

12

WHITE OAK MOUNTAIN AREA PLAN



Apison
Collegedale
East Brainerd
Ooltewah
Summit



2-11-19 - Adopted by the Chattanooga-Hamilton County

Regional Planning Commission

WHITE OAK MOUNTAIN AREA PLAN Draft 8/14/18

Acknowledgements

Many thanks go out to those who participated in the White Oak Mountain Area Plan process including the Hamilton County Commission, Chattanooga City Council, the City of Collegedale and multiple departments. Additionally, the following individuals served on the White Oak Mountain Advisory

Committee. Their volunteer time and efforts are much appreciated.

Rick Roberts Habitat for Humanity
Kristy Smedley Environmental Science/S&ME
Alan Reimann Electronics and Sales
David Barto Landscape Design
Duane Horton Developer/Scenic Land Company
Scottie Neil Finance/Banking
Sterling Jetton Pastor/Friends of E. Brainerd
Shaleigh Cronan Realtor/Contractor
Andy Hodes Realtor/Keller Williams
DeWarren Washington Engineer/TVA
Bob Kincaid Engineer/Pilot/Veteran
Mike Steele Payroll Services
Jay Bell Developer
RC Hoff Planner/Educator (retired)
Dean Moorehouse Healthcare (retired)
Barry Payne Developer/Planning Commission
Kelly Martin Planner/City of Collegedale
Charles Adamson Developer/Adamson Developers
Tom Lamb County Parks
Connie Vaughan McKee Foods/Industry
Jake Stone McKee Foods/Industry
Mike Hartline Retired

Additionally, the following Chattanooga-Hamilton County Regional Planning Agency (RPA) staff members contributed to the development of this plan.

Karen Hundt, *Director, Community
Planning & Design, AICP*

Travis Kazmierzak, *Senior*

Planner Justin Tirsun, Senior

Planner

Pamela Glaser, *Principal Planner*

Andrew Ray, *Principal Planner*

Courtney Geary, *Senior Planner*

Jonathan Gibbons, *Green Trips*

Coordinator Stephanie Koop, UTC

Intern

Cassidy Campbell, *UTC Intern*

Randy Pullen, *GIS Specialist*

Aleeta Zeller, *GIS Specialist*

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Prologue

From the Director:

With one of the highest residential growth rates in Hamilton County, the White Oak Mountain area consists of a collection of mostly suburban and rural communities that are wrestling with how to manage this growth. Many residents moved to the area because of the scenic rural landscapes, quiet neighborhoods and good schools. These very amenities are drawing more residents as Hamilton County continues to attract jobs and people as a regional destination. While it is expected that growth does bring some change, that change does not have to mean a loss of livability or the scenic amenities that make the White Oak Mountain area home. Having a plan that can guide this growth provides predictability, promotes coordination between new development and public services, and provides decision makers with the policy tools to promote development that enhances the area's unique features.

This plan seeks to provide this guidance by offering policy options for the built environment, transportation and natural resource systems that define this area. These recommendations include promoting green buffers along existing roads to retain rural character as new development takes place, encouraging new development where sewer services and schools are already or planned to be located, while limiting development on sensitive steep slopes, floodplains and established rural areas. To provide flexibility for each site, the policy options are not intended to be prescriptive or to be used in the review of specific development proposals. Instead they are intended to serve as an informational resource for developers and citizens.

The plan highlights some of the existing road improvement plans underway to address growing traffic congestion, and identifies options to improve the performance of our existing transportation system through pedestrian connections to schools and established commercial centers, use of access management to minimize curb cuts on busy road corridors, and context sensitive road design that responds to the scenic character of the area's rural roads.

This plan also uses a "placemaking" approach that organizes future development patterns around "Place Types" that reflect the suburban, rural and urban qualities that define the White Oak Mountain area. These "Place Types" provide greater predictability for the location and character of future growth. Existing rural areas that do not have sewer services are encouraged to remain rural, while existing areas already served by sewer are noted for suburban or urban development. Some locations close to schools and existing commercial centers are recommended for "mixed residential housing" to accommodate apartments, townhomes and other housing forms that supply the housing needs of the work force. Finally, future commercial development is recommended to be focused around existing nodes and intersections to avoid "strip development," and to have a character that is walkable and can accommodate a wider variety of activities.

These recommendations are based on the issues and aspirations residents shared with staff through three community surveys, seven community meetings and eight advisory committee meetings. Throughout the 12- month process, over 500 people participated. These issues can be summarized into three main topics as noted below:

- Balance growth with adequate infrastructure. Traffic congestion is a growing concern among residents. As new schools are built, more people are moving to this area. Participants were

concerned about how to direct housing growth to areas that have adequate services.
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- Retain the “Rural Character” of the White Oak Mountain area. This was one of the top comments voiced during the public meetings and survey results. Maintaining existing character in areas where growth or change is occurring is a concern.
- Improve the quality of commercial development. There is a desire for additional retail, restaurants, medical and other commercial uses as part of the community’s growth, but with better quality and design that reflects the area’s scenic character.

These issues drive the main theme of the plan: to grow responsibly by promoting development in areas with adequate infrastructure, while also preserving and enhancing the unique scenic qualities of the area, so that as growth occurs, these assets are retained.

This plan is just the beginning. It sets forth principles and policy options, and a palette of Place Types, to be used as a guide for the Chattanooga-Hamilton County Regional Planning Commission, County Commissioners and Council members. The monthly decisions made by these officials, and the public service providers (schools/sewer/roads) ultimately determine the future of this community. Using this document as a guide, these decisions can promote a future that is in keeping with the aspirations of the area’s residents and business leaders. Many thanks to the Hamilton County Commission, City of Chattanooga and Planning Commission who sponsored this plan, as well as to the citizen stakeholders who spent many hours in meetings with staff to develop this plan.

Respectfully,

John Bridger, Executive Director

Chattanooga-Hamilton County Regional Planning Agency



1. Introduction/Background

1.1 Planning Framework

The Regional Planning Agency (RPA) has been tasked with developing a strategy for policies and tools that promote the appropriate balance of development and conservation throughout Hamilton County. The response is a 3-step county-wide initiative called *Growing Forward: A Framework for Hamilton County* that includes:

Step 1) *Renewing our Vision – A Countywide Comprehensive Plan (adopted in 2016)*

Step 2) *Strategy for Great Places – 12 Area Plans that will cover all of*

Hamilton County Step 3) *Building the Future – A Policy and Code Update*

During Step 1, Hamilton County was divided in 12 geographic areas. The RPA will systematically create Area Plans for each one over the next several years. Within each of these Area Plans goals, recommendations and development policy from Step 1 will be scaled to meet the varying needs and character of each area.

Once adopted, Place Types will inform monthly zoning decisions and are intended for use by elected officials, government staff, and private development. Area Plans must also align with the Chattanooga-Hamilton County /North Georgia Regional Transportation Plan (RTP) in terms of land use policy and future investments.

Working with the public to identify key issues and develop preferred options is an integral part of the area planning process. Community input helps determine which parts of an area are likely to

experience a complete transformation, which are in a state of gradual transition, and which areas are likely to remain the same.

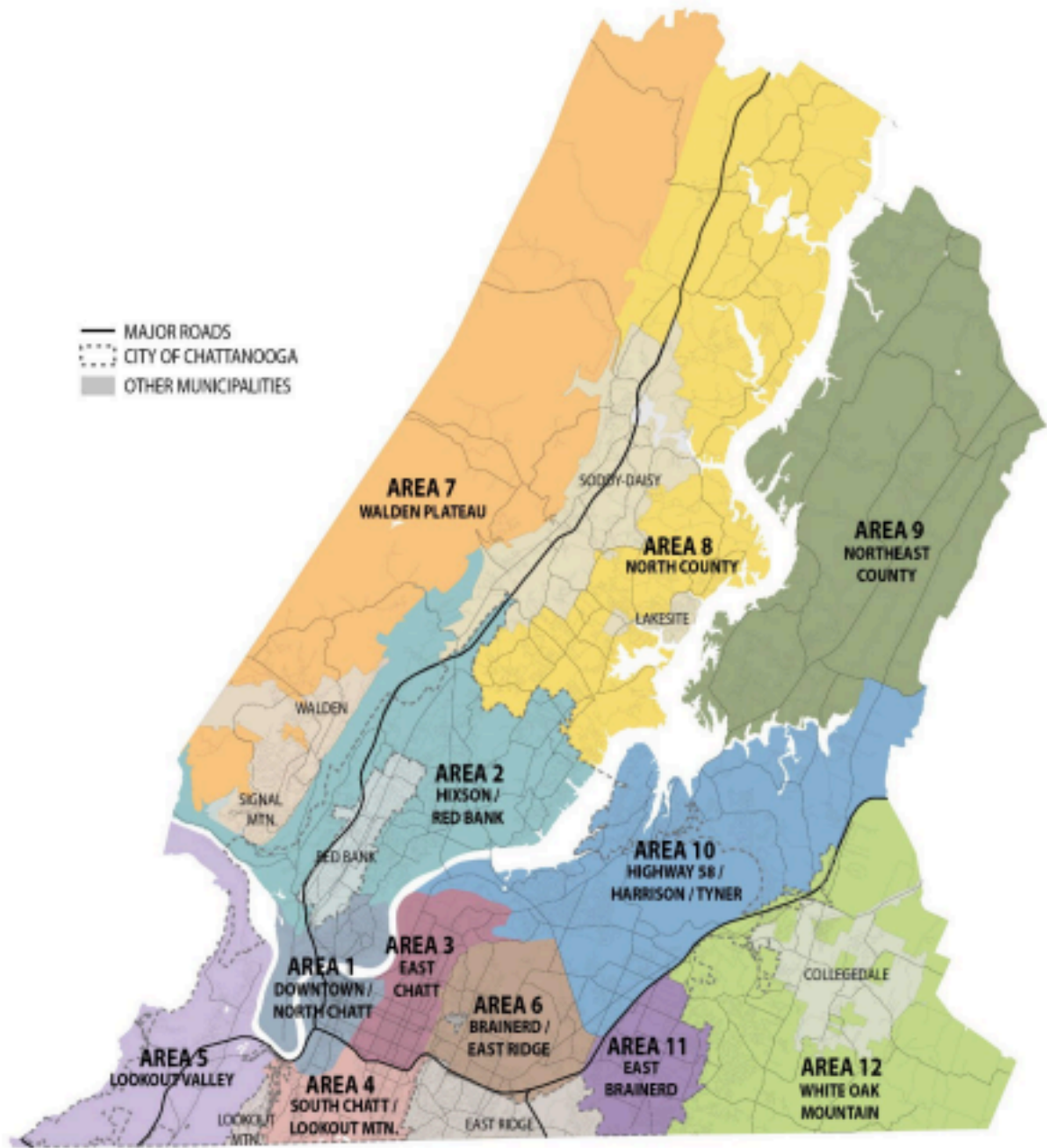
The intention behind integrating these planning efforts is to establish a unified vision, coordinate public investments with private development, and to promote place-based development patterns that support the needs and aspirations of Hamilton County residents. Taking a proactive approach to managing future growth is crucial to a community's long term viability.

COMPREHENSIVE PLAN

The countywide Comprehensive Plan (*Renewing our Vision*), along with the Regional Transportation Plan, sets the broader vision and policy for future physical development across all of Hamilton County. Its six overarching goals are carried forward and serve as a general basis for subsequent Area Plans. <https://chcrpa.org/index.php/planning/projects/comprehensive-plan/> The goals serve as basic themes that should be found in all new development as Hamilton County moves forward. Area Plans should incorporate these goals in future recommendations.



Figure 1.1 - HAMILTON COUNTY PLANNING AREAS



COMPREHENSIVE PLAN GOALS

GOAL 1: BUILD COMPLETE COMMUNITIES

A complete community, large or small, meets the basic needs of its residents. Those basic needs include, but are not limited to, housing, shopping, entertainment, employment, recreation, education and transportation options.

GOAL 2: BUILD CONNECTED COMMUNITIES

A connected community has a variety of transportation options connecting all of its community components described in Goal 1 as well as connecting it to other nearby communities. Those transportation options within each community or neighborhood may include some of the following: walking, biking, local or express bus service, commuter rail, on-demand transit, park and rides, carpooling or ride sharing, taxis, individual automobiles, ferries and other watercraft, and aviation.

GOAL 3: CREATE HEALTHY COMMUNITIES

A healthy community keeps its air and water clean. It recognizes the delicate balance between its natural systems and its man-made systems. The natural systems include wetlands, large forested and wooded areas, water sources, hillsides, and floodplains.

GOAL 4: CREATE SAFE COMMUNITIES

A safe community has inviting public areas including sidewalks, streets, parking areas, and parks. If a community's public areas feel unsafe or uninviting, people will not use them, perpetuating the condition. Inviting public areas are safe public areas because they encourage more use and activity.

GOAL 5: FOSTER UNIQUE AND ATTRACTIVE COMMUNITIES

A unique community celebrates its own special character, or "sense of place." A community's sense of place is typically influenced by its history, location, culture, natural features, special landmarks, physical form, and architecture. Protecting and enhancing these elements contributes to a community's identity and is what clearly distinguishes it from other communities. An attractive community is pleasing to the senses. It may draw attention because it is visually attractive or simply because it remains consistently clean and tidy. The buildings may be purposely arranged and designed in such a way to attract the eye.

GOAL 6: ENCOURAGE ECONOMICALLY VIBRANT COMMUNITIES

Economic growth through jobs, land development, and new housing provides opportunities for Hamilton County citizens to prosper, existing businesses to expand, and local government to grow the tax base to pay for public services and infrastructure.

The Comprehensive Plan also includes a Development Policy Map indicating appropriate intensity levels for new development. These intensity levels range from Intensity Level – 1 (least appropriate for development) to Intensity Level 5 (most appropriate for development), based on the presence of transportation infrastructure and sensitive natural resources. This Development Policy Map serves as the context for recommending more specific Place Types in each Area Plan. Areas indicated as low intensity on the map should have more specific policies that promote low intensity development or natural resource conservation, whereas higher intensity areas should be appropriate for more intensive development due to the availability of transportation infrastructure. (See *Chapter 2: Research & Analysis - Development Patterns*, page 35.)

1.2 Area Plans

WHAT IS AN AREA PLAN?

As part of the Comprehensive Plan, the RPA divided Hamilton County into 12 smaller geographic Areas as shown on the map (page 3). These Area Plans are intended to support the vitality and livability of Hamilton County with an emphasis on “placemaking” by answering the following questions:

- Where should growth occur? How much growth can be accommodated?
- Where should growth be limited?
- What physical qualities about this community should be preserved or enhanced as it grows?
- Which areas are ready for a transformation?
- What are the future transportation and infrastructure needs of the community?



Recommendations in the Area Plans are based on previous planning efforts, public input, professional planning principles, and an analysis of current and projected socioeconomic data, development trends, natural resources, and transportation needs.

Area Plans should be used by elected officials, government staff, private developers, business owners and residents. They are intended to serve the following purposes:

- Engage citizens to establish a shared vision and goals that reflect each community’s deeply rooted values and unique context of place.
- Provide a general policy guiding where, when, and how much new growth, redevelopment and preservation should occur, based on infrastructure capacity and the vision set forth by the people who live and work in the area. A plan is not meant to be a rigid solution, but a guide based on the community’s desires.
- Identify the most appropriate locations for a diversity of housing types that will support the county’s changing demographics and lifestyle preferences.
- Identify viable, existing commercial “centers” that can be expanded or redeveloped with an emphasis on clustering retail, offices and housing in a walkable pattern that can also support transit now or in the future.
- Better coordinate investments in transportation, sewers, schools, parks and other infrastructure with development to ensure more responsible use of tax dollars across the county.
- Incorporate, or replace, previously adopted plans.
- Inform monthly zoning decisions.
- Prioritize the implementation of the recommendations outlined in the Area Plan.
- Present alternative development options for specific locations, when applicable.
- Assign Place Types to better describe intended land uses with an emphasis on form and character.

HOW IS AN AREA PLAN USED?

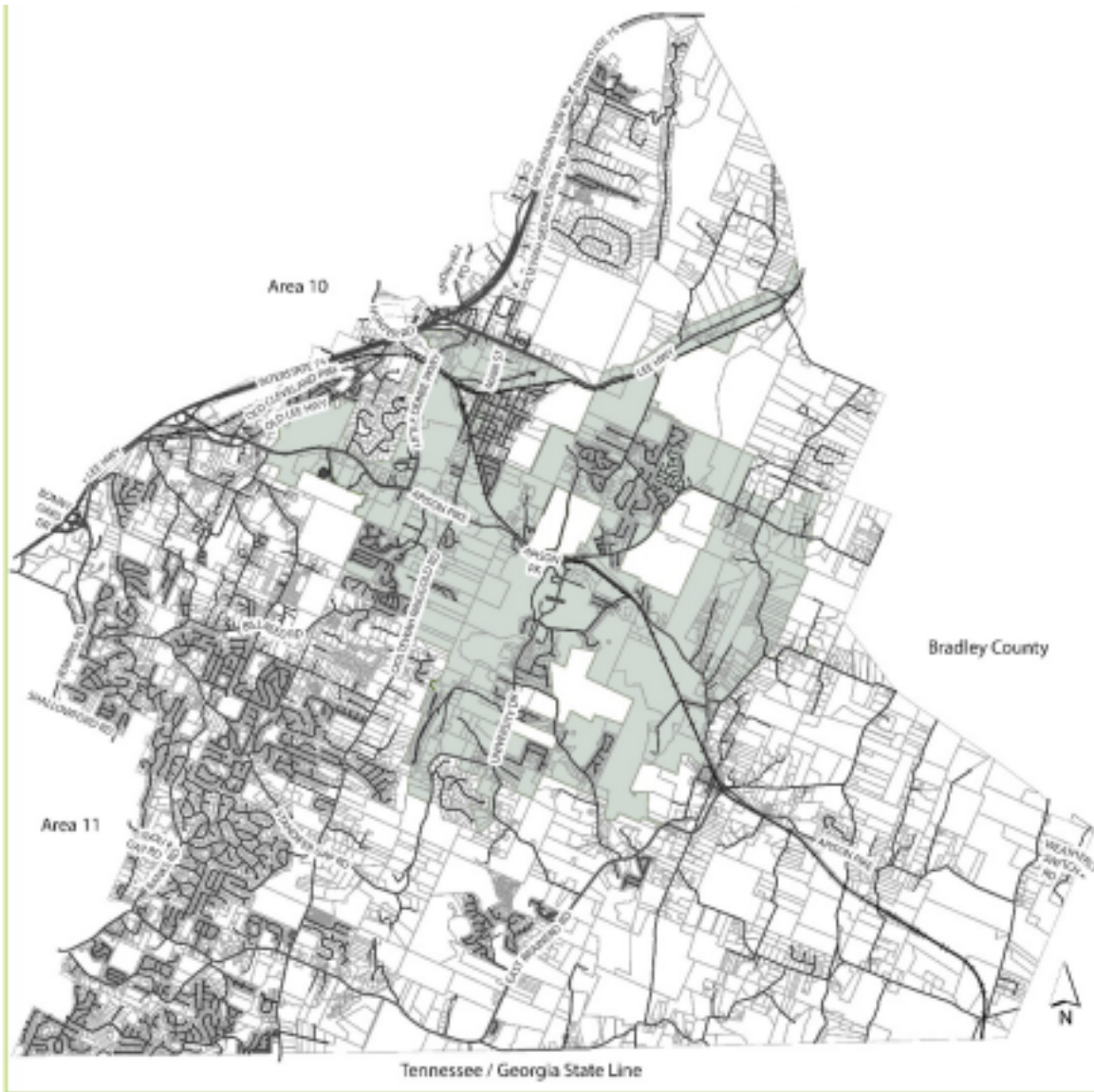
Area Plans do not ensure the funding of specific projects, but rather influence the priorities for implementing public infrastructure projects and better coordinate the timing of those projects with private development. All Area Plans will include a robust public input process and will be reviewed by the Chattanooga-Hamilton County

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Regional Planning Commission and adopted by the Chattanooga City Council or Hamilton County Commission. It is important for citizens to take ownership of the Area Plan and stay involved in its implementation. Area Plans should be updated every 5 – 7 years to ensure they remain relevant and reflect the most current development, socio-economic patterns, and other changes.

Based on the theme “*Advancing Great Places*,” Area Plans also introduce a system of “Place Types” to better describe intended land uses with an emphasis on form and character. After the adoption of each Area Plan, development regulations and policies will be audited by the RPA and revised or replaced as needed, to ensure they are consistent with the community’s goals for how they want to see their area grow and develop in the future.

Figure 1.2 – AREA 12 BOUNDARY



1.3 White Oak Mountain Study Area

Area 12 is experiencing one of the highest residential growth rates in Hamilton County (followed by the East Brainerd/Hamilton Place area and the Hixson/Red Bank area) but was without an adopted plan that covered the entire area. Therefore, it was chosen as the first Area Plan to be undertaken.

Area 12 covers the eastern most portion of Hamilton County and is bounded by Bradley County on the east, the Georgia state line on the south, Banks Road on the west, and I-75 on the north (as shown on the map on the previous page.) Running north-south through Area 12, White Oak Mountain is the most dominant geographic feature, and as such, was chosen early in the planning process by the community as a more defining name for the Area 12 Plan. The more heavily developed part of Area 12 lies generally to the west of White Oak Mountain, while the portion to the east is more rural.

The unincorporated communities of Apison, Ooltewah, Summit and a portion of East Brainerd are included in Area 12. The City of Collegedale also lies entirely within Area 12. The City of Collegedale has a planning staff and recently adopted their own growth plan; therefore, the RPA was not asked to provide

recommendations for future Place Types or recommendations specific to Collegedale, but simply considers their previously adopted recommendations. Collegedale participated in the study to provide input and helped to ensure compatibility between the Area 12 Plan and the City of Collegedale Growth Plan.

1.4 Public Process

Public input is a crucial component of the Area Planning process. For Area 12, public input was gathered in multiple ways: public meetings, email and website updates, advisory committee feedback, technical advisors, and surveys. Over 350 people participated in the public meetings and 236 surveys were completed.



Four sets of public meetings were held, in multiple communities throughout Area 12 in order to reach out to a greater number of people. A database of email addresses was created and updated after each public meeting. Regular project updates and notices of public meetings were sent to everyone on this list and posted on the Regional Planning Agency’s website at www.chcrpa.org.

Two surveys were distributed to help create a community vision for the future of the White Oak Mountain Area and to gauge community preferences for different types of development. The survey results, combined with the feedback given at public meetings, informed recommendations on future development, helped identify concerns facing the area, and prioritized on key issues.

