

Hickory by Choice 2030 Comprehensive Plan City of Hickory, North Carolina



Hickory by Choice 2030 Comprehensive Plan

City of Hickory, North Carolina

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Introduction

Purpose

Communities grow and prosper for scores of reasons. Some are external and beyond local control, but many others are well within the powers of municipalities to shape and leverage strategically, serving the long-range health, safety and welfare of the community.

This plan is a first step in addressing those concerns, and to achieving, through opportunities that growth may bring, improvements residents have long hoped to make. Though for many years the community has done well without a true long-range comprehensive plan, it is recognized that a broader scope of consideration offers the City a stronger, more efficient and effective basis for directing its future.

Topics Covered

A long-range plan guides what happens on the ground relative to land use, transportation, natural resources, parks, and other aspects of a community's development. It provides direction integrating most aspects of a municipality's physical, economic and social development to achieve goals, both short and long-term. In many communities, plans such as this are referred to as comprehensive plans – aptly named, since all are intended to help cover and coordinate the



Figure 1.1 - The Julian Whitener Municipal Building houses the offices of many of the city's administrative departments. (Image source: City of Hickory.)

gamut of actions and services provided by a municipality.

Most of the chapters in this document summarize topical issues and challenges, identify relevant parts of the planning vision and provide a set of goals and policies intended to guide the City's regulatory and budgetary decision making. Notable and important exceptions are the Vision and Community Design chapter, which articulates the larger consensus voice of the plan and the Implementation chapter, which offers programs and strategies for the City to enact.

The plan consists of the following chapters:

- *Introduction – covering planning context, participation program, document summary*
- *Vision and Community Design – introducing and presenting the plan's overarching vision and directives*

- *Land Use – introducing and presenting policies related to future land use and growth patterns, including the future land use map*
- *Housing – introducing and presenting policies related to the availability and qualities of Hickory’s housing stock*
- *Transportation – including goals and policies related to all modes of travel in Hickory as well as network patterns and inter-connectivity*
- *Economic Development – introducing and presenting policies for the City’s overall economic development approach*
- *Public Facilities – introducing and presenting policies related to Hickory’s provision of municipal, police, fire, water and wastewater services*
- *Recreation & Parks – introducing and presenting policies supporting facilities and services not already provided in Hickory’s existing recreation and parks plan*
- *Implementation – introducing and presenting a strategic set of programs and actions Hickory may take in implementing the comprehensive plan*



Figure 1.2 - Union Square is Hickory’s historic heart, but the community is much, much more. (Image source: Studio Cascade, Inc.)

Enabling Legislation

North Carolina State law enables and allows cities and towns to enact building and development regulations supporting the general health, safety and welfare of its citizens.

The 1923 legislative act that enabled zoning granted cities authority to zone within their corporate or city limits, including a provision that zoning be in accordance with a comprehensive plan. Since that time, the latter provision has been interpreted by the North Carolina Supreme Court as requiring that zoning be applied throughout a municipality. Perhaps as a consequence, the State does not mandate or even provide guidelines for comprehensive plans. When such plans exist, changes to regulations must reference consistency with adopted plans.

Hickory’s Historical Context

Hickory grew from a small trading center located on the Western North Carolina Railroad. There was a great explosion of growth in the area from 1880 through the 1930’s. This growth was fueled by the development and expansion of industry, primarily furniture-making and textiles.. This growth led to increased population, the establishment of service industries, and increased construction activity. This prosperity led to development of high quality residential areas, cultural facilities, educational institutions, and the extension of public services.

Hickory’s thriving economy led to increased residential development. In *From Tavern to Town: The Architectural History of Hickory, North Carolina*, the authors relate that in the 1920’s various lending institutions were encouraging home ownership. By the late 1930’s, approximately 75 percent of Hickory’s citizens owned their own

homes.

Growth has continued in Hickory, though the basis for the current land use patterns was established in those early stages of city development. Industrial land is still primarily focused on the railroad, but more recent industrial development has focused on highway corridors. Residential development radiates from the city center, but more recent housing development seems less attached to the community's traditional core.

Study Area

Hickory is located primarily in the northwestern portion of Catawba County in western North Carolina. Portions of the city also extend into Burke and Caldwell Counties. It has a rich tradition of attractive neighborhoods, a vital city center, good recreational opportunities, and an entrepreneurial spirit. It combines excellent residential areas with the character and scenic quality of the western North Carolina landscape. This tradition has established Hickory as a desirable place to live and invest in the region.

Since the 2001 downturn, the economy has slowed growth and diminished economic capacity. However, growth and development in the last decade have increased traffic and placed more demand on public services. Some of Hickory's essential qualities, such as a vital central city and bustling factories nearby, have changed as development moved outward and the economy worsened. As a result, Hickory has recognized the importance of a continued and proactive stance to city development in order to maintain a high quality of life and to promote appropriate development.

Extra-Territorial Jurisdiction (ETJ)

North Carolina law has long allowed towns and cities to establish land use regulations in areas just

1.3

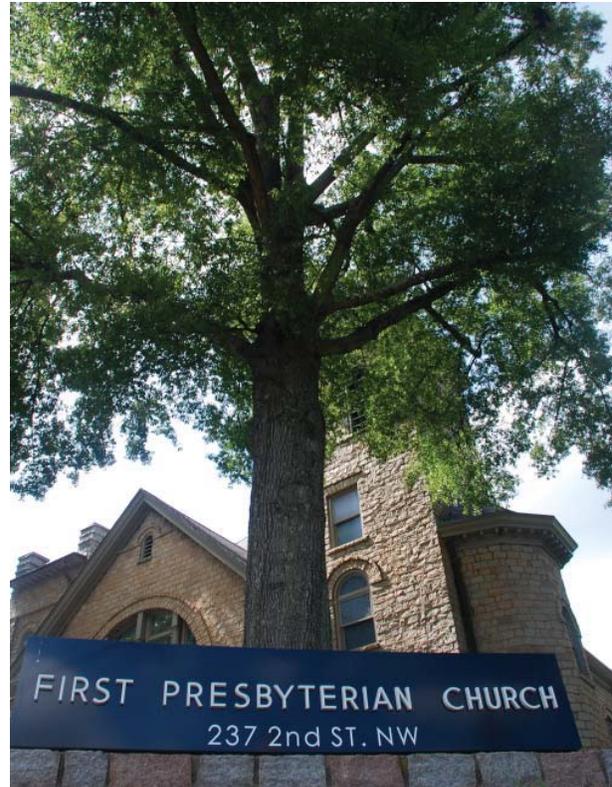


Figure 1.3 - The community's churches play a major role in defining Hickory's landscape and community activity patterns. (Image source: Studio Cascade, Inc.)

outside jurisdictional limits. First called "perimeter zoning," the current system enables communities to designate such lands as part of an Extra-Territorial Jurisdiction (ETJ), the maximum size of which is determined by community population.

Extraterritorial areas must be based on "existing or projected urban development and areas of critical concern to the city, as evidenced by officially adopted plans for its development." The established boundary does not need to be based on a detailed legal survey, but the boundary must be described with sufficient precision that landowners can determine whether their properties are included without hiring a surveyor .

North Carolina law provides no mandatory relationship between annexation and extraterritorial jurisdiction, but one of the primary reasons for the creation of ETJs is the need for coordinated planning and development in areas that may someday become urbanized. Cities typically restrict annexation plans to areas within

their ETJs.

Given Hickory's irregular city limits, its ETJ is not easily described by metes and bounds. Though it is depicted graphically in maps presented in this document, users wishing to determine specific applicability are urged to contact the City's Planning Department for the most current map.

Recent Planning Efforts

This document, developed through public input, updates the existing Comprehensive Land Use and Transportation Plan, adopted by City Council in 1999. That previous planning effort provided planning and decision-making guidance appropriate for that time, but economic and community changes have necessitated a reevaluation of that plan's basic tenets.

The intent of this document is to evaluate and, if appropriate, confirm the underlying vision and direction of the community as expressed in the 1999 plan.

This plan will serve as a road map for the community to follow as it considers decisions, both large and small. It reflects a changing social and economic landscape - addressing existing trends and forecasted growth - to imagine civic needs 20 years into the future. This comprehensive plan is Hickory's vision for the future and strategic outline for getting there.

The plan provides a framework for making development and zoning decisions, promoting orderly land use, implementing public improvements, and generating private investment. In addition, the plan outlines a vision of where the residents of Hickory want to be in the future and provides a detailed strategy to achieve that vision. With this plan, decision-makers will be able to make short-term decisions that promote orderly long-term development and represent the views of the citizens of the community.

This plan incorporates concepts and policy from the previously adopted planning documents. Table 1.1 lists and describes those documents used in the



Figure 1.4 - Reusing the community's empty industrial buildings continues to be a challenge, in Hickory and throughout the Greater Hickory region. (Image source: Studio Cascade, Inc)

development of this plan.

Public Participation Program

Hickory by Choice 2030 is more than simply an update to Hickory by Choice. It is a thorough review of the 1999 land use and transportation plan and an expansion of it. The new Hickory by Choice represents a critical evaluation and revision of the older document, and it includes more elements than the original, addressing housing, the environment, economic development, and public facilities and utilities.

While this document captures extensive and current community thought on Hickory's future, much of its core direction carries forward the message of the earlier plan. The process that created the 1999 Hickory Land Use and Transportation Plan was "community driven." That plan was a direct reflection of the citizens'

Table: 1.1 - Previously adopted planning documents

Document	Date	Notes
Hickory by Choice – Comprehensive Land Use and Transportation Plan	1999	This plan updated the 1986 plan.
City Center Plan	1999	Provides a vision for the city center and the Oakwood, Claremont, Green Park, Ridgeview, and Kenworth neighborhoods.
Hickory Horizons – Continuing the Vision	1995	Regional visioning process (third iteration).
Eight Neighborhood/ Area Specific Master Plans	1996 - 2008	Neighborhood plans were designed to supplement the Comprehensive Plan.
Sidewalks, Bike, Greenway, and Trails Master Plan	2000 - 2005	Provides policy for improving access and mobility for pedestrians and bicyclists.
Hickory Public Art Master Plan	2001 - 2002	Provides a framework of policy for public art acquisition and placement across the City.
Hickory Landscape Master Plan - Creative Horizons	1996	Provides guidance for gateways and corridors.
Park and Recreation Master Plan	1997	Provides standards across park types along with policy guidelines.
Cloninger Mill Park Master Plan	2009	Provides a preferred design concept for development of Cloninger Mill park site.

values and visions for the future. Though times have changed, the community values and vision expressed then have not changed significantly.

The first step of this process was to define the existing trends, opportunities, and constraints within the community. The information for this analysis was obtained from solicitation of issues, ideas, and visions for the future through orientation interviews with community members and City staff, as well as a critical review of the

first Hickory by Choice. The early workshops in this process served to bring into focus those values and policy directives from the first plan that should be carried forward into this version.

The public process accompanying the first Hickory by Choice effort was extensive, including several public meetings, a week-long planning charrette, community interviews, and a thorough inventory of existing conditions. This plan update did not seek to replicate that process. Rather, this approach was based on initial workshop results confirming the applicability of the first plan’s overall goals, focusing on specific revisions, plan expansion and refinement of the land use and community development concepts presented in 1999. Measures to implement the plan concepts and recommendations were then developed to provide the city with a roadmap to achieve the vision of Hickory’s future as outlined in this plan.

A summary of the public process for this planning effort is included in Appendix D.

From the outset, Hickory residents were consulted and asked to help lead the plan’s update. Outreach efforts were extensive and included:

- *The creation of a Council-appointed, 16-member Advisory Committee*
- *Early, one-on-one orientation interviews with staff, council and others to help spotlight existing needs and issues*
- *Six public workshops, summarized later in this section*
- *Short, issue-oriented questionnaires available on-line and in paper form*
- *Informational booths set up and staffed during local events*
- *Mail, newsletters and notices*
- *A project website, including all process materials, exercises, on-line questionnaires and custom videos*
- *Informational meetings hosted by the Advisory Committee, including a design workshop to explore form-based zoning*



Figure 1.5 - A workshop series was the backbone of the public participation effort, but a project website and neighborhood presentations also invited public comment. (Image source: Studio Cascade, Inc.)

- *Articles, letters to the editor and guest editorials, published in the Hickory Daily Record, Charlotte Observer and Hickory Hound blog*
- *An hour-long, talk-radio interview introducing the planning process with Planning and Development Director Brian Frazier and consultant Bill Grimes*
- *A local cable TV interview with Planning and Development Director Brian Frazier*
- *Several neighborhood meetings with presentations by City staff*

Several announcements and articles on the plan and its progress in Hickory's City Snippets newsletter

In all, the level of outreach and community participation for the plan update effectively created a community dialogue and established a set of consensus, values-based goals to drive plan development.

Workshops

Developing Hickory by Choice 2030 took a “funnel” approach, beginning with work to elicit long and short-term ideals, moving to identify existing issues and opportunities, developing and receiving feedback on several differing land-use strategies, gathering responses to potential policy solutions, and finally, presenting a draft plan for review and comment.

All public meetings were publicized, and meeting minutes were taken for the record.

The following paragraphs summarize the public workshops used to update the plan. The full range of materials, including meeting and questionnaire results, a website archive, presentations and more, can be found on the city’s website and in the Planning and Development Department.

Vision - Issues & Options Workshop, March 24, 2009

This workshop concentrated on reviewing and evaluating the vision from Hickory by Choice, giving direction on how it might be revised to address community and economic changes that have occurred since 1999. Presentations on findings were made by many individuals to the larger audience.

Centers and Corridors Workshop, April 28, 2009

This workshop presented general results from the March 24 meeting and presented specific challenges related to shaping the vision expressed then to match the development patterns taking shape along the community’s major arterial corridors. Participants were asked to evaluate the downtown, north Highway 127, and the Viewmont area; discussing what characteristics made each environment either suitable for or hostile to pedestrians, motorists and shopkeepers.

Policy Options Workshop, June 18, 2009

The workshop asked participants to discuss and

evaluate some of the key policies contained in the existing plan, particularly those related to the neighborhood and commercial centers envisioned in Hickory by Choice. In addition, participants learned about and discussed the City's Land Development Code (LDC) and considered new types of development standards the community may wish to adopt.

Presentations included findings from the April Plan Priorities workshop, and introduced ways the City's LDC can be improved to help the community grow according to residents' long-term vision.

Commercial Land Use October 26, 2009

This workshop covered potential means of developing successful mixed-use centers and corridor areas, as called for in Hickory by Choice. Consultants presented a review of current zoning strategies, offered schematic site plans for select centers, and engaged residents in exercises to refine potential solutions.

Residential Land Use, February 9, 2010

This workshop presented strategies for designating and zoning Hickory's residential neighborhoods, applying the concepts established in the visioning and policy development phases to the management of residential development. In addition, a set of likely or potential programs necessary to implement the plan was presented.

Plan Roll-out, October 4, 2010

This meeting presented citizens with a summary of the completed draft plan and its proposed translation into development standards. It provided opportunities for written comments, a question-and-answer session, and a "what's next" portion offering a summary of the official city review and adoption process.

Using this document

Cities generally employ two types of instruments to

guide and enact legislation – policy documents, such as long-range or comprehensive plans, and regulatory documents, such as zoning or development standards. Both are intentionally distinct, but for obvious reasons, must be well-coordinated and complementary.

Citizens, often far more familiar with local development standards, may confuse the two. In using this document, it's important to understand that its intended role is, in brief:

An internal guide, providing City staff with set goals, policies and programs leading actions and budgeting activities

A guide for elected and appointed leaders, providing direction on decision-making and in establishing regulations

A type of contract between residents and leadership, articulating and establishing expectations regarding key issues and community characteristics

It is also important to understand the limits of this or any other plan. Many citizens assume plans are a type of "end-all," holding legal sway over City activities or somehow extending automatically into land-use regulation. This is not the case. Instead, this document outlines a vision for future growth along with objectives to achieve that vision. Further actions, just as essential as this one, include:

Further study – in some cases, the City will need to conduct relatively simple inventories or studies; in other cases, the creation of more topic-specific or sub-area plans will be required

Consistency – the City's set of development and zoning regulations are being updated to implement the plan. Other, department-specific plans such as those related to public works, recreation and parks, or utilities, may also require review

Use and updates – City leaders and staff will need to internalize and use the plan, marking progress, considering revisions, and updating the plan regularly, on-pace with conditions

Citizen involvement – expectations for this plan – as evidenced by the level of public input sought in

crafting it – seem to mark the desire for a new, more participatory role for residents in the community’s future. If so, citizens will need to remain active in helping achieve goals and in monitoring the plans’s progress over time

Caveat

Few, if any of the various goals, policies or programs in this or any plan should be considered isolated from the whole. Decisions which on the surface seem exclusively transportation-related, for example, may well have deep implications related to housing, commerce, land value, or even to social issues. This plan is ordered by chapter and subject for the sake of accessibility. That does not imply that these orderings present a complete, or even best representation, of the plan’s comprehensive objectives. Some, such as City staff, may wish to review individual chapters to assess project budgeting or compliance with plan objectives. Others may value individual chapters as a more immediate, accessible way of understanding community objectives. But for those wishing to gain a more comprehensive understanding of the plan, it should be taken in its entirety; an excellent means of absorbing this plan’s intent is provided with the list of goals, policies and projects for each subject area included at the end of each chapter.

□



Figure 1.6 - As project participants learned, comprehensive planning impacts land use, community design, transportation and virtually everything else that shapes the city. (Image source: Studio Cascade, Inc.)

Vision & Community Design

Communities grow and are shaped by numerous factors, including external market forces, natural features, topography, climate and available resources. But often, it is the power of civic will that plays the largest role in creating successful, livable places.

This plan's vision may be considered the foundation for everything else in the plan. By design, it is intentionally broad-brushed in nature – written to be indefinite enough to engender consensus and survive over the life of the plan, yet specific enough to direct policy.

This chapter communicates Hickory's planning vision for the next 20 years, establishing a snapshot of Hickory in the year 2030. The vision captures the community's aspirations, articulated through this planning process, and makes more current the concepts put forward in the 1999 Hickory by Choice land and transportation plan.

It also introduces the concept of community design, speaking to Hickory's physical environment and how it helps to provide the quality of life that residents of Hickory desire. While the plan's subsequent chapters deal with specific topic areas, this one is somewhat more holistic, focusing on the community's vision and how that vision is embodied in Hickory overall. Policies included at the end of this chapter focus on how the various planning elements – such as land use,



Figure 2.1 - Hickory is set in a rich and diverse environment, with thickly wooded areas, streams and convenient access to transportation establishing an enviable quality of life. (Image source: Studio Cascade, Inc.)

transportation, housing and economic development – interrelate to shape the type of Hickory the community desires.

Conditions and Issues

Hickory's manufacturing past and its emergence as a regional service center, technology hub and data center corridor have provided the community with a high level of infrastructure and a breadth of land uses and economic activity. Although Hickory's roadways, utilities, and community institutions are well established, the community's overall quality of life is vulnerable to conditions that ebb and flow depending on a range of other influences.

Issues identified during previous planning efforts, data inventory and analysis, public input, and interviews are summarized here by category, relating those issues directly to the

topic chapters this plan contains. These issues identify the community's concerns and indicate potential opportunities for Hickory's future direction.

Economics

A large portion of the furniture and textile industry has left the region, and a restructured economy has not yet taken root. A spirit of regional collaboration in economic development has emerged, however, with the communities working together to revive the area's economic heartbeat. The transportation, medical, educational, data processing, and light manufacturing sectors have shown signs of growth, and the 321 corridor south of Hickory is feeling development pressure for light industrial and data storage facilities.

Downtown

Hickory serves as a regional center for employment, medical services and cultural events. An action plan was developed to strengthen the city-center and adjoining neighborhoods, but community unemployment and storefront vacancies grow. Retail uses, including those positioned on Union Square, tend to experience difficulty, while other areas of the city have seen positive growth. The downtown plan provides additional assessment of the issues facing the area, offering suggestions for the built form. Despite its focus and recommendations, however, the plan has not been fully implemented and may need to be reconsidered in light of Hickory's current economic and demographic conditions. Hickory has been designated as a North Carolina Main Street Community, and its strategic planning and business development practices are consistent with that model.

Rail corridor/industrial land

A good deal of industrial and manufacturing land is underutilized. Many railroad corridor sites

qualify as "brownfields," abandoned, vacant or underutilized properties and targeted for redevelopment. The City has recently completed a three-year brownfields assessment, examining the potential reuse of many of those properties and the steps necessary to reintroduce them to the active urban fabric.

Highway corridors

Highways 127 and 70 were designed and developed to serve the automobile, with high-speed access and strip-style development. Some of the older commercial centers, obsolete by today's standards, are experiencing disinvestment with no real indication of redevelopment and reuse in the near future. Other areas along these highway corridors, however, are quite prosperous, notably those near major intersections and more affluent residential areas. The "center-oriented" land use plan in Hickory by Choice has provided little direction for development of these highway corridors.

Core neighborhoods

Several neighborhood centers throughout the city were identified in the 1999 Hickory by Choice land and transportation plan. Redevelopment of those designated centers has not occurred as envisioned, but some commercial centers have developed in these areas in the past decade. It has been difficult to direct development toward the model proposed in Hickory by Choice, with guidelines for connectivity, building placement and the mixing of residential and retail uses. "Tried and true" retail development practices persist. The essential component of the concept is the development of a walkable community, where land use and transportation work together to make walking or bicycling a convenient and attractive transportation choice. A more comprehensive approach to managing land in these core neighborhoods, as



Figure 2.2 Hickory's train depot, located just south of Union Square. (Image source: City of Hickory)

well as a recognition of the influences of the adjacent corridors, will be necessary for the concept to succeed.

Regional center

Hickory is a center for employment, medical services, and cultural events. Its function as a regional center enlivens the community and strengthens its economic base, but it also leads to increased volumes of vehicle travel on certain major thoroughfares, particularly during commuting hours.

Population

Growth in prior decades has resulted in a corresponding increase in housing construction occurring outside of the city center and in established neighborhoods.

Traffic

Travel patterns in the city do not always support commercial activity centers, with a great number of single-occupant vehicles and freight traffic traveling through designated core neighborhoods. Hickory also has several one-way pairs, parallel streets a block apart that were once two-way but converted to one-way travel. While these one-way pairs expedite traffic flow, they also tend to lessen the viability of land alongside them for commercial or residential development. The 1999 Hickory by Choice plan recommended that one-way pairs be studied for conversion back to two-way streets.

Aesthetics

Gateways and corridors leading into and through the community do not communicate a positive image to visitors and city residents.

Recreation and open space

The community's less developed areas provide unofficial recreation and open spaces. Recreation opportunities are not available in all areas. Lake Hickory is a beautiful feature, and the community desires increased recreational access to its shores and water.

Planning Vision

The community identified its vision as one of shaping a Hickory that is more sustainable than today's Hickory. Through the 1999 planning effort, the residents of Hickory defined sustainable development as enhancing what is already good about the community and ensuring that future generations will be provided the same opportunities. A sustainable Hickory will incorporate ecological integrity, economic security, equal opportunity, and social well being into its future.

This new planning process is built upon the original principle of Hickory by Choice that most services be within walking distance of neighborhoods. The process also sought to provide an expanded planning vision that takes into account the complexities and unique physical characteristics, opportunities and constraints. While the community agrees that the original planning principle of providing a range of services within walking distance of residences is a worthwhile ideal, recent practice has indicated it is not as universally achievable as the earlier plan may have proposed.

This vision keeps that ideal in mind, but it also adds other components to refine it and clarify its application. It provides for transportation options, mixing of land uses where appropriate and an openness to a variety of housing options to accommodate the types of complex and diverse neighborhoods envisioned in Hickory's planning.

The community's history and role as a regional center is considered in this more detailed vision. Residents desire a future that embraces a community providing for community housing, prosperous commerce, appropriate land uses, transportation options, accessible and diverse recreation and sustainable coexistence with the environment.

The following pages present the plan vision developed for Hickory by Choice 2030. Though its primary use in plan development was to articulate the desires of the city's residents, it is presented here for at least two reasons:

1. To provide context. Because the vision was developed as the foundation of the plan, topics have been categorized to (as much as possible) relate to chapters in the plan. As one reviews policies in the Housing chapter, for instance, it should be possible to understand their overall intent by reading that portion of the vision.
2. To engender consensus. To be successful, long-range plans must be dynamic, i.e., able to evolve along with the many forces and changes that occur after (and even during) its adoption. Over time, programs are completed, policies are revised, or, given new circumstances, civic priorities change. But the more basic values – expressed in the vision – are very likely to endure. Just as they helped formulate the goals, policies and programs included upon adoption of the plan, it' is hoped the vision will provide guidance when implementing new policies. As much as is possible in a diverse community, the vision offers a consensus view of what the town represents, and what it ought to achieve over time.

Just as with the plan policy matrices, which can be found at the end of each chapter, the following vision should be understood to represent a more balanced, comprehensive view of Hickory's aspirations than more topic-specific queries might indicate. Participants in crafting the plan were typically presented with competing ideals and asked to consider input in context with other, perhaps equally valid concerns.

In order to facilitate participants' long-view consideration of issues, many parts of the vision were expressed in a future-tense format, understanding that all such conditions do not necessarily exist today.

Hickory's Vision

Natural Resources & Sustainability

Hickory is a place that does not contribute to environmental degradation. The city is a community of green open spaces which support mixed-uses that minimize pollution and protect the environment.

Lake Hickory is protected from contaminants and overuse. Rainwater is collected, and water is reused for landscaping and other non-potable needs. Water that is not collected for reuse is naturally filtered prior to entering surface and ground water. Residents are healthy and are not exposed to pollutants.

Housing and Land Use

Hickory is a sustainable community with a vibrant downtown, neighborhood shopping, open spaces and parks, employment, and services. Hickory is a livable place, with preserved view-sheds, housing and employment. Housing is a priority with housing options for all economic levels.

The network of neighborhoods provides a traditional pattern of single family residences that support neighborhood schools and mixed-use commercial districts. Some larger commercial, industrial, and office centers are located along major corridors to provide regional services and employment. The overall pattern of centers and corridors connects all areas of the city and focuses the greatest growth to the downtown.

Transportation

A network of neighborhoods supports a multi-modal transportation system that is centered on mixed-use districts, corridors and the downtown. This compact development pattern allows opportunities for transit to travel from the downtown to neighborhoods and between centers. Transit opportunities also improve access to mixed-use commercial, industrial, and office centers.

Parking is no longer the focus of commercial development and is located behind buildings. Street trees, landscaping and other amenities provide natural breaks between vehicle routes and sidewalks. The complete streets are built for pedestrians, bicycles and vehicles, with on-street parking on many of them.

While private transportation is still popular, the community is less reliant on automobiles in general and promotes a more sustainable economy.



Figure 2.3 - Participants frequently mentioned Lenoir-Rhyne University as a defining component of Hickory's culture, economy and historic context. (Image source: Studio Cascade, Inc.)



Figure 2.4 - Hickory's railroads were fundamental to its economic prosperity, but the future of the railroad landscape is anybody's guess. (Image source: Studio Cascade, Inc.)

Utilities

Hickory has positioned itself and is committed to serve as a regional provider of water and sewer service. The City has partnered with Catawba County and several municipalities to form strong, forward-thinking plans for interconnections or extensions with various operational agreements to provide water service to the majority of Catawba County and portions of Alexander, Burke, Caldwell, and Iredell counties.

Economic Development and Commerce

Hickory is a regional provider of medical services, retail shopping, cultural activities, and employment and has built upon Hickory's traditional development pattern. A seasonal farmers' market is located in the revived and vibrant downtown. Outside of the downtown, grocery stores anchor regional centers and neighborhood redevelopment.

Hickory has a flexible business environment with incentives for business development. Industry is compatible with surrounding uses, made somewhat easier by a shift away from manufacturing. Vacant structures are reused for new business development. High tech jobs are an increasingly popular employment choice.

Recreation and Parks

Hickory is a city full of parks and recreation opportunities, with easy access to residents of all ages. Residents are proud of the healthy community options Hickory has to offer. Pedestrian and bicycle enhancements are provided in many areas.

Public Facilities, Safety and Services

Hickory has an informed process for decision-making. New development pays its share for parks and transportation improvements, and landscaping is planted as part of all new and re-development activities. Project developers and property owners volunteer to enhance the public realm adjoining their property. Hickory is an innovative city with alternative energy and building choices. Public transit connects housing, higher education centers, work, shopping, and medical facilities.

Arts, Culture and Education

The city has an ethic rooted in sustainability which promotes inclusiveness, involvement, and the intertie between all aspects. Quality of life is very important for Hickory residents with interconnections that strengthen sense of community. Residents believe in life-long education, cultural activities, and access to art. They know that diverse art, culture and education opportunities are an intrinsic part of a strong economy.

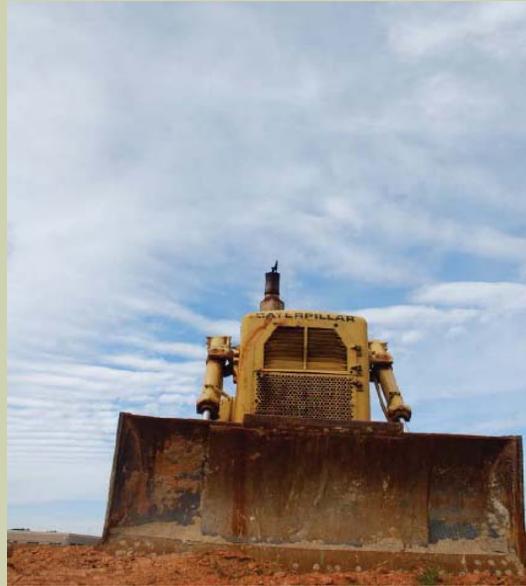


Figure 2.5 - Change is coming. If the past decade is any indication of what can happen, the community's vision must be both directive and adaptable. (Image source: Studio Cascade, Inc.)



Figure 2.6 - While Union Square provides an iconic image of Hickory, this vision and the design directives emerging from it must address the larger community's diversity. (Image source: Studio Cascade, Inc.)

Design directives

A gap exists between where Hickory is today and where the vision suggests it should be by 2030. These design directives articulate high-level principles, seeking to close the gap and inform goal and policy choices included in this plan. They connect the vision to commercial and industrial development, neighborhoods, pedestrian and vehicular circulation, utilities and facilities, economic development, open space, parks, and natural resource conservation.

Ensure that open space and natural resource areas are preserved and protected

Residents want to have the open spaces and

resource areas for the ecological, economic, and recreational services that they provide. From air and water quality to industry, these lands provide irreplaceable benefits and the residents are clear that they want to see their protection and conservation.

Redefine commercial development patterns to be more thoughtful and sustainable

Hickory residents want to see growth primarily focused into identified centers and the corridors that connect them. Hickory's corridors present interesting design and community development challenges and opportunities. The directive is clear in that the relationship between corridors and centers needs to be restructured to favor a viable retail environment in centers, allowing for an increasingly walkable community. Neighborhood identity should be preserved, even as infill occurs to intensify activity in identified centers. The new pattern would include a variety of housing types while supporting a more pedestrian focus.

Provide opportunities for economic growth in a balanced and deliberate manner

Hickory's residents want a sustainable economy that provides jobs and retains the factors that make the community an enjoyable place to live. The community sees the potential to reestablish commercial and economic prosperity through offering a more eclectic, diverse and local economy. Existing buildings and infrastructure can be reused and reinvented. Strategically located centers can serve residents and be connected by well-planned corridors.

Integrate parks and recreation citywide

Residents enjoy recreational pursuits, through city parks, bicycling, water-activities, and sports. They want believe that recreation opportunities must be available to all age-groups.

Support culture and arts

Residents love the myriad of cultural activities and

realize that these events support Hickory as a regional destination. To ensure that current art and culture opportunities are supported, promoted and developed into innovative programs is their goal. Support for future expansion of the local arts, heritage, and culture programs is essential.

Develop a diverse transportation system

Automobile travel is the dominant means of transportation in Hickory. Residents do not intend to give up this mode of travel, but they do want viable and attractive options for walking, bicycling, and public transit.

Promote development that is easily served by facilities and services

The community expects Hickory to provide quality and affordable public safety, utilities, and transportation services. This requires consideration of how public services are provided, developed, and managed to ensure fiscal balance and equity. The community seeks a system of public utilities that is environmentally friendly, safe and financially responsible, designed and constructed from a regional approach and responsive to all ratepayers.

Community Design Goals

The following goals are included to translate the preceding design directives into the language of a long-range plan. These goals, as well as the policies designed to achieve them, are described below and presented in the table at the end of this chapter.

Community design goals tend to be less specific than the goals found in other chapters of this document. They are more holistic, focusing on the integration of the community's various systems and attributes to create and maintain the type of Hickory residents and businesses love. Components of these goals will touch on topics dealt with in more depth in other chapters, and the table at the conclusion of this chapter provides cross references to indicate where additional policy

or planning concept information can be found in this document to support direction indicated here.

Goal 1: Improve quality of life for all Hickory residents

By paying attention to the way Hickory develops, by the way land use, transportation, open spaces and housing interrelate, Hickory can ensure that the quality of life for its residents remains high.

Goal 2: Promote and protect Hickory's heritage.

Hickory's historic properties are an important element of local heritage. Strategically coordinating and supporting community efforts that enhance Hickory's physical and cultural heritage can further a sense of community among residents and visitors alike.

Goal 3: Support Hickory's active civic legacy.

Hickory residents desire to be engaged in decision making that will affect their community. Collaborative and responsive action to citizen concerns can provide a vehicle for the continued civic participation essential to community vitality and social stewardship.

Goal 4: Ensure a sustainable future

Developing, employing, and updating community indicators to track Hickory's environmental, social and fiscal sustainability provides Hickory an important tool to assess the impacts of local growth and development and to consider these impacts in light of the community's desire to provide numerous lifestyle choices while becoming more ecologically, physically, socially, and economically sustainable.

Goal 5: Meet regional and community commercial needs.

