LAND USE PLAN



Town of Signal Mountain

Adopted January 16, 2008

Updated and Adopted March 12, 2018

Town of Signal Mountain
1111 Ridgeway Ave.
Signal Mountain, TN 37377
Phone 423.886.2177
Fax 423.886.2939
Web: www.signalmountaintn.gov

This plan serves as a general policy guide for future community improvements and rezoning requests. This document provides the basic framework for land use, transportation, public services, and community improvements that the Town Council is to use in performing its duties.

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1.0 Introduction

The Signal Mountain Land Use Plan is the result of a collaborative planning effort by the residents and business people in the community, planning staff, elected officials, and other community stakeholders. The purpose of the plan is twofold. First, it will provide residents, businesses, and policy makers with information on the conditions that exist in Signal Mountain today. Second, the plan will provide a framework to guide future growth and redevelopment in the town in a way that can improve the livability and long-term economic prosperity of the area.

This document is divided into nine sections. **Section 1 – Introduction** provides an overview of area plans and the process used to develop the Signal Mountain Land Use Plan. **Section 2 – Study Area Profile** provides background data for the study area including topics such as demographics, land use, and zoning. **Section 3 – Plan Approach –** discusses public input and overall goals for growth. **Section 4 – Land Use Plan** illustrates future land use recommendations and describes the various issues, objectives, and recommendations related to each land use category. **Section 5 – Historic and Cultural Preservation and Section 6 – Resource Management Plan** address historic and scenic assets as well as natural resource issues. **Section 7 – Utilities** describes the town's utility infrastructure. **Section 8 – Transportation** focuses on a multi-modal system, while **Section 9 – Parks and Recreation** outlines plans for the town's recreation amenities.

1.1 Planning Process

This plan and subsequent updates were prepared by the Chattanooga-Hamilton County Regional Planning Agency and the Southeast Tennessee Development District in consultation with the Town of Signal Mountain, appointed and elected officials, and community stakeholders.

A land use plan guides how, when, and where new growth, redevelopment, and preservation should occur in a particular area. Community input provides a foundation for this plan. However, a plan should balance fact-based research and the values expressed by a community. It is also important that sound planning principles provide the framework for the plan goals, policies, and implementation strategies.

This land use planning process is also a positive approach to discuss and seek a balance between private and community interests. A list of planning principles, compiled by the Chattanooga-Hamilton County Regional Planning Agency, can be seen below.

Planning Principles

Planning should provide for the health, safety, and welfare of the community.

- Planning should be proactive and visionary.
- Planning should reflect the integration of comprehensive economic, social, and environmental factors.
- Planning should promote the wise use of existing resources without compromising our options for the future.
- Planning should recognize the importance of diversity in our community, including its people, cultures, values, places, and natural resources.
- Citizen involvement in the planning process is essential.
- Planning should reflect a high ethical standard, free from conflicts of interest.
- Planning should seek to find a balance between what is good for the community as a whole and the rights of citizens as individuals.
- Planning should incorporate realistic and flexible implementation components that define specific areas of responsibility.
- Planning should recognize the importance of the urban, suburban, and rural areas to the economic and cultural vitality of the entire community.
- Planning should facilitate new growth while protecting neighborhoods, infrastructure, and the environment.
- Planning should be an ongoing process in which previously developed plans are reviewed periodically and updated or modified as needed if conditions or preferences have changed.

Tennessee Code Annotated 13-4-201. General plan for physical development. —
It is the function and duty of the commission to make and adopt an official general plan for the physical development of the municipality, including any area outside of its boundaries which, in the commission's judgment, bears relation to the planning of the municipality. The plan, with the accompanying maps, plats, charts, and descriptive and explanatory matter, shall show the commission's recommendations for the physical development, and may include, among other things, the general location, character and extent of streets, bridges, viaducts, parks, parkways, waterways, waterfronts, playgrounds, airports and other public ways, grounds, places and spaces, the general location of public buildings and other public property, the general location and extent of public utilities and terminals, whether publicly or privately owned, for water, light, power, sanitation, transportation, communication and other purposes; also the removal, relocation, widening, extension, narrowing, vacating, abandonment, change of use or extension of any of the foregoing public ways, grounds, places, spaces, buildings, properties or utilities; also a zoning plan for the regulation of the height, area, bulk, location and use of private and public structures and premises and of population density; also the general location, character, layout and extent of community centers and neighborhood units; also the general location, character, extent and layout of the replanning of blighted districts and slum areas. The commission may from time to time amend, extend or add to the plan or carry any part of subject matter into greater detail.

Government officials will use an adopted plan as a general policy guide when making decisions involving future community improvements and rezoning requests. A neighborhood association can use an area plan as a concise way to present its vision for the future to area residents, businesses, potential community partners, and investors.

Because a land use plan is a guide, its adoption does not guarantee that community improvements or zoning changes will occur. Committed citizens and town officials must continue to work on implementing the recommendations of the plan.

The plan is reviewed and acted on by the Signal Mountain Planning Commission. State law requires that the Planning Commission have a municipal plan in place. The Town Council can choose to adopt the plan also, although this is not required.

1.2 Why do we need a plan?

Some benefits of having a plan include the following:

- A plan helps a community capitalize on its assets and develop coordinated initiatives for solving its problems.
- A plan provides citizens guidance for their positions on rezoning requests and capital improvements.
- A plan gives developers and other investors the opportunity to work in concert with the community's established vision.
- A plan can increase citizen participation in community affairs and foster community pride.
- A plan can be used to support the Town's and neighborhood associations' efforts to secure grants for community projects.
- A plan coordinates public improvements such as roads, sewers, and parks.

1.3 What area does this plan cover?

This plan is focused on the Town of Signal Mountain and its Urban Growth Boundary (UGB). The State of Tennessee passed a law in 1998—*Public Acts 1998*, Chapter 1101—requiring all Tennessee counties to develop a comprehensive 20-year growth boundary plan. In 2001, Hamilton County and its municipalities signed an interlocal agreement showing those areas that contain the corporate limits of each of the county's ten municipalities and the adjoining territory where growth is expected. Chapter 1101 expressly recognizes annexation as a legitimate municipal growth tool.

In 2014, Public Acts 2014 Chapter 707 drastically reduced the ability of cities to annex territory without permission from affected property owners. The Urban Growth Boundary is still in place, however, as a limit for annexing territory.



The town's Urban Growth Boundary is shown in blue on the map to the left.

1.4 What is the difference between a plan and zoning?

A land use plan differs from zoning in that a plan is an advisory document which includes a set of strategies for achieving specific community goals. These goals relate to things such as land use, transportation, resource protection, and community facilities.

Zoning on the other hand is a tool used to implement an area plan. Zoning is a legal and enforceable part of city or county code and is used to regulate the use of land and the type, scale, and intensity of development on that land.

1.5 How does this plan relate to other plans?

Data and recommendations from several plans and studies created for and by the town have been consulted and incorporated into this document. Those planning documents include the following:

- *Hamilton County Comprehensive Plan 2030*
- *Town of Signal Mountain Zoning Ordinance*
- *Walden's Ridge Plateau Area Plan, 1997*
- *Town of Signal Mountain Subdivision Regulations*
- *Planning documents related to Hamilton County's Urban Growth Plan*
- *TransPlan 2030*
- *Congestion Management Plan*
- Signal Mountain High School Business Plan (Friends of Signal Mountain High School)
- Mountain Vision, Strategic Planning Process
- Chattanooga Area Regional Bicycle and Pedestrian Plan

The plans or documents in italics were created and/or are administered by the Regional Planning Agency. The recommendations of this plan may also be incorporated into future plans and studies.

1.6 How does the planning process work?

Active citizen participation is vital to the success of any plan. When stakeholders in a community are directly involved in the planning process, they are more likely to take ownership of the plan and then play an important and much-needed role in its implementation.

This plan was prepared using a community-based approach with stakeholders providing input and recommendations through a series of public workshops. The Regional Planning Agency served as a facilitator and professional resource at these workshops. Through the planning process a set of objectives, principles, and strategies emerged for the Town of Signal Mountain.

Tennessee Code Annotated 13-4-203. General purposes of the plan — Surveys and studies.

In the preparation of the plan, the commission shall make careful and comprehensive surveys and studies of the existing conditions and future growth of the municipality and its environs. The plan shall be made with the general purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the municipality which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process of development.

1.7 Preplanning phase

During the beginning of the planning process in 2007, Planning Commissioners, Town Council members, and citizens reviewed the 2000 Land Use and Transportation Plan goals and objectives and discussed what items had been addressed previously, what recommendations had been implemented, and in what areas should the updated plan focus.

Additionally, the renowned open space conservation subdivision design planner Randall Arendt was contracted with to provide planning advice specifically for the town.



Randall Arendt speaks at public meeting

Mr. Arendt conducted three in-depth sessions for individuals involved in mountaintop issues specifically. The first session was for local developers and landowners that either actively develop on the mountaintop or are interested in developing in the area. Participants had the opportunity to ask very detailed questions about using open space design as a tool. Issues that were discussed included roadway connectivity, types of natural areas that are most important to preserve, economic benefits of this form of development, and ownership and maintenance of open space.

During the second session, Mr. Arendt presented an Ordinance Review for local officials, specifically identifying obstacles to conservation design in their current codes, and offering practical alternatives for the subdivision and zoning ordinance language. This



Participants at one of the Public Input sessions



critique, with feedback provided to town officials and staff, helped identify shortcomings in the regulations and provided advice to improve any deficiencies. *(Mr. Arendt's ordinance review is in the Appendix.)*

The third meeting was open to all residents to help them gain a better understanding of the importance of open space design and to gain support from all stakeholders for the idea of partnering growth with open space preservation. Particular attention was given to the special topological and environmental issues of the plateau and the meeting ended with a question and answer period.

1.8 Public Input

Over 200 people attended the first public meeting in June of 2007 at Nolan Elementary School. Participants identified over 270 issues during this workshop-style event. Planning staff categorized the comments made during that meeting by general topic with some being specifically related to development of the land use plan and other topics being provided for general information during plan development.

Strengths/Assets

- Low Density
- Natural Beauty
- Small Town Feel
- Sense of Community/Community Involvement
- Family-oriented
- Multi-generational
- Location
- Safety
- Senior Housing
- Housing Diversity
- Residential developments
- Businesses: type, location, and signage
- Trees
- Schools
- Community Involvement
- Town Services and amenities
- Sidewalks

Needs/Opportunities

- Planned Growth
- Capacity study
- Control Population Growth
- Maintain Small Town Atmosphere

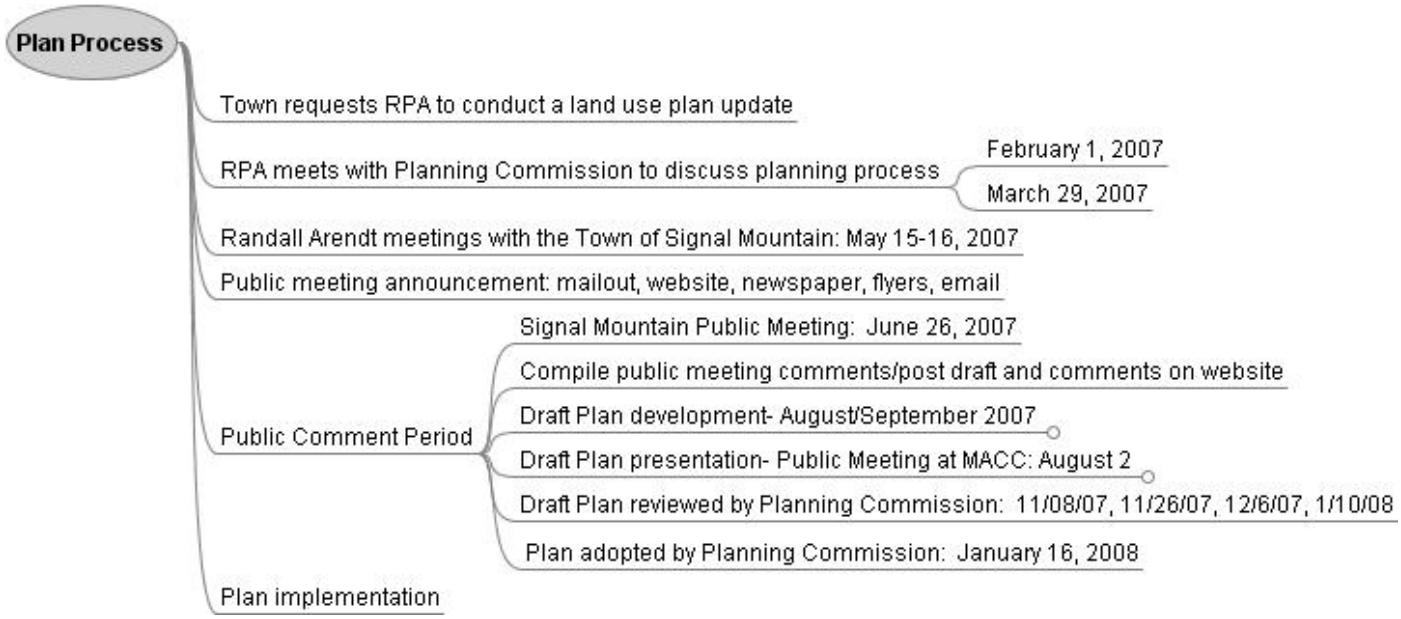
- Citizen Involvement
- Housing Diversity
- Cluster Development/Conservation Subdivisions
- Address appropriate density
- Similar development to Old Town
- Green Space in Neighborhoods
- Planned Growth
- Business Façade Improvements
- Expanded Non-residential Opportunities
- Tree Preservation
- Protect Natural Environment
- Protect Water Resources
- Address Sewer Service/Septic issues
- Intergovernmental Cooperation
- Infrastructure
- Trails
- Green Space Expansion and Promotion
- Expansion of Trails, Sidewalks, Bicycling opportunities
- New Road up mountain
- Limit Truck Traffic
- Bus Stops

Weaknesses

- Lack of Planned Growth
- Lack of Information
- Lack of Diversity
- Sense of Community can decline as community changes
- Vacant Property
- Lack of Commercial Design Standards
- Development Not Concentrated
- Clear-cutting of Trees
- Water Pollution
- Sewer/Septic issues
- Town Services/Roles
- Utilities' Services
- Amount/maintenance of Sidewalks
- Limited Access on/off mountain
- Lack of Transit
- Bicycling Facilities/Hiking Trails/Greenways
- Traffic Congestion/Road Capacity
- Roadway Maintenance
- Shackleford Ridge Rd.

The draft plan was presented to the public in August and then received public hearings at Planning Commission meetings in November and December. During this time the draft plan was available online and

interested stakeholders could also receive a copy via postal mail, email, or by picking up a copy at town hall. All comments were recorded and made available online and at all public meetings.



1.9 Plan Update

In early 2016, the Town Planning Commission considered updating the Land Use Plan. After lengthy discussion and analysis, the Planning Commission determined that although an update was needed, many of the plan's original goals and objectives were still applicable as guiding principles for the Town's development. With this in mind, an update was completed.

A draft of the updated plan was made available online, and a public hearing was held to discuss the newly updated plan as part of the February 1st, 2018 Planning Commission meeting. Additionally, the plan was presented and discussed at a local community group called the Community Forum. The Planning Commission adopted the plan at their March 1st, 2018 meeting and recommended it to Town Council, who adopted the plan on March 12th, 2018.

2.0 Study Area Profile

The following provides background information about the town including a brief history, government structure, demographics, zoning, and land use.

2.1 History of the Town of Signal Mountain

The Town of Signal Mountain gets its name from its historic use as a location for signalization. It is believed that the Creek, Cherokee, and other Native American tribes used Signal Point and nearby promontories on the mountain to send fire and smoke signals for centuries prior to European settlement. During the fall of 1863, the Union Army used Signal Point as a communications station to signal various locations in the Chattanooga area.

The history of Signal Mountain as a town began in 1878 when Mr. Charles E. James led a group of people to the Signal Point area to escape a yellow fever epidemic in Chattanooga. While there he purchased 4,400 acres of land and began plans for a residential community. With that purchase, the town's history began.

Thirty years elapsed before Mr. James began developing the Signal Point area. In 1913 twelve miles of streetcar track were constructed, connecting Chattanooga to Signal Mountain. The Signal Mountain Inn opened in 1913 and catered to those on their way to winter in Florida. The hotel included a casino and numerous dance floors, and was so successful that soon Mr. James added two hundred additional rooms. Many of these rooms were later occupied by friends and families of soldiers stationed at Fort Oglethorpe during World War 1. For the next six to eight years, Mr. James' principal interest was developing the area surrounding the hotel.

In 1918, the Signal Mountain Golf Course was completed. This created a problem on Walden's Ridge, which had served as open range for cattle. Farmers from Red Bank, Mountain Creek, and the surrounding areas drove their cattle up to Walden's Ridge in the spring and left them to forage until fall. Attracted to the golf course greens, the animals collected there in large numbers. When the Town was incorporated, its first ordinance prohibited running livestock within the Town limits.

On April 4, 1919, the Tennessee Legislature passed the bill that chartered the Town. The Charter established a governing body of three commissioners to be elected by the Town's registered voters. The first Mayor was, of course, Mr. Charles E. James. He served as Mayor from 1919-1921. When Mr. James died in 1925, two hundred houses had been built, primarily within a few blocks of the Signal Mountain Inn. Many of these were summer residences.

Over the next few years, Signal Mountain continued to grow. In 1927 a Town Hall, fire hall, and temporary jail were constructed, and The Signal Mountain Grammar School opened.



Alexian Brotherhood Health Resort -Chattanooga-Hamilton County Bicentennial Library archives

A major change occurred in 1936 when The Alexian Order purchased the Signal Mountain Inn, built a monastery, and converted the hotel into a home for elderly men by 1938. In 1950 the Generalate of the Congregation of Alexian Brothers moved the headquarters to the Town. The Order reopened the former Inn site in 1983 as the Alexian Village of Tennessee, which serves as a total life care community for the elderly. The Alexian Inn, a thirty-three unit assisted living facility, located in the old hotel building, opened in August 1992, with a major expansion occurring in 2014.

In 1939 a swimming pool near the Signal Mountain Golf Course was constructed for $8,000. Wilkes T. Thrasher Elementary School opened in 1961. By 1971, 1,294 students were enrolled in the two elementary schools and Signal Mountain Junior High. Kindergartens were in operation at both schools by 1975.

The 1970's brought many changes to the Town. By this time the population had grown to 4,839 residents. A library was established. A new fire hall was built. A sewer system was approved for the oldest part of the community as well as part of the Palisades Drive area. Additional recreational facilities and a new Town Hall, including the Town's Administrative Offices, were built in 1979.

During the last thirty years, the Town has continued to change, grow, and improve. Recreational facilities built during this period include a municipal playground, tennis courts, baseball, softball and soccer fields, and the Paul

Mathes Family Center at the corner of Ridgeway and Rolling Way. A new library facility opened in 1988.

The Tennessee Legislature amended the Town's Charter to convert the Town's government to a Council/Manager form of government in May, 1990.

In May 2001, the Town signed an interlocal agreement with Hamilton County and its other municipalities outlining their Urban Growth Boundaries as part of the requirement under the state's Chapter 1101 regulations.

On May 18, 2005, Signal Mountain and Walden residents supported referendums that authorized the towns of Signal Mountain and Walden to issue $10 million in bonds to help build a high school to serve the mountain communities. Subsequently, the Hamilton County Commission agreed to issue bonds to pay for $96 million in school construction, a plan that included a new middle and high school on Signal Mountain. The new schools opened for the 2008 school year, and has since been filled to capacity.

In 2007, the Town and the Hamilton County Wastewater Treatment Authority chose to self-impose a moratorium on new sewer connections. The moratorium was put in place to allow the town and Hamilton County WWTA to address sewer system problems. Because major commercial and residential developments require adequate sewer availability, the ongoing moratorium has negatively impacted the town's ability to develop and grow. As of 2018, the plan to lift the moratorium will require WWTA's Signal Mountain system to connect with the City of Chattanooga's Moccasin Bend Wastewater Treatment Plant.

In 2014, the Town adopted new Subdivision Regulations. One of the main goals of the new regulations was to promote development which preserved the natural environment through the adoption of conservation subdivisions.

As seen in the demographic profile, the Town continues to see consistent growth each year. A majority of that growth has come from new residential developments, a testament to the Town's continued desirability as a place to call home.

Crucial portions of this section of the plan were paraphrased from Signal Mountain and Walden's Ridge by Z. Carter Patten and various other sources and taken from the Town's 2000 Land Use and Transportation Plan. Minor revisions and updates were made as part of the 2007and 2017 planning/update process.

2.1 Government Structure

The Town was incorporated in 1919. It operated for many decades with the Commission form of government. In 1988, a Charter Study Committee was appointed by the Town Commission to study alternative forms of governmental structures. With the assistance of the Municipal Technical Advisory Service, the Charter Study Committee recommended to the Town Commission that the Council/Manager form of government be pursued. The Town Commission voted on February 12, 1990, to adopt the Private Act approved on January 29, 1990, by the Tennessee Legislature which amended the Town Charter to convert the Town's government from the Commission form of government to the Council/Manager form.

The Council is comprised of five members elected at-large by the voters with three of the five members running every two years on even-numbered years matching the national elections. All members serve without pay. Of the three candidates that receive the largest number of votes in each election, two receive four-year terms and one (the third place finisher) receives a two-year term. This ensures that three members of the Council will be up for election every two years.

The Council sets all policies, including ordinances, resolutions, contracts, personnel policies, personnel staffing levels, purchasing policies, the budget, tax rate, and other municipal policies.

The Mayor and Vice-Mayor are selected by and from among the Councilmembers. The Mayor presides at Council meetings and otherwise provides leadership for the Council and the Town. The Vice-Mayor acts as Mayor in the Mayor's absence.

The Council appoints the Town Manager, who serves at the will of the Council. The Charter provides the Manager with powers to be the chief administrative officer, to supervise all employees (except the Town Attorney and Judge), enforce all laws and ordinances of the Council, draft a budget for Council review, prepare an annual financial statement, supervise all purchasing using the Council's purchasing policy, and make recommendations to the Council through the agenda for Council meetings. All meetings are open to the public.

The Town has a number of boards and commissions, including the Planning Commission, Recreation Advisory Board, Library Board, Tree Board, Parks Board, Design Review Commission, Board of Zoning Appeals, and Condemnation Board, composed of citizen volunteers appointed by the Town Council who are interested in serving their community.

2.2 Planning Commission

While all the town's boards play an important role, it is the Planning Commission that is tasked with creating and adopting the official general plan for the town's physical development. The Planning Commission is composed of the Town mayor or the mayor's appointee, one member of Town Council, and seven other members appointed by the mayor and approved by the town council. While state law does allow Planning Commissioners to be compensated, members of the Signal Mountain Planning Commission are unpaid.

I know of no safe depository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them but to inform their discretion by education. – Thomas Jefferson

In addition to creating and adopting an official general plan for the physical development of the municipality, Tennessee Code specifies further powers of the Planning Commission. These include making advisory reports and recommendations, reviewing and commenting on public projects through the mandatory referral process, reviewing subdivision regulations and site plans, preparing and providing recommendations regarding the zoning ordinance and zoning maps, and reviewing amendments to the zoning ordinance and maps.

Signal Mountain Municipal Code further refines the local purpose and function of the Commission in Title 2, Chapter 11, Section 2-1103. This section specifies that the duties of the Planning Commission are as follows (summary):

(1) Collect Data and keep informed.

(2) Work in cooperation with town departments and employees

(3) Make maps and plans…which bear a relation to the planning and future growth of the municipality.

(4) Certify to the town council a zoning plan.

(5) Carry out its power and authority to review plats and develop regulations for the subdivision of land within the limits of the town.

(6) Hire the services of architects, engineers, and contractors for other professional services…as it shall deem necessary for the performance of its functions with the approval of the town manager.

(7) Carry out all of its powers, functions, and duties in accordance with all applicable provisions of Tennessee Code Annotated title 13.

2.3 Demographics and Development Trends

In order to effectively plan for the future growth and development of the town, it is important to understand historic growth patterns and assess how much growth is likely to occur in the future and whether this projected growth can be adequately accommodated. The following section assesses demographic data within the Town of Signal Mountain and the surrounding county. One growth trend not captured by this data is development occurring on Signal Mountain outside the town limits.

The Regional Planning Agency's countywide Comprehensive Plan 2030 considers the study area's development form to be Outer Suburban:

Outer Suburban Development Sector

The hallmark of the Outer Suburban area is the distinct separation of residential and non-residential uses. The residential developments are usually single-units which are found on larger lots. Multi-family dwellings such as apartments are also found in select areas, usually as a buffer between more intense commercial uses and lower-density dwellings. Municipal services such as sanitary sewers are present in most parts of the Outer Suburban area; however, some areas are not serviced. The street network, although relatively dense in some locations, does not usually adhere to a grid pattern. Commercial uses are usually found along major arterial roadways while industrial uses are often concentrated in industrial parks.



Typical development pattern of the Outer Suburban area

In summary:

- Larger lot sizes
- Distinct, clearly-defined separation of residential and non-residential uses
- Minimal sidewalks and no street grid
- Limited public transportation
- Single-unit residential dominates
- Little connection between subdivisions
- Greater distance between public recreational facilities
- Average Residential Density: 1.2 Dwelling Units/Acre *[this is a countywide average and is higher than the existing Town density]*

Word of Caution

Users of these data should be aware that population projections rely on a number of assumptions about the continuation of past trends into the future. When using population projections such as these, people are encouraged to use them as a guide illustrating a general possible scenario of future growth patterns. Although these projections are based on a mathematical model using sound scientific principles, ultimately, the overall accuracy of these projections will depend on the extent to which future events unfold in a manner that mirrors these past observations. Different projections using different assumptions will inevitably yield different results. In addition, there may be people with specific knowledge or understanding of events and factors that may affect their local communities that could result in a more complete understanding of the growth dynamic affecting their community. Thus, we caution users not to construe these figures as predicting a specific or inevitable future course of events. Instead, the numbers contained within this report should be read as a likely course of future population change based on a continuation of past trends. Population projections such as these are simply one of a number of tools that planners and local community leaders should consider when envisioning the future for their communities.

Hamilton County

The Town of Signal Mountain is one of ten municipalities within Hamilton County. The following information provides a countywide look at development trends:

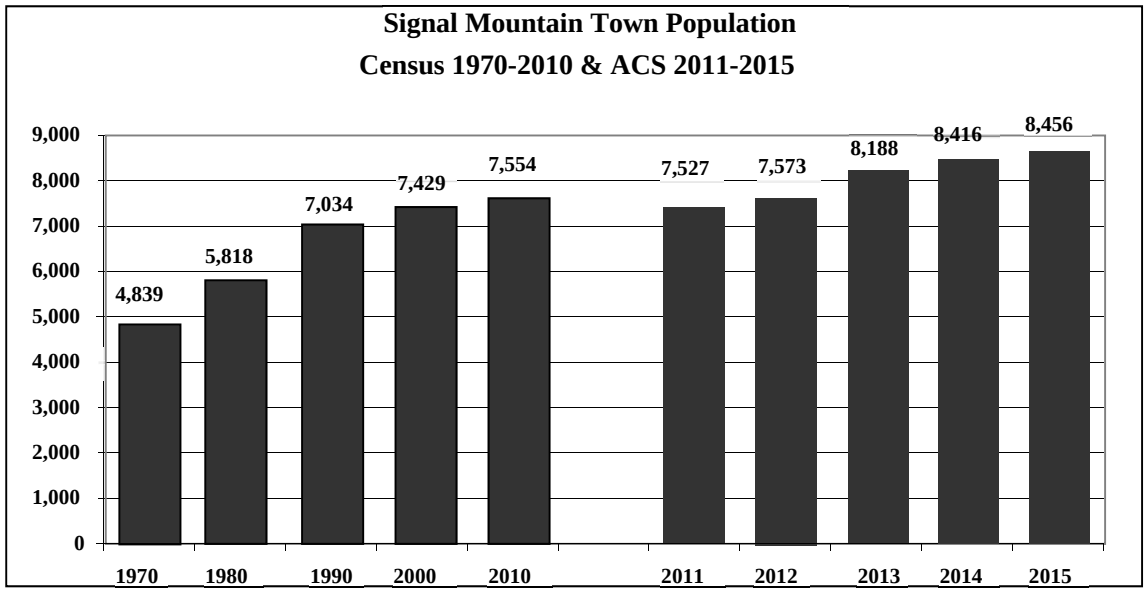
- During the 2000 to 2006 period, 350 new major subdivisions were recorded throughout Hamilton County. 322 (92%) of these were residential subdivisions, and included 9,510 lots.
- The period between 2009 and 2014 saw a sharp drop in new residential lots. During this time 1,742 new residential lots were created in the county. The drastic change can be explained by the nationwide economic recession in the late 2000's. The number of residential lots has been on the rise since 2011.
- **The previous breakdowns of subdivision recordings include only "major" subdivisions, which are defined as those with five or more new lots, or new subdivisions with new streets.*
- Between 2000 and 2006, almost 13,000 (86%) of the permits issued for New construction were for New Residences. This number dropped to 9,608 between 2009 and 2014, again reflecting the economic recession. 4,812 of the permits issued during that time period were for new single family detached residences.
  **Data from Red Bank not available for analysis and not included in this data.*

Population Growth

According to the U. S. Census Bureau, the total population in the Town of Signal Mountain was 7,554 in the year 2010. This figure represented an increase of 125 people or 1.6% from the previous Census in 2000, and was lower than the corresponding growth rates in recent decades. From 1960 to 1970 the population increased by 1,425 (41.7%); from 1970 to 1980 the town added 979 people (20.2%); from 1980 to 1990 it grew 1,216 (20.9%); and from 1990 to 2000 population increased by 395 people (5.6%).

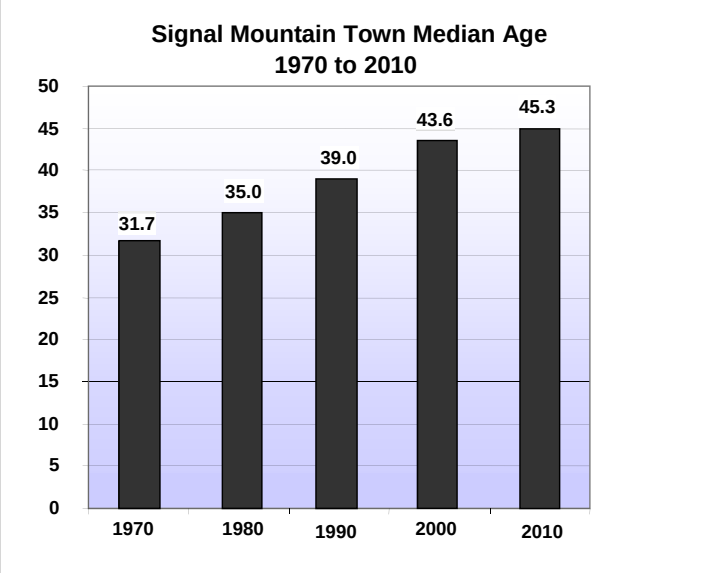
After the 2010 Census, The University of Tennessee's Center for Business and Economic Research (CBER) and the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) created population projections for all of Tennessee's cities and counties every five years between 2015 and 2030. These

estimates predicted a population decline in Signal Mountain. Instead, the opposite has happened. The 2015 American Community Survey (ACS) population estimate for Signal Mountain was 8,456—an increase from 2010 of 902 people or 11.9%. The ACS population estimates between 2011 and 2015 show an average population increase of approximately 2.9% per year. These figures point to a slow but steady growth rate.

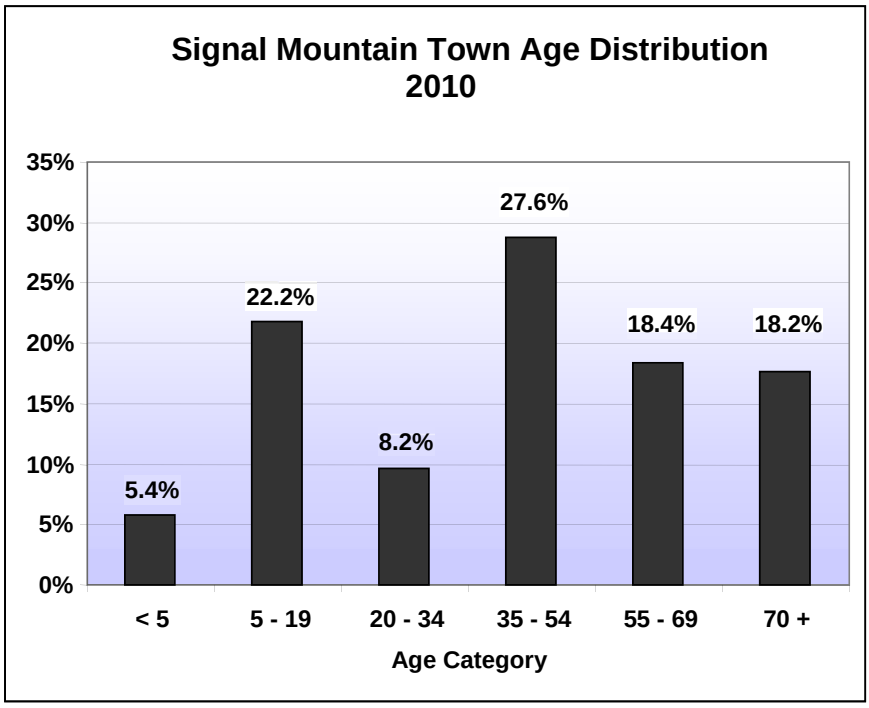


Age

Since 1970, the median age of Signal Mountain's population has increased with each Census year. The median age of Signal Mountain's population is influenced somewhat by the older residents at the Alexian Brothers' facilities on the Mountain, which is addressed on the following page.



In both 1960 and 1970, approximately 6% of the Town's population was 70 years of age or older. In 1980, this percentage rose to 8%. Then in 1990 it jumped to 12%, and in 2000 the figure rose to 16.6%. In 2010 the figure was 18.2%.

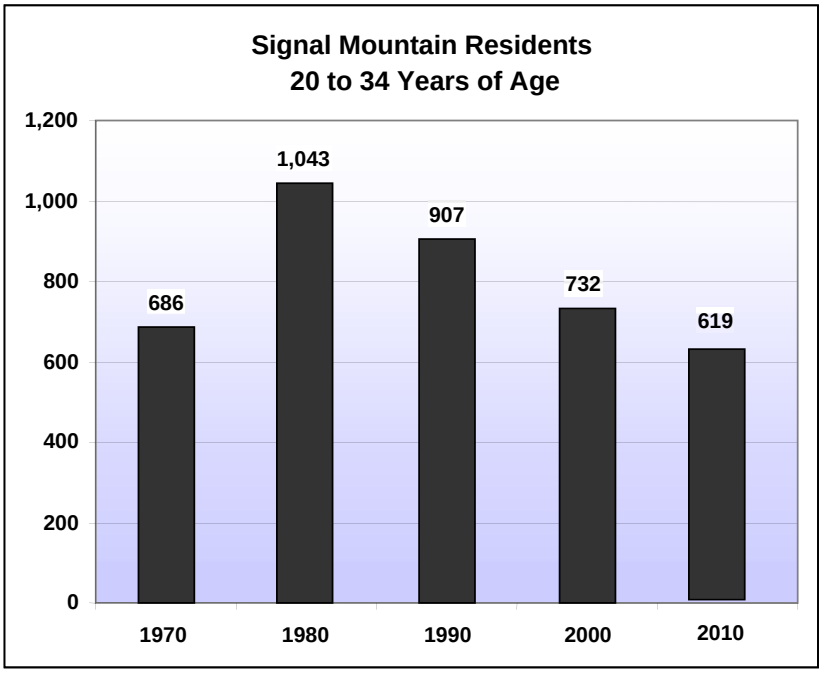


As mentioned earlier, the median age and the proportion of residents in the 70 and older age bracket are influenced by the older residents at Alexian Brothers. Figures provided by Mr. Aaron Sheppard of Alexian Brothers show the number of residents by age group at the three facilities on Signal Mountain as of April 2016.

55 to 69: 13
70 or older: 471
Total: 484

The existence of the Alexian Brothers facility, which makes up approximately 5.7% of the town's population, certainly influences the median age. If the Alexian Brothers population 70+ were not included, then the percentage of all other residents in Signal Mountain aged 70 or older would be lower, and more in line with all of Hamilton County or the City of Chattanooga (as is shown in the box on the next page).

In another vein, it is worth noting that only 8.2% of the Town's population was in the 20 to 34 year age bracket in the 2010 Census, which is considered to be a major child-bearing age category. This percentage is less than one-half of the comparable percentage for the State of Tennessee, for all of Hamilton County, and for the city of Chattanooga. American Community Survey Data does show this number beginning to recover, however, with an estimated 761 individuals in the 20-34 age bracket in 2015.



Households and Families

In 2015, there were 3,246 households in the Town of Signal Mountain; 2,525 (77.8%) of these were family households, and the remaining 721 were non-family households.

Approximately 94% of these non-family households were single individuals living alone. The average household size was 2.50 persons per household, and the average family size was 3.01 persons per family.

Among the 2,525 families, 84.7% were married-couple families, and 15.3% were other family types. Overall, 31.6% of the families had children under the age of 18.

The following calculations were made to determine how Alexian Village senior housing complex impacts the overall age distribution:

2015 ACS population estimate: approximately 8,456 people live in the Town of Signal Mountain.

Approximately 484 residents live in the Alexian complex that are 70 years of age or older.

