

**MONROE COUNTY AND THE CITIES
OF CULLODEN AND FORSYTH**



**2022 JOINT COMPREHENSIVE
PLAN UPDATE**

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Introduction

The Joint Comprehensive Plan for Monroe County and the cities of Culloden and Forsyth was adopted in October 2022 and is in fulfillment of the requirement of Chapter 110-12-1: Minimum Standards and Procedures for Local Comprehensive Planning set by the Georgia Department of Community Affairs. The goal of this plan is to serve as the guiding document for the physical development and guide of land use in Monroe County and the incorporated cities. This plan is a living document, capable of being amended, updated, and improved to provide a flexible framework for development across the county for the next 20 years. This plan was built around and details the vision, goals, needs, and opportunities, current and future land use, and a five-year community work program that will help Monroe County and the cities of Culloden and Forsyth evaluate new development projects, direct capital improvements, guide public policy and ensure the county continues to prosper into the future.

The Middle Georgia Regional Commission met with each local government in February 2022 to discuss the Comprehensive Plan update requirement. These meetings allowed all jurisdictions to determine the best approach for plan development and stakeholder involvement. Based on that input, the Comprehensive Plan update process formally began when the initial kick-off public hearing was held on April 5, 2022, at 5:00 pm at the Monroe County Administration Building. Documentation from this meeting can be found in the Appendix. The purpose of the hearing was to brief the community on the process to be used to develop the Joint Comprehensive Plan, opportunities for public participation, and to obtain input on the planning process. The meeting was attended by representatives from local governments, community stakeholders, and members of the general public. The planning process schedule is included below.

Monroe County Comprehensive Plan Update Schedule		
Phase	Action	Timeframe
1	Initial Meetings with Local Governments	February 2022
2	Public Engagement, Including Kick-off Public Hearing	March-May 2022
3	Steering Committee Meetings	June 2022
4	Community Work Program Update	July 2022 – August 2022
5	Drafting and Review	August 2022
6	Revision and Adoption	September 2022 – October 2022

After meetings with Monroe County and the cities of Culloden and Forsyth, it was decided that conducting an online survey to elicit public input would be appropriate. This survey saw a good amount of participation from the general public in Monroe County and cities of Culloden and Forsyth, gaining 226 responses. The survey was open for public participation after the kick-off public hearing and remained open through all of the steering committee meetings. The results from the online survey are included in the Appendix.

Monroe County Joint Comprehensive Plan

Monroe County Steering Committee Meeting Schedule		
Meeting Number	Topic(s)	Date and Location
1	Initial Public Hearing	April 5, 2022, 5:00 PM – 6:00 PM @ Monroe County Administration Building
2	Joint Meeting: Transportation, Public Facilities and Utilities, and Broadband	June 1, 2022, 10:00 – 11:00 AM @ Monroe County Administration Building
3	Joint Meeting: Housing	June 7, 2022, 10:00 – 11:00 AM @ Monroe County Administration Building
4	Joint Meeting: Infrastructure (Public Facilities and Utilities, Transportation, and Broadband)	June 8, 2022, 6:00 PM – 7:30 PM @ Forsyth City Hall
5	Joint Meeting: Natural and Cultural Resources	June 14, 2022, 10:00 AM – 11:00 AM @ Monroe County Administration Building
6	Joint Meeting: Quality of Life (Natural and Cultural Resources, Public Safety, and Housing)	June 21, 2022, 6:00 PM – 7:30 PM @ Forsyth City Hall
7	Joint Meeting: Economic Development and Land Use	June 23, 2022, 10:00 AM – 11:00 AM @ Monroe County Administration Building
8	Joint Meeting: Public Safety and Healthy and review of previous topics	June 28, 2022, 10:00 AM – 11:00 AM @ Monroe County Administration Building
9	Joint Meeting: Economic Development and Land Use	June 29, 2022, 6:00 PM – 7:30 PM @ Forsyth City Hall
10	Meeting with Culloden: Community Work Program and Future Land Use	July 28, 2022, 9:30 AM – 12:00 PM @ Culloden City Hall
11	Meeting with Monroe County: Community Work Program and Future Land Use	July 29, 2022, 10:00 AM – 12:30 PM @ Monroe County Administration Building
12	Meeting with Forsyth: Community Work Program and Future Land Use	August 2, 2022, 10:00 AM – 12:30 PM @ Forsyth City Hall
13	Second Public Hearing	August 8, 2022, 6:00 PM – 7:00 PM @ Monroe County Administration Building



Picture 1: Picture of stakeholder session on economic development and land use topics

For the Steering Committee Meetings phase of the Comprehensive Plan update, Monroe County and the cities of Culloden and Forsyth jointly coordinated with the Middle Georgia Regional Commission to determine the most efficient manner of conducting their meetings. The schedule of meetings is included in the table on the previous page. The meetings began with an overview of the Comprehensive Plan requirements and an update on the planning process. Because Monroe County is Georgia’s Public Safety Capital, the steering committee decided a new section on public safety and health should be included in this update. The discussion of each topic included a review of the goals, needs, and opportunities from the 2017 plan, sharing results from the online survey and public engagement, and group engagement exercises including SWOT analysis, mapping activities, and facilitated group discussions. The sign-in sheets from these meetings are included in the Appendix.

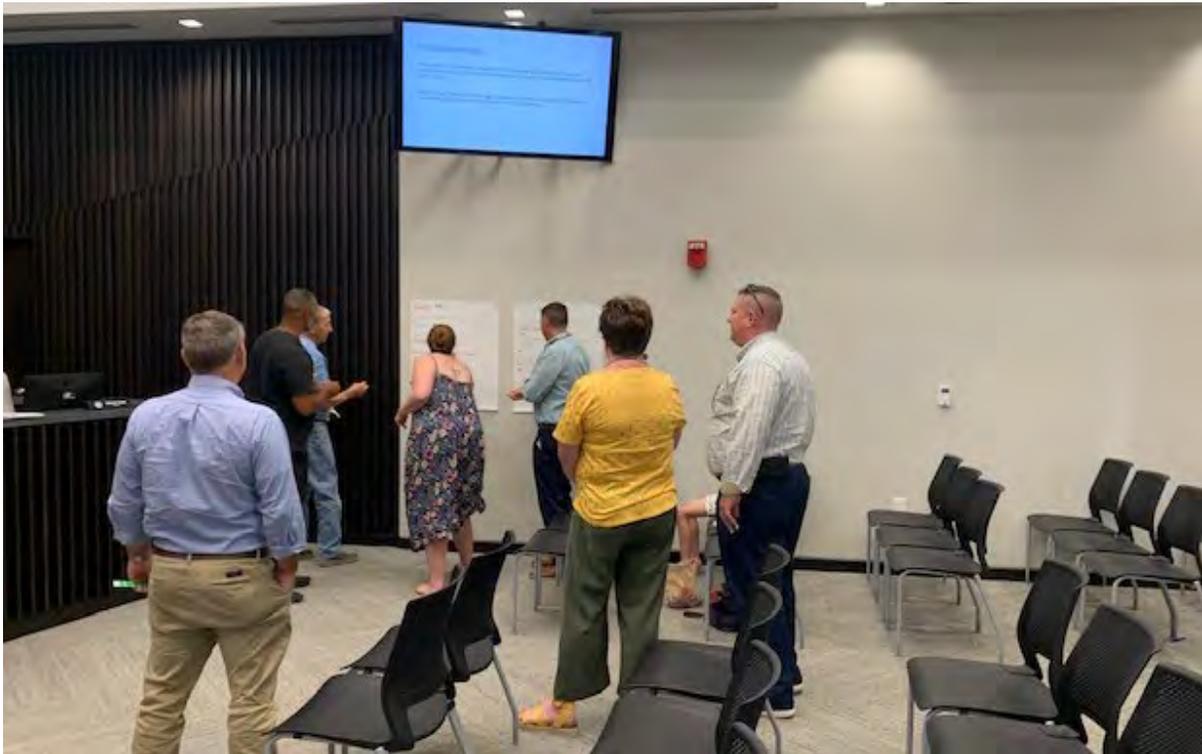
Monroe County Joint Comprehensive Plan

Monroe County Joint Comprehensive Plan Update Steering Committee Members				
Name	Organization	Title	Name	Organization
Lynn Miller	City of Culloden	Mayor	George Schulz	Resident
Lisa Elder	City of Culloden	City Clerk	Jay Sanders	Resident
Margie Bryant	City of Culloden	Councilwomen	Cathy Sanders	Resident
Mike Dodd	City of Forsyth	Councilman	Libby King	Resident
Janice Hall	City of Forsyth	City Manager	Danny Lyndall	Resident
Julius Stroud	City of Forsyth	Councilman	Yvonne Stuart	Resident
Eric Wilson	City of Forsyth	Mayor	Gail Donnelly	Resident
Mike Batchelor	City of Forsyth	Utilities Director	Jessica Price	Resident
Cody Ellis	City of Forsyth	Economic Development Director	William Horne	Resident
Chris Hewett	City of Forsyth	Councilman	Carol Horne	Resident
Regina Ivie	City of Forsyth	City Clerk	Nancy Schulz	Resident
Rebecca Headley	City of Forsyth	Main Street Coordinator	Baraba Goree	Resident
David Herndon	City of Forsyth	Fire Chief	Keith Boone	Resident
Greg Head	Development Authority of Monroe County	Vice Secretary/Treasurer		
Joyce White	Development Authority of Monroe County	President	Alan Gibbs	Resident
Tom Baugh	Development Authority of Monroe County	Chairman	Kenneth Donnelly	Resident
Wendell Horne	Development Authority of Monroe County	Board Member	Marian Donnelly	Resident
Tye Hanna	Stakeholder		Leah Yates	Resident
Gilda Stanbery	Forsyth Convention and Visitors Bureau	Executive Director	Ken Hurt	Resident
Richard Dumas	Monroe County	Public Information Officer	Happy Wyatt	Resident
Greg Tapley	Monroe County	Chairman	Hough Mercer	Resident
George Emami	Monroe County	Commissioner	Gretchen Mercer	Resident
Jim Hedges	Monroe County	County Manager	Sim Buff	Resident
Brad Freeman	Monroe County Sheriff's Office	Sheriff		
Kelsey Fortner	Monroe County	Community Development Manager		

Monroe County Joint Comprehensive Plan

After completing the Steering Committee meetings, the Middle Georgia Regional Commission took all of the information gathered from the meetings and public engagement activities and began drafting the goals, needs, and opportunities for each section in the Comprehensive Plan. These drafts were brought to the next round of meetings with both local governments when discussing the Community Work Program from June through August. At these Community Work Program meetings, the groups reviewed the 2017 Community Work Program and gave updates on all the previous projects and initiatives before discussing potential new projects for the 2022 – 2027 update to be included in the new Community Work Program.

The draft of the Comprehensive Plan was shared with Monroe County and the cities of Culloden and Forsyth on in advance of the public hearing. The second required public hearing was held on August 8, 2022, to present the plan to the public. Final comments were received over the following days and incorporated into the plan before it was submitted to the Georgia Department of Community Affairs for their formal review before being adopted by both municipalities. All of the documentation from these meetings is included in the Appendix.



Picture 2: Stakeholders engaging in an activity during a session on Infrastructure

Vison Statement

The 2017 vision statement was reviewed during the steering committee meetings. Generally, the theme and messaging from the previous vision statement were found to still be largely applicable today. The 2022 vision statement is below.

“Monroe County and the Cities of Culloden and Forsyth are welcoming communities primed for managed growth. Citizens, businesses, and governments are committed to cultivating a “small-town feel” where all people are safe, embrace diversity, and experience an excellent quality of life.”

Economic Development

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. Pursue appropriate industrial development to maintain a healthy tax base while protecting the high quality of life of Monroe County residents.

Needs and Opportunities

1. An expanded workforce is needed to support growing job opportunities in Monroe County. *

As Monroe County has grown in population over the previous 20 years, its workforce has not grown enough to fully support businesses in the county. The unemployment rate of the county was 2.1 percent in 2021, which is a sign that the labor market is tight, and employers might have difficulty finding workers to fill available positions. This problem is exacerbated by job opportunities outside of Monroe County, as 55.3 percent of employed Monroe County residents commute outside of the county for work, and businesses in the surrounding counties offer higher wages than Monroe County businesses. This leaves some Monroe County businesses, particularly those in the service sectors, struggling to find staff to operate at an efficient level. Stakeholders expressed a belief that the labor force will grow as the county's population continues to grow; however, the Capital Improvement Element adopted by Monroe County projects employment in the county to grow at a faster rate than the population. To support current and future businesses in Monroe County, a plan to attract more workers to Monroe County is needed.

2. Interstate-75 and a central location between Atlanta and Macon/Warner Robins are opportunities to encourage commercial and industrial development.

Monroe County's location along Interstate-75 between Atlanta and Macon/Warner Robins gives the county a strategic advantage to attract development. The interstate offers businesses



Picture 3: Five Below Distribution Center, located near Interstate 75

convenient access to Hartfield-Jackson International Airport and the Port of Savannah and brings thousands of potential consumers through the county on I-75. As stakeholders discussed economic development, a consistent theme was a desire to protect the character of Monroe County. By leveraging I-75 to attract development, Monroe County can be alluring to developers while keeping large developments in an appropriate area, preserving most of the county for residential and low-impact developments. As the communities plan for the impact of Plant Scherer being scaled back, new industrial and commercial development will be needed to offset the loss to the tax base, with I-75 being a prime resource to attract the needed development.

3. The tourism industry in Monroe County has the potential to provide increased economic impacts.

There are a variety of natural and cultural resources that make Monroe County an ideal location for tourism development. Lake Juliette, High Falls State Park, Indian Springs, and the Forsyth Golf Course are some of the main attractions in the county that bring people from all over Georgia. Tourism throughout Monroe County is growing, as more visitors came to the county in 2021 than in 2019 before the Covid-19 pandemic. Continuing to grow the tourism sector is an ideal opportunity to support local businesses and help ease the tax burden on residents when Plant Scherer scales back production. Stakeholders identified recruiting the film industry and offering additional community events as opportunities to grow the tourism sector.

4. As the central gathering place in Monroe County, additional investments in downtown Forsyth are needed to continue its growth. *

When asked about downtown Forsyth, stakeholders expressed pride and described it as an ideal modern small-town USA downtown. Residents expressed joy in going downtown to shop and eat and hoped that the area will continue to grow. However, downtown traffic, specifically from lumber trucks and tractor trailers, was shared as a hindrance to easy access downtown. In addition, expanding parking availability and increasing the walkability of downtown were seen as opportunities to provide a better downtown experience. By making necessary investments, downtown Forsyth can continue to grow, offering residents more expanded commercial and entertainment opportunities that are key for a high quality of life.



Picture 4: Downtown Forsyth

Natural and Cultural Resources

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. A wide variety of recreational opportunities and community events are available to Monroe County residents and visitors.

Needs and Opportunities

1. Use additional space to build out recreational infrastructure and provide more recreational opportunities. *

Monroe County and the City of Forsyth possess exceptional recreational facilities. Both jurisdictions seek to expand their parks and recreational facilities to better meet the needs of residents and visitors. Additionally, the county and city are focusing on increasing recreational opportunities for adults and seniors to encourage an active and healthy lifestyle, as well as reducing the need for travel to neighboring counties to pursue recreational opportunities unavailable in Monroe County. Monroe County, the City of Forsyth and the City of Culloden have been successful in their



Picture 5: Country Club Park in the City of Forsyth

efforts to provide residents and visitors with several year-round opportunities to participate in events throughout the county. Throughout the comprehensive planning process, the steering committee stressed the importance of expanding the availability of public events to encourage the development and strengthening of community ties.

2. **Protect the natural character of Monroe County.**

Participants at multiple stakeholder sessions conveyed a strong affection for the quaint, small-town charm of their respective communities in Monroe County. Many additionally expressed a strong desire to retain the natural character of the county with both its agricultural roots and plentiful mixture of natural resources from dense forests and hilly grasslands to largely unspoiled lakes, rivers and streams. Much of this concern stems from the haphazard development of metropolitan counties along the Interstate-75 corridor that failed to balance long-term economic growth with the greater concerns for residents' quality of life. The steering committee, leaders and stakeholders representing multiple local jurisdictions conveyed the necessity of preserving the county's natural heritage alongside future economic growth.

Community Facilities and Services

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. Offer high quality utilities to all current customers and expand services to residents in need.

Needs and Opportunities

1. **Monroe County should consider expanding their water distribution system to areas with contaminated wells.***

Monroe County will invest a considerable amount of money into its water distribution system, highlighted by a \$21 million project to extend its water distribution system to the Juliette area. This project was needed because many wells in the area are contaminated with toxins. While this project is going to be a big benefit to many residents, there are still areas that need access to water service, including some in the Juliette area that live off private roads. Many residents are content to continue to use private wells for their water needs, but those with contaminated wells need water service to protect their health.



Picture 6: Monroe County officials at ceremony commemorating water service being turned on for the first time in the Juliette area

2. Some neighborhoods in Forsyth have old water mains, which cause inadequate water pressure. *

Forsyth has metal galvanized lines in their water distribution system that have passed their useful life and are not the correct size to support the quantity of water volume used by residents. The 2” and 4” water mains have begun to rust and have become encrusted with iron and magnesium oxidizing bacteria that create friction during water transmission and cause inadequate water pressure. This limits the fire suppression ability of the Forsyth Fire Department. The Georgia Department of Natural Resources regulations require 6” lines for fire hydrants to ensure adequate water pressure and frustrates residents who do not have adequate pressure for household use. Work has been done in the Blount Street area, and the City is working to replace the water lines in the Sunset Terrace and Brookwood Drive neighborhoods, but there are other areas of Forsyth that need to have the water lines replaced and upgraded.

3. By expanding water treatment capacity, Forsyth will be able to meet the needs of future development. *

The City of Forsyth has adequate capacity in its water system for its current needs, but additional investments are needed to ensure they can serve the needs of future development. The City has begun working with the U.S. Department of Agriculture to fund improvements to increase the capacity of the water treatment plant, which will allow the City to sell more water to Monroe County and support all but the largest potential industrial developments in the City. Construction is expected to be completed within 24-to-36 months; however, further work is needed to improve the water lines so they can handle the increased capacity without breaking. To support development in the eastern part of the city across I-75, a new water storage tank is also needed.



Picture 7: Water tower in Forsyth

4. There are areas in Forsyth that have reoccurring drainage issues. *

There are areas of Forsyth that are prone to flooding during periods of heavy rainfall. Some areas, such as downtown, struggle with flooding due to storm sewer lines that are too small and become overwhelmed easily. There are other areas, such as Lee Street and Blount Hill, that are topographically located in low points where residents regularly complain about flooding when it

rains. Ensuring there is adequate infrastructure to support the downstream impacts of heavy rain is critical to minimizing the impacts on residents.

5. Monroe County should consider expanding their community facilities to prepare for forecasted growth. *

In the coming years, Monroe County is expecting substantial population growth. In the recently adopted Capital Improvement Element, the county projects a population of 37,928 by 2045, which is an increase of 33 percent from the 2021 population. To support this growth, the library, fire department, sheriff's department, animal shelter, parks and recreation facilities, landfill, and roads will need to be expanded. Funding these improvements, through Special Purpose Local Option Sales Tax (SPLOST), development impact fees, or other ways, are critical to ensuring Monroe County can provide high-quality services as they continue to grow. Monroe County is exploring whether impact fees are an appropriate way to finance these expansions; their adopted Capital Improvement Element is included in the Appendix.



Picture 8: The Monroe County Public Library, which will need to be expanded in the future

Housing

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. Determine the housing needs of the community.
2. Seek opportunities to advance housing opportunities for all citizens.

Needs and Opportunities

1. Encourage economic development and housing professionals to work together to develop homes of different sizes and at multiple price points.

Monroe County's housing market reflects a national trend of extremely limited options for purchasing a new home with very little housing stock available and few residential developments underway. By coordinating with housing developers to expand the range of home sizes and price points, Monroe County can ensure opportunities for homeownership among all residents. Building smaller homes, duplexes, or lofts above downtown businesses may better meet the changing needs of a growing population of senior citizens, as well as young professionals less interested in the traditional neighborhood home.



Picture 9: Union Hill Apartments in Forsyth

2. Work with property managers to improve rental property.

Many community stakeholders expressed concern related to the condition of housing in certain neighborhoods. It was identified that a large portion of blighted structures are rental properties. Ensuring that property owners maintain the integrity and exterior facades of rental homes will require both a strong code enforcement presence and bilateral communication between community leaders and the owners or managers of rental properties to ensure that housing is available for the community's workforce.

3. Educate citizens to improve their ability to own a home.

Many citizens are limited in their ability to purchase a home. These limitations come in the form of a lack of financial resources, lack of understanding of the home-buying process, lack of knowledge of investment and budget techniques, and more. To overcome these challenges, the steering committee suggested that community stakeholders explore opportunities to provide educational forums or courses to citizens interested in pursuing home ownership. An increase in homeownership in the community will not only create tangible financial benefits but will also bring societal benefits to families and communities. Those who own a home are far less likely to move than renters; therefore, they become more invested in their community, creating a sense of pride for all.

Transportation

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. Alleviate downtown congestion.
2. Assess transportation needs throughout the community.
3. Encourage walkability and pedestrian safety measures.

Needs and Opportunities

1. Reduce traffic congestion near public facilities.

Commercial and residential growth throughout the county has generated increased traffic congestion near public facilities such as schools, post offices and government centers. Widening roads with additional travel lanes and incorporating turning lanes at major intersections may allow motorists to more efficiently navigate roadways and intersections.

2. Expand and improve existing sidewalks and crosswalks. *

Sidewalks and crosswalks are vital to community interconnectivity and walkability desired by residents. Investment in this type of infrastructure can lead to several positive outcomes. First, the alleviation of traffic and parking as individuals may choose to walk or bike to desired areas rather than drive. Second, safe sidewalks and crosswalks promote a healthier lifestyle among residents. And finally, there is an increase in the sense of place and connectedness when communities are walkable.



Picture 10: Cracked sidewalk in Forsyth

3. Enhance roadway and intersection safety. *

The enhancement of intersections and roadways is an important factor in safe travel practices. One of the action items set forth by the steering committee for the City of Forsyth speaks to the creation and implementation of a maintenance plan for roads. A maintenance plan would help with the allocation of funding and encourage the continual upkeep of infrastructure. Moreover, as part of conversations surrounding how best to accommodate for the mobility of the older population, the steering committee discussed extend the time on the crosswalk light system to allow pedestrians more time to cross intersections.

Public Safety and Health

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. **Monroe County is Georgia's Public Safety Capital. Monroe County and the City of Forsyth will work to maintain current public safety and health service levels.**

Needs and Opportunities

1. **More fire stations are needed in Forsyth and Monroe County to expand fire service levels throughout the county. ***

The topic of fire service coverage was brought up during stakeholder engagement sessions and was highlighted in survey results as an important factor for maintaining a high quality of life in Monroe County. The Monroe County Fire Department has a sizeable workload protecting a 395.7-square-mile service area and 23,216 residents in the unincorporated county and City of Culloden. The county currently operates 13 county stations to provide the level of services expected by residents, and more are needed given Monroe County's projected growth of 19.7 percent through 2040 according to Woods and Poole Economics, Inc. Monroe County plans to build a new station in the High Falls area and replace a station in the Smarr area during the next five years. Longer term, the need for additional fire stations in the county will continue to expand with the population.

The City of Forsyth also identified the need for an additional fire station to serve the northern portion of the city. This area was recently annexed and has been identified as an area that is likely to experience rapid growth in the near future. This area is more than five road miles from the current Forsyth Fire Station, which is the cutoff distance stated by the Insurance Services Office to consider an area covered by fire protection. Additionally, a railroad crossing separates the fire station from a significant portion of its response area, creating a lengthy and potentially life-threatening delay. By building a new fire station across the railroad tracks, the City can ensure a timely response when their services are needed.

2. **Monroe County and the City of Forsyth need to plan for long-term public safety capital improvements. ***

Forsyth and Monroe County have been plagued by long wait times and higher prices when trying to acquire emergency vehicles and equipment. These circumstances necessitate longer-range planning for vehicle procurement and other integral public safety equipment. Regarding facilities, the need for a new county jail within approximately 15 years surfaced during stakeholder meetings. A large-scale project like this should be allowed ample planning time, with factors such as future building material procurement, land availability, and contractor availability being taken into advanced consideration.



Picture 11: New fire engine purchased by Monroe County

3. There is an opportunity to utilize the research done by Mercer University and its Georgia Rural Health Innovation Center to better inform public health policies.

It was identified at a stakeholder meeting that Mercer University and the Georgia Rural Health Innovation Center (GRHIC) are valuable health information resources in the region. The Mercer University School of Medicine maintains a focus on training physicians for work in rural areas and the GRHIC conducts research into health issues unique to rural areas. Specifically, the GRHIC studies healthcare infrastructure, mental health, maternal and child health, and the physician and health workforce shortage, all of which could provide valuable information to city and county decision makers. Exploring partnerships with these organizations to broaden access to public health analytics is an opportunity that should be considered by Monroe County and the City of Forsyth.

Broadband

High priority needs and opportunities are identified with an asterisk ().*

Goals

1. Ensure that all Monroe County residents have access to high-speed broadband services.

Needs and Opportunities

1. Monroe County should continue its support of Central Georgia EMC, Southern Rivers Energy, and other private internet service providers to expand coverage throughout the county. *

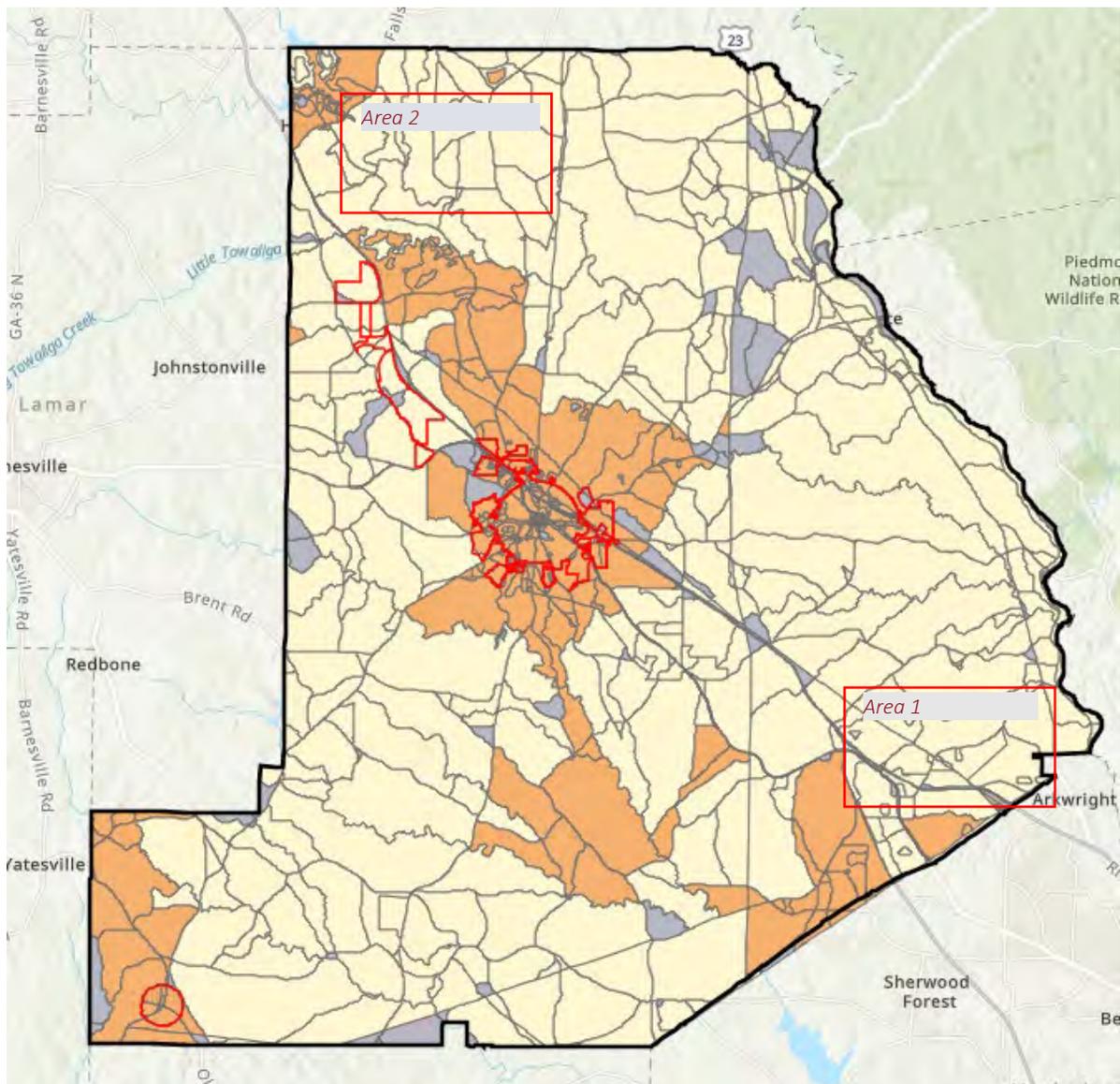
In February 2021, Monroe County entered into an agreement with the Monroe County Board of Education, the Development Authority of Monroe County, Central Georgia EMC, and Southern Rivers Energy on a project to bring high-speed internet to all EMC customers in the county. This project is critical to providing broadband internet to many portions of Monroe County that are considered unserved or underserved and will greatly improve the quality of life for residents and support business operations. Continuing support of efforts to expand broadband services across the county is critical to ensuring every resident has access to reliable high-speed internet.

Analysis of Underserved Areas:

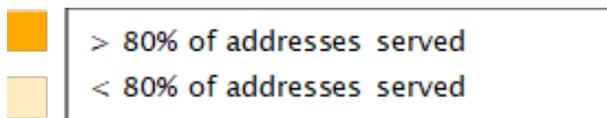
The State of Georgia, as part of the Georgia Broadband Deployment Initiative (GBDI), undertook a large-scale survey of broadband access, mapping more than 5 million locations of homes and businesses across the state, and overlaying that data with information on broadband provider service availability. Map 1, below, shows this data at the Census Block level. An interactive version of this data made by the Middle Georgia Regional Commission can be found at: <https://tinyurl.com/MonroeCoBroadband>.

As can be seen from Map 1, shown below, the majority of the unserved areas in Monroe County are in the unincorporated area, though a low-density portion of northwestern Forsyth is also unserved. Across the entire county, 61 percent of Census Block locations are considered 'unserved,' meaning that fewer than 20 percent of locations within each respective block do not meet the FCC's minimum definition of broadband service (at least 25 Mbps download speed and at least 3 Mbps upload speed).

Monroe County Joint Comprehensive Plan

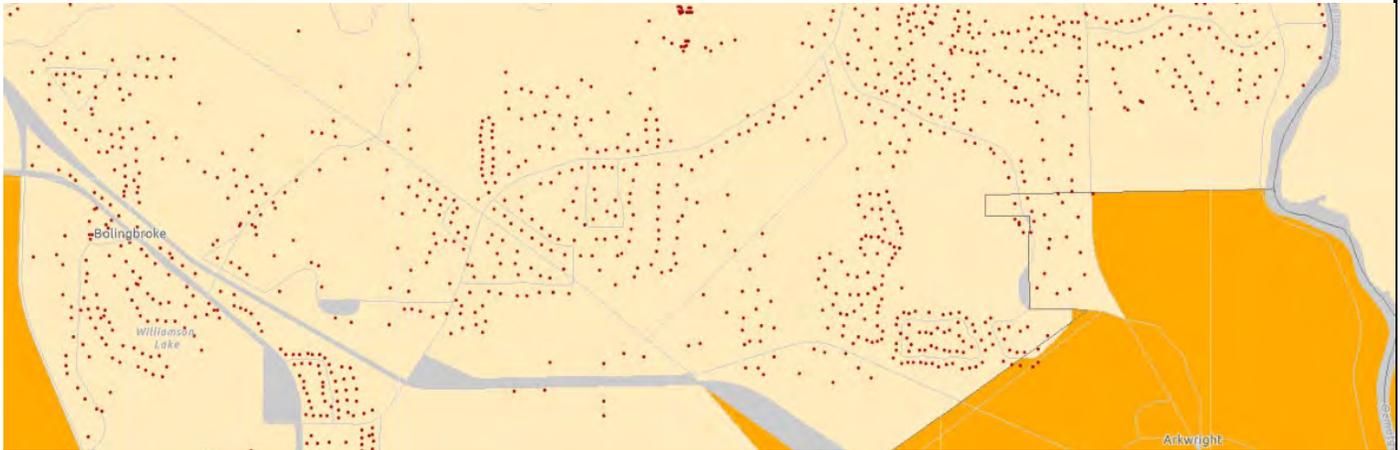


Map 1: Served and unserved areas of Monroe County



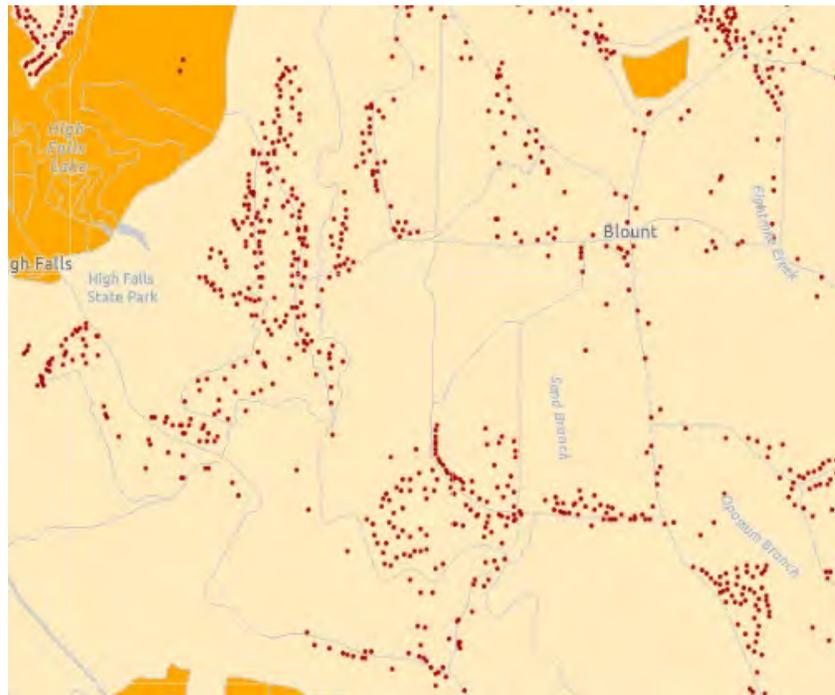
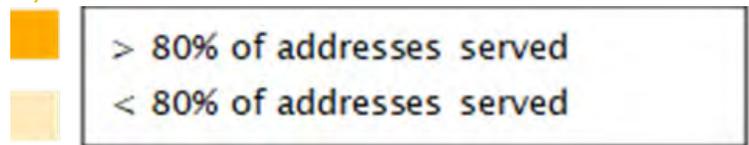
Monroe County Joint Comprehensive Plan

In examining the levels of service available in Monroe County and the Cities of Culloden and Forsyth, two focus areas were identified that would significantly benefit from expanded broadband capabilities, both in the unincorporated areas of the county. Map 2, shown below, shows the first identified area, the Bolingbroke area of the county, located southeast of the City of Forsyth, and includes points indicating the location of residential, commercial, industrial, and public buildings. Expanding service south of Pea Ridge Road, east of Highway 41, and west of the county border could capture the hundreds of homes located in currently underserved block groups.



Map 2: Unserved areas near the Bolingbroke area of Monroe County

Map 3, shown right, shows the other identified area of focus with points indicating the location of residential, commercial, industrial, and public buildings. This is the High Falls area of Monroe County. The area east of Boxankle Road, west of Freeman Road, and south of the county boundary has hundreds of structures that are unserved by broadband service. Both sub-areas 1 and 2 would benefit from increased broadband service availability.



Map 3: Unserved areas in the High Falls area of Monroe County



Map 4: Areas of Monroe County with grant funded projects.

Map 4, above, shows areas of Monroe County that will be served by projects funded by broadband grants in the coming years.

Between funding from the Federal Communications Commission Rural Digital Opportunity Fund and the American Rescue Plan, the majority of Monroe County will receive expanded broadband service. There are no planned projects in Forsyth because the entire city is already considered served by broadband service.

Land Use

Monroe County and the City of Forsyth have zoning regulations in place to assist the communities with protecting the character of the community and ensuring orderly and well-planned growth and development. Due to this practice, the county and city are required to develop a land use element of the comprehensive plan. For consistency in the plan, the City of Culloden also developed a parcel based future land use map. The jurisdictions opted to create a future land use map to serve as a visual guide to future planning. These future land use maps build upon the future land use map included in the 2017 Joint Comprehensive Plan.

