

The top half of the cover features a photograph of a building with classical architectural details, including columns and arches, partially obscured by lush greenery and several vibrant red roses in the foreground. The scene is brightly lit, suggesting a sunny day.

Union County

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UNION COUNTY 2050 COMPREHENSIVE PLAN

RECOMMENDED BY THE UNION COUNTY 2050
COORDINATING COMMITTEE ON FEBRUARY 23, 2021

ADOPTED BY THE UNION COUNTY BOARD OF
COMMISSIONERS ON AUGUST 16, 2021

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THANKS AND ACKNOWLEDGEMENTS

Union County 2050 is a citizen-led plan. Hundreds of residents provided their input through the three phases of the plan, and dozens of residents served on the six different committees that evaluated information and input to develop a vision, preferred scenario, and overall comprehensive plan. The Union County Board of Commissioners sincerely thanks them for their diligent work over the 14 months they committed to completing this plan. A special thanks goes to Archie Morgan, who served as the chairman for the coordinating committee, and personally presented updates and plan recommendations to the board of commissioners. The following people served on these boards at time of adoption in 2021.

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EXECUTIVE SUMMARY



The committee members and the public identified traffic congestion, developmental density, rural character, agri-business, flooding, safe drinking water, and broadband internet access as areas of concern.

In the past 30 years Union County has added over 150,000 residents and is projected to add nearly the same amount in the next 30 years. Based on the impacts and changes over the previous 30 years, Union County has adopted a new comprehensive plan that takes an active position to address issues created or exacerbated by growth, while establishing clear guidance on where and how future growth should occur. This plan was created during the unprecedented COVID-19 pandemic, and its impacts on how people work, attend school, and shop have highlighted Union County's advantages as well as weaknesses. Many workers who previously endured long commutes to downtown Charlotte are now able to work from home, which makes Union County's quiet neighborhoods, excellent schools, and lower taxes an even bigger draw for growth. Conversely, people now realize the need for outdoor recreation and reliable broadband internet. The conclusion drawn from the COVID-19 crisis and regional growth analysis is that Union County will continue to grow, and the mandate for Union County 2050 is to determine where and how that growth should occur.

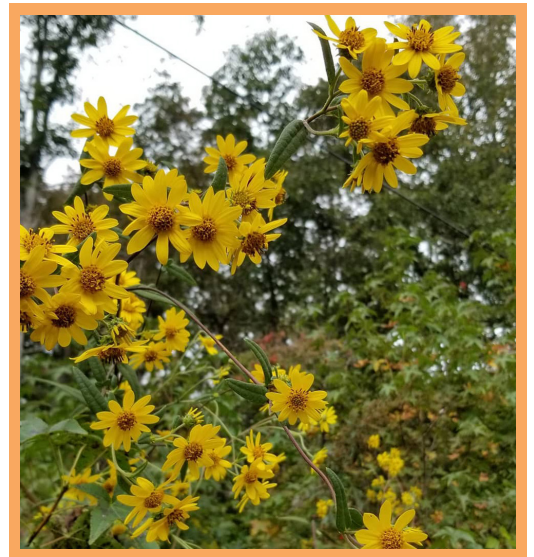
The Union County 2050 comprehensive plan reflects the work of dozens of community leaders, and input from hundreds of residents. The County is home to many engaged and talented people, and over 60 residents dedicated more than a year of their time to identify areas of concern, learn about options to address those concerns, consider the tradeoffs, and select strategies to include in this plan. The committee members and the public identified traffic congestion, development density, rural character, agri-business, flooding, safe drinking water, and broadband internet access as areas of concern. Some of these issues can be addressed at little to no cost to the County through revising development regulations. Other issues, such as transportation or broadband internet, will require committing funds. The County Commissioners agreed that Union County should commit funds to address these issues.

Union County 2050 supports the individual visions of the County's 14 municipalities, which are home to more than 70% of the County's residents. The County looks forward to partnering with the municipalities on initiatives to address mutual areas of concern.

Meeting the vision of Union County in 2050 will require sustained commitment by Union County, its municipalities, and outside partners. For example, the two transportation planning organizations representing Union County would need to pass resolutions supporting a future interstate designation for US 74. The North Carolina Department of Transportation is expected to continue to be a reliable partner in applying for transportation grants and implementing mutually supported projects to address congestion and safety.

The Union County Planning Board and Board of Commissioners have considered the observations, community input, analysis, and recommendations in this plan and support its implementation. Union County 2050 is truly a comprehensive plan. This plan makes recommendations to address public health, environmental protection, infrastructure, and economic development in meaningful and reasonable ways. Union County has effectively engaged its residents in innovative ways over the course of the year long process, and the recommendations found in this plan reflect that input.

This plan makes recommendations to address public health, environmental protection, infrastructure, and economic development in meaningful and reasonable ways.





INTRODUCTION

A comprehensive plan is the official adopted statement for future development of a community. *Union County 2050* analyzes existing conditions and emerging trends in the County, describes the process for gathering public input on future goals, establishes a vision for future development, and outlines steps for achieving that vision. The Plan will serve as the foundation for making land use and public investment decisions for the next nearly 30 years.

The Union County Board of Commissioners determined in early 2019 that the current Union County Comprehensive Plan, adopted in 2014, needed to be updated. This decision was motivated by significant changes in the County since the former plan was adopted in 2014, and is consistent with North Carolina planning legislation (Chapter 160D) advising that comprehensive plans must be “reasonably maintained.”

The 2014 Plan

The *2014 Union County Comprehensive Plan* was developed between 2012 and 2014, as Union County and the rest of the nation were recovering from the Great Recession, and reflected a 20-year horizon. At the same time, Union County developed a transportation plan that supported the comprehensive plan recommendations. The County was wrestling with a tax base heavily skewed towards residential, while paying off tens of millions of dollars in school bonds used to pay for multiple new elementary, middle, and high school facilities. In the previous decade, Union County had been the fastest growing county in North Carolina, and there was concern about accommodating and paying for the impacts of growth. Some notable accomplishments resulting from the plan were:

- *Pedestrian requirements along many roads as a part of the development process*
- *Critical intersection program to prioritize transportation investments*
- *Allowing conditional rezonings to facilitate commercial development approvals*

Motivation to Update the 2014 Plan

The 2050 Comprehensive Plan process began several months before the COVID-19 pandemic struck the nation, changing many daily routines and assumptions about how a community should operate. A downturn in economic activity affected the nation, although Union County’s position as a suburban and exurban part of the Charlotte metropolitan region began to be seen as an advantage as people were asked to work from home more frequently, and “Baby Boomers” accelerated their plans to retire from higher cost and denser areas.

