Community Frameworks

This chapter focuses on the key principles guiding urban and community frameworks, the Future Land Use Map (FLUM), and focal area studies. These frameworks will guide the town on establishing policy direction and principles for planning the built environment with consideration for locating future parks, schools, community services, and street and trail improvements.

Photo Credit: Design Workshop

PRINCIPLES AND PROCESS

With this Comprehensive Plan, Leland has made a choice on how it can support growth in a way that also supports the natural environment and the vision it has articulated for itself within this plan.

Photo Credit: Design Workshop

This comes through balancing the location of development with protection of critical natural environments; matching development types and intensities with their underlying environmental conditions; anticipating where new centers of commerce, employment, gathering, and recreation may be best located; anticipating potential future roadway and trail connections; matching a menu of community and node types with transportation types and the natural environment; and establishing policy direction and principles for key urban frameworks such as the location of parks, schools, community services, road design, access management, trails, and urban design features.

KEY POLICIES AND PRINCIPLES FOR URBAN FRAMEWORKS

Several specific policies and principles can work together to best ensure that the vision described by the community is met over time. This includes:

- **Creating neighborhoods that are walkable with pedestrian-scaled streets and blocks.**
- **Creating roadway and trail connectivity in a connected street pattern adapted to the natural environment and land use type.**
- **Establishing access management designs on major roadways that avoid multiple curb cuts and lengthy turning lanes, establish back street connectivity, and promote parking lot connectivity.**
- **Locating buildings so that they frame the public realm.**
- **Locating parking so that it does not visually impact the public realm.**
- **Defining open space networks based on connecting the natural environment together.**
- **Developing amenities through the use of the open space network with trails, signage, education, and recreational elements.**
- **Requiring parks and open spaces that are within walking distances of neighborhoods.**
- **Locating community types and nodes so there are identifiable centers and a transition of land uses from more compact to less compact as you radiate away from the center.**
- **Growing in an organized fashion that takes advantage of existing and phased investment of infrastructure.**
- **Locating schools, places of worship, parks, and community services within mixed-use nodes that are scaled to the neighborhood types they support.**
- **Avoiding lining major commercial roadways with linear shopping centers or other single use land uses.**
- **Locating jobs close to where people live to avoid excessive commuting times.**
- **Using complete streets and context-sensitive street designs that include sidewalks, bike facilities, street trees, and attractive signage that are scaled to the environments they pass through.**

Meeting the goals of the plan will require considerations for the most appropriate type of regulatory tools to manage and support new growth and development. This may include:

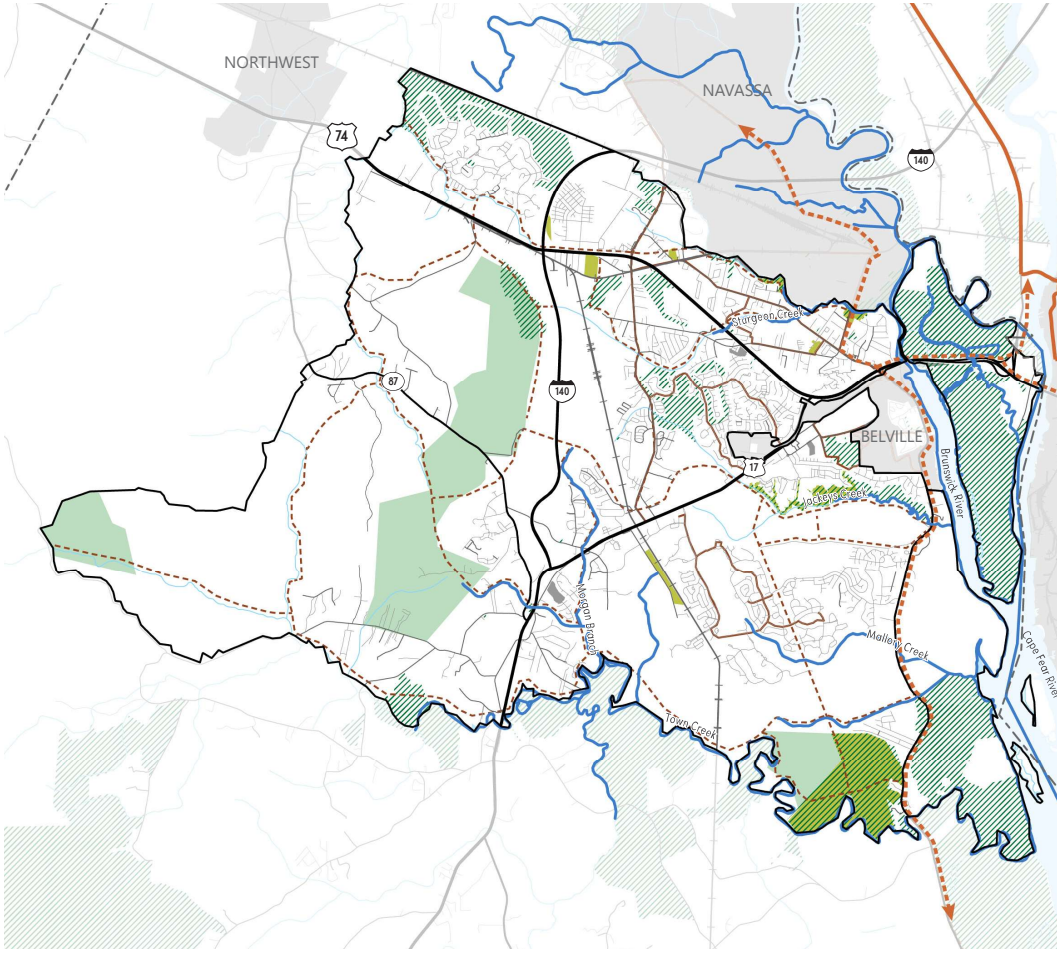
- **Utilizing form-based or zoning codes similar to the FlexCode.**
- **Reviewing and updating existing ordinances and regulations to provide clarity, improve organization, and support the vision and goals of the Leland 2045 plan.**
- **Overlays or special considerations within the zoning code for critical areas of the natural environment that need to be protected.**
- **The expansion of green infrastructure and green development and building techniques to enable development to sit within sensitive environments more harmoniously.**
- **Land conservation strategies like conservation easements, clustering, buffering, and lower densities.**
- **Design standards and design guidelines that support zoning and articulate requirements for aesthetic, technical items, and character.**
- **Streamlining permitting and review processes, creating education, and promoting clarity within the review process so that implementation isn't slowed down or made confusing and time-consuming.**
- **Accommodating the development of affordable housing to meet demand.**
- **Small area planning that anticipates new areas of growth, establishes guidelines and policies, and graphically describes how new areas should be organized spatially.**
- **Coordinating new growth areas and small area plans with planning for transportation, parks and recreation, schools, utility services, affordable housing, jobs, and community services.**
- **Creating complete streets design standards.**

OPEN SPACE/ENVIRONMENTAL FRAMEWORK

Leland and Brunswick County have large areas of protected open space, along with plans for more land conservation. As shown on the open space framework map, a comprehensive open space and greenway / blueway network (the Green Network) can link new and existing neighborhoods across the Town with its surrounding natural environment and recreational assets to:

Expand recreation tourism opportunities, enhance Leland's brand and image, elevate quality of life, and provide a catalytic economic development tool.

Photo Credit: Town of Leland



MAP 9: POTENTIAL OPEN SPACE FRAMEWORK

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LEGEND

- EXISTING TRAIL/MULTI-USE PATH
- EXISTING REGIONAL TRAILS
- BLUEWAYS
- PROPOSED TRAILS
- FUTURE GULLAH GEECHEE HERITAGE TRAIL
- ALREADY PROTECTED/MANAGED AREA (NCNHP)
- EXISTING PARK
- POTENTIAL FUTURE PARK LOCATIONS

Map Source: Design Workshop, Leland GIS Department, ESRI

Table 1: Environmental Composite Framework

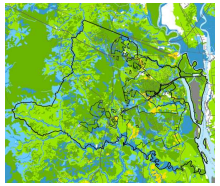
INPUT CATEGORIES/ LAYERS	ASSIGNED VALUE	WEIGHT
HYDROLOGIC SOIL GROUPS *Source: USDA NRCS, ESRI*		**5%**
Group A	2	
Group B	3	
Group C	7	
Group D	10	
WETLAND FUNCTIONAL ASSESSMENT *Source: NCDEQ - NC CREWS)*		**20%**
Beneficial	5	
Substantial	8	
Exceptional	10	
FLOOD HAZARD ZONES *Source: FEMA Flood Insurance Rate Map (FIRM) Effective 8/28/2018*		**30%**
.2% Annual Chance	5	
Zones A and A99	8	
Zones AE, AH, AO, and AE Floodway	10	
STORM SURGE (SLOSH) *Source: NOAA Sea Lake and Overland Surge from Hurricanes (SLOSH)*		**15%**
Category 5	1	
Category 4	3	
Category 3	7	
Category 2	9	
Category 1	10	
NATURAL AREAS *Source: North Carolina Natural Heritage Program (NCNHP)*		**15%**
General	2	
Moderate	4	
High	6	
Very High	8	
Exceptional	10	
BIODIVERSITY AND WILDLIFE HABITAT ASSESSMENT SCORE *Source: NC One Map/Green Growth Tool Box*		**15%**
0	0	
1	1	
2-4	3	
5	5	
6	6	
7	7	
8	8	
9-10	10	

ENVIRONMENTAL COMPOSITE

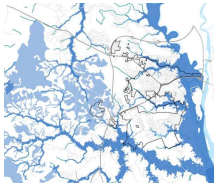
Protecting environmentally sensitive areas is an essential framework for future land use planning in Leland and the planning area.