Rather than maintaining specific goals or needs related to land use, Monroe County and the City of Forsyth will continually seek to implement their land development ordinances in a manner that promotes growth in accordance with the future land use map. The categories used to develop the future land use maps are described below.

Separate maps have been created to show the future land uses of Monroe County, the City of Culloden, and the City of Forsyth. All land parcels therein have been placed into one of seven categories: Residential, Commercial, Industrial, Public/Institutional, Park/Recreation/Conservation, Agriculture/Forestry, or Mixed Use. These land use maps are not to be used in place of zoning maps, as they show only general categories of land use with none of the specificity inherent in zoning classifications. What follows is a description of the land use categories to provide a consistent definition for each and a general idea of how they pertain to current land use patterns.

Residential

Residential land is that whose primary use is single-family and/or multi-family dwellings. In Monroe County and Forsyth, this category encompasses stick-built and manufactured homes, apartments, and townhomes. While residential land use is found scattered throughout Monroe County, the primary residential areas lie roughly along Interstate-75 with large residential clusters in the southeast, in and around the City of Forsyth, and in the northwest corner of the county. There is also a smaller residential development in and around the City of Culloden.



Brentwood Place Apartments



Single-Family Residence

Commercial

On commercial land, one can find businesses that provide goods and services to the public, excluding industrial interests. It is important to note the range of use intensities that fall into this category span from low-intensity office spaces to higher-intensity big-box shopping centers. As such, this category includes many varied business types. Some commonly included are office buildings, restaurants, shopping centers, service centers, convenience stores, and entertainment facilities. The current commercial land uses within Monroe County are by and large found within the City of Forsyth, due to the city's provision of commercially critical utilities like sewer access.



Walmart Supercenter in Forsyth, GA



The Whistle Stop Café in Juliette, GA

Industrial

The Industrial category is designated for areas used for manufacturing facilities, processing plants, warehousing, and mining. Typically, industrial land uses require vast, multi-acre properties due to their large-scale nature. Industrial land uses in Monroe County exist in various parts of the unincorporated county as either standalone operations or as clusters of industrial uses. A large cluster of industrial developments can be found off Rumble Road in the southern portion of the county, as well as along the eastern border. Additionally, some industrial uses are located within or close to the Forsyth city limits.



Vulcan Materials Company in Monroe County



Encore Industries Inc. in Forsyth, GA

Public/Institutional

It is important to note that the Public/Institutional land use category has been expanded since the 2017 Comprehensive Plan to include the uses of the Transportation/Communication/Utilities category. In addition to the destination-based uses that the category initially encompassed, including governmental buildings, churches, cemeteries, hospitals, etc., the category now includes infrastructure-related uses, such as major power generation plants, railroad facilities, and other such facilities. Most Public/Institutional lands currently identified in Monroe County are in the vicinity of the City of Forsyth, with a few parcels being in the City of Culloden. Georgia Power’s Plant Scherer, while fitting the definition of Public/Institutional, is located on a parcel primarily used for Park/Recreation/Conservation purposes because on the parcel includes Lake Juliette.



Georgia Public Safety Training Center in Monroe County



Monroe County Hospital in Forsyth, GA

Park/Recreation/Conservation

The Park/Recreation/Conservation category refers to those lands in Forsyth and Monroe County that have been set aside for recreational purposes, as well as those that are intended to be preserved in their current state. Recreational uses include both active recreation (purpose-built recreational facilities such as soccer fields, basketball courts, and tennis courts) and passive recreation (land requiring minimal development for recreation, such as hiking or biking trails). Monroe County contains Lake Juliette, High Falls Lake, and a section of the Ocmulgee River, as well as golf courses throughout the county. These areas, as well as designated parks in the City of Forsyth, comprise Monroe County’s principal Park/Recreation/Conservations land uses.



High Falls State Park in Monroe County



Forsyth Golf Club in Forsyth, GA

Agricultural/Forestry

Agricultural/Forestry areas denote privately owned land used mainly for crop farming, pastureland, livestock production, timber harvesting, and related practices. Agricultural/Forestry currently accounts for the largest land use category in Monroe County, with the overwhelming majority of unincorporated county parcels being of this use type.



Peach farming land located near Culloden, GA



Example Forestry Operation

Mixed Use

The category of Mixed Use is reserved for land hosting multiple, compatible use categories on the same parcel. These uses can be contained within a single building, such as apartments lofted over a strip of commercial development or spread out in different areas over the parcel. Outside of a couple of Mixed Use developments within the Forsyth city limits, there is currently very little Mixed Use development in Monroe County.



Mixed-Use Example: Avalon in Alpharetta, GA



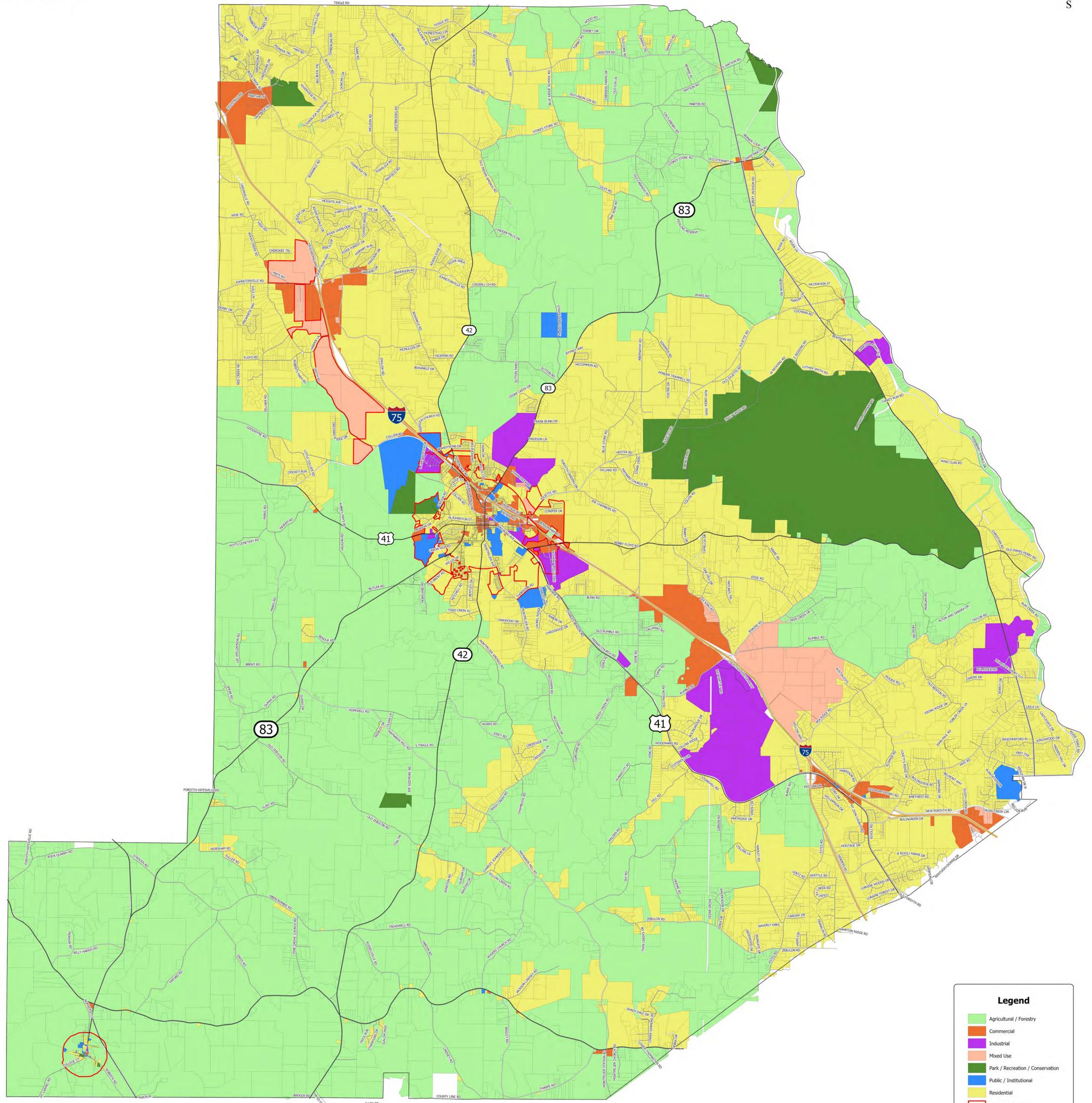
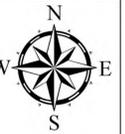
"Global Villages" Proposal in Gwinnett County

Future Land Use:

The Future Land Use model was deemed an appropriate visual format for this Comprehensive Plan. Input from Steering Committee members, City and County government officials, and the general public was incorporated to form a cohesive vision for the community. Individualized meetings were conducted with City of Culloden, City of Forsyth, and Monroe County elected/appointed officials and staff to discuss future developments and land use trends in their respective jurisdictions. Public stakeholder sessions allowed for citizen input on county/city character and how that character should be considered in future land use decisions. The Future Land Use Map that follows represents the future land use postures of Monroe County and the cities of Culloden and Forsyth, including the following:

- Expansion of the existing residential clusters branching off the Interstate-75 corridor, specifically in and around the City of Forsyth and in the southeast and northwest portions of the county.
- Industrial and higher-intensity commercial uses are suitable for parcels along Interstate-75.
- The City of Culloden anticipates future development within the city to be consistent with current land use patterns.
- The City of Forsyth has identified large parcels within the recent city annexations along Interstate-75 as possibly accommodating a mixture of uses, primarily residential and commercial.
- The increased development of the industrial use areas along southern Rumble Road, south of Interstate-75.
- The lands along northern Rumble Road, north of Interstate-75, show potential for mixed-use development.
- Throughout Monroe County, smaller land parcels abutting major intersections are generally suitable for commercial uses. Smaller land parcels that are adjacent to existing commercial properties are also generally suitable for commercial uses.
- When neighboring uses conflict, buffer zones may be necessary to transition from higher-intensity to lower-intensity use areas.

Monroe County, GA: Future Land Use



Legend

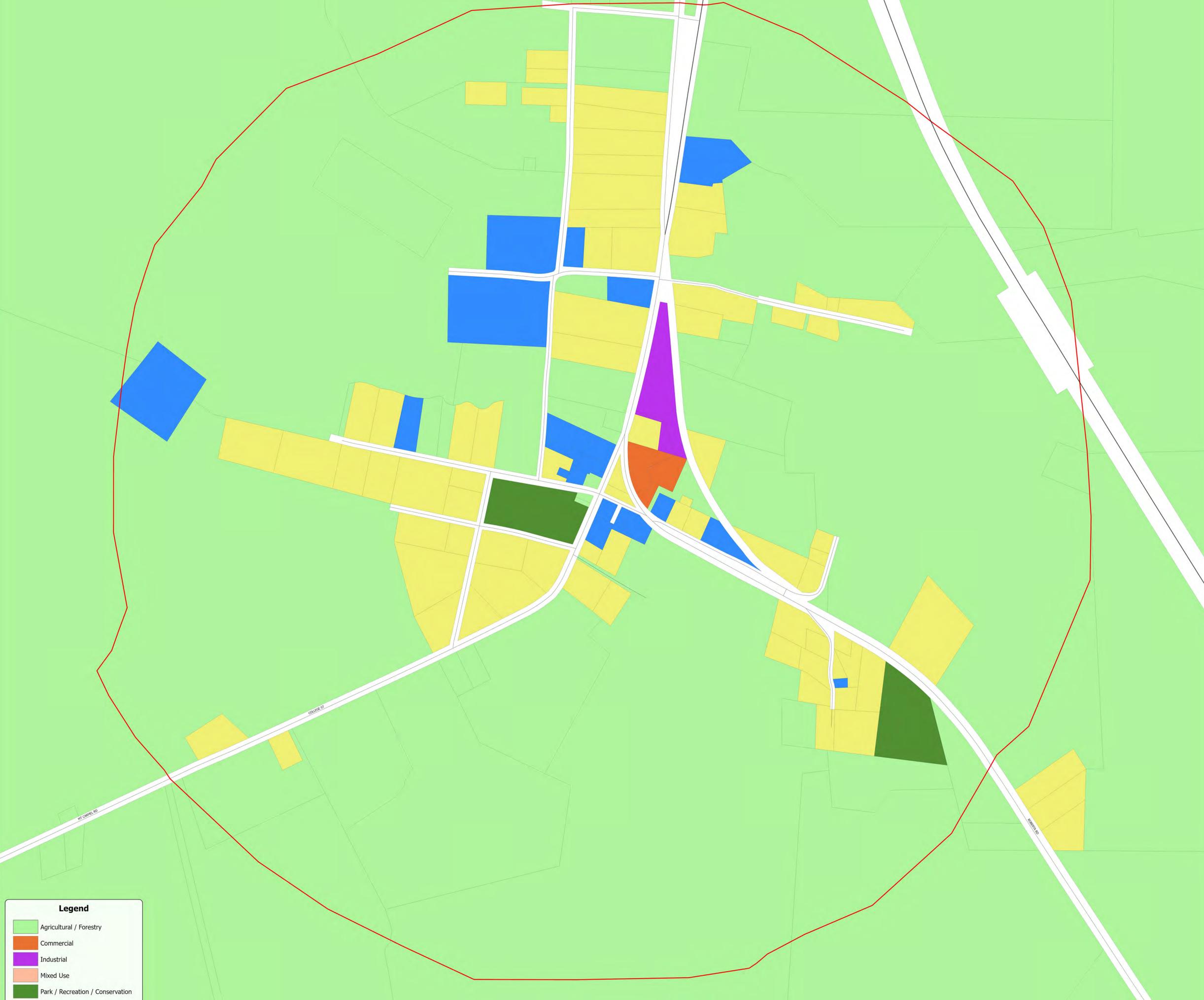
- Agricultural / Forestry
- Commercial
- Industrial
- Mixed Use
- Park / Recreation / Conservation
- Public / Institutional
- Residential
- Municipal Boundary

Road Class

- Interstate
- Highway
- Local Street



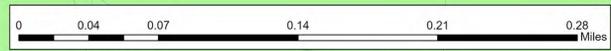
City of Culloden, GA: Future Land Use



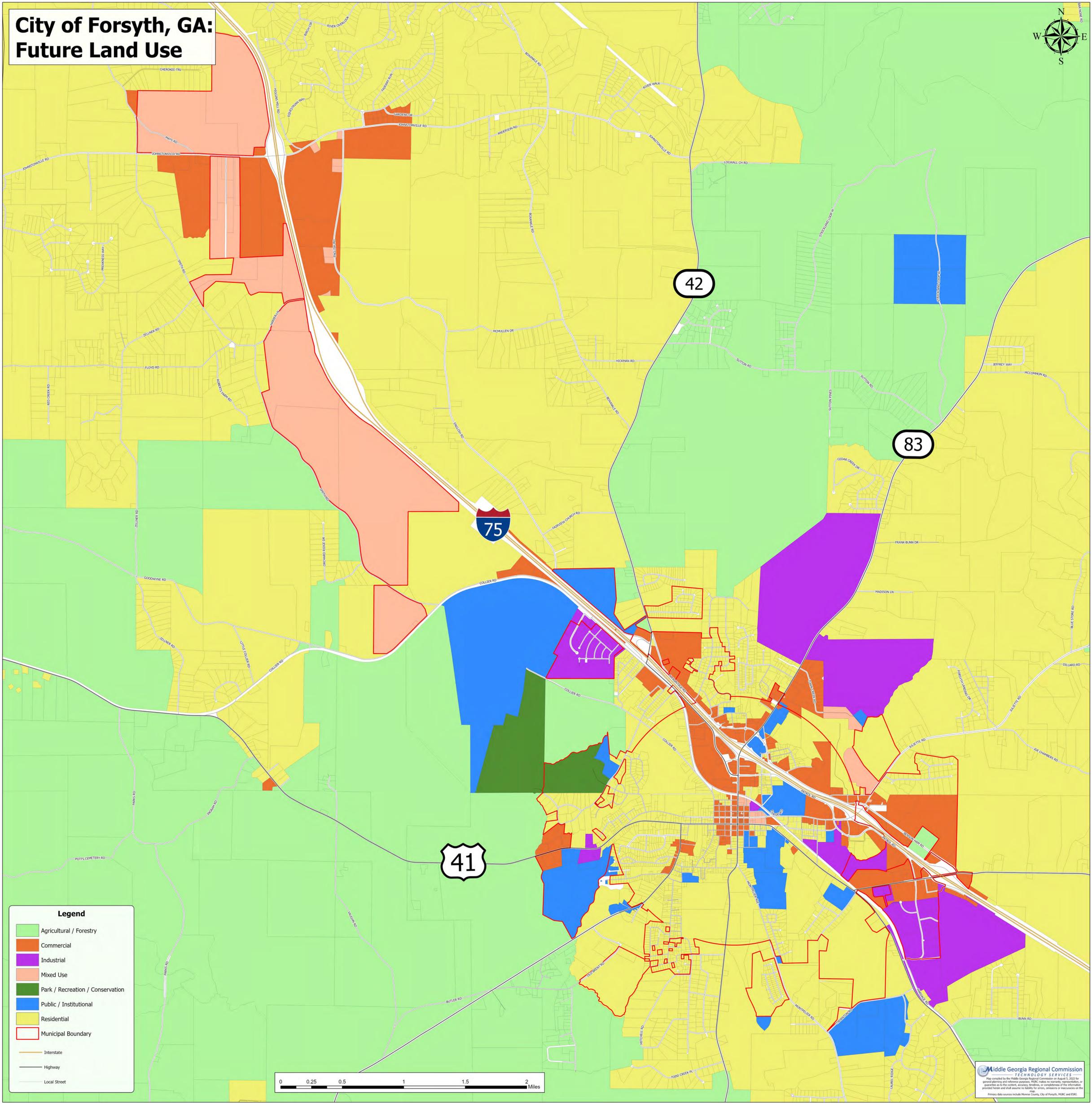
Legend

- Agricultural / Forestry
- Commercial
- Industrial
- Mixed Use
- Park / Recreation / Conservation
- Public / Institutional
- Residential
- Municipal Boundary

— Interstate
— Highway
— Local Street



City of Forsyth, GA: Future Land Use



Legend

- Agricultural / Forestry
- Commercial
- Industrial
- Mixed Use
- Park / Recreation / Conservation
- Public / Institutional
- Residential
- Municipal Boundary
- Interstate
- Highway
- Local Street





*Report of
Accomplishments
and Community Work
Programs*

Monroe County Report of Accomplishments

#	ACTIVITY	Status	Notes
Economic Development			
1	Pursue the establishment of a career academy.	Ongoing	The county will support the efforts in the county to establish a career academy.
2	Establish a centralized listing of jobs throughout the county.	Completed	A listing of jobs throughout Monroe County was completed by the Middle Georgia Economic Alliance.
3	Develop a cluster strategy to attract business.	Canceled	County pursuing other strategies with the Development Authority of Monroe County.
4	Place greater emphasis on aesthetics and landscaping in areas that serve as gateways to industrial parks and along frontage roads by establishing design regulations for signage, lighting, and landscape buffering.	Canceled	County leaders determined this to be ambiguous and difficult to measure performance.
Housing			
1	Coordinate with the Forsyth Housing Authority, Monroe County, and the Middle Georgia Regional Commission to apply for the Georgia Initiative for Community Housing (GICH) program.	Ongoing	County leaders continue working with other local jurisdictions to improve housing in the community.
2	Coordinate with the GICH program to identify and implement plan of action to improve housing throughout the county.	Ongoing	County leaders continue working with other local jurisdictions to improve housing in the community.
Natural and Cultural Resources			
1	Create a pet park.	Canceled	The City of Forsyth established a dog park at Country Club Park.
2	Create walking and biking trails.	Completed	The Georgia Department of Community Affairs created trails in High Falls State Park. Because of this, this is no longer a priority of the county.
3	Improve river access and recreational opportunities at the river.	Completed	This project was completed with funding assistance from the Georgia Department of Natural Resources.
4	Improve river signage.	Canceled	No longer a priority of the county.
5	Create a countywide preservation plan which considers Juliette, Culloden, Forsyth, Bolingbroke, Smarr, and other historic and natural resources in the county to capitalize on the economic opportunities, which accompany sound heritage and nature-based tourism practices.	Canceled	No longer a priority of the county.
6	Enact measures to protect the cultural heritage of the county, particularly crossroads communities and places under development pressures such as Bolingbroke, High Falls, Juliette, and Smarr.	Canceled	No longer a priority of the county.
7	Adopt a tree ordinance.	Completed	Addressed in Unified Development Ordinance.
8	Upgrade recreational complex to meet all ability needs: restrooms; sidewalks; softball, football and playground areas.	Completed	Between 2018 and 2022, the Monroe County Recreational Complex completed multiple facility upgrades to infrastructure and playing fields and courts.

Monroe County Report of Accomplishments

9	Annex Youth Center with a smaller multipurpose facility that will accommodate classes and younger age groups for basketball.	Completed	Project completed in 2020.
10	Complete renovation of Fields 5 and 6. Remove existing dugouts, bleachers, backstops and scorers towers and replace with spectator and player-friendly structures. Dig out infields and correct drainage issues.	Completed	This project is was completed with a cost of \$300,000 for both fields.
11	Install beach sand volleyball courts next to Pavilion 1.	Canceled	No longer a priority of the county.
12	Add grilling pits to all pavilions.	Canceled	No longer a priority of the county.
13	Refurbish batting cages and add cages between Fields 5/6 and 7/8.	Canceled	No longer a priority of the county.
14	Install an all-abilities playground.	Completed	Playground facilities at the Monroe County Recreational Complex were expanded in 2020 to include children of all ability levels.
15	Convert Field 8 into an all-abilities adult and youth baseball/softball field.	Canceled	No longer a priority of the county.
16	Convert Pavilions 4 and 5 into a screened-in facility.	Canceled	No longer a priority of the county.
17	New recreation property: Move rodeo arena to new property and designate acreage for livestock shows. Build arena with stalls.	Canceled	Relocating the rodeo facility with improvements proved cost-prohibitive at an estimated cost of \$8.4 million.
18	New recreation property: Install combination baseball/softball facility for tournaments (4 fields) with concessions/restroom facility.	Ongoing	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$1,000,000 with 100% funding by SPLOST and impact fees.
19	New recreation property: install an 8-lane track with a multipurpose field in the center.	Ongoing	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$750,000 with 100% funding by SPLOST and impact fees.
20	New recreation property: install tennis courts.	Ongoing	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$450,000 with 100% funding by SPLOST and impact fees.
21	New recreation property: install a 5K cross-country trail.	Ongoing	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$600,000 with 100% funding by SPLOST and impact fees.
22	New recreation property: install a secondary entrance/exit.	Completed	A secondary entrance/exit for the Monroe County Recreational Complex is under construction to alleviate traffic congestion and facilitate accessibility.
23	New recreation property: install a disc golf course.	Canceled	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$4,500 with 100% funding by SPLOST and impact fees.
24	New recreation property: install picnic areas.	Canceled	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$10,000 with 100% funding by SPLOST and impact fees.

Monroe County Report of Accomplishments

26	New recreation property: install outdoor basketball courts.	Canceled	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$20,000 with 100% funding by SPLOST and impact fees.
27	New recreation property: install adult softball fields (a minimum of 2 fields with 350-foot fences).	Canceled	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) at \$175,000 with 100% funding by SPLOST and impact fees.
28	Consider establishing incentives to make land preservation more feasible and attractive to owners/sellers/buyers of agricultural and forestry property.	Canceled	No longer a priority of the county.
Community Facilities and Services			
1	Create and adopt a Capital Improvements Plan.	Completed	Capital Improvements Plan created and adopted in 2020.
2	Increase community-wide participation in the volunteer exposition.	Canceled	No longer a priority of the county.
3	Educate the public and families on the importance of and services offered by the Boys and Girls Club.	Completed	Project was completed through a joint effort by Monroe County and the City of Forsyth.
4	Evaluate capacity of water system and expand, rehabilitate, or enhance to meet future demand as necessary.	Ongoing	Monroe County completed the expansion of its water system and continues to evaluate and improve its capacity.
5	Explore opportunities for low-impact recreational opportunities around the county.	Canceled	No longer a priority of the county.
6	Consider altering the aesthetics of areas surrounding public safety facilities, especially the corridors around the GPSTC.	Canceled	No longer a priority of the county.
7	Pave/repave roads and repair/reconstruct bridges in the unincorporated areas of Monroe County.	Ongoing	Incorporated by reference in the Capital Improvements Element Community Work Program (CIE/CWP) partially funded by SPLOST and impact fees.
8	Draft and implement a sign ordinance to establish restrictions on the number and size of signs and billboards allowed along state highways to maintain the existing rural sense of place.	Canceled	No longer a priority of the county.
9	Benchmark the City of Forsyth's ordinances for applicability in cross-roads communities and throughout the county.	Canceled	No longer a priority of the county.
Transportation			
1	Update the countywide Bike-Pedestrian Plan and promote connectivity with the Regional Bike-Pedestrian Plan.	Canceled	No longer a priority of the county.
2	Coordinate with Jones and Butts counties on the Multi-County Transportation Study.	Canceled	No longer a priority of the county.
3	Develop a county-wide Transit Development Plan.	Completed	The Monroe County Rural Transit Development Plan was written in 2018.

Monroe County Report of Accomplishments

4	Complete a wayfinding plan.	Completed	Wayfinding plan executed with installation of signage throughout Forsyth and Monroe County. Some signage may need to be refurbished due to exposure to the elements.
5	Construct a round-about near Indian Springs Business Park.	Canceled	No longer a priority of the county.
6	Assess public transit use to determine if services and routes are needed.	Canceled	No longer a priority of the county.
7	Seek funding for improvements to existing sidewalks and crosswalks.	Canceled	No longer a priority of the county.
8	Conduct a study to determine where sidewalks are needed.	Canceled	No longer a priority of the county.
9	Continue to develop a roadways maintenance plan.	Ongoing	Monroe County established and maintains a plan which prioritizes roads for resurfacing and repair throughout the county.
10	Develop a golf cart ordinance.	Canceled	No longer a priority of the county.
11	Establish a permanent rideshare next to I-75 near Johnstonville Road.	Canceled	No longer a priority of the county.
12	Build a natural gas refill station.	Canceled	This project was determined to be cost-prohibitive and require replacement of existing fleet vehicles with those running on liquid natural gas.
13	Consider establishing a road classification system with an official major thoroughfare map to assist with growth, traffic flow and volume.	Canceled	No longer a priority of the county.

City of Culloden Report of Accomplishments

#	ACTIVITY	STATUS	NOTES
Economic Development			
1	Establish a flea market/farmer's market in Welcome Center.	Ongoing	Project started in 2019 but was delayed by the COVID pandemic.
2	Pursue the establishment of a career academy.	Ongoing	Culloden is a participant but project is largely led by the City of Forsyth and Monroe County.
3	Establish a centralized listing of jobs throughout the county.	Completed	A listing of jobs throughout Monroe County was completed by the Middle Georgia Economic Alliance.
Natural and Cultural Resources			
1	Preserve Culloden's historical museum.	Ongoing	The museum has fallen into disrepair and needs to be preserved.
2	Pursue development of a garden center located in the Old City Hall building with assistance from the Monroe County Gardening Club and Monroe County 4-H Club students for area beautification.	Ongoing	The City is interested in utilizing space at the former city hall to develop a garden center with the intergenerational expertise of the Monroe County Gardening Club and local 4-H students from Mary Persons High School and other interested residents to beautify Culloden.
Community Facilities and Services			
1	Develop a Downtown Revitalization Plan and/or façade renderings of individual buildings within Culloden (Consider UGA Charette; DCA Resource Team and other programs).	Ongoing	Project started in 2019 but was delayed by the COVID pandemic.
2	Establish a city website.	Ongoing	This project has an estimated annual maintenance fee of \$1,509.
3	Establish a resource center to include a computer in the vacant section of city hall.	Completed	Public computer access established at city hall funded by grants and general fund.
4	Recreation upgrades; maintain existing recreational facilities (pickleball courts, ball field, and playground equipment).	Ongoing	Project includes replacing tennis courts with pickleball courts, creating a basketball court and softball field with funding assistance from the county.
5	Install a propane generator at fire station/city hall.	Completed	The City purchased a propane generator for the fire station/city hall.
6	Complete installation of new city well and install new water lines on Orange Street.	Ongoing	Study completed regarding water quality and volume from the well.
7	Pursue solar power panels for renewable energy source.	Ongoing	The City applied for funding; announcements are pending.
8	Secure land to expand city cemetery.	Ongoing	Culloden is exploring opportunities to purchase land near its cemetery to expand the availability of burial plots.
9	Secure land and purchase a discounted accessory building to establish a community food bank/crisis-resource center.	Ongoing	The City is interested in purchasing a portable building at about \$6,000 to serve as a food bank/crisis center for distribution of toiletries and other personal necessities to those in need throughout the region.
Transportation			
1	Develop a county-wide Transit Development Plan.	Completed	The Monroe County Rural Transit Development Plan was written in 2018.

City of Culloden Report of Accomplishments

2	Assess public transit use to determine if services and routes are needed.	Ongoing	The City continues to explore whether there is a need for on-demand transit services in Culloden.
3	Seek funding for improvements to existing sidewalks and crosswalks.	Ongoing	The City anticipates TSPLOST funding for sidewalk improvements.
4	Develop a roadways maintenance plan.	Ongoing	The City is preparing an inventory of city roads and their conditions to prioritize repaving and repairs over time.

City of Forsyth Report of Accomplishments

#	ACTIVITY	STATUS	NOTES
Economic Development			
1	Pursue the establishment of a historic museum.	Cancelled	Duplication of effort as Forsyth already supports a museum at the railroad depot.
2	Educate the public and families on the importance of, and services offered by, the Boys and Girls Club.	Completed	Completed with participation from One Monroe in 2018.
3	Pursue the establishment of a career academy.	Ongoing	The city is working to acquire grant funding to establish a career academy.
4	Establish a centralized listing of jobs throughout the county.	Completed	A listing of jobs throughout Monroe County was completed by the Middle Georgia Economic Alliance.
Housing			
1	Coordinate with the Middle Georgia Regional Commission and local real estate agents to conduct a housing study.	Ongoing	The housing study has an estimated cost of \$6,000 to \$10,000 funded by the city budget.
2	Coordinate with the Forsyth Housing Authority, Monroe County, and the Middle Georgia Regional Commission to apply for the Georgia Initiative for Community Housing (GICH) program.	Ongoing	The city intends to apply for the GICH program.
3	Coordinate with the GICH program to identify and implement a plan of action to improve housing throughout the county.	Ongoing	The Forsyth Housing Authority is interested in GICH assistance once eligible properties have been acquired.
4	Create a county-wide preservation plan which considers Juliette, Culloden, Forsyth, Bolingbroke, Smarr, and other historic and natural resources in the county to capitalize on the economic opportunities, which accompany sound heritage and nature-based tourism practices.	Ongoing	Forsyth contributes as a participant city with funding established through hotel-motel tax revenue.
Community Facilities and Services			
1	Make improvements to Lee Street parking lot.	Ongoing	Project cost estimated at \$150,000. Started in 2020.
2	Create and implement a Capital Improvements Master Plan for the entire city.	Ongoing	Project to be funded by SPLOST, grants and Combined Utility Fund.
3	Complete sidewalk/streetscape improvements along E. Johnston Street from downtown to Tift College Drive.	Completed	Project cost \$3,000,000 with funding from Transportation Enhancement Grant and matching city funds.
4	Expand current water plant and reservoir on Tobesofkee Creek and the wastewater treatment plants.	Ongoing	Project cost estimated at \$30,000,000 funded by grants, bonds and SPLOST.
5	Establish an employee wellness program.	Completed	Wellness program established through health insurance for employee participation with incentives.
Transportation			
1	Update the countywide Bike-Pedestrian Plan and promote connectivity with the Regional Bike-Pedestrian Plan.	Ongoing	The bike trail runs along Tift College Drive between the Ingles grocery store to the State Offices South at Tift College.
2	Develop a county-wide Transit Development Plan.	Completed	The Monroe County Rural Transit Development Plan was written in 2018.
3	Complete a wayfinding plan.	Completed	Wayfinding signage installed. Signage may require refurbishment due to exposure to elements.

City of Forsyth Report of Accomplishments

4	Assess public transit use to determine if services and routes are needed.	Cancelled	No longer a priority to the city.
5	Seek funding for improvements to existing sidewalks and crosswalks.	Ongoing	Forsyth is using 100% of TSPLOST funding for sidewalk and crosswalk improvements and expansion.
6	Develop a roadways maintenance plan.	Ongoing	Forsyth is preparing an inventory of roadways with emphasis on condition and priority for repaving and repairs.
7	Install a crosswalk at the intersection of North Lee Street and East Adams Street.	Underway	City is working with GDOT to complete the installation with \$2,500 cost funded through the City's general fund.
8	Build a natural gas refill station.	Cancelled	This project was determined to be cost-prohibitive for compression system infrastructure and need to replace combustible engine fleet with vehicles powered by liquid nitrogen gas.