When the 2014 plan was developed, the County was still recovering from the recession, and development was slow. By 2019, Union County had gained over 20,000 residents and recession recovery was complete. During the 2014 planning process, the County recognized the need to accommodate a range of housing types. The resulting land use plan identified areas for “mixed-residential” development, meaning the County would consider rezonings for higher density and attached housing developments. Developers responded to this new plan, and rezoning applications increased from one or two per year to one or two per month. At the same time the North Carolina legislature reduced the ability of municipalities to use extra-territorial jurisdiction (ETJ) and annexations to guide development on their periphery. The result was frequent requests to rezone to more intensives uses on the edges of municipalities. Municipal leaders and residents frequently spoke at public hearings in opposition to developments. The County Commissioners wanted to determine a better way for planned growth to reflect municipal desires, so they initiated the process with a growth summit in the summer of 2019.

Union County 2050 Plan Development Process

The County Commissioners started the comprehensive planning process with a two-day county retreat, held August 28-29, 2019, at the Union County Agricultural Center. Each of the 14 municipalities was invited to present their respective visions and desired outcomes of a County comprehensive plan. Twelve of the 14 municipalities presented to the Commissioners, with the input confirming the importance of County decisions on the ability of the municipalities to achieve their aspirations. Water and sewer was reported as the most critical concern, but approved developments on the edge of their municipalities was frequently mentioned. Input was also captured in a survey sent to each of the municipalities in advance of the retreat. The survey results highlighted a trend of multiple municipalities looking to develop their downtowns and other public spaces, responding to changing residential housing demands, and addressing stormwater concerns.

The Planning Department proposed a one-year schedule for updating the plan, with a robust citizen oversight role. The plan would be guided by citizens appointed to five focus areas, along with municipal staff serving as liaisons on a sixth subcommittee. This Municipal Subcommittee allowed the County to provide the municipalities with current details of the plan, as well as to provide a forum for the municipalities to provide updates on their respective plans. The focused work of the subcommittees would be presented and discussed by the Coordinating Committee.



A representative from each of the five focus areas, plus five direct appointees would serve on the Coordinating Committee. This committee would balance the input and issues identified by each of the subcommittees and make the final decisions at key milestones throughout the process.

Union County 2050 reflects a 30-year planning horizon that corresponds to the regionally adopted housing and jobs projections used in transportation planning and other multi-county initiatives. This allows the County to take advantage of growth allocation outputs that reflect continuing development trends based on the current development pressure and land use patterns in Union County and elsewhere in the region.

The plan process was divided into three phases – visioning, scenario planning, and plan development.

1. Visioning – the first four months of the process involved subcommittee, Coordinating Committee, and public input into what would describe an ideal Union County in 2050. The adopted vision served as the guide to help determine an appropriate range of alternative scenarios to consider evaluating in the second phase of the process, as well as what strategies would be appropriate to consider in the plan development phase of the process.
2. Scenario Planning – the second four months allowed the subcommittees, Coordinating Committee, and the public to consider several versions of Union County in 2050 that achieved the adopted vision in different ways. These scenarios provided residents and committee members options from a range of land use changes, regulatory tools, and new programs to address identified issues.
3. Plan Development – once a scenario was selected, the subcommittees and Coordinating Committee were tasked with developing the range of goals and strategies to help make the scenario a reality.

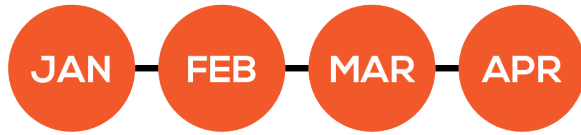
Together these three phases allowed the committee members, general public, and county commissioners to engage in the process and provide effective input and guidance and then see the impacts of their decisions on the next phase of the process.

2019



County Retreat & Municipal Survey

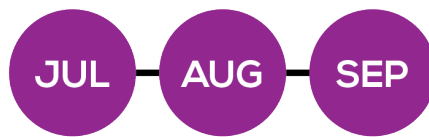
Committee Recruiting & Appointments



Visioning



Scenario Building



Scenario Adoption

2021



Plan Development



Adopted Vision Statement

A vision for Union County was adopted by the Coordinating Committee on May 26, 2020, after a month of public engagement, as well as numerous meetings of the subcommittees. The subcommittees, Coordinating Committee, and the public had four distinct visions to choose from. The competing visions were based on over 200 pieces of input from the subcommittees and included observations of the impacts of the visions to help the committee members and the public understand their benefits and limitations. The adopted vision below reflected the input of the committees and was adopted by the Coordinating Committee.

Union County in 2050 is a place defined by connections, where local governments work together on targeted issues. There are clearly communicated plans for growth and infrastructure improvements, and resources are committed to their implementation. Union County is a growing community where there is:

- Increased capacity to address education, transportation, water, public safety, and other multi-jurisdictional issues*
- High-density residential, retail and employment options in designated areas*
- Convenient accessibility between retail, residential, and employment land uses*
- Complementary development patterns along corridors*
- Preserved rural character outside of water and sewer coverage areas*
- Recognition and support of agriculture as a key industry*
- Enhanced community connections for arts, agri-tourism, and parks and recreation*



IMPLEMENTATION STRATEGIES

Implementation Strategies

With the understanding that Union County cannot address all issues, the following recommendations answer three questions: is there an identified issue, is there an effective strategy, and is it a feasible strategy?

The recommendations are organized by topic with background information and results of citizen and stakeholder input on identified issues. The report then lists potential strategies, with explanations of why certain ones were not ultimately included in the plan recommendations. The strategies that answered yes to the three questions listed above are included in the appropriate subject area. The strategies are presented in the following format:

Strategy 1

Issue: What is currently happening in the county that needs to be addressed?

Strategy: What should be done to address the issue?

How: How to address the issue?

Who: Who is the lead agency or department?

