

Future Land Use • Snapshot

Intent

“Future land use” essentially means what will get built where. Land-use *planning* is designating appropriate future locations for different types of building and developments. This chapter includes a schematic map with explanatory text that plans what will get built where in the next 22 years.

Local governments accomplish three primary objectives through land-use planning. Each objective guides development to promote “public health, safety, morals, convenience, order, appearance, prosperity, and general welfare” (SCC §6-29-710).

1. Land-use planning enables local governments to plan for and manage systems of public infrastructure. By directing growth to expected locations, the County can plan roads and public buildings prior to growth in particular communities or areas, making expansion of infrastructure systems more timely and cost-effective.
2. Land-use planning enables local governments to direct development to land and soils best suited to accommodate buildings and infrastructure. As well as to constrain growth in sensitive environmental areas, reducing impacts to water quality and wildlife habitats.
3. Land-use planning protects enjoyment of personal property, thereby enhancing property values. Local government land-use planning pre-empts or reduces harm caused by incompatible land uses.

Existing Land Use

Dorchester County conducted a windshield survey of its existing land in 2006. The results of this survey appear on the following map, *Existing Land Use*. This data set is vitally important to future land-use planning and zoning and must be kept current in order for the County’s planning policies to be accurate and dynamic.

The 2000 US Census reported the size of Dorchester County at 574 square miles. Approximately 561 square miles are accounted for in the land-use survey. The remaining land area is likely road and drainage rights-of-way.

Farmland and forestland combine to occupy the vast majority of Dorchester County, as illustrated by the following pie chart. These two undeveloped land categories occupy 19 and 62 percent, respectively, of the 561 square miles of land surveyed.

Basic land uses in Dorchester County:



Industrial (MeadWestvaco)



Commercial (Dukes Barbecue)



Institutional (Summerville High School)

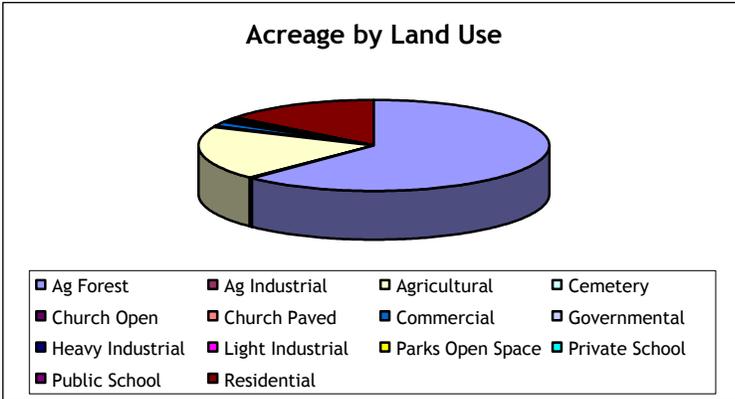


Residential



Agricultural - forestry

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**Dorchester County
Acreege by Land Use**

Land Use	Acreege	Percentage
Ag Forest	223,245	62.21%
Ag Industrial	1,308	0.36%
Agricultural	68,792	19.17%
Cemetery	351	0.10%
Church Open	334	0.09%
Church Paved	314	0.09%
Commercial	5,586	1.56%
Governmental	988	0.28%
Heavy Industrial	3,166	0.88%
Light Industrial	1,148	0.32%
Parks Open Space	429	0.12%
Private School	65	0.02%
Public School	960	0.27%
Residential	52,172	14.54%
Total Land Surveyed	358,859	100.00%

Much of the developed land in Dorchester County is used for residential purposes: 14.54 percent. This category, however, includes tracts of land up to 518 acres, much of which may be naturally vegetated. Of the remaining land-use categories, only commercial land exceeds one percent. This may be due to the inclusion of golf courses as commercial land. The table in the sidebar reports the full results.

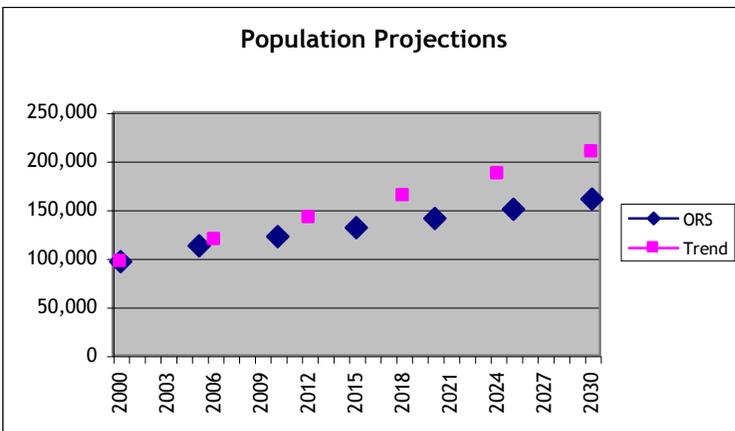
Population Growth

In the current decade, Dorchester County has grown faster than any other county in South Carolina, by rate of population increase. The 2000 US Census counted a population of 96,413. The South Carolina Budget and Control Board's Office of Research and Statistics estimated 118,979 residents in Dorchester County in 2006.

Research and Statistics projects a Dorchester County population of 160,640 in the year 2030, thirty-five percent greater than estimated in 2006. The following chart illustrates the State's projection to be a conservative one. If the population increase trend of the 2000s continues in Dorchester County, it will exceed 200,000 residents by 2030.

Dorchester County government surveyed land use by parcel in 2006 throughout Dorchester County. A summary of the results appears in the above table.

The fastest growing county in the United States from 2000 to 2006 was Flagler County, Florida. Its population increased 66%, to about 83,000 residents. Maricopa County, Arizona, added the most residents, about 700,000. In comparison, Dorchester County population rose 22,566 - an increase of 23.4% over the same time period.



Housing production can be expected to outpace population growth for two primary reasons. First, some houses will become economically obsolete and cleared in favor of other land uses. The residents will find shelter elsewhere, driving demand for new homes.

Second, the average household size in Dorchester County, like the rest of the Charleston Metropolitan Area and the United States as a whole, is declining. The “baby boom” generation is nearing retirement and its children are entering the market for housing. Older and younger adults will significantly outnumber adults in child-rearing years.

A local government’s future land-use plan must identify suitable areas to accommodate increased population to the horizon year, 2030. It must also provide for the types of development demanded by the growing population. In the interim, the local government ensures that adequate land is zoned to accommodate industrial, commercial, institutional, residential, and agricultural growth.

Dorchester County Zoning

Dorchester County administers land-use restrictions within the southern portion of Dorchester County, below Four Holes Swamp, as well as around interstate highway interchanges. An image of Dorchester County’s zoning map illustrating these areas is available on the website of the Department of Planning and Zoning.

The geographic extent of these land-use restrictions is similar to that studied when the County prepared a Comprehensive Plan in 1998. At that time, the areas were expected to assimilate the vast majority of projected growth in Dorchester County.