Paying attention to and promoting Hickory's varied commercial resources can facilitate business development consistent with the community's vision and the planning principles included in this

plan by providing greater support and encouragement to mixed use projects and the redevelopment of vacant and under-utilized properties within the City.



	Goal		Policy
1	Use community design to improve quality of life for all Hickory residents	A	Focus on downtown revitalization
		B	Make housing affordability a priority
		C	Promote design that creates community character, livability and mobility
2	Promote and protect Hickory's heritage	A	Preserve historic properties that embody important elements of Hickory's heritage
		B	Provide a sense of community through strategically-placed public art and support of local events
		C	Coordinate community enhancements and beautification efforts
3	Support Hickory's active civic legacy	A	Promote civic engagement and involvement in government and community
		B	Take responsive action on community voiced concerns
		C	Initiate collaborative efforts that focus on social stewardship
4	Employ community design strategies to ensure a sustainable future	A	Develop and update community and sustainability indicators to track environmental, social and fiscal sustainability
		B	Consider environmental impacts, social equity, and economic diversity in decision-making
		C	Concentrate growth into compact, well-defined centers that are connected by an efficient, transit-oriented, multi-modal transportation system
		D	Provide the opportunity for residents to live near jobs and urban activities
		E	Support efforts for waste reduction and other measurable steps to decrease Hickory's impact on the earth
5	Provide options for commercial diversity to ensure community and regional needs are met	A	Focus growth to support the success of mixed use centers and corridors
		B	Encourage redevelopment of brownfields and other underutilized land
		C	Facilitate new business development in a manner consistent with plan principles and community vision

Land Use

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on land use considerations.

Led by the plan's vision and directives, the goals, policies and programs in this chapter are provided to guide implementation, including city resource allocation and regulatory decision-making.

This chapter also references the city's future land-use map, which will serve as a graphic policy to guide future decisions related to land use. The map is intended to reflect future uses - categorized more generally than with the zoning map - as well as uses the City sees as conducive to the community's long-range goals. Like other forms of policy, it represents an overall direction supporting larger community objectives, and requires the creation or refinement of site and building-specific regulatory instruments for implementation.

Change is part of all living communities. Toward that end, the plan directs new development towards places best suited for it - either because such places are largely vacant and are easily reached by municipal services, or because they are urbanized and developed in a manner that can easily accommodate new development.

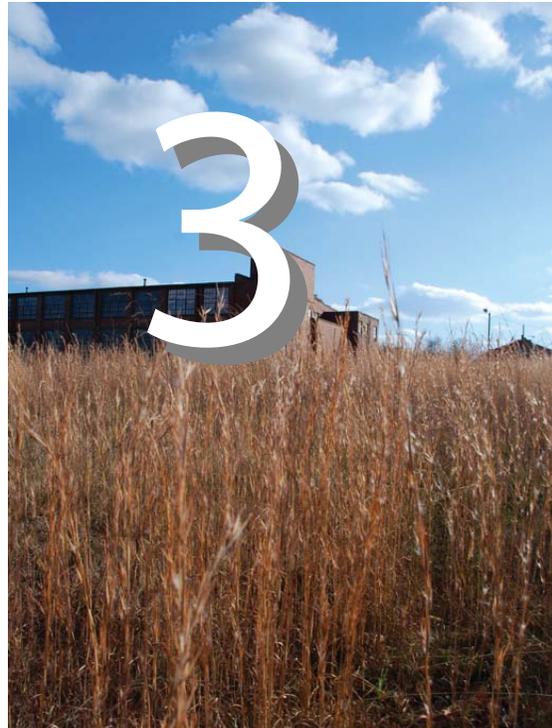


Figure 3.1 - The land use element attempts to balance Hickory's historic legacy with opportunities for sensitive and sustainable use of its industrial, commercial and residential landscapes. (Image source: Studio Cascade, Inc.)

Issues & Conditions

Hickory has historically been a single-family residential community. Population growth has kept up demand for single-family homes. A rising demand for high-quality affordable housing in recent years has increased demand for higher density and lower cost housing. There is a demand for a range of housing types and sizes to accommodate a broad range of households.

Hickory's status as a commercial center that serves city residents and a four-county region was originally established more than one hundred years ago. As the trends in the size and location requirements of commercial establishments have changed, the focus of commercial development has shifted from the city center to major roadways leading into Hickory.

Manufacturing and other industries have been



Figure 3.2 - The plan envisions increased density to emulate the traditional town neighborhood design and allow residents to walk to retail and commercial services. Viewmont Square's recent attempt to capture this concept is pictured here. (Image source: Studio Cascade, Inc.)

the backbone of the Hickory economy throughout the city's history. These industries are typically dependent on a good transportation network. This has resulted in the largest concentrations of industrial facilities being located along major thoroughfares such as U.S. 321, Highland Avenue, Tate Boulevard, Sweetwater Road, and along the railroad. Because of industry's importance to the economic viability of the region, industrial development is a key component of both the land use and transportation planning effort.

Public input sessions addressed a large number of issues including the proposed location of neighborhood mixed use and regional commercial districts, the retention and enhancement of neighborhood mixed use districts, and providing opportunities for regional establishments. Other themes that were discussed include the need for design standards that incorporate pedestrian access and improve the aesthetics of commercial areas.

Important themes that evolved during the planning
Hickory by Choice 2030 Comprehensive Plan

process included continued reliance on efficient access to a regional/interstate road system, the importance of multi-modal connections, compatible land use relationships, and the need for appropriate aesthetic standards.

Most of Hickory's commercial establishments are located along major thoroughfares, primarily NC 127, Springs Road, U.S. 321, and U.S. 70. These locations require Hickory residents to travel from all quadrants of the city to reach a commercial establishment. The location of regional commercial uses along the U.S. 70/I-40 corridor does provide a good location for these establishments due to the high volumes of traffic generated by this type of commercial development and because of access to the regional roadway system. Retail districts serving local customers, however, are not now equitably distributed throughout the city to minimize the length and number of automobile trips.

Most industrial facilities are located along major thoroughfares in Hickory. However these major thoroughfares are also the gateways into the city and are an important factor in developing a community image in the minds of residents and visitors.

Commercial development in Hickory is not well connected to surrounding residential neighborhoods, especially for pedestrians. While pedestrian access needs improvement, there is an abundance of automobile access to retail establishments. Commercial areas along road corridors have at least one curb cut for each business, usually more. A more equitable distribution between pedestrian access and automobile access to commercial areas should be provided, and that access needs to be safe and efficient.

Industrial growth in Hickory has historically been an important factor in the continued high quality of life and low tax rates city residents have experienced over the years. The last decade, however, has been difficult for industry, resulting in high industrial vacancy rates and efforts to restructure the region's economy. While industry may recover, it is likely to be from its situation

before this past decade's decline.

In many cases, modern industrial needs cannot be met by the utilization of existing, older facilities. The City has begun to help with the reuse of these structures, conducting a brownfields assessment on many properties and instituting a variety of grant programs to incentivize the rehabilitation and occupation of these buildings. Reuse of older structures may be appropriate for start-up or smaller industrial businesses.

Plan Concept

There are multiple concepts shaping the proposed land use pattern, as derived from the community's vision and the process to develop this plan. Those concepts are introduced here, followed by the six over-arching goals guiding land use policy.

Redefine the commercial corridor development pattern in Hickory.

In the past few decades, commercial development in Hickory has followed a similar pattern as most cities in this country. Long, continuous corridors of commercial development along major thoroughfares have become the normal pattern in the city. This has created real and perceived problems such as visually unattractive gateways into Hickory, wide roadways, and safety concerns for both pedestrians and motorists. City and neighborhood identities are lost when the roadways in Hickory most heavily traveled by visitors and residents are a canyon of parking lots and commercial structures.

Recognize that commercial establishments in Hickory serve a variety of customers ranging from residents in surrounding neighborhoods to regional customers.

Hickory has provided retail customers in the city and region a large selection of shopping opportunities over the years and will continue to do so in the future. The city needs to create a sustainable economic mix of retail establishments



Figure 3.3 - Committing to pedestrian friendliness will mean rethinking street design standards, as well as rearranging the land uses in commercial districts to make walking a realistic transportation alternative. (Image source: Studio Cascade, Inc.)

to serve the needs of city and regional customers. As an example, large “big-box” or superstore retail development is not compatible with quiet, smaller-scale single-family residential neighborhoods because of noise, scale of development, and large volumes of automobile and truck traffic. However, commercial development that is similar in context and scale with the surrounding neighborhood is a compatible land use.

Guiding future development that serves the needs of neighborhood and regional customers requires different scales of commercial development. The sense of neighborhood is very strong in Hickory and residents and city officials want to sustain that sense of identity by providing neighborhood-scaled commercial districts at appropriate locations throughout the city. Economic reality dictates that cities need larger commercial establishments to provide the services and products that consumers require. Locations where larger-scale commercial

districts can serve multiple neighborhoods are needed. Regional shopping will also be required to continue Hickory's tradition of serving consumers in the surrounding communities.

Promote the development of pedestrian friendly neighborhood and community commercial districts.

Existing commercial development patterns and the lack of a coherent pedestrian circulation system in Hickory have minimized the opportunities for residents of surrounding neighborhoods to access retail shops by walking, biking, or driving an automobile short distances. Constant use of the automobile to access several establishments along roads, such as NC 127 or Springs Road, creates safety problems due to the large number of curb cuts along the roads. Increases in air pollution from vehicle usage.

One role of neighborhood and community commercial districts is to provide shopping and other commercial activities in close proximity to a large population of city residents. Another role is to give residents the opportunity to establish an informal gathering space to socialize. Development of pedestrian and road connections between surrounding neighborhoods and the commercial districts will provide additional circulation options without a need to access high volume roadways. Pedestrian amenities could lead consumers to spend more time in the district. This could lead to increased retail sales. Because these districts tend to be located on higher volume roadways, traffic calming measures in locations adjacent to these roadways and clearly identifiable pedestrian and automobile circulation systems would be required to provide an environment that is safe for pedestrians.

Establish appropriate design standards for commercial districts that embody a "sense of place" and respect the surrounding residential neighborhoods.

With the exception of Downtown, most commercial areas in the city do not reveal any true "sense of place." Corridor commercial areas along

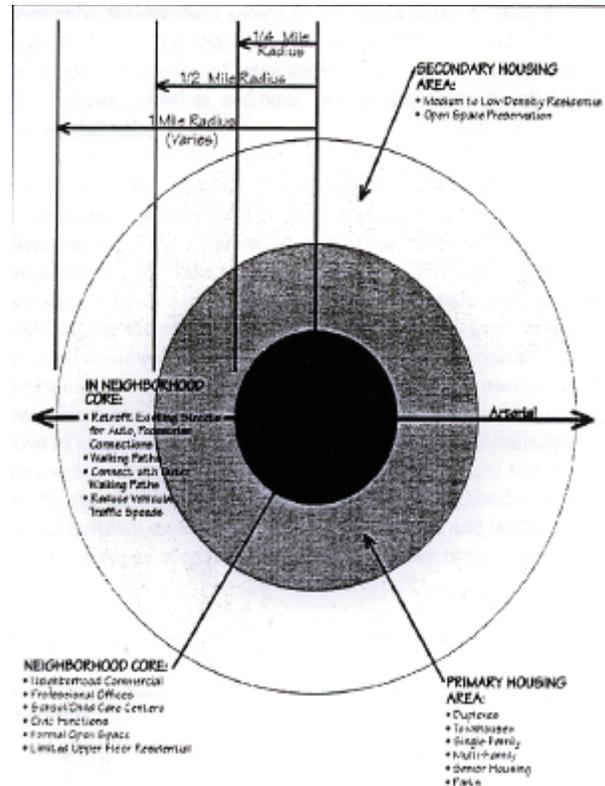
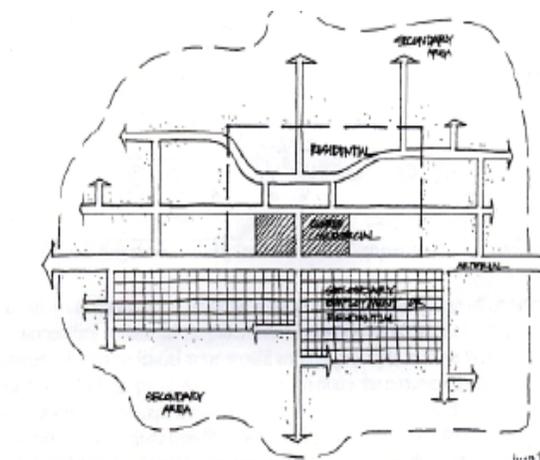


Figure 3.4 (above) - Hickory by Choice 1999 presented a neighborhood concept that still enjoys popular support today. Only somewhat modified to reflect the demands and influences of prevalent corridor development the plan update includes replacement of the terms "Neighborhood Core", "Primary Housing Area" and "Secondary Housing Area" with "Neighborhood Mixed Use", "High Density Residential" and "Medium Density Residential." (Image source: Hickory by Choice, 1999)

Figure 3.5 (below) - That neighborhood concept was illustrated more fully in Hickory by Choice, showing how various uses can be arranged to accomplish the centrality encouraged by the model. (Image source: Hickory by Choice 1999.)



NC 127, Springs Road, and U.S. 70 are not easily distinguishable from commercial corridors in other parts of Hickory or other cities. The road frontage is generally a “sea of asphalt” for regional commercial establishments, or a smaller parking lot for most corridor commercial areas. Landscaping is minimal in older commercial areas, which creates a development pattern that is less visually appealing and physically uncomfortable during the hot summer months. Improvements to commercial districts are another element of improving the community’s image to city residents and visitors. Most commercial areas are along gateways into Hickory and should contribute to the positive image of the city.

Promote economic sustainability by providing a variety of facility development opportunities for both large and small industrial businesses.

The establishment of business parks should provide a variety of parcel sizes to accommodate large industrial facilities as well as smaller and start-up businesses. This variety provides the community the opportunity to diversify industrial business sizes that can then better withstand economic downturns. Another factor in identifying a variety of parcel sizes is the topography in the city. There are areas that are relatively unconstrained for large-scale industrial development. However there are also many locations where topography, watershed, aircraft safety, and flood prone areas limit the size and density of development.

Ensure efficient access to major transportation systems by locating industrial land uses in close proximity to highways and major thoroughfares.

Another critical factor in the success and sustainability of the industrial sector in Hickory is the ability to get company products to the market. Safe, efficient access to interstate highways and major thoroughfares in the city will aid in the long-term viability of these businesses. The proximity of limited access roads also helps reduce fuel

consumption and air pollution by minimizing the number of times that trucks stop and start. This proximity to high volume roads would reduce the use of residential streets.



Figure 3.6 - Industrial vitality will demand access to transportation systems. One challenge will be managing the development to be sensitive to the community’s overall image. (Image source: City of Hickory)

Minimize land use conflicts between industrial areas and residential neighborhoods.

Residential neighborhoods and industrial land uses are usually not compatible and generally should not be located adjacent to each other; however, there are instances where industrial land and single-family neighborhoods can and will be in close proximity. Adequate distance buffering and landscape techniques provide an example of the tools employed to soften potential incompatibilities.

Prepare and enforce appropriate aesthetic controls.

Because roads such as Tate Boulevard SE, Highway 70, and U.S. 321 are gateways into Hickory, it is appropriate to encourage a minimum aesthetic standard for these businesses. However, these aesthetic controls would not necessarily apply to industrial facilities that are not along minor or major thoroughfares.

Land Use Goals

The following goals, and the policies designed to achieve them, are drawn from the 1999 Hickory by Choice and amended to reflect the community’s current vision and planning directives. They are consistent with the planning concept articulated in previous pages and explained below.

Goal 1: Support land uses that are complementary to surrounding uses

While Hickory is a diverse place, residents appreciate harmony. As the City manages development, it should keep in mind that balance and compatibility are important characteristics. This guides the designation of land uses on the comprehensive plan map, informs zoning district standards, and shapes land use and subdivision approvals. New uses must “fit in”, respecting the context into which they are set.

Goal 2: Promote pedestrian-oriented neighborhoods, centers and corridors

A fundamental underpinning of 1999’s Hickory by Choice was the commitment for pedestrian access from neighborhoods to daily services. This plan update carries that directive forward, though its policies modify it slightly. While pedestrian access is important, the community does not have the expectation that every neighborhood will be within easy walking distance of services.

Goal 3: Provide a balance between development and open space

Open spaces include natural areas, parks, plazas - those unbuilt areas that provide for ecological balance, community recreation or social gathering. They are a critical component of our community landscape and should be remembered when time comes to consider which areas to develop. Whether implemented through cluster or conservation subdivision design, a community parks plan, development design guidelines, land conservation initiatives, or environmental regulations, open spaces should balance with development.

Table 3.1 - Land Use Districts and Characteristics

Land Use	Characteristics
High Density Residential	Multi-family residential
	Single-family residential
	Smaller building lots
	Pedestrian friendly roads
	Sidewalks
	Open space and parks
	Schools
	Office uses along thoroughfares and as a transition between commercial and residential uses
Medium Density Residential	Medium density housing
	Single-family residential
	Pedestrian friendly roads
	Sidewalks
	Open space and parks
	Schools
Low Density Residential	Single-family residential
	Larger average lot size
	Transition to rural areas
	Open space and parks
	Conservation subdivisions
	Open space preservation
Neighborhood Mixed Use	Retail
	Office
	Schools
	Limited upper floor residential
	Formal public spaces
	Pedestrian friendly
	Transit stops
	Architectural compatibility with residential
Community Center Commercial	Serves a larger consumer market than neighborhood mixed use
	Allows big-box retail development
	Pedestrian friendly
	Limited upper floor residential
	Transit stops

Regional Commercial	Regional retail with big-box development
	Pedestrian friendly
	Limited upper floor residential
	Transit stops
Commercial Corridor	Primary application along NC 127 and Springs Road.
	Pedestrian Focused development that accommodates vehicles.
Central Business District	Institutional (finance, government, and medical)
	Sidewalks
	Formal public spaces
General Business	Provides diverse commercial and office uses
	Focused on development along major transportation routes serving both local and pass-through traffic.
Revitalization Area	Primary application along one way pairs, Highland Avenue, Hwy 70 SW, and Old Lenoir Road
	Commercial and freight corridors
	Mix of light industry, commercial, and residential uses
	Enhanced character of historic areas
Industrial	Opportunities for start-up or small businesses
	Minimized environmental impacts
	Reuse of existing structures
	Aesthetic improvements
	Efficient access to transportation systems

Goal 4: Locate industrial uses in a manner compatible with their surroundings

Hickory has a legacy of thriving industry, and many of its industrial buildings are located near residential neighborhoods. That type of historic development pattern may no longer be appropriate, as Hickory’s residents value land use compatibility. Still, the community needs new, viable industry. This goal recognizes that new industrial development should occur; however, it underscores the need for appropriate buffering

and facility design to ensure that industrial uses are compatible with adjacent land uses and constructed in a manner consistent with community goals and objectives.

Goal 5: Support a network of mixed-use centers and corridors

Similar to Goal 2, this goal promotes the effective integration of diverse land uses, allowing Hickory’s residents to live near where they shop, work or use public transportation. While this may not describe the community’s current land use pattern or transportation habits, managing development along corridors and in centers with this goal in mind will help the community adapt as future development incites change.

Goal 6: Include comprehensive citizen participation in planning and plan implementation

Hickory’s residents desire involvement in the shaping, adoption and implementation of public policy. This goal underscores that desire, generating policies to keep citizens informed and active in local land use planning.

Future Land Use

Land use recommendations are based on the principle of mixed-use neighborhoods, which include commercial, civic, and recreation uses in conjunction with a variety of housing types and transportation mode options. This network of neighborhoods could begin to balance downtown development with suburban investment by organizing proposed growth around a series of transportation options and keeping development compact. This strategy has several advantages, including:

- *Less emissions of air pollutants and degradation of water quality*
- *Less land consumed for development*
- *Less traffic generated*



Figure 3.7 - While mixed-use development has been the ideal, even recent neighborhood commercial projects have depended on large parking lots to accommodate customers. (Image source: City of Hickory)

- *More natural resources and open space conserved*

The land use categories are summarized in Table 3.1 on pages 3.6 and 3.7. The proposed future land use distribution for the City of Hickory can be found on the Future Land Use Map, which is available on the city website and in the Planning and Development Department.

It is evident from the public input process that there is a desire to change the development pattern in Hickory. The community no longer wants commercial areas stretched out over long distances on major thoroughfares. Rather, there is a desire for design that fosters diversity, pedestrian scale, and public identity. Changing the commercial development patterns in Hickory necessitates the creation of a variety of commercial districts. The Central Business District and proposed Neighborhood Mixed Use Centers and Community Commercial districts would meet the desire for a more pedestrian scale development, Regional Commercial and Commercial Corridor districts would serve regional customers.

High Density Residential

High density residential development in Hickory is located near mixed-use areas or higher-intensity commercial districts. The area covered by this land use extends approximately one half mile from the central point of each mixed use center, allowing

for convenient walking or bicycling from home to shop. This will create higher density living in close proximity to neighborhood-scale shopping and office employment centers. The combination of smaller single-family lots, shorter building setbacks, shorter blocks, and multi-family development would create a gross average density for housing at approximately 12 to 35 units per acre. These areas may also contain office uses along thoroughfares and adjacent to commercial areas to act as a transition between commercial and residential land uses.

Medium Density Residential

Medium density residential areas make up a large portion of the city north of I-40. These residential areas are associated with each neighborhood mixed use areas as well as adjacent high density residential districts and/or higher intensity commercial districts throughout the city. Medium density



Figure 3.8 - Medium and high density residential housing can be designed and developed to blend in to a historic context. (Image source: Studio Cascade, Inc.)

residential areas will expand the existing single-family housing character in the city, and they will provide a medium density housing option where the gross density would be approximately six to twelve units per acre. Although the housing density would be less than the high density residential areas, pedestrian and vehicular circulation strategies employed here will continue the pattern of connectivity from the more intensely developed areas.

Most of the land in this land use category is in the northern portion of the city where natural constraints are fewer. Conservation subdivision principles should be used to conserve flood plains, wetlands, and minimize storm water runoff in watershed protection areas. The use of conservation design principles should look beyond individual subdivisions in the medium density residential area and identify opportunities for connecting to open space in other areas of Hickory.

Low Density Residential

This land use category is intended to provide an area of transition between higher density housing in Hickory and the surrounding rural areas by offering development at four to six units per acre. This development pattern also provides a measure of diversity of housing options for city residents. Although the gross density in these areas is proposed to be less than medium density residential, conservation subdivision design principles can provide opportunities for a combination of small and large lot development that helps preserve open spaces and environmentally sensitive lands.

Neighborhood Mixed Use

The Neighborhood Mixed Use form provides the basis of most of the future development patterns in Hickory, but it occupies a small percentage of the community's overall land. Because these districts are intended to serve local residents they are located in a spatial pattern that provides most city residents the opportunity to travel a mile or

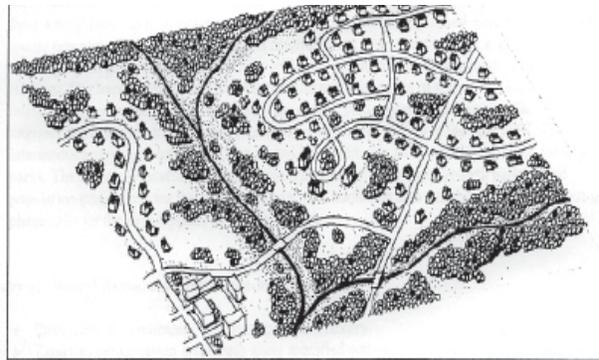


Figure 15 An Example of a Conservation Subdivision Design

Figure 3.9 - Hickory by Choice suggested conservation subdivision design, such as that pictured here, to help preserve natural features while still accommodating residential development. (Image source: Hickory by Choice 1999.)

less to work, shopping, small parks, or open space. These districts are proposed to be approximately one quarter of a mile in radius. This distance will be a comfortable distance for persons in the surrounding neighborhood to walk to businesses and services.

A typical neighborhood mixed use district would have a mix of retail and office space. The key elements for these districts include neighborhood scale commercial establishments such as grocery stores, pharmacies, banks, small-scale office buildings, civic or institutional functions, residences, schools, and small parks.

Many of the existing neighborhood commercial areas currently have elements that are common to this proposed land use, including grocery stores, pharmacies, banks, and dry cleaners at locations such as the intersection of 16th St NE (Sandy Ridge Road) and 29th Avenue Drive NE. The current development patterns at these locations will not change dramatically in the short-term. However as development and redevelopment proposals arise, infill development and reuse of existing properties should utilize the existing character of the surrounding neighborhood as a development model.

Existing neighborhood and community commercial development should be identified and "grandfathered." In locations where new neighborhood mixed use districts are proposed and there is minimal existing development in close proximity, the design elements of the commercial

structures can influence the design of surrounding development.

To aid in the sustainability of these commercial activities, consumers beyond these districts will have easy access since these areas are located at intersections of major thoroughfares.

Community Commercial

Community commercial districts provide services and retail establishments that serve a larger market than a neighborhood mixed use district. The intent of this district is to provide opportunities for larger scale retail developments that serve the northeast, northwest, and southern portions of the city and reduce the need for cross town travel to the regional shopping area along the U.S. 70 corridor.

Regional Commercial

Regional commercial is currently focused on the I-40/U.S. 70 corridor and this plan recommends the continuation of this development pattern. The I-40/U.S. 70 corridor provides the most convenient access for city residents as well as persons living in the surrounding communities due to the proximity of I-40, U.S. 321, and U.S. 70. Another advantage to this location for “big-box” or superstores, and regional shopping malls is that there are minimal opportunities for land use conflicts with single family residential.

Commercial Corridor

The Commercial Corridor is primarily applicable to those areas located along NC 127 and Springs Road. While these areas are intended to be pedestrian focused the commercial corridor should remain accomadating of vehicular traffic. The Commercial Corridor is designed to protect residential areas, to provide connectivity and community open space and to alleviate conflicts in land use.

Central Business District

The traditional downtown serves many functions of a neighborhood mixed use district as well as a regional service provider of banking and medical services. Residential neighborhoods surrounding the City Center not only provide the market for smaller neighborhood or convenience commercial services but these residential districts also provide a market for a variety of the Central Business District's services which afford residents a visitors a vibrant, pedestrian rich, atmosphere in the City's downtown.

This district applies to the historic core, drawing attention to the need to ensure any new development in the area occurs in harmony with its historic surroundings and is designed to contribute to the area's pedestrian environment. This designation anticipates that the work conducted by the City to update zoning in the



Figure 3.10 - The central business district land use designation can help new development and redevelopment recognize and benefit from characteristics unique to the district's area. (Image source: Studio Cascade, Inc.)

CBD and the establishment of a boundary for this downtown district will lead to the implementation of specific development policies that apply to this area.

General Business

The General business designation provides for a diverse set of commercial and office uses. The district accommodates shopping, services, and professional offices. It is intended to capture the diversity of uses along Tate Boulevard, while also

providing a predictable set of standards. Though the designation does include some residential uses, its primary focus is for commercial development accessed primarily by the automobile. Screening and landscaping standards are generally more relaxed than they are in other places given the proximity to similar use types.

The General Business designation is generally located along the north and south sides of Tate Boulevard between Lenoir-Rhyne Boulevard and McDonald Parkway, south of Tate Boulevard east of McDonald Parkway, along Fairgrove Church Road and on both sides of the western end of Springs Road.

Revitalization Area

The City has created this district to help address current conditions in some of Hickory's historic and less economically active areas. The Revitalization designation includes those areas that have a diverse mix of light industrial, commercial and residential uses and are typically located along rail corridors or busy, disinvested arterials, such as US 70 west of South Center Street, Old Lenoir Road, Springs Road near Shuford Mills, Highland Avenue, and North US 321.

The intent of this designation is to promote opportunities for redevelopment and expansion by applying flexible standards and targeted incentive programs. Its focus on the revitalization of commercial and freight corridors, will help those areas most in need of economic development assistance.

Industrial

Over the years, industrial development has concentrated in various areas in the city. These areas include the rail corridors, Highland Avenue NE, Old Lenoir Road, Tate Boulevard SE, U.S. 321, and 1st and 2nd Avenue SW. Although most industry has been concentrated in these areas there have been numerous individual industrial facilities scattered throughout the city.

The existing concentrations of industrial

businesses provide a basis for industrial districts. The industrial districts along U.S. 321 and Highland Avenue east of Springs Road will focus on redevelopment opportunities. Land in the vicinity of the airport is appropriate for industrial development, which is designed to be compatible with safety requirements for aircraft operations and reflects the long-term needs of airport operations. Industrial development in the vicinity of the airport will also be required to adhere to watershed protection regulations to protect the water quality of the Catawba River, which is the primary source of drinking water for the city. The combination of these safety and environmental constraints will result in the construction of lower density, environmentally oriented businesses. Although these two areas offer some potential for industrial growth, the greatest potential for larger scale industrial development exists along Tate Boulevard, Sweetwater Road (21st Street SE), and the southern portion of Fairgrove Church Road.



Figure 3.11 - Redevelopment of functionally obsolete industrial buildings is one of the biggest challenges facing the city's rail corridor. (Image source: City of Hickory)

This area has significant expansion opportunities for larger-scale industrial development. The proximity to I-40, U.S. 70 and U.S. 321 provide excellent access to regional and interstate transportation systems.

Excellent access to regional transportation systems is also a factor in the location of the proposed business/industrial park east of the U.S. 321/River Road interchange. This development area will incorporate many of the key principles of

conservation subdivision design to minimize the impact to sensitive natural resources along the Henry River, but maximize the development potential of that area.

Parks

Parks in the city include neighborhood parks, district parks, and passive open space. Many of the existing parks are located in areas where population density is higher, such as Kenworth, Ridgeview, and West Hickory neighborhoods. The current Park and Recreation Master Plan identifies



Figure 3.12 - Open spaces integrated into the urban landscape can serve multiple purposes. Here, a park in northeast Hickory provides a recreational amenity and an opportunity for storm water management. (Image source: City of Hickory)

numerous improvements to the city's existing park and recreation facilities. To accommodate projected growth patterns the city has proposed to develop new parks in the southern and northeastern portions of the city. The proposed park in the Mountain View area will be a 12-15 acre neighborhood park to serve new subdivisions south of Brookford. The new park in the northeast will be a 20-30 acre district park located just east of Sulphur Springs Road.

The future Cloninger Mill Park will serve increases in population in the northeast and provide additional access to Lake Hickory. Recreation in the southern portion of the city should incorporate the passive recreational opportunities along the Henry Fork, Jacob Fork, and South Fork Catawba

River watersheds. Bird watching, fishing, hiking, and biking are potential outdoor recreation pursuits for the proposed open space in these watersheds.

Public/Institutional

Public/institutional facilities in Hickory include public works, hospitals, and schools in the allocation of Public land uses. In addition to being the regional center for retail, Hickory also provides the region a rich cultural environment with public facilities such as the SALT Block, and schools such as Lenoir Rhyne University and Catawba Valley Community College. Cultural facilities such as the SALT Block and Lenoir Rhyne University are important to the region and are also located in close proximity to a large concentration of the city's population.

Hickory's two hospitals offer good vehicular access with Frye Regional Medical Center's proximity to NC 127, and Catawba Valley Medical Center's proximity to I-40. These locations also offer opportunities for employees to walk to work from surrounding neighborhoods. The hospitals are also located in proximity to medical offices and commercial establishments that provide services for the hospitals and nearby residential neighborhoods. Catawba Valley Medical Center is located in an area that provides opportunities for expansion while Frye Regional Medical Center is surrounded by older residential and office development limiting expansion potential.

Implementing Zones

Table 3.3 indicates which zoning districts are intended to implement the various land use designations included in this plan.

Land Use Map

The Future Land Use Map presents a graphic expression of this plan's land-use policy. Provided to guide decisions on land use, the map reflects both current uses - categorized more generally

Table 3.2 - Land Use Districts and implementing zones

Land Use	Zones
High Density Residential	R-4
	OI
Medium Density Residential	R-2
	R-3
Low Density Residential	R-1
Neighborhood Mixed Use	NC
Community Commercial	CC-1
Regional Commercial	C-3
Commercial Corridor	CC-2
Central Business District	C-1
General Business	OI
	C-2
Revitalization Area	C-2
	C-3
	OI
	R-4
	IND
Industrial	IND
Public/Institutional	OI

than with the City’s zoning map - as well as uses the City sees as conducive to the community’s long-range goals. As opportunity and interest emerge for changes in land use and regulation, the map should be referenced to ensure those changes meet overall planning goals. In contrast to the City’s zoning regulations, the map is presented with soft-edged use boundaries, which are intended to identify current designations but at the same time reflect the fact that as policy, specific boundaries are less critical than the map’s overall intent, including type quantities and their relative arrangement. The adopted map can be viewed in the Planning Department offices.