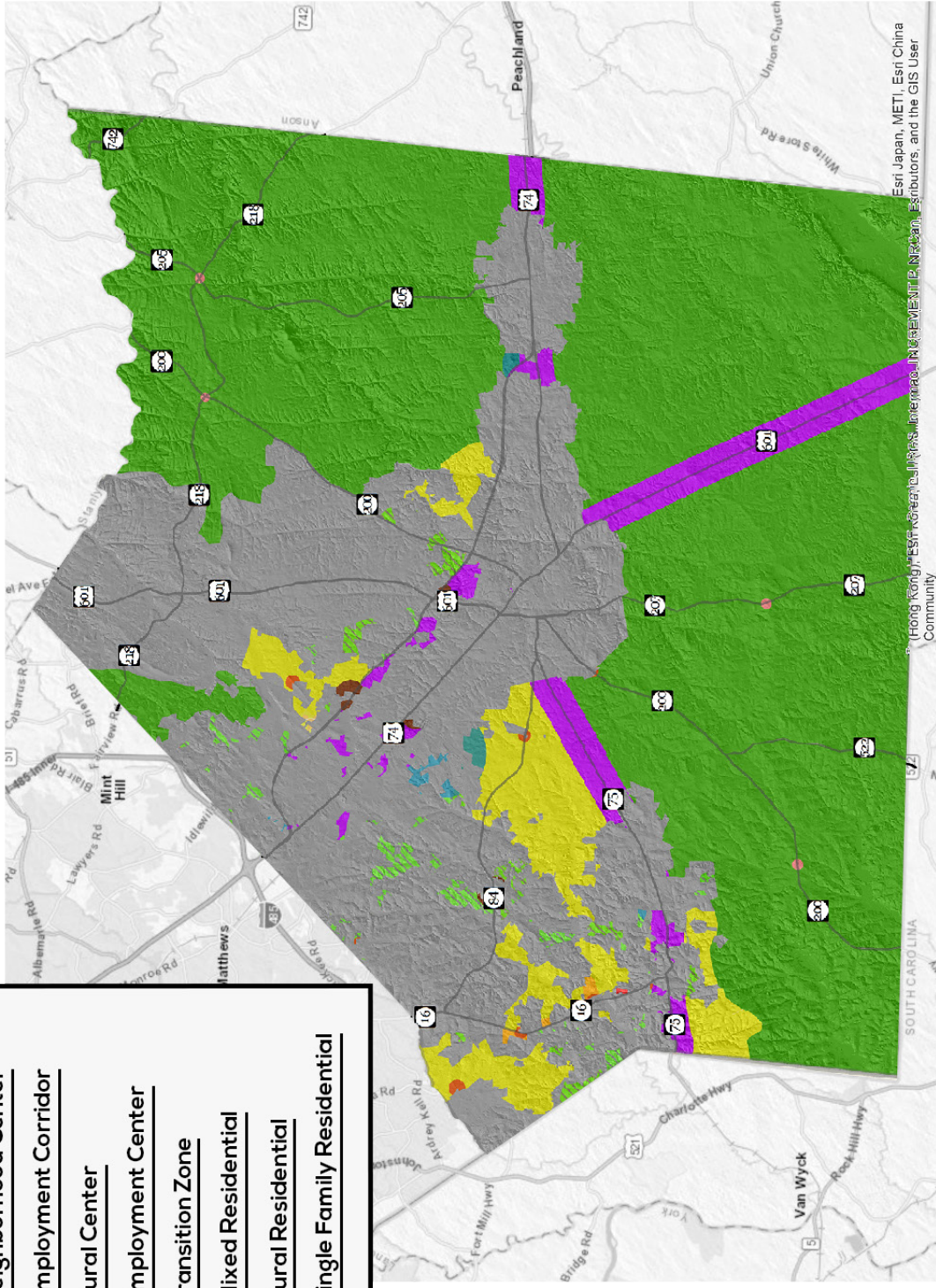
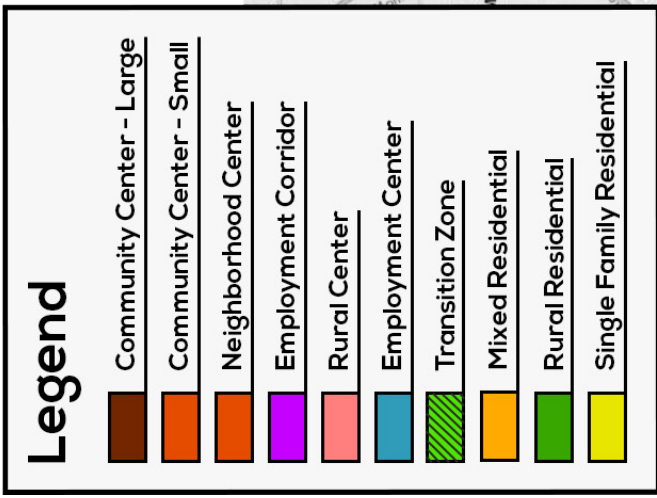
Future Land Use Plan

Many people use “land use plan” and “comprehensive plan” interchangeably to describe the planning process. A land use plan is just that – a guidance for a series of land use recommendations to encompass the study area. A land use plan does not make recommendations on the underlying conditions that impact what land uses are and are not appropriate in certain areas. A comprehensive plan makes land use recommendations, but also makes recommendations to the infrastructure systems, policies and regulatory environment that impact and influence appropriate land development.

The Future Land Use Plan discusses a range of considerations on how to impact systems and policies that help determine what land uses are appropriate in a particular area. This section of the plan looks at what land uses were considered, and what was ultimately recommended for adoption. The following land use districts are found in the 2014 land use plan component of the comprehensive plan. These categories carry over into the 2050 comprehensive plan with limited changes to the range of uses, but with more changes on where these districts are located.

While Union County has seen dramatic growth, the amount of growth permitted and processed by the Union County Planning Department is much less than that total. Since 2000 only 30 percent of the more than 37,000 housing units permitted in the county were in unincorporated Union County. The *Union County 2050 Comprehensive Plan* should therefore not be considered a land use plan for the entire county. While the recommendations cover a majority of the land mass in Union County, the recommendations will affect a minority of future developments, as much of the growth in the County occurs within municipalities.

Union County 2050 Land Use Map



Esri Japan, METI, Esri China

(Hong Kong), Esri Korea, InRoads, Intermap, Inc., Esri Maps, ArcView, ArcView 3D, ArcView, Esri, and the GIS User

The map associated with a future land use plan is the most visible representation of the County's vision of the future. However, one map with a range of colors for different land use categories masks myriad details that make the different land use types interact with the least amount of conflict. This is because the land use map cannot depict the buffers, stormwater systems, sidewalks, tax structure, road ownership, fire coverage, and other considerations that make a community work. Despite these limitations, a land use plan and corresponding map are very powerful tools to inform property owners and developers about supported land uses in specific areas.

In addition to the land use map, the text associated with the future land use plan will provide guidance as inevitable unique situations arise. For instance, when a "mixed-residential" district, would apartments be allowed anywhere within that district, or would higher density uses like apartments be restricted to that zone and also be required within that zone to be adjacent to commercial areas? This section of the plan addresses such issues to hopefully provide sufficient guidance to the public, property owners, and developers so that all parties have an equal understanding of the types of uses recommended for specific areas. Unfortunately since this plan encompasses nearly 30 years of recommendations, it is not strictly focused on preserving all current land uses. This may cause conflict as proposed higher intensity land uses are supported as a corridor is widened and utilities become available.

Rural Residential: Rural residential areas are those parts of the county expected and intended to retain an agricultural or low density residential pattern. For purposes of this plan, low density means either a lot size or a development density of no more than one unit per acre. To help preserve rural character, major subdivision developments (those resulting in more than eight lots) will be required to set aside open space along road frontage or surrounding important environmental features. Where water and/or sewer service is available, smaller lot sizes are supported, but with significant open space requirements to result in the overall density of no more than one unit per acre.

Single-Family Residential: Single-family development is recommended in the more populated parts of the county. Overall density for developments is no more than two units per acre. Townhouses and other types of multi-family development are not supported in these areas unless in close proximity to commercial areas. When there is no water or sewer utility infrastructure present, typical density allowed will be one unit per acre. Where such utilities are present, smaller lot sizes would be supported to yield two units per acre.