The remainder of property in Dorchester County falls within a zoning district named “Absence of Controls.” This zoning district places no prohibitions on land use. Its restrictions include setback requirements and a minimum lot size of 14,500 square feet.

With a residential intensity limit of three housing units per acre, a suburban area will build out to a population density of roughly 1,200 persons per square mile. A population density of 1,500 is the minimum necessary to support bus transit as a feasible transportation option. A population density of 3,000 typically supports walking and bicycling as regular options for local trips, provided communities are designed for them. An urban density is 7,000 persons per square mile, which can be found on peninsular Charleston.

The average household size in 1990 in Dorchester County was 2.87 persons per household. That statistic declined to 2.72 persons per household by the year 2000. (Source: 2000 US Census)

“Build-out” is an expression referring to full development of property, where urban land uses replace all previously forested and agricultural uses. Only a small percentage of Dorchester County’s land area is developed. It is many decades from being built out.

Much of Dorchester County has a residential zoning density limit of three homes per acres. If it built out at such density, the county would be home to more than half a million people.

Areas in and around Summerville have a population density right around 3,000 persons per square mile. The map, *2003 Population Density Map of BCD Region*, shows how Dorchester County compares to the rest of the Charleston-North Charleston Metropolitan Area.

Future Land Use • Shape

Goal 1

Communities in Dorchester County will honor the character of the landscape, complement existing neighborhoods and commercial districts, and utilize public infrastructure where capacity exists or is planned while accommodating projected growth to the year 2030.

Policy 1.1: The *Future Land Use Map* divides Dorchester County into four “Growth Areas,” as listed in the table at right. “Restricted Growth” has been separated into two sub-categories: “Rural” and “Conservation.” Each of these areas has been mapped on the *Future Land Use Map* with respect to existing natural and cultural resources, access to public facilities, proximity to population centers, and conditions of existing land use. A target population density for each area is then set according to the constraints and the purpose of each Growth Area. A distinct community includes all four of these Growth Areas such that jobs, shopping, schools, places of worship, open spaces, and a variety of housing choices are located in close proximity to one another for the benefit of commerce, residents, and public facilities. Descriptions and components of each of the four Growth Areas appear herein.

Employment Growth Areas

The purpose of an Employment Growth Area is to serve as an *economic development district* – Dorchester County’s current and future job centers. Areas so designated are suited to industry and wholesale trade due to their access to infrastructure, especially expressways and freight rail, and distance from cultural and natural resources. Construction-related businesses and large automobile-oriented businesses are also best suited to economic development districts, but their recruitment to such districts is less advantageous due to typically lower wages in these businesses.

Tools to build Employment Growth Areas include these:

- Infrastructure extensions planned to arrive at the outset of development or in advance of investment to attract employers;
- Wide roads, designed for heavy truck mobility and busses transporting workers, provide circulation at moderate to high speeds (These routes will avoid school zones and other pedestrian zones.);
- Land-use restrictions that utilize rural-density residential standards to reserve an adequate supply of industrial land; and
- Deep buffering between Employment Growth Areas and adjoining communities.

Growth Areas of the *Future Land Use Map*

Growth Area	Target Population Density (Persons per sq. mi.)	Indication on Map
Employment	100	Lavender
Managed	1500-3000	Yellow
Constrained	500	Beige
Restricted - Rural	100	White
Restricted - Conservation	100	Light green



An example of an Employment Growth Area is New Century Industrial Park on US-78 in St. George.

Managed Growth Areas

As is their purpose, Managed Growth Areas define the existing *towns and neighborhoods* of Dorchester County and provide for their natural growth to the year 2030. This designation also identifies appropriate areas for new towns. Most of the population increase of nearly 42,000 is expected to reside in these towns and neighborhoods.

Land in a Managed Growth Area is typically suitable for development in that it has fair to good access to transportation infrastructure and occupies mostly high ground away from sensitive natural resources. Towns and neighborhoods include moderate- to high-density residential development, shopping centers, and town centers, which are identified as “Nodes” on the *Future Land Use Map* (FLUM). Circulation is provided by local streets, low-speed collector streets with bike lanes, low-speed mixed-use avenues with on-street parking and wide sidewalks, and moderate-speed boulevards with bike lanes. Aesthetics may be suburban – with moderate setbacks and buffering of shopping centers and other higher-intensity land uses – or town-like – with shops and townhouses built close to the sidewalks.

Tools to build Managed Growth Areas include the following:

- Flexible land use regulations that mix uses and provide housing that can support commerce in an interconnected street system;
- Prescriptive design standards to integrate commercial development into the community, especially in unincorporated “donut holes” near historic Summerville;
- Civic Nodes sited at the center of neighborhoods and communities as gathering places for worship, learning, and recreation (To preempt unnecessary congestion, elementary and middle schools will not be sited on major thoroughfares, but rather in communities where they are safely and conveniently accessible to students by foot and bike.);
- Multiple vehicle and pedestrian circulation connection points between neighborhoods and communities to promote transit service (Dorchester County will not accept street systems for maintenance that are laid out inefficiently.);
- New collector streets that connect existing and planned arterials (Some of these collector streets are recommended on the FLUM, which must be translated to the County’s Official Map upon identification of a feasible right-of-way. Developers of large projects will then build those road sections as a condition of land development approval.);

Summerville’s historic district and downtown are well loved places in Dorchester County (next 2 images). New towns and neighborhoods will incorporate successful aspects thereof.



A “new town,” incorporating urban and suburban districts as well as an office park for economic development, is growing on Daniel Island (next 3 images).



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- Street design that prioritizes pedestrian and cyclist access and safety over heavy truck mobility (This means well-marked crosswalks, tighter intersections, and narrower roadways that make drivers slow down. Only boulevards at neighborhood edges should prioritize 18-wheelers.); and
- A “traditional neighborhood development” (TND) ordinance. (Dorchester County will adopt such an ordinance upon approval of the Plan.)

Towns and Neighborhoods in Concept



1. Civic uses are incorporated into the neighborhood, allowing better access by bike and foot, rather than locating on major arterials to reduce congestion.
2. Commercial uses enjoy visibility from the adjacent major arterial, but are oriented onto a perpendicular minor arterial or collector road, which has on-street parking, slower traffic, and better pedestrian access.
3. Homes occur in a variety of types and lot sizes to promote choice and affordability for residents.
4. Residents enjoy proximity to common open space, which boosts nearby property values while using land more efficiently than large private yards.
5. A well-connected street system ensures efficient access to commercial areas, civic uses, and open space for residents and emergency response and public transit vehicles, including school busses. An irregular grid system offers more visual interest and neighborhood character than a rigid rectangular grid.

