
**Comprehensive Plan for
Chatham County, North
Carolina**

Phase I Report

April 12, 2016

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1 PHASE I REPORT

Project Overview

Chatham County has experienced exceptional growth in recent years, and has been named the seventh fastest growing county in the state of North Carolina. The County is in the path of additional growth, particularly in the northeast portion of the County along the US 15/501 corridor.

The development of a new Comprehensive Plan is needed at this time in response to pending challenges related to infrastructure provision and environmental protection in light of projected growth. It presents an opportunity to address the specific needs of the community and improve the quality of life enjoyed by current and future residents.

This effort will result in a plan that is strategic in nature, identifying key strategies to be implemented by the County and its partners in both the public and private sectors to facilitate growth management initiatives that are critical to protecting the character of the County and ensuring future economic stability.

The planning process has two phases. Phase 1 was intended to take a cursory look at the existing conditions of the County and clarify the plan objectives, and to establish the framework for the planning process. The Plan will be developed in Phase 2 in accordance with a scope of work refined with the results of Phase 1.

Process

The first phase was conducted over a four-month period which included three meetings with the Steering Committee (refer to Appendix A for a list of the Steering Committee members). The Committee provided important insights that have helped shape the direction of the planning process. The primary tasks and products of Phase 1 included the following:

- Project Coordination Plan – The purpose of the Project Coordination Plan is to ensure clear lines of communication among project partners and establish guidelines and procedures for the creation and delivery of work products throughout the planning process (established in the contract and provided to staff).
- Public Engagement Plan – The Public Engagement Plan (PEP) clearly defines a “menu” of outreach strategies that are appropriate for Chatham County. It offers specific guidance on tactical approaches and provides other important information to consider in engaging stakeholders. As the County works to ensure citizens and other stakeholders have a voice in the process, staff and leaders can refer to the PEP to determine the best path forward and utilize available resources efficiently. It is also a guidebook for the Steering Committee members and other stakeholders who will assist in this project.
- Community Assessment – In an effort to sharpen the approach to plan development, an initial assessment of the existing conditions in the County and its context was conducted. This assessment involved the compilation and synthesis of information gathered through stakeholder interviews (refer to Appendix B for a list of the key stakeholders interviewed during Phase 1), a review of adopted plans (refer to Appendix C for the Plan Review), and a look at relevant data provided by the County and acquired from various sources. From this, a preliminary set of issues and opportunities were identified and confirmed by the Steering Committee. These findings informed the refinements to the scope of work for Phase 2.
- Scope for Phase 2 – The Comprehensive Plan will be developed in accordance with a refined scope of work for Phase 2.

This report provides the refined scope of work for Phase 2. Other products of Phase 1 not incorporated into the appendices of this report are provided under separate cover.

Phase I Findings

The following sections highlight priorities and goals from previous plans as well as findings that have influenced the areas of emphasis that will be the focus of the Comprehensive Plan. For a more detailed plan review, see Appendix C.

1.1.1 LAND USE

Key land use-related goals in previous plans include:

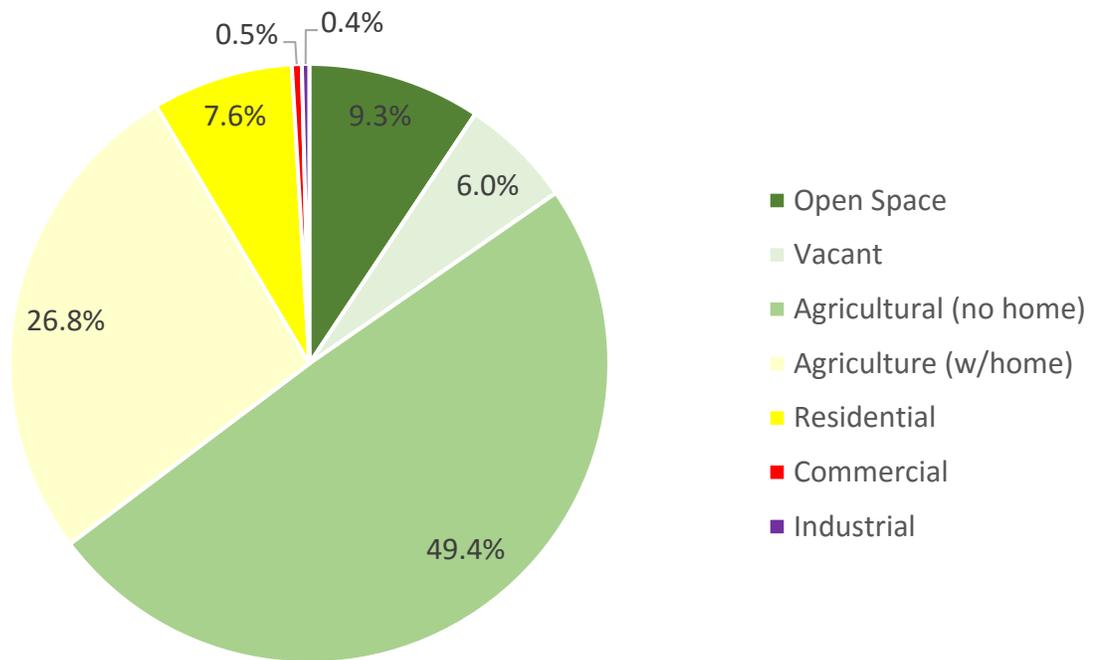
- Land Conservation & Development Plan
 - Preserve both the form and function of rural character.
 - Encourage compact communities with a mix of activities as development occurs.
 - Designate economic development centers in order to promote a diversified, sustainable business community.
 - Develop an integrated approach to protecting and promoting high-quality open space, recreation, historic and tourism locations.
 - Ensure quality and availability of groundwater and surface water resources.
 - Provide infrastructure in ways that support the land use, economic development and environmental objectives: water supply, wastewater and transportation.
- Chatham-Cary Joint Land Use Plan
 - Maintain the rural form and character of the area.
 - Protect the water quality of Jordan Lake, a regional water supply.
 - Limit development (suburban growth).

Based on the Plan Review as well as input received from stakeholder interviews and Steering Committee meetings, the Land Use portion of the Comprehensive Plan must accomplish the following to be successful:

- Include a realistic land use plan map that recognizes growth coming, informs regulations and guides utility planning and investment
- Reinforce municipalities as centers
- Create more balance and diversity in land uses
 - Tax Base (currently commercial and industrial uses account for only 6% of the tax base)
 - Housing (more choices needed related to type and cost of housing)
 - Retail (more retail options needed to reduce leakage—currently about \$0.63 of every retail dollar is spent outside Chatham County)
 - Employment (encourage economic development and provide local job options)
- Have flexibility and recognize the uniqueness of Chatham County
- Support agriculture and diversity in agriculture (i.e. small farms, large farms, specialty growers, conventional operations)
- Support transportation
 - Fewer trips out of the County for work or other purposes
 - Reduce trip lengths (reducing vehicle miles traveled (VMT), emissions, etc.)
- Protect environment, culture and rural character (limit conflict and encroachment)
- Address growth pressure from Durham/Chapel Hill and Wake County
- Factor in impact of Chatham Park and potential “spill-over” effects in Chatham County
- Integrate health impacts and outcomes related to the built environment

- Consider emerging industrial uses such as hydraulic fracturing and structural fill for mine reclamation using coals combustion residuals

FIGURE 1: EXISTING LAND USE



1.1.2 HEALTH

Key health related stats from the Chatham Health Assessment (2014) include:

- 26% of adults in Chatham County are obese
- 7.6% of high school students said they had attempted suicide in the past year
- Cancer and heart disease are the two leading causes of death (2009-2013)

Priorities identified in the Chatham Health Assessment (2014) include:

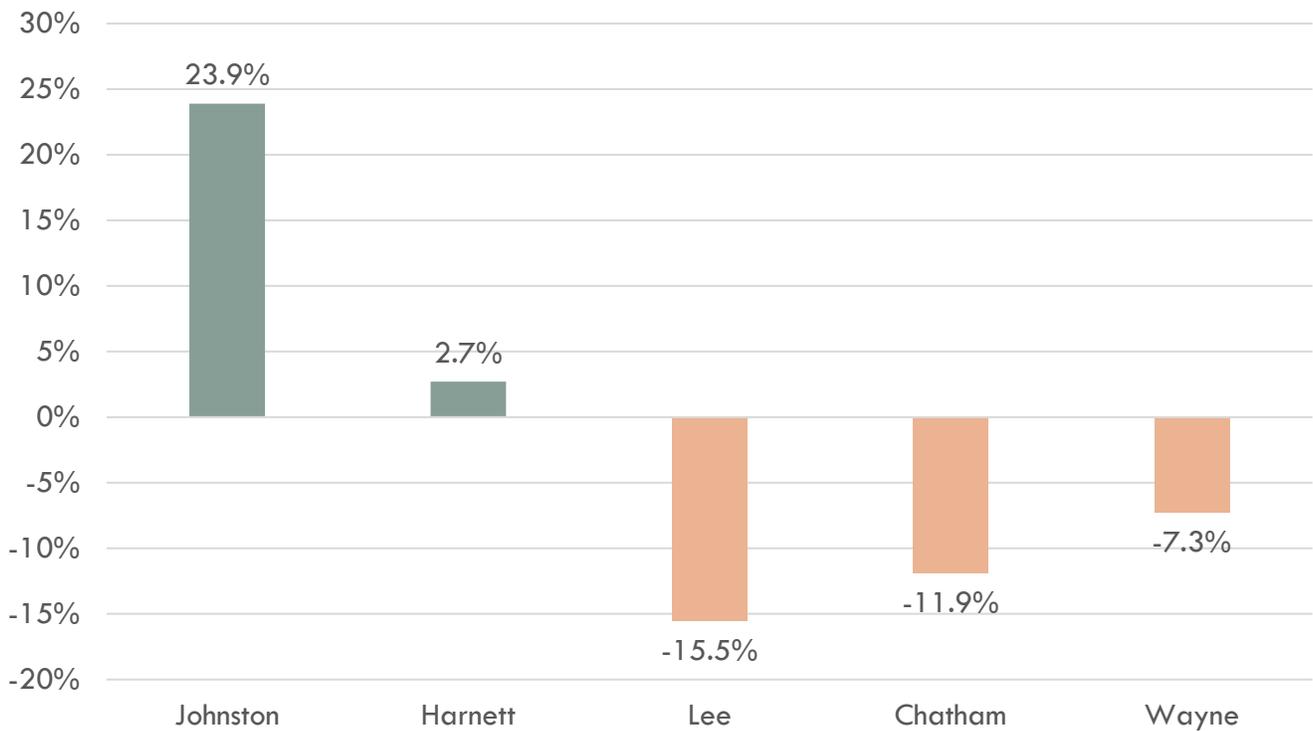
- Obesity
 - Encourage healthy lifestyles through changes in the built environment (community design)
 - Promote physical activity
 - Promote healthy eating
- Access to mental health services
 - Work collectively to prevent substance abuse
 - Promote mental health treatment
 - Promote substance abuse treatment and counseling services
- Access to health care
 - Promote, provide, and assist in coordination of health care services
 - Examine gaps in health care services
 - Promote and increase enrollment in the health insurance marketplace

1.1.3 ECONOMIC DEVELOPMENT

Based on the Plan Review as well as input received from stakeholder interviews and Steering Committee meetings, major issues related to Economic Development that need to be addressed with the Comprehensive Plan include:

- Job growth is down (need more jobs, higher-skilled, higher-wage jobs)
- Average wage in the County is substantially lower than the NC Average
- Concerns about economic strategy aligning with infrastructure/utility capacity
- Economic strategy should be long-term and non-political
- Orientation - residents look outside County for work, shopping and services
- Retail sales - leakage
- Focus on quality of life and community character
- Inequities across the County
- Need for County-wide collaboration

FIGURE 2: COUNTY JOB GROWTH 2000-2014



1.1.4 AGRICULTURE

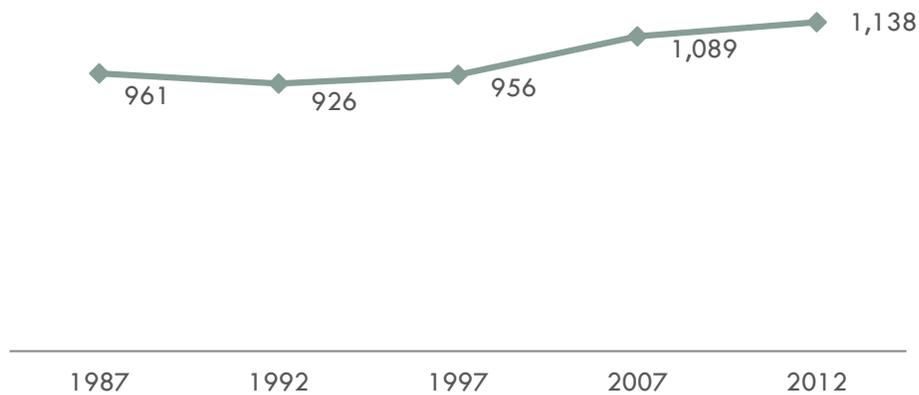
Major findings related to Agriculture include the following:

- The number of farms in the County has increased slightly every agricultural census since 1992 (i.e. in 2007, there were 1,089 farms and in 2012, there were 1,138 farms).
- Acres in farms has remained more or less steady since 1987 (112,674 acres in 1987 and 111,778 acres in 2012).
- Significant progress has been made since the 2009 Farmland Preservation Plan.
 - Successful farmers' markets
 - Expanding Community Supported Agricultural (CSA) operations
 - Voluntary Agricultural Districts (26,000+ acres)
 - Agricultural Extension programs and staff
 - Agricultural Extension classes draw participants from across the state
 - County support for staffing during state funding crisis
 - Agricultural Center
 - Funded in 2012, open in 2016

Based on the Plan Review as well as input received from stakeholder interviews and Steering Committee meetings, major issues related to Agriculture that need to be addressed with the Comprehensive Plan include:

- Residential / agricultural conflicts
- Increasing price of land
- Groundwater concerns
- Proximity to markets / demand for local food
- Diversity of agricultural sectors
 - Traditional farming strong in western part of County
 - Specialty crop production
 - Landscapers / green industry fastest growing agricultural sector
 - Timber production (~30% of agricultural lands)
- Access to processing facilities