	Goal		Policy
1	Support land uses that are complementary to surrounding uses	A	Provide transitions between residential neighborhoods and mixed-use centers with open space, alleys and landscaping
		B	Provide a mix of development intensity with denser mixed-use centers and high density residential areas surrounded by medium density and low density residential areas
		C	Support development that creates a strong functional relationship between land uses
		D	Employ strategic street tree planting to enhance and complement adjoining uses and provide visual continuity along corridors and within centers
		E	Enliven street frontages by minimizing or eliminating blank walls on the street edge
		F	Minimize the impacts of new development through public amenities and landscaping
		G	Develop design guidelines that create architectural and site amenities in mixed use centers which are identifiable with the surrounding residential neighborhood through the use of similar building materials, architectural elements, and landscaping
2	Promote pedestrian-oriented neighborhoods, centers and corridors	A	Include a variety of housing types such as condominiums, apartments, and small lot single family residential in high density residential neighborhoods
		B	Establish standards for mixed use centers that create a "sense of place"
		C	Provide opportunities for residences above ground-floor storefronts in centers and corridors
		D	Ensure landscaping in commercial areas is visually appealing and provides physical comfort throughout the year for pedestrians
		E	Locate and orient land uses to help make pedestrian and bicycle travel an attractive, practical, and safe transportation alternative
		F	Ensure pedestrian scale routes are preserved and developed between neighborhood housing and commercial centers
3	Provide a balance between development and open space	A	Provide for open space creation through cluster development that preserves existing density requirements
		B	Develop conservation subdivision design which considers preservation of wetlands, steep hills, floodplains, agricultural fields, forest and open space
		C	Provide public open spaces in new development and redeveloped areas
		D	Prioritize redevelopment of existing commercial and industrial areas

4	Locate industrial uses in a manner compatible with their surroundings	A	Focus industrial uses within industrial areas
		B	Minimize land use conflicts between industrial areas and residential neighborhoods with landscaping, intensity restrictions near residential, and use restrictions based on compatibility to surrounding land uses
		C	Impose more stringent design standards for industrial sites on major thoroughfares and abutting residential neighborhoods, with less strict standards in other areas
		D	Develop landscape standards that improve the appearance of industrial areas from public corridors
5	Support a network of mixed-use centers and corridors	A	Provide mixed use centers and corridors to meet neighborhood and regional demand for a variety of uses including retail, offices, service, civic, recreational, and high density residential
		B	Locate high density residential neighborhoods within one-quarter mile of mixed use centers
		C	Combine transit stops and on-street parking in mixed use centers with improved pedestrian and vehicular connectivity to surrounding neighborhoods
		D	Provide formal open spaces and parks in mixed use centers to serve residential demand
		E	Integrate parking lots into the design of mixed-use districts by locating most parking on-street, behind buildings, or in the interior of lots
		F	Employ a combination of little to no setbacks, windows, landscaping, and architectural details to enhance the appeal of mixed use centers, engaging the street edge
		G	Ensure mixed use centers provide a compact scale that meets the commercial requirements of the neighborhood or community it serves
6	Include comprehensive citizen participation in planning and plan implementation	A	Ensure that public involvement serves the community over the long-term with solutions that advance the community's overall health and welfare
		B	Encourage diverse participation for neighborhood capacity building
		C	Provide opportunities for community-wide involvement, including neighborhood events

Housing

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on the City's role in facilitating housing for Hickory's citizens.

Led by the plan's vision and directives, the goals and programs in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

Conditions

Housing in Hickory has been primarily single-family residential throughout most of the city's history. Single-family development took early root in Kenworth, Hillcrest, Ridgeview, Claremont, and Oakwood neighborhoods. These neighborhoods established a strong sense of pride in home ownership early in the city's history, but they also offered diversity in housing type. Apartment buildings and small single-family homes coexisted with the more stately homes of Hickory's professional class and company officials.

Diversity and Affordability

Hickory's neighborhoods are the backbone of the community's civic body. Among their many functions, they provide housing to its



Figure 4.1 - Hickory's neighborhoods offer a wide variety of housing choices. Retaining neighborhood character and accommodating an increasingly diverse population are important objectives in the comprehensive plan. (Image source: Studio Cascade, Inc.)

diverse population, represent significant individual and family investment in the community's well-being, and define the context within which children are raised, people worship and in which neighbors form relationships. But these neighborhoods are not homogenous. All differ from one area to the next, and some may even differ from one house to the next. Hickory is a diverse place, socially, economically and culturally. And so are its neighborhoods.

While the community's neighborhoods are essential to Hickory's way of life, they are also undergoing change.

Table 4.1 shows race in Hickory in 1990, 2000, and 2008. During that time, the community's racial composition changed, with the Black or African-American population growing at a slower rate than the White or "all other" population segments. Specifically, Black or African-American residents accounted for 17.1% of Hickory's

Table 4.1 - Race in Hickory

	Number	Percent
2008		
White	30,553	73.3%
Black or African American	5,253	12.6%
All others	5,880	14.1%
2000		
White	28,747	77.2%
Black or African American	5,243	14.1%
All others	3,232	8.7%
1990		
White	23,032	81.38%
Black or African American	4,827	17.1%
All others	442	1.5%
Change 1990-2008		
White	7,521	32.7%
Black or African American	426	8.8%
All others	5,438	1230.3%

Source: US Census, 1990, ACS 2000 and 2006-08

population in 1990 (4,827 people) but only 12.6% in 2008 (5,253 persons). The number of White residents grew from 23,032 in 1990 to 30,553 in 2008, but their overall percentage shrunk from more than 80% of the population to less than 74%. The “all other races” Census category increased from 1.5% of the city’s population in 1990 to 14.1% in 2008.

Table 4.2 illustrates ethnicity in Hickory in 1990, 2000, and 2008. During that 18-year span, Hickory became more ethnically diverse. The Hispanic or Latino population grew faster than all other populations, growing from 221 people in 1990 to 6,095 people in 2008. Though growth in the Hispanic population outpaced growth among other ethnic groups, Hickory’s Hispanic population only accounted for approximately 14.6% of the City’s population in 2008.

These figures indicate that social diversity in Hickory is on the rise, with increases in “all other” race categories and Hispanic ethnicity revising the community’s make up over the last 20 years.

Affording the purchase of a single family home is also an issue in Hickory. Information from the

Table 4.2 - Ethnicity in Hickory

	Hickory
2008	
Total population	41,686
Hispanic or Latino	6,095
Percent Hispanic or Latino	14.6%
2000	
Total population	37,222
Hispanic or Latino	2,863
Percent Hispanic or Latino	7.7%
1990	
Total population	28,301
Hispanic or Latino	221
Percent Hispanic or Latino	0.8%
Change 1990-2008	
Total population	13,385
Hispanic or Latino	6,056.6%

Source: US Census, 1990, ACS 2000 and 2006-08

2006 - 2008 American Community Survey (ACS) indicates that Hickory’s median home price was approximately \$152,200 with the median household income approximately \$40,100. Using the standard housing affordability index of 30% maximum household income spent for housing, no more than \$1,000 was available for the median-income household to spend per month on mortgage, insurance and utilities. Carried forward, a home selling for \$152,200 financed with a 90%, 30-year mortgage at a 6% interest rate would likely require a monthly payment of approximately \$821. Adding monthly utilities and insurance allowances brings the housing expense for the median value home to just over \$1,200.

Housing Stock and Ownership

The American Community Survey (ACS) from 2005-2007 estimates that there are approximately 18,213 housing units in Hickory, with a vacancy rate of 11 percent. A quarter of the housing units were built after 1990.

Average household size is 2.42, which is below the national average of 2.6. The breakdown of housing



Figure 4.2 - No single housing type is suitable for all, and diverse - but compatible - housing is something the community will need to support in gaining its long-term objectives. (Image source: Studio Cascade, Inc.)

types is: 58 percent single-unit, 39 percent multi-unit, and four percent mobile homes.

The 16,174 occupied housing units had 55 percent owner occupancy. Monthly housing costs varied greatly with those people who had a mortgage paying an average of \$1,155. Those without a mortgage had a cost of \$400, while renter housing costs averaged \$584. The breakdown of people spending 30 percent or more of their household income on housing costs or rent are: 18.3 percent owners with a mortgage (U.S. was 24.8 percent), 3.6 percent owners without a mortgage (U.S. was 4.9%), and 42 percent renters (U.S. was 45.6 percent).

The median value of homes within the City of Hickory was estimated at \$143,700, which was considerably higher than Catawba County's median of \$123,100, and was slightly higher than North Carolina's median value of 136,800.

Ownership rates of 54.9 percent are much lower within

the City than the County or State (72.3 percent and 68.4 percent respectively). Of the central cities of the fourteen MSAs in North Carolina, Hickory has the 6th highest home ownership rate. The median home ownership rate in those central cities is 54.15. Central cities will almost always have a higher than average concentration of rental units given that these cities function as regional employment centers.

Previous census data from the 1990 and 2000 Census reported age, type, and value of the housing supply available within the city. Although the data has changed since the last Census was published (primarily due to market-driven factors), the information is important in understanding the housing trends that have affected the City of Hickory.

There were a total of 12,690 housing units in Hickory in 1990 and 16,571 units in 2000. Of these housing units in 2000, 55 percent of the housing stock was owner occupied, 45 percent of the housing stock was renter-occupied, and 7.2 percent of the housing stock was classified as vacant. As of 2000, the median gross rent was \$540 dollars per month.

The City of Hickory has also tracked the number of subdivision requests and documented those numbers in the City of Hickory Planning Department Annual Report. In 2008, there were four major subdivisions applications approved. The 2008 report indicated subdivision activity for 2004-2008 and the 2005 Report indicated new single and multi family housing permits for 2000-2003. As can be seen in the following table, permits for new housing development hit a high in 2005 and has slumped since then.

ACS data support findings that home ownership, a staple in the diet of stable and comfortable single-family neighborhoods, is not easily attained in Hickory, even for those households earning median incomes. If ownership remains a goal, the city may wish to consider alternative ownership housing types like townhouses and condominiums



Figure 4.3 - While Hickory’s housing market continues to be active, there is a gap between what the median income family earns and what the median income family can afford to buy. (Image source: Studio Cascade, Inc.)

Hickory Housing Programs

The City of Hickory has acknowledged the affordable housing issue that affects the community. The Hickory Public Housing Authority manages public housing, which is primarily concentrated in the southeast and southwest portions of the city. Demand for these facilities surpasses the supply.

The city and private developers have created local housing programs along with some federal and state programs. These programs are designed to encourage quality, affordable, owner-occupied housing for low and moderate-income families. The following is a summary of housing assistance programs active throughout Hickory:

The city has successfully developed the 21 lot Hickory Hollow subdivision. The City is expanding housing opportunities for new affordable, owner occupied subdivisions for low and moderate-

Table 4.3 - Residential Subdivision Lots and Potential Units Approved 2000-2009

Year	Residential Lots/Units
2008	107
2007	226
2006	45
2005	429
2004	156
2003	161
2002	200
2001	297
2000	315

income first time homebuyers. A project in the Green Park neighborhood on four acres owned by Habitat for Humanity is currently under construction. The site will be 11 single-family lots.

The City of Hickory’s First Time Homebuyer Program was developed to help qualified low to moderate-income persons to apply for a loan for the purchase a new or existing home. Residents who have lived within the corporate limits of the city for at least one year can receive up to \$6,500 for purchase of an existing home or \$10,000 for new construction. Those who reside outside of the city can qualify for a \$5,000 loan for existing housing or \$7,500 for new construction. The loans are for the purpose of assisting the applicant with down payments, closing costs, discount points, or loan application fees. These loans are made on a case-by-case basis and are repaid at zero-percent interest upon final payment of the first mortgage, refinancing of the first mortgage, or when the house is sold.

The Housing Rehabilitation Program was created to assist in the conservation of existing housing and the preservation of neighborhoods. The program is designed to provide low-interest loans at a rate of three percent to homeowners residing in residential areas characterized by the concentration of lower-income families and deteriorating housing stock. The program targets very low, low, and moderate-income homeowners who would otherwise be unable to perform home repairs. It also is designed to stabilize older neighborhoods and prevent deterioration of

property, eliminate unhealthy and unsafe housing conditions, conserve energy by making funds available for energy improvements, and improve the neighborhood appearance.

No less than 80 percent of available funds will go to low and moderate-income applicants, based on the US Department of Housing and Urban Development Community Development Block Grant guidelines. In addition, eligible properties must be in violation of the city's Minimum Housing Standards as defined in the Hickory City Code, and funds must be used towards the elimination of conditions that, in the judgment of the Rehabilitation Specialist, are hazardous to the health and safety of the occupants. This program also allows a non-income based loan for repairs to preserve historic structures in designated historic areas.

The Urgent Repair Program (URP) is a rehabilitation program sponsored by the City of Hickory. The goal of this program is to eliminate housing conditions that pose an imminent threat to the life and safety of very low and low-income homeowners with special needs. This program is funded by the North Carolina Housing Finance Agency, and offers urgent repair assistance to eligible homeowners with a limit of \$5,000. These funds cannot be used in conjunction with any other state or federal housing assistance program, with the exception of the Weatherization Assistance Program, and at least 50 percent of the funds must be spent on energy-related repairs.

With the help of these programs, it is the intent of the city to produce more mixed and moderate-income housing, moving away from traditional public housing. But it is important to realize that each of these programs operate on a limited-funds basis.

Aesthetic & Functional Characteristics

Hickory's neighborhoods are distinct. Many were developed during different eras, with lots, streets, houses, and open spaces designed and arranged in ways commonly associated with their vintage. The

central and original part of town was built around the railroad station, and subdivided into a traditional, rectangular grid aligned along the tracks, modified in places to accommodate the area's rolling topography. More recent neighborhoods were designed around the private car, accessed by high-volume arterials emanating from the city's core and consisting of homes with prominent garages. Other neighborhoods feature homes and lots more responsive to the terrain – with curving roads, sloping yards and dramatic open spaces that capture the natural landforms. Some areas seem to have been developed somewhat haphazardly, likely taking advantage of opportunities to subdivide isolated parcels of land and creating residential outposts in otherwise commercial or wooded areas. More than a century of residential development has created diversity in pattern and place, with neighborhoods taking on characteristics consistent with their age of creation.

Hickory is all of these places, and it is important that they be recognized and included in the community's plan for its future. These neighborhoods typically serve the needs of their residents, and, while some neighborhoods may benefit from re-investment or rehabilitation, they are an important part of the community's collective identity.

Interrelationships

Neighborhoods are not necessarily exclusively residential. While this chapter focuses on housing policy, it is also important to consider how the people who live in Hickory's neighborhoods access the services enabling them to live, work, shop, learn and play.

The combination of gross housing costs and transportation costs can consume up to 50% of a household budget. Based upon AAA 2009 average per mile cost of vehicle ownership and a median income in Hickory between 2006 and 2008 of \$40,100.00, auto owners in Hickory spend between 18 and 23 percent of household income on personal automobile transportation. A core principle of this plan is to reduce transportation costs by more effectively connecting housing areas

to commercial, civic, recreational, or employment areas. Reduced transportation costs attained by less reliance on private transportation can help make housing more affordable.

Connections to non-residential uses can also add character and vitality to nearby residential areas. Downtown's residential districts already benefit by being within an easy walk of the commercial district along Union Square and with their association to the nearby parks and natural, historic landscapes. Other neighborhoods enjoy similar, if smaller-scale relationships with mixed-use or commercial areas, such as those abutting the Viewmont commercial district or in the vicinity of Green Park, Kenworth, Highland and Claremont.

Needs

With affordable housing growing more rare, families have had to move to more affordable but more distant peripheral areas, consuming agricultural land and open space in and beyond Hickory's ETJ, and overloading roads with longer commutes. In the past few years the demand for more affordable housing has resulted in an increase in large-scale multi-family residential developments in the city. Some neighborhoods near the city's center still suffer from disinvestment, but others have enjoyed recent vitality.

Still, Hickory needs to accommodate a diverse housing stock to meet an increasingly diverse community demand, and it needs to provide that housing affordability. Reflecting on its past, Hickory has a legacy of mixing housing types and doing it successfully. Neighborhoods can accommodate variety, as long as they maintain scale and are designed with appropriate levels of amenities.

Plan Concept

Responding to these needs requires a planning concept that is based on the understanding that successfully housing a community is more than just

providing houses. It is understanding the relationships between housing and the community's other uses of land, the patterns of living that residents maintain, and the variety and scale of its neighborhoods that make Hickory unique. The following planning directives spring from that complexity, responding the community's call for a vibrant, diverse and affordable Hickory.

Promote mixed-use/multiple use neighborhoods.

Hickory is similar to most communities in keeping different land uses separated. While there may be parks, schools, and in some locations, small commercial districts, in close proximity to residential areas, these land uses are not truly integrated. By minimizing physical barriers and promoting pedestrian access to non-residential uses in a neighborhood, people will be encouraged to walk or bike through their neighborhood to enjoy parks, use open spaces, attend schools, go shopping, or simply visit with their neighbors.

Provide a variety of housing options to meet the needs of all residents of Hickory

Cities across this country have experienced a significant out-migration of residents to suburban communities; however, Hickory is unique. Unlike many cities experiencing growth at the urban fringe and beyond, stable increases in population and household income in addition to a demand for varied housing types has afforded the city maintenance of its urban and older suburban housing stock. While Hickory has been able to maintain a diverse residential population in its older neighborhoods and has provided new construction desired in the mid to upper price ranges, the development community has thus failed to meet the demand for affordable housing in Hickory.

Unintended side effects of Hickory's inadequate housing options within the city limits are numerous. For instance, many employees of industrial and commercial establishments, as well as city staff, have turned to other communities



Figure 4.4 - Higher-intensity housing can fit in harmoniously with existing and historic neighborhoods, offering a more affordable housing type at a scale compatible with its surroundings. (Image source: City of Hickory.)

such as Conover, Newton, Catawba, Alexander, Caldwell, and Burke Counties to find housing that meets their financial requirements. Additionally, this settlement pattern has generated traffic congestion and a need for costly infrastructure expenditures as those living in areas outside of Hickory commute into the city for work, etc. These related consequences can be addressed by identifying appropriate locations in Hickory for higher density, more affordable housing and revitalization areas.

Ensure compatibility between single-family residential and higher density residential and non-residential land uses.

Hickory is dominated by single-family residential neighborhoods that want to preserve their residential character. However, the desire for the traditional development pattern of disconnected single-family residential neighborhoods is beginning to change. Hickory residents have revealed their desire to provide more connectivity and proximity to commercial uses, public spaces and facilities, and in some limited form, higher density residential. This desire is predicated on adequate transitions of building size and use, and buffering from non-residential or higher-density residential areas that will retain the character of single-family neighborhoods while allowing proximity to non-residential uses.

Housing Goals

Goal 1: Provide diverse housing options suited to neighborhood character

While the plan calls for housing diversity, it also recognizes the importance of having stable, vital neighborhoods. New housing types should be encouraged, but they should be designed and distributed in a way that respects the scale and character of existing neighborhoods.

Goal 2: Sustain and enhance existing neighborhoods

Neighborhood decline should be suppressed, and successful neighborhoods should be supported and emulated. This goal does not suggest that Hickory's neighborhoods all be alike. Instead, it strives for all neighborhoods to be successful in serving the unique needs of the residents who live there. Those characteristics that make neighborhoods lively, healthy places should be applied universally, adapted to reflect individual neighborhood social, cultural and economic makeup.

Goal 3: Promote urban infill with a variety of housing types

For this plan's greatest goals and principles to succeed, Hickory must find ways to insert housing into its neighborhood and community centers. Whether it involves new housing downtown, revitalized housing along the community's corridors or the establishment of an entirely new housing type and philosophy in mixed-use centers, housing plays a crucial role in the revitalizing of Hickory's cityscape.

	Goal		Policy
1	Provide diverse housing options suited to neighborhood character	A	Encourage affordable housing with tools like public-private partnerships, rezoning to allow multi-family housing outright in identified areas, and providing more options for combined residential and non-residential development
		B	Ensure development within mixed-use centers is compatible with the housing in surrounding neighborhoods
		C	Reflect neighborhood design characteristics in higher density housing infill without strict architectural style requirements
		D	Incorporate alleys, landscape screening and other amenities in multi-family development to buffer the higher density from surrounding lower density housing
		E	Low density residential development can provide larger lots further from mixed use centers
2	Sustain and enhance existing neighborhoods	A	Support efforts to retain the historic character of the neighborhoods surrounding downtown
		B	Enforce housing and property maintenance, sign, animal control, littering and noise code requirements
		C	Consider innovative zoning tools to protect neighborhood character and retain historic integrity
		D	Support pedestrian-oriented neighborhoods
		E	Support community development efforts for homeownership and rental rehabilitation
		F	Support acquisition, rehabilitation, and purchase programs to increase home ownership
3	Promote urban infill with a variety of housing types	A	Provide mixed use centers throughout the city which provide opportunities for more intense condo, townhouse and apartment housing options
		B	Provide a variety of housing options in all housing districts for aging in place options for seniors and for others desiring more affordable housing
		C	Provide accessory dwelling unit (ADU) options in medium density neighborhoods.

Transportation

Introduction

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on transportation issues.

Led by the plan's vision and directives, the goals, policies and programs in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

Transportation is a topic with far greater implications than most people realize. Far from being simply about practical matters of getting from point to point, considerations such as method and speed of travel, distribution, orientation and the design of streets are among those things that often have the largest impact on communities.

Existing Conditions

Hickory is well served by rail, arterial roadways, and a regional airport. The variety of transportation options is important for business to get supplies or goods to market and for residents of the city to travel to other destinations. The transportation system also provides circulation within the region and city for commuters to and from Hickory.



Figure 5.1 –Hickory is located at a major highway crossroads, underscoring the region's reliance on a robust, diverse, and functioning transportation system.. (Image source: Studio Cascade, Inc.)

The city has good regional access with U.S. 70 and 321, and I-40 which is included in the North Carolina Strategic Highway Corridor Vision Plan.

I-40 is a major east-west facility through the Greater Hickory Metropolitan Region. This interstate is a part of the National Highway System – the backbone of the country's freeway system that serves the interstate and inter-regional travel between major population centers. I-40 connects the state of North Carolina from the port of Wilmington through the Blue Ridge Mountains and into Tennessee. I-40 is important to interstate commerce, as well as travel and tourism, which form the lifeblood of many towns in the North Carolina Mountains.

US 70, while not part of the North Carolina Strategic Highway Corridors Vision Plan, serves the Central Business Districts of multiple smaller towns and links them to

larger urban areas, including Hickory. US 70 is the region's nearest parallel facility to I-40; it serves as a business route through the Greater Hickory Metropolitan Region; and, as an alternative route to I-40 in emergency situations.

US 321, a major north-south facility serving the Western Piedmont area of North Carolina, connects the Charlotte/Gastonia urban area to the major furniture and textile industrial area of Hickory/Lenoir and to the tourist areas of Blowing Rock and the Blue Ridge Parkway before it crosses into Tennessee. In the Greater Hickory Metropolitan Region US 321 provides a critical connection between the Hickory urban area and other towns in Caldwell County such as Lenoir, Hudson, Sawmills and Granite Falls.

Transportation issues in Hickory have been addressed at a region-wide scale for three decades. The Greater Hickory Metropolitan Planning Organization, guided by the Western Piedmont Council of Governments (WPCOG), is responsible for carrying out the area wide transportation planning within the Hickory region. Federal Law (Section 134(a) of Title 23 United States Code), the Transportation Equity Act for the 21st Century known as TEA-21 and the Safe, Accountable, Flexible, Efficient, Transportation Equity Act- a Legacy for Users (SAFETEA-LU) as well as State law (General Statute 136-66.2) require a documented comprehensive, continuous and cooperative transportation planning process for urban areas with a population of 50,000 people or more. The Hickory area met these requirements in 1980 and was designated by the United States Census Bureau as an Urban Area. The designation of an urban area also requires the establishment of an integrated, inter-modal transportation plan with a minimum planning horizon of 20 years. Since 1980, several comprehensive Long Range Transportation Plan (LRTP) studies were completed for the Hickory Urban Area.

MPO Planning

The first Hickory-Newton-Conover Urban Area Transportation plan was adopted in 1986. Due to growth exceeding projections assumed in the 1986



Figure 5.2 - Though a decade of planning policy has attempted to reduce reliance on the auto, Hickory still is a community of cars. (Image source: Studio Cascade, Inc.)

plan, the MPO prepared an updated plan that was adopted in 1997. Since that time the regional plan has been updated and adopted several times – first in 2001 then in 2005 and most recently in March 2010.

Growth in population and employment in the Greater Hickory MPO area is the basis for long-range transportation planning for the region. The MPO established a new Traffic Analysis Zone (TAZ) structure for the entire Metropolitan Area Boundary (MAB) following the MPO enlargement in 2002. Using population data derived from the 2000 Census and employment data from InfoUSA (a commercial vendor of current employment data), a 2002 base year was established. Population and employment were then projected to a horizon year of 2030. This projected growth was the basis for the 2005 Plan update.

The most current plan update was commenced in

2009. The 2035 Hickory Long Range Transportation Plan update is a technical update of the 2005 Transportation Plan with a 2007 base year and 2035 horizon year.

The 2035 Hickory Urban Area Long Term Transportation Plan is a multi-modal transportation plan that will guide the planning and development of the urban area's transportation system for the next generation. The Plan has also been developed in coordination with the Air Quality Conformity Analysis Report and Conformity Determination, and the 2009-2015 Metropolitan Transportation Improvement Program (MTIP).

Given the limited financial resources at the federal, state and local levels, the rapidly increasing costs of fuel and construction materials, the heightened air quality standards, and the desire by the citizens in the Hickory Urban Area to maintain a high quality of life, the emphasis of the Plan is to provide a better balance of transportation facilities, programs and services that will serve the urban area's future travel needs. In fact, the 2010 Hickory Urban Area Long Range Transportation Plan states that walking and biking are effective in meeting all five stated goals included in the plan update.

With the increased interest and acceptance of walking and cycling, four objectives for pedestrian and bicycle transportation are included in the Plan update.

Provide a pedestrian and bicycle system that is a safe alternative means of transportation, allows greater access to public transit, supports recreational opportunities and includes off-road trails.

Develop a transportation system that integrates pedestrian and bicycle modes of transportation with motor vehicle transportation and encourages the use of walking and bicycling as alternative modes.

Develop a continuous, direct, safe and coordinated system of regional bicycle facilities in the GHMPO Planning Area.

Provide a pedestrian and bicycle system that is connected inter-regionally, for example the



Figure 5.3 - The current urban area transportation plan prepared by the Metropolitan Planning Organization recognizes the importance of bicycles as a viable transportation alternative. (Image source: Studio Cascade, Inc.)

Carolina Thread Trail.

Additionally, public transportation has been recognized as a vital element of the total transportation services provided within a metropolitan area. Not only does public transportation provide options to senior citizens, those without vehicles, and those who are physically or economically disadvantaged, but public transportation is an efficient, low cost, high capacity means of moving people through a densely traveled corridor. The Greater Hickory Metro area has a regional transit authority serving Alexander, Burke, Caldwell and Catawba Counties. Greenway Public Transportation began operations in July 2008 with the intent of improving transportation alternatives regionally.

The Greater Hickory Urban Area Long- Range Transportation Plan continues to addresses many

issues affecting the roadway system in Hickory and surrounding region including traffic generated within the city, commuter traffic, and traffic volume from motorists passing through the region. Part of the transportation plan encompasses an evaluation of thoroughfares (highways) along with other transportation modes. The Highway Chapter of the 2035 Plan identifies existing and future deficiencies and uncovers the need for improving the existing transportation system. This part of the Plan analyzes and makes recommendations based on the ability of the existing street system to serve the present and future travel as the area continues to grow. The usefulness of transportation planning is in the analysis of different roadway configurations for their efficiency in serving the area.

To address these issues the 2035 Transportation Plan recommended numerous transportation



Figure 5.4 - Highway access to the greater region is critically important for Hickory's economic development. (Image source: Studio Cascade, Inc.)

improvements to create efficient east-west and north-south traffic patterns. The proposed road construction in the plan will provide improved regional access for commuters traveling to employment centers, better access to I-40, U.S. 70, and U.S. 321 and improvements to north-south circulation. While construction of one proposed thoroughfare (Northern Cross-town) is intended to improve east-west circulation, improvements to McDonald Parkway would be needed to achieve desired improvements. Other significant improvements include widening U.S. 321 to accommodate projected traffic increases.

While some improvements are only proposed at this time, others have been programmed into the State Transportation Improvement Program (STIP). Of those projects currently programmed into a STIP, some have received funds, while other identified projects await funding. The 2035 Hickory Urban Area Long Range Transportation Plan contains a full list of recommended improvements and other information regarding regional transportation planning. In addition this planning effort has revealed some additional improvements that should be implemented to accomplish the vision that city residents and officials have for Hickory.

MPO UATP Proposed Projects

The following paragraphs describe changes in the 2035 LRTP. Hickory's comprehensive plan may suggest improvements and philosophies that differ from these, and those differences are noted here where appropriate.

Fourth Street SW, NW and Extension

This north-south facility is located in Hickory's CBD and extends from 16th Avenue NW to US 70. This facility links cross-town travel between northern residential suburbs and the commercial areas along US 70 and southern suburbs to the commercial developments along NC 127 in northern Hickory. In addition, this facility also serves a mixture of development ranging from residential on the northern section to government offices and commercial businesses in the

downtown and southern Hickory. The existing cross-section of this facility varies from two to four lanes.

Although present travel conditions are generally good, the projected future traffic is expected to result in deteriorating travel conditions. To avert this problem, the section of Fourth Street between First Avenue NW and US 70 should be improved as needed. On the section north of First Avenue NW, adding a left turn lane at the major intersections is recommended.

Lenoir-Rhyne Boulevard (SR 1534/SR 2205)

This major thoroughfare provides a major connection between northern Hickory and the regional commercial center along the I-40/US 70 corridor. It connects to Eighth Street NE on the north end and the south end terminates at US 70. Lenoir-Rhyne Boulevard has a 5-lane cross-section north of Tate Boulevard to US 70. Development along this corridor is mostly commercial and considerable congestion currently occurs during peak hours, especially at the southern end. The proposed McDonald Parkway, already completed to Springs Road, will take some travel pressure off Lenoir-Rhyne Boulevard by providing an additional connection to I-40 and US 70. With strong commercial development projected along this corridor and a continuation of high demand in travel between northern Hickory and the I-40/US 70 corridor, traffic on Lenoir-Rhyne Boulevard is expected to gradually build up to capacity.

Although widening would be the best solution to improve the level of service on this road, it does not appear to be a viable option considering the high cost to purchase additional right-of-way and the detrimental impact to the commercial developments along the corridor. Adequate space is available to add a loop to the northeast quadrant of the I-40 interchange. This addition will improve northbound travel, thus eliminating the need for a protected left turn phase at the northern exit ramp traffic signal. The “saved” green time can be added to the through movement on Lenoir-Rhyne

Boulevard, increasing the service capability of the facility. Other improvements such as signal coordination, adding acceleration and deceleration lanes where right-of-way is available and other traffic control measures should be implemented.

Second Avenue NW and Extension (Hickory-Long View)

This east-west major thoroughfare provides service for travel in the Hickory and Long View urban areas. On the west end, it terminates at SR 1653 and turns into the eastbound leg of the Second/Third Avenue one-way pair in downtown Hickory. The existing cross-section of Second Avenue NW ranges from two to four lanes. The 4-lane section extends from US 321 to 30th Street Place NW. Mixed development exists along this facility. Intense commercial and industrial development occupy the section west of downtown Hickory while a mixture of residential, commercial and office uses exist along the one-way pair section. In addition to serving these developments, Second Avenue NW provides a valuable service for travel in the northeast section of the planning area. It links eastern Burke County to Long View and downtown Hickory and connects these urban areas to Hickory Regional Airport just north of the facility.

Current travel on Second Avenue NW is moderate with the highest traffic volume on the section west of US 321. Travel pressure on this facility will increase greatly during the planning period due to high development growth anticipated for this area (LRTP 2035, p. 2-27). To ease potential traffic problems, Second Avenue NW should be extended westward to Mount Harmony Church Road at SR 1627. This extension will serve new growth in eastern Burke County and provides a continuous east-west facility serving commuter traffic in the northeast part of the planning area. A multi-lane cross-section is recommended.

Second/Third Avenue NW one-way pair

This one-way pair system is located in downtown Hickory and serves a mixture of development



Figure 5.5 - Even as roadways get widened to increase capacity, attention must be paid to the pedestrian environment and to the widened roadway's impact on adjacent land use. (Image source: Studio Cascade, Inc.)

including businesses, offices, governmental institutions and housing. It also functions as a major cross-town facility between eastern Caldwell County, Burke County, Long View, downtown Hickory and eastern Hickory. Due to the lack of an efficient system serving east-west travel in northwest Hickory, especially traffic to and from US 321, the Second/Third Avenue NW one-way pair will continue to be used as a surrogate route. Projected growth in both housing and employment in northern Hickory and southern Caldwell County, the east-west travel in northwest is expected to increase.

The Second/Third Avenue NW one-way pair is expected to shoulder a large portion of this increased traffic. The future travel demand on this one-way pair will exceed the practical capacity of

this system. Adding lanes is not feasible due to the detrimental impact on the housing communities and businesses and the high cost to purchase right-of-way. Therefore, other remedies such as signal optimization, adding acceleration/deceleration lanes where right-of-way is available and other traffic control measures will help to ease the traffic congestion. Nonetheless, difficult travel conditions are expected in the design year unless there is another facility to share the travel burden with the Second/Third Avenue NW one-way pair.

Southern Corridor

Currently, NC 10 is the only major thoroughfare that serves the southern part of Hickory and Newton. This 2-lane highway mostly provides for travel to and from the City of Newton. The Southern Corridor has been proposed to serve the area between the NC 10 and US 70/ I-40 corridors connecting four future growth areas in the region - western Newton, River Road/US 321 interchange, Mountain View and southern Brookford. The link between this project, the Newton-Conover Loop, the Northern Cross-town and 33rd Street in Long View would form a loop system in the planning area. This system will facilitate the suburban travel as well as the inter-city travel between Hickory, Newton, Conover and Long View.

The recommended Southern Corridor extends from the City of Newton on the east to Hildebran on the west. The corridor consists of the widening of Settlemyre Bridge Road (SR 1165), River Road at the US 321 South interchange and Hildebran-Shelby Road. Between these roads are the new location segments. The recommended cross-section for this project is a 4-lane divided boulevard with a grass median. The Southern Corridor is needed to serve the future travel in the southern part of the planning area. The Southern Corridor is programmed in the TIP as Project U-2532.