TECHNICAL ADVISORS

Technical advice was provided on specific issues by several agencies and government departments including:

- Tennessee Department of Transportation (TDOT)
- Hamilton County Department of Education (HCDE)
- Hamilton County Parks Department
- Hamilton County Public Works Department

ADVISORY COMMITTEE

An Advisory Committee was formed to serve as a “sounding board” to the RPA throughout the planning process, to encourage more participation in the process by reaching out to other community members, and to serve as a liaison between the larger community and the RPA.

The Advisory Committee was composed of residents and business people from various backgrounds as well as elected officials who represent the area. Area 12 is represented on the Hamilton County Commission by Commissioner Sabrina Smedley and Commissioner Chester Bankston. A small portion of Area 12 also lies within District 4 of the Chattanooga City Council, represented by Councilman Darrin Ledford, and District 6 represented by Councilwoman Carol Berz. These local elected officials were involved throughout the process and nominated people to serve on the Advisory Committee for Area 12. (See the Advisory Committee list in *Acknowledgements*.)

Several Advisory Committee meetings were held to review community input and provide feedback to the staff. All of the public and Advisory Committee meetings are listed below.

PUBLIC MEETINGS

March 30, 2017 Kickoff-Community Vision Collegedale City Hall
April 1 Kickoff-Community Vision East Hamilton Middle-High School July 24 Community Choices Cambridge Square, Ooltewah July 27 Community Choices Tri-Community Fire Hall, Apison August 3 Community Choices Mt. Summit of Peace Church, Summit
September 25 Infrastructure Forum Tri Community Fire Hall, Apison February 15, 2018 Draft Plan Review Collegedale City Hall
March 22, 2018 Draft Plan Open House Collegedale City Hall

ADVISORY COMMITTEE MEETINGS

January 30, 2017 Collegedale City Hall
March 6 Collegedale City Hall
April 24 Collegedale City Hall
June 19 Collegedale City Hall
November 8 Collegedale City Hall
November 9 Main Street, Old Ooltewah
December 14 Development Resource Center, Downtown Chattanooga
August 20, 2018 Collegedale City Hall

Input from these meetings, along with the survey results, were used to identify issues that are highlighted in the following chapter.

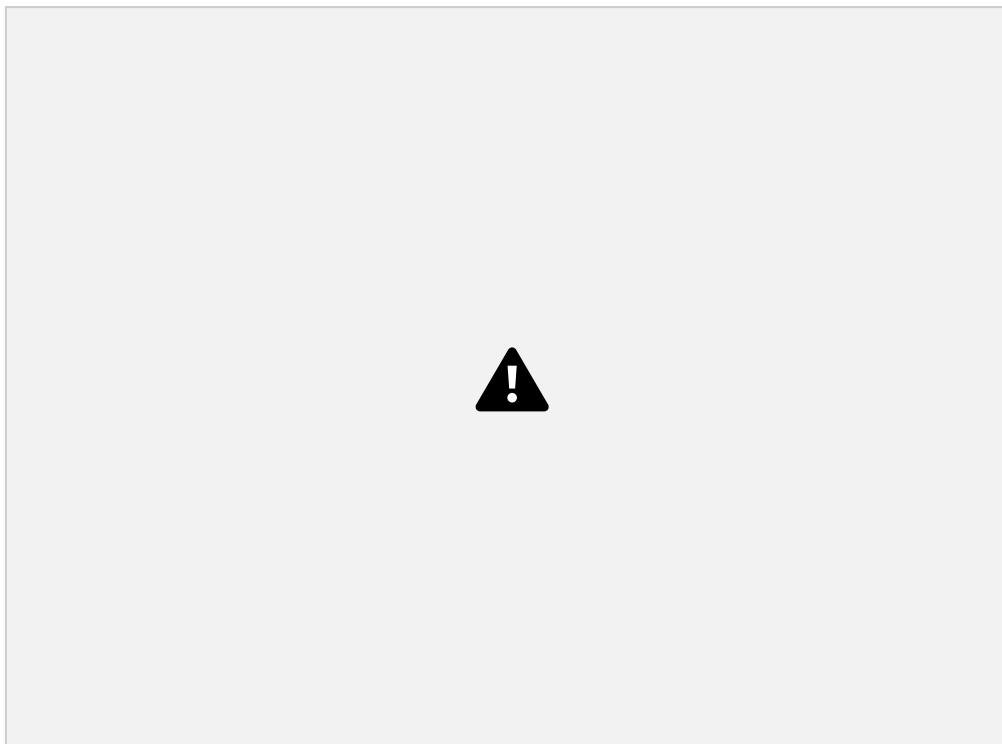


The plan is informed by input gathered by multiple methods: public meetings, surveys, advisory committee feedback, field visits, and stakeholder meetings. Area 12 residents and business owners participated throughout the process.

2. Research & Analysis

2.1 Area 12 Background

Figure 2.1 – AREA 12 LOCATION MAP



HISTORY OF THE WHITE OAK MOUNTAIN AREA

In the past, this area was part of James County (generally lands east of the Tennessee River) with Apison and Ooltewah serving as the primary towns. Established in 1871, James County was centered with Ooltewah serving as the county seat and existed until 1919 when reabsorbed into Hamilton County. A train depot was located in downtown Ooltewah near Main Street along with the James County Courthouse. Well served by rail, the area took part in the growing mining industry found throughout the region. This area featured bauxite mines, produced ore and limestone, and included farming, saw mills and small businesses.

In the early twentieth century, the town of Apison worked to recruit people to this area known for its rich farm lands where forage crops, sweet potatoes and dairies thrived along with businesses and residences. As a connector to Bradley County, Lee Highway and Apison Pike served as thoroughfares to Cleveland, McDonald and the Red Clay area. White Oak Valley exists today as a reminder of the rural landscape once predominant during the twentieth century.

With the advent of the Volunteer Army Ammunition Plant during World War II, the area experienced growth as the result of displacement from the Highway 58 area, resulting in more housing for workers and many local churches being added to the Summit area. Once a place of farming and share cropping, Summit was

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established as an African-American community named for the high ridge tops. Some elevations in Summit, although not as high as Lookout Mountain, are equivalent to Missionary Ridge and provide views over the valley.

During the 1980's and 1990's, the area began to see development along the I-75 interstate with new development clustering along the exits and bringing businesses to the Lee Highway area. The Summit landfill was added to the Apison Pike area and was in operation for nearly twenty years. Now closed, the landfill site exists as a private softball complex and recreation area managed by the City of Chattanooga. The City of Collegedale was established as a municipality in 1968 and is centered around Southern Adventist University and McKee Foods the major employers in the area. Additionally, the East Brainerd area expanded towards Ooltewah-Ringgold Road with multiple subdivisions and the Westview Elementary school was added, changing the makeup of this once rural part of Hamilton County.

Today, Area 12 is seeing new housing of all types, with park investments, greenways, new businesses, road projects and new schools established among the green spaces and beautiful views. The addition of major employers such as US Express, Volkswagen and Amazon in close proximity to the White Oak Mountain Area has contributed to an increase in new homes in the area.

PREVIOUSLY ADOPTED PLANS

Although some planning efforts have occurred over the years for portions of the White Oak Mountain area, those plans are outdated. The East Brainerd Corridor Community Plan was conducted in 2003, the Wolftever Community Plan in 2007, and the Summit Land Use Plan was completed in 2013. The City of Collegedale most recently adopted a new plan in 2016 and also began ordinance updates to address commercial corridors, signage and landscaping. Previous neighborhood plans provide a basis for initial study, but will be replaced by the White Oak Mountain Area Plan (with the exception of the Collegedale Plan.)

2.2 Study Area Profile

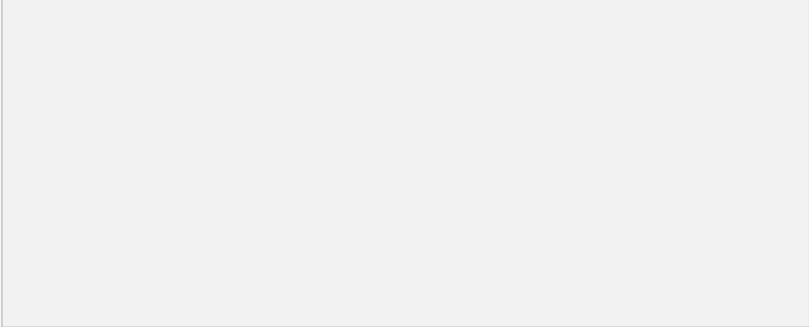
The White Oak Mountain study area includes 37,800 acres. Over the last 5 years, 2,231 building permits and 100 zoning cases (through 2017) have occurred (not including Collegedale). The 2015 population estimate was 43,080 per the American Communities Survey, US Census Bureau.

POPULATION

Hamilton County is growing – from 336,463 to 356,156 since the 2010 Census - a moderate growth. For 2045, the population for Area 12 is projected to grow to 52,300. Recent studies indicate that 13,000 housing units will be needed across Hamilton County by 2026 (Source: *Hamilton County-Chattanooga Area Real Estate Market Trends Analysis*, 2016, <https://chcrpa.org/index.php/project/hamilton-county-real-estate-market-study/>)

The median age of persons in Hamilton County is 39.3 years. Persons between the ages of 18 to 64 make up 62% of overall population. The median age of Area 12 is higher than the county median age. The median age for Apison is 47.2 years, Collegedale is 36.7 years and Ooltewah is 59.3 years per the 2015 *American Communities Survey*.

Figure 2.2 – PROJECTED 2045 POPULATION GROWTH



**CROP AND REPLACE LEGEND
WITH NEW ONE (IN FOLDER)**

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Census information of specific origins for Apison, Collegedale and Ooltewah, there are 1,048 individuals of Hispanic origin or 2% of the population. Compared to Hamilton County, the population of the White Oak Mountain Area has some distinct characteristics. These include a slightly larger working age cohort (28% of Area 12 population is aged 36-52 compared to 22% for the county), more predominantly Caucasian (87% of Area 12 population compared to 75% for the county), and a significantly higher number of families with children (80% of households in Area 12 compared to 54% for the county). These figures describe a population that is predominantly working age, with families that will continue to shape the area's demand for housing, schools and public services. See *table below*.

TOTAL

The racial makeup of the area is 87% White, 8% Black

or African-American, 3% Asian and 1% Other. Based on **Figure 2.3 – POPULATION FOR HAMILTON**

COUNTY AND AREA 12

POPULATION 348,121 43,080 AGE

Hamilton County % Area 12 %

% % of Hamilton County's total population

12.37

0-17 years 71,244 20% 9,559 22%
17-35 89,463 26% 8,868 21%
36-52 77,833 22% 12,071 28%
53-70 78,206 22% 8,576 20%
65+ Seniors 59,571 17% 6,428 15%

RACE & ORIGIN

White 261,594 75% 37,591 87% % of Area 12's total population Black or African
American 69,042 20% 3,389 8%
American Indian 623 0% 0 0%
Asian 6,899 2% 1,384 3%
Hispanic* 17,138 4.9% 1,048 2% * Based on Towns/Zip codes for Apison, Other 3,450 0.9% 222 1%
Collegedale and Ooltewah

HOUSEHOLD MAKEUP

Households ** 163,319 14,864 9% % of Hamilton County total households Families 88,629 54% 11,832
80% % of Area 12 total households Married Couples 64,081 39% 9,938 67%
Living Alone 12,399 8% 2,548 17%
Other Family 24,548 15% 1,894 13%
Female Head of
Household 13,854 8% 1,321 9%

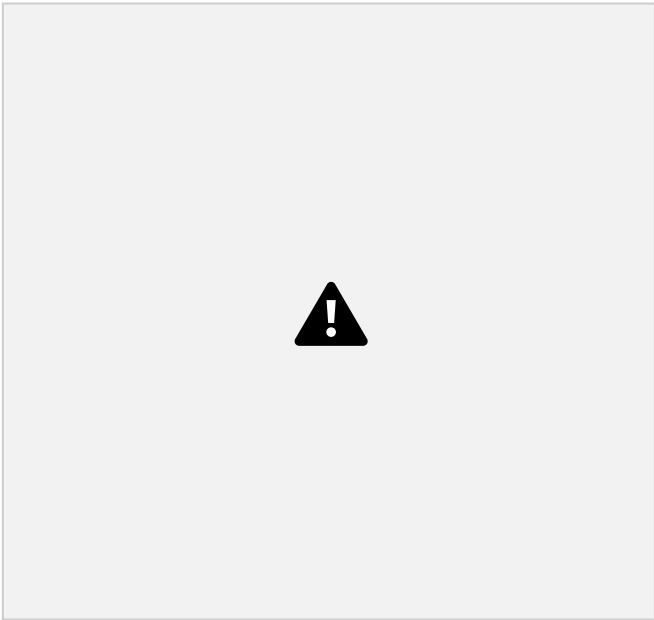
** 2.9 persons per household in Area 12
Source: American Communities Survey, 2015
Census

Currently Hamilton County has an average of 2.48 persons per household, whereas in 2015, Area 12 had 2.90 persons per household indicating a slightly larger family sizes in Area 12.

The map below generally indicates the distribution of population in Area 12 based on the location and density of buildings.

Figure 2.4 - BUILT SYSTEMS

See Appendix A for full-size map.



MAJOR EMPLOYERS

The major employers in Area 12 provide jobs to almost 6,000 people with another approximately 5,000 employees located nearby at Enterprise South. The percent of change in job growth for this area is projected at 42.8 % from 2015-2045. *Source: 2015 Census Bureau and Draft RTP 2045 projections.*

Figure 2.5 – MAJOR EMPLOYERS

Source: Chamber of Commerce Major Employers List (MEL) 2016

Company Product/Services		Full Time Employees	Part-Time Employees
McKee Foods Corporation	Mfr. Cakes & Cookies	2,900	0
Cigna HealthCare	Health Services	45	0
U.S. Xpress Express Transportation		1,055	24
Miller Industries Towing Equipment, Inc.	Mfr. Towing Equipment	546	14
Southern Adventist University	Education	460	41
Gestamp Chattanooga, LLC	Auto metal stamping and welded assemblies	402	0
Federal Express (Opened August 2017)	Parcel Delivery	300	50
Publix	Food Store	120	
Frost Cutlery	Knife Store/Manufacturing	<u>50</u>	<u>20</u>
Total		5,878	149
MAJOR BUSINESSES OUTSIDE AREA 12			
Volkswagen Chattanooga	Mfr. Automobiles	3,100	0
Amazon LLC	Distribution Center	<u>2,289</u>	<u>492</u>

Total		5,389	492
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FIELD ASSESSMENT

A Field Study of the White Oak Mountain area was a first step in understanding what defines the community in terms of character and unique elements. Based on initial observations made by the RPA staff, many community types were found from rural countryside to busy commercial centers, with single-family residential subdivisions contributing to the overall makeup of the area. Early in the process, RPA staff made several field trips to document the area along with Advisory Committee members. The following “subareas” were identified and serve as a later reference for identifying issues specific to certain parts of Area 12.

Figure 2.6 – COMMUNITY SUB-AREAS



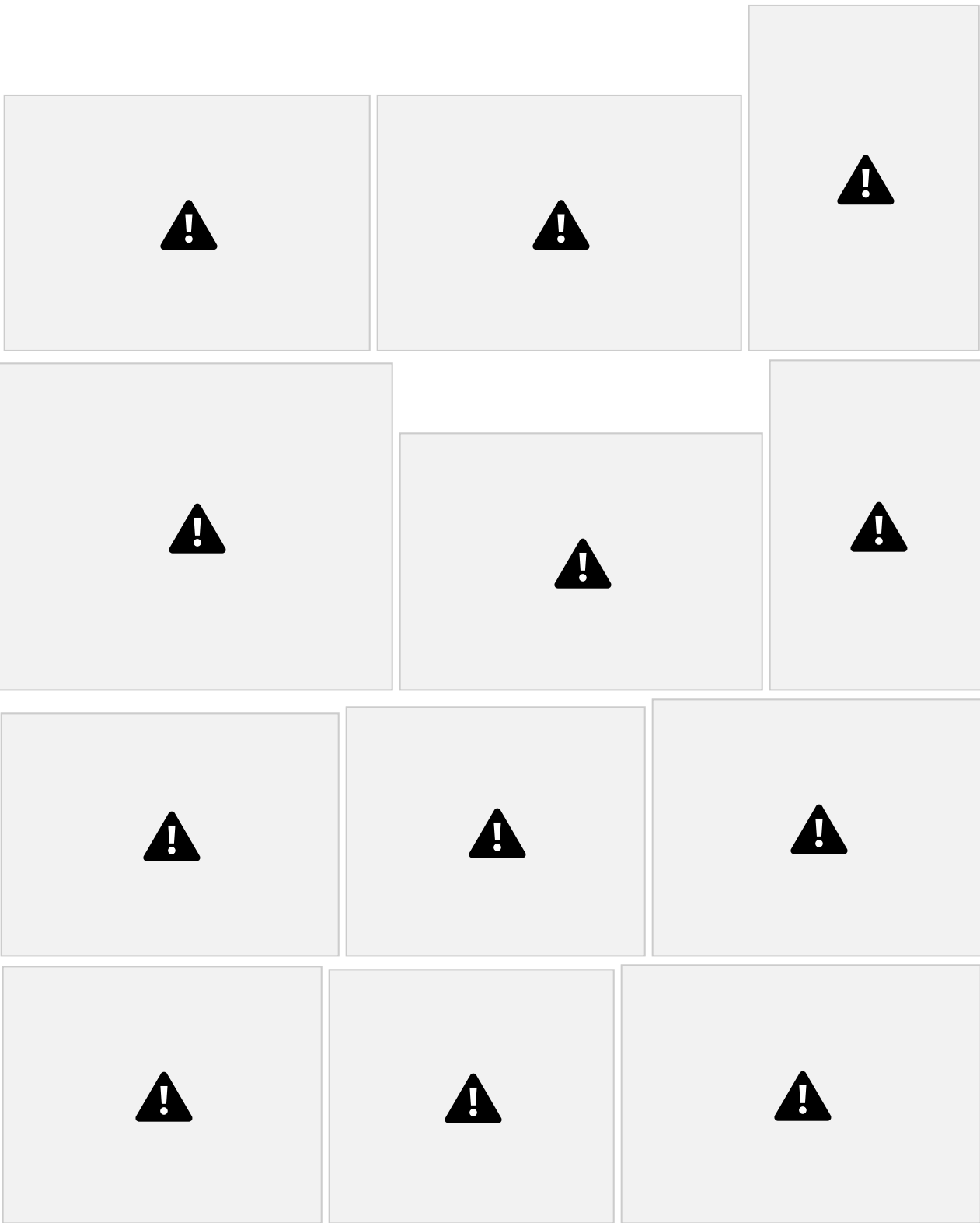
The following observations were made during the Field Study:

- Area 12 - This area is defined by White Oak Mountain, ridges and creeks. Some ridges in the area feature distant views of the Appalachian foothills to the northeast. While other hills and ridges meander through subdivisions such as Mountain Shadows, Deer Ridge, and Summit. Wolftever Creek is the primary water body that flows through the area.
- Old Apison - A post office, churches, a large park site and a grid of streets contribute to the rural town character of Apison.. Outlying Apison, beyond the newer subdivisions, has more rural characteristics and many farms that provide a sense of the local culture and history of early settlement and Native American tribes due to the proximity of Red Clay State Park. Just east of Grindstone Mountain, the White Oak Valley area and “Owl Holler” are very secluded and have retained this rural character.
- East Brainerd - Near East Hamilton Middle/High School and Westview Elementary is a

commercial development with housing nearby, but most of the East Brainerd community included in Area 12 is dominated by single-family residential subdivisions.

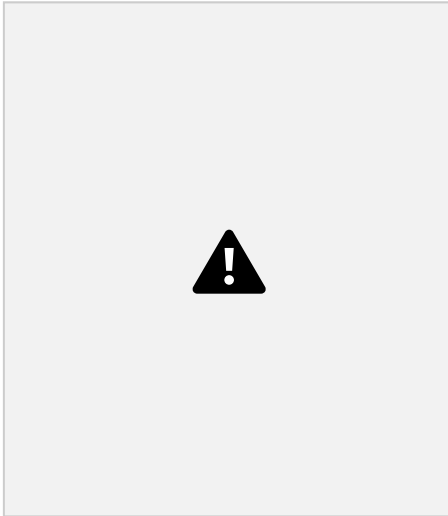
- Summit has a prime location near the freeway and it serves as a gateway to the larger Collegedale area. With the new Apison Pike roadway and intersection improvements complete, it has the possibility of becoming a small village center.
- Collegedale - New apartments are found along Little Debbie Parkway near the Collegedale gateway. As noted in public comments, Collegedale sets the bar extremely high when it comes to parks, especially the greenway and Imagination Station. Participants in the planning process also noted that Collegedale is a shopping destination for the Highway 58 and East Brainerd communities. East of town is an industrial area and the local airport.
- Old Ooltewah has a lot of charm with the Main Street buildings, the old James County Courthouse and residences. Much of it is within a walkable street grid giving it the compact feeling of a small town. A few shops exist along Main Street as well as churches and service oriented businesses.
- Cambridge Square is the new hot spot and is almost urban in its appeal. Both tourists and locals frequent its shops and restaurants. To the north, Mountain Lake Drive features subdivisions that still impart a rural countryside feel with large lots, such as Hiawatha Estates. Most residential developments along Ooltewah-Georgetown Road are in close proximity to the businesses on Lee Highway.
- Street Network - Many roads, such as Standifer Gap, Bill Reed, and Tucker Road, connect all the way through Area 12 offering alternative routes. Area 12 is near Hamilton Place and the larger East Brainerd community (Planning Area 11) resulting in some Area 12 roads being impacted by higher traffic.
- Parks and Greenways - The most significant development of parks and greenways is found in Collegedale. The Southern Adventist University has a large amount of open space.

The following photos of the area were taken during the field assessment in 2017. They represent a snapshot of the diverse range of uses within the White Oak Mountain community and its existing character.



2.3 Community Priorities

COMMUNITY VISION SURVEY



The Regional Planning Agency kicked off the planning process with public meetings and a survey to identify issues and important community values. These were called the “Community Vision” meetings. The following is a summary of responses to a survey conducted in the spring of 2017 to gather feedback about issues in the area. Participants had an opportunity to take the Community Vision survey at the plan kick-off meetings held March 31, 2017 and April 1, 2017 or to take the survey on-line through May 8, 2017. The focus of the survey is to gauge community reaction to recent changes in the area and to identify future opportunities and challenges. One hundred thirty-seven (137) residents participated in the survey. The following are a few key survey responses presented in summary. See <https://chcrpa.org/index.php/project/area-12-plan/> for the complete *Community Vision Survey results.*

Q. What do you like most about living in the White Oak Mountain Area?

In addition to a Feeling of Safety/Security and the Cost of Living, the high level of satisfaction White Oak Mountain area residents have for living in this area can be attributed to its Rural Character, Open Space and the outdoor activities it affords. (17 category choices)

Q. What concerns you the most about living in the White Oak Mountain Area?

As with many communities experiencing higher rates of growth, survey respondents were most

concerned about Traffic, Street Conditions and Route Choices. The Types and Quality of New Development also ranked in the top 5 concerns. (17 category choices)

The top 5 responses for “What do you like...?”