Mixed Residential: Small lot residential, townhouses, and apartments are recommended in these parts of Union County. These areas have access to major roads, utilities, and easy access to existing or proposed commercial nodes, and are therefore appropriate for high density development.

Commercial: Commercial development is identified at key intersections throughout Union County. These intersections are identified on the map, and reflect a balanced perspective of adjacent residential development, utility availability, and road access. These different types of commercial nodes are described below:

Rural centers: Rural Centers function as small scale civic and commercial centers for rural areas of the County. These Centers are clusters of low-density, non-residential uses located at a crossroads of two or more major or minor thoroughfares. Appropriate uses include

convenience stores, civic buildings, gas stations and others. Rural Centers provide limited commercial and community services while still maintaining the rural nature of the community.

Neighborhood Centers: Neighborhood Centers are located near concentrations of existing or planned residences, in areas with access to major thoroughfares and utilities and where not in competition with existing centers. These Centers incorporate commercial uses that serve the surrounding neighborhoods, including grocery stores, retail establishments, restaurants and services. Typical Neighborhood Centers range from 30,000 square feet to 125,000 square feet of retail space, and have a service area of one-to-two miles. Key characteristics of a Neighborhood Center include an interconnected street system that provides access to shopping, services, housing and amenities, and a well-connected pedestrian and bicycle network.

Small Community Center: A Small Community Center typically serves a larger population and includes 125,000 square feet to 400,000 of square feet of leasable space. The typical trade area of a Community Center is three to-six miles. Small Community Centers should be anchored by a commercial use such as a grocery store or retailer.

Large Community Center: A Large Community Center serves a greater population and includes 400,000- 650,000 square feet of leasable space. A Large Community Center typically has more than one large retailer as anchor and should also include between 15 – 40 businesses that include general merchandise stores, restaurants and convenience services.

Employment Corridors: Employment Corridors have access to transportation infrastructure such as railways, airports and major roads, and have available land within a close proximity to similar uses. Employment Corridors connect employment nodes and other large job centers throughout the County and neighboring counties. A variety of employment uses may be appropriate along these corridors. Dependent on location and adjacent facilities, development uses that may be appropriate include distribution, logistics, aeronautics, industrial and agri-business. Connectivity and roadway capacity should be prioritized in these areas to encourage opportunities for job growth.

Employment Centers: Employment Centers facilitate employment growth in key areas that have access to transportation and adequate utility infrastructure and existing viable employment and available land suitable for employment. Uses encouraged near these centers include, but are not limited to, light industrial, warehouse, office, research, tech-flex and technology. Employment Centers should incorporate a limited amount of supporting commercial uses, such as restaurants and convenience retailers to serve employees, as well as multifamily residential uses including conveniently-located apartments. However, these uses should only be situated where not in conflict with existing employment land uses and should not be built in such a way as to jeopardize the use of those lands most suitable for office or industrial development.

Strategies

[Clustering Lots](#)

[Increased Open Space Requirements](#)

[School Siting](#)

[Transition Zones](#)

Infrastructure

A key difference between a land use plan and a comprehensive plan is the interplay of land use recommendations and the infrastructure necessary to support the land use patterns depicted in the plan. The preferred land use plan will inform the supporting infrastructure systems about where growth is supported. The ideal focus areas for future growth will be those areas with infrastructure capacity and supported by land use planning recommendations.

The following sections of the document will describe the status of various infrastructure systems, such as transportation, schools, water and sewer, parks and recreation, and emergency management.

Schools

Despite projections of tens of thousands of new residents in Union County over the next decade, Union County Public Schools does not project construction of any new schools solely for overcrowding in the next ten years, although it is developing plans to upgrade or replace old facilities. Several new charter and private schools have been built in the western parts of Union County since 2017, which adds capacity where student enrollment may continue to increase. Overcrowded schools are a reality in some areas of the County, but UCPS recognizes that the time between a crowded school and actually opening a new school to address that issue could be a decade. By that point an area may “age out” and the overcrowding issues may have lessened. Therefore, the decision to commit to a new school is not one to take lightly. New schools cost tens of millions of dollars, and represent a significant financial commitment that must address a need that extends beyond years and into decades.

Alternatively, this comprehensive planning process explored the impacts of school siting decisions on land use and transportation. A strategy is to change schools from a “by right” land use to a “conditional use”, which means that the Union County Zoning Board of Adjustment would consider a new school (private, charter, or public) and consider its use on a particular piece of land. The board would consider transportation and land use impacts to determine if a school was appropriate for that location.

Strategies

School Siting

Broadband Internet



Transportation

In 2017 the Union County Board of Commissioners committed \$100,000 to a roundabout project at the dangerous intersection of Rocky River, Parkwood School, and NC 200. This was the first time that Union County committed county funds to a road project. Union County, like all other 99 counties in North Carolina, does not own roads. Yet despite this lack of direct responsibility, Union County is heavily involved in the transportation planning process and regularly coordinates with the NCDOT, regional transportation planning organizations, and the county's municipalities to cooperatively plan and implement improvements to the transportation system. *Union County 2050* will help establish priorities on the use of limited funds, activities the County will look to undertake to increase the capacity of the county to help implement an improved system, and ways that the county can guide growth to best utilize the system we have.

Transportation in Union County consists of more than just roads, although for the 91 percent of residents who drive to work alone by themselves or with others, the road network is of utmost importance. Union County Transportation is the county-run demand-response public transportation system that serves all of Union County. This public transportation system mainly serves the elderly and disabled to take them to medical appointments, but the general public is eligible for trips.

The strategies included in the adopted plan help economic development through a vision for interstate status for the US 74 corridor, manage traffic by tying rezonings to completing funded road improvements, and enhanced land use coordination with municipalities.

Strategies

[School Siting](#)

[Transition Zones](#)

[Interstate Access](#)

Water and Sewer

Union County Public Works and the City of Monroe are the only two providers of water and sewer service in Union County. Union County Public Works meets the needs of nearly 50,000 customers for clean, great-tasting, drinking water throughout unincorporated Union County and 13 of the 14 municipalities within the County. UCPW also provides wholesale water supply to the Town of Wingate and has a water sales agreement with the City of Monroe to sell up to 2 million gallons per day to the City as part of their long-term water supply strategy.

Potable Water: Union County has worked to address water supply and reliability concerns by creating connections to additional raw water sources. The largest initiative is the Yadkin Regional Water Supply Project (YRWSP). In the past several years this project has made significant progress towards securing a long-term, sustainable water supply for Union County. The project will reduce the County's dependence on the Catawba River and support economic growth within Union County and neighboring regions. The YRWSP is separated into two projects: the intake facility and raw water pipeline and the water treatment plant and finished water pipeline. Union County selected the progressive design-build method to deliver the projects. A route for the raw water and finished water pipeline has been identified and right-of-way acquisition has begun.