FIGURE 3: NUMBER OF FARMS (SOURCE: 2012 CENSUS OF AGRICULTURE, USDA)

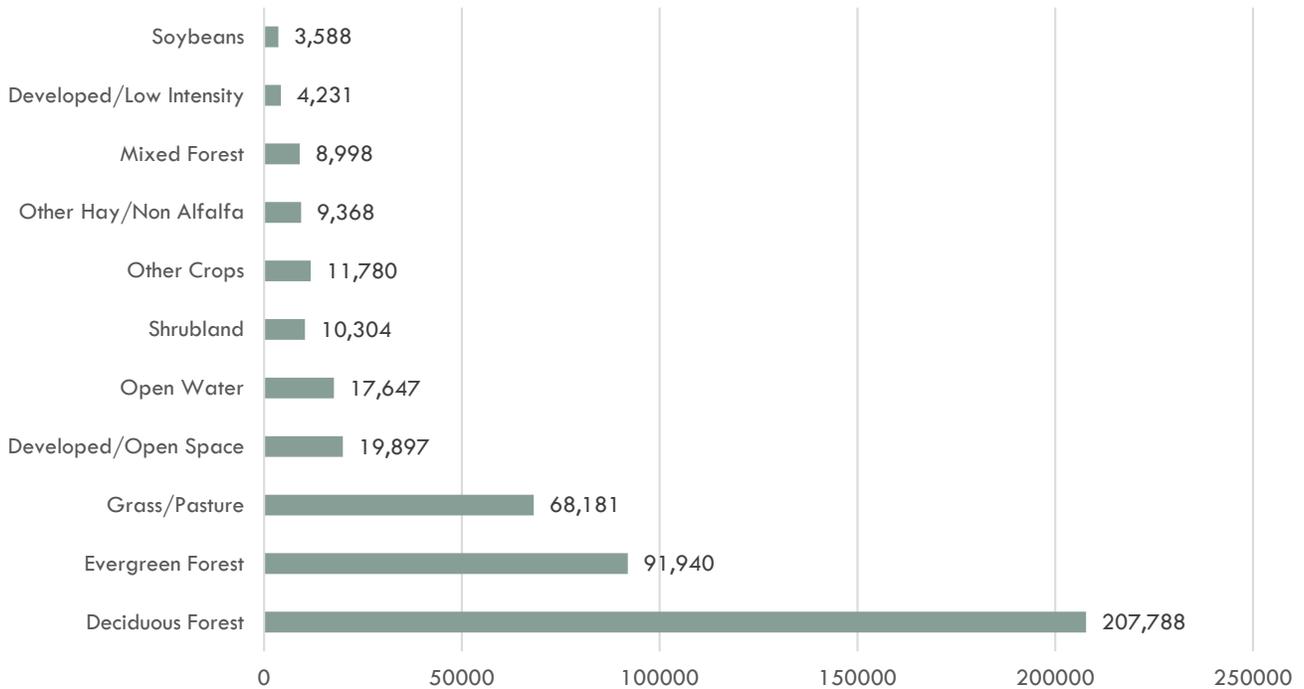


1.1.5 ENVIRONMENT

Based on the Plan Review as well as input received from stakeholder interviews and Steering Committee meetings, major issues related to Environment that need to be addressed with the Comprehensive Plan include:

- Significant growth pressures exist and will be exacerbated in the future near sensitive areas
- Development impacts need to be mitigated through policies that reduce conflict and those that encourage better design. Specifically, the primary impacts of concern are:
 - Water pollution (point and non-point source)
 - Alteration of terrestrial habitats (i.e. fragmentation)
- Need to build on past successes
 - Compact Communities Ordinance
 - Preservation of high riparian buffer standards
 - Partnership with the Chatham Conservation Partnership
- Need to preserve and, in some cases, restore ecological balance / ecosystem services
 - Acknowledgement of ecosystem services needed for benchmarking
 - Invasive species
 - Fire suppression
 - Tick-borne illnesses

FIGURE 4: LAND COVER 2015 (SOURCE: USDA CROPSCAPE DATA)



1.1.6 PARKS AND RECREATION

Major findings for Parks and Recreation include the following:

- Significant progress has been made since the 2009 Parks and Recreation Master Plan.
 - Northwest District Park
 - Northeast District Park
 - Briar Chapel Community Park
 - Haw River Trail land acquisitions/donations (public, non-profit, and private sector)
- Open space is part of the Chatham County brand.
- There will be increasing demand for active and passive facilities in the future.
- Private development will need to provide facilities/meet demand in some areas.
- There is a need to better connect neighborhoods to recreational destinations and demand for greenways in the county jurisdiction is largely unmet.

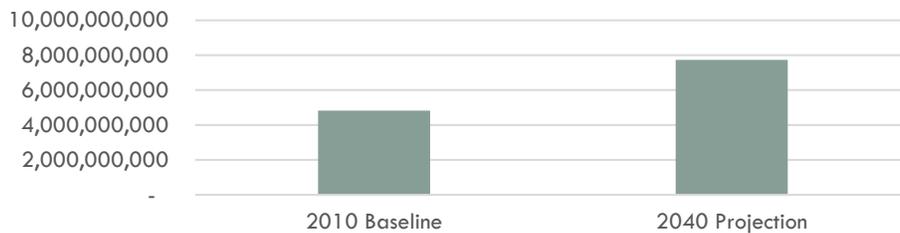
JORDAN LAKE STATE RECREATION AREA IN CHATHAM COUNTY REPORTED THE HIGHEST ATTENDANCE AT 1.6 MILLION VISITS (WWW.NCPARKS.GOV)

1.1.7 TRANSPORTATION

Based on the Plan Review as well as input received from stakeholder interviews and Steering Committee meetings, major issues related to Transportation that need to be addressed with the Comprehensive Plan include:

- Planning for Growth from Orange, Durham, Wake and Chatham Park
 - Impacts to major roads (US 15/501, US 421, and US 64 in particular)
 - Impacts to minor roads
 - Need for multimodal solutions
- Connectivity for all of Chatham County
 - Linking cities – Siler City, Goldston and Pittsboro
 - Providing mobility throughout the County
- Pedestrian and Bicycle Facilities
 - Recreational and non-recreational facilities
- Freight, goods movement, and emergency and disaster resilience
- Vehicle Miles Traveled (VMT) is expected to increase across the region and will be a primary driver of emissions in the years to come

FIGURE 5: ANNUAL VMT ESTIMATES (SOURCE: DCHC MPO)



1.1.8 HOUSING

Major findings related to Housing include the following:

- There is a lack of affordable rental product in the County.
 - Rental product should supply more than 50% of demand for affordable units, however rental units only make up 6% of housing stock in the County
 - Limited in the market even prior to 2010 for both single-family and multifamily
 - Rental supply in adjacent counties within the Durham-Chapel Hill Metropolitan Statistical Area (MSA) has met market needs
 - Interest has increased for market rate multi-family development in recent months
- There is a lack of affordable housing for sale in the County.
 - Homeownership sales among low to moderate-income households have decreased market wide
 - Land values limit affordability
 - Average home price at Briar Chapel is \$385,000 versus \$312,465 for the MSA.
 - Chatham County has had the highest average price in the five-county area
 - Top ten areas builders include only one with average pricing under \$200,000
- Existing policies related to inclusion of affordable housing product in larger planned developments are not effective.
- Partnership with municipalities to deliver affordable rental product is underway and will be a key factor for success in the future.
- Green building techniques need to be incorporated into affordable housing initiatives
- **The Board of Commissioners has recently identified affordable home ownership, affordable rental, and transitional/supporting housing as priorities**

1.1.9 UTILITIES

Major findings related to Utilities include the following:

- Water availability is a concern in many areas
- Water quality is an issue, since it is a wide-spread rural water system (more interconnects needed)
- Sewer treatment will require coordination with municipalities (i.e. Pittsboro, Siler City and Sanford) and/or additional private package plants
- County sewer policy has had an emphasis on private, decentralized utilities may have unintended consequences
 - Long-term maintenance issues
 - Difficulty achieving compact growth objectives and economic development along US 15/501 corridor
- Mapping of future sewer service areas is needed
- Broadband availability was brought up during the stakeholder interviews as an emerging issue countywide.

2 COMPREHENSIVE PLAN SCOPE

2.1 Background

As part of our initial analysis, the team will generally document the evolution of Chatham to the County of today. The team will weave the story of Chatham's growth and development throughout its history into the planning process to provide context to Plan elements and recommendations. Using

available data, a context map showing the locations of early settlement areas and historic sites will be produced.

Deliverable: Context Map

2.2 Community Profile

Understanding the importance of this effort to result in meaningful economic development strategies, Economic Leadership will create an economic and demographic profile of the study region. Using data from the US Census Bureau, Bureau of Labor Statistics (BLS), and data purchased from Economic Modeling Specialists International (EMSI) the team will quantify economic trends in the County. EMSI data is able to provide economic trends up to the most recent quarter of the current year.

The Consultant will conduct a demographic, socio-economic, housing and employment analysis that will include projections. Planning for future populations requires an understanding of the characteristics of the population today and how it might change over time. The median age, education levels, income levels, lifestyle preferences and health conditions are among the attributes that help to define the types of circumstances that the County might expect in the future, and therefore, must proactively prepare for.

Deliverable: Community Profile

2.3 Public Utilities and Infrastructure

As development consistent with this Comprehensive Plan occurs, specific infrastructure improvements will be needed to support and even facilitate such development. Knowing where service is currently (distinguishing public systems from private) and where it can be easily extended is important input into the land use planning stage. In addition, mapping areas where capacity and pressures are inadequate and septic systems are failing could help delineate areas where additional investments may be needed before more development can be encouraged. Therefore, in this step, the LandDesign team will reveal where in the study area new development can be supported easily in the short term and areas where water and wastewater service is a limiting factor for future development. Later, as the Proposed Future Land Use Map is finalized, recommendations for improvements to the utility systems will be developed to ensure short and long-term utility investments facilitate desired growth. Projections generated in the Community Profile Memo, coupled with land use as envisioned in the Proposed Future Land Use Plan will help determine future utility demands at the subarea level so updates to water and sewer plans consistent with the Comprehensive Plan can be made.

Deliverable: Utility Infrastructure Recommendations

2.4 Land Use

The primary purpose of the land use analysis is to answer questions that are critical to the creation of a vision for the future of the County, such as how suitable is available land for new housing, and where is the greatest development pressure likely to be? In this task, the team will examine the existing development pattern and the likely distribution of new development to assess the issues and opportunities.

Development Pattern – The team will examine the existing development pattern, employing GIS data and aerial photography. The primary purpose of this step is to examine the diversity of development in terms of uses and intensity, and define a generalized set of development pattern categories.

Through a qualitative assessment of development characteristics in the study area, the team will identify the features that, in combination, contribute to the character of subareas. The team will examine the features to identify those that distinguish one subarea from another, such as the mixture of uses, heights of buildings, and scale of public spaces and streets. The geographic assignment of each category will further define the study area's development pattern.

Land Supply – In addition to the types of uses, the results of the market and economic analysis will indicate the amount of development the area can support. The second step in the analysis, therefore, is an assessment of available land to determine whether there is a sufficient supply to accommodate the projected development. The land supply is a combination of undeveloped parcels (or “vacant” parcels, as noted in the County tax records) and parcels considered to be underutilized, and therefore, likely to be redeveloped given the value of the improvements on the parcel relative to the land value. We will delineate the parcels that comprise the land supply as part of this task.

Suitability – The land supply must be evaluated to better understand the land's capacity to support future development. Land suitability represents the likelihood that a parcel will be developed. The set of characteristics associated with each will determine its attractiveness for certain uses. Typically, factors that influence the suitability of land include heavy industrial uses; topography; parcel size; access to infrastructure (water, wastewater, roads, rail, transit); proximity to jobs, services and compatible uses; distance to community facilities (schools, parks); and distance from incompatible uses (landfill, airport).

Build-out Capacity – the team will utilize the land supply to estimate current development capacity based on adopted policies and zoning. This will help to illustrate the consequences of a “business as usual” or “do nothing” scenario.

Proposed Land Use Plan – The results of the land use analysis will inform decisions about the future land use pattern. Building on recent land use planning efforts, the team will prepare land use concepts that respond to the community topics. In doing so, the team will take into account areas where competition for land may be present; potential high-growth zones; the locations of available infrastructure; adjoining jurisdictions' land development plans; emerging industrial uses; and opportunities around Megasites and other employment concentrations. Coordination with municipalities, the schools system and large landowners such as Chatham Park will be essential to this task. These concepts will be evaluated in meetings with the public to solicit feedback and arrive at a preferred land use concept, which will be the basis for the Proposed Future Land Use Plan Map and land use policy recommendations.

Deliverables: Existing Land Use Map, Suitability Maps, Proposed Future Land Use Plan Map, Land Use Policy Recommendations, and Supporting Conceptual Development Illustrations

2.4A Health and the Built Environment

Health outcomes are influenced by the social, natural and built environments that are encountered on a day-to-day basis. This plan will build on previous work by the Chatham County Health Department and the recommendations in the 2014 Health Assessment to understand how land use decisions, natural resource priorities, and infrastructure and recreational investments can assist in encouraging healthy lifestyles and outcomes. During the development of the plan, it is anticipated that the project team will meet with representatives from the Chatham County Health Alliance at key points in the process.

Deliverable: Existing conditions research, goals, and recommendations related health will be integrated into the Land Use, Transportation, Parks and Recreation, Environment, and Agriculture portions of the Plan.

2.5 Economic Development

For this effort, Economic Leadership will help augment the recently completed Strategic Action Agenda of the Chatham County Economic Development Corporation by assessing opportunities that might be outside their current scope of work or resource capabilities. A longer economic development horizon will be considered in light of future land use deliberations. Emerging trends that are impacting job growth and sector strength will be analyzed and presented. Finally, the impacts of current strategic decisions by the Research Triangle Regional Partnership, the Piedmont Triad Partnership, the North Carolina Chamber of Commerce, the North Carolina Partnership for Economic Development, the Raleigh-Durham Airport Authority and neighboring counties will be incorporated into the process.