Monroe County Community Work Program

#	ACTIVITY	CWP YEAR	RESPONSIBLE PARTIES	ESTIMATED COST	POSSIBLE FUNDING SOURCES
Economic Development					
1	Pursue the establishment of a career academy.	2022-2027	Monroe County, City of Culloden, City of Forsyth, Monroe County School Board	Staff time	Budget
Natural and Cultural Resources					
1	Complete parks and recreation facility improvements identified in the Capital Improvements Element.	2022-2023	Monroe County	\$2,979,500	SPLOST, Impact Fees
Community Facilities and Services					
1	Expand capacity of water system and expand, rehabilitate or enhance to meet future demand.	2022-2027	Monroe County	\$20,000,000	Budget, ARPA, SPLOST
2	Expand animal services facility.	2022-2027	Monroe County	\$88,000	Budget, Impact Fees
3	Purchase collection materials for the Monroe County Library	2022-2027	Monroe County	\$75,000	Budget, Impact Fees
Housing					
1	Coordinate with the Forsyth Housing Authority, Monroe County, and the Middle Georgia Regional Commission to apply for the Georgia Initiative for Community Housing (GICH) program.	2022-2027	Monroe County	Staff time	Budget
2	Coordinate with the GICH program to identify and implement a plan of action to improve housing throughout the county.	2022-2027	Monroe County, Forsyth Housing Authority	Staff time	Budget
Transportation					
1	Pave/repave roads and repair/reconstruct bridges in the unincorporated areas of Monroe County.	2022-2027	Monroe County	\$15,000,000	Budget, TSPLOST
2	Continue to develop a roadways maintenance plan.	2022-2027	Monroe County	Staff time	Budget
Public Safety and Health					
1	Staff 18 fire department positions.	2022-2027	Monroe County	\$1,350,000	Budget
2	Build new fire station in Smarr.	2022-2027	Monroe County	\$1,400,000	Budget

Monroe County Community Work Program

3	Build new fire station in Juliette.	2022-2027	Monroe County	\$1,400,000	Budget
4	Build new fire station in High Falls.	2022-2027	Monroe County	\$1,400,000	Budget
5	Purchase an ambulance and a fire truck for Juliette Fire Station.	2022-2027	Monroe County	\$1,700,000	Budget
6	Add living facilities at Bolingbroke fire station.	2022-2027	Monroe County	\$200,000	Budget
7	Build training facility for Sheriff's Office.	2022-2027	Monroe County	\$450,000	Budget
Land Use					
1	Use planning and zoning to ensure growth is managed.	2022-2027	Monroe County	Staff time	Budget
Broadband					
1	Support Central Georgia EMC, Southern Rivers Energy and other private internet service providers to expand coverage throughout the community.	2022-2027	Monroe County, City of Culloden, City of Forsyth	Staff time	Budget

City of Culloden Community Work Program

#	ACTIVITY	CWP YEAR	RESPONSIBLE PARTIES	ESTIMATED COST	POSSIBLE FUNDING SOURCES
Economic Development					
1	Establish a flea market/farmer's market in Welcome Center.	2022-2027	City of Culloden	Staff time	Budget
1	Pursue the establishment of a career academy.	2022-2027	Monroe County, City of Culloden, City of Forsyth, Monroe County School Board	Staff time	Budget
Natural and Cultural Resources					
1	Explore the establishment of a museum highlighting the history of Culloden.	2022-2027	City of Culloden	Staff time	Budget
2	Pursue development of a garden center located in the Old City Hall building with assistance from the Monroe County Gardening Club and Monroe County 4-H Club students for area beautification.	2022-2027	City of Culloden	Staff and volunteer time	Budget
Community Facilities and Services					
1	Develop a Downtown Revitalization Plan and/or façade renderings of individual buildings within Culloden (Consider UGA Charette; DCA Resource Team and other programs).	2022-2027	City of Culloden	Staff time	Budget
2	Establish a new city website.	2022-2027	City of Culloden, Middle Georgia Regional Commission (MGRC)	Annual maintenance fee: \$1,509	General Fund
3	Recreation upgrades; maintain existing recreational facilities (pickleball courts, ball field, and playground equipment).	2022-2027	City of Culloden	Staff time + \$10,000	Grants and General Fund
4	Complete installation of new city well and install new water lines on Orange Street.	2022-2027	City of Culloden	\$400,000	GEFA Grants/Loans and General Fund
5	Pursue solar power panels for renewable energy source.	2022-2027	City of Culloden	\$300,000	Grants and General Fund
6	Secure land to expand city cemetery.	2022-2027	City of Culloden	Staff time	Grants and General Fund

City of Culloden Community Work Program

7	Secure land and purchase a discounted accessory building to establish a community food bank/crisis-resource center.	2022-2027	City of Culloden	Staff time + \$6,000	Grants and General Fund
Housing					
1	Pursue funding for housing rehabilitation	2022-2027	City of Culloden	Staff time	Budget, CHIP, CDBG
Transportation					
1	Assess public transit use to determine if services and routes are needed.	2022-2027	Monroe County, Cities of Forsyth and Culloden	Staff time	Budget
2	Seek funding for improvements to existing sidewalks and crosswalks.	2022-2027	Monroe County, Cities of Forsyth and Culloden	Staff time	Budget
3	Continue to develop a roadways maintenance plan.	2022-2027	Monroe County, Cities of Forsyth and Culloden	Staff time	Budget
Public Safety and Health					
1	Work with the Monroe County Fire Department to ensure the efficient operation of the Culloden Fire Station	2022-2027	City of Culloden	Staff time	Budget
Land Use					
1	Continue intergovernmental agreement for code enforcement to address blight.	2022-2027	Monroe County, City of Culloden	Staff time	Budget
Broadband					
1	Pursue Broadband Ready Initiative.	2022-2027	City of Culloden	Staff time	Budget
2	Support Central Georgia EMC, Southern Rivers Energy and other private internet service providers to expand coverage throughout the community.	2022-2027	Monroe County, City of Culloden, City of Forsyth	Staff time	Budget

City of Forsyth Community Work Program

#	ACTIVITY	CWP YEAR	RESPONSIBLE PARTIES	ESTIMATED COST	POSSIBLE FUNDING SOURCES
Economic Development					
1	Pursue the establishment of a career academy.	2022-2027	Monroe County, City of Culloden, City of Forsyth, Monroe County School Board	Staff time	Budget
2	Construct a Department of Drivers Services building for commercial drivers licenses at industrial park off Highway 18.	2022	City of Forsyth, Development Authority of Monroe County	\$1,000,000	Budget, SPLOST
3	Develop and implement Indian Springs Business Park marketing strategy to facilitate economic development	2022-2027	City of Forsyth, Development Authority of Monroe County	Staff time	Budget
Natural and Cultural Resources					
1	Establish a junior council.	2022-2027	City of Forsyth	Staff time	Budget
3	Update and implement a Parks Plan	2022-2027	City of Forsyth	Staff time	Budget
4	Complete improvements to Forsyth Golf Course and the clubhouse	2022-2027	City of Forsyth	\$1,000,000	Budget
Community Facilities and Services					
1	Make improvements to Lee Street parking lot.	2022-2027	City of Forsyth	\$150,000	General Fund
2	Create and implement a Capital Improvements Master Plan for the entire city.	2022-2027	City of Forsyth	Staff time	Grants, SPLOST, and Combined Utility Fund
3	Expand current water plant and reservoir on Tobesofkee Creek and the wastewater treatment plants.	2022-2027	City of Forsyth	\$30,000,000	Grants, Bonds, SPLOST, USDA Grant and Loan
4	Replace metal water lines throughout city neighborhoods.	2022-2027	City of Forsyth	\$10,000,000	Budget, SPLOST, GEFA, and grants
5	Improve water system in the Sunset Terrace and Brookwood Drive neighborhoods.	2022-2027	City of Forsyth	\$750,000	Budget, SPLOST, GEFA, and CDBG
Housing					
1	Coordinate with the Middle Georgia Regional Commission and local real estate agents to conduct a housing study.	2022-2027	City of Forsyth, MGRC	\$6,000 - \$10,000	Budget

City of Forsyth Community Work Program

2	Coordinate with the Forsyth Housing Authority, Monroe County, and the Middle Georgia Regional Commission to apply for the Georgia Initiative for Community Housing (GICH) program.	2022-2027	City of Forsyth, MGRC	Staff time	Budget
3	Coordinate with the GICH program to identify and implement plan of action to improve housing throughout the county.	2022-2027	City of Forsyth, Monroe County	Staff time	Budget, Forsyth Housing Authority
4	Edit ordinances to pursue blight remediation	2022-2027	City of Forsyth	Staff time	Budget
Transportation					
1	Update the countywide Bike-Pedestrian Plan and promote connectivity with the Regional Bike-Pedestrian Plan.	2022-2027	City of Forsyth	Staff time	Budget
2	Develop a countywide Transit Development Plan	2022-2027	City of Forsyth	Staff time	Budget
3	Seek funding for improvements to existing sidewalks and crosswalks.	2022-2027	City of Forsyth	Staff time	Budget, TSPLOST
4	Develop a roadways maintenance plan.	2022-2027	City of Forsyth	Staff time	Budget
5	Install a crosswalk at the intersection of North Lee Street and East Adams Street.	2022-2027	City of Forsyth	\$2,500	Budget
Public Safety and Health					
1	Construct new public safety facility.	2022-2027	City of Forsyth	\$1,000,000	Budget, SPLOST
Land Use					
1	Evaluate zoning map for appropriateness based on annexations and development.	2022-2027	City of Forsyth	Staff time	Budget
2	Implement annexation plan	2022-2027	City of Forsyth	Staff time	Budget
Broadband					
1	Pursue Broadband Ready Initiative.	2022-2027	City of Forsyth	Staff time	Budget
2	Support Central Georgia EMC, Southern Rivers Energy and other private internet service providers to expand coverage throughout the community.	2022-2027	Monroe County, City of Culloden, City of Forsyth	Staff time	Budget

Appendices

Appendix A: Adoption Resolutions

Appendix B: Public Hearing Documentation

Appendix C: Steering Committee Meeting Documentation

Appendix D: Community Survey Results

Appendix E: Monroe County Capital Improvement Element



Appendices

Appendix A: Adoption Resolutions



**RESOLUTION
BY MONROE COUNTY
ADOPTING THE JOINT COMPREHENSIVE PLAN UPDATE
FOR
MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH**

WHEREAS, the 1989 Georgia Planning Act requires that all local governments submit a comprehensive plan; and

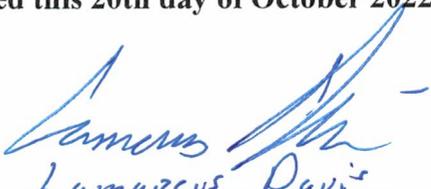
WHEREAS, O.C.G.A. 50-8-1 et seq. gives the Department of Community Affairs authority to establish standards and procedures for appropriate and timely comprehensive planning by all local governments in Georgia; and

WHEREAS, all portions of the Joint Comprehensive Plan Update for Monroe County and the Cities of Culloden and Forsyth were completed by Monroe County with the assistance of the Middle Georgia Regional Commission; and

WHEREAS, this document was reviewed by the Georgia Department of Community Affairs and was found to be in compliance with the Local Planning Requirements.

THEREFORE, be it resolved that Monroe County does hereby adopt the Joint Comprehensive Plan Update for Monroe County and the Cities Culloden and Forsyth.

September
Adopted this 20th day of ~~October~~ 2022.



Lamarcus Davis
Gregory V. Tapley, Chairman
Monroe County Board of Commissioners



Witness

**RESOLUTION
BY THE CITY OF CULLODEN
ADOPTING THE JOINT COMPREHENSIVE PLAN UPDATE
FOR
MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH**

WHEREAS, the 1989 Georgia Planning Act requires that all local governments submit a comprehensive plan; and

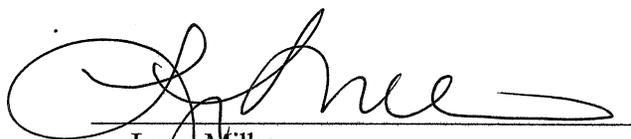
WHEREAS, O.C.G.A. 50-8-1 et seq. gives the Department of Community Affairs authority to establish standards and procedures for appropriate and timely comprehensive planning by all local governments in Georgia; and

WHEREAS, all portions of the Joint Comprehensive Plan Update for Monroe County and the Cities of Culloden and Forsyth were completed by the City of Culloden with the assistance of the Middle Georgia Regional Commission; and

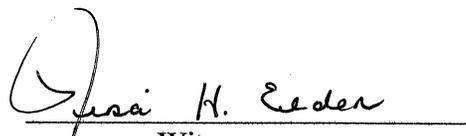
WHEREAS, this document was reviewed by the Georgia Department of Community Affairs and was found to be in compliance with the Local Planning Requirements.

THEREFORE, be it resolved that the City of Culloden does hereby adopt the Joint Comprehensive Plan Update for Monroe County and the Cities of Culloden and Forsyth.

Adopted this 12th day of October 2022.



Lynn Miller
Mayor, City of Culloden



Gusa H. Eeder
Witness

**RESOLUTION
BY THE CITY OF FORSYTH
ADOPTING THE JOINT COMPREHENSIVE PLAN UPDATE
FOR
MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH**

WHEREAS, the 1989 Georgia Planning Act requires that all local governments submit a comprehensive plan; and

WHEREAS, O.C.G.A. 50-8-1 et seq. gives the Department of Community Affairs authority to establish standards and procedures for appropriate and timely comprehensive planning by all local governments in Georgia; and

WHEREAS, all portions of the Joint Comprehensive Plan Update for Monroe County and the Cities of Culloden and Forsyth were completed by the City of Forsyth with the assistance of the Middle Georgia Regional Commission; and

WHEREAS, this document was reviewed by the Georgia Department of Community Affairs and was found to be in compliance with the Local Planning Requirements.

THEREFORE, be it resolved that the City of Forsyth does hereby adopt the Joint Comprehensive Plan Update for Monroe County and the Cities of Culloden and Forsyth.

Adopted this 3rd day of October 2022.



Eric Wilson
Mayor, City of Forsyth



Witness

Appendices

Appendix B: Public Hearing Documentation



MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
COMPREHENSIVE PLAN UPDATE KICKOFF PUBLIC HEARING

Public Hearing Sign-In Sheet

April 5, 2022, 5:00 p.m. | Monroe County Commission Chambers

Name	Phone	Email
Mike Dodd	478-394-1993	mikedodd22@gmail.com
Janice Hall	478-994-519	jhalla@cityofforsyth.com
Regina Ivie	478-994-5649	r.ivie@cityofforsyth.com
Janel Abbott	478-256-4446	jabbott@monroecoga.org
Lamarus Davis	478-841-2567	ldavis@monroecoga.org
Eric Wilson	478-461-0889	ewilson@cityofforsyth.com
Kelsy Fortner	478 994 7040	kfortner@monroecoga.org
Landon Sparks	478 994 7795	lsparks@monroecoga.org
Edder Rowland	478-808-9254	erowland@monroecoga.org
Greg Tapley	478-256-9277	gtapley@monroecoga.org
John H Ambrose	478 960-0764	JHAMBROSE@Bellsouth.net
Matt Jackson	478-994-7000	mjackson@monroecoga.org
Dana Renaud	478-992-5049	recycle@monroecoga.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH JOINT COMPREHENSIVE PLAN

PUBLIC HEARING AGENDA

April 5th, 2022, 5:00 p.m. | Monroe County Commission Chambers

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Status to-date | MGRC |
| 4) Timeline | MGRC |
| 5) Goals Discussion | MGRC |
| 6) Questions/Comments | MGRC |
| 7) Future Meeting Discussion | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
 COMPREHENSIVE PLAN UPDATE Second PUBLIC HEARING

Public Hearing Sign-In Sheet
 August 8, 2022, 6:00 p.m. | Monroe County Commission Chambers

Name	Phone	Email
Gail Donnelly	478 960-7266	captain gail donnelly@gmail.com
MARIAN DONNELLY	609-605-1344	mdonnelly54@VERIZON.NET
Ken Donnelly	215-435-2445	Kend51@verizon.net
Card Z Horne	478-994-9294	Card.horne@att.net
Barbara Goree	478-994-4017	bblanham@netzero.com
Nancy Z Schulz	478 994 0734	notschulz@att.net
George R. Schulz	478 994-0734	nick.schulz@ATT.NET
John H. ZEINER	478 994 1130	—
Debbie Zellner	478-994-1130	—
MIKE McALLISTER	478-992-8729	Mike McAllister@OUTLOOK.COM
Jay Sanders	229-854-2926	Ol Oljay.sanders@gmail.com
Steven Yates	828-332-1047	gr33nmustard@gmail.com
B. DAVID Hunter	478-808-7459	bdavidhunter.com
Lewis Young	770-655-9698	lewisyoung09@gmail.com
AIAN Gibbs	478-737-1365	AIAN GI 78@gmail.com

Name	Phone	Email
W James Green	478 973 1743	WGreen8310@aol.com
Jackie Green	478 973 1740	WGreen8310@aol.com
Kelsey Fortner	478 994 7040	kfortner@monroecoga.org
Diane Glidewell	478-993-1104	news@mymcr.net
Eric Wilson	478-461-0889	ewilson@cityofforsyth.com
Chris Wieters	678 468 8008	cwieters@landmark-mgt.com
T.J. Heath	478-607-1626	Theath@Landmark-mgt.com
Ken Hunt	404-771-9705	KENHUNT@TITANLLC.NET
Mike Dodd	478-394-1993	mikedodd22@gmail.com
Brad Freeman	478 808-3692	bfreeman@monroecosherriffga.us

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

PUBLIC HEARING AGENDA

August 8, 2022, 6:00 p.m. | Monroe County Commission Chambers

- | | |
|------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) Review of process to-date | MGRC |
| 3) Plan review | MGRC |
| 4) Next steps | MGRC |
| 6) Questions/Comments | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org
Thomas Neaves	tneaves@mg-rc.org

Forsyth sets millage at 2.5

By Diane Glidewell
news@mymc.net

Forsyth set its tentative millage rate for 2022 at 2.5 mills at its July 12 council meeting. This is the same millage rate as 2021, although the tax base in the city has increased due to construction and property enhancements. There will be a public hearing on the millage rate during the council meeting on Monday, Aug. 15.

City manager Janice Hall said the city reduced its millage rate to 3 mills in 2015 and in 2016 voted to allocate all property taxes to special projects, such as recreation, and not include property tax revenue in its general operations budget.

Mayor Eric Wilson reminded council that after approving a tentative millage rate, council can decide to set the rate below the tentative rate but not above it.

In other city news:

- On July 12, Forsyth approved paying four bills that totaled \$93,640. Council now only approves payment of bills over \$6,000. Of the four bills approved, three were for the electric department. The fourth and largest bill, \$45,000 to Core & Main, was for water meters.

- The electric department purchased three poles from Ace Pole Company for \$8,550 and will pay Southern Line Contractors, Inc. \$26,500 for trimming right-of-ways on Brooklyn Ave. and Indian Springs St. It will pay Gresco Utility Supplies \$13,590 for materials to restock inventory supplies.

- Council approved buying five pickup trucks for the public works department, purchases that weren't included in the 2022 budget. Hall said council approved buying the trucks in 2020,

but the city didn't make the purchase then.

Hall said fleet vehicles are hard to find; she estimated the cost for the trucks the public works department needs at about \$40,000 each. However, she said she was asking for council's approval so that she can put in a purchase order and be in line to buy the vehicles when they're available. She said she doesn't know what the price of the basic trucks or additional equipment for them will be.

Hall said several of the trucks the public works department is now using have 250,000-300,000 miles on them and are 14-18 years old. Electric department director Mike Batchelor said the trucks the city has now are single cab and it needs

trucks that will hold more workers.

"My plan is not to let things get this way again," said Batchelor.

Wilson said the city will surplus its current trucks when it gets new ones.

Council member Stroud asked if one of the five trucks could be electric. Hall said that electric trucks, like other fleet trucks, aren't available and it would cost the city \$100,000 to put in a charging station for the truck.

- Council also approved buying six vehicles for the police department, another expense that wasn't in the budget. There was no discussion about the cost of the vehicles.

JORDAN QUALITY FOREST PRODUCTS ELECTRICAL SUPERVISOR

Position Summary: We are seeking a self-motivated candidate to develop and implement Electrical Maintenance solutions by providing electrical support to a highly automated and fast paced lumber milling facility. The qualified candidate should understand industrial facilities and have strong problem solving and trouble shooting skills with a strong background in electrical and industrial controls. The position will require experience with, electrical distribution, mechanical drives, pneumatics, hydraulics, PC's, and Electrical Controls networks.

Key Job Responsibilities:

- Lead and develop a team of electrical technicians through safe work practices, mentoring, training, up-skilling, engagement, behaviors, etc.
- Develop and implement sustainable structure for the Electrical department
- Develop and implement electrical/controls solutions.
- Provide troubleshooting, maintaining and repairing electrical systems and controls.
- Have experience in power distribution systems, lighting systems, machine controls, drives, MCCs, feedback loops, machine controls, etc.
- Review key plant metrics/KPIs and equipment data to identify potential areas for continuous improvement to support a team to develop and implement a solution
- Maintain a library for all control device back-ups and updates
- Ensure equipment in area is maintained, guarded and operated in accordance with defined safety regulations and procedures

Education and Work History:

- Technical degree in a related field or equivalent experience
- Strong overall electrical knowledge and experience with electrical and industrial control systems
- Excellent communication skills and effective team building skills a must
- Experience in a lumber mill a plus

E-mail resume to ddouglas@jordanforestproducts.com

PUBLIC HEARING NOTICE

for Monroe County and the Cities of Culloden and Forsyth Joint Comprehensive Plan Update

A public hearing will be held on Monday, August 8, 2022 at 6:00 p.m. in the Monroe County Commission Chambers, located at 38 West Main Street, Forsyth, GA 31029. The purpose of this hearing is to brief the community on the contents of the Joint Comprehensive Plan; provide an opportunity for residents to make final suggestions, additions, or revisions; and notify the community of when the plan will be submitted to the Georgia Depart-

ment of Community Affairs for review. Comments will be received at the above public hearing or may be submitted in writing to the Middle Georgia Regional Commission at 175 Emery Highway, Suite C, Macon, GA 31217.

All community members are invited to attend the Public Hearing. For additional information or comments regarding plan content, please contact Joe Black, Government Services Specialist with the Middle

Georgia Regional Commission, at (478) 751-6160 or jblack@mg-rc.org.

Persons with special needs relating to disability access or foreign language should contact the Monroe County Board of Commissioners at (478) 994-7000 prior to the meeting for necessary accommodations. Persons with hearing disabilities may contact the Georgia Relay Service at (TDD) 1-800-255-0056 or (Voice) 1-800-255-0135.

Appendices

Appendix C: Steering Committee Documentation



**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Stakeholder Session One
June 1, 2022, 10:00 a.m. | Monroe County Commission Chambers**

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Public Utilities | MGRC |
| 4) Public Facilities | MGRC |
| 5) Transportation | MGRC |
| 6) Broadband | MGRC |
| 7) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Stakeholder Session Two
June 7, 2022, 10:00 a.m. | Monroe County Commission Chambers**

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Housing | MGRC |
| 4) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Stakeholder Session Three
June 8, 2022, 6:00 p.m. | Forsyth City Council Chamber**

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Transportation | MGRC |
| 4) Public Utilities | MGRC |
| 5) Broadband | MGRC |
| 6) Public Facilities | MGRC |
| 7) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
Stakeholder Session Three- Infrastructure

June 8, 2022, 6:00 p.m. | Forsyth City Council Chamber

Name	Phone	Email
Jay Sanders	225 854 2526	01jay.sanders@gmail.com
Cathy Sanders	229-272-8792	
Eric Wilson	478-461-0889	ewilson@cityofforsyth.com
Mike Dodd	478-394-1993	mikedodd72@gmail.com
Libby ^{Marcus} King	478 283 2192	blueathena623@gmail.com
Julius Stroud	478-974-8965	jstroud@cityofforsyth.com
Danny Lyndall	251-455-0884	1LYNDALL70@outlook.com

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

Stakeholder Session Four

June 14, 2022, 10:00 a.m. | Monroe County Commission Chambers

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Community Survey Results | MGRC |
| 4) Recreation | MGRC |
| 5) Historic Preservation | MGRC |
| 6) Tourism | MGRC |
| 7) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Stakeholder Session Five
June 21, 2022, 6:00 p.m. | Forsyth City Council Chamber**

- | | |
|-----------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Natural and Cultural Resources | MGRC |
| 4) Housing | MGRC |
| 5) Public Safety and Health | MGRC |
| 6) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
Stakeholder Session Five- Quality of Life

June 21, 2022, 6:00 p.m. | Forsyth City Council Chamber

Name	Phone	Email
Jay Sanders	229-854-2926	01jay.sanders@gmail.com
Eric Wilson	478-461-0889	ewilson@medprogn.net
Mike Dodd	478-394-1993	mikedodd72@gmail.com
Janice Hall	478-994-5649	jhall@cityofforsyth.com
Brad Freeman	478 994-7048	bfreeman@monroecostheriffga.us
Joyce White	478993 1717	president@daomc.net

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

Stakeholder Session Six

June 23, 2022, 10:00 a.m. | Monroe County Commission Chambers

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Economic Development | MGRC |
| 4) Land Use | MGRC |
| 5) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

Stakeholder Session Seven

June 28, 2022, 10:00 a.m. | Monroe County Commission Chambers

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Public Safety | MGRC |
| 4) Public Health | MGRC |
| 5) Other/Review | MGRC |
| 5) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Stakeholder Session Eight
June 29, 2022, 6:00 p.m. | Forsyth City Council Chambers**

- | | |
|---------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) About Comprehensive Planning | MGRC |
| 3) Economic Development | MGRC |
| 4) Land Use | MGRC |
| 5) Other | MGRC |
| 6) Wrap-up | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

Greg Boike	gboike@mg-rc.org
David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
Stakeholder Session Eight - Economic Development and Land Use

June 29, 2022, 6:00 p.m. | Forsyth City Council Chambers

Name	Phone	Email
Eric Wilson	478-461-0889	ewilson@cityofthym.com
Darrell (Tye) Hank	404-376-3766	thanne@titanllc.net
Diane Glidewell	478-993-1104	news@mymcr.net
William S. Horne Jr	478-994-9299	horne_sirclair@att.net
Carol Z Horne	478 994. 9299	Carol.horne@att.net
George R. Schulz	478 994. 0734	rick.schulz@ATT.NET
Nancy Z Schulz	478 994 0734	notschulz@att.net
Barbara Z Goree	478-994-4017	bbkhanham@netzero.com
Keith Boone	478 214 2190	Boone@trkings@AOL.COM
ALAN Gibbs	478-737-1365	ALANGI78@Gmail.com
Gail Donnelly	478 960-7266	captaingaildonnelly@gmail.com
Kenneth Donnelly	215-435-2449	kends1@verizon.net
MARIAN DONNELLY	609-605-1344	mdonnelly54@VERIZON.NET
Leah Yates	828 311 4296	leahyates@speech@gmail.com
Ken Hurst	404-771-9705	KENHURST@TITANLLC.NET

NET

Name	Phone	Email
Happy Wyatt	478 252-8882	Hwyatt1214@gmail.com
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Gretchen Mercer	(478) 993-6692	ghmercerc@yahoo.com
Jay + Cathy Sanders	229/222-8792	@jayanders@gmail.com
Jim Burt	478-957-1826	jimburt963@gmail.com
Tom Burt Baugh	478-955-8395	tbaugh@DAOMC
Joyce White	478 993 1717	President@DAOMC.net
Wendell Horne	478 ⁴⁰⁵⁻⁰³⁰⁰ 993	homeowner + DAOMC
Janice Hall	478-994-5649	jhall@cityofforsyth.com
Greg Head	478-992-0045	greg.headhvac@att.net

**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN**

**Community Work Program and Future Land Use
July 28, 2022, 9:30 a.m. | Culloden City Hall**

- | | |
|------------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) Goals, Needs, and Opportunities | MGRC |
| 3) Community Work Program | MGRC |
| 4) Future Land Use | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org
Thomas Neaves	tneaves@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH JOINT COMPREHENSIVE PLAN

Community Work Program and Future Land Use
July 29, 2022, 10:00 a.m. | Monroe County Administration Building

- | | |
|------------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) Goals, Needs, and Opportunities | MGRC |
| 3) Community Work Program | MGRC |
| 4) Future Land Use | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

David Lane	dlane@mg-rc.org
Joe Black	jblack@mg-rc.org
Thomas Neaves	tneaves@mg-rc.org
Greg Boike	gboike@mg-rc.org

MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH JOINT COMPREHENSIVE PLAN

Community Work Program and Future Land Use August 2, 2022, 10:00 a.m. | Forsyth City Hall

- | | |
|------------------------------------|------|
| 1) Welcome & Introductions | MGRC |
| 2) Goals, Needs, and Opportunities | MGRC |
| 3) Community Work Program | MGRC |
| 4) Future Land Use | MGRC |

If you have any questions or would like to discuss the plan, please contact us by phone at 478-751-6160 or email (below).

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**MONROE COUNTY AND THE CITIES OF CULLODEN AND FORSYTH
JOINT COMPREHENSIVE PLAN
Community Work Program and Future Land Use**

SIGN IN

August 2, 2022, 10:00 a.m. | Forsyth City Hall

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Appendices

Appendix D: Community Survey Results



Monroe County Comprehensive Plan Public Input Survey

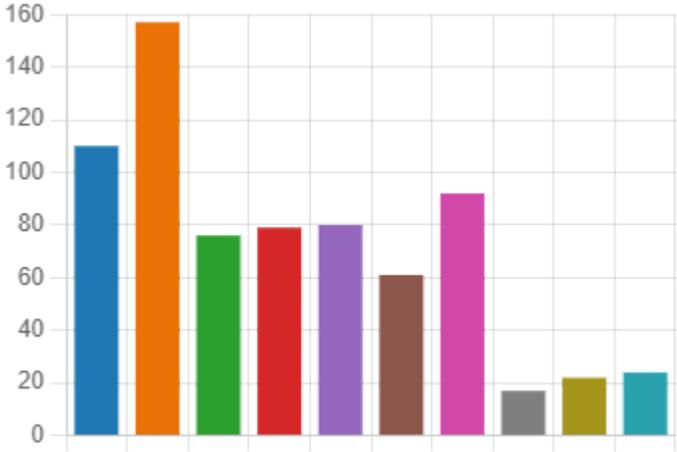
226
Responses

11:10
Average time to complete

Active
Status

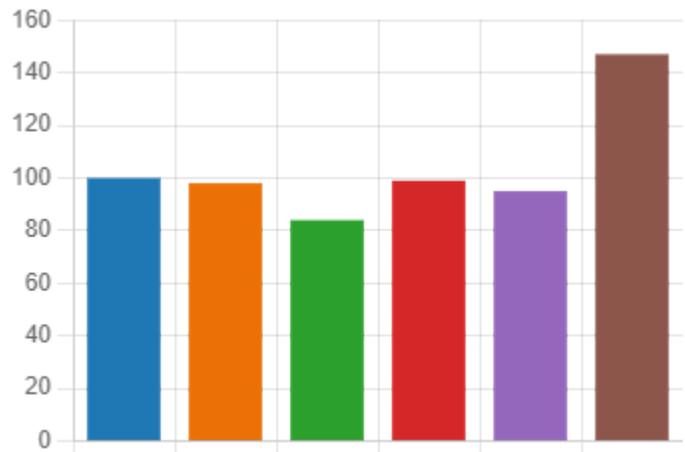
1. What are the most important items for quality of life in Monroe County? (Select your top three)

- Affordable property and housing 110
- Safety and security 157
- Recreational activities (youth an... 76
- Job opportunities 79
- Sense of community 80
- Community activities and progr... 61
- Quality services (water, wastewa... 92
- Walkability / bikeability 17
- Proximity to diverse commercial... 22
- Cultural resources and events 24



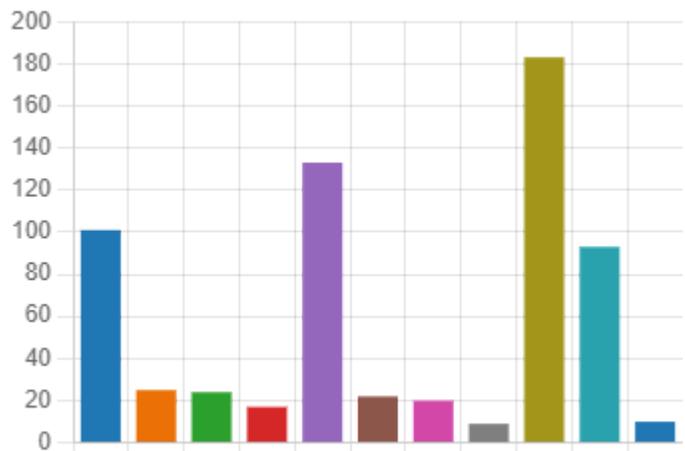
2. What should be the focus as communities plan for the future? (Select your top three)

- Promoting affordable housing o... 100
- Improving the condition of exist... 98
- Encouraging commercial/retail/... 84
- Providing recreation opportuniti... 99
- Increasing community events an... 95
- Improving planning for growth ... 147



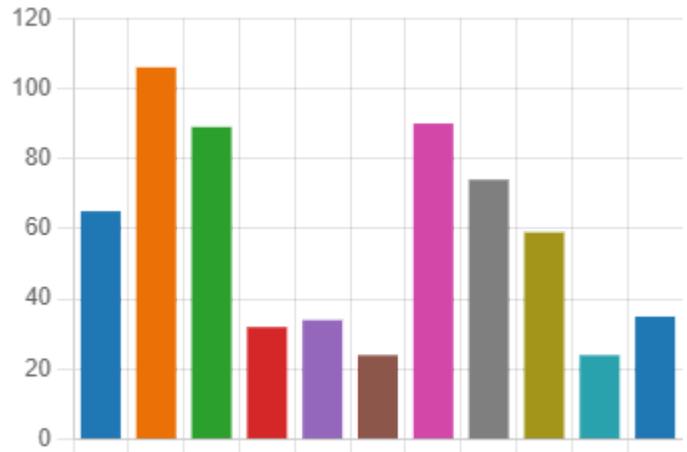
3. In your opinion, what are Monroe County's greatest strengths? (Select your top three)

- Sense of community 101
- Parks and recreation 25
- Community activities and events 24
- Housing quality and price 17
- Safety 133
- Convenient shopping and dining 22
- Proximity to employment centers 20
- Government responsiveness 9
- Quality schools 183
- Regional highway access 93
- Other 10



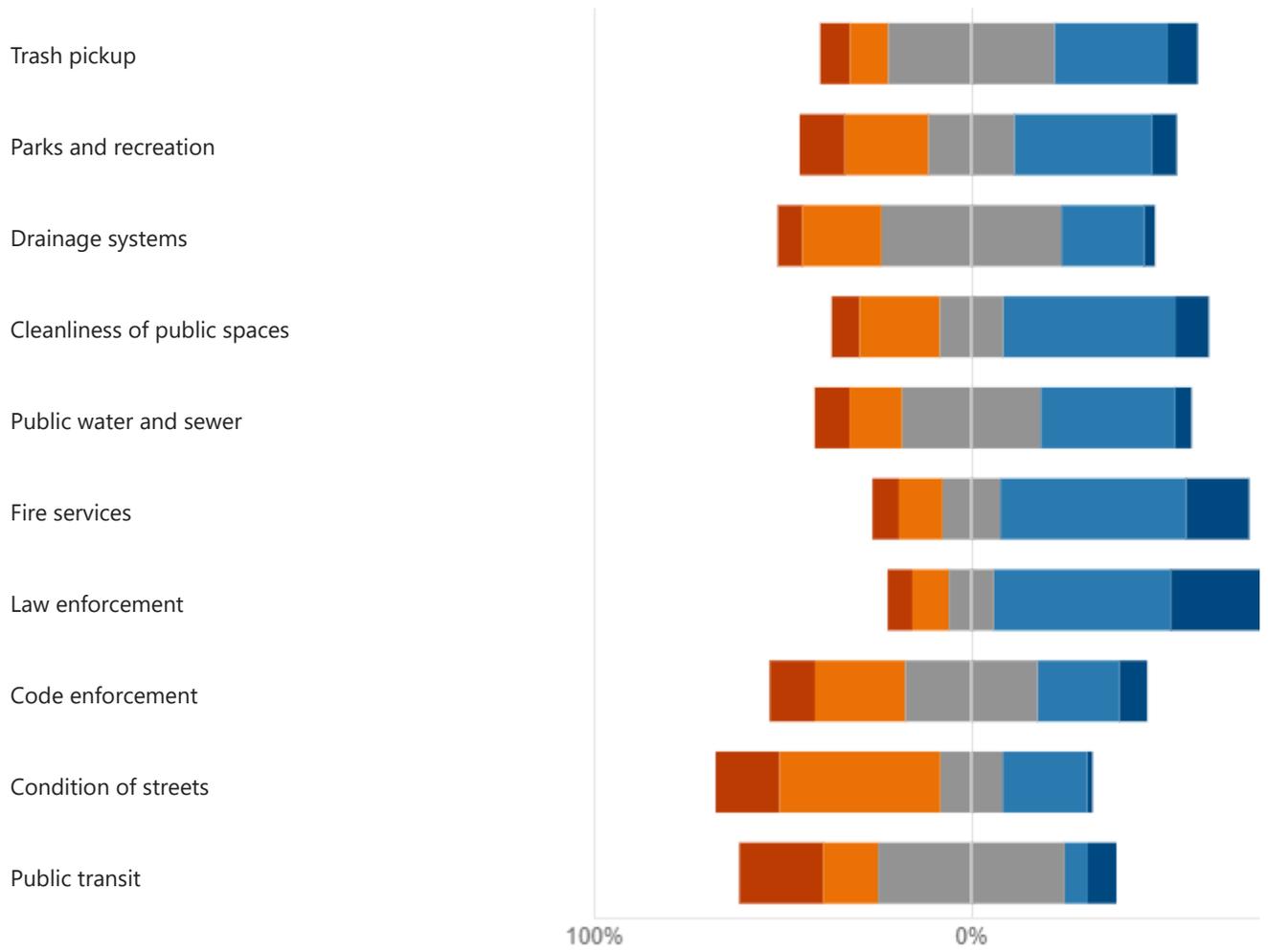
4. In your opinion, what are Monroe County's greatest challenges to overcome? (Select your top three)

● Lack of commercial development	65
● Housing affordability	106
● Housing choices	89
● Lack of community activities	32
● Access to public transportation	34
● Safety	24
● Lack of job opportunities	90
● Water and drainage infrastru...	74
● Lack of parks and recreation faci...	59
● Lack of a sense of community	24
● Other	35



5. Please rate your level of satisfaction with each of the following public services or facilities.

■ Very dissatisfied
 ■ Somewhat dissatisfied
 ■ Neither satisfied nor dissatisfied
 ■ Satisfied
 ■ Very satisfied



6. If you would like to explain your responses to question (5), please do so here.

55
Responses

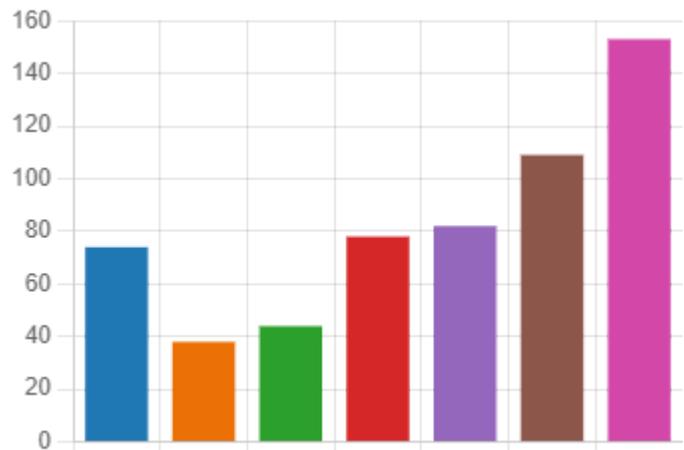
Latest Responses

18 respondents (33%) answered **county** for this question.