Leland's natural resources were mapped and prioritized based on the environmental composite framework (Table 1; left) to determine areas best suited for protection and areas that are more available for development. The framework was established based on CAMA requirements and community priorities.

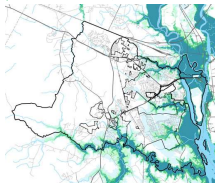
| HYDROLOGIC SOIL GROUPS



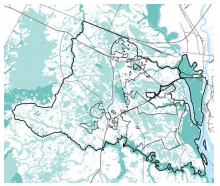
| FLOOD HAZARD ZONES (FEMA)



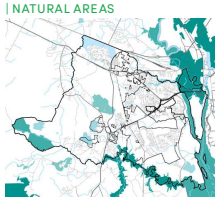
| STORM SURGE (SLOSH MODEL)



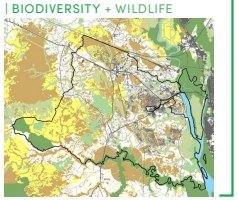
| WETLANDS

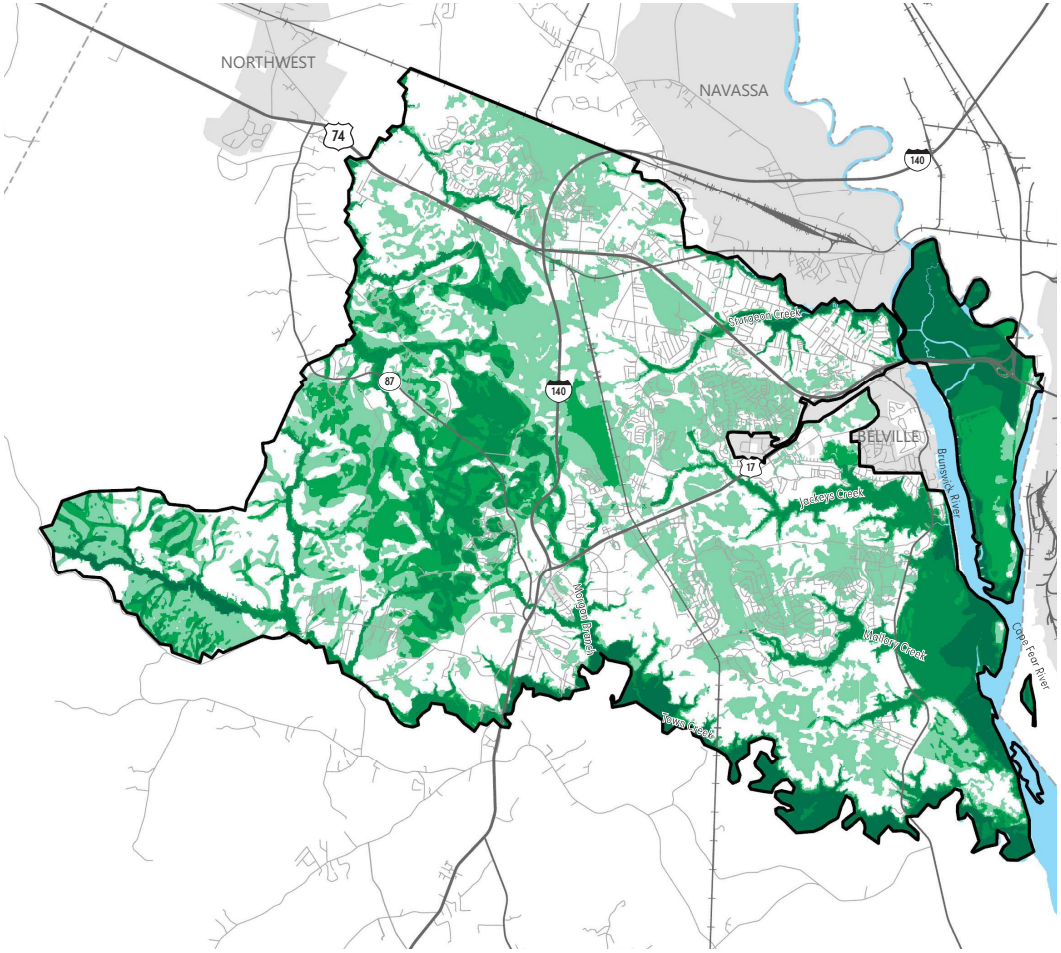


| NATURAL AREAS



| BIODIVERSITY + WILDLIFE





MAP 10: ENVIRONMENTAL COMPOSITE FRAMEWORK

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LEGEND

- 2045 PLANNING AREA BOUNDARY
- WHITE - LOWER ENVIRONMENTAL RISKS
- DARK GREEN - HIGHER ENVIRONMENTAL RISKS

Map Source: Design Workshop, NCNHP, NC One Map Green Grwoth Tool Box, NOAA SLOSH, NCDEQ, NRCS, Leland GIS Department, ESRI

TRANSPORTATION CONNECTIVITY

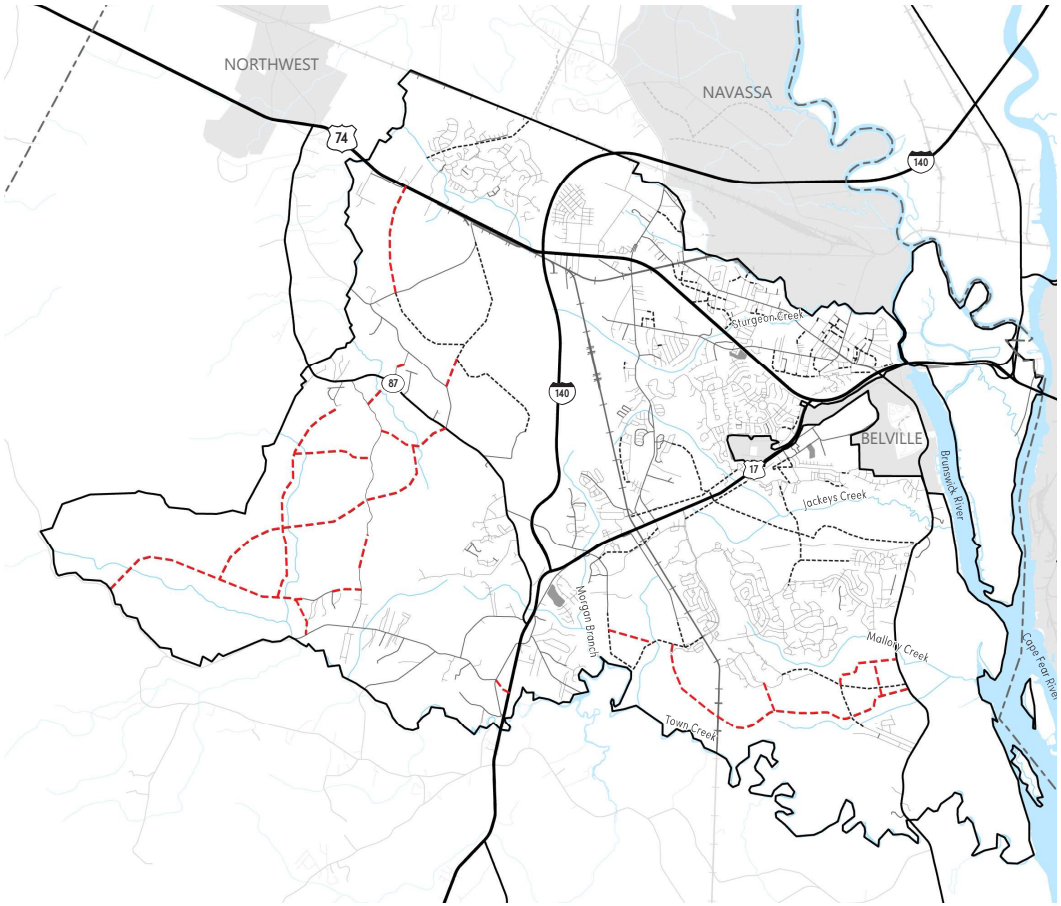
With its Collector Street Plan, Pedestrian Plan, Street Design Manual, Comprehensive Bicycle Plan, and Street Infill Plan,

Leland has committed itself to planning for higher levels of multimodal connectivity as well as designing complete streets that fit with their surrounding character and context.