Proposed Catawba Valley Boulevard Extension (Hickory-Newton)

Catawba Valley Boulevard is located on the south

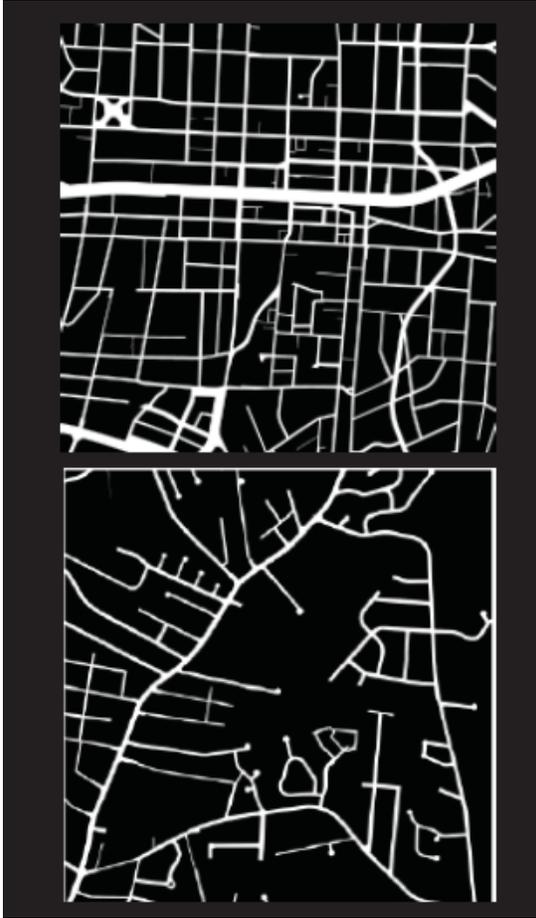


Figure 5.6 - The idea of street networks forming the “bones” of communities was presented early in the process. Both street networks are from Hickory; however, each portrays very different lifestyles. The upper layout identifies a more pedestrian-friendly and livable place. The lower layout shows how scale and lack of interconnectivity can all but dictate a car-centric lifestyle. (Image source: Studio Cascade, Inc.)

side of the Valley Hills Mall extending from Robinson Road (SR 1146) to Startown Road (SR 1005). This 5-lane facility serves major commercial and residential developments and provides a connecting service between Startown Road and Robinson Road.

The proposed extension will connect Catawba Valley Boulevard to 20th Street in Newton and create a major east-west facility paralleling US 70. Due to the anticipated growth on US 70, future travel demands are expected to increase causing some congestion problems along this facility. The proposed road will also create an efficient route to

link Hickory and Newton. A 4-lane divided boulevard with a grass median is recommended west of Fairgrove Church Road. East of Fairgrove Church Road, a 2-lane rural cross-section is recommended.

Functional Roadway Classification

Many of the roads in Hickory are classified by the North Carolina Department of Transportation as belonging to the local jurisdiction. Generally speaking, the NCDOT system roads within city limits are major facilities making significant regional connections.

Streets are usually classified according to the following hierarchy, with those roadways carrying higher volumes traditionally belonging to NCDOT. Many collectors and virtually all local streets belong to the City of Hickory.

Parkways

Parkways would have the widest ROW and be reserved for roads with the heaviest traffic volumes in industrial and commercial areas such as:

Tate Boulevard SE,

U.S. 70,

McDonald Parkway,

16th Street NE extension from Lenoir-Rhyne Boulevard to Highland Avenue NE, and the Southern Corridor.

These roads are intended to serve high volumes of automobile and truck traffic but still provide a visually attractive gateway to Hickory. This roadway cross section includes a 10-foot median that would be landscaped with wildflowers and shrubs. Medians on NCDOT streets may need to be wider to accommodate trees. Because these sections of roads will handle large volumes of traffic and will not always be directly serving residential neighborhoods the construction of sidewalks will usually not be required. For areas where sidewalks are necessary, they should be



Figure 5.7 - Streets carrying arterial traffic can still be designed and managed to provide an attractive, residential landscape. This image illustrates the contrast between approaches to streetscape design. (Image source: Studio Cascade, Inc.)

separated from the curb by a landscape buffer between 10-12 foot wide to enhance pedestrian safety. The proposed pavement widths include an option for one three-foot bike lane in each direction.

Arterials

Arterials would carry the bulk of the city's traffic volume since many more roads would have this designation. These roads would include:

NC 127, Springs Road, Sulphur Springs Road, Highland Avenue NE, Lenoir-Rhyne Boulevard, 16th Street NE, N/S Center Street, Fourth Street SW/NW, Cloninger Mill Road, Kool Park Road, Clement Boulevard NW, 29th Avenue NW, 29th Avenue Drive NE, and 16th Street NE (north of Highland Avenue NE), and 8th Street Drive NE

Arterials will provide the primary roads leading to neighborhood mixed use and community commercial districts. These new roadway cross sections include streetscape improvements that would benefit both the persons in the vehicles as well as pedestrians. The intensity of streetscape improvements would vary depending on the location of the road. The roadways with the most intense streetscape improvements would be in the neighborhood mixed use and community commercial districts. Because these commercial districts will be located along Major Thoroughfares, a typical cross section would include a four-lane, divided arterial with landscaping along the sides of the road and in the median to provide "friction" and help encourage the motorist to reduce the vehicle's speed. The road pavement widths will be narrowed to allow easier pedestrian crossing at intersections and to force motorists to drive at a slower speed. The speeds in the neighborhood core and community commercial districts would be less than portions of the arterials outside the districts. To ensure that motorists slow their vehicles when entering a commercial district, a transition area would be constructed just prior to the district. This transition area would be approximately one block long and include the introduction of streetscaping, signage, narrowing of driving lanes, and the introduction of a median.

Collector Roads

Collector roads will continue to serve the function that they currently serve which is funneling traffic from local streets to arterials or to other local streets throughout the city. Although these roads will also be in residential areas they will carry a heavier volume of traffic making a designated turning lane a viable option in appropriate locations to allow continuous traffic flow and minimize potential for accidents. The proposed revisions to the ROW for these roads include landscaping, sidewalks, and bike lanes where they are determined to be appropriate.

Local Streets

Most streets in the city are considered local streets. Local streets serve individual properties and direct

traffic to collectors or arterials. The proposed revisions to the ROW include landscaping and sidewalks. There are no bike lanes proposed since the traffic volume of these roads would be significantly less than collectors, arterials, and parkways allowing automobiles and bikes to share the road. In addition to smaller lane widths, proposed revisions to ROW include provision of on-street parking in appropriate locations. The High Density Residential area would be a typical location for a two-lane local street with on-street parking. This road design could also be found in the side streets of the Neighborhood Mixed Use districts to provide a traffic-calming effect as well as providing additional parking close to commercial establishments. All of the proposed revisions to roadway cross sections included curb and gutter; however, Hickory permits both curb and non-curb construction and in some locations it would be appropriate to eliminate the need for curb and gutter and provide stormwater drainage swales. This stormwater management measure should be incorporated into neighborhoods where conservation subdivision design is implemented.

Traffic and Level of Service

Traffic volumes on main roads are compared to generalized roadway capacity guidelines to determine levels of service.

In general, few of the Hickory's roadway facilities experience severe levels of traffic congestion based on daily traffic volumes.

Bicycle and Pedestrian

The City of Hickory adopted a Sidewalk and Bikeway Master Plan in March 1997. The plan identified seventy five miles of sidewalks, one and 1/2 miles of bikeways and five miles of walking tracks and unpaved trails in City parks.

In September 2000 the City adopted a Sidewalk, Bikeway, Greenway and Trail Master Plan. The plan provides overall guidance for policy and program development for improving access and mobility for pedestrians and bicyclists. Consistent with the Plan's goals and objectives, the Master

Plan identifies a network of 137 miles of sidewalks, 132 miles of bikeways, 8.8 miles of greenways and .34 mile of trails. Design guidelines to assist in the implementation of the network are also included in the Plan. It also addresses initiatives to develop new sidewalks, bicycle routes, greenways and trails connecting the City's parks, schools, cultural facilities and shopping centers. Finally, the Plan proposes initiatives in the areas of facility maintenance, bicycle usage, enforcement and education programs.

In 2005 the City of Hickory amended its 2000 Sidewalk, Bikeway, Greenway and Trail Master Plan to further expand its existing and proposed greenways and to add facilities defined as urban trails. The 2005 update of the greenway component of the Master Plan identifies 21 specific greenways and urban trails, which collectively total 48.39 miles. While subject to the availability of funding, the implementation of the Plan is divided into three time periods. Short-range projects should be implemented within the first 12 years of the Plan. Medium range projects have a 12-20 year implementation period and long range projects have a horizon period of over 20 years.

Transit

The current transit service is not well utilized. In addition to the existing transit route, drop-off and pick-up sites should be incorporated into new commercial developments. The Neighborhood Mixed Use districts, with their shopping destinations and higher residential densities, would make logical transit stops. Transit amenities should also be incorporated into the new Community Commercial areas and Regional Commercial districts. Providing transit stops in these districts would encourage use of transit to travel from one commercial area to another and allow more residents the opportunity to utilize the Greenway Public Transportation System to get to work.

Aviation

Hickory Regional Airport is a regional asset that provides a valuable service to corporations and

residents of Hickory. Because of the projected growth for corporate aircraft, compatible land uses are required near the airport. Residential development should be discouraged in the vicinity of the airport. Industrial development that is compatible with aircraft operations should be located in the vicinity of the airport. However, airport zoning needs to reflect the need to preserve the long-term capability and safety concerns of the airport by limiting the height of structures as well as the location and density of development.

Rail

The railroad currently serves manufacturing industries in Hickory, but there is a potential to accommodate passenger service in the future. Passenger service should be reestablished to the Downtown area. Passenger rail service would provide additional travel options and potential customers for downtown retailers.

Issues & Needs

The transportation themes in this plan are carried through from the original Hickory by Choice, reinforced through public workshops and affirmed for their importance.

Vehicular Traffic

The development patterns in Hickory over the last 50 years have been the primary contributor to traffic congestion in the community. It is a symptom of the evolving economy in the area. While downtown employment once dominated, suburb to suburb traffic patterns now produce greater commute distances, driving time, and air pollution.

I-40 is currently a 4-lane controlled access freeway. Traffic projections indicate that I-40 through the Hickory Metropolitan Region will be over capacity by 2035 and is therefore recommended to be widened to 6-lanes in the 2035 LRTP

US 70 does not have the capacity to serve longer distance, free-flowing travel; however, because of



Figure 5.8 - Hickory's public transportation system is relatively young, but it has an established and diverse ridership. (Image source: Studio Cascade, Inc.)

the industry located in close proximity to major thoroughfares, a large percentage of heavy trucks comprise the total amount of traffic served by this facility. Daily traffic volumes vary along the corridor but one of the heaviest areas is located in the vicinity of Valley Hills Mall in Hickory. US 70 near this location is expected to be over capacity by 2015. The 2035 Greater Hickory Urban Area Long Range Transportation Plan indicates that if portions of US 70 are not widened at some point excessive congestion and delays will occur along the facility resulting in increased air pollution due to the stop-and-start conditions along the roadway. This Plan also states that safety conditions along the roadway will also be compromised due to the high number and closeness of vehicles in the traffic stream. No recommendations are part of the LRTP but are part of the Comprehensive Transit Plan (CTP).

In certain sections of US 321 the daily traffic volume will be over capacity by 2015. Other sections will be over capacity by 2025 and 2035. Currently, the portion of US 321 from US 70 in Catawba County to US 64/NC 18 in Lenoir is programmed in the TIP for widening to 6 lanes.

As the city and region grows these transportation systems will also need to evolve and improve to meet the demands of business and residents.



Figure 5.9 - The airport no longer enjoys commercial air carrier service, but it serves the greater region's air travel needs through general aviation. (Image source: Studio Cascade, Inc.)

Pedestrian Circulation

Residents of Hickory enjoy the small town character and relatively compact development patterns of the older portions of the city. However, beyond that area, a wide-spread pedestrian circulation system does not exist.

Transit

The region is currently served by the Greenway Public Transportation system, which is primarily used by residents that may not have regular access to an automobile. Although this transit service is not widely used, residents of Hickory expressed support for continuation and improvement of the bus system and the Western Piedmont Regional Transit Authority is currently developing a plan to expand service throughout the region.

Aviation

Hickory Regional Airport is an important asset to residents and businesses. Because of its importance to the community, the airport needs to be protected from development that would hinder its operations.

Rail

From the earliest days in Hickory's history rail service has been an important transportation option for Hickory. Passenger service declined and was eventually discontinued. Some limited passenger service is now proposed. This may lead to an increase in the use of rail for tourist transportation.

Plan Concept

Promote multi-modal transportation options.

The automobile is the primary transportation option in Hickory. Greenway Public Transportation provides access to services that people need in their daily lives such as retail shops and medical facilities. While an expansion of the transit service area is being planned, the current service offered is not used extensively.

For travelers leaving the city the automobile is generally the first option, but Greyhound bus service has recently reestablished service to Hickory. A former transportation option for people traveling to destinations beyond Hickory was the railroad. Although it has been decades since this option was available for travelers, there is the possibility that passenger rail service may again be provided in the near future.

A transportation system that weaves each of these options into a coordinated system and provides convenient access from one mode of travel to another would best serve the community. A multi-modal transportation system, when linked to higher density land uses, would offer more options for employees to get to work, provide seniors access to medical facilities and shopping, and families to go to district/regional recreational facilities.

Promote vehicular and pedestrian connectivity throughout the city.

The roadway system in Hickory is not ideally



Figure 5.10 - Creating active, walkable streets and neighborhoods requires an integrated approach involving more than just modifications to the transportation system. (Image source: City of Hickory)

connected resulting in drivers taking circuitous routes in order to reach their destination. Pedestrian circulation has also been limited because of a lack of sidewalk connectivity and topography in residential and commercial areas. Limiting circulation options results in an increase in the number of trips in automobiles, a corresponding increase in the number of miles traveled in automobiles, and increases in air pollution.

Increasing vehicular and pedestrian connectivity would offer more paths for people, giving them the opportunity to reduce the length of their trip, elect from a variety of roads on which to drive, and reduce congestion on major thoroughfares. Improved pedestrian connectivity would offer an opportunity for people to elect alternative modes of transportation and would encourage shoppers to walk from one store to another.

Establish measures to ensure pedestrian and motorist safety.

Motorist safety has always been one of the most important elements of roadway design. Designing safer roads has in many cases been in the form of wider ROW and lane widths, which have inadvertently given drivers a sense of safety. Safer, wider roads also encourage higher speeds. Sidewalk construction has generally been given a low priority in the design process resulting in sidewalks constructed next to roadways with no physical space buffering pedestrians from automobile traffic, or no sidewalk at all.

Higher traffic speeds are appropriate along roadways that are needed to move large volumes of traffic, but in areas where there are potential pedestrian/vehicle conflicts, vehicles need to be slowed down to minimize these conflicts. Neighborhood Core and Community Commercial districts are the primary locations where traffic calming measures such as narrow lane widths, road landscaping, and the construction of medians, would aid in slowing traffic and provide a safer environment for pedestrians.

Promote measures to reduce congestion and the amount of vehicle miles traveled in Hickory.

As Hickory and the surrounding region grows, there will be a corresponding increase in traffic on major thoroughfares and local streets. The growth of the region also increases the distance many people have to travel to work, shopping, cultural activities, and visits with friends. One of the most important measures of reducing traffic congestion and vehicle miles traveled is adjusting land use patterns.

Thoughtful land use planning is critical to establishing the spatial relationship of where people live, work, shop, and recreate. Land use planning should identify appropriate locations for neighborhoods that enhance and preserve residential character while offering opportunities to easily access shopping, open space and recreation, and employment with only a short drive, walking, or biking. By maximizing these

opportunities, congestion and the long distances of commuter travel can be reduced.

Transportation Goals

Goal 1: Provide connectivity for pedestrians and vehicles

Hickory by Choice 1999 and the public workshops convened as part of this update were clear: Hickory residents desire transportation options. By increasing connectivity, Hickory will help its residents use a variety of travel modes. Increased connectivity facilitates travel by car, on foot or by bicycle, allowing travelers to find multiple routes to their destinations.

Goal 2: Manage increased traffic volumes and pressure on transportation infrastructure through a combination of system improvements, demand management and land use actions as an alternative to capacity improvements alone

Simply increasing roadway capacity is not an adequate strategy for managing increasing transportation volumes. Wider roads may promise increased capacity, but, over time, congestion overcomes the initial capacity benefit. Wider roads tend to encourage increased traffic volume, leading to the truism “you can’t pave your way out of traffic congestion.” Hickory desires a more integrated approach to managing increased traffic, finding ways to manage demand on its roadways and to arrange its land uses to reduce reliance on single-occupant vehicles traveling on major thoroughfares. While regional traffic will continue to either travel through Hickory or to destinations in Hickory, this goal suggests that local traffic should be managed in a way that does not burden arterial roadways.



Figure 5.11 - In some cases, increased connectivity may require reestablishing railroad crossings. (Image source: City of Hickory)

Goal 3: Improve aesthetics of community gateways and corridors

Improving the quality of the journey is the principle underlying this goal. When entering and traveling through Hickory, travelers should have a pleasant trip. A pleasant street environment is understood to be an economic development advantage, as well.

Goal 4: Provide a transportation network that serves automobiles, pedestrians, bicyclists and public transit

This goal is closely related to the goal on connectivity, but it dictates an approach to transportation system design that actively recognizes that multiple travel modes will be using

public rights of way. Public roadways should be designed to be more “complete,” serving pedestrians, bicyclists and motorists without necessarily increasing the amount of paving provided to accommodate them. In addition, this goal supports the expansion and use of sidewalks, bikeways and greenways to encourage pedestrian and bicyclist travel, both for recreational purposes and as an alternative to single-occupant travel by car.

Goal 5: Consider industrial requirements in transportation decisions

Hickory’s economy has relied on an industrial base, and the region’s economic future still will likely feature a significant industrial component. The community’s transportation infrastructure has been developed to serve industry, and this goal suggests that the transportation system and the community’s industries will continue to have an interdependent relationship. Transportation improvements should consider industrial requirements, just as industrial location decisions consider access and transportation facilities.

	Goal		Policy
1	Provide connectivity for pedestrians and vehicles	A	Provide many pedestrian and road connections within and between neighborhoods, mixed use centers and commercial centers for local circulation without requiring use of high-volume roadways
		B	Develop a continuous network of sidewalks and bikeways to allow people to walk or bicycle to shopping, employment areas, schools, parks, and neighborhoods
		C	Minimize driveways on major thoroughfares for pedestrian and traffic safety
		D	Design and manage roadway intersections to calm traffic and improve pedestrian and motorist safety
		E	Provide many route options to and through neighborhoods with an interconnected system of streets
		F	Require new development to provide a proportional share of parks/greenways and transportation improvements based on estimated level of impact
2	Manage increased traffic volumes and pressure on transportation infrastructure through a combination of system improvements, demand management and land use actions as an alternative to capacity improvements alone	A	Emphasize transportation investments that provide alternatives to single occupant vehicles, such as transit, bikeways and pedestrian paths, and Transportation Demand Management (TDM)
		B	Support and preserve two-way streets to support retail establishments, reduce traffic speeds and enliven neighborhoods
		C	Provide more routes to reach destinations to reduce demand and congestion on major thoroughfares
		D	Reduce the length and number of vehicle trips per capita by locating jobs and shopping close to residential areas
3	Improve aesthetics of community gateways and corridors	A	Provide welcoming and positive gateway corridors and entrances into and throughout the city
		B	Provide landscape amenities and open space along the communities corridors
		C	Provide landscaping, shade trees and other aesthetic amenities with visual access to retail businesses along corridors

4	Provide a transportation network that serves automobiles, pedestrians, bicyclists and public transit	A	Develop good circulation and drop-off sites for transit services to improve traffic flow within regional commercial corridors and in mixed use centers
		B	Incorporate measures in the design of mixed use centers to slow traffic
		C	Provide parking that does not disrupt pedestrian routes or negatively impact surrounding residential
		D	Integrate pedestrian and bicycle facilities with school, open space, recreation, transit, and land development planning
		E	Support the state recommended passenger rail expansion to bring service through Hickory
		F	Promote on-street parking for easy access to stores and sidewalks and to slow roadway traffic
		G	Review road standards with NCDOT to ensure that roadways meet local, regional, and state goals.
5	Consider industrial requirements in transportation decisions	A	Locate industrial land uses in close proximity to highways, major thoroughfares, the airport and rail lines for good access to major transportation systems

Economic Development

Introduction

This chapter contains a brief overview of the city's existing conditions and community needs, as well as a goal and policy framework focused on the city's economy and on economic development considerations.

Led by the plan's vision and directives, the goals, policies and programs in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

Existing Conditions

Traditionally, Hickory's economic development occurred along its rail line. As the city grew and the transportation network expanded, industries naturally followed. Hickory, once highly devoted to the furniture industry, has worked hard to diversify over the last two decades. Historically, a strong entrepreneurial climate has defined the region. However, substantial changes in Hickory's economic profile during the past decade have resulted in uncertainty when applying historic trends to economic predictions.

Hickory currently serves as a trade, manufacturing, distribution, and service center for a multi-county area. While areas of



Figure 6.1 - Hickory is finding new ways to use its traditional industrial landscape, part of an overall need to restructure the regional and local economy. (Image source: City of Hickory)

economic development are still focused around the transportation system, some corridors and segments of the city have been devoted entirely to local commercial, regional development, and industrial land uses.

Information from the US Census 2006-2008 American Community Survey (ACS) and from a variety of other local and regional sources help describe economic conditions in the greater Hickory region.

Setting

As part of North Carolina's seventh largest Metropolitan Statistical Area (MSA), Hickory is home to a workforce of approximately 170,000 (Western Piedmont Workforce Development Board, Economic Indicators Newsletter, Vol. 13 No 1, spring 2010). The City's proximity to major transportation routes provides convenient travel and

shipping options. Interstate 40 runs east-west through Catawba County, and Interstate 85 is approximately 30 minutes away via US Highway 321. Interstate 77 is also only 30 minutes distant, via Interstate 40. The Norfolk Southern Corporation Railroad runs east to west through central Hickory, with the Caldwell County Railroad connecting from the north near downtown Hickory.

Charlotte (the nation's 18th largest city), Charlotte-Douglas International Airport, and the Appalachian mountain resort areas of Boone and Blowing Rock are within one hour of Hickory. The City of Asheville is an hour and a half to the west; and Winston-Salem, Greensboro and the Piedmont Triad International Airport are an hour and a half to the east.

Utilities

The City's water and wastewater systems are operating below capacity, with room for expansion. Recent water studies indicate that the City has sufficient water availability to support forecast population growth and the growth in the business sector. The City's water service area is far larger than the city limits and ETJ, and the city contracts with multiple municipalities in the region.

Transportation

Hickory is accessible. Interstate 40 and US Highway 70 run east-west through the heart of the city, and US 321 and NC 127 run north-south, providing excellent freight access. The Hickory Regional Airport was designed and constructed to accommodate commercial air traffic and while no commercial service is currently offered, the airports flight control tower is manned 24 hours seven days a week and The Hickory "HOP" offers shuttle service between Hickory Regional and Charlotte-Douglas International airports. Major rail lines also link Hickory to the region and beyond, accessing the community's industrial corridors. Additionally, Greenway Transit is looking at a fairly large expansion of their transit

services to Lenoir, Taylorsville, Boone, and Morganton.

Income and Employment

Hickory's per capita income was estimated to be \$21,415 in 1998; and while per capita income increased to an estimated \$27,266 in 2008, income has not kept pace with inflation. Similarly, median household income has remained virtually stagnant between 2000 and 2008 increasing from approximately \$37,236 in 2000 to \$40,133 in 2008. Even with the estimated increase in median income over that period, the stability of household income has resulted in decreased purchasing power due to inflation. When compared to other geographic areas, household income in Hickory is lagging. Household income in 2008 was more than \$4,000 less than Catawba County levels and more than \$12,000 less than the National average. The average income from Social Security was \$15,461, an important factor given Hickory's aging population.

Based on 2006-08 American Community Survey data, more than 83 percent of Hickory residents employed were private wage and salary workers. Nearly 10 percent were federal, state, or local government workers, and 6 percent were self-employed. The same ACS data sets show the most common occupations within Hickory as (Figure 6.2):

Management, professional, and related occupations – 36.0 percent

Sales and office occupations – 21.8 percent

Service occupations – 18.3 percent

Production, transportation, and material moving occupations – 17.2 percent

Construction, extraction, maintenance and repair occupations – 6.6 percent

ACS 2006-08 period estimates identify the leading industries in Hickory as: educational services, health care, and social assistance - 23.2 percent - and Manufacturing – 21.0 percent. Manufacturing sectors that call Catawba County home include

machining and metalworking, plastics, fiber optic and coaxial cable, and the furniture sector (Figure 6.3).

Tables 6.1 and 6.2 provide context for the largest

Figure 6.2 - Occupation estimates 2006-2008 (Source: US Census ACS)

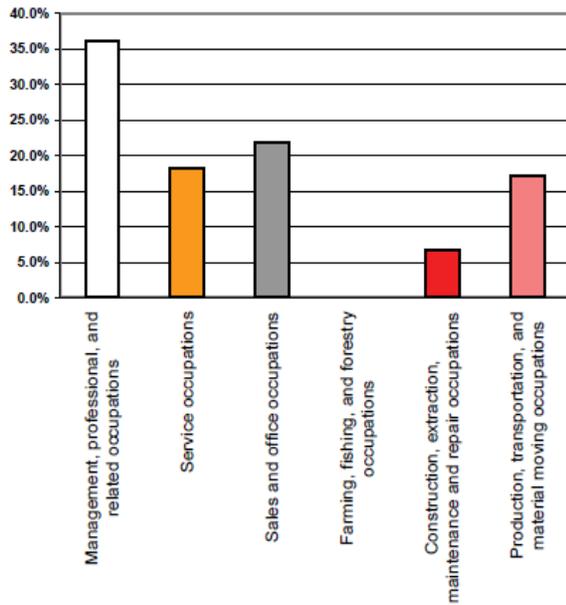
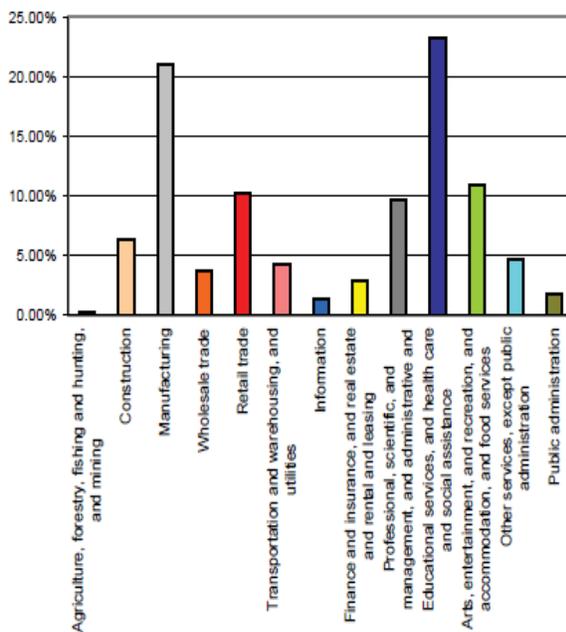


Figure 6.3 - Employment by industry estimates 2006-2008 (Source: US Census ACS)



employers in the region. Specific data is not available for the City of Hickory, but regional employment provides a representative picture of what types of work is available to Hickory residents.

In Catawba County, unemployment rates have increased from 7.1 percent reported in June 2008 to 15.2 percent in January 2010. Table 6.4 provides unemployment rate information for all of Catawba County. The high unemployment rates

Table 6.1 - Top 25 employers in Alexander, Burke, Caldwell and Catawba Counties - quarter ending December 31, 2008 (Source: Quarterly Census of Employment and Wages Unit, ESC/LMI Division)

Employer	Industry	Jobs
State of North Carolina	Public admin	1,000+
Catawba Co Schools	Education	1,000+
Burke Co Schools	Education	1,000+
Caldwell Co Schools	Education	1,000+
CommScope	Manufacturing	1,000+
Catawba Valley Medical Center	Health Svcs	1,000+
Frye Reg'l Medical Center	Health Svcs	1,000+
Merchants Distributors	Transportation	1,000+
Corning Cable Systems	Manufacturing	1,000+
County of Catawba	Public admin	1,000+
Wal-Mart	Trade	1,000+
Bernhardt Furniture Co	Manufacturing	1,000+
Alexander Co Schools	Education	500-999
Hickory Springs	Manufacturing	500-999
Broyhill Furniture	Manufacturing	500-999
Century Furniture	Manufacturing	500-999
Turning Point Services	Education	500-999
Caldwell Mem. Hospital	Health Svcs	500-999
CVCC	Education	500-999
Grace Hospital	Health Svcs	500-999
HDM Furniture	Manufacturing	500-999
Valdese Weavers	Manufacturing	500-999
Hickory City Schools	Education	500-999
Caldwell Comm. College	Education	500-999
Thomasville Furniture	Manufacturing	500-999

Table 6.2 - Top 25 employers in Catawba County - All Industries (as of 3rd quarter 2009)(Source: Quarterly Census of Employment and Wages (QCEM) Unit, ESC/LMI Division)

Employer	Industry	Jobs
Catawba Cnty Schools	Education	1,000+
Catawba Valley Med Cntr	Health Svcs	1000+
Frye Reg'l Medical Center	Health Svcs	1000+
Comm Scope Inc.	Manufacturing	1,000+
Corning Cable	Manufacturing	1,000+
County of Catawba	Public Admin	1,000+
Wal-Mart Associates Inc	Trade	1,000+
Hickory Springs Mfg. Co	Manufacturing	500-999
Hickory City Schools	Education	500-999
HDM Furniture	Manufacturing	500-999
Target Stored Div	Trade	500-999
City of Hickory	Public Admin	500-999
CVCC	Education	500-999
Pierre Foods	Manufacturing	500-999
Convergys Custmr Mgmt	Prf & Bus Svcs	500-999
Sherrill Furniture Co	Manufacturing	500-999
Century Furniture LLC	Manufacturing	500-999
Newton Conover Schools	Education	500-999
McCreary Modern Inc	Manufacturing	500-999
Cargo Transporters Inc	Transportation	500-999
Ethan Allan Operations	Manufacturing	500-999
Draka Comteq	Manufacturing	250-499
Institution Food House	Trade	250-499
Bassett Furniture	Manufacturing	250-499
U S Postal Service	Trade, Trans	250-499

are clear indicators of an uncertain and transitional economy; however, multiple economic strengths have been identified and industry located throughout the region has seen numerous positive changes recently.

Trends

The Western Piedmont Council of Governments recently prepared some trend studies for the Greater Hickory area that provide statistics about the current economic climate in the region,

Table 6.3 - Businesses by category in Catawba County - quarter ending September 30, 2009 (Source: NAICS Employment and Wages, Quarterly Census of Employment and Wages (QCEW) Unit, ESC/LMI Division)

	No. of Business Units
Total all industries	4,431
Natural resource and mining	23
Construction	425
Manufacturing	464
Trade, transportation & utilities	1,147
Information	43
Financial activities	399
Professional and business services	606
Education and health services	444
Leisure and hospitality	380
Other services	289
Public administration	46
Unclassified	165

namely that the region continues to experience sharp decreases in employment - with the biggest decrease in manufacturing. Across the spectrum of manufacturing, the biggest losses were in furniture and apparel in the MSA and Catawba County. Over the 2000 to 2008 period, the Western Piedmont Council of Governments study indicates an employment loss of over 31,000 jobs within the Hickory MSA. Figure 6.3 depicts second quarter employment in the Hickory MSA between the years of 2000 and 2008 and Figures 6.4 and 6.5 show employment distribution and job losses by sector, respectively.

Unemployment rates within the City of Hickory have doubled in a very short time. The recent fluctuation provides no indications of what may occur in the future. The data also indicated that there was a decrease in the population having higher educational attainment and specific training. The data indicate that this population segment is leaving the area to find employment meeting career objectives. This pattern may abate, but if employment opportunities are not developed, residents may choose to leave the region to meet employment needs and career goals.

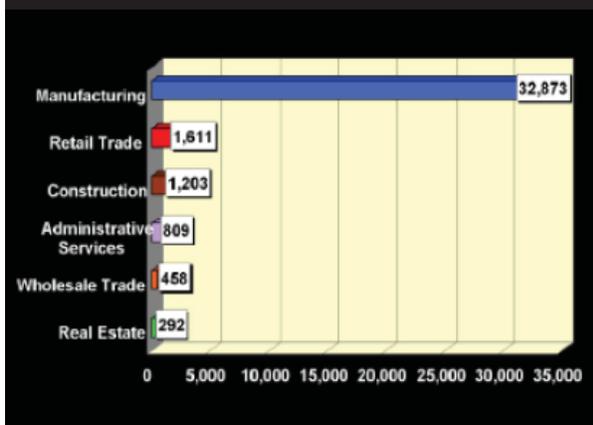
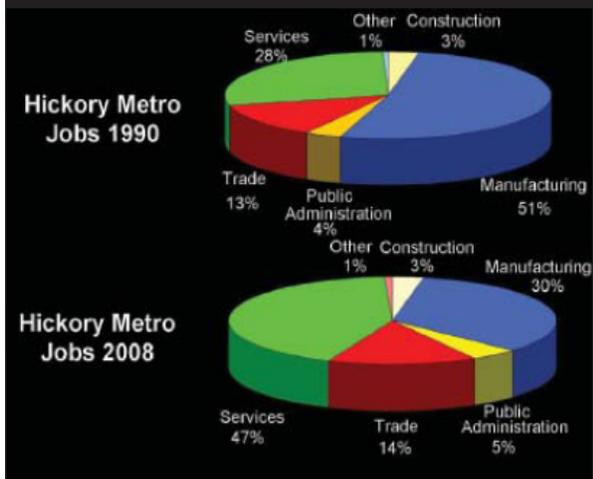
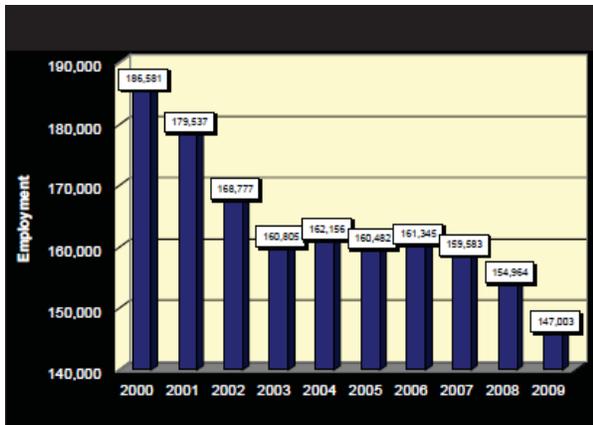


Figure 6.4 (top) - Hickory MSA employment, second quarter 2000-2009

Figure 6.5 (middle) - Hickory MSA employment distribution, 1990-2008

Figure 6.6 (bottom) - Hickory MSA job losses by sector, second quarter 2000-2008

(Sources: Western Piedmont Council of Governments, North Carolina Employment Security Commission, and US Census)

Table 6.4 - Hickory's civilian labor force unemployment estimates, 2002-2009 (Source: North Carolina Employment Security Commission/WPCOG)

Year	Annual	January	June
2009		10.6%	12.8%
2008	6.3%		
2007	4.9%		
2006	4.5%		
2005	5.2%		
2004	7.8%		
2003	9.4%		
2002	9.9%		

The number of people at or below the poverty level increased by 33 percent between 2000 and 2007. In 2008, 14.6 percent of all Hickory residents were living in poverty.