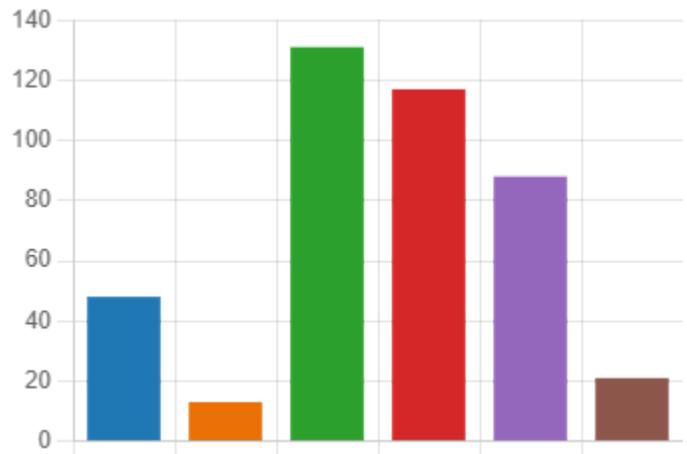
7. What characteristics of development should be emphasized in future residential development? (Check all that apply)

- Sidewalks within neighborhoods 74
- Sidewalks and paths connecting... 38
- Retail amenities within walking ... 44
- Streetlights in neighborhoods 78
- A mix of housing types (e.g. sin... 82
- Clear separation between reside... 109
- Preserving undeveloped rural ar... 153



8. Which of the following, if any, are housing issues within Monroe County?

● Housing stock in disrepair	48
● High number of vacant homes	13
● Lack of affordable homes for ho...	131
● Lack of affordable, quality rental...	117
● Lack of senior-friendly housing	88
● Other	21



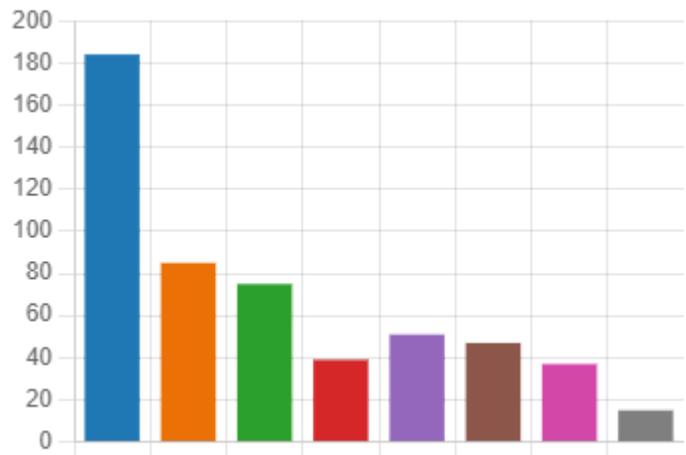
9. When planning for future commercial and retail development, what type of development should there be an emphasis on? (Check all that apply)

● Revitalized commercial spaces i...	152
● Walkable mixed-use centers wit...	59
● New strip commercial developm...	39
● Redevelopment of existing com...	144



10. Which of the following transportation improvements are most needed within Forsyth, Culloden, and Monroe County? (Check all that apply)

● Maintenance of existing roads a...	184
● Paving of dirt roads	85
● Reducing traffic congestion	75
● Expanded sidewalk connections	39
● Alternative transportation netw...	51
● Transportation assistance for se...	47
● Public transit	37
● Other	15



11. What types of recreational amenities do you most enjoy? Is anything new needed in Monroe County?

113
Responses

Latest Responses

"I most enjoy swimming. But what we need is anything that'll c..."

21 respondents (19%) answered **parks** for this question.



12. Please provide any additional thoughts on the future of Monroe County and any initiatives you think should be undertaken in the next 10 years.

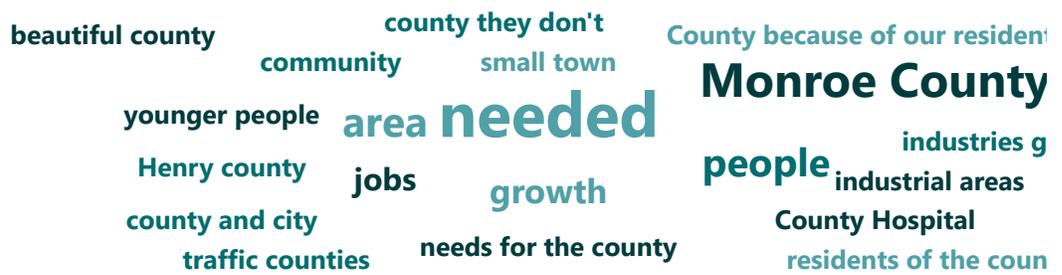
110
Responses

Latest Responses

"I enjoy our low property taxes. Most of the items related to this..."

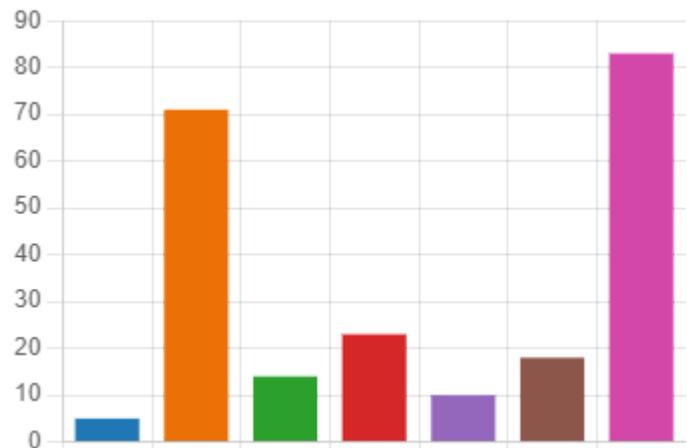
"I feel like Monroe county is going downhill fast. And that were ..."

30 respondents (27%) answered **needed** for this question.



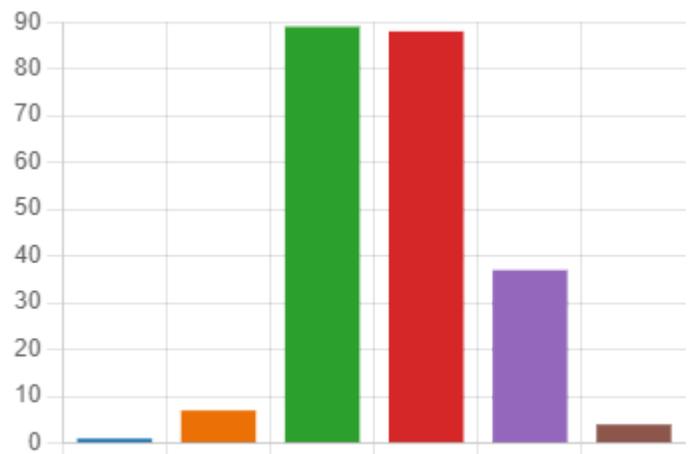
13. Which of the following best describes where you live?

City of Culloden	5
City of Forsyth	71
High Falls	14
Juliette	23
Bolingbroke	10
Smarr	18
Other unincorporated Monroe ...	83



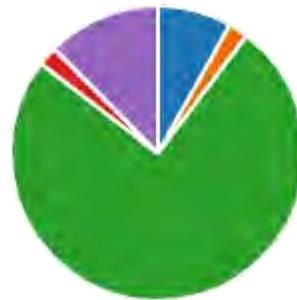
14. What is your age?

● Younger than 18	1
● 18 to 24	7
● 25 to 44	89
● 45 to 64	88
● 65 or older	37
● Prefer not to answer	4



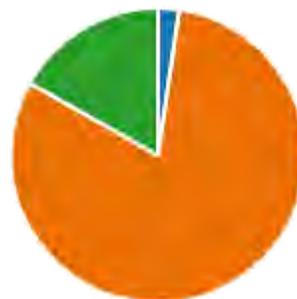
15. What is your race? (Check all that apply)

● African-American (Black)	19
● Asian or Pacific Islander	5
● Caucasian (White)	175
● Other	5
● Prefer not to answer	29



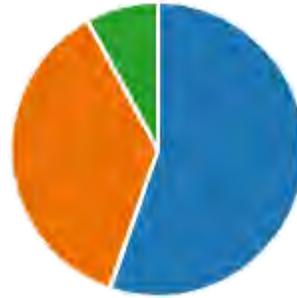
16. What is your ethnicity?

● Hispanic or Latino	5
● Not Hispanic or Latino	173
● Prefer not to answer	36



17. Please indicate your gender

Female	125
Male	83
Prefer not to answer	18



18. If you would like to receive updates about the planning process and invitations for future involvement, please share your email below, so we can add you to our mailing list.

73
Responses

Latest Responses
"Gte635r@gmail.com"
"Itzbubba2020@gmail.com"

2 respondents (3%) answered **Yes** for this question.

Tmburnette80@gmailcom **Gte635r@gmailcom** **Luckybanana1@gmailcom** myka(
oneson1@bellsouthnet **dhutch50@bellsouthnet**
Elizabetpierson@attnet **Yes** **Rickschulz@attnet**
Lwalk627@bellsouthnet sloanoliver@earthlinknet **No** **Notschulz@attnet** zoezicc@a
Shearerdebbie@gmailco **Carolhorne@attnet** **lisa4mbliss@yahooocom**
1oreorocki

Appendices

Appendix E: Monroe County Capital Improvement

Element



Impact Fee Program



CAPITAL IMPROVEMENTS ELEMENT

Monroe County Georgia

Including:
Library Services
Parks and Recreation
EMS and Fire Protection
Sheriff's Office
Animal Control
Road Improvements

Adopted August 2, 2022

ROSS+associates
urban planning & plan implementation

in association with
HatleyPlans, LLC

CAPITAL IMPROVEMENTS ELEMENT

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Introduction

Unlike a tax, an impact fee is a FEE, an important distinction. With taxes—like property taxes and sales taxes—there is no direct relationship between the taxes one pays and the return—the services—that each taxpayer receives. Everyone pays school taxes based on the value of their property, regardless of whether they have one kid in school, six kids in school or no kids at all. A fee, on the other hand, must be related to the service being made available. For instance, only those obtaining a building permit pay the building permit fee (which covers the cost of plan reviews and approvals, **and construction inspections**). **One’s water bill is a fee because the amount is based on how much water they used. In the case of impact fees, the amount of each fee is directly related to the County’s cost of capital improvements through which particular services are made available—the cost of fire trucks and fire stations located within reasonable response distances, for instance, or the 911 center’s ability to handle emergency calls efficiently, or the ability to quickly respond with law enforcement personnel.**

Under the State impact fee law, impact fees can be collected only for specific public facility categories. Those included in this Capital Improvements Element are the library, road improvements, parks and recreation, and public safety (fire protection, emergency medical services, the County Sheriff, emergency communications, and animal control).

■ Impact Fees Authorized

Impact fees are authorized in Georgia under Code Section 37-71, the *Georgia Development Impact Fee Act* (DIFA), and are administered by the Georgia Department of Community Affairs under Chapter 110-12-2, *Development Impact Fee Compliance Requirements*.

Under DIFA, the County can collect money as a one-time ‘**impact fee**’ from new development based on that development’s proportionate share—its ‘**fair share**’—of the cost to provide the facilities needed specifically to serve new development.

Fee calculations must recognize that revenue for such facilities also may be produced from new development in other ways: such as through future property taxes paid by the homes and businesses that growth creates. To the extent that new growth and development generates other revenue that is used to pay for non-impact fee eligible portions of impact fee projects, a credit against impact fees must be granted. In other words, an impact fee represents the shortfall in facility funding not covered by other sources of revenue that will be generated by new development and spent on the same improvements.

The provisions of DIFA are extensive in order to assure that new development pays no more than its fair share of the costs and that impact fees are not used to solve existing service deficiencies.

■ The Capital Improvements Element

The legal basis for the collection of impact fees in the county is the adoption of a Capital Improvements **Element (CIE) as part of the County’s Comprehensive Plan. Data prepared for the** Impact Fee Program enlightens the CIE. Population, housing, and employment forecasts have been prepared specifically for use in the Impact Fee Study. This CIE will be submitted for regional (Middle Georgia Regional Commission) and state (Dept. of Community Affairs) review and adopted following the procedures for adoption of a Comprehensive Plan amendment.

The Capital Improvements Element reflects the methodologies used to determine **new development's** fair share of future county capital improvements. The CIE establishes clear public policies regarding infrastructure development, ensures sound fiscal planning for capital improvements, and establishes the need for new facilities, including a compilation of the capital facilities on which impact fee revenue can be spent. An important consideration is that impact fee revenue can only be spent on projects listed in the CIE, and only in the category for which it was collected. For example, impact fees collected for fire facilities can only be spent on fire facility projects listed as eligible (and to the extent eligible) in this CIE.

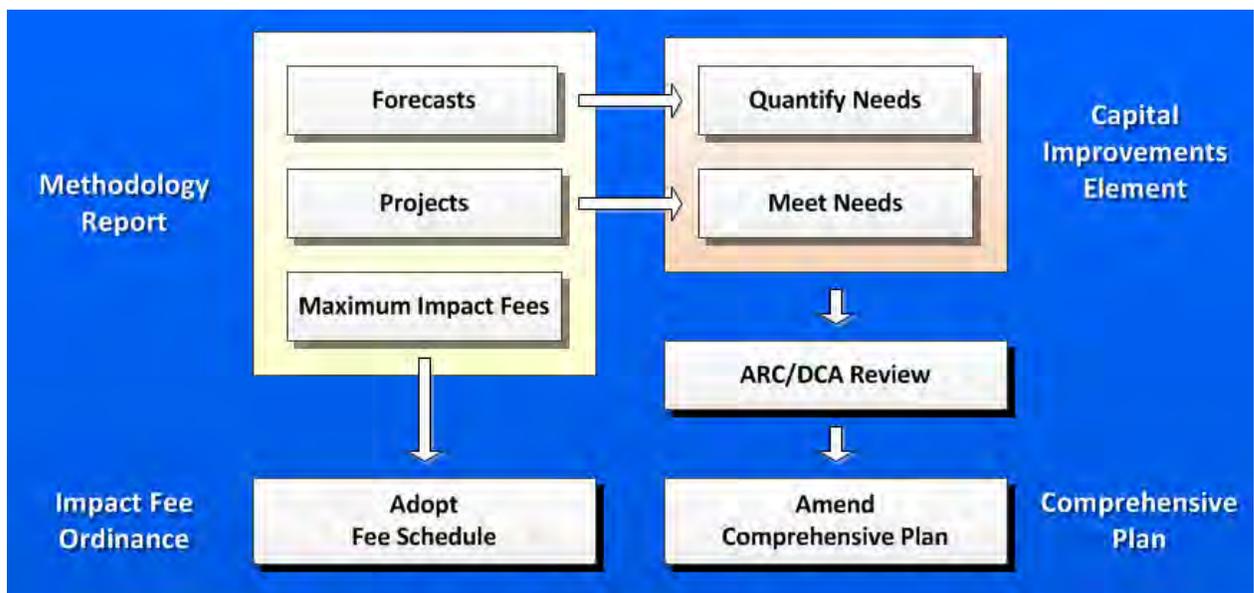
Focus of This Report

This report focuses on the public facilities that will be needed to meet the demands of future growth and development while maintaining the current level of service enjoyed by residents and businesses **in the county today**. The key is that the capital improvement, whether it's land, buildings or long-lived vehicles, must create new capacity within the system to keep pace with the number of future residents and businesses as the county grows. Maintenance and personnel are not eligible for impact fee funding, nor would replacement of deteriorated floor space or a run-down vehicle because, although the replacement is maintaining the level of service, no new capacity is created to serve the needs of new growth.

Components of the Impact Fee System

The Monroe County Impact Fee System consists of four components:

- A Methodology Report, which includes:
 - updated forecasts of population, housing and employment for the county;
 - capital improvement projects to serve new growth, based on Level of Service standards, for each public facility category; and,
 - the impact cost of new growth and development (and thus the maximum impact fees that can be assessed).



- This Capital Improvements Element (CIE) to implement the County's proposed improvements, including an updated Five-Year Community Work Program.
- Amendments to the Impact Fee Ordinance, including an updated impact fee schedule by land use category.
- **The County's** Comprehensive Plan, which will be amended by the adoption of this CIE.

■ Editorial Conventions

This report observes the following conventions:

The capitalized word 'County' applies to the government of Monroe County, the County Board of Commissioners or any of its departments or officials, as appropriate to the context. An example is **"the County has adopted an impact fee ordinance"**.

The lower-case word 'county' refers to the geographical area of Monroe County, as in **"the population of the county has grown"**.

Single quote marks (' and ') are used to highlight a word or phrase that has a particular meaning or refers to a heading in a table.

Double quote marks (" and ") are used to set off a word or phrase that is a direct quote taken from another source, such as a passage or requirement copied directly from a law or report.

Importantly:

Numbers shown on tables are often rounded from the actual calculation of the figures for clarity, but the actual calculated number of decimal points is retained within the table for accuracy and further calculations.

Forecasts

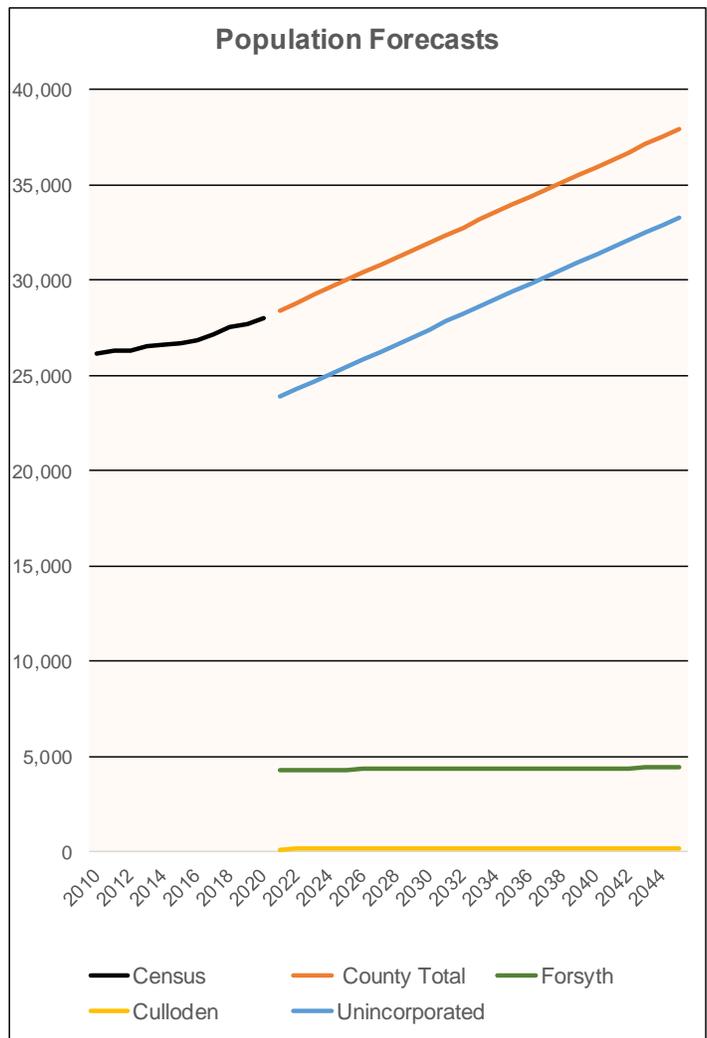
Notable future growth and development is forecast for Monroe County over the coming 20+ years as recovery from the Great Recession takes wing—a process that is already well underway.

County Projections

Population projections reflect this extensive growth that is expected by 2045 in the county, interrelated with both housing and business growth. The ultimate population forecast for 2045 is almost 38,000 people—an additional 33% in the number of people in the county today. Housing for this future population growth will increase at the same rate, yielding a 2045 housing stock of 16,502 units of all types of housing, adding 4,130 units to the existing housing supply.

Table 1: Forecasts of Future Growth

	County Total	Forsyth	Culloden	Unincorporated
2010	26,133	3,991	177	21,965
2011	26,301	4,096	179	22,026
2012	26,336	4,097	176	22,063
2013	26,585	4,133	179	22,273
2014	26,637	4,119	179	22,339
2015	26,683	4,130	181	22,372
2016	26,880	4,172	182	22,526
2017	27,153	4,192	184	22,777
2018	27,523	4,246	186	23,091
2019	27,677	4,267	187	23,223
2020	28,042	4,312	189	23,541
2021	28,437	4,317	188	23,933
2022	28,833	4,321	190	24,322
2023	29,228	4,326	191	24,712
2024	29,624	4,330	192	25,101
2025	30,019	4,335	193	25,491
2026	30,415	4,340	195	25,880
2027	30,810	4,344	196	26,270
2028	31,205	4,349	197	26,660
2029	31,601	4,353	199	27,049
2030	31,996	4,358	200	27,438
2031	32,392	4,362	201	27,828
2032	32,787	4,367	203	28,217
2033	33,183	4,372	204	28,607
2034	33,578	4,376	205	28,997
2035	33,973	4,381	207	29,386
2036	34,369	4,385	208	29,776
2037	34,764	4,390	210	30,164
2038	35,160	4,395	211	30,554
2039	35,555	4,399	213	30,943
2040	35,951	4,404	214	31,333
2041	36,346	4,408	215	31,723
2042	36,742	4,413	217	32,112
2043	37,137	4,417	218	32,502
2044	37,532	4,422	220	32,890
2045	37,928	4,427	221	33,280
Increase 2021-2045	9,490	110	33	9,347
Percent	33.37%	2.55%	17.55%	39.06%



The total number of jobs in the county is forecast to increase in pace with the number of new residents, adding 9,307 total new jobs while the population increases by 9,490; close but not quite a 1:1 ratio. Of the total jobs added by 2045, 8,142 are classified as 'value-added' jobs. These 'value-added' jobs are private sector, building-occupying employment figures and exclude those that are referred to as 'non-building related' jobs. 'Non-building related' jobs are those that do not normally require issuance of a building permit, and thus would not be assessed an impact fee, such as employment that is considered to be transitory in nature (such as those working on construction sites) or are strictly land-based such as farm workers. In addition, the workers employed by governmental entities are excluded because governments are exempt from impact fees.

■ Service Area Projections

In Table 2 the service area forecasts are presented for the countywide service area measured in two ways: countywide housing units (which quantifies Library Services, Parks & Recreation, and Animal Control facility demands), and countywide day-night population (for the Law Enforcement, EMS and E-911 facilities).

Table 2: Service Area Forecasts – Countywide

	Residential Uses	Nonresidential Uses		
	Housing Units	Population	Value-Added Jobs	Day-Night Population
2021	12,372	28,437	8,750	37,187
2022	12,545	28,833	9,013	37,846
2023	12,716	29,228	9,277	38,505
2024	12,889	29,624	9,540	39,163
2025	13,061	30,019	9,803	39,822
2026	13,233	30,415	10,090	40,505
2027	13,405	30,810	10,378	41,188
2028	13,577	31,205	10,665	41,871
2029	13,749	31,601	10,953	42,553
2030	13,921	31,996	11,240	43,236
2031	14,093	32,392	11,566	43,958
2032	14,266	32,787	11,892	44,679
2033	14,437	33,183	12,217	45,400
2034	14,610	33,578	12,543	46,121
2035	14,781	33,973	12,869	46,842
2036	14,954	34,369	13,243	47,612
2037	15,125	34,764	13,618	48,382
2038	15,298	35,160	13,992	49,152
2039	15,469	35,555	14,367	49,922
2040	15,642	35,951	14,741	50,692
2041	15,813	36,346	15,171	51,517
2042	15,986	36,742	15,601	52,343
2043	16,158	37,137	16,032	53,169
2044	16,330	37,532	16,462	53,994
2045	16,502	37,928	16,892	54,820
Increase 2021-45	4,130	9,490	8,142	17,632

The 'day-night population' calculation is a combination of the future population and employment projections shown on Table 2. The day-night population is used to determine Level of Service standards for facilities that serve both the resident population and business employment on a 24-hour basis. The County Sheriff, for instance, protects one's house whether or not anyone is at home, and protects stores and offices whether or not they are open for business. Thus, this 'day-night population' is a measure of the total services demanded of a 24-hour service provider facility and a fair way to allocate the costs of such a facility among all of the beneficiaries.

Unlike county-wide services, the Monroe County Fire Department provides its primary services to the County Fire District. This covers most of the unincorporated area and the cities of Between, Good Hope and Walnut Grove. Those forecasts are shown on the following table.

Table 3: Future Growth Forecasts - Countywide Excluding Forsyth

	Residential Uses	Nonresidential Uses		
	Housing Units	Population	Value-Added Jobs	Day-Night Population
2021	10,427	24,121	7,422	31,543
2022	10,598	24,512	7,645	32,157
2023	10,766	24,903	7,868	32,771
2024	10,937	25,293	8,092	33,385
2025	11,107	25,684	8,315	33,999
2026	11,278	26,075	8,559	34,634
2027	11,448	26,466	8,803	35,269
2028	11,618	26,857	9,046	35,903
2029	11,788	27,248	9,290	36,538
2030	11,957	27,638	9,534	37,172
2031	12,127	28,029	9,810	37,839
2032	12,298	28,420	10,087	38,507
2033	12,467	28,811	10,363	39,174
2034	12,638	29,202	10,639	39,841
2035	12,807	29,593	10,916	40,509
2036	12,978	29,984	11,233	41,217
2037	13,147	30,374	11,551	41,925
2038	13,318	30,765	11,868	42,633
2039	13,487	31,156	12,186	43,342
2040	13,658	31,547	12,503	44,050
2041	13,827	31,938	12,868	44,806
2042	13,997	32,329	13,233	45,562
2043	14,167	32,720	13,598	46,318
2044	14,337	33,110	13,963	47,073
2045	14,507	33,501	14,328	47,829
Increase 2021-45	4,080	9,380	6,906	16,286

A much more extensive socioeconomic analysis and description of the growth projections is contained in Appendix A: Future Growth.

Library Services

■ Introduction

Originally organized as the Forsyth City Library in August 1922 with the aid of the Forsyth Woman's Club, the name was changed to Monroe County Library, and the library was moved to its current location on West Main Street on September 7, 1937.

In 1964 the library affiliated with the Flint River Regional Library, a multi-county Regional Library System. In 1981, the present facility was updated and in 2014 the present facility was expanded to its current size.

■ Service Area

The Monroe County Library provides a full range of library services to the residents of the entire county.

■ Library Facilities

The current floor area and number of collection materials are shown on Table 4 and Table 5 respectively, below.

Table 4: Inventory of Library Facilities

Facility	Location	Gross Floor Area in Square Feet	Collection Materials
Monroe County Library	62 West Main Street, Forsyth	9,981	35,533

Table 5: Collection Materials - 2021

Type of Collection Materials	Number of Volumes in Collection
Adult & Children's Books	33,983
Audiobooks	818
DVDs	675
Other	57
Total Collection	35,533



■ Level of Service

Demand for library facilities is almost exclusively related to the county's resident population. Businesses make some use of public libraries for research purposes, but the use is incidental compared to that of the families and individuals who live in the county. Thus, a library services system impact fee is focused on future residential growth.

Table 6: Current Level of Service Calculation - Libraries

Facility	Current Service Population	Current Level of Service
Existing Square Feet	Number of Housing Units (2021)	Square Feet of Floor Area per Housing Unit
9,981	12,372	0.8067
Existing Collection Materials	Number of Housing Units (2021)	Collection Materials per Housing Unit
35,533	12,372	2.8720

The current Level of Service (LOS) is calculated by dividing the floor area in the library facility and the number of collection materials by the number of housing units in the county today. This yields a LOS per housing unit currently being provided to the county's residents. This current LOS adequately serves the current population.

■ Future Demand for Library Services

The current level of service available to the county's residents today (from Table 6) is applied to the future number of housing units projected to be added to the county by 2045.

Table 7: Future Demand Calculation - Libraries

This results in a future need for 3,332 additional square feet of floor area (whether as an addition to

Current Level of Service	Service Area Growth	New Growth Demand
Square Feet of Floor Area per Housing Unit	Number of New Housing Units (2021-45)	Square Feet of New Floor Area Needed
0.8067	4,130	3,332
Collection Materials per Housing Unit	Number of New Housing Units (2021-45)	Collection Materials Needed
2.8720	4,130	11,862

the existing library or the creation of a branch library or libraries) and the net expansion of the collection by more than **11,800 materials**. This 'net' expansion consists of the acquisition of new collection materials exclusive of new materials to replace the number of old materials discarded each year.

Table 8 presents the expected demand for new library

facilities in an annual format. The table shows a future library project roughly in pace with the anticipated growth in dwelling units. This project could be an expansion of the current library or the construction of a new branch somewhere in the county. In whatever future configuration, it is the addition of 3,332 square feet that is impact fee eligible.

Table 8: Future Library Facility Projects

Year	New Housing Units	Running Total: SF Demanded	Project	Square Footage
2022	173	173		
2023	171	344		
2024	173	517		
2025	172	689		
2026	172	861		
2027	172	1,033		
2028	172	1,205		
2029	172	1,377		
2030	172	1,549		
2031	172	1,721		
2032	173	1,894		
2033	171	2,065	Future Expansion	3,332
2034	173	2,238		
2035	171	2,409		
2036	173	2,582		
2037	171	2,753		
2038	173	2,926		
2039	171	3,097		
2040	173	3,270		
2041	171	3,441		
2042	173	3,614		
2043	172	3,786		
2044	172	3,958		
2045	172	4,097		
Total	4,130			3,332



Table 9 presents the figures for collection materials demand. Materials demanded by new growth are calculated by multiplying the Current Level of Service (from Table 6) times the net new dwelling units each year (from Table 2). Thus the 'New Materials Needed (annual)' column represents the number of materials that must be purchased in order to meet new growth's demand in each year.

Table 9: Future Collection Materials Needed

Year	New Growth Demand		
	New Dwelling Units	New Materials Needed (annual)	Running Total
2022	173	497	497
2023	171	491	988
2024	173	497	1,485
2025	172	494	1,979
2026	172	494	2,473
2027	172	494	2,967
2028	172	494	3,461
2029	172	494	3,955
2030	172	494	4,449
2031	172	494	4,943
2032	173	497	5,440
2033	171	491	5,931
2034	173	497	6,428
2035	171	491	6,919
2036	173	497	7,416
2037	171	491	7,907
2038	173	497	8,404
2039	171	491	8,895
2040	173	497	9,392
2041	171	491	9,883
2042	173	497	10,380
2043	172	494	10,874
2044	172	494	11,368
2045	172	494	11,862
Total	4,130	11,862	

■ Future Costs

New Library Space

The building floor area needed to serve new growth identified in Table 8 is used to calculate the future cost to meet service demand, as shown in Table 10. The costs are shown in current dollars, and then adjusted to reflect the Net Present Value based on the year in which the expenditure is anticipated. For facility construction, the estimated current cost of construction is adjusted using the BCI (building construction cost index), and then reduced by the Discount Rate to determine the Net Present Value.¹

Table 10: Facility Costs to Meet Future Demand

Year	Project	Total Floor Area	Total Cost	% for New Growth*	New Growth Share (NPV)**
2033	Future Expansion	3,332	\$ 1,332,800.00	100%	\$ 1,739,584.55
Total		3,332	1,332,800		\$ 1,739,584.55

* Based on Georgia Public Library Service formulas for calculating new building construction and building addition costs.

** Net Present Value = 2022 cost estimate inflated to target year using the Building Cost Index (BCI), reduced using the Discount Rate.

New Collection Materials

The average cost of a collection material is based on the overall value of all of the materials in the current collection. The inventory of the current collection is shown on Table 11, along with the average cost to acquire each type of material and the total value of all such materials on hand. Overall, the system’s collection of over 35,500 materials has a current (replacement) value of almost \$990 thousand. Dividing one by the other, the average per volume value in the collection is \$28.25 in today’s dollars.



¹ For more information on the cost inflator factor and net present value, see the ‘Adjustments and Credits’ appendix of this report.

Table 11: Value of Collection Materials – 2021

Type of Collection Materials	Number of Volumes in Collection	Average Cost Per Volume	Total Value (Current \$\$)
Adult & Children's Books	33,983	\$ 25.00	\$ 849,575.00
Audiobooks	818	\$ 35.00	\$ 28,630.00
DVDs	675	\$ 27.00	\$ 18,225.00
Other	57	\$ 26.00	\$ 1,482.00
Total Collection	35,533		\$ 897,912.00

The new collection materials needed to serve new growth, identified on Table 9, are used to calculate the future cost to meet service demand, as shown in Table 12. The 'Total Cost' each year (in current 2021 dollars) is produced by multiplying the number of collection materials needed times the average per-volume cost calculated from Table 11.

Table 12: Collection Material Costs to Meet Future Demand

Year	New Materials Needed (annual)	Total Cost (2021 Dollars)	% for New Growth	New Growth Share (2021 \$)	Net Present Value
2022	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 14,398.61
2023	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 14,599.37
2024	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 15,151.24
2025	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 15,452.34
2026	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 15,851.06
2027	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 16,260.06
2028	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 16,679.61
2029	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 17,109.99
2030	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 17,551.48
2031	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 18,004.36
2032	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 18,576.30
2033	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 18,835.31
2034	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 19,547.31
2035	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 19,819.86
2036	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 20,569.08
2037	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 20,855.87
2038	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 21,644.25
2039	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 21,946.04
2040	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 22,775.62
2041	491	\$ 13,874.15	100.0000%	\$ 13,874.15	\$ 23,093.19
2042	497	\$ 14,036.43	100.0000%	\$ 14,036.43	\$ 23,966.14
2043	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 24,442.41
2044	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 25,073.10
2045	494	\$ 13,955.29	100.0000%	\$ 13,955.29	\$ 25,720.05
Total	11,862	\$ 335,089.23		\$ 335,089.24	\$ 467,922.67

Average replacement cost = \$28.25

Because all of the materials listed on Table 12 are new purchases that increase the collections, they are 100% impact fee eligible. Collection materials that are acquired to replace discarded materials are not impact fee eligible because they do not increase the number of **materials in the library's** collection, even though they may increase the quality of the collection.

This results in the 'New Growth Share' amounts are then adjusted to reflect the Net Present Value based on the year in which the expenditure is anticipated. The Net Present Value calculation for the acquisition of collection materials is based on the CPI (consumer price index) inflation factor, and then reduced by the Net Discount Rate to determine the Net Present Value.



Parks and Recreation Facilities

■ Introduction

Public recreational opportunities are provided by Monroe County through **the County’s Recreation Complex** and its many recreation components. In addition, the County has determined the need for additional recreation facilities to expand service in the near future, which are listed on Table 13.

Table 13: Current County Parks and Planned Improvements

Current County Park Lands and Planned Improvements

County Parks:

Monroe County Recreation Complex	100 Dan Pitts Drive, Forsyth	196.22 acres
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Short-Term Plans:

11 baseball/softball fields, 6 soccer/football fields, covered arena with stalls and trailer parking, Full size Track and Field, Indoor Recreation Center and some additional trail features for the community.

Demand for parks and their related recreational facilities is almost exclusively related to the county’s resident population. Businesses make some incidental use of public parks, such as office picnics, but the use is minimal compared to that of the families and individuals who live in the county.

The parks and recreation facilities impact fee is therefore based on future residential growth.

Additionally, the City of Forsyth also maintains a system of public parks and recreation facilities that are, technically, available to all residents of the county. Cooperation between the County and the City to meet the public demand for recreational opportunities is exemplified by the **County’s Youth Center**, which is jointly managed by the City and the County, and the fact that all of the **County’s Recreation Complex** facilities are currently located within Forsyth (plus some vacant land outside the city).



■ Service Area

All parks and recreation components are operated on a countywide basis. Facilities are provided equally to all residents **of the unincorporated area and the county’s two cities.**

Level of Service

Level of Service standards for park lands and their related recreational components are exemplified by the investment that the County has made in the park acreage and in the many recreational facilities currently available to the service population. This current LOS adequately serves the current population. These capital investments are shown on the following Table 14 for park land acquisitions and individual recreation facilities, and on Table 15 for recreation buildings and rolling stock (vehicles and motorized equipment that last more than 10 years).

On each table, the original capital cost and the year expended for each item is shown. All original costs are then brought forward to what the item would cost in today’s dollars considering inflation using the CCI, the BCI or the CPI, as appropriate.