Principles that are guiding the advancement of Leland's connectivity include:

- Re-designed major roadways and state highways that make them more safe, multimodal, and livable, which includes multipurpose paths, access management, streetscape, crosswalks, signalization, reduced travel speeds, and reduced travel lane dimensions.
- Context-sensitive design principles applied to the design or redesign of all streets and roadways.
- Higher levels of connectivity and multimodal transportation options that connect people across the town, planning area, and county to places of employment and regional destinations.
- Exploring ways to make Leland and Brunswick County more feasible for public transportation by establishing transit ready routes and transit ready nodes along major roadways that connect residents and visitors to their workplace, the beach, or major commercial areas.
- Working cooperatively with the municipalities, neighboring counties, and NCDOT to identify, fund, and implement needed road improvements.
- Preserving road capacity by adopting, applying, and enforcing policies to manage access and reduce vehicle miles traveled (VMTs).
- Land use policies that encourage internal trip capture and promote development whose location and density are suitable to support public transportation and other alternative modes of transportation.
- Requiring new road projects to minimize their adverse environmental impacts and enhance the Town's aesthetic qualities.
- Pursuing transportation alternatives that are aligned with land preservation and land use decisions.
- Investing in transportation options that consider all users and all modes and that support Leland's economic opportunity, access, environment, sense of place, and quality of life.

Photo Credit: Design Workshop



MAP 11: EXPANDED STREET NETWORK

EXPANSION OF COLLECTOR ROAD NETWORK

As shown on the Future Land Use Map and Focal Area Plans, expanding upon the Collector Street Plan to plan for enhanced connectivity within the Planning Area will enable Leland to grow more connected. This includes a broad network of streets and trails that connect nodes together, as well as provisions for pedestrian-oriented block sizes in more urbanized areas.

Map Source: Design Workshop, Leland GIS Department, ESRI

LEGEND

- EXISTING ROADS
- POSSIBLE FUTURE ROADWAY CONNECTIONS
- PROPOSED COLLECTOR ROADS (FROM COLLECTOR PLAN)

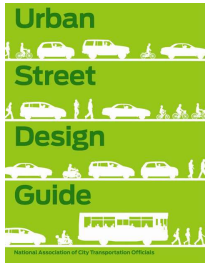
0 .75mi 1.5mi 3mi

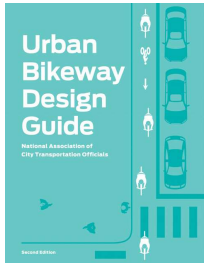
CONTEXT-SENSITIVE AND COMPLETE STREET DESIGN

According to North Carolina Department of Transportation (NCDOT), "complete streets are designed to be safe and comfortable for all users, including pedestrians, bicyclists, transit riders, motorists, and individuals of all ages and capabilities. These streets generally include sidewalks, bicycle lanes, transit stops, appropriate street widths and speeds, and are well-integrated with surrounding land uses. Complete Street design elements that emphasize safety, mobility and accessibility for multiple modes may include crosswalks, bus lanes, landscaping, lighting, signaling systems, and adequate separation between sidewalks and streets."

The Town of Leland should reference standards from the NACTO (National Association of City Transportation Officials) Urban Street Guide and Urban Bikeway Design Guide as well as the NCDOT Complete Streets and Design Guidelines in preparing and adopting a complete street design manual calibrated for Leland's unique context. This manual should be used when considering the design of future streets in Leland's planning area to ensure that complete and context-sensitive streets promote Leland's sense of place and quality of life, while providing safe multimodal connectivity.

Source: https://www.completestreetsnc.org/wp-content/themes/CompleteStreets_Custom/pdfs/NCDOT-Complete-Streets-Planning-Design-Guidelines.pdf