If 18.2% of the Town of Signal Mountain's population is estimated to be 70 years of age or older, then 1,538 people are 70 years of age or older in the total Town of Signal Mountain population in 2015.

2015 total population (70 years of age or older) minus Alexian population (70 years of age or older, assuming a similar population in 2014 as 2016) = 1067.

Therefore, approximately 12.6% of the Town's total population is people aged 70 years or older that do not reside in the Alexian complex.

Chattanooga 70+ population percentage: 10.3%

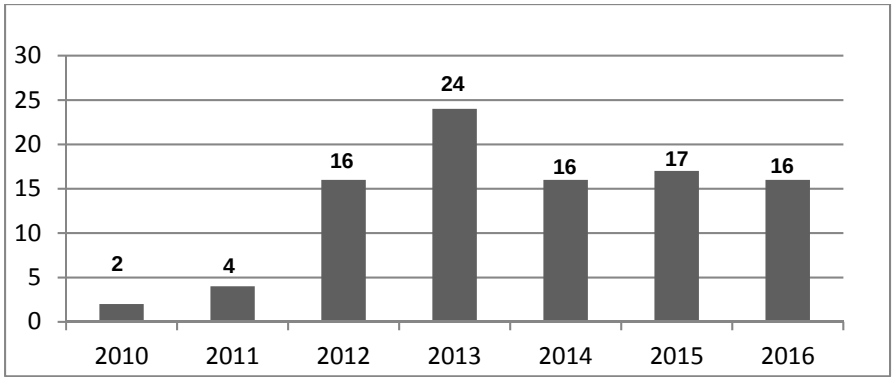
Hamilton County 70+ population percentage: 10.2%

Housing Units

In the year 2010, the Census Bureau enumerated 3,168 housing units in the Town. At that time 2,960 (93.4%) were occupied and 208 (6.6%) were vacant. Among the 2,960 occupied units, 2,441 (82.5%) were owner-occupied while 519 (17.5%) were renter-occupied. American Communities Survey figures show that 218 (6.1%) of the 3,575 housing units were built from 2000 to 2009. Overall, 3,034 (84.9%) of the housing units were classified as single-unit detached housing. The other 541 (15.1%) were defined as single-unit attached structures or multi-family housing.

During the period from 2010 to 2016, 95 building permits were issued for new residential construction. A dip in residential building permits, which can be attributed to the 2008/2009 national financial crisis, is visible in the 2010 and 2011 numbers. The relatively stable number of new building permits issued since that time supports the Town's steady population growth figures.

New Residential Building Permits



The average (mean) value of new residential construction in 2016 was $399,063 and the median value was $340,000.

Based on Hamilton County Assessor records, there were 2,947 single-family residences located in the town of Signal Mountain in 2016. Approximately 4% of the houses were valued at less than $150,000, and another 25.4% were valued at $150,000 to $249,999.

Signal Mountain Town
Appraised Value of Single-Family Houses
(including land value)
2016

	Number	Percent
Under $50,000	1	<0.1%
$50,000 to $99,999	20	.7%
$100,000 to $149,999	89	3.0%
$150,000 to $199,999	347	11.7%
$200,000 to $249,999	404	13.7%
$250,000 to $299,999	504	17.1%
$300,000 to $349,999	430	14.6%
$350,000 to $399,999	326	11.1%
$400,000 to $449,999	232	7.8%
$450,000 to $499,999	159	5.4%
$500,000 to $749,999	313	10.6%
$750,000 to $999,999	87	2.9%
$1 million and higher	35	1.2%
Total	2,947	100.0%
Mean	$355,011	
Median	$310,900	
Source: Hamilton County Assessor records		

In the year 2016, 190 sales of single-family properties in the town of Signal Mountain were recorded by the Assessor's office. This was a slight decrease from 212 single-family home sales in 2015.

Sales of Single-family Residences in Town of Signal Mountain by Recorded Sales Consideration (Price)

	2015		2016	
	Number	**Percent**	**Number**	**Percent**
Under $100,000	17	8%	16	8.4%
$100,000 thru $199,999	37	17.4%	16	8.4%
$200,000 thru $299,999	53	25%	59	31.1%
$300,000 thru $399,999	57	26.8%	52	27.4%
$400,000 thru $499,999	23	10.8%	29	15.3%
$500,000 thru $749,999	18	8.5%	13	6.8%
$750,000 thru $999,999	3	1.7%	4	2.1%
$1 million or more	4	1.8%	1	.5%
Total	212	100.0%	190	100.0%
Median Sales Consideration	**$348,611**		**$322,346**	
Source: Hamilton County Assessor records				

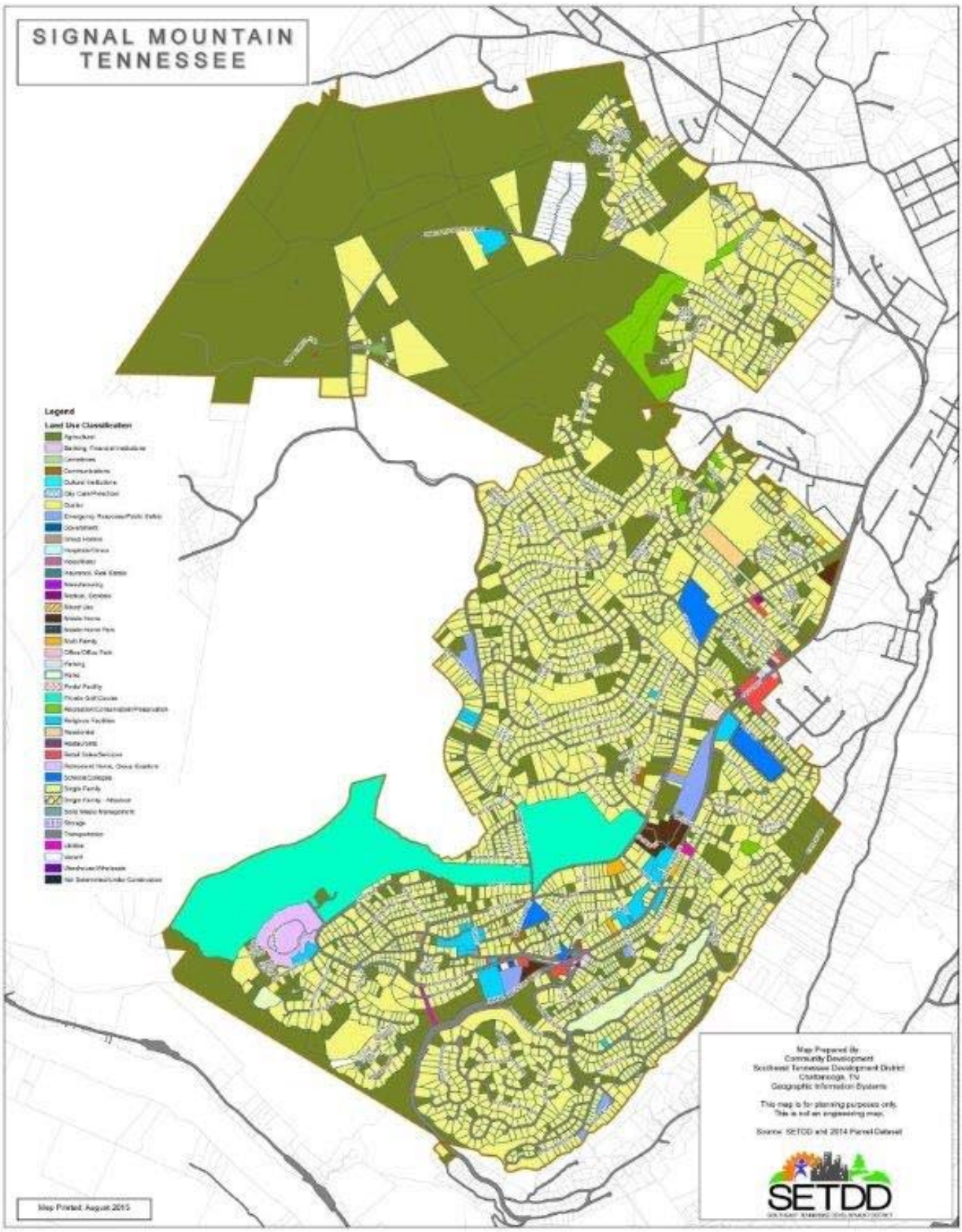
2.4 Existing Land Use

The Town developed around the prominence and success of Signal Mountain Inn. Early development patterns were residential in character and centered on the Inn, which is the present day site of the Alexian Village complex. The primarily single-family residential nature of the town, in part, stems from the entire residential portion of the town being zoned low-density residential which allowed only single-family development as late as the mid-1960s. Planned Unit Developments with apartments were allowed at that time but at a very low density. According to RPA planning documents, by the mid-80s, rising housing costs and the aging of the population created a demand for multi-family housing. As a result, condominium townhouses were constructed on Signal Mountain Boulevard. Since that time, a few other multi-family units have been added. Another recent addition to residential development is Alexian Brothers' six-story multi-unit senior living expansion.

Residential single-family lot sizes range from one quarter to one third acre lots in the Old Towne area to half acre to one acre lots in more recent subdivisions to large, rural lots in the Shackleford Ridge Road area.

The Town's current business development is centered at three locations: near the intersection of Signal Mountain Blvd. and Mississippi Avenue, Ridgeway Avenue at Palisades Drive, and along Taft Hwy. between Cauthen Way and the town limits near Albert Road. Much of the development is single-story strip development or stand-alone, single-use structures such as offices, restaurants, or banks. There is no integration of residential or civic uses and pedestrian connectivity within and between nodes is limited.

Development outside of the town within its Urban Growth Area consists of large lot residential development with scattered subdivisions. Some of these residential developments such as Windtree and Fox Run were annexed into the town before annexation laws changed in 2014. Existing land uses are shown on the map on the following page.


SIGNAL MOUNTAIN
TENNESSEE
Legend
Land Use Classification
Map Printed: August 2015
Map Prepared By:
Community Development
Southeast Tennessee Development District
Chattanooga, TN
Geographic Information Systems
This map is for planning purposes only.
This is not an engineering map.
Source: SETDD and 2014 Parcel Dataset
SETDD

2.5 Existing Zoning

Every parcel and right-of-way in Hamilton County has a zoning designation. Zoning is the legislative process by which the local governing body divides the town into districts or zones and adopts regulations on buildings and the use of land for each zone. A zoning ordinance consists of the maps detailing the zones and a text document that outlines the rules for each zone and the procedures for administering them. The Town's zoning ordinance is available on the town's website.

Zoning authority is derived from the Constitution's police power provision that allows government to enforce controls to protect public health, safety, convenience and welfare. Zoning is a legal and enforceable part of the town's code and is used to regulate the use of land and the type, scale and intensity of development on that land. According to the Planning Commissioner Journal "the primary goal of zoning is to avoid or minimize disruptive land use patterns involving incompatible land uses."

Residential

Most of the residential portion of the Town is zoned Low Density Residential District (LDR). Permitted uses in this district primarily include single-family dwellings; however, schools, parks, public buildings, and churches are also allowed. The minimum lot size for lots on public sewer in this district is 21,780 sq. ft.

Several areas more recently annexed into the town are zoned Residential Estate District (RE). This district has uses similar to those found in areas zoned LDR, but permitted uses also include riding rings and outdoor recreation facilities for the use of the residents. The minimum lot size in the RE district is 21,780 sq. ft.

Other residential uses are zoned Medium Density Residential (MDR) or High Density Residential (HDR). The HDR zone requires a minimum building site for two family dwellings of 20,000 square feet (on sewer). An additional 5,000 square feet is required for each additional unit up to four units. Over four units require an additional 4,000 square feet of for each additional unit. This roughly equates to a maximum density of approximately 10 du/acre allowable in this zone. Under the MDR zone, a two-family home may be built

1 acre= 43,560 sq. ft.

on a lot of 21,780 sq. ft. (on sewer). This corresponds to a density of 4 dwelling units/acre. As seen on the zoning map, these zones are scattered throughout the area and usually reflect low-intensity attached housing such as two-family (duplex) dwellings or small-scale multi-family housing.

Westfield, a mixed attached and detached housing, and the Alexian Brothers complex are the largest of the higher-intensity developments.

Although available as an option in the zoning ordinance, currently no property is zoned for Residential Townhouse District.

Under certain conditions, residential developments other than single-family residential detached structures are subject to review by the town's Design Review Commission.

The majority of the unincorporated county inside the town's Urban Growth Boundary is zoned A-1 Agricultural District. Detached single-family dwellings and agricultural uses such as the raising of poultry and livestock are the most common uses in this zone.

Non-residential

The existing retail nodes at the intersections of Signal Mountain Boulevard and Mississippi Avenue, and Signal Mountain Boulevard and Palisades Drive are zoned Highway Commercial with some Office District zoning. As stated in the intent statement of that zone, this designation is for "the clustering and development of commercial facilities which are directly related to traffic along highways and major thoroughfares" with allowable uses such as restaurants, grocery stores, drugstores, banks, and offices. According to the zoning ordinance, businesses within this zoning designation "shall be situated on sites so as to utilize frontage on a principal arterial for principal access." Arterials, as classified by the Tennessee Department of Transportation, are those roadways that move traffic, but also collect traffic from local streets, major commercial centers, and provide interchange access. TDOT classifies Signal Mountain Boulevard as a minor arterial.

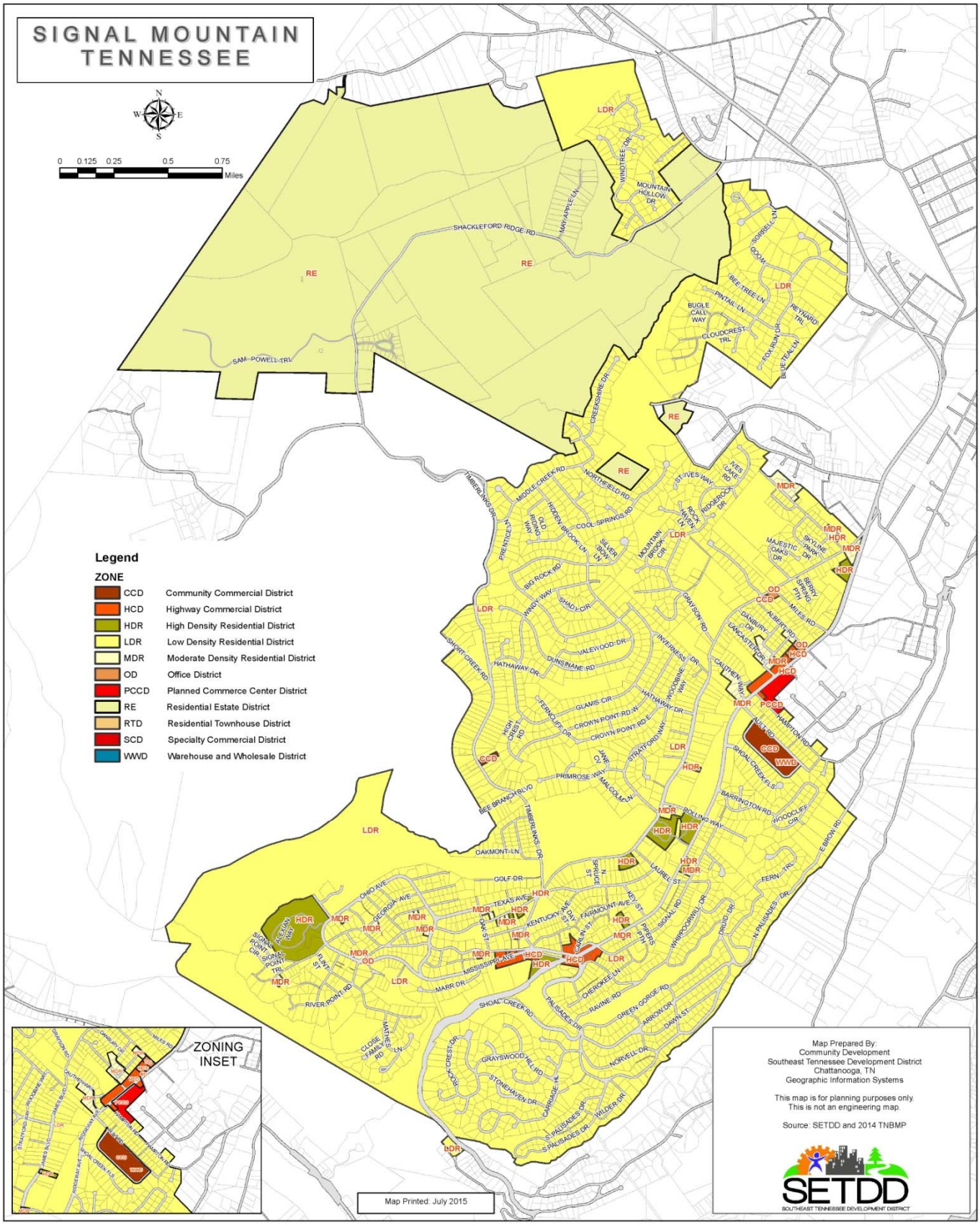
Commercial property fronting on the west side of Taft Highway between Cauthen Way and Albert Road are zoned Highway Commercial except for three properties near Albert Road. The Pruett's grocery store complex is zoned as a Planned Commerce Center (PCC). Permitted uses in this zone include many retail and service uses along with service stations, offices, clinics, and banking facilities.

There are scattered non-residential uses zoned Community Commercial District which allows neighborhood retail uses such as bakeries, beauty shops, offices and repair shops. One example is the former Signal Mountain Middle School site. This property is zoned both Community Commercial and Warehouse and Wholesale District in order to allow for a broad range of uses at the unique location.

The town currently has no property zoned Specialty Commercial District.

Public or semi-public uses such as town hall, the library, and schools or religious facilities are not required to have a specific zoning and are generally found in residential zones.

Within the town's Urban Growth Boundary but outside the town's existing limits is a small commercial zone on Taft Highway abutting Sequatchie County.


SIGNAL MOUNTAIN
TENNESSEE
N
W
E
S
0 0.125 0.25 0.5 0.75
Miles
Legend
ZONE
CCD Community Commercial District
HCD Highway Commercial District
HDR High Density Residential District
LDR Low Density Residential District
MDR Moderate Density Residential District
OD Office District
PCCD Planned Commerce Center District
RE Residential Estate District
RTD Residential Townhouse District
SCD Specialty Commercial District
WWD Warehouse and Wholesale District
ZONING INSET
Map Printed: July 2015
Map Prepared By:
Community Development
Southeast Tennessee Development District
Chattanooga, TN
Geographic Information Systems
This map is for planning purposes only.
This is not an engineering map.
Source: SETDD and 2014 TNBMP
SETDD
SOUTHEAST TENNESSEE DEVELOPMENT DISTRICT

3.0 Plan Approach

3.1 Mission and Plan Principles

The mission of the Town of Signal Mountain is to be a community that preserves its small town atmosphere by managing growth and requiring development to be orderly and consistent; provides services that are necessary for the well-being and general welfare of its citizens; and endeavors to be a desirable and safe place in which families may live and grow.

The overall goal of this land use plan is to provide a working document that can be used by the Town Council, Planning Commission, and other public bodies in all applicable decision making processes.

This plan builds on past planning efforts and seeks to address challenges resulting from a desirable school system, fluctuating sewer conditions, and increasing development in the town's growth area. The following principles reflect the desires of the citizens regarding the future development of the municipality, and serve as the foundation for the recommendations made by this Land Use Plan. Land use planning decisions should…

- Preserve, protect, and enhance the small town quality of life in Signal Mountain while encouraging a high standard of development.
- Promote residential development that is compatible with surrounding neighborhoods while recognizing the desire for some higher density housing in certain areas.
- Provide for concentrated commercial centers serving the needs of residents.
- Ensure adequate utility service is available to meet the current and anticipated needs of all developments within the Town.
- Ensure that adequate vehicular and pedestrian infrastructure serves all developments.
- Help to provide an efficient and effective transportation system in the Town that includes pedestrian and bicycle options.
- Protect the environment and natural resources of the Town.
- Facilitate intergovernmental coordination and cooperation between all local governments on the mountaintop.

3.2 Community Attitudes

During the public meetings, residents and other stakeholders were asked to provide their thoughts on the strengths and weaknesses of their community and the opportunities that exist for the town. These comments, along with their prioritization as noted by meeting attendees, have been analyzed in conjunction with past and current planning efforts to derive these prevailing community attitudes.

Growth and Development
Growth continues on the mountaintop, both inside and outside the town limits. This growth will increase when the Town is no longer under a sewer moratorium. There is concern in the community about the ability of infrastructure, particularly roads and the school system, to meet the needs placed on them by increased growth. There is additional concern that new development negatively impacts existing residential neighborhoods and a "small town" quality of life. Therefore, residents desire controlled, planned growth in currently undeveloped areas which matches the Town's ability to provide infrastructure and services.

Transportation
Topographic features separate the communities of Walden's Ridge from the urban areas of Chattanooga, and often make them a pass through for those travelling to other parts of the region. Additionally, there is concern that increased growth on the mountaintop will equate to greater volume in traffic on transportation corridors already at capacity. New development is viewed by many as having a negative impact on the transportation system.

Interlocal Cooperation/Competition
It is clear that the Town has an infrastructure network and service system that assists its neighboring jurisdictions. Interlocal cooperation and the elimination of interlocal competition is needed to ensure the long term efficient and cost-effective provision of infrastructure and services to the Plateau's residents. Many of the issues concerning the Town regarding growth and development are best addressed at the subregional level with the Town of Walden, Hamilton County, and even perhaps Sequatchie County.

Preservation of natural resources
Town residents feel strongly that natural resources contribute to quality of life and possess ecological value. Specific natural features that were identified for protection include tree cover, water quality, streams, viewsheds, biodiversity and slopes.

Planning Initiative: Smart Growth
- Mix land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost effective
- Encourage community and stakeholder collaboration in development.

More information is available at www.epa.gov

3.3 Goals for Development and Growth Management

It is the intent of this Growth Management section to provide overarching goals and objectives which help to define the ideology of this Land Use Plan. These goals are based on a combination of community attitudes and sound planning practices. Latter sections will provide strategies to implement these concepts.

Goal: Preserve and enhance the small town character with a sense of place that consists of distinctive neighborhoods, open spaces, and appropriate-scale development.

Objective: The Signal Mountain Town Council, Planning Commission, and other applicable boards will use this land use plan as a tool for making development decisions regarding land use, development, zoning, and the expansion of public infrastructure.

Objective: Open space and natural resource preservation will be promoted through compact development patterns, such as conservation subdivisions and mixed-use developments, in the town's developing areas.

Objective: Infill residential development should preserve the integrity of existing neighborhoods and be of compatible density and form.

Objective: New non-residential development is encouraged to cluster in and around activity centers to provide convenient and accessible services to town residents (as discussed in Section 4.3).

Goal: The Town of Signal Mountain should grow and develop efficiently relative to the location, cost, and timing of providing infrastructure and public services.

Objective: Infrastructure, particularly sewer and water service and site-specific transportation improvements, should be available concurrently with new development.

Goal: Pursue intergovernmental coordination and cooperation particularly regarding primary transportation corridors.

Objective: Increase communication with surrounding cities and counties regarding land use decisions, municipal services, and other issues of mutual concern.

Objective: Target intergovernmental transportation planning as essential to addressing increased demand on the roadway network. Include organizations like TDOT, Hamilton County Public Works, and the Hamilton County Transportation Planning Organization in transportation planning decisions whenever applicable.

Goal: Make development decisions consistent and predictable.

Objective: Provide a development process that is clear and predictable and moves forward in a timely manner.

Objective: Encourage a collaborative planning process that seeks to best integrate proposed projects into existing neighborhoods. This is achieved through better communication throughout the development process, inclusion of features that enhance the community, and by positively addressing sustainability issues.

Goal: Encourage public/private partnerships to support desired development

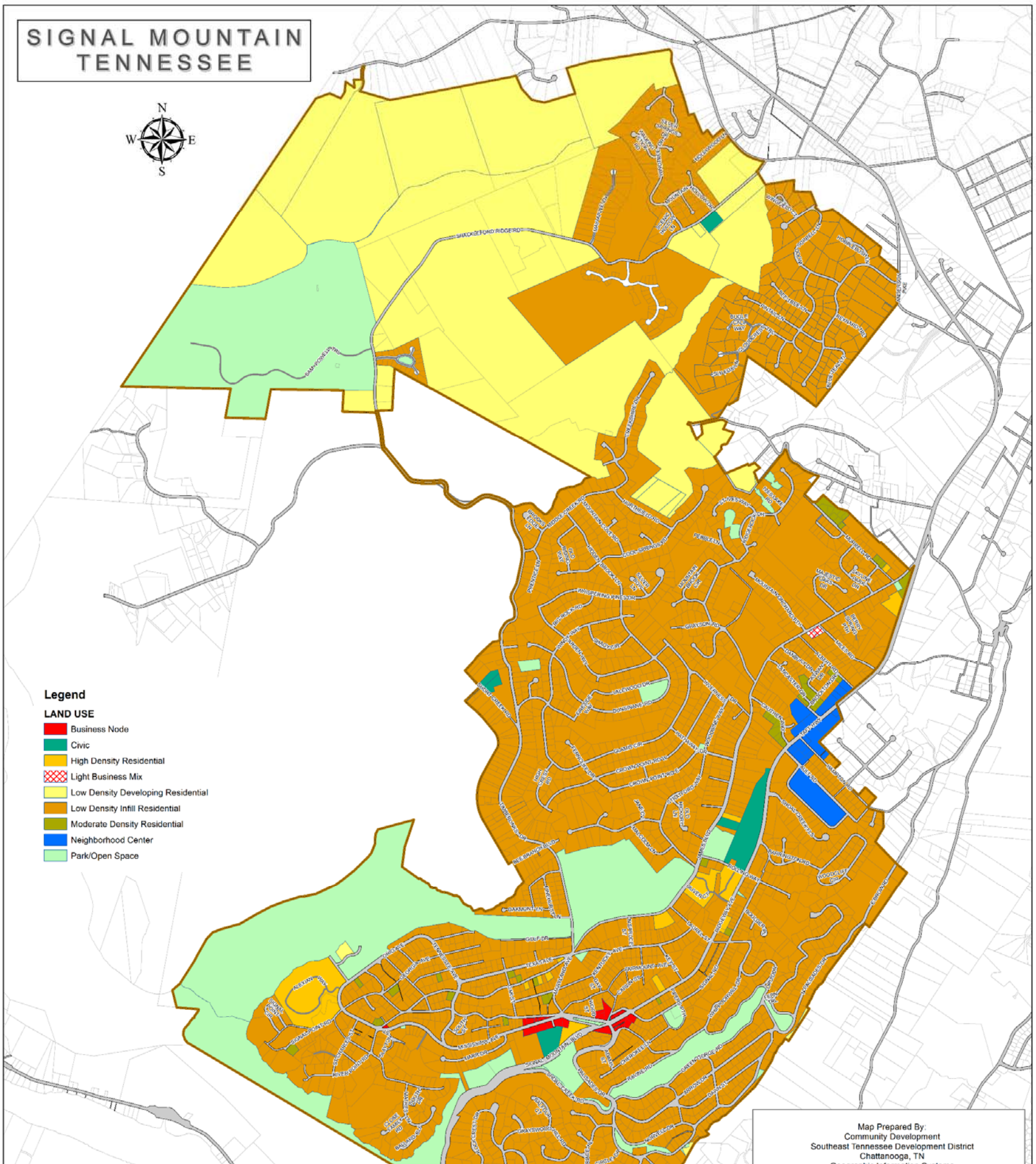
Objective: Continue efforts to strengthen partnerships with other local, state and regional agencies, as well as with non-profit and private enterprises.

4.0 Land Use Plan

The following chapter assigns land use classifications to all properties in Signal Mountain. These classifications are meant to serve as a description of how land should be occupied or utilized. They should serve as a guide to property owners and public decision makers for analyzing development strategies and requests. The land use classifications are meant to be broad enough to give the Town and stakeholders flexibility in implementation, but clear enough to provide sufficient direction in making informed decisions.

The land use classifications outlined in this chapter show a property's ideal recommended use, and are not legally enforced like the city's Zoning Ordinance. The Land Use Plan will not cause automatic changes to existing zoning. Instead, the plan will be used in part to advise individual future zoning decisions and requests.

The Town's Zoning Ordinance contains more detailed provisions and standards and can be found at www.signalmountaintn.gov. Unless specified in this plan, more than one zoning district may be consistent with a single land use classification.


SIGNAL MOUNTAIN
TENNESSEE
N
W
E
S
Legend
LAND USE
Business Node
Civic
High Density Residential
Light Business Mix
Low Density Developing Residential
Low Density Infill Residential
Moderate Density Residential
Neighborhood Center
Park/Open Space
0 650 1,300 2,600 3,900 5,200
Feet
Map Printed: August 2015
Map Prepared By:
Community Development
Southeast Tennessee Development District
Chattanooga, TN
Geographic Information Systems
This map is for planning purposes only.
This is not an engineering map.
Source: SETDD and 2017 Parcel Dataset
setd
SOUTHEAST TENNESSEE DEVELOPMENT

Land Use Classifications

Parks/Open Space
Open space areas include a mix of undisturbed open space that is currently protected from development and unprotected vacant, open space areas. This category includes public or privately-owned land such as golf courses, parks, community lots owned by neighborhood associations or other developed sites used for recreational activities.

Civic
This classification is primarily used to identify government properties. Typical uses in this designation include the Town hall, fire/rescue stations, the library and other government facilities.

Low-density Infill Residential
This category provides for the maintenance of the existing pattern of low-density detached residential development. Most of this area should continue to develop with lots with a minimum size of 1/2 of an acre. New developments on larger lots, or a combination of lots, should be of the same character of the surrounding residential development. Planned Unit Developments with attached single-family residences and Conservation Subdivisions are only appropriate under certain conditions.

Low-density Developing Residential
To help preserve the scenic beauty and sensitive natural features of this area, Conservation Subdivisions are the preferred method for development in these areas. Residential development should be limited to single-family detached housing unless the development is included in a PUD. In this case, attached houses may acceptable as long as the development consists primarily of single-family detached housing with an overall, low gross density.

Moderate-density Residential
This classification is primarily used to specify locations of existing moderate-density residential uses. The plan does not recommend expansion of moderate-density residential uses except in locations depicted on the map.

High-density Residential
Existing high-density developments are shown on the map, but any new development of this density and/or use is shown as part of a Focus Area.

Townhouses when developed outside of cohesive PUD subdivisions are included in this class as well as patio homes, attached condominium units and smaller-scale apartment developments. This classification is most often recommended for use as a "step down" use between intense commercial development and less intense residential dwellings. This class is primarily depicted in the "Focus Area" studies at the end of this chapter.

Light Business
Single-use businesses such as offices or neighborhood serving commercial are dispersed throughout the community with very few having their use reflected in their current zoning. This category reflects the existing land use and expansion of these uses is discouraged.

Business Nodes
Land uses within these nodes are typically a mix of retail and office use with intensity of uses varying depending on location to higher-capacity transportation corridors.

Neighborhood Centers
Land uses within Neighborhood Centers should consist of a variety of small-scale retail shops, small drug stores, convenience stores, eating establishments, offices, and personal and business service establishments with civic and institutional uses such as green space included. Higher-density housing may also be appropriate, either in mixed-use structures, or in single-use developments.

4.1 Park/Open Space Land Use

Open space areas include a mix of undisturbed land protected from development and unprotected vacant, open space. This category includes public or privately-owned land such as golf courses, parks, community lots owned by neighborhood associations, or other developed sites used for recreational activities. *(See Section 6.1 that recommends reclassifying areas as Preserve or Reserve areas once further study is completed.)*

4.2 Residential Land Use

Public meeting participants indicated a strong preference for maintaining a low-density within the town. However, residents did express that there is a need and opportunity for development other than single-family housing. The Town and its urban growth areas are generally developed and should continue to be developed overall at a low-density level to maintain its small-town character. This plan does not specify a maximum gross density for developments, but limiting residential density is recommended due to several factors:

- This is the current prevailing development form.
- There is currently limited capacity on the roadways up and down the mountain. Maintaining residential growth at a lower-density level will help manage the increase in vehicle trips on the roadways up and down the mountain.

The recommendations for Signal Mountain's residential land use classifications are intended to meet these objectives:

- Continue to protect and preserve the existing residential areas of the Town.
- Provide land use categories to encourage a variety of housing options including higher density and attached housing in appropriate areas.
- Recognize that the Town is composed of residential neighborhoods, each with its own individual character, and allow change consistent with reinforcing positive neighborhood values.
- Densities of new residential development shall be compatible with surrounding residential areas, and a

buffer will be provided when there is a significant difference in densities.

- Routine maintenance by private property owners is encouraged and the overall condition of the property should be upgraded where necessary to preserve neighborhood stability. When necessary, the Town shall utilize strict code enforcement to protect and preserve stable residential areas.

Variations on the traditional single-family dwelling subdivision have been discussed in Signal Mountain as a way to expand housing opportunities while maintaining the essential character of mountain life. Planned Unit Developments, Conservation Subdivisions, and other types of residential development options are seen as viable alternatives to previous development types. They can allow a mix of housing types, subject to certain buffering and locational criteria to help ensure their compatibility.

Low-density Infill Residential

The Town's existing neighborhoods are generally low-density, residential developments of primarily detached, single-family structures with larger lots, generous setbacks, large blocks, and limited connectivity. Higher-density developments are either stand-alone (such as Jamestown or Stonewood) or incorporated into mixed-residential developments (such as Westfield).

These areas are expected to change very little over time with some expansion or replacement made to individual homes and limited development on single "remnant" lots in subdivisions.

New developments on larger lots, or a combination of lots, should be of the same character of the surrounding residential development. Building setbacks, street frontage, garage placement, building scale and materials, and design features can help make new developments more compatible with existing neighborhoods.

Most of this area should continue to develop with lots with a minimum size of 1/2 of an acre.

Planned Unit Developments (PUD) are allowed in Infill areas and can provide better site design and sensitivity to existing conditions than traditional single-family

residential subdivisions. PUDs allow a density of up to 4 dwelling units per acre in low-density residential areas and allow attached dwellings—townhomes and multi-family housing.

The density and housing types allowed in PUDs may not match the character of surrounding development, and they are not always a compatible development type. PUDs are most appropriate in Infill areas if the following conditions are met:

- The higher-density allowed under the PUD is off-set by meaningful open space.
- If a development contains attached housing in an area of predominately detached housing, the attached housing should be located to the interior of the development.
- If a development contains attached housing in an area of predominately detached housing, the development should retain a natural vegetative buffer separating the perimeter of the site from adjacent, exterior roadways and the neighboring properties.

Conservation Subdivisions are also allowed in Low-density Infill areas. Although attached housing is not permitted, the reduced lot size allowed under this option may not be compatible with surrounding development. This development form is appropriate if the required open space or additional landscaping is used as a buffer separating the perimeter of the site from adjacent, exterior roadways and the neighboring properties.

Low-density Developing Residential

Residents value the open space in their community and realize that it helps provide character. However, large lot development with structures distributed on an equal amount of acreage with large lawns and wide roads contributes to the loss of this character and does not protect wildlife habitat and water quality. To help preserve the scenic beauty and sensitive natural features of this area, Conservation Subdivisions and Planned Unit Developments with substantial amounts of open space are the preferred methods of development in Low-density Developing Residential.

A major and persistent public misconception equates cluster development to multi-family housing and assumes that reduced lot-sizes result in lower quality homes. This is not the case. Many people prefer a lifestyle facilitated by maintenance-free homes and smaller yards.

– *Site Planning and Community Design for Great Neighborhoods*, Frederick D. Jarvis

In order to preserve desired natural features, the focus in this area should be providing more flexibility within regulations regarding net density, while maintaining a gross low density. This will allow better preservation of open space and environmental features.



The drawing to the left depicts a development with low gross density with areas of higher net density.

Gross Density: The number of total dwelling units within an area divided by the total area (in acres). This includes all nonresidential land uses and private streets in the town, as well as rights-of-way of dedicated streets and dedicated open space.

Net Density: The number of total dwelling units divided by the net area (in acres). This does not include public rights-of-way and private streets, dedicated open space, parks, sidewalks, and other public facilities within the area.

Residential development should be limited to single-family detached housing unless the development is included in a Planned Unit Development. In this case, attached houses may acceptable as long as the development consists primarily of single-family detached housing with an overall, low gross density.

Attached housing units within a PUD should be sited to the interior of the development site. In addition, PUDs should retain a substantial natural vegetative buffer

separating the perimeter of the site from adjacent, exterior roadways and the neighboring properties.



Conservation Subdivision development in the Low-density Developing Residential Area should meet the following criteria:

- Be solely residential.
- Maintain a substantial amount of the site as open space.
- Site houses on smaller parcels of land in exchange for preserving large portions of open space.
- Preserve all primary conservation areas and as much secondary conservation area as is practicable. Primary and secondary conservation areas are outlined in the Signal Mountain Subdivision Regulations.
- Reduce the impacts of development on wooded areas and watersheds.
- Be compatible with surrounding neighborhoods (where existing), or provide adequate vegetated buffers.
- Open space areas must be protected by conservation easements.
- A Homeowners' Association is usually responsible for protecting and maintaining the open space, though other options are outlined in the Subdivision Regulations.
- A portion of open space can provide community members with larger recreation areas and create a sense of openness that many people desire.

Moderate-density Residential

This classification is primarily used to specify locations of existing moderate-density residential uses. The plan does not recommend expansion of moderate-density residential uses except as a transitional use between commercial and residential areas.