Utility Impact on Land Planning: Water and sewer access play a significant role in attractiveness to development, and the *Union County 2050 Comprehensive Plan* recognizes this influence without making inappropriate land use recommendations for the sole purpose of accommodating utility access.. Instead of supporting rezonings to allow higher-density developments due to the availability of water and sewer, the Unified Development Ordinance (UCO) should be amended to allow smaller lot sizes to take advantage of utilities, but with no overall increase in density through traditional subdivision rules. Undisturbed land would remain as open space, preserving rural character and environmental features. Conversely, Union County Public Works does not oppose capacity expansion or installation of new lines to assist municipalities in support of economic development or land planning efforts. The cost of these system expansions would be the responsibility of the municipalities.

Strategies

[Clustering Lots](#)

[Transition Zones](#)

[Well Testing](#)

Parks and Recreation

Union County Parks & Recreation manages three parks. The largest and most well known is Cane Creek, a reservoir, camping area, and recreation resource south of Waxhaw, drawing residents from throughout the region. Fred Kirby Park near Lake Park and Jesse Helms Park near Wingate are smaller, but still well used. The County relies on three recreation associations to organize sports leagues. Piedmont, Waxhaw, Weddington-Wesley Chapel, and Porter Ridge athletic associations are each home to active youth organizations. Several municipalities also maintain parks and recreation departments that organize leagues.

According to Union County Parks and Recreation leadership, the most frequently requested amenity for the department is trails and greenways. This was reflected in the visioning and scenario comparison phases of the community outreach process. Outside of existing park facilities, the county has not accepted maintenance responsibility for trails or other facilities built as part of any neighborhood. In addition, the County has not committed to building trails or greenways identified in the Carolina Thread Trail, County Multi-Modal Plan, or Parks and Recreation Master Plan. Individual municipalities have built such facilities in recent years, and based on recent COVID-19 distancing requirements, trails and greenways have been in high demand.

The committees did not consider where new parks should be located but did discuss whether to recommend additional funding and commitments be made to develop new facilities. This expanded role for the County was supported as a partnership with municipalities. This would allow the additional capacity to be located where more people live, as well as leverage municipal funding to pay for additional facilities. This partnership will ideally result in multi-jurisdictional trails and similar amenities, based on municipal plans and initiatives.



Strategies

[Clustering Lots](#)

[Increased Open Space Requirements](#)

Environment

Union County recognizes that a healthy environment is important to a healthy community. However, when developing a comprehensive plan, receiving input for “protecting the environment” can be a public mandate loaded with meaning and misunderstanding. The environment at its most broad definition would include the air, ground, water, subsurface, and all living creatures within it. All modern human activities impact the environment in some way. Existing state and federal environmental regulations will continue to factor in transportation planning and land development processes to protect air, water, and land and the flora and fauna within it. The question for all residents of Union County to consider is what value to assign to the environment, and what restrictions or requirements they are willing to impose upon themselves to preserve or enhance the natural resources of the county. The County also understands that opinions on environmental regulations vary throughout the County. The following recommendations are based on research, presentations, and committee members’ expertise.

Preserving wetlands can reduce the impact of flooding. Shade provided by mature trees can reduce air conditioning costs. Cleaning trash and debris from the road reduces the incidence of roadkill and car-animal crashes. Union County 2050 undertook a comprehensive look at environmental issues in the county, as defined by a subcommittee of 12 residents, as well as public input as a part of the year-long plan development process, in order to identify areas of concern, research effective strategies to address those concerns, and then confirm local willingness to support implementation of proposed strategies.

Stormwater

Stormwater and flooding concerns have become a widespread issue in Union County. In the fall of 2018 more than 70 roads were closed at one point due to Hurricane Florence, and again in February 2020 due to Winter Storm Kade following weeks of wet weather. Proposed rezonings are often opposed by the public due to concerns of increased runoff. Unfortunately the comparison of development permitted under the current stormwater regulations versus requirements of 10 to 20 years ago results in a counterintuitive conclusion – newer, more dense development often has less impact than lower density developments of a decade ago. This is because dense development results in less impervious area per capita.

The following strategies are included in the plan to mitigate stormwater impacts of development.

- *Lowering density for major subdivisions in rural areas to increase buffers along streams and wetlands*
- *Increasing the storm event a development is required to meet from a 25 year storm to a 50 or 100 year storm standard*
- *Requiring major subdivisions (more than eight lots) and all commercial development greater than one acre to provide on-site detention*

Strategies

[Stormwater](#)

[Increased Open Space Requirements](#)

[Clustering Lots](#)

[Transition Zones](#)

[Litter Task Force](#)



Trees and Open Space

Union County and its municipalities have access to a professional forester, who is housed within the agricultural extension office. The urban forester presented information for the benefit of the Environmental Subcommittee. He advised the committee on the benefits of trees, how to accommodate trees into site plans, and what current regulations and trends are at odds with the professed objectives of the current comprehensive plan. Trees do not tolerate disturbed ground, so the intent of preserving large trees immediately adjacent to new development frequently results in trees dying after a period of time.

In addition, large lot subdivisions with larger contiguous stands of preserved trees may also suffer as individual property owners cut down trees or otherwise modify their property. Areas intended to remain undisturbed or otherwise serve a natural function should be placed into common areas or dedicated to a lands conservancy as a conservation easement. These areas should be contiguous with similarly protected lands on adjacent properties in order to provide a larger natural area, and provide an opportunity for any trail networks.

The following strategies are included in the plan to support preservation of tree cover and open space:

- *Lowering density for major subdivisions in rural areas to increase buffers along streams and wetlands*
- *Increasing cluster flexibility in residential areas to meet market demands for smaller lots while not exceeding density recommendations in the plan.*



Strategies

[Clustering Lots](#)

[Increased Open Space Requirements](#)

[Litter Task Force](#)

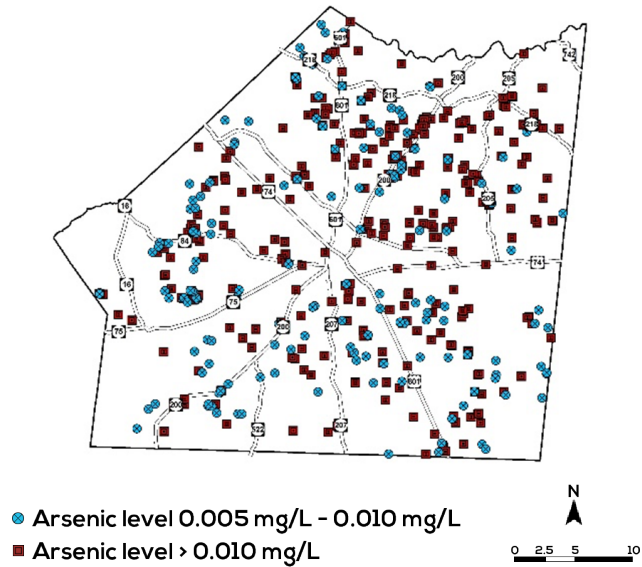
Well and Septic Systems

Over 80 percent of new development is served by public water and sewer service, but that still leaves tens of thousands of Union County residents who rely on septic service and/or well water. Union County has a high percentage of wells testing positive for unhealthy concentrations of arsenic, manganese, and other harmful substances. Union County has one of the highest concentrations of arsenic in North Carolina. Providing safe drinking water to those residents is a frequently mentioned demand of Union County. Less frequently mentioned, but no less important, are older homes (1970s and earlier) on smaller lots and served by failing septic fields. These lots are too small to locate a replacement drain field, so the residents can be faced with high costs to dig up and replace the septic field. At the extreme end of this situation, these homes could be declared uninhabitable.