Table 14: Capital Investment in Parks & Recreation Facilities - Part 1

Capital Improvement	Year Expended	Original Cost	2022 Net Present Value
Park Lands			
Land Parcel	1983	\$ 12,000.00	\$ 32,410.13
Land Parcel	1984	\$ 118,665.00	\$ 312,433.89
Land Parcel - Recreation	2016	\$ 458,496.33	\$ 534,220.33
		Subtotal	\$ 879,064.35
Recreation Facilities			
Batting Cages	1998	\$ 11,118.15	\$ 16,386.01
Bleachers, Arena	2000	\$ 28,100.73	\$ 40,097.90
Bleachers	2001	\$ 7,436.00	\$ 10,440.59
Weight Room Equipment	2006	\$ 5,150.00	\$ 6,669.62
Playground Equipment	2012	\$ 59,149.00	\$ 69,523.41
Field 4 Fencing	2020	\$ 26,308.30	\$ 27,172.50
Field 6 Fencing	2020	\$ 26,428.30	\$ 27,296.44
Land Imprv: Group of Concrete Paving	1980	\$ 8,187.34	\$ 16,140.40
Land Imprv: Group of Chain Link Fencing	1984	\$ 12,536.80	\$ 23,167.79
Land Imprv:Group of Outdoor Lighting	1984	\$ 43,752.59	\$ 80,854.04
Land Imprv:Group of Asphalt Paving	1986	\$ 993,688.68	\$ 1,777,917.32
Land Imprv:Group of Chain Link Fencing	1986	\$ 72,149.71	\$ 129,090.95
Land Imprv:Group of Outdoor Lighting	1986	\$ 305,426.75	\$ 546,472.47
Land Imprv:Fencing	1997	\$ 8,855.00	\$ 13,263.18
Land Imprv:Paving	1998	\$ 18,360.00	\$ 27,059.11
Land Imprv:Paving Handicap Parking	2001	\$ 105,545.06	\$ 148,191.61
Land Imprv: Guard Rail/Fencing	2007	\$ 19,227.50	\$ 24,501.82
Land Imprv: Paving Youth Parking Lot	2008	\$ 71,550.78	\$ 89,716.33
Land Imprv: Lighting Soccer/Football	2008	\$ 220,604.75	\$ 276,612.63
Land Imprv:Field 5 Fencing	2012	\$ 14,520.17	\$ 17,066.93
Land Imprv: Field 1 Fencing	2012	\$ 15,310.17	\$ 17,995.49
Land Imprv: Field 2 Fencing	2012	\$ 16,820.17	\$ 19,770.34
Land Imprv:Field 3 Fencing	2012	\$ 13,804.31	\$ 16,225.51
Land Imprv: Football Field Fencing	2012	\$ 20,415.38	\$ 23,996.13
Land Imprv:Soccer Field Fencing	2012	\$ 22,101.61	\$ 25,978.11
VersaCourt Outdoor Court Tiles	2021	\$ 65,843.72	\$ 66,916.42
AccuDock Floating Dock	2021	\$ 24,999.00	\$ 25,406.28
		Subtotal	\$ 3,563,929.33

NOTE: All expenditure years and original costs taken from the Capital Assets Listing prepared by the County Finance Department.

Table 15: Capital Investment in Parks & Recreation Facilities - Part 2

Capital Improvement	Year Expended	Original Cost	2022 Net Present Value
Buildings			
Equipment Shelter	1980	\$ 9,904.40	\$ 27,385.88
Restroom/Concession Building - Tball Field	1984	\$ 23,077.29	\$ 57,918.43
Concession Building - Baseball Quad*	1986	n/a	\$ 203,500.00
Equestrian Arena Building	1986	\$ 6,134.14	\$ 14,667.38
Senior Center**	2000	\$ 446,020.00	\$ 759,836.63
Concession Building - Football	2001	\$ 153,624.00	\$ 255,451.43
Youth Center - Recreation*	2006	n/a	\$ 2,101,000.00
Pavillions - Recreation	2011	\$ 67,782.08	\$ 88,470.37
Concessions & Bathrooms Softball Fields	2011	\$ 167,209.56	\$ 218,244.87
Subtotal			\$ 3,726,474.99
Rolling Stock***			
Tractor, Farm	1998	\$ 14,170.55	\$ 26,117.10
Front End Loader	2000	\$ 5,200.00	\$ 9,107.80
Tractor w/ mower	2005	\$ 10,823.00	\$ 16,689.27
ATV - Gator (Motor Blown)	2005	\$ 8,732.00	\$ 13,464.90
John Deere TX Gator	2015	\$ 8,000.00	\$ 9,561.78
John Deere Farm Loader	2016	\$ 6,230.00	\$ 7,258.93
John Deere Tractor	2016	\$ 36,607.00	\$ 42,652.91
Embark Zero Turn	2017	\$ 10,000.00	\$ 11,358.49
John Deere TX Gator	2019	\$ 8,251.16	\$ 8,906.50
SCAG - Turf Tiger II	2019	\$ 10,995.00	\$ 11,868.27
Grasshopper 71" Diesel Mower	2019	\$ 13,345.00	\$ 14,404.92
TORO SandPro 5040	2019	\$ 29,676.00	\$ 32,033.00
Ford 150	2019	\$ 28,765.00	\$ 31,049.65
John Deere TX Gator	2019	\$ 8,251.16	\$ 8,906.50
2020 Chevrolet Silverado	2020	\$ 25,348.80	\$ 26,673.84
Field Top Dresser	2021	\$ 11,025.00	\$ 11,309.48
SCAG - Turf Tiger II	2021	\$ 11,465.00	\$ 11,760.83
Subtotal			\$ 293,124.17
Grand Total			\$ 8,462,592.84

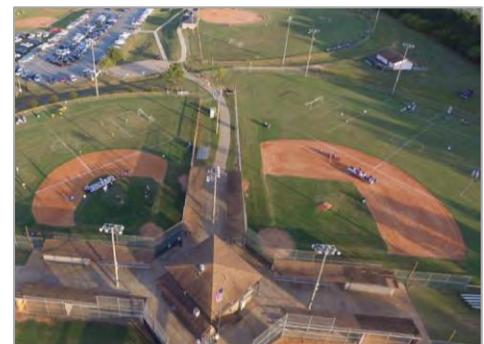
* Taken from the Buildings Listing prepared by the County Finance Department. All other data and original costs taken from the Capital Assets Listing, also prepared by the Finance Department.

** Although a County building, the Senior Center is operated by the Middle Georgia Area Agency on Aging.

*** Equipment having an expected life of 10 years or more.

In bringing past expenditures up to current values, the Consumer Price Index (CPI) inflation rate was used for park lands and rolling stock; for recreation facilities, the Engineering News Record’s Construction Cost Index (CCI) was applied; and for the recreation buildings, the Engineering News Record’s Building Cost Index (BCI) was used.

Overall, the County has invested almost \$8.5 million in its parks and recreation facilities (in today’s dollars).



Future Demand for Parks and Recreation Facilities

Unlike other public facility categories covered in this Report, the calculation of future demand for parks and recreation facilities is 'investment based'.

Most of the other public facility categories use the 'improvement based' approach, in which the existing public facilities form the basis for the expansion or extension of those public facilities to future growth and development at the same (current) Level of Service. For instance, library services are provided to the future population by taking the current Level of Service enjoyed by the current population and extending it to the future increased population. In this way, the current and future population will be provided library services at the same LOS, which assures that the existing population will not experience a degradation in services due to the increasing service demands of new residents.

Under the 'improvement based' approach, only the specific facilities existing today would be extended to serve future growth and development. The 'investment based' approach provides for the addition of new facilities that are not currently available—a skate park, for instance, or pickleball courts.

Table 16: Calculation of Future Investment Needed

	Current Investment	Existing Housing Units	Investment Per Housing Unit	Increase in Housing Units to 2045	Current Cost to Support New Growth	2035 Net Present Value
Park Land	\$ 879,064.35	12,372	\$ 71.05	4,130	\$ 293,447.77	\$ 419,203.65
Recreation Equipment	\$ 3,563,929.33	12,372	\$ 288.06	4,130	\$ 1,189,704.83	\$ 1,491,740.65
Recreation Buildings	\$ 3,726,474.99	12,372	\$ 301.20	4,130	\$ 1,243,965.54	\$ 1,745,975.53
Rolling Stock	\$ 293,124.17	12,372	\$ 23.69	4,130	\$ 97,850.21	\$ 139,783.53
Future Investment to Serve Future Growth					\$ 2,824,968.35	\$ 3,796,703.36

All of the recreation components needed to serve future growth, of course, will not occur in 2035. However, since the actual pace and timing of construction for the improvements proposed to meet future demand have not been programmed, an 'average' year of 2035 is used for Net Present Value calculations—some improvements will occur earlier for less money, and some later at greater cost. All will average out.



EMS and Fire Protection

■ Introduction

Emergency medical services and fire protection are provided by the County through its EMS/Fire Department.

■ Service Area

The entire area outside of the City of Forsyth is considered a single service area for the provision of emergency medical and fire protection services. All residents and employees in the service area have equal access to the benefits of the services provided. While the County has mutual aid agreements with the City of Forsyth, the city maintains its own fire department, which includes first responder medical services as well.

■ Level of Service

The capital value of public safety services is based upon facility square footage and vehicles.

Currently, public safety facilities that are owned by the County include its thirteen fire stations and headquarters with a combined square footage of 61,968, utilizing a total of 32 public safety vehicles (that is, vehicles having a service life of 10 years or more). Table 17 shows the departments buildings while Table 18 provides a summary of the department's vehicles. This current LOS adequately serves the current population.

Table 17: Existing Monroe County Fire Stations

Existing System Stations			Floor Area		
Name	Location	Number of Bays	Floor Area	Year Built	Current Value**
High Falls Fire Station 2	3901 High Falls Road, Jackson	2	3,054	1974	\$ 241,000
Cabaniss Fire Station 6	56 Blue Ridge School Road	2	2,576	1981	\$ 210,500
Popes Ferry Fire Station 7	95 Popes Ferry Road, Juliette	2	2,576	1982	\$ 210,500
Bollingbroke Fire Station 4	8037 Rivoli Road, Bollingbroke	2	4,268	1983	\$ 352,000
Juliette Fire Station 3	5487 Juliette Road, Juliette	2	3,130	1983	\$ 237,000
Brent Fire Station 8	193 Hopewell Road, Forsyth	2	2,576	1984	\$ 210,500
Russellville Fire Station 9	73 Russellville Road, Forsyth	2	2,576	1986	\$ 210,500
Smarr Fire Station 10*	50 Evans Road, Forsyth				
Culloden Fire Station 5	58 College St, Culloden	3	2,964	1986	\$ 212,500
Johnstonville Fire Station 12	2220 English Road, Forsyth	2	3,000	2000	\$ 196,500
Dames Ferry Fire Station 14	2106 Dames Ferry Road, Forsyth	2	4,875	2014	\$ 337,000
Fire Station 1	693 Juliette Road, Forsyth	4	13,297	2019	\$ 1,595,000
Shi Fire Station 11	2519 Shi Road, Forsyth	1	2,000	2019	\$ 131,000
Headquarters	693 Juliette Road, Forsyth		12,500	2019	\$ 1,224,000
Total Bays, Floor Area and Current Value		26	59,392		\$ 5,368,000

* Station 10 is out of service and scheduled to be replaced.

** Current (2021) value established by Monroe County Finance Department.

Table 18: Current EMS/Fire Department Vehicles

Dept. ID	Year Acquired	Year, Make, Model	Location Station	Dept. ID	Year Acquired	Year, Make, Model	Location Station
Fire Apparatus				Ambulances			
Brush 5	1988	88 Ford F250	5	M-08357	2016	16 Ford F450	Reserve
Engine 1	2022	2022 HME Ahrens-Fox	1	M-08392	2017	17 Ford F450	Reserve
Engine 2	2022	2022 HME Ahrens-Fox	2	M-08511	2019	19 Ford F450	9
Engine 3	2022	2022 HME Ahrens-Fox	3	M-07977	2019	19 Chevy 4500	1
Engine 4	2021	2021 HME Ahrens-Fox	4	M-09408	2019	19 Ford F550	12
Engine 5	2021	2021 HME Ahrens-Fox	5	M-08003	2020	20 Ford F450	4
Engine 6	2022	2022 HME Ahrens-Fox	6	Support Vehicles			
Engine 7	2022	2022 HME Ahrens-Fox	7	Command	2016	16 Ford F350	1
Engine 8	2020	2020 Freightliner	8	Car 1	2020	20Chevy Tahoe	1
Engine 9	2022	2022 HME Ahrens-Fox	9	Car 2	2019	19 Ford Explorer	1
Engine 10	2022	2022 HME Ahrens-Fox	10	Car 3	2019	19 Ford F150	1
Engine 11	2021	2021 HME Ahrens-Fox	11	Car 4	2019	19 Ford Ranger	1
Engine 12	2022	2022 HME Ahrens-Fox	12	Utility 1	2019	19 Ford F150	1
Engine 14	2021	2021 HME Ahrens-Fox	14	NOTE: All vehicles having a service life of 10 years or more.			
Reserve 1	2020	2020 Freightliner	10				
Reserve 2	2020	2020 Freightliner	8				
Tower 1	2009	09 Pierce	10				
Pumper 1	2016	17 Kenworth	1				
Squad 1	2003	03 Pierce	1				
Rescue 1	2007	07 Sterling	7				

Table 19 summarizes the departments vehicles as to the number by type.

Table 19: Summary: EMS/Fire Vehicles

Type and Number of Vehicles	
Fire Apparatus	
Brush Truck	1
Engine	15
Pumper/Tanker	1
Platform Ladder	1
Squad	1
Rescue	1
Total Apparatus	20
Ambulances	6
Support Vehicles	6
Total Vehicles	32

Note that the term 'fire apparatus' applies to any rolling stock which is used for the primary purpose of fighting, suppressing or controlling fires of any type—buildings, fields, automobile wrecks, wooded areas, etc. The County does not contemplate acquiring any type of fire apparatus other than those listed above, but may as technological, fire-fighting or medical techniques advance in the coming decades, or other unanticipated types of existing vehicles (such as an air truck) come to be needed.

Future Demand for EMS and Fire Protection Facilities

The extension of service to future growth and development will be based on the current LOS applied to the population and business increases in the service area between 2021 and 2045. Table 20 shows the EMS and fire protection facilities that currently exist, and the Level of Service those facilities provide to the county’s residents and businesses today. The additional facilities needed to adequately serve future growth and development without degrading current services will be based on these LOS figures.

Table 20: Current Level of Service Calculations

Facility	Service Population	Level of Service
Existing Square Feet	2021 Day-Night Population	Square Feet per 2021 Day-Night Population
59,392	31,543	1.88289900
Existing Fire Apparatus	2021 Day-Night Population	Fire Apparatus per 2021 Day-Night Population
20	31,543	0.00063406
Existing Support Vehicles	2021 Day-Night Population	Support Vehicles per 2021 Day/Night Population
6	31,543	0.00019022
Existing Ambulances	2021 Day-Night Population	Ambulances per 20121 Day-Night Population
6	31,543	0.00019022



Over the coming years and decades, the need for additional fire stations and administrative space will increase, as well as the need to expand the fleet. Table 21 quantifies those anticipated needs in order to maintain the current level of service for the county’s residents and businesses available today, while extending the same level of service to future residents and employers as the county grows.

Table 21: Future Demand for Fire Stations and Vehicles

Level of Service	Future Population	New Growth Demand
Square Feet per 2021 Day-Night Population	Day-Night Population Increase (2021-45)	Net New Square Feet Demanded
1.88289900	16,286	30,666
Fire Apparatus per 2021 Day-Night Population	Day-Night Population Increase (2021-45)	Net New Apparatus Demanded
0.00063406	16,286	10.33
Support Vehicles per 2021 Day/Night Population	Day-Night Population Increase (2021-45)	Net New Support Vehicles Demanded
0.00019022	16,286	3.10
Ambulances per 2021 Day-Night Population	Day-Night Population Increase (2021-45)	New Ambulances to Meet Demand
0.00019022	16,286	3.1



Since the cost of acquiring an additional ‘fire truck’ varies considerably based on the type of vehicle, Table 22 examines the departments’ current fleet as to each type of vehicle, and the extent to which that type of vehicle comprises a portion (percentage) of the fleet. In order to approximate that mix of vehicles over the projection period, those percentages are applied to the total number of vehicles projected to be needed to maintain the current LOS (from Table 21 – 11.88). Since the department cannot acquire a portion of a vehicle, the raw needs are translated into whole numbers (up or down), resulting in a total of 12 fire apparatus. This approach is also applied to the number of support vehicles and ambulances needed to round up the calculated need (based on the LOS) to whole vehicles.

Table 22: Vehicles needed by Type

	Existing Vehicles	% of Existing Fleet	# of Needed Vehicles	Rounded*
Brush Truck	1	5.00%	0.52	0
Engine	15	75.00%	7.75	7
Pumper	1	5.00%	0.52	1
Platform/Ladder	1	5.00%	0.52	1
Squad	1	5.00%	0.52	0
Rescue	1	5.00%	0.52	1
Fire Apparatus Vehicles		100%	10.33	10
Support Vehicles	6	100%	3.10	3
Ambulances	6	100%	3.10	3

* Number of vehicles rounded down to 10 fire apparatus vehicles at 100% impact fee eligibility, and 3 support vehicles at 100% impact fee eligibility. Ambulances rounded down to 3 at 100% impact fee eligible.

The following table brings together the new floor area and vehicles needed by 2045 to maintain the level of service currently available. For new fire stations, the cost per square foot is based on recently constructed facilities in other communities in Georgia, as reported in publications of the Engineering News Record (ENR), brought up to 2022 values using ENR’s Building Cost Index.

For vehicles, original cost figures are obtained from past expenditures by the County for similar vehicles by type. These original cost figures are brought to current (2022) costs using net present value calculations to account for inflation since each vehicle was purchased.

Since the actual pace and timing of construction for the improvements and acquisition of vehicles to meet future demand have not been programmed, an ‘average’ year of 2035 is used for the Net Present Value calculations – some construction or purchases will occur earlier for less money, and some later at greater cost. All will average out.

Table 23: Building and Vehicle Costs to Meet Future Demand

	Number	2022 Cost Each	Total 2022 Cost	Estimated Cost 2035 (NPV)	% Impact Fee Eligible	Total Impact Eligible Cost
New Building Area*	30,666	\$ 300.00	\$ 9,199,800.00	\$ 12,811,790.93	100.0%	\$ 12,811,790.93
Brush Truck	0	\$ 200,000.00	\$ -	\$ -		\$ -
Engine	7	\$ 550,000.00	\$ 3,850,000.00	\$ 5,361,572.54	100.0%	\$ 5,361,572.54
Pumper	1	\$ 250,000.00	\$ 250,000.00	\$ 348,154.06	100.0%	\$ 348,154.06
Platform/Ladder	1	\$ 1,500,000.00	\$ 1,500,000.00	\$ 2,088,924.37	100.0%	\$ 2,088,924.37
Squad	0	\$ 40,000.00	\$ -	\$ -		
Rescue	1	\$ 250,000.00	\$ 250,000.00	\$ 348,154.06	100.0%	\$ 348,154.06
Support Vehicles	3	\$ 40,000.00	\$ 120,000.00	\$ 167,113.95	100.0%	\$ 167,113.95
Ambulances	3	\$ 238,857.00	\$ 716,571.00	\$ 997,908.42	100.0%	\$ 997,908.42
Totals		\$ 3,069,157.00	\$ 15,886,371.00	\$ 22,123,618.33		\$ 22,123,618.33

* Building cost estimate based on comparable facilities in other Georgia communities, published in Engineering News Record reports; estimated vehicle unit costs are current acquisition costs available in the area.

To calculate the Net Present Value (NPV) of the impact fee eligible cost estimate for the construction of future fire stations or supporting facilities in 2035 (which may be an expansion of an existing facility or the construction of a new building), the NPV is calculated by increasing the current (2022) **estimated costs using the Engineering New Record’s (ENR) 10-year average building cost inflation (BCI) rate** out to 2035, and then discounting this future amount back using the Net Discount Rate.

To calculate the NPV of the impact fee eligible cost estimates of the fire apparatus, the current estimated cost is inflated to the target year (2035) using the 10-year average Consumer Price Index (CPI) and then reduced using the Net Discount Rate to produce the Net Present Value.

Lastly, the 2035 estimated cost of each item is reduced by the percentage at which the item is impact fee eligible (see the footnote to Table 22) to determine the portion of the total amount that is eligible for impact fee funding. Since the new building space is 100% eligible, this only applies to rolling stock.



Sheriff's Office

■ Introduction

Law enforcement, inmate incarceration, and services provided to the Monroe County courts fall under the purview of the Monroe County Sheriff's Office.

■ Service Area

Services provided by the Sheriff, officers and staff are provided throughout the county.

■ Level of Service

The Level of Service is determined by an inventory of the square footage located within the County Justice Center and other buildings involved in law enforcement activities. This current LOS adequately serves the current population.

Table 24: Monroe County Sheriff's Facilities

Facility	Floor Area (square feet)
County Justice Center	51,220
Comprising:	
Inmate Housing	
Inmate Recreation	
Jail Administration	
Jail Operations	
Radio Room	
Investigations Division	
Patrol Division	
Armory	
Evidence Room	
Superior Court Courtroom	
Superior Court Judge's Office	
District Attorney's Office	
Jury Room	
Magistrate Court Room	
Magistrate Court Personnel	
Training Structure	840
Storage Building	1,800
Victim's Services Unit	2,240
Total Floor Area	56,100

Table 24 shows the floor area of the Sheriff's facilities that currently exist. It is noted that patrol cars and other vehicles operated by the Sheriff's officers do not normally last for 10 years or more because of the normal mileage driven by the vehicles and their wear and tear require that they be replaced more often.

The extension of services provided by the Sheriff's Office to future growth and development is based on the current LOS, shown on Table 25. The total floor area utilized by the Sheriff's Office, from Table 24, is divided by the population and 'day-night' business employment in 2021 to determine the floor area available for each resident and impact fee eligible business employee. This results in the Level of Service those facilities provide to the county's residents and businesses today.

Table 25: Current Level of Service - Sheriff's Office

Facility	Service Population	Level of Service
Existing Square Feet	2021 Day-Night Population	Square Feet per 2021 Day-Night Population
56,100	36,977	1.51715932

■ **Forecasts for Service Area**

Future Demand

The additional floor area needed to be occupied by Sheriff Office’s activities in the future in order to extend the current level of service to future residents and business is shown on Table 26. The current level of service, taken from Table 25, is multiplied times the increase in the day-night population projected to 2045 to determine the additional floor area that will be needed to serve new growth and development in the future without degrading the LOS for current residents and businesses.

Table 26: Future Demand for New Floor Space

Level of Service	Future Population	New Growth Demand
Square Feet per 2021 Day-Night Population	Day-Night Population Increase (2021-45)	Net New Square Feet Demanded
1.50857414	17,632	26,600

Future Costs

Since the actual pace and timing of construction for the improvements to meet future demand have not been programmed, an ‘average’ year of 2035 is used for the Net Present Value calculations – some construction will occur earlier for less money, and some later at greater cost. All will average out.

To calculate the Net Present Value (NPV) of the impact fee eligible cost estimate for the construction of future building area (which may be an expansion of an existing facility or the construction of a new building) and the jail expansion, the NPV is calculated by increasing the current (2021) estimated costs using the Engineering News Record’s (ENR) 10-year average building cost inflation (BCI) rate, and then discounting this future amount back using the Net Discount Rate.

A per-square foot construction cost of \$300 has been used to estimate the cost of future construction projects, based on an average of similar projects included in recent editions of a nationally recognized source (BNi Publications annual building cost books).

To calculate the NPV of the impact fee eligible cost estimate of the new building floor area, the current estimated cost is inflated to the target year (2035) using the 10-year average Building Construction Index (BCI) and then reduced using the Net Discount Rate to produce the Net Present Value.

The total improvement cost is shown on Table 27.

Table 27: Building Costs to Meet Future Demand

	Square Feet	2022 Cost Each	Total 2022 Cost	Estimated Cost 2035 (NPV)	% Impact Fee Eligible	Total Impact Eligible Cost
New Building Area*	26,600	\$ 300.00	\$ 7,980,000.00	\$ 10,932,490.34	100.0%	\$ 10,932,490.34
Totals		\$ 300.00	\$ 7,980,000.00	\$ 10,932,490.34		\$ 10,932,490.34

* Building cost estimate based on comparable facilities in other Georgia communities, published in Engineering News Record reports.



Animal Services

■ Introduction

In Monroe County the Animal Services facilities support **the County’s animal control program, and** thus provide services throughout the county. Demand for animal control services is almost exclusively related to the county's resident population. Thus, an impact fee for animal service facilities is based on future residential growth.

■ Service Area

The entire county is considered a single service area for the provision of animal services because all residents in the county and its cities have equal access to the benefits that the service provides.

■ Level of Service

The Animal Services Shelter provides space for the administration of the department and kennels. In addition, services are delivered throughout the county utilizing animal services vehicles to transport animals to the shelter.

Current facility data are shown on Table 28.

The current level of service is related to the square footage in the Animal Services Center for the **department’s offices and animal** housing. In addition, the service maintains a number of vehicles that have useful lives of 10 years or more. Vehicles currently in service range in age from 2 to 20 years. This current LOS adequately serves the current population.

Table 28: Animal Services Capital Inventory

Current Buildings and Vehicles

	Sq. Feet
Animal Services Center	3,000
Vehicles	Number
2001 Ford Van	1
2006 Chevy 1500	1
2012 Chevy Tahoe	1
2019 Ford F-150	1
Total Vehicles	4



In Table 29, the **Current Level of Service figures are determined by dividing the ‘existing’ figures by** the number of housing units in the county in 2021. These figures establish the Level of Service Standards that will be used to calculate the additional facilities that will need to be added to provide the same level of service to future residents of the county as the current residents currently enjoy.

Table 29: Current Level of Service - Animal Services

Facility	Current Service Population	Current Level of Service
Existing Square Feet	Number of Housing Units (2021)	Square Feet of Floor Area per Housing Unit
3,000	12,372	0.242483
Existing Vehicles	Number of Housing Units (2021)	Vehicles per Housing Unit
4	12,372	0.000323



■ **Future Demand for Facilities**

As noted above, the Current Level of Service figures from Table 29 set the standards for calculating Future Demand for facilities and long-lived equipment between 2021 and 2045 by multiplying the Current Level of Service figures times the projected increase in housing units.

Table 30: Future Demand for Animal Services

Current Level of Service	Service Area Growth	New Growth Demand
Square Feet of Floor Area per Housing Unit	Number of New Housing Units (2021-45)	Square Feet of New Floor Area Needed
0.242483	4,130	1,001
Vehicles per Housing Unit	Number of New Housing Units (2020-45)	Additional Vehicles Needed
0.000323	4,130	1.335



The Level of Service standards yield calculated 'needs' for animal transport vehicles that is not a whole number. For instance, in order to meet the future calculated need for new vehicles (1.335), more than one would have to be acquired. That would result in the purchase of 2 vehicles, which would exceed the 'need' by about two-thirds of a vehicle. Clearly, only a portion of a vehicle cannot be purchased. The purchase of only one is therefore anticipated in this Methodology Report, which would be 100% impact fee eligible.

■ Costs to Serve Future Development

Since the actual pace and timing of construction for the building expansion improvements and purchase of a vehicle proposed to meet future demand have not been programmed, an ‘average’ year of 2035 is used for Net Present Value calculations—some improvements and the vehicle purchase may occur earlier for less money, and some improvements later at greater cost. All will average out. The results are shown on Table 31.

To calculate the Net Present Value (NPV) of the impact fee eligible cost estimate for the construction of the new floor area, the NPV is calculated by increasing the current (2022) estimated cost using **Engineering News Record’s 10-year average building cost inflation (BCI) rate** for buildings, and the 10-year average CPI rate for the vehicle. All projected costs are then reduced to current NPV dollars using the Net Discount Rate.

For facility cost estimates, documented construction cost info on hand is used, which is for a 41,000 sf Animal Care & Protective Services facility on 4.5 acres in Jacksonville. That facility would have run \$287.22 per square foot today (including cages and facilities). This is projected forward to 2035 using the BCI Building Construction Index inflation percentage.

For the new vehicle, the recent purchase of a Ford 250 fitted out with an animal transport body in another county sets the standard. That cost (\$47,337) inflated to 2035 using the 10-year Consumer Price Index average and the current discount rate results in a 2035 estimated equivalent cost of almost \$66,000.

Table 31: Building and Vehicle Costs to Meet Future Demand

	Number	2022 Cost Each*	Total 2022 Cost	Estimated Cost 2035 (NPV)	% Impact Fee Eligible	Total Impact Eligible Cost
New Building Area	1,001	\$ 287.22	\$ 287,507.22	\$ 393,878.38	100.0%	\$ 393,878.38
New Vehicle	1	\$ 47,337.00	\$ 47,337.00	\$ 65,922.11	100.0%	\$ 65,922.11
Totals		\$ 47,624.22	\$ 334,844.22	\$ 459,800.49		\$ 459,800.49

* Building cost and new vehicle estimates based on comparable animal control facilities and vehicles in other Georgia counties.

Road Improvements

■ Introduction

The information in this chapter is derived from the Transportation Plan prepared by the County, which specifically considers projects considered for SPLOST funding.

■ Service Area

The service area for these road projects is defined as the entire county, in that these road projects are recognized as providing primary access to all properties within the county as part of the county-wide network of principal streets and thoroughfares. All new development within the county will be served by this countywide network, such that improvements to any part of this network to relieve congestion or to otherwise improve capacity will positively affect capacity and reduce congestion throughout the county.

■ Level of Service Standards

Level of Service for roadways and intersections is measured on a 'letter grade' system that rates a road within a range of service from A to F. Level of Service A is the best rating, representing unencumbered travel; Level of Service F is the worst rating, representing heavy congestion and long delays. This system is a means of relating the connection between speed and travel time, freedom to maneuver, traffic interruption, comfort, convenience and safety to the capacity that exists in a roadway. This refers to both a quantitative measure expressed as a service flow rate and an assigned qualitative measure describing parameters. *The Highway Capacity Manual, Special Report 209*, Transportation Research Board (1985), defines Level of Service A through F as having the following characteristics:

1. LOS A: free flow, excellent level of freedom and comfort;
2. LOS B: stable flow, decline in freedom to maneuver, desired speed is relatively unaffected;
3. LOS C: stable flow, but marks the beginning of users becoming affected by others, selection of speed and maneuvering becomes difficult, comfort declines at this level;
4. LOS D: high density, but stable flow, speed and freedom to maneuver are severely restricted, poor level of comfort, small increases in traffic flow will cause operational problems;
5. LOS E: at or near capacity level, speeds reduced to low but uniform level, maneuvering is extremely difficult, comfort level poor, frustration high, level unstable; and
6. LOS F: forced/breakdown of flow. The amount of traffic approaching a point exceeds the amount that can transverse the point. Queues form, stop & go. Arrival flow exceeds discharge flow.

The traffic volume that produces different Level of Service grades differs according to road type, size, signalization, topography, condition and access.

■ Road Improvement Costs

Projects that provide additional road capacity will serve new growth as well as existing traffic. The County’s Transportation Plan addresses two distinct categories of improvements: paving dirt roads and roads that are already paved but needing improvements. In many cases, additional right-of-way will need to be acquired and reconstruction involved.

Unpaved Roads

One category—improving dirt roads—will clearly provide additional capacity. These projects are listed on Table 32. All such projects are eligible for impact fee funding. There is, however, a complete dearth of professional or scientific standards regarding the operational level of service or vehicular capacity of such roads. There is, however, no question that dirt-surface roads limit vehicular speeds and thus capacity, and pose seriously restricted emergency vehicle access, particularly during inclement weather.



Table 32: Unpaved County Roads

Road Name	Miles	Road Name	Miles	Road Name	Miles
Abare Road	0.90	Frank Bunn Road	0.60	Motpelier Springs Road	2.80
Abernathy Road	1.50	Franklin Road	1.40	Old Indian Springs Road	2.20
Adams Road	0.80	Gibson Road	0.80	Parks Road	0.60
Askin Place	0.70	Goodwyn Road	2.70	Pennington Road	0.60
Atkinson Road	0.20	Gordon Road	0.60	Pierson Road	0.90
Berner Loop	0.80	Harper Lane	0.50	Potts Cemetary Road	1.30
Blue Ridge School Road	1.20	Hayes Drive	0.13	Riverbend Road	0.30
Bobby Floyd Road	0.50	Hays Farm Road	1.80	Rumble Road	3.00
Bolingbroke Alley	0.10	Higgins Mill Road	0.50	Samples Road	0.50
Boxankle Drive	0.30	Hillcrest Lane	0.60	South Tingle Road	0.70
Boxankle Road	2.30	Holly Grove Road	4.00	Strickland Loop to landfill	1.00
Brown Road	0.30	Honeycutt Road	0.60	Sullivan Road	0.30
Buck Creek Drive	0.20	Ingram Road	1.30	Texan Lane	0.40
Butler Road	0.80	Ivey Circle	0.30	Tobler Creek Lane	0.30
Byars Road	2.50	Jeffrey Way	1.80	Tolbert Road	1.20
Castleberry Road	0.40	Joe Chambers Road	1.10	Towaliga South Road	1.00
Christian Road	1.00	Joe Sizemore Road	0.40	Treadwell Road	4.00
Cochran Road	0.60	John Paul Road	0.90	Unionville Road	1.60
Collins Lane	1.00	Katie Johnson Road	0.50	Vaughn Road	1.20
Colvin Road	0.80	King Road	1.30	Wadley Road	3.20
Cork Road	0.10	Little Collier Road	0.05	West Redding Road	0.30
Doe Run	0.30	Lower Martin Road	0.60	Westbrooks Road	1.60
Duncan Circle	0.40	Martin Road	1.90	Wise Road	1.20
East Redding Road	1.00	Mays Road	0.60	Yellow Creek Road	0.25
Ebeneezer Road	1.30	McCowan Road	2.60	Zellner Road	2.80
Edwards Road	1.40	McMullen Road	0.60		
English Road	1.00	Midway Church Road	0.50		
				Total Miles	84.33

As discussed thoroughly in the *Trip Generation Appendix* at the end of this report, new growth and development will represent 44% (rounded) of the traffic on the county’s road network in 2045. If all of the unpaved roads listed on Table 32 were to be paved, the 83.5 miles would probably constitute about \$12,942,500 in current (2021) dollars. Since many of the projects would be made in future years, net present value calculations would increase this total. For the time being, new growths portion of the cost (44%) would indicate that \$5,698,017 would be impact fee eligible, or \$29.13 per vehicle trip.

Paved Road Improvements

The County’s Transportation Plan lists a number of road improvement projects for currently paved roads. These are listed on the following two tables

The cost figures on the two tables are expressed in 2021 dollars. Once impact fee eligibility is established for specific projects, the costs will be increased to the years of expected implementation using the **Engineering News Record’s 10-year** average construction cost inflation (CCI) rate, and then discounting this future amount back to 2022 dollars using the Net Discount Rate.

In order for a road improvement project to be impact fee eligible, it must increase the traffic capacity of the road (and thus provide additional service to future growth and development). The Georgia Department of Community Affairs has explicitly ruled that filling potholes and even resurfacing roads are not impact fee eligible—they are considered ‘maintenance’ and do not create additional capacity. It will therefore be important to identify those road projects on the following two tables that involve actual road widenings or other improvements that increase capacity (such as the additions of medians or turn-lane additions to intersections).

Most of Monroe County consists of rural, family-owned undeveloped large tracts. These properties are prime candidates for development, if not by the current family patriarch/matriarch, future generations.

Most roads do not meet engineering standards for right of way, lane width, geometric typical section, pavement structure, sight distance, drainage including bridges/culverts, and other safety enhancements necessary for increased traffic counts.

The paved roads list has 165 roads totalling 227 miles. Eighty of the roads are one mile or more with a total length of 198 miles, typically collector type roads. It is estimated that least half of the 198 miles would need some type of upgrade to accommodate increased traffic count due to new development.