High-density Residential

A density of approximately 7.4 dwelling units per acre is allowed under the town's regulations. Existing high-density developments are shown on the map, but any new development of this density and/or use is shown as part of a Focus Area.

Townhouses when developed outside of cohesive PUD subdivisions are included in this class as well as patio homes, attached condominium units, and smaller-scale apartment developments. This classification is most often recommended for use as a transitional use between intense commercial development and less intense residential dwellings or inclusion in a mixed-use center.

Residential Land Use Goal: The Town will support a range of housing opportunities and choices that preserve the character of the surrounding area.

Residential Implementation Strategies:

- Provide zoning classifications that permit a variety of residential development types.
- Consider strategically reducing minimum lot size requirements where appropriate while keeping overall density low.
- Use transitional areas such as linear greenbelts, landscaping, or other design elements between residential neighborhoods of differing densities, and between residential and non-residential areas in order to enhance compatibility of land uses.
- Require traffic impact studies for new residential developments in conformance with Section 4-103.2 of the Subdivision Regulations.
- Under state law, some divisions of a lot 5 acres or more do not have to meet the requirements of the subdivision regulations. Landowners and developers of these properties should be encouraged to meet the intent of this plan's recommendations.

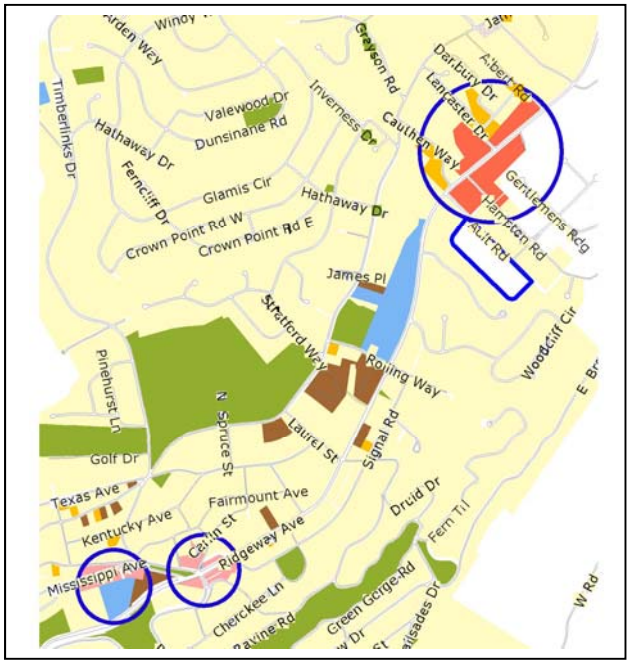
- Use open space as a buffer to maintain the visual character of roadways in developing areas.

4.3 Non-Residential Land Use

This plan recommends some expansion of the Town's business district. At the initial public meeting, residents expressed that the opportunity exists for more non-residential uses (i.e. "mixed-use", "retail", "medical clinics", "quality restaurants").

If the town wishes to function as a small town, there needs to be a variety of retail and service opportunities. However, the development of new sites and the redevelopment of existing sites should occur appropriately. The Town has existing guidelines regulating design of developments (other than single-family residential detached). The Signal Mountain Design Review Commission has oversight of these regulations. Landscaping, screening, parking and paved areas, building design, and signage are included in the standards. The guidelines apply to new construction, remodeling, renovations, and Planned Unit Developments all of which require site plan submittal.

Two existing areas will continue to be classified as Business Nodes. All development and redevelopment will comply with the design criteria and landscaping requirements contained in the Town's Design Manual.



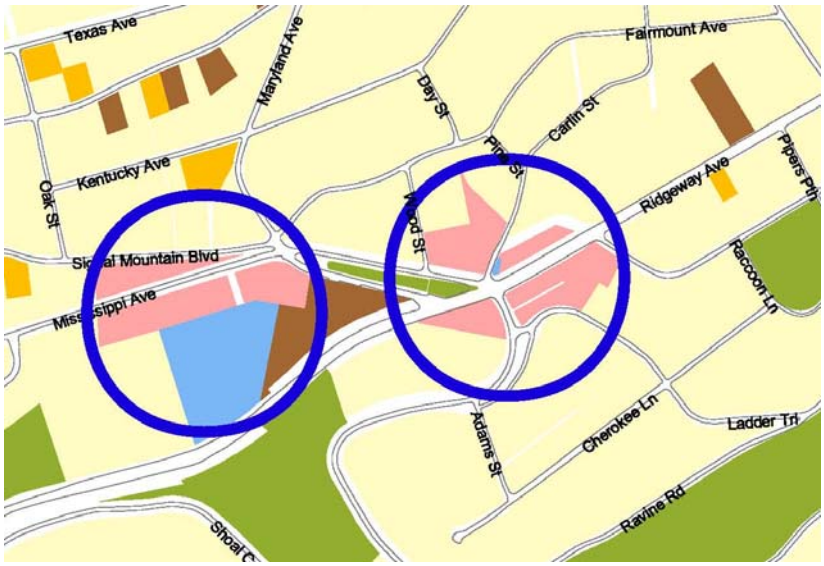
The plan has identified four Focus Areas, shown in the map on the right. The purpose of discussing these areas individually is to develop a strategy to balance potential growth while protecting existing development.

Light Business Mix

Single-use businesses such as offices are dispersed throughout the community with very few having their use reflected in their current zoning. Expansion of these uses is discouraged.

Business Nodes

These nodes, located around the convergence of Signal Mountain Boulevard, Mississippi Avenue, and Ridgeway Avenue, have a mix of retail and office uses. Existing nodes, with a few exceptions for more recently developed uses, have smaller or shared parking facilities. Few pedestrian or bicycle amenities exist within or between nodes.



Focus Area: Signal Mountain Blvd. and Mississippi Ave.

This node contains a mix of retail and office uses. The western edge of this area is bounded by the church south of Mississippi Avenue and by the five-way intersection to the east. In order to maintain the residential integrity of this area, there should be no expansion of this node unless as identified below, other than potential conversion of some solely office uses to low-intensity, neighborhood retail uses if appropriate parking is available.

What is a mixed-use development?
-Mixed-Use Development Handbook, Urban Land Institute
Both the concept of mixed-use development and the actual product have evolved tremendously. The original definition developed in 1976, however, still holds today. Mixed-use developments are characterized by:

- Three or more significant revenue-producing uses (such as retail/entertainment,/office, residential, hotel, and/or civic/cultural/recreation) that in well-planned projects are mutually supporting;
- Significant physical and functional integration of project components (and thus a relatively close-knit and intensive use of land), including uninterrupted pedestrian connections; and
- Development in conformance with a coherent plan (that frequently stipulates the type and scale of uses, permitted densities, and related items).

Focus Area: Ridgeway Ave. at Palisades.

This Business Node contains higher-intensity uses than the one located at Signal Mountain Blvd. and Mississippi Ave. This mix of uses is appropriate due to its location on Ridgeway Avenue/Hwy. 127, the number of travel lanes, and the protection offered by the traffic light. However, no expansion of this commercial node is recommended in order to protect the integrity of the surrounding residential properties. Redevelopment of this area is encouraged to provide pedestrian and bicycle amenities such as bike racks and sidewalks, and seek to improve the appearance of this node through streetscaping.

Before bicycle, pedestrian and/or streetscaping are installed, consideration needs to be given to the existing parking layout as many businesses have back-out parking in front of their buildings. If right-of-way needs to be taken for pedestrian and bicycle facilities, an adequate amount of parking for these businesses needs to be ensured. Ideally, the Town and the property owners will seek safer alternatives to the back-out parking situation, particularly along the heavily-traveled Hwy. 127 corridor.

Neighborhood Centers

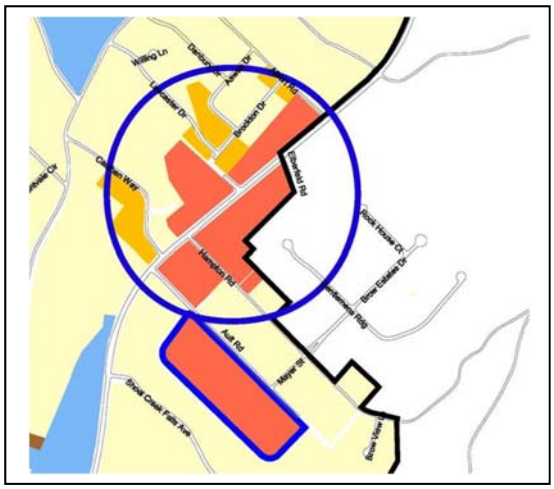
Land uses within Neighborhood Activity Centers typically consist of a variety of small-scale retail shops, small drug store, convenience stores, eating establishments, offices, and personal and business service establishments. Civic and institutional uses, as well as open spaces, neighborhood parks, greens, and squares should also be included.

Neighborhood activity centers should balance pedestrian and automobile needs with pedestrian access being an integral element of the commercial core and the surrounding residential neighborhoods. A continuous network of sidewalks in the commercial and residential areas encourages people to walk from their homes to retail shops, parks, and open spaces. To make the commercial core more attractive for pedestrians, landscape amenities and public open spaces should be provided.

As part of a mixed-use center, higher-density housing may also be appropriate, either in mixed-use structures, or in single-use developments. With the intention of designing a community that lets older residents remain on the mountaintop, providing a location of housing other than single-family detached near Neighborhood Centers allows older residents to remain active in the community once they no longer drive. This location will allow them to take advantage of the restaurants, banks, and other services this location can provide.

These should be places designed for people. Attractive sidewalks, small parks, and shops and restaurants that serve the community allow residents to interact with each other and help create the "small town" feel residents appreciate.

Focus Area: Taft Hwy. at Cauthen Way to town limits



Some expansion of this existing center may be appropriate to provide the town and its residents the wider range of services present in a small town. However, any expansion should be carefully considered.

Development of this area should be sensitive to the sloping topography and any streams nearby. All developments should be accessed off of Taft Highway. Additionally, any development or redevelopment in this focus area should provide a buffer between the development and any nearby residences. The size and type of buffer can be determined as a condition of rezoning or as part of a site plan.

Most appropriately developed as a whole, rather than on a parcel by parcel basis, development of this focus area should ideally provide transitional space between higher intensity uses and the surrounding residential neighborhoods. An example of this "stepped" approach would be a high density residential development or office space providing a transition between a highly-traffic commercial node and single-family residences.

Focus Area: Middle School Site

The middle school site on Ault Rd. closed when the new Middle and High School opened in Fall 2008. During the public input process, comments directed towards the school mentioned that this site could provide an opportunity for something else to occur. Among the uses listed for this location are retail, teen center, senior-targeted housing, offices, mixed-use, higher-density housing, coffee shop, and a park. In response to these public comments, the property was rezoned to Community Commercial District and Warehouse and Wholesale District after the school closed. This flexible zoning designation allows for a variety of development types.

Currently the site is home to several commercial developments including the Signal Mountain Athletic Club, and the existing buildings remain intact. A deed restriction was filed against any residential development on the property.

Objective: Maintain a diversity of retail and office uses to serve both town and mountaintop residents.

Implementation Strategies:

- Encourage existing commercial nodes to incorporate suggested improvements for pedestrians and cyclists.
- Permit a variety of retail and service uses.
- Review existing zoning ordinance to determine if existing zones provide for the scale and form of preferred development.
- Use this Land Use Plan as a guide for directing development towards appropriate retail areas.

Objective: Continue the process of making retail centers distinctive and attractive destinations through the work of the Design Review Commission and others.

Implementation strategies:

- Encourage the maintenance and revitalization of existing commercial centers.
- Create a plan for improved streetscapes in commercial centers.
- Review existing landscaping and parking requirements in the Design Manual and revise if needed.
- Continue to provide architectural guidance through design guidelines.

Objective: Balance land use and the transportation system.

New development will generate new trips that will impact the transportation network. Generally, higher-density and intensity projects are more appropriately located along transportation corridors where capacity is greater and the system is more able to absorb the impact of these trips.

Implementation Strategies:

- Guide development towards existing nodes or the intersection of major thoroughfares in developing areas.
- Require traffic studies for new non-residential developments via the Vehicular Access ordinance (Ord. 98-5). This ordinance gives the Town Manager the ability to require a Traffic Study if 300+ trips are anticipated to be created by the new development.
- Include commercial centers as important destinations during pedestrian and bicycle planning efforts.

Objective: Manage the transition between higher and lower-intensity land uses through landscaping or better site design. Create and enhance commercial centers that are compatible with existing and new neighborhoods.

Purpose of the Signal Mountain Design Review Commission (language from Town Code):
2-501. Purpose. (1) Maintenance of the town as a predominantly single-family residential community by protecting the character and integrity of existing and future residential areas through the provision of high quality
design standards in new development and the protection of residential areas from encroachment by noncompatible land uses;
(2) Maintenance of a balance among land uses within the town favoring residential over commercial or industrial growth, a policy requiring the town to protect its' residential property tax base through the implementation of appropriate community appearance standards generally and, more specifically, of standards insuring that commercial, industrial and multi-family development do not impair the property values of single-family detached residential development within the town.

Implementation Strategy:

- Review existing landscaping and buffering requirements in the Design Manual and revise if needed.
- Require site plans for all new commercial and higher-density residential developments during the rezoning process.

Objective: Ensure landscaping standards are adequate for further development and redevelopment.

Implementation Strategies:

- The Design Manual's "statement of intent" should describe why landscaping is required in parking areas. In addition to landscaping's role in improving lot appearance and safety, its value regarding water quality protection and stormwater management should be mentioned.

- Landscaping regulations typically require a certain percentage of a parking area be vegetated. Consider the possibility of stormwater management plans incorporating these areas. For example, stormwater runoff can be directed to sunken vegetated islands (typically raised and curbed) that can filter and infiltrate stormwater (raingardens or bio-retention areas).

Objective: Ensure existing guidelines provide clear guidance on recommendations and requirements.

Implementation Strategies:

- Review existing Design Manual for areas of improvement or needed change.
- Reformat and revise Design Manual with graphics and pictures to better explain principles and standards.

Other Implementation Strategies:

- Anyone proposing a zoning change should meet with planning staff and the town to review the proposal in regard to the land use plan and existing zoning ordinance and other regulations.

- Review regularly and modify town codes if needed to incorporate provisions for desired new technologies like green building and Low Impact Developments.
- Reference the threatened and endangered species map and database maintained by the TDEC Division of Natural Areas and the proposed Resource Map in making development decisions and through the rezoning process.

Industry/Manufacturing

In the Town's 2000 Land Use and Transportation Plan, there was an expressed desire to prohibit the location of heavy industrial uses in the Town with a recommendation that the Planning Commission and Council reevaluate this restriction with every plan update. Limiting high-intensity manufacturing and industrial uses seems even more appropriate with the recent restriction on the operation of trucks with three or more axles passing through town. This plan does not recommend any development of industrial or manufacturing uses.

5.0 Historic and Cultural Preservation

Historic resources provide residents with another way of connecting with their community. Historic places provide a community's background, and the protection of these places saves valuable resources while providing a link to this past. According to the National Trust of Historic Preservation the style and the variety of historic places makes communities more attractive.

Other advantages of historic preservation include:

- Preservation and protection of the historical and /or architectural value and cultural heritage of buildings, landmarks, and historic districts.
- Stabilization and improvement of property values
- An increase in neighborhood pride and awareness of the beauty and noble accomplishments of the past.
- Enhancement of the area's attraction to residents, tourists, and visitors through the protection and preservation of historically significant areas which serve as a support and stimulus to business and industry.
- The fostering and encouragement of preservation, restoration, and rehabilitation of structures, areas, and neighborhoods.

The Town has many sites worthy of preservation due to their historic or cultural significance. Currently, one site and one district are on the National Register of Historic Places. The National Register is the nation's official list of cultural resources worthy of preservation. The Register is part of a nationwide program to support public and private efforts to identify and protect historic and archaeological resources. It is important to note that listing on the National Register does not ensure protection of buildings from demolition or abusive alterations. Listing does not restrict the rights of private property owners. Listed sites in the town include:

- Signal Mountain Elementary School: 809 Kentucky Ave., Listed 2001-04-19
- Signal Mountain Historic District: Roughly along James Blvd., Brady Point Rd., and Signal Point Rd., Listed 2001-10-05

It should be the goal of the Town to foster and encourage the preservation, restoration, and

rehabilitation of structures, areas, and neighborhoods. The following principles apply:

- The Town will place increased emphasis on protecting and restoring historic landscapes and settings as well as individual structures.
- Emphasis should be given to the upkeep and enhancement of publicly-owned historic features.
- The potential impacts of proposed developments on historic sites or areas should be carefully considered, and appropriate measures should be required of the owner that mitigate any adverse impacts.

Implementation Strategies:

- Inventory and establishing a comprehensive listing of historic structures and districts.
- Pursue possible designation of Local Historic Districts. Usually, the purpose of local designation is to protect historically and architecturally significant neighborhoods and districts from insensitive alterations and demolition and to ensure that new buildings are compatible with the old. This process involves an ordinance change, the creation of a historic zoning commission, designation of local district(s), and creation and implementation of design review guidelines.
- Coordinate local preservation efforts with local, state, and federal programs to broaden potential scope and impact of such programs. The Tennessee Historical Commission and Southeast Tennessee Regional Historic Planner (as staff of the Southeast Tennessee Development District) can provide assistance with both state and federal programs and funding.

6.0 Natural Resources

The desire for a high quality of life extends to a high quality environment and landscape in which to work, live, and play. The Town of Signal Mountain will continue to be a desired location to develop, but this does not mean that unnecessary losses of natural resources and environmental quality must be the result. It is clear that the preservation of existing natural features and the scenic beauty of the Town are paramount concerns of Town residents. These concerns extend not only to the impact on future development trends and areas, but also to the desire expressed by many residents to address the concerns of failing septic systems and water quality issues.

Currently, the Town has approximately 600 acres of land reserved for park and recreation usage. These are discussed further in chapter 9. Much of the town-owned property set aside for parkland lies on or near steep slopes (defined in the Signal Mountain Zoning Regulations as 25% or greater) or waterways. Although not within the Town's municipal limits, Prentice Cooper State Forest provides 26,000 acres of open space and recreational opportunities to residents. It also contains 13 miles of the Tennessee Cumberland Trail State Park which connects to the Town's Rainbow Lake Wilderness Area.

In 2007, the Tennessee Department of Environment and Conservation (TDEC) imposed a moratorium on sewer hookups in the Town because the Hamilton County Water and Wastewater Treatment Authority's wastewater treatment plant serving the town had repeatedly violated environmental regulations during the previous three years. TDEC has also listed three streams- Bee, Short, and Shoal Creeks- on their state-wide list of impaired streams due to the presence of E. coli. According to TDEC, the elevated bacteria levels are due to failing septic systems.

The three creeks have been on TDEC's impaired waters list since 2004. This list identifies the streams and lakes within watersheds in Tennessee that are "water quality limited" or are expected to exceed water quality standards within the following two-year period and need pollution controls. (Year 2016 303(d) List, May, 2017, Tennessee Department of Environment and Conservation)

Most of the Town is in the Tennessee River watershed with a portion of the Town and its growth area in the Suck Creek watershed. Watersheds, because of their physical shape and composition, naturally filter, absorb, and direct water to rivers, streams, lakes, and other naturally occurring bodies of water. Land development patterns and disturbance can dramatically affect water quality in a watershed.

Important natural areas that contribute significantly to a healthy balance between land development and the environment include riparian zones, hillsides, rock structures, sink holes, caves, and trees/vegetation which filter air and water pollutants, help maintain temperature balance, and provide scenic beauty and wildlife habitat.

Policies and actions promoting the preservation of the Town's scenic beauty and natural resources are provided through recommendations in this section and throughout the land use plan.

6.1 Mapping Resources

It is beneficial to maintain maps which identify specific natural resources within the community. The Town should identify and map sensitive resource areas and maintain a current map of these sites.

Implementation Strategy:

- Create a map of environmentally sensitive areas including slopes, native or endangered species, and riparian buffers.
- Reference the threatened and endangered species map and database maintained by the TDEC Division of Natural Heritage.
- Once resources are identified and mapped, update Parks and Open Space category on Land Use Plan map to reflect the following:

  Preserve Areas

  Preserve areas include undisturbed natural open space that is currently protected from development. This class includes areas under environmental protection by law, as well as land acquired for conservation through purchase or

by easement. Examples of Preserve Areas include:

- Surface water bodies
- Protected wetlands
- Purchased open space
- Greenways and Trails
- Conservation easements

Reserve Areas

The category includes areas of vacant, open space that are not currently protected from development under current code. Included are: steep slopes, open space, view sheds corridors intended for acquisition and required buffers.

These areas may include public or privately-owned land such as golf courses, parks, community lots owned by neighborhood associations, or other developed sites used for recreational activities. Although they are expected to remain relatively undeveloped, Reserve lands still have the potential for eventual use at a higher intensity. In this case, the lands should be developed at intensity compatible with surrounding uses. Ideally, many Reserve lands will eventually gain the protected status enjoyed by Preserve Area lands.

6.2 Stormwater Management

Stormwater is water which flows across the ground and pavement during and after a rain. Stormwater runoff has been identified as one of the major contributors to ongoing water quality problems in the United States. (EPA Report: Our Built and Natural Environments, A Technical Review of the Interactions between Land Use, Transportation, and Environmental Quality.) The need for stormwater maintenance is directly related to development. A lack of responsible development practices results in higher maintenance costs, undue health and safety risks, and a devaluation in property owner investment.

For several years, the town has been found in compliance with its Municipal Separate Storm Sewer System (MS4) permit. Compliance with their permit shows the town's commitment to environmental protection, and should be maintained into the future.

Implementation Strategies:

- Continue to work with Hamilton County Groundwater Protection regarding failing septic systems, appropriate remediation, and action taken.
- Aggressively enforce stormwater regulations.
- Actively and aggressively meet the requirements of the Town's current MS4 permit to avoid fines or involvement of the Environmental Protection Agency.
- Require installation, inspection, and maintenance of Best Management Practices (BMPs).
- Identify failing septic systems and prioritize remediation. Educate and encourage residents to connect to the sewer system.
- Encourage educational programs and distribute BMP materials such as brochures and/or articles as part of stormwater management.
- Develop opportunities for increased public education at schools or with civic groups regarding stormwater protection and the environment.
- Adopt landscaping provisions to complement existing Stormwater Management Standards.
- Encourage the use of stormwater management alternatives for street culverts such as bio-retention facilities.
- Continue painting "Dump No Waste – Drains to River" notices next to all stormwater drains.
- Seek local assistance (UTC, TDEC, and the Tennessee Division of Natural Areas) in the identification of wetlands and sinkholes and with enforcement of existing state and federal regulations. These regulations ensure wetlands shall not be regraded, filled, piped, diverted, channeled, built upon, or otherwise altered or disturbed except where state or federal permits have been obtained.

6.3 Riparian Buffers

TDEC defines a riparian buffer as a strip of undisturbed, original vegetation, enhanced or restored existing vegetation, or the re-establishment of vegetation surrounding an area of disturbance or bordering streams, ponds, wetlands, or lakes. The purpose is to protect water quality by filtering pollutants, sediment, and nutrients from runoff, reduce storm runoff velocities, protect channel banks from scour and erosion, cool rivers and streams by creating shade, and provide food and cover for wildlife and aquatic organisms. Currently, Signal Mountain's Stormwater

Ordinance requires a thirty foot (30') non-disturbance area adjacent to all streams.

Implementation Strategies:

- Continue to enforce the Town's Stormwater Ordinance as it relates to riparian buffers and general stream protection.
- Update the Town's regulations as needed to ensure conformance with state and federal standards for riparian buffers.

6.4 Greenways

Greenways such as the North Chickamauga Greenway, while used for recreational purposes, exist predominantly for environmental protection, helping to protect the watersheds of the waterways they are located along.

Objective: Institute and coordinate a program of mountain stream greenway planning.

Implementation Strategies:

- Incorporate greenways into transportation planning documents.
- Sponsor stream restoration or stream clean-up projects.
- Work with the Trust for Public Land and other partners to continue expansion of the network of multi-use paths.
- As development occurs, work to secure easements for a greenway network expansion as part of the development process.
- Make mountain stream and other greenways a priority concern when planning future open space acquisitions, protection easements, and local land trusts, or other forms of management agreements with private land owners.

Benefits of Trees
-From "Building Greener Neighborhoods", American Forests and National Association of Home Builders

Energy Conservation and Air Quality

- Deciduous trees provide shade and can save 10 to 50 percent on a home's summer cooling costs.
- Deciduous trees provide evaporative cooling, lowering temperatures throughout a community.
- Evergreen trees block winter winds and can save 20 percent on a home's winter heating needs.
- Trees store carbon, offsetting the harmful by-products of burning fossil fuels.
- Trees trap air pollution particulates, cleaning air.

Storm-water Control and Water Quality

- Trees intercept and absorb storm-water, reducing runoff and soil erosion.
- Tree buffers near waterways improve water quality by acting as a filter.

Psychological and Physical Health

- Trees have a restorative effect that can improve physical wellbeing.
- Trees block and mask noise.
- Trees offer beauty and create a sense of place in the community.
- Trees provide recreational settings and wildlife habitat.

Marketability

- A well-treed development enhances property values and sales.
- Tree conservation enhances the developer's and builder's image.

6.5 Slopes

Protection of steep slopes next to streams is important due to the potential harm to water quality and aquatic habitats due to stream siltation and contamination of surface waters. Steep slope protection also prevents problems resulting from slope instability while providing for the maintenance of important view sheds. Finally, slope protection maintains an area's natural topography and drainage patterns.

The Town's existing Zoning Ordinance and Subdivision Regulations contain some requirements and options for developers to practice environmentally sensitive development design. Slopes are defined as moderate (15-25% slope) and steep (over 25% slope). The regulations protect steep slopes, and provide general guidance for grading on slopes, and recommend minimizing cut and fill practices. Moderate slopes are more specifically protected in Conservation Subdivisions, where they are required to be included as part of Conservation Lands.

Implementation Strategies:

- Consider expanding slope regulations to require additional protection for moderate slopes in both conventional and conservation subdivisions.
- Identify ways to improve the zoning ordinance to reflect the importance of slope conservation including options such as an expedited development process for developments including slope protection in a site plan.

6.6 Tree Preservation

Public comments were clear that residents value the town's tree cover, and concerns were expressed about the clear-cutting of development sites. Currently, there are no provisions or incentives for the prevention of extensive tree removal or tree preservation outside of a Conservation Subdivision, where trees are protected within Conservation Lands.

Implementation Strategies:

- Assess the need for a tree coverage ordinance and and/or the creation of BMPs for tree protection.

- Consider the creation of a minimum standard for retaining existing tree cover on steep slopes.
- Update Conservation Subdivision Regulations to include consequences and remedies for tree removal that occurs in Conservation Lands.

6.7 Open Space Preservation

The Town can use the acquisition of open space as a tool to protect high-priority resources. This is one method to insure that places of natural beauty and areas of wildlife habitat are preserved and maintained. There are also organizations that provide assistance to landowners to place their land in permanent conservation easements to ensure that important assets are preserved.

Land Trusts are local, regional, or statewide nonprofit conservation organizations directly involved in helping protect natural, scenic, recreational, agricultural, historic, or cultural property. Land trusts work to preserve open land that is important to the communities and regions where they operate. They have direct involvement in land transactions. They initiate, implement, and monitor land protection devices for individual pieces of property or for larger land areas, depending on the trust's specific goals.

Objective: Use public and private open space acquisition as a method of preserving important natural resources.

Objective: The Town should encourage the use of conservation easements in conjunction with a land use trust as a tool to protect natural resources. As previously mentioned, there are also organizations that provide assistance to landowners to place their land in permanent conservation easements.

Objective: The Town should accept private open space donations as a method of preserving important natural resources. The Town should encourage the purchase of additional open space as public funds are available. The use of eminent domain for the purchase of additional public lands is not recommended.

Implementation Strategies:

- Prioritize areas/attributes for open space acquisition.
- Engage land trusts in conservation efforts.
- Maintain public open spaces and require private open space to be maintained.
- Use an array of techniques for open space preservation and acquisition, including promoting the use of Conservation Subdivisions.

Other Implementation Strategies:

- Sponsor stream restoration or stream clean-up projects.
- Review erosion control plans for construction areas which have the potential for erosion during and following construction. In addition, provide Best Management Practices information for proper installation of erosion control devices and materials.
- Consider adoption of maximum parking standards, instead of the minimum requirement found in the current zoning ordinance, and shared parking requirements to discourage development of vast surface parking lots and reduce impervious surfaces.

7.0 Utilities

7.1 Sewer Service

The public sewer system in the Town of Signal Mountain is owned, operated, and maintained by the Hamilton County Water and Wastewater Treatment Authority (WWTA), not the Town of Signal Mountain. This has been the case since September 2002, when the Town became a member of WWTA and the Authority accepted the town's sewer system. The WWTA is governed by a Board of Commissioners composed of five members appointed by the Hamilton County Mayor and a representative from each municipality that has joined the WWTA, including Signal Mountain.

WWTA's mission: "To provide reliable, courteous, and low-cost sewer service within our service area in order to promote economic development, eliminate health problems, and protect the environment."

For several years, the Hamilton County WWTA has been under a sewer mortarium imposed by the Tennessee Department of Environment and Conservation (TDEC). The moratorium means that no additional capacity, meaning no new sewer hook ups, are allowed within the WWTA system in Signal Mountain. The result of the moratorium is that development in the sewer system area, except in special cases, is not permitted.

The moratorium was put in place because of issues with the sewer system's wastewater treatment plant, located at the base of Signal Mountain. The plant is outdated, and is subject to high levels of inflow and infiltration, or I & I. This means that, particularly during times of heavy rainfall, too much water gets into the sewer system. The excess water leads to sanitary sewer overflows at the treatment plant.

The moratorium can only be lifted once the overflow problem is solved. The current plan to correct the issue is to connect WWTA's Signal Mountain system with the City of Chattanooga's Moccasin Bend Wastewater Treatment Plant. Until this fix occurs and WWTA's sewer system can be expanded, development in Signal Mountain will have to rely on individual septic tanks or alternative sewer systems.

7.2 Septic Tanks

Areas of Signal Mountain not served by WWTA rely on individual subsurface sewage disposal systems, or septic tanks. Each septic tank is owned and maintained by the individual property owner where the tank is located.

Septic tanks are regulated, however, by the state, with local officials responsible for enforcement. In Hamilton County, the enforcement agency is Hamilton County Groundwater Protection. Hamilton County Groundwater Protection is responsible for siting and permitting septic systems in new developments, and for enforcing regulations remediating septic tank failures.

Although septic systems are an acceptable alternative where public sewer is not available, septic system failure is a major environmental concern. Failed septic tanks are in violation of state and local regulations, and pollute surrounding soils and streams. When a septic tank fails, it can be reported to Hamilton County Groundwater Protection by the property owner, neighbors, or the Town. Groundwater Protection is then responsible for ensuring the tank's owner takes corrective action on the failing system.

Implementation Strategies:

- Because of the threat of septic failure, particularly in Signal Mountain's rocky soil, future growth on septic or other non-sewer systems is highly discouraged.
- Until the sewer moratorium is lifted and sewer can be extended to new areas of town, encourage the use of alternative sewer systems in new subdivisions as opposed to individual septic systems.
- Work with WWTA to develop a master sewer plan for the entire community to be implemented once the sewer moratorium is lifted.
- Respond quickly to all reports of failing septic systems, and continue to work with Hamilton County Groundwater Protection regarding appropriate remediation and action taken.

7.3 Drinking Water Supply

The Town of Signal Mountain owns and operates its own water system using treated water purchased from the Tennessee-American Water Company. The Town of Signal Mountain's water system has the capacity to store up to two million gallons and can pump up to 800,000 gallons of water a day. The Public Utility director does not project much growth within the system's service area with Walden's Ridge Utility District providing service to most areas in the town's growth boundary.

The Division of Water Supply with the State of Tennessee Department of Environment & Conservation conducts an annual survey of the Signal Mountain Water System in accordance with the Sanitary Survey Manual for Community Public Water Supplies.

The water system is among Tennessee's approved public water supplies. Copies of the state's approval are kept on file at Town Hall.

Walden's Ridge Utility District (WRUD) serves Signal Mountain residents not within the town's water system, the Town of Walden, and other unincorporated areas on the mountain. Walden's Ridge Utility District obtains its water from the Hixson Utility District and currently serves over 3,000 customers.

8.0 Transportation

8.1 Multi-modal Facilities

This land use plan has a bicycle and pedestrian plan as a companion document. The Signal Mountain Bike and Pedestrian Plan was developed concurrently with the 2016/2017 update of the Land Use Plan.

It is important to maintain and plan for a transportation system which ensures an adequate street network capable of providing safe and efficient movement of people and goods within and through the Town. This Plan recognizes that transportation system improvements are needed in order to provide alternatives to single-occupancy vehicle travel.

As population continues to grow in the Town, it is essential that a comprehensive pedestrian circulation system be established. Accordingly, this Plan strongly encourages the development of a comprehensive, "multi-modal" transportation system addressing not only automobile travel, but also pedestrian, bicycle, and transit alternatives. Priority routes for the development of this system can be found in the Bike and Pedestrian Plan.

8.2 Bicycling

Like walking, the convenience of bicycling for travel is often determined by the pattern in which land is developed. Most people are willing to travel for about fifteen minutes for non-vehicular transportation trips. In fifteen minutes, most cyclists can cover about two miles, making bicycles a versatile mode of travel.

Some land use patterns that encourage both bicycling and walking include:

- Development densities that allow people to live close to destinations such as schools and stores.
- Mixed-use zoning that allows commercial and residential land uses in the same area, along with standards that ensure compatible building design.
- Locating buildings close to the street, which can slow traffic and offers easier bicycle access.

Some common land development practices that discourage bicycle and pedestrian travel include:

- Segregated land uses that create long distances between destinations.
- Commercial properties set far back from the street with large parking lots in between. Such sites also

typically include access and parking facilities for automobiles only.
- Large lots in residential areas that create greater distance between home and other destinations.

The Signal Mountain Bike and Pedestrian Plan provides recommendations on the types and locations of bicycle facilities on Signal Mountain. Types of facilities include:

- Bicycle Boulevards
- Advisory Shoulders
- Paved Shoulders
- Bike Lanes
- Multi-Use Paths

The design and appropriate location for each facility type is further outlined in the plan. The location of future bicycle amenities focuses on areas where bike routes would provide connectivity between different types of land uses.

When the town considers any development proposals or road projects, the recommendations of the Bike and Pedestrian Plan should be implemented.

8.3 Pedestrian/Sidewalks

Everyone is a pedestrian at some point in life. Sidewalks and trails provide critical links in the transportation network by providing pedestrian access to schools, neighborhoods, businesses, and recreational and natural areas. As mentioned previously, most people are willing to walk for about fifteen minutes, or one-half mile, for non-vehicular transportation trips. This distance has become a benchmark planning principle for those designing walkable communities.

Currently, the majority of Signal Mountain's sidewalks are found in Old Towne and providing connections to schools. Town residents support the addition of sidewalks in the community but commented that the poor condition of existing sidewalks were of concern. Frequently identified problems include sidewalk surfaces in poor repair, such as cracked or uneven concrete, and lack of regular sidewalk maintenance, including overhanging trees and overgrown shrubs. Fortunately, as of 2017, the town is in the process of a major project to renovate Old Town sidewalks, which will alleviate many of these concerns.

Town of Signal Mountain Code 15-303. Off street use restricted. No motorcycle, motor scooter or any other motor driven cycle or bicycle shall be ridden upon any sidewalk of the Town of Signal Mountain nor shall any such vehicle be ridden or any vacant lot, yards or privately-owned property without the written consent of the owner.

The Town of Signal Mountain assigns property owners the responsibility for upkeep of the sidewalks adjacent to their property even though sidewalks are a part of the public right-of-way. Citizen maintenance extends to issues such as litter removal, limb and debris removal after a storm, and removal of vegetation. If walking is to be encouraged, a clear pathway must be maintained. If, as current Town Code requires, citizens are responsible for sidewalk maintenance, landowners must be made aware of the requirements and responsible maintenance practices enforced.

Citizens often report maintenance problems. This might be the only method that the town currently has of being aware of repair needs. The town should consider other methods of identifying sidewalk concerns.

New Sidewalks

The Signal Mountain Bike and Pedestrian Plan provides recommendations on the types and locations of pedestrian facilities on Signal Mountain. Types of facilities include:

- Multi-Use Paths/Greenways
- Sidewalks
- Pedestrian Lanes

The design and appropriate location for each facility type is further outlined in the plan. The location of future pedestrian amenities focuses on areas where pedestrian routes would be safe, geographically feasible, and provide connectivity between different types of land uses.

When the town considers any development proposals or road projects, the recommendations of the Bike and Pedestrian Plan should be implemented.

Multi-use Paths/Greenways

Multi-use paths can be an important element in a transportation network. Multi-use paths, often referred to as greenways, are discussed in the Natural Resources section as providing a variety of important environmental functions. However, these paths also provide many other important benefits to communities:

- Connectivity/Transportation: Multi-use paths can be an integral element in a regional non-motorized transportation network, offering an alternative to driving by connecting homes, parks, schools, offices, commercial areas, and workplaces.
- Recreation: Multi-use paths provide recreational opportunities for citizens of all ages, and create linkages between parks and other community facilities.
- Health: Multi-use paths provide opportunities for moderate exercises such as walking and bicycling, activities that when performed regularly can have significant health benefits.
- Education: Multi-use paths may incorporate natural, historic, and cultural resources along their routes into interpretive programs to educate the community.
- Economic and Quality of Life: Multi-use paths are significant community assets that increase the attractiveness and desirability of communities for current and potential residents.