Views of town and neighborhood concepts:



Baptist church on Daniel Island



Publix grocery store in Greenville



Townhomes in Summerville



An active park in the BCD Region



A new neighborhood in Knightsville

Constrained Growth Areas

Conservation communities are environmentally sensitive villages, neighborhoods, and commercial areas tucked into a broad natural landscape where public services and infrastructure to support development are lacking or sparse. These characteristics comprise Constrained Growth Areas. Their purpose is to allow contextually sensitive development without overburdening public services, especially schools, roads, and emergency response stations. These services are less frequent and have lower capacities in Constrained Growth Areas.

The designation of land in a Constrained Growth Area does not dictate low-density development on a permanent basis. The landowner may choose to hold land until public facilities can be extended to support urban levels of service.

Natural and cultural resources are present but not necessarily pervasive in Constrained Growth Areas. Paired Commercial and Civic Nodes identify the center or crossroads of a conservation community. Low-density neighborhoods occur around the crossroads in a village-like pattern. Communities will occur in pods buffered by belts of wetlands or other conserved green spaces. Village centers should have low-speed streets with parallel parking. Roundabouts may be preferable to wide intersections with stoplights where traffic circulation demands control. Aesthetics include moderate setbacks and buffering with a majority of detached structures, none taller than three stories.

Tools to build Constrained Growth Areas include the following:

- Low-density residential zoning and low ratios of impervious surface area to lot area, on average, throughout conservation communities;
- Conservation subdivision requirements (a.k.a. clustering), including conservation easements;
- Cultural and natural resource surveying to determine lands most desirable for conservation;
- Buffering between communities (typically along wetlands or other drainage features) as well as buffers between incompatible land uses;
- Land development standards that protect water quality, promote wildlife corridors, and conserve tree canopy;
- Road corridors with access management tools to conserve capacity, such as shared access easements to reduce curb cuts on thoroughfares, medians rather than two-way left-turn lanes, and roundabouts at some intersections, and

Reevesville, a farming community of about 200 residents, has a post office tucked in a small commercial center on Rigby Street, which intersects US Highway 78. This village center is surrounded by a neighborhood with residential lots of various sizes, which in turn, are enveloped by active farmland. Reevesville is a forerunner to a conservation community (next 3 images).



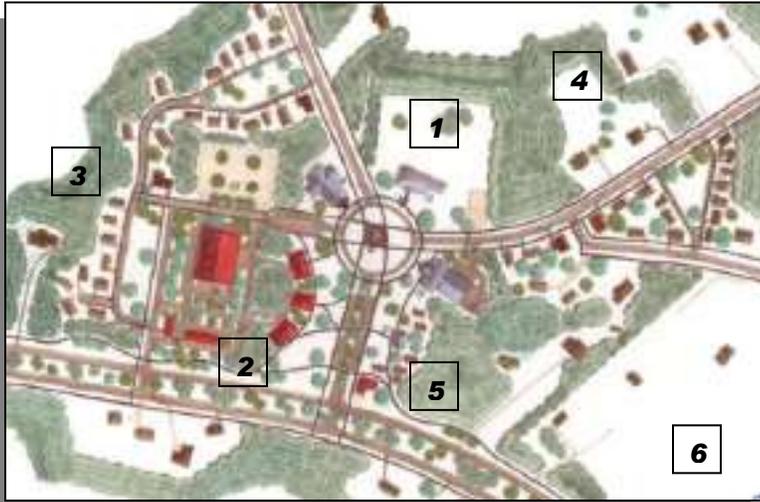
At the opposite end of Dorchester County, Poplar Grove bills itself a modern “conservation community.” It includes 450 homes on sites ranging from 2,000 square feet to 100 acres on a former rice plantation that covered roughly 5 square miles. While the path to this development plan troubled some, the end result is beneficial to Dorchester County and can be duplicated through long-range planning and growth management.

At the headwaters of the Ashley River is a new community known as The Ponds. With 1,950 homes planned, The Ponds is a more intense development than Poplar Grove; nevertheless, large swaths of land adjacent to the Ashley River and Great Cypress Swamp are placed in permanent conservation. The Ponds also demonstrates a successful transition from a Managed Growth Area to sensitive lands; it incorporates commercial and civic sites and townhomes in the new community.

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- Most critically, selective extension of water and sewer service, to prevent these public services from outpacing road service. (Sanitary sewerage will be confined to conservation community villages, detailed below, and for isolated cases to protect public health.)

A Conservation Community Village in Concept



1. Civic uses define the center of the village and encircle a roundabout that offers good vehicular circulation as well as a visual focal point. This arrangement constitutes a community gathering place.
2. Commercial uses are easily accessible from the gathering place as well as the primary thoroughfare serving the area. The low-density residential nature of conservation communities demands that the majority of customers drive for goods and services.
3. Homes cluster in the village center, providing convenient access to goods and services as well as places of learning and worship.
4. Large residential lots are also a choice for homebuyers and might allow for small-scale agriculture or keeping horses.
5. The village center benefits from well connected roads, sidewalks, and multi-use trails. This allows smaller parking areas to be distributed throughout and reduced in number rather than aggregated in one or more large paved surfaces for each individual use.
6. A conservation community village warrants its own sanitary sewerage system to facilitate development, privately constructed but publicly maintained. The preferred treatment method is land application on a nearby conserved tract of land.

Views of conservation community concepts:



McClellanville Middle School (image courtesy of Charleston County School District, www.ccsdschools.com, 2005) is centrally located.



Piggly Wiggly supermarket, Gardens Corner



Homesites with native vegetation and preserved mature trees, North Charleston



A large, mostly wooded homesite in Givhans.



Walking trail between trees, Goose Creek

Restricted Growth Areas

Extensive and valuable natural and cultural resources, rural enclaves, estates (e.g., horse ranches), and active high-value agriculture characterize *natural and rural places*. Extensive new development often adversely affects these places, hence their designation as Restricted Growth Areas.

Most of Dorchester County's active farmlands are designated Restricted Growth Areas. So, too, is the historically significant plantation district, once active farmland, bisected by Ashley River Road. The Wire Road corridor, a former stagecoach road with historical and cultural significance, is also designated a Restricted Growth Area. These two areas represent the two subcategories of Restricted Growth Areas: Rural and Conservation. The Conservation designation will ensure that the historic context around Middleton Place will be preserved as well as the landmark itself.

Conservation Areas also incorporate Dorchester County's significant rivers and swamps and their floodplains. High-density development in these areas is not only detrimental to natural resources, but impractical as well.

Circulation is provided by high-speed highways and quiet side roads. Aesthetics include freestanding buildings with deep setbacks on main highways and buffering of higher-intensity land uses.