Deliverable: Economic Development Strategies Beyond 2020

2.6 Agriculture

The LandDesign team will build on previous work in the County and the Triangle Region to create an inventory of working agricultural lands and lands that are suitable for agricultural use. An Agricultural Assets Inventory will be compiled that will include farmland, forestry lands, prime soils and other assets related to processing, storage and distribution. Available data will be compiled to accomplish this including 2014 USDA Cropscape Data, Present Use Value (PUV) tax data, NRCS soil data, EMSI data and information developed by Agriculture and Community Development Services. The team will also convene and facilitate up to two meetings of an Agricultural Focus Group (or sub-committee) to inform the analysis.

In addition, an Agricultural Suitability Analysis will be conducted. This will be done using a custom GIS-based model that considers economic and environmental variables contributing to the long-term financial viability of agriculture. Exact inputs and weighting will be determined by coordination with the Agricultural Focus Group (or sub-committee), but may include parcel size, slope, soil type, adjacent residential density, etc. Outputs of the Agricultural Suitability Analysis will be used to develop a Strategic Farmland Map. Areas of strategic value and potential land use conflict between agriculture and urban growth pressure will be delineated, which will aid in recognizing areas to be targeted for farmland protection.

The team will also coordinate with the Agricultural Extension to fold results of an agricultural survey into the planning process. The survey is scheduled to be conducted late spring/early summer of 2016 by the Agricultural Extension office.

Deliverable: Agricultural Assets Inventory, Strategic Farmland Map, Recommendations

2.6A Agriculture/Food Supply Analysis

With knowledge of the viable agricultural operations and potential opportunities in the County, the team can conduct a related study of food supply and access. By mapping food deserts and food sources (grocery stores, farmers markets, and other outlets) relative to the concentrations of population, and comparing that information to the locations of agricultural operations, the team can highlight opportunities for resolving food desert issues in the County with support from the agricultural industry.

Deliverable: Food Desert/Food Outlet Opportunity Map

2.7 Market Analysis (US 15/501 Corridor)

This component will analyze the US Highway 15/501 corridor in Chatham County from the Pittsboro town limits north to the Orange County line. One goal is to inform recommendations of appropriate locations for new development and the impact on increasing the non-residential tax base and employment options. Research will explore the existing context - physical, demographic, economic and regulatory - along the corridor. Interviews with elected leaders, businesses, government staff and other local experts will help to confirm community values and the desired future direction for this area of the County. The analysis will investigate and analyze potential market demand for new non-residential development, by category. Finally, it will recommend guiding principles and strategies for encouraging appropriate new development within the 15/501 corridor with a possible goal of increasing Chatham County's non-residential tax base and employment opportunities.

Deliverable: Market Analysis for the 15/501 Corridor

2.8 Capital Improvement Plan

The team will review the County's adopted Capital Improvement Plan and suggest a strategy for incorporating the policies of the Comprehensive Plan into the CIP.

Deliverable: Capital Improvement Plan and Incorporation Strategy

2.9 Environment

An inventory and review of natural resources components of plans and ordinances will be conducted. Local plans and ordinances will be compared to regional and national best practices. Existing plans and ordinances will be evaluated by a customized scoring matrix that includes components from a variety of best practice guides including the Green Growth Toolbox, conservation planning literature and the American Planning Association.

The LandDesign team will rely on information collected from this inventory to identify and evaluate the valuable assets and define a system of "green infrastructure." Through a GIS-based suitability analysis, parcels and portions of parcels can be described as more or less suitable for preservation as open space within new development or as land acquisition priorities. This Conservation Suitability or Green Infrastructure Map will be utilized during the development of policies and strategies that aim to conserve the natural assets in Chatham County. Strategies to address potential impacts of oil and gas development will be assessed as a parallel effort (see Section 2.21). Recommendations from this process will be incorporated into the Plan as appropriate.

Deliverable: Environment Analysis and Recommendations, Green Infrastructure Map

2.9B Optional Sub-area Concepts

Sub-area plans that focus on areas with sensitive natural resources will be developed to conceptually illustrate how development might be integrated into an area, demonstrating adherence to a specific set of design standards.

Note: This task is not included in the Contract presently, however grant funds may be pursued to enable this occur in the fall of 2016.

2.10 Parks and Recreation

A comprehensive system of public and private spaces for recreation — passive and active — is critical to the livability of a place. The LandDesign team will review the most recent parks and recreation planning efforts, including those in the existing Chatham County Parks and Recreation Master Plan, to understand the existing and planned system of facilities. The analysis will focus on opportunities for bolstering the system in terms of complementing municipal and state facilities, and more importantly, supporting efforts to link all such facilities through a connected system of local and regional greenways. Recommendations will be provided that advance the land use vision in the Comprehensive Plan.

Deliverable: Parks and Recreation System Recommendations

2.11 Transportation and Mobility

This Transportation element will be crafted to support and promote the goals and objectives of the community as expressed through the Comprehensive Plan. VHB will coordinate with staff and officials from the Triangle Area RPO, the Durham-Chapel Hill-Carrboro MPO, Chatham Transit Network (CTN), Chapel Hill Transit (CHT), NCDOT (Division 8, Transportation Planning Branch, Public Transportation, Rail, and Bicycle & Pedestrian Divisions, and Mobility & Safety), and other transportation agencies and stakeholders.

The Transportation element will describe existing and future conditions of all modes, including: roadways and collector streets, bicycle routes, transit routes, pedestrian facilities, parking facilities and policies, rail lines, and other modes as appropriate.

Planning for transit service will consider the size, location, and concentration of potential markets (local, express, park-and-ride, human services), pedestrian and bicycle access, route efficiency and convenience, service characteristics, consistency with land use and urban design decisions, and relative competitiveness with other modes.

Freight and goods movement, emergency access, and disaster resilience will also be addressed. With respect to industrial development, both the need for reliable freight access and the potential impacts of this freight traffic on infrastructure, the environment, and communities will be assessed. Railroad infrastructure and service will be evaluated, and significant safety or capacity concerns arising from at-grade railroad crossing will be documented. The unique impacts of fracking on rural road systems and communities (due to temporary but locally-intensive use by large volumes of very heavy vehicles) may warrant special considerations.

Transportation & Mobility Sub-Tasks

Existing Conditions Analysis

The most recent Transportation Improvement Program (TIP), Comprehensive Transportation Plan (CTP), Metropolitan Transportation Plan (MTP) and other relevant transportation plans and studies (including transit, freight, bicycle, and pedestrian) will provide the basis for establishing existing conditions and identifying current deficiencies. VHB will review supporting data and analyses as well as final products. Output of the latest Triangle Regional Model (TRM) and (if available) Statewide Travel Model network assignments will be reviewed and incorporated as appropriate. Historic traffic counts will be compiled and reviewed to establish trends and identify outliers in terms of traffic growth. In addition, more subjective observations obtained from public involvement and stakeholder outreach will be incorporated in the existing conditions and deficiency analysis.

- Available countywide crash data (including pedestrian and bicycle) over the past five years will be reviewed and assessed to identify types and locations of significant problems.
- Traffic congestion identified in the TRM, as well as other studies and observations, will be summarized, with special emphasis especially on US 15/501 and other major travel corridors. Critical bottlenecks and intersection “hot spots” will be described.
- Transit service will be addressed with respect to generalized quality of service and infrastructure, as well as identifying served and unserved markets.
- Existing bicycle and pedestrian facilities will be identified, along with relevant trip generators, gaps, barriers, and hazardous locations.
- Freight and goods movement will be assessed in terms of truck routes and high demand corridors, major generators of truck traffic, and constraints on truck routing. Rail volumes, access, and speeds/speed restrictions will also be documented, with special focus on at-grade crossings, due to their potential impacts on travel times and crash rates.
- Current travel demand management (TDM) programs (such as ride-matching) will be summarized.

This task does not include new data collection or detailed level-of-service analysis.

Deliverables: Existing Conditions memorandum describing existing transportation systems and documenting deficiencies in narrative and tabular formats, and defining performance measures used. Includes:

- **Special section addressing US 15/501.**
- **Map identifying major transportation networks (by mode), along with major trip generators. Includes separate US 15/501 corridor map.**
- **Map summarizing major transportation deficiencies (gaps, bottlenecks, hazards, underserved areas, etc.). Includes separate US 15/501 corridor map.**

Chatham Park

Due to its significant short and long-term impacts on travel in the County, Chatham Park will receive special consideration. Available transportation impact studies will form the basis of this analysis, and the CTP, MTP, and other relevant plans will be reviewed to determine whether they adequately consider and reflect the potential transportation impacts of Chatham Park. If not, potential implications will be described. The assumptions in the TRM will also be reviewed to ensure that the impacts of Chatham Park are accurately represented in its outputs. If not, socio-economic/land use inputs to the

TRM will be appropriately revised so that it can more reliably be used to help assess future conditions and develop recommendations.

Note: Separate transportation impact analysis of Chatham Park will not be conducted as part of this task.

Deliverables: Memorandum summarizing short and long-range transportation impacts of Chatham Park, emphasizing any differences from assumptions in existing plans that could significantly affect or alter recommendations in those plans.

If needed, revised inputs to TRM along with resulting model outputs and supporting documentation.

Future Conditions

Using the TRM Existing + Committed and MTP networks (with any modifications needed to represent Chatham Park) as a starting point for estimating future travel demands for automobile and transit modes, anticipated travel conditions and deficiencies will be estimated. Any land use patterns recommended by this Comprehensive Plan that differ significantly from assumptions in the TRM will be documented. If deemed necessary, minor changes to the socio-economic data of no more than six (6) traffic analysis zones (TAZs) will be made; additional modifications would need to be performed outside of this scope of work.

Analysis of future conditions will focus on any significant differences between the findings of this Comprehensive Planning effort and currently-approved or adopted plans, primarily the CTP and MTP, along with relevant transit, bicycle, and pedestrian plans. This task will parallel the Existing Conditions analysis with respect to travel mode categorization.

This task does not include detailed level-of-service analysis or coding of new roadway or transit links in the TRM. However, revisions to the highway capacity of US 15/501 are included.

Deliverables: Future Conditions memorandum describing anticipated transportation systems and documenting anticipated deficiencies in narrative and tabular formats, applying performance measures established in the Existing Conditions task. Includes:

- **Special section focusing on US 15/501.**
- **Map (derived from CTP and MTP maps) summarizing major transportation deficiencies (gaps, bottlenecks, hazards, underserved areas, etc.). Includes separate US 15/501 corridor map.**

Recommendations

A set of prioritized transportation recommendations will be developed, summarized in matrix and map formats. These recommendations are intended to supplement and inform subsequent updates of the CTP, MTP, TIP, and other plans. Recommendations will be categorized by mode, and prioritized into “short-” “medium-” and “long-range” time horizons. Related projects will be cross-referenced, and contingencies or triggering events/thresholds identified. Performance of each recommendation relative to achieving or advancing the goals and principles of the Comprehensive Plan will be indicated (i.e. how transportation recommendations can help achieve land use related goals).

Active modes and opportunities to advance the principles of healthy communities will be emphasized, and considerations of funding sources, NCDOT prioritization methodology sensitivities, and private participation will be included.

In developing transportation recommendations, VHB will review existing and proposed transportation projects from the TIP, the CTP, and other plans and programs, as well as input received from the community. Our assessments will not be limited to measures of mobility, but will include safety, accessibility, range of options, and community, environmental, and economic impacts.

Deliverables: Recommendations memorandum and summary matrices as described above.

Includes:

- **Special section focusing on US 15/501.**
- **Map of proposed Conceptual Transportation System identifying recommendations by mode and priority. Includes separate US 15/501 corridor map.**

2.12 Fiscal Impact Analysis Guidance

The LandDesign team will provide guidance on the methodology to employ to determine the impacts that different land use scenarios may have on the tax revenue of the local Chatham County government.

2.13 Affordable Housing

Starting with the housing analysis completed as part of Task 2.2 Community Profile, the team will conduct a more in-depth analysis to understand the supply of affordable housing for households within Chatham County. From both a policy and development perspective, the team will assess key issues and challenges to prioritize affordable housing in the context of the land use map and recommendations for policy changes.

Deliverable: Affordable housing policy and strategy recommendations

2.14 Series 1 of Community Meetings (3)

The first series of community meetings will bring together a diverse group of stakeholders including local elected officials, key institutional leaders, and members of the general public for a public meeting to determine a set of sound, community-supported goals. The goals preliminarily defined by the Committee will be used as a starting point. To be realistic, such goals must be refined with a keen awareness of the realities of study area. The agenda will take attendees from the big-picture view of the County through a focused look at subareas with a discussion of the issues and opportunities. The meeting will culminate in an interactive session to develop goals through an expression of values, which will inform the direction of the plan.

Deliverable: Meeting Minutes, Meeting Notes, Plan Goals

2.15 Series 2 of Community Meetings (3)

The purpose of the second series of community meetings is to simultaneously examine all of the plan elements and gain an understanding of the interrelationship of the elements. Specifically, the LandDesign team will present the land use concepts developed in Task 2.4 and preliminary recommendations for the other elements (i.e. transportation, utilities, environment, etc.), and conduct the workshop in a manner that allows the attendees to explore the many choices within the concepts presented; understand the manner in which the concepts address the community goals; and evaluate the concepts by judging the performance of each relative to the goals. Having considered the details of each scenarios and the trade-offs in selecting one direction over another, the attendees will have an opportunity to offer informed opinions about their preferred direction. The input gathered will help the team develop the preferred scenario, which will be the basis for the Proposed Land Use Plan Map.

Deliverable: Meeting Materials, Meeting Notes

2.16 Recommendations and Implementation Strategies

Based on goals, objectives, and the details of the land use concept plan, the team will draft a set of policy recommendations and strategies tailored to meet the needs and expectations of the County. The team will refer to precedents throughout the US for best practices and lessons learned to ensure a policy framework that is up-to-date yet meaningful for this region, given its unique circumstances. The array of policies to be addressed will include but not be limited to economic development that can then fuel the creation of additional jobs and tax base; housing location and diversity; transportation and adequate access to jobs and services; natural resource protection; and infill development and redevelopment.

The team will further assist the County by creating an action plan that describes the implementation strategies to be carried out in the short term. Within the action plan will be the identification of up to five major strategic initiatives to be led by the County. The initiatives will be selected conferring with County staff and elected and appointed officials. The LandDesign team will refer to precedents regionally and throughout the US to ensure the action steps related to these initiatives take into account best practices. The team will name the types of entities that would be best suited to execute each strategy listed so that responsibilities can be assigned (or assumed) at the local and regional levels. The worksheet will serve as an effective tool in not only guiding the implementation activities but in monitoring progress and recording successes.