- 1) Feeling of Safety/Security**
- 2) Rural character**
- 3) Open Space/Natural features**
- 4) Trails, Parks or other Passive Recreation**
- 5) Cost of Living**

The top 5 responses for “What concerns you most about living in the area...?”

- 1) Traffic Volumes**
- 2) Street Conditions**
- 3) Quality of New Development**
- 4) Ease of Getting Around/Route Choices**
- 5) Restaurant Choices**

Q. What would you say is the most critical issue facing the White Oak Mountain Area TODAY?

Most respondents indicated that Traffic was the most critical issue facing the White Oak Mountain area, accounting for 37% of the written comments. Throughout the survey, and in the public kick-off meetings held in March 2017, this has also been a recurring theme.

Q. Which of the following types of development would you like to see more of in the White Oak Mtn. Area?

Respondents were given 23 options from which to choose. Natural Areas/Trails, Greenways, and Parks, were mentioned the most with 12% and 9% of the responses, respectively. Walkable Retail (like Cambridge Square) also received 9% of the responses.

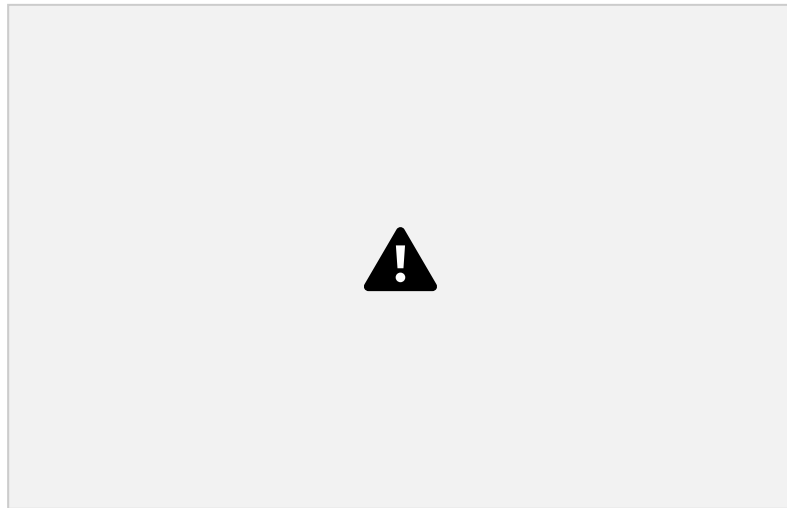
other park spaces needed?” Approximately one hundred (100) attendees participated in the three subareas meetings. One hundred and twenty-six residents (126) participated in the survey.

The top 7 responses for “What types of development would you like to see more of...?”

- 1) **Natural Areas/Trails and Greenways** (90 votes)
- 2) **Parks** (67 votes)
- 3) **Walkable Retail Centers** (67 votes)
- 4) **Wider Roads** (62 votes)
- 5) **Sidewalks** (59 votes)
- 6) **More Road Network Connections** (46 votes)
- 7) **New Schools (Or Expansion)** (44 votes)

COMMUNITY CHOICES SURVEY

The Regional Planning Agency conducted a second round of public meetings in order to gauge priorities about how their issues should be addressed. Citizens were asked “What would you like to see in terms of development?” People responded to questions like “Where do you envision higher density mixed-use areas...or more apartments or townhomes? What about the protection of natural areas... or where are greenways or



The results of the “Community Choices Survey” address issues related to each subarea. They can be summarized as follows:

ISSUE: RETAIN THE “RURAL CHARACTER” of the White Oak Mountain area. This was one of the top comments voiced during the public meetings and survey results. What tools or policies are needed in order to protect and maintain existing character in areas where growth or change is occurring?

*Responses related to **RURAL CHARACTER** indicate support for requiring “green” setbacks or buffers with 94% noting agreement. Requiring larger minimum lot sizes is also supported by a positive response with 88% agreeing for areas designated as “rural.”*

ISSUE: SCHOOLS - As new schools are built, or existing schools are expanded, more people will be drawn to this area. What policies and/or strategies should be adopted to address this concern?

Responses to TRAFFIC CONGESTION AROUND SCHOOLS indicate support for trails and greenways (81% Agree).

ISSUE: ADDITIONAL COMMERCIAL - There is a desire for additional retail, restaurants, medical facilities and other commercial uses as part of the community's growth, but with regulations that address the quality, site design and/or location of new commercial development.

Responses to ADDITIONAL RETAIL indicate support for allowing existing commercial to expand as nodes (82% Agree). Whereas expanding commercial along corridors was met with mixed reviews.

Responses to FUTURE RETAIL DEVELOPMENT indicate support for more "walkable" development (81% Agree). Requiring pedestrian aspects was supported with 73% in agreement.

ISSUE: HOUSING DEVELOPMENT – some areas outside of the already established suburban nodes are experiencing an upsurge in subdivisions and housing development. What is suggested to direct housing growth more efficiently?

Respondents supported HIGHER DENSITY DEVELOPMENT located near school areas and commercial centers (59% Agree) to reduce number of car trips and congestion.

ISSUE: ACCESS AND MOBILITY - Traffic congestion on primary corridors demands a solution, whether it be additional lanes, signal timing, access management, alternate routes or network design.

Responses to EAST BRAINERD/SUMMIT indicate support that road design should be consistent with the rural character (62% Agree) and 71% agreed that incorporating sidewalks is needed. Whereas bike lanes had 45% in favor and 38% disagreeing. 70% wanted to see access management to address curb cuts.

Responses to OOLTEWAH-RINGGOLD ROAD AND EAST BRAINERD ROAD indicate support for incorporation of sidewalks (71% Agree) whereas, responses to adding bike lanes was mixed. Use of traffic/access management was positively met with 71% agreement. 67% of respondents indicated agreement with keeping road design consistent with rural character.

ISSUE: NATURAL RESOURCES – Manage potential impacts through policies that limit development to lower densities in sensitive areas (critical slopes or floodplains.)

Responses to PROTECT CREEKS AND HILLSIDES indicate support for limiting development on slopes or in floodplains (90% Agree).

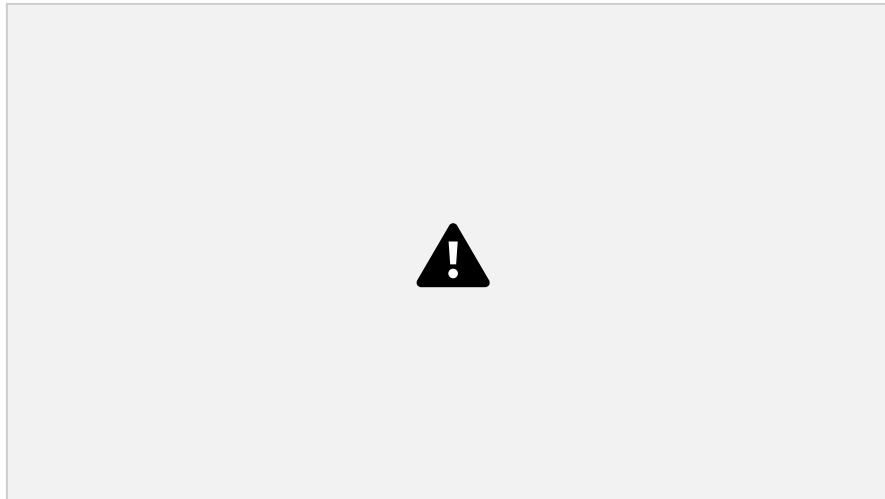
See <https://chcrpa.org/index.php/project/area-12-plan/> for the complete Community Choices Survey results.

CHALLENGES IDENTIFIED BY THE COMMUNITY

Managing growth and dealing with expanding infrastructure needs is an overarching challenge faced by most of Hamilton County. Similar challenges were identified as priorities for Area 12 during the public input process. For over more than a decade, Area 12 has experienced a change from a low-key community, with small scale businesses, subdivisions and single-family housing to a rapidly expanding area of commercial development, apartments, senior living facilities, services, major employers and recreation areas. Citizens asked “How much more is expected to occur in our area? Why is this growth happening here?” They noted that these changes have resulted in increased traffic and an increase in attendance at new schools. Where estates and farmland previously existed, conversion to subdivisions or new apartment complexes is occurring at a rapid pace.

During community meetings, people expressed these major concerns that are summarized as follows.

- Some schools are already near or over capacity; increased traffic from the new schools is causing traffic problems during certain times of day.
- New road projects are nearing completion (Apison Pike and East Brainerd Road) but only as phases. The community needs a better understanding on the timeline of future projects and what type of road designs are being proposed.
- Citizens were concerned about water quality, flooding and the capacity of waste systems to handle the growth.
- People enjoy the Wolftever Greenway and existing parks system, but would like to see more green space and better connections to key destinations.
- Funding of new projects - how does a community handle costs and prioritize needs? Especially when rapidly changing development patterns cause reactionary responses instead of planned, proactive choices.
- While the influx of apartments and more multi-family units provides housing alternatives and supports area businesses, many long-time residents felt that the denser housing was not in keeping with the more remote, countryside areas. How to meet the demand for housing diversity is a challenge for the Hamilton County region.

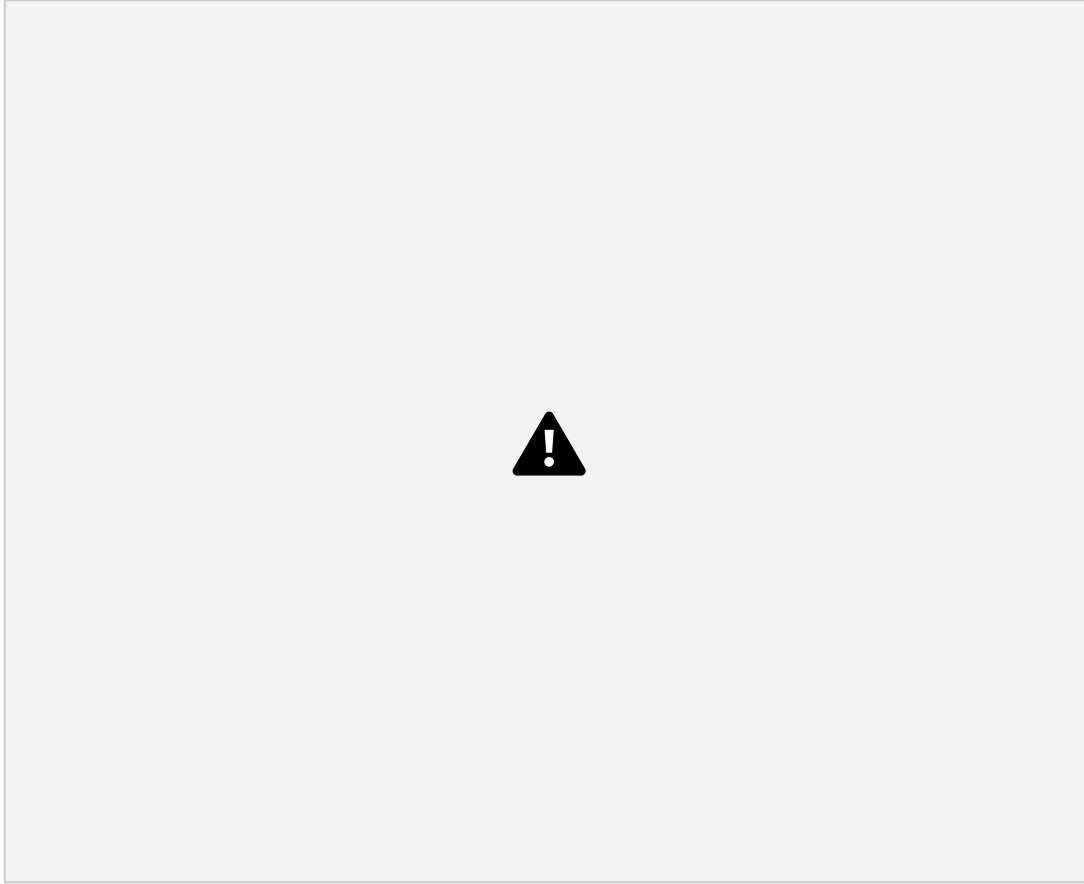


PLAN FRAMEWORK

The photo of the hand-colored map below is a composite of responses from the “Community Choices” meetings that highlights commercial development, residential areas and green connections identified by the community. It serves as a conceptual framework for plan recommendations and provides an initial map of development potential.

The following locations for potential “centers” were identified during the Community Choices meetings, building upon the idea of clustering, concentrating and intensifying commercial development in key locations where commercial businesses already exist.

- 1) **OLD OOLTEWAH** – Main Street Area
- 2) **OLD APISON** - between Apison Pike and Bill Jones Road
- 3) **LEE HIGHWAY CORRIDOR**
- 4) **STANDIFER GAP** at Bill Reed Road/Green Shanty Road. (Not seen as appropriate for further development due to topography and other issues)
- 5) **LONDON LANE** at Cherokee Valley Road.
- 6) **JENKINS ROAD** near I-75
- 7) **SUMMIT** – Intersection at Apison Pike and Old Lee Hwy/Old Cleveland Pike
- 8) **OOLTEWAH-RINGGOLD RD**/Apison Pike – Four Corners
- 9) **OOLTEWAH-RINGGOLD RD**/E. Brainerd Rd. Intersection to Parker’s Gap



2.4 Plan Analysis

Plan analysis includes a study of impacts, alternatives and potential outcomes to gauge future growth. Reviewing current patterns of development and studying subdivisions, building permits and zoning applications provides an indicator of activity in an area and the rate of development. The plan utilizes the latest land use model and ties in the Travel Demand Model for projections, along with Development Intensity Level mapping to analyze or provide a picture of future growth in an area. The systems analysis focuses on existing conditions and future projections to aid in understanding the interrelated aspects of basic community elements. These elements found within the White Oak Mountain area are organized and shown here as the following systems:

- Built System
- Transportation System
- Natural Resource System

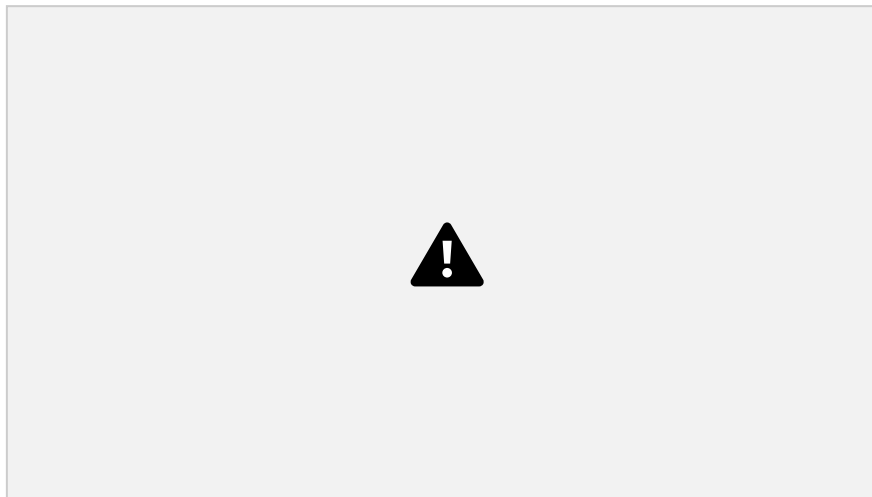
Overall, analysis considers existing conditions and trends, the results from baseline resources or systems maps in conjunction with public input, forecasts, projections and modeling to provide data for future Place Types and recommendations.

2.4.1 Built Environment

LAND USE AND DEVELOPMENT

The built environment includes buildings, property improvements, public realm projects, services and infrastructure, such as roads, parks, schools and sewers. It also takes into consideration development patterns, land use and zoning. One of the most impactful aspects of community development is the built environment or “built system.”

Area 12 is projected to experience the highest share of future residential demand (17.5%) in Hamilton County and 7.8% of the future commercial demand in the next decade.



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WHITE OAK MOUNTAIN AREA PLAN Draft 8/14/18

EXISTING CONDITIONS

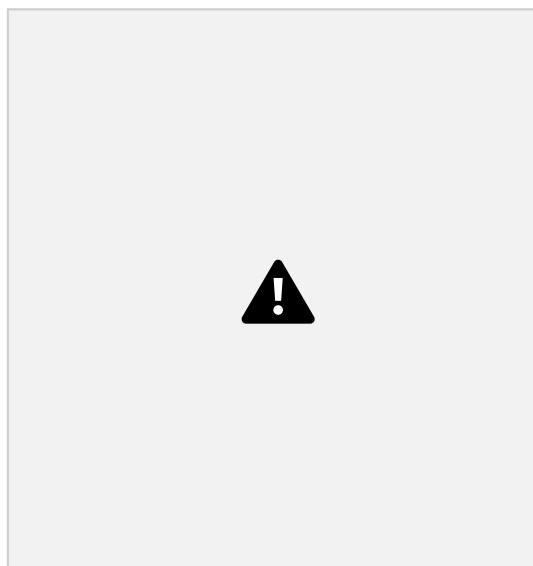
Figure 2.7 - EXISTING LAND USE (2017)

The numbers below are parcel-based and do not include land devoted to rights-of-way.

LAND USE	ACRES	% OF AREA 12
Single-Family Residential	21,637	60.25%
Vacant	9,013	25.10%
Institution	1,442	4.01%
Parks or Reserve	1,329	3.70%

Recreation	752	2.10%
Industrial	692	1.93%
Multi-Family Residential	364	1.01%
Commercial	316	0.88%
Utilities	173	0.48%
Transportation	147	0.41%
Mixed Use	44	0.10%

As shown in the above Land Use Percentage Table, the area is primarily categorized as residential with 61% of the land used for some type of residential purpose. Land devoted to commercial or industrial uses is under 3% and institutional uses (schools or religious facilities) are 4%, indicating very little non-residential activity in comparison. Of the 37,830 acres in the area, there are 35,440 parcels and 2,400 acres of rights of way. Approximately 9,000 acres are vacant, with an additional 1,329 acres categorized as natural resource use (including agriculture.) Approximately 25% of the area is categorized as vacant.



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Figure 2.8 - Existing Land Use
See Appendix A for full-size map.

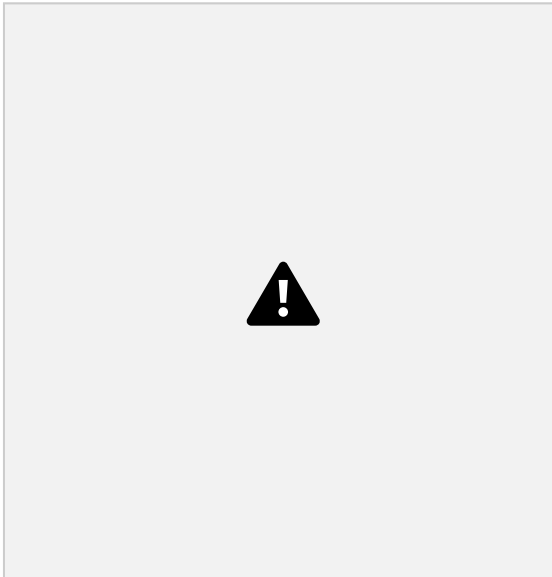
EXISTING ZONING

Currently, the majority of the area is zoned for residential purposes as either a Residential Zone or A-1 Agricultural Zone (67%), which also allows residential development. Commercially zoned areas (2.7%) are concentrated along two primary corridors - Lee Highway and Apison Pike. The percentage of land by zoning designation, excluding Collegedale, is shown below (from most to least acres.)

Figure 2.9: EXISTING ZONING

See Appendix A for full-size map.

ZONE	ZONE NAME	% of AREA	ZONE	ZONE NAME	% of AREA
			RT-1	Residential Townhouse	0.13%
			R-T/Z	Residential Townhouse/Zero Lot Line	0.10%
A-1	Agriculture	67.06%	C-3	General Business Commercial	0.07%
R-1	Single-Family Residential	16.39%	M-3	Warehouse and Wholesale	0.04%
R-2A	Rural Residential	4.33%	R-3M D	Moderate Density Residential	0.02%
M-1	Industrial	4.07%	O-1	Office	0.02%
R-2	Urban Residential	2.29%	RZ-1	Zero Lot Line Residential	0.00%
C-2	Local Business Commercial	1.91%			
R-5	Single-Wide Manufactured Home	1.68%			
M-2	Wholesale and Light Industry	0.66%			
UGC	Urban General Commercial	0.50%			
R-4	Special Zone	0.45%			
R-3	Multi-Family Residential	0.40%			
C-4	Planned Commercial Center	0.17%			
MH	Manufactured Home Park	0.17%			



WHITE OAK MOUNTAIN AREA PLAN Draft 8/14/18

ZONING HISTORY

During the past two years, 30 zoning cases within the Area 12 boundary were processed by the Regional Planning Agency. The vast majority of cases were approved, or approved with some conditions. Most cases were requests to develop residential subdivisions, some with a mixture of townhomes, on land formerly zoned for agriculture. One case in Summit was a request for apartments, while two other Summit cases were for commercial development, all in the vicinity of I-75 and Old Lee Highway. Three cases in Old Ooltewah were requests to convert existing residences into commercial uses near Main Street. Two cases were related to the proposed commercial development at the intersection of Ooltewah-Ringgold Road and East Brainerd Road.

Some issues that were repeatedly raised concerning these cases include the following:

- The number of new homes is increasing traffic on the major corridors, some of which are two-lane roads.
- Concerns about impact of developments on traffic congestion and flooding.
- Added zoning conditions to address parking location, landscaping, lighting and signage because they were not addressed by the current zoning regulations.
- Smaller lot sizes adjacent to existing older single-family subdivisions.

ZONING UPDATES

Based on the zoning history for this area, there is a need for future zoning updates. Conflicts are created by issues related to flooding, access, and compatibility between adjacent uses or scale of development, especially when in a rural setting. Additionally, as noted by the public as a priority, ensuring quality commercial development, green space and bike/pedestrian facilities will be difficult without programs and incentives or zoning tools. Residential uses in what is currently zoned agricultural need additional study and efforts to address special event venues, eco tourism, lodging and/or other businesses proposed in low intensity areas should be reviewed. The creation of conservation-based zoning or incentives is also needed. (See Chapter 5 for next steps.) A future phase of study needed for this area is to also update residential zoning standards with an emphasis on increasing housing diversity (see *Missing Middle missingmiddlehousing.com*).