Tools to build and sustain Restricted Growth Areas include the following:

- Rural-density residential zoning and low impervious surface coverage ratios, which will pre-empt the need for typical stormwater management (drainage and detention) systems;
- Transfer of Development Rights, a voluntary program that results in conservation easements on sensitive tracts of land;
- Ample buffering and setback requirements from natural and cultural amenities to protect neighboring owners' use of resources and enjoyment of land;
- Land use and development standards for family compounds and heirs property, to enable continuation of rural development patterns;
- Alternative land development standards that allow short dirt or gravel roads and other rural landscape characteristics; and
- Wells for potable water and on-site disposal systems, because extending sewer lines to distant areas for low-density development is not cost-effective.

Views of rural Dorchester County: a rural estate, a horse pasture, a scenic river, a scenic byway, an old country store, and a volunteer fire department



Greenbelts

The purpose of Greenbelts is to preserve the sensitive natural landscapes and the distinct communities of Dorchester County. Greenbelts accomplish these objectives by protecting the County's most significant cultural and natural resources – the historic plantation district, stretches of Wire Road, the Ashley and Edisto rivers, the Beidler and Brosnan forests, and swamps and other significant jurisdictional wetland systems.

These ecosystems have always been natural borders between the communities of Dorchester County. Their protection ensures the continuation of these boundaries. Each community, therefore, remains spatially independent of one another, thus promoting its individuality and sense of place. In contrast, Summerville and North Charleston have effectively “grown together.” This loss of boundary between the two communities erodes the individuality of both.

Greenbelts function as wildlife corridors and passive parks, where desired, for birding, kayaking, hunting, and other outdoor recreation. They protect water quality within their ecosystems and viewsheds from the water.

The depth of Greenbelts and land uses allowable within them will vary by location. Generally, larger, more remote ecosystems – Edisto River, Four Holes Swamp, and Beidler Forest – will be afforded a 300-foot average setback from their jurisdictional wetland systems. Fifty to 100 feet will be the average setback from land development for the remainder of mapped Greenbelts on undeveloped tracts. Greenbelt depth on redeveloping sites and previously subdivided lots will vary by conditions on the ground. Minor subdivisions, involving ten or fewer lots, may occur within Greenbelts. Greenbelts will not eliminate the development capacity of land by regulation.

Dorchester County will enact conservation measures for these Greenbelts and the resources they bound. First, it will uphold existing federal and state protections for wetlands. Such protections ensure much of the land within Greenbelts cannot be developed. In some cases, State authorities require vegetative buffers along the delineated edges of these wetlands. Additional tools to build Greenbelts include these:

- Clustering provisions to prevent landowners from losing land development capacity due to environmental regulatory constraints (Dorchester County will allow density bonuses, up to ten percent more housing units and commercial square footage than allowed by zoning, to the developer burdened by imposition of setbacks for Greenbelts.); and
- Transfer of Development Rights, a voluntary program that results in conservation easements on sensitive tracts of land, which essentially pays landowners not to develop their property. (This tool is detailed in Chapter 6, “Priority Investment Areas.”)

Views of the Ashley and Edisto rivers



Letchworth, England, is the first “garden city,” designed by Barry Parker and Raymond Unwin based on the city planning theories of Ebenezer Howard (image courtesy of University of Maryland, www.lib.umd.edu, 2006). One principle is to provide open country in close proximity to townsfolk. Greenbelts make this principle a Dorchester County policy.



Goal 2

The communities of Dorchester County will be distinct places where people meet, interact, and collaborate. These places will happen in central locations that are easily accessible to surrounding neighborhoods where infrastructure supports higher intensity use of land.

Policy 2.1: The *Future Land Use Map* identifies focal points of activity throughout Dorchester County as “Nodes,” both existing and future. Each Node falls into one of four land-use categories, as listed at right. Each new Node placed on the map identifies an opportunity for an economic hub, commercial center of activity, a community gathering place, or a central neighborhood.

Each Node is located according to where it will function best: along a major transportation route, on high ground away from natural resources, or in a location central to new communities. Additionally, Nodes of different types are collocated to function symbiotically. For instance, a Commercial Node is often paired with a Housing Node to build in a market for commercial services. Finally, Nodes are more concentrated in Managed Growth Areas, those areas previously addressed as appropriate for the establishment and expansion of towns and neighborhoods.

The purpose of Nodes is to include a full complement of public and private services in each community, so that residents have opportunities to live, work, play, learn, worship, and shop near their neighborhood and within their community. Each community will therefore benefit from more convenient services, shorter vehicle trips, and a stronger sense of place organized around common points of interaction.

Employment Nodes

The purpose of an Employment Node is to serve as an *economic hub* – a generator of jobs and attractor of further private investment. Large employers, like factories, office buildings, and hospitals, generate “spin-off.” That means the activities, employees, and customers of these economic hubs generate wholesalers and service providers that establish businesses nearby, thus compounding economic development.

Criteria for Employment Node locations are similar to those for Employment Growth Areas. Identifying a proper location for a single employer, however, is an imperfect science. The Planning Commission may therefore consider a Commercial Node a suitable location for an economic hub, provided the scale and externalities of the proposed land use are appropriate to the site. Items for consideration include access; heavy truck traffic and routing; availability of public services or the ability to provide them; environmental and cultural sensitivity of the land and surrounding area; air, water, and light pollution; and noise and vibration across property boundaries.

Nodes of the Future Land Use Map

Node	Indication on Map
Employment	Purple
Commercial	Red
Civic	Blue
Housing	Orange

Robert Bosch Corp. has been an important employer in Dorchester County for many years, as demonstrated by public investment extending Patriot Blvd. to Bosch’s main entrance on Dorchester Rd.



A medical center is important to economic development not only for the jobs it creates, both directly and indirectly, but also for the service it provides. Prospective employers are growing more in tune with employees’ desire for community services. (Photo courtesy of Trident Health System, www.tridenthealthsystem.com, 2007.)



The Daniel Island Medical Center was established early in the development of the new town, a positive trait attracting investors and homebuyers.



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To build an Employment Node, special exception permitting standards must be present in the County Zoning Ordinance. These will prepare the County to review the suitability of large employers in Commercial Nodes identified on the *Future Land Use Map* on a case-by-case basis while avoiding the possibility of illegal spot-zoning.

Commercial Nodes

The purpose of a Commercial Node is to serve as an *activity center* where complementary businesses benefit from proximity to one another – a market-driven condition called agglomeration. Agglomeration has many benefits, both economic and for growth management. A cluster of like businesses enjoys easier marketing and increased exposure to consumers. The community benefits because traffic and environmental impacts are confined to an area where they can be more efficiently managed, on high ground away from sensitive natural resources and where public infrastructure provides easy access and greater capacity. Additionally, a commercial activity center can be a community focal point, where neighbors meet, dine, and recreate together.

Commercial Nodes are planned at intervals of a quarter-mile to one mile along arterial roads and some collector roads in Managed Growth Areas. This interval ensures that surrounding neighborhoods have at least one Commercial Node within walking distance. Moreover, Commercial Nodes serve bus riders much better than disbursed commercial establishments, since multiple goods and services are available in walking distance of one another. A Commercial Node in a Managed Growth Area could take on many forms, ranging from an agglomeration of restaurants to a regional shopping center. Given this range of possibilities, Chapter 7: Community Design provides more detail regarding the location and design of Commercial Nodes.