Table 33: Paved Road Improvements - Part 1

Road Name	Length (Miles)	Cost	Road Name	Length (Miles)	Cost
LAKESIDE DRIVE	0.15	\$ 63,000	CALLAWAY ROAD	0.50	\$ 210,000
SHONEYS ROAD	0.10	\$ 42,000	DUMAS ROAD	1.69	\$ 709,800
TOWN CREEK ROAD	1.00	\$ 420,000	LOWER SIMMONS ROAD	1.46	\$ 613,200
WILDER DRIVE	0.41	\$ 172,200	SOUTH TINGLE ROAD	0.75	\$ 315,000
OAK RIDGE TERRACE	0.06	\$ 25,200	COUGAR ROAD	0.35	\$ 147,000
OAKRIDGE DRIVE	1.50	\$ 630,000	MAYNARDS MILL ROAD	10.02	\$ 4,208,400
INDIAN SPRINGS DRIVE	1.00	\$ 420,000	ENSIGN ROAD	1.38	\$ 579,600
MCCCOMMON ROAD	1.70	\$ 714,000	HERTFORD PLACE	0.20	\$ 84,000
BROKEN ARROW TRAIL	0.50	\$ 210,000	TWIN CREEKS DRIVE	0.30	\$ 126,000
DYAS SCHOOL ROAD	0.25	\$ 105,000	BOLINGREEN DRIVE	1.00	\$ 420,000
FLINT ROAD	2.00	\$ 840,000	BOWDOIN ROAD	1.14	\$ 478,800
HAMILL DRIVE	0.13	\$ 54,600	CAMELLIA DRIVE	0.18	\$ 75,600
HARDAGE ROAD	1.00	\$ 420,000	CHRISTIAN ROAD	2.09	\$ 877,800
JOE CHAMBERS RD	2.50	\$ 1,050,000	COUNTRY CREEK RD	1.00	\$ 420,000
JOSEY ROAD	2.69	\$ 1,129,800	COUNTRY PLACE	0.12	\$ 50,400
LINDSEY ROAD	2.99	\$ 1,255,800	COUNTRY TRAIL	0.12	\$ 50,400
LOWER THOMASTON RD	0.42	\$ 176,400	DEER LAKE DRIVE	0.50	\$ 210,000
MONTPELIER CHURCH RD	1.00	\$ 420,000	EDGE ROAD	2.76	\$ 1,159,200
MONTPELIER STATION RD	1.12	\$ 470,400	ESTES ROAD	5.23	\$ 2,196,600
OLD BRENT ROAD	1.50	\$ 630,000	JENKINS ROAD	3.42	\$ 1,436,400
RENOUF ROAD	1.84	\$ 772,800	JENNINGS LANE	1.00	\$ 420,000
SHI ROAD	2.00	\$ 840,000	LANCASTER COURT	0.19	\$ 79,800
CHARLES JOHNSON RD	2.00	\$ 840,000	LORAIN WOODS PLACE	0.06	\$ 25,200
THARPE ROAD	2.48	\$ 1,041,600	MARVIN CIRCLE	0.75	\$ 315,000
MCCOWEN ROAD	2.71	\$ 1,138,200	MCCRACKIN STREET	2.45	\$ 1,029,000
BAGLEY ROAD	2.50	\$ 1,050,000	NATURES TRAIL	1.50	\$ 630,000
BILLY HARRIS ROAD	1.79	\$ 751,800	NEWTON ROAD	1.03	\$ 432,600
BUCKHEAD LANE	0.25	\$ 105,000	PEA RIDGE SHORTCUT	0.50	\$ 210,000
BUNN ROAD	1.65	\$ 693,000	SAPPHIRE COURT	0.13	\$ 54,600
CIRCLE STREET	0.35	\$ 147,000	SAPPHIRE DRIVE	0.39	\$ 163,800
COLLINS RIDGE DR	0.60	\$ 252,000	SEARCY DRIVE	0.86	\$ 361,200
DAVIS ROAD	2.06	\$ 865,200	SEARCY PLACE	0.50	\$ 210,000
DEBRA DRIVE	1.00	\$ 420,000	SLEEPY CREEK ROAD	0.50	\$ 210,000
JACKSON-LINDSEY RD	2.35	\$ 987,000	SPELMAN ROAD	0.26	\$ 109,200
MUSIC ROW	0.20	\$ 84,000	TREY TERRACE	0.50	\$ 210,000
OLD MACON ROAD	4.46	\$ 1,873,200	WHITTLE ROAD	1.29	\$ 541,800
PEEBLES DRIVE	0.25	\$ 105,000	WOODS ROAD	1.00	\$ 420,000
REEDY CREEK ROAD	1.00	\$ 420,000	DEER CREEK DRIVE	1.00	\$ 420,000
STROUDS ROAD	1.00	\$ 420,000	OLD POPES FERRY RD	0.50	\$ 210,000
WOODVALLEY LANE	0.10	\$ 42,000	SAPPHIRE CIRCLE	2.55	\$ 1,071,000
WOODWARD ROAD	0.46	\$ 193,200	NORTH RIVOLI FARMS DR	1.20	\$ 504,000
YELLOW CREEK ROAD	0.25	\$ 105,000	CARRIAGE DRIVE	0.25	\$ 105,000

Table 34: Paved Road Improvements - Part 2

Road Name	Length (Miles)	Cost	Road Name	Length (Miles)	Cost
COLEBROOK DRIVE	0.25	\$ 105,000	FORSYTH LANDING DR	0.50	\$ 210,000
FAITH COURT	0.06	\$ 25,200	ANDERSON ROAD	0.50	\$ 210,000
FAITH DRIVE	0.25	\$ 105,000	BLOUNT ROAD SHORTCUT	0.21	\$ 88,200
LEE KING CIRCLE	0.50	\$ 210,000	BROWNLEE ROAD	2.01	\$ 844,200
PATE ROAD	5.41	\$ 2,272,200	BUCK CREEK ROAD	2.00	\$ 840,000
POPES FERRY LANE	0.50	\$ 210,000	CRAIG ROAD	1.50	\$ 630,000
POPES FERRY ROAD	0.25	\$ 105,000	FREEMAN ROAD	5.57	\$ 2,339,400
RIDGECREST DRIVE	0.50	\$ 210,000	HARPER LANE	0.50	\$ 210,000
DEER RIDGE TRAIL	0.25	\$ 105,000	HIGH FALLS ROAD	6.34	\$ 2,662,800
HARVEST DRIVE	0.25	\$ 105,000	JOHNSTONVILLE ROAD	5.80	\$ 2,436,000
MT ZION CHURCH RD	0.50	\$ 210,000	LASSITER ROAD	5.00	\$ 2,100,000
WEATHERFORD PLACE	0.50	\$ 210,000	LOGWALL CHURCH ROAD	0.30	\$ 126,000
FAWN DRIVE	0.06	\$ 25,200	MACE MANOR	0.67	\$ 281,400
KLOPPER ROAD	3.00	\$ 1,260,000	MAYNARD CHURCH ROAD	2.55	\$ 1,071,000
KENT DRIVE	0.50	\$ 210,000	OLD CABANISS ROAD	1.62	\$ 680,400
OAK LANE	0.06	\$ 25,200	OLD JULIETTE ROAD	1.00	\$ 420,000
TAYLOR ROAD	2.70	\$ 1,134,000	ROBERTS FARM ROAD	1.99	\$ 835,800
CREEKSIDE DRIVE	0.12	\$ 50,400	SCOFIELD LANE	0.50	\$ 210,000
BIG BUCK TRAIL	0.91	\$ 382,200	TINGLE ROAD	1.25	\$ 525,000
BOXANKLE ROAD	2.50	\$ 1,050,000	TOMMYS TRAIL	0.69	\$ 289,800
CHEROKEE TRAIL	0.70	\$ 294,000	TOWALIGA LAKE DRIVE	0.50	\$ 210,000
ELBERT JACKSON RD	1.25	\$ 525,000	GREGORY ROAD	1.97	\$ 827,400
HAM ROAD	0.75	\$ 315,000	HAPPY LANE	0.25	\$ 105,000
HAYES DRIVE	0.13	\$ 54,600	HERON COVE	0.17	\$ 71,400
HIGGINS MILL ROAD	1.21	\$ 508,200	TOWALIGA RIVER DR	1.00	\$ 420,000
HIGH ROAD	1.00	\$ 420,000	MALLARD COURT	0.06	\$ 25,200
JULIE LANE	0.50	\$ 210,000	OLD UNION GIN ROAD	2.00	\$ 840,000
LAKESHORE DRIVE	1.68	\$ 705,600	RUBY ROAD	0.50	\$ 210,000
LAKEVIEW ROAD	0.12	\$ 50,400	SHORT ROAD	0.13	\$ 54,600
PINE LANE TRAIL	0.25	\$ 105,000	ROCKY CREEK ROAD	1.70	\$ 714,000
PIONEER TRAIL	1.00	\$ 420,000	GENEVA LANE	0.06	\$ 25,200
TALMADGE ROAD	0.66	\$ 277,200	ANDERSON LANE	0.25	\$ 105,000
WATSON ROAD	3.52	\$ 1,478,400	MONTPELIER ROAD	5.20	\$ 2,184,000
DILLARD ROAD	0.44	\$ 184,800	PEA RIDGE ROAD	7.55	\$ 3,171,000
DREWARY COMPANY DR	0.25	\$ 105,000	JULIETTE ROAD	5.00	\$ 2,100,000
MAYNARD DRIVE	0.55	\$ 231,000	PONDER-TRAMMEL RD	2.00	\$ 840,000
OAK CIRCLE	0.06	\$ 25,200	WELDON ROAD	3.06	\$ 1,285,200
SPRINGDALE ROAD	0.07	\$ 29,400	WESTBROOKS ROAD	3.12	\$ 1,310,400
STOKES STORE ROAD	5.00	\$ 2,100,000	CHARLES WAY	0.28	\$ 117,600
SMITH ROAD	7.30	\$ 3,066,000			
FORSYTH LANDING BLVD	0.25	\$ 105,000			
FORSYTH LANDING COURT	0.12	\$ 50,400			
			TOTAL	227.12	\$ 95,390,400

Since the actual scheduling of road improvement construction has not been established for all road improvement projects, an 'average' year of 2035 is used for Net Present Value calculations. This average year anticipates that some road improvements may occur earlier for less money, and some road improvements later at greater cost. All will average out reflecting evolving priorities and the availability of funds. The results are shown on Table 35.

To calculate the Net Present Value (NPV) of the total road improvement cost estimates, the NPV is calculated by increasing the current (2021) **estimated cost using Engineering News Record's 10-year average construction cost inflation (CCI)**. Both projected costs for the unpaved and paved road project categories are then reduced to current NPV dollars using the Net Discount Rate.

Table 35: Road Project Costs in 2035

Improvements	2021 Cost	2035 Net Present Value*
Unpaved Road Projects	\$ 12,942,500	\$ 16,228,272
Total Paved Road Projects	\$ 95,390,400	\$ 119,607,598
Maximum Total - All Projects	\$ 108,332,900	\$ 135,835,870

* Net Present Value = 2021 cost estimate inflated to target year using the Construction Cost Index (CCI), reduced using the Discount Rate.

Taking the total cost of road improvements from the previous table, the next table calculates the cost per trip for the total number of vehicle trips that are projected for 2045. This results in a 'net cost per trip' for all projected traffic in each category.

Table 36: Net Cost of Road Improvements to Serve New Growth

	Unpaved Roads	Paved Roads at 50%*	Total
Cost of Improvements	\$ 16,228,272	\$ 59,803,799	\$ 76,032,071
Total Trips 2045	444,373	222,187	222,186.50
Net Cost per Trip - All Traffic	\$ 36.5195	\$ 269.1604	\$ 305.6798
New Res Trips	37,200	18,600	18,600
New Res Cost	\$ 1,358,524.75	\$ 5,006,382.75	\$ 6,364,907.50
New Nonres Trips	158,438	79,219	79,219
New Nonres Cost	\$ 5,786,073.77	\$ 21,322,614.80	\$ 27,108,688.57
Total Net New Growth Cost	\$ 7,144,598.52	\$ 26,328,997.55	\$ 33,473,596.07
Percent of Total Cost	44.03%	44.03%	44.03%

* It is estimated that 50% of the total cost of paved road improvements will result in an increase of Level of Service.

These figures are then broken down for the future 2045 traffic that will be generated by new development alone, both for residential and nonresidential future development. Based on these new development trip totals, the cost applicable to residential and nonresidential future development is calculated.

Overall, the table shows the total road improvement costs that would be attributable to new growth and development. This amounts to a little over 44% of all road improvement costs for both the unpaved road projects and the widening and other capacity-improving projects planned for the **county's inadequate paved roads**.

Taking the net cost per trip of road improvements for all traffic from the previous table, Table 37 calculates the total cost per vehicle trip that could be assessed for road improvements as an impact fee. This total combines the net cost with a 3% administration fee and a 1.5% fee for preparation of the impact fee program.

Table 37: Total Cost to Serve New Growth - per Vehicle Trip

Description	Cost
Net Cost per Trip - All Traffic	\$ 305.6798
Administration Fee @ 3%	\$ 9.1704
CIE Preparation Fee @ 1.5%	\$ 45.8520
Maximum Impact Fee per Trip	\$ 360.7022

Annual CIE Review and Reports

As part of an impact fee program, State law requires that the program be reviewed at least once a year after adoption **and that an annual report “describing the amount of any development impact fees collected, encumbered, and used during the preceding year by category of public facility and service area” be prepared.**

■ Annual CIE Update

To facilitate the annual report requirement, *DCA’s Development Impact Fee Compliance Requirements* sets out the parameters for the report, which it calls the Annual CIE Update. To complete the update, two elements are required:

1. **Financial Report.** The County must provide a Financial Report—based on the County’s annual audit—that shows the amount of impact fees collected, expended, encumbered, or saved for the year. The funds expended and encumbered are matched up with the projects funded.
2. **Community Work Program.** The 5-Year Community Work Program (CWP) is a component of the County’s *Comprehensive Plan*. If the County collects impact fees, the CWP must be updated annually to maintain its 5-year horizon (by adding a new last year and dropping the year just passed). The CWP describes the anticipated capital improvements to be undertaken in that timeframe. Estimated project costs are included, and sources of funding are identified. For impact fee eligible projects, the percentage of funds expected from impact fees must be shown.

The DCA guidelines require that the Annual CIE Update report be submitted to ARC and the Dept. of Community Affairs each year. This report is to include the Financial Report and the update to the Community Work Program described above.

■ CIE Amendments

Beyond the required Annual Update, a full amendment of the CIE will sometimes be in order. The population and employment forecasts, any debt service calculations, and tax base forecasts should be reviewed. Any changes in the basic assumptions of the CIE should be reflected in a full amendment of the CIE. If projects or project costs have changed, or if County policies have changed (i.e. a change in the adopted level of service), then the CIE would need to be amended. By law, the County can **charge no more than the “fair share” of capital improvements to the new development served by those facilities.** The methodology of the CIE can be used to re-calculate the impact fee amount, based on any changes made.

DCA’s current Minimum Standards and Procedures for Local Comprehensive Planning require that a **community’s** Comprehensive Plan must be updated every 5 years, based on a schedule prepared by DCA. (Sandy Springs’s **next due date is to adopt its** Comprehensive Plan update by the end of October, 2016.) Since a CIE is a required chapter in any Comprehensive Plan for a community that has adopted impact fees, an amendment to the CIE itself following the 5-year schedule would be appropriate. Alternately, a CIE can be amended at any time that changing conditions warrant, and inserted into the subsequent 5-year Comprehensive Plan update accordingly.

Community Work Program – 2022-2026

Impact Fee Eligible Projects

Category	Action/Item	Responsible Party	Cost Estimate	Funding Source	2022	2023	2024	2025	2026
Library Services	Collection Materials Purchase	Monroe County Library	\$14,398.61	100% impact fee eligible	X				
Library Services	Collection Materials Purchase	Monroe County Library	\$14,599.37	100% impact fee eligible		X			
Library Services	Collection Materials Purchase	Monroe County Library	\$15,151.24	100% impact fee eligible			X		
Library Services	Collection Materials Purchase	Monroe County Library	\$15,452.34	100% impact fee eligible				X	
Library Services	Collection Materials Purchase	Monroe County Library	\$15,851.06	100% impact fee eligible					X
Parks and Recreation	Install 4 combination baseball/softball facility w/concessions and restrooms	Parks and Recreation Department	\$1,000,000	100% impact fees; SPLOST	X	X			
Parks and Recreation	Install an 8-lane track with a multipurpose field in the center	Parks and Recreation Dept	\$750,000	100% impact fees; SPLOST	X	X			
Parks and Recreation	Install tennis courts	Parks and Recreation Dept	\$450,000	100% impact fees; SPLOST		X	X		

Capital Improvements Element Community Work Program

Category	Action/Item	Responsible Party	Cost Estimate	Funding Source	2022	2023	2024	2025	2026
Parks and Recreation	Install a 5K cross country trail	Parks and Recreation Dept	\$600,000	100% impact fees; SPLOST		X	X		
Parks and Recreation	Install a disc golf course	Parks and Recreation Dept	\$4,500	100% impact fees; SPLOST		X	X		
Parks and Recreation	Install picnic areas	Parks and Recreation Dept	\$10,000	100% impact fees; SPLOST			X	X	
Parks and Recreation	Install outdoor basketball court	Parks and Recreation Dept	\$20,000	100% impact fees; SPLOST			X	X	
Parks and Recreation	Install adult softball fields (a minimum of 2 fields with 350-foot fences)	Parks and Recreation Dept	\$175,000	100% impact fees; SPLOST			X	X	
Animal Services	Purchase new vehicle	Animal Services Department	\$65,922	100% impact fees					X
Sheriff's Office	Begin site and design work for new building	Sheriff's Office	\$10,932,490.34 <u>Total</u> building cost	100% impact fee eligible					X
EMS and Fire Protection	Acquire new fire engine.	EMS/Fire Department	\$550,000	100% impact fee eligible		X			
EMS and Fire Protection	Acquire new pumper.	EMS/Fire Department	\$250,000	100% impact fee eligible					X
EMS and Fire Protection	Acquire new ambulance	EMS/Fire Department	\$238,857	100% impact fee eligible			X		

Category	Action/Item	Responsible Party	Cost Estimate	Funding Source	2022	2023	2024	2025	2026
Road Improvements	Pave unpaved roads	County Manager	\$16,228,272 Total Program to 2045	100% impact fee eligible	X	X	X	X	X
Road Improvements	Increase capacity of paved roads to meet traffic demand	County Manager	\$59,803,799 Total Program to 2045	50% impact fees, 50% TSPLOST	X	X	X	X	X

Glossary

The following terms are used in this report. Where possible, the definitions are taken directly from the Development Impact Fee Act.

Capital improvement: an improvement with a useful life of ten years or more, by new construction or other action, which increases the service capacity of a public facility.

Capital improvements element: a component of a comprehensive plan adopted pursuant to Chapter 70 of the Development Impact Fee Act which sets out projected needs for system improvements during a planning horizon established in the comprehensive plan, a schedule of capital improvements that will meet the anticipated need for system improvements, and a description of anticipated funding sources for each required improvement.

DCA: The Georgia Department of Community Affairs.

Development: any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any change in the use of land, any of which creates additional demand and need for public facilities.

Development impact fee: a payment of money imposed upon development as a condition of development approval to pay for a proportionate share of the cost of system improvements needed to serve new growth and development.

Eligible facilities: capital improvements in any of the following categories:

- (A) Water supply production, treatment, and distribution facilities;
- (B) Waste-water collection, treatment, and disposal facilities;
- (C) Roads, streets, and bridges, including rights of way, traffic signals, landscaping, and any local components of state or federal highways;
- (D) Storm-water collection, retention, detention, treatment, and disposal facilities, flood control facilities, and bank and shore protection and enhancement improvements;
- (E) Parks, open space, and recreation areas and related facilities;
- (F) Public safety facilities, including police, fire, emergency medical, and rescue facilities; and
- (G) Libraries and related facilities.

Impact cost: the proportionate share of capital improvements costs to provide service to new growth, less any applicable credits.

Impact fee: the impact cost plus surcharges for program administration and recoupment of the cost to prepare the Capital Improvements Element.

Level of service: a measure of the relationship between service capacity and service demand for public facilities in terms of demand to capacity ratios or the comfort and convenience of use or service of public facilities or both.

Project improvements: site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project and are not system improvements. The character of the improvement shall control a determination of whether an improvement is a project improvement or system improvement and the physical location of the improvement on site or off site shall not be considered determinative of whether an improvement is a project improvement or a system improvement. If an improvement or facility provides or will provide more than incidental service or facilities capacity to persons other than users or occupants of a particular project, the improvement or facility is a system improvement and shall not be considered a project improvement. No improvement or facility included in a plan for public facilities approved by the governing body of the municipality or county shall be considered a project improvement.

Proportionate share: means that portion of the cost of system improvements which is reasonably related to the service demands and needs of the project.

Rational nexus: the clear and fair relationship between fees charged and services provided.

Service area: a geographic area defined by a municipality, county, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area. Service areas shall be designated on the basis of sound planning or engineering principles or both.

System improvement costs: costs incurred to provide additional public facilities capacity needed to serve new growth and development for planning, design and engineering related thereto, including the cost of constructing or reconstructing system improvements or facility expansions, including but not limited to the construction contract price, surveying and engineering fees, related land acquisition **costs (including land purchases, court awards and costs, attorneys' fees, and expert witness fees)**, and expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element, and administrative costs, provided that such administrative costs shall not exceed 3 percent of the total amount of the costs. Projected interest charges and other finance costs may be included if the impact fees are to be used for the payment of principal and interest on bonds, notes, or other financial obligations issued by or on behalf of the municipality or county to finance the capital improvements element but such costs do not include routine and periodic maintenance expenditures, personnel training, and other operating costs.

System improvements: capital improvements that are public facilities and are designed to provide service to the community at large, in contrast to 'project improvements.'

Appendix A: Future Growth

In order to accurately calculate the demand for future services for Monroe County, new growth and development must be quantified in future projections. These projections include forecasts for population, households, housing units, and employment to the year 2045. These projections provide the base-line conditions from which the current (2021) or future (2045) Level of Service calculations are produced.

■ Types of Projections

Accurate projections of population, households, housing units, and employment are important in that:

Population data and forecasts are used to establish current and future demand for services where the Level of Service (LOS) standards are per capita based.

Household data and forecasts are used to forecast future growth in the number of housing units.

Housing unit data and forecasts relate to certain service demands that are household based, such as parks, and are used to calculate impact costs when the cost is assessed when a building permit is issued. The number of households—defined as *occupied* housing units—is always smaller than the total supply of available housing units, which include vacant units. Over time, however, each housing unit is expected to become occupied by a household, even though any unit may become vacant during future re-sales or turnovers.

Employment forecasts are refined to reflect 'value-added' employment figures. This reflects an exclusion of jobs considered to be transitory or non-site specific in nature, and thus not requiring building permits to operate (i.e., are not assessed impact fees), as well as governmental uses that are not subject to impact fees.

'Value-added' employment data is combined with population data to produce what is known as the 'day-night population.' These figures represent the total number of persons receiving services, both in their homes and in their businesses, to produce an accurate picture of the total number of persons that rely on certain 24-hour services, such as fire and emergency medical services.

The projections used for **the Sheriff's Office** and Jail, the County Library, animal control, and E911 categories are countywide forecasts because these services are delivered by the County throughout the county. The Parks and Recreation category is also considered countywide, even though Forsyth has a Parks and Recreation department of its own; in practice both the city and county share access to all parks and recreation facilities operated by both jurisdictions (and the city and county specifically operate the Youth Center together). The Fire Protection and Emergency Medical Services categories, however, are provided as first responders throughout the unincorporated area and Culloden, but Forsyth maintains its own Fire Department which includes first responder EMS.

■ Historic Population Growth

Every year, the US Census Bureau estimates the population in Monroe County between decennial censuses (e.g., 2000 and 2010). After a decennial census, the Bureau revises the annual estimates based on the actual Census count. Unlike the decennial censuses, which are 'as of' April 1, the annual estimates are 'as of' July 1 of each year. Those annual estimates are shown in Table 38

Table 38: Annual Census Estimated Population

	Population Estimate (as of July 1)									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Monroe County Total	21,824	22,092	22,767	23,499	23,648	24,080	24,924	25,726	25,969	26,233
Cullogen	204	200	198	198	192	190	188	185	184	178
Forsyth	4,199	4,124	4,121	4,127	4,030	3,989	3,991	3,964	3,926	3,841
Balance of County	17,421	17,768	18,448	19,174	19,426	19,901	20,745	21,577	21,859	22,214

	Population Estimate (as of July 1)										
	2010*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Monroe County Total	26,133	26,301	26,336	26,585	26,637	26,683	26,880	27,153	27,523	27,677	28,042
Cullogen	177	179	176	179	179	181	182	184	186	187	189
Forsyth	3,991	4,096	4,097	4,133	4,119	4,130	4,172	4,192	4,246	4,267	4,312
Balance of County	21,965	22,026	22,063	22,273	22,339	22,372	22,526	22,777	23,091	23,223	23,541

* 2010 estimate revised by Census Bureau in 2020.

Note: All data as of July 1 of each year. 2000 and 2010 differ from Decennial Census counts, which were as of April 1.

Sources: For 2000 to 2009: *Intercensal Estimates 2000-2010*, US Bureau of the Census. For 2010 to 2020: *Census Annual Estimates Program* recertified to 2020 Census, US Bureau of the Census.

Based on the county’s perseverance during the Great Recession and its anticipated continuing growth in the housing market, the future is improving for Monroe County. That is not to say that population growth in each of the past two decades has been smooth.

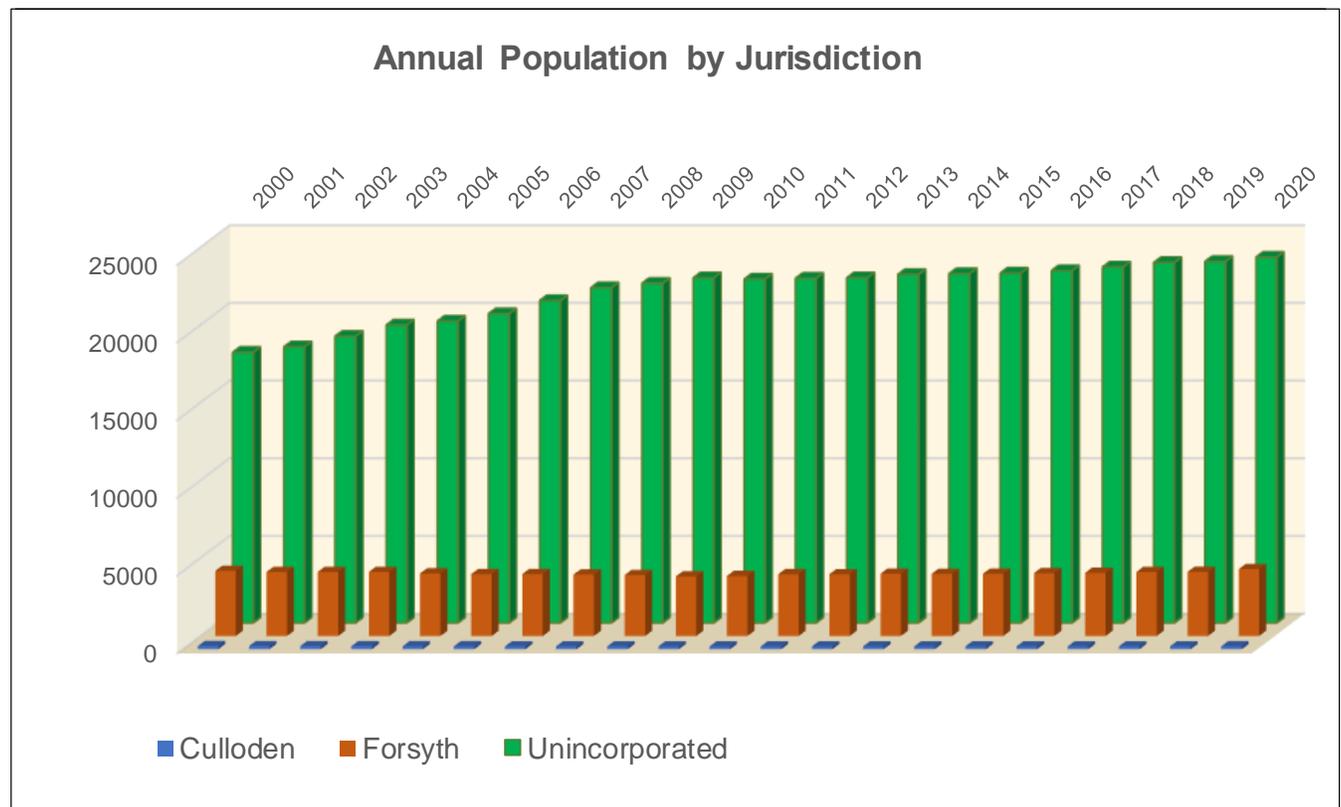
While Monroe County posted a percentage increase in population between 2000 and 2020 overall (26.82%), growth from 2000 to 2010 registered a higher growth increase for just those 10 years (20.20%) than the more recent 2010-2020 period (5.91%). Comparing the recent 10-year period to the previous 10-year period is not enough to explain the difference. Clearly the Great Recession, which began in mid-2008, had a notable impact on the housing industry and then the national economy in general, affecting the county as well.

Reviewing the annual population estimates by the Census Bureau shown on Table 38, the annual percentage increase in population from 2000 through 2007 averaged 2.38% (from a low of 0.63% to a high of 3.5% in 2006). Reflecting the full impact of the recession during 2008 and its effects lingering to 2015, this dropped to an average annual increase of only 0.45%. Since then, population growth has recovered somewhat, ranging from a low of 0.55% (in 2019) to a high of 1.34% (in 2018), producing an overall annual average increase of 1% during the recovery.

Population growth in Monroe County has been dominated by growth in the unincorporated area. This is clearly illustrated in the data and chart on Table 39.

Table 39: Population Growth by Jurisdiction

	2000-2010		2010-2020		Total 2000-2020	
	Number Increase	Percent Increase	Number Increase	Percent Increase	Number Increase	Percent Increase
Monroe County Total	4,309	20.20%	1,909	7.30%	6,218	28.49%
Culloden	-27	-12.75%	12	6.78%	-15	-7.35%
Forsyth	-208	-8.53%	321	8.04%	113	2.69%
Balance of County	4,544	27.51%	1,576	7.18%	6,120	35.13%

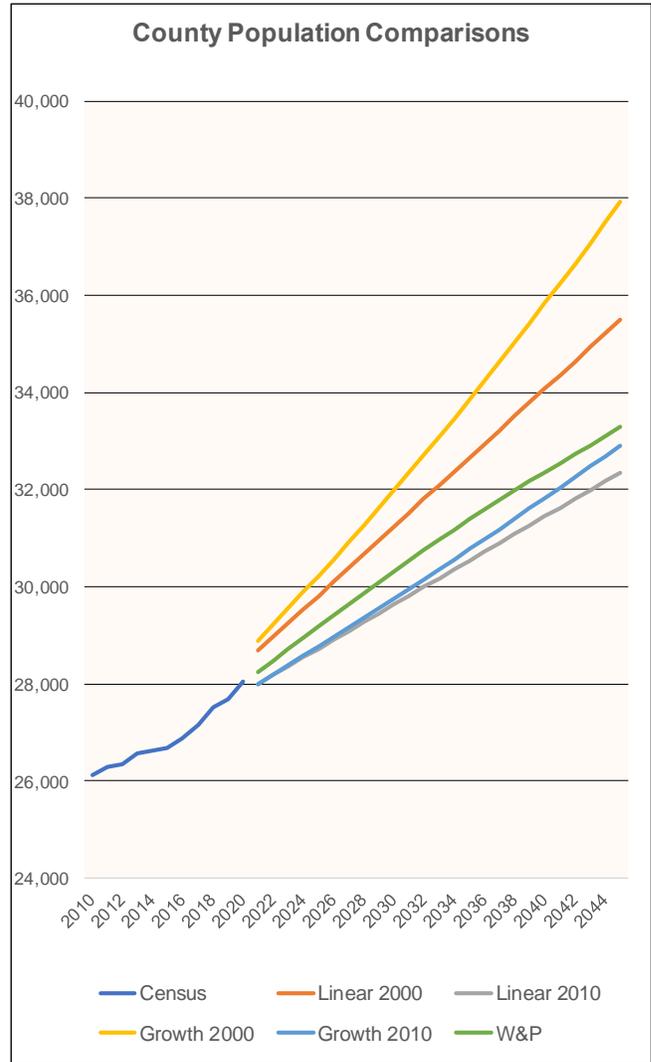


Population Forecasts

Two forecast methods were used to project the county’s past population growth forward to 2045, one using a ‘linear trend’ (straight line) and the other a ‘growth trend’ (curved line) forecast algorithm. Table 40 shows the results using both the Census estimates for 2000-2020 and the nearer term estimates for 2010-2020. The raw numbers of each projection method are shown on the table.

Table 40: Future Population Trend Comparisons

	Linear Trend		Growth Trend		Woods & Poole	Census
	2000 to 2045	2010 to 2045	2000 to 2045	2010 to 2045		
2000	22,717		22,755		21,824	21,824
2001	23,001		23,015		22,092	22,092
2002	23,285		23,278		22,767	22,767
2003	23,569		23,544		23,499	23,499
2004	23,853		23,813		23,648	23,648
2005	24,138		24,085		24,080	24,080
2006	24,422		24,360		24,924	24,924
2007	24,706		24,638		25,726	25,726
2008	24,990		24,919		25,969	25,969
2009	25,274		25,203		26,233	26,233
2010	25,558	25,996	25,491	26,008	26,186	26,133
2011	25,842	26,178	25,782	26,184	26,353	26,301
2012	26,126	26,359	26,077	26,361	26,385	26,336
2013	26,410	26,541	26,374	26,539	26,630	26,585
2014	26,694	26,723	26,676	26,718	26,681	26,637
2015	26,978	26,905	26,980	26,898	26,731	26,683
2016	27,262	27,086	27,288	27,080	26,935	26,880
2017	27,546	27,268	27,600	27,263	27,181	27,153
2018	27,830	27,450	27,915	27,447	27,520	27,523
2019	28,114	27,631	28,234	27,632	27,757	27,677
2020	28,398	27,813	28,556	27,818	27,997	28,042
2021	28,682	27,995	28,882	28,006	28,242	
2022	28,966	28,177	29,212	28,195	28,477	
2023	29,250	28,358	29,545	28,386	28,713	
2024	29,534	28,540	29,883	28,577	28,948	
2025	29,818	28,722	30,224	28,770	29,183	
2026	30,102	28,903	30,569	28,964	29,415	
2027	30,386	29,085	30,918	29,160	29,646	
2028	30,670	29,267	31,271	29,357	29,875	
2029	30,954	29,449	31,628	29,555	30,100	
2030	31,238	29,630	31,989	29,755	30,324	
2031	31,523	29,812	32,354	29,955	30,544	
2032	31,807	29,994	32,724	30,158	30,762	
2033	32,091	30,175	33,097	30,361	30,976	
2034	32,375	30,357	33,475	30,566	31,186	
2035	32,659	30,539	33,857	30,773	31,392	
2036	32,943	30,721	34,244	30,980	31,593	
2037	33,227	30,902	34,635	31,189	31,791	
2038	33,511	31,084	35,030	31,400	31,984	
2039	33,795	31,266	35,430	31,612	32,175	
2040	34,079	31,448	35,835	31,825	32,362	
2041	34,363	31,629	36,244	32,040	32,549	
2042	34,647	31,811	36,658	32,257	32,734	
2043	34,931	31,993	37,076	32,474	32,918	
2044	35,215	32,174	37,500	32,694	33,102	
2045	35,499	32,356	37,928	32,914	33,287	



NOTE: 2000-2019 trend figures are shown "as revised" by the projection methodology and are not the Census estimate figures.

Given the proposition that recovering from the Great Recession is an indication of future growth in the county, and that in the long run future growth will ultimately reflect growth over the past two decades, the 'growth trend 2000' projection most clearly reflects the future population growth to 2045. As population growth has steadily recovered since 2010 (as illustrated on the graph on Table 40), the 'growth trend 2000' projection curve most clearly represents the continuation of this recovery. Population forecasts for each of the incorporated areas in the county are shown on Table 41

Table 41: Future City Population Trends

Forsyth Future Population Trends

	Linear Trend		Growth Trend	
	2000 to 2045	2010 to 2045	2000 to 2045	2010 to 2045
2000	4,007		4,007	
2001	4,016		4,016	
2002	4,025		4,025	
2003	4,034		4,034	
2004	4,044		4,043	
2005	4,053		4,052	
2006	4,062		4,061	
2007	4,071		4,070	
2008	4,080		4,079	
2009	4,089		4,088	
2010	4,098	4,027	4,097	4,029
2011	4,108	4,054	4,106	4,054
2012	4,117	4,080	4,115	4,080
2013	4,126	4,107	4,124	4,106
2014	4,135	4,133	4,133	4,132
2015	4,144	4,160	4,142	4,159
2016	4,153	4,186	4,152	4,185
2017	4,162	4,212	4,161	4,212
2018	4,172	4,239	4,170	4,239
2019	4,181	4,265	4,179	4,266
2020	4,190	4,292	4,188	4,293
2021	4,199	4,318	4,198	4,320
2022	4,208	4,345	4,207	4,348
2023	4,217	4,371	4,216	4,375
2024	4,227	4,397	4,226	4,403
2025	4,236	4,424	4,235	4,431
2026	4,245	4,450	4,244	4,460
2027	4,254	4,477	4,254	4,488
2028	4,263	4,503	4,263	4,517
2029	4,272	4,530	4,273	4,545
2030	4,281	4,556	4,282	4,574
2031	4,291	4,582	4,292	4,603
2032	4,300	4,609	4,301	4,633
2033	4,309	4,635	4,311	4,662
2034	4,318	4,662	4,320	4,692
2035	4,327	4,688	4,330	4,722
2036	4,336	4,715	4,339	4,752
2037	4,345	4,741	4,349	4,782
2038	4,355	4,767	4,359	4,813
2039	4,364	4,794	4,368	4,843
2040	4,373	4,820	4,378	4,874
2041	4,382	4,847	4,388	4,905
2042	4,391	4,873	4,397	4,937
2043	4,400	4,900	4,407	4,968
2044	4,410	4,926	4,417	5,000
2045	4,419	4,952	4,427	5,032

NOTE: 2000-2020 trend figures are shown "as revised" by the projection methodology and are not the Census estimate figures.

