundant sunshine and (thought to be) the medicinal qualities of the pine-scented air. As patients' needs varied, Tuft built an assortment of cottages, rooming houses, and hotels, later followed by a livery stable, fire department, laundry, markets, department stores and poultry/dairy farms. Tuft finally named the Village "Pinehurst" ("pine" for the trees, and "hurst" for a rising plot of ground). Most of the original buildings are still in existence and can be toured today. The Tufts Archives is open to the public



***Given Memorial Library & Tufts Archives***

and free of charge.

In 1900, Donald Ross was hired as the developer for golf at the Pinehurst Resort. Pinehurst Resort remained privately-held by the Tufts family until 1920 when a corporate form of ownership, Pinehurst, Inc., was obtained. By the late 1960's, the shareholders of Pinehurst, Inc., sold the property to the Diamondhead Corporation, who created 7,000 "membership" lots to sell, accompanied by the appropriate infrastructure – roads, water, sewer, etc. In 1980, pursuant to an Order of Incorporation, the Village of Pinehurst became an incorporated municipality. The resort property has changed hands several times over the years and world-renowned golf courses have been developed and expanded under each owner. Donald Ross eventually designed four (4) golf courses that would mark their places in history, as would famed golfers such as Ben Hogan, Sam Snead, Byron Nelson, Arnold Palmer, Jack Nicklaus, Payne Stewart, and many more.



***Statue memorializes  
Payne Stewart's  
1999 US Open win***

In 1996, the Village of Pinehurst and Pinehurst Resort had the distinct pleasure of being given National Landmark status for their historical, significant role in United States golf history. Since then, the Village of Pinehurst has become the home of the North & South Golf Amateur (since 1901), PGA Championships, Ryder Cup matches, US Amateurs, Senior Open, and the 1999/2005 US Opens. In 2014, Pinehurst was the first venue in history to host the men's and women's US Open in back-to-back weeks.



Though known as the “Home of American Golf” (with more than 41 courses, most being playable year round), Pinehurst is rich with history, artists, pottery, architecture, and beautiful horse country. Unlike other burgeoning golf communities, Pinehurst retains a true small town atmosphere. It also hosts world championship matches in clay court tennis, croquet, and yard bowling; and is the home of superior equestrian and dog

facilities. Each fall, equestrian owners from the North and Midwest bring their jumpers, hunters, and dressage horses to the area to take advantage of the mild climate and soft sand footing.



***Pinehurst Harness Track***

Pinehurst has enjoyed its resort status, boasting world-renowned golf facilities and a Village Center filled with the charm of the New England area. Shopping in the Village of Pinehurst, the Town of Southern Pines, and Aberdeen offers quaint boutiques and specialty shops, as well as numerous restaurants

and cafes. The quiet and tranquil atmosphere makes Pinehurst an excellent vacation destination as well as a wonderful place to live. Committed to offering top quality services to residents and visitors alike, the Village of Pinehurst strives to ensure that residents enjoy a wonderful quality of life and visitors have a memorable experience.

Several factors have contributed to major demographic and economic changes to the Village of Pinehurst in recent years. The close working proximity to the Research Triangle (Raleigh, Durham, and Chapel Hill), Charlotte Metro, and Fort Bragg, have made Pinehurst an extremely desirable place to live and raise a family. From 1990 to 2000, the US Census Bureau indicated that Pinehurst's population grew by 91%, as compared to 27% for Moore County and 21% for North Carolina. This population growth is expected to continue, especially with changing demographics. While

Pinehurst remains largely a community based on retirement, there is a growing population of families with children relocating to the Village.



**Family activities abound in Pinehurst**

The Village's unique Sandhills location with its moderate year round climate has led to a large number of tourists and sports enthusiasts traveling through or visiting the area each year; and consequently, some out-of-state tourists have begun to build summer/vacation homes in the area. In addition, the resort area has become a very popular retirement community.