Unfortunately the Union County Public Works department has limited funds to pay for water and sewer extensions to take such homes off of well and septic service. The department does not receive funds from Union County property taxes; the system is run as an “enterprise fund,” meaning that only rate payers support the system. If new capacity is added that does not result in a sufficient number of customers to pay for the extension, then the costs are subsidized by existing rate payers. Analysis of completed and proposed short line extensions concluded the cost to take one home off of a well was between \$40,000 and \$50,000.



Arsenic Concentrations in Private Wells
Union County, North Carolina
August 2008 - December 2018



The following strategies are included in the plan to support safe drinking water and mitigate impacts of septic systems:

- *Requiring well inspections for new homes as part of the land transfer process*
- *Continuing the short line water extension program to take homes with unsafe well water off of wells*

Strategies

[Well Testing](#)

[Increased Open Space Requirements](#)

Business and Economic Development

The role of residential and commercial development in the local economy was a key consideration in the development of *Union County 2050*. A dedicated subcommittee comprised of local business leaders and concerned residents was created to focus on the issues related to growth and the economy. A significant percent of Union County’s economic activities is related to residential and commercial development. Realtors, brokers, general contractors, builders, and related supporting industries employ thousands of people in Union County. Maintaining a stable and predictable development environment helps both land owners and developers. A well thought-out and implemented comprehensive plan can accomplish that goal.

The following strategies are included in the plan to support business and economic development:

- *Supporting complementary land use rezonings near commercial nodes, such as high-density residential*
- *Supporting commercial rezonings at appropriate locations, such as along major roads near population centers*
- *Allowing cluster developments in more residential zones in order to reduce infrastructure costs and disturbances to the environment*
- *Providing a predictable development process, particularly for rezonings*

Strategies

[Clustering Lots](#)

[School Siting](#)

[Interstate Access](#)

[Transition Zones](#)

[Broadband Internet](#)



Municipal Solid Waste

The Union County Public Works Solid Waste Division operates facilities for the disposal of municipal solid waste, more commonly known as garbage, construction and demolition (C&D) debris, yard waste, recyclables, and waste materials which are banned from landfills in North Carolina. These facilities are located at the County's Solid Waste Management Center and are designed to serve the needs of commercial haulers that collect garbage and recyclables from residents and businesses within the community, as well as to provide accommodation to individuals to dispose of these materials.

The Division currently operates five residential waste and recycling drop-off sites located throughout Union County to provide a convenient location for residents that do not utilize curbside collection programs to dispose of their garbage, recyclables, used motor oil, and electronics, such as computers and TVs.

Municipal Solid Waste (MSW), maintains robust volumes which is indicative of a strong economy and continued population growth in the County. There were 83,686 tons of MSW delivered into the system in FY18, which was the third-highest volume on record. The heightened levels also reflect the ease of use in the County's six residential waste and recycling drop-off sites, as well as strong relationships with commercial haulers who utilize the County's transfer station for MSW drop off.

Like MSW, Construction and Demolition (C&D) tonnage is an indicator of growth and favorable economic conditions. This sector of waste continues to grow at an astounding rate. In FY18, 34,990 tons were delivered into the system. This marks more than a 350% increase in tonnage since FY14, the highest annual volume on record.

Union County has recognized the impact of trash services on the environment, particularly in litter accumulation on the sides of roads. Union County recently approved a differential rate structure to impose higher fees on loads brought in without a covering to reduce litter blown out of the back of vehicles. This strategy has reduced the incidence of unsecured loads being brought to the county landfill, but with sustained growth projected in the county, vigilance is necessary. Volunteer groups such as Union County Litterbusters play a key role in advocating for litter clean-up, which benefits public safety, aesthetics, and wildlife. In support of this advocacy role, a strategy considered in the comprehensive plan process was to appoint a litter task force, which would identify additional strategies for addressing litter in Union County.

Strategies

[Litter Task Force](#)

[Transition Zones](#)

Community Connections

A sense of community and acceptance of diversity was a surprising need identified among committee members during the visioning process. More than two-thirds of all Union County residents live within a municipality, so the idea of civic engagement for such a large and populous county can become nebulous without appropriate definitions. More than half (eight of 14) of the municipalities in Union County were created since 1980, so it could be said these municipalities already had a significant amount of engagement to successfully complete the incorporation process. The counter to this perspective is that these newly incorporated communities are also in the fast-growing western side of the county and therefore have to continuously re-engage with newcomers, with the notable exceptions of Hemby Bridge, Fairview, Mineral Springs, and Unionville.

During the planning process, several issues requiring collective action were identified: transportation, stormwater, and trails. Moving the needle on any of these issues cannot occur without a broad base of support and commitment, both financial and political. Unfortunately, public consensus on these issues may be difficult to reach, given the differing perspectives of residents, both long-term residents and newcomers, throughout the County.



Other issues identified in Union County 2050 may not take money, but they do require political commitment. Allowing higher density residential or commercial rezonings in appropriate areas, choosing between student redistricting versus building new school capacity, implementing enhanced protections for wetland and environmentally sensitive areas, or changes to the Unified Development Ordinance (UDO) for the county does not necessarily impose a large cost on Union County, but does require making choices. Having the support of county residents makes these decisions more acceptable and durable.

What does an engaged and cohesive community look like? Is it a high voting turnout rate? Is it the percent attending a community event in the last year? Is it awareness of current events in

their municipality? Or is it a sense of engagement – that the residents feel they can and should participate in the action of improving Union County?