Deliverable: Action Plan

2.17 Comprehensive Plan Preparation and Presentation

The Comprehensive Plan will be developed integrating the various products of the previous tasks. The first draft will be prepared for review by County staff and the Steering Committee. A second draft will be made available to the public for comment, and from the input received, a final Plan will be produced.

A PowerPoint presentation will be prepared that gives an overview of the Plan, highlighting the most salient points in the recommendations. The presentation will generally explain the intended use of the document by the County and any others who will actively participate in the implementation of the Plan. This presentation will be used by the LandDesign team in making a presentation to the Board of Commissioners in one joint meeting as part of the formal adoption process.

Deliverable: PowerPoint Presentation, Final Comprehensive Plan Document

2.18 Project Coordination

The LandDesign team will initiate regular communication with the County staff throughout the process.

- In-person Client Meetings – Up to 4 meetings.
- Teleconference Client Meetings – Up to 24 meetings.

The LandDesign team will also conduct up to 10 meetings with the Comprehensive Plan Steering Committee at key points in Phase 2.

2.19 Public Engagement Plan Implementation

As outlined in previous tasks, the Consultant anticipates meetings with the Comprehensive Plan Steering Committee, Client and the community. Based on the Public Engagement Plan developed in Phase 1, we

will recommend a variety of supplemental community engagement activities to ensure citizens and other stakeholders have ample opportunities to participate in the process, provide input at critical points, and otherwise, help shape the County's vision and plan for the future.

The following engagement activities will be undertaken by the Consultant with the assistance from the Client:

- Stakeholder interviews (completed in Phase I)
- 10 Steering Committee meetings (8 in Phase II)
- Community meetings (2 rounds of 3 meetings in different geographic areas of the County, 6 in total)
- Project website (hosted by County)
- Online engagement via a MySidewalk website/forum (potentially leveraging Survey Monkey for online survey component)
- Project Identity development
- Tools (including social media, an FAQ, flyers/postcards)

The following activities are recommended to be considered as needed during the development of the Comprehensive Plan:

- Media Relations (including media kits, press releases, and media advisories)
- Supplemental Meetings (including Focus Groups, a Meeting in a Box (a process for community leaders to hold small-group meetings to involve certain segments of the population that may not be able to attend regular public meetings), and special meetings)

2.20 Additional Services

Any meetings or project activities required in addition to those defined herein and requested by the Client will be considered additional services, and labor hours devoted to preparing for and/or attending such meetings or participating in specified activities at the Client's written request will be billed on an hourly basis plus expenses. The contract includes a not-to-exceed amount for this phase that could be used for attending and facilitating additional meetings, creating materials for and/or processing information from Meetings in a Box or focus group meetings that are not included in the contract.

2.21 Parallel Efforts

There are parallel County-led efforts that may begin within the next few months. Although these tasks are not described in detail in the Comprehensive Plan scope outlined above, they may produce analysis and/or recommendations that could be included in or referenced by the final Plan. These efforts are listed below:

- Broadband Study
- Natural Gas Development Impacts Study
 - In response to Section 7a of the Ordinance of the Chatham County Board of Commissioners Instituting a Temporary Moratorium on Oil and Gas Development Activities within Chatham County, North Carolina (Adopted 17th of August, 2015).

3 APPENDIX A: STEERING COMMITTEE MEMBERS

Andy Bailey
Esta Cohen (alternate)
George Lucier
James Crawford (interim)
Jim Elza
John Fogleman
Kalyan Ghosh
Linda Harris
Marcia Herman-Giddens
Tandy Jones
Casey Mann
Amanda Robertson
Caroline Siverson
Del Turner
Terry Schmidt
Sharon Garbutt
Jamie Nunnelly (alternate)
George Lucier (alternate)
George Pauly (alternate)
Sherri Stuewer (alternate)

4 APPENDIX B: STAKEHOLDERS INTERVIEWED DURING PHASE I

- Environment
 - Dave Mattison, Environmental Review Advisory Committee
 - Vic D'Amato, Environmental Review Advisory Committee
 - Sonny Keisler, Climate Change Advisory Committee
 - Laura Lauffer, Climate Change Advisory Committee
 - Ron Dameron, Climate Change Advisory Committee
 - Brooke Massa, Wildlife Resources Commission
 - Brian Burkhart, Chatham County Environmental Quality Director
- Land Use
 - George Lucier, Chatham County Planning Board Chair
 - Bill Arthur, Chatham County Planning
 - Jeff Jones, Town of Pittsboro Planning Director
 - Dan Sundberg, Chatham County Appearance Commission
 - Chuck Smith, Chatham Park
 - Tim Cannup, Town of Goldston Mayor
- Infrastructure
 - Fred Royal, Pittsboro Town Engineer
 - Terry Green, Siler City Public Works Director
 - Dan LaMontagne, Chatham County Assistant County Manager/ Public Works Director
 - Larry Bridges, Chatham County Utilities Director
 - Tim Cannup, Mayor of Goldston
 - Chuck Smith, Chatham Park Representative
 - Brian Burkhart, Chatham County Environmental Quality Director
- Agriculture
 - Ronnie Vaughn, Agriculture Advisory Board
 - Sam Groce, NC Cooperative Extension, Chatham County
 - Debbie Roos, Chatham County Food Council
 - Charlotte Glen, NC Cooperative Extension, Chatham County
- Economic Development
 - Doug Emmons, Chatham Economic Corporation Board, Treasurer
 - Kyle Touchstone, Chatham Economic Corporation Board, President
 - Jack Meadows, Town of Siler City Planning Director
 - Karen Howard, Chatham County Board of Commissioners
 - Tim Cannup, Town of Goldston, Mayor
 - John Spoon, CCCC Small Business Center
 - Bryan Thompson, Town of Siler City Manager
 - Bryan Gruesbeck, Town of Pittsboro Manager
- Community and Health
 - Dr. Marcia Herman-Giddens, Board of Health
 - Dennis Streets, Director, Council on Aging
 - Karen Howard, Chatham County Commissioner
 - Del Turner, Chatham Comprehensive Plan Steering Committee
 - Chris Blice, Chatham County Schools
 - Mark Hall, Provost, CCCC
 - Megan Lynch, Chatham Parks and Recreation Advisory Committee
- Transportation (TAC Meeting)
 - Matt Alexander – Chair
 - Ed Regan – Vice Chair

- Roy Girolami – District 1
- Don Wollum – District 4
- Mike Fiocco – Pittsboro
- Mike Zelek – Health Dept.
- Jennifer Park – Health Dept.
- Brendan Merithew – NCDOT
- Matt Day – TARPO
- Hillary Pace – Chatham Co.
- Cara Coppola – Chatham Co.
- Health Alliance and Obesity sub-committee
 - Obesity Subcommittee Focus Group
 - Phil Bors, Active Living By Design
 - Lexie Wolf, Chatham Partnership for Children
 - Claire Karasek, Chatham Hospital/UNC School of Public Health
 - Phyllis Smith, NC Cooperative Extension
 - Tracy Burnett, Chatham County Parks and Recreation
 - Jennifer Park, Chatham County Public Health Department
 - Meg Bryson
 - Health Alliance
 - Hillary Pace, Planner, Chatham County Planning Department
 - Hugh Tilson, Community Member
 - Jack Brooks, Chatham Cares Pharmacy
 - Jennifer Park, Health Educator, Chatham County Public Health Department
 - Jenny McCarthy, Social Worker, Chatham County Public Health Department
 - Karin Erickson, Kidscope
 - Kathy Heilig, Chatham Hospital
 - LaCourtney Setzer, Trinity Behavioral Healthcare
 - Lisa Nicholson, Therapeutic Alternatives
 - Abby DeVries, Piedmont Health Services
 - Anna Stormzand, Chatham County Public Health Department
 - Anna Testerman, Executive Director, Chatham Transit Network
 - Cindy Bucy, Cardinal Innovations
 - Courtney Goldston, Human Resource Analyst, County Manager's Office
 - Daisy Womble, Community Member, Co-Chair
 - Debra Henzey, Chatham County
 - Debbie Knight, Galloway Ridge
 - Dennis Streets, Executive Director, Chatham County Council on Aging, Chair
 - Frank Abrams, Chatham County Board of Health Member
 - Michelle Morehouse, Farm at Penny Lane
 - Mike Zelek, Director of Community and Family Health Connections Division, Chatham County Public Health Department
 - Phyllis Smith, Cooperative Extension
 - Ronda Stubbs, Cambridge Hills
 - Sarah Weller Pegna, Strategy & Evaluation Coordinator (Chatham Health Alliance), Chatham County Public Health Department
 - Shamecca Bryant, FVRC
 - Sue Carson, beGrantwise

- Tara Gregory, Nutritionist, Chatham County Public Health Department
- Jason Sullivan, Planning Director, Chatham County Planning Department
- Marcia Herman-Giddens, Chatham County Board of Health Member, Tic-NC
- Tracy Burnett, Chatham County Parks and Recreation
- Layton Long, Health Director, Chatham County Public Health Department
- Lynn Glasser, Chatham Cares Pharmacy
- Donna Albertone, Public Health Improvement Partners

5 APPENDIX C: INITIAL PLAN REVIEW

The following includes a brief overview, key findings and recommendations from previous plans that were reviewed as part of the Phase I process.

Land Conservation and Development Plan (2001)

Overview

The Land Conservation and Development Plan was adopted in 2001. This plan functions as the County's current comprehensive plan, addressing the elements of a typical comprehensive plan. It provides guidance on such matters as land use decisions and investments in infrastructure such as water and wastewater systems. As stated in the plan, the primary objectives are as follows:

- Portray a clear vision for the County's physical development;
- Provide guidelines which, when applied to public and private decisions that affect physical development in Chatham County, will help transform its vision into reality; and
- Specify public and private actions considered essential to realize the vision.

The plan emphasizes resource protection and conservation. It identifies seven types of places characterized primarily by environmental value and the availability of infrastructure. A few of those types, together encompassing 109 square miles, are the areas deemed to be suitable for future development, particularly in a "compact community" form. The plan discourages more intense development where such development could negatively impact water quality, rural character, viable agriculture, or other asset. It calls for regulations (performance standards) to effectively strike the balance between economic development and resource conservation objectives.

The plan was written for adaptability and, for specific topics, acknowledges the need for additional studies by working groups and/or the establishment of boards to advise County leaders on an ongoing basis. The plan also stresses the importance of cooperation with local, regional and state agencies to successfully implement the plan. Therefore, the plan provides recommendations aimed at realizing the vision through the actions of many, not just County staff and elected and appointed officials.

Key Recommendations

The plan provides specific recommendations, which are in support of the policies set forth in the plan. Two major policies recommended in the plan are:

- Land development and conservation will reflect balanced growth.
- Chatham County's approach to land development and conservation will be open, proactive and cooperative.

The other six policies that are guiding public and private sectors as they make decisions that affect the physical development of the county are as follows:

- Preserve both the form and function of rural character -- the landscape, agriculture, and homebased businesses.
- Encourage compact communities with a mix of activities as development occurs.
- Designate economic development centers in order to promote a diversified, sustainable business community.
- Develop an integrated approach to protecting and promoting high-quality open space, recreation, historic and tourism locations.
- Ensure the long-term quality and availability of groundwater and surface water resources.

- Provide infrastructure in ways that support the land use, economic development and environmental objectives: water supply, wastewater and transportation.

Relevance to Comprehensive Plan

As the current comprehensive plan, this plan offers a starting point for the creation of the new comprehensive plan. The existing conditions, trends, and community values upon which the recommendations of this plan are based must be evaluated to decide what has changed over time and therefore indicates a shift in priorities, if any, that must be acknowledged in the new plan. Recommendations that are determined to be relevant today will be considered during the process and brought forward as appropriate.

Chatham-Cary Joint Land Use Plan (2012)

Overview

The Chatham-Cary Joint Land Use Plan was adopted in 2012 by the Town of Cary and Chatham County. The study area is bordered by White Oak Creek to the south, Wake County to the east, Durham County to the north and Jordan Lake to the west. This plan is the result of a seven-year collaboration; the two jurisdictions worked together to agree upon a set of land use policies for the area, which is in the County's jurisdiction but likely to be annexed in part by the Town. Such annexations can occur through voluntary annexations requested by private developers seeking infrastructure and other services provided by the Town. The planning effort was in response to concerns about additional growth and the potential impacts of development on an area that various stakeholders deemed worthy of protection. The primary objectives included the following:

- Maintain the rural form and character of the area
- Protect the water quality of Jordan Lake, a regional water supply
- Limit development (suburban growth)

The plan, therefore, provides guidance regarding land development regulations and infrastructure investments. While a variety of uses are envisioned for the area, the future land use map depicts very low density residential development for over 40% of the land area, and another 36% designated for parks and other types of open space.

Key Recommendations

The Joint Land Use Plan included the following key recommendations:

- Development Impact Minimization and Mitigation
- Amend the County Subdivision Regulations and/or Zoning Ordinance and Zoning Map to implement the recommendations of the plan.
 - Limit development density to maintain the rural character and to protect water quality. Located in a portion of the water supply watershed of the Jordan Lake Reservoir, development in this area should be limited to predominantly very low density residential development (3- to 5-acre lots, or smaller where utilities can be extended).
- Require compliance with the local watershed and stormwater management ordinances and programs that already meet or exceed state and federal requirements or guidelines.
- Provide design guidelines for transitions between developments to ensure compatibility.
- Create buffers where appropriate.
 - Separate private development with buffers adjacent to areas land owned by the Federal Government (U.S. Army Corps of Engineers) to protect adjacent private

property owners. This area is state-managed game lands where hunting is permitted. Also, controlled burns reduce the risk of uncontrolled forest fires and maintain healthy forest habitat.

- Establish vegetative buffers along streams for improved water quality.
- Provide a natural buffer along either side of the American Tobacco Trail right-of-way to ensure the experience of the trail that is created by the dense vegetation is maintained.
- Establish a “Rural Buffer Boundary” to buffer the Jordan Lake from the more intense development occurring to the east.
- Develop a uniform homebuyer notification requirement for new and existing development adjacent to land owned by the Federal Government (U.S. Army Corps of Engineers).
- Utility Extensions
 - Limit utility extensions west of the “Rural Buffer Boundary,” except where properties served by failing utility systems need to be “rescued.”
 - For new development, require private landowners (or developers) to request permission to connect to the utility system and, if permission is granted, to construct the extensions to Town standards.
- Transportation
 - Work together with the MPO, RPO, and NCDOT to study the current transportation infrastructure in place and plan for any improvements that may be needed if the area develops.
- Parks and Greenways
 - Continue to work together to plan future parks and greenway facilities for the area that may be needed.
 - Investigate opportunities for co-location on county school sites.
- Schools
 - Work together to forecast and evaluate long-term school needs in the joint planning area, and to jointly plan for the location of public school(s) in the area, if they are needed.