Foreclosures have increased but are now holding steady at approximately 1,750 to 1,950 cases per year between 2003 and 2008 within the MSA. Catawba County has seen a similar pattern of high foreclosures, with approximately 750-850 per year between 2000 and 2008. By the end of 2009 foreclosures in the county had risen slightly to 886.

As of March 2010, RealtyTrac found that an average one in every 1,867 housing units located in Hickory received a foreclosure filing in 2010. County wide this figure is one in every 1,469.

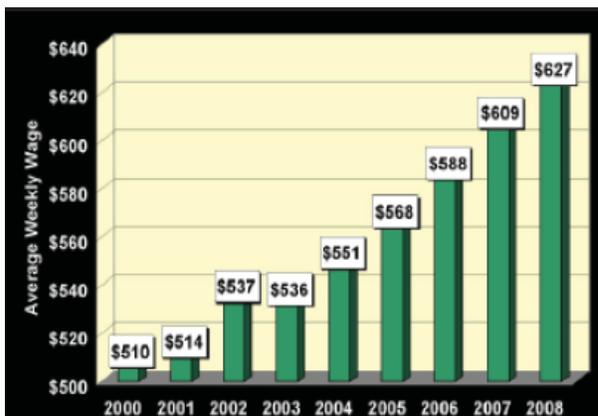


Figure 6.7 - Hickory MSA average weekly wage, second quarter 2000-2008 (Source: Western Piedmont Council of Governments, North Carolina Employment Security Commission, and US Census)



Figure 6.8 - Even with the downturn in the manufacturing economy as a whole, many of Hickory's furniture manufacturers continue to be competitive. (Image source: City of Hickory)

While trends indicate that foreclosure filings have been on the rise over the past six months, RealtyTrac documented only a total of 80 foreclosures in Hickory between October 2009 and March 2010.

The Hickory MSA has a lower-than-average educational attainment, with the MSA ranked last out of 14 MSAs in the state for high school and bachelor's degrees or higher.

Regional Strengths

In 2005 *Southern Business and Development* ranked the Hickory Metro area 3rd in its Small Market category for Top Deals and Hot Markets and in 2008 ranked Catawba County the 20th top Mid-Market in the South.

An expedited development approvals process is in place to help relocate businesses to Hickory and

Catawba County, finding new ways to diversify the regional economic base. With increased focus on non-manufacturing industries, enhanced services to existing industries, proximity to major transportation arteries, and significant recent announcements, the metropolitan area continues to strengthen its pro-business position.

Hickory's location at the center of the region's retail shopping, entertainment, healthcare, and cultural life generates more than \$4 billion in annual retail sales. The region has maintained its reputation as a source for fine furniture, with much available in the Hickory Furniture Mart and the Catawba Furniture Mall.

Education and technical training continues to be a high priority for the Hickory region. Catawba Valley Community College (CVCC) is experiencing record enrollment, and Appalachian State University, Lenoir-Rhyne University and Catawba Valley Community College have become partners to offer quality graduate and undergraduate coursework, non-credit certificate courses, research and specialized workforce training.

The Appalachian State University Greater Hickory Partnership provides the Hickory area with strong economic development opportunities by aiding in recruitment and industry retention while, at the same time, offering students and workers with a unique collaborative learning experience. Other educational initiatives and developments include CVCC's Center for Emerging Manufacturing Solutions, North Carolina Center for Engineering Technologies, Center at Hickory, and Lenoir-Rhyne University's transition from a college to a university.

The Ensure Classic (a PGA Tour Champions' Tour Event) - formerly the Greater Hickory Classic - occurs annually at Rock Barn Golf and Spa, one of the county's six golf courses, continues to help the regional economy. *Golf Digest* ranked the Hickory-Morganton-Lenoir MSA as number 2 in North Carolina of their 2005 Best Places to Play, and 55th out of 330 MSA's in the country.

Economic Successes

Recent economic successes, as observed by the Catawba County Economic Development Corporation (EDC), for Hickory and Catawba County include the development of the Fairgrove Business Park - which has spaces occupied by FedEx Ground, FedEx Freight, Unifour Hardscape, and Tarheel Paper. Other successes include the diversification of the manufacturing base over the last five years as indicated by the entrance of the following businesses:

Fill-Pac (cleaning products)

Baker Furniture (relocation of HQ from Grand Rapids, MI and consolidated distribution)

Profile Products (landscaping products)

Tigra USA (assembly & distribution)

Turbotec (metal working)

Convergys (customer service center)

Fiserv (customer service and back office support center)

FedEx Ground and Freight (distribution)

Stealth Laboratories (security electronics)

In addition, CommScope has continued as a mainstay within the fiber optic cable industry. They are listed in the Fortune 1,000, and are approaching Fortune 500 status with the purchase of Andrew Communications.

Further diversification has occurred along the medical corridor (Tate Boulevard) that links Frye Regional Medical Center and Catawba Valley Medical Center. The following medical related businesses have emerged in the last five years:

Tate Medical Commons

Piedmont Cardiology

Moss Medical & Professional Building

Northwestern Carolina Oncology

Graystone Ophthalmology



Figure 6.9 - Hickory's education sector is flourishing. (Image source: Studio Cascade, Inc.)

Chancellor Health Services

VA Clinic

Piedmont Oncology

1900 Tate

Catawba Valley Medical Center expansion

Need

There is a diverse business community within the City of Hickory that contributes to the economy and the tax base, but the city and region are in the midst of an economic downturn that is and will continue to be a challenge to government and business. The region will need to strengthen its job base, and determine how to provide services and amenities that residents and businesses desire.

Economic Development Programs

The City’s primary economic development goal is to foster economic growth, job creation and quality of life through attracting and retaining diverse business and industry; providing resources to promote small business development; encouraging tourism, and supporting community revitalization. To this end, the City focuses on collaborating with existing and new businesses in the development process. The City also works with outside agencies including the Catawba County Economic Development Corporation, the Catawba County Chamber of Commerce, the Western Piedmont Council of Governments, Duke Energy, the Charlotte Regional Partnership, Advantage West, the Hickory Downtown Development Association, the Hickory-Conover Tourism Development Authority, Greenway Transit, and surrounding local governments to promote balanced growth and job creation.

The City’s economic development programs aim to promote diversified economic development, encourage growth in the property tax base, improve recruitment of business and industry, enhance job creation, and continue to encourage Hickory’s ability to function as the hub of the greater metropolitan area. The following provides an overview of the programs and resources provided by the City of Hickory and its economic development partners.

Economic (Re)Development Initiatives

The City started an economic development initiative in 2008 called “Operation No-Vacancy” to proactively attract reinvestment in distressed commercial and industrial corridors. To encourage new and existing businesses to locate in vacant and underutilized buildings within six target redevelopment zones, the City has:

- Developed a vacant building inventory tool*
- Designated a commercial revitalization area*
- Created a vacant building revitalization grant program*

Unified existing redevelopment programs

The City has also been proactive in assessing brownfield sites within the City’s Community-Wide Brownfields Initiative, funded through a grant from the US Environmental Protection Agency (EPA).

Incentive Programs

The City of Hickory provides economic development assistance and has developed the Operation No-Vacancy initiative, as adopted in June of 2008. Grants are available while the unemployment rate is greater than five percent. This assistance is meant to help diversify economic development, promote adaptive reuse of vacant and underutilized buildings, and to support Hickory as the hub of the larger metropolitan area.

Other incentives available for new and expanding businesses have been summarized by the Catawba County Economic Development Corporation, and on the EDC’s website (www.catawbaedc.org).

Assistance to Business

North Carolina provides all qualified companies with financial programs and advantages that lower the cost of doing business, thus improving corporate bottom lines.

The Commerce Finance Center (CFC) provides a “one-stop” financial center to which relocating companies and existing employers may receive full listing and assistance regarding all financing alternatives available in North Carolina.

Incentives to Qualifying Businesses

Article 3J Credits

Article 3J provides two types of tax credits to eligible taxpayers that undertake qualifying activities in North Carolina.

Credit for Creating Jobs

Eligible taxpayers that meet a minimum threshold of new full-time jobs created during the taxable year may claim a credit for each new job created. The credit is taken in equal installments over four years following the year the jobs are created. The

job threshold and the credit amount per job are determined by the tier designation of the county in which the jobs are created. Currently for Catawba County, a minimum of 5 jobs must be created paying at or above the wage standard of \$592/week (or \$14.80/hr) to qualify for tax credits equaling \$1,000 per new job created in the Urban Progress Zone. Additional incentives include a 7% credit for investing in machinery and equipment, with a \$0 threshold.

Credit for Investing in Business Property

Eligible taxpayers may claim a credit based on a percentage of the cost of capitalized tangible personal property that is placed in service during the taxable year, in excess of an applicable threshold. This credit is taken in equal installments over four years, beginning the year after the property is first placed in service. The current threshold for Catawba County is \$1 million and the credit percentage is 5%.

Industrial Revenue Bonds

Industrial Revenue Bonds (IRB's) or Industrial Development Bonds may be used by companies engaged in manufacturing for the acquisition of real estate, facility construction, and/or equipment purchase. IRB's fall under three issuance types: Tax Exempt, Taxable, and Pollution Control/Solid Waste Disposal bonds. Regulations governing bond issuance are a combination of Federal regulations and North Carolina statutes. Population determines the amount each state may issue annually.

Business Energy Loans

These loans may be used by business for facilities or projects that demonstrate energy efficiency or the use of renewable energy resources resulting in energy cost savings.

Industrial Access/Road Access Fund

Administered by the NC Department of Transportation, this program provides funds for the construction of roads to provide access to new/expanded industrial facilities.



Figure 6.10 - Warehouses along the rail corridor, many of which have become vacant, can present opportunity for revitalization, provided new uses can fit into the older spaces. (Image source: City of Hickory)

The Rail Industrial Access Fund Program

This program provides grant funding to aid in financing the cost of constructing or rehabilitating railroad access tracks required by a new or expanded industry, which will result in a significant number of new jobs or capital investment.

Industrial Training

North Carolina's Community College System provides approved training for new employees at no cost to the participant company. This is widely considered the top incentive offered by North Carolina and is a model program nationally. Funding is provided from a statewide pool and does not come from the regular operating budget at Catawba Valley Community College.

Plan Concept

The planning process focused on land use and transportation issues, but economic development played an active part in the community discussion. Hickory's economic challenges were a primary reason for this plan's updating, and concerns about the region's future influenced conversations on all elements of the plan.

The community's heightened awareness of Hickory's economic condition, its vulnerabilities



Figure 6.11 - The City's brownfield assessment work has met with some acceptance by local property owners, such as with the Hollar Hosiery site in east Hickory. (Image source: Studio Cascade, Inc.)

and its strengths increased focus on the quality of the community's neighborhoods, the importance of its skilled and educated workforce, and the legacy of industry that can be a springboard into a more prosperous future. It was this context that created the goals and policies included in this chapter.

Hickory is a complex system, with social, economic, cultural and racial diversity growing even greater with time. The complexity of its social makeup underscores the concept that an economic boom in a single sector will not serve the entire community. Economic development policies and strategies must facilitate an economy that is as broad and diverse as the population that make up Hickory, ensuring that a rising tide in the future really does "lift all boats."

Several economic development concepts became favored parts of the discussion, each of which motivated the goals incorporated here.

Hickory was a manufacturing center, and much of the community's prosperity grew from the success of that sector. When that sector faltered, however, the community felt a large impact. While manufacturing will probably continue to be a significant part of the local and regional economy, Hickory must find ways to diversify its economic base so the community is more resilient to market shifts.

Quality of life is also an important consideration. Residents, particularly those who have the potential to restore, generate and sustain economic vitality in the community, appreciate the environment that Hickory offers. Maintaining a high quality of life will help retain the community's entrepreneurs and businesspeople. Part of that is working to make the community's corridors and commercial districts more attractive and functional.

As part of this, the planning concept also directs investment inward, strengthening infrastructure and utilities within the community's core areas and promoting the development of infill housing, helping Hickory create a more compact and more fiscally-sustainable development pattern. While the community's low-density housing types will certainly continue and be an important component of the town's economic profile, this plan encourages new population to be accommodated in a more land-efficient pattern.

Hickory is a central place for commerce, attracting residents from all over the region to shop, dine, be entertained and work. This is a characteristic that should be retained, and the community recognizes it. Two of this plan's goals target Hickory's regional significance, identifying the need to retain the position of regional commerce center and regional cultural center. Hickory is positioned to serve a wide range of needs, for both its residents and the residents of other areas.

As this most recent economic twist has shown, local provision of higher education is critical. Lenoir-Rhyne University, Hickory Higher Education Center and others have experienced growing enrollment. The community believes that economic prosperity relies on the creation of new

markets and innovation in old ones. Having a local, educated population is a key ingredient to both.

Economic Development Goals

The following goals translate the plan concept into long-range goals for Hickory's economic development, spawning and programs to help the community prosper.

Goal 1: Grow the economy based on diverse industries and commerce

While Hickory grew its wealth based on a manufacturing economy, recent years have shown that a regional economy based on a single industry is vulnerable to political and market changes. While manufacturing may remain important, the community should also diversify and take advantage of its geographical and economic opportunities.

Goal 2: Reconfigure the existing pattern of strip development commercial corridors to enliven neighborhood centers

Hickory's commercial corridors present a great deal of potential for redevelopment and reinvestment. Hundreds of acres along the corridors are either vacant or underused, indicating an oversupply of undifferentiated commercial and industrial land. By reconfiguring these corridors to attract a mix of uses, Hickory can reinvigorate its neighborhoods and its neighborhood commercial districts.

Goal 3: Support development of regional commercial centers

Hickory is the center for a large regional population. Residents of Burke, Caldwell, Alexander and Catawba counties consider Hickory

the place for shopping and commerce. This is an important element of Hickory's identity, and much of the non-residential investment in Hickory depends on Hickory's position to serve the greater Hickory metro population.

Goal 4: Support Hickory as the regional center for cultural events

As with its position as a regional center of commerce, Hickory is also a regional center for the arts. This is a cultural component that enriches Hickory's quality of life, but it is also an important economic development component, as well. Visitors come to Hickory to shop and to go to school. They also come to Hickory for cultural and artistic engagement.

Goal 5: Encourage educational achievement

Hickory's shifting economy has attracted more students than ever to its institutions for higher education. Residents wish to remain in Hickory, and they're going to college and technical schools to help them either compete for or create jobs in this community. By encouraging local education attainment, Hickory can also encourage local entrepreneurship and an increasingly diverse and resilient local economy.

Goal 6: Develop Entrepreneurial Initiatives

Facilitate collaboration between the community's institutions for higher learning, local businesses and property owners to establish entrepreneurial initiatives to help start and grow locally-based businesses. These initiatives can take many forms, such as an incubator, with low rents and easy lease terms for small businesses, tuition rebates for business people looking to make that entrepreneurial leap, or advisory boards and committees like the recently formed Business Development Committee.

	Goal		Policy
1	Grow the economy based on diverse industries and commerce	A	Encourage strategic economic development planning at a regional scale
		B	Promote economic sustainability through a variety of development opportunities for large and small industrial business facilities
		C	Promote existing industrial spaces for reuse and support redevelopment of vacant buildings and remodels
		D	Create a sustainable economic mix of retail, institutional, and service establishments to address city and regional demand
		E	Include a mix of retail and service businesses in mixed use centers
		F	Promote economic development with neighborhood-serving business
		G	Attract grocery stores as new development to anchor and help in the redevelopment of existing commercial/ industrial corridors
		H	Support airport planning efforts to develop a strategic and business plan
2	Reconfigure the existing pattern of strip development commercial corridors to enliven neighborhood centers	A	Locate commercial areas at intersections of major thoroughfares to provide adequate traffic access and volumes to help with the long-term viability of retail establishments
		B	Focus mid-block corridor development on office uses, live-work options with residential and other supporting uses above, and high density housing with open space buffers along road corridors
		C	Locate parking in the rear of buildings and on the street
		D	Encourage unique identities for corridors in the city consistent with surrounding neighborhood character
3	Support development of regional commercial centers	A	Promote a healthy pattern of growth with the downtown as the City's primary center
		B	Locate regional centers where they can serve multiple neighborhoods conveniently
		C	Allow "big-box" stores in regional districts to reduce cross-town travel, provided they use existing buildings or are designed to blend with the surrounding community
		D	Provide internal vehicle circulation and pedestrian circulation to reduce automobile trips within and around regional and highway commercial areas
		E	Limit curb cuts for pedestrian safety and focused access to commercial centers

4	Support Hickory as the regional center for cultural events	A	Support innovative ideas for the expansion of art and culture programs
		B	Encourage the growth of the SALT block as a regional destination
		C	Support existing cultural activities with advertising and community outreach
		D	Identify areas that can contribute to the expansion or development of events and cultural opportunities
5	Encourage educational achievement	A	Support school district and educational institutions in the expansion of programs
		B	Ensure that educational activities are allowed as a land use throughout the city
		C	Consider life-long learning opportunities in city programming
		D	Collaborate and share facilities for continuing education programs
6	Develop entrepreneurial initiatives	A	Encourage cooperation between the community's institutions to help facilitate small business development and capacity building.

Public Facilities

Introduction

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on Hickory's public facilities, including Water System, Wastewater System, Stormwater, Libraries, Recreation, Fire Protection, Police and other essential services.

Led by the plan's vision and directives, the goals and policies in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

This chapter does not replace current or future Departmental planning efforts.

Existing Conditions

The City of Hickory provides a wide range of municipal public services including but not limited to- Water System, Wastewater System, Stormwater within public rights of way, Libraries, Recreation, Fire Protection, and Police. Public Utilities are provided throughout the City of Hickory and the surrounding unincorporated areas as well as other Municipalities either through ownership or contract arrangements.

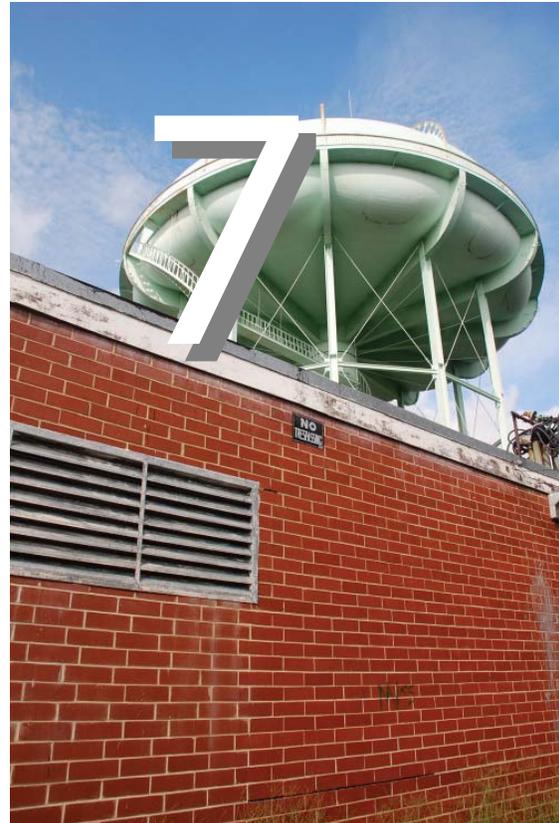


Figure 7.1 - Much of Hickory's infrastructure was developed and designed to serve high-demand industrial clients. (Image source: Studio Cascade, Inc.)

Water System

Source

The City of Hickory's water source is Lake Hickory/ Catawba River. This source water is projected to meet the needs for customers of the system for the current and planned future needs. The average daily withdrawal from this source water is approximately 13 MGD, currently.

Water withdrawn from Lake Hickory/ Catawba River undergoes conventional treatment and finished water is pumped to onsite Clear Wells for storage before it is distributed to the System. The City of Hickory Water Treatment Facility has approximately 20 hours of Finished water storage including onsite Clear Wells and



Figure 7.2 - The City operates water and wastewater utilities, serving an area much larger than the city limits and extra-territorial jurisdiction. (Image source: City of Hickory.)

Finished Water Storage tanks in the distribution system.

The watershed for Lake Hickory/Catawba River in the general area of the Water Treatment Facility is classified as WS-IV watershed by the NC Department of Environment and Natural Resources. Overall water quality in Lake Hickory/Catawba River is considered good. The 2010 Catawba River Basin Plan Chain of Lakes listed Lake Hickory with no exceedences and fully supporting.

Treatment

The City of Hickory's Water Treatment Plant is a regional water supply facility, providing potable drinking water to three counties and manages three purchased water systems extending from Icard to Claremont and from Northern Alexander County to the Sherrill's Ford area of Catawba County. Hickory supplies water to the towns of Maiden, Brookford, Catawba, Conover, Claremont and emergency connections for Mooresville and Long View. The City of Hickory Water Treatment Facility has a permitted capacity of 32 MGD. The facility is a conventional treatment process with adequate capacity remaining for the current and planned future. The facility is expandable on the same property.

Distribution

The Water Distribution System consists of approximately 890 miles of water lines of varying sizes from 2-inch to 36-inch. The customer base of Hickory's Distribution System is approximately 24,200 residential customers and 3,250 commercial connections for a total of 27,450 direct Hickory customers. The City serves water to other municipalities through Master Meter arrangements, which provide service to other distribution systems with a multitude of customers. The estimated customer base for the overall combined regional Hickory Distribution System is 95,000 population.

Projections

Population of the service area is predicted to grow over the next 40-year planning period. Table 7.1 shows the projected growth in water service demand for the service area.

Conservation

The City of Hickory has a Water Shortage Response Plan in place, which is enacted during times of drought. The City of Hickory participates in a number of Water Resource planning groups, which strive to plan for the proper use of water from the basin and explore water use efficiencies to share with customers. The City of Hickory is part of an organization called the Catawba-Watree Water Management Group, which works cohesively during times of drought to share the resource effectively and manage drought events. This group includes major water providers and Duke Energy.

Needs

The City of Hickory has aging facilities and infrastructure that is in need of continued maintenance and repair and must continue to plan for growth in the system due to population/industrial increases. The City has identified the need for additional water storage in the Distribution System, continued replacement of aging infrastructure, replacement of water meters to improve efficiency of service delivery and an additional intake site has been purchased for future development.

Table 7.1 - Water demand and availability (in millions of gallons per day)
 (Source: Hickory Local Water Supply Reporting Form, Section 5: System Planning, 2007.)

	2007	2010	2020	2030	2040	2050
Service Area Demand	12.31	12.45	13.65	14.95	16.4	17.99
Sales	5.75	7.8	7.8	9.0	9.0	9.0
Total Demand	18.06	20.25	21.45	23.95	25.4	26.99
Total Supply	32	32	32	32	32	32
Percent Used	56.4%	63.3%	67.0%	74.8%	79.4%	84.3%

Wastewater System

Wastewater Collection System

The Wastewater Collection System consists of approximately 500 miles of gravity sanitary sewer lines of varying sizes from 4-inch to 42-inch. The customer base of the Hickory Collection System is approximately 14,250 customers. The City provides sanitary sewer service to specific areas in the unincorporated areas of Catawba County, Alexander County and well as the towns of Brookford and Catawba. The predominant sizes of Collections System lines are 8-inch and 12-inch with larger lines acting as trunk sewers to carry flow to the Wastewater Treatment Facilities.

Treatment

The City of Hickory owns, operates and maintains three Municipal Wastewater Treatment Facilities. The Northeast WWTP and the Henry Fork WWTP are both located in the City of Hickory to provide service to customers in the City of Hickory Municipal Service Area. The Hickory-Catawba WWTP is located in the Town of Catawba and provides wastewater service to the Town of Catawba and Sherrill's Ford service areas.

The Northeast WWTP is a 6 MGD Activated Sludge facility that is currently at approximately 50% capacity utilization. This facility provides for treatment services to the CBD of Hickory, Northeast Hickory, Northwest Hickory and Alexander County. This facility is in transition currently and is being upgraded to a new Oxidation Ditch facility to improve quality of effluent and operating efficiency, however no

additional treatment capacity is being constructed at this time.

The Henry Fork WWTP is a 9 MGD Biological Nutrient Removal Activated Sludge facility that is currently at approximately 30% capacity utilization. This facility provides for treatment services to Southeast Hickory, Southwest Hickory, Town of Long View, Town of Brookford, Town of Hildebran and a portion of Eastern Burke County.

The Hickory-Catawba WWTP is a 0.225 MGD Extended Air facility that is currently at approximately 15% capacity utilization. This facility provides for treatment services to the Town of Catawba and the Sherrill's Ford Area. This facility is in transition currently and is being designed and permitted to provide for 1.5 MGD capacity Oxidation Ditch facility. This upgrade and expansion will replace the current 50-year-old facility and allow for wastewater service provision in the identified growth area of Sherrill's Ford and around the Town of Catawba. Catawba County is currently designing and installing sanitary sewer service to specific areas of the unincorporated area to allow for growth.

The City of Hickory is the lead agent for a Regional Compost Facility, which treats Bio-Solids produced by Regional WWTP's. This facility is managed by a Consortium of Hickory, City of Conover and Catawba County. Veolia Water Southwest is the contract operator for this facility.

Needs

A need for upgrades to the Northeast WWTP and Hickory-Catawba WWTP were identified in mid-2000 and work is progressing on both facilities to



Figure 7.3 - City wastewater capacity far exceeds that required to serve current and expected demand, allowing room for additional growth beyond the current planning period. (Image source: Studio Cascade, Inc.)

allow for improved treatment quality and capacity. The City of Hickory has a capital replacement plan that provides for the replacement of aging infrastructure as a means of ensuring continuous, reliable service provision, improved efficiency of operation or expansion of capacity to allow for growth. One such project that has recently been completed is the replacement of 14,100-lft of 21-inch Terra Cotta sanitary sewer that was installed in the early 1900's that is being upgraded to 24-inch PVC sanitary sewer line to improve efficiency with the elimination of potential inflow-infiltration sources and gaining some capacity for growth potential. This capital improvement plan is a continuously evolving plan that addresses issues, be they growth or necessity, as appropriate.

Stormwater

Lake Hickory is the City's source of drinking water, and the lake, creeks and streams leading to it are among Hickory's greatest environmental and recreational resources. Hickory has developed a Stormwater Management Program to help protect and preserve these assets. Stormwater runoff is a concern because of the high concentration of pollutants found in urban discharges.

Development in urbanized areas substantially increases impervious surfaces - such as streets, driveways, parking lots, rooftops and sidewalks - on which pollutants from human activities settle and remain until a storm washes them untreated into nearby storm drains or streams. In addition to its water quality impacts, increased stormwater runoff may also result in significant drainage problems and potentially hazardous flooding.

Protecting and enhancing the quality of life in Hickory is the ultimate goal for the City's Stormwater Management Program. The Stormwater Management Program Action Plan was facilitated and prepared by JEWELL Engineering Consultants (JEC) and was adopted in June of 2007. That action plan made key recommendation successfully protecting and preserving the natural environment. Those recommendations in order are:

Budget additional resources for NPDES Phase II program requirements

Create a full-time Stormwater Program Manager position

Charter a Hickory Stormwater Advisory Committee (SWAC)

Perform a representative City-wide stormwater services survey

Continue and expand program collaboration with area local governments

Evaluate options to fund the future Municipal Stormwater Program

The complete action plan provides details on the process

and the required steps.

Some of the steps suggested in the action and implementation plan have been implemented by the City or are part of an ongoing process – a Stormwater Advisory Committee (SWAC) was appointed by City Council to assess current and future municipal levels of service and funding for the stormwater program: The SWAC developed a program implementation plan for presentation to the City Council.

There are approximately 40,000 Municipal Separate Storm Sewer System (MS4) components within Hickory. The storm drainage system is separate from the sanitary sewer system; stormwater runoff goes directly into nearby streams and lakes untreated.

The City of Hickory has developed an inventory of the MS4 as a part of its National Pollutant Discharge Elimination System (NPDES) Phase II program requirements. The MS4 is generally comprised of drainage inlets along streets, catch basins of varying types and sizes, and pipes that convey runoff from streets and discharge into the receiving waters.

Need

As is the case with any type of public infrastructure, the MS4 must be maintained, repaired, and replaced over time in order to protect this significant and important public asset. Additional resources should be committed to fund the NPDES Phase II program requirements.

When resources allow, the City should consider development of watershed-based stormwater master plans that would include design for improvements of specific drainage and water quality problem areas, both current and future. And, because Citizens are often most concerned with the “visible” problems caused by unmanaged stormwater runoff – such as land and stream bank erosion, clogged or undersized storm drains backing up water into a street or adjacent properties, increased runoff from nearby properties, and minor or major flooding, it is important that the city continue to make its citizens and property owners aware of state and

7.5



Figure 7.4 - Managing storm water is a challenge, particularly ensuring that urban runoff is treated adequately before it is discharged into the Catawba River or other local streams. (Image source: Studio Cascade, Inc.)

federal regulatory requirements as well as continuing to satisfy needs for other municipal stormwater services.

Libraries

The Hickory Public Library is a department of the City of Hickory and is governed by the City Council. The City of Hickory provides two public libraries within the community’s service area; these libraries provide important benefits to the community. The main branch, Patrick Beaver Memorial Library, is located at 375 3rd Street NE. The Ridgeview Library branch located at 706 1st Street SW opened in 1998. Both Hickory libraries are free of charge to Catawba County residents.

Catawba County Library Facilities are also available

Chapter 7 - Public Facilities

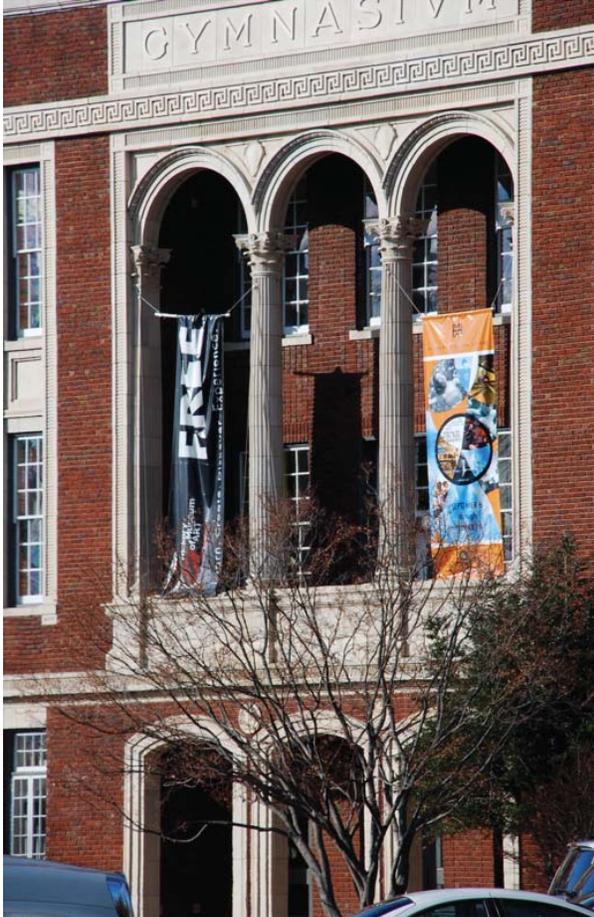


Figure 7.5 - The SALT Block, site of the old Hickory High School, houses the community's library, aquarium, arts center and a variety of other arts and culture-related uses. (Image source: Studio Cascade, Inc.)

in or near the city. The Mountain View branch is located in the city limits while the Springs Road Branch is in the city's extra territorial jurisdiction (ETJ). Other library resources include those located at Catawba Valley Community College as well as the Carl A. Rudisill Library located at Lenoir-Rhyne University.

Need

While Hickory's libraries are governed by City Council, needs are addressed by an Advisory Board appointed by City Council. Board members serve as the citizens' voice with the Library Administration and City Council. Library Advisory Board meetings are held on the second Thursday of even-numbered months in the Patrick Beaver Memorial Library meeting room and are open to

the public.

Recreation and Parks

For information regarding the condition, needs, and plan concept for Hickory's Recreation and Park facilities please refer to chapter 9 of this document - Recreation and Parks.

Fire Service

The City of Hickory earned an Insurance Service Organization (ISO) Class 3 as of March 2005 due to a merger of urban and rural areas (Viewmont and Fairbrook). The City of Hickory Fire Department and the Hickory Rural District provide fire protection for a 43 square miles area. The City of Hickory has seven fire stations: Station 1 (Earl G. Moser - Main Station), Station 2 (Highland Station), Station 3 (West Hickory Station), Station 4 (Airport Station), Station 5 (Fairbrook Station), and Station 6 (Viewmont Station) and Station 7 (Larson Moore Station).

The Department intends to develop a master plan and develop standards for response and performance as part of national accreditation through the Commission on Fire Accreditation International Center for Public Safety Excellence.