To help foster connections, the following strategies are included in the plan to support community connections:

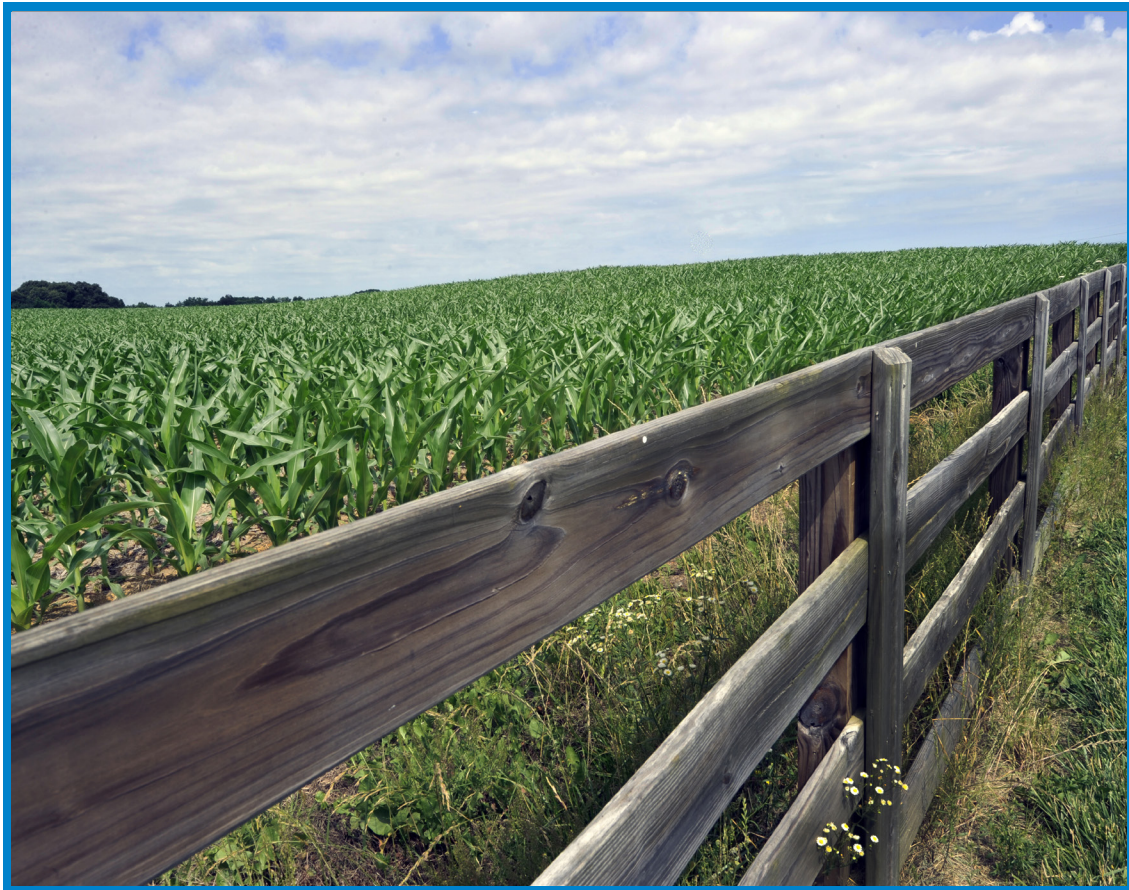
- *Support rezonings for higher density residential in immediate proximity to commercial nodes*
- *Establish transition zones for islands of unincorporated Union County so that any new development requiring a rezoning would be consistent with municipal plans and be annexed into the municipality.*

Strategies

[Litter Task Force](#)

[Broadband Internet](#)

[Transition Zones](#)



Agriculture

Union County is one of North Carolina's most important agricultural centers. Despite being home to nearly a quarter-million people, Union County is still the third-most agriculturally productive county in the state, with a half-billion dollars in annual sales (Source: Monroe – Union County Economic Development). Approximately half of all land (over 186,000 acres) in Union County was used for agricultural activities in 2017. This is down seven percent in just five years.

Despite this loss of land, Union County still is the number four county in the state for value of agricultural products sold. This productivity ranges from crop production (#1 in both soybeans and wheat) to cattle (#10) and poultry (#1 in egg layers, #2 in broilers, and #4 in turkeys). In addition to growing and raising crops and livestock, Union County is home to several animal processing plants, grain silos, and related industries.

Union County wishes to protect this industry and land use as a reflection of the county's heritage, as well as a critical aspect of the local economy. The conflict is how to protect these uses from encroaching residential development while not diminishing the opportunity for farmers to comfortably retire by selling land at prices warranted by residential development pressures.

The following strategies are included in the plan to support agriculture:

- *Advocating for, or even financially supporting, expansions of high-speed internet into rural areas with high levels of agricultural activity*
- *Advocating for interstate status for US 74 and the Monroe Expressway to support agri-business development*
- *Continuing the short line water extension program to take homes with unsafe well water off of wells*
- *Lowering density for major subdivisions in rural areas to preserve rural character*

Strategies

[Clustering Lots](#)

[Broadband Internet](#)

[Interstate Access](#)

[Increased Open Space Requirements](#)

Municipal Coordination

Approximately three-quarters of all development currently occurs within Union County's 14 municipalities. These municipalities and their visions vary greatly--from rural oriented municipalities with large lot requirements exceeding those of the county to urbanized municipalities with multi-family development, and industrial and commercial areas. Residents expect development in unincorporated Union County to blend with each of these 14 municipal visions and development standards.

The following strategies were proposed in the scenario and plan development phases of the comprehensive plan process for feedback and potential inclusion in the final document:

- *Support parks, trails and community gathering places in cooperation with municipalities*
- *Support water and sewer line extensions to support municipal revitalization and economic development initiatives*
- *Establish transition zones for islands or smaller nearly surrounded portions of unincorporated Union County so that any new development requiring a rezoning would be consistent with municipal plans and be annexed into the municipality*
- *Reduce extent of higher-density land use districts adjacent to municipalities*

Strategies

[Stormwater](#)

[School Siting](#)

[Transition Zones](#)

[Litter Task Force](#)

[Interstate Access](#)

[Broadband Internet](#)

BROADBAND INTERNET

Issue: Reliable high-speed internet has become an essential utility service for working from home and distance learning, as well as for agri-business operations. Internet service is provided by private businesses, meaning that service won't be provided in certain areas if they cannot make money from the investments. These gaps in service are affecting educational equity and economic development in Union County.

Strategy: Union County will engage with private service providers on the issues with high speed internet coverage gaps in the county, what is needed to close the gaps, and how to apply for state and federal grants to apply to upgrades to the network where such investments will otherwise not occur. Union County will also work with the school system on ways to provide internet service for students who are better served by remote learning. These initiatives will require local funding, and Union County will need to determine the appropriate revenue source to pay for these commitments.

How: Engage NC Broadband Infrastructure Office and private telecom companies on grants and network plans for expansion to increase coverage.

Who: Union County Public Schools, Union County

CLUSTERING LOTS

Issue: Water and sewer service is available in parts of Union County identified for rural residential and agricultural uses. Serving large-lot residential developments with water and sewer requires excessive infrastructure to build and maintain.

Strategy: Allow residential developments in areas designated for rural residential land uses to build on smaller lot sizes to take advantage of available utilities. This clustering of lots would not increase overall lot yield.

How: Amend the Union County Unified Development Ordinance to allow smaller lot sizes where water and/or sewer service is available. The resulting lots would still meet development standards for setbacks and other applicable concerns, and would demonstrate a reduction of infrastructure (roads, water lines, sewer lines) necessary to serve the lots compared to the status quo. An example would be a 20 acre parcel zoned R-40, but with water and sewer access. The developer could choose to still develop 20 lots, but do so on only five acres of land but creating quarter acre lots. The remaining 15 acres would remain undeveloped.