In Constrained Growth Areas, Commercial Nodes are planned at intervals of a mile or more apart. The activity center is typically paired with a Civic Node to establish a conservation community village, as discussed in the section about Constrained Growth Areas.

Commercial Nodes in Restricted Growth Areas are limited due to sparse population and lack of infrastructure. A rural activity center might be as simple as a gas station or general store. A major commercial development, like a shopping center, would be out of scale with the area, and supporting infrastructure is not available.

Commercial Nodes are planned at the edges of Employment Growth Areas as well. These activity centers will accommodate commercial operations that support large employers in these areas.

The original activity centers of Dorchester County are the centers of its municipalities, the “downtowns.” Downtown St. George (below) and Downtown Summerville (second from top) both enjoy direct access from broad surrounding areas.



More recent activity centers have fewer routes to them and are configured in a way that discourages walking or bike-riding to them (examples in St. George and Summerville, respectively, appear below).



A gas station or general store is often the commercial activity center of a rural area. The example below instills pride in the McCellanville area.



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Nodes occur at intersections to ensure optimal access within the Node as well as to the Node from surrounding neighborhoods. A large land development may establish a new Commercial Node by introducing a new perpendicular route through or adjacent to the land development. This is best accomplished an amendment of the Comprehensive Plan. During the amendment process, the Planning Commission can study the destination of the proposed road and appropriate land uses for its corridor.

Tools to build Commercial Nodes include the following:

- Confining general sales and service uses to a radius around intersections through zoning to promote agglomeration (The appropriate radius varies by road type. A larger radius will apply along an arterial road compared to the intersection of two narrower collector roads. This radius must be translated to zoning, where selected land uses are confined to Nodes. Allowable land use intensity – building height, bulk, and lot coverage – must be increased in Commercial Nodes.);
- Adequate access to and capacity of infrastructure (Optimal pedestrian access, provided via on-street parking, wide sidewalks, and frequent crosswalks, promotes pedestrian-oriented commercial areas. The target speed for motor vehicles in pedestrian-oriented Commercial Nodes must be no greater than 30 miles per hour, while 25 is preferable. The radius of a pedestrian-oriented Commercial Node is best suited at ¼ mile – a comfortable walking distance.);
- In automobile-oriented commercial areas, access to private property, balanced with mobility (Turn lanes to parking areas and interconnected parking lots, via shared access easements, are needed. Mobility must then be prioritized *between* Nodes. The speed limit in automobile-oriented Commercial Nodes must be no greater than 35 miles per hour. This improves visibility for businesses and allows more time for drivers to safely maneuver into parking areas once they have identified their destinations.); and
- A public plaza, or outdoor gathering space, to facilitate development of a Commercial Node by providing a centerpoint for orientation. (This is especially beneficial in a pedestrian-oriented Commercial Node, where it can serve as a destination itself or as space for outdoor dining.)

Commercial Nodes often work in concert with other Nodes. When paired with a Civic Node in a Constrained Growth Area, the result might look like the Newpoint community near Beaufort. (See the section about “conservation communities for more information.)



A Commercial Node over a Housing Node indicates a mixed-use, pedestrian-oriented activity center. In this example, the l’On community in Mt. Pleasant, the Node is oriented to a public plaza. Some of these are labeled “Gateway Districts” - priority investment areas.



Businesses like these along Clements Ferry Road support industry. A Commercial Node over an Employment Node represents them.



Civic Nodes

The purpose of a Civic Node is to establish a public facility as a *gathering place* in the center of a neighborhood or community. The three prevalent types of gathering places are (1) places of worship, (2) schools, and (3) parks, including clubhouses and recreation facilities. Municipal buildings and post offices are important Civic Nodes as well.

A Civic Node is conveniently and safely accessible by car, bike, and foot from the surrounding community. High-speed highways are ill-suited sites for most of these institutional uses, because they lack accessibility from nearby neighborhoods and unnecessarily congest arterial roads.

Tools to build Civic Nodes include these:

- Sites of appropriate size and location provided in larger land developments;
- New collector roads to expand the County's transportation network so that new Civic Nodes are readily accessible to the surrounding community;
- Public buildings in highly accessible locations with a full complement of public services able to serve the new facility;
- New or improved public buildings that represent the governing body's commitment to investing in the community (A Civic Node increases surrounding property values and generates economic activity.);
- Partnerships between Dorchester County and its school districts to build cultural and recreational facilities available to pupils and area residents; and
- Open spaces obtained in proportion to the expected residential population in a proposed land development and in scale with the character of development proposed. (That means active recreational space in smaller areas in multi-family communities and more natural, passive open space in low-density neighborhoods.)

Town Hall is a municipality's most important Civic Node.



A post office is also an important Civic Node in a small town or village.



Due to its size and traffic generation, a high school might be the exception to the goal that schools should be located on collector roads within or between neighborhoods.



A church is a valuable community center, often the only Civic Node in a rural area.



Clubhouses, like this restored historic farmhouse at The Ponds, are often gathering places for new communities (photo courtesy of Robert Behre, *The Post & Courier*, 2008).



Housing Nodes

Central neighborhoods are comprised of residents who are willing to trade large yards for amenities and proximity to goods and services. Many of these residents are childless couples, whether just starting out or downsizing after raising children. Others are single adults at all stages of life. These residents may be working class, unable to afford rising home prices in the Summerville area, or an entrepreneurs who invests more of their net worth in business than housing.

A Housing Node is a central neighborhood of moderate- to medium-density homes in a highly accessible location adjacent to Commercial and Civic Nodes. The neighborhood may include rowhouses, townhouses, apartments, or a combination of the three. The Housing Node provides a share of the consumers the Commercial Node needs to flourish, especially if the Commercial Node is pedestrian-oriented. The central neighborhood also provides a transition between the activity of the Commercial Node and the tranquility of nearby low-density neighborhoods.

Central neighborhoods benefit Dorchester County by concentrating housing where infrastructure capacity exists or is planned. These neighborhoods also generate more taxes, because they are more likely comprised of rental properties than low-density neighborhoods, and exert less demand on services. Most notably, central neighborhoods house fewer school children.