Need

In order to maintain adequate service to the city, existing facilities and fire hydrant distribution system must match any growth occurring within fire district limits and as the district limits expand. In addition, the Fire Department is seeking national accreditation in order that they are capable of fully exploring their mission and purpose, evaluate organizational goals and review the effectiveness and efficiency of the organization.

Police Service

The City of Hickory's Police Department is a full service municipal police agency with its headquarters located in the downtown area. To provide more 24-hour presence in certain locations

Police and Community Together (PACT) has established a community-policing program. Five PACT areas have been established within the City of Hickory: Adam (northwest area), Baker (northeast area), Charles (southeast area), David (Ridgeview area), and Edward (southwest area and some portions of the northwest area). Another group is the Special Operations Team (SOT) to respond to critical incidents such as hostage or other high-risk situations.

Schools

There are four school systems that serve the planning area – Hickory Public Schools, as well as Catawba, Caldwell, and Burke County School Systems. While listed under the Public Services section of this plan, non of these school systems is governed by the City of Hickory.

The Hickory Public School System had 4,587 students enrolled in 2005-2006 school year. The City System includes nine schools: two high schools – Hickory High and the Hickory Career Arts Magnet School; two middle schools – Northview and Grandview Middle; and five elementary schools – Jenkins Elementary, Longview Elementary, Oakwood Elementary, Southwest Elementary, and Viewmont Elementary.

The Catawba County School System had 17,577 students enrolled in the 2005-2006 school year and includes seven school attendance locations within the City of Hickory: two high schools - St. Stephens High and Fred T Foard High; one middle school – Arndt Middle; and five elementary schools – Clyde Campbell, Mountain View, St. Stephens, Snow Creek, and Webb A. Murray. The County also offers an Extended Day School in the City of Hickory at CVCC. In addition to the public school system, there are several private schools in the city.

Colleges

There are two colleges located within the City of Hickory - Catawba Valley Community College (CVCC) and Lenoir-Rhyne University - and a collaborative center for higher education including



Figure 7.6 - Hickory High School is located in the Viewmont area of town, adjoining what is designated for mixed-use residential and retail development. (Image source: Studio

Appalachian State University’s North Carolina Center for Engineering Technologies and Appalachian State University’s Center at Hickory. The main campus of Catawba Valley Community College is located off Highway 70. Catawba Valley Community College is primarily a technical and vocational school. Lenoir-Rhyne University, located along 7th Avenue NE, recently expanded their degree offerings and made a change from a private liberal arts college to a university.

An agreement was made between Appalachian State University, Catawba Valley Community College, Caldwell Community College and Technical Institute, and Western Piedmont Community College to facilitate expansion of Appalachian’s degree offerings in Hickory and in Caldwell and Burke Counties. The Appalachian State University Greater Hickory Partnership offers the region undergraduate and graduate degree programs, non-credit certificate course, and research and specialized workforce training.

Gas

Piedmont Natural Gas Company supplies natural gas service to Hickory. It operates and maintains extensive gas transmission and distribution lines within the service area.



Figure 7.7 - Duke Energy currently provides Hickory electrical service, with abundant capacity in the face of the community's decline in manufacturing industry. (Image source: Studio Cascade, Inc.)

Electrical

Electrical service is provided throughout the City of Hickory by Duke Energy Corporation.

Hospitals/Medical Facilities

There are two hospitals located in the City of Hickory: Catawba Valley Medical Center (CVMC), a 258-bed regional medical center serving a five-county area, and Frye Regional Medical Center. CVMC is located on Fairgrove Church Road. Frye Regional Medical Center is located on North Center Street.

Plan Concept

The City's public service capacity is sufficient to accommodate the anticipated growth in population over the next 20 years. The challenge will be in bringing those services on line in a manner and on schedule to meet changes in demand as the community's population grows. While this plan anticipates what the community's future population may be and where it will be located, it does not necessarily identify which improvements need to be made at what time to address which need. To some extent that determination must be made on a case-by-case basis, evaluating how individual proposals or changes in circumstance will dictate City response. Even so, this plan presents a framework to support shorter term strategic planning and decision-making.

Several priorities have guided the formation of the plan's goals:

Protect and enhance the quality of life for residents of Hickory.

The ultimate goal for the City of Hickory is to protect and enhance the quality of life of those living in Hickory. Because the type and quality of services provided in urban areas is often associated with quality of life standards, these issues can be addressed by offering quality public safety, recreation and library services, and through the promotion and support of higher education opportunities in addition to other public services, facilities, and utilities.

Improve and protect the quality of Lake Hickory.

Some of these issues can be addressed by continuing to lead and support the coalition of governments in Catawba River Basin to protect Lake Hickory's tributaries; by creating partnerships with other organizations such as Reese Institute, Covekeepers, WaterWatch, Duke Energy, and the Catawba River Study Committee to promote policies and practices which protect Lake Hickory and the Catawba River Basin, improve water quality and provide for water supply; and with the

continued promotion of the “Your Catawba Use it Wisely” conservation program. More directly, the city can meet federal stormwater regulations through the adoption and implementation of a stormwater management plan and through the promotion of stormwater best management practices in addition to supporting Duke Energy’s final agreement on the FERC relicensing process.

Promote economic growth through the pursuit of quality public services, facilities, and utilities.

As the city continues to leverage its regional utilities and pursues agreements with new communities, care should be taken to provide that such promotion and extensions of service will encourage orderly growth consistent with the goals and policies identified within this comprehensive plan.

Seek additional funds for municipal infrastructure.

Like many cities, Hickory has aging facilities and infrastructure that are in need of maintenance and repair as well as areas that need improvement due to growth pressures. Due to the limited resources from which local governments can draw for infrastructure needs and funding shortfalls for water, wastewater, and stormwater improvements at the state level, the City of Hickory should continue to support the North Carolina League of Municipalities in their efforts to seek legislation to provide additional funds for municipal infrastructure, including long term, permanent sources of dedicated revenue, additional local option revenue sources, and state bond packages for infrastructure needs.

Adopt a Stormwater Management Plan

The Stormwater Management Program Action Plan was adopted in June, 2007. That action plan made key recommendation for successfully protecting and preserving the natural environment.

The complete action plan provides details on the process and the required steps. For additional stormwater information refer to the 2007

Stormwater Management Program Action Plan.

Public Facilities Goals

Goal 1: Ensure access to safe, high quality and affordable community services, education and health care options

Hickory’s residents, businesses and institutions must be adequately served with the range of public utilities and facilities provided by the City and others. Hickory’s primary asset is its quality of life, and maintaining high levels of service sustainably, is something the community expects.

Goal 2: Improve efficiency in resource consumption and service provision

Increasing population and increasing economic activity demand increased care in the use and management of natural resources. Water availability is finite. If Hickory intends to serve a larger customer base, it will continue to encourage conservation and to find efficiencies in how it delivers its utility services.

Goal 3: Distribute services and costs equitably

Infrastructure should be available to support urban levels of development throughout Hickory, and it should be available to support development in those areas of the ETJ targeted for growth. However, its costs should be distributed equitably, ensuring that ratepayers assume a fair share of system costs in proportion to their demand.

Goal 4: Encourage service-efficient development

This plan calls for a more compact development style, reconfiguring Hickory’s commercial corridors to emphasize mixed-use commercial centers. By doing this, and by acting to increase overall residential development intensity, Hickory will encourage a land development pattern that is more efficient to serve. By carefully managing Hickory’s urban expansion, water, wastewater,



Figure 7.8 - Upgrading utility services in the community's older, urbanized areas for retail and residential customers will be an important component in the community's revitalization strategies. (Image source: Studio Cascade, Inc.)

services, still more work needs to be done to ensure long-term public health and to position the system to continue as a regional water utility.

parks, transportation and institutional facilities and services can operate more efficiently.

Goal 5: Improve water quality

Lake Hickory is impacted by upstream runoff and its water quality is threatened by increasing levels of nutrients. The City can help improve its water quality by enhancing stormwater controls and continuing to collaborate regionally on stormwater management. Hickory's residents expect to be able to enjoy high-quality, available drinking water, and this goal stresses the resource's importance.

Goal 6: Improve the water delivery system

Hickory's water system has been an operating utility for more than a century. While the utility has been working to upgrade its transmission lines, treatment facility and booster stations to repair leaks, upgrade fire flows and improve provision of

	Goal		Policy
1	Ensure access to safe, high quality and affordable community services, education and health care options	A	Collaborate with hospitals and other medical facilities to ensure medical access is available
		B	Collaborate on land use decisions for school design and placement, considering walking routes to schools and access to surrounding neighborhoods
		C	Provide adequate law enforcement and promote crime prevention through techniques like the Community Watch Program and PACT program
		D	Improve traffic safety in neighborhoods considering sight distance, on-street parking, pavement markings, and speed limit reduction.
		E	Encourage promotion and education for a safer community
		F	Develop and implement school-based bicycle and pedestrian safety education programs through the Hickory Police Department
2	Improve efficiency in resource consumption and service provision	A	Support increased routes and frequency for public transit
		B	Provide education for energy efficiency, water conservation, trash reduction, and recycling options
		C	Develop a relationship with public entities, private groups, and associations to provide shared services and facilities, minimizing duplication
3	Distribute services and costs equitably	A	Consider methods to recoup costs - negotiated solutions like development agreements or special districts - based on a development's proportional share of impact to parks, transportation, public safety, and utilities
4	Encourage service-efficient development	A	Effectively use the existing utility systems, prioritizing development with existing utility and services extensions first (infill development)
		B	Prioritize investment for infrastructure, street lighting, and street improvements to centers and corri-
5	Improve water quality	A	Create a stormwater utility to provide maintenance, management, and education on water issues
		B	Coordinate with other municipalities to develop regional water quality programs
		C	Develop standards and best management practices for managing runoff
6	Improve the water delivery system	A	Construct new water supply lines as looped systems to prevent stagnant water conditions
		B	Manage the water delivery system to keep pace with new development and population growth

Environment

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on Hickory's environment, particularly in terms of natural resources and hazardous conditions.

Led by the plan's vision and directives, the goals and policies in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

Existing Conditions

An overview of natural resource conditions in the Hickory planning area provides one component of the framework for decision-making about future development patterns in the city. Factors such as water quality, air quality, soils, and unique ecological resources should be considered during the planning process.

The few constraints to development in Hickory include topography and flooding. The most significant is topography, which is most pronounced in the northern portion of the city. The effect of steep slopes on development is evident on the development pattern. Housing in this portion of the city is constructed on varying lot sizes to account for slope conditions. The southern portion of



Figure 8.1 - Lake Hickory is a popular recreational resource, but it is also the source of much of the region's drinking water. (Image source: Studio Cascade, Inc.)

Hickory also has some areas of steep slopes that will affect development patterns and increase construction costs. Flood prone areas are identified along the many drainages of Lake Hickory and the Henry Fork River, and development is regulated along these floodplains by the city's Flood Damage Prevention Ordinance. Wetlands are a constraint to development, however at this time there are few locations where wetlands are known to exist.

Ecological Resources

The historic development patterns in the northern portions of Hickory have eliminated many opportunities for large-scale conservation of natural resources although there are numerous parks and trails developed

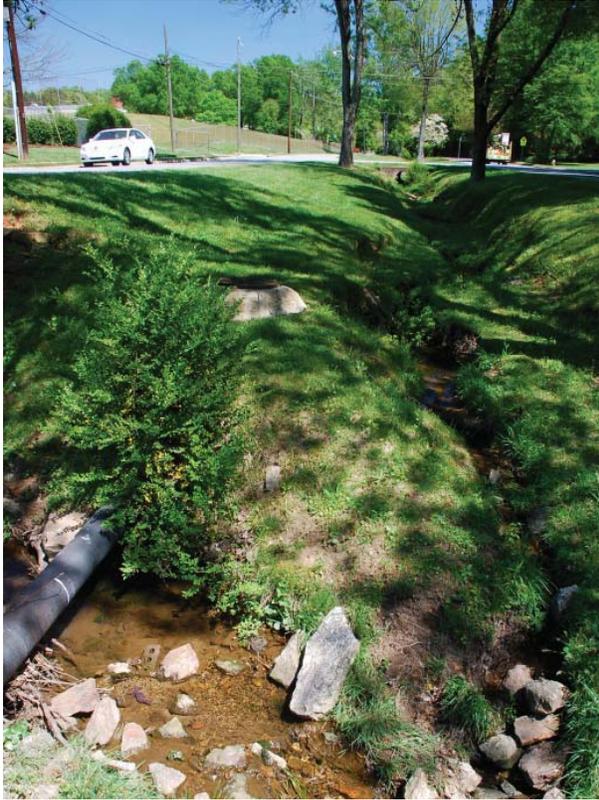


Figure 8.2 - Hickory has a network of small creeks and streams, each contributing to the community's ability to coexist with the area's ecosystems and manage fluctuations in nature. (Image source: Studio Cascade, Inc.)

in this area. The southern portion of the city planning area includes excellent natural resource areas. The Henry Fork, Jacob Fork, and South Fork Catawba River watershed form an interconnected basin for natural resource conservation. Another basin is the Clark Creek watershed. These watersheds include high-quality ecological resources, floodplains, steep slopes and woodlands that could be interconnected to provide a regional environmental and recreational resource.

Air Quality

In May 1999, the Catawba Air Quality Committee (CAQC) was formed and began meeting on a monthly basis. Catawba County and the City of Hickory took the lead in educating its citizens about air quality. The CAQC was a very active group dedicated to the importance of air quality issues in the county. The CAQC evolved into the Unifour Air Quality Committee (UAQC) after ten

local governments (representing a larger geographical area) in the region signed the Early Action Compact in December 2002 to address ozone non-attainment. The Western Piedmont Council of Governments (WPCOG) has served as the lead agency for the CAQC and the Unifour Air Quality Committee (UAQC), working together to address air quality issues and to achieve clean air.

Each local government has either begun working on an air quality plan for their area, or have completed such a plan. Catawba County, Caldwell County and the City of Hickory have taken the lead in preparing air quality plans, and are offering examples to the other local governments. The WPCOG is assisting in plan development and other aspects of air quality planning as needed. These air quality plans are important tools leading to steps reducing ozone production. The plans are geared towards what employers, employees and citizens can do individually to help reduce ozone levels in the air.

A list of 14 control measures were adopted by the UAQC group to be used as a guide for all Early Action participants as ways to reduce ozone production. The list contains strategies adopted by participating members to help guarantee clean air. Hickory adopted an Air Quality Action Plan in 2004.

Flood Prone Areas

Flood-prone areas expose humans and their possessions to potential harm. The City of Hickory's flood-prone areas are associated with the Catawba River, the Henry Fork River, and their tributaries.

The City of Hickory participates in the National Flood Insurance Program, which includes floodplain management and land use controls within the floodway and floodway fringe.

Continued growth within flood areas could increase the potential for flooding along the city's waterways. Additional development could also add impervious surface in the form of roads, structures and parking lots, thus increasing both the volume and rate of surface water runoff and the potential

for flooding.

Watershed Protection Districts

There are two areas designated as Water Protection Districts in Hickory. These areas have two components – “critical areas” and “protected areas.” Requirements differ depending on where in the district a property is located. Critical areas include property adjacent to Lake Hickory west of the NC 127 bridge, extending approximately one-half mile from the lake at approximately the ridgeline of the watershed. The other areas included are portions of the Hickory Regional Planning Area located in the Jacob’s Fork Water Supply Watershed. Protected areas extend five miles upstream of the critical areas, draining to the portions of Lake Hickory west of the NC 127 bridge or to the ridgeline of the watershed - whichever comes first - and also includes portions of the Hickory Regional Planning Area in the Jacobs Fork Water Supply Watershed.

A minimum 100-foot vegetative buffer is required for all new high-density development activities and a minimum 30-foot vegetative buffer is required for all new low-density development activities along all indicated perennial waters within the Watershed Protection District. New development is not permitted within the buffer except for artificial stream bank or shoreline stabilization, water dependent structures and public or private projects such as road crossings or greenways when no practical alternatives exist. Buffer area activity should limit impervious areas, direct runoff away from surface waters and maximize best management practices.

Henry River Conservation District

The Henry River Conservation district attempts to limit the impact of development to the Henry River and its perennial and intermittent streams. The focus is on impacts including increased storm water runoff from development, altered hydrographic conditions, nutrient loading and pesticide contamination from point and non-point sources.

The district is generally bounded by the City’s municipal boundary line on the north, US 321 on the west, Sandy Ford Road on the south, and Startown Road on the east. Land within this area must annex to the city and be subject to the Henry River Conservation District regulations to receive water or sewer service.

Techniques to minimize impacts include the requirement of low-impact development techniques in combination with traditional stormwater control for control of post development increase in stormwater. Water quality management plans and a two-tier buffer area are also required for all new development, along with protection of flood plains.

Open Space

Open Space is a way to conserve natural areas within a growing urban area while at the same time providing outdoor recreation opportunities. These opportunities could include such activities as walking, cycling, hiking, picnicking, camping, hunting and fishing. In addition to conservation of existing natural areas, rehabilitation of existing man-made areas can be reclaimed to provide open space. These open spaces provide a type of “oasis” in areas where development may not be so attractive, such as vacant lots, abandoned rail lines, easements for sewers or power lines. Some options for open space creation and protection include cluster development and conservation easements.

The City of Hickory adopted a Sidewalk and Bikeway Master Plan in March 1997. The plan identified 75 miles of sidewalks, 1.5 miles of bikeways, and five miles of walking tracks and unpaved trails in City parks.

In September 2000, the City adopted a Sidewalk, Bikeway, Greenway and Trail Master Plan. The plan provides overall guidance for policy and program development for improving access and mobility for pedestrians and bicyclists. In 2005, the City of Hickory amended its 2000 Sidewalk, Bikeway, Greenway and Trail Master Plan to further expand its existing and proposed greenways and to add facilities defined as urban

trails.

Consistent with the Plan's goals and objectives, the Master Plan identifies a network of 137 miles of sidewalks, 132 miles of bikeways, 8.8 miles of greenways and .34 miles of separate trails. Design guidelines to assist in the implementation of the network are also included in the plan. It also addresses initiatives to develop new sidewalks, bicycle routes, greenways and trails connecting the City's parks, schools, cultural facilities and shopping centers. Finally, the plan proposes initiatives related to facility maintenance, bicycle usage, enforcement and education programs.

The 2005 update of the greenway component of the Master Plan identifies 21 specific greenways and urban trails, which collectively total 48.39 miles. The implementation of the plan is divided into three time periods. According to the plan, short-range projects should be implemented within the first 12 years of the plan, medium-range projects have a 12-20 year implementation period, and long-range projects have a horizon period of over 20 years.

Soils

There are four soil associations in the City of Hickory. Each soil association consists of several soil types and is a unique landscape unit within the city. Because the soil associations consist of several soil types, they are used for citywide land use planning. Site-specific developments should be based on more detailed studies of soil properties at the individual site. The soil associations for the city are briefly described below:

- These soils are predominately found on broad ridge-tops and short side-slopes. These soils are well-drained and range from gently sloping to moderately steep. Locations of this association in the city occur primarily throughout the northeast. Slope is the main limitation to development on these soils.

- Soils in this association are found on fairly broad ridge-tops and short side-slopes. These soils are well drained and range from gently sloping to

moderately steep. This association in the city occurs along and just south of US Highway 70, beginning near the Catawba Valley Community College area, extending to the east, and after the City limits, extends to the northeast. Slope is the main limitation to development on these soils.

- This association is generally found on long, narrow, winding ridge-tops and long side-slopes. These soils are well-drained and range from gently sloping to steep, mainly gravelly soils. Locations of this association in the city occur along steeper terrain surrounding Lake Hickory, through the eastern side of downtown, around the airport area, and to the area just south of downtown Hickory. Slope is the main limitation to development on these soils.

Madison-Cecil Association - Fairly narrow ridge-tops and long side-slopes are where the soils in this association are typically found. These soils are well-drained, and range from gently sloping to moderately steep, mainly gravelly soils. This association in the city occurs in the area between US 321 and I-40, and again around the Town of Brookford. Slope is the main limitation to development on these soils.

Scenic Views

Scenic views of the Blue Ridge Mountains including Grandfather Mountain, Table Rock and Hawks Bill and Lake Hickory exist in several locations around Hickory and in a few locations within downtown Hickory. Natural areas that have potential scenic views occur in several areas along the Henry Fork River.

Wetlands

Wetlands are found in depressions, along drainages leading to Lake Hickory, and drainages in the southern portion of the city such as Henry Fork River, where they are subjected to periodic flooding. A number of larger forested wetlands are located just south of I-40, west of the US 321 interchange. Wetlands are important year-round habitats for hundreds of bird species, amphibians,

reptiles, and mammals, especially in warmer climates. Additionally, many upland animal species depend on wetlands for water and food. The local council of governments maintains mapping on major wetland areas in the city.

Wetlands provide many services to the community. They act as a sponge in collecting water and then slowly releasing that water. This minimizes flooding and erosion downstream. Stored water is filtered as it is slowly released back into the system. Sediment drops out of the water and helps naturally clean pollution, toxins and nutrients from the water system.

Tree Preservation

The City of Hickory has had a “Tree City” designation for the last four years and has planted over 2,500 trees on public property in the past 12 years. The City works with the Community Appearance Commission to give out tree seedlings on Arbor Day each year (over 2,000). The City has also started the Treasured Trees Program, and plans to develop a website connected to the City’s website to get citizens to nominate their trees as “treasured trees” to bring about awareness that mature trees are a treasure to our community. Currently, mandatory tree preservation in new subdivisions is not required.

Tree Canopy Study

A tree canopy study was conducted in 2006 with a NC Urban Forestry Grant. City Staff completed a canopy study for the city limits of Hickory using 2005 aerial photography, providing baseline data for that year. This allows the City to measure changes in Hickory’s tree canopy.

The study discussed the canopy as part of the City’s green infrastructure and the reasons for a tree canopy, the guidelines for canopy tree cover (stormwater erosion, air and water quality, energy conservation, wildlife habitat, etc.).

The study used a mapping process - using City Green Software - which calculated percentage of canopy, impervious surface, open space areas, etc.

and estimates a dollar value for the City’s trees.

Under the guidelines for tree canopy cover, Hickory’s canopy is considered urban residential, with 32% tree canopy for the entire City. Considering open space and canopy, about 25% of all areas are impervious surfaces. The downtown tree canopy totals 6.2% because of impervious surface with some open space. Tree canopy percentages for neighborhood developments in Hickory include Kenworth – 36.9%; Falling Creek 1 – 36.2%; Falling Creek 2 – 30%; Moore’s Ferry – 23%; Meadow Creek – 23%; Hunter’s Run – 19.6%; Grayfield – 36.4%, and Brookfield – 32%. A change in the City’s subdivision ordinance in 1987-88 provided for larger amounts of open space to be preserved in these areas.

The 2005 tree canopy data also gives the City a benchmark in comparing new aerial photography with land uses, and identifying where additional tree cover is needed.

Plan Concept

“Sustainability” that promotes inclusiveness, involvement, and collaboration is a key component in Hickory’s environmental policy. Policies in this chapter reaffirm the City’s commitment to providing a full range of urban development, while at the same time being mindful of the natural resources upon which the community depends and the public safety risks of locating development in environmentally hazardous areas. With this in mind, the community focused on the following directives for environment-related policy.

Conserve natural resources and open space of local and regional significance.

Hickory has developed a large portion of land in its northwest, and its northeast is actively being developed, minimizing opportunities for conservation of any large tracts of land that may be home to significant natural resources. The portion of the city south of the I-40/U.S. 70 corridor still provides excellent opportunities for open space/natural resource conservation.

The Henry Fork River watershed offers an opportunity for Hickory to be a leader in the region for conservation of open space and natural resources - without precluding development. These watersheds include natural features that could be linked into a continuous ribbon of open space, protecting important plant species, providing wildlife corridors, preventing erosion of soils from development on steep slopes, and minimizing flood hazards.

Protect air and water quality.

Air and water quality are important criteria for maintaining a high quality of life. However, the Hickory region in been in non-attainment status for PM 2.5 for a number of years; PM 2.5 refers to particulate emissions where particles have a diameter of 2.5 microns (one-millionth of a meter) or less. PM 2.5 comes from a wide variety of stationary, mobile, and natural sources. Industrial sector growth and population increase will result in increases in pollutant emissions from both industry and automobiles. Growth may also influence water quality .

Natural resource and open space conservation can aid in environmental protection. Open space conservation, particularly along waterways, provides additional time for surface water runoff to percolate into the ground, reduces the speed of surface water flow, filters pollutants, and cools the temperature of the water in streams. These advantages improve water quality, help limit flooding, and enhance riparian habitat. Large tracts of open space and consistent tree cover throughout the city would help filter air pollutants and help to cool the city during hot summer months.

Further develop recreational facilities and public access to recreational/natural resources.

Open space and natural resources are an important aspect of a high quality of life. As mentioned previously, the city has numerous opportunities for open space/natural resource conservation and should continue to plan for the development of parks and recreation facilities. Two of the most

significant recreational and natural resources are Lake Hickory and the watersheds in the southern portion of the city. It is important to provide access to these resources in a manner that does not degrade their qualities.

Emphasize open space/greenway conservation

Hickory is blessed with natural beauty. Large areas of natural open space are no longer in abundance in the city, however there are opportunities for conservation of valuable resources, particularly along waterways and drainages. Establishment of conservation greenways along waterways and drainages could provide natural resource and water quality protection and floodplain management. Because land along the Henry Fork River, its tributaries and other watersheds in the southern portion of Hickory are not intensely developed, a conservation greenway could protect wetlands and wildlife habitat in these watersheds. Combining greenways with a comprehensive sidewalk and bikeway system can also provide pedestrian movement for both recreation as well as providing access from residential areas to cultural, commercial, recreational, and public facilities.

Greenways utilized for pedestrian circulation and recreation can incorporate linkages to city sidewalks to create a comprehensive pedestrian circulation system throughout Hickory. This comprehensive pedestrian circulation system could also provide needed access to parks and open spaces in the community, particularly in residential neighborhoods. The greenway planning process is not much different than land use planning. The main differences are site specific data are required on a smaller scale than for citywide land use planning. Public participation is vital in the greenway planning process particularly for communities that are leery of greenways or have not been exposed to the benefits of greenways.

Greenway planning has been included in Hickory's Sidewalk, Bikeway, Greenway, and Trails Master Plan The plan can also be incorporated into the city's Parks and Recreation Plan as both active and passive recreation opportunities. The greenway plan should also be incorporated into a storm

water management plan. The most logical coordination of planning efforts would be continuing efforts to combine greenways planning with regional open space planning.

Employ conservation subdivision design

Open spaces can also be preserved in residential neighborhoods. These neighborhood open spaces could be used to provide visual relief, protect wetlands, wildlife, wood lots, or steep slopes and provide opportunities to experience nature with just a short walk from home. New subdivision design and development in watershed protection areas in Hickory should utilize conservation subdivision principles when appropriate to conserve open space. Conservation subdivision design principles which were synthesized by the Natural Lands Trust in the book *Conservation Design for Subdivisions*, is essentially a four-step process that is briefly outlined in the following text. The design process should occur in the following order:

Identification of Potential Conservation Areas. This step identifies lands that should not be developed including historic resources, flood plains, wetlands, steep slopes, and significant wildlife and plant habitat.

Locate development sites. Utilizing the conservation areas as a starting point the housing sites can be located on the site in a manner that maximizes views, connectivity, and minimize environmental impacts.

Design Street Alignments and Trails. This phase identifies the most appropriate alignment for roads that provide connectivity within the subdivision as well as connectivity with surrounding development. This phase of the design will also take into consideration the potential for pedestrian connectivity with greenway trails, sidewalks, and bikeways outside the development.

Subdivision of the property into individual lots. This final phase is simply drawing lot lines delineating individual building parcels.

A regional open space initiative could provide the necessary open space to conserve and protect

important plant and wildlife habitat and corridors in all or portions of Catawba, Burke, Caldwell, and Alexander Counties. Currently the Western Piedmont Council of Governments is working with the public on a Regional Trails and Open Spaces Plan. Open space planning at the regional level will require political support from all communities in the region. The process will also require public participation at a regional scale to aid in identifying the priorities and criteria for open space conservation. In addition to the requirements for regional support by political entities and the public, an open space plan should at a minimum include:

Identification of lands that pose hazards (flood plains, airports),

Significant natural resources (areas of high biological integrity),

Wildlife movement corridors,

Areas already designated as recreational resources or areas with potential for active or passive recreation and,

Implementation measures and funding sources.

An additional benefit of open space conservation is storm water management. Open space interspersed with clustered residential developments would help reduce flooding potential in that neighborhood and downstream by reducing the amount of impervious surface in the watershed. Drainages should be left in their natural state as much as possible with only minimal channelization or piping of the waterway. Roadways in areas where open space and natural drainages are conserved could provide drainage swales instead of curb and gutters to allow time for storm water to percolate into the soil. This would also slow the speed of the surface water runoff prior to reaching the natural drainage way.

Passive parks/open spaces should be utilized to protect valuable natural and scenic resources on both neighborhood and regional scales. In addition to these potential neighborhood open spaces and parks, Hickory's Parks and Recreation Department has identified a number of new neighborhood park

locations for the northeast and southern portions of the city.

industrial segment.

Environmental Goals

The following goals translate the environmental plan concept into the language of the comprehensive plan, providing footing for the policies listed in the table at the end of this chapter.

Goal 1: Conserve open space and natural resource areas

There must be a balance between what is developed and what is left undeveloped. This will help maintain equilibrium in the community's natural systems, ensuring that there is adequate open space to help manage surface water runoff, that there remains adequate habitat to help minimize impact to the area's ecosystems. Similarly, locating development away from areas of steep slopes, wetlands, frequently-flooded areas, or geological hazard simply makes sense, allowing Hickory residents and businesses to live, work and play safely

Goal 2: Reduce per capita waste production

Solid waste disposal remains a challenge to urban populations, and Hickory should institute strategies to minimize its waste generation and demand on landfill space. Programs to divert recyclables from the waste stream and to encourage reuse can have significant impact both on direct reduction in demand and on heightened community awareness of the solid waste issue.

Goal 3: Support environmentally-based businesses

Part of Hickory's economic restructuring may involve "green" industry, applying the region's manufacturing infrastructure to produce goods and services that enhance quality of life while reducing global environmental impact. The City should consider these new industries as more than just an environmental trend and participate in nurturing them and encouraging their growth into a mature

Goal 4: Minimize environmental impacts of development

When considering development applications, Hickory should be aware of likely environmental impact, both on the area's ecosystems and on the quality of life for those surrounding the proposed development project. Impacts to be considered would include air quality, water quality, habitat, light, noise, traffic, and historic and cultural resources.

	Goal		Policy
1	Conserve open space and natural resource areas	A	Develop mechanisms to conserve and create open space using development incentives, conservation easements, conservation overlay districts and land conservation and donation programs
		B	Improve mechanisms for conservation subdivision development in lower density areas and in areas that have open space or natural resource lands
		C	Encourage clustering of homes in close proximity to higher density residential areas
		D	Encourage decision-makers to develop mixed-use public open spaces with tree canopy and other green infrastructure to preserve ecological functions and create connected green corridors
		E	Implement the proposed greenway trail system and identify new opportunities to provide connections between parks and other open spaces
2	Protect air and water quality	A	Develop stream buffering regulations considering development, topography and waterway characteristics
		B	Use conservation subdivision design for new housing development and industrial/commercial development in delineated watershed protection areas
		C	Promote land use and transportation solutions that reduce air pollution
3	Reduce per capita waste production	A	Encourage recycling, waste reduction, reuse and resource conservation
		B	Lead by example with an action plan for becoming a more efficient city
4	Support environmentally-based industries and businesses	A	Consider incentives for redevelopment of vacant structures with the intent to minimize further environmental impacts from contaminated sites
		B	Provide incentives for green building
5	Minimize environmental impacts of development	A	Ensure that no impacts to environmentally sensitive areas occur with new development
		B	Consider managing development of land along stream edges to improve water quality.
		C	Support a storm water management system to decrease water-borne contaminants
		D	Consider alternative forms of storm water retention, like filtered swales, green roofs, and rainwater collection for irrigation to protect surface water

Recreation & Parks

Introduction

This chapter contains a brief overview of the City's existing conditions and community needs, as well as a goal and policy framework focused on the City's recreation and parks considerations.

Led by the plan's vision and directives, the goals, policies and programs in this chapter are provided to guide implementation, including City resource allocation and regulatory decision-making.

Existing Conditions

The City of Hickory provides City residents and visitors with parks and recreation services – currently the Parks and Recreation department operates and maintains 19 parks consisting of over 492 acres, 6 recreation centers and 2 senior citizens centers in addition to the operation of the L.P. Frans Baseball Stadium.

The Department maintains and operates the park facilities shown in Table 9.1.

From its inception, Hickory established a focus on quality of life, recreation and leisure pursuits. First established as an industry town, the community has continued to capitalize on its parks, recreational facilities and proximity to forested landscapes.



Figure 9.1 - Hickory's LP Frans baseball stadium is home to the Hickory Crawdads. (Image source: Studio Cascade, Inc.)

In addition to Hickory's parks and recreation facilities Catawba County maintains several parks including: River Bend, a 450-acre regional park; St. Stephens Park, formerly a part of the City of Hickory's system; and Bakers Mountain which has the highest elevation in the county. Catawba County also shares with its neighboring Counties three reservoirs along the Catawba River – Lake Hickory, with an estimated 4,100 acres and 105 miles of shoreline; Lake Lookout Shoals with 1,270 acres and 39 miles of shoreline; and Lake Norman with 32,510 acres and 520 miles of shoreline.