HOUSING

Housing plays a central role to the quality of life for Hamilton County residents. It provides a place to rest, to raise a family, and serves as the place where we commute to and from work. For many citizens, home ownership is central to fulfilling their lifelong dreams. Since the 2009 Great Recession however, there are a number of changes that are reshaping housing needs and creating additional challenges for citizens to realize their housing aspirations. These changes include escalating housing costs, diversifying households, and evolving living preferences which have implications

for how we plan for future housing in the White Oak Mountain area.

"Home is a safe haven and a comfort zone. A place to live with our families and pets and enjoy with friends. A place to build memories as well as a way to build future wealth. A place where we can truly just be ourselves. And whether our houses are big, small, fancy or modest, they are our shelters and our sanctuaries." — Linda (Habitat for Humanity client)

Housing costs are rising

A recent Times-Free Press article, "Housing Costs Rise Twice as Much as Inflation" published August 8, 2018, noted that the average price for a home in Chattanooga had risen 5.8% to \$188,000, which was more than double the 2.9% increase in income. Part of a nationwide trend that has persisted since the Great Recession, housing costs (both rental and homes for purchase) are rising at rates that exceed income growth. What are the forces behind the increase in housing costs?

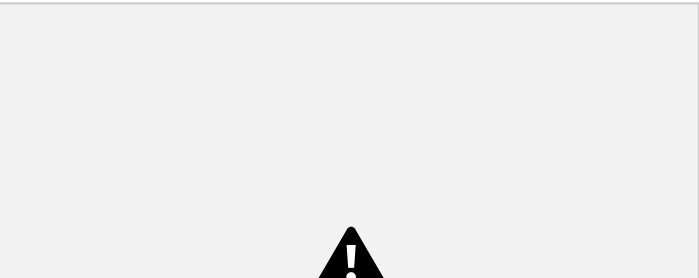
The Harvard Joint Center for Housing Studies tracks national trends in the home construction, existing homes, and rental housing markets. Their recently published "The State of the Nation's Housing 2018" highlights some of the driving forces behind housing cost:

- "Although better housing quality accounts for some of this increase, sharply higher costs for building materials and labor, coupled with limited productivity gains in the homebuilding industry, have made housing construction considerably more expensive"
- "Land prices have also skyrocketed as population growth in metro areas has intensified demand for well located sites"
- "...new regulatory barriers have also served to limit the supply of land available for homes and increased the time, complexity, and risks of housing development"
- "Supplies of existing single-family homes for sale remain extremely tight. In fact, both key measures of inventories are at their lowest levels since the National Association of Realtors began its tracking in 1982."

Figure 2.10 – HOUSING COSTS

Source: National Association of Homebuilders

The National Association of Homebuilders (NAHB) also provides a regular



report on the key drivers of housing costs. The most recent 2017 report notes that the combination of construction costs (55%) and lot costs (21.5%) represents three quarters of a home's sales price. So what is contributing to the growth in construction and lot costs? As noted in the State of the Nation's Housing report, increases in building material costs, labor costs, lack of available land and regulations combine to drive the cost of home construction up. For example, OSB (Oriented Strand Board), a common board used in home construction, had risen nearly 38% in cost from January 2015 to September 2016 (NAHB Eye on Housing Report). While construction and labor costs are a significant driver of housing affordability, regulations can also impact housing costs by impacting lot yields, lot development costs and lengthy review processes. A 2011 NAHB report noted that government regulations can account for up to 25% of the final sales price of a home.

These concerning cost trends are underscored by a 2018 NAHB builder survey (below) where they highlighted their primary concerns.

Figure 2.11 – HOMEBUILDER CONCERNS

Source: HMI Special Survey, NAHB



What is an affordable home?

The Tennessee Housing and Development Agency (THDA) provides a definition of “affordable housing” that is commonly used. A household that is living in “affordable housing” spends no more than 30% of income on housing costs. When adding in the cost of transportation, no more than 45% of income should be devoted to housing costs and transportation costs combined.

Based on the median income and the scenario described to the right, at a 3.75% interest rate, an affordable house in Hamilton County is estimated between \$120,000 (low income) and \$160,000 (moderate income). These numbers would be even lower if transportation costs were added into the equation. The 2016 new house sales median for Hamilton County was \$290,000 or \$311,150 on average. *Source: TN State Comptroller Assessor’s Office*

Median Household = \$49,434 / year
Income

Low Income Household = \$39,000 /
year (80% of median)

Low to Moderate = \$40,000 – \$85,000 / year
Income Household

Source: Census.gov (2016)

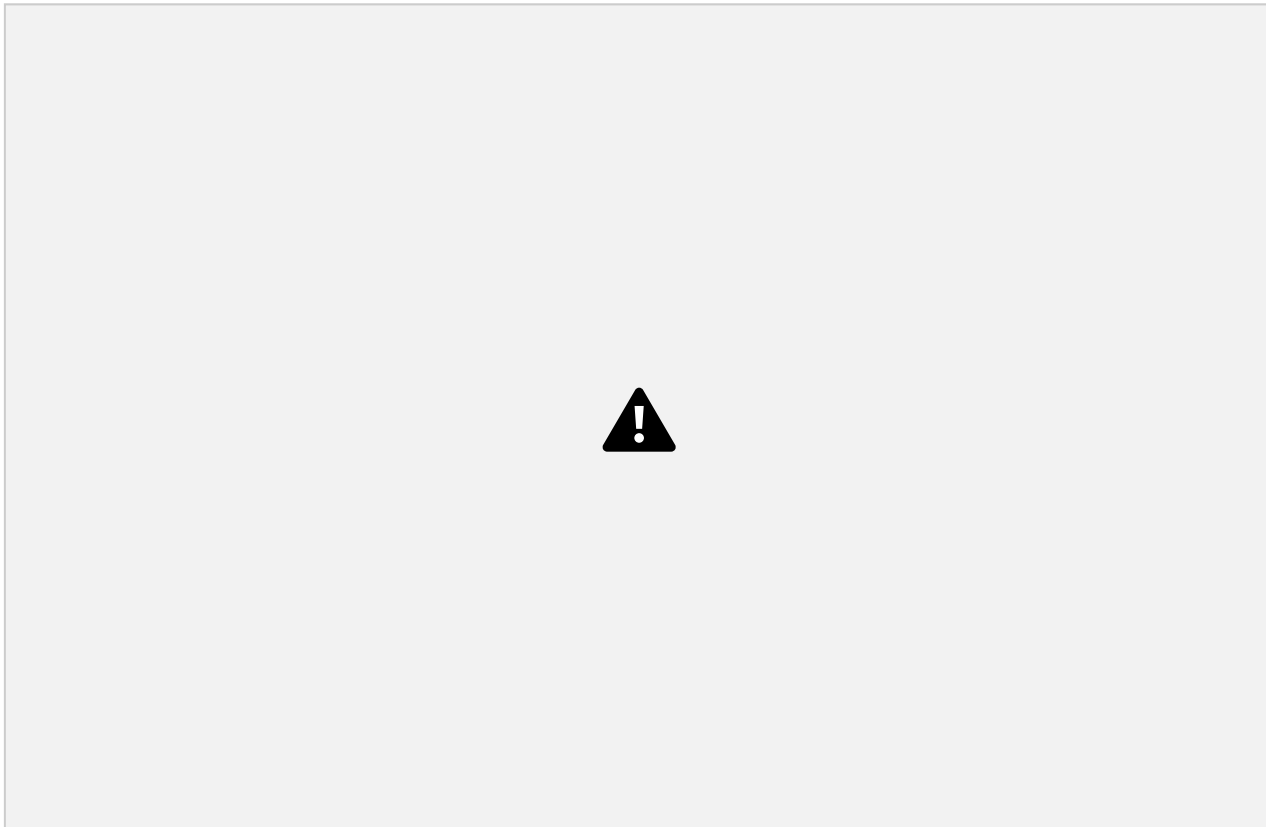
For Hamilton County:

Housing affordability is an issue across the state as noted in the graphic below. Across Tennessee, housing costs are rising faster than income, especially in the larger cities per the “Housing and Transportation Index” and the 2018 THDA (Tennessee Housing and Development Agency) reports. When evaluating the percentage of income per household devoted to housing and transportation costs, nearly all housing in Hamilton County would be considered “unaffordable” based on the location of people and jobs, increased commute times and transportation costs.

Figure 2.12 – HOUSING AND TRANSPORTATION AFFORDABILITY

Source: Tennessee Housing and Development Agency, *Transportation as a Key to Housing Affordability*,

2018.



These statistics underscore the reality that for most Hamilton County households, buying a conventional new home is not a feasible option. Currently and in the future, there will be a growing need for more housing options that include smaller lot single family, townhomes, apartments, existing homes and other housing forms that are affordable to Hamilton County residents. Planning policies considered by this plan should also consider potential impacts on the added costs to housing delivery such as loss of lot yield or added site development cost implications.

Housing needs are changing

Housing costs and incomes are not the only factors impacting housing needs. Changing demographics and lifestyle preferences are also shaping housing demand. The following is excerpted from the Comprehensive Plan 2030 Update: *Renewing our Vision*:

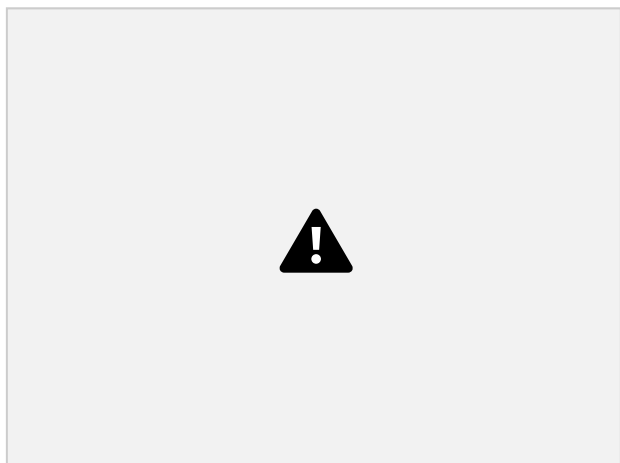
- The two largest population groups in the county are the Baby Boomers (born 1946-1964) and the Millennials (born 1981-2000). Their unique lifestyle preferences will have planning implications for

suburbs and are expected to stay in their homes as they age. They will need more support services and transit options to accommodate their changing mobility needs. More than prior generations, Millennials tend to favor living in urban places that are walkable, transit friendly, and provide a variety of nearby social gathering places. It is not conclusively known whether Millennials will continue to prefer urban living or change their preferences to a more suburban lifestyle as they marry and start families.

- Hamilton County is becoming more ethnically diverse with minorities increasing from 28% of the population in 2010 to 41% of the population by 2040. While Hamilton County is not expected to become a “minority-majority” by 2040, this growth in diversity, particularly in new immigrants, will have implications for housing and transportation needs. Nationally, minority households have a lower median income (\$32,584-\$38,039 versus the national average of \$49,777) and are less likely to own a home (46- 47% versus 64.9%) compared to the general population.
- Hamilton County households are decreasing in size and growing in number, increasing demand for housing and changing community needs. In 2010, household size dropped to 2.3 people per household from 2.9 people per household in 1970. Households are changing from a predominance of two-parent families to one-parent families and one-person households. These changing demographics alter the market demand for certain housing types. There will be a need for a greater variety of housing with a premium on convenient access to jobs and community services as households diversify.

Implications for Policy

The growing costs of housing construction, combined with the shifts in generation composition, household size and population diversity underscore a need to provide for more diversified housing needs and lifestyles. Communities across Hamilton County must consider whether there is a diversity of housing types (single-family, apartments, townhouses, studios/granny flats, lofts, etc.) and adequate affordable housing options being offered that accommodate these projected changes in household size and makeup. With housing costs on the rise, many communities struggle when trying to provide affordable housing for working families. Many retirees would like to age in place and may need to downsize, but often affordable housing options are not available. Future policies should be informed by these trends in order to address all of Hamilton County’s housing needs.





These development examples feature elements such as smaller footprints, rear loaded parking, attached units, streetscape, modular building components and accessory dwelling units. All designed to provide affordable housing options and a range of housing choices, they may be rental apartments, student housing or owner occupied.

Trends/Projections

Residential Development Patterns

Area 12 is projected to experience the highest share of future residential demand (17.5%) in Hamilton County or 1,354 new homeowners in 10 years. This is a larger share than all others, with the Hixson/Red Bank area with a projected 15% share of housing market and Hwy 58/Tyner area at 14%. Additionally the Area 12 rental market remains strong with a similar amount of units needed.

Area 12 - 10 YEAR HOUSING PROJECTIONS

1,354 Total **New Homeowners** .

1,016 Total **New Renters**

Commercial Development Patterns

The 2016 Real Estate Market Trends Analysis (BAG) states that the newly developed portions of Area 12 will see higher growth in the residential sector and less in commercial sector. Over 10 years, the share of countywide commercial growth is projected at 7.8%.

Source: *Hamilton County-Chattanooga Area Real Estate Market Trends Analysis 2016*, by Bleakley Advisory Group – See <https://chcrpa.org/index.php/project/hamilton-county-real-estate-market-study/> for the full report.

Analysis/Conclusions

DEVELOPMENT PATTERNS

“Renewing Our Vision” studied the projected development intensity needed to support the community goals expressed for Hamilton County. Locating more development in areas already supported by infrastructure or for planned transit hubs and mixed-use centers is promoted as “Intensity Levels.” The map is focused on “centers” with future transit and “intensification” created to layout a more efficient pattern for future growth. Areas in red indicate the more intense centers, and grays and green identify more sensitive natural resources where development is less intense. Based on planned infrastructure, the I-75 area around Apison Pike and Lee Highway show potential for growth as well as the Apison Pike corridor into “Old Apison” to the east of Collegedale.

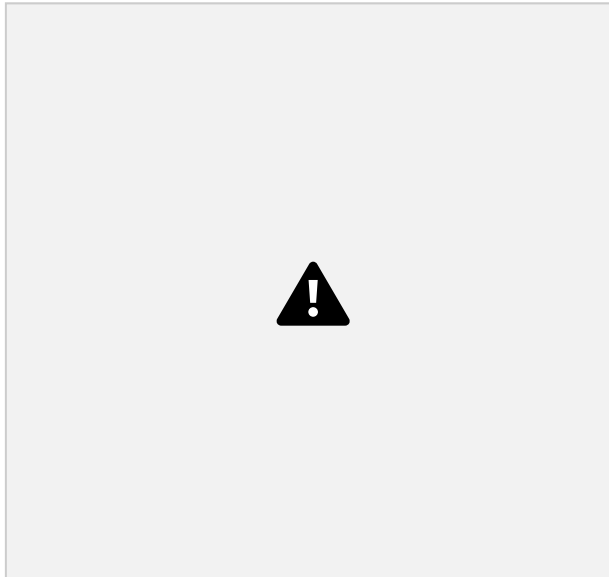


Figure 2.13 – DEVELOPMENT INTENSITY LEVELS

See Appendix A for full-size map.

Area 12 Residential Housing: Rate of Development - An average of **150 units** per year are being built currently as new housing starts (based on building permits from 2015 through July 2017). Includes building permit applications, houses built, and houses yet to be built.

Area 12: Number of County Building Permits

- 2015 **116**
- 2016 **153**
- 2017 **181** (through July)

Source: Hamilton County

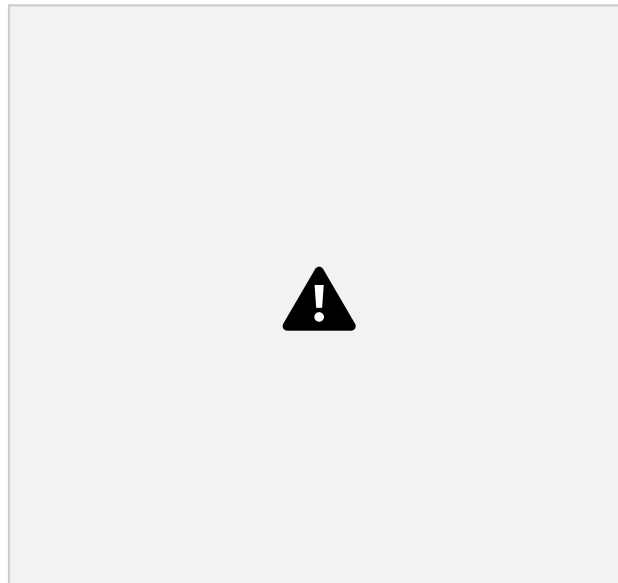
FUTURE HOUSING DEMAND

Per the Hamilton County-Chattanooga Area Real Estate Market Trends Analysis Study 2016, for Area 12: **120 units can be absorbed per year over the next 10 years** (based on projected demand). Hamilton County Building Permits indicate 820 new home construction permits have been approved since 2015. Between 2015 and 2018, approximately 732 new house lots were approved for future development through the subdivision process. As of the end of 2018, 458 building permits had been issued for lots within these subdivisions, leaving approximately 274 remaining lots that could be developed.

DEVELOPMENT POTENTIAL

There are 37,800 acres in the study area. If all the land that is already developed as subdivisions, commercial or industrial uses is subtracted from the total acreage, this leaves 19,451 acres that could be developed. This developable land includes large vacant parcels (in light yellow on the map below) and parcels that have only one structure, with the majority of the site in a vacant, undisturbed state (hatched on the map below.) The developable land calculation also includes floodplains and slopes over 30% (which account for 3% of the land in the study area.) Although slopes and floodplains can be developed, if those acres were deducted from the calculation, 18,900 acres would still remain for future development.

This analysis indicates that Area 12 has a significant amount of land that could accommodate the projected demand for the area, even without disturbing slopes and floodplains; however, without appropriate policy guidance development could negatively impact sensitive natural areas.



**Figure 2.14 - Development Potential:
Subdivision**

Opportunities

See Appendix A for full-size map.

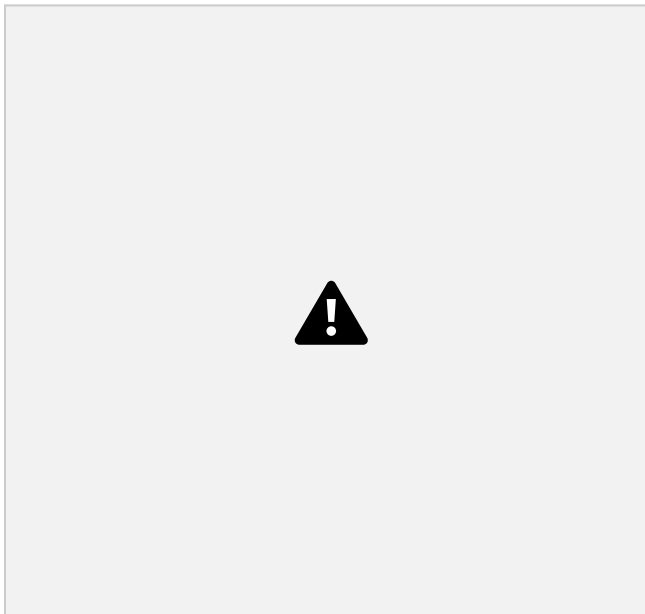
Existing Conditions

SCHOOLS & MAJOR INSTITUTIONS

There are currently 6 public schools that are part of the Hamilton County Department of Education (HCDE) and located in Area 12 as listed in the table below.

Figure 2.15 –SCHOOLS Figure 2.16 – School Enrollment See Appendix A for full-size map. Source: HCDE

* School is located outside of Area 12 but zoned within the Area 12 boundary.



Ooltewah Elementary *	989	1095	90.3%
Westview Elementary	622	665	93.5%
Wolftever Creek Elementary	584	610	95.7%
Hunter Middle *	810	928	87.3%
Ooltewah Middle	722	980	73.7%
Ooltewah High	1512	1365	110.8%
East Hamilton Middle-High S	1747	1650	105.9%

School	Current Enrollment	Capacity	Current Utilization
Apison Elementary	557	600	92.8%

o



Over the last two decades, new subdivisions have added many new single-family residential units to the area, thus increasing the demand for school expansions and road improvements.

Trends/Projections

A new middle school is planned on the property behind Apison Elementary which will add 1,100 in capacity. East Hamilton Middle-High will then be converted to a high school only. This will add 1,200 in capacity to the High School.

New schools (in particular those that are high



performing) attract population more so than population drives new schools.

Approximately 50 – 60% of students travel to school by car in Suburban areas.

Source: HCDE

Along with the rise in new subdivision development in the area, the biggest factors in locating schools are access or proximity to homes and students, and availability of land.

Analysis/Conclusions

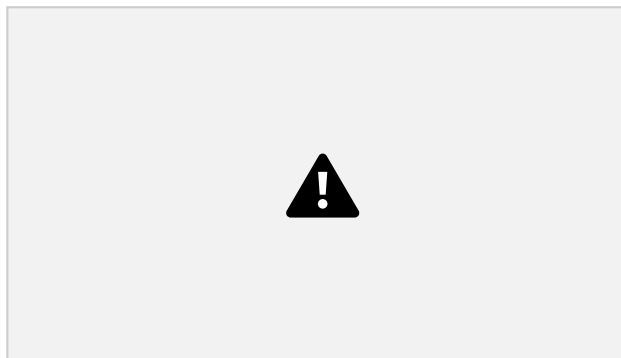
SCHOOLS AS CATALYSTS FOR RESIDENTIAL DEVELOPMENT

New schools tend to attract new growth in the form of residential development. As the area continues to grow, schools may approach, or exceed, capacity due to increasing student enrollment. Factors such as transportation, access, and space needed for buildings, parking, and recreation must be considered as new schools are planned.

In the future, better alignment of growth and infrastructure can be achieved. Building a relationship between partners and working together during the decision making process is crucial. Through this planning process an opportunity was created to improve coordination between the public schools and other service providers. This collaboration and coordination should continue in the future.

NOTE: This study is not intended to anticipate how many more students can be accommodated at the present schools or identify future sites as these type of decisions are made by the Hamilton County Department of Education (HCDE).