As of 2017, the town has one multi-use path under development. The path will run along Taft Highway from the Town Hall Complex to Albert Road. This path was noted by citizens as a high priority, and will provide a connection between different areas of town.

Objective: Create a walkable, bikeable community for residents of all ages. The Town of Signal Mountain will provide a transportation system that meets the needs of all users, including pedestrians, bicyclists, and motor vehicle drivers, regardless of age or mobility level. These needs shall be accommodated and balanced in all types of transportation and development projects.

Implementation Strategies:

Pedestrian:

- Bicyclists and pedestrians shall be given due consideration in comprehensive transportation plans.
- Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities.

- Use the Bike and Pedestrian Plan when considering all road and development projects. The plan will help identify needs, prioritize funding, and furnish design and implementation guidelines for projects.
- Design streets, pedestrian paths, and bicycle facilities to link neighborhoods with community facilities.
- Create a maintenance plan to address existing facilities. It is recommended that a plan be developed that specifically addresses how maintenance concerns will be identified, what corrective actions will be taken, and who is responsible for maintenance of sidewalks.
- Maintenance strategies should be identified in the planning stages of new construction.

Bicycle:

- Bicyclists and pedestrians shall be given due consideration in comprehensive transportation plans.
- Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities.
- Consider adoption of roadway design standards to include cross-sections that incorporate different types of bicycle facilities.
- Use the Bike and Pedestrian plan when considering all road and development projects. The plan will help identify needs, prioritize funding, and furnish design and implementation guidelines for projects.

Roadway:

- Monitor the operation and performance of the roadway network by establishing a routine data collection program and by conducting special data collection as the need arises.
- Require roadway and signal improvements for development projects to minimize decline of existing levels of service.
- Study and implement physical and operation improvements to optimize roadway and intersection capacities.

- Promote the reduction of single occupant vehicle trips, and encourage an increase in the share of trips taken by other forms of travel.
- Require traffic studies and traffic impact studies where applicable per the requirements set forth in Ordinance 98-5 and the Subdivision Regulations.

Land use and transportation:

- Review requirements of an access plan. Currently a plan is required for each new building or use of land per Ordinance 98-5.
- Review existing curb-cut policy found in the Vehicular Access Ordinance 98-5.
- Provide clear guidance on requirements by reviewing and rectifying the requirements found in the Zoning Ordinance, Subdivision Regulations, New Street Criteria, and vehicular access ordinance.

9.0 Parks and Recreation

As mentioned in Chapter 6, maintaining a high quality of life in Signal Mountain means providing a quality environment in which to live, work, and play. Public recreation opportunities are a major contributor to this quality of life equation. The town's recreation department currently manages 15 recreation sites and numerous public parks and natural areas located throughout the town. The department maintains the parks and provides organized recreation activities for all ages.

These parks and recreation sites, which allow for sports leagues, exercise, and open space preservation, are very important to the town. As a result, their maintenance and programming should continue to be a part of the town's budgeting and long-term planning processes.

9.1 Facility Inventory

Public Recreation Facilities: The town operates multiple recreation facilities including an indoor gymnasium, a pool, 6 ball fields, a basketball court, 10 tennis courts, and 5 playground areas.

Recreation Facility	**Location**
Gymnasium	Paul Mathes Community Center in Town Hall Complex
Town Pool	Town Hall Complex
Basketball Court	James Boulevard behind Country Club
Ball Fields	
Driver Field	James Boulevard behind Country Club
Hedges Field	Town Hall Complex
Wagner Field	600 Timberlinks Drive
Marion Field	James Boulevard behind Country Club
Rutledge Field	Town Hall Complex
Scott Field	Town Hall Complex

Tennis Courts	
6 Tennis Courts	Town Hall Complex
4 Tennis Courts	James Boulevard behind Country Club
Playgrounds	
Andy Anderton	Valewood Lane and Dunsinane Road
Althaus Park	James Boulevard behind Country Club
Town Park	Town Hall Complex
Timberlinks Park	600 Timberlinks Drive
Norris Field	Signal Road and Pipers Path

Parks: The Town of Signal Mountain maintains numerous parks of various types and sizes. Some are large and contain miles of hiking trails, while some are as small as a single lot. The Town categorizes these parks as Horticultural, Scenic, Wilderness, or Natural Areas. Horticultural parks are relatively small, and generally serve the aesthetic purpose of maintaining green space in the town. Natural areas and wilderness parks preserve the natural landscape, and many provide opportunities for hiking. Scenic parks provide overlooks which capitalize on the town's beautiful mountain setting.

Park	**Location**
Horticultural Parks	
Adams Square Park	Ridgeway and Carlin Street
Boy Scout Park	James Boulevard and Maryland Avenue
James Park	Ridgeway and Signal Mountain Boulevard
Ladder Trail Park	Palisades and East Palisades
Lena Givens Park	Signal Mountain Boulevard and Mississippi
Memorial Park	James Boulevard and Timberlinks
Robin Hood Park	Robin Hood Drive and Arrow Drive
Wilder Triangle Park	North and South Palisades Roads

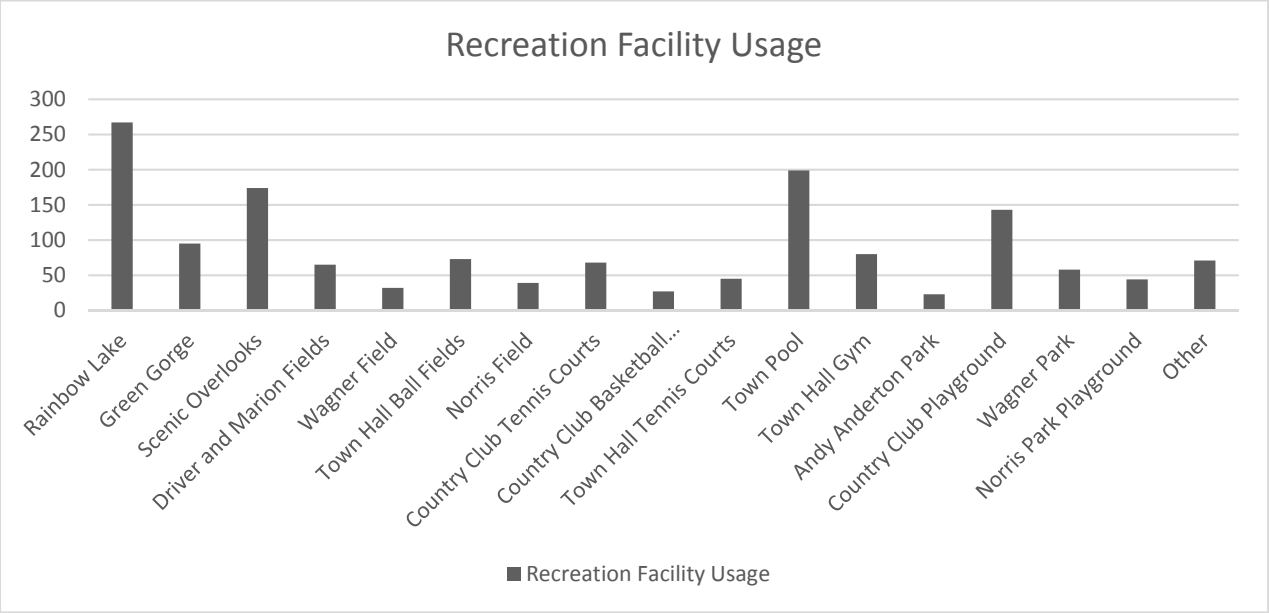
Wishing Well Park	Texas Avenue and Tennessee Avenue
Natural Areas	
Norvell Park	Palisades and Norvell Drive
Wildflower Park	Robin Hood and Arrow Drive
Woodland Park	Wilder and Palisades Road
Scenic Parks	
Overlook Park	300 North Palisades Drive
Sunrise Lookout Park	100 North Palisades Drive
Signal Point National Park	Signal Point Road
Wilderness Parks	
Coolidge Park	700 Ridgeway Avenue
Patten Park	Palisades and Green Gorge Road
Shackleford Ridge County Park	Sam Powell Trail
Shoal Creek	Shoal Creek and Signal Mountain Boulevard
Rainbow Lake	Ohio Avenue

9.2 Recreation Needs Assessment Survey

This recreation chapter was added to the Land Use Plan as part of the 2016/17 update. To ensure this new chapter reflected the needs of the town and its citizens, an online recreation needs assessment survey was conducted in December of 2017. The full results of this survey are available in the appendices of this document, but a summary of major findings and themes has been included below.

For the most part, residents believe that the amount and availability of public recreation facilities in Signal Mountain is satisfactory. Out of 403 survey respondents, a total of 372, or 93%, reported being "Very Satisfied" or "Somewhat Satisfied" with the variety of recreation amenities offered by the town. 25.2% reported visiting town facilities at least once a week, with 22.4% visiting 3 or more times a week. The

graph below indicates the recreation facilities most used by survey respondents. Rainbow Lake Park and the Town Swimming Pool were the most used facilities.



A few items were identified by the survey as possible areas for improvement:

- Respondents mentioned better maintenance of existing facilities and more programming for adults and children as the top improvements that would encourage them to participate in recreation more frequently.
- When asked which recreation activities they would like to see made available, most respondents were interested in seeing additional amenities for hiking, bicycling, and walking. The top three other items requested by respondents were an indoor pool, rock climbing facilities, and improvements to existing fields for sports like lacrosse.

Objective: Ensure all parks and recreation facilities are adequately maintained.

Implementation Strategies:

- Using capital expenditure planning and grant funding when available, prioritize and renovate existing facilities.

- Top priority parks include: Marion and Driver Fields, Town Hall Tennis Courts, and Playgrounds at Norris Park and Timberlinks Park.

Objective: Consider developing additional programming for adults and children.

Implementation Strategy

- Work with Parks and Recreation staff to identify any gaps in programming availability.
- Consider other available town facilities, such as the Mountain Arts Community Center and Playhouse, when developing programming opportunities.

Objective: Partner with adjacent local governments to ensure all mountaintop residents have access to adequate facilities.

Implementation Strategies

- Sign interlocal agreements to provide sports leagues at various sites across the mountaintop.
- Consider working on joint projects with other mountaintop governments to develop additional facilities for all to use.

Appendix

Randall Arendt, FRTPI, ASLA (Hon.)
43 Prospect Avenue
Narragansett, RI 02882
(401) 792-8200
rgarendt@cox.net
www.greenerprospects.com
"Designing with Nature for People"

Specific Memo

To: Signal Mountain Planning Commission

From: Randall Arendt

Date: April 3, 2007

Subject: Constructive Comments on the *Land Use and Transportation Plan*, the Zoning Ordinance, and Subdivision Regulations Regarding Greenspace Protection

As requested, I have reviewed the Town's *Land Use and Transportation Plan* and its zoning and subdivision ordinances from the perspective of a land-use planner who strives to blend conservation with new development in order to conserve interconnected networks of open space. However, because I am not an attorney, my recommendations should, of course, be reviewed by your legal counsel.

REGIONAL COMPREHENSIVE PLAN 2030

This document is very thorough and most commendable. It contains numerous policies concerning the environment and rural character, such as:

-- retain scenic beauty and diverse wildlife habitats
-- develop a Residential Conservation District of a contiguous greenbelt
-- preserve open space in rural areas
-- provide rural development options that cluster density while preserving…woodlands, hillsides, prime farmland, viewsheds…
-- formulate new zoning tools allowing higher density or small lot developments in exchange for preservation of substantial areas of open space (above quotes are from pages 75 and 113)

LAND USE AND TRANSPORTATION PLAN

By contrast, this more local document is surprisingly deficient and incomplete. Rather than being comprehensively written, it appears to focus lopsidedly on development, as evidenced in chapter headings such as "Development Policy Plan", "Development Plan", and "Development Goals". A plan that is supposedly broad-based, reflecting the full spectrum on interests in the community, would give equal (or almost equal) weight to the countervailing conservation objectives of community residents.

Although most such documents often go by the name of "Comprehensive Plan" (due to their more comprehensive nature), historically the local planning documents adopted by Connecticut towns were once known as the "Plan of Development". About a decade ago, however, the state legislature changed the enabling legislation to officially rename these documents as the "Plan of Conservation and Development". (This action was not unrelated to the publication of my first book -- *Dealing with Change*

in the CT River Valley: A Design Manual for Conservation and Development -- which graphically illustrated exactly how those two seemingly conflicting goals could be blended through a technique that is now known as "conservation subdivision design".) The next time your Plan is updated, I suggest that the Town consider taking this more balanced approach.

Your current Plan appears to contain a seriously-below average amount of written information regarding natural and cultural features. As noted in the *General Memo*, it contains only just one single map with information about natural resources. And that map -- called *Natural Constraints in Developing Areas* -- is one where the natural features are viewed as obstacles (to development), rather than as the invaluable resources they are in terms of the environment, air quality, water quality, wildlife habitat, scenic viewsheds -- and the opportunities they represent for preserving community character.

This almost negative perception of natural resources is re-enforced by the very revealing title chosen for a chapter on those parts of town rich in such natural resources: *Vacant Land/Open Space* (emphasis added), as if were land just waiting to be filled up with more houselots and streets.

From this evidence, it appears that the philosophy of the community at the time this Plan was written was one which was focused almost entirely upon development. This is in marked contrast to the County's *2030 Comprehensive Plan*, which placed far more weight -- in a truly balanced manner -- upon environmental resources.

The current Plan's policies and implementation measures could greatly benefit by being expanded and updated, and among the kinds of additional goals it might embrace are the following:

• to protect undeveloped lands through flexible land-use controls that would become the norm rather than the exception

• to use conservation design to locate houses and streets on the least productive farmland or the least significant woodland habitat, to locate septic sewage systems on soils best-suited for that purpose, and to provide for stormwater infiltration areas to recharge groundwater supplies (rather than permitting the “catch-and-release-downstream" method of stormwater management).

• to amend other development regulations to specifically and effectively protect historic and cultural features, and scenic viewsheds, and to restore degraded landscapes.

In addition, I would suggest considering the following changes:

-- limiting the creation of impervious or graded surfaces, specifically including limiting woodland clearance for lawns, though conservation subdivision design (which effectively enforces a "maximum lot size"), and

-- protecting key scenic resources and roadways, such as through a Scenic Road listing that creates a special category for roads where conservation design would be required, such as "Rural Roads".

The *Plan* also misses several opportunities to further advance the thinking about creative zoning provisions and subdivision procedures for open space development design. Said another way, the *Plan* could have placed more emphasis on the potential of these techniques for becoming a major “form-giver” in shaping the patterns of new development, reserving linked systems of conservation land to protect community character much more effectively than do conventional regulations. I believe the *Plan’s* recommendations in this chapter should be expanded upon to provide readers with more details of what specific kinds of refinements -- both substantive and procedural -- would be necessary to protect more open space during the development design process.

As an example of these shortcomings, the current *Plan* does not sufficiently advise readers that conservation design can be a major tool for protecting interconnected networks of open space and implementing key goals of the *Plan*, that land trusts can play an important role in preserving, owning,

and maintaining conservation lands, that easements (rather than deed restrictions) are the much preferred way of protecting lands legally, and that the subdivision design and review process itself could benefit from an expanded *Context Map*, a more comprehensive *Existing Resources/Site Analysis Map*, a mandatory site visit by voting officials and staff, a tracing paper overlay sheet format for the *Sketch Plan*, and the four-step design process.

However, these short-comings can be easily rectified. The easiest way to accomplish this might be to add a special chapter on implementation, such as by including some of the wording contained in the "Model Comprehensive Plan Language" appendix appearing in my fourth book, *Growing Greener: Putting Conservation into Local Plans and Ordinances.* Such amendments would give the Town a firmer legal foundation for implementing the specific kinds of ordinance refinements described in this memo and in my "General Memo". The sections in that model Comprehensive Plan language which might be added to your *Land Use and Transportation Plan* describe a few items appropriate for your zoning ordinance and six items for your Subdivision Regulations. Many of these items refer to specific things the Town is not yet providing requirements or standards for (such as TDRs, landowner compacts, and "traditional neighborhood design"), while other items relate to things that it is already doing but which it could be doing better (a *Context Map,* site analysis plans, sketch plan overlay sheets, site visits, a prioritized list of natural features conservation standards, etc.). It does no harm to augment the language in your existing *Land Use and Transportation Plan* and could help in several ways, making it easier to defend innovative improvements to your ordinances, and pointing the way toward even more creative approaches that are worth considering as future ordinance amendments.

As recommended in my "General Memo", another critical element of an updated plan would be a new map, called the *Town-Wide Map of Potential Conservation Lands*. That kind of document would play a central role in ensuring that the open space designated in each new subdivision will form part of a larger open space network comprising parts of several contiguous parcels, helping to preserve the integrity of natural systems and also assisting in the maintenance of the neighborhood's character.

One final thought about the *Land Use and Transportation Plan*: Drawing from my experience in the Keystone State, the East Pikeland *Comprehensive Plan* contains a critical sentence stating that "The nature of existing development practices should be analyzed to determine the extent to which the municipality wishes to continue or discontinue selected practices." This is an excellent sentiment and I feel something like this should be printed in bold-face type in every such municipal plan. That passage recently led to the engagement of a planning consultant to personally visit and photograph the vast majority of subdivisions built there since the late 1950s, and to prepare a constructive critique of what he found, highlighting both positive aspects to encourage in the future, and negative features that should be avoided in new subdivision designs.

I would recommend that the officials visit past and current developments in their community and critically evaluate them, to learn first-hand how those subdivisions either succeeded or failed in terms of implementing the few policies in your current *Land Use and Transportation Plan* that address conservation concerns, such as this passage from page 58: "The preservation of existing natural features and the scenic beauty of the Town are paramount concerns of Town residents."

Learning from past mistakes or missed opportunities helps any community avoid repeating those errors, and also helps them to reach as high as their ideals. (To do this best, it is recommended that the applicant's original site analysis map showing all the property's existing features prior to development be retrieved from the files and studied, to appreciate the conservation opportunities which had been overlooked at the time and subsequently lost forever.)

With great prescience, your Plan states that "Existing zoning...provides little incentive for developers to practice environmentally sensitive development design."

The most hopeful sentences in your current plan are found on page 59:

"Open space overlay zoning will be developed to allow residential development while preserving sensitive natural areas."
"Places of rare natural beauty should be preserved."
"Mature vegetation…should be protected from indiscriminate removal." and
"Enhance existing mountain stream greenways with new greenways were appropriate."

Subdivision Regulations

Purpose. This section (103) is surprisingly devoid of language mentioning the importance of conserving natural or cultural features, but does contain the briefest mention of the need to conserve open space for recreation and the need to conserve water. Such brevity misses an important opportunity to say more about what makes the Town special and now these regulations are designed to protect those attributes. In light of these short-comings, I would suggest that the Town consider adding several more purposes, such as:

• to provide for open spaces and environmental protection through the most efficient design and layout of the land,
• to preserve the natural beauty and rural landscape of the Town, to conserve its historic and cultural features, and to ensure appropriate development with regard to those special character-giving features,

-- to help protect interconnected networks of open space, to protect water resources, to sustain a diversity of native vegetation and wildlife, and

-- to help establish substantial buffers along boundaries with scenic roadways, existing protected land, and actively-worked farmland.

My point is that even conventional subdivisions can be designed with some greater degree of sensitivity to the natural and cultural landscape than they are at present, and that the Town should not set its sights too low when dealing with non-conservation subdivisions.

One further idea is the following:

As many such “Purposes” sections speak of the need to “mitigate significant negative impacts of proposed development", it would be refreshing if this part of the code were worded to state that developments should produce positive environmental outcomes. As typically worded, success could be defined as “getting down to zero”, which is an odd way for a community to define the future it wishes to create. For instance, habitat areas that have been degraded by forest clearance and/or agricultural drainage could be restored or at least enhanced thorough management practices within open space preserved in new conservation subdivisions. As an example, drain tiles from old farm fields converted into subdivision open space could be crushed, allowing the original hydrology to reappear, supporting wetland vegetation and attendant wildlife. And cleared areas (either played-out croplands or abandoned mineral workings) could be planted up as conservation meadows providing habitat variety for local wildlife.

Subdivision Procedures and Plan Requirements. Most of the comments I would make with regard to subdivision procedures and plan requirements have also been covered in the “General Memo” accompanying this document. Key elements of those articles describe a fuller set of procedures and plan content requirements pertaining to more detailed *Context/Vicinity Maps* and *Existing Resources/Site Analysis Maps, Sketch Plans* as overlay sheets on top of the *Existing Resources/Site Analysis Maps*, an *On-Site Visit* by local officials with that detailed site analysis map in hand, and a four-step design process in which open space is identified from the outset (in relation to a *Town-wide Map of Potential Conservation Lands*).

Vicinity/Context Maps. The Vicinity Map required in Section 401.5 should, I believe, be substantially expanded in scope and content so that staff and Commission members may acquaint themselves with

the resources and development patterns in the vicinity of the proposed development site at an early stage of the process. This expanded item would then be re-named as a *Context Map.* To minimize the cost involved, it would show only data that can easily be reproduced from existing published sources such as aerial photographs, USGS topo sheets, FEMA floodplain maps, and USFWS wetlands maps. These readily-available maps and photos should then be reproduced by the applicant's engineer to the same scale (1" = 400 feet), showing reviewing officials the location of natural features and development patterns on properties within one-half mile of the development site (expanding the document by about five inches around all four sides). The value of such an enhanced *Context Map* would be to help reviewers understand the relationship of resources on the subject property to natural and cultural features (and to possible development patterns) on adjacent and nearby lands. This kind of understanding is critical to planning for improved buffers and open space connections, and minimizing developmental impacts in the neighborhood.

Existing Resources and Site Analysis Map and Site Visit. Because it is impossible to completely understand a site only by examining a two-dimensional paper document inside a municipal building, it is essential that most of the Planning Commission members and staff walk the property with a comprehensive map analyzing all relevant site conditions and identifying the significant and noteworthy historic and cultural resources, to take the full measure of the proposed development site. I also recommend inviting the abuttors along at this time, very early in the process, when their input might actually be able to make a difference. Waiting until the public hearing stage to solicit their views and recommendations is unfair to them because by that time so much money has been spent on engineering design details that the applicant is most unwilling to go back and make any substantive changes. I have also witnessed abuttors taking a much more reasonable and sometimes even relatively positive view of the proposal, once they have experienced the site walks, and have seen how the proposed open space protects important features and buffers their properties. It also gives the applicant an early opportunity to modify some aspects of his proposal to demonstrate his willingness to listen to their views and to make his peace with them while lines are still very fluid and easy to change.

Site visits really help provide a much better understanding of the best locations for potential conservation areas on the subject parcel, and their potential linkages to natural or cultural features on adjacent properties that might be sensitively developed sometime in the future, using conservation design techniques. It is impossible to understand any site and to make good decisions when the information base is incomplete. Applicants need more specificity, and the Town needs to be clearer about what it requires if it is to be able to reject applications not supplying enough detailed information to enable officials to make fully informed decisions. (Not having this vital information is like trying to play Gin Rummy with a 34-card deck.) One needs to know where the woodlands and hedgerows are located, for example, and within those areas where the trees of greatest magnitude are growing. With modern GPS (Global Positioning Systems) technology available to most engineering firms today, it is quite easy to pinpoint the location of individual objects in the field, such as trees, rock outcrops, etc. A number of communities with which I have worked routinely require that developers' plans show the location of every tree greater than a given diameter (which varies with species), and that these trees be identified by species on the drawing. In this way, reviewers can identify those parts of woods that are more worthy of conservation and "designing around" (which trees to hug and which to let go). However, I would not require this information for trees growing in areas that would not be disturbed because of their location within proposed conservation areas. I would not require invasive non-native trees to be identified unless the goal is to remove them (which would not be a bad idea). Similarly, one should definitely add vernal pools and their associated upland habitat areas (essential in the life-cycle of salamanders and other woodland amphibians) and "views into the property from public roads or highways", to enable those important considerations to be properly evaluated.

Another factor that is absolutely key at this point in the inventory process is soil data, specifically the location of the best soil available on the entire property. In the absence of sewers, and recognizing the disadvantages of stream-discharge "package plants" (which fail to remove nitrogen and phosphorus pollutants, and which fail to recharge local aquifers), suitable soils are a basic necessity. Both individual and community systems need the deepest, best-drained soil that can be provided, and those areas must be "designed around" just as carefully -- and from the very beginning -- as any of the "Primary

Conservation Areas", so they may be reserved for sewage treatment and effluent disposal and not be carelessly covered by foundations, driveways, or streets.

If we agree that these items are necessary and should be submitted at some point during the subdivision application process anyway, it doesn't increase the applicant's costs for them to be required up front where the important information they provide can be of the greatest use (helping to avoid wasting money on plans that do not take these features fully into account).

Regarding timing, I really like to walk the site with the applicant well before the *Sketch Plan* is prepared. Officials who choose not to attend Site Visits, and who do not have good reasons to miss them, should be offered other ways in which they might serve the Town -- because (in my judgment) they cannot serve the Town well without walking potential development sites. In many communities this is a brand-new concept, and it is often a "hard sell" among municipal officials who are already very busy with many other matters. However, I maintain it is simply not possible to make an informed decision without experiencing the site in question -- unless the application is clearly deficient for certain obvious reasons.

Sketch Plan Overlay Sheet. This document, which would be required, is absolutely essential for the subdivision process to proceed smoothly and efficiently. If the first document to be submitted is the so-called "Preliminary Plan", the process is farcical. I say that because any "Preliminary Plan" which requires street profiles, sewer profiles, manholes, and inverts; water line size and location; and drainage calculations for stormwater retention (as your code does) ensures that applicants will arrive at their first official meeting with a plans that have been so expensive to produce, with such great engineering detail, that they will be absolutely (and quite understandably) totally unwilling to make any substantial changes in his layout. (It is almost as if one were bringing a $75,000 diamond ring on one's first date.)

A proper *Sketch Plan Overlay Sheet* is far more informative and useful than the bare-bones "rough sketch" which is optional and simply "encouraged" in Section 201.1 (an entirely inadequate provision that does not even list the data items which must be included so that the Town may begin to understand the proposal). The *Sketch Plan* that I earnestly advocate should be prepared on tracing paper as a very useful "overlay sheet", to the same scale as the ER/SA Map. As mentioned in the "General Memo", this format would enable reviewing officials and staff to see clearly how well (or how poorly) the proposed layout avoids impacting the underlying resources, and what opportunities have been taken (or missed) to actually improve site conditions (such by helping to restore habitats degraded by prior agricultural practices).

I believe that this plan (and other more detailed plans submitted later in the process) should be required to be prepared by either a landscape architect or by a physical planner experienced in applying landscape architecture principles to development design. It is relevant to note that South Kingstown RI regularly hires a landscape architect or planner of its choice, with applicants' fees, to walk the site with the developer, to understand the developer's building program (in terms of house widths, etc.), and to prepare a *Sketch Plan* for the developer, so that the planning process gets off to a positive start. I think this a terrific idea and commend it to you most highly. A site designer with a working knowledge of ecological planning principles would probably be the best choice.

The combined influence of the expanded *Context Map*, the *Existing Resources/Site Analysis Maps*, the *Site Visit* (by the entire Planning Commission and relevant staff), the *Sketch Plan* overlay sheet, and the four-step design approach (described in *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*) would make a significant difference in the way that sites are approached by developers, their engineers, and Town officials, and in the quality of the resulting layout of conservation areas, houselots, and streets.

A number of other procedural items on which I have comments are listed below:

1. At a new non-voluntary *Sketch Plan* stage, I would require applicants to submit an *Existing Resources/Site Analysis Map*, which would identify the locations of the healthiest woodlands and trees larger than a selected diameter (according to species, as suggested in the *General Memo*), laurel and

rhododendron stands (if any), significant wildlife habitat (such as vernal pools and their associated upland habitat), historic or cultural features (at least including cemeteries and military earthworks), geologic features, and public viewsheds. Without this information, Town officials cannot make a truly informed decision about whether the *Sketch Plan* layout has been intelligently drawn, or whether it has missed important opportunities to design around certain noteworthy features.

It is quite impossible to judge the quality of a *Sketch Plan* layout without knowing exactly where all of these existing features are located. Since that information must be submitted sooner or later, it only makes sense to have it in hand from the beginning -- in fact from the very beginning, even before the *Sketch Plan* is submitted, way back in the process when the Site Visit occurs. As mentioned elsewhere in these memos, further details are also needed, such as the location of large trees by species and size, and even ephemeral but critical features such as vernal pools. Relying on an incomplete data-set, having only part of the information that is needed to render a truly informed decision, the only kind of decision which can be made is an uninformed one.

2. As mentioned above, of the engineering informational pieces necessary at the *Sketch Plan* stage, the most fundamental is detailed soils data from test pits or borings, unless the site is to be sewered. My experience in dealing with soils is that they can often be highly variable over even relatively short distances. For that reason I recommend that a “high intensity soil survey” (as defined by the UDSA NRCS) accurate down to 1/10th of an acre be prepared and submitted from the very beginning (as compared with accuracy down to two acres available from the survey books published by the government). I would definitely retain and upgrade this requirement, and would encourage this critical part of the puzzle to be sorted out as early on in the design process as possible (definitely at the *Sketch Plan* stage), because it really drives so many other project design aspects.

Streets

The following comments are based upon my long standing philosophies, which have evolved over decades of experience working with local governments around the country. As I was not given a copy of the Town's "New Street Criteria" for review, these comments might or not apply specifically to Signal Mountain.

Cul-de-Sacs**.**

Most codes limits cul-de-sacs to something like 1000 feet in length, regardless of the number of lots served. Regarding maximum length, public safety rationale has historically been based on the fact that cul-de-sacs began to appear in the 1920's, when most subdivisions were still built as infill or extensions to established neighborhoods in or at the edges of older towns, often supplied with public water and fire hydrants. The genesis of the more typical 600-foot maximum length is that this corresponded with the standard length of fire hose that fire engines carried. Seen in that historic context, such a standard loses its rationale when developments are built well away from the fire hydrant service area.

Rather than limiting street length *per se*, I recommend limiting the number of lots cul-de-sacs may serve, because it is the number of residents potentially at risk in the event of an emergency when the single-access street is blocked that is important, not the length of asphalt leading up to their homes.

The national standard advocated by the American Society of Civil Engineers (ASCE) in its excellent volume *Residential Streets* is 25 households, before a second (“emergency”) access is required. The idea is that if, for example, 25 households were located along a 1000-foot cul-de-sac, that situation would not be more risky than 25 households living along a 2000-foot cul-de-sac (for example).

I highly recommend requiring central planting islands within cul-de-sac turnarounds, according to several basic design standards. First, these should be planted with canopy shade trees, whose graceful spreading branches will, upon maturity, fill the large “celestial space” that lies above these huge turning circles. Second, a growing number of planners are beginning to recommend that cul-de-sac planting islands be designed to perform double-duty as “bio-retention areas” designed to promote groundwater

recharge through infiltration trenches, and I concur with them on that important point. A requirement that cul-de-sac turnaround pavements be pitched inward toward the center would be a good start in this direction

An alternative to standard short cul-de-sacs is the “loop lane” or "close" (graphics appended). Instead of there being a 50-foot wide ROW leading up to a turnaround with a 130’ outer-edge diameter, the street would be designed as two parallel lanes 16 feet wide within a 130-foot wide ROW separated by a central bio-retention area or planting strip perhaps 60 feet wide. Such streets or boulevards could be limited in length to 800 or 1000 feet, if desired.

I would also recommend requiring developers to erect signs reading “Temporary Cul-de-sac” whenever a future street connection has been required. This would put all lot purchasers on notice that street connections will ultimately be established, thereby making it harder for them to argue to the Town that they had assumed the cul-de-sac would remain as such forever, when they made the decision to buy their lot or house. Also, requiring developers to fully pave such extensions right up to their perimeter boundary line (instead of simply reserving space for them on their paper plans) would also be a wise and prudent move.

Finally, regarding maximum length (typically 600-1000 feet), the public safety rationale based on the fact that cul-de-sacs began to appear in the 1920's, when most subdivisions were still built as infill or extensions to established neighborhoods in or at the edges of older towns, often supplied with public water and fire hydrants. The genesis of the 600-foot rule is that this corresponded with the standard length of fire hose that fire engines carried. Seen in that historic context, such a standard loses its rationale when developments are built well away from the fire hydrant service area.

Rather than limiting length *per se*, I recommend limiting the number of lots cul-de-sacs may serve, because it is the number of residents potentially at risk in the event of an emergency when the single-access street is blocked that is important, not the length of asphalt leading up to their homes.

The national standard advocated by the American Society of Civil Engineers (ASCE) in its excellent volume *Residential Streets* is 25 households, before a second (“emergency”) access is required. The idea is that if, for example, 25 households were located along a 1500-foot cul-de-sac, that situation would not be more risky than 25 households living along a 2500-foot cul-de-sac (for example).

Pavement Width: In my professional judgment, minimum pavement widths of 18-20 feet are ideal for local (service) streets and 22 feet is fine for collector streets, with sufficient off-street parking in driveways and garages. When densities rise and lot sizes decrease to below 10,000 sq. ft., on-street parking provision becomes a legitimate issue, and the addition of an eight-foot parking lane becomes justifiable.

Reverse Curves: Many codes prohibit reverse curves (without straight tangent sections between them) for local and collector streets, thereby also prohibiting graceful meanderings. On arterial streets with speed limits of 35 mph or more. I would suggest allowing reverse curves when the horizontal radii of the curves are very long and gentle, 350 or more feet in radius.

Roadway Grading and Shoulder Standards. Many codes contain a truly counter-productive requirement calling for the clearing of the full width of street rights-of-way (50 and 60 feet for local/service and collectors). In my view, this is an excessive and unnecessary practice ensuring that new streets constructed through wooded areas will resemble airfield landing strips. The origin of such requirements is probably the highway design manual again, when engineers were worried about people travelling at highway speeds crashing their cars into trees growing within the rights-of-way. In most rural communities with which I am familiar, the older rural roads running through wooded areas are almost never graded out to the right-of-way lines, and it is likely that residents would complain loudly and most bitterly if that kind of clearing were to be undertaken. With the lower and more reasonable street geometry and design speeds advocated in this memo, the potential occurrence of serious accidents involving trees is greatly diminished. I would suggest that you insert wording specifically prohibiting the clearing and grading of

more land than is essential for the construction of the street and utilities. By clearing fewer trees, the stump dumps required to be located within new subdivisions could be reduced in size, meaning less site disturbance in those locations as well.

Regarding shoulder requirements, I would recommend three feet of sand and gravel sub-base. I also recommend loaming and seeding shoulders, providing a firm base for pulling partway off the road when parking. It is usually not necessary to pull completely off the road unless one is interested in moving vehicles through subdivisions at the greatest possible speed and with the fewest impediments. When vehicles are parked partly on and partly off the road, they tend to slow down the traffic, because when opposing vehicles approach each other in such situations, in which two moving vehicles cannot both pass at the same time, one slows down and lets the other one through. This kind of “traffic-calming” is becoming increasingly recognized as a positive thing, especially in residential neighborhoods with many children and pets.

An excellent example of a new subdivision street where the grading was minimal and roadside trees were preserved can be seen on page 334 of *Rural by Design* (Fig. 20-9b), from Guilford, CT.

Curbs and Stormwater. In a rural community with low-density development, my view is that curbing is quite unnecessary (also counter-productive). However, in sewered areas with lot sizes that might well be in the range of 8,000 to 13,000 sq. ft. (if conservation design and 40% usable open space is adopted, as recommended in these memos), curbs could well be justified. Conservation planners such as me generally favor open swales rather than curb-and-gutter, except in situations where lots are in the village/hamlet size range (as stated above). Besides imparting a needlessly urban aspect to residential streets, curbs in rural subdivisions channel all stormwater into pipes and detention basins, rather than allowing part of the stormwater to infiltrate into the ground as it flows along grassy swales. Such infiltration could be increased through the construction of so-called “rain gardens” to intercept stormwater runoff at various points along the street (say for every 4-6 lots), which are designed to serve as infiltration areas landscaped with moisture-tolerant trees and flowers. Another effective stormwater management technique is to require that downspouts be connected to “French drains” located in yards.

I would suggest that aquifer replenishment is another worthy reason why the Town should take a strongly affirmative stance encouraging creative alternatives to typical “bomb crater” detention basins providing virtually no infiltration, and which are often ugly to look at and more difficult and expensive to maintain, compared with newer, smarter approaches suggested in this memo.

If some form of curbing is unavoidable, may I suggest the technique called the "thickened edge" (illustrated in Rural by Design, Fig. ___). My local public works department recently repaved my street in this manner, and it is highly effective in containing the stormwater. It is far less expensive than standard curbing, and is visually much less intrusive, and important consideration in rural areas.

Stormwater standards should apply to both the rate and to the total volume of runoff. I have read Article 11 and am not sure if it requires post-development runoff volume to be no greater than pre-development runoff volume. Certainly runoff rate is regulated, but possibly not volume. A simple clear declarative sentence, without technical jargon (such as "hydrologic response") would help readers understand this section better, in this regard.

Controlling only the runoff rate prevents downstream flooding, streambank erosion, and sedimentation resulting from that erosion, which are all commendable goals. These are necessary objectives; however, they alone are not sufficient. These good regulations could be made even better by mentioning a few of the ways to achieve on-site infiltration and aquifer recharge, a practice which helps to attain the ideal goal of zero increase in runoff volume. Fortunately, conservation design offers many opportunities to disperse stormwater over much broader areas, so that deep engineered structures with steep sides and spillways are not needed in most situations. Even more important than the aesthetic advantage is the groundwater recharge benefit that such infiltration-focused stormwater design brings.