The influx of residents during 2008 to 2012 has resulted in the median household income being \$66,436 in Pinehurst as compared to the state average of \$46,450. Likewise, persons living below the poverty level are only 4.1% as compared to the 16.8% statewide. It is noteworthy that, typically, children and the elderly population are generally in the greatest need of pedestrian facilities and/or use them more frequently. With senior citizens representing almost half of the population of the Village of Pinehurst, certainly health and wellness opportunities are in great demand.

Because of year-round tourism and rapid population growth, the leaders of the Village of Pinehurst have recognized the need for a Comprehensive Pedestrian Plan that addresses both the current and future needs of their residents and visitors. This Pedestrian Plan will provide direction and purpose as the Village strives to meet the



**Enjoying the outdoor lifestyle**

daily pedestrian needs of their community, as well as impact the citizenry of the Village and its surrounding area for many years to come. The *Village of Pinehurst Comprehensive Pedestrian Plan 2015* addresses their vision by identifying specific goals and objectives; and, makes recommendations for achieving them.

### **1.3 OVERALL GOALS**

The purpose of the Comprehensive Pedestrian Plan is to create a document to guide the Village of Pinehurst with development criteria for the following phases of its proposed comprehensive pedestrian system: (1) Planning, (2) Design, (3) Financing, (4) Implementation, and (5) Maintenance.

While enhancing and prioritizing capital improvements/maintenance projects for the Village, the Plan will also include special consideration given to critical areas for

pedestrian transportation and safety; as well as address compliance issues with Americans with Disabilities Act (ADA).

The goals of the Village of Pinehurst Comprehensive Pedestrian Plan 2015, which were developed with input from the study's Steering Committee, are as follows:

### **Goals and Objectives**

- Increase “walkability” in the Village of Pinehurst
  - Plan pedestrian routes with input from the community in mind.
  - Increase and improve the pedestrian infrastructure.
  - Provide aesthetically pleasing landscaping and resting places along commonly used paths and routes.
  - Connect the pedestrian network to common destination points.
  - Promote a “walking/biking culture” in Pinehurst.
- Create a pedestrian network that is an important part of the urban structure.
  - Provide attractive, yet safe, pedestrian *connections* from Village residential areas to nearby destinations.
- Promote walking as a healthy exercise
  - Develop and/or participate in more healthy walking programs such as “Eat Smart, Move More North Carolina”, etc.
  - Partner with health and recreation providers to create healthy living programs and events that encourage and promote walking as a form of alternative transportation.
- Create a pedestrian environment that is friendly to all users - including seniors, disabled persons, and children
  - Provide ADA compliant sidewalks and curb ramps.
  - Increase pedestrian safety with regard to vehicular traffic.
  - Provide facilities for sitting/resting opportunities.



***Walking School Bus***

- Improve connections between disparate parts of the Village
  - Provide pedestrian connections between downtown Pinehurst and surrounding areas/destinations.
  - Promote neighborhood connectivity.
  - Provide equitable access to the pedestrian network(s).
  - Provide pedestrian access to schools, shopping areas, and work places.
  
- Promote pedestrian safety
  - Promote pedestrian safety through educational programs both inside and outside the schools.
  - Design a pedestrian network that can be safely traversed by all.



## **1.4 Previously Completed Planning Studies and Documents**

Current planning studies include several on-going efforts by state and local entities, which were taken into consideration as the Comprehensive Pedestrian Plan for the Village of Pinehurst has evolved. These are discussed in greater detail in Section 3 and include, but are not limited to the 2003 Long Range Comprehensive Plan and the latest Village Greenway Plan. Other programs and/or initiatives that are either currently underway or being planned involve resources from the Transportation Improvement Program (TIP) and various Safety & Education Programs.