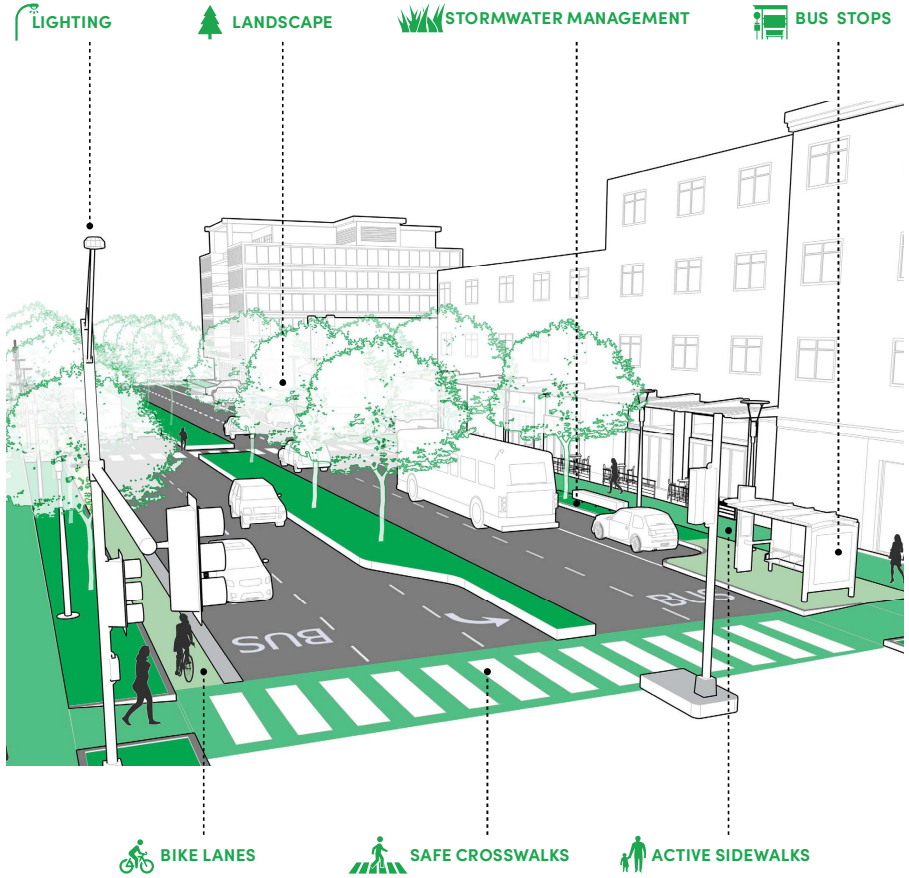


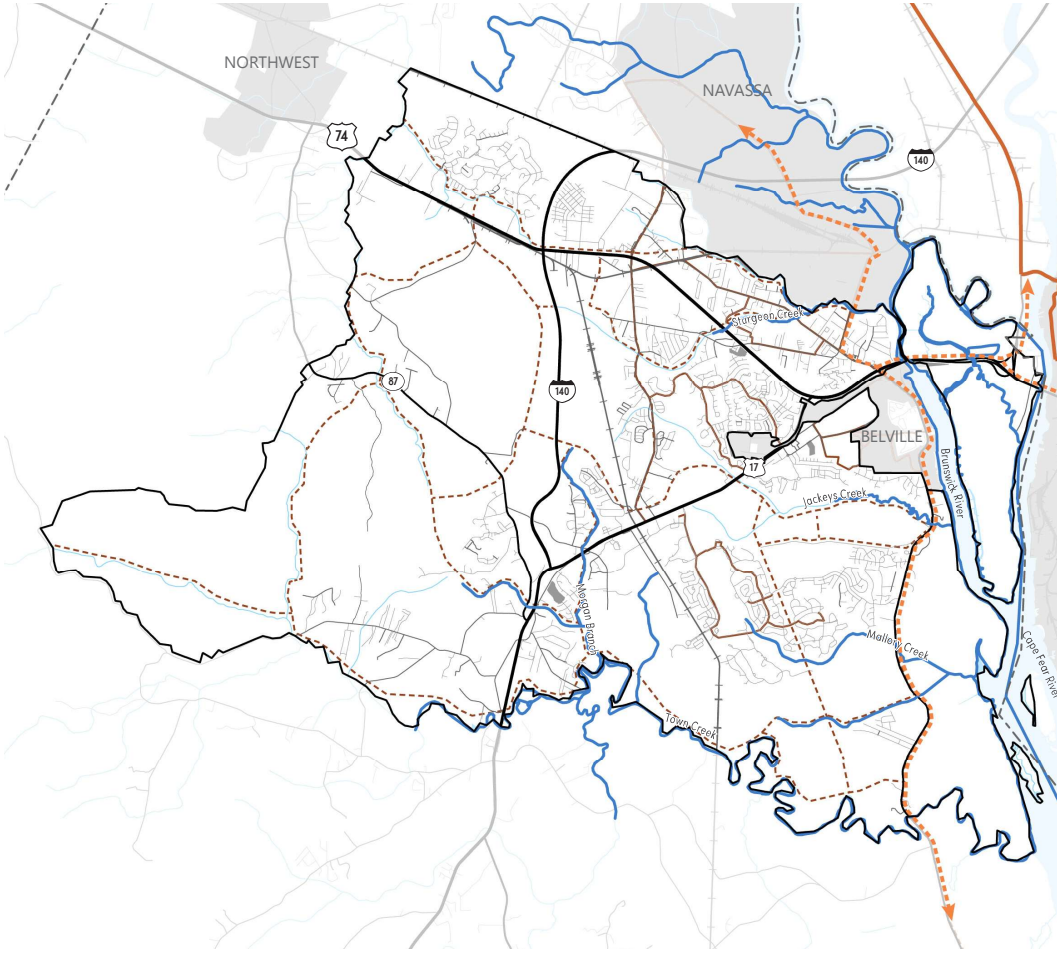
Figure 4: Example of typical principles and components considered in complete streets with the ultimate goal of safety, mobility and accessibility for all users including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. These components will look different depending on their context, whether that is rural, urban, or suburban.

Photo Credit: Design Workshop

EXPANSION OF TRAILS NETWORK

As Leland grows and expands, its identity can include biking and walking as a major component of day to day living, mobility, and recreation. Leland can become a major destination for hiking and biking in all forms, and a comprehensive and accessible trail network can link Leland's neighborhoods with its natural areas and gathering places. Trails can be built into future land use planning and become a primary framework from which to create neighborhoods and communities.

The trail system will provide cyclists and pedestrians numerous ways of moving through and around Leland safely, for both active transportation and recreation, to create a truly connected town – one that is connected to the Cape Fear River, regional trails and the proposed Gullah Geechee Heritage Trail. Blueway trails can also be envisioned and planned for to expand access to Leland's waterways.



MAP 12: EXPANDED TRAIL NETWORK

LEGEND

- EXISTING TRAIL/MULTI-USE PATH
- EXISTING REGIONAL TRAILS
- BLUEWAYS
- PROPOSED TRAILS
- FUTURE GULLAH GEECHEE HERITAGE TRAIL

Map Source: Design Workshop, Leland GIS Department, ESRI

TRANSIT READINESS

Future planning considers that transit use may be more desirable and convenient over time, as habits change and more people move to Leland. Planning for "transit ready" nodes, that correspond to planned nodes within the Future Land Use Map, along major roadways at half-mile spacing, will set Leland up for the potential to take advantage of transit opportunities as they arise.

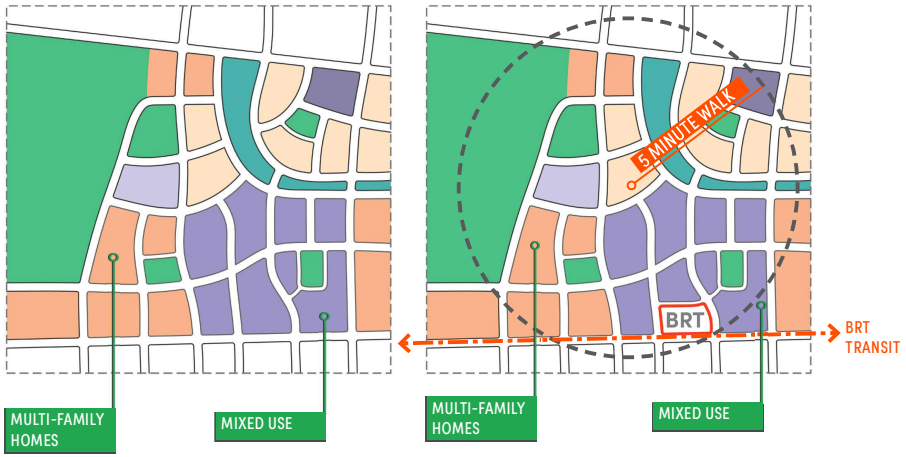
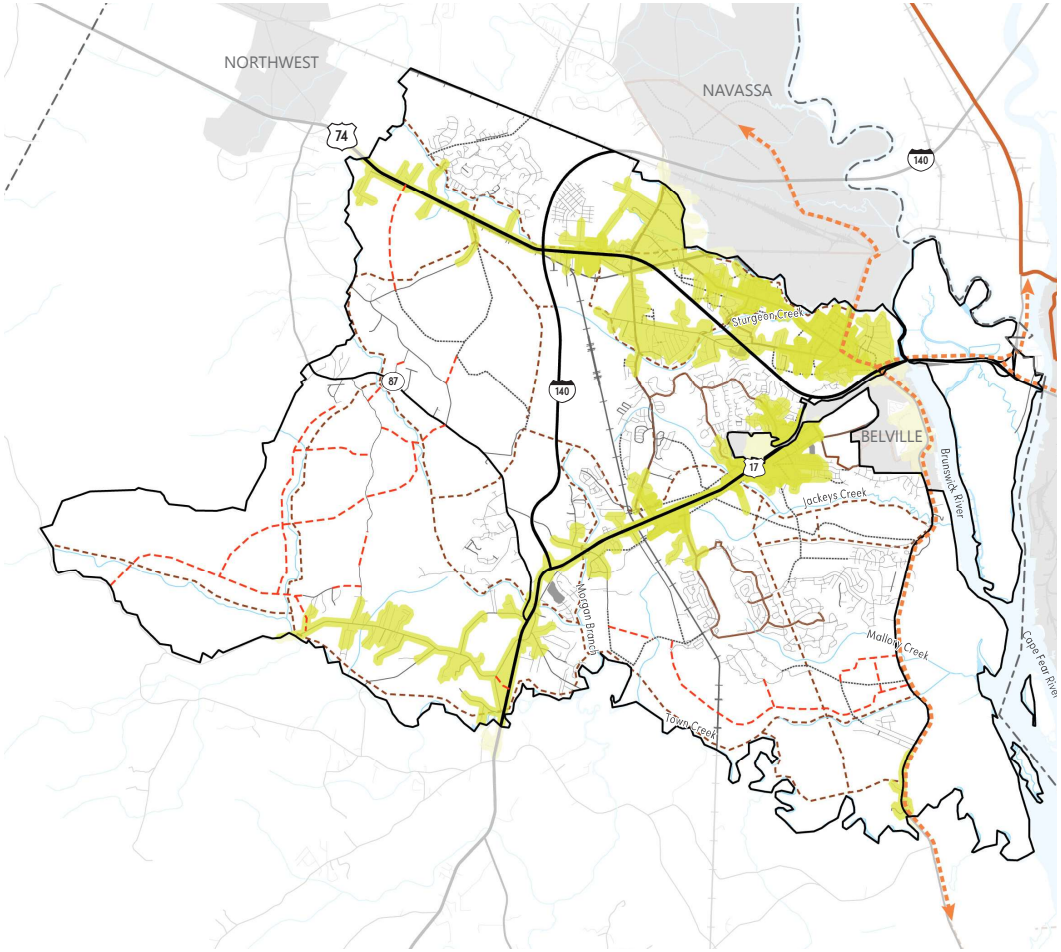


Figure 5: "Transit ready" nodes



MAP 13: POTENTIAL TRANSIT CORRIDORS

LEGEND

- EXISTING ROADS
- POSSIBLE FUTURE ROADWAY CONNECTIONS
- PROPOSED COLLECTOR ROADS (FROM COLLECTOR PLAN)
- EXISTING TRAIL/MULTI-USE PATH
- EXISTING REGIONAL TRAILS
- PROPOSED TRAILS
- FUTURE GULLAH GEECHEE HERITAGE TRAIL
- POTENTIAL TRANSIT SERVICE AREA (15-MINUTE WALK)