Apison Elementary School



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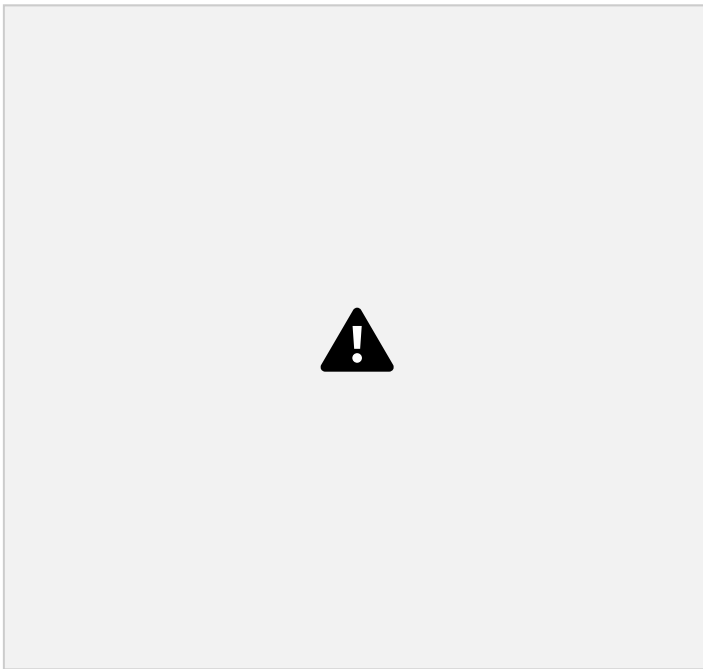
WHITE OAK MOUNTAIN AREA PLAN Draft 8/14/18

Existing Conditions

SEWER SERVICE

Figure 2.17 – SEWER INFRASTRUCTURE

See Appendix A for full-size map.



Types of Lines

Sewer systems are made up of different types of lines and other facilities including:

Force Main: Can NOT tap into

Force Low: able to tap into

Gravity Main: able to tap into

Pump Stations: for moving sewage over ridges or higher elevations

Treatment Plants – Currently all sewage in Hamilton County eventually flows to Moccasin Bend for treatment.

This map indicates the areas that are currently served by sewers and shows areas that may have the potential to tap into existing sewers if identified for new growth and new development is desired. The costs of sewers and associated

facilities, as well as future monitoring, must also be justified by the amount of users created by a new development.

Trends/Projections

Average cost to expand sewers at this time is \$100 - \$150 per linear foot (over .5 million dollars per mile). These costs are usually absorbed by the land developer and then passed on to home buyers as part of the housing price.

Additionally the cost of other facilities must be considered, such as pump stations and treatment centers, as well as ongoing maintenance costs.

Future Sewer Capacity – The Water and Wastewater Treatment Authority (WWTA) is planning to add a new major treatment facility to the south side of the river to meet the future capacity needs as growth occurs in the northern and eastern sections of Hamilton County.

Analysis/Conclusions

SEWER SERVICE IN SUBURBAN/RURAL AREAS

One might ask, “How are sewer extensions planned?” Do they follow municipal plans for growth and adopted land use plans, or are they extended at the request of developers? Currently sewer extensions are driven by the market. Builders seeking to develop property that is currently unsewered are required to

pay for the cost of extending sewers to their property. This has been a common practice for many decades.

- Additionally steep slopes, rock or soil types in an area may rule out sewers or make them prohibitively expensive. Sewer facilities and expanded lines are best justified in locations where high density housing is planned and in close proximity to existing lines.
- Other system technologies may be used in the more rural areas. Independent systems are available that include smaller scaled treatment facilities and, in some cases, pump stations. An independent system may be better suited for conservation-based subdivisions where a clustering of units requires smaller lots.
- In the more rural Apison area, before “Old Apison” can be expanded to a larger commercial center, sewers would need to be extended there or an independent system put in place.
- Generally, the minimum lot size required for septic systems is 25,000 square feet. Residential development in rural areas without sewer service must therefore be built with these larger lots.

Infrastructure and Growth

Q. Why isn't infrastructure being planned and built ahead of growth?

A. Another top concern voiced by White Oak Mountain Area residents during the planning process was about having adequate infrastructure (streets, schools, sewers) in place ahead of new growth.

Ideally, infrastructure should lead growth,

but due to the way infrastructure is financed locally that is not always possible. For instance, when it comes to state road projects, Tennessee is a “pay as you go” state. The state does not go into debt to pay for road projects. Tax revenues from new development help pay for the projects, which means the infrastructure sometimes lags behind the growth.

Additionally, state road projects have multiple required phases (initial design and environmental review, right-of-way acquisition, final design, construction) which cumulatively can take 10 – 15 years. Nonetheless, the White Oak Mountain Area does currently have several funded state road projects, as shown on the “Transportation Projects” map in the Area Plan.

For schools, the Hamilton County Department of Education must balance the needs for new schools across the entire county with a limited budget. They do have plans to build a new middle school behind Apison Elementary and then convert East Hamilton Middle-High into a high school only, which will add capacity.

Builders seeking to develop property are required to pay for the cost of extending sewers to their property. These new sewer areas must also have adequate treatment facilities, pump stations, and they must be maintained by the public utility providers, thus adding to future costs and long term budgeting challenges.

All of this being said, the Plan does respond to this issue by designating the various Place Types based on the availability of existing infrastructure.

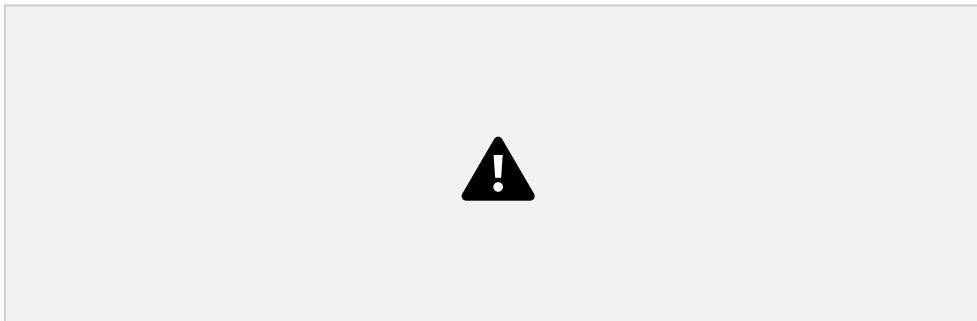
WWTA INFRASTRUCTURE DECISIONS

Current capacity of the sewers is managed by the Water and Wastewater Treatment Authority (WWTA) with flows routed to the County's only treatment facility on Moccasin Bend many miles away. The WWTA must also consider extensions from north to south and the needs of the Collegedale system. A new treatment facility is planned to be in place within the next 10 years.

Currently, sewage waste is transferred to the

Moccasin Bend Waste Water Treatment facility located across the river. A new facility is being planned to serve this portion of the County more efficiently, although it will be many years before in place.

2.4.2 Transportation



Over the last two decades, changes in the Area 12 transportation network have

included improved interstate access, widening of major east-west corridors, the use of roundabouts in

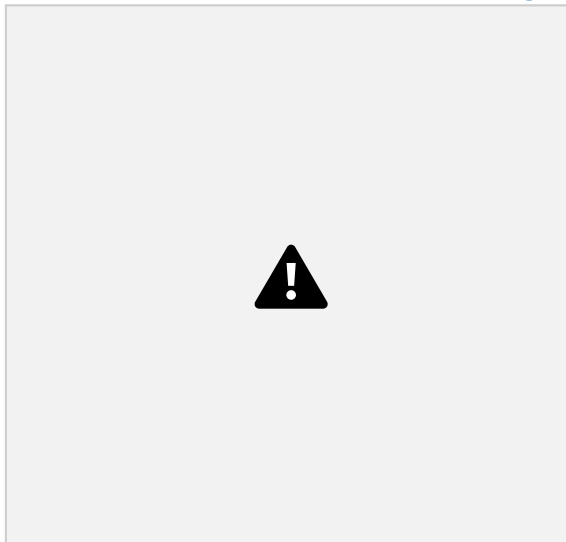
residential neighborhoods, and greenways, sidewalks and improved signalization in key areas. Because several roads in the White Oak Mountain Area are state routes, both the Federal Highway Administration (FHWA) and the Tennessee Department of Transportation (TDOT) influence improvements to the street network, with additional local input given through the Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (TPO). Connectivity, including streets, sidewalks, and bike routes, is critical to the overall function of the transportation network, by providing people with multiple routes and options for travel. New development also impacts the efficiency of the transportation network and this development is regulated by municipal subdivision regulations, zoning, and building codes.

Those who participated in the White Oak Mountain Area Plan process indicated that traffic and congestion were the most critical issues of concern.

Existing Conditions

Functional Classification – Functional Classification is a hierarchy of categories into which states assign streets and highways, based on their expected volume, type of trips, connections, length, and other factors. This classification of roads affects potential funding for road improvements.

Figure 2.18 - Functional Classification of Roads



See Appendix A for full-size map.

FUNCTIONAL CLASSIFICATION OF AREA 12 ROADS

Interstates

I-75

Other Freeways & Expressways (none in Area 12)

Principal Arterials

Apison Pike (from I-75 to East Brainerd Road)

Minor Arterials

East Brainerd Road (from Banks Road to Apison Pike)
Standifer Gap Road
Ooltewah-Ringgold Road / Main Street / Ooltewah-Georgetown Road
Lee Highway
Old Lee Highway
Little Debbie Parkway

Major Collectors

Bill Reed Road
Apison Pike (East Brainerd Road to Bradley County)
Tallent Road

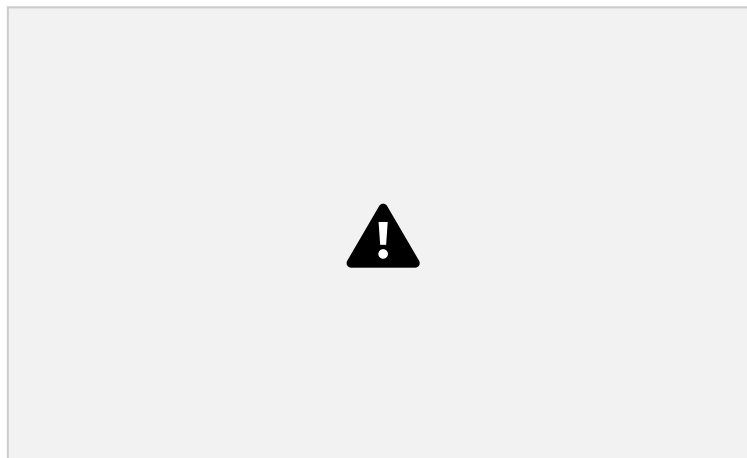
Minor Collectors

Woodland Drive
Pine Ridge Road
Prospect Church Road
East College Drive
Edgemon Road
London Lane

All other roads are categorized as “Local” Roads. Further information about the Functional Classification can be found at https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/

STATE VERSUS MUNICIPAL ROADS

Additionally, roads are divided into municipal and state routes, which is an indication of which jurisdiction maintains and improves the roads. In Area 12, the State roads include East Brainerd Road (west of Ooltewah-Ringgold Road), Ooltewah-Ringgold Road, Main Street, Apison Pike, and Lee Highway.



The State of Tennessee’s *Improving Manufacturing, Public Roads and Opportunities for a Vibrant Economy Act* (2017 IMPROVE Act) provided additional

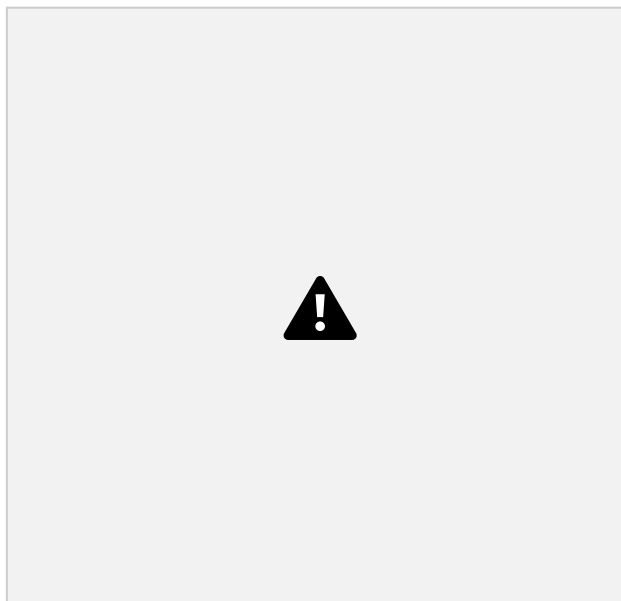
transportation funding which will aid in moving several Area 12 State projects forward. TDOT provided a summary of these projects during the September 25, 2017 Infrastructure Forum. Typically major road projects take 12 to 15 years for completion. This timeframe is generally broken into Preliminary Engineering, Environmental Studies, Design, Right of Way Acquisition, and Construction. Usually, public meetings are held throughout project development. Projects of this nature are typically funded with state and federal dollars. The specific project related finances may be found in the TPO “Transportation Improvement Program” found at

<https://chcrpa.org/index.php/projects/transportation-planning-organization/>

See Appendix B for a list of TDOT Projects in Area 12.

Figure 2.19 - Transportation Projects

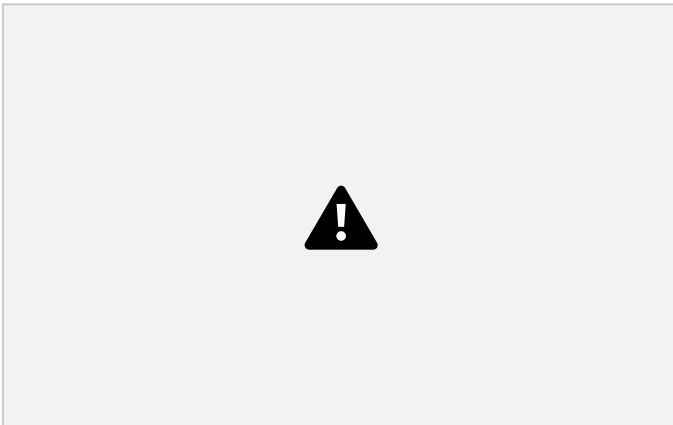
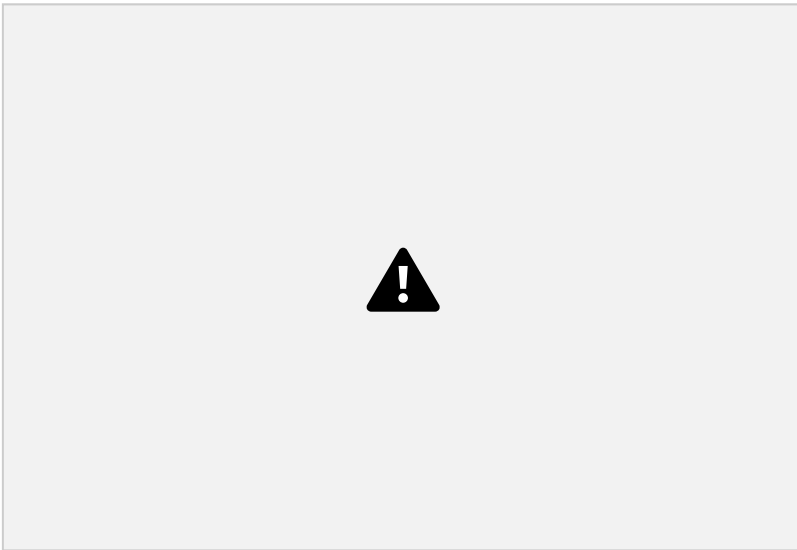
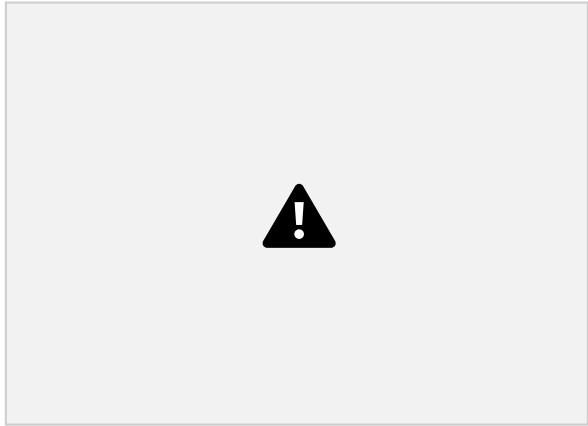
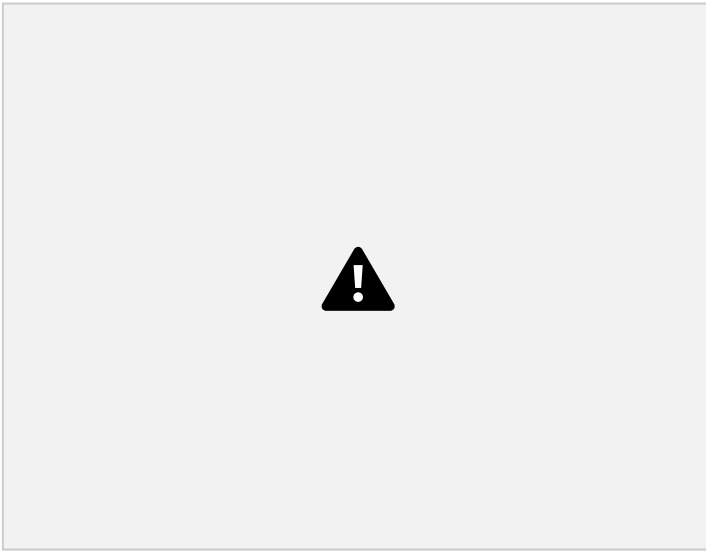
See Appendix A for full-size map.



ALTERNATIVE TRANSPORTATION MODES

A well connected community has a variety of transportation options, however, those options are limited in the White Oak Mountain Area. Although most of the area is not served by public transit, the Chattanooga-Hamilton County Regional Transportation Authority’s (CARTA) Dial-a-Ride Route 6 serves the Rainbow Creek Apartments, the Health Center at Standifer Place, and U.S. Express. The Dial-A-Ride bus service provides rides within the East Brainerd neighborhood and provides connections to Route 4 at Hamilton Place Mall. The Southeast Tennessee Human Resources Agency (SETHRA) offers on-demand shuttle service within some subdivisions.

For pedestrian facilities, few sidewalks can be found along main roads, except along the newly completed portion of Apison Pike and Little Debbie Parkway. Similarly, few bike facilities exist in the area, but bike lanes were also added to Apison Pike as part of the widening project from Old Lee Highway to Ooltewah-Ringgold Road. Greenways can also be used for more than recreation, by providing alternative connections between residential areas, schools and commercial centers.



The Wolftever Creek Greenway connects a major employer and the University to facilities at the Collegedale Municipal Hall/Town Center. The greenway serves as an alternative transportation mode as well as for recreational purposes.

Trends/Projections

CONGESTION

Greenways and sidewalks can provide safe, alternate

The Regional Planning Agency projects future population and employment as part of the Regional Transportation Plan (RTP.) An update to the Regional Transportation Plan for 2045 is currently underway. Based on the modeling for this update, congestion is expected to increase at the Ooltewah-Ringgold Road – East Brainerd Road intersection, and along the Lee Highway corridor near the interstate exchange.

<p>Regional Trends - Chattanooga is the NATION'S number one metro area for through freight traffic and this greatly impacts conditions and the function of roads connected to the interstate and local highway system. Source: 2040 RTP</p>
<p>The 2040 Regional Transportation Plan (RTP) analyzed corridors by reviewing the lack of bicycle, pedestrian, and transit infrastructure, population and employment density, and congestion levels. Ooltewah-Ringgold Road is identified as having a high need for additional multimodal infrastructure, as is East Brainerd Road (west of University Drive).</p>
<p>The draft 2045 Regional Transportation Plan (RTP) projects future population and employment growth and focuses on aligning transportation with that growth for a more efficient use of resources and tax dollars. If growth continues outward from existing urban areas, then services must follow. "Intensification," or increased density and clustering of commercial businesses, jobs and housing in designated centers, can alleviate the need for expanding services and roads, reduce traffic congestion, and accommodate transit in the future.</p>

TRAFFIC COUNTS

The Tennessee Department of Transportation updates traffic counts on their state routes every year. Following are the traffic counts from 2015 and 2016. These traffic counts indicate only moderate growth on some roads, however other roads exhibit higher increases, such as East Brainerd Road at Apison Elementary (67.5% growth) and Bill Read Road at Auburn Hills Drive (32.3% growth).

Figure 2.20 - Annual Average Daily Traffic (AADT)

Source: TDOT, <https://www.tdot.tn.gov/APPLICATIONS/traffichistory>

Traffic Count Station Location	2017	2016	2015	% of Change 2017 to 2015	Station #
SR 317 Apison Pike at Old Lee Hwy	15,655	15,972	15,115	+3.6	73
SR 317 Apison Pike at Sanborn Drive	17,802	20,046	18,679	-4.7	207
SR 317 Apison Pike at Silver Lane	5,601	4,821	5,078	+10.3	249
SR 317 Apison Pike at McDonald Rd.	4,344	4,031	3,871	+12.2	81
Lee Highway at I-75	31,022	32,860	33,918	-8.5	597
SR 320 East Brainerd Rd at Westview Elementary	13,096	12,752	13,515	-3.1	88
SR 320 East Brainerd Rd at Dakota Lane	7,895	7,756	7,651	-3.2	86
SR 321 Ooltewah-Ringold Road at Mountaineer Dr.	8,645	8,262	7,624	+13.4	87
SR 321 Ooltewah-Ringold Road at Frost Ridge Rd.	9,874	8,789	9,367	+5.4	89
Ooltewah-Georgetown Road at Amos Rd.	5,575	5,520	5,668	-1.6	76
Standifer Gap Road at Walker Rd.	8,347	8,484	8,350	-.04	94
Bill Reed Road at Arthur Lane	3,113	3,463	3,080	+1.1	250
Lee Hwy at Edgmon Rd.	12,075	12,487	12,363	-2.3	77
SR 320 East Brainerd at Apison Elementary	5,642	4,317	3,369	+67.5	85
SR 321 Ooltewah-Ringold Rd. at Leyland Drive	9,601	9,821	10,074	-4.7	80
SR 321 Ooltewah-Ringold Rd. at Wolftever Creek Elementary	10,043	9,944	9,973	-0.7	79
Bill Reed Rd. at Auburn Hills Drive	2,312	1,732	1,748	+32.3	469

this area, a traffic study of the Ooltewah-Ringold Road and East Brainerd corridors was conducted. In addition, TDOT conducted a Technical Report to inform the improvement of Ooltewah Ringold Road. Both are summarized below.

TRAFFIC STUDIES

Because traffic congestion was an identified issue for

HAMILTON COUNTY TRAFFIC STUDY

In 2017, Hamilton County conducted an “Area 12 Traffic Study – Preliminary Corridor Assessment” to assess conditions along East Brainerd Road and Ooltewah-Ringgold Road. Annual Average Daily Traffic counts (AADT) were studied over the past ten years revealing an average of approximately 3.7% annual traffic growth on the corridors. Recommendations from this preliminary study include the following:

- Ooltewah-Ringgold Road - Four travel lanes, plus a combination center turn lane and landscaped median were recommended for Ooltewah-Ringgold Road. Although the projected traffic does not warrant a five-lane roadway, this corridor parallels Interstate 75 and frequently serves as an alternative route between Chattanooga and north Georgia during incidents on the interstate. The study suggests the additional capacity could be beneficial to accommodate this situation.
- East Brainerd Road – The addition of a continuous turn lane was

Traffic Congestion

Q. How does the Plan address traffic at the intersection of East Brainerd and Ooltewah-Ringgold Roads and other congested areas?