Relevance to Comprehensive Plan

The efforts that went into developing land use policies to guide future growth and development in this area should be respected and carried over into the Comprehensive Plan for Chatham County. The policies may have some applicability to other areas within the County’s jurisdiction that are also adjacent to the Jordan Lake Reservoir and should be taken into consideration as the Comprehensive Plan is developed.

Community Health Assessment (2014)

Overview

The Community Health Assessment (CHA) is a strategic plan aimed at identifying the factors that affect the health of the population and what resources are available within the community to address the most pressing health issues. The CHA is required of all counties by the NC Division of Public Health and is updated every three years. The Chatham County Public Health Department is charged with leading the effort and partners with Chatham Hospital as well as community members, agencies, non-profits, health agencies, local government, and the school system. The most recent CHA was completed in 2014, and it identified the following as the top three health issues the County is facing:

- Obesity

- Access to mental health services
- Access to healthcare

Key Recommendations

- Encourage healthy lifestyles through changes in the built environment (community design)
- Promote physical activity
- Promote healthy eating
- Work collectively to prevent substance abuse
- Promote mental health treatment
- Promote substance abuse treatment and counseling services
- Promote, provide, and assist in coordination of healthcare services
- Examine gaps in healthcare services
- Promote and increase enrollment in the health insurance marketplace

Relevance to Comprehensive Plan

Public health is becoming an increasingly important element of comprehensive plans, as decisions about growth and development can have an impact on community health. Decisions that influence the shape and quality of the built environment, for instance, can directly affect an individual's activity level and therefore be a determinant of their physical health. More specifically, a compact, mixed-use development pattern connected by safe, comfortable pedestrian routes encourages walking. The recommendations of the CHA will be incorporated into the Comprehensive Plan, as appropriate. In addition, as other elements of the plan are developed, the health issues identified in the CHA should be taken into consideration so that policies promote improvement of all aspects of human health. The recommendation to promote physical activity, for example, will influence policy in the parks and recreation element as well as the land use element.

Economic Development Plans

Overview

The most recent and most relevant economic development document is the Chatham Economic Development Corporation's *Strategic Action Agenda 2015-2020*, completed in 2014. There have been other important plans pertaining to economic development, including: Chatham County-Town of Cary Joint Land Use Plan (2012); the Chatham Agricultural Economic Development Plan (2009); Chatham's Land Conservation and Development Plan (circa 2000); and Chatham's Land Use Strategic Plan (1999). However, the goals of the EDC's *Strategic Action Agenda* align well with the prior documents, and it best presents a current, comprehensive strategy for improving economic opportunity in the County.

The EDC's *Strategic Action Agenda* was created following an economic and demographic data review, analysis of relevant trends, board retreats and survey, and input from three community focus groups.

The report detailed **strengths** in Chatham's economic picture, such as: low unemployment rate; high household incomes; a well-educated population. Significant areas of **weakness** included: a majority of Chatham residents commuting outside the County for work; net job losses since 2000; tax base less than 10% industrial and commercial; and low local retail sales per capita.

The plan outlines several goals organized in terms of eleven goal areas:

1. Balanced growth
2. Adequate and diverse housing supply
3. Conserved and protected natural resources
4. Efficient, effective, and responsible county and municipal governments
5. Healthy people
6. Safe living and work environments
7. Quality system of education
8. People working together
9. Marketable, diversified workforce relevant to needs of the community
10. Commercial and industrial endeavors, a net long-term asset to the community
11. Rich cultural environment

Each goal is expressed as a desired outcome and is supported by a rationale.

Key Recommendations

The Strategic Action Agenda's ten goals and priorities for the future can be summarized in these five points:

- A. Preserve the character of rural and agricultural areas, while strengthening existing towns – especially downtowns
- B. Generate more jobs inside the County, increase the non-residential tax base, and increase retail sales
- C. Improve job training and workforce skills
- D. Promote small businesses, entrepreneurship, and businesses related to agriculture, the arts, and tourism
- E. Create greater economic opportunity for residents in all parts of Chatham County

Relevance to Comprehensive Plan

Since economic opportunity is an important aspect of Chatham County's future, economic development strategies will be a significant component of the Comprehensive Plan. Economic strategies must be coordinated with land use plans, infrastructure availability, and capital improvements planning. The Comprehensive Plan process will consider specific ways to implement *Strategic Action Agenda* goals, and possibly augment those goals by developing a strategy beyond the year 2020. The process will accomplish this by:

- Reviewing available data to draw an accurate picture of Chatham's current economic landscape;
- Surveying elected officials and other stakeholders for their input on County economic development priorities;
- Analyzing current industry clusters and the most appropriate targeted industries for the future;
- Evaluating the current status of two economic development "megasites," their readiness and attractiveness for various potential uses, and recommended land uses in proximity to these sites;
- Evaluating the market potential for business uses (such as office, retail, and light industrial) on the 15/501 corridor, utility and infrastructure needs to increase the viability of this area for economic development, and recommending specific locations for appropriate development;

- Evaluating other locations across the County for potential business development, and recommending appropriate land use designations.

The process will also provide a summary of fiscal impact analysis and cost of services studies, as well as options for new analysis, that could help inform future land use decisions related to economic development.

Conceptual Land Use Plan (2013)

Overview

The Chatham Economic Development Corporation (EDC), Chatham County Geographical Information Systems, planners from Chatham County, Siler City and Pittsboro, Chatham County Public Works and local utility directors partnered to prepare a broad framework for future growth. The primary purpose of the effort was to position Chatham County for sustainable and balanced growth for future generations.

The initiative promotes four guiding principles upon which decisions about future growth and development should be based:

- Balance (jobs/housing; tax base)
- Preservation (individuality of towns, crossroad communities, rural areas; agriculture; natural environmental resources; historic resources; quality of life)
- Economic Prosperity (attract business, industry and jobs to areas with infrastructure)
- Collaboration

Four conceptual land use plan scenarios were developed:

- Decentralized Growth
- Conservation / Farmland Preservation
- Compact Centers and Growth Corridors
- Targeted Employment

Key Recommendations

- The primary recommendation was to pursue a land use pattern that achieved the preferred scenario, which was entitled “Rural Preservation with Targeted Employment”. This scenario focused the majority of growth near existing towns and existing and proposed employment centers, which preserving much of the working farms and key open space in between.
- Secondary recommendations included:
 - Develop an infrastructure plan
 - Prepare a comprehensive plan that guides land use decisions
 - Develop regulatory tools and incentives to accomplish long-term plans
 - Attract future commercial and residential prospects

Relevance to Comprehensive Plan

The Conceptual Land Use Plan is a framework, not a comprehensive plan. It recommends the creation of a new comprehensive plan for the County. The framework serves as valuable input into the current comprehensive planning process. This framework for future growth should be the basis for at least one of the land use alternatives to be prepared and evaluated as part of the process. Input received

through the survey associated with this initiative should be taken into consideration in the current planning process.

Farmland Preservation Plan (2009)

Overview

The Farmland Preservation Plan was prepared for the Chatham County Agricultural Advisory Board in 2009. It consisted of two parts: an Agricultural Land Use Plan and an Agricultural Economic Development Plan. The Chatham County Agricultural Land Use Plan included a number of recommendations tailored to reduce conflict between agricultural (including forestry) uses and suburban land uses. The recommendations fall within three categories:

- Working Lands Protection
- Future County Policy and Planning
- State and Federal Advocacy

The Agricultural Economic Development Plan outlined specific programs that would aid in the support of agribusiness and expand access to markets. The three focus areas for this plan are:

- Agribusiness Attraction, Retention, and Expansion
- Agricultural Market Expansion
- Public Policy and Regulation

The plan also included a detailed analysis of agricultural production and industry trends.

Key Recommendations

Key recommendations in the Agricultural Land Use Plan include:

- Coordinate Farmland Protection Outreach, Education, and Policy Development
- Strengthen the Chatham County Voluntary Agricultural District Program
- Develop a Strategic Farmland Map
- Build Support for a County Working Lands Protection Program
- Formally Adopt the Agricultural and Farmland Preservation Plan as a County Policy Guidance Instrument
- Update Subdivision Regulations and Zoning to Meet the Needs of Agriculture and the Community
- Explore Means to Ensure that Agriculture Has Long-Term Access to Water Supplies
- Advocate for Farm- and Forestry-Friendly State Agricultural Policies
- Seek Innovative Means to Integrate Working Lands Protection into the Jordan Lake Rulemaking Process
- Advocate for Integration of Regional Agricultural and Land Development Policies

Key recommendations in the Agricultural Economic Development Plan include:

- Develop a Forestry and Agribusiness Retention, Expansion, and Attraction Plan
 - Targeted marketing plan focusing on the strategic advantages of Chatham County
 - Encourage better utilization of rail access and sidings in Siler City
 - Identify Key marketing partners and conduct outreach with generators of agribusiness deal flow

- Prepare marketing collateral and disseminate decision-making information
- Develop a pilot program for streamlining and/or fast-tracking agribusiness development in key areas
- Explore Feasibility of Dedicated Agribusiness Park
- Enhance Integration of Forestry and Agribusiness in Business and Economic Development Programs
 - Support Chatham County Economic Development integration with the agricultural industry by funding expansion of the agricultural element of any economic development work plan or strategic plan.
 - Develop a feedback mechanism to incorporate agribusiness and forestry needs in county development programming through periodic agribusiness
 - Support the creation of a pilot-scale manufacturing plant and business incubator.
 - Facilitate the development of formal “masterminding” roundtables of farmers, agribusinesses, and other related industries
- Develop an Integrated Marketing System that Expands Opportunity to Direct Market and Wholesale Level Trade
 - The target market for the system is the more than \$550 million in retail food leakage regionally.
 - Identify a core group of farmers, restaurants, and retailers with an expressed interest in providing year-round local products to assess the need for developing a comprehensive agricultural marketing information system.
 - Develop a list of key target products.
 - Create a marketing and asset tracking information system
 - Develop a countywide food purchasing policy, using a single point of supply, to be adopted across all county funded programs.
- Create an Alternative Energy Development Program
 - Conduct an alternative energy conference
 - Provide grant support for applied research and education
 - Conduct consumer and industry outreach and provide technical resources.
 - Work with landowners to develop woody biomass aggregation and distribution capability
- Support Public-Private Development of an Agritourism, Retail, and Culinary Arts Center
- Create an Outreach and Public Relations Program
 - Work with the Farm Bureau and the North Carolina Forestry Association to develop a farmer-based committee that will coordinate outreach and serve as a first line of response in neighbor/industrial conflict.
 - Work with the public school system and youth programs, such as 4-H and youth equine activities, to integrate the “message” of agriculture
 - Expand farm tours to support the message of agriculture as well as topical on-farm issues.
 - Enhance the public relations network
- Expand Education and Training Programs
 - Create a web based information sharing system for use by farmers, landowners, and the forest products industry to integrate and enhance existing information exchange systems.
 - Work with educational institutions at the post-secondary and continuing education level to develop flexible training modules for use by agricultural operations

- Develop a Farmer Recruitment Program
- Support Regional Agricultural Leadership Development
- Enhance Labor Force Conditions

Relevance to Comprehensive Plan

Future County Policy and Planning was a major focus of the Agricultural Land Use Plan. Many of the land use policy and farmland protection policies rely on integration with planning efforts at the County level. Specifically the Plan called for the, “inclusion of the Agricultural and Farmland Preservation Plan as an element of the Chatham County Land Conservation and Development Plan (LCDP).” The Comprehensive Plan will function as the update of this document so inclusion of key, high priority policies and strategies from the Agricultural Land Use Plan will be appropriate. In addition, it should be noted that many of the recommendations and action items under the Working Land Protection focus area are tied to the development of a strategic farmland map. As part of the draft Comprehensive Plan scope it is anticipated that the Project Team will coordinate with representatives from the Conservation Trust for North Carolina and build on their work at the regional level to define strategic farmlands within Chatham County.

Although progress has been made on some recommendations in the Agricultural Economic Development Plan through economic development efforts and ongoing work by the North Carolina Agricultural Extension and coordination with the community college, many of the recommendations from the Agricultural Economic Development Plan have not been carried out as originally intended. Some problems include the need for coordination across multiple agencies and jurisdictions. Cost estimates for planning efforts and programs also may be low.