The design flexibility in the *Growing Greener* system permits extensive areas to be utilized for on-site infiltration, such as in conservation meadows or through infiltration trenches carefully located to snake between the larger trees in a woodland setting. If your engineering advisors are not yet familiar with the concept of “rain gardens” and bio-retention areas, I recommend that you obtain descriptive materials for them from the Center for Watershed Protection, in Ellicott City, MD (www.cwp.org.). Written by nationally-known environmental engineers who conduct workshops on this topic around the country, the booklets they publish contain a wealth of relevant and helpful information.

Sidewalks. Another important concern involves sidewalks. Section 301.C appears to require them everywhere (except in very low-density situations, with lots of three acres of larger). I absolutely favor sidewalks, but feel they are not necessarily essential on both sides of every local access street and cul-de-sac, particularly if an extensive, well-connected off-street trail system is also being provided. Usually the situation is reversed, and sidewalks are not required in as many places as they should be provided. Many times the rule book takes an extremely myopic view, requiring sidewalks only under certain circumstances, such as within the vicinity of schools, shops, and playgrounds, as if schoolchildren were the only residents possessing working legs (and as if people shopped on foot anymore). Few pupils nowadays live anywhere near the schools they attend, and even if they lived near schools they would probably be driven to the bus-stop and bussed to school. In my experience, village residents tend to drive whenever they can, because no one wishes to lug heavy grocery bags back home, as a pedestrian.

This is to say there are far, far more important reasons to require sidewalks other than to favor walking schoolchildren or pedestrian shoppers. I believe that sidewalks are important for all residents. Numerous surveys have revealed the No. 1 recreational pastime of Americans is walking. Sidewalks provide basic separation between motor vehicles and pedestrians (children walking to/from the school bus, parents pushing baby carriages, couples out for an evening stroll around the neighborhood, etc.), not to mention joggers. In rural situations, sidewalks may take the form of curving asphalt-surfaced footpaths, if desired. My earnest recommendation is therefore that sidewalks be required with a grassy “tree-lawn” separating them from the street pavement in nearly every instance. Sidewalks constructed adjacent to curbs are extremely ugly and provide little psychological or actual protection to pedestrians.

Street Trees. Shade tree planting is arguably the single most important design standard, in terms of ultimate appearance. I might have missed them, but I did not see any such standards in your ordinance, except for Conservation Design (Zoning Section 616)... Some communities exempt tree planning requirements when the street is on a wooded parcel. Allowing existing trees along subdivision streets to substitute for new shade tree planting is extremely short-sighted, in my view. Even with the reduced clearing and grading standards I recommend, planting shade trees within the denuded street rights-of-way in new subdivisions will be essential if you hope the new neighborhoods in The will ultimately acquire a stately appearance in years to come. Therefore the presence of many trees on a thickly wooded site should never be taken as demonstrating no need for proper shade tree planting along new streets. When swaths are cleared through existing woodlands in preparation for street grading and construction, the trees remaining along the edges tend to be tall and spindly, having grown up in a forested situation with sunlight coming only from above. For that reason, such trees are not round and full in shape, and will not become so for many years (if ever) after being exposed to daylight as a result of the road clearing. These existing trees along the roadside edges are therefore no substitute for new canopy shade tree plantings.

Your code should also provide detailed guidance as to the appropriate species to be planted. Based on many years experience, I favor spacing shade trees at 30-50 feet. My very strong recommendation is that canopy shade trees are one of the most important improvements any community can require of developers. They should be deciduous varieties of hardy species capable of attaining a mature height of at least 60 feet (not flowering ornamentals, which are more suited to courtyard situations and areas of lawn decoration), they should be planted with a minimum dbh of 2-1/2”, at intervals of about 40 feet on both sides of each street, in “tree-lawns” at least five feet wide located between the sidewalk and the curb or edge of pavement.

Utilities can and should be located either within the roadway or in a special utility easement located beyond the sidewalk. Such standards will ensure that residential streets created in The will be leafy and shady in future years. Maintenance requirements are also very important, with replacement assured within 18 months after planting, through a performance guarantee (such as a bond). I feel that shade trees are the single most important aspect of subdivision design, second only to open space preservation

The perceived threat that tree roots might possibly crack and lift sidewalks or rupture footpaths after decades of growth can be greatly diminished -- if not altogether eliminated -- by new techniques devised by urban foresters. One approach involves the developer installing vertical barriers 12 inches deep along the inside edge of sidewalks, to deflect root growth down deep under the sidewalk. The second approach requires that developers install a special “structural soil mix” developed at Cornell University, consisting of large stones with sizable gaps or spaces between them, through which the roots would grow. For further details, see: http://www.hort.cornell.edu/department/faculty/bassuk/uhi/ssoils/index.htm

Recommended species are listed in Section 702.B.3 of the model *Growing Greener* subdivision ordinance, and specifically exclude invasive exotics such as Norway maple and structurally weak trees such as silver maple and Bradford Callery pear (which is unsuitable due to structural weakness causing massive limb failure in ice storms and wet snow conditions). I also exclude the Gingko, which is a non-native tree that looks very out-of-place in the traditional New England landscape, with an ungainly shape for many years until it attains a height of 40 or 50 feet, at which time it begins to fill out and look a bit more like a Northamerican tree, rather than an Asian variety dating from prehistoric times (which is in fact the case). The reason to specifically exclude Norway maple is that it invades adjacent woodlands, rapidly proliferating and out-competing native species, so that ultimately it completely dominates the area, shading out saplings of other trees species, as well as shading out native shrubs and wildflowers.

With respect to standards for protecting existing trees during construction, any filling, re-grading, or movement of heavy equipment should be prohibited anywhere within one foot of the outer edge of the canopy “drip zone”. Such a standard might help encourage applicants to utilize the flexible conservation design options which give their site designers increased maneuverability to avoid impacting significant trees that should really be saved. The best way to save trees is to give them a wide berth when laying out streets, sidewalks, houses, driveways, and garages. Such care in site planning is far better than constructing tree wells.

Shared Driveways and “Country Lanes”. I typically recommend allowing shared driveways for up to three or four homes, and private "country lanes" for up to six or eight homes. Shared drives can be 12 feet wide, and country lanes 15 feet, in rural situations. Standards should also be stated with regard to important considerations such as the depth and type of base and sub-base material, the wearing course, crowning, drainage, maximum gradient, and minimum horizontal curvature (to permit long fire engines to negotiate sharp turns, e.g.). Such standards exist in the *Growing Greener* model codes. A graphic showing how shared drives can vastly improve a situation where a handful of houselots is created from a small roadside farm is shown in Fig. 12-5 on page 206 of *Rural by Design*.

Alleys. Many times communities adopt alley standards that are nearly street-like, mandating 16 feet of pavement width. I suggest 12 feet, or perhaps 10 if one-way. Wide pavement requirements (16 ft.) encourage these back lanes to be used for parking, while narrower ones do not invite that. I consider alleys (or back lanes) to be essentially a form of common driveways, and they could be regulated as such, without maintenance by the Town. Of course, alleys should also be planted with shade trees in the same way that streets are, if these back lanes are to become shady, inviting places instead of remaining boring, treeless strips of asphalt.

“Single-loaded” Street Design. As a way of improving the appearance and functionality of neighborhood design, I have long advocated the use of “single-loaded” streets as part of the overall circulation network. (This term refers to street segments bounded by houselots on one side only, the other side being abutted by open space. In less rigid layouts, neighborhood greens bordered by such streets could be introduced into new developments without increasing overall street length and cost by the simple

technique of shaving a bit off the width of the proposed lots. In other words, the same street length can easily be designed to accommodate the same number of homes with added greenspace along some of the alignment if each of the lots is reduced in width by 10, 15, or more feet. I have done this on numerous occasions, to transform standard conventional plans into more interesting layout. For those with access to the book *Conservation Design for Subdivisions* (Island Press, 1996), all of the seven examples I designed contain significant lengths of single-loaded streets, with total street length at least somewhat shorter than the double-loaded streets serving fatter lots. In the 18-page *Growing Greener* booklet, Figures 4, 7, 8, 11, 12, and 19 illustrate the same point.

Lots Backing Up to Public Streets. Many ordinances prohibit "double-frontage" lots but do allow them in situations where they would back up to arterials and to collector streets. I recommend discouraging or prohibiting this form of lotting, and favor such restrictions, particularly in open field situations. I also recommend not allowing a certain kind of exception that is commonly granted by some municipalities, which is to permit this kind of lot layout when the second street is a state highway. Sometimes this exception is dealt with (unsatisfactorily) by requiring buffer strips to be planted along the back lot lines, in open field situations. However, a superior design approach would be to lay out the development so homes would face forward toward the existing public road system, with access via a “parallel access street”, keeping backyards more private and the view from the existing road system more attractive (housefronts are always more nicely designed than “housebacks”, with their sliding glass doors and pressure-treated decks). Please see Fig. 5-13 in *Growing Greener* to see how a “fanny-first” layout in an open field situation was redesigned to be much more attractive for both residents and passersby through the use of parallel access street concept, with a conservation meadow located between the existing road and the new access street. In such layouts, the depth of the “foreground meadow” could be reduced from 500 feet (cited above) to 300 feet. (In totally wooded situations, a no-cut buffer at least 150 feet deep should be required along back lot lines that face toward existing public roads or highways, to buffer the viewsheds from these thoroughfares.)

Interior Lots (or “Flag Lots”). The absolute prohibition of "flag lots" in Section 304.2 is an example of overkill, in my professional judgment. Certainly this form of lot design has been abused in the past. However, it remains a most useful tool when designing conservation subdivisions. Due to past abuses of the flag-lot design approach, many communities have taken the easy step of banishing this form of lot configuration, not even allowing them in special situations where they would make great sense, such as at the ends of cul-de-sacs or along tight road bends. As a site designer I can tell you how valuable this aspect of design flexibility is when laying out conservation subdivisions minimizing the impact on natural and historic resources. The flag lot concept can be overdone unless it is carefully controlled. In my book *Conservation Design for Subdivisions* there are flag lot locations at the ends of cul-de-sacs appear in numerous cases (pp, 68, 88, 94, and 110). In the 18-page *Growing Greener* summary booklet, flag lots may be seen in Figures 7, 8, 11, and 12. I cannot see any problem with that kind of spatial arrangement, and as it reduces overall street length it would seem to be desirable to encourage rather than prohibit.

On-Lot Septic and Wells. It is unclear to me whether the Town (or County) requires that septic system drainage fields be located within the lots they serve, or whether they may be located under the common open space. It is reasonable to expect that each lot must have an approved soil suitability determination from state agencies, but that leaves open the question of whether the actual site of that “determination” must be located within the confines of each lot or whether it may be located within the common open space in a place convenient to the lots whose systems would be situated there.

Whether individual wells and septic systems must be located on-lot or whether they may be located off-lot has enormous implications for the ability of site designers to produce high-quality conservation layouts in your community. I favor the latter approach, and would clarify that wording to specifically state that individual wells and drain fields may be so situated. In Pennsylvania, where I have worked for nine years, both Chester Town and the state DEP permit individual septic systems situated within common open space in cluster layouts, and if this not yet the case in The, I would encourage you to allow such arrangements to encourage smaller lots and higher percentages of conservation land. I would also explicitly allow individual wells to be located within the common open space too, in areas specifically reserved for them on the *Final Plan.* This would enable such individual utility systems to be located

under “conservation meadows”, playingfields, or village green-type areas that could also serve as an invaluable buffer area between suburban back yards and working farmland next door. This very important concept is more fully explained (and illustrated) on pages 47-48 of *Growing Greener*. It is also depicted in Figures 8 and 20 in the 18-page *Growing Greener* summary booklet.

ZONING ORDINANCE

Overall. The most critical deficiency of the Zoning Ordinance, in my view, is that it does not appear to allow flexible lot sizes (essentially precluding conservation design) as a by-right Permitted Use, and that submission standards and review criteria for Planned Unit Developments (PUDs) are wholly inadequate in terms of data requirements and design standards for open space. This deficiency is related to a continuing reliance on conventional platting techniques that are actually inconsistent and at odds with the kinds of policies, goals, and objectives for open space and natural resources protection that are the foundation of Comprehensive Plans in most other communities.

(Note: I have also read the more recent zoning amendments which were adopted in 2004 and later rescinded. The chief difference between the older and the newer versions, as I perceive the situation, is that the more recent one increased the legal building density -- in sewered locations -- from about two du/ gross acre for "Conservation Design" developments in the older version (Section 616.C), to about four du/gross acre for "open space subdivisions" in the newer version. However, as the older (and once again current) version originally allowed and now continues to allow sewered PUDs at four du/gross acre (in Section 613.07.01), the density standard would seem to be four du/gross acre in either case. As an outside observer, I do not feel it is my place to recommend any particular density to people living in other communities. However, the way that density is applied and put on the ground is a central concern of nine professionally, and forms the basis for many of the comments in the ensuing section of this memo.)

Purposes. Of all the zoning ordinances I have reviewed over the years, I cannot recall ever reading a Purposes section such as the one in yours (102), where there is absolutely no mention whatsoever of the desire to protect scenic character, environmental resources, historical or cultural features, or even to promote the creation of attractive neighborhoods and ensure harmonious development.

Below is a list of a dozen purposes taken from the section of my model Zoning, illustrating just how many concepts could be incorporated into Signal Mountain's zoning, if this were the community's desire.

1. To conserve open land, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains and wetlands, by setting them aside from development;

2. To provide greater design flexibility and efficiency in the siting of services and infrastructure, including the opportunity to reduce length of roads, utility runs, and the amount of paving required for residential development;

3. To reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of development on steep slopes;

4. To provide for a diversity of lot sizes, building densities, and housing choices to accommodate a variety of age and income groups, and residential preferences, so that the community's population diversity may be maintained;

5. To implement adopted municipal policies to conserve a variety of irreplaceable and environmentally sensitive resource lands as set forth in the municipality’s *Open Space Plan*, including provisions for reasonable incentives to create a greenway system for the benefit of present and future residents;

6. To implement adopted land use, transportation, and community policies, as identified in the municipality's Comprehensive plan;

7. To protect areas of the municipality with productive agricultural soils for continued or future agricultural use, by conserving blocks of land large enough to allow for efficient farm operations;

8. To create neighborhoods with direct visual access to open land, with amenities in the form of neighborhood open space, and with a strong neighborhood identity;

9. To provide for the conservation and maintenance of open land within the municipality to achieve the above-mentioned goals and for active or passive recreational use by residents;

10. To provide multiple options for landowners in order to minimize impacts on environmental resources (sensitive lands such as wetlands, floodplain, and steep slopes) and disturbance of natural or cultural features (such as mature woodlands, hedgerows and tree lines, critical wildlife habitats, historic buildings, and fieldstone walls);

11. To provide standards reflecting the varying circumstances and interests of individual landowners, and the individual characteristics of their properties; and

12. To conserve scenic views and elements of the municipality's rural character, and to minimize perceived density, by minimizing views of new development from existing roads.

Minimum Lot Sizes: Signal Mountain, like many other municipalities, commits the fundamental error of regulating density through the indirect method of setting minimum lot sizes. This counter-productive approach unintentionally robs the community of the very resource lands that give it its special rural character. Instead, I have long advocated regulating density directly, by stating that no more than one house may be built per X amount of buildable land on any given property. And I then address the open space conservation issue by setting a maximum lot size (or an average maximum lot size) -- smaller than the current minimum lot size -- in order to be able to set aside land during the development design process, while still attaining the normal building density. When regulating density directly in this way (rather than indirectly *via* minimum lot size), the issue of minimum lot size becomes far less important. In fact, the smaller the lots become, the greater the open space becomes, as density is established by tables stating the overall land requirements per dwelling unit.

By-Right Designation: One can hardly overstate the importance of classifying Conservation Subdivisions as by-right Permitted Uses, and also classifying conventional developments as Special Permit uses, or Conditional Uses.

Many local ordinances which allow flexible design approaches unwittingly sandbag them by classifying them as Special Permit uses or as Conditional Uses. When your Zoning is again updated, these issues will come to the forefront of discussion. Although your dysfuntional PUDs require Special Exceptions (in Section 603.04), conservation design (in Section 616) apparently does not. The next logical step would be to abolish or reform PUDS and to re-classify conventional development as Special Exceptions (or CUs).

Classifying flexible developments as requiring Conditional Uses or Special Exception permits typically produces a chilling effect upon many applicants, frequently discouraging them from opting for the flexible design approach that municipalities actually want to encourage. I have found that local governments can control as much, if not more, with detailed standards in the subdivision ordinance as they can with the Conditional Use process.

Conservation Design subdivisions with lots smaller than those typical in conventional developments can be made to “perform” well through a set of detailed and strict “performance standards” relating to the quantity, quality, and configuration of the protected open space. Extra measures of protection for the Town, such as those guiding the design process (the “four-step” method, plus the detailed “Resource Conservation and Greenway Delineation Standards”, both contained in my model subdivision ordinance -- Sections 402.C.3 and 603) should give officials a greater feeling of security that this new approach will produce superior results. These recommended standards are more comprehensive than those contained in your current ordinance.

Minimum Tract Size and Requiring Clustering. The common zoning requirement that conservation subdivisions occur on tracts of at least 20 acres effectively ensures that many parcels will be denied the advantages of flexible site design. This is a pitfall that Signal Mountain has avoided, with its 10-acre minimum. Small minimum tract sizes such as that are a healthy attribute (in my view), as conservation

subdivisions can sometimes serve very beneficial purposes on surprisingly small parcels. For example, in Lower Merion Twp., (Montgomery Town, PA), the Board of Commissioners ten years ago decided to mandate this design approach and to apply it to every parcel containing five or more acres. They recognized that even parcels at the lower end of the size spectrum could contribute a greenway link (such as along a stream valley), providing connections between open spaces on each side. Even if only two acres of flat dry ground were to be conserved on a four -acre tract, that would be plenty to serve as neighborhood green (or informal playing field), significantly enhancing the quality of life for nearby residents. In more rural districts, clustering can be extremely important as an implementation tool in a potential Scenic Overlay District and other potential overlay districts pertaining to riparian areas, groundwater recharge, constrained soils or steep slopes. In a Scenic Overlay District, for example, significant open space can be required to be located within the public viewshed. For that reason, Newcastle Town, DE, ten years ago mandated clustering in the Red Clay Valley, a particularly scenic part of the Brandywine Hundred (as described in *Rural by Design*, pp. 193-96).

Determining Density. In the model conservation zoning provisions I have developed over the past two decades, I recommend that applicants be given two alternative methods for determining density. I have always favored offering applicants the choice between a purely mathematical approach (in which certain types of constrained lands are deducted) and a map-based approach called the “Yield Plan”. I actually favor the latter for its simplicity and directness (as contrasted with sometimes controversial ways of calculating actual buildable land and basing density on that net acreage only). “Yield Plans” demonstrate the maximum number of units that could be built in a prudent and responsible configuration, conforming to the standard dimensional criteria. They must, of course, be realistic, without make-believe lots that would be unbuildable in the real world due to site constraints. In other words, "Yield Plans" must pass the "straight-face" test. (This is explained on page 43 of *Growing Greener*.)

There is a need in my judgment, for the Town to be specific as to how such “Yield Plans” must be prepared. Town In unsewered areas, for example, applicants would be required to submit deep-hole test pits to demonstrate septic suitability on a 10% sample of lots selected by the Town (the most dubious lots, based on soils map data, the elevation of the land within the property, vegetation patterns. etc.). If any of the sample lots fail, the Yield number is reduced and the applicant waits four weeks to submit a second 10% sample. This process continues until all the lots in a given sample pass the test for septic suitability. Developers who recognize the time-value of money will not horse around with fictitious lots and will be forthcoming with a realistic Yield Plan. (Model ordinance language describing “Yield Plans” in greater detail can be found in the *Growing Greener* book -- and on the CD-ROM of the same name).

Calculating Open Space Areas. Perhaps I missed it, but I did not see any specific minimum percentage of open space for PUDs (one very big reason I consider them to be dysfunctional), except that open space shall be provided to some unspecified degree, and that it must not be either unbuildable or inaccessible (!). For this and many other reasons, I strongly suggest that the PUD section of your ordinance be given a speedy and decent burial, to be superseded entirely by the Conservation Design approach, which at least possesses some explicit -- if minimal -- open space requirements. (Another reason for dispatching the PUD regs: the underlying zoning density of two du/acre is inexplicably more than doubled, to four du/acre, based on gross tract area, which often includes completely unbuildable land, quietly conferring a sometimes very large and not-so-obvious density bonus to developers whose have bought difficult parcels containing much unbuildable land.)

In the Conservation Design Overlay District, the 25% open space requirement is flawed in two ways. First, it does not reflect the potential for easily preserving 40% of buildable land as open space (simply by reducing lot sizes proportionately). Second, it appears to contain absolutely minimal standards for ensuring the quality of the resulting open space, allowing the conservation land to be almost entirely wet or steep -- inherently unbuildable and practically unusable except by bullfrogs and mountain goats. (Only 2% of the 25% open space must be relatively flat and usable for active recreation, amounting to a mere 0.5% of the total tract area.) I address this issue in my model regulations by specifying that the minimum required open space must be in addition to wetlands and steep slopes. It cannot be said too many times that this kind of approach does not represent a “taking”, because the open space typically remains in private hands, and because the applicant’s overall building density remains completely undisturbed.

In a district where two du/acre is the norm, lots that would ordinarily run about 22,000 sq. ft in area could be resized to about 13,000 to achieve 40% open space. In districts where (for example) three du/ac might be the goal, normal-sized lots of about 13,000 sq. ft. could be redrawn to be about 8,000 sq. ft. Elegant ways to design such neighborhoods would ideally blend conservation design with the principles of "New Urbanism", as described and extensively illustrated in my fifth book, *Crossroads, Hamlet, Village, Town: Traditional Neighborhoods Old and New*.

(Again, I should re-iterate my standard position of neither endorsing not criticizing any particular locally-adopted density level. I leave that up to local residents to decide, although I feel professionally obliged to comment constructively on the way that this density is actually arranged on the land. In my experience, it is often possible to arrange greater density so that substantially more open space and conservation land is protected with smaller lots than would be the case with larger lots and lower overall density. If there is a sound public purpose for supporting greater density in any given area, then I feel that area should be zoned I such a manner that unfragmented, usable land is set aside for conservation purposes. And I usually turn to the principles of the "New Urbanism" to achieve that result, even in rural areas -- where the hamlet or village model becomes very relevant.)

If a simple Yield Plan were required of applicants -- to demonstrate how many regular-sized lots could actually be created on their property (given its physical constraints) -- that same number of lots could still be created with 40% of the unconstrained land being preserved as open space, in addition to the unbuildable land where the Yield Plan would of course show no development. That is because the re-sizing of the lots could create the potential for 40% of the buildable land area to be preserved as value-enhancing neighborhood greens, squares, parks, ballfields, and greenways.

Permanent Protection of Open Space: I suggest requiring conservation easements rather than just covenants or deed restrictions. These easements would typically be held by conservation groups such as land trusts, Conservation Commissions, and Soil & Water Conservation Districts. Designating multiple holders of such easements is also a wise idea, to ensure protection if one organization wavers in its commitment. I saw permissive wording in Section 616 allowing easements to be created, but I did not see any language requiring them. If this is indeed missing, it is a significant omission in the ordinance.

Open Space Ownership Options: Regarding ownership options, in addition to HOAs, I recommend land trusts and public bodies as designated holders of the open space, as well as "non-common" open space owners such as wholesale nurserymen, operators of equestrian facilities, operators of Community-Support Agricultural operations, etc.

The concept of non-common ownership is an idea I have been advocating for years. In southeastern PA, I know of conservation subdivision open space having been sold to individuals who use it for specific purposes, such as wholesale nurseries, orchards, and equestrian facilities. I have examples of all of the above in my slide collection, and frequently include them in my presentations. Another non-common ownership is the "conservancy lot", typically at least 10 or more acres in size, which would support a principal dwelling, perhaps a barn or stable, and also an accessory dwelling unit (such as a caretaker's cottage, which could also be rented out as a granny flat). The uses allowed on non-common open space must be strictly limited and regulated, and they should be subject to the same kinds of permanent easements and Management Plans as any other kinds of open space.

Non-common ownership not only relieves HOAs of acreage they would otherwise have to maintain, but also provides developers with an additional bonus for doing the right thing and opting for conservation design.

HOAs work well with mandatory or automatic membership (which is required in 616) and would function even more effectively if the Town were to require that their bylaws be drafted to specifically state that the HOA possesses legal authority to place a lien on the property of any member who fails to pay his dues, after being issued three notices. Quite frankly, few people enjoy being known as deadbeats, cheapskates, or free-loaders among their own neighbors, but sometimes a cantankerous old

curmudgeon might decide to withhold dues payment for some reason. Not to worry, as he cannot sell his property without paying all back dues, with full interest, to the HOA. Another word on HOA's: I believe they should regulate only the common open space, not the land within houselots (as does the HOA where my brother lives, in Sonoma, CA). Individuals' houselots should be their own domain, in my judgment, and regulating what people do on their own lots simply invites internal strife. I recommend that HOAs authority be limited to common lands such as village greens, playing fields, trails, etc, plus the woodland conservation areas and any farmland that might be leased out to local farmers.

Perimeter Buffers. I believe that conservation subdivisions should be subject to the same buffering requirements as pertain to conventional large-lot subdivisions. In other words, no special setbacks should be required, other than the standard ones for homes on standard-sized lots. If buildings on the normal half-acre lots are required to be set back by a certain distance in a particular rural district, that would also be the appropriate building setback for use in conservation subdivisions. For multi-family housing, which constitutes a different house type, an exception could be made in terms of size and bulk, often with different parking provisions. The common 100-foot landscaped buffer requirement found in many cluster ordinances might be appropriate if the land use were a quarry, sandpit, junkyard, or mobile home park. But it is counterproductive for conservation subdivisions. On a 36-acre tract, for example, such a requirement could consume fully 44% of the total acreage, not a sensible way to distribute the limited open space. Conservation lands should be designated according to other criteria other than buffering new single family dwellings from pre-existing single-family dwellings.

Streamside Buffers. The 30-foot naturally vegetated streamside buffers required in Section 616.F.c could easily be increased to a more standard 75-foot no-cut buffer by implementing the recommended re-sizing of lots and consequent increase in the percentage of open space able to be conserved. Similarly, the 50-foot streamside buffer in steep-slope situations could just as easily be increased to 100 feet, applying the same design techniques.

Lot Size Reduction Potential. The best conservation design regulations do not set any minimum lot sizes or frontage requirements, which I believe is very progressive, as density is strictly capped in other more direct ways, as it properly should be.

The most progressive code provisions I have seen, such as contained in parts of the Lower Merion (PA) zoning ordinance, essentially dismiss the notion of minimum lot size and concentrate instead on the really important elements: the maximum number of dwellings permitted, the minimum percentage of quality open space required, and minimum separations between buildings. A basic tenet of conservation planning under *Growing Greener* is that lot size minima are almost irrelevant, as overall density and minimum open space are both established in another way. In fact, the smaller the lot, the more open space there is. In Lower Merion, where similar ordinances have been in effect for about ten years, the absence of lot size minima has not led to abuses in that direction. Developers there have routinely produced the largest lot they can under that community's ordinance while still meeting the basic 50-60% open space minimum standard. In conservation design, the *maximum* lot size is the critical element, as it really defines the minimum open space that must be conserved. I would be pleased to discuss with you how the idea of "maximum lot sizes" for conservation subdivisions could help the Town achieve a greener future, with interconnected networks of open space permanently protected for future generations to enjoy.

A New Look at Density Incentives. One central question hovering over the subject of using conservation design to protect significant parts of one's Town concerns how to ensure that developers will utilize the preferred approach, and not continue to stamp out the familiar pattern of "wall-to-wall" houselots. Most of the older cluster ordinances on the books today include density bonuses as a "carrot" to entice developers to select this option. However, my experience is that density incentives (when unaccompanied by density *dis*incentives) typically need to be rather huge, in order to persuade many developers to do anything different from the standard cookie-cutter in situations where they can easily continue to build these land-consumptive layouts at full density, by-right.

As you probably already realize, large incentives often set up a certain negative community dynamic inadvertently, wherein local residents (often abuttors) vent their displeasure at having to put up with a significantly higher number of people living nearby, not to mention more schoolchildren to educate, and more traffic to congest the roadways. Rather than face such opposition, most developers usually opt for the simple and relatively hassle-free route, with standard full density in standard lots and no open space.

For many years I have advocated *reversing this dynamic*, so that developers must "earn" their basic full standard density through conservation design with significant open space. Under this approach, there is no density bonus for the standard conservation subdivision with the percentages recommended above for the unconstrained land designated as open space. That kind of development becomes the basic standard, and is the only way for developers to achieve full density. Those who wish to continue with cookie-cutter designs covering the entire development tract with houselots and streets may do so, but only at a substantially lower overall density, such as one-half or one-third the normal lot yield. Or they decide to work in other municipalities with lower standards instead.

However, If such density disincentives are not politically feasible in Signal Mountain, the community could effect much the same result by classifying Conservation Design as a by-right Permitted Use, and re-classifying conventional land-hog development as a Conditional Use which is structured so as to be extremely difficult to attain, as described above.

Density Bonuses for Special Public Interest Goals. I would also recommend considering density bonuses to encourage the public dedication of conservation land, or at least public access to parts of the conservation land (e.g., existing trails and also new trails, such as along streamside greenway corridors). Additional density bonuses to provide endowments for land trusts which may eventually own and manage the open space are also advisable, as described on pages 48-49 of *Growing Greener*. A third kind of density bonus could encourage age-restricted housing, which represents a positive cash-flow for the Town because it generates no schoolchildren requiring costly education, and which provides opportunities for older residents (including empty-nesters as well as retirees) to remain living in Town.

Requiring Conservation Design in Certain Situations. As noted above, the Town might consider *requiring* conservation design (instead of conventional plats) in situations where parcels are proposed for development along the Town's pre-determined *Map of Potential Conservation Lands*, to ensure that possible future greenway connection opportunities are not lost. Other areas where conservation design could be required are on properties abutting scenic roads, public parks, Town or state forests, conservancy lands, working farms, etc., as well as in groundwater recharge or aquifer protection districts. This approach would ensure that the interconnected network of open space would become a reality, and not simply be another good idea which is seldom implemented.

Signal Mountain Public Meeting Comments: Strengths, Opportunities, Weaknesses

Note: Every comment recorded at the public meeting is listed as it was written (with some minor edits).

Public meeting participants were given the opportunity to "vote" on the issues they felt were most important. Numbers in parentheses represent the number of people that marked that a comment was a priority.

General headings (bolded) sum the individual comments. Comments were grouped under general headings to organize the data with some comments crossing several categories. This method is used to get an idea of participants' priorities and will be used as a general guide in creating the land use plan.

STRENGTHS

General

Sense of Community/Community Involvement (1)
Pride of our history & future
Level of citizen interest and concern, voter turnout meeting attendance - good quality of citizens
Community involvement in school system (1)
Community involvement
Community has sense of history
Sense of community – running into people, community activities

Small Town Feel (6)
Small town atmosphere, warm, friendly, people know people
Small township – know neighbor
Small town character has been preserved
Small town feeling-knowing people wherever you go (small population contributes to this)
Small town atmosphere (4)
Small town atmosphere (2)
Small community
Village atmosphere – low density

Family-oriented (2)
Family oriented/ family friendly.
Family oriented (2)
Great family community
A good place to raise children
Children and education are valued – family oriented
Traditional values

Multi-generational (1)
Multi-generational residents

Range of ages in population
Variety of people – different age groups, educational backgrounds, socio-economic
Diversity of age – elementary age to elderly

Location
Geographic location
Quiet – away from Chattanooga
Separation
Bedroom community – proximity to Chattanooga
Convenient location

Safety (5)
Safety (5)
Safety
Safety
Safety (crime)
Safety
Safety
Safety
Lack of crime – people feel safe
Safe
Feeling of safety and security

Other (1)
Intelligent, caring, committed people (town attracts these)
Historic district
Inclusive community
Active athletic program for youth
Stable and rising property values
Growth should progress slowly to maintain character
Capacity/Ratio
High educational level – high expectations
Diversity of churches
Low density population,
Geography, playgrounds, accessible officials and government, golf course
Plan development
Rural nature
Media – better feedback on issues
Non urban – trees, woods, low traffic, quiet, low noise level
Good police and fire department
High quality of life- safety/natural beauty/rustic/ recreation/arts
Low population
Well planned land use plan
Low population- x total of people
Quiet, calm environment-lack of noise from roads, industry etc
Climate – cool, hospitable (1)

Residential Strengths

Low Density (12)
Low population density, large lots, retention of trees
Low density residential areas – privacy at home (11)
Growth should progress to maintain character 1-2 hourse per buildable acre
Max 4 condos/houses an acre-limited development
Maintain low density – Single family housing
Low density-residential development, contributes to character (1)
Size of yards- Low density
Small community with large lots (3/4) acre plus
Low density residential compared to other towns (Walden is better)

Senior Housing
Alexian Village
Alexian Village and retirement diversity
Alexian Village – age in place
Enough senior housing on the mountain

Housing Diversity
Diverse types of neighborhoods. i.e. Old Town's bungalows
Diversity of housing
Varied Neighborhoods
Diverse neighborhoods/mixed income neighborhoods
Range of residential property values
Number of existing neighborhoods
Established neighborhoods

Residential developments
Old Town
Old Town – stability, commitment
Hidden Brook, Old Town, Birnam Woods, Carriage Hill
Fox Run has good community – younger, active families, cul-de-sacs

Other (1)
Close proximity of neighborhoods fosters safety, sense of community
Long term residents promote sense of place and stability
Density fosters neighborly atmosphere/block parties
People know their neighbors
Presentation of older homes and sidewalks
No large apt. complexes (easily degraded) (1)
Good subdivision planning

Nonresidential Strengths

Businesses Type and Location (3)
Minimal business district/ small numbers clustered together/ small stores (3)
No big box businesses (Home Depot, Lowes)
Focused location of commercial areas, not spread out, easy to keep a handle on it.
Contributes to small town ambience
Lack of heavy commercial development
Retail – Convenient
Good diversity of restaurants
Awareness of present commercial development

Business Signage
Minimal commercial signage/ordinance
Limited commercial signage

Other
Good environment for small businesses

Environmental Strengths

Natural Beauty (17)
Natural resources/streams, forests, views (4)
Natural beauty's unique location
Location to natural features and services.
Natural beauty of mountain-bird sanctuary (1)
Natural beauty- places: woods on Shackleford Ridge Road, Prentice Cooper, Rainbow Lake, creeks, Shoal Creek, Signal Point, viewshed off mountain, Mabbitt Springs (3)
Natural beauty- trees, creeks, plants, nature, climate
Natural beauty (6)
Natural beauty, trees, green spaces (1)
Natural beauty (2)

Trees
Trees
Trail, trees, wooded areas.
Trees, open space, flowers, birds- Palisades, Green Gorge, etc. near Alexian access to Prentice Cooper
Large amount of trees (greening)
Lots of trees (strength), lots of space yet know our neighbors and can't just cut down all the trees for growth.