A. Traffic at this intersection was the topic of many comments during the planning process, and it helps to illustrate the previous points about street connectivity.

Two schools – Westview Elementary and East Hamilton Middle-High – are located near this intersection, as well

as some commercial businesses. Unfortunately, there are no street connections between nearby subdivisions and these destinations, therefore, all car traffic has to enter East Brainerd or Ooltewah-Ringgold Road. To compound matters, all of the school traffic arrives in the mornings and departs in the afternoons at about same time.

While people experience frustration while sitting in traffic during morning or afternoon rush hours, research shows that the duration of congestion in the White Oak Mountain Area is usually limited to these peak times. During most of the day, the major corridors - East Brainerd Road, Ooltewah-Ringgold Road, Lee Highway, and Apison Pike - are not congested and have the capacity to accommodate additional traffic. The state, county and city Departments of Transportation consider a number of factors in making such determinations. For example, they look at the Annual Average Daily Traffic counts (AADT), or volumes, and the Level of Service (LOS), which indicates how traffic is flowing. They also consider the impacts of future development.

Suggestions to widen roads were voiced at the public meetings, however those are very expensive and long-term projects. A number of less expensive and shorter-term solutions could alleviate this traffic.

Additional turn lanes at busy intersections
Greenway and sidewalk connections from schools to nearby subdivisions
Staggered student arrival and departure times
Encouraging carpooling through the Green Trips program
“Access management” techniques, such as consolidating curb cuts (entrances) to numerous businesses.

Ooltewah-Ringgold Road is currently being studied for widening by the Tennessee Department of Transportation (TDOT). The Plan recommends that any future widening be designed with “context sensitive solutions” that help retain the rural character the community desires.

recommended for East Brainerd Road (west of the Ooltewah-Ringgold Road intersection) to accommodate school traffic and projected traffic from proposed future commercial development at this intersection. East of this intersection (toward Apison) the study indicates the two existing lanes will be sufficient to accommodate future traffic volumes.

- Other Recommendations – The traffic study also includes recommendations that reinforce community input from Area 12 and the Regional Transportation Plan, such as:
 - Access management to limit the number of driveways for new development along these two corridors;
 - Context Sensitive road designs that help preserve the rural character of the corridors; and
 - Multi-modal facilities, including sidewalks, bike lanes, or a combination bicycle-pedestrian path.

See <https://chcrpa.org/index.php/project/area-12-plan/> for the complete Hamilton County Traffic Study.

TDOT TECHNICAL REPORT

As mentioned previously, the state’s adoption of the “IMPROVE Act” has provided additional funding for road projects, so the timeline for Ooltewah-Ringgold Road has moved forward in priority. As a result, TDOT initiated a subsequent study for 4.48 miles of this corridor between East Brainerd Road and Apison Pike. There are currently no plans for study of the segment north of Apison Pike. The current study phase is designed to analyze options and identify a preferred alternative that will improve safety and provide efficient movement of vehicles, goods, and pedestrians where demand is warranted. A series of public meetings with opportunities for feedback should be part of the upcoming TDOT process.

Findings from this TDOT study include the following:

- Ooltewah-Ringgold Road is characterized by a large number of driveways and side roads, limited sight distances at intersections, narrow lanes and shoulder widths, all of which contribute to crashes. The last 3-years of crash data indicate 135 crashes along this corridor.
- The projected AADT (Annual Average Daily Traffic) for 2020 is 10,330 and 13,220 for 2040 using a 1.7% annual growth rate.
- A preliminary environmental assessment identified 18 threatened or endangered species but no significant wetlands.

The study considered four possible alternatives for this corridor. All design options include a 10-foot multi-use path, a green verge and sidewalks.

1. Alternative 1 is a three-lane roadway with one travel lane in each direction and a center turn lane.
2. Alternative 2 is a five-lane roadway with two travel lanes in each direction and a center turn lane.
3. Alternative 3 is a three-lane roadway (as described in Alternative 1) but with additional right-of-way to potentially accommodate five lanes, if future traffic increases warrant additional lanes. (Alternative 3 is not discussed in this Area Plan because it has the same number of lanes as Alternative 1, only with additional right-of-way).
4. A “no build” scenario was included which leaves the corridor as is.

The corridor was then divided into three segments (from south to north) to measure Level of Service, the Volume to Capacity Ratio, and Speed. Those three indicators are briefly defined below.

1. **Level of Service (LOS)** – An indication of how well traffic is flowing, with “A” being the best and “F” being the worst.
2. **Volume to Capacity Ratio (V/C Ratio)** – The number of vehicles passing through divided by the number of vehicles that can be accommodated when the roadway is operating at its designed capacity. At a V/C Ratio of 1.0, the roadway is operating at capacity. If the ratio is less than 1.0, the roadway has additional capacity.
3. **Speed** – A projected average vehicular speed.

Findings for the three segments are summarized below:

- **Segment 1 (East Brainerd Road to Standifer Gap Road)** – Segment 1 shows a current LOS D and worsening to LOS E in 2040. Alternative 2 produces an improvement in Level of Service (D to A) and the V/C Ratio. Conversely, both Alternatives 1 and 2 result in increased Speeds for this segment. It should be noted that even under the “no build” scenario, the V/C ratio remains below .70 for both travel directions for the projected 2040 traffic.
- **Segment 2 (Standifer Gap Road to the Collegedale city limits)** – Segment 2 shows a current LOS E and D for 2020 and worsening to LOS E in 2040. Alternative 2 produces an improvement in Level of Service (B and A) and the V/C Ratio. Conversely, both Alternatives 1 and 2 result in increased Speeds for this segment. This is typically the case when roads are widened, as the additional space gives motorists the sense that they can safely drive faster.
- **Segment 3 (the Collegedale city limits to Apison Pike)** – Segment 3 shows a current LOS E for 2020 and 2040. Alternative 2 results in an improvement to the LOS (from E to A/B) and the V/C Ratio, but once again, speed increases with both Alternative 1 and 2 from around 20 mph to over 40 mph.
- **The Volume to Capacity Ratio remains under 80% for all three segments under all alternatives, indicating the corridor has adequate capacity for future growth even under the No Build alternative.**

See <https://chcrpa.org/index.php/project/area-12-plan/> for the complete TDOT Report on SR 321.

Analysis/Conclusions

ROAD IMPROVEMENTS

There are a number of road improvement projects underway, particularly along the most heavily traveled corridors (E. Brainerd Road, Ooltewah Ringgold Road, Apison Pike). Some of the planned corridor projects are nearing completion (Apison Pike/E. Brainerd to Banks Road), whereas some are in the early planning phase (Ooltewah Ringgold Road between E. Brainerd and Apison Pike). These projects will take years to complete. However, it should be noted that while congestion has increased, the roads are not over capacity. Most of the congestion occurs during peak hours (such as the E. Brainerd – Ooltewah Ringgold Rd intersection). Modifications at key intersections, such as the existing roundabout at Standifer Gap Road, can provide added capacity to address peak hour congestion. These intersection improvements, combined with strategies to reduce school traffic peak volumes, can reduce peak hour congestion.



STREET NETWORK

The street network in Area 12 includes a few arterials that provide through connections, but there are limited minor connections between these arterials. Many subdivisions also include multiple cul de sacs, but only provide one point of access to the greater street network. Since the automobile is currently the only practical mode of transportation for most trips in Area 12, this lack of connectivity on the local

streets results in most traffic being funneled onto the arterials, which adds to congestion, especially during peak hours. This lack of connectivity and alternate travel routes is further impacted by the following:

- White Oak Mountain creates a natural barrier with very narrow passes, such as Parker’s Gap, that hinder east-west traffic movement.
- Railroad crossings and overpasses also affect the efficient flow of traffic when multiple lanes must converge to two lanes.
 - Secondary roads, such as Patten town Road and Tucker Road, do provide some additional connections between arterial and collector roads, but as they are two-lane, winding roads through residential neighborhoods, motorists may be reluctant to use them as secondary “back roads.”

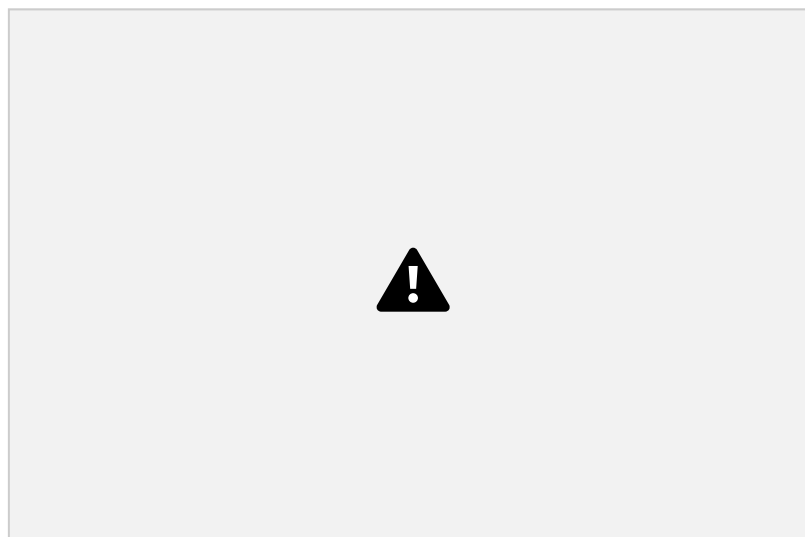
Bike lanes, sidewalks and greenways can also provide alternatives to a limited street network if they connect residential areas to major destinations. Participants in the Area 12 planning process expressed a desire for more sidewalks and greenways.

DEVELOPMENT PATTERNS

A lack of secondary connectivity between residential areas and key commercial or school destinations contributes to congestion on the main roads as everyone must exit their subdivision onto one of those few arterials to reach their destination. The draft 2045 Regional Transportation Plan (RTP) recommends locating future commercial centers and schools in proximity to higher density housing areas, and where adequate infrastructure is planned or already exists. This clustered, or mixed, pattern of commercial businesses (or schools) and higher intensity residential development allows some residents to walk or ride a bike to a store or a school, thereby alleviating the need for everyone to drive on the major roads. For those who do need to drive their car, a clustered, mix of uses allows them to park once and walk from one store to another.

ACCESS MANAGEMENT

Area 12 suffers from problems associated with a lack of access management on the main corridors. Access management generally refers to limiting the number of driveways opening onto a roadway. Multiple driveways (or curb cuts) create conflicts that contribute to traffic congestion as motorists turning onto, or off of, the major roads slow traffic and increase the likelihood of



accidents.

Lee Highway has multiple curb cuts and access points which contribute to overall traffic congestion and/or delays. The wide right of-way limits pedestrian accessibility, although the existing median provides potential for traffic calming measures such as crosswalks and tree plantings.

2.4.3 Natural Resources

The White Oak Mountain Area has a rich history and culture in small town communities defined by rural landscapes and scenic mountains and ridges. In addition to critical slopes and floodways, natural resources also include park space and conservation areas. Without good planning, the unique features that make these areas attractive could be lost. A focus of area plans is to balance development



and conservation so that as an area grows, the most valued scenic assets and rural features are protected.

Based on public feedback, retaining Natural Resources is a major concern. Protecting the area's natural resources not only ensures continued environmental function, but also adds to the attractiveness and quality of life in Area 12.

Existing Conditions

SENSITIVE RESOURCES

This map indicates points within the study area that feature natural resources deemed sensitive in terms of water function, steep slopes or habitat as identified in the adopted 2016 Comprehensive Plan for Hamilton County. In the White Oak Mountain Area, **15.04%** of the land is 25% or greater slope and **4.56%** is in the 100-year Floodplain. Waterways are shown to indicate the Floodway and 100-year and 500-year flood plains along with Impaired Waterways (303D) which indicate water quality status based on monitoring of sediment, pollution (metals, pesticides/fertilizer run-off, etc.) and erosion or changes in flow/volumes. Development in the floodway is prohibited.

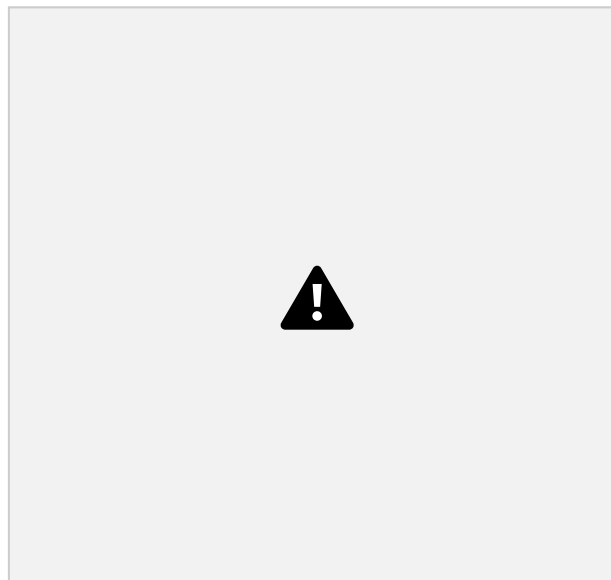
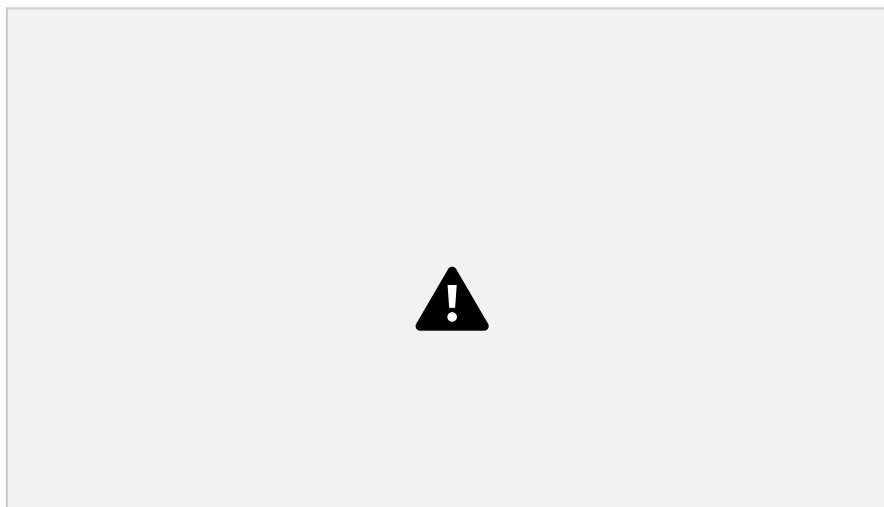


Figure 2.21 - Sensitive Resources

See Appendix A for full-size map.



White Oak Mountain is a prominent natural feature that is seen from many points within

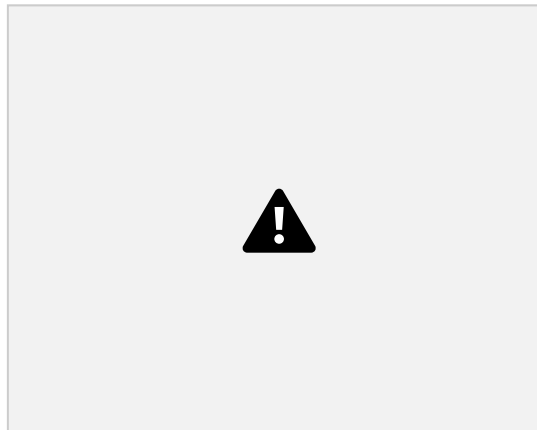
the area. Indicative of the Appalachian range, it is representative of the typical “valley and ridge” topography found throughout the region.

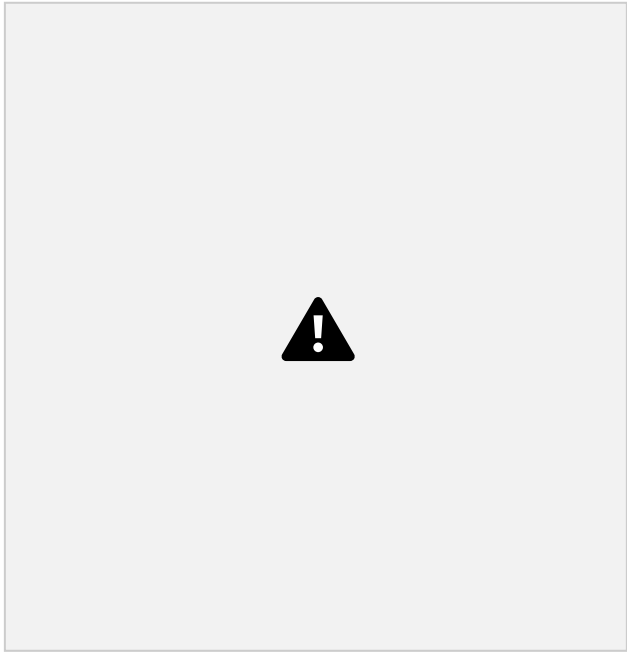
WATER QUALITY

Under rulings from the Tennessee Department of Environment and Conservation (TDEC) as well as the Environmental Protection Agency, Hamilton County and the City of Chattanooga have regulations in effect that manage the amount of run-off or stay-on-volume (STV) of water after a rain event and for a determined period of time (72 hours). The amount of impervious surface and changes from pervious surface are monitored when development occurs and as part of local regulations.

Figure 2.22 – WATERSHEDS

See Appendix A for full-size map.





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Trends/Projections

The Comprehensive Plan Update for Hamilton County recommends carefully considering the intensity levels of new development and potential disturbance for sensitive resources identified as Preserve or Level 1 areas. For slopes and waterways, the plan notes the following:

1. Water quality – reduced soil erosion and disturbance of riparian areas and reduced run-off or possible pollutants (includes sedimentation)
2. Increased Access and Connectivity to natural spaces
3. Retaining Forest cover: Improves Air quality/Habitat/Biodiversity
4. Awareness of Natural Resource contributions to overall quality of life and region's economy

For sensitive resource areas, lower density levels are recommended (ex. 1/2 acre lots to 2 acre lots) and creating clustered development that minimizes disturbance of key natural resource features. Disturbance of these resources may include clear cutting, removing a slope, significant grading or adding large retaining walls and filling of the floodplain. Tools used in other communities include L.I.D.s (Low Impact Developments) and conservation-based designs. See www.epa.gov/smartgrowth

The Thrive 2055 Plan for this region states that the Natural Resources in the area can be seen as a great asset and amenity for living and enjoying the area. The Thrive study - "Explore Our Region" - notes importance as more than an attractor, these natural resources also provide environmental benefits that help ensure the sustainable function of water, soil and air.

For Area 12 - many opportunities exist for open space or designated conservation areas that compliment new residential development, as sensitive lands are set aside, they may serve as parks, trails, pedestrian ways, picnic areas, recreation, and or nature areas that enhance the quality of life for White Oak Mountain area residents and visitors.

Water Quality

Q. What protection already exists for creeks and floodplains?

- A.** Within the study area, most of the major creeks and smaller streams are listed by the Tennessee Department of Environment and Conservation (TDEC) as 303D, or impaired. The State of Tennessee requires a 60-foot **buffer from the top of the bank on each side of a stream** for drainage areas of more than 2 square miles, 45-feet for each side of streams from 1.0 square mile to 1.99 square miles, and 30-feet on each side of a stream less than 1 square mile.

Currently, in Hamilton County, **development is allowed in the 100-year floodplain** as long as the finished floor level of any habitable space is raised at least one foot above the 100-year floodplain elevation.

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WHITE OAK MOUNTAIN AREA PLAN Draft 8/14/18

Existing Conditions

PRIME FARMLANDS & FOREST COVER

This map indicates existing prime farmland (Source: USDA) and amount of forest cover (based on aerial views). The more rural eastern areas are primarily made up of residential homes, farms, agricultural pastures or forests with few businesses or commercial development. An overall character of countryside and nature is prevalent throughout Area 12, due to the predominance of agricultural uses in the past. Currently a very small portion of the area is used for farming or agricultural production (less than 3%). Prime farmland is based on soil types and determined by the USDA.

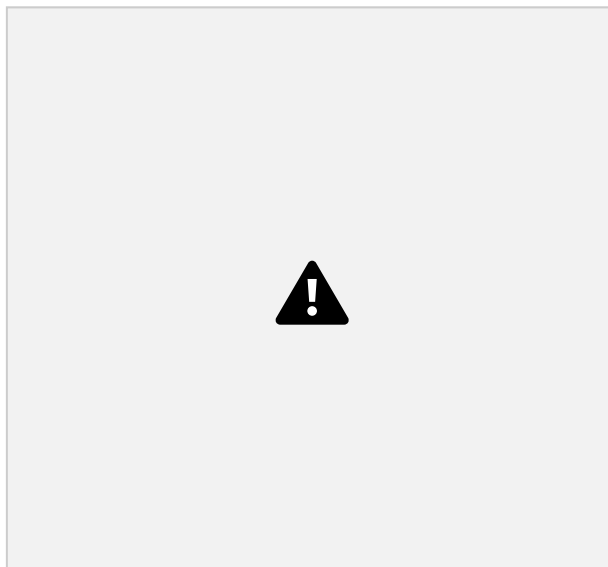
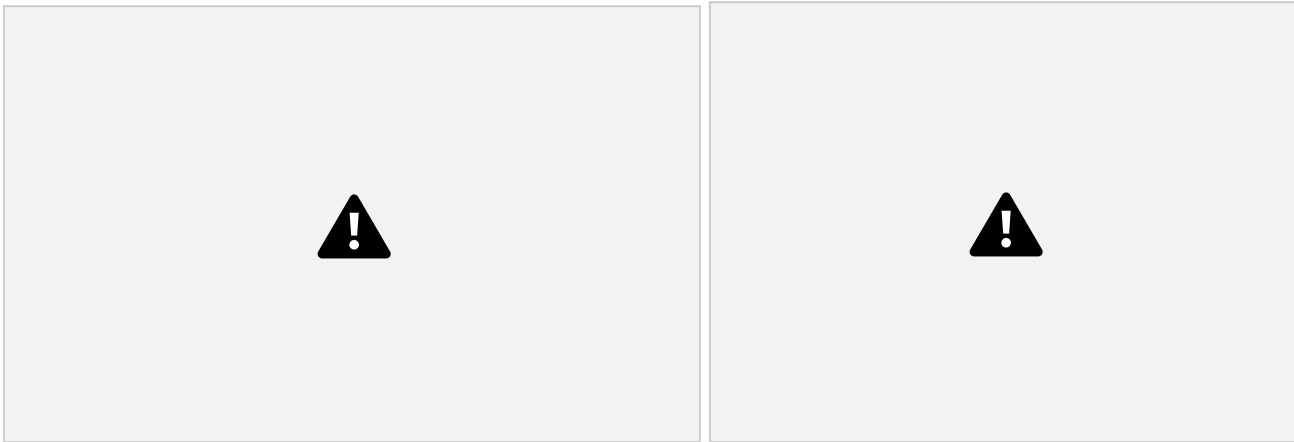


Figure 2.23 - PRIME FARMLAND

See Appendix A for full-size map.