Comprehensive Conservation Plan (2011)

Overview

The Comprehensive Conservation Plan (Conservation Plan) was completed in 2011 by the Chatham Conservation Partnership (CCP). The CCP consists of over 50 organizations and participants including government agencies, non-profits, developers and land owners. It included a description of important natural resources, GIS maps and analysis, and policy and strategy recommendations related to land protection, resource management, land use planning and implementation. Major threats identified included:

- Development / growth pressures
- Alteration of terrestrial and aquatic habitats
- Water pollution (point and non-point source)
- Invasive species
- Fire suppression

Key Recommendations

- Protect areas with conservation value as shown on the Biodiversity/Wildlife Habitat and Forest Resource analysis maps
- Buffer high-quality habitats
- Consider watershed-based planning

- Ensure >70% forest and/or natural cover to protect water quality, especially in water supply watersheds
- Limit impervious surface within watersheds to <10%, especially in water supply watersheds and in watersheds with federally listed aquatic species habitats
- Protect and provide adequate buffers for riparian areas, adjacent uplands, headwater streams, wetlands, seeps and springs
- Develop performance standards for developments within and adjacent to important resources
- Provide technical review and guidance that promotes design that minimizes impacts
- Continue to require and refine the criteria and processes for environmental impact assessments for new development
- Develop a strategic farmland map to identify priority protection areas and actions needed
- Develop and manage greenways as part of a countywide green infrastructure
- Avoid alteration of hydrology and control point and non-point source pollution
- Update GIS layers as new data becomes available and improve access to GIS mapping and data
- Increase funding for land acquisition, restoration and planning and protection of natural resources
 - Bonds, cost share/incentives, Working Lands Protection Program, natural resource professional, etc. (has any of this been done?)
- Expand education and outreach activities
 - Technical assistance, citizen education, courses on wildlife management at the community college
 - Demonstrations of backyard wildlife habitat improvements, rain gardens & BMPs
 - Pollinator gardens is progress on this
- Monitor the status, condition and trends of important resources
 - Review and analyze updated data to determine land use changes
 - Support monitoring of water quality
 - Monitor reports on an annual basis
- Implementation and update information and recommendations
 - Support the Chatham Conservation Partnership (CCP) and update plan every 4 years
 - Incorporate GIS data and info in the Plan into land use planning, development review and permitting
 - Update the Inventory of Natural Areas and Wildlife Habitats of Chatham County
 - Consider revising the Biodiversity / Wildlife Habitat and Forest Resource analyses with alternative weighting methods and update these analyses a minimum of every four years
 - Conduct a threats assessment as part of the Land Conservation and Development Plan update that considers changes expected in Chatham County over the next 50-100 years
 - Consider conducting a parcel density analysis to track threats to important resources due to land use changes

Relevance to Comprehensive Plan

The Conservation Plan specifically recommended that the research and analysis included in the plan be utilized to inform subsequent planning efforts. Therefore it is essential for the Conservation Plan to be utilized to inform the Comprehensive Plan. Specifically the Comprehensive Plan will include a focus

on Environment and Agriculture. This will include an analysis of existing conditions that will help to update key components of the Conservation Plan. Key components of this will be:

- Update on land use trends and changes
- Update on water quality trends
- Threat assessment for high value natural and agricultural areas that incorporates the most recent Biodiversity / Wildlife Habitat data from DENR
- A strategic farmland map
- Review of current policies and programs that serve to safeguard natural resources
- A summary of progress made on implementation steps since the Conservation Plan

In addition, the plan will build on work completed in the Conservation Plan by incorporating key recommendations in the Land Use, Environment and Agricultural sections of the plan. Where possible, the Comprehensive Plan will provide additional information and direction that will assist the County in implementing the goals of the Conservation Plan.

Southwest Shore Conservation Assessment

Overview

This conservation assessment was prepared by the Triangle Land Conservancy and the Center for Sustainable Community Design within the Institute for the Environment at the University of North Carolina-Chapel Hill. It provides an assessment of 10,000 acres on the southwest shore of the Haw River and Jordan Lake. It documents the conservation value of different areas and makes recommendations on how critical lands can be protected as development occurs in the area.

Key Recommendations

Overarching recommendations in the plan include:

- Protect the water quality of Jordan Lake
- Protect the most sensitive natural areas of the Southwest Shore Wilderness
- Protect and enhance game and wildlife habitat
- Utilize prime agricultural soils for market farms and crops
- Create a system of trails connecting the new community, cultural assets, and natural areas
- Protect scenic views
- Preserve areas of cultural and historic significance

Relevance to Comprehensive Plan

Specific recommendations that could impact other areas of the county as well as guide the analysis and policies that will be included in the Comprehensive Plan include:

- Minimize stream crossings by roads and utilities
- Implement techniques such as green roofs, rain gardens and pervious pavement to limit stormwater runoff
- Use drought tolerant plants and reclaimed water for irrigation
- Design wildlife core areas and corridors

- Preserve high quality wildlife habitat including streams (perennial, intermittent and ephemeral), riparian areas, vernal pools, wetlands, rock outcrops, mature hardwood forests and lands adjacent to protected areas
- Avoid development on areas with slopes greater than 15%
- Cluster development to preserve contiguous forest
- Conduct a historical inventory prior to development
- Specific buffers on key natural features
 - 1000 ft minimum buffer along the Haw River to protect the lower Haw State Natural Area and Haw River Significant Aquatic Habitat
 - 450 ft buffers around game lands (for built structures) and 1/2 mile buffer around all prescribed burn areas
 - 300 ft Along Robeson Creek, and Stinking Creek to accommodate potential trails, wildlife, and water quality protection measures
 - 200 ft buffers on perennial streams and 100 ft buffers on intermittent streams draining into the Haw River Aquatic Habitat (area designated as Cape Fear Shiner Habitat)
 - 100 ft buffers on perennial streams, 50 ft buffers on intermittent streams, and 30 ft buffers on ephemeral streams throughout the study area

Transportation Plans

DRAFT CHATHAM COUNTY COMPREHENSIVE TRANSPORTATION PLAN (2016)

Overview

The Chatham County Comprehensive Transportation Plan (CTP) is being developed for Chatham County as a collaborative effort between Chatham County; the municipalities of Goldson, Pittsboro, and Siler City; the Triangle Area Rural Planning Organization (TARPO); The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHCMPO), and NCDOT. The CTP focuses on transportation needs in the next 25-30 years. The document covers recommendations for roadway, pedestrian, bicycle, rail, and transit infrastructure and projects.

Key Recommendations

Roadway

- Improve US 64 to freeway standards in the county, with bypasses of Pittsboro and Siler City (new location north and west of Siler City to complete a bypass route, using a portion of US 421)
- Improve US 421 to freeway standards from Siler City south to Sanford
- Full beltline around Pittsboro with new location expressway and boulevard south of US 64 Business
- US 15/501 raised to expressway standards
- Multiple new location boulevards east of Pittsboro
- Improvements to other major roads including NC 87, NC 751, Farrington Road, Hamlets Chapel Road, Jones Ferry Road, Mt. Gilead Church Road, and Piney Grove Church Road

Ped/Bike

- Multi-use paths along US 64 and Rocky River
- New sidewalks, primarily around Siler City and Pittsboro and Goldston

- Extensive expansion of on-road bike facilities throughout the county

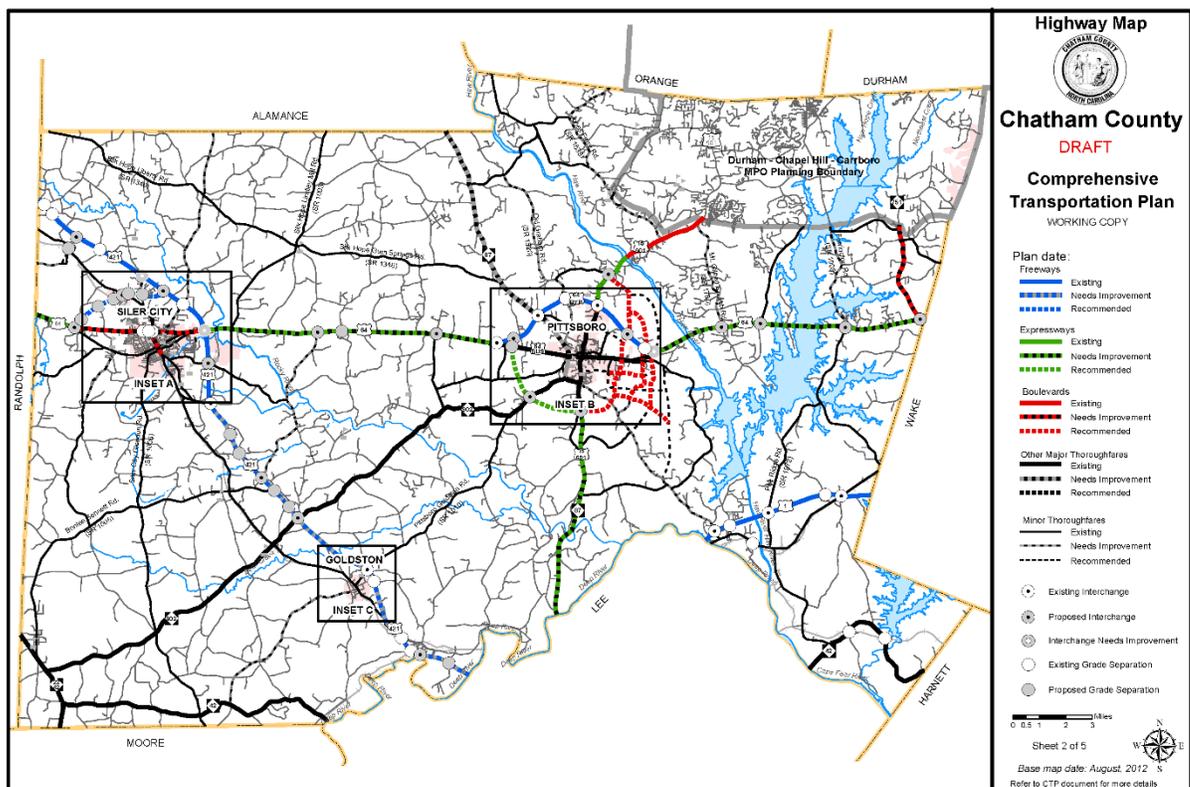
Transit and Rail

- New bus routes into the county from the east and west on US 64
- New bus route along US 421 through the county
- New bus route south from Pittsboro to Sanford

Relevance to Comprehensive Plan

The CTP lays out the overarching vision for major transportation projects over the next 25-30 years. These projects help ensure mobility throughout the county, responding to expected growth and development pressures. The Comprehensive Plan will use the CTP recommendations when considering recommendations.

FIGURE 6: CHATHAM County draft CTP Highway map



DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION 2040 METROPOLITAN TRANSPORTATION PLAN (2015)

Overview

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHCMPO) 2040 Metropolitan Transportation Plan (2040 MTP) includes a set of transportation improvement projects for the Triangle region, planned to be implemented by 2040. The MTP is a fiscally constrained document, meaning projects are designed to fit within a budget of expected revenues that will be available for transportation projects in the region. Only a small portion of the northeast corner of Chatham County is within the DCHCMPO planning boundary. Most projects included in the 2040 MTP are in Orange, Durham, or Wake counties.

Key Recommendations

- Improvements to Jack Bennet Rd / Lystra Rd between US 15/501 South and Farrington Mill / Point Rd by 2030. This project is not a widening, but roadway improvements

Relevance to Comprehensive Plan

Although only a small area of Chatham County is included in the DCHC MPO and few projects are planned for Chatham County, this plan is important for Chatham County residents. There are a significant number of projects envisioned for areas just to the north or east of Chatham County's boundaries. These transportation projects are responding to development pressures being felt right at the doorstep of Chatham County. The projects also could enable more growth to occur in these areas near the county boundary. In particular, some major projects like NC 540 and improvements to US 15/501 and NC 54 in Chapel Hill could lead to increased development pressure in Chatham County.

TOWN OF PITTSBORO COMPREHENSIVE TRANSPORTATION PLAN (2015)

Overview

The Town of Pittsboro completed a Comprehensive Transportation Plan (CTP) in December 2015, covering long-term transportation recommendations for the town. The plan covers improvements needed through 2035 to aid mobility around Pittsboro. Current and future conditions were modeled and alternatives were analyzed for impacts to mobility. The plan recommendations focus on roadway improvements to meet future travel needs.

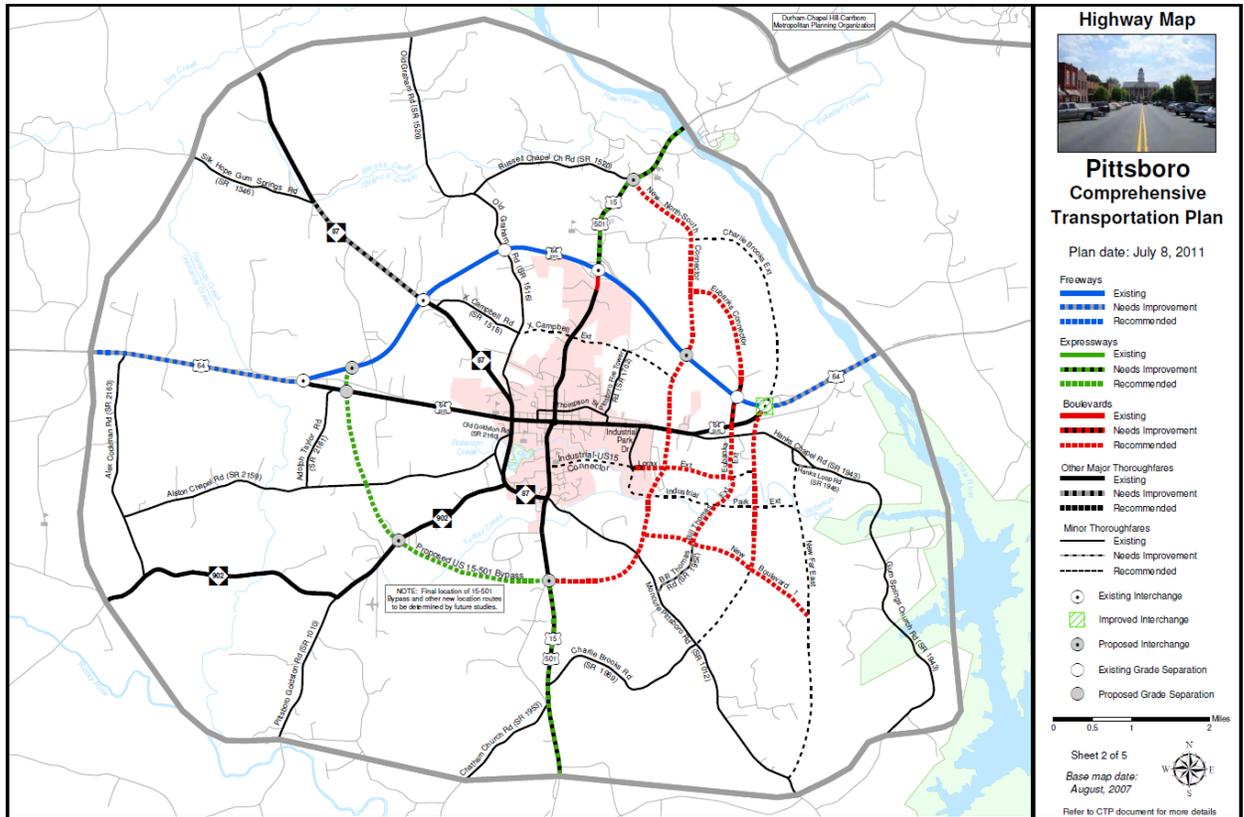
Key Recommendations

- Upgrade US 15/501 / NC 87 south of Pittsboro to an expressway facility and provide an expressway bypass of Pittsboro to the southwest of Pittsboro linking US 64 and US 15/501
- Construct a boulevard east of Pittsboro to connect from 15/501 north of Pittsboro to 15/501 south of Pittsboro. The facility should be able to be converted to six lanes when volumes warrant such expansion
- Upgrade US 15/501 north of US 64 Bypass to an expressway facility
- Upgrade US 64 to a four-lane freeway facility to the east and west of US 64 Business

Relevance to Comprehensive Plan

The Pittsboro CTP includes a number of projects that have implications for transportation around Chatham County. The projects included as part of the Pittsboro CTP also appear in the draft Chatham County CTP. These projects will be evaluated and considered as the Comprehensive Plan is developed.