Tools to build Housing Nodes include the following:

- A range of housing types and densities allowed by right in County zoning (The zoning map must indicate sites for denser housing where infrastructure is in place or programmed. The Planning Commission will then need the authority to approve a housing development to avoid a drawn-out permitting process that angers neighbors and increases costs to the developer. These costs are inevitably passed on to the homebuyer, thus hindering affordability of housing for all residents.)
- Housing Nodes planned only in Managed Growth Areas, where the County has the full complement of public services planned (Other areas are not appropriate for moderate- to medium density residential development.); and
- Dorchester County land development standards, which the Planning Commission administers, that mitigate increased residential densities with good site planning (The Commission should assess what each site plan includes that expands the transportation network as well as what existing capacity will be exhausted. Site planning is addressed further in Chapter 7: Community Design.);

Dorchester County's original central neighborhoods are within walking distance of downtown St. George and Summerville. Centrally located, historic homes are sought after throughout the tri-county area. These neighborhoods mix duplexes and mother-in-law suites with houses.



More recent development patterns concentrate apartments in a large pod, sometimes on less desirable land, in part because they are illegal in newer neighborhoods.



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- In turn, public road standards prepared by the County that are applicable to denser residential development, including alleys for parking and local streets for townhouse communities with on-street parking. (This will make housing more affordable and allow Dorchester County better control over the transportation network.);
- Accessory dwelling units – also known as mother-in-law suites or garage apartments – and live-work units (apartments above shops) allowed by right in County zoning for Housing Nodes and pedestrian-oriented Commercial Nodes. (These dwelling units provide inexpensive housing options to renters and help homeowners or shop-owners pay their mortgages without harming the character of the neighborhood.); and
- Six “Gateway Districts,” established by the *Future Land Use Map*, that allow pedestrian-oriented commercial areas mixed with high-density housing. (Four of these are planned near potential commuter rail station locations; a fifth is sited at the north end of Bacon’s Bridge, where substantial road improvements are planned; and a sixth is located near Sland’s Bridge, also a major capital improvement project expected in coming decades.)

Modern land developments are beginning to reintegrate apartments into communities, because a strong market exists for them.



By the same token, commercial uses are appearing in modern multi-unit communities.



These developments are often called “traditional neighborhoods,” because they resemble historic areas. Recent amendments to South Carolina planning enabling legislation encourage new traditional neighborhoods.

Goal 3

Road corridors will effectively manage transportation needs while contributing to the character of Dorchester County communities.

Policy 3.1: The *Future Land Use Map* (FLUM) identifies Community-Oriented Corridors and Automobile-Oriented Corridors. Dorchester County deems the character of these Automobile-Oriented Corridors incongruous with its goals for land-use planning, transportation planning, and community design. All collector- and arterial-road corridors will be planned and designed to serve their communities as the roads come up for improvements.

Those roads that function as Automobile-Oriented Corridors are highlighted in red on the FLUM. These Corridors include a wide variety of commercial uses, ranging from gas stations to restaurants to shopping malls. One road simply does not have the capacity to safely and conveniently serve the intensity of uses and the traffic they generate over several miles and function for commuters and through traffic.

Community-Oriented Corridors are highlighted in pink. These Corridors include neighborhood services and small-scale multi-unit housing. More intense uses, like restaurants and supermarkets, are planned for Commercial Nodes, which are located periodically along these Corridors.

Land-use planning is just one factor in a successful corridor. Parking and road design are also critical. More attention is devoted to these factors in the following chapter, Community Design.

Goal 4

Development proposals of all sizes will adhere to the vision, achieve the goals, and conform to the policies of the Comprehensive Plan.

Policy 4.1: Large development proposals may necessitate amendment of a comprehensive plan to align the goals of the community and a large landowner. The landowner will thus utilize the land-use planning tools prescribed for Dorchester County in this chapter to achieve a development proposal commensurate with the goals of this Comprehensive Plan.

Policy 4.2: Dorchester County finds that it is desirable to encourage private long-term planning efforts and public-private partnerships through the creation of “Master-Planned Overlay Areas.” Such partnerships provide for a unique opportunity to proactively manage long-term, planned regional growth and to develop a common vision for new communities in the Lowcountry. Master-Planned Overlay Areas consist of properties that are:

Automobile-Oriented Corridors are numerous in the tri-county area. The frequency of high-speed five-lane highways is no coincidence.



Main Street Moncks Corner transitions from a central business district to a Community-Oriented Corridor in both directions.



Neighborhood services in this Community-Oriented Corridor look like these.



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- Anticipated to help absorb a significant portion of Dorchester County growth through the year 2030 or longer within the master-planned communities that are designed to provide the associated infrastructure improvements concurrently with the completion of such development;
- Sufficient in acreage – at least 10,000 acres in area – to provide for the development of master-planned communities containing mixed residential, civic, institutional, commercial, and industrial uses in development phases;
- Eligible for long-term (up to 50 years) development agreements pursuant to the South Carolina Local Government Development Agreement Act; and
- Located so that existing infrastructure may be utilized or supplemented so as to minimize the development impact on infrastructure needs, or may be designed and laid out so that unintended growth potential for infrastructure-driven development outside the proposed Master-Planned Overlay Area can be minimized.

Dorchester County finds that the desired public and private investments through long-term development agreements within the Master-Planned Overlay Areas are best facilitated by predictability in the County's development approval process. Dorchester County desires to encourage long-term land-use planning by facilitating predictability in the County's development approval process; therefore, no amendment of this Comprehensive Plan or any of its components is required for development within the Master-Planned Overlay Areas solely on the grounds that the development master plan presents variations from the land use, infrastructure, or community design section of this Comprehensive Plan. The development density provisions of this Comprehensive Plan need not be applied as absolute density maximums but may be utilized as qualitative indicators of the character of the specific Growth Areas. Developments within a Master-Planned Overlay Area shall be required to mitigate their proportionate share of infrastructure impact. County Council shall authorize transfers of credit to the original developer for any determined excess contribution. Any development agreement containing such provisions and governing the development of property within the Master-Planned Overlay Areas shall be considered consistent with this Comprehensive Plan.

Note: County staff, in cooperation with MeadWestvaco Corporation representatives, provided the text for Policy 4.2.

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MeadWestvaco is the largest landowner in Dorchester County, as well as one of its largest employers. Most of its land is held in large tracts of timberland. A processing facility, which stands at the fork of highways 165 and 78 in the Brownsville area, is among other MeadWestvaco property in the county.

Like many American timber companies, MeadWestvaco requires less land to grow pines for paper fiber. All these companies are divesting land that may have value for other uses. The St. Joe Company, for example, has successfully developed new towns and conservation subdivisions in northern Florida, near existing towns and resorts.

MeadWestvaco has undertaken the largest master planning effort to date in the BCD Region. Company representatives and their planning consultants from EDAW, Inc., held two series of public input meetings in Ridgeville, Summerville, Clubhouse, Hollywood, and North Charleston in 2007. The input from these meetings is expected to shape the East Edisto master plan, due just after printing of this document. Recurrent themes recorded in MeadWestvaco's planning process have been compact, walkable towns and villages, significant conservation of natural and cultural resources, and self-sustaining communities that do not overburden infrastructure.