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Map Source: Design Workshop, Leland GIS Department, ESRI

PROCESS - CHOOSING FROM SCENARIOS

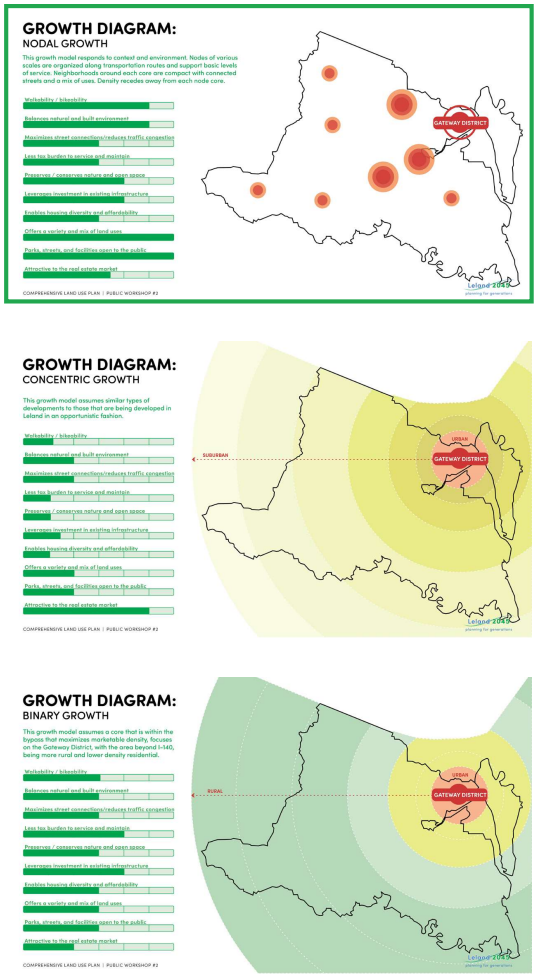


Figure 6: Growth typology diagrams.

The Future Land Use Map and Focal Area Plans were created based upon input from the community, stakeholders, and prior planning efforts. As part of the process, the community provided its preferred type of growth based on the trade-offs associated with three alternative scenarios of nodal growth, binary growth, and concentric growth.

The majority of participants chose the nodal growth scenario, which includes identifiable activity nodes organized along major transportation routes. This was preferred over binary growth, which would limit growth in the planning area to lower density and maximize growth within Leland's core.

Nodal growth was also preferred over concentric growth, which suggested that Leland's current growth patterns would be continued out into the planning area.

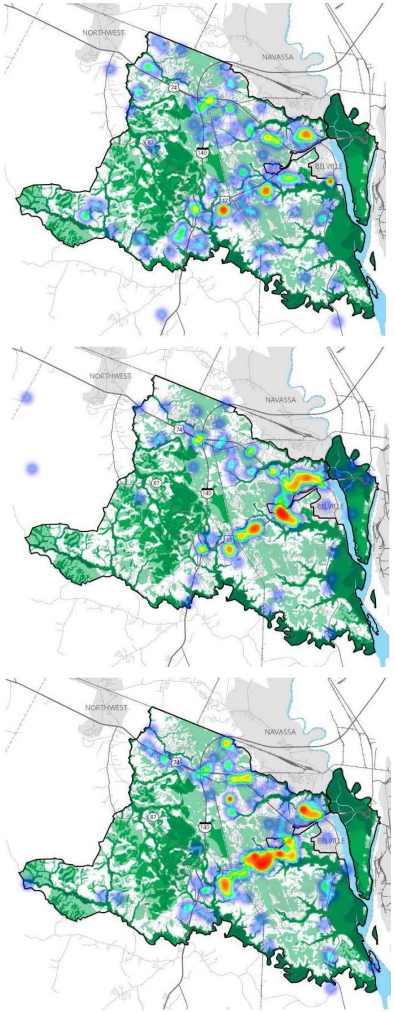


Figure 7: Survey results showing heatmap of node location preferences.

In a community survey, participants were asked to indicate where they thought various node types would be best located throughout the planning area. This resulted in the heat maps displayed in Figure 13 that helped to guide and inform the conversation around future growth and land uses.

Three versions of nodal growth were then modeled for further discussion and evaluation as it related to scale, frequency, mix of uses, and orientation. This resulted in a preferred direction about how the community desires to manage its growth.

THE ECONOMIC CASE FOR SMART, NODAL GROWTH

The cost of sprawl has been documented for over 40 years in city after city. Jurisdictions that understand this have benefited their bottom lines by promoting development and redevelopment in more compact, walkable forms — ideally where infrastructure, human capital, housing and services already exist. As desire for smarter growth has grown, more and more studies have been prepared in cities across the country that compare the cost / revenue benefits of developing smartly over sprawl.

In support of this growing knowledge, Smart Growth America conducted a national survey to compare smart growth development principles over conventional suburban development methods to understand their impact on municipal finances. The studies compared two development types. The first type, defined as Smart Growth Development, which "includes buildings located closer to each other; more walkable neighborhoods; streets with better connections among destinations; a greater mix of home types; and more transportation options." The second type is Conventional Suburban Development, which "includes siting buildings farther away from each other; designing neighborhoods primarily for driving; creating a less-connected street system with longer distances between destinations; and providing fewer public transportation options."

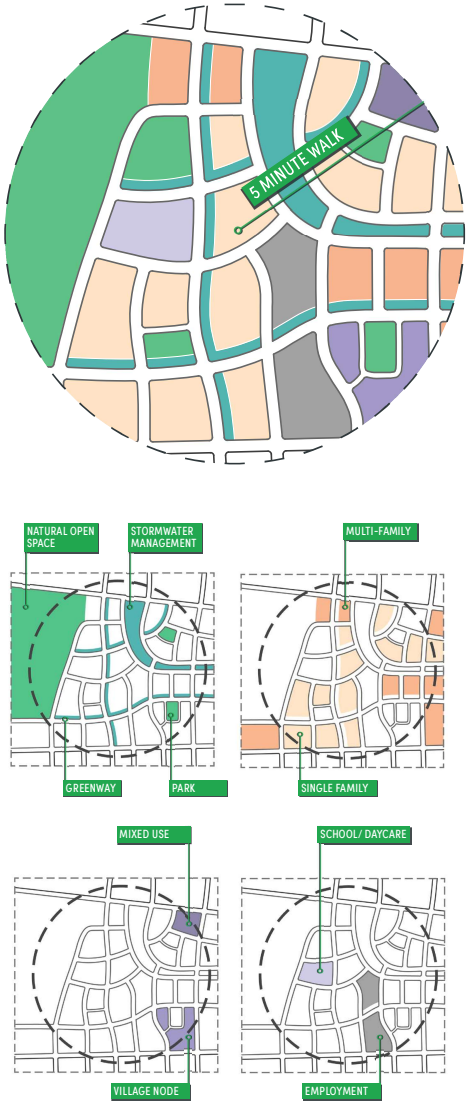
In summary, the national study concluded that:

1. **In general, smart growth development costs one-third less for upfront infrastructure, and saves an average of 38% on upfront costs for new construction of roads, sewers, water lines, and other infrastructure. Many studies have concluded that this number is as high as 50%. Smart growth development patterns require less infrastructure, meaning upfront capital costs and long-term operations and maintenance costs, and, presumably, lower costs for eventual replacement. Smart growth development also often uses existing infrastructure, lowering upfront capital costs even more.**

2. **Smart growth development saves an average of 10% on ongoing delivery of services such as police, ambulance, and fire. Smart growth patterns can reduce costs simply by reducing the distances service vehicles must drive. In some cases, the actual number of vehicles and facilities can also be reduced, along with the personnel required.**

3. **Smart growth development generates 10 times more tax revenue per acre on an average per-acre basis than conventional suburban development. This number includes property tax.**

Source: Building Better Budgets: A National Examination of the Fiscal Benefits of Smart Growth Development; Smart Growth America: Making Neighborhoods Great Together



PRINCIPLES OF SMART GROWTH

Smart growth looks different from place to place, but in essense, it is an overall approach to development that encourages a mix of building types and uses, diverse housing options, and walkable development within existing neighborhoods.