Culloden Future Population Trends

	Linear Trend		Growth Trend	
	2000 to 2045	2010 to 2045	2000 to 2045	2010 to 2045
2000	195		195	
2001	194		194	
2002	193		193	
2003	192		192	
2004	191		191	
2005	191		190	
2006	190		190	
2007	189		189	
2008	188		188	
2009	187		187	
2010	186	176	186	176
2011	186	177	186	177
2012	185	178	185	178
2013	184	179	184	179
2014	183	181	183	180
2015	182	182	182	182
2016	182	183	182	183
2017	181	184	181	184
2018	180	185	180	185
2019	179	187	179	187
2020	178	188	178	188
2021	177	189	178	189
2022	177	190	177	190
2023	176	192	176	192
2024	175	193	175	193
2025	174	194	175	194
2026	173	195	174	196
2027	172	196	173	197
2028	172	198	172	198
2029	171	199	172	200
2030	170	200	171	201
2031	169	201	170	202
2032	168	203	169	204
2033	168	204	169	205
2034	167	205	168	206
2035	166	206	167	208
2036	165	208	167	209
2037	164	209	166	211
2038	163	210	165	212
2039	163	211	164	214
2040	162	212	164	215
2041	161	214	163	216
2042	160	215	162	218
2043	159	216	162	219
2044	158	217	161	221
2045	158	219	160	222

NOTE: 2000-2020 trend figures are shown "as revised" by the projection methodology and are not the Census estimate figures.

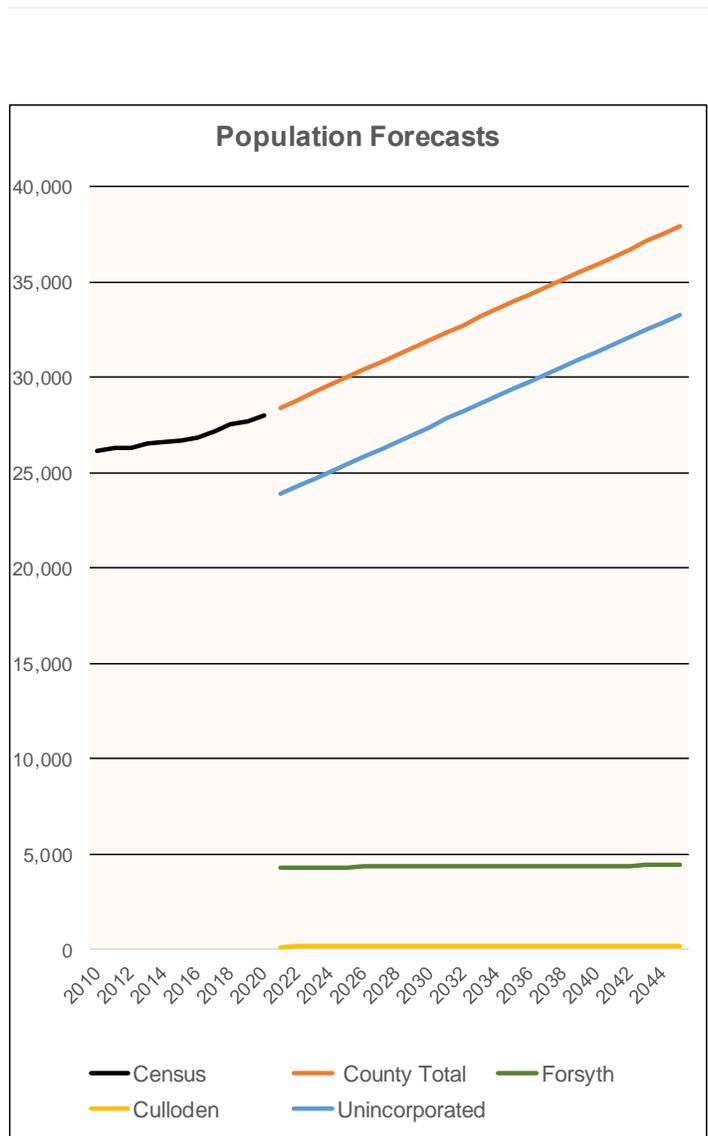
Future population figures for the cities were calculated in the same manner as for the county as a whole. The linear trend and the growth trend algorithms were applied to the 2000-2020 and to the 2010-2020 Census estimates. In both cases, however, the growth trend applied to the Census estimates for the nearer term 2010-2020 most closely compared to the 2020 Census estimates.

Correlating with the Census

The algorithms used to prepare the projections shown on Table 40 and Table 41 present a 'smooth' line from the 'start' date (2000 or 2010 depending on the projection period chosen), which also changes the population figures for 2000 to 2020 on the tables from the actual Census data (shown on Table 38). Because of this, the projected future population estimates must be rectified so that the Census 2020 population figure is the 'start' population for each forecast.

Table 42: Growth Trend Forecasts Rectified to Census

	County Total	Forsyth	Culloden	Unincorporated
2010	26,133	3,991	177	21,965
2011	26,301	4,096	179	22,026
2012	26,336	4,097	176	22,063
2013	26,585	4,133	179	22,273
2014	26,637	4,119	179	22,339
2015	26,683	4,130	181	22,372
2016	26,880	4,172	182	22,526
2017	27,153	4,192	184	22,777
2018	27,523	4,246	186	23,091
2019	27,677	4,267	187	23,223
2020	28,042	4,312	189	23,541
2021	28,437	4,317	188	23,933
2022	28,833	4,321	190	24,322
2023	29,228	4,326	191	24,712
2024	29,624	4,330	192	25,101
2025	30,019	4,335	193	25,491
2026	30,415	4,340	195	25,880
2027	30,810	4,344	196	26,270
2028	31,205	4,349	197	26,660
2029	31,601	4,353	199	27,049
2030	31,996	4,358	200	27,438
2031	32,392	4,362	201	27,828
2032	32,787	4,367	203	28,217
2033	33,183	4,372	204	28,607
2034	33,578	4,376	205	28,997
2035	33,973	4,381	207	29,386
2036	34,369	4,385	208	29,776
2037	34,764	4,390	210	30,164
2038	35,160	4,395	211	30,554
2039	35,555	4,399	213	30,943
2040	35,951	4,404	214	31,333
2041	36,346	4,408	215	31,723
2042	36,742	4,413	217	32,112
2043	37,137	4,417	218	32,502
2044	37,532	4,422	220	32,890
2045	37,928	4,427	221	33,280
Increase 2021-2045	9,490	110	33	9,347
Percent	25.02%	2.49%	14.93%	28.09%



■ Housing Unit Forecasts

Projecting new growth and development in terms of housing units is important because residential impact fees are assessed when building permits are issued for new units. Thus, the housing unit is used as the basis for assessing impact fees.

Using the housing unit for fee calculations rather than the number of residents that may occupy the housing unit is more equitable because the average number of residents in the unit, based on unit size, is unreliable. The number of people residing in a particular housing unit will most likely vary in the years ahead as lifestyles change, families grow, children grow up, occupants age, or the unit becomes occupied by a different household as the previous occupants move out. Thus, using average family sizes as the basis will vary widely as the years go by. This would result in a constant reassessment of the impact fees due because the demand for services would vary as the number of residents in the unit varies. Instead, using an average fee per housing unit based on average household sizes results in 'averaging' the demand for services which would otherwise vary as the population in the unit changes over time.

The future increase in the number of housing units in the county is based on the population forecasts presented in the previous section.

Household Projections

First, future population numbers from Table 42 are converted into the number of households expected in future years in the county as a whole, for each city, and for the unincorporated area.

This conversion is based on the average household size data taken from the 2020 Census for the county as a whole and for each city. These figures differ for each jurisdiction, and it is assumed that these ratios will persist into the future. The number of households in the unincorporated area of the county is determined by subtracting all of the city household numbers from the countywide total.

The results are shown on Table 43: Households 2021-2045, on the following page.

Table 43: Households 2021-2045

	County Total	Forsyth	Culloden	Unincorporated
2020	11,027	1,789	79	9,159
2021	11,182	1,791	80	9,311
2022	11,338	1,793	80	9,465
2023	11,493	1,795	81	9,617
2024	11,649	1,797	81	9,771
2025	11,804	1,799	82	9,923
2026	11,960	1,800	83	10,077
2027	12,115	1,802	83	10,230
2028	12,271	1,804	83	10,384
2029	12,426	1,806	84	10,536
2030	12,582	1,808	85	10,689
2031	12,737	1,810	85	10,842
2032	12,893	1,812	86	10,995
2033	13,048	1,814	86	11,148
2034	13,204	1,816	87	11,301
2035	13,359	1,818	88	11,453
2036	13,515	1,819	88	11,608
2037	13,670	1,821	89	11,760
2038	13,826	1,823	89	11,914
2039	13,981	1,825	90	12,066
2040	14,137	1,827	91	12,219
2041	14,292	1,829	91	12,372
2042	14,448	1,831	92	12,525
2043	14,603	1,833	92	12,678
2044	14,759	1,835	93	12,831
2045	14,914	1,837	94	12,983
Increase 2021-2045	3,732	46	14	3,672
Average HH Size	2.543088321	2.410285075	2.362500000	2.573131482

Note: Average household sizes are computed for each jurisdiction individually from 2020 Census data.

New Housing Units

A ‘household’ represents an occupied housing unit. Additional ‘vacant’ housing units, therefore, need to be added to the number of households in order to estimate the total number of housing units in the county and in each city.

This is accomplished by increasing the number of households in each jurisdiction with the vacancy rate reported in the 2020 Census. As above, these ratios are assumed to continue each year into the future on average.

To arrive at the estimated total housing units for each year, including vacant units, the number of households (i.e., occupied housing units) is increased by the applicable vacancy rate. These calculations are shown on Table 44.

Table 44: Housing Units 2021-2045

	County Total	Forsyth	Culloden	Unincorporated
2020	12,201	1,943	90	10,171
2021	12,372	1,945	91	10,340
2022	12,545	1,947	91	10,511
2023	12,716	1,950	92	10,680
2024	12,889	1,952	92	10,851
2025	13,061	1,954	93	11,020
2026	13,233	1,955	94	11,191
2027	13,405	1,957	94	11,360
2028	13,577	1,959	94	11,531
2029	13,749	1,961	96	11,700
2030	13,921	1,964	97	11,870
2031	14,093	1,966	97	12,040
2032	14,266	1,968	98	12,210
2033	14,437	1,970	98	12,380
2034	14,610	1,972	99	12,550
2035	14,781	1,974	100	12,719
2036	14,954	1,976	100	12,891
2037	15,125	1,978	101	13,060
2038	15,298	1,980	101	13,231
2039	15,469	1,982	102	13,399
2040	15,642	1,984	104	13,569
2041	15,813	1,986	104	13,739
2042	15,986	1,989	105	13,909
2043	16,158	1,991	105	14,079
2044	16,330	1,993	106	14,249
2045	16,502	1,995	107	14,418
Increase 2021-2045	4,130	50	16	4,078
Occupancy Rate	90.3789%	92.0741%	87.9121%	90.0494%

Note: Occupancy rates for the County and its cities are computed individually from 2020 Census data.

■ Employment Forecasts

For the employment projections, we looked first to the countywide forecasts prepared by Woods & Poole (W&P). W&P counts jobs, not just employed people, which captures people holding two or more jobs, self-employed sole proprietors and part-time workers, as well as vacant positions. This gives a more complete picture than Census figures (which report only the number of people with jobs).

On Table 45, the number of jobs shown include the types of jobs that would not be associated with an impact fee (such as farm workers, itinerant construction workers and governmental employees). **The remaining employment, called the 'value-added jobs', would be businesses subject to impact fees.**

Table 45: County-wide Employment Forecast (Jobs)

	2021	2025	2030	2035	2040	2045	2021-2045 Change	
							Number	Percent
Total Employment	12,802	14,024	15,685	17,554	19,685	22,109	9,307	42.1%
Farm Employment	204	205	207	208	212	216	12	5.6%
Forestry, Fishing	80	83	87	91	97	102	22	21.6%
Mining	46	48	51	56	61	67	21	31.3%
Construction	881	936	1,009	1,087	1,169	1,255	374	29.8%
Total Non-Building	1,211	1,272	1,354	1,442	1,539	1,640	429	26.2%
Federal Civilian	34	33	34	35	35	36	2	5.6%
Federal Military	73	74	75	77	79	83	10	12.0%
State & Local Government	2,734	2,842	2,982	3,131	3,291	3,458	724	20.9%
Total Government	2,841	2,949	3,091	3,243	3,405	3,577	736	20.6%
Utilities	131	144	161	181	202	228	97	42.5%
Manufacturing	252	245	238	231	225	220	-32	-14.5%
Wholesale Trade	738	815	908	1,007	1,112	1,221	483	39.6%
Retail Trade	1,245	1,411	1,623	1,856	2,123	2,429	1,184	48.7%
Transportation & Warehousing	609	700	828	973	1,141	1,332	723	54.3%
Information	61	66	71	78	87	96	35	36.5%
Finance & Insurance	578	703	870	1,049	1,243	1,458	880	60.4%
Real Estate	499	585	704	843	1,006	1,197	698	58.3%
Professional & Technical Services	603	712	867	1,047	1,260	1,508	905	60.0%
Management of Companies	45	51	60	72	87	106	61	57.5%
Administrative & Waste Services	1,310	1,539	1,874	2,274	2,755	3,331	2,021	60.7%
Educational Services	144	154	164	174	184	194	50	25.8%
Health Care & Social Assistance	715	732	755	779	800	818	103	12.6%
Arts, Entertainment & Recreation	270	315	383	463	559	674	404	59.9%
Accommodation & Food Services	738	757	778	799	819	840	102	12.1%
Other Private Services	812	874	956	1,043	1,138	1,240	428	34.5%
Total Value-Added	8,750	9,803	11,240	12,869	14,741	16,892	8,142	48.2%

Source: Woods & Poole Economics, Inc., 2021 Georgia Data Book, Monroe County, as adjusted.

The Woods & Poole job numbers have been adjusted for Monroe County because of an apparent undercount by Woods & Poole. The population forecast for Monroe County by Woods & Poole to 2045 is only 32,387, compared to the population forecast for this report at 37,310, which is 12.1% higher.

Looking at every year beginning in 2020, the population forecast in this report progressively increases every year over the Woods & Poole forecast, beginning 'even' in 2021 and increasing smoothly to the 12.1% difference in 2045.

The jobs numbers shown on Table 45 for each year have therefore been adjusted across the board by the applicable percentage representing the 'undercount' in the year indicated.

Table 46 provides a summary of future jobs in Monroe County taken from Table 45 for the years shown on that table and interpolated for each year in between. As noted above, it is the 'value-added' jobs that impact fees can be applied to.

Table 46: Summary - Countywide Jobs

	Total Jobs	Non-Building Related	Government	Value-Added Jobs
2021	12,802	1,211	2,841	8,750
2022	13,108	1,226	2,868	9,013
2023	13,413	1,242	2,895	9,277
2024	13,719	1,257	2,922	9,540
2025	14,024	1,272	2,949	9,803
2026	14,356	1,288	2,977	10,090
2027	14,688	1,305	3,006	10,378
2028	15,021	1,321	3,034	10,665
2029	15,353	1,338	3,063	10,953
2030	15,685	1,354	3,091	11,240
2031	16,059	1,372	3,121	11,566
2032	16,433	1,389	3,152	11,892
2033	16,806	1,407	3,182	12,217
2034	17,180	1,424	3,213	12,543
2035	17,554	1,442	3,243	12,869
2036	17,980	1,461	3,275	13,243
2037	18,406	1,481	3,308	13,618
2038	18,833	1,500	3,340	13,992
2039	19,259	1,520	3,373	14,367
2040	19,685	1,539	3,405	14,741
2041	20,170	1,559	3,439	15,171
2042	20,655	1,579	3,474	15,601
2043	21,139	1,600	3,508	16,032
2044	21,624	1,620	3,543	16,462
2045	22,109	1,640	3,577	16,892
Increase 2021-45	9,307	429	736	8,142

■ Service Area Forecasts

Various County services are each provided in one of two service areas. Housing unit, population, and employment forecasts are presented on the following tables for each service area.

Several services are delivered by the County throughout the county. **These include the Sheriff’s Office and Jail, the County Library, Animal Services, E911, and Parks and Recreation categories.** County-wide growth forecasts are shown on Table 47 for these services.

Table 47: Future Growth Forecasts - Countywide

	Residential Uses	Nonresidential Uses		
	Housing Units	Population	Value-Added Jobs	Day-Night Population
2021	12,372	28,437	8,750	37,187
2022	12,545	28,833	9,013	37,846
2023	12,716	29,228	9,277	38,505
2024	12,889	29,624	9,540	39,163
2025	13,061	30,019	9,803	39,822
2026	13,233	30,415	10,090	40,505
2027	13,405	30,810	10,378	41,188
2028	13,577	31,205	10,665	41,871
2029	13,749	31,601	10,953	42,553
2030	13,921	31,996	11,240	43,236
2031	14,093	32,392	11,566	43,958
2032	14,266	32,787	11,892	44,679
2033	14,437	33,183	12,217	45,400
2034	14,610	33,578	12,543	46,121
2035	14,781	33,973	12,869	46,842
2036	14,954	34,369	13,243	47,612
2037	15,125	34,764	13,618	48,382
2038	15,298	35,160	13,992	49,152
2039	15,469	35,555	14,367	49,922
2040	15,642	35,951	14,741	50,692
2041	15,813	36,346	15,171	51,517
2042	15,986	36,742	15,601	52,343
2043	16,158	37,137	16,032	53,169
2044	16,330	37,532	16,462	53,994
2045	16,502	37,928	16,892	54,820
Increase 2021-45	4,130	9,490	8,142	17,632

For public facility categories that serve only residential uses, impact fees are assessed for each housing unit as building permits are issued. For services provided to both residential and nonresidential uses, the fees are based on the day-night population generated by the use.

For Fire Protection and Emergency Medical Services, fees are based on future growth throughout the county but excluding the City of Forsyth. For these public services, impact fees for residential uses are assessed on the basis of housing unit growth, while nonresidential uses are assessed using future growth in the 'day-night' population, within the county outside of Forsyth.

Table 48: Future Growth Forecasts - Countywide Excluding Forsyth

	Residential Uses	Nonresidential Uses		
	Housing Units	Population	Value-Added Jobs	Day-Night Population
2021	10,427	24,121	7,422	31,543
2022	10,598	24,512	7,645	32,157
2023	10,766	24,903	7,868	32,771
2024	10,937	25,293	8,092	33,385
2025	11,107	25,684	8,315	33,999
2026	11,278	26,075	8,559	34,634
2027	11,448	26,466	8,803	35,269
2028	11,618	26,857	9,046	35,903
2029	11,788	27,248	9,290	36,538
2030	11,957	27,638	9,534	37,172
2031	12,127	28,029	9,810	37,839
2032	12,298	28,420	10,087	38,507
2033	12,467	28,811	10,363	39,174
2034	12,638	29,202	10,639	39,841
2035	12,807	29,593	10,916	40,509
2036	12,978	29,984	11,233	41,217
2037	13,147	30,374	11,551	41,925
2038	13,318	30,765	11,868	42,633
2039	13,487	31,156	12,186	43,342
2040	13,658	31,547	12,503	44,050
2041	13,827	31,938	12,868	44,806
2042	13,997	32,329	13,233	45,562
2043	14,167	32,720	13,598	46,318
2044	14,337	33,110	13,963	47,073
2045	14,507	33,501	14,328	47,829
Increase 2021-45	4,080	9,380	6,906	16,286

Appendix B: Trip Generation

In order to calculate new growth and development's fair share of the cost of road improvements, it is necessary to establish how much of the future traffic on Monroe County's roads will be generated by new growth, over and above the traffic generated by the county's residents and businesses today. This Appendix Section describes the process through which this determination is made.

■ Summary

A Level of Service must be established for road improvements in order to assure that, ultimately, existing development and new growth are served equally. This Section also presents the process through which new growth and development's 'fair share' of road improvement costs is calculated, and tables summarizing the technical portions of this methodology are included.

Level of Service

The County has set its Level of Service for road improvements at LOS "D", a level below which a number of roads in the county operate. Using this LOS maximizes roadway capacity before traffic conditions actually break down (LOS "F").

All road improvement projects benefit existing and future traffic proportionally to the extent that relief from over-capacity conditions eases traffic problems for everyone. For example, since new growth by 2045 will represent a certain portion of all 2045 traffic, new growth would be responsible for that portions' cost of the road improvements.

It is noted that the cost-impact of non-Monroe County generated traffic on the roads traversing the county (cross commutes) is off-set by state and federal assistance. The net cost of the road projects that accrues to Monroe County reasonably represents (i.e., is 'roughly proportional' to) the impact on the roads by Monroe County residents driving to and from their homes, and commuters that come in to the county to work in.

The basis for the road impact fee would therefore be Monroe County's cost for the improvements divided by all traffic generated within the county in 2045 (existing today plus new growth)—i.e., the cost per trip—times the traffic generated by new growth alone. For an individual land use, when a building permit is issued, the cost per trip would be applied to the number of trips that will be generated by the new development, assuring that new growth would only pay its 'fair share' of the road improvements that serve it.

Approach

This methodology proceeds along the following lines:

- Total traffic currently generated by Monroe County residents and businesses in 2021 on the road system within the county is calculated from trip generation and commuting data. Various data sources are relied upon to determine current conditions, as explained in each appropriate section, below.
- Future Monroe County-generated traffic from new growth in the county is calculated from housing unit and employment forecasts to 2045.
- The portion of total 2045 traffic that is generated by new housing units and employment in the county establishes the percentage of Monroe County's cost of the future road improvements that can be included in an impact fee.

Summary Table

The table below shows how the portion of 2045 traffic generated by new growth is calculated. The figures represent all trips generated by general land use, including pass-by and diverted trips.

Table 49: Average Daily Trip Ends Generated by New Growth

	2021	2045	Increase	Percent New Growth Trip Ends
Residential Trips	115,614	152,814	37,200	
Nonresidential Trips	218,590	478,751	260,161	
Less: Internal Commutes*	(85,469)	(187,192)	(101,723)	
Net Trip Ends	248,735	444,373	195,638	44.0%

* Residents who work in Monroe County. These trips to and from work are included in the residential trips.

Overall, new residents and businesses located within Monroe County will generate 44% (more accurately, **44.025627%**) of all Monroe County vehicles **on its roads**. Thus, new growth's 'fair share' of the cost to the County to provide road improvements to serve current and future traffic cannot exceed this figure.

■ Residential Trip Generation

Average trip generation rates published by the Institute of Transportation Engineers (ITE) differentiate between 'single-family detached housing' and 'apartments'. The closest correlations with the US Census definitions are 'single-family units' and 'multi-family units', which are shown on the following table.

Table 50: Residential Units by Type – 2021 and 2045

	2019*	Percent**	Total in 2021	Increase 2021-2045	Total in 2045
Single-Family Units	10,185	91.52%	11,406	3,670	15,076
Multi-Family Units	944	8.48%	1,057	340	1,397
Total	11,129	100.0%	12,463	4,010	16,473

* Based on Census 2019 American Community Survey data report.
 ** Percent of 2019 total housing units.

The 2019 breakdown of housing units by type on the table above are taken from the most recent American Community Survey for Monroe County (published by the Census Bureau). The 2019 percentage by housing type (single-family and multi-family) is calculated, and applied to the total number of housing units projected in 2021). It is assumed that these percentages will persist into the future, producing a breakdown of the projected 16,473 new housing units forecast for the 2021-2045 period.

The next table, below, calculates the amount of traffic that is generated by the county’s housing stock today, and the amount that will be generated in 2045.

Table 51: Residential Trip Generation - 2021-2045 New Growth Increase

	ADT* Trip Ends	2021 Units	2021 ADT Trip Ends	2045 Units	2045 ADT Trip Ends	Increase 2021-2045	Percent New Growth Trip Ends
Single-Family Units	9.52	11,406	108,585	15,076	143,524	34,939	
Multi-Family Units	6.65	1,057	7,029	1,397	9,290	2,261	
Total		12,463	115,614	16,473	152,814	37,200	

* Average Daily Traffic (trip ends) on a weekday; Institute of Transportation Engineers *Trip Generation*, 9th Edition. Total includes trips to/from work.

The calculations are made on the basis of ‘average daily traffic’ on a normal weekday, using average trip generation rates derived through multiple traffic studies across the country (350 for single-family and 86 for apartments) and published by ITE. The rates are expressed for ‘trip ends’—that is, traffic both leaving and coming to a housing unit.

Comparing traffic in 2021 to 2045, the future increase in trip ends can be calculated, which will represent 24.3% of all residential trip ends generated in the county.

It should be noted that the traffic generated includes trips to and from work and, more particularly, residents who work at a business within the county.

■ Nonresidential Trip Generation

Calculating traffic generated by businesses located in Monroe County is more problematical than residential trips because there is no breakdown of types of businesses in the county that is readily available. In addition, while employment forecasts have been made in terms of the number of jobs, there is no data available for floor areas, much less by detailed type of use.

The alternate is to view nonresidential traffic generation on a broad 'average' basis. For this, there is data available from ITE for a number of individual uses relating to the total number of trips generated per employee. These trips, of course, include not only trips taken by the employees (to/from work, lunch, etc.) but also customers, deliveries and others that are attracted to the use, serve it or are served by it in some way.

The Average Daily Traffic (ADT) numbers on the following table, therefore, are calculated by dividing all trips to a use—employees, customers, deliveries to or from, etc.—by the number of employees alone. Since there is more data available for the average number of employees per 1,000 square feet of floor area, it enables a determination of the average total trips generated by the land use by **the same floor area (and thus the number per '1' square foot of floor area for impact fee calculations).**

The table on the following page **shows the 'trips per employee' per 1,000 square feet of floor area for those uses for which impact fees are commonly collected and for which the data is available.**

Overall, the average trip generation rate of all uses shown on the following table is 10.21 trips per employee **for 'industrial' uses and 25.31 for all 'commercial' uses.** The 'industrial' category includes such uses as manufacturing and assembly, storage and transportation of goods; **the 'commercial' category includes all sales and service uses such as stores, offices, motels, banks, amusements and private institutions).** **The last column shows the average rate for all 'commercial' uses listed, as opposed to the 'industrial' uses shown in the column on its left.**

Although the 'overall' averages are useful for projecting total traffic generation, impact fees for particular uses will reflect the actual average trip generation rate for the specific use.

Table 52: ITE Trips-per-Employee Data

	ITE CODE	LAND USE	ADT Trip Ends per Employee	Average by Category	Average All Commercial
<i>Industrial (100-199)</i>	110	General Light Industrial	3.02	10.74	25.63
	120	General Heavy Industrial	0.82		
	140	Manufacturing	2.13		
	150	Warehousing	3.89		
	151	Mini-Warehouse	32.47		
	152	High-Cube Warehouse	22.13		
<i>Lodging (300-399)</i>	310	Hotel or Conference Motel	14.34	13.58	
	320	Motel	12.81		
<i>Recreational (400-499)</i>	443	Movie Theater	53.12	36.83	
	460	Arena	10.00		
	480	Amusement Park	8.33		
	490	Tennis Courts	66.67		
	491	Racquet/Tennis Club	45.71		
	492	Health/Fitness Center	46.71		
<i>Institutional (500-599)</i>	495	Recreational Community Center	27.25	29.58	
	520	Private Elementary School	15.71		
	530	Private High School	19.74		
	560	Church/Place of Worship	26.24		
<i>Medical (600-699)</i>	565	Day Care Center	28.13	5.26	
	566	Cemetery	58.09		
	610	Hospital	4.50		
<i>Office (700-799)</i>	620	Nursing Home	3.26	4.18	
	630	Clinic	8.01		
	710	General Office Building	3.32		
	714	Corporate Headquarters Building	2.33		
	715	Single-Tenant Office Building	3.70		
	720	Medical-Dental Office Building	8.91		
<i>Retail (800-899)</i>	760	Research and Development Center	2.77	34.55	
	770	Business Park	4.04		
	812	Building Materials and Lumber Store	32.12		
	814	Variety Store	66.70		
	815	Free-Standing Discount Store	28.84		
	816	Hardware/Paint Store	53.21		
	817	Nursery (Garden Center)	21.83		
	818	Nursery (Wholesale)	23.40		
	826	Specialty Retail Center	22.36		
	841	Automobile Sales	21.14		
	850	Supermarket	87.82		
<i>Services (900-999)</i>	854	Discount Supermarket	40.36		
	860	Wholesale Market	8.21		
	890	Furniture Store	12.19		
	912	Drive-in Bank	30.94		

Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers, where survey results given for key land uses.

We know from the 2010 Census (the latest data available) how many people worked in Monroe County based on commuting patterns. The next table provides a breakdown between commercial and industrial employment in the county and calculates trip ends generated by each.

The table calculates the total number of trips using the average rates for commercial and industrial from the ITE Trips-per-Employee Data table on the previous page. From the total of all nonresidential trips is deducted the number of trips to/from work generated by county residents, since these trips have already been calculated as part of the residential trip generation rates (i.e., county residents driving to/from work at county establishments).

Lastly, the following table calculates the total number of trip ends that will be generated by new nonresidential growth in future traffic on Monroe County’s roads.

Table 53: Nonresidential Trip Generation - 2021-2045 New Growth Increase

	2021 Employees	Avg. ADT	2021 Trip Ends	2045 Employees	2045 Trip Ends	2021-2045 Increase	Percent New Growth Trip Ends
Commercial	8,367	25.63	214,475	18,489	473,938	259,463	
Industrial+Utility	383	10.74	4,115	448	4,813	698	
Total	8,750		218,590	18,937	478,751	260,161	
Less: Internal Commutes at*		39.1%	-85,469		-187,192	-101,723	
Net Nonres Trip Ends			133,121		291,559	158,438	

* Residents who work in Monroe County based on Census data. These trips are included in residential trip generation rate.

The table above shows the number of trip ends currently generated by Monroe County businesses based on 2021 employment. The same calculations are made for the year 2045 based on projected employment in the county, and the difference between 2021 and 2045 represents trip ends generated by future growth and development. This totals 54.3% of all nonresidential 2045 trip ends.

The results of the residential and nonresidential trip generation analyses are combined on the Summary table at the beginning of this Appendix for an overall calculation of new growth’s share of future traffic generated by Monroe County residents and businesses.

Terminology

This Methodology uses the term ‘average daily traffic’ (ADT) for a weekday, which is defined by ITE as the ‘average weekday vehicle trip ends’, which are “the average 24-hour total of all vehicle trips counted from a study site from Monday through Friday.”

Additionally, ITE defines a ‘trip or trip end’ as “a single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site. For trip generation purposes, the total trip ends for a land use over a given period of time are the total of all trips entering plus all trips exiting a site during a designated time period”.

Lastly, ITE defines 'average trip rate' as "the weighted average of the number of vehicle trips or trip ends per unit of independent variable (for example, trip ends per occupied dwelling unit or employee) using a site's driveway(s). The weighted average rate is calculated by dividing the sum of all independent variable units where paired data is available. The weighted average rate is used rather than the average of the individual rates because of the variance within each data set or generating unit. Data sets with a large variance will over-influence the average rate if they are not weighted.

Appendix C: Adjustments and Credits

■ Cost Adjustments

Calculations related to impact fees are made in terms of the 'present value' of past and future amounts of money, including project cost expenditures and credits for future revenue.

The Georgia Development Impact Fee Act defines 'present value' as "the current value of past, present, or future payments, contributions or dedications of goods, services, materials, construction, or money." This section describes the methodologies used to make appropriate adjustments to capital improvement project cost figures, both past and future, to convert these costs into current dollars when such an adjustment is appropriate.

Calculations for present value (PV) differ when considering past expenditures versus future costs. In both cases, however, the concept is the same—the 'actual' expenditure made or to be made is adjusted to the current year using appropriate rates—an inflation rate for past expenditures and a discount rate for future costs that have been inflated to the year of expenditure. In essence, the present value is considered in light of the value of money as it changes over time because of inflation.

Past Expenditures

Past expenditures are considered in impact fee calculations only for previous expenditures for projects that created excess capacity for new development and are being recouped. An expenditure that was made in the past is converted to PV using the inflation rate of money—in this case the Consumer Price Index (CPI). Although this approach ignores the value of technological innovation (i.e., better computers are available today for the same or lower historic prices) and evolving land prices (often accelerated beyond inflation by market pressures), the approach best captures the value of the money actually spent. For instance, it is not important that you can buy a better computer today for the same price that was paid five years ago; what is important is the money was spent five years ago and what that money would be worth today had it been saved instead of spent.

Future Project Costs

In order to determine the present value of a project expenditure that will be made in the future, the Net Present Value (NPV) of the expenditure is determined. To calculate the NPV of any project cost, two figures are needed—the future cost of the project anticipated in the year the expenditure will be made, and the Net Discount Rate. Given the current cost of a project, that cost is first inflated into the future to the target expenditure year to establish the estimated future cost when the expenditure will be made. The future cost is then deflated to the present using the Net Discount Rate, which establishes the NPV for the project in current dollars. These two formulas are:

$$\text{Future Cost} = \text{Current Cost} \times (1 + \text{Inflation Rate})^{\text{Year of Expenditure} - \text{Current Year}}$$

$$\text{Net Present Value} = \text{Future Cost} \times (1 + \text{Net Discount Rate})^{\text{Current Year} - \text{Year of Expenditure}}$$

In this section, two important adjustments are discussed that are required to convert current costs into future cost figures, and then back into current dollars.

First, an appropriate cost inflator is identified. This adjustment factor is important in determining the future cost of a project, based on current cost estimates. The cost inflator may be based on anticipated inflation in construction or building costs, or on anticipated inflation in the value of money (for capital projects that do not include a construction component). In essence, costs increase over time. By identifying the appropriate inflation rate that is related to the type of project (building

construction, project construction or non-construction), current cost estimates can be used to predict future costs in the year they are expected to occur.

The second cost adjustment is a deflator—the Net Discount Rate. Essentially, the Net Discount Rate is the interest rate that accrues to monies being held in escrow. That is, as impact fees are collected and 'saved up' over the years for future expenditure, they increase at the rate that the account is accruing interest. Having determined the inflated cost of a project at some future date, the cost in **today's dollars can be** reduced to the extent that interest will increase the funds on hand as they build up. This calculation determines how much money needs to be added to the account so that, with interest, it will grow to the amount needed for that future expenditure at that time. This is the Net Present Value of that future expenditure.

■ Cost Inflatoms

Three different cost inflators are used in the impact fee calculations, based on the type of project being considered. **For infrastructure projects, a 'construction cost inflator' is used. For projects that require construction of a structure (such as a fire station expansion), a 'building cost inflator' is used** as the appropriate inflation rate. For all non-construction types of projects (such as a fire truck or park land), an inflation rate is used that is based on the Consumer Price Index. These different types of inflators are discussed below.

Engineering News Record's Cost Indexes

ENR publishes both a Construction Cost Index (CCI) and a Building Cost Index (BCI) that are widely used in the construction industry. The indexes are based on annual cost increases of various construction materials and applicable labor rates and are calibrated regionally. For calculation of the CCI and the BCI, ENR sets its indexes in 1913 at 100.

Construction Cost Inflator

Table 54 uses the example of a calculation of the annual average rate of increase reflected in construction costs. For this analysis, the 2010-2020 ten-year period is used as a base time period for an estimate of future construction cost increases due to inflation in labor and materials costs.

Table 54: Construction Cost Inflator – CCI

Year	Amount	BCI*		Effect of Inflation	
		1913=100	2010=1.0	BCI	Avg. Rate =
					2.4511014%
2011	\$ 100,000.00	3,837.47	1.000000	\$ 100,000.00	\$ 100,000.00
2012		3,970.93	1.034779	\$ 103,477.88	\$ 102,451.10
2013		4,022.11	1.048115	\$ 104,811.46	\$ 104,962.28
2014		4,076.81	1.062369	\$ 106,236.92	\$ 107,535.01
2015		4,108.05	1.070509	\$ 107,050.89	\$ 110,170.81
2016		4,126.72	1.075375	\$ 107,537.52	\$ 112,871.20
2017		4,278.39	1.114899	\$ 111,489.95	\$ 115,637.79
2018		4,408.94	1.148918	\$ 114,891.82	\$ 118,472.19
2019		4,523.59	1.178795	\$ 117,879.51	\$ 121,376.06
2020		4,615.43	1.202727	\$ 120,272.71	\$ 124,351.12
2021		5,816.76	1.515780	\$ 151,577.99	\$ 127,399.09
				\$ 1,245,226.65	\$ 1,245,226.65

* Building Cost Index, Atlanta Region.
 Source: *Engineering News Record*, Annual Average Indices.