Other (4)
Open space is a treasure we need to honor
Better air quality, climate and less noise
Ecological diversity (flora and fauna) (2)
Shoal Creek, Palisades, Green Gorge, Signal Point
Waterfalls and watersheds (Mabbitt Springs)
The terrain is a strength

Mountain – View – Environment – Woods (Trees, Creeks) (1)
Town location as part of Cumberland Plateau, natural areas like Rainbow Lake, Green Gorge (1)
Natural Areas
Biological diversity
Plants & animals
Environment is asset: clean air, water

Civic Strengths

Schools
Schools with great playgrounds and walking paths
Safety and security in schools
Excellent schools
School system involvement
Schools – parent involvement due to small community
Schools and parents participation in schools
Schools
Education opportunity
Opportunities for public/private quality schools
Quality School

Community Involvement
Community involvement
Community interest in development process
Loyalty of community – civic activities
Civic pride
Opportunity to participate in government
Community spirit strong
Volunteer Town Council – need more citizen participation than in the past
Ability to solve problems

Town Services
All needed services available in town
Self-contained community – services available
Town services – recreation – town police
Fire, police, EMS
Excellent police force
Enforce leash law

Town Amenities (1)
Public pool, tennis, library, parks, ball fields
Great 4th of July
Signal Mountain Playhouse
Great Churches
Boy Scout Troops
Recycling Center, Library
Walden, Pumpkin Patch
Summertown & Little Brown Church

Amateur sports program for kids
Playhouse & MACC & Bachman
Recycle system
Recycling center (1)
Recreational sports program
Boy scouts, girl scouts, daycares, church programs
Cultural facilities
Recycling center
Sports programs and activities for children-diverse, competitive recreational-baseball, swimming, tennis
Tennis, pool, ballparks
Recreation – baseball, soccer, basketball, town gym, swimming etc
Excellent youth programs
Diversity of activities
4th of July

Other
Churches
Zoning is strength

Parks and Open Space Strengths (1)
Public pull offs for vistas living conditions as N. Palisades
Prentice Cooper
Trails, public open space and community (Signal Point and Rainbow Lake)
Open space – trees
Proximity to state forest
Family friendly, recreation facilities
Outdoor activity – Need lakes
Green space and trails (1)
Park – Natural and recreation (Golf Course)
Swimming pool, opportunities for activities
Tennis courts, ball fields, hiking trails
Outdoor recreation-hiking, mountain biking, unimproved public areas
Golf and country club (sledding area) and tennis, softball, Althaus Park, Rainbow Lake, Green Gorge

Transportation Strengths (3)

Sidewalks
Need Sidewalks
Sidewalks (though torn up)
Sidewalks (old strength) (1)

Other
One traffic light
Only one traffic light
Narrow roads, low speeds, scenic, pleasant
No more trucks – traffic lights – congestion – loss of small town feel
Easily to get to places

Small size of community – concern growth will increase traffic (2)
Courtesy/tolerance of bikes from general public especially off 127

OPPORTUNITIES

General Opportunities

Planned Growth (21)
Chance to limit growth (2)
Manage development and growth
Set example of how to manage growth and quality of life
Implement state of art growth plan (1)
Protect integrity (1)
Preserve qualities and strengths (1)
High quality development – Shackleford Ridge-central focus of commercial (6)
Controlled development – Quality and location (2)
Carefully plan development to preserve character of town
Develop 100 year visionary plan
Opportunity to plan growth instead of haphazard development (1)
Can make Shackleford Ridge something special, not cookie cutter (1)
Leverage high school to develop regulations that benefit town, not developers (5)
Strength as well as opportunity, nature, spirit, family sense of community, school system to maintain this for future. (1)

Study Capacity (30)
Once the moratorium is lifted how is the city going to provide water and other infrastructure? (2)
What is the capacity of the mountain? to keep it a nice place to live? Traffic, school, density of population, trees, green space, safety. (7)
Do not have to accept growth limit population. Numbers addressing density opportunity. (2)
Need environmental/topographical study of this area to determine how much growth our town can sustain in terms of sewage, transportation, water quality (e-coli in streams, runoff) (7)
Determine realistic population density-conservative (5)
Look at mountain soils, hydrology & other natural features (slopes etc.) to determine density. (7)

Control Population Growth (10)
Maintain current population density (7)
Population growth – Opportunity to limit population
Keep the population in check
Preserve the strengths we have by controlling population (3)

Maintain Small Town Atmosphere (1)
Keep small town atmosphere
Make more of a town rather than a bedroom community (1)
Maintain the small town

Citizen Involvement (1)
Good folks interested in town
Citizens need more voice

Let landowner have more voice (1)
People making the decisions are more responsible to people

Other
St. Simon's Island good example
Bad development
Opportunity due to lack of development
Landscape protection – Landscape ordinance (2)
Window of opportunity to act with some urgency
Creative ways of zoning vs. current approach (1)
Limit building permits with a cap (1)
Developers to pay impact fees (1)
Growth to support the new high school
Solar and wind options; land use priorities for horses, rural environment.

Residential Opportunities

Housing Diversity (5)
Economic housing for entry level profession (e.g. Policemen, etc.)
Need housing choice- types/balance/price
Zoning for varying home types (3)
Improve housing opportunities for young families, empty nesters
Denser development around the new school: town homes, condos not in existing neighborhoods
Places for singles and senior citizens near town – quiet
Put condos where SMMS is.
Zero lot line housing development (2)
Smaller homes- Like the ideas of Randall Arendt
Demand for homes for first time buyers, retirees that would like a smaller place
Need more affordable housing
Need for down-sizers- low maintenance (offer similar arrangement as Westfield)
Large lot sites

Cluster Development/Conservation Subdivisions (1)
Adopting Randall Arendt's vision for new neighborhoods: open space, mixed housing types, trails, green space, congregating areas
Cluster development possibilities (1)
New development does not have history, character; clustering homes with green area can help provide character
Improve zoning to reduce focus on lot size and focus on density (per last month's presentation)
Cluster development needed.

Density
Low density development
Adding density on Taft?
Four condos/houses – acre – limited development

Old Town

Old Towne with open space
Zoning that would allow Old Town to be built today

Green Space in Neighborhoods
Developers contribute green space when they develop subdivisions
Preserve the existing open space in established neighborhoods

Other
Control residential growth (1)

<u>Nonresidential Opportunities</u>

Planned Growth (4)
Control business growth
Planned commercial growth
Develop new commercial areas with interest and character like Savannah, Charlestown, Highlands, Hinsdale, IL. (1)
Limit commercial property to Taft
In future commercial will be built- in doing this it should respect the terrain of the mountain. (3)

Façade Improvements (1)
Improve facades of existing commercial properties (1)
CVS Pharmacy not good – looks bad – traffic ugly

Expanded Non-residential Opportunities (4)
Expand commercial zoning opportunity (liquor store) (3)
Need more restaurants (is there the population to support these?)
Quality restaurants
Need more retail establishments: clothing, extensions of major stores: Kathy's Closet an example
More retail, tax base, medical clinic
Consider mixed use developments
Teen center – Old Middle School, old CVS (1)
Need more commercial

Other
Have empty spaces
Retail left b/c of increase in taxes
Street Zoning Laws: sewers, parking setbacks, greater soft beds
Trees on commercial properties

Environmental Opportunities

Tree Preservation (4)
Opportunity to preserve trees – no clear cutting (1)
Ordinances to prevent clear cutting (3)
Enact tree ordinance specifying which trees can be cut and enforce it.

Kudzu control
Kudzu control
Kudzu eradication program
Too much kudzu
No goats

Protect Natural Environment (2)
Maximize green areas for environment (1)
Protect integrity of environment
Plan for preservation of natural environment
Plan ecologically sustainable development (1)

Protect Water Resources
Preserve the wetland and stream corridors
Restore Rainbow Lake to "safe" conditions

Civic Opportunities

Sewer Service/Septic (4)
Improvement of sewers
Enforce septic tank codes
Connect existing homes to sewer lines
Better sewage treatment or can't accommodate growth efficiently
Develop preventive maintenance plan, septic, sewer
Comprehensive sewage treatment plan (4)
Separate density – sewers first to existing development
Offer option to connect to sewer line along Timberlinks when new line installed

Governmental Cooperation (2)
County, Walden and Signal Mountain intergovernmental cooperation
Keep working together
More coordination w/Walden and unincorporated county regarding services
Integrate local governments (1)
Consolidate towns (1)

Infrastructure
Expand services as town expands i.e. development fees to pay for cost of extending services to new development (1)
Maintain current infrastructure

Other
Retain strong education system

Maintain Toll House and Historical places
Monument at James/Timberlinks
Elected Planning Commission- bad development (1)
Storm water control
Need more fire trucks in case of forest fires (outside town limits)
Maintain our public properties better 1. roadsides 2. parks
Curbside recycling
Create more athletic fields/recreational fields

Parks and Open Space Opportunities

Trails (4)
Build more trails
Bike/Hike trail down mountain – non-motorized (4)
More hiking and biking trails

Green Space Expansion and Promotion (5)
Green space preservation
Town could get involved in land conservation through conservation easements, tax breaks for donations, agreements not to develop (4)
Pursue grants for public land acquisition
Create more parks
Planned green space
Promote the green spaces (1)
A park where SMMS is: Theatre – Bowling Alley

Other (2)
Rainbow Lake – new dam-cleaning – service projects – restoring – safety (1)
More help in parks and town facilities (1)

Transportation Opportunities

Trails, Sidewalks, Bicycling (10)
New neighborhoods have greenways, sidewalks (2)
Add new sidewalks
Biking/jogging trails among new communities
Developers contribute to costs of sidewalks, bike paths
Dedicated trails – bicycle
Greenways –mixed use trails – not concrete- Old Town sidewalks changed to natural materials – recycled materials (6)
Hiking trails at the beginning and throughout new developments/neighborhoods
Opportunity to make community more walkable and bikeable and family friendly (2)

New Road (7)
A new road could be a useful possibility (1)
Another road up the mountain
Another way to outside world
Improve and/or add road and access up mountain (4)
Review additional transportation access (2 access roads may not be sufficient

Improve road up and down mountain
Another road up and down mountain
Determine maximum population of town in terms of traffic capacity (ingress/egress from mountain)
New road off mountain (2)

Truck Traffic (7)
By-pass for Signal Mountain, find an alternative to traffic around mountain (Suck Creek?) (4)
Legislate 14 wheelers, truck traffic (3)

Bus Stops (1)
Carefully think school drop off and pick up
Plan bus stops – safer for young children (1)

Other (2)
Emergency plan for access
Revisit speed limit changes
Cul-de-sacs and designs can contribute to community
Access to Shakleford Ridge from Timesville Road (1)
Seek funds for restoring roads after construction other than taxpayers
What is the true capacity for growth, mainly automobile? (1)

WEAKNESSES

General Weaknesses

Lack of Planned Growth (7)
Past development did not always consider long term effects (e.g. e. coli in streams, sewer system)
Haphazard past planning – current constraints (2)
Traditional planning process driven by greed and arrogance
Current zoning regulations do not protect natural resources and small town character (1)
Concern about what county will do density, transportation. (3)
Lack of orderly growth pattern (1)
Lack of foresight

Lack of Information (1)
Lack of information – i.e. environment, traffic studies, etc
Lack of adequate citizen input (1)
Lack of understanding of citizens regarding growth issues

Lack of Diversity
Lack of social, economic, ethnic diversity
Signal Mountain lacks diversity of culture

Other (4)
Increasing property values – younger generation won't be able to afford mountain.
Uncertainty of what the H.S. will bring
Seclusion – escape – keep out
Strength – increase in home value also a weakness
History
Development can provide discord
Geographic location creates physical limitations for growth
Rapid intense growth
Impact (negative) of growth on infrastructure- roads, sewer, utilities, schools- unmatched capacity? (1)
Losing agricultural areas (3)

Residential Weaknesses

Sense of Community
Large homes can breed isolation
Promotes cooperation, neighborhood interaction
Subdivisions that lack a sense of community development house size, clear cut land for development
Old Town has sense of community, architecture, Arts & Crafts, new development that is compatible and complementary
New residential development seems to attract "pass through" residents

Other
High density development leads to problems

Poor subdivision regulation and lack of landscape ordinance
Construction on St. Charles Avenue
Remove all the trees, cookie cutter development
Diversity of future housing opportunities

Nonresidential Weaknesses

Vacant Property
Could use old CVS
Could use old SMMS
Do not use all commercial now available

Lack of Commercial Design Standards (3)
Lack of strong commercial design
Lack of control of control of the architecture of the commercial buildings
Commercial areas lack character because of zoning restrictions
No design standards for commercial (3)
Need commercial buildings to blend into neighborhoods as in Brentwood, Tennessee

Development Not Concentrated
Commercial zoning is spotty- there are "strange areas" zoned commercial in between residential zones
Lack of concentration of commercial areas
Too much commercial on Taft Hwy – Group commercial

Other (3)
Lack of support for community-Retail establishments (restaurants fail, etc.)
Weak business growth plan
CVS Parking lot is stupid and dangerous
Lack of entertainment in commercial development (2)
Lack of sales tax revenue due to stagnant/declining commercial base (1)

Environmental Weaknesses

Clear-cutting of Trees (1)
Clear cut development
All trees cut down, storm water run off to creeks and sewer
Lack of protection for trees and green space (ordinances to limit clear cutting) (1)
Clear cutting – county land

Water Pollution (5)
Water pollution
Ground water problem
Water pollution – health issues (1)
Water quality – polluted streams, related to sewer/septic (4)

Other (2)
Thin soil, slopes, physical limitations
Extended not burning – county burning

Abusing natural resources: Rainbow Lake, creeks (pollution), vandalism of trees, rocks
Bluff beautification
Need to preserve natural habitats-plants (2)

Civic Weaknesses

Sewer/Septic (18)
Sewage/ septic tanks (2)
Septic and sewer problems
Lack of sewers in existing neighborhoods
Aging septic systems causing seepage into streams, e.g. deterioration of Rainbow Lake
Sewer system (2)
Inadequate sewer system – Perc rate problems (3)
Sewer treatment plant
Inadequate sewage treatment and access (4)
Sewer infrastructure (leaky)
Lack of good terrain for septic systems
Water, sewage drainage issues (3)
Quality of life issue: Septic/sewer weakness in the sense that prior planning could be inadequate and has already been inadequate. (4)
Hidden Brook follow-up to previous septic comment. Built on rock, but home owners gave money for future sewage system then gave money back to developers. What do we do?

Town Services/Roles
Lack of building inspectors- Need more inspectors
Too many police- poor resource allocation-need to develop regulation
Waste Management: Solid Household
Road obstructions -leaves (code not enforced)
Water system inadequate
Litter and trash, streets and public spaces-
Trash on roads – Shackleford Ridge Rd.
Services overextended?
Trash service projects
Police service – negative comments

Utilities' Services
Need underground utilities

Governmental (6)
Elected officials that yield to development pressures
Current Planning Commission self serving developers (1)
Too many municipalities – lack of coordination
Planning should be elected – conflict of interest (5)
Pro-Growth Planning Commission (town)
Lack of combination/coordination with Walden

Other
Potential for new high school to use excessive resources/ sewer/ $ BOND (3)
Property taxes high

Parks and Open Space Weaknesses (1)

Destruction of trail system in Shackleford Park was tremendous lack of planning (1)
No input into county park – use for recreation, independent use
Not many neighborhood playgrounds
No teen center or opportunities
Nothing for teenagers to do

Transportation Weaknesses

Sidewalks (9)
Limited sidewalks in neighborhoods
Not pedestrian friendly
Transportation system not friendly to pedestrians, children, bicyclists and animals (4)
Lack of repair of old sidewalks- (Old Town), need code changed on books
Lack of neighborhood sidewalks – no linkages – Shackleford Ridge Road (2)
Need sidewalks and other paths
Sidewalks – lack there of (2)
Lack of pedestrian access – need more sidewalks – James Blvd- Ridgeway Ave (1)
Connect neighborhoods with sidewalks
Lack of sidewalks and bike paths

Access on/off mountain (6)
Limited highways down mountain
New road off mountain
Transportation infrastructure up and down mountain a problem
No extra road up mountain (1)
No coordination with Sequoyah – need another way off
Lack of quick ingress/egress, not very easy to access
Access from off mountain (affects emergency response getting people to hospital, etc.)
Road up and down mountain – safety issue, another lane
Limited major traffic arteries up and down mountain, Timberlinks Rd. ability to handle additional traffic (5)

Transit (1)
Poor public transportation
Transit – Traffic (1)
Lack of public transportation
No bus service
Lack of public transportation

Bicycling Facilities/Hiking Trails/Greenways (5)
No bike paths- 2002 Bicycle Master Plan (1)
Lack of bicycle path
Bikeways – need more safe bike lanes on Timberlinks, James, Taft, Palisades, Signal Mountain Road
Lack of Greenways

Less than ideal bike safety and pedestrian and cars-traffic in general on major roads- Taft and James (1)
Inadequate walking and biking trails (try to encourage use for exercise and recreation) (3)
Walking and biking trails not networked together- Have to drive to where you can walk or bike
Bikes riding up and down mountain
Need to accommodate low/high speed bikers
Lack of sidewalks and bike paths

Traffic Congestion/Road Capacity (4)
Traffic congestion (2)
Capacity of the main road to handle additional residential/commercial traffic
Can't accommodate increase in traffic
Traffic from Timberlinks will go through residential areas
Traffic congestion – (too many cars for the roads- James, Rolling Way and other cross streets)
Rush hour traffic in particular – traffic contributes to accidents (2)

Roadway Maintenance (1)
Street maintenance
Road system capacity and maintenance. (1)
Road repair

Shackleford Ridge Rd. (1)
Lack of crossroad connection with Shackleford Ridge
Single road going to the new middle/high school
Management of traffic from Shackleford Ridge area (need to avoid cut-through in residential areas) (1)

Other (2)
Widening of roads????
Roads
Too many commercial trucks on side streets
Speed limit too low on main roads (2)
No good way to get on/off mountain except car
Lack of turning lanes
Hard to read street signs
Address Roberts Mill
Heavy trucks that carry lumber, noise.

Glossary

Active Park
A park designed for active recreation. Active recreation typically requires intensive development and often involves cooperative or team activity, including playgrounds and playing fields.

Activity Center
A concentration of mixed-use or multi-use areas containing commercial, office, civic and institutional uses, parks and open space, and medium to high-density residential dwellings arranged in a compact, pedestrian friendly environment.

ADT
Average Daily Traffic. An average count of the number of vehicles passing a specific point during a 24- hour period.

Arterial, Major
A major thoroughfare characterized by high vehicular capacity and continuity of movement used primarily for through traffic rather than for access to abutting land.

Arterial, Minor
In rural areas, roads linking cities and larger towns. In urban areas, roads distributing trips to small
geographic areas without penetrating identifiable neighborhoods.

CARTA
Chattanooga Area Regional Transportation Authority

Character
Specific features or traits of a community or region developed over time that distinguish it from adjacent
development.

Cluster Development
A development design technique that concentrates buildings on a part of the site to allow the remaining
land to be used for recreation, common open space, or preservation of environmentally sensitive areas.
The open space may be owned by either a private or public entity.

Collector, Minor
In rural areas, routes that serve intra-county uses rather than statewide travel. In urban areas, streets that provide direct access to neighborhoods and arterials.

Condominium
A structure that is connected to at least one other structure with a firewall on a single lot, but also shares common land with the other lots in the structure. The common land is to be communal and must be owned in common by all the owners of the individual units in the structure. The owner owns interior of his or her unit in the structure.

Conditional Zoning
A type of zoning ordinance that allows additional stipulations on the type(s) and manner of uses that may occur on a particular property. These conditions apply in addition to any requirements stated by the standard zoning ordinance.

Covenants
Rules set forth in a private agreement with the land owners or potential land owners which is to be stated and recorded in the deed. This is a way regulate a development with emphasis on physical and economic integrity. Covenants are to be enforced by the land owners and are not enforced city or other public agencies.

Crossroads Development
An emerging growth center, usually located at the intersection of arterial and/or collector streets. These centers include small-scale, neighborhood-oriented establishments.

Deed Restriction
A limitation on the use of a lot or parcel of land that is set forth in the deed and recorded with the county register of deeds. It is binding on subsequent owners.

Dwelling Unit
Any building or portion thereof that contains sleeping, cooking, and sanitary facilities for one household. This definition specifically excludes hotels, motels, and other similar short-term lodging types.

Dwellings, Attached Units- Attached units are attached on one or more sides by a wall, and situated on the same parcel of land with the exception of a townhouse.

Dwelling, two-family (duplex)
An attached structure that contains two units separated by a firewall situated on a single lot.

Dwelling, three-family (triplex)
An attached structure contains three units separated by a firewall on the adjoining walls with the said structure being situated on a single lot.

Dwelling, four-family (quadplex)
An attached structure contains four units separated by a firewall on the adjoining walls with the said structure being situated on a single lot.

Dwelling, multi-family (apartments)
A single room or suite of rooms with restroom accommodations located in a single structure devoted primarily for one family per unit use. This building will contain no less than two units and a reasonable number of units being the maximum for the character of the surrounding area. Apartments are typically seen as multi-family buildings.

Townhouse
Buildings that can be different stories in height with at least one side being connected to another structure and open space in the front and rear of the units to provide for light, air, and access. Townhouses typically have the main entrance on the ground level. The owner owns lot, interior and exterior of structure. Townhouses and other attached dwellings should generally be located in or near transitional areas or areas that are more urban in character. Transitional areas are typically located between business districts and residential districts and act as a buffer between uses of different density, intensity or compatibility. Urban character areas are generally characterized by moderate and higher residential density in or near commercial development and business centers.

Dwellings, Detached Units
Detached units consist of one unit that is not attached to any other units excluding accessory units (i.e. sheds or garages) and is situated on the same lot.

Dwelling, Single-family detached
A single house that is situated on one lot with one family living on the premises. Patio homes are single family dwellings that are permitted to have a zero lot line, and they may or may not be attached to other patio homes. A zero lot line means that one side of the structure may be placed on the lot line with no setback. A double wide manufactured home and a modular home are considered a single family unit by Tennessee state law.

Easement

A legal interest in land, granted by the owner to another person or entity which allows the use of all or a
portion of such land for a specific use such access or placement of utility lines.

Flood Zone, 100-year

The low land near a watercourse which has been, or may be covered by water of a flood of 100-year frequency. It also means a flood of this magnitude has a one percent chance of occurring in any given year.

Goal

The end state of affairs that a plan intends to achieve and/or maintain.

Greenway

A linear park, or open space conservation area acquired and maintained by a municipality providing passive recreational opportunities, pedestrian and / or bicycle paths.

Gross Density

The numerical value obtained by dividing the total number of dwellings in a development by the gross area of the tract of land in acres.

Historic District

The Register is part of a nationwide program to support public and private efforts to identify and protect historic and archaeological resources.

Impervious Surface - A hard surface area that either prevents or retards the entry of water into the soil mantle or causes water to run off the surface in greater quantities or at an increased rate of flow. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, and gravel roads.

Incentive Zoning

The granting of additional development capacity in exchange for providing a public benefit or amenity such as preservation of greater than the minimum required open space.

Intensity

The degree to which land is utilized or the density of the development as determined by measures such as the number of dwelling units per acre, amount of traffic generated, or amount of site coverage. Facilities and services needed to sustain development and land-use activities including utility lines, fireand police stations, parks, schools, and other public facilities.

Infill Development

The development of vacant or underutilized parcels which are surrounded by or in close proximity to areas that are either substantially or fully developed.

Land Use Plan

A long-range plan for the desirable use of land in a municipality as officially adopted and amended from time-to-time by the planning commission and elected body.

Level of Service (LOS)

A scale that measures the amount of traffic that a roadway or intersection can accommodate, based on such factors as maneuverability, driver dissatisfaction, and delay.

Lot of Record

A parcel of land with dimensions of which are shown on a document or map on file with the Register of Deeds.

LRTP

Long Range Transportation Plan. TransPlan 2030 seeks to identify improvements and establish transportation policy that will be needed by the target year 2030. Adopted in June 2005, the plan's goal is to promote the efficient movement of people and goods,

while also supporting the CHCNGA TPO area's land use and economic development goals.

Mixed Use Development

Developments intended to encourage an integrated, diverse blend of compatible land uses.

Multi-Use Development

The development of a tract of land or building with two or more different uses such as but not limited to residential, office, retail, public, or entertainment in a compact urban form.

Multi-use path

A linear park located in a right-of-way or easement. Often but by no means exclusively located adjacent to waterways in the floodway, multi-use paths are multi-purpose, though some types serve one purpose to a greater extent than others. Multi-use paths provide protection for environmental areas, recreational opportunities for the community, and, frequently, enhanced neighborhood connectivity for walkers, runners, and bikers.

Neighborhood Center

Neighborhood shopping centers generally provide convenience shopping for the day-to-day needs of consumers in nearby residential neighborhoods.

Node

Discrete concentrations of relatively higher-density development. Nodes are often appropriate at major
intersections.

Open Space

Any parcel of land or portion thereof essentially unimproved and dedicated or reserved for public or private use.

Open Space Subdivision

A site design technique that concentrates dwelling units in a compact area in one portion of the development site in exchange for providing open space and natural areas elsewhere on the site. The minimum lot sizes, setbacks, and frontage distances for the residential zone are relaxed in order to createadditional open space at the site.

Parcel

A piece of land that can be owned, sold, and developed. Parcels have legal descriptions which not only describe their boundaries but also contain information concerning rights and interests.

Patio Home

A single-family detached unit located on a reduced size, zero-lot line parcel and situated to provide for efficient use of available land.

Policy

The principles, plan or procedures established by an agency, institution, or government, generally with the intent of reaching a long-term goal.

Preserve

Open space that is currently protected from development. It includes areas under environmental protection by law or standard, as well as land acquired for conservation through purchase, or by easement.

Reserve

Environmentally sensitive areas such as the 100-year flood plain and steep slopes that may require special considerations for development. Additionally, through special efforts, many of these areas could be added to the Preserve category in the future.

Riparian Habitat

Lands comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams.
Riparian habitats are delineated by the natural existence of plant species normally found near freshwater.

Sanitary Sewer
A system usually operated by a municipality, consisting of a system of conduits, pumps and underground pipes designed to convey wastewater from its source to a treatment center before discharge into open waterways.

Scale
The relative size of a development when compared to others of its kind, to its environment, or to humans.

Septic System
A subsurface wastewater treatment system commonly found in rural areas consisting of a settling tank and a subsurface disposal field.

Setback
The minimum distance any building or structure must be separated from the lot lines of the parcel on which it is located.

Shared Parking
The development and use of parking areas on two or more separate properties for joint use by the businesses or residents on those properties.

Slope
The deviation of a land surface from horizontal, usually expressed in percent or degrees. Many municipalities consider slopes of 25% or greater to be steep slopes.

Spot Zone
The zoning of a small area of land or parcel for a use that is substantially different from the zoning of land in the surrounding area. Spot zoning is normally invalid if the permitted use is very different from the surrounding area; the area involved is small; or it can be shown that it primarily promotes the private interest of the owner rather than the general public welfare. Spot zoning may be valid if a land use plan calls for such zoning changes as part of the plan's implementation as a benefit to the community at large.

Streetscape
The combination of building facades, signage, landscaping, street furnishings, sidewalks, and other elements along a street.

Strip Commercial
A form of commercial land use in which each establishment is afforded direct access to a major thoroughfare; generally associated with intensive use of signage.

Stormwater - That portion of rainfall runoff that does not infiltrate into the soil, but instead flows through culverts, ditches and streams into progressively larger channels until it reaches a larger body of water such as the Tennessee River.

Subdivision
The division of a tract of land into two or more lots.

Suburban Development
A form of development, generally beginning after World War II that is characterized by a distinct separation of land uses. The street network deviates from the historical grid system as cul-de-sacs and curvilinear routes are common.

TDEC
Tennessee Department of Environment and Conservation.

303(d) List

The list of streams and lakes that are not meeting their designated uses (impaired waters) because of excess pollutants. States must update this list every two years.

Traditional Neighborhood Development

A type of development that emulates early 20th Century urban conventions in the United States by diversifying and integrating land uses while attempting to preserve a human-scale design.

Transition Area

An area in, near, or between a significant change in land uses.

Total Maximum Daily Load

The maximum level (plus a margin of safety) of a particular pollutant a waterway can withstand without endangering its designated use.

Townhouse, see Dwelling, Townhouse

TPO

Transportation Planning Organization. A policymaking board comprised of representatives from local government and transportation authorities who review transportation issues and develop transportation plans and programs for the metropolitan area. Analogous to Metropolitan Planning Organization (MPO).

Vehicle Miles Traveled (VMT)

Miles of travel by all types of motor vehicles as determined by the states based on actual traffic counts and established estimating procedures.

Viewshed

Those segments of a landscape that can be seen from a particular point.

Watershed

The land area from which surface runoff drains into a stream, channel, lake, reservoir, or other body of water; also called a drainage basin.

Zoning

The legal mechanism for the creation of districts in certain specified areas within a municipality land uses with other limitations such as height, lot coverage, density, and other stipulations in order to protect the health, safety and welfare of residents.

Rezoning Proposals

Properties which are not currently zoned for commercial, office, industrial, or multi-family uses will be evaluated for non-speculative land uses based on a rezoning proposal prepared by the developer. The elements of the rezoning proposal are described below and much of the information is similar to those required by the Regional Planning Agency in its Site Plan Requirement Policy.

The intent of the rezoning proposal process is to promote well-planned, sustainable development that is in keeping with the intent of the adopted land use plan. The proposals will help elected officials make well-informed decisions about rezonings for development that may have substantial impacts, both positive and negative, on the community. A pre-proposal conference with Regional Planning Agency and town staff is strongly recommended.

Recommended elements of a comprehensive zoning proposal:
1. A written narrative describing:
   - the proposed development,
   - the suitability of the property for the proposed development including a brief description of road frontage, access,
   - availability of infrastructure, and topography issues,
   - how the proposed development is (a) consistent with and (b) meets the objectives of the adopted land use plan, and
   - the compatibility of the proposed development with the uses of nearby properties and with the character of the surrounding neighborhood including, but not limited to, an impact analysis and proposed mitigation measures for things such as noise, light and glare, security, and privacy.

2. A copy of correspondence soliciting comments from area property owners or neighborhood associations.
3. A preliminary site plan including building footprints; pedestrian, bicycle, and vehicular access; parking; open space; pedestrian and bicycle amenities such as sidewalks, benches, plazas, and bike racks; existing natural vegetative buffers;
wetlands; storm water management facilities; and any proposed cut and fill areas.
4. A landscaping plan.
5. A traffic impact study as required by the adopted Vehicular Access ordinance (Ord. 98-5) and other traffic information as requested by town staff or Planning Commission, and proposed mitigation measures if requested by RPA or town staff.
6. An environmental impact analysis and proposed mitigation measures if requested by RPA or town staff.

Rezoning Tips for Developers

At times, it may be necessary to demonstrate a project's consistency with an approved land use plan by amending the plan before the formal rezoning process can be initiated. The following tips may be helpful in preparing to request a rezoning:

- Work with community groups and neighbors to develop a consensus before initiating the formal rezoning process.

- Try presenting a conventional development plan or "by right" development plan to illustrate the advantages of your creative development concept.
- Use graphics and three-dimensional images such as perspective sketches, bird's-eye views, house elevations, cross-sectional views, or models to help others see your design concept.
- Look for ideas and successful examples in resource materials such as publications by the National Association of Home Builders, slide shows, videotapes, the Urban Land Institute's Project Reference File, and model ordinances; use them to show local planning and zoning officials innovative and creative approaches to land planning.

Source: Site Planning and Community Design for Great Neighborhoods, Frederick D. Jarvis, Home Builder Press.

Regional Planning Agency policy on Townhouses

The Regional Planning Agency uses this policy as a guide regarding appropriate locations for attached housing.

Definition: A townhouse is a single family dwelling unit attached by common walls to other similar housing type units, each unit having an open space for light, air, and access in front and rear.

Location: Townhouses have historically been located in the more densely populated urban areas, thus the name "town" house. Therefore, they are most appropriate in areas that are more urban in character. Urban character areas are generally characterized by moderate and high residential density in or near commercial development and business centers.

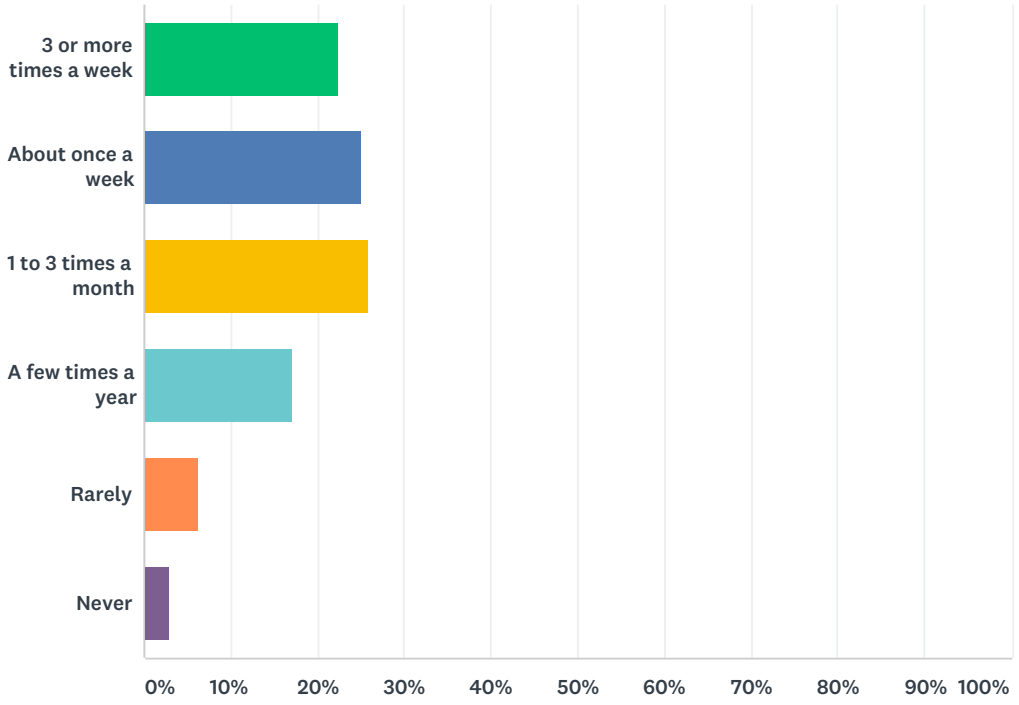
Townhouses are also appropriate in or adjacent to commercial, high density residential, or transitional areas. Transitional areas are typically located between business districts and residential districts and act as a buffer between uses of different density, intensity or compatibility.

Townhouses are also generally more acceptable and compatible with surrounding detached low-density single-family residential development if they are part of a Unified Development and sited to the interior of that development. A Unified Development is a single development consisting mostly of detached single-family residential dwellings with a smaller attached dwelling component.

Discretion: Townhouse-only developments have been approved in predominantly single family low-density residential areas. Some have been appropriate and compatible developments and some have not. Whether or not such a development fits into a low-density residential area seems to depend on the quality and architectural compatibility of the townhouses as well as the degree of landscaping. Landscaping is the only one of these components that can be directly regulated by the zoning ordinance. Therein lies the problem in determining whether or not a townhouse development is appropriate. It is ultimately up to the developer to provide evidence of the quality of the product and to provide whatever assurances are possible as to the quality and compatibility of the proposed units.

Q1 How frequently do you or members of your household visit the Town of Signal Mountain's public recreation facilities? Examples include parks, ball fields, trails, the pool, etc.