New towns and villages located within East Edisto have the potential to accommodate much of Dorchester County's projected population growth to 2030. East Edisto presents to Dorchester County and the broader metropolitan area a unique opportunity to proactively manage regional growth by partnering with one landowner to develop a common vision for new communities in the Lowcountry.

MeadWestvaco recently placed large tracts of land within the Edisto River floodplain in conservation easements, thus preserving the natural beauty and water quality of the river. These easements contribute to an emerging "greenbelt" – a contiguous ribbon of permanently protected natural land – running the length of Dorchester County, connecting two nationally significant Conservation Areas: the ACE Basin and the Francis Beidler Forest.

Some participants in MeadWestvaco's planning process, as well as Dorchester County's, expressed a vision of a regional greenbelt, encircling the urbanized Charleston-North Charleston Metropolitan Area, of which Summerville is a part. This regional greenbelt would build upon Cape Romain National Wildlife Refuge, the Francis Marion National Forest, and Lake Moultrie with privately secured conservation easements like those volunteered by MeadWestvaco. Dorchester County can promote the realization of this vision through policies outlined in this Chapter.



The highlighted land indicates the extent of the East Edisto study area. It covers 72,000 acres between Givhans and Adam's Run, in Charleston County. This acreage is similar to that incorporated by the City of Charleston (image courtesy of MeadWestvaco, www.eastedisto.com, 2007).

Future Land Use • Build

How to Use This Chapter

This chapter on Future Land Use is a template for two distinct parties. One is the County Planning Commission, which must prepare and map zoning throughout unincorporated Dorchester County. The second party is the real estate development industry, which must carry out land planning for development proposals in accordance with this chapter to gain approval from the County.

The Planning Commission must commit up to three years to implement this chapter through zoning. This task requires time and consensus building. The Commission will therefore phase the implementation of zoning into at least two geographic sections.

The first section surrounds Ridgeville, Givhans, and Clubhouse Corners. The upper portion of the county above Four Holes Swamp might be further segmented by Indian Field Swamp.

The purpose of geographic phasing is to include representatives of these rural areas in a broader task force that includes the Planning Commission. This will couple Commissioners' experience in land development review and expertise in real estate with local knowledge and direct community representation.

The County's zoning will not directly reflect the *Future Land Use Map* (FLUM) immediately upon adoption of zoning. Rather, the Zoning Ordinance will enable land use to mature into a reflection of the map. Moreover, the Planning Commission will

prepare zoning districts based on this template that enable the Official Zoning Map to be quickly updated. Updates will occur primarily in two instances: (1) improvement to public facilities and (2) a land development proposal that includes a commitment to improve public facilities through a development agreement.

A developer who prepares a Planned Development District in accordance with this chapter shall be considered substantially in compliance with the Dorchester County Comprehensive Plan. Such a proposal will locate according to the FLUM, adhere to the stated principles of the Node or Growth Area, utilize the templates in this section, "Build Future Land Use," and employ the Community Design guidelines as applicable.

Full compliance with the Comprehensive Plan shall include provisions for public facilities. Capacity will be in place, scheduled in the County's Capital Improvements Program, or addressed in a development agreement. Upon meeting these benchmarks, the developer should expect expeditious review and uncomplicated approval.

Compliance with the Plan includes adherence to environmental protection standards as well. Within these standards, wetland buffering is addressed in relative terms, varying by context, rather than fixed depths. Those wetlands to be buffered will be those within the purview of state and federal agencies charged with protecting wetlands.

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Build Employment Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Residences & accommodation functions	VERY LOW: 3-10 acres per unit (0.1-0.33 units per acre), 1-2.5 stories	LOW: capacity to be reserved for non-residential uses	MEDIUM: moderate wetland buffering, tree protection during land development	NONE
General sales & services	MEDIUM: 1-2.5 stories	MEDIUM	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: landscaping along primary roads
Manufacturing & wholesale trade	MEDIUM: lot size must ensure noise and vibration do not disrupt adjoining uses	HIGH	LOW: minimal wetland buffering, no tree protection	LOW: heavy buffering along primary roads
Transportation, communication, information, and utilities	HIGH	HIGH	LOW: minimal wetland buffering, no tree protection	LOW: landscaping along primary roads
Arts, entertainment, & recreation	VERY LOW: Passive open space only, except as accessory use	VERY LOW	LOW: Passive open space might occupy sensitive lands.	NONE
Institutions	LOW: to be allowed only as necessary in the Growth Area	MEDIUM: as necessary for the function	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: landscaping along primary roads
Construction-related businesses	MEDIUM	MEDIUM	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: heavy buffering along primary roads
Mining & extraction establishments	HIGH	MEDIUM: as necessary for the function	LOW: minimal wetland buffering, no tree protection	LOW: buffering of adjacent uses against dust, heavy buffering along adjacent roads
Agriculture & forestry	≥12 acres per tract	LOW	NONE	VERY LOW: forestry BMPs

Employment Growth Area Notes

The target population density for Employment Growth Areas must be no greater than 100 persons per square mile – a rural equivalent density. The purpose of these areas is to host job creators that do not necessarily coexist well with residential development.

Zoning must reflect this purpose so as not to deter prospective employers. The table lists appropriate functions with the types and levels of growth management tools needed to optimize efficiency of land use and development in Employment Growth Areas. Zoning will be applied to ensure that the County Planning and Codes Department has the authority needed to approve applications for land

use. Likewise, the Planning Commission will have the authority to approve land development applications, so as to streamline the permitting process for applicants. Any application for change in land use (rezoning) should proceed directly to the full body of County Council to streamline the review process. These notes regarding land use and development review are appropriate throughout Dorchester County. Transparency and predictability are beneficial to all parties involved in the land development review process.

Performance standards will correlate the lot coverage with lot size to mitigate externalities. Light buffering is needed for heavy uses that generate dust or intense light.

Build Managed Growth Areas

Areas Outside of Nodes and Corridors

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Residences (See Nodes, Corridors)	MODERATE: 3 housing units per acre of buildable land, 1-3 stories	MODERATE: interconnected roads and walkways, water and sewer	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: See Chapter 7: Community Design.
General sales & services (See Nodes, Corridors)	VERY LOW: home occupations only	MODERATE	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: landscaping along primary roads, will appear residential in scale and character
Utilities	MEDIUM: no externalities across lot lines; to serve broader area	MODERATE	LOW: minimal wetland buffering, no tree protection	MEDIUM: setbacks, buffering as necessary to obscure, mitigate externalities
Camps, parks, & recreation (athletic fields and courts, public swimming pools, clubhouses)	LOW: 35-ft. height limit, <50% lot coverage	LOW-MODERATE	LOW: Nature of use should conserve sensitive lands.	MEDIUM: building, site oriented to neighborhood, buffering of service areas.
Education (See Nodes)	LOW: PreK-8 only, 1-2 storey buildings with small footprints (more likely private)	MEDIUM: at intersection	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: building, site oriented to neighborhood, buffering of service areas.
Public safety	LOW: 35-ft. height limit, <50% lot coverage	MEDIUM: on collector road	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: landscaping along primary roads, buffering to shield neighbors from noise
Health & human services	VERY LOW: residential in scale	MODERATE	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: landscaping along primary roads, residential in character
Religious institutions (See Nodes)	LOW: 35-ft. height limit, buildings with small footprints, <50% lot coverage	MEDIUM: at intersection or on collector road	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: organization should voluntarily promote good design
Agriculture & forestry	≥12 acres per tract	MEDIUM: frontage on collector or arterial, not neighborhood street	VERY LOW: forestry BMPs	MEDIUM: careful buffering against controlled burns, trucking

Managed Growth Area Notes

The target population density for Managed Growth Areas is 1,500 to 3,000 persons per square mile. Housing in Nodes and Automobile- and Community-Oriented Corridors may contribute to achieve this range. Implementation for Nodes and Corridors appears hereafter and is not accounted in the above table.