For the purposes of this chapter, it's important to note that Hickory's parks and recreation system is augmented by multiple private and institutional recreation facilities, including:

Hickory Motor Speedway

Lenoir-Rhyne University

Catawba Valley Community College

Table 9.1 - Existing Parks Facilities

Park	Acres	Function
Civitan	7.5	Neighborhood
Cliff Teague	8.1	Neighborhood
Cloninger Mill	63.3	Undeveloped
Fairbrook Optimist	6.7	Neighborhood
Bud-Geitner/ Rotary	96.0	Regional
Henry Fork Regional Rec-	45.0	Regional
Hickory Optimist	6.0	Neighborhood
Hickory City	15.0	Neighborhood
Hilton	70.5	Open Space, Passive
Jaycee Park	5.0	Neighborhood
Kiwanis	16.0	Community
Neill Clark	22.7	Community
Sandy Pines	13.0	Undeveloped
Southside Heights	12.7	Neighborhood
Stanford	37.0	Community
Taft Broome Park	9.6	Neighborhood
West Hickory	5.6	Neighborhood
Westmont Center	3.0	Neighborhood
Winkler	50.0	Regional
Total	492.7	

Hickory Foundation YMCA

Catamba Springs and Hampton Heights Golf Courses

Lake Hickory Country Club

The SALT Block and its multiple facilities

These private and institutional facilities do not appear in the City’s inventory, but they do help address the community’s recreational demand. They provide, for a fee in many cases, recreational outlets that fall outside the scope of the City’s parks and recreation department.

For more information about Recreation and Parks in Hickory’s please refer to the City’s Park and Recreation Master Plan (Gardner Gidley & Associates, February, 1997), the Sidewalk, Bikeway, Greenway, and Trail Master Plan (Hickory Regional Planning Commission; Hickory



Figure 9.2 - The SALT Block, former site of Hickory High School, houses the art museum, symphony, library and science center, among other things. (Image source: Studio Cascade, Inc.)

Recreation Commission, updated February, 2005), the Cloninger Mill Park Master Plan (accepted by Hickory City Council and Hickory Parks and Recreation Commission March, 2009).

Needs

At the present time, Hickory’s existing recreation system is well positioned to meet many current needs. As the population continues to grow, the anticipation of future needs will result in the extension of recreation services to new areas and improvements to the existing recreation system to bring it up to contemporary standards.

Plan Concept

The complete Parks and Recreation Master Plan updated by Gardner Gidley & Associates in 1997



Figure 9.3 - Hickory's open spaces, hardwood forests and creeks provide beautiful backdrops for recreation activity. (Image source: Studio Cascade, Inc.)

builds upon their 1979 study of the park and recreation needs of Hickory. Standards and principles recommended in the previous study have served the City well - actions recommended in the 1979 study have largely been completed – and with minor changes, continue to form the basis of recommendations in the current study.

Most of the standards recommended in 1997 plan update relate to population; since 1979, Hickory's population has grown to over 41,000 which is only 7,000 residents short of the 1997 plan projections for the year 2020. More current projections indicate a 2020 population within Hickory of between 52,000 and 57,000 by 2020. The complete Parks and Recreation Master Plan update identifies recreation needs and makes specific development program recommendations for three time frames: immediate, intermediate, and long-range. The 1997 report used local and national recreation preferences and needs to establish space and facility standards for recreation and parks in Hickory. Key recommendations of the 1997 plan

include: the quality of recreation sites and their development, the adequacy of space and facilities, and the optimum use of both public and private resources.

Since the completion of the Parks and Recreation Master Plan update in 1997, the Cloninger Mill Park Master Plan has been completed. The Master Plan which includes walking trails, a mountain bike course, picnic shelters, disc golf course, an outdoor education classroom, playgrounds, overlooks, and a water fall was accepted by the Hickory City Council and the Hickory Parks & Recreation Commission March 10, 2009.

The Parks and Recreation Department completed a needs assessment in May 2010 that prioritizes facility and park development according to nationally recognized standards. Please refer the Parks and Recreation Needs Assessment for more detailed information. The document has a twenty year time horizon.

At least two core philosophies guide the City's parks planning policy.

Neighborhoods

Hickory made a commitment to providing convenient recreation opportunities to residents of all its neighborhoods. The 1997 park plan affirmed that commitment, and the City continues to increase and enhance its parks facilities and recreation programs. Underpinning this philosophy is the understanding that parks facilities and greenways contribute to both the functional characteristics and aesthetic characteristics of neighborhoods. They help neighborhoods act as community development resources, getting residents out of their homes and meeting each other in public open spaces. They also make neighborhoods more attractive and valuable, presenting a very public statement of the community's investment in local quality of life. Placing a park in a neighborhood is far more than simply placing a park in a neighborhood. It presents opportunities for the community's families and individuals to enjoy public space together, to share stories and to build relationships.

The neighborhood park is but one type of park the City provides. It also provides community and regional park facilities, supporting recreation at a variety of scales for a variety of audiences. While some who are involved in specific athletic activities, such as baseball or soccer, may desire additional fields, the overall makeup of athletic facilities is more than adequate for a city of Hickory's size.

Sustainability

Fiscal balance, sensitivity to environmental context and an awareness of important community needs underpin virtually all of what the parks and recreation department does. The department's management philosophy is to ensure that it maintains fiscal solvency, provides a high level of community service and protects Hickory's natural environment for the enjoyment of present and future generations.

Parks and Recreation Goals

Parks and recreation goals and policies from the 1997 plan are carried forward in this comprehensive plan, confirming the City's commitment to providing a system of parks and greenways and a range of recreation programs that respond to community needs. It calls for developing and maintaining neighborhood parks, developing and enhancing a system of greenway trails, collaborating with Catawba County and adjoining municipalities and ensuring that all neighborhoods have access to recreation opportunities.

Goal 1: Expand recreation facility offerings and public access to recreation and resource areas

The City has a commitment to enhancing its recreational offerings, and this goal emphasizes the importance of continually improving the community's recreational experience. It also emphasizes the City's commitment to access to its



Figure 9.4 - Active recreation facilities in neighborhood parks are an important component of Hickory's parks offerings. (Image source: City of Hickory)

open spaces, for both active and passive recreation.

Goal 2: Distribute recreational opportunities equitably

While the City recognizes the need to enhance its overall recreational offerings, it is particularly sensitive to the needs of the neighborhoods and the desire for all Hickory residents to enjoy access to recreational facilities, regardless of socio-economic status.

Goal 3: Provide options for all ages and for active and passive uses

This goal underscores Hickory's commitment to design its recreational facilities to address the breadth of community demand. Young and old, athletes and non-athletes, all should be able to enjoy Hickory's recreational spaces and satisfy their leisure needs.

Goal 4: Coordinate offerings with other recreation providers

There are multiple providers of recreational facilities and services in and around Hickory. Not all users of Hickory's recreational resources are

Hickory residents, and not all recreational resources used by Hickory residents are owned and operated by the City of Hickory. This goal recognizes that providing comprehensive recreational access relies on partnerships, either formal or informal, and that the City should collaborate with other recreation providers to ensure its citizens are served.

Goal 5: Promote and provide walking and cycling opportunities throughout the City

Recreation involves more than just parks, golf courses, racetracks and gymnasiums. Many Hickory residents recreate by walking and bicycling, spending time on foot or on wheels with family and friends. This goal recognizes what is a popular community pastime and directs the City to meet the needs of pedestrians and cyclists.

Goal 6: Collaborate regionally for improved arts and culture programs

Hickory is a regional center for arts and culture which provides for leisure pursuits, educational opportunities, and economic development. Hickory's arts and cultural assets attract a wide variety of visitors. This goal builds on that regional position, seeking to enhance the community's arts and culture programs by emphasizing collaboration with regional jurisdictions and those who sponsor arts and cultural activities.

	Goal		Policy
1	Expand recreation facility offerings and public access to recreation and resource areas	A	Plan and design facilities and programs to take full advantage of all existing resources, both natural and man-made
		B	Develop neighborhood parks and open spaces in north-east Hickory
		C	Improve public access to Lake Hickory
		D	Provide a variety of land and water areas adequate in size and strategic in location for both active and passive leisure pursuits and for visual enhancement and conservation
		E	Establish appropriate levels of local funding sufficient to match other sources of funds; and sustain a program of land acquisition, facility construction and program administration
2	Distribute recreational opportunities equitably	A	Distribute and locate recreation areas and facilities equitably and conveniently throughout the City to provide recreational opportunities for all
		B	Adopt the standards recommended in the Parks and Recreation Plan, as updated, as minimums for: publicly-owned acreage for recreation and open space; convenient and equitable site location; and facilities for indoor and outdoor recreation programs
		C	Prioritize park and recreation development based on the amount of benefit a project provides to the community
3	Provide options for all ages and for active and passive uses	A	Provide diverse facilities and programs to meet the basic needs of children, teenagers and adults.
		B	Continue to provide police enforcement for public parks and facilities
		C	Maintain all recreation areas and facilities to their appropriate design standards
4	Coordinate offerings with other recreation providers	A	Continue to coordinate a long range open space initiative with state and local governments and civic organizations
		B	Offer programs, services and facilities which complement and supplement those provided by other public and private agencies
5	Promote and provide walking and cycling opportunities throughout the City	A	Provide sidewalks and direct access to mixed use centers from residential areas
		B	Implement and update greenway, trails, and sidewalk planning efforts as indicated in the Sidewalk, Bikeway, Greenway and Trail Master Plan amended in February 2005
		C	Provide walking and biking trails for community wellness and fitness options
		D	Sponsor promotions, events, and activities that encourage bicycling and walking

	Goal		Policy
6	Collaborate regionally for improved arts and culture programs	A	Create partnerships that expand the resources available for municipal programs focused on public art, preservation, and beautification
		B	Partner with other communities for increased access to park and recreation facilities

Implementation

This chapter summarizes and lists key strategies to help Hickory begin implementing the comprehensive plan. All projects presented support the overall goals and policy objectives expressed by the community in developing and adopting the plan.

This chapter guides future resource allocation and regulatory decisions, and is based on and developed to implement the City vision and directives presented in that section.

This chapter does not replace current or future departmental plans.

Partners

The plan's implementation depends on building partnerships. The City will need to work with County and other regional agencies along with Hickory's community groups to make the larger goals contained in this plan a reality. For example, tailoring Hickory's economic growth to fit resident desires for a specific quality of life will rely on collaboration with the Catawba EDC, the Western Piedmont Council of Governments (WPCOG), the Catawba County Chamber of Commerce and others. Efforts to revitalize Hickory neighborhoods will rely on active involvement of neighborhood residents, property owners and neighborhood associations, ensuring policies and actions the



Figure 10.1 – The plan will provide the message, but the community's implementation will be critical for success. (Image source: Studio Cascade, Inc.)

City pursues meet citizen needs.

Revitalizing and reshaping the community's arterial corridors will require active coordination and participation of City Departments, WPCOG, the North Carolina Department of Transportation, businesses and property owners. Corridors are complex environments, and any intense planning work will demand effective collaboration.

Partnerships with residents, agencies and organizations are essential to this plan's successful implementation.

Plan Programs

The programs listed in this chapter are prioritized according to current estimates of need, urgency, and fiscal possibility. Attempting all implementation items at once would certainly drain the City's resources, and likely even the energies of the community. Instead, the City must budget projects and

Figure 9.1 - Existing Parks Facilities

complete them in a timely and strategic fashion, maintaining fiscal balance, ensuring steady progress, and advancing productive, civic involvement.

For public works projects, creating, and annually updating a capital facilities plan will aid in moving projects from concept to realization. Capital facilities planning, together with long-range budgeting for necessary improvements, is critical.

This plan and the implementation programs presented here reflect the community's expressed needs and goals today, but as those needs and goals change, so should the relative priorities of the program items. An important program, then, is the periodic (at least every 5 years) review of the plan itself, ensuring it remains on-track with community needs and expectations.

The following pages detail the various implementation projects and programs to help Hickory achieve its comprehensive planning goals.

The comprehensive plan's effectiveness is measured by its ability to guide and effect desired change. This change will occur over the long-term through a number of short-term decisions made by elected and appointed officials acting in accordance with this plan.

Regional Cooperation

Cooperation between state and federal governments, neighboring municipalities, and regional entities are vitally important in the successful implementation of the recommendations in this plan. Hickory has historically served, and continues to this day, to serve as a regional center for employment, medical services, retail sales, cultural resources, and to a limited extent, provision of public services. However, there are instances where the city must pool resources in the region to ensure an equitable distribution of responsibility.

Natural resource protection, recreation, transportation, economic development, and public

services are just a few areas where the city will need to continue regional collaborative efforts. Although the city should be proactive in continuing or initiating regional cooperation, the WPCOG and the Greater Hickory MPO will also bear responsibility in these efforts. These responsibilities will include, among many others, continued coordination of transportation planning, coordination of water quality programs, investigation of regional land use planning, and promoting regional cooperation for affordable housing and economic development.

Plan Updates

The analysis of existing conditions, responses from public participation, and formulation and evaluation of land use patterns form the basis for the creation of Hickory's plan and vision. This plan is intended to be a dynamic document and should be referred to, discussed and revised as needed over time. Revisions to the plan should consider changes in the economy, population, or other types of baseline indicators.

Staff will solicit community input and review plan goals and policies annually and make a status update to the Hickory Regional Planning Commission. No less than once every 5 years should the plan be comprehensively updated to reflect changes in conditions and citizen sentiment.

Baseline Indicators

The baseline of existing conditions can be found as part of the appendices and throughout this planning document. This baseline data was used to develop the plan, but it is also a great way to monitor the plan. This baseline provides a starting point and is intended to be a signal to the community about potential problems and issues that need to be addressed.

Updating this baseline data as new information is available or as conditions change and developing key "sustainability" indicators can help the community monitor the success of the current plan

and provides a first step when commencing an update process.

Baseline indicators should:

Be understandable to the community

Be accepted by the community

Show the link between the economy, society, and the environment

Focus over a long period of time - in some cases twenty years or more.

Measure local sustainability, but consider a regional viewpoint

Be based on reliable and timely information

The development of indicators should occur following the adoption of this plan. The number of indicators selected by the community should be reasonable to ensure that they will be monitored in a timely and efficient manner.

Communications Strategy

The planning process is continuous. To ensure that the public stays involved in the implementation of the plan, a communications strategy is recommended. This communications strategy will include providing review copies at public locations such as City Hall, public libraries, and schools. The public will also be available to purchase the plan through Hickory's Planning Department and view the plan on the city's internet web page.

The plan may be obtained by interested persons at the Planning Department.

Implementing the Plan

In addition to the goals and policies contained in the individual chapters of this plan, this section recommends that the City take the following specific actions to fully implement this Comprehensive Plan. The proposed actions involve both the development of new master plans and updates to existing master plans. These actions will occur in areas where more detailed study is needed to facilitate achievement of plan goals.

1.1 Update the City's Land Development Code and Manual of Practice

The Comprehensive Plan expresses a vision for the community's long-range development. Part of this most recent planning update process has involved a review and revision of Hickory's Land Development Code. Work to revise the code has concentrated on making it easier to use and administer, reducing its size, removing redundancy and making specific changes to standards as indicated through review of the comprehensive plan. Modifications to commercial zoning districts along highway corridors, the fine-tuning of conservation subdivision standards, the consolidation or removal of planned development zoning with regard to future projects proposals, new zoning strategies for neighborhood centers and the community's overlay districts have also been completed. Staff will also review and update the Manual of Practice which contains the City's design standards for physical infrastructure. This work should be completed simultaneously with the adoption of the Comprehensive Plan.

1.2 Prepare a regional economic development plan and strategy

Hickory's economy has struggled over the last decade, and various economic development groups have worked diligently to help the community recover. Still, no single economic development plan or strategy has emerged to help the various entities in the four-county area coordinate their efforts. Assembling such a plan may not present too much difficulty since each organization has its own, either formally or informally. Regional collaboration is key to success, and this regional plan will be a significant step in that direction

1.3 Prepare a master plan for the LRU "X"

Collaborating with Lenoir-Rhyne University and the area's property owners, prepare a master plan for the LRU "X" exploring feasibility and design for development of that area as a mixed-use district. The plan can build on the concepts promoted in Hickory's downtown plan and involve the university as a primary character and activity driver.

1.4 Complete a Corridor Study for Highway 70

Pursue creative approaches to identify and resolve issues related to Transportation and Land Use along this corridor, directing a study to investigate methods of stimulating reinvestment along the corridor's declining areas, managing traffic and land use to encourage multi-modal travel, enhancing the corridor's position as a regional retail center and clarifying its position relative to downtown and adjacent residential neighborhoods. The 2035 Hickory Urban Area Long-Range Transportation Plan can be used as a resource in this effort, allowing the corridor

study to concentrate more on land use, revitalization, and urban design than on Highway 70's function as a thoroughfare.

1.5 Complete a Corridor Study for Tate Boulevard

Critically review the land use designations and transportation system design for the corridor, evaluating feasibility of commercial and professional office uses in place of industrial ones and developing a strategy to take advantage of the corridor's increasing popularity as an east-west arterial. This may involve a complete restructuring of the philosophy of this corridor, resulting in a new mix of envisioned land uses and a new take on the design of the transportation system put in place to serve it.

1.6 Review and Expand the Highway 127 Corridor Study

Review and expand the Highway 127 Corridor Study to encourage vital neighborhood centers at important intersections and respect the strategic position of development along the corridors between them. A revised corridor study arising from this review could incorporate new strategies, such as form-based zoning and increased street connectivity, to the comprehensive plan's goals.

1.7 Prepare a rail corridor revitalization plan

Hickory has recently completed a brownfield study to investigate reuse options for several properties along its rail corridor. This revitalization plan would take that work one step further, basing revitalization recommendations on the brownfield study's findings and establishing a revitalization strategy for the entire rail corridor. This plan would involve historic preservation, transportation and economic development elements and may help target reinvestment near the community's core; however, implementation of this type of plan may result in some expense to the City.

Appendix A

Acronyms, Abbreviations and Definitions

List of Acronyms & Abbreviations

ADD	Average Daily Demand (water/wastewater)
ADU	Accessory Dwelling Unit
ADT	Average Daily Traffic
BMP	Best Management Practices (water/wastewater)
BOD5	Five-day Biochemical Oxygen Demand (water/wastewater)
CBD	Central Business District
CFP	Capital Facilities Plan
CIP	Capital Improvement Program
DF	Direct Filtration (water/wastewater)
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
ERU	Equivalent Residential Unit
ETJ	Extra-Territorial Jurisdiction
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
GIA	Grassed Infiltration Area (water/wastewater)
GPCD	Gallons Per Capita per Day (water/wastewater)
HUD	United States Department of Housing and Urban Development
IBC	International Building Code
I/I	Infiltration and Inflow (water/wastewater)

LID	Low Impact Development
LOS	Level of Service
MDD	Maximum Day Demand (water/wastewater)
MGD	Millions of Gallons per Day (water/wastewater)
MMD	Maximum Month Demand (water/wastewater)
MPA	Minimum Planning Area
MS4	Medium and large Municipal Separate Storm Sewer Systems
NCDOT	North Carolina Department of Transportation
NPDES	National Pollutant Discharge Elimination System
PDR	Purchase of Development Rights
PHD	Peak Hour Demand (water/wastewater)
RAS	Return Activated Sludge (water/wastewater)
RTPO	Regional Transportation Planning Organization
TDR	Transfer of Development Rights
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load (water/wastewater)
TND	Traditional Neighborhood Development
TSS	Total Suspended Solids (water/wastewater)
UA	Urbanized Area (US Census tracking)
WTP	Water Treatment Plant
WWTP	Waste Water Treatment Plant

Definitions

Accessory

As applied to a use, building or structure, means customarily subordinate or incidental to, and located on the same lot with a principal use, building, or structure.

Accessory Dwelling Unit

A dwelling unit created within another owner-occupied dwelling unit.

Activity Centers

Those places in the community that feature a collection of public spaces, commercial land uses and public institutions serving neighborhoods, the community or the region.

Adaptive Reuse

The conversion of outmoded buildings for use or uses unrelated to the original building use. Adaptive reuse projects have traditionally converted old school buildings, train stations, hospitals and other public buildings, inns, hotels and warehouses, factories or other industrial buildings into residential or mixed-use projects.

Aesthetic

The intangible quality of a place or thing that creates the sensory experience of the sublime.

Affordable Housing

Housing where the occupant is paying no more than 30 percent of gross income for gross housing costs, including utility costs. In the case of ownership housing, the purchase costs of a housing unit is equal to or less than three times a household's annual gross income.

Americans with Disabilities Act of 1990 (ADA)

Ensures access for the disabled for publicly used facilities, employment, public transportation and public communication.

Annexation

The process that a city undertakes to incorporate new territories into its existing boundaries.

Aquifer

Any geologic formation that will yield water to a well or other withdrawal works in sufficient quantity for beneficial use.

Aquifer Recharge Areas

Areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water.

Arterial Roadways

A class of roadway serving major movements of traffic not served by freeways. Arterial roadways are functionally classed depending on the degree to which they serve through traffic movements verses access to land.

Average Daily Traffic (ADT)

This is the average amount of traffic (average number of vehicles) crossing one location of a roadway within a 24 hour period. Generally the ADT is a yearly average. ADT and other traffic level measurements differ from the VMT in that they measure traffic crossing at one point while VMT measures the total miles driven along a certain stretch of roadway within a given period of time. The confusion between these two terms stems from the fact that a specific ADT (a point location measure) is often assigned to a whole stretch of a roadway.

Big Box

Large, warehouse-style discount stores.

Buffer

An area contiguous with a critical area, natural resource land, or urban growth area that is required for the integrity, maintenance, function, and stability of the area or land.

Building Vernacular

Those specific components and architectural treatments that define a style and establish a structure's link to a particular place or region, such as chimney design, eave treatments, window surrounds, exterior materials or building placement on the site.

Business Sectors

In economic development terms, a grouping of businesses and facilities that serve an individual industry, such as medicine or defense, seeking economies of scale and enhanced access to resources or markets.

Capacity

The maximum number of vehicles that can pass over a given section of a lane or roadway in one direction (or in both direction for a two- or three-lane facility) during a given time period under prevailing roadway and traffic conditions. It is the maximum rate of flow that has a reasonable expectation of occurring.

Capital Cost

Costs of transportation systems such as purchase of land, construction of roadways, and acquisition of vehicles. Distinguished from operating costs.

Capital Facilities

As a general definition, public structures, improvements, pieces of equipment or other major assets, including land, that have a useful life of at least 10 years. Capital facilities are provided by and for

public purposes and services. For the purposes of the capital facilities element, capital facilities are surface water management, solid waste disposal, law and justice, general government, parks and recreation, airport, transportation, education, fire protection, sanitary sewer and public water supply systems.

Capital Improvement Program (CIP)

A plan that matches the costs of capital improvements to anticipated revenue and a time line. CIPs are usually prepared for six or more years, updated annually, and coordinated with the comprehensive planning process.

Collector System

In Rural Areas Principal Arterials, Minor Arterial Roads, Collector Roads, Local Roads. In Urbanized Areas Principal Arterials, Minor Arterial Streets, Collector Streets, and Local Streets. In Small Urban Areas Principal Arterials, Minor Arterial Streets, Collector Streets, and Local Streets.

Community Design

An analysis of needs for governing landscaping, building design, tree planting, signs, and suggested patterns and standards for community design, development, and beautification.

Compatible

Capable of existing together without discord or in a state of mutual tolerance.

Comprehensive Plan

An official public document adopted by a local government as a policy guide to decisions about the physical development of the community. It indicates in a general manner how the community and its government leaders want the city to develop in the next 10 to 20 years.

Concurrency

The concept of timing the provision of public services, particularly road and utilities infrastructure, to meet changes in demand for those services, especially as population grows and public demand increases.

Connectivity

The sharing of a common link, such as a trail connecting two neighborhoods.

Conservation Easement

Is a legal agreement between a private landowner and a municipal agency or a qualified, not-for-profit corporation to restrict the development, management, or use of the land.

Context

All the factors which systematically determine the form, meaning, and/or appropriateness of a definable object within its locale as a whole.

Contiguous Development

Development of areas immediately adjacent to one another.

Cooperative Home Ownership

An enterprise or organization owned by and operated for the benefit of those using its services. The basic six principles providing the framework for cooperative housing are open and voluntary membership, democratic control, limited rate of return on investment, return of surplus to members, cooperation among cooperatives and constant education. Housing cooperatives offer low-income families the opportunity to own a share of stock in a housing corporation that gives its members many advantages over rental housing.

Demographic

Social, economic, racial and age characteristics of an area's population, helpful in describing in general terms a community's composition.

Density

The ratio between the number of families, individuals, housing units, or residential dwelling units per land surface area (usually expressed as square miles or acreage).

Density Bonuses

Where a proposed development is designed and constructed at a level of quality in excess of the minimum, additional development rights may be allowed in locations where added density can be accomplished while still providing appropriate protection to neighboring properties and the general public.

Design standards

Standards used to govern how portions of the built environment may look and/or function.

Development

Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

Development Regulation(s)

The controls placed on development or land use activities by a county or city.

Diversity

A broad range within a definable category.

Downtown

For purposes of this plan, downtown includes that area characterized as the town's center, including the historic commercial district established near the rail depot, the secondary ring of offices and institutions surrounding it, and the historic residential areas on its periphery.

Ecological Functions

Those uses of land that are part of a larger related natural system. These functions include, but are not limited to, storm water detention; floodway/floodplain; drainway; sediment collection area; aquifer recharge area; fish and wildlife habitat conservation area; wind break; noise, sight, or dust barrier; shade; erosion control; waste disposal; and, maintenance of slope stability.

Economic Development

Sustained increase in the fiscal standard of living of a population, normally accomplished by increasing the supply of physical and human capital and improving technology.

Essential Services

Activities that include the maintenance and operation of public utilities associated with electric, gas, telephone, sewer, and water lines.

Extremely Low Income

Income below 30% of median income.

Flood plain

All land adjacent to a watercourse over which water flows in times of a flood. The flood plain is subject to a 1% chance of flooding in any given year as designated in an “area of special flood hazard” by the Federal Insurance Administration.

Floor Area Ratio (FAR)

A method of calculating the amount of allowable floor area. An assigned FAR multiplied by the parcel size equals the amount of allowable floor space that can be developed on a site.

Frequently Flooded Areas

Lands in the floodplain subject to a one- percent or greater chance of flooding in any given year. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and the like.

Functional Classification

Functional Classification is the grouping of highways, roads, and streets that serve similar functions into distinct systems or classes. Functional Classification defines the primary role a road or street serves within the total existing or future highway network (see Collector System above).

Geologically Hazardous Areas

Areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

Goal

Broad statements which indicate a general aim or purpose to be achieved. A goal is a direction setter. It is an ideal future end, condition, or state related to the public health, safety, or general welfare

toward which planning and implementation measures are directed. A goal is a general expression of community values and, therefore, is abstract in nature. Consequently, a goal is generally not quantifiable, time-dependent, or suggestive of specific actions for its achievement.

Green Building Design

The philosophy, approach and application of energy and environmental conservation in the design and construction of buildings, often associated with specific criteria for determining compliance, such as Leadership in Energy and Environmental Design (LEED) certification.

Greenway

A trail facility dedicated exclusively to pedestrian, bicycle and/or equestrian use, usually following alignments other than parallel to roadways and designed to help promote non-automotive travel in a natural or near-natural setting.

Gross Density

Gross density means the total number of dwelling units divided by the total land area of the site or area, excluding nothing.

Growth management

A wide range of techniques used in combination to determine the amount, type, and rate of growth and to direct it to designated and appropriate areas.

Hazardous Areas

An area in which a danger is present, or likely to be present, in quantities that require special precautions for construction.

Housing Forms

A range of residential styles such as: single-family, condominium, multifamily, or town home.

Impacts

Consequences (both good and bad) of an action or decision that occur beyond the site under consideration.

Impervious Surfaces

Those paving, roofing or other impermeable surfaces that impede the flow of rainwater or storm runoff into the ground.

Implementation Measure

Regulatory and non-regulatory measures used to carry out the plan.

Incompatible Uses

Uses of land that is not harmonious.

Indigenous (Landscaping) Materials

Plants and landscaping materials generally recognized as being native to an area.

Infill

The process of developing vacant or redeveloping under-used parcels within existing urban areas.

Infill Housing

The construction of new residential units on land within existing neighborhoods, making available new housing without expanding into vacant land on the community's periphery.

Infrastructure

Facilities and services needed to sustain the functioning of an urban area.

Intensity

The measurement of all use in a defined area.

Interconnectivity

The concept of enhancing linkages within and between neighborhoods, promoting and facilitating walking, bicycling and reduced automotive congestion by accommodating and dispersing traffic flow.

Land Bank

Land is acquired independently of a specific development project, for the expressed purpose of providing affordable housing at a future time.

Land Conservation

The placement of dwellings and accessory buildings in a pattern of development which reduces impervious surface area, lowers costs of development and maintenance and retains larger expanses of property available for agriculture, forestry, or continuity of ecological functions characteristic of the property to development.

Land Use

The specific purpose for which land or a building is designated, arranged, intended, or for which it is or may be occupied or maintained.

Landscaping Buffers

The separation of land uses from other land uses or sensitive environmental areas by a strip of unoccupied land, reducing potential conflicts and negative impacts by putting distance and screening between the two.

Level of Service

Means an established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need.

Living Wage

Earned income sufficient to allow one individual wage earner per household to support that household.

Local Road

A class of roadway with the primary function of providing access to abutting properties. Traffic control is usually limited with slow speeds and numerous driveways. This roadway class typically carries low traffic loads and is usually 1 to 2 lanes. They can be paved or gravel and don't often extend over much distance.

Long-term Commercial Significance

Includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land.

Lot Line

The legal perimeter of a parcel of property, often shown on a record of survey, final plat and/or legal description of property.

Low-Income

Households whose income is between 51% and 80% of the median income for the area, as determined by the Department of Housing and Urban Development (HUD).

Manufactured Housing

A manufactured building or major portion of a building designed for long-term residential use. It is designed and constructed for transportation to a site for installation and occupancy when connected to required utilities.

Mass Transit

The general term used to identify bus, rail, or other types of transportation that move large numbers of people at one time.

Middle Income

Between 96% and 120% of median income.

Minerals

Clay, coal, gravel, industrial mineral, valuable metallic substances, sand, stone, and other similar solid materials or substances to be excavated from natural deposits on or in the earth for commercial, industrial, or construction use.

Mixed-Use

Mixed-use buildings, typically with residential units above or beside a story or two of commercial spaces. This category provides for a mixture of uses where no single use predominates. The mixed-use

district allows for a mixture of residential housing types and densities; commercial, office, and institutional uses, parks and recreation uses; and public uses.

Moderate Income

Between 81% and 95% of median income.

Multi-modal

Two or more modes or methods of transportation. The means by which people move from place to place including, but not limited to automobiles, water vessels, trains, planes, bicycles, skateboards, and by foot.

Mutual Housing Associations

Members share ownership of an association that owns housing cooperatives. Residents participate in the development, operation, and management of the property. (They do not build up equity in their housing but have the right to residency as stipulated by an occupancy agreement).

Neighborhood Center

A small-scale concentration of mixed uses, generally located at the crossing of arterial streets, consisting of less than 80,000 total square feet of retail and office space, and intended to serve the daily needs of the immediately surrounding neighborhoods.

Net Density

The total number of dwelling units divided by the net area of the lot or site. The net area excludes roads, public open spaces, community facilities, and critical areas (environmentally sensitive areas).

Non-Motorized Transportation

Bicycle, pedestrian and equestrian transportation modes.

Open Space

Land in a predominantly natural state or altered for natural resource based uses (e.g., farming), and may include, but is not limited to: riparian areas, agricultural lands, watersheds, forests, floodplains, and habitat areas.

Operating Costs

Those recurring costs in a transportation system, such as salaries and wages, maintenance, energy, taxes, insurance, and supplies. Distinguished from capital cost.

Ordinance

A municipal statute or legislative action adopted by a local government that has the force of law.

Overlay Zone or District

A designated area applying additional special regulatory requirements or standards to address unique circumstances, such as on land near airports, in environmentally sensitive areas or in historic districts.

Pedestrian and Bicycle Orientation

Neighborhoods and areas of the town (e.g., downtown) that are designed for the safe movement of pedestrians and bicyclists via sidewalks, bike paths, etc.

Pedestrian Friendly Development

Development designs that encourage walking by providing site amenities for pedestrians. Pedestrian friendly environments reduce auto dependence and may encourage the use of public transportation.

Pedestrian Infrastructure

Those elements that support those traveling on foot or by bicycle, often including sidewalks, benches, trash receptacles, awnings, bike racks, enhanced roadway crossings, public squares and plazas, and small-scale signs.

Plan Amendment

An amendment or change to the text or maps of the long-range comprehensive plan.

Planning Commission

A group of citizens appointed by the City Council to research, survey, analyze, and make recommendations on current and long range development policies, resource management, implementing ordinances and land use decisions such as subdivision plats and zoning requests.

Planning Period

Refers to the amount of time the comprehensive plan is intended to perform. This plan is designed for a 20-year life with reviews every 5-to-7 years.

Policy

Guidelines that establish a definite course to guide present and future decisions. A policy is a specific statement that guides decision-making. It indicates a clear commitment of the local legislative body. A policy is based on a comprehensive plan's goals as well as the analysis of data. A policy is effectuated by implementation measures (such as zoning, land division, and environmental ordinances).

Potable Water

Suitable for human consumption as drinking water.

Preserve

To save from change or loss and reserve for a special purpose.

Proscriptive ordinance

A written law specifying prohibited actions.

Protect

In legal terms, preservation is the action required to provide the conditions for a monument, site, or

historic area to survive. The term is also related to the physical protection of historic sites to ensure their security against theft or vandalism, as well as environmental attack and visual intrusions. Buffer zones also provide protection to historic areas. Legal protection, which is based on legislation and planning norms, aims to guarantee defense against any harmful treatment, provide guidelines for proper action, and institute corresponding punitive sanctions.

Public Facilities

Infrastructure including streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

Public Services

Include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services.

Public Spaces

Those areas dedicated to use by the general public, such as streets, sidewalks, parks, community buildings, schools, public open spaces, plazas and other similar spaces.

Public Transportation

Multi-passenger transportation services available to the general public including buses, ferries, vans, airline and rail transit.