FIGURE 7: PITTSBORO COMPREHENSIVE TRANSPORTATION PLAN HIGHWAY MAP



CHATHAM COUNTY TRANSPORTATION ADVISORY COMMITTEE STRATEGIC PLAN (2011)

Overview

The Town Chatham County Transportation Advisory Committee (TAC) completed a Strategic Plan in 2011 that identified key strategic goals and actions for Chatham County to undertake in the short-term. The plan provides the roadmap for Board members to accomplish the mission of the TAB, including assessing, anticipating, and addressing transportation issues.

Key Recommendations

- Sets the values, goals, and strategies for the TAB including:
 - Ensure public participation
 - Provide guidance on policies and plans
 - Provide guidance in prioritizing projects
 - Provide convenient and accessible transportation services
 - Assess the status and quality of the transportation system
 - Provide credible education and information sharing

Relevance to Comprehensive Plan

This plan helps set out the values and goals that underpin the work of the Chatham County TAB and can help inform the Chatham County Comprehensive Plan process. The plan also provides benchmarks of some measures of mobility in the county. This plan is under revision at this time.

NORTH CAROLINA TRANSPORTATION NETWORK AND STRATEGIC TRANSPORTATION CORRIDORS FRAMEWORK (2015)

Overview

NCDOT's Strategic Transportation Corridors network (STC) "is intended to ensure transportation system connectivity, provide high levels of mobility, and improve access to important state and regional activity centers throughout the state."

Key Recommendations

Chatham County includes segments of three Strategic Transportation Corridors:

- Corridor K – US 421
- Corridor L – US 1 and CSX rail line
- Corridor R – US 64

As stated in the Framework, the STC goals are:

1. **System Connectivity:** *Provide essential connections to national transportation networks critical to interstate commerce and national defense.*
2. **Mobility:** *Facilitate high volume inter-regional movements of people and goods across the state.*
3. **Economic Prosperity:** *Support efficiency of transport logistics and economic development throughout the state for economic regions and clusters of existing and emerging activity centers.*

Relevance to Comprehensive Plan

To achieve these goals, it is essential to protect the corridor's key functions through a wide variety of consistent and coordinated strategies, including access management, driveway permitting, effective traffic signal timing/coordination, multimodal connectivity, and compatible land use planning. Efficient freight access and goods movement is also necessary. With respect to the Chatham County Comprehensive Plan, managing development is critical to preserve capacity and reduce environmental and financial costs of future improvements. Careful planning is needed to reduce conflicts between land use and transportation objectives, while maintaining an appropriate balance between local access and regional/statewide mobility.

FIGURE 8: STRATEGIC TRANSPORTATION CORRIDOR VISION, GOALS AND OBJECTIVES

<p>Strategic Transportation Corridors Vision: to provide North Carolina with a network of high-priority, integrated multimodal transportation corridors comprised of facilities that interconnect statewide and regional transportation-dependent activity centers, to enhance economic development in all regions of the state, promote highly reliable and efficient mobility and accessibility, and support good decision-making.</p>	
Goals	Objectives
<p>System Connectivity <i>Provide essential connections to national transportation networks critical to interstate commerce and national defense.</i></p>	<p>Provide a continuous, consistent network of reliable, higher speed interstate, defense, and major freight routes. For system connectivity, corridors should provide functional classification and facility type consistent with those attributes; corridors should have high capacity consistent with speed and reliability objectives.</p>
<p>Mobility <i>Facilitate high volume inter-regional movements of people and goods across the state.</i></p>	<p>Serve major inter-regional travel corridors with high levels of service, moving higher volumes of passenger or freight traffic, and provide multiple transportation modes or routes for the opportunity of choice and flexibility in travel or shipping in the corridor.</p>
<p>Economic Prosperity (Activity Center Access) <i>Support efficiency of transport logistics and economic development throughout the state for economic regions and clusters of existing and emerging activity centers (1).</i></p>	<p>Provide high-quality access to defined intrastate activity center clusters and to nearby critical activity centers in surrounding states, and ensure access to at least one strategic corridor for each multicounty region of Tier 1 Economic Development counties (2).</p>
<p>Notes:</p> <ol style="list-style-type: none"> 1. Activity Centers are the major hubs or destinations across the state that are critical to the state's economic prosperity and whose success in part is driven by ready access from all or significant parts of the state. 2. The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns each a Tier designation based on four factors: adjusted property tax base per capita; percentage population growth; median household income; and average unemployment rate. The 40 most distressed counties are designated as Tier 1. 	

CHATHAM PARK PLANNED DEVELOPMENT DISTRICT MASTER PLAN (SUBMITTED MAY 2015; APPROVED AUGUST 10, 2015)

Overview

Chatham Park Planned Development District (PDD) Master Plan establishes the maximum number of residential dwelling units at 22,000 DUs and the maximum gross square footage for non-residential development at 22,000,000 GSF. The Chatham Park PDD Master Plan addresses a number of critical elements related to land use, infrastructure, public services, and environmental impacts. The Multi-Modal Transportation Plan (MMTP) “is an integrated, balanced intermodal transportation system that safely and efficiently moves people and goods, consistent with the goals stated in the Town of Pittsboro’s Comprehensive Transportation Plan (CTP).”

Key Recommendations

The MMTP identifies concepts and strategies for providing “connectivity of land uses through a network of roadway improvements and pedestrian sidewalks and/or trails and/or bicycle facilities, the final layout of which will be determined as specific site plans or subdivision plans are approved.” These include:

- Sidewalks, walkways, greenways, and roadway crossings for pedestrians
- On-street facilities, shared roadways , multi-use trails, and ancillary amenities for bicycles
- A highly-connected roadway network built in accordance with NCDOT adopted *Complete Streets Planning and Design Guidelines*
- Bus stops, park-and-ride lots, and other appropriate accommodations for transit service

Additional pending elements of the PDD include a Master Parking and Loading Plan and a Master Transit Plan. Furthermore, each of the 27 “Small Areas” identified in the Land Use Plan Map and Table of Permitted Uses will have a Small Area Plan prepared that includes a transportation planning analysis based on the latest transportation models and roadway layouts and designs consistent with NCDOT *Complete Street Guidelines*.

Relevance to Comprehensive Plan

Chatham Park is a major new development planned for the eastern part of Chatham County, which will bring significant new levels of employment and housing to Chatham County. Because of its size, the development has implications for transportation both within the development and in the surrounding areas. There are also tax base, land use, and environmental implications.

US 64 CORRIDOR STUDY, WAKE AND CHATHAM COUNTIES (JANUARY 2011)

Overview

The US 64 corridor is designated by NCDOT as Strategic Highway Corridor, playing a critical role in regional and statewide mobility. Given the importance of efforts to enhance and sustain transportation, economic development, and environmental stewardship, the US 64 Study identifies projects and strategies that protect and maximize the value of this corridor. The study prepared a master plan “to preserve and enhance mobility and safety along US 64, while balancing community access and interests. This plan will be used to guide development and improvements along the corridor from US 64 Business in Pittsboro to US 1 in Cary.”

Key Recommendations

The study presents a short-term plan of mostly operational enhancements to improve mobility, safety and pedestrian access at major intersections, as well as a long-term plan (for beyond 2035) that converts many major intersections to interchanges or overpasses. The study establishes “a framework and collaborative process for the decision making for land use and transportation along the corridor.” Recognizing the uncertainty inherent in long range planning, especially in the face of rapid growth and change, the study emphasizes the need for flexibility and for frequent, collaborative plan updates to “better balance the community’s needs while maintaining the overall vision for the corridor.”

Relevance to Comprehensive Plan

The US 64 Corridor Study specifically references the Chatham County Land Conservation and Development Plan and the Chatham County Land Use Strategic Plan as critical elements in achieving long-term goals for corridor mobility, safety, economic development, and environmental preservation. The study recommends that Chatham County review land use policies, instituting controls to prevent “strip mall type development” along US 64. It also suggests Chatham County and the Town of Pittsboro evaluate emergency response times and consider the findings of the study in locating additional fire stations to accommodate population growth. The identification of potential park-and-ride facilities, as well transit, bicycle, and pedestrian connectivity improvements are also cited.

TRIANGLE AREA RURAL PLANNING ORGANIZATION (TARPO) LOCALLY COORDINATED HUMAN SERVICE TRANSPORTATION PLAN (LCP) (JUNE 2013)

Overview

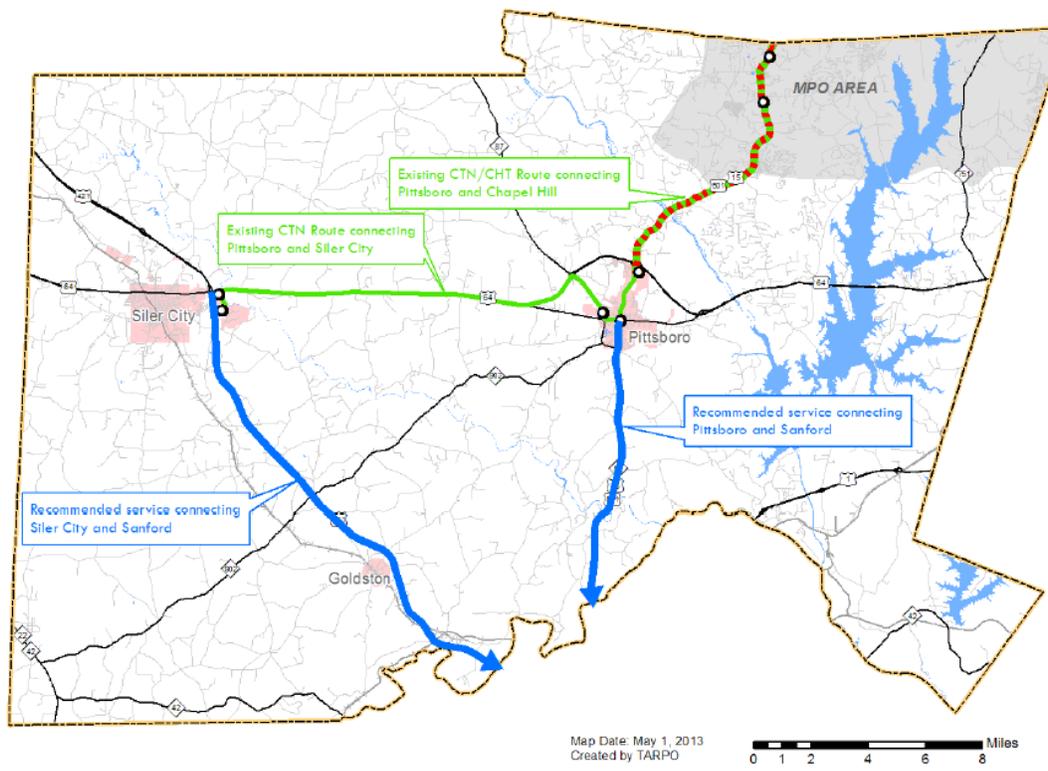
The TARPO LCTP describes existing and recommended human service public transportation needs and services for Chatham, Lee, Moore and Orange Counties. It was developed through a process combining demographic and service analyses with stakeholder workshops and surveys.

Key Recommendations

The report focuses needs and strategies associated with Chatham Transit Network (CTN) service. The highest priorities were associated with expanding the amount of service, extending hours of operation, and covering underserved portions of the county. Specific recommendations included:

- Adding and improving fixed/deviated-fixed routes connecting Siler City to Sanford and connecting Pittsboro to Sanford, as well as a possible connection to Asheboro.
- Increasing/extending early morning and evening service.
- Providing a Mobility Manager to improve customer service and provide better information to riders.
- Increasing visibility, marketing, and education.
- Improving regional coordination, especially with Lee County.

FIGURE 9: TARPO RECOMMENDED IMPROVEMENTS



Relevance to Comprehensive Plan

The LCP provides recommendations for transit that will be important as multimodal options are considered throughout the Comprehensive Plan process.

Active Recreation Plans

CHATHAM COUNTY BICYCLE PLAN (2011)

Chatham County's bicycle plan incorporates elements evaluation, engineering, enforcement, education, and encouragement; these five "essential elements" are recognized as necessary for bicycle friendly communities. At the time of adoption, Chatham County had over 130 miles of signed on-road bike

routes, and no bike lanes. A portion of the American Tobacco Trail passes through the county, connecting Durham and Cary.

Through surveys conducted as part of the bicycle plan, a lack of on and off street bicycle infrastructure was viewed as an obstacle to riding in Chatham County. Aspirational goals were identified for short-term and long-term bicycle infrastructure projects to build the county's network to a total of 420.5 combined miles of shared roads, bike lanes, and shared-use (off road) paths. Policies and education programs were identified to increase ridership and decrease unsafe driving behavior on Chatham County roadways.

The County Bicycle Plan sought the creation of a Bike and Pedestrian Subcommittee to represent the issues and needs of active transportation to the county's Transportation Advisory Board (TAB). The County Plan includes *Facility Design Guidelines*, which provide a helpful starting point for bicycle infrastructure. Some of these designs are out of date with best practices, however; future plans should simply refer to design guidelines and standards accepted nationally (NACTO, AASHTO Guide for the Development of Bicycle Facilities, FHWA Separated Bike Lane Planning & Design Guide).

Strengths: Emphasizes the "5 E's" (essential elements of Bicycle Friendly Communities, *League of American Bicyclists*). Identifies perceived obstacles to increased ridership in the county and presents aspirational goals, potential solutions, and funding sources. Analysis of crashes in Chatham County.

Weaknesses: Limited data collection and ridership information. Low survey participation. Some recommendations are out of date with best practices for safety and encouragement of active transportation (example: *Share the Road* signs are being replaced by many municipalities, some state DOTs with MUTCD R4-11, *Bike May Use Full Lane, Change Lanes to Pass*).