The table above shows a construction project that cost \$100,000 in 2010, and how much the same project would cost in each subsequent year using the Construction Cost Index published by **Engineering News Record for the Atlanta area. Setting the 2010 Construction Cost Index (CCI) at '1.0,'** the increase in the CCI as a multiple of 2010 is also shown on the table. The equivalent cost of the same project in each subsequent year is calculated by multiplying the CCI multiplier times \$100,000. When the total for all such projects is summed for the 2010-2020 period, the equivalent average annual rate of increase is calculated as the percentage that would produce the same total. This percentage is used in the text of this report as the applicable inflator for infrastructure construction projects that will begin in future years.

Building Cost Inflator

The inflator for future construction costs for buildings is based on ENR’s Building Cost Index (BCI) for each year from 2010 through 2020, and is calculated in the same manner as described above for the Construction Cost Inflator. Table 55 shows the results.

Table 55: Building Cost Inflator – BCI

Year	Amount	CCI*		Effect of Inflation	
		1913=100	2010=1.0	CCI	Avg. Rate =
					1.6291673%
2011	\$ 100,000.00	5,829.65	1.000000	\$ 100,000.00	\$ 100,000.00
2012		5,892.64	1.015118	\$ 101,511.78	\$ 101,629.17
2013		5,983.23	1.026087	\$ 102,608.66	\$ 103,284.88
2014		6,147.52	1.041861	\$ 104,186.15	\$ 104,967.56
2015		6,245.74	1.070469	\$ 107,046.94	\$ 106,677.66
2016		6,277.14	1.087572	\$ 108,757.20	\$ 108,415.61
2017		6,433.18	1.093039	\$ 109,303.91	\$ 110,181.89
2018		6,592.98	1.120212	\$ 112,021.20	\$ 111,976.93
2019		6,681.50	1.148037	\$ 114,803.70	\$ 113,801.23
2020		6,750.41	1.163450	\$ 116,345.04	\$ 115,655.24
2021		7,414.97	1.175450	\$ 117,545.04	\$ 117,539.45
				\$ 1,194,129.62	\$ 1,194,129.62

* Construction Cost Index, Atlanta Region.
Source: *Engineering News Record*, Annual Average Indices.

CPI Inflator

For projects that do not involve construction, only the future value of money needs to be considered (without regard to inflation in labor or materials costs). For this calculation, the Consumer Price Index (CPI) is used, assuming past experience will continue into the foreseeable future.

Table 56 shows the CPI figures for every year since 1982, updated to the most recently reported year (2019).

Using an annual expenditure of \$10,000 as an example, the multipliers on

Table 56 yield the figures shown for the CPI on the table under the ‘present value’ heading. Cumulatively, the \$380,000 spent over the 1982-2019 period would have a total present value of **\$600,974.62 in today’s dollars**. Considering the present value figures for the \$10,000 annual expenditures, an average annual inflation rate of more than 2.572% yields the same total amount over the 1982-2019 period.

The 37-year average of annual CPI change (the period of 1982-2019) shown on

Table 56 would be useful in estimating the present value (PV) of past expenditures but would not be the best indicator of future change because of the long timeframe covered. While the historic CPI multipliers reflect the swings in inflation in the past, these rates have moderated somewhat in recent years as inflation has become a primary target of federal monetary policy.

Looking only at the change in CPI for the ten years from 2009 to 2019, an average annual inflation rate of slightly less than 1.72% best captures the change over that period. This lower inflation rate (compared to the 1982-2019 period) is assumed to be experienced 'on average' in future years, and is used for inflator calculations for future non-construction expenditures.

Table 56: Non-Construction Cost Inflator – CPI

Year	Amount	CPI*		Present Value: CPI	Long Term Inflator =	10-Year Inflator =
		1982-84=100	2020=1.0			
					2.49984150%	
1982	\$ 10,000.00	96.50	2.88029	\$ 28,802.90	\$ 26,194.17	
1983	\$ 10,000.00	99.60	2.79064	\$ 27,906.43	\$ 25,555.32	
1984	\$ 10,000.00	103.90	2.67515	\$ 26,751.49	\$ 24,932.06	
1985	\$ 10,000.00	107.60	2.58316	\$ 25,831.60	\$ 24,324.00	
1986	\$ 10,000.00	109.60	2.53602	\$ 25,360.22	\$ 23,730.77	
1987	\$ 10,000.00	113.60	2.44673	\$ 24,467.25	\$ 23,152.00	
1988	\$ 10,000.00	118.30	2.34952	\$ 23,495.18	\$ 22,587.36	
1989	\$ 10,000.00	124.00	2.24152	\$ 22,415.16	\$ 22,036.48	
1990	\$ 10,000.00	130.70	2.12661	\$ 21,266.11	\$ 21,499.04	
1991	\$ 10,000.00	136.20	2.04073	\$ 20,407.34	\$ 20,974.70	
1992	\$ 10,000.00	140.30	1.98110	\$ 19,810.98	\$ 20,463.16	
1993	\$ 10,000.00	144.50	1.92352	\$ 19,235.16	\$ 19,964.09	
1994	\$ 10,000.00	148.20	1.87549	\$ 18,754.93	\$ 19,477.19	
1995	\$ 10,000.00	152.40	1.82381	\$ 18,238.06	\$ 19,002.16	
1996	\$ 10,000.00	156.90	1.77150	\$ 17,714.98	\$ 18,538.72	
1997	\$ 10,000.00	160.50	1.73176	\$ 17,317.63	\$ 18,086.59	
1998	\$ 10,000.00	163.00	1.70520	\$ 17,052.02	\$ 17,645.48	
1999	\$ 10,000.00	166.60	1.66836	\$ 16,683.55	\$ 17,215.13	
2000	\$ 10,000.00	172.20	1.61410	\$ 16,141.00	\$ 16,795.27	
2001	\$ 10,000.00	177.10	1.56944	\$ 15,694.41	\$ 16,385.66	
2002	\$ 10,000.00	179.90	1.54501	\$ 15,450.14	\$ 15,986.03	
2003	\$ 10,000.00	184.00	1.51059	\$ 15,105.87	\$ 15,596.15	
2004	\$ 10,000.00	188.90	1.47140	\$ 14,714.03	\$ 15,215.78	
2005	\$ 10,000.00	195.30	1.42318	\$ 14,231.85	\$ 14,844.69	
2006	\$ 10,000.00	201.60	1.37871	\$ 13,787.10	\$ 14,482.65	
2007	\$ 10,000.00	207.34	1.34053	\$ 13,405.29	\$ 14,129.43	
2008	\$ 10,000.00	215.30	1.29096	\$ 12,909.62	\$ 13,784.83	
2009	\$ 10,000.00	214.54	1.29557	\$ 12,955.71	\$ 13,448.64	2.580330%
2010	\$ 10,000.00	218.06	1.27466	\$ 12,746.63	\$ 13,120.64	
2011	\$ 10,000.00	224.94	1.23566	\$ 12,356.59	\$ 12,800.65	\$ 12,901.52
2012	\$ 10,000.00	229.59	1.21061	\$ 12,106.07	\$ 12,488.46	\$ 12,576.99
2013	\$ 10,000.00	232.96	1.19313	\$ 11,931.30	\$ 12,183.88	\$ 12,260.63
2014	\$ 10,000.00	236.74	1.17408	\$ 11,740.84	\$ 11,886.73	\$ 11,952.22
2015	\$ 10,000.00	237.02	1.17269	\$ 11,726.92	\$ 11,596.83	\$ 11,651.57
2016	\$ 10,000.00	240.01	1.15808	\$ 11,580.82	\$ 11,313.99	\$ 11,358.49
2017	\$ 10,000.00	245.12	1.13393	\$ 11,339.26	\$ 11,038.06	\$ 11,072.77
2018	\$ 10,000.00	251.11	1.10689	\$ 11,068.91	\$ 10,768.86	\$ 10,794.25
2019	\$ 10,000.00	255.66	1.08719	\$ 10,871.93	\$ 10,506.22	\$ 10,522.72
2020	\$ 10,000.00	261.56	1.06265	\$ 10,626.55	\$ 10,249.98	\$ 10,258.03
2021	\$ 10,000.00	277.95	1.00000	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
1982-21 \$ 400,000.00				\$ 674,001.84	\$ 674,001.84	
2011-21 \$ 110,000.00				\$ 125,349.20	← →	\$ 125,349.20



*Consumer Price Index data is from the U. S. Department of Labor, Bureau of Labor Statistics.

Calculating Net Present Value

Determining the NPV of future **project expenditures depends on the type of 'project' being funded.**

For a building construction project (such as a recreation center), the current cost estimate for the project is inflated into the future using the average Building Cost Inflator (from Table 55) applied to the number of years until the year planned for its construction. This future cost is then deflated back to the present using the Net Discount Rate (currently 0.00005%) since this reflects the present value of a future amount of money.

For other construction projects (such as playground equipment), the current cost estimate for the project is inflated into the future using the average Construction Cost Inflator (from Table 54) applied to the number of years until the year planned for its installation. Like building construction projects, this future cost is then deflated back to the present using the Net Discount Rate.

For non-construction capital projects (such as purchase of an ambulance or land acquisition), the 10-year average CPI inflator (from

Table 56) is used to estimate the project expenditure in future dollars while the Net Discount Rate is applied to deflate that future cost to present value.

■ Tax Credits

An important restriction on an impact fee program is that new growth and development cannot be charged more **in impact fees than their 'fair share' of the cost of funding the public facilities needed to serve just that new growth. The calculation of that 'fair share' is intrinsic to the impact fee calculations** carried out in the chapters addressing each public facility category in this report. There is a situation, however, in which new development will be paying property taxes for the same projects for which impact fees are being assessed. This situation relates to the portion of impact fee projects that are not eligible for impact fee funding (such as a project that is only 90% impact fee eligible).

Per-Project Funding Shortfall Credit

As noted, some capital projects in the impact fee program may have portions that are not 100% impact fee eligible. These are situations in which a project serves both a future (impact fee eligible) need *and* a need to provide service to the current residents and businesses at the same level of service as new growth. Funding for these non-eligible portions are the responsibility of the current residents and businesses, not new growth.

To the extent that new growth will be contributing property taxes for non-eligible portions of impact fee projects (for which they are not financially responsible), a credit must be applied reflecting these tax collections in order to avoid **new growth paying more than their 'fair share' of total costs.**

For individual projects that are only partially eligible for impact fee funding, it is assumed for calculation purposes that the non-eligible portions will be covered by General Fund revenue.

Since both existing and future residents and businesses will be paying the property taxes, the situation that new growth would be paying both impact fees to cover its fair share of the costs and generating property taxes that can be used to cover the (ineligible) portion of the cost for which it is not responsible **results in a form of 'double taxation'.** This credit reduces the impact fee portion to account for the tax contribution.

To the extent that credits are due, they are subtracted from the impact fee project costs as part of the calculation of maximum impact fees allowed within each of the public facility chapters to which they apply.

The sections on the next eight pages explain how these credits are calculated.

Current Property Tax Bases

The table below shows the current tax base figures for the county as a whole (including all of the incorporated area), the area outside of Forsyth (the unincorporated Area plus Culloden), and the City of Forsyth itself. This table and the projections that follow form the basis leading up to the ‘% New Growth’ columns on Table 60 and Table 61. It is the percentages in the ‘% New Growth’ columns that are applied as a credit against any portion of an impact fee project that is not impact fee eligible.

Table 57 summarizes the current property tax base for the entire county, as reported to the State Department of Revenue. All properties in the county are assessed at the rate of 40% of their actual value. The abbreviation ‘M&O’ means Maintenance and Operations, which is the historical term for the General Fund tax levy or millage rate.

Table 57: Monroe County Tax Base

	County Total	Unincorporated	Culloden	Area Outside Forsyth	Forsyth
Residential	\$ 612,715,838	\$ 556,948,039	\$ 1,789,396	\$ 558,737,435	\$ 53,978,403
Historical	\$ 11,760	\$ -	\$ -	\$ -	\$ 11,760
Agricultural	\$ 89,197,503	\$ 87,689,635	\$ 159,544	\$ 87,849,179	\$ 1,348,324
Conservation Use	\$ 121,485,685	\$ 120,827,245	\$ 259,360	\$ 121,086,605	\$ 399,080
Forest Conservation	\$ 22,186,560	\$ 22,186,560	\$ -	\$ 22,186,560	\$ -
Commercial	\$ 133,048,839	\$ 72,198,741	\$ 134,956	\$ 72,333,697	\$ 60,715,142
Industrial	\$ 19,907,402	\$ 17,413,578	\$ -	\$ 17,413,578	\$ 2,493,824
Utility	\$ 643,044,728	\$ 640,084,770	\$ 123,260	\$ 640,208,030	\$ 2,836,698
Motor Vehicle	\$ 18,446,430	\$ 16,953,680	\$ -	\$ 16,953,680	\$ 1,492,750
Mobile Home	\$ 2,260,968	\$ 2,117,692	\$ 71,374	\$ 2,189,066	\$ 71,902
Timber 100%	\$ 3,785,394	\$ 3,785,394	\$ -	\$ 3,785,394	\$ -
Heavy Equipment	\$ 21,285	\$ 21,285	\$ -	\$ 21,285	\$ -
Gross Tax Base	\$ 1,666,112,392	\$ 1,540,226,619	\$ 2,537,890	\$ 1,542,764,509	\$ 123,347,883
Exempt	\$ (227,258,882)	\$ (212,967,476)	\$ (264,785)	\$ (213,232,261)	\$ (2,853,377)
Total Tax Base--M&O	\$ 1,438,853,510	\$ 1,327,259,143	\$ 2,273,105	\$ 1,329,532,248	\$ 120,494,506
Net Taxable Residential	\$ 385,456,956	\$ 343,980,563	\$ 1,524,611	\$ 345,505,174	\$ 51,125,026

Countywide Tax Base Projections

In the following table, the total value added to the tax base by new growth and development throughout the county is calculated. New houses recently constructed for owner occupancy in the county² were being offered at an overall average sales price of \$669,780, which would be a tax assessment value of \$267,912.

Countywide nonresidential value added is calculated as the assessed value of all commercial, industrial and utility property in the county divided by the current number of ‘value-added’ jobs in the county, resulting in a figure of \$90,972 in assessed value per employee.

² On June 12, 2021, Zillow reported 50 newly constructed homes for sale or on offer for single-family occupancy (there were none in Forsyth). Overall, offering prices ranged from a low of \$165,000 to a high of \$1.67 million.

The annual increases in housing units and the annual increases in 'value-added' employees can be found on Table 47.

[The value added is expressed in assessed value terms; this is 40% of the market or appraised value. Millage rates are applied to assessed value, rather than appraised.]

Table 58: Tax Base Increases from New Growth – Countywide

Year	Residential			Non-Residential			Total Annual Added Assessed Value
	Total Housing Units	New Housing Units	Added Assessed Value*	Value-Added Employees	New Employees	Added Assessed Value**	
2021	12,372			8,750			
2022	12,545	173	\$ 46,348,776	9,013	263	\$ 23,925,636	\$ 70,274,412
2023	12,716	171	\$ 45,812,952	9,277	263	\$ 23,925,636	\$ 69,738,588
2024	12,889	173	\$ 46,348,776	9,540	263	\$ 23,925,636	\$ 70,274,412
2025	13,061	172	\$ 46,080,864	9,803	263	\$ 23,925,636	\$ 70,006,500
2026	13,233	172	\$ 46,080,864	10,090	287	\$ 26,108,964	\$ 72,189,828
2027	13,405	172	\$ 46,080,864	10,378	287	\$ 26,108,964	\$ 72,189,828
2028	13,577	172	\$ 46,080,864	10,665	287	\$ 26,108,964	\$ 72,189,828
2029	13,749	172	\$ 46,080,864	10,953	287	\$ 26,108,964	\$ 72,189,828
2030	13,921	172	\$ 46,080,864	11,240	287	\$ 26,108,964	\$ 72,189,828
2031	14,093	172	\$ 46,080,864	11,566	326	\$ 29,656,872	\$ 75,737,736
2032	14,266	173	\$ 46,348,776	11,892	326	\$ 29,656,872	\$ 76,005,648
2033	14,437	171	\$ 45,812,952	12,217	326	\$ 29,656,872	\$ 75,469,824
2034	14,610	173	\$ 46,348,776	12,543	326	\$ 29,656,872	\$ 76,005,648
2035	14,781	171	\$ 45,812,952	12,869	326	\$ 29,656,872	\$ 75,469,824
2036	14,954	173	\$ 46,348,776	13,243	374	\$ 34,023,528	\$ 80,372,304
2037	15,125	171	\$ 45,812,952	13,618	374	\$ 34,023,528	\$ 79,836,480
2038	15,298	173	\$ 46,348,776	13,992	374	\$ 34,023,528	\$ 80,372,304
2039	15,469	171	\$ 45,812,952	14,367	374	\$ 34,023,528	\$ 79,836,480
2040	15,642	173	\$ 46,348,776	14,741	374	\$ 34,023,528	\$ 80,372,304
2041	15,813	171	\$ 45,812,952	15,171	430	\$ 39,117,960	\$ 84,930,912
2042	15,986	173	\$ 46,348,776	15,601	430	\$ 39,117,960	\$ 85,466,736
2043	16,158	172	\$ 46,080,864	16,032	430	\$ 39,117,960	\$ 85,198,824
2044	16,330	172	\$ 46,080,864	16,462	430	\$ 39,117,960	\$ 85,198,824
2045	16,502	172	\$ 46,080,864	16,892	430	\$ 39,117,960	\$ 85,198,824

*New housing unit value is estimated at an average assessed value per housing unit of: \$ 267,912

**Nonresidential value is estimated at an assessed value per employee of: \$ 90,972

Tax Base Projections – Countywide Outside of Forsyth

The following table follows the same path as described for the county as a whole, above in Table 58, but based on housing unit and value-added job forecasts taken from Table 48 for the area outside of Forsyth.

Table 59: Tax Base Increases from New Growth - Outside Forsyth

Year	Residential			Non-Residential			Total Annual Added Assessed Value
	Total Housing Units	New Housing Units	Added Assessed Value*	Value-Added Employees	New Employees	Added Assessed Value**	
2021	10,427			7,422			
2022	10,598	171	\$ 45,812,952	7,645	223	\$ 11,090,459	\$ 56,903,411
2023	10,766	168	\$ 45,009,216	7,868	223	\$ 11,090,459	\$ 56,099,675
2024	10,937	171	\$ 45,812,952	8,092	224	\$ 11,140,192	\$ 56,953,144
2025	11,107	170	\$ 45,545,040	8,315	223	\$ 11,090,459	\$ 56,635,499
2026	11,278	171	\$ 45,812,952	8,559	244	\$ 12,134,852	\$ 57,947,804
2027	11,448	170	\$ 45,545,040	8,803	244	\$ 12,134,852	\$ 57,679,892
2028	11,618	170	\$ 45,545,040	9,046	243	\$ 12,085,119	\$ 57,630,159
2029	11,788	170	\$ 45,545,040	9,290	244	\$ 12,134,852	\$ 57,679,892
2030	11,957	169	\$ 45,277,128	9,534	244	\$ 12,134,852	\$ 57,411,980
2031	12,127	170	\$ 45,545,040	9,810	276	\$ 13,726,308	\$ 59,271,348
2032	12,298	171	\$ 45,812,952	10,087	277	\$ 13,776,041	\$ 59,588,993
2033	12,467	169	\$ 45,277,128	10,363	276	\$ 13,726,308	\$ 59,003,436
2034	12,638	171	\$ 45,812,952	10,639	276	\$ 13,726,308	\$ 59,539,260
2035	12,807	169	\$ 45,277,128	10,916	277	\$ 13,776,041	\$ 59,053,169
2036	12,978	171	\$ 45,812,952	11,233	317	\$ 15,765,361	\$ 61,578,313
2037	13,147	169	\$ 45,277,128	11,551	318	\$ 15,815,094	\$ 61,092,222
2038	13,318	171	\$ 45,812,952	11,868	317	\$ 15,765,361	\$ 61,578,313
2039	13,487	169	\$ 45,277,128	12,186	318	\$ 15,815,094	\$ 61,092,222
2040	13,658	171	\$ 45,812,952	12,503	317	\$ 15,765,361	\$ 61,578,313
2041	13,827	169	\$ 45,277,128	12,868	365	\$ 18,152,545	\$ 63,429,673
2042	13,997	170	\$ 45,545,040	13,233	365	\$ 18,152,545	\$ 63,697,585
2043	14,167	170	\$ 45,545,040	13,598	365	\$ 18,152,545	\$ 63,697,585
2044	14,337	170	\$ 45,545,040	13,963	365	\$ 18,152,545	\$ 63,697,585
2045	14,507	170	\$ 45,545,040	14,328	365	\$ 18,152,545	\$ 63,697,585

*New housing unit value is estimated at an average assessed value per housing unit of: \$ 267,912

**Nonresidential value is estimated at an assessed value per employee of: \$ 49,733

As noted above, none of the new houses available for sale or on offer for single-family occupancy in the county were located within Forsyth. The same average assessed value for new housing units within the service area is therefore the same as shown on Table 58 - \$267,912.

Nonresidential value added is calculated as the assessed value of all commercial, industrial and utility property not located in Forsyth, divided by the current number of 'value-added' jobs in the service area from Table 48, resulting in a figure of \$49,733 in assessed value per employee.

Application of Credits Against Impact Fees – Generally

As the county grows, new development will add to the property tax base every year and will thus represent an ever-increasing proportion of the total taxable values.

Table 60: New Growth Property Tax Generation - Countywide, shows the net increase in taxable value created each year from residential development (new housing units) on the left, and from all new residential and nonresidential development together each year on the right (both taken from Table 58).

Also shown is the cumulative increase in the 'Net M&O Residential Tax Base' each year generated by the annual 'contribution' from new residential growth. (The same are shown on the right side for tax base increases generated by all residential and nonresidential growth together.)

For both tax base projections, the total cumulative new tax base growth is shown. By dividing the total tax bases each year by these cumulative new growth amounts, the percentage of the total tax base amounts generated by new growth and development is calculated.

These 'percent new growth' figures are used to determine the extent to which the ineligible portion of an impact fee project paid from the General Fund would represent a contribution from new growth for which it is not responsible (having covered its funding responsibility through the impact fees that it generated).

Table 61: New Growth Property Tax Generation - Outside Forsyth shows the same data as in Table 60, but for the portion of the county lying outside of the City of Forsyth.

Table 60: New Growth Property Tax Generation - Countywide

Year	Fees based on Housing Units			Fees based on Day-Night Populaton			
	Net M&O Residential Tax Base *	Net New Tax Base from Residential	Total New Tax Base from Residential	Total Net M&O Tax Base *	Net New Tax Base from All New Growth	Total New Tax Base from All New Growth	% New Growth
2021	\$ 385,456,956	\$ 46,348,776	\$ 46,348,776	\$ 1,438,853,510	\$ 70,274,412	\$ 70,274,412	4.88%
2022	\$ 431,805,732	\$ 45,812,952	\$ 92,161,728	\$ 1,509,127,922	\$ 69,738,588	\$ 140,013,000	9.28%
2023	\$ 477,618,684	\$ 46,348,776	\$ 138,510,504	\$ 1,578,866,510	\$ 70,274,412	\$ 210,287,412	13.32%
2024	\$ 523,967,460	\$ 46,080,864	\$ 184,591,368	\$ 1,649,140,922	\$ 70,006,500	\$ 280,293,912	17.00%
2025	\$ 570,048,324	\$ 46,080,864	\$ 230,672,232	\$ 1,719,147,422	\$ 72,189,828	\$ 352,483,740	20.50%
2026	\$ 616,129,188	\$ 46,080,864	\$ 276,753,096	\$ 1,791,337,250	\$ 72,189,828	\$ 424,673,568	23.71%
2027	\$ 662,210,052	\$ 46,080,864	\$ 322,833,960	\$ 1,863,527,078	\$ 72,189,828	\$ 496,863,396	26.66%
2028	\$ 708,290,916	\$ 46,080,864	\$ 368,914,824	\$ 1,935,716,906	\$ 72,189,828	\$ 569,053,224	29.40%
2029	\$ 754,371,780	\$ 46,080,864	\$ 414,995,688	\$ 2,007,906,734	\$ 72,189,828	\$ 641,243,052	31.94%
2030	\$ 800,452,644	\$ 46,080,864	\$ 461,076,552	\$ 2,080,096,562	\$ 75,737,736	\$ 716,980,788	34.47%
2031	\$ 846,533,508	\$ 46,348,776	\$ 507,425,328	\$ 2,155,834,298	\$ 76,005,648	\$ 792,986,436	36.78%
2032	\$ 892,882,284	\$ 45,812,952	\$ 553,238,280	\$ 2,231,839,946	\$ 75,469,824	\$ 868,456,260	38.91%
2033	\$ 938,695,236	\$ 46,348,776	\$ 599,587,056	\$ 2,307,309,770	\$ 76,005,648	\$ 944,461,908	40.93%
2034	\$ 985,044,012	\$ 45,812,952	\$ 645,400,008	\$ 2,383,315,418	\$ 75,469,824	\$ 1,019,931,732	42.79%
2035	\$ 1,030,856,964	\$ 46,348,776	\$ 691,748,784	\$ 2,458,785,242	\$ 80,372,304	\$ 1,100,304,036	44.75%
2036	\$ 1,077,205,740	\$ 45,812,952	\$ 737,561,736	\$ 2,539,157,546	\$ 79,836,480	\$ 1,180,140,516	46.48%
2037	\$ 1,123,018,692	\$ 46,348,776	\$ 783,910,512	\$ 2,618,994,026	\$ 80,372,304	\$ 1,260,512,820	48.13%
2038	\$ 1,169,367,468	\$ 45,812,952	\$ 829,723,464	\$ 2,699,366,330	\$ 79,836,480	\$ 1,340,349,300	49.65%
2039	\$ 1,215,180,420	\$ 46,348,776	\$ 876,072,240	\$ 2,779,202,810	\$ 80,372,304	\$ 1,420,721,604	51.12%
2040	\$ 1,261,529,196	\$ 45,812,952	\$ 921,885,192	\$ 2,859,575,114	\$ 84,930,912	\$ 1,505,652,516	52.65%
2041	\$ 1,307,342,148	\$ 46,348,776	\$ 968,233,968	\$ 2,944,506,026	\$ 85,466,736	\$ 1,591,119,252	54.04%
2042	\$ 1,353,690,924	\$ 46,080,864	\$ 1,014,314,832	\$ 3,029,972,762	\$ 85,198,824	\$ 1,676,318,076	55.32%
2043	\$ 1,399,771,788	\$ 46,080,864	\$ 1,060,395,696	\$ 3,115,171,586	\$ 85,198,824	\$ 1,761,516,900	56.55%
2044	\$ 1,445,852,652	\$ 46,080,864	\$ 1,106,476,560	\$ 3,200,370,410	\$ 85,198,824	\$ 1,846,715,724	57.70%
2045	\$ 1,491,933,516	\$ 46,080,864	\$ 1,152,557,424	\$ 3,285,569,234	\$ 85,198,824	\$ 1,931,914,548	58.99%

* Total tax base and Residential tax base countywide including all M&O exemptions.

Table 61: New Growth Property Tax Generation - Outside Forsyth

Year	Fees based on Housing Units			Fees based on Day-Night Populaton			
	Net M&O Residential Tax Base*	Net New Tax Base from Residential	Total New Tax Base from Residential	Total Net M&O Tax Base*	Net New Tax Base from All New Growth	Total New Tax Base from All New Growth	% New Growth
2021	\$ 334,331,930	\$ 45,812,952	\$ 45,812,952	\$ 1,318,359,004	\$ 56,903,411	\$ 56,903,411	4.32%
2022	\$ 380,144,882	\$ 45,009,216	\$ 90,822,168	\$ 1,375,262,415	\$ 56,099,675	\$ 113,003,086	8.22%
2023	\$ 425,154,098	\$ 45,812,952	\$ 136,635,120	\$ 1,488,315,234	\$ 56,953,144	\$ 169,956,230	11.87%
2024	\$ 470,967,050	\$ 45,545,040	\$ 182,180,160	\$ 1,544,950,733	\$ 56,635,499	\$ 226,591,729	15.22%
2025	\$ 516,512,090	\$ 45,812,952	\$ 227,993,112	\$ 1,602,898,537	\$ 57,947,804	\$ 284,539,533	18.42%
2026	\$ 562,325,042	\$ 45,545,040	\$ 273,538,152	\$ 1,660,578,429	\$ 57,679,892	\$ 342,219,425	21.35%
2027	\$ 607,870,082	\$ 45,545,040	\$ 319,083,192	\$ 1,718,208,588	\$ 57,630,159	\$ 399,849,584	24.08%
2028	\$ 653,415,122	\$ 45,545,040	\$ 364,628,232	\$ 1,775,888,480	\$ 57,679,892	\$ 457,529,476	26.63%
2029	\$ 698,960,162	\$ 45,277,128	\$ 409,905,360	\$ 1,833,300,460	\$ 57,411,980	\$ 514,941,456	29.00%
2030	\$ 744,237,290	\$ 45,545,040	\$ 455,450,400	\$ 1,892,571,808	\$ 59,271,348	\$ 574,212,804	31.32%
2031	\$ 789,782,330	\$ 45,545,040	\$ 501,263,352	\$ 1,952,160,801	\$ 59,588,993	\$ 633,801,797	33.49%
2032	\$ 835,595,282	\$ 45,812,952	\$ 546,540,480	\$ 2,011,164,237	\$ 59,003,436	\$ 692,805,233	35.49%
2033	\$ 880,872,410	\$ 45,277,128	\$ 592,353,432	\$ 2,070,703,497	\$ 59,539,260	\$ 752,344,493	37.41%
2034	\$ 926,685,362	\$ 45,812,952	\$ 637,630,560	\$ 2,129,756,666	\$ 59,053,169	\$ 811,397,662	39.18%
2035	\$ 971,962,490	\$ 45,277,128	\$ 683,443,512	\$ 2,191,334,979	\$ 61,578,313	\$ 872,975,975	40.99%
2036	\$ 1,017,775,442	\$ 45,812,952	\$ 728,720,640	\$ 2,252,427,201	\$ 61,092,222	\$ 934,068,197	42.63%
2037	\$ 1,063,052,570	\$ 45,277,128	\$ 774,533,592	\$ 2,314,005,514	\$ 61,578,313	\$ 995,646,510	44.20%
2038	\$ 1,108,865,522	\$ 45,812,952	\$ 819,810,720	\$ 2,375,097,736	\$ 61,092,222	\$ 1,056,738,732	45.67%
2039	\$ 1,154,142,650	\$ 45,277,128	\$ 865,623,672	\$ 2,436,676,049	\$ 61,578,313	\$ 1,118,317,045	47.09%
2040	\$ 1,199,965,602	\$ 45,812,952	\$ 910,900,800	\$ 2,500,105,722	\$ 63,429,673	\$ 1,181,746,718	48.50%
2041	\$ 1,245,232,730	\$ 45,277,128	\$ 956,445,840	\$ 2,563,803,307	\$ 63,697,585	\$ 1,245,444,303	49.82%
2042	\$ 1,290,777,770	\$ 45,545,040	\$ 1,001,990,880	\$ 2,627,500,892	\$ 63,697,585	\$ 1,309,141,888	51.06%
2043	\$ 1,336,322,810	\$ 45,545,040	\$ 1,047,535,920	\$ 2,691,198,477	\$ 63,697,585	\$ 1,372,839,473	52.25%
2044	\$ 1,381,867,850	\$ 45,545,040	\$ 1,093,080,960	\$ 2,754,896,062	\$ 63,697,585	\$ 1,436,537,058	53.38%
2045	\$ 1,427,412,890	\$ 45,545,040					

* Total tax base and Residential tax base outside Forsyth including all M&O exemptions.

Application of Credits Against Impact Fees

The property tax credit projections in the previous two tables are summarized in the following table.

Table 62: Property Tax Credits - New Growth

Tax Credit - Countywide			Tax Credit - Outside Forsyth		
Year	For Fees Based on:		Year	For Fees Based on:	
	Housing Units*	Day- Night Population*		Housing Units*	Day- Night Population*
2022	12.02%	4.88%	2022	12.05%	4.32%
2023	21.34%	9.28%	2023	21.36%	8.22%
2024	29.00%	13.32%	2024	29.01%	11.87%
2025	35.23%	17.00%	2025	35.27%	15.22%
2026	40.47%	20.50%	2026	40.54%	18.42%
2027	44.92%	23.71%	2027	45.00%	21.35%
2028	48.75%	26.66%	2028	48.83%	24.08%
2029	52.09%	29.40%	2029	52.17%	26.63%
2030	55.01%	31.94%	2030	55.08%	29.00%
2031	57.60%	34.47%	2031	57.67%	31.32%
2032	59.94%	36.78%	2032	59.99%	33.49%
2033	61.96%	38.91%	2033	62.05%	35.49%
2034	63.87%	40.93%	2034	63.92%	37.41%
2035	65.52%	42.79%	2035	65.60%	39.18%
2036	67.10%	44.75%	2036	67.15%	40.99%
2037	68.47%	46.48%	2037	68.55%	42.63%
2038	69.80%	48.13%	2038	69.85%	44.20%
2039	70.95%	49.65%	2039	71.03%	45.67%
2040	72.09%	51.12%	2040	72.14%	47.09%
2041	73.08%	52.65%	2041	73.15%	48.50%
2042	74.06%	54.04%	2042	74.10%	49.82%
2043	74.93%	55.32%	2043	74.98%	51.06%
2044	75.75%	56.55%	2044	75.81%	52.25%
2045	76.53%	57.70%	2045	76.58%	53.38%
Average	52.43%	32.14%	Average	52.49%	29.29%
Median	57.60%	34.47%	Median	57.67%	31.32%

* Average Annual Mid-Year (July 1) number.

* Average Annual Mid-Year (July 1) number.

The left-hand portion of Table 62 relates to tax credits that would apply to public facility categories that serve the entire county, such as **the Sheriff’s office and parks & recreation projects**. The right-hand portion applies to the Fire Departments capital improvements, since Forsyth has its own Fire Department.

Within each portion of the table, the tax base generated only by new residential growth and by the combination of residential and nonresidential growth are shown. These figures would apply to projects for which only residential growth would be assessed impact fees (i.e., libraries, recreation facilities and animal control) and to projects that serve both residential and business uses, such as the **Sheriff’s Office** and road improvements.

In any given year, the percentage from the applicable '**% New Growth**' column for that year would be applied as a credit against any portion of an impact fee project that is intended to be expended that year which is not impact fee eligible.

By way of example, if a particular project were only 80% impact fee eligible, then the other 20% would be expected to be generated from non-new growth sources since the '**ineligible**' portion would be the responsibility of the current residents and businesses in the county. Assuming property taxes are the funding source for the non-eligible portion, it must be recognized that some of that 20% would, in fact, be generated by new growth. The solution is to find the percentage of new growth participation in property taxes for the particular year of expenditure for the particular type of project.

The ineligible portion of a parks & recreation project in 2030, for instance, would garner 55.01% in property tax revenue from new residential growth. Thus, the impact fee eligible portion of such a project would be reduced by that percentage (the ineligible 20% of the total cost times 55.01%). **The object, in the long run, is to assure that new growth pays no more than its 'fair share' of the cost of facilities that are needed to specifically serve it through this combination of impact fees paid and property tax generated, while the existing residents and businesses pay their fair share of the cost that specifically serves only them.**

The same scenario applies to public facility expenditures for projects that are funded by both residential and nonresidential development, such as road improvements. These types of projects are based on both residential and nonresidential growth—**known as the 'day-night' population. As in the first example, the ineligible portion of such a project expended in 2030 would be funded by 31.94% of the total tax base. This percentage would be applied to the ineligible amount of the project cost to establish the credit that is applied.**

■ Other Fees and Charges

In addition to the net impact fees for each public facility category, there are two additional charges than can be assessed in an impact fee program. Based on the definition of 'system improvement costs' (see the Glossary), there are possible impact fee charges beyond the categories already discussed that are allowed under state law. These may be directly or indirectly related to the cost of capital projects and can include a fee for the administration of the impact fee program as well as a fee to recoup the cost to prepare the Capital Improvements Element. Specifically, DIFA allows for the collection of impact fees reflecting:

"administrative costs, provided that such administrative costs shall not exceed 3 percent of the total amount of the costs"

And,

"expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element".

Program Administration

A surcharge of 3%, the maximum allowable under state law, has been added to the subtotal of impact fees for the individual categories. The fees collected in this category can be used for all costs related to the administration of the impact fee program and are reported annually to the State just like the other service categories. Like any fee, this must have some rational and reasonable connection to the service rendered. Commonly, the administrative fee collected is used to offset some or all of the cost to handle impact fee calculations by the building permit staff, some or all of the cost for the finance department to process, record and distribute impact fees, and some or all of the cost for the management and oversight of the program by administrative staff. In addition, a 1.5% surcharge for the recoupment of the cost to prepare the Capital Improvements Element has been added to the subtotal of the individual category impact fees in addition to the administration fee.