Who: Union County Public Works and Planning Departments

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INCREASED OPEN SPACE REQUIREMENTS

Issue: Residential developments with R-40 and RA-40 (40,000 square foot lots) zoning do not protect rural character or environmental features.

Strategy: Increase open space requirements to preserve undisturbed land at entrance to development and/or environmental features such as wetlands or mature tree stands to reduce impact from new development and preserve rural character.

How: Amend Unified Development Ordinance regulations for major subdivisions (eight or more lots) with 40,000 square foot lots without water or sewer service to require 20% of the overall development set aside as increased setbacks from main roads or environmental features.

Who: Union County Planning Department and Urban Forester

INTERSTATE ACCESS

Issue: Union County is considered “remote” for industrial and commercial development purposes because it does not have an interstate running through it. The NCDOT and the Charlotte Regional Transportation Planning Organization (CRTPO) have recently approved a vision for US 74 that recommends upgrades to bring the corridor to a freeway status to Wilmington. This would support a future interstate designation for the corridor.

Strategy: The US Department of Transportation has established a process for interstate designation, which would require all affected municipalities, counties, and transportation planning organizations to pass resolutions of support for such a designation. The NCDOT could then pass a similar resolution and submit a designation request to the American Association of State Highway and Transportation Officials (AASHTO), who approves such requests.

How: Union County would work with the municipalities and affected transportation planning organizations to format and pass such resolutions, and urge the NCDOT to commit to the same position.

Who: Union County Planning Department and Board of Commissioners

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STORMWATER

Issue: Union County encounters frequent and increasingly severe flooding events and runoff onto adjacent properties as development occurs.

Strategy: Expand the types of developments required to build stormwater detention facilities, and build the capacity for retaining runoff from larger storms.

How: Amend the Union County Unified Development Ordinance to require all commercial and residential developments design stormwater infrastructure to accommodate the 50 year storm.

Who: Union County Planning Department

SCHOOL SITING

Issue: K-12 schools (public, private, or charter) are allowed as a by right use in all zoning districts in unincorporated Union County. This flexibility has resulted in schools being built on smaller parcels of land, with compromises on appropriate vehicular access, buffering, and proximity from conflicting uses..

Strategy: Establish minimum standards for road access, lot size, and buffering from conflicting uses that must be met for a school to be permitted at a specific location.

How: Amend Unified Development Ordinance to establish minimum road frontage, lot size, and distance from existing industrial and related land uses to minimize conflict and impact from school development.

Who: Union County Planning Department

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LITTER TASK FORCE

Issue: Litter along quiet rural secondary roads and higher volume arterials impacts public safety, the environment, and the perception of Union County to outsiders.

Strategy: There is no one silver bullet to solve a litter issue. Materials may fly out of the back of vehicles, be inappropriately discarded by unscrupulous trash haulers, or accumulate in streams from run-off during storm events. These issues and potential activities would be researched and evaluated by a task force, who would present findings and recommendations to the Board of Commissioners for their use.

How: The Board of Commissioners would appoint a task force of citizens to research the issue, with support from County staff. This task force would be directed to develop strategies to address litter and present the recommendations.

Who: Union County Solid Waste and Planning Department

TRANSITION ZONES

Issue: Many Union County municipalities have irregular boundaries. This has resulted in numerous pockets of unincorporated land nearly or completely surrounded by adjacent municipalities. Providing municipal services to these areas is complex, and development proposals often create conflict between the county and adjacent municipalities, who often have different plans for future land uses in these areas.

Strategy: Identify these "donut areas" and establish a policy of Union County to not approve rezonings that would increase density or intensity of uses. The property owners would be advised to propose development to the adjacent municipality for rezoning and annexation.

How: Establish a transition zone designation in the land use map and pass a resolution establishing the policy of the Union County Board of Commissioners to not approve "upzoning" in these transition zones.

Who: Union County Planning Department and Board of Commissioners

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WELL TESTING

Issue: Union County has a high percent of wells testing positive for contamination, including E. Coli, coliform, Manganese, and Arsenic. These contaminants affect human health and are a common concern for residents relying on well water.

Strategy: Raise awareness of the status of drinking water in new homes using wells by requiring the results of any tests be provided to the buyer before a certificate of occupancy is issued. The decision on requiring repairs or remediation will be left to the buyer.

How: Amend the Union County Unified Development Ordinance and permitting process to require documentation that well testing has occurred and the results have been received by the buyer of the home. A certificate of occupancy will not be granted until such documentation has been provided.

Who: Union County Building Code Enforcement and Environmental Health Departments



CONCLUSION

Conclusion

Union County 2050 was developed during unprecedented times. The plan development process began in mid-2019, when working or attending school from home was not common, and public engagement was still primarily conducted through face-to-face meetings. As the end of this planning process in early 2021, much of how the world works is different, but many of the issues relating to growth remain. Availability of the internet is now central to education, working, and commerce. The value of personal interactions has been highlighted, and public health is a community concern. Despite these changes, and perhaps even because of these changes, Union County remains an attractive place to live and raise a family.

The work of dozens of County residents over more than a year resulted in a broadly supported vision of a cooperative Union County. There was a recognition that addressing some existing issues, such as transportation and safe drinking water, would require additional funding commitments. Other issues, such as stormwater and inconsistent development patterns along corridors, are best addressed through the development process. The residents recognized that higher-density development isn't appropriate everywhere in the county, and that rural character and a thriving agriculture industry is central to what makes Union County special. Residential housing options are needed in the county, and higher-density development should not be avoided when it allows developers and communities to create active, attractive destinations.

The public, municipalities, and subcommittee members all aided in informing the Coordinating Committee and County Commissioners on how they would like to implement the vision of *Union County 2050*. Hundreds of residents provided feedback on the various land use maps, regulatory changes, and new programs identified by the Coordinating Committee and approved by the County Commission as feasible options. The results were clear – a new land use map with more focused high-development areas, coupled with more control by municipalities over “donut” areas, was needed. The feedback and eventual strategies included in the plan also reflected a recognition that addressing some issues would take money. Transportation, broadband internet, safe drinking water, and litter task force strategies were included in the plan. These recommendations each received strong support from the Coordinating Committee, which reflected a broad range of constituencies in the county. The County Commissioners agreed with these recommendations and included them in the adopted plan.

By 2050, Union County will be home to over 370,000 residents. The recommendations found within this plan will help to create a home for those residents that is safe, resilient, efficient, and distinctive. Tens of millions of dollars will be invested in locally-supported transportation projects. Excess stormwater runoff and flooding will be prevented through new programs. Public health will be enhanced through safe drinking water. Walkable mixed-use destinations will be supported through land use and infrastructure decisions. Agriculture will continue to thrive. And Union County will continue to be known as a place that celebrates individual efforts and rewards hard work, while balancing being an active part of a thriving urban region in the scenic Southern Piedmont.





CHAIN REACTION
— studios —