The Smart Growth Network has developed a set of 10 basic principles based on communities around the nation:

1. **Mix land uses**
2. **Take advantage of compact design**
3. **Create a range of housing opportunities and choices**
4. **Create walkable neighborhoods**
5. **Foster distinctive, attractive communities with a strong sense of place**
6. **Preserve open space, farmland, natural beauty, and critical environmental areas**
7. **Direct development towards existing communities**
8. **Provide a variety of transportation choices**
9. **Make development decisions predictable, fair, and cost effective**
10. **Encourage community and stakeholder collaboration in development decisions**

Source: https://www.epa.gov/sites/default/files/2017-06/documents/sm_growth_guide.pdf

COMMUNITY AND NODE TYPES

Community and node types were envisioned to help the community visualize and choose the most appropriate scale, type, density, and form of growth for Leland's future. These community and node types can also influence future zoning, zoning overlays, small area plans, and policies that will ensure that Leland grows in alignment with the vision of this comprehensive plan.

Describing Leland's future growth with the use of Community Types and Node Types will help accomplish the community's vision of achieving balance between the built and natural environment, as well as:

- Improve the performance and quality of the built environment.
- Promote development patterns that support safe, effective, and multi-modal transportation options, including auto, pedestrian, bicycle, and transit. This will minimize vehicle traffic by providing for a mix of land uses, walkability, and compact community form.
- Provide neighborhoods with a variety of housing types to serve a diverse population.
- Promote the greater health benefits of a pedestrian-oriented environment.
- Reduce sprawling, auto-dependent development.
- Reinforce the unique identity of Leland that builds upon great neighborhoods, amenities, quality of life, access to nature, inclusiveness, and affordability.

The Future Land Use Map and Focal Area Plans that follow utilize Community Types and Node Types, and promote their use across the Planning Area.

COMMUNITY TYPES

NATURAL / PRESERVE | CONSERVATION COMMUNITY | AMENITY COMMUNITY | TRADITIONAL NEIGHBORHOOD | COMMERCIAL/ EMPLOYMENT | URBAN MIXED-USE NEIGHBORHOOD

More Preservation — Density and character can range from preserved nature to more compact and urban — More Urban

NODE TYPES

NEIGHBORHOOD NODE | VILLAGE NODE | URBAN CENTER NODE

CONSERVATION COMMUNITY

- Conservation easements
- Environmental buffers along waterways
- Very low-density residential or rural
- Variety of housing types and price points
- Clustered homesites on small footprint
- Single family homesites
- Rural streets with bike lanes
- Context-sensitive street design
- Greenways and trails along environmental buffers
- Low Impact Development (LID) principles

AMENITY COMMUNITY

- Primarily single-family with medium-density townhouses and multifamily
- Variety of home types and price points
- Open space, parks and amenities provided
- Connected internal streets and greenways
- Suburban street networks / limited use cul-de-sacs
- Residential street designs with sidewalks and street trees
- Low Impact Development (LID) principles

TRADITIONAL NEIGHBORHOOD

- Medium density / mixed density
- Variety of housing types and price points
- Single-family homes, townhouses and multifamily
- Open space, parks, schools, services, neighborhood retail, small-scale employment, small office, institutions
- Connected / gridded street network and greenways
- Suburban and urban block patterns and sizes
- Complete streets design with narrow traffic lanes, sidewalks, street trees, walkable block sizes
- Traditional neighborhood designs
- Low Impact Development (LID) principles

COMMERCIAL/EMPLOYMENT

- Allocation of land for employment uses of all types including high-tech, green industry, light industry, office and commercial, service and institutional
- Buildings fronting streets with parking in the rear
- Bus and Bus Rapid Transit (BRT) transit locations
- Access management on fronting streets
- Urban street patterns and block sizes
- Green building and development principles
- Parking management solutions to reduce parking
- Complete streets

URBAN MIXED-USE NEIGHBORHOOD

- Mixed-use
- Higher density / range of densities
- Townhouses and multifamily
- Variety of housing types and price points
- Allocation of land for employment uses of all types including incubator spaces, entrepreneur's space, office, commercial businesses
- Street-oriented commercial
- Parking in rear of buildings
- Complete streets
- Transit nodes
- Open space, parks, schools, services, neighborhood retail, employment, institutions
- Urban block patterns and sizes – highly pedestrian

NEIGHBORHOOD NODE

- Mixed-use
- Variety of housing types and price points
- Small traditional neighborhoods
- Neighborhood-scaled retail
- Small office
- Gridded walkable streets
- Parking in rear of buildings
- Bus transit locations
- Parks, services, institutions
- Greenway and trail access

VILLAGE NODE

- Mixed-use
- Variety of housing types and price points
- Small Traditional Neighborhoods
- Regional scaled retail and employment centers, small office and other employment uses
- Open space, parks, schools, services
- Gridded walkable streets
- Bus Rapid Transit (BRT) locations
- Parking in rear of buildings
- Greenways and trail access

URBAN CENTER NODE

- High Density mixed use
- Variety of housing types and price points
- BRT transit locations
- Parking management solutions
- Regional scaled retail and commercial centers, office and other employment uses
- Open space, parks, schools, services
- Gridded walkable streets
- Parking in rear of buildings
- Parks, parklets, services, institutions
- Greenways and trail access

FUTURE LAND USE MAP (FLUM)

Citizen and Town leadership want Leland to grow into an even more sustainable, healthy, equitable, responsible, and highly livable place that elevates the lives of those who live here, while protecting the attributes and assets that make it unique.

The Future Land Use Map will help preserve and promote the character and quality of Leland for generations. It describes in concept how the town can manage anticipated population growth over the next 25 years. It includes the creation of Community Types, promoting different types of living, anticipating a transit ready future, and supporting living and working near each other to reduce traffic congestion and commuting times. It directs development, over time, to land that is more suitable for development and protects critical environmental systems.

Nodes of various scales are located along major transportation routes to create identifiable and walkable centers and to support quality-of-life elements such as parks, shopping, jobs, gathering, worship, and support.

FUTURE LAND USE CATEGORIES

ALREADY PROTECTED/MANAGED AREAS (NCNHP)

IDEAL CONSERVATION/PRESERVATION AREAS

- Protected/Open Space

NATURAL RESOURCE ORIENTED DEVELOPMENT POTENTIAL

- Protected/Open Space
- Conservation Community
- Low Impact Development

MODERATE DEVELOPMENT POTENTIAL

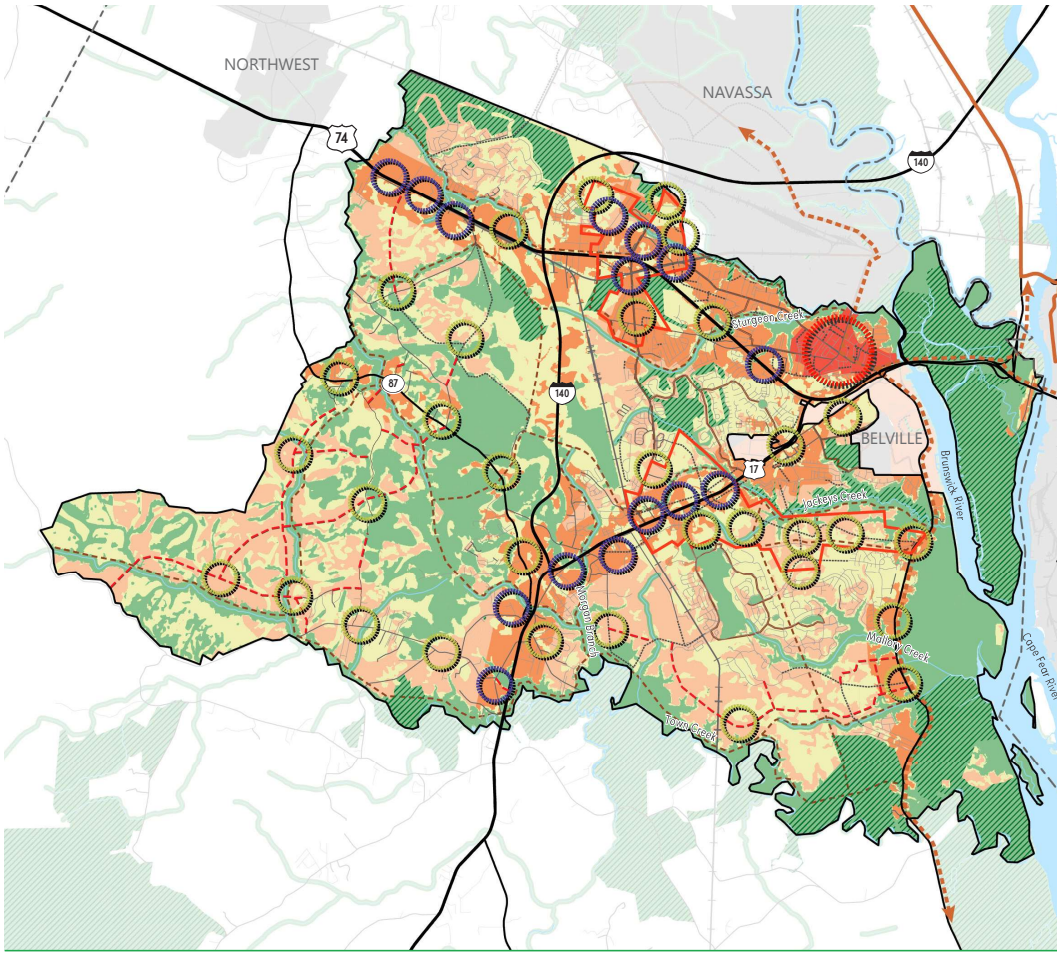
- Conservation Community
- Amenity Community
- Traditional Neighborhood

HIGH DEVELOPMENT POTENTIAL

- Conservation Community
- Amenity Community
- Traditional Neighborhood
- Urban Mixed-Use Neighborhood
- Commercial Employment

GATEWAY DISTRICT

The area west of the Village Road interchange with US 74/76 that includes much of the historic origins of Leland. This area has been referred to as the gateway to Leland, and was identified as the Gateway District in the 2009 Master Plan. The area forms the nucleus of the community's vision of a town center and a discernible "downtown."