### **Past and Current Municipal Efforts**

#### **Village Greenway Master Plan**

Pinehurst maintains an existing Greenway trail that is approximately six (6) miles long, and represents the first three (3) phases of the Village Greenway Plan. The previously completed plan ultimately proposed 24 miles of planned trail. Part of the Greenway Project included the formation of the Village Greenway Habitat Committee. This group is working to



make the Pinehurst Greenway a place where people can learn about the native plants and animals. The Committee has conducted frequent surveys along the Greenway in order to catalog the diverse flora and fauna that can be found along the path.

***Bridge along the Village Greenway***



The Greenway Master Plan consists of a system of several loops and endpoints, which meander through a suburban landscape of parks, homes, open areas, recreation facilities, and wooded tracts. The Greenway accommodates runners, walkers, and cyclists. Currently golf cart use of the trail is prohibited. However, there has been public interest in possibly accommodating golf cart travel on certain parts of this multi-modal pathway system.

## **Village of Pinehurst Engineering Standards and Specifications Manual**

In August 2004, the Pinehurst Village Council adopted an Engineering Standards and Specifications Manual that specifies the minimum design standards for all new development within the jurisdiction of the Village. Section 4.0 of this Manual includes technical specifications for both sidewalks (minimum thickness of 4-inches, minimum clear-width of 5-feet) and for greenways (minimum 6-inches compacted, stone screenings, minimum clear-width of 6-feet). Standard details are also included in the Manual for Concrete Sidewalk, Brick Sidewalk, and Greenways. The Manual has been amended on several occasions since its original adoption, and continues to serve as the primary engineering reference document utilized in development within the Village.

## **Pinehurst Development Ordinance (PDO)**

The Pinehurst Development Ordinance, commonly referred to as the PDO, was recently updated and adopted by Village Council in October 2014. This document establishes various rules and regulations associated with development within the Village, including requirements for sidewalks and greenways. The current PDO requires sidewalks to be installed on one side of all new streets in new residential developments that serve 8 or more dwelling units, and on both sides of all new streets in non-residential developments. The PDO also establishes the definition of a greenway as “a linear open space, either privately-owned or owned by the Village or another unit of government, which may contain a trail for walking, bicycling, horseback riding or other passive recreation, but not for use by vehicles for purposes other than maintenance of the greenway.”

## **Historic District Standards and Guidelines**

The Village’s Historic District and Guidelines were originally adopted by Village Council in September 2006, and provide “design principles and standards” for structures and

landscaping within the local historic district. The document is also utilized by the Village's Historic Preservation Commission (HPC) in reviewing proposed changes and new construction within the District. While the document does not provide design standards for sidewalks or walkways, it does reference that "original sand-clay and patterned brick sidewalks contribute to the character of some streetscapes in the District." Projects within the public right-of-way do not require approval from the HPC according to the Standards and Guidelines document.

## **1.5 Benefits of Pedestrian Facilities**

For centuries, the pedestrian has been a constant presence in the human environment.



Most individuals walk to some destination every day. The environment which facilitates walking is different for every pedestrian in that it varies from urban settings to linear parks running along creeks. Pedestrian environments are created either by being deliberately planned; or, they can develop as a result of natural landscape characteristics, with no particular forethought of the pedestrian. To better understand what makes a pedestrian-friendly environment, it is necessary to study and

analyze the places where people travel most comfortably as pedestrians. For instance, the addition of a random sidewalk may not encourage people to walk; unless it connects pedestrians to places they want to go. This example reinforces the need for a pedestrian plan *prior* to the actual realization of the plan.

A "walkable" community is defined by its ability to enhance the lives of all its citizens through a variety of measures, which include the following:

- Community Health
- Transportation Alternatives
- Environmental Benefits
- Safety
- Community Identity

A walkable community needs connecting pedestrian corridors that are conveniently located in close proximity to homes, schools, entertainment/shopping meccas, and places of employment.