Farms in the area serve multiple purposes from grain production, to raising livestock to special event uses and agri-tourism.

Trends/Projections

Nationwide, the U.S. had 2.1 million farms in 2012. This was 4% fewer than those existing in 2007, continuing a long-term decline in the number of farms per U.S.D.A. 2014 statistics. The decrease is particularly evident in the southeast and Midwest. Regionally there is a decrease in farmlands with Tennessee experiencing a 60,000 acre loss annually. As a metropolitan area, Hamilton County has experienced a similar decrease in large scale agricultural production, but small farms, community gardening and the promotion of “farm to table” and local goods is a trend seeing growth. *Source: USDA, TN.gov*

In Area 12, the general makeup of the soils and geology features are similar to that found across Hamilton

County with a variety of conditions existing. The primary farms with large acreage existing at the time of this study that are in production and serve as rural farms are highlighted and include the Hale Farm, the Thatcher Farm, the White Oak Valley Farm and the Hullander Farm.

“Trees help protect our state’s most important natural resources,” said Tennessee Department of Environment and Conservation Commissioner Bob Martineau. “They are vital for maintaining water quality, healthy air, flood prevention, wildlife habitat and healthy communities.” 2017

- In 50 years one tree provides \$130,750 in total benefits including oxygen, air pollution control and stormwater drainage.
- The U.S. Forest Service found that more than two million acres of Tennessee’s native forests were cut and more than 500 thousand acres of forest were converted to other uses annually. *Source: Tennessee Environmental Council /U.S. Forest Service*

Analysis/Conclusions

SENSITIVE RESOURCES

During the 2016 Comprehensive Plan update, sensitive resources were identified where development may occur but on a limited basis that takes into consideration the sensitive features and lessening potential impacts. Primarily along ridges or in floodplains, these areas, if significantly disturbed may result in the following impacts:

- Erosion
- Flood Plain alteration/Flooding
- Water Quality impacts
- Tree Cover or Vegetation loss/Loss of Wildlife Habitat or Key Farmland/Soils
- Scenic Qualities or Community Character lessened
- Reduction in Air Quality

Steep Slopes - The primary source of sensitivity shown on the “heat map” above is due to White Oak Mountain and its ridges, South Chickamauga Creek, Wolftever Creek, Hurricane Creek and associated tributaries. The percentage of properties that are classified as 25% slope or greater is 15.04 % or 5,686 acres. Currently, the majority of these properties remain undeveloped, with only a few ridge tops developed such as Balata Drive and Horizon Drive.

Water Quality – Like most parts of Hamilton County, storm water management is an issue for this area due to the significant portions of both the Wolftever Creek and the South Chickamauga Creek watersheds found in the study

area. Within the study area, most of the major creeks and smaller streams are listed by TDEC as 303D or impaired. Both state and local regulations limit development and or activity within buffer areas along these waterways. Although the floodway is regulated, what occurs in the surrounding floodplain (100 year) is also of concern and considered sensitive. Area 12 features critical flood plain areas (outside of the established protected floodway or 303d listed) where limited disturbance of riparian areas is suggested. These types of areas may also be set aside as open space/conservation areas

Farmlands - While most parts of the area are typically considered “rural” or countryside as they existed in

the past, today the percentage of key farm land soils is limited and mostly found in the eastern portion of the study area near Apison and White Oak Valley.

Existing Conditions

PARKS, RECREATION AND GREENWAYS

Publically used parks in Area 12 when combined total approximately 149 acres.

- 24.5 acres Standifer Gap Recreation Area
- 23.0 acres East Hamilton Recreation Area
- 83.0 acres Summit Ball Fields

6.0 acres Apison Park

12.0 acres Wolftever Greenway & Collegedale City Parks (Imagination Station, Vets Park & 2.4 miles trail

Under conservation or held privately are nearly 336 acres as the Bauxite Ridge Conservation Area (University held) and 17.5 miles of trails. The existing a large regional park in close proximity.

AREA 12 Parks include:

- Standifer Gap Recreation Area
- Summit Softball Complex
- Imagination Station
- Wolftever Greenway
- East Hamilton Recreation Area
- Bauxite Ridge Conservation Area
- Apison Park

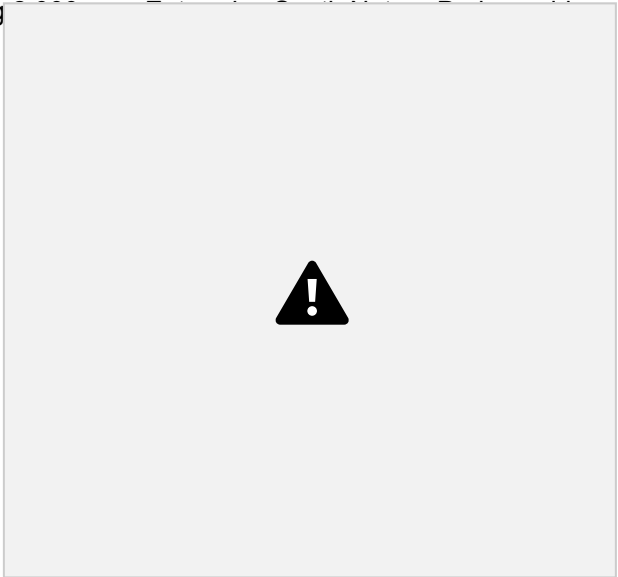
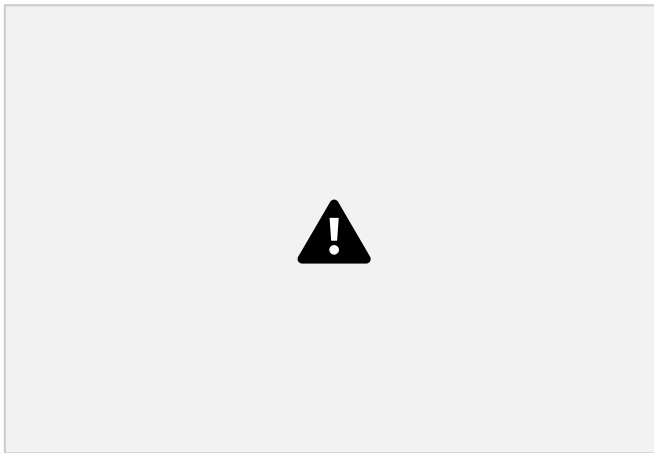


Figure 2.24 - PARKS AND GREENWAYS

See Appendix A for full-size map.



A community's park system should offer a variety of activities for users of many different age groups and interests from hiking trails through wooded hillsides, to ballfields and playgrounds, to educational exhibits, to open lawns.

Trends/Projections

Hamilton County: Parks & Recreation -

A multi-use athletic facility with 15-30 acres for youth sports is needed to add places for soccer and ball fields.

Costs for Park Trails/Track: One-mile track at 6 feet wide = \$2,000 – 2,500 per mile (without land costs)

County Parks will consider Pocket Parks (one acres or less)

- These would need to be provided by private developers
- Within bike riding distance (1/2 mile) of major subdivisions or destinations
- Including playgrounds, and small walking trail systems
- Public-Private Partnerships have brought great parks to the region such as the Riverwalk.
Multiple entities administer and maintain Area 12 facilities including the City of Collegedale, Hamilton County Parks and Recreation and the City of Chattanooga Public Works department

Funding for parks and greenways is often supplemented by water quality program (TDEC), transportation dollars (alternative modes), local sponsorship, easements, capital improvements budget and grants or donations. See *TPL.org*

Analysis/Conclusions

Area 12 features six major public parks or areas dedicated to recreation and leisure services.

Standards from the National Parks and Recreation Association (NPRA) reveal that 9.6

acres of parks per 1,000 residents is the national

standard. Based on existing public park acreage

and current population, parks are being provided at a rate of 3.42 acres per 1000

residents in the White Oak Mountain Area.

School recreation fields and tracks are also used by the community as well as conservation areas and campus open space. Additionally, the Enterprise South Nature Park serves the area regionally with the nearby 2,000 acre park located across I-75 at the Volkswagen entrance.

Area 12 features some areas set aside in conservation for public use that are held by institutions or private property owners such as by McKee Foods and Southern Adventist University.

An opportunity exists for multiple agencies and administrations to come together to continue the growth of the White Oak Mountain Area's park system.



Park access and improved connectivity is needed to area recreation resources. Plan participants were in support of adding greenways and connecting trails to park spaces or conservation areas. The issue of accessibility and the need for improvements was pointed out by many residents.

- A study of walking or biking potential in relationship to existing parks shows that many residential areas are well outside the convenient range of a ¼-mile walking distance.
- Bike/pedestrian connections are needed for parks in the following locations:
 - East Brainerd area with a focus on schools
 - Old Apison for greenways and conservation areas
 - Collegedale to Summit
 - Cambridge Square

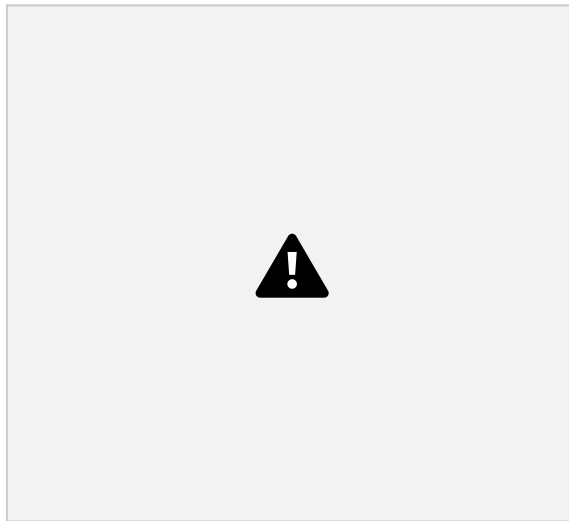


Figure 2.25 – PROXIMITY FOR CENTERS, SCHOOLS, AND PUBLIC PARKS

See Appendix A for full-size map.

During the September 2017 Infrastructure meetings, the following issues for subareas and or neighborhoods were discussed and are listed below. These findings were noted from consultations with the Hamilton County Parks staff.

- Summit Ballfields – a City of Chattanooga facility used only for tournaments features no casual community use and gates are often locked. Overall, a trail or greenway that connects these facilities and the Summit center is needed.
- Hamilton County Schools allow casual community use of almost all school facilities. Playgrounds and tracks are used the most. Create new connections to residential uses where possible.
- Standifer Gap Recreation area needs work and even though in poor condition, it is still well used because it is the only place available. Improvements are needed and additional sites should be

studied for East Brainerd.

- Are there expansion/improvement plans for the existing County facilities such as Standifer Gap Recreation Area (the public would like a pool) or the East Hamilton ball fields?
- What about the Bauxite Ridge Conservation area near the University and Apison – how can the public or neighborhoods have better access?

For new facilities planned, there is an opportunity to tie in future greenways with partners or community coalitions in place as advocates. This approach could help to preserve White Oak Mountain and other creek areas as greenspace. Collegedale's Wolftever Greenway and Imagination Station serve as an example of the type of quality design and level of programming that is envisioned for parks in the area.



Wolftever Creek Greenway in Collegedale features public art, walking trails and play areas as well as passive areas for rest and reflection.

3. Community Principles & Vision

Shaping a vision for the future of the White Oak Mountain Area involves exploring the future potential of this area and speaking to residents and business owners about what they want to see in their community 10 years from now. What qualities do people value? What elements make the area unique or special?

As described in the previous chapter, two surveys were distributed during the planning process to identify those community values. During public meetings, participants were asked to identify issues and prioritize potential solutions to their concerns. While some issues were specific to a particular sub-area, many applied to the entire area. Advisory Committee members were asked to help draft a vision statement for the future of the White Oak Mountain Area.

Based on the survey responses, input from community meetings, feedback from the Advisory Committee, professional guidance from the staff and technical advisors, the following PRINCIPLES, VISION STATEMENT, GOALS and RECOMMENDATIONS were drafted to represent the shared values of the citizens of the White Oak Mountain Area and to establish a direction for the future. The goals from the countywide Comprehensive Plan and the Regional Transportation Plan also helped inform the White Oak Mountain Area Plan.

Following is a brief definition of each of these types of statements.

PRINCIPLES are traits or qualities that are considered worthwhile; they represent an individual's highest values or priorities and deeply held driving forces.

A community's **VISION STATEMENT** describes what that community aspires to be. A Vision Statement focuses on what is valued by the community. It provides direction.

GOALS lay out desired outcomes that support the Vision; a target to be achieved. Goals are usually broad, general expressions of the aspirations of a community, but they should be focused as directly as possible on outcomes. Goals should promote and be in line with the Vision. Goals should be few in number, since each of them can generate more than one activity to accomplish it. Goals typically begin with a verb.

More specific **RECOMMENDATIONS** then provide specific, measurable activities need to achieve those Goals.

3.1 PRINCIPLES

PRINCIPLE 3.1.1. Balance the Preservation of Rural Character with New Growth

Preserving the rural character of the White Oak Mountain Area as growth occurs is a top priority for residents. New growth should be directed to areas with sewer services, but limited in established rural communities that are not served by sewer. A predominance of low density residential development, interspersed with farms and open space, contributes to that rural character.

PRINCIPLE 3.1.2. Protect the Natural Resources

The beauty of White Oak Mountain, and other ridges, adds to the quality of life and they are important natural features. Undeveloped floodplains help protect the water quality, provide critical wildlife habitat, and contribute to the rural character.

PRINCIPLE 3.1.3. Provide Outdoor Recreation

The White Oak Mountain area is a great place for families with children. Having adequate parks, hiking and biking paths is vital to serving family needs. Trails and greenways are important not only to provide recreation, but also because they offer different ways of getting to schools, stores, and other destinations from neighborhoods.

PRINCIPLE 3.1.4. Promote Walkability and Connectivity

Residents like the walkability and high quality of Cambridge Square and want to see those aspects incorporated in other new development. Sidewalks, trees, lighting, benches and other amenities make commercial development more walkable, pleasant and safe for pedestrians. Incorporating a mix of uses, and including housing in each development, means some people can walk to work and customers can park once and walk to multiple destinations. Connecting commercial development, and schools, to residential subdivisions – whether by streets, sidewalks, or greenways - is also important.

PRINCIPLE 3.1.5. Provide Adequate Infrastructure

As new growth occurs, it is important to plan ahead for roads, sewers, and schools to avoid traffic congestion, water quality issues, and overcrowded schools. This infrastructure should be coordinated with new development.

PRINCIPLE 3.1.6. Provide Quality Shopping and Residential Development

The White Oak Mountain Area is growing fast with new restaurants and other businesses that offer convenience to area residents. It is important that this new development be of a high quality. Residents prefer retail businesses that cater to the local market; not large regional centers. Stores that front directly onto sidewalks, common green space, parking that doesn't dominate visually and is well landscaped, signage that is scaled to the pedestrian, and quality materials all contribute to the quality of shopping centers. Subdivisions that incorporate usable open space, and housing that is similar in scale, or provides a gradual transition in height and mass to adjacent developments, are desired.

PRINCIPLE 3.1.7 Provide a range of affordable housing.

Housing construction costs have increased in recent years, due in part to rising prices for building materials, labor, increasing costs of land, and regulations. These costs make it very challenging for developers to build low-priced, single-family housing. In addition to rising building costs, rents are going up partly because land values in desirable neighborhoods are increasing. The demographics and preferences of our community are also changing. Many people are choosing to rent for a variety of reasons. Families are smaller. There are more single-parent and non traditional households, and many people, especially Millennials, want to live in walkable communities near work, shops and other amenities. Seniors are increasingly choosing to age in place, and their homes (often the most affordable option for first time homebuyers) are therefore not on the market for resale. A greater variety of housing options, sizes, densities and locations is needed to accommodate these changing demographics and preferences throughout Hamilton County.

3.2 VISION STATEMENT

The White Oak Mountain Area's natural beauty, rural landscapes, suburban living, and convenience to commercial centers appeal to many people, but residents fear losing those very qualities that draw

people to the area in the first place. Based on the Principles above, the following Vision Statement was written to summarize what the community wants to see.

In the future, the citizens of the White Oak Mountain Area want to see growth that is managed responsibly by promoting development in areas with adequate infrastructure. They want to see the unique, scenic qualities of the area preserved and enhanced, so that as growth occurs these assets are retained.

4. Goals & Policy Recommendations

A set of **Goals** (see list below) was created to support the community's Principles and Vision Statement. These Goals are then supported with a series of **Policy Recommendations** and some potential options for achieving that Goal. Examples of different development forms and successful projects found in suburban communities throughout the southeast are also included for illustration.

GOAL 4.1.1. Promote orderly development that accommodates expected new growth while protecting the rural character of the White Oak Mountain area.

GOAL 4.1.2. Minimize strip commercial development and concentrate new commercial development around established commercial areas.

GOAL 4.1.3. Make commercial centers more attractive and walkable with a greater variety of activities in each (live, work, play, shop).

GOAL 4.1.4. Provide opportunities for a variety of housing options (senior housing, work force housing, townhomes, apartments) to ensure the area accommodates all housing needs as it grows.

GOAL 4.1.5. Align future public infrastructure investments in schools, roads, and sewers with new growth.

GOAL 4.1.6 Develop tools that promote affordable housing options to provide a range of housing choices.

GOAL 4.1.7. Preserve the rural character of Apison.

GOAL 4.1.8. Preserve the rural character of Parker's Gap and the London Lane area, and the gap at White Oak Valley.

GOAL 4.1.9. Create a new commercial center in Summit near the intersection of Apison Pike and I-75.

GOAL 4.2.1. Increase mobility options throughout the region, while protecting residents' desire to maintain privacy and control of traffic in their neighborhoods.

GOAL 4.2.2. Improve the design of new road projects to complement the rural and suburban character of the White Oak Mountain Area.

GOAL 4.2.3. Minimize congestion on arterial roads.

GOAL 4.2.4. Reduce traffic demand related to schools and major employers during peak travel times. GOAL 4.3.1. Protect the creeks, hillsides, and other natural resources.

GOAL 4.3.2. Increase the number of greenway connections and parks.

GOAL 4.5.1. Create a "Village Center" at Old Ooltewah with the following qualities:

- *A mix of uses*
- *Multi-story buildings*
- *Buildings located close together*
- *Parking in the rear or to the side*
- *Sidewalks*
- *Generous landscaping*
- *Pedestrian amenities (benches, lighting, etc.)*
- *Public gathering spaces*

GOAL 4.5.2. Create a “Village Center” in Summit with the following qualities:

- *Mix of Uses*
- *Multi-story buildings*
- *Buildings located close together*
- *Parking in the rear or to the side*
- *Sidewalks*
- *Generous landscaping and gateways*
- *Pedestrian amenities (benches, lighting, etc.)*
- *Public gathering spaces*
- *Cluster higher intensity Commercial at major corridors or interchanges*
- *Neighborhood Center uses or Mixed-Residential to create a transition between single-family residential*

GOAL 4.5.3. Expand the “Town Center” at Cambridge Square with the following qualities:

- *A mix of uses within each building*
- *Multi-story buildings*
- *Buildings located close together*
- *Parking in the rear or to the side*
- *Sidewalks*
- *Generous landscaping*
- *Pedestrian amenities (benches, lighting, etc.)*
- *Public gathering spaces*
- *Cluster higher intensity Commercial at major corridors or interchanges*

GOAL 4.5.4. Create a “Crossroads” in Old Apison with the following qualities:

- *Typically distance to an intersection is within 250 ft*
- *Small Scaled Commercial (generally under 5,000 sq ft)*
- *Parking to the rear or side, or no more than one bay of parking along the road frontage or in front of buildings*
- *Includes walkability and pedestrian access for area residents and visitors*

GOAL 4.5.5. In the future, if sewers are extended, create a Rural “Village Center” in Old Apison with the following qualities:

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- *A mix of uses*
- *Multi-story buildings (up to 2-1/2 stories) featuring façades and/or materials and smaller scaled designs that reflect the character of the rural setting.*
- *Buildings located close together or at a crossroads*
- *Parking preferred in the rear or to the side*
- *Sidewalks and/or trails*
- *Generous landscaping and green buffers*
- *Pedestrian amenities (benches, lighting, crosswalks, etc.)*
- *Public gathering spaces, greenways and parks*

GOAL 4.5.6. Create a “Neighborhood Center” at East Brainerd and Ooltewah-Ringgold Road with the following qualities:

- *A mix of uses*
- *Multi-story buildings*
- *Buildings located close together*
- *Parking preferred to the rear or to the side or no more than one bay of parking along the road frontage or in front of buildings*
- *Sidewalks*
- *Generous landscaping and greenway connections*
- *Pedestrian amenities (benches, lighting, etc.)*
- *Public gathering spaces*

GOAL 4.5.7. Create a “Suburban Center” on Jenkins Road with the following qualities:

- *Multi-story buildings*
- *Buildings located close together*
- *Parking preferred in the rear or to the side*
- *Sidewalks*
- *Generous landscaping and screening*
- *Pedestrian amenities (benches, lighting, etc.)*
- *Public gathering spaces*
- *Cluster higher intensity Commercial at major corridors or interchanges*
- *Mixed-Residential to create a transition for single-family residential*

How will these Goals and Policy Recommendations be used? Once the Area Plan is adopted, it should serve as a guide for future land use decisions and development choices. Its recommendations are meant to be broad enough to give the Chattanooga-Hamilton County Regional Planning Commission and local legislative officials flexibility in implementation, but clear enough to provide sufficient direction in making informed zoning and infrastructure investment decisions. Private builders can also refer to the Plan when considering the best locations for future development projects.

Some issues have been given further study by looking at potential options that could accomplish the Goals. Additionally, a list of PROS (positives or benefits) and CONS (negatives or constraints) is provided for each of these options. These options are for informational purposes only and are not intended to be used as a basis for approving or denying a re-zoning request. Future rezoning decisions will be influenced by the Place Types Map and the Place Types Matrix.