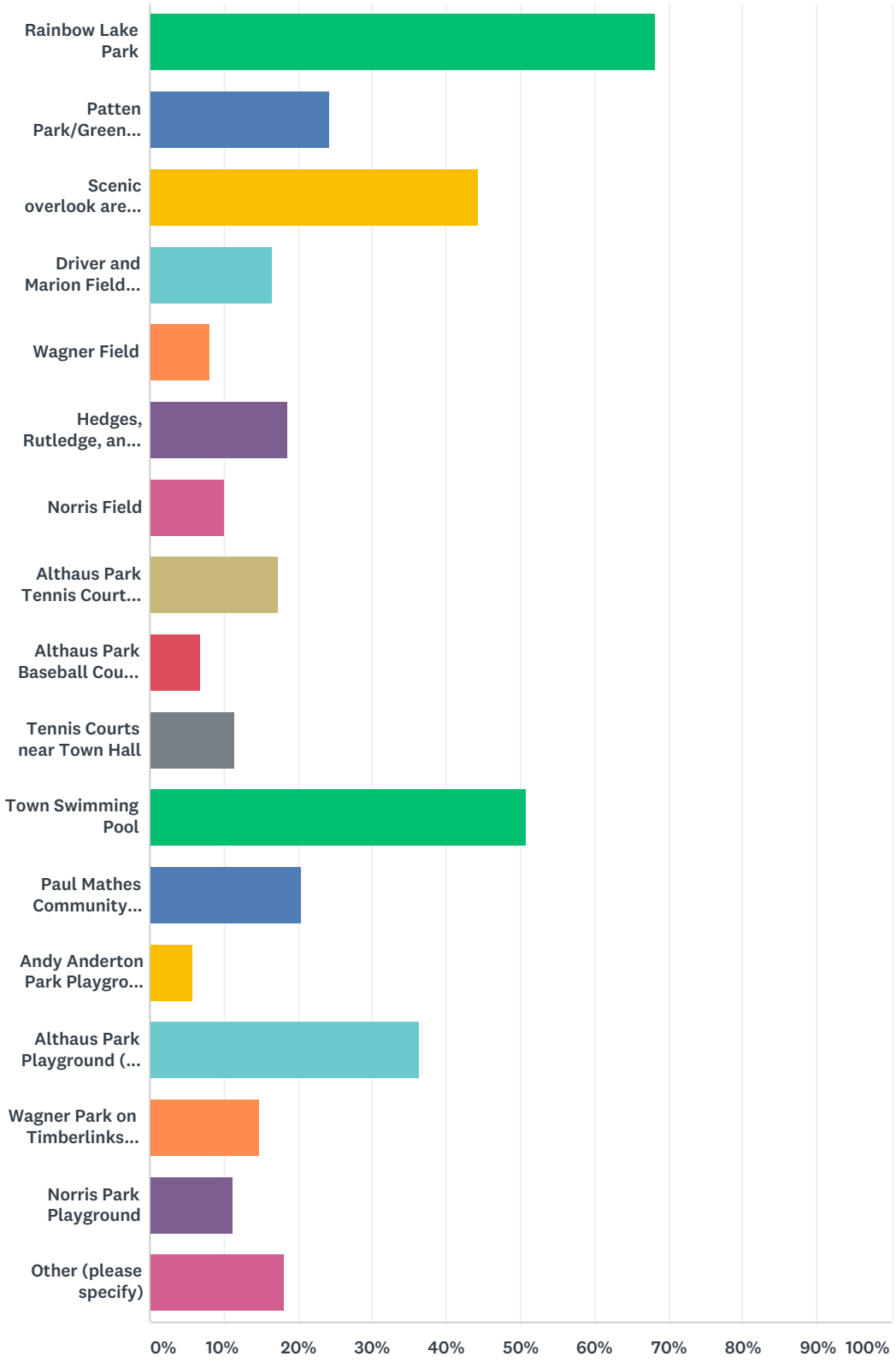
Answered: 401 Skipped: 2



ANSWER CHOICES	RESPONSES	
3 or more times a week	22.44%	90
About once a week	25.19%	101
1 to 3 times a month	25.94%	104
A few times a year	17.21%	69
Rarely	6.23%	25
Never	2.99%	12
TOTAL		401

Q2 Which of Signal Mountain's recreation facilities do you or members of your household visit regularly? (Choose all that apply)

Answered: 392 Skipped: 11



ANSWER CHOICES	RESPONSES	
Rainbow Lake Park	68.11%	267
Patten Park/Green Gorge	24.23%	95
Scenic overlook areas on N. Palisades Drive	44.39%	174
Driver and Marion Fields (by Country Club)	16.58%	65
Wagner Field	8.16%	32
Hedges, Rutledge, and Scott Fields (near Town pool)	18.62%	73
Norris Field	9.95%	39
Althaus Park Tennis Courts (by Country Club)	17.35%	68
Althaus Park Baseball Court (by Country Club)	6.89%	27
Tennis Courts near Town Hall	11.48%	45
Town Swimming Pool	50.77%	199
Paul Mathes Community Center (indoor gymnasium adjacent to Town Hall)	20.41%	80
Andy Anderton Park Playground at Valewood and Dunsinane	5.87%	23
Althaus Park Playground (by Country Club)	36.48%	143
Wagner Park on Timberlinks Blvd	14.80%	58
Norris Park Playground	11.22%	44
Other (please specify)	18.11%	71
Total Respondents: 392		

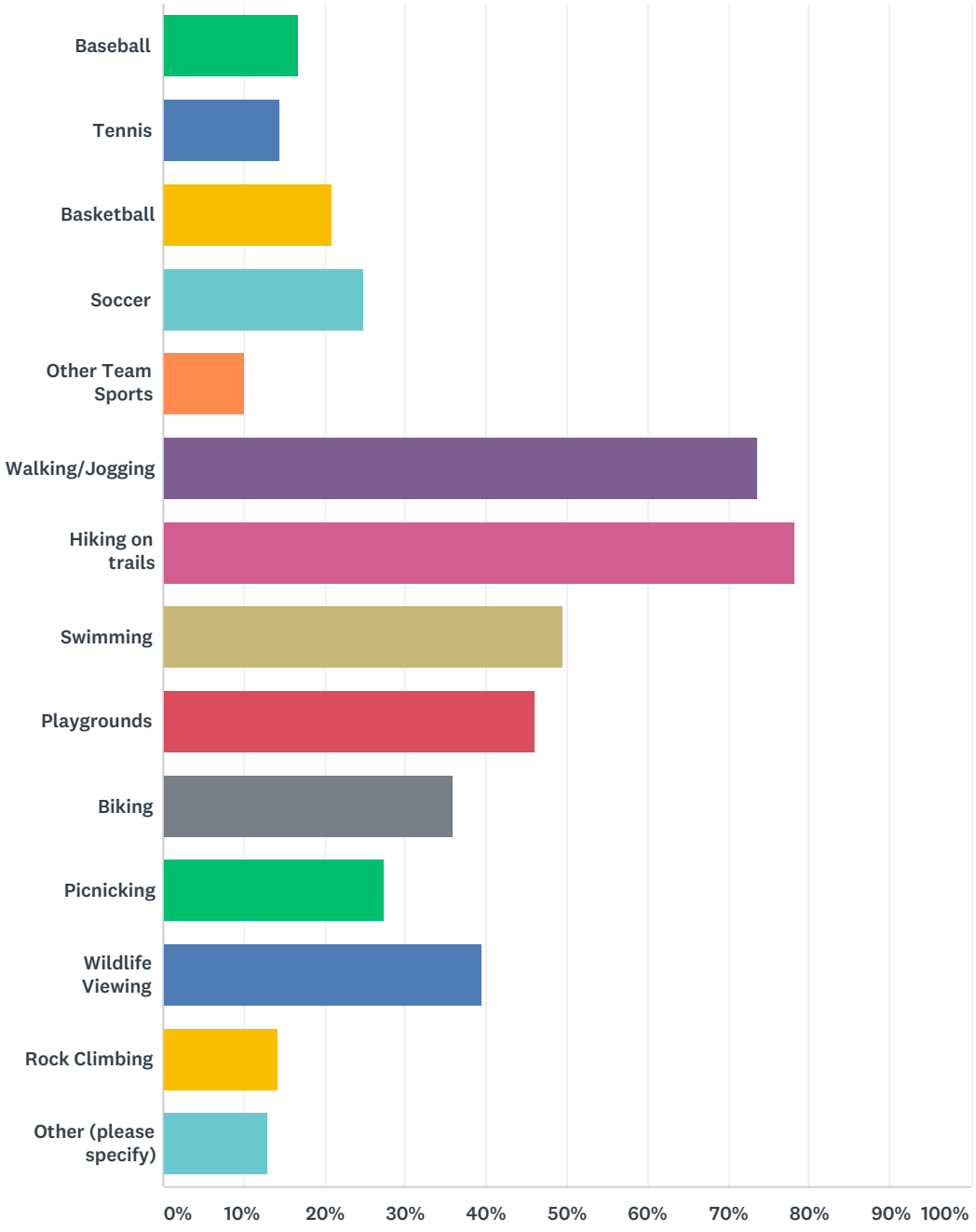
#	OTHER (PLEASE SPECIFY)	DATE
1	Signal point	12/24/2017 4:04 AM
2	Town Hall Basketball Court	12/23/2017 12:30 PM
3	Hiking trails	12/14/2017 10:04 PM
4	DwwwGreen Gorge Park	12/14/2017 5:17 PM
5	Mccoy farm. Edwards point trails	12/14/2017 12:01 PM
6	Timberlinks field, Dressler field	12/14/2017 8:54 AM
7	Dressler	12/14/2017 8:35 AM
8	Signal Pointe	12/14/2017 7:07 AM
9	Not sure where all these are . Mc coy farms	12/13/2017 11:52 PM
10	Shackleford trails and Cumberland Trail; Edwards Point	12/13/2017 10:10 PM
11	Signal Point	12/13/2017 8:19 PM
12	Town Playground (near Town Swimming Pool)	12/13/2017 3:19 PM
13	We use several fields to play, practice etc, but don't know their formal names	12/13/2017 10:43 AM
14	Mabbit	12/13/2017 9:45 AM
15	Green Gorge trail	12/13/2017 8:50 AM
16	Signal Point	12/13/2017 8:05 AM

17	Sequatchie Overlook...sure wish we'd fix this little overlook up into something we could be proud of.	12/13/2017 7:34 AM
18	New to the area - don't know yet	12/13/2017 6:36 AM
19	Soccer fields	12/13/2017 5:20 AM
20	None	12/13/2017 1:35 AM
21	Soccer fields, Trails at high school	12/12/2017 11:35 PM
22	Shoal Creek Road when closed on Sundays	12/12/2017 11:20 PM
23	None	12/12/2017 10:58 PM
24	Sunday Point trail system and other hiking trails	12/12/2017 10:19 PM
25	Pumpkin patch playground	12/12/2017 10:07 PM
26	Trail at outdoor playhouse	12/12/2017 10:04 PM
27	Used to walk the trails where the High School is now located. WAS a great place.	12/12/2017 9:50 PM
28	Shackleford ridge park	12/12/2017 9:48 PM
29	Town Hall Basketball Court	12/12/2017 9:45 PM
30	Mabbot springs and Roberts mill	12/12/2017 9:05 PM
31	Signal Point Park	12/12/2017 8:45 PM
32	None	12/12/2017 8:33 PM
33	Prentice cooper forest access	12/12/2017 8:25 PM
34	Boy Scout Park	12/12/2017 7:37 PM
35	Soccer fields and walking trails behind SMMHS	12/12/2017 7:18 PM
36	We walk the James Blvd. sidewalks	12/12/2017 7:13 PM
37	Signal point	12/12/2017 6:41 PM
38	Pumpkin Patch	12/12/2017 6:39 PM
39	none	12/12/2017 6:36 PM
40	Soccer fields	12/12/2017 6:36 PM
41	Soccer fields	12/12/2017 6:36 PM
42	Trails behind smmhs	12/12/2017 6:22 PM
43	McCo Farm trails, trails to Mushroom Rock, trails by High school	12/12/2017 5:44 PM
44	Playground near the pool	12/12/2017 5:31 PM
45	Baseball fields townhall gym	12/12/2017 5:12 PM
46	soccer fields @ SMMHS	12/12/2017 5:09 PM
47	Shackleford Ridge Park	12/12/2017 4:47 PM
48	Signal Point Park	12/12/2017 4:44 PM
49	Pumpkin Patch	12/12/2017 4:43 PM
50	Shackleford Ridge Park	12/12/2017 4:40 PM
51	Town Park (playground next to SM pool)	12/12/2017 4:14 PM
52	Pumpkin Patch	12/12/2017 4:10 PM
53	Shoal Creek Rd on Sundays	12/12/2017 4:05 PM
54	Pavilions area of Althaus Park.	12/12/2017 4:01 PM
55	Shoal Creek Road when it's closed for pedestrian use	12/12/2017 3:49 PM
56	Pumpkin Patch	12/12/2017 3:48 PM

57	Pumpkin Patch... or is that Walden?	12/12/2017 3:48 PM
58	Pumpkin Patch	12/12/2017 3:46 PM
59	Playground next to Town Pool and Pumpkin Patch when reopened	12/12/2017 3:34 PM
60	Areas towards Edward's Point.	12/12/2017 3:33 PM
61	Shackleford Ridge Park trails	12/12/2017 3:29 PM
62	Signal Point	12/12/2017 3:23 PM
63	DON'T USE ANY OF THESE	12/12/2017 3:18 PM
64	Signal point	12/12/2017 3:16 PM
65	Used them more when kids were still living at home. Less now.	12/12/2017 3:16 PM
66	Pumpkin Patch	12/12/2017 3:14 PM
67	trails at Mabbitt Springs and SMMHS	12/12/2017 3:09 PM
68	Thrasher Playground	12/12/2017 3:08 PM
69	sidewalks on James from Old Towne to Skyline Drive	12/12/2017 3:07 PM
70	MACC	12/12/2017 2:54 PM
71	Sidewalks along James Blvd. (not a facility, but you need to consider it), also gym at old school property	12/12/2017 2:50 PM

Q3 What recreation activities do you or members of your household regularly participate in? (Choose all that apply)

Answered: 395 Skipped: 8



ANSWER CHOICES	RESPONSES	
Baseball	16.71%	66
Tennis	14.43%	57
Basketball	21.01%	83
Soccer	24.81%	98

Other Team Sports	10.13%	40
Walking/Jogging	73.67%	291
Hiking on trails	78.23%	309
Swimming	49.62%	196
Playgrounds	46.08%	182
Biking	35.95%	142
Picnicking	27.34%	108
Wildlife Viewing	39.49%	156
Rock Climbing	14.18%	56
Other (please specify)	12.91%	51
Total Respondents: 395		

#	OTHER (PLEASE SPECIFY)	DATE
1	Softball	12/14/2017 6:25 PM
2	Equestrian	12/14/2017 1:22 PM
3	football, flag football	12/14/2017 11:30 AM
4	Lacrosse	12/14/2017 11:14 AM
5	Lacrosse	12/14/2017 8:54 AM
6	Lacrosse	12/14/2017 8:35 AM
7	Kayaking	12/13/2017 11:52 PM
8	Lacrosse	12/13/2017 10:28 PM
9	Lacrosse & kickball	12/13/2017 8:25 PM
10	Informal neighborhood games	12/13/2017 8:19 PM
11	Pickleball	12/13/2017 8:19 PM
12	Paddleboarding	12/13/2017 1:30 PM
13	Lacrosse	12/13/2017 10:43 AM
14	Fly Fishing	12/13/2017 9:45 AM
15	Running (on streets and sidewalks); over 40 softball	12/13/2017 8:32 AM
16	Lacrosse	12/13/2017 7:55 AM
17	Biking	12/13/2017 12:56 AM
18	None	12/12/2017 10:58 PM
19	pickleball	12/12/2017 10:43 PM
20	Hunting and fishing	12/12/2017 10:19 PM
21	Walking my dog.	12/12/2017 9:50 PM
22	Lacrosse	12/12/2017 9:45 PM
23	Softball	12/12/2017 9:21 PM
24	Horseback riding	12/12/2017 9:05 PM
25	Pickleball	12/12/2017 8:46 PM
26	Pickleball	12/12/2017 8:45 PM

27	Pickleball	12/12/2017 8:45 PM
28	None	12/12/2017 8:33 PM
29	Rock climbing	12/12/2017 8:25 PM
30	Men's 40+ Softball	12/12/2017 7:45 PM
31	Gymnastics	12/12/2017 7:35 PM
32	Golf	12/12/2017 6:39 PM
33	Lacrosse	12/12/2017 6:07 PM
34	Dog walking, throwing ball for her to chase	12/12/2017 5:30 PM
35	Lacrosse	12/12/2017 5:20 PM
36	Lacrosse	12/12/2017 5:12 PM
37	softball	12/12/2017 4:47 PM
38	Softball	12/12/2017 4:43 PM
39	softball	12/12/2017 4:34 PM
40	Other team sports = lacrosse	12/12/2017 4:17 PM
41	Scouting events	12/12/2017 4:01 PM
42	We regularly pick up litter on our walks and hikes	12/12/2017 3:49 PM
43	Horseback riding, yoga	12/12/2017 3:44 PM
44	We used to use athletic facilities extensively but our kids are now in middle school and have essentially aged out of rec sports.	12/12/2017 3:27 PM
45	Lacrosse	12/12/2017 3:18 PM
46	Softball	12/12/2017 3:00 PM
47	Lacrosse	12/12/2017 2:59 PM
48	Football, Baseball	12/12/2017 2:55 PM
49	Meetings and exercise programs at the MACC	12/12/2017 2:54 PM
50	Pickleball	12/12/2017 2:50 PM
51	Pickle Ball	12/12/2017 2:49 PM

Q4 Are there any recreation activities you would like to see made available in Signal Mountain?

Answered: 244 Skipped: 159

#	RESPONSES	DATE
1	Walking, biking, running trails or paths. And some much needed upkeep of the tennis courts and /or building new ones.	12/26/2017 9:58 PM
2	More adults only hours at the pool	12/26/2017 10:54 AM
3	Lacrosse	12/25/2017 3:52 PM
4	Indoor pool	12/25/2017 2:45 PM
5	More hiking trails and mountain bike trails. Lookout mountain has far surpassed us, sadly.	12/24/2017 4:04 AM
6	Na	12/22/2017 3:00 PM
7	Playground for small children	12/22/2017 10:23 AM
8	Dog park	12/22/2017 9:28 AM
9	None at this time.	12/22/2017 8:27 AM
10	more mountain biking	12/21/2017 11:56 AM
11	More bike and pedestrian lanew	12/20/2017 9:36 PM
12	Yes, we need an indoor year round pool and steps put into the summer swimming pool!!	12/20/2017 12:03 PM
13	No	12/18/2017 9:40 PM
14	Bocce ball	12/18/2017 9:33 PM
15	Better trails with more visible markers	12/18/2017 3:14 PM
16	Greenways, greenways, greenways.	12/18/2017 9:16 AM
17	Bird watching	12/17/2017 9:05 PM
18	Indoor Town Swimming Pool	12/17/2017 8:29 PM
19	1. Safe biking on all roads and off-road bike lanes 2. Trailhead markers and connectivity between parks, schools, Signal Mountain Marker plaza and across the mountain down into the Sequatchie Valley.	12/16/2017 11:03 PM
20	dog park	12/16/2017 6:15 PM
21	Zip lining Outdoor drive inn movie theater :)	12/16/2017 5:00 PM
22	Rock Climbing (bouldering), mountain biking	12/16/2017 8:11 AM
23	Yes, please better sidewalks, more greenways and better marked and maintained trails!	12/15/2017 10:04 PM
24	More nature trails	12/15/2017 4:49 PM
25	no	12/14/2017 9:58 PM
26	I like the current availablity	12/14/2017 7:46 PM
27	A dog park.	12/14/2017 6:00 PM
28	A dog park.	12/14/2017 6:00 PM
29	safe bike paths and a dog park or area where dogs are at least allowed	12/14/2017 2:04 PM
30	N/A	12/14/2017 2:03 PM
31	Dog Park	12/14/2017 1:22 PM
32	More walking trails. Or sidewalks. Bike trails in and around old town. Exercise for seniors. Tai Chi.	12/14/2017 12:17 PM

33	No	12/14/2017 11:47 AM
34	More field space, central full field sports complex w/storage, scoreboards, concessions. Baseball complex w/more fields, batting cages.	12/14/2017 11:30 AM
35	I feel lacrosse and football get the “make it work” fields. Would love to see a field that could be used in fall football. In spring lacrosse. And soccer too. Also I don’t understand why soccer won’t share the shakleford ridge fields with either of those organizations. Jared Thompson has been great to find the lax organization field space.	12/14/2017 11:14 AM
36	No	12/14/2017 9:32 AM
37	Plenty available as is	12/14/2017 7:40 AM
38	splash pad	12/14/2017 7:03 AM
39	Summer water play park where kids can play in water but not be in a pool. Like the one at Warner park pool in Chatt. but not as large. Has showers, squirting water, buckets of water that tip onto you, etc.	12/14/2017 6:33 AM
40	Special programs for older/retired residents, programs for disabled	12/14/2017 6:16 AM
41	I would love an inclosed facility that could be used for children parties for sports teams or other gatherings/meetings	12/14/2017 12:55 AM
42	Indoor swimming, public golfing and putting. DOG PARK!!!! Sufficient for trails and large spaces . Check out the dog parks in Eugene Oregon	12/13/2017 11:52 PM
43	No	12/13/2017 10:18 PM
44	Would pay for indoor/year round pool membership. Same for indoor climbing facilities. Mixed use fitness trails with stations for users of all ages and abilities.	12/13/2017 10:10 PM
45	Can't think of anything	12/13/2017 8:50 PM
46	Fields for Lacrosse	12/13/2017 8:25 PM
47	No additional activities needed.	12/13/2017 8:19 PM
48	.Pickleball for beginners: time to practice when Pickleball club is not using courts for games; lessons, coaching, or at least beginners games Also would like a dog park.	12/13/2017 8:19 PM
49	Heated lap pool	12/13/2017 8:01 PM
50	More baseball fields. The demand outstrips supply.	12/13/2017 7:30 PM
51	Dog park	12/13/2017 7:16 PM
52	.	12/13/2017 6:56 PM
53	Netted batting cages for baseball practice	12/13/2017 6:53 PM
54	more parking, a picnic shelter at Norris Park	12/13/2017 6:31 PM
55	More biking/running lanes	12/13/2017 6:29 PM
56	No	12/13/2017 3:56 PM
57	Na	12/13/2017 3:38 PM
58	More sidewalks	12/13/2017 3:22 PM
59	Mountain bike trails, climbing on town property	12/13/2017 1:30 PM
60	No	12/13/2017 12:49 PM
61	Practice and playing fields for lacrosse	12/13/2017 10:43 AM
62	Fishing.	12/13/2017 9:45 AM
63	My husband and I walk for exercise. Because of the terrain and narrow streets we can only walk in certain places. We appreciate the sidewalks we have but they need to be maintained better. Many are cracked, overgrown (by homeowners), or contain debris. Also, low hanging branches. I don't think more sidewalks is the answer because of the hills and turns we have. If new sidewalks were established, the area would have to be evaluated. Not all areas would be conducive.	12/13/2017 8:58 AM
64	More sidewalks/running lanes and trails	12/13/2017 8:32 AM

65	Mountain bike trails Rock climbing	12/13/2017 8:10 AM
66	Mountain Bike Trails	12/13/2017 8:08 AM
67	No	12/13/2017 8:07 AM
68	...	12/13/2017 8:05 AM
69	Macc playground	12/13/2017 8:04 AM
70	Mountain Bike Trails	12/13/2017 7:55 AM
71	More hiking trails....like an easier marked path to Mushroom Rock etc	12/13/2017 7:34 AM
72	None come to mind.	12/13/2017 7:21 AM
73	Bocce court may be fun! Perhaps sand volleyball?	12/13/2017 7:01 AM
74	Long-distance running paths - prefer paved but not sidewalks right on the road	12/13/2017 6:36 AM
75	More sidewalks for walking!	12/13/2017 6:31 AM
76	volleyball	12/13/2017 5:20 AM
77	Mountain biking trails. Approved Rock climbing areas.	12/13/2017 2:02 AM
78	Rock climbing	12/13/2017 1:35 AM
79	Safer biking areas; bike lanes on sides of major roads.	12/13/2017 12:56 AM
80	Dog park	12/12/2017 11:35 PM
81	Trails connecting the town	12/12/2017 11:35 PM
82	Benches along trails to rainbow lake for disabled people that can't walk the trail to the lake so they can rest and be able to make it all the way and trails marked better for people that don't know the trails	12/12/2017 11:34 PM
83	Interconnected trails, sidewalks and bike paths wide and safe enough for walking to and from the business district.	12/12/2017 11:20 PM
84	Rock climbing and camping	12/12/2017 11:15 PM
85	Side walks	12/12/2017 11:08 PM
86	An indoor pool.	12/12/2017 10:58 PM
87	None that aren’t already available	12/12/2017 10:47 PM
88	Mountain Biking	12/12/2017 10:43 PM
89	none	12/12/2017 10:33 PM
90	More bicycle lanes on roadways	12/12/2017 10:19 PM
91	Yes. Indoor pool.	12/12/2017 10:04 PM
92	More activities that are non-athletic; classes at MACC, etc.	12/12/2017 10:02 PM
93	Cannot think of anything to add	12/12/2017 9:57 PM
94	A tennis league for Signal Mountain. Group hikes to areas.	12/12/2017 9:55 PM
95	Small walking tracks around playgrounds	12/12/2017 9:54 PM
96	I would like trails for walking in a shady area, just like the ones that were in the park where the high school now sits.That was relatively flat area and very pleasant. I could take my dog for a walk without worrying about neighborhood dogs running out at us. It seems the most of the "Recreation" is for children, which is fine if there were some areas for older adults.	12/12/2017 9:50 PM
97	Dedicated/regulation lacrosse fields. Wall ball for lacrosse.	12/12/2017 9:45 PM
98	Rock climbing	12/12/2017 9:41 PM
99	rock climbing	12/12/2017 9:25 PM
100	Golf cart/multi-purpose (no motorcycle/ATV) trail interconnecting the various neighborhoods through natural space and alongside and over/under Taft Hwy.	12/12/2017 9:21 PM

101	Golf and golf lessons outside of a country club membership	12/12/2017 9:14 PM
102	More parks	12/12/2017 9:13 PM
103	More land to explore .. less development !	12/12/2017 9:05 PM
104	More trails for walking and biking	12/12/2017 8:51 PM
105	More bike/running paths.	12/12/2017 8:50 PM
106	NO	12/12/2017 8:46 PM
107	Backpacking Sites and Mountain Biking Trails at Rainbow Lake and Rock Climbing at Signal Point Park	12/12/2017 8:45 PM
108	Indoor exercise clases	12/12/2017 8:40 PM
109	More bike and walking trails	12/12/2017 8:37 PM
110	Rock climbing wall	12/12/2017 8:35 PM
111	Something for children	12/12/2017 8:33 PM
112	More kids sports that are not late in the evening	12/12/2017 8:31 PM
113	no	12/12/2017 8:28 PM
114	Chattanooga is a hot spot for rock climbing and mtn biking and signal mtn has some of the best rocks and trails. More access trailheads and parking.	12/12/2017 8:25 PM
115	No	12/12/2017 8:24 PM
116	Grills in the pool for picnicing, Event amphitheatre or community space, Dog park, summer evening activities similar to those in Seaside, FL!	12/12/2017 8:22 PM
117	Rock climbing	12/12/2017 8:17 PM
118	All good with current offerings	12/12/2017 8:13 PM
119	Rock climbing made legal!	12/12/2017 8:12 PM
120	More walking paths, not just in hiking trails.	12/12/2017 8:00 PM
121	Splash pads	12/12/2017 7:35 PM
122	Maybe add bike lane on Taft Hwy, james, timberlinks	12/12/2017 7:14 PM
123	no new ones	12/12/2017 7:13 PM
124	Lacrosse	12/12/2017 7:04 PM
125	I would like to have a dog park. Red Bank and Chattanooga both have dog parks and Signal needs one.	12/12/2017 7:02 PM
126	Indoor pool	12/12/2017 7:00 PM
127	NA	12/12/2017 6:58 PM
128	More walking biking trail	12/12/2017 6:54 PM
129	better trails , add moutnain bike trails taht dont allow atv	12/12/2017 6:52 PM
130	Organized, informational hikes; neighborhood gardening	12/12/2017 6:46 PM
131	?	12/12/2017 6:41 PM
132	More walking trails	12/12/2017 6:36 PM
133	Climbing gym	12/12/2017 6:36 PM
134	Climbing gym	12/12/2017 6:36 PM
135	I don't think any more are needed.	12/12/2017 6:29 PM
136	A bigger better girls softball league.	12/12/2017 6:27 PM
137	A dog park.	12/12/2017 6:21 PM
138	More sidewalks for safe walking to avoid traffic	12/12/2017 6:18 PM

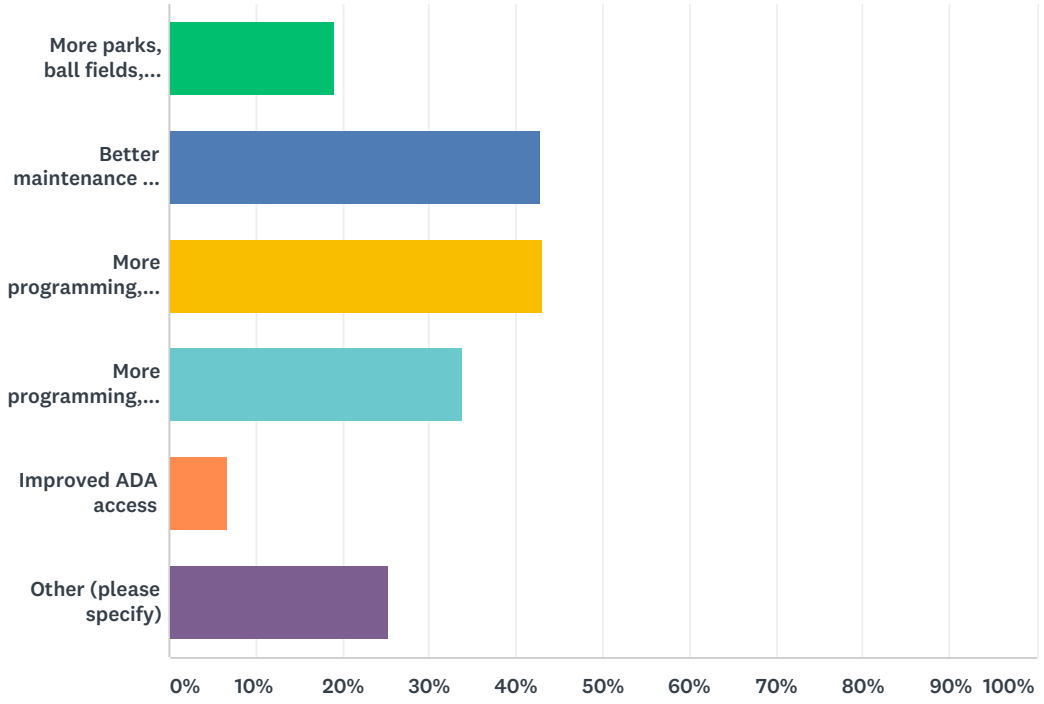
139	Lacrosse Bowling	12/12/2017 6:18 PM
140	Indoor walking during cold weather. The town gun is not available	12/12/2017 6:14 PM
141	Volleyball, not sure if it’s available or not.	12/12/2017 6:07 PM
142	Lacrosse	12/12/2017 6:01 PM
143	No	12/12/2017 5:55 PM
144	I would like more non sport recreation like bingo!	12/12/2017 5:55 PM
145	Bike trails	12/12/2017 5:49 PM
146	More walking trails. Easy terrain or paved walking tracks	12/12/2017 5:44 PM
147	no	12/12/2017 5:40 PM
148	better sidewalks in neighborhoods	12/12/2017 5:35 PM
149	Ice rink; tether ball	12/12/2017 5:31 PM
150	Lacrosse facilities	12/12/2017 5:12 PM
151	More field space for baseball, more gym space and fields for lacrosse, more sidewalks	12/12/2017 5:12 PM
152	More bike trails	12/12/2017 5:11 PM
153	more soccer fields	12/12/2017 5:06 PM
154	Bike trails	12/12/2017 5:06 PM
155	More trails and parks that aren't sports-specific for hiking, walking, etc.	12/12/2017 5:01 PM
156	Golf	12/12/2017 4:51 PM
157	Thai Chi, Yoga Classes, etc. for the elderly on limited fiscal resources. MAAC has some classes but are expensive. Senior Discounts?	12/12/2017 4:49 PM
158	year round swimming-indoor pool	12/12/2017 4:47 PM
159	Dog Park	12/12/2017 4:44 PM
160	No	12/12/2017 4:43 PM
161	More sports for toddlers	12/12/2017 4:43 PM
162	All good!	12/12/2017 4:41 PM
163	A dog park similar to the ones in Hixson, Red Bank, and other Chattanooga suburbs would be a good addition. With our leash laws it’s hard to find a place to let your pooch run free.	12/12/2017 4:40 PM
164	more trails!	12/12/2017 4:34 PM
165	mountain biking	12/12/2017 4:33 PM
166	Not at this time	12/12/2017 4:30 PM
167	Bike trails	12/12/2017 4:26 PM
168	Bike paths on road	12/12/2017 4:24 PM
169	Rock climbing. Indoor swimming	12/12/2017 4:21 PM
170	Indoor Rock climbing	12/12/2017 4:19 PM
171	Mountain Biking or hiking	12/12/2017 4:17 PM
172	Public Golf area (for non country club members). A driving range would be ideal but a chipping/putting green would be nice too.	12/12/2017 4:17 PM
173	Dog park More sidewalks	12/12/2017 4:15 PM
174	Lacrosse Mountain biking	12/12/2017 4:15 PM
175	More connectivity for biking on main roads.	12/12/2017 4:15 PM

176	It would be helpful for parents of children of different ages if a couple of the bucket swings at Althaus Park could be moved to the upper playground and a couple of the regular swings could be moved down to the lower playset. Swings are frequently mixed at other playgrounds, so it does not make sense why these cannot be. Please consider. It is safer for everyone, if a child is using an age appropriate swing.	12/12/2017 4:14 PM
177	Not sure yet, but just don't get ride of any that you already have.	12/12/2017 4:11 PM
178	A pool that's outside of the Town of Signal Mtn	12/12/2017 4:10 PM
179	No	12/12/2017 4:07 PM
180	More hiking trails and walker friendly lanes or sidewalks in Palisades area	12/12/2017 4:05 PM
181	Indoor pool. Pretty please.	12/12/2017 4:05 PM
182	Not currently	12/12/2017 4:02 PM
183	Multi use trail would be great	12/12/2017 3:57 PM
184	safe bike trails that connect Fox Run/Anderson Pike annexed areas to the heart of the mtn at Pruetts, etc.	12/12/2017 3:53 PM
185	More lap swimming opportunities at city pool when open. Would use daily. Often pools have 6-8, 11-1, etc. Tennis leagues. Mountain bikes trails. Running trails / paths. Racquetball.	12/12/2017 3:50 PM
186	Designated bike/hike trails; interconnected trails in a loop system throughout Town	12/12/2017 3:49 PM
187	Rock climbing for entire family	12/12/2017 3:48 PM
188	We enjoy mountain biking on designated biking trails.	12/12/2017 3:48 PM
189	Not that I can think of	12/12/2017 3:46 PM
190	More opportunities for yoga	12/12/2017 3:44 PM
191	Town hall bathroom and area before bath needs a thorough clean. Pro shop needs cleaning and organizing too.	12/12/2017 3:44 PM
192	more bike paths and safe ways to cross taft highway	12/12/2017 3:39 PM
193	Greenway connecting portions of the town	12/12/2017 3:38 PM
194	Organized clubs for walking for older citizens	12/12/2017 3:38 PM
195	na	12/12/2017 3:34 PM
196	more trails or paved areas for walking/strolling	12/12/2017 3:34 PM
197	Sculpture Garden	12/12/2017 3:34 PM
198	Easy accesses to Cumberland Trail from several points	12/12/2017 3:33 PM
199	Improved field conditions and more fields for sports...such as lacrosse.	12/12/2017 3:32 PM
200	Indoor Pool	12/12/2017 3:30 PM
201	More paved walking trails.	12/12/2017 3:29 PM
202	A playground at the MACC. Also, an indoor pool somewhere would be AMAZING.	12/12/2017 3:29 PM
203	No	12/12/2017 3:27 PM
204	Paint ball, beach volleyball (used to be courts at Signal Crest).	12/12/2017 3:27 PM
205	A dog park would be a great addition	12/12/2017 3:24 PM
206	No	12/12/2017 3:18 PM
207	INDOOR WALKING TRAIL WHERE DOGS ARE WELCOMED	12/12/2017 3:18 PM
208	A beautiful floral garden.	12/12/2017 3:18 PM
209	More walking trails and more sidewalks developed in neighborhoods for walking.	12/12/2017 3:18 PM
210	Disc Golf	12/12/2017 3:17 PM
211	Mountain Biking	12/12/2017 3:16 PM

212	Dog park!!	12/12/2017 3:16 PM
213	More sidewalks	12/12/2017 3:16 PM
214	None come immediately to mind.	12/12/2017 3:15 PM
215	More bike paths and walking paths away from vehicular traffic.	12/12/2017 3:15 PM
216	Motor cross	12/12/2017 3:14 PM
217	I think a covered pool for the cooler months would be welcomed by many.	12/12/2017 3:13 PM
218	More sidewalks for walking	12/12/2017 3:11 PM
219	Indoor pool	12/12/2017 3:10 PM
220	mountain bike specific trails, with a section for youth	12/12/2017 3:09 PM
221	A Multi-use Trail network connecting the various parks would be amazing.	12/12/2017 3:08 PM
222	Miniature golf	12/12/2017 3:07 PM
223	More mountain bike trails	12/12/2017 3:07 PM
224	Off-road connections to parks.	12/12/2017 3:06 PM
225	Dog park	12/12/2017 3:06 PM
226	More bike trails to get around the mountain by bike without being in the street.	12/12/2017 3:03 PM
227	No	12/12/2017 3:02 PM
228	Lacrosse and dog park	12/12/2017 2:59 PM
229	Ice skating	12/12/2017 2:59 PM
230	I'm good	12/12/2017 2:55 PM
231	Non-athletic recreation such as wildflower hikes, choral and music groups, reading groups, dramatic groups...	12/12/2017 2:53 PM
232	Golf	12/12/2017 2:51 PM
233	Volleyball court indoor & sand	12/12/2017 2:51 PM
234	Skate park for rollerblading and skateboarding	12/12/2017 2:51 PM
235	More walking trails. How about some sort of greenway connecting various neighborhoods if possible? Need a better option for pedestrian crossing Taft Highway, too. Sidewalks in Old Town are either broken and dangerous or not even existing. Texas gets a lot of foot traffic but no sidewalks.	12/12/2017 2:50 PM
236	Disc golf	12/12/2017 2:50 PM
237	More bike/pedestrian friendly	12/12/2017 2:48 PM
238	More purpose built bike trails.	12/12/2017 2:48 PM
239	Tennis hitting wall at courts by SMGCC	12/12/2017 2:48 PM
240	Sidewalks on Shackleford Ridge Road. Walking, jogging, kids on bikes...	12/12/2017 2:48 PM
241	none	12/12/2017 2:47 PM
242	More bike trails	12/12/2017 2:47 PM
243	Bike Lanes on street Mt. Bike Paths	12/12/2017 2:44 PM
244	Sometimes it seems as though there are more kids that want to play sports than there are fields available to handle them.	12/8/2017 2:45 PM

Q5 Which of the following improvements would encourage you to participate in recreation more frequently? (Choose all that apply)

Answered: 359 Skipped: 44



ANSWER CHOICES	RESPONSES	
More parks, ball fields, etc. close to where I live	18.94%	68
Better maintenance of existing facilities	42.90%	154
More programming, like exercise classes or guided hikes, for adults	43.18%	155
More programming, like summer camps or sports teams, for children	33.98%	122
Improved ADA access	6.69%	24
Other (please specify)	25.35%	91
Total Respondents: 359		

#	OTHER (PLEASE SPECIFY)	DATE
1	More adults only swim hours at pool	12/26/2017 10:54 AM
2	Arts & crafts classes	12/25/2017 2:45 PM
3	More playgrounds for young children	12/22/2017 10:12 AM
4	None	12/18/2017 9:40 PM
5	Did I mention greenways?	12/18/2017 9:16 AM
6	The outdoor town swimming pool needs entrance/exit step for senior citizens. The ladders are too vertical and short to allow easy use by seniors. Being in the water is excellent exercise for senior citizens. With the addition of steps, more seniors can exercise to stay healthy. A sling chair for a single person wouldn't be efficient and would be off putting for seniors.	12/17/2017 8:29 PM
7	Safer biking and running options on Signal Mountain. Wayfinding signage for trails and parks.	12/16/2017 11:03 PM