### **Community Health**

There are numerous benefits to be gained by walking - the most prevalent being the acquisition of healthier lifestyles. Unhealthy eating habits, which are primarily due to the increased consumption of fast food, continue to contribute to rising obesity rates in Americans of all ages. Walking is a preventive measure for heart disease, cancer,



diabetes, and mental health diseases. 'Walkable communities' encourage people to walk, thereby, increasing physical activity and decreasing television or computer time, which propagate sedentary lifestyles.

By providing accessible, inviting pedestrian facilities, the Village of Pinehurst can provide equal opportunities for everyone to improve health and prevent disease through routine or planned walking exercise(s). This, in turn, saves governments and local employers the money in health care costs and the lost productivity due to sick days that would otherwise have occurred.



Studies show that walking increases:

- Energy, stamina, and metabolism
- Wellness, fitness, and psychological well-being
- The reduction of risk factors (such as high blood pressure, anxiety, obesity, etc.), which contribute to coronary artery disease, some cancers, and other chronic diseases
- HDL – the 'good' cholesterol
- Muscle development and bone density

Additional information regarding aspects of walking/biking and health can be found in the 2015 Pinehurst Comprehensive Bicycle Plan.

### **Transportation Alternatives**

Walking also creates an alternative to vehicular transportation. Nationally, traffic congestion in urban areas is getting worse and the cost of owning/operating an automobile is rising astronomically. Pedestrian facilities are necessary to provide a means whereby people may choose to walk instead of drive; thus, reducing the number of vehicles on the road.

Walking is a cost-effective means of transportation. There are no fees, taxes, or licenses required as compared to the average annual cost of operating an automobile - which can easily exceed \$5,000 per year. Economically speaking, walking is by far the most affordable mode of transportation available to anyone.

For some segments of the population, walking is the *only* means of transportation available. Such a cross section of the community primarily includes people, whose incomes prohibit them from purchasing/maintaining automobiles, and senior citizens, who eventually become unable to drive. These members of our society rely heavily on walking in order to work, shop, exercise, and/or participate in other social activities.

## Environmental Benefits

Walking is not only the most affordable mode of transportation; it also has the least negative impact on the environment. Choosing to walk to destinations as an alternative to using a vehicle will reduce air pollution. Improving air quality is a major concern across the United States. During the 1996 Olympics in Atlanta, Georgia, some Atlanta thoroughfares in the area were closed to vehicular traffic in order to relieve traffic congestion. During this period of time, the local, environmental air quality monitoring indicated a significant decrease in various air pollutants as when it was compared to periods of normal traffic flow. It is a well-known statistic that air pollutants will escalate in direct proportion to the increased vehicular miles that are traveled each year in this country.



Walking, as opposed to driving vehicles, also positively impacts the availability and conservation of our natural resources. Reducing the consumption of petroleum (specifically in cars and asphalt) will be increasingly beneficial in the years to come. Although sensitive populations should *decrease* walking during ozone-active days, an overall *increase* in the amount of walking done on a regular basis could actually reduce mobile emissions/ozone. As more walking occurs, lesser emissions are produced; thus, creating a cyclic phenomenon, which is naturally and environmentally friendly.

Some pedestrian facilities (such as greenways) are often developed along rivers and streams. Often, these facilities create “buffers”, which separate drainage areas from new development; thereby improving the water quality for watersheds. As an added benefit, greenways help provide connectivity for wildlife habitats and natural ecosystems.

## Safety

The walking community needs to be safe and comfortable. Any area, which seems dangerous or has obstacles, discourages people from walking; and consequently, the would-be walkers resort to other methods of transportation. Pedestrian routes need to be designed to minimize vehicular conflict by providing pathways, which are safe and free of hazards. Safety is a *major* component in all phases of this Comprehensive Pedestrian Plan, and was a significant concern expressed by residents during community input events.