The Goals and Policy Recommendations are organized into the following five categories: 1. **Built Environment** – manmade development including housing, schools, retail stores and other businesses 2. **Transportation** – roads, sidewalks, greenways, bike lanes and transit 3. **Natural Resources** – creeks, floodplains, wetlands, steep slopes, ridgetops, and scenic rural landscapes 4. **Place Types** – areas that exhibit the same general development form (building types, heights, setbacks, street connectivity, lot coverage, etc.) 5. **Centers** – Concentrations of commercial businesses or civic activities

4.1 Built Environment

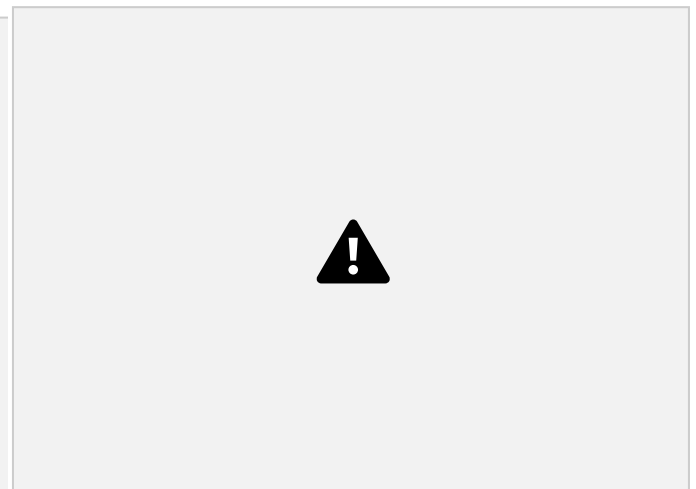
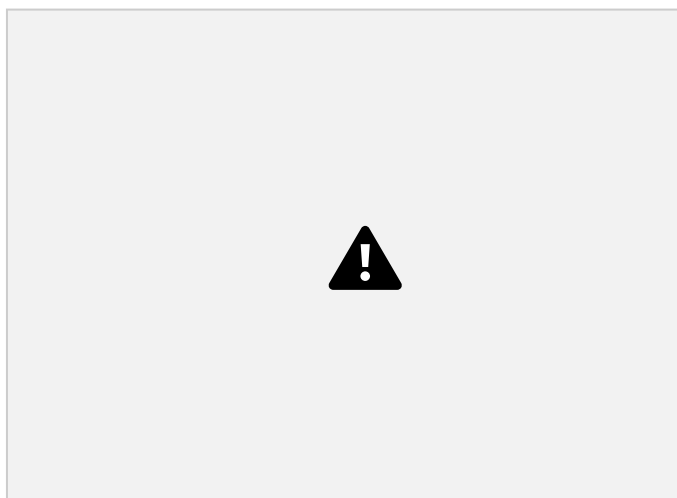
Perhaps no system has a greater influence on the character of the White Oak Mountain Area than the Built Environment. New subdivisions, commercial developments and schools have long-term, visual and economic impacts on the community. Changes can be expected as a result of Hamilton County's growth, however, without a plan for this growth, these changes can produce negative impacts, such as congested roads, overcrowded schools and a loss of the area's unique character. Focusing new development in locations where the existing infrastructure and services can support it is



important to White Oak Mountain Area residents.

White Oak Mountain Area residents expressed a desire for additional retail, restaurants, and medical facilities during the planning process, however, they want quality development that complements the area's scenic, rural character. They specifically pointed to a preference for "walkable" retail development such as Cambridge Square.

Cambridge Square features pedestrian amenities and a concentration of shops and offices that make it walkable.



Examples of "Countryside Residential" housing or large lot residential development that may be appropriate in areas not served by sewers or with sensitive natural resources.

Green Buffers

Q. How do green buffers help maintain rural character?

A. A citizen who attended one of the public meetings brought this idea to the table and it received a lot of support in the subsequent community surveys. Most people experience the rural character of the farms, ridges and open space of the White Oak Mountain Area while traveling along the major corridors.

If green, vegetated buffers can be maintained along those major corridors, with new subdivisions located behind those buffers, much of the rural character can still be experienced, while still accommodating new growth. Some areas have the potential to retain their rural character, while other areas are already developed as suburban, but may look to enhance their “countryside” attributes as changes occur along the corridors.

The RPA staff and some of the Advisory Committee members visited the middle Tennessee area last year and saw these

types of buffers being used. Around the Nashville Franklin-Murfreesboro area, the green buffers ranged from about 100 to 200 feet deep.

Property ownership would not change with these buffers; buildings would simply have a deep setback from the major road. Even in the White Oak Mountain Area, some existing subdivisions, including Frost Creek Farms, Waterbury, Oak Brook, and Horizons, are already set back from the main road by 80 to over 300 feet. Where development already exists closer to the main road, a wide (12 feet or more) planted median could be substituted

GOAL 4.1.1. Promote orderly development that accommodates expected new growth while protecting the rural character of the White Oak Mountain area.

The following options are presented as potential ways for achieving the above Goal. They are for informational purposes only and are not intended to be used as a basis for approving or denying a zoning case or as part of the permitting process.

Figure 4.1 – GREEN BUFFERS AND PRESERVING RURAL CHARACTER

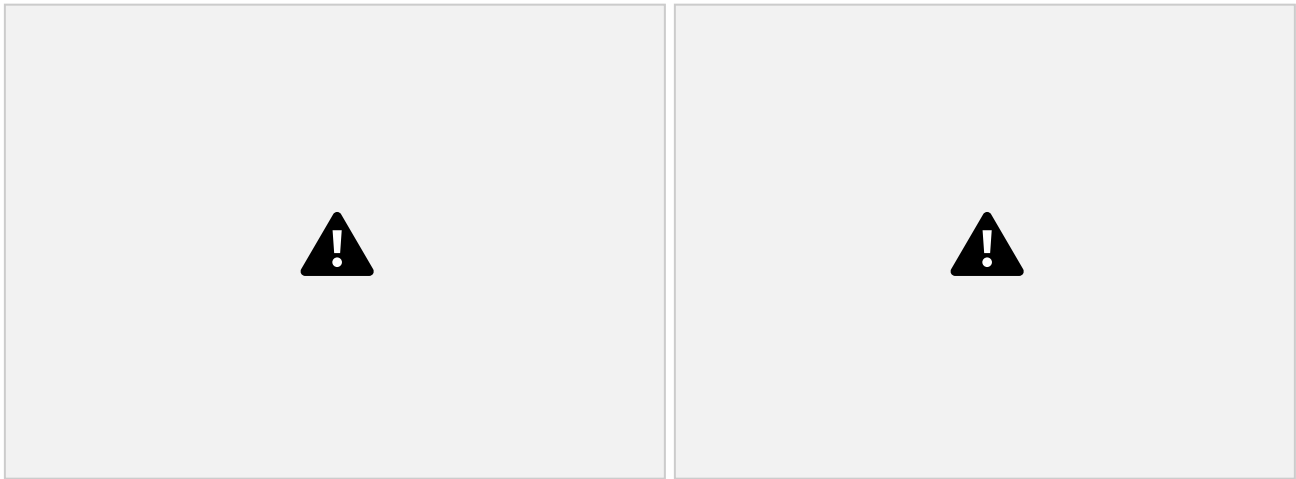
Potential Options	Pros/Benefits	Cons/Constraints
<p>Option: <i>Incorporate Deeper Setbacks for the lots that front major corridors.</i></p>	<p>Helps minimize the loss of tree lined roads and pastoral views typically associated with rural settings.</p> <p>Provides space for sidewalks and bike lanes.</p> <p>The front portion of some development already includes landscaped entries, community lots, or open space set asides.</p>	<p>If required on private land this may result in the loss of developable lots, which impacts the costs of housing.</p> <p>If green buffers are created incrementally on a development by development basis, complete connections may take years to accomplish.</p>

	Pros/Benefits	Cons/Constraints
<p>Option: <i>Include Green Buffers in Planned Unit Developments (P.U.D.) and allow the developer to increase density in return for providing green buffers along the major corridors, or allow these green buffers to count towards the open space requirement.</i></p>	<p>Already required community lots may double as green buffers.</p> <p>Provides an amenity for residents and may connect neighborhoods to local schools, parks or shopping in the area.</p> <p>May allow more house lots since impacts to character are minimized by the green buffer.</p>	<p>The developer may incur additional costs if an enhanced entry way or open space was not envisioned as part of the development, which then impacts the costs of housing.</p> <p>The Residential P.U.D requirements and subdivision regulations would need to be modified.</p> <p>Cost of maintenance over time must be considered.</p>
	Pros/Benefits	Cons/Constraints
<p>Option: <i>Corridor Plan/Study – Include green buffers as part of corridor enhancements for future CDOT, County or TDOT projects. (The green buffer area may be in existing public R.O.W. or may involve the acquisition of private land if needed.)</i></p>	<p>May be able to work with existing vegetation or introduce new plantings.</p> <p>May include bioswales or other green infrastructure to meet storm water management needs.</p> <p>Brings partners together to determine a cohesive design and</p>	<p>May involve acquisition of, or easements on, private property.</p> <p>Maintenance over time must be considered.</p> <p>Upfront design and costs must be incorporated into the road project.</p>

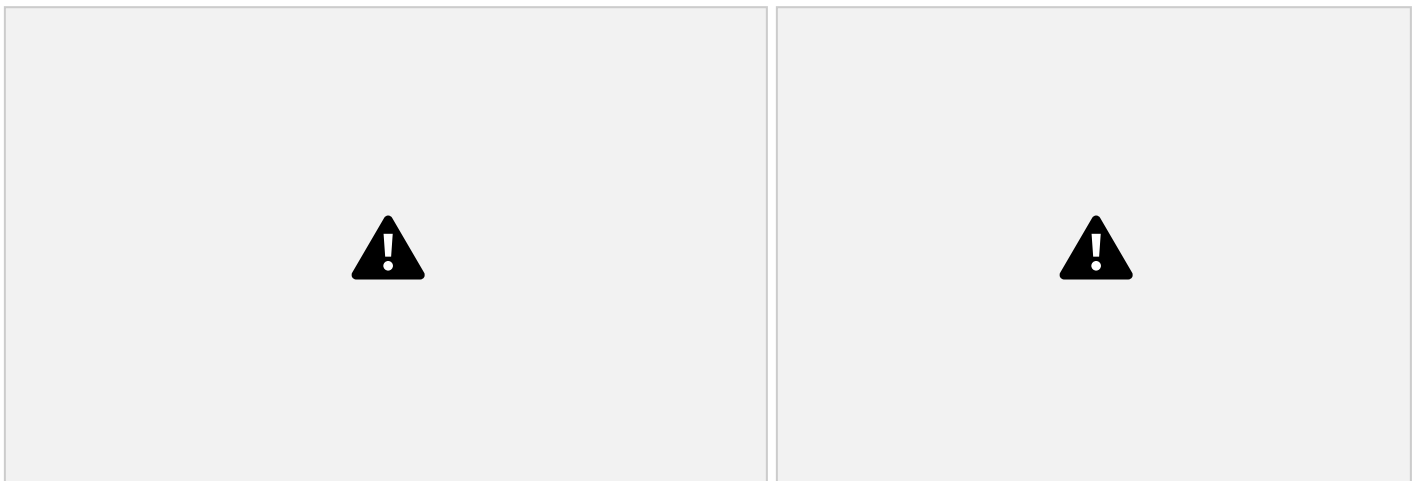
<p>▪ Include planted medians where buffers are not possible.</p> <p>▪ Include Bike/Ped Paths to provide an alternative transportation mode that can reduce traffic and improve the accessibility of an area.</p>	<p>solution to address traffic concerns.</p> <p>Provides outdoor recreation and promotes healthy lifestyles with walking and bike paths.</p> <p>Establishes tree canopy along major corridors.</p> <p>Provides additional space for future road changes and utilities.</p> <p>Since the goals of the State and local TPO are to improve walkability and connections, funding may be available as part of transportation projects.</p>	<p>Currently, TDOT does not engage in landscaping unless a partnership is established with a municipality.</p> <p>Must be studied and implemented on a corridor scale in order to see cohesive results.</p>
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Policy Recommendations:

- 4.1.1.1. Suburban areas served by sewer are more suitable for development, and are generally not appropriate for “rural” development policies. However, these sites should be developed responsibly by retaining important scenic features and minimizing impacts on steep slopes and flood plains.
- 4.1.1.2. Locate higher density residential development, including subdivisions with small lots, in areas already served by sewers and roads, or in close proximity to schools.
- 4.1.1.3. Locate low density residential development in the more rural areas that are not served by sewer, have sensitive natural features (steep slopes or floodplains), or are located far from schools and other public services.
- 4.1.1.4 As an alternative, where deeper setbacks and green buffers are not feasible, install tree-planted medians in the public right-of way to provide the street landscaping enhancements desired by the community.
- 4.1.1.5 Encourage low density development on ridgelines in order to protect these scenic backdrops to the White Oak Mountain Area.
- 4.1.1.6 Study options within the Residential Planned Unit Development (P.U.D.) process for incentives or bonuses for including a green buffer along the street edge as part of new residential development.



Green setbacks or buffers along the major roads was an idea suggested by members of the community to help maintain the rural character of the White Oak Mountain Area. These green buffers could accommodate walking or biking paths and utility lines while still accommodating new residential development beyond the buffer.



These examples include paths for pedestrians/bikes and tree-lined medians that enhance road designs while also adding to the “Countryside” character that is typical to this area.

GOAL 4.1.2. Minimize strip commercial development and concentrate new commercial development around established commercial areas.

Policy Recommendations:

4.1.2.1. Do not extend commercial zoning along the major corridors as this increases “strip development.”

4.1.2.2. Limit new commercial zoning to the locations for commercial centers designated in this

Plan under the following Place Types:

- Crossroads
- Village Center
- Suburban Commercial
- Neighborhood Center
- Town Center

GOAL 4.1.3. Make commercial centers more attractive and walkable with a greater variety of activities in each (live, work, play, shop).

Policy Recommendations:

4.1.3.1. Promote new commercial development that incorporates elements that make it more “walkable” and attractive. Develop new commercial zoning districts that promote these elements.

- A mix of uses, including housing

- Maximum building footprint sizes
- Parking in the rear or to the side of buildings
- Buildings located close to each other
 - Buildings that front directly onto the sidewalk
- Sidewalks
- Shade trees, and landscape
- Public gathering space

“Maintaining Rural Character”

Q. Why does the White Oak Mountain Area Plan recommend more intensive development in some areas when the community said they want to maintain rural character and are concerned about traffic congestion? Those ideas seem to contradict each other.

A. The Plan seeks to balance two things: 1) the desire of residents to retain the rural character of the area; and 2) how to accommodate the growth that is coming.

The plan therefore, recommends a clustering of moderate density residential and commercial development in limited locations (or “centers”). This may seem to run counter to maintaining rural character, however, that is not the case. **For areas that are experiencing new growth, one of the best ways to maintain the rural character people desire, is to concentrate new higher intensity development in a few key locations,**

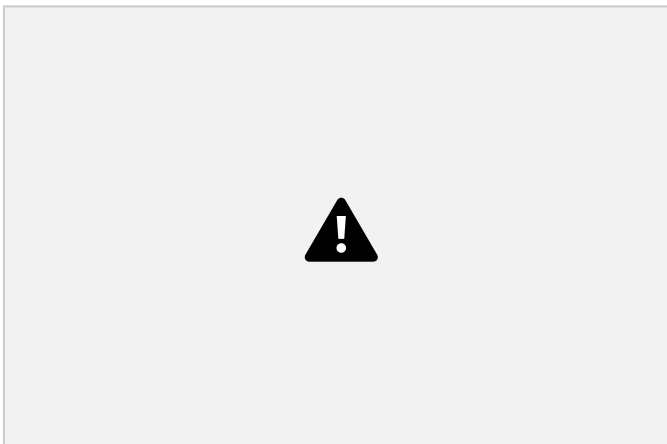
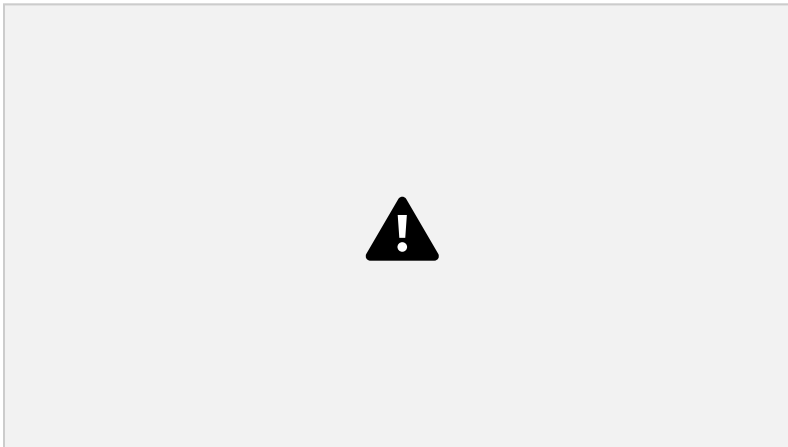
rather than allowing it to spread

throughout the entire area.

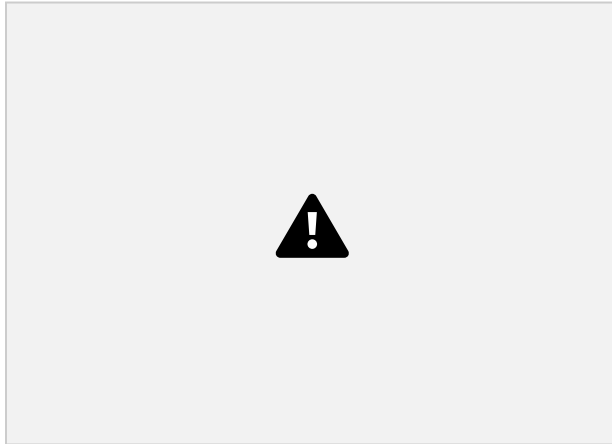
- Pedestrian-level lighting, benches, and other pedestrian amenities

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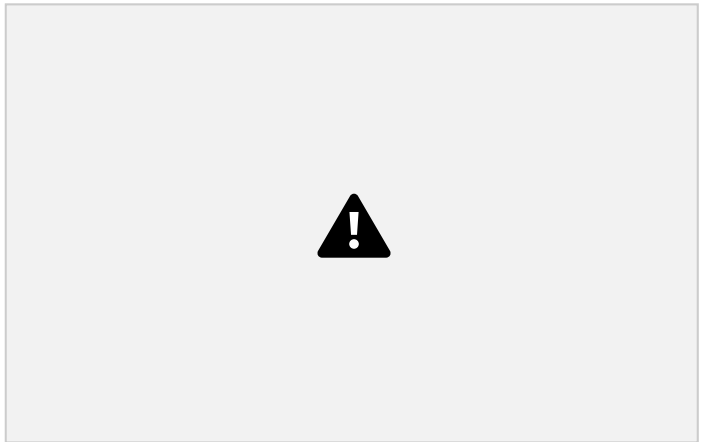
Vibrant commercial centers that include a mix of uses are found across the southeast as shown here in Woodstock, GA; Leiper's Fork, TN; Berry Farms, Franklin, TN and Bluffton, SC.



GOAL 4.1.4. Provide opportunities for a variety of housing options (senior housing, work force housing, townhomes, apartments) to ensure the area accommodates all housing needs as it grows.

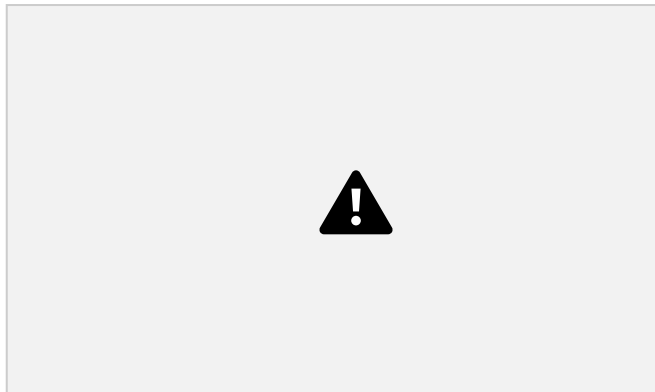
Policy Recommendations:

4.1.4.1. As properties are re-zoned, allow for the development of moderate to higher intensity residential development (such as apartments, townhouses, or small lot subdivisions) on arterial and collector roads, near established or planned commercial centers, schools, and in areas with adequate infrastructure, as designated in the Place Types map.



“Mixed-Residential” housing comes in many forms, from attached units, townhouses, condos or small lot single-family houses to apartment buildings.

Housing Trends



Q. During the planning process, some people objected to more apartment development and even moderate density housing, such as small lot subdivisions. Why does the Plan recommend such development at all?

A. There is a real need for these types of residential development throughout Hamilton County. That need is being driven by the changes in household size (more singles, empty-nesters, and smaller families) and by the rising costs of new home

construction. Residential markets are diversifying in response. In fact, there are as many renters projected to move into the White Oak Mountain Area in the future, as home owners.

The White Oak Mountain Area Plan only designates 180 acres of land for the Mixed Residential (MR) Placeintensity housing to be feasible. Type. This is a small fraction of the 37,800 acres in the

entire study area.

Additionally, only six locations are designated for Centers with this surrounding Mixed Residential development.

Additionally, any future transit services will require concentrated commercial centers and areas of higher

GOAL 4.1.5. Align future public infrastructure investments in schools, roads, and sewers with new growth.

Policy Recommendations:

- 4.1.5.1. Prioritize already developed areas first when considering locations for new publicly funded infrastructure (schools, roads, sewers) to maximize the use of public funding and to maximize return on investment.
- 4.1.5.2. Avoid locating new infrastructure in areas with sensitive natural resources and target locations that are most suitable for land development.

GOAL 4.1.6 Develop tools that promote more housing options and also provide a range of affordable housing choices.

As a growing residential community, the White Oak Mountain area has an opportunity to incorporate multiple housing types and more affordable options within its future housing mix. The following studies are recommended to inform a strategy or approach that will reduce housing development costs and broaden the availability of housing options for homebuyers.

Figure 4.2 – HOUSING OPTIONS

Potential Studies

Option: Create a developer “toolbox” focused on promoting a range of housing choices that may include: potential incentive programs such as infrastructure subsidies, waiving of fees, and/or public realm investments.

Option: Study housing needs for both low-income and low to moderate income households to understand the overall status of housing in Hamilton County.

Option: Develop a future housing strategy for Hamilton County and its municipalities to provide more housing choices.

Option: Study local zoning regulations to consider amending residential zones to promote small lot designs, attached twins, ADU’s, bungalow courts, townhomes, apartments and other lower cost housing options.

Option: Review development regulations and procedures to maximize development review efficiency and to minimize conflicting code requirements.

Policy Recommendations:

- 4.1.6.1 Consider including affordable housing units within close proximity to “Centers” as part of future mixed-use development that are designed for higher densities and where there is potential for transit in the future.