Purchase of Development Rights (PDR)

A mechanism typically used to help conserve open spaces, with public agencies or foundations acquiring from landowners the right to subdivide their land, keeping the land as open space in perpetuity.

Revitalization

A process of economic, social, and cultural redevelopment of a civic area or neighborhood.

Right of Way (ROW)

The right of way is the right to pass over the property of another. It usually refers to the land required for the traffic lanes plus shoulders on both sides of roads, railroads, bikeways, and trails.

Roadway

An open, generally public way for the passage of vehicles, persons, and animals. Limits include the outside edge of sidewalks, curbs and gutters, or side ditches.

Sanitary Sewer Systems

All facilities, including approved on-site disposal facilities, used in the collection, transmission, storage, treatment of discharge of any waterborne waste, whether domestic in origin or a combination of domestic, commercial or industrial waste.

Scenic Resources

Includes, among other things, the historical pattern of land use (including logging and farming activities).

Sedimentation

The process by which suspended particles in water settle to the bottom of a lake or river bed.

Self-Help Housing

Self-help, or sweat equity, housing enables potential homeowners to build up credit for a down payment on a home by contributing their labor to the construction or renovation. It can be a means for the low-income household to enter the housing market.

Sensitive Development

A use capable of being continued with minimal long-term effects on infrastructure and environment.

Shared Housing

Occurs when people reside together for social contact, mutual support and assistance, and/or to reduce housing expenses. This may range from two elderly persons sharing a small home to several disabled adults sharing a large single family home. A single mother with an extra bedroom may share her home with an elderly person who helps with childcare and/or living expenses.

Soil Erosion

The wearing away of the soil by the elements.

Sole Source Aquifer

Sole Source Aquifer is an EPA definition. It defines those areas where more than 50 percent of the drinking water is obtained from the groundwater.

Species of Local Importance

Those species that may not be endangered, threatened or sensitive from a statewide perspective, but are of local concern due to their population status, sensitivity to habitat manipulation, or other educational, cultural or historic attributes.

Sprawl

The development and expansion of urbanized areas at generally low residential densities, requiring the provision of roadways and urban services at costs exceeding provider income generated by such growth.

Streetscape

The view along a street from the perspective of a driver or pedestrian, especially of the natural and man-made elements in or near the street right of way, including street trees, lawns, landscape buffers, signs, street lights, above-ground utilities, drainage structures, sidewalks, and street furniture.

Structured Parking

A multi-story structure or part thereof which is specifically designed for vehicle parking.

Suburban

Blending or characterized by the blending of the urban and the rural. A land use development pattern that is dispersed as opposed to decentralized.

Supportive Housing

Housing for groups or individuals that need assistance to be able to maintain independent living.

Sustainability

Balancing the need for development and growth against the need to protect the natural and built environment, while at the same time meeting the needs of the present generation without compromising the needs and aspirations of future generations. Focuses on economic, environmental and social needs to ensure needs of future generations are met.

Threshold Markers

Those indicators of population density, transportation costs, employment commute patterns or household income used to determine at what point another action can or should be taken, used in this context to help determine at what point a transit system could be considered.

Traffic Calming

A set of strategies used by urban planners and traffic engineers that aim to slow down traffic and improve safety for pedestrians and bicyclists. Typical of: curb extensions, center islands, speed bumps, street tree canopies, strategically placed valley pans, and roundabouts.

Transfer of Development Rights (TDR)

The transfer of the right to develop or build, expressed in dwelling units per acre, either on land within one zoning district under contiguous ownership, or from land in one zoning district to land in another district where such density/development is permitted.

Transit

A general term applied to passenger rail and bus service available for the use by the public and generally operated on fixed routes with fixed schedules.

Transition Zone

That difficult-to-define area where one district ends and another begins, often featuring development and/or use patterns typical of each abutting district. In Southern Pines, one example are areas along the periphery of downtown.

Transitional Housing

Per the definition of Transitional Housing from the Federal McKinney Act, transitional housing is made available for up to 24 months to people who are homeless or are leaving emergency shelters.

Transportation Demand Management (TDM)

Methods or strategies aimed at changing travel behavior by reducing the demand for single occupancy vehicle travel rather than by expanding transportation facilities to meet travel demand. The strategies can include such things as expanding transit or ride-sharing options, changing parking policies, promoting work hour changes, and providing for telecommuting.

Transportation Facilities

Includes capital facilities related to air, water or land transportation.

Transportation Level of Service Standards

A measure that describes the operational condition of the travel stream and acceptable adequacy requirements. Such standards may be expressed in terms such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience, geographic accessibility, and safety.

Urban Forest

Includes tree-lined roadways, open green spaces, undeveloped forests, and parks, along with other public and private spaces within an urban area.

Urban Governmental Services

Include those governmental services historically and typically delivered by cities, and include storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with non-urban areas.

Urban Growth

Refers to growth (commercial, industrial, and residential) that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban.

Urban Sprawl

Urban sprawl manifests itself in one or more of the following patterns (a) Leapfrog development which bypasses vacant parcels located closer to the urban area that are suitable for development and instead locates away from existing urban areas; (b) strip development which allows commercial, retail, and multi-family residential developments to locate in a linear pattern along both sides of a major arterial; and (c) large expanses of low density, single-family dwelling development.

Urbanized Area

That space served by public utilities and services and characterized by development intensity of more than two residential units per acre.

Utilities or Public Utilities

Enterprises or facilities serving the public by means of an integrated system of collection, transmission, distribution, and processing facilities through more or less permanent physical connections between the plant of the serving entity and the premises of the customer. Included are systems for the delivery of natural gas, electricity, and telecommunications services.

Very Low Income

Between 31% and 50% of median income.

Viewshed

The landscape or area that can be seen directly from a defined viewpoint or along a transportation corridor.

Visioning

A process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals.

Wetland or Wetlands

Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wildfire Mitigation

The implementation of various measures designed to reduce the risk of destruction by wildfires.

Zone and Zoning District

A legislatively defined and enacted policy, including standards, a detailed map and other criteria, all of which control and define areas of physical development of the county or any part thereof or any detail thereof and which are classified by the zoning ordinance as available for certain uses and unavailable for certain other uses.

Zoning

The demarcation of an area by ordinance (text and map) into zones and the establishment of regulations to govern the uses within those zones (commercial, industrial, residential) and the location, bulk, height, shape and coverage of structures within each zone.

Appendix B

Plan Context & Community Background

Introduction

Study Area

The study area for this baseline and the Comprehensive Plan update include the City of Hickory and its Extra-Territorial Jurisdiction area (ETJ). The City of Hickory is in the foothills of the Blue Ridge Mountains along the Catawba River approximately 50 miles north of Charlotte and 80 miles east of Asheville in North Carolina's Piedmont region. The city encompasses approximately 29 square miles and is crossed by Interstate 40, US Highway 321 and US Highway 70.

Hickory, with a population of about 40,000, is mostly located in Catawba County, but is also partially situated in Burke and Caldwell Counties. Alexander County, just to the north of Hickory, completes the Hickory-Lenoir-Morganton Metropolitan Statistical Area (MSA) – the State's seventh largest. Residents sometimes refer to the MSA as the “Unifour,” with Hickory as its hub. The MSA is primarily urban and is comprised of 24 municipalities.

Government

The Hickory Tavern post office was established in 1860. Ten years later, in 1870, “Hickory Tavern” was incorporated. Seven years later, the “tavern” portion of the name was dropped, providing the official beginning for the City of Hickory. In 1931, the city expanded its boundaries to include the previously independent towns of West Hickory and Highland. The City has operated under a council/manager form of government since 1913 – the first jurisdiction in North Carolina and the third jurisdiction in the United States to adopt this method of government. The City Council is comprised of a mayor and six council members representing area wards, who are elected to staggered terms on a nonpartisan basis in citywide elections. The Council is the City's policy-making and legislative authority, and is responsible for

adopting the annual budget, and other matters related to the health and welfare of the City. The Council makes appointments to various boards and commissions and appoints the City Manager. The City Manager is the Chief Executive Officer, and is responsible for enforcement of laws and ordinances, delivery of services, implementing policies, managing daily operations and appointing department heads.

History

Hickory was initially incorporated as Hickory Tavern, which grew and took in the incorporated areas of Highland and West Hickory in 1931. Excerpted from the book *From Tavern to Town*, by Kirk F. Mohny & Laura A.W. Phillips. City of Hickory Historic Properties Commission, Hickory Landmarks Society, Inc.: 1988:

Hickory began as a small Piedmont city whose growth and development moved it from a late nineteenth-century trading center on the Western North Carolina Railroad to a thriving twentieth-century manufacturing center for furniture, bosierey, and textiles.

The history and development of Hickory has been divided into five stages of growth. The earliest phase began at the end of the eighteenth century and ended with the outbreak of the Civil War (1769-1860).

The second phase began when the Civil War ended, as the city's population and economy expanded as well as increased development in cultural and educational facilities (1861-1900).

This second phase lasted until around 1900, when the establishment of the first large-scale furniture plant made permanent changes in the manufacturing business. From 1901 through 1917, many furniture factories as well as bosierey and textile mills were built in the city's realm resulting in a rise in population, service industries, and building activity.

During World War I, construction in the city declined only to be followed by a large increase in population and housing needs, growth of businesses and manufacturing companies, and the extension of public services rendered by local government (1918-1940).

Table B.1 - Hickory's Population Trends, 1970-2007

Hickory Population Trends	
Year	Population
1970	20,569
1980	20,757
1990	28,301
2000	37,222
2007	40,520

Source: NC Office of State Budget and Management - 2009

Growth since

1945 – After World War II, Hickory continued growing and by 1961 the city boasted 46 furniture plants, 89 hosiery mills, 27 other manufactories, and a population of 37,000 people.

A vast urban renewal project as well as continual redevelopment also accompanied this period of growth. Much of the historic fabric of Hickory's downtown was removed or drastically altered in the 1960s and 1970s, leaving gaping holes in the urban landscape. Yet, this period also saw the emergence of historic preservation efforts in Hickory, a trend that has grown in scope by instilling pride in the city's past by encouraging the appreciation, preservation, and continued use of Hickory's historic resources.

The 1980's and the 1990's brought new economic growth to the region. The fiber optic industry made its home in the region and added to the overall prosperity of Hickory. However, many factories have since closed and the fiber optics industry has down-sized. Globalization is generally seen as the most significant factor in this most recent downturn.

The past 20-plus years have also witnessed the opening of Hickory's Arts and Science Center, the beginning of the new US 321 Corridor, construction of the new L.P. Frans Stadium, and

Hickory Public Library's distinction as the first public library in North America to use "smart card technology."

In 2001, the Hickory Metropolitan Higher Education Center, a collaboration of Lenoir-Rhyne University, Catawba Valley Community College and Appalachian State University, was developed. In 2009, the center became the Appalachian State University Greater Hickory Partnership. Hickory was designated as a North Carolina Main Street Community by the North Carolina Department of Commerce in 2006. Also in 2006, a section of the McDonald Parkway connected northeast Hickory to the southeast quadrant of the city. In 2007 Hickory was named "All America City" for the 3rd time.

Demographics

Introduction

A primary source of demographic data is the United States Census Bureau. Recently, the City of Hickory participated in the Bureau's American Community Survey (ACS), an annual survey containing multiyear estimates for areas with populations less than 65,000. The City's involvement contributed to a multi-year community estimate, spanning from 2005 to 2007. Under the ACS, surveys are sent to a population sample, providing a snapshot of larger population characteristics and conditions. This demographic information is of tremendous value in assisting Hickory's choices regarding service provision and resource allocation.

Additional demographic information is available

Table B.2 - Hickory's Population Change and Land Area, 2000 and 2007

Hickory Population			Land Area (Sq. Miles)				
July	April	Total	Population	Urban	2000	Annexed	2007
2007	2000	Growth	Annexed	Growth	Limits	2000-07	Limits
40,520	37,222	3,298	1,453	1,845	28.071	0.933	29.004

Source: NC Office of State Budget and Management - 2009

f r o m

Table B.3 - Growth Rates in the Four County Region

County	1990	2000	% Growth	2007	% Growth
Alexander	27,544	33,603	22.0	36,656	9.1
Burke	75,740	89,145	17.7	88,439	-0.8
Caldwell	70,709	77,708	9.9	79,376	2.1
Catawba	118,412	141,686	19.7	153,404	8.3
Total	294,395	344,142	16.9	357,875	4.0

Source: NC Office of State Budget and Management - 2009

the State of North Carolina and the Western Piedmont Council of Governments (WPCOG). Demographic data from these sources will also be considered for a more complete understanding of the population.

Understanding existing population trends, employment conditions and housing markets helps determine Hickory’s growth potential, as well as providing a better perspective of the community. The city’s growth potential is useful for predicting future trends, influencing the allocation of land and infrastructure for future planning efforts, and for the formulation of development opportunities, goals, and objectives.

Table B.4 - American Community Survey 2005-07 Estimates of Age Breakdown by Segment and Median Age

Age	Population
Under 5 years	2,708
5 to 9 years	2,802
10 to 14 years	2,432
15 to 19 years	2,688
20 to 24 years	2,835
25 to 34 years	6,240
35 to 44 years	6,062
45 to 54 years	5,197
55 to 59 years	2,514
60 to 64 years	1,517
65 to 74 years	2,647
75 to 84 years	1,885
85 years and over	854
Total Population	40,381
Median age (years)	35.6

Population Characteristics

The City of Hickory has been in a state of positive growth over the last several decades. More recent growth, although not as aggressive as in the past, is consistent with the population trends occurring in both the Hickory- Morganton-Lenoir Metropolitan Statistical Area (MSA) and throughout Catawba County.

According to the NC Office of State Budget and Management (OSBM), Hickory’s population in 2007 was 40,520. Of this population, 40,412 were located in Catawba County, 80 were located in Burke County, and 28 were in Caldwell County. Recent growth within the City is split between new growth and annexation as shown in the following table:

Regional growth rates show a similar pattern of slower growth between 2000 and 2007, and indicate the Hickory-Lenoir-Morganton MSA’s highest growth area as being within Catawba County:

Population data indicates:

Hickory’s population grew by an estimated 8.9 percent between the year 2000 and 2007 as reported by the US Census Bureau. During the same time period, the MSA experienced a growth rate of 4.0 percent, and Catawba County grew at a rate of 8.3 percent.

Since 1990 the area’s population has continued to grow. The OSBM reported the population of the City of Hickory to be 40,520 in 2007. In contrast, Hickory’s estimated population in 1996 was 32,632. The population change from 1996

Table B.5 - American Community Survey Demographic Race Estimates, 2005-07

Race	Hickory Estimate	Percent	Catawba Estimate	Percent	NC %	U.S. %
One race	39,538	97.9	151,060	98.6	98.5	97.9
White	28,961	71.7	125,375	81.8	70.5	74.1
Black or African American	5,584	13.8	12,299	8	21.3	12.4
American Indian and Alaska Native	269	0.7	689	0.4	1.2	0.8
Asian	828	2.1	4,056	2.6	1.8	4.3
Native Hawaiian and Other Pacific Islander	0	0	0	0	0.1	0.1
Some other race	3,896	9.6	8,641	5.6	3.7	6.2
Two or more races	843	2.1	2,186	1.4	1.5	2.1
Hispanic or Latino (of any race)	5,720	14.2	12,730	8.3	6.7	14.70

to 2007 represents a 15 percent increase, much of which may be associated with the annexation of previously unincorporated areas.

Catawba County will lead all counties within the Hickory MSA in total population gain through 2030. The US Census Bureau estimates that the MSA had a population of 363,036 in 2008.

The population data were reviewed for age distribution, racial composition, and education attainment level within the area. This information, when combined with other socioeconomic data, helps to evaluate the characteristics of typical residents and consumers within the community.

Census data indicates:

The Hickory median age is 35.6, almost two years younger than Catawba County.

Hickory is more racially/ethnically diverse and the Latino population was increasing, compared to Catawba County as a whole. Based on the 2005-2007 American Community Survey, Whites represented 73 percent of the population – a decrease of 4 percent since 2000 and Black or African Americans represented 14 percent. Of any race, 14.2 percent claimed to be Hispanic or Latino - high for the County and State and an increase from 7.7 percent from 2000, but similar to national percentages. Catawba County figures show any-race Whites representing 81.8 percent of the population and 8.3 percent any-race Hispanic or Latino.

Hickory and ETJ Census Tract Population 2009 Estimates and 2025 Projections Methodology

Population (100% county) from the 2000 Census were collected for each of the Census Tracts in and near the City of Hickory City Limits or its ETJ Limits. The 2009 Census Tract estimates are based on a proportion of population given to each Census Tract from the 2009 County population estimates (for Alexander, Burke, Caldwell and Catawba counties) from the OSBM.

The 2025 Census Tract projections are based on a proportion of population given to each Census Tract from the 2025 County population estimates from the OSBM. Census Tracts that have received a higher proportion of building permit growth (site built and multi-family) over the past five years (2004 through 2008) were given a higher proportion of population growth per year than tracts with less building permit activity. Household size for each Census Tract was also reduced by another five percent to match state projections of fewer persons per household from the US Census Bureau. This trend explains how some Census Tracts may have lost population since 2000. Please note that the Census Tract projections for 2025 are only projections based on current and future economic conditions, zoning ordinances, and national, state and local government policies. The next 100% population count of the Census Tracts will not occur until after the 2010 Census.

Table B.6 - Projected Population Growth for the Four County MSA Region, 2007-2030

County	2007	2010	2020	2030	2007-2030 % Growth
Alexander	36,656	37,695	40,705	43,434	18.50%
Burke	88,439	88,397	87,782	87,081	-1.50%
Caldwell	79,376	80,270	81,913	82,927	4.50%
Catawba	153,404	158,842	175,603	192,270	25.30%
Total	357,875	365,204	386,003	405,712	13.40%

Source: NC Office of State Budget and Management - 2009 and Western Piedmont Council of Governments

For the region, the State Projections for the four-county MSA show substantial growth in Catawba County, Hickory's primary population base.

The following maps can be used to cross-reference with Table 5 to see where the census tracts are located in relation to the projected growth. Ultimately, land use patterns will help determine where actual growth will occur. The maps do not reflect land use decisions and should be considered only as a short-term indication of regional growth.

Households and Housing

The population increase experienced in the City of Hickory and throughout the region is also reflected in the household growth patterns occurring during the same time period. Based on Census data, the following household and housing patterns have emerged:

There are an estimated 18,213 housing units as of

2007 with an average household size of 2.42 persons.

The number of households increased from approximately 12,580 in 1998 to an estimate of 16,174 households in 2007. Trends are consistent throughout the area, which show continued growth but at slower rates.

Hickory in 2000 had an average household size of 2.35. By 2007, the average household size had increased to 2.42 persons per household. Although increasing household size is unusual, Hickory's average is still smaller than those of Catawba County or the State. Nationwide, trends indicate average household size is generally on the decline.

Trends

There is a diverse business community within the

Table B.7 - Projected Population Growth for the Four County MSA Region, 2007-2030

Characteristics	Hickory	Percent	Catawba	Percent	NC %	U.S. %
Total housing units	18,213	-	66,369	-	-	-
Occupied housing units	16,174	88.8	58,797	88.6	86.1	88.4
Owner-occupied housing units	8,877	54.9	42,526	72.3	68.4	67.3
Renter-occupied housing units	7,297	45.1	16,271	27.7	31.6	32.7
Vacant housing units	2,039	11.2	7,572	11.4	13.9	11.6
Owner-occupied homes	8,877	-	42,526	-	-	-
Median value (dollars)	143,700	-	123,100	-	136,800	181,800
Selected monthly median owner costs						
With a mortgage (dollars)	1,155	-	1,009	-	1,174	1,427
Not mortgaged (dollars)	400	-	265	-	324	402

Source: NC Office of State Budget and Management, Western Piedmont Council of Governments, and the United States Census Bureau

Table B.8 - Projected Population Growth in the Hickory Region

Location		Population			Change	
County	Tract	2009	2025	Population	Total %	Annual %
Catawba	102.01	4,853	5,518	665	13.7	0.8
Catawba	102.02	7,595	9,081	1,487	19.6	1.1
Catawba	103.01	5,086	6,325	1,239	24.4	1.4
Catawba	103.02	5,583	6,334	751	13.5	0.8
Catawba	103.03	4,322	4,458	137	3.2	0.2
Catawba	103.04	4,101	4,184	83	2.0	0.1
Catawba	104.01	6,660	7,235	575	8.6	0.6
Catawba	104.02	5,010	4,990	-21	-0.4	0.0
Catawba	105	6,971	7,858	887	12.7	0.8
Catawba	106	6,385	6,570	184	2.9	0.2
Catawba	107	2,736	2,700	-36	-1.3	-0.1
Catawba	108	399	390	-9	-2.4	-0.2
Catawba	109	4,377	4,354	-24	-0.5	0.0
Catawba	110	2,974	2,961	-13	-0.4	0.0
Catawba	111.01	3,361	3,512	152	4.5	0.3
Catawba	111.02	6,191	7,263	1,073	17.3	1.0
Catawba	117.01	4,120	4,687	566	13.7	0.7
Catawba	118.01	6,043	7,685	1,642	27.2	1.5
Burke	211	5,741	6,068	327	5.7	0.3
Burke	212.02	4,226	4,422	196	4.6	0.3
Caldwell	313	6,941	8,433	1,492	21.5	1.2
Caldwell	314	8,781	9,381	600	6.8	0.4
Alexander	407	7,092	9,032	1,940	27.4	1.5
Total		119,549	133,440	13,892	11.6	0.6

Source: NC Office of State Budget and Management - 2009 and Western Piedmont Council of Governments

City of Hickory that contributes to the economy and the tax base, but the city and region are in the midst of an economic downturn that is and will continue to be a challenge government and business. The region will need to strengthen its job base, and determine how to provide services and amenities that residents and businesses desire.

The Western Piedmont Council of Governments recently prepared some trend studies for the Greater Hickory area that provide sobering statistics about the current economic climate in the

region, namely that the region continues to experience sharp decreases in employment - with the biggest decrease in manufacturing. Across the spectrum of manufacturing, the biggest losses were in furniture and apparel in the MSA and Catawba County.

Recent unemployment rates within the City of Hickory have doubled in a very short time period. The recent fluctuation provides no indications of what may occur in the future. The data also indicated that there was a decrease in the

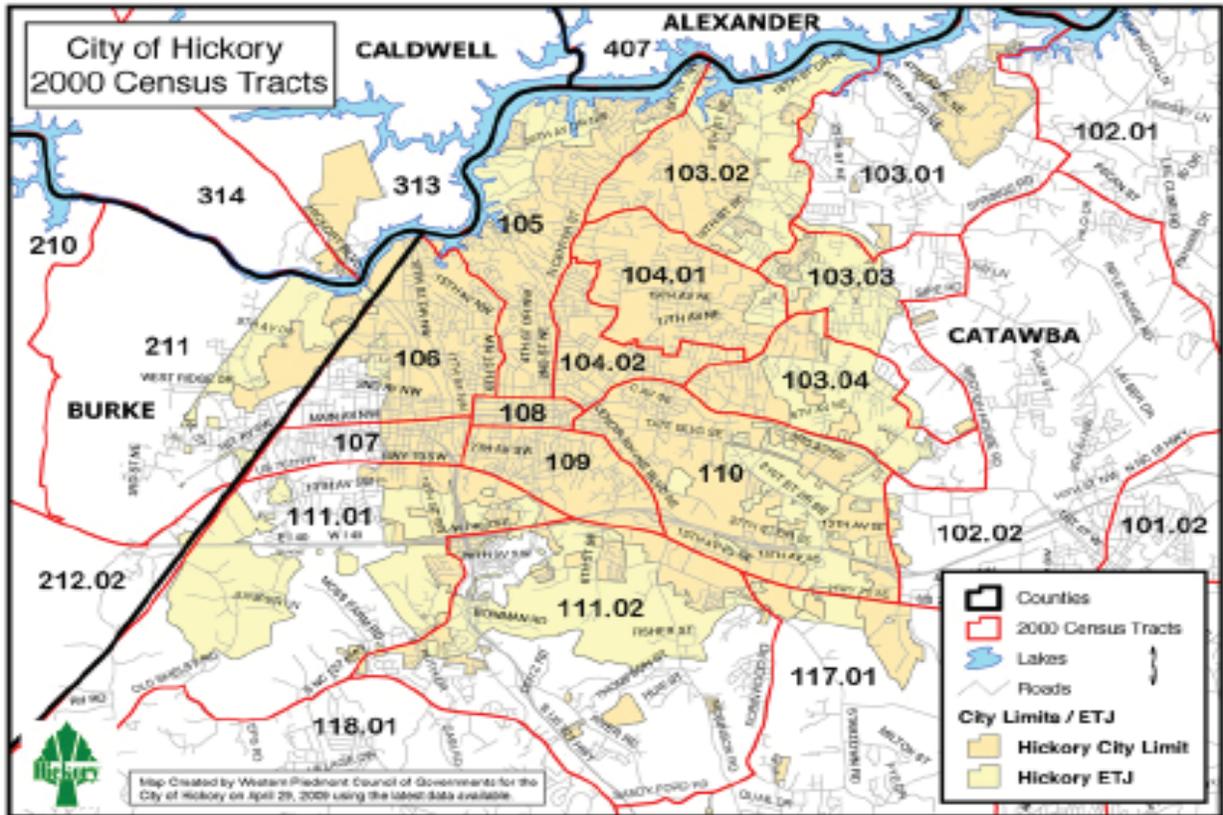


Figure B.1 - Census Tracts for Hickory, the ETJ, and the Surrounding Region

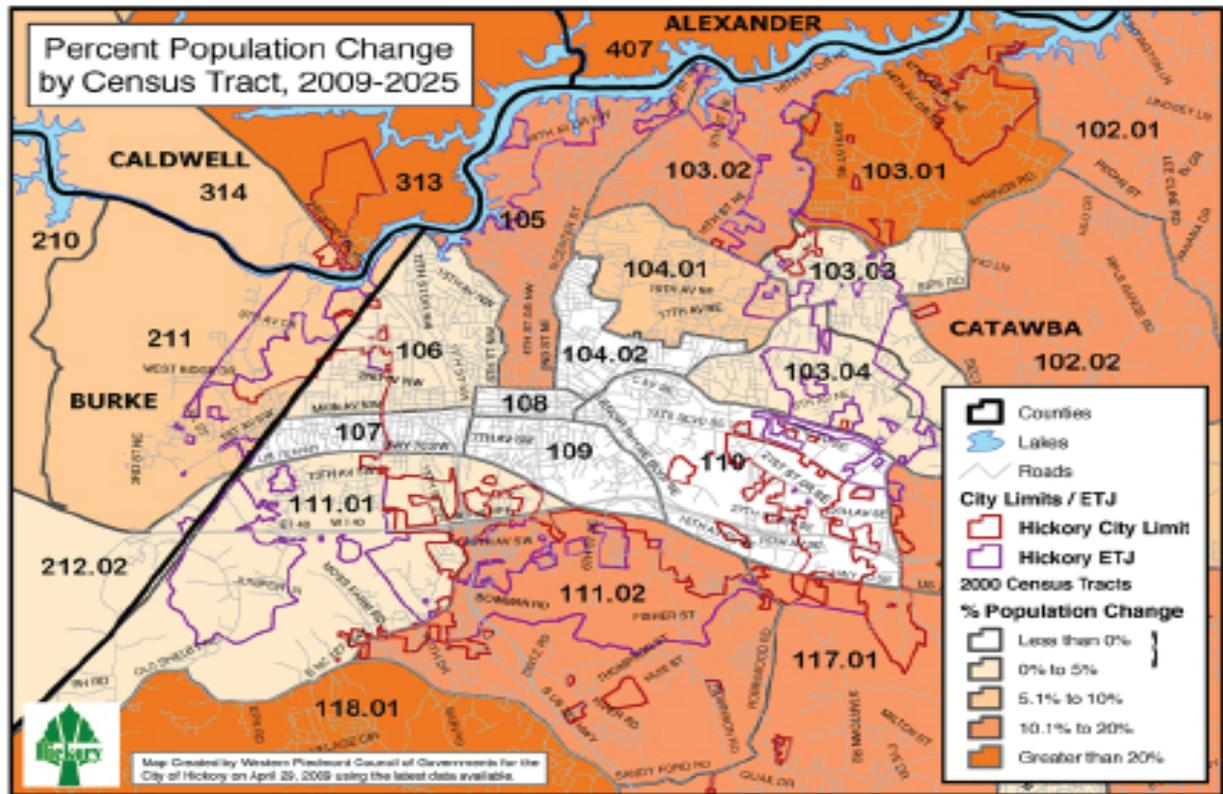


Figure B.2 - Projected Census Tract Population Gains

population with higher education and specific training. The data indicates that this population segment is leaving the area to find employment that meets career choices. This pattern may abate, but if employment opportunities are not developed, many residents may choose to leave the region to meet employment needs and career goals.

- *The region has seen an upward growth in income as shown by the increase in weekly wages over the last eight years, although this increase has not kept up with inflation.*
- *The number of people at or below the poverty level increased by 33 percent between 2000 and 2007.*
- *Foreclosures have increase but are now holding steady at approximately 1,750 to 1,950 cases per year between 2003 and 2008 within the MSA. Catawba County has seen a similar pattern of high foreclosures (approximately 750-850 per year between 2000 and 2008).*
- *The Hickory MSA has a lower-than-average educational attainment, with the MSA ranked last out of 14 MSAs in the State for high school and bachelor's degrees or higher.*

Cultural Resources

Cultural Opportunities

There are numerous cultural opportunities in Hickory. A regional center for performances and museums is located in the Science Arts and Literature Together (“SALT”) Block. The Catawba Science Center, the Arts and Science Center, Hickory Choral Society, and Patrick Beaver memorial Library are all located there, as well as the offices of the Western Piedmont Symphony. Concerts are held at several local churches, Lenoir-Rhyne University and the Museum of Art. Music programming also provides in-school performances, senior facility concerts and a library series.

Historic Districts

Hickory’s rich heritage is reflected in many structures located throughout the city. Although there are numerous historic structures located in Hickory, most are within historic districts. Many individual structures have been determined to possess significant architectural qualities and have been listed in the National Register of Historic Places and/or designated as Local Landmarks. Properties with these designations include the Brown-Penn Gym, Old City Hall, J. Summie Propst House, Elliott-Carnegie Library, and the Piedmont Wagon building.

In addition to significant individual structures, the city has four historic districts: Claremont, Oakwood, Kenworth, and the Southwest Downtown Historic District. All districts are listed in the National Register of Historic Places, and the three neighborhoods also been designated as local Historic Districts. Three districts are all primarily residential neighborhoods located close to the city center while the other district is a five-block area with historic commercial buildings.

The Claremont District is located northeast of the city center. The district is comprised of numerous examples of Queen Anne style architecture and other prominent architectural styles including bungalows, Colonial Revival, and Tudor Revival. Gridded streets and large building lots also characterize this district. Although single-family residences are the most predominant structural type in this district, the most prominent feature of the district are the public facilities associated with the SALT Block. This complex is located along NC 127, and includes the public library and the Catawba Valley Arts and Sciences Center. Another interesting feature in this district is Carolina Park. This small pocket park and arboretum, which was the city’s first large park in 1909, is located on the southern end of the historic district.

The Oakwood District is located northwest of the city center and west of the Claremont Historic District. This district has similar distinguishing characteristics as the Claremont Historic District to the east. The primary characteristic is single-family residential development demonstrating

examples of Queen Anne, Shingle, Colonial Revival, Spanish Mission Revival, bungalow, and Tudor Revival architecture. Other distinguishing characteristics of this district include consistent setbacks from the street and garages in the side or back yards. Another interesting feature of this district is the Oakwood Cemetery.

The Kenworth Historic District is in southeast Hickory. This neighborhood historic district is characterized by the largest intact group of bungalow-style homes in the city, and was the first planned subdivision in Hickory. The significance of this district comes from the large number of similar style structures, small building lots and the use of similar building materials. Non-residential structures in this district include a former elementary school and a church. The former elementary school is now an apartment complex for elderly and disabled residents.

The Hickory Southwest Downtown Historic District is located on five city blocks in the southwest quadrant of Hickory near the city's center, and is bordered on the north by the Southern Railroad rail line. The district contains historic commercial buildings including the former Hickory Passenger Depot, US Post Office, former Harper Motor Company, former Hickory Bonded Warehouse, former Hickory Overall Office, and the former Armory.

The importance of historic resources in the region is outlined in the Hickory Horizons Visioning process. That effort realized the connection between the preservation of historic and cultural resources and the quality of life for citizens of the community. Recommendations from this visioning process included establishment of better coordination within the region, the creation of task forces to tackle numerous issues related to historic preservation, and preparation of educational materials regarding historic resources.

Historic Preservation Commission

The commission has the responsibility for reviewing proposed construction or improvements to structures and awarding certificates of

appropriateness. The city has also enacted a Historic District Zoning Overlay for these historic districts and landmarks. This overlay district regulates modifications to structures and is outlined in the city's design review guidelines for historic districts. The purpose of the design review guidelines is to help citizens in making appropriate modifications to structures, and to educate the community about the design review process.

The federal government also offers some protection of historic structures and districts through Section 106 of the National Historic Preservation Act, if federal funds are used for the affecting project.

Public Art

The Public Art Commission reviews project proposals for the placement of pieces of art throughout the City. The Public Art Commission was appointed by the Hickory City Council to provide a forum for integrating public art into the public space, to help create a visual sense of the community, and to provide leadership in implementing a public art program for Hickory. The Public Art Commission is composed of twelve members with three-year terms - one from each ward and five at-large members and one representative from the Youth Council.

The Commission has an adopted Public Art Master Plan, which provides guidance for developing a comprehensive public art program. The master plan is designed to be a guidebook for public art in the city, and to be the major tool for implementing the public art program. The plan is a working document assisting the Public Art Commission and City Council in planning and funding for art-related projects, and provides artists' guidance when responding to those projects. The plan provides opportunities to include art works and programming. The document also provides guidance for developing goals and policies for Hickory's Comprehensive Plan.