## **Community Identity**

Pedestrian facilities are also an important medium for maintaining and enhancing the public and social interaction of a community. The pedestrian experience should be aesthetically inviting and elicit feelings of pleasure and comfort. Open spaces, parks, the downtown area, convenient retail, and other similar destinations - all enhance the pedestrian environment. In addition, the ideal pedestrian environment should possess amenities such as landscaping, benches, specialty paving, safety factors, and other elements that create a safe environment that pedestrians enjoy. The restoration or construction of new sidewalks should be an important aspect in the Village of Pinehurst - as sidewalks often serve as *catalysts* for walking, outdoor dining, window shopping, sitting areas (benches) for social interaction, business engagements, and tourism.

## **1.6 SCOPE, METHODOLOGY, AND PURPOSE OF PLAN**

McGill Associates, P.A., was retained by the Village of Pinehurst to prepare a village-wide pedestrian plan as a guide for identifying and prioritizing safe pedestrian linkages; thereby, creating a viable pedestrian network. Many areas within the Village limits lack sufficient pedestrian facilities. The Village recognizes the need to plan for the future by developing a pedestrian network, which provides connectivity for its users. Using a proactive approach (such as this) is imperative in establishing priorities for future pedestrian facilities, reducing construction costs, and implementing facilities in a logical manner.

The study area spans the Pinehurst Village limits and the immediate, surrounding extraterritorial jurisdiction (ETJ). Although the research will be focused primarily within the Village limits, it is important to understand the existing pedestrian patterns into and out of Pinehurst and their destination points.

In order to comprehend the existing conditions, identify user needs, and be able to recommend appropriate improvements in the pedestrian plan, the following processes were used:

1. ***Inventory of the existing pedestrian system:*** A sidewalk, greenway, and crosswalk inventory of the Village's pedestrian facilities was conducted - identifying existing safety issues.
2. ***Assessment of the needs of the pedestrian:*** The needs of pedestrians and the apparent lack of connectivity to destination points were identified and evaluated through data collected via public meetings, surveys, and direction provided by Village Staff and the Project Steering Committee.
3. ***Formulation of objectives and recommendations:*** Guidelines for the future development of facilities, repair of existing facilities, and maintenance were created. Probable costs for all recommendations were provided.

4. **Implementation of improvements by action-oriented method:** Key pedestrian linkages and sidewalk needs were identified and prioritized. Possible funding sources for the Village to pursue were identified.
5. **Examination and possible revision of current policies/programs:** Guidelines and implementation of current policies and existing pedestrian programs were identified and addressed.

These components provide justification for the proposed improvements. Also, any time that recommendations for improvements or new construction are made, these recommendations must be prioritized. Implementing all of the proposed improvements at one time, or in a short time frame, would be both cost-prohibitive and overwhelming. It is important that the most immediate necessities be recognized first as the implementation of capital improvements begins. In addition to facility needs, the formation of an implementation plan is an important short-term goal in establishing long-term objectives.



**Connectivity is crucial to any functional pedestrian network**

Pedestrian facility-related needs – which are considered to be of the highest priority – are called critical needs. The critical facility needs for the Village are all focused on improving safety conditions for pedestrians. In addition to sidewalk improvements, other emphasis should be placed on immediately addressing unmarked crosswalks and inappropriate signage. The safety of pedestrians is critical; it is the most important component of the

pedestrian facilities.

Pedestrian facilities are the primary focus of this plan - in particular, sidewalks (located on Village streets and state roads) and pedestrian safety at intersection and crosswalks. In addition, off-street pedestrian facilities such as greenways and multi-purpose trails are examined. Thus, the Village Pedestrian Plan delineates the (current and future) location, implementation, and maintenance of the proposed facility improvements; thereby, creating a pedestrian network that allows for connectivity within the Village as well as with its neighboring communities.

The improvements recommended in this Pedestrian Plan are intended to be implemented over a period of time and will require creative funding mechanisms. Therefore, another significant short-term goal will be to identify improvement costs and funding opportunities, as well as prioritizing the improvements and projects.

**- END OF SECTION -**