CHATHAM COUNTY TOWN OF CARY JOINT LAND USE PLAN (ADOPTED 2012)

Transportation Planning – Identifies future needs for transportation planning and cooperation between Cary, Chatham County, MPO, and NCDOT due to the diverse rural and urban land uses in the area. Anticipated growth justifies study of existing plans and infrastructure to prepare for necessary improvements that may be needed.

Parks and Greenways – Currently no public parks in this area of Chatham County. The 4.7 mile portion of the American Tobacco Trail is the only existing greenway. Co-location on county school sites recommended for potential parks and greenways; both the town and county Parks and Recreation Plans include this area of Chatham County.

PITTSBORO PEDESTRIAN TRANSPORTATION PLAN (ADOPTED 2009)

Prepared by NCDOT Division of Bicycle & Pedestrian Transportation. Existing conditions: minimal and incomplete sidewalk network, and few town-owned off-road pathways. Existing sidewalks limited to arterials and collectors. Few intersections have pedestrian signals or marked crosswalks.

Priorities identified based on public/steering committee input and data collection. 12 priority facilities identified, mostly NCDOT jurisdiction. Walkability identified as a top priority, generally; lack of infrastructure stated as reason for so little walking in community. Increasing walking for transportation and recreation a top priority, along with safety and inclusion of pedestrian transportation in new comprehensive land use plan. As in other regional/local plans, strong desire expressed for additional miles of trails and greenways through land acquisition and future development. Land Use Plan 2008 Update – Recommend that zoning ordinance be amended to require sidewalks in new non-residential development. Evaluation plan seeks to measure safety,

usage, facilities, education/enforcement, and institutionalization (measures of total budget spending on pedestrian/greenway projects).

Comprehensive Parks and Recreation Master Plan, 2009-2029

Overview

The Comprehensive Park and Recreation Plan was completed in 2011 by McGill and Associates. It outlines recommendations for land acquisition, park and greenway development and recreational programming. Key highlights that most relate to the Land Use Plan have been provided which include implications to policy, partnerships and land acquisition for future parks and greenways. This plan was not formally adopted, which may have been detrimental to the County's efforts to compete for state parks and recreation funding grants.

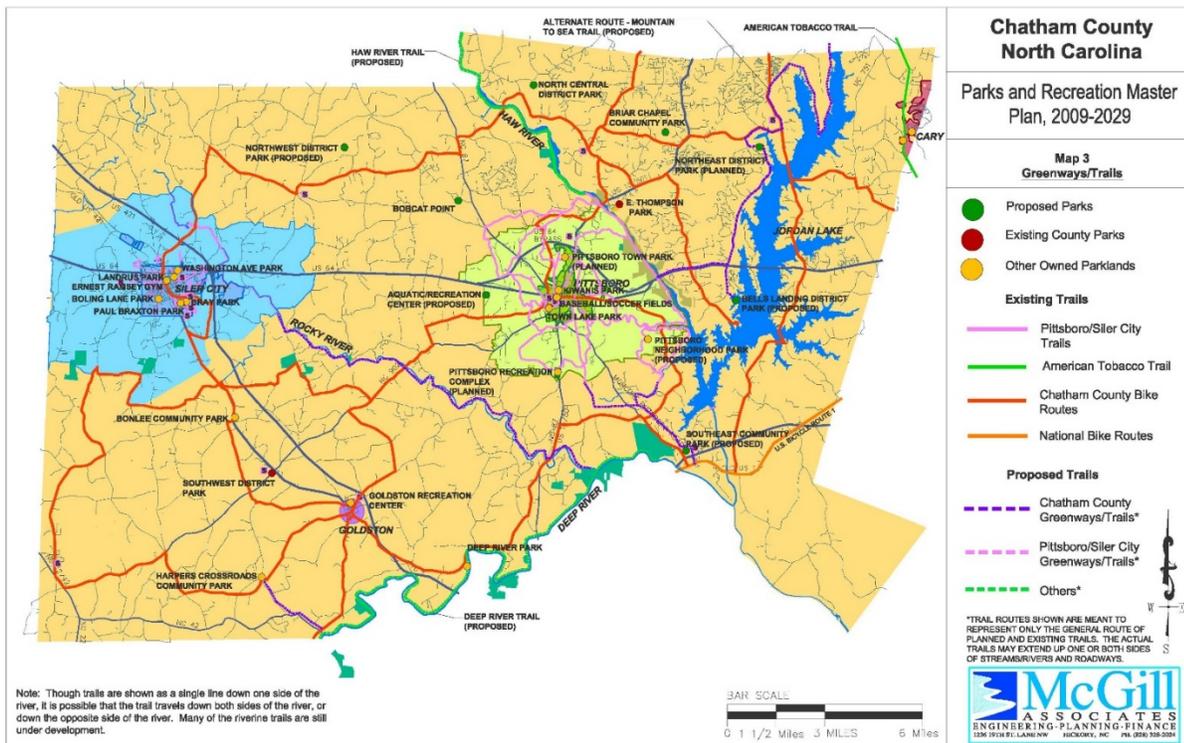
Key Recommendations

Key recommendations from the Chatham County Comprehensive Parks and Recreation Master Plan:

- **Expand the System**
 - Focus on maintaining existing facilities
 - Add more facilities
 - Reevaluate its programming as the population grows
 - Continue to build multi-jurisdictional and public/private partnerships to expand the system
 - CCCC- partner to expand facilities
 - Town of Goldston – Guidance to provide facilities in this rural area
 - Siler City – Develop stronger partnership, County to focus on passive recreation
 - Pittsboro – County to support Town efforts to develop planned facilities
 - Coordinate long range planning and development efforts between Chatham County Parks and Recreation and Chatham County School System
 - NC Division of Parks and Rec- continue partnership to develop Haw River Trail and Deep River Trail
 - NCWRC- partnership for management of Bells Landing and hunting agreements near proposed Northeast District Park to ensure park safety
 - NCDOT – coordination of ATT and bicycle routes
 - Triangle Land Conservancy- continue to build partnerships to preserve working farm land and forested lands
 - Haw River Assembly- partner to restore and protect land along the Haw River and Lake Jordon
 - YMCA- partnership to identify a YMCA site
 - Deep River Park Association
- **Economic Development Initiatives**
 - Ecotourism (develop greenway and paddle trails along the Haw River, Deep River, Rocky River and near Jordan Lake and the proposed Bells Landing Park; provide connectivity with trails and parks to lengthen and extend visits;
- **Action steps**
 - Coordinate with County Departments to implement the policy requirements
 - Add pedestrian/bike projects to NCDOT TIP
 - Seek increased funding and alternative funding for parks and greenways (including local assessment districts, developer extractions, etc.)

- Evaluate the enhancement of the existing fee in lieu formula in the Chatham County subdivision ordinance
- Proposed key facilities
 - Acquire land for park and greenways
 - Expand the park system that is geographically distributed
 - Expand the greenway system to connect destinations, preserve open space, and offer transportation choices
 - Northeast District Park (Phase 1, 2 and 3)
 - Northwest District Park
 - Greenways/Blueways

FIGURE 10: PARKS AND RECREATION MASTER PLAN FACILITY MAP



Relevance to Comprehensive Plan

Since 2009 significant progress has been made to acquiring land and constructing proposed district parks. The Comprehensive Plan will need to identify and confirm remaining facility priorities as well as determine priority connections between facilities (bicycle/pedestrian, greenway, and blueways). The Comprehensive Plan will need to determine how public and private investments can be leveraged to build a connected system of parks with active and passive recreational opportunities. This will be integral to land use planning, preserving the environment and capitalizing on regional tourism.

Housing Plans

Overview

Plans reviewed include the Chatham County Housing Needs Assessment Update (2008) & the Chatham County Affordable Housing Retreat Presentation (10/2015)

The work completed in the Housing Needs Assessment gives quantitative review of the historical conditions in the County. There are a number of data points that contributes to the current situation.

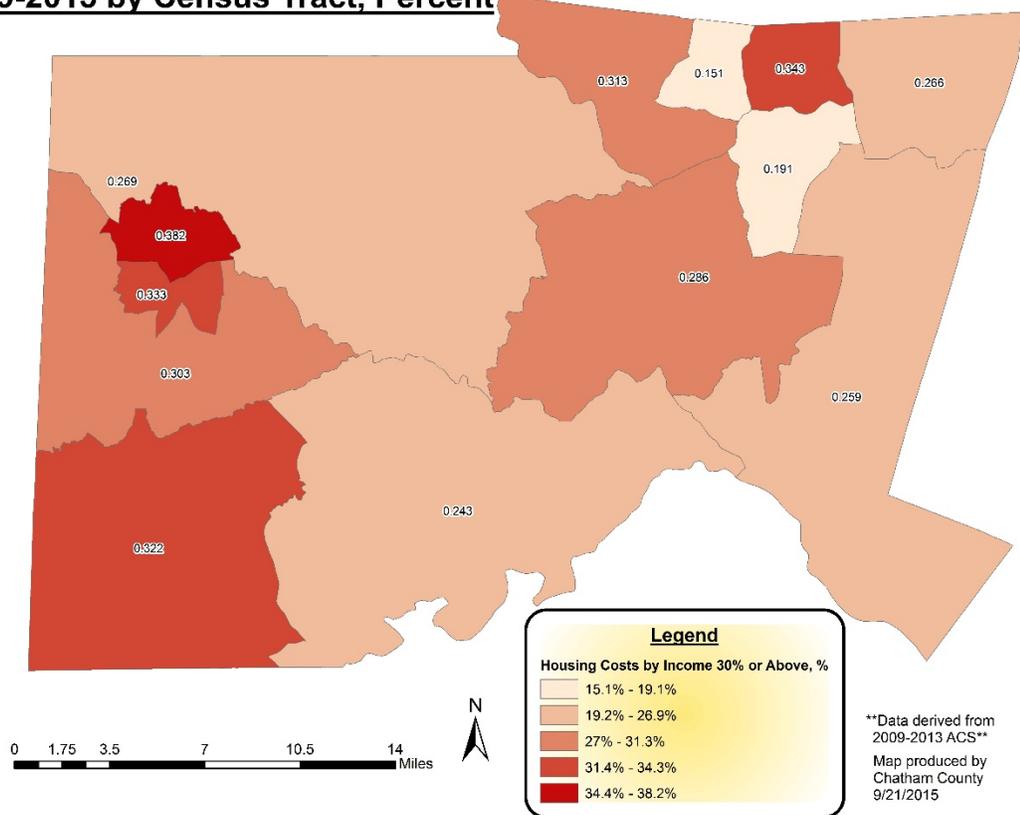
- The supply of rental housing is extremely low accounting for less than 6% of the housing stock. Trends since this study show a low number of new development that results in a below normal percentage of rental stock compared to more stable communities.
- Chatham County has residential For Sale product has been predominantly priced over \$200,000 with 78% of the product priced over this price. Homes prices today are averaging over \$350,000.
- 44.7% of renters spend >30% of income on housing
- 55% of homeowners spend >30% of income on mortgages
- The County household income distribution has 30% of the population with wages under \$30,000. Given the lack of wage growth statewide and the solid employment the housing for this populations is underserved for both for sale and rental housing.
- Land values have risen to within a small percentage of pre-recession pricing. This is being driven by high demand and limited lot supply.
- Population growth for the greater Raleigh-Durham-Chapel Hill area has maintained solid and consistent growth and this trend is expected to continue. Chatham County will continue benefit from a high net in-migrations as job growth continues.

The Affordable Housing Retreat Presentation prepared by the Housing Task Force demonstrates a clear understanding of all housing conditions, needs and resources relative to For Sale, For Rent and Emergency & Transitional / Supportive. The issues that require additional improvement and inclusion include:

- Land use regulations require dramatic changes to accomplish the locations and densities for Affordable Housing
- The costs of delivering Affordable units in addition to developing, permitting, retrofitting and building cost should be expanded.
- Inclusion of plans and funding for transportation options in conjunction with new Affordable units is critical as transportation costs will increase income for housing
- Local funding, leadership, and resources will be requires to accomplish plans.

FIGURE 11: HOUSEHOLDS WITH MONTHLY HOUSING COSTS >30%

**Households with Monthly Housing Costs 30% or greater of Income
2009-2013 by Census Tract, Percent**



Relevance to Comprehensive Plan

There is a substantially increasing need for both Affordable and Workforce housing based upon the apparent current deficiency of rentals and the population growth projections as well as the growing challenges of affordability. Additionally, there is strong political and public desire to have a much more diverse housing stock County wide.

There are two key locations where policy, land planning and zoning can be effectively updated to allow for the development of Affordable and Workforce Housing. Given the historic development patterns the County as a whole has significant traditional subdivision and master plan development patterns that are outdated and do not provide for the inclusion of the needed subsidized housing. That said the opportunity for significantly increasing this housing type is to look at both a Greenfield and Municipal/ Town Center delineation which would provide for unique and specific recommendations for both densities and infrastructure situations.

It is important to note that there are several other limiting factors to increasing this housing type, both rental and for sale. There are few non-profit's, both builders and developers, in the area who have the capacity and funding to develop more than a small percentage of units. The local builders are not geared to this product type and price point and typically do not have enough incentive to allow for adding this product type. National builders and regional builders can provide this product type if adequate volume and incentive are in place. Land developers are not educated on this product type

and given the strong market rate conditions have no incentive to seek to include the housing type absent of public private partnerships and financing.

The Workforce, Affordable and Emergency & Transitional / Supportive housing needs are currently being served by a number of non-profits that provide an array of support services. These organizations have strong missions and leadership. It would be critical to have them continue to partner on developing the necessary plans and programs, however, it would appear that the capacity of these groups and resources will need to grow to support the suggested growth in this sector. Additionally there will need to be capital from the Municipalities and County to pay for this development as historic funding sources are disappearing. Staff and building resources could be made available to steward both the for-profit and nonprofit stake holders to real production.

Lastly, it will be critical to define growth goals by locations, type, tenure and size for a 3, 5 and 10-year plan with product design recommendations. These goals will help direct all planning initiatives and will also serve to attract additional nonprofits and organizations in the industry to the area.

Utility Plans

The stakeholder interviews served as the primary source of determining the scope in Phase 2. During Phase 2 a more detailed plan review will be done focusing on capital improvements planned and long term utility master plans for respective utility systems within the County.