MAP 14: FUTURE LAND USE MAP (FLUM)

0 .75mi 1.5mi 3mi

LEGEND

- EXISTING ROADS
- POSSIBLE FUTURE ROADWAY CONNECTIONS
- PROPOSED COLLECTOR ROADS (FROM COLLECTOR PLAN)
- EXISTING TRAIL/MULTI-USE PATH
- EXISTING REGIONAL TRAILS
- PROPOSED TRAILS (INCLUDES ALREADY PLANNED)
- NEIGHBORHOOD NODE
- VILLAGE NODE
- URBAN CENTER NODE
- FOCAL AREA
- FUTURE GULLAH GEECHEE HERITAGE TRAIL

ABOUT THIS MAP

The Future Land Use Map (FLUM) describes how Leland can continue to grow and prosper, while also protecting its valuable natural resources. The Future Land Use Map considers how community types and nodes can be selected to work in harmony with the underlying environmental conditions.

Map Source: Design Workshop, Leland GIS Department, ESRI

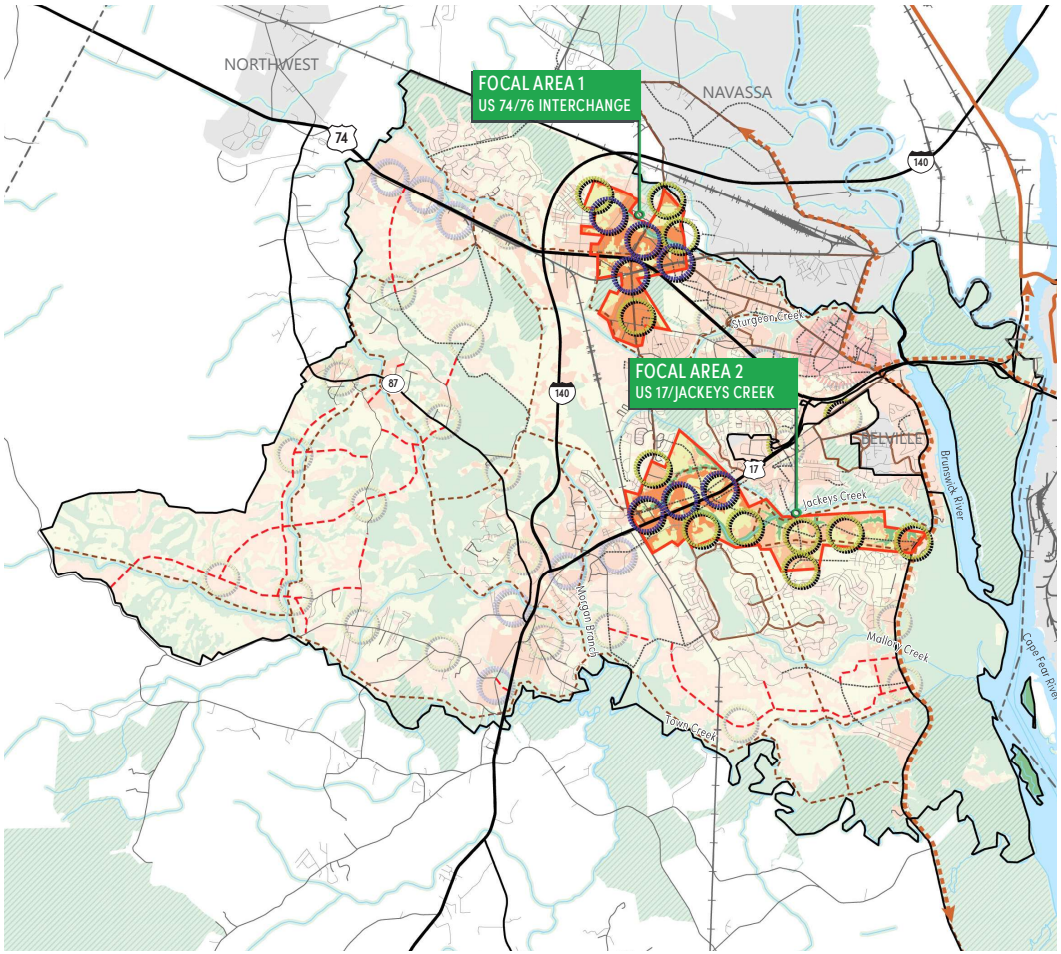
FOCAL AREA PLANNING

Two areas of Leland have been studied to demonstrate, in concept, how they might be developed to meet with Leland's vision, principles, and policies.

These areas are generally considered to be more immediate growth areas. They are both located along existing infrastructure, adjacent to existing development, and are located on sizable roadways. Each of these areas has the potential to define by example how Leland can create places, neighborhoods, and communities that perform at a high level related to quality-of-life indicators.

It is important to note, however, that these concepts have not been created based on market research, development feasibility, or other considerations, and should be looked at only as inspiration for how connectivity, nodes, community types and trails can be established within these areas. In that regard, they are illustrative only and do not indicate any proposed plan for implementation. That will happen with community-based small area planning and working with developers and landowners to create the most balanced and highest-performing plan.

Figure 8: Aerial of Focal Area 2.



MAP 15: FOCAL AREA KEY MAP

0 .75mi 1.5mi 3mi

LEGEND

- EXISTING ROADS
- POSSIBLE FUTURE ROADWAY CONNECTIONS
- PROPOSED COLLECTOR ROADS (FROM COLLECTOR PLAN)
- EXISTING TRAIL/MULTI-USE PATH
- EXISTING REGIONAL TRAILS
- PROPOSED TRAILS (INCLUDES ALREADY PLANNED)
- NEIGHBORHOOD NODE
- VILLAGE NODE
- URBAN CENTER NODE
- FOCAL AREA
- FUTURE GULLAH GEECHEE HERITAGE TRAIL

Map Source: Design Workshop, Leland GIS Department, ESRI

VISION:

Focal Area 1 supports urbanizing development forms and promotes a medium to high density and mix of uses that enable people to live, work, and recreate within a compact footprint. Every quality-of-life element, such as employment, education, recreation, and safety, is considered within this Focal Area and planned so that they are located within accessible nodes along pedestrian- and bike-friendly streets.

These areas are located along Highway 74, also named Andrew Jackson Highway, which is a primary access into Leland from the west. The area benefits from being planned and zoned as an industrial and innovation park to support employment. It is also zoned for commercial use to take advantage of the car traffic that is within this area.