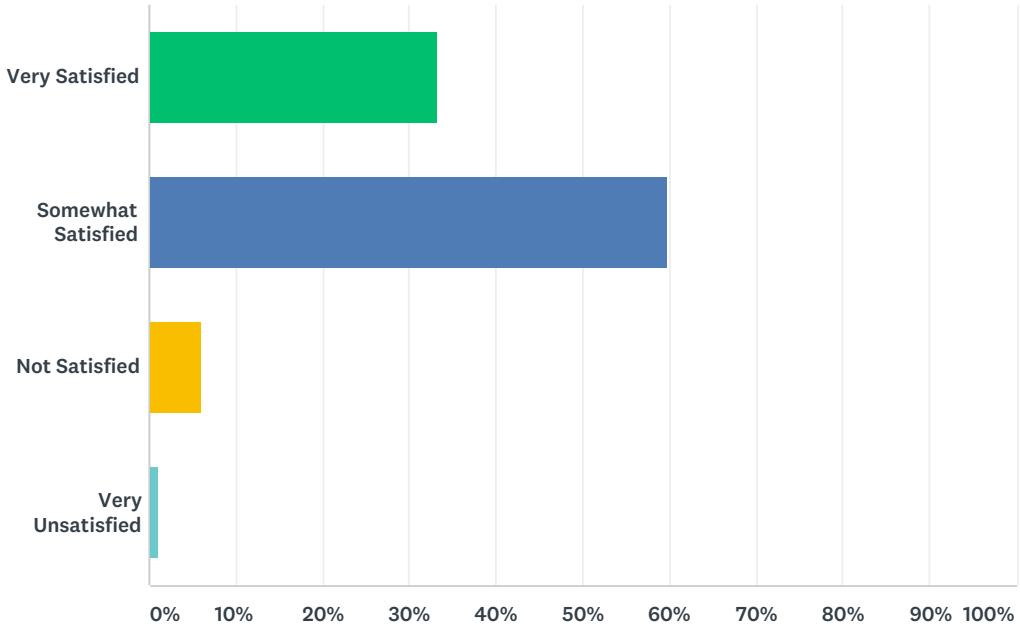
8	More sidewalks, crosswalks, and better marked and maintained trails!	12/15/2017 10:04 PM
9	Cheaper pool admission	12/15/2017 4:49 PM
10	Improved seating in parks	12/14/2017 6:00 PM
11	Improved seating in parks	12/14/2017 6:00 PM
12	Maintenance of trails and bridges in Rainbow Lake and Green Gorge	12/14/2017 5:17 PM
13	Dog Park where dogs can run off leash	12/14/2017 1:22 PM
14	I would like to see Hamilton County dept or rec working with SM in usage of all the shackleford road fields. It's sad that each field is "controlled" by a particular sport and no one else has access.	12/14/2017 11:14 AM
15	add sidewalks and trails, green belts etc to make it easier to ride bikes or walk	12/14/2017 10:39 AM
16	No answer	12/14/2017 6:33 AM
17	More indoor skills and development for younger children. Indoorr swimming, community yoga at the rec center	12/13/2017 11:52 PM
18	Expansion of offerings for all season use.	12/13/2017 10:10 PM
19	More time in a day could help	12/13/2017 8:50 PM
20	Better maintained fields from bees & wasp	12/13/2017 8:25 PM
21	Someplace to allow dogs off-leash;	12/13/2017 8:19 PM
22	More recreational activities for younger children and a dog park	12/13/2017 7:16 PM
23	Sidewalks	12/13/2017 3:22 PM
24	Pave our roads. Light our many dark streets.	12/13/2017 12:49 PM
25	practice and playing fields for lacrosse, summertime recreational programs for older kids - middle school - sports strictly for fun like basketball, lacrosse, tennis,	12/13/2017 10:43 AM
26	I am retired and do not have grandchildren. If I had grandchildren I would make more use of the town's facilities.	12/13/2017 8:58 AM
27	More opportunities to run without traffic	12/13/2017 8:32 AM
28	Developing new mountain bike trails	12/13/2017 8:10 AM
29	Improved bike lanes and more sidewalks on roads. It would be easier to get to parks if we had sidewalks.	12/13/2017 8:05 AM
30	Rock climbing	12/13/2017 1:35 AM
31	See previous answer	12/13/2017 12:56 AM
32	Dog park	12/12/2017 11:35 PM
33	Safe bike paths along Taft Highway and Palisades.	12/12/2017 11:20 PM
34	N/A	12/12/2017 10:47 PM
35	A dog park with open areas, shaded areas, benches. a water station and waste disposal bags and bins. Separate areas for large and small dogs.	12/12/2017 9:50 PM
36	See answer 4. Trails should connect existing facilities as well.	12/12/2017 9:21 PM
37	Less development .. more sidewalks and hiking trails	12/12/2017 9:05 PM
38	Sidewalks	12/12/2017 8:46 PM
39	Sidewalks	12/12/2017 8:45 PM
40	Sidewalks	12/12/2017 8:45 PM
41	Organized trail days to cleanup / maintain existing trails / parks	12/12/2017 8:45 PM
42	Bike trails	12/12/2017 8:37 PM
43	participation limited by age	12/12/2017 8:28 PM

44	More hiking, climbing and biking trails!	12/12/2017 8:25 PM
45	creation of new public spaces	12/12/2017 8:22 PM
46	Dogs on leashes	12/12/2017 8:17 PM
47	More basketball courts/gyms. Need more hoops please!	12/12/2017 7:45 PM
48	Info markers	12/12/2017 7:37 PM
49	More sidewalks to get to parks	12/12/2017 7:15 PM
50	you only gave options that require extra expendatures. You should have included "nothing new needed"	12/12/2017 7:13 PM
51	Lower cost at the town pool. $7 per adult is high considering what we pay for taxes	12/12/2017 7:02 PM
52	none	12/12/2017 6:36 PM
53	Tennis for kids	12/12/2017 6:36 PM
54	Tennis for kids	12/12/2017 6:36 PM
55	Sidewalks, paved trails safe for joggers or cyclists who don’t want to encounter traffic	12/12/2017 6:22 PM
56	I think every neighborhood should have a playground.	12/12/2017 6:21 PM
57	Sidewalks	12/12/2017 6:18 PM
58	Bike lanes	12/12/2017 5:40 PM
59	Bike trails and sidewalks	12/12/2017 5:11 PM
60	Bike lanes and sidewalks to get to the parks from my house.	12/12/2017 4:40 PM
61	parking - signal point and rainbow lake parking is horrible	12/12/2017 4:34 PM
62	Indoor swimming	12/12/2017 4:21 PM
63	Sidewalks everywhere	12/12/2017 4:15 PM
64	more adult swimming	12/12/2017 3:59 PM
65	more level walking paths	12/12/2017 3:59 PM
66	Tennis league	12/12/2017 3:50 PM
67	Bike/hike lanes; lower speed limit through Town and on Palisades	12/12/2017 3:49 PM
68	Better/safer pedestrian and biking paths throughout the town to access the community.	12/12/2017 3:48 PM
69	Adult coed, women’s leagues: kickball, basketball	12/12/2017 3:46 PM
70	safe bike lanes and crosswalks	12/12/2017 3:39 PM
71	Indoor pool and pool classes such as exercise	12/12/2017 3:30 PM
72	Specifically, more classes for Pre-K. But, really, we use all the Missoula do use regularly, and we are pretty happy.	12/12/2017 3:29 PM
73	Improvement of pool operations, hours, outdoor kitchen.	12/12/2017 3:27 PM
74	Better upkeep on hiking trails	12/12/2017 3:18 PM
75	Walking trails	12/12/2017 3:18 PM
76	“Share The Road” signs for cycling	12/12/2017 3:16 PM
77	Dog park	12/12/2017 3:16 PM
78	sidewalks	12/12/2017 3:16 PM
79	Safe walking and biking (away from vehicular traffic).	12/12/2017 3:15 PM
80	improved pool locker rooms, More shade (via umbrellas) around pool to protect young kids. Would love a "splash pad" somewhere. Those are great for younger kids who can't swim yet.	12/12/2017 3:13 PM
81	more sidewalks	12/12/2017 3:11 PM
82	sidewalks, bike lanes and safe street crossings for better access	12/12/2017 3:09 PM

83	The tennis courts require a proper restroom when other facilities are closed	12/12/2017 3:06 PM
84	Continue to support the existing programs and the MACC and Bachman programs	12/12/2017 3:03 PM
85	Evening and night hours at the pool in the summer	12/12/2017 2:59 PM
86	The town pool needs an overhaul. See Cramer Mountain Country Club Pool for an example of what would be nice for the new town pool.	12/12/2017 2:51 PM
87	Convenience	12/12/2017 2:50 PM
88	Tennis Courts at the town hall and bathroom needs work	12/12/2017 2:50 PM
89	Mountain biking and hiking groups for kids	12/12/2017 2:48 PM
90	Biking and hiking trails	12/12/2017 2:47 PM
91	group hikes	12/12/2017 2:44 PM

Q6 How would you rate your overall satisfaction with the variety of recreation amenities offered by Signal Mountain's parks and recreation facilities?

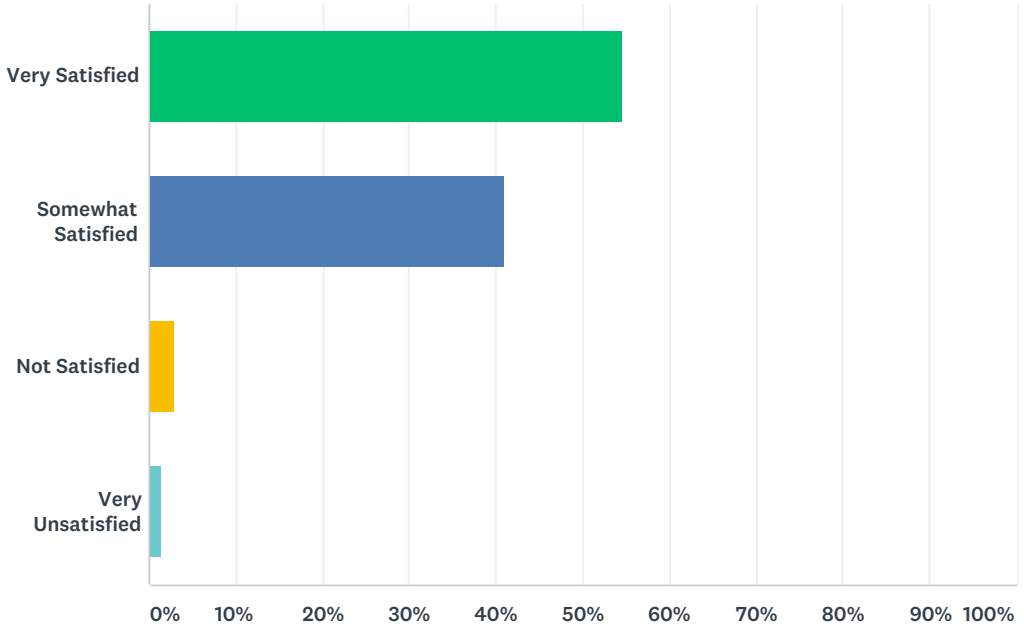
Answered: 400 Skipped: 3



ANSWER CHOICES	RESPONSES	
Very Satisfied	33.25%	133
Somewhat Satisfied	59.75%	239
Not Satisfied	6.00%	24
Very Unsatisfied	1.00%	4
TOTAL		400

Q7 How would you rate your overall satisfaction with the safety of Signal Mountain's parks and recreation facilities?

Answered: 396 Skipped: 7



ANSWER CHOICES	RESPONSES	
Very Satisfied	54.55%	216
Somewhat Satisfied	40.91%	162
Not Satisfied	3.03%	12
Very Unsatisfied	1.52%	6
TOTAL		396

Q8 Please identify any specific safety concerns related to the Town's parks and recreation facilities.

Answered: 184 Skipped: 219

#	RESPONSES	DATE
1	None	12/26/2017 10:54 AM
2	None	12/25/2017 3:52 PM
3	None	12/24/2017 4:04 AM
4	The Tennis Courts need to be resurfaced, specifically the top ones. The fence on the top courts also needs to be fixed.	12/23/2017 12:30 PM
5	Na	12/22/2017 3:00 PM
6	More lighting	12/22/2017 8:27 AM
7	N/a	12/20/2017 9:36 PM
8	We really need steps going into the pool for Moms and Grandmothers	12/20/2017 12:03 PM
9	The facilities are not ADA compliant and this causes a great safety issue for residents.	12/19/2017 3:36 PM
10	Bathrooms need to be unlocked for use. Maybe cameras installed if vandalism is a problem.	12/18/2017 9:40 PM
11	More police patrol	12/18/2017 9:33 PM
12	N/a	12/18/2017 3:14 PM
13	None	12/18/2017 9:16 AM
14	Outdoor swimming pool needs steps that allow senior citizens to safely enter and exit the water. Water exercise is excellent for older people--easy on the joints and fun. Steps would be useful for other groups of people also. Water exercise should be encouraged for all people. Water exercise classes could be offered-even Zumba can be practiced in the water. Steps could be added in the corners of the shallow end. The ladders are just too vertical and short to be practical for senior citizens. Lack of arm strength--a senior citizen problem --makes the ladders extremely difficult for older people. Steps are greatly needed.	12/17/2017 8:29 PM
15	There is so much traffic on Signal Mountain - and it continues to grow. There are so few safe areas for biking and running. Also, the lack of wayfinding signage makes it difficult to be aware of parks and trails.	12/16/2017 11:03 PM
16	none	12/16/2017 6:15 PM
17	N/a	12/16/2017 5:00 PM
18	Water quality - ecoli in streams due to old septic systems in high density neighborhoods. We avoid recreation around mountain streams.	12/16/2017 8:11 AM
19	Poorly marked hiking trails	12/15/2017 10:04 PM
20	N/A	12/15/2017 4:49 PM
21	no	12/14/2017 9:58 PM
22	I have none	12/14/2017 7:46 PM
23	None	12/14/2017 6:00 PM
24	None	12/14/2017 6:00 PM
25	Removal of dead trees and debris from trails and insure safety of bridges.	12/14/2017 5:17 PM
26	Would like to walk more. There are no crosswalks to CVS and across James to sidewalks in old town. The 6 way intersection and 5 way intersections dangerous.	12/14/2017 12:17 PM
27	Pitted fields. Several need to be graded and crowned to be corrected.	12/14/2017 11:30 AM

28	No safety issues	12/14/2017 11:14 AM
29	no safe places to walk to these parks and rec facilities	12/14/2017 10:39 AM
30	None	12/14/2017 9:32 AM
31	The tennis courts are in horrible shape and the surface is unsafe.	12/14/2017 8:54 AM
32	Need more bike lanes and sidewalks.	12/14/2017 7:07 AM
33	None	12/14/2017 6:33 AM
34	None	12/14/2017 12:55 AM
35	Playgrounds need to have more mulch protective ground cover	12/13/2017 11:52 PM
36	Trash pickup, random items left	12/13/2017 10:28 PM
37	Bathrooms can be gross.	12/13/2017 10:18 PM
38	None at this time	12/13/2017 10:10 PM
39	None	12/13/2017 8:50 PM
40	None I am aware of	12/13/2017 8:19 PM
41	I am not aware of safety concerns.	12/13/2017 8:19 PM
42	Water quality (e coli) in Town creeks.	12/13/2017 7:30 PM
43	.	12/13/2017 6:56 PM
44	The batting cages beside the town center are collapsing!	12/13/2017 6:53 PM
45	Norris Park could be better maintained	12/13/2017 6:31 PM
46	None	12/13/2017 6:29 PM
47	None.	12/13/2017 3:56 PM
48	The curse words that are still visible on our slides and playground equipment.	12/13/2017 3:38 PM
49	Drainage hole near concession stand/parking lot/announcer booth at town hall baseball complex	12/13/2017 3:26 PM
50	None	12/13/2017 3:22 PM
51	some of the trails need to be marked more clearly. the trail to mushroom rock wasn't marked at all until a citizen put up some streamers and a sign.	12/13/2017 10:43 AM
52	Bicycles that impede traffic. Especially those going up and down the mountain.	12/13/2017 9:35 AM
53	I see grafitti in some areas and the public bathrooms are rarely open unless a function is going on--especially Signal Point which draws a lot of off the mountain people.	12/13/2017 8:58 AM
54	Driver field has a tree hanging over the outfield fence, and soft spot/holes/various tripping hazards in the outfield grass area. The infield has lots of small rocks in it that can cause bad bounces (and injured infielders).	12/13/2017 8:32 AM
55	Trash along 4 wheel trails	12/13/2017 8:10 AM
56	None specific	12/13/2017 8:07 AM
57	Sidewalk access	12/13/2017 8:05 AM
58	None	12/13/2017 8:04 AM
59	The financial investment in recreation facilities for our town is disappointing. I would like to see the town run all of the youth rev programs instead of all the individual organizations which have a hard time working together.	12/13/2017 7:55 AM
60	Why is everything "in town". Why not do some stuff on the Sequatchie side of the mountain....like fix the Sequatchie overlook up.	12/13/2017 7:34 AM
61	N/A	12/13/2017 7:21 AM
62	None	12/13/2017 6:36 AM
63	Just ongoing maintenance	12/13/2017 6:31 AM

64	Not satisfied with the conditions of the bathrooms at the pool and tennis courts . Actually, ashamed to have guest visit the facilities. Signal Mountain has such a great reputation and then guest from off the mountain come for swim meets or to play or watch a tennis match and have to use our bathrooms. It is embarrassing. I know there are updates planned in the future but paint and cleaning wouldn't hurt until the the time comes.	12/13/2017 5:56 AM
65	none	12/13/2017 5:20 AM
66	None	12/13/2017 1:35 AM
67	None	12/12/2017 11:34 PM
68	The shoulder along Taft Highway should be separated from the traffic lane with a raised curb or other protective barrier. Also, there should be a wide, safe bike lane along Palisades which is a curvy, narrow road that separates my subdivision, Carriage Hill, from Taft Highway.	12/12/2017 11:20 PM
69	Condition of side walks in Old Town.	12/12/2017 10:58 PM
70	None	12/12/2017 10:47 PM
71	more trash cans	12/12/2017 10:33 PM
72	None	12/12/2017 10:19 PM
73	Trail upkeep on rainbow lake not great. In Feb last year My 8 year old son got a significant cut on his arm last year trying to jump over a tree fallen across the path. It had a very sharp branch sticking straight up.	12/12/2017 10:07 PM
74	None	12/12/2017 10:02 PM
75	None	12/12/2017 9:57 PM
76	None at this point	12/12/2017 9:55 PM
77	Maintaining playground equipment, mulch, and general upkeep	12/12/2017 9:54 PM
78	Water quality in streams	12/12/2017 9:41 PM
79	None	12/12/2017 9:21 PM
80	Not well taken care of	12/12/2017 9:13 PM
81	None	12/12/2017 9:05 PM
82	better lighting	12/12/2017 8:51 PM
83	Na	12/12/2017 8:50 PM
84	LIGHTING	12/12/2017 8:46 PM
85	More sidewalks would make walking safer!	12/12/2017 8:46 PM
86	More sidewalks would make walking safer!	12/12/2017 8:45 PM
87	More sidewalks would make walking safer!	12/12/2017 8:45 PM
88	Once while hiking & setting up camp near Rainbow Lake with my kids a really sketchy guy came walking thru camp with a pitbull on a heavy chain. Said he had hiked from his house near Edward Point. Looked like he was on drugs. We packed up camp and left. But on walk down did see Signal Mountain police. Liked that they frequently hike these trails. Keep that up.	12/12/2017 8:45 PM
89	Continue doing a good job making areas safe and not worry about profiling.	12/12/2017 8:40 PM
90	none	12/12/2017 8:33 PM
91	None	12/12/2017 8:24 PM
92	we can better utilize the space deeded as parks with landscaping, hardscaping, additional structures, and planning. Let's focus on improving spaces already maintained before purchasing/acquiring new spaces	12/12/2017 8:22 PM
93	Vandalism isn't always handled quickly, and causes safety concerns.	12/12/2017 8:22 PM
94	No concerns	12/12/2017 8:13 PM
95	Cracks in the tennis courts could be dangerous.	12/12/2017 8:04 PM

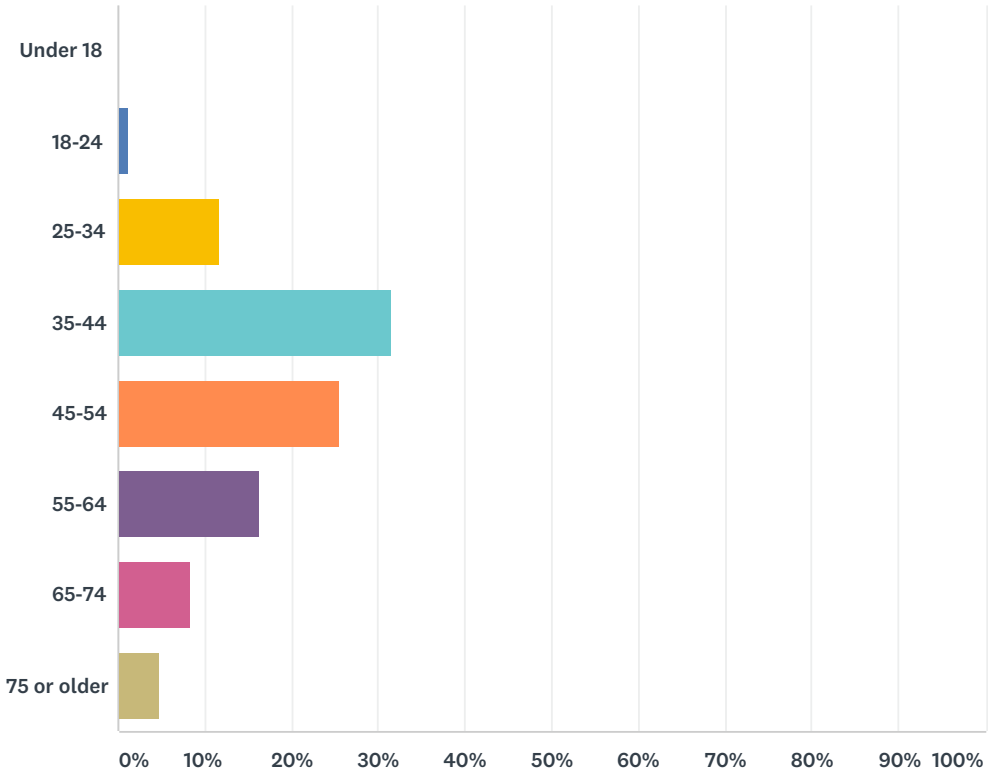
96	Great number of parked cars during the events (baseball, football) at the Town Hall fields can be dangerous for kids	12/12/2017 7:45 PM
97	none	12/12/2017 7:13 PM
98	Safety maintenance	12/12/2017 7:04 PM
99	Limited parking	12/12/2017 7:00 PM
100	NA	12/12/2017 6:58 PM
101	na	12/12/2017 6:52 PM
102	None	12/12/2017 6:46 PM
103	Need side walks from town hall to the plaza for the kids	12/12/2017 6:41 PM
104	A crossing on Taft Hwy to shopping center	12/12/2017 6:36 PM
105	A crossing on Taft Hwy to shopping center	12/12/2017 6:36 PM
106	When there is a safety concern at a playground it should be fixed. Not torn down.	12/12/2017 6:21 PM
107	Excessive traffic as development continues. This should be taken in to consideration as development outpaces infrastructure	12/12/2017 6:18 PM
108	No specific ones I can think of	12/12/2017 6:18 PM
109	The wooden and metal bleachers at Altus fields are very dangerous	12/12/2017 6:14 PM
110	We are new here and played lacrosse. Felt like we were being hidden in the back also not friendly for kids and or parents to get to the bathrooms.	12/12/2017 6:07 PM
111	None	12/12/2017 6:01 PM
112	setting fires and leaving trash on the trails	12/12/2017 5:59 PM
113	None	12/12/2017 5:55 PM
114	none	12/12/2017 5:49 PM
115	Glad to see Pumpkin Patch getting a facelift. Have always loved all of the parks. They seem better maintained now than about 10-15 years ago	12/12/2017 5:44 PM
116	none	12/12/2017 5:40 PM
117	Pool needs attention especially locker rooms. Athleus park trash collection and restrooms	12/12/2017 5:35 PM
118	N/a	12/12/2017 5:31 PM
119	Need a lacrosse field	12/12/2017 5:20 PM
120	Bee stings and snakes at parks	12/12/2017 5:12 PM
121	None	12/12/2017 5:11 PM
122	none	12/12/2017 5:06 PM
123	N/A	12/12/2017 5:01 PM
124	None	12/12/2017 4:51 PM
125	The softball fields behind the country club are always in bad shape. There are often large holes, broken bleachers, and random pipes/cables sticking out of the ground. The electrical panel is also in bad shape and causes problems. The pavilion at Althaus Park also had electrical problems when we had a party here in October and we were left with no lighting.	12/12/2017 4:43 PM
126	None	12/12/2017 4:43 PM
127	upkeep	12/12/2017 4:41 PM
128	not a safety issue but why is softball so ignored? Is it because it is a girl's sport? Baseball fields are much better maintained and plentiful.	12/12/2017 4:34 PM
129	None	12/12/2017 4:30 PM
130	None	12/12/2017 4:24 PM
131	gym floors are too slick	12/12/2017 4:21 PM

132	Better bleachers	12/12/2017 4:19 PM
133	None	12/12/2017 4:17 PM
134	Lack of lighted playgrounds, emergency phones would be great	12/12/2017 4:17 PM
135	My daughter twisted her ankle due to uneven ground on the fields behind the town pool.	12/12/2017 4:17 PM
136	None	12/12/2017 4:15 PM
137	Swings for handicapped children at Althaus Park do not have harnesses.	12/12/2017 4:14 PM
138	The fence on one of the tennis courts is in dire need of repair	12/12/2017 4:07 PM
139	The bathrooms at the pool are a disgrace. Also, I don't think all the lifeguards take their jobs seriously.	12/12/2017 4:05 PM
140	Fences around playground areas for children with special needs.	12/12/2017 4:05 PM
141	Parking lots! Most facilities do not have adequate parking and/or lots in disrepair causing safety issues when trying to enter/leave lots	12/12/2017 4:02 PM
142	off leash dogs are a big problem even where there are signs	12/12/2017 3:59 PM
143	None	12/12/2017 3:57 PM
144	Facilities Are all very outdated	12/12/2017 3:55 PM
145	Better access to get to them. Otherwise happy with what they are safety wise.	12/12/2017 3:50 PM
146	None	12/12/2017 3:48 PM
147	None.	12/12/2017 3:48 PM
148	None	12/12/2017 3:46 PM
149	None	12/12/2017 3:44 PM
150	We cross taft highway to get to town hall gym and tennis courts and would love a crosswalk at any point between cvs and the town hall. We live on Cherokee Ln and I know this is true for all of us in this area.	12/12/2017 3:39 PM
151	We need more baseball, football and soccer fields.	12/12/2017 3:38 PM
152	none	12/12/2017 3:34 PM
153	Better footing on trails (seniors). Handrails or Roping holds where trail narrow, any fall potentially life-threatening, wet / icy conditions and at any stream crossing.	12/12/2017 3:33 PM
154	Not adequate parking at some town fields. Lack of field/park lighting. Sidewalks that are available are not maintained; other areas really could use sidewalks. It would be nice that there was s thought out plan that can tie the town of Signal together like other communities, i.e, Hilton Head, SC or Amelia Island, FL.	12/12/2017 3:32 PM
155	We have not experienced any cause for concern.	12/12/2017 3:29 PM
156	NA	12/12/2017 3:27 PM
157	Rainbow Lake dam has a risk of failing and is a hazard for users. Rainbow Lake needs a management plan.	12/12/2017 3:27 PM
158	I'm not sure who owns or maintains Shackleford Ridge park and Sam Powell Dr, but that road needs sidewalks. It's very dangerous walking from the trail heads to the various ball fields and other areas. The roads have little to no shoulder.	12/12/2017 3:24 PM
159	None	12/12/2017 3:18 PM
160	Not well lighted at night. Any supervision of children?	12/12/2017 3:18 PM
161	Thank you for giving Signal Mtn Lacrosse places to play when no one else will. It means the world to our kids (& parents!!)	12/12/2017 3:18 PM
162	None that I've noticed.	12/12/2017 3:17 PM
163	Clean up of Rainbow Lake waterway	12/12/2017 3:16 PM
164	Polluted streams, broken sidewalks	12/12/2017 3:16 PM

165	None.	12/12/2017 3:15 PM
166	Speeding and distracted drivers in residential areas and near parks.	12/12/2017 3:15 PM
167	Na	12/12/2017 3:14 PM
168	I think proposed bike lanes will be a huge mistake.	12/12/2017 3:13 PM
169	crosswalks	12/12/2017 3:11 PM
170	Trail maintenance is sometimes poor and can be hazardous	12/12/2017 3:07 PM
171	Do something with the gravel and drainage at the soccer fields so the cars don’t bottom out and the grass isn’t soggy	12/12/2017 3:03 PM
172	None	12/12/2017 2:55 PM
173	No specific concerns	12/12/2017 2:51 PM
174	Age of equipment	12/12/2017 2:51 PM
175	See comment about the town pool.	12/12/2017 2:51 PM
176	I think our town does a great job and we're blessed with an area safer that many other places. As such, safety within those areas isn't really as big a concern (due to the existing environment we enjoy). Focus more on smoking/vaping/drugs in schools and keeping those out!	12/12/2017 2:50 PM
177	None	12/12/2017 2:50 PM
178	None	12/12/2017 2:48 PM
179	Need more sidewalks/bike paths for kids to stay out of traffic.	12/12/2017 2:48 PM
180	Lacrosse fields	12/12/2017 2:48 PM
181	Pumpkin Patch improvements that are currently happening. Thanks to the volunteers and donors!	12/12/2017 2:48 PM
182	none	12/12/2017 2:47 PM
183	none	12/12/2017 2:44 PM
184	None	12/8/2017 2:45 PM

Q9 Demographic Data: What is your age?

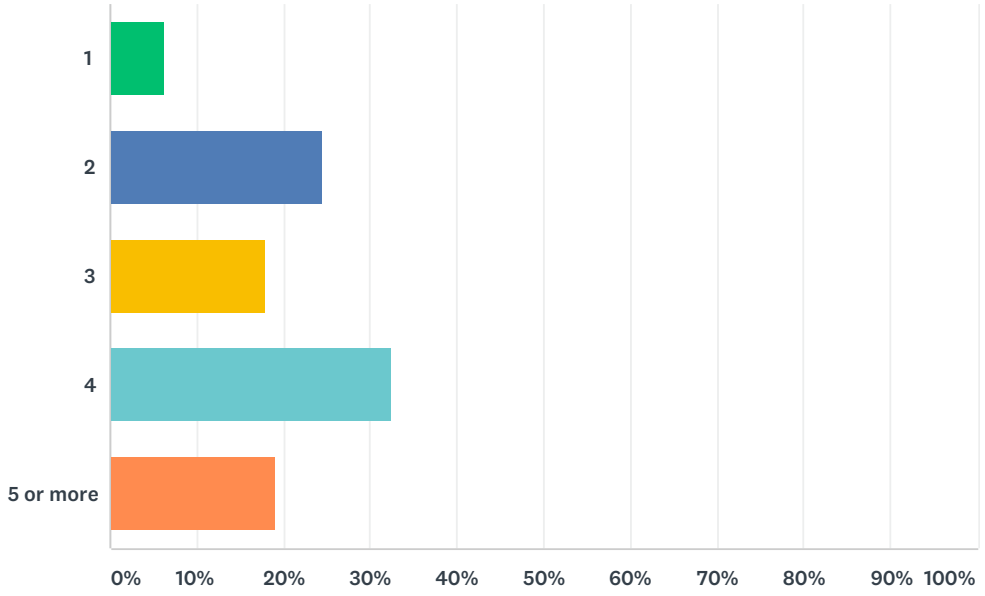
Answered: 402 Skipped: 1



ANSWER CHOICES	RESPONSES	
Under 18	0.25%	1
18-24	1.24%	5
25-34	11.69%	47
35-44	31.59%	127
45-54	25.62%	103
55-64	16.42%	66
65-74	8.46%	34
75 or older	4.73%	19
TOTAL		402

Q10 Demographic Data: How many persons currently live in your household?

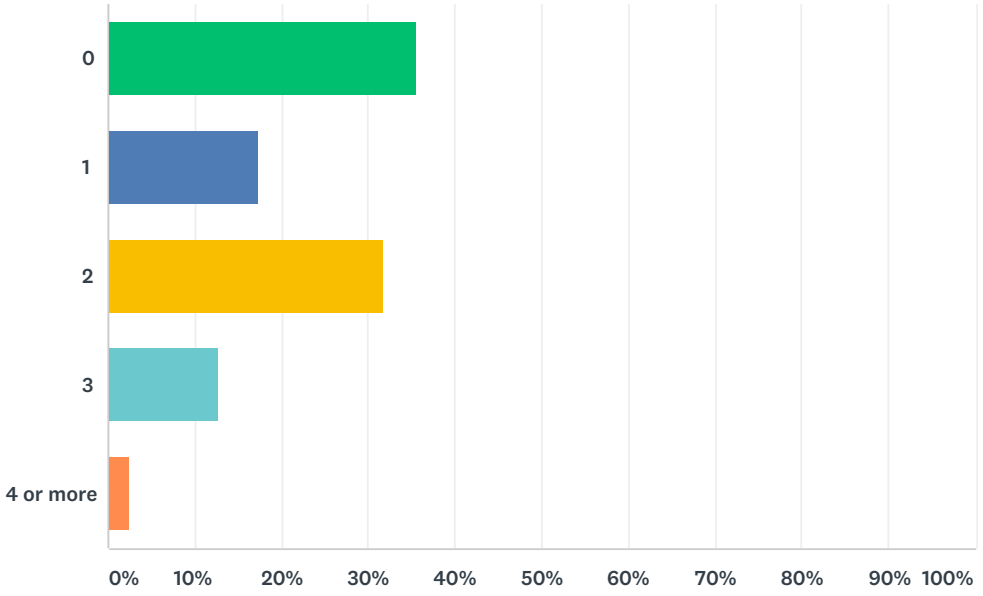
Answered: 401 Skipped: 2



ANSWER CHOICES	RESPONSES	
1	6.23%	25
2	24.44%	98
3	17.96%	72
4	32.42%	130
5 or more	18.95%	76
TOTAL		401

Q11 Demographic Data: How many members of your household are under 18?

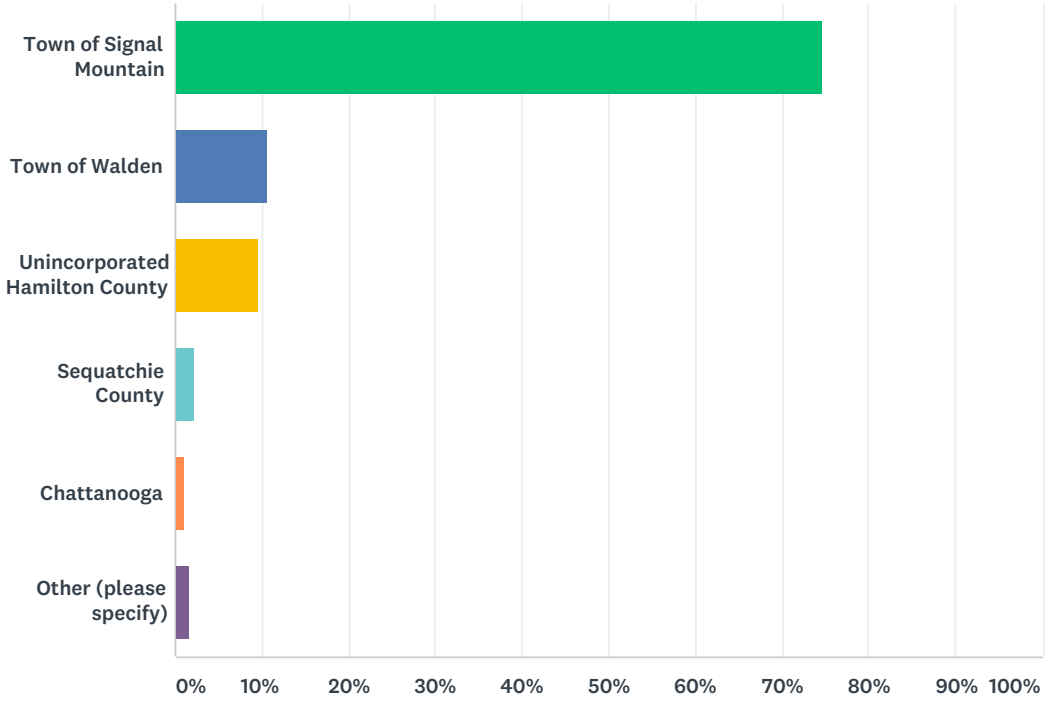
Answered: 402 Skipped: 1



ANSWER CHOICES	RESPONSES	
0	35.57%	143
1	17.41%	70
2	31.84%	128
3	12.69%	51
4 or more	2.49%	10
TOTAL		402

Q12 Demographic Data: Where do you currently live?

Answered: 403 Skipped: 0



ANSWER CHOICES	RESPONSES	
Town of Signal Mountain	74.69%	301
Town of Walden	10.67%	43
Unincorporated Hamilton County	9.68%	39
Sequatchie County	2.23%	9
Chattanooga	0.99%	4
Other (please specify)	1.74%	7
TOTAL		403

#	OTHER (PLEASE SPECIFY)	DATE
1	Ringgold	12/12/2017 6:41 PM
2	Chattanooga technically, but side of Signal physically.	12/12/2017 4:11 PM
3	Red bank	12/12/2017 3:19 PM
4	Chattanooga but we Own property on the mountain and have a lot of family there	12/12/2017 3:15 PM
5	Unicorporated Ham Co., but will move to the town next year.	12/12/2017 3:13 PM
6	Whitwell	12/12/2017 2:48 PM
7	Red Bank	12/8/2017 2:45 PM