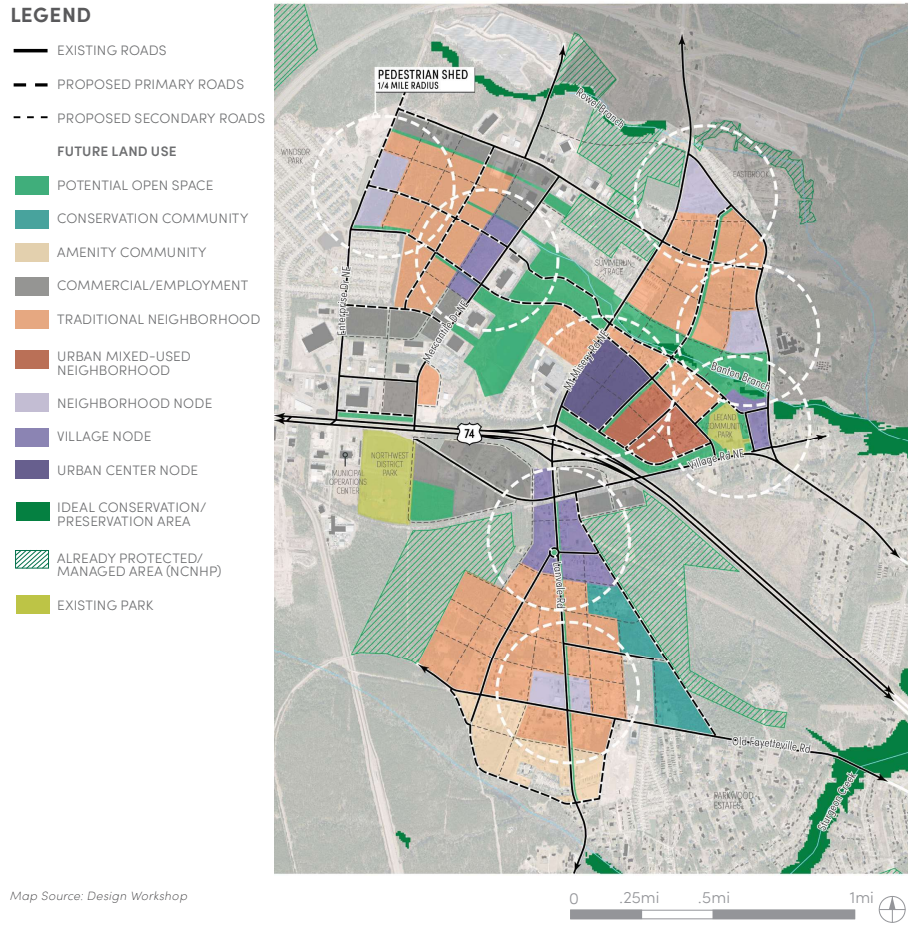
Figure 9: Aerial looking west towards Windsor Park neighborhood from plan north of Focal Area 1.

Key planning considerations:

- Retain and support job-creating land uses.
- Promote job creation of all types including office, light industrial, commercial, lodging, entertainment, incubator, and others while discouraging heavy industrial uses.
- Support the employment uses with medium- to high-density housing that enable employees to walk or bike to work.
- Create a grid of streets that allow for multiple circulation routes, and smaller pedestrian-oriented streets.
- Preserve sensitive open spaces, natural drainage ways, and floodplains within a connected corridor that also provides opportunities for multipurpose trail connectivity.
- Locate higher densities, mixed uses, parks, schools, gathering areas and community services within mixed-use nodes that range from neighborhood nodes to village nodes to urban nodes.
- Concentrate higher-density housing within and around these nodes.
- Provide for a variety of housing types from conservation communities to amenity communities, traditional neighborhoods and urban neighborhoods depending upon locations along transportation corridors, open spaces and natural areas, and existing land uses.
- Connect open space areas with greenways that flank pedestrian-friendly streets.
- Consider locating consolidated or districted stormwater management systems in appropriate locations to serve more than one development or neighborhood and enable higher usage of land within the neighborhoods or developments.
- Transition the scale, height, and intensity of development to the focal area's perimeter to create compatibility with existing neighborhoods.

MAP 16: FOCAL AREA 1

This map describes how Leland's principles and values associated with creating great neighborhoods, connectivity, protection of open space, and walkability can be applied to new growth areas.



Map Source: Design Workshop

VISION:

Focal Area 2 supports urbanizing development forms and promotes a medium to high density and mix of uses that enable people to live, work and recreate within a compact footprint. Quality-of-life elements, such as employment, education, recreation and safety, is considered within this Focal Area and planned so that they are located within accessible nodes along pedestrian- and bike-friendly streets.

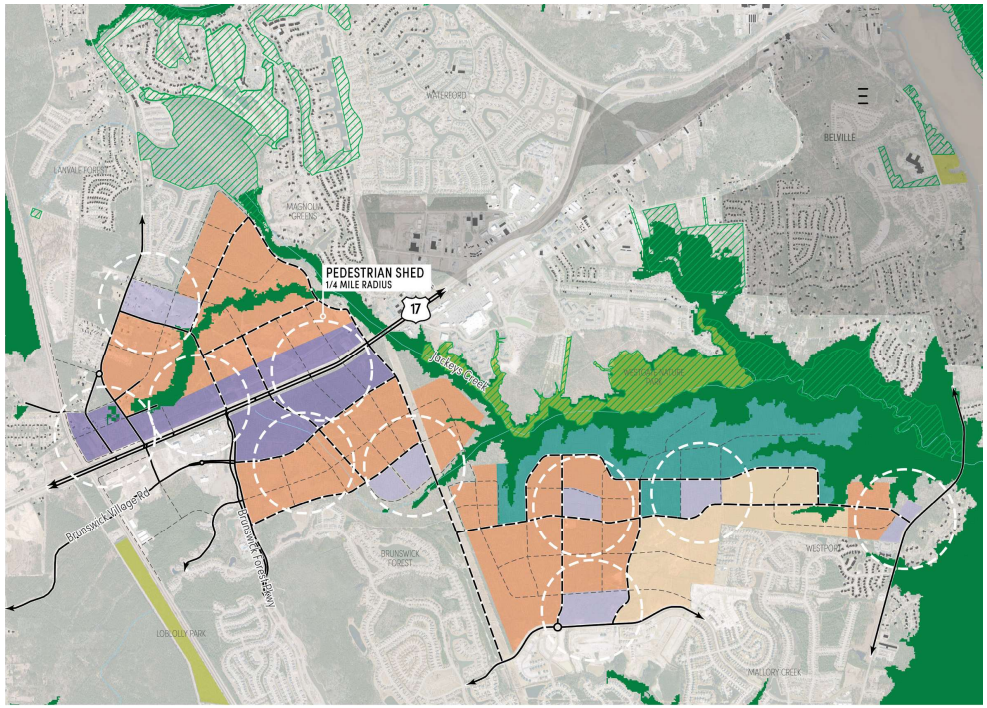
This area is located along US Highway 17 (Ocean Highway E), which is a primary access into Leland from the south. It also has access from NC Highway 133 (River Rd SE), which is a roadway with scenic qualities with future plans for improvements as part of the conceptual Gullah Geechee Heritage Trail that will connect to larger regional trail systems. The area benefits from being planned and zoned as commercial and residential. Its commercial zoning takes advantage of the car traffic along Highway 17. Existing commercial centers already support the area, along with large, planned developments such as Brunswick Forest. The eastern portion of the focal area has more sensitive environmental conditions and is adjacent to Highway 133 (River Rd SE). A major drainage flows along the north boundary to Jackeys Creek, which flows to Brunswick River and Cape Fear River and ultimately the Atlantic Ocean.

Key planning considerations:

- Locate village centers along Highway 17 (Ocean Highway E) to take advantage of commercial and retail opportunities within mixed-use destinations.
- Create a grid of streets that allow for multiple circulation routes, and smaller pedestrian-oriented streets.
- Preserve sensitive open spaces and natural drainage ways and floodplains within a connected corridor that also provides opportunities for multipurpose trail connectivity.
- Locate higher densities, mixed uses, parks, schools, gathering areas and community services within mixed-use nodes that range from neighborhood nodes to village nodes.
- Concentrate higher-density housing within and around these nodes.
- Provide for a variety of housing types from conservation communities to amenity communities and traditional neighborhoods depending upon locations along transportation corridors, open spaces and natural areas, and existing land uses.
- Connect open space areas with greenways that flank pedestrian-friendly streets.
- Consider locating consolidated or districted stormwater management systems in appropriate locations to serve more than one development or neighborhood and enable higher usage of land within the neighborhoods or developments.
- Transition the scale, height, and intensity of development to the focal area's perimeter to create compatibility with existing neighborhoods.
- Connect to existing large developments to promote higher levels of connectivity within the area.

MAP 17: FOCAL AREA 2

This map describes how Leland's principles and values associated with creating great neighborhoods, connectivity, protection of open space, and walkability can be applied to new growth areas.



LEGEND

- EXISTING ROADS
- PROPOSED PRIMARY ROADS
- PROPOSED SECONDARY ROADS

FUTURE LAND USE

- CONSERVATION COMMUNITY
- AMENITY COMMUNITY
- TRADITIONAL NEIGHBORHOOD
- NEIGHBORHOOD NODE
- VILLAGE NODE
- IDEAL CONSERVATION/PRESERVATION AREA
- ALREADY PROTECTED/MANAGED AREA (NCNHP)
- EXISTING PARK

Map Source: Design Workshop