The *Future Land Use Map* (FLUM) identifies approximately 33 square miles of undeveloped

land – either agricultural or forested – in Managed Growth Areas. At 1,500 persons per square mile, these areas can accommodate 49,500 new residents. This number is about 18 percent higher than the increase of 41,661 based on the Office of Research and Statistics projection. This difference is an appropriate contingency to ensure that adequate land supply exists for development throughout Dorchester County. The County will avoid constraining land supply, so as not to artificially inflate land values and home prices.

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A population density of 1,500 persons per square mile is the minimum necessary to support bus service. Managed Growth Areas with a mix of Nodes may reach as high as 3,000 persons per square mile. This density enables most residents to walk or bicycle to their destinations in the Nodes. Dorchester County must gradually move its land-use policy to reflect denser, more town-like settlement patterns. This would slow the consumption of land by development. Residents, especially those in outlying areas, might then perceive that the County has successfully slowed growth.

Conventional zoning will typically protect homes from non-residential land uses not stated in the first table. A developer may cluster housing units to protect environmental resources, conserve open space, or provide active recreation space. The developer may be granted a density bonus for providing sites for civic institutions (e.g., from three up to four housing units per acre).

The Planning Commission will review the FLUM to determine the appropriateness of land conservation and donations. It will amend the Map as necessary to reflect a Civic Node, standards for which follow.

Commercial Nodes of Managed Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Residences & housing services for the elderly	Desirable where coupled with Housing Node on <i>Future Land Use Map</i> (See previous table.)			
General sales & service (except as provided hereafter); communications & information; arts, entertainment, & recreation	HIGH: 1-2 stories, may have offices and/or housing above	VERY HIGH: at intersection of arterial road	LOW: minimal wetland buffering and tree protection during land development, to be mitigated through tree banking	HIGH: See Chapter 7: Community Design.
Automobile & heavy consumer goods sales or service; special trade contractor	MEDIUM: 1 storey, may have offices, housing above in pedestrian-oriented Commercial Node	VERY HIGH: at intersection of arterial road In pedestrian-oriented Commercial Node: alleys to access enclosed or garaged equipment	MEDIUM: moderate wetland buffering, tree protection during land development, tree banking to mitigate	HIGH: See Chapter 7: Community Design.
FIRE, rental & leasing; business, professional, scientific, technical, & personal services, & hotels, motels, or other accommodation services	HIGH: 1-4 stories	VERY HIGH: at intersection of arterial road In pedestrian-oriented Commercial Node: alleys to access enclosed or garaged equipment	LOW: minimal wetland buffering and tree protection during land development, to be mitigated through tree banking	HIGH: see Chapter 7: Community Design.
Other functions	Default to standards for areas outside of Nodes and Corridors.			

Commercial Node Notes

Commercial Nodes will develop at an intersection of arterial roads with collectors or another arterial and extend a few hundred feet from that intersection. This will typically occur through rezoning, although performance standards may

suffice for some functions to streamline development review.

A Gateway District is a pedestrian-oriented Commercial Node with optimal access to infrastructure, either via major roadways or commuter rail stations, should they come to pass. Its maximum height is five stories versus the four

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stories of other Commercial Nodes. Residential density will not be limited by a ratio of units per acre, but rather by building envelope, thus encouraging smaller, more affordable homes. Gateway Districts are covered in more detail in Chapter 6.

Pedestrian-Oriented Commercial Nodes will benefit from the same performance standards and form-based coding as Housing Nodes. Automobile-Oriented Commercial Nodes – those not paired with Housing Nodes on the *Future Land Use Map* – will continue to benefit more from

conventional zoning that segregates uses to minimize the negatives of automobile traffic and noise.

Tree canopy in Commercial Nodes is advantageous, but the intensity of development in these Nodes makes strict adherence to tree protections infeasible. Tree banking and replanting within the Node are highly desirable alternatives when protection cannot be achieved. The exception is large surface parking areas. Large trees are more desirable than immature trees, growth of which can be stunted by the pavement.

Institutional Functions Planned for Civic Nodes of Managed Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Arts, entertainment, & recreation (non-commercial)	MEDIUM: 1-2 stories	MEDIUM: Avenue or intersection of two collector roads	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: organization should voluntarily promote good design
Education	HIGH: 1-3 stories	MEDIUM: Avenue or intersection of two collector roads (except grades 10-12: arterial road only)	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: building, site oriented to neighborhood, buffering of service areas.
Public administration and safety	HIGH: 1-3 stories	HIGH: intersection of two collector roads or arterial	LOW: minimal wetland buffering, no tree protection	LOW: organization should voluntarily promote good design
Religious institutions	HIGH: 1-3 stories	HIGH: intersection of two collector roads or arterial	MEDIUM: moderate wetland buffering, tree protection during land development	LOW: organization should voluntarily promote good design

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Housing Nodes of Managed Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Residences	MODERATE-MEDIUM: 4-12 housing units per acre, 1-3 stories	HIGH: on arterial or at intersection of two collector roads	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: See Chapter 7: Community Design.
Housing services for the elderly	MODERATE-MEDIUM: 4-12 units per acre, depending on type	HIGH: on arterial or at intersection of two collector roads	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: Similar to central neighborhood; see Chapter 7.
Retail sales & service (except automobiles & heavy consumer goods); communications & information	LOW: 1 storey, <10,000 SF, may have offices, housing above	HIGH: on arterial or at intersection of two collector roads	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: See Chapter 7: Community Design.
FIRE, rental & leasing, business, professional, scientific, technical, & personal services	MEDIUM: 1-3 stories, footprint <20,000 SF	HIGH: on arterial or at intersection of 2 collector roads; alleys to access enclosed or garaged equipment	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: see Chapter 7: Community Design.
Other functions	Default to standards for areas outside of Nodes and Corridors. (See table on previous page.)			

Housing Node Notes

Housing intensity will be based on performance standards, including mixture with commercial uses to build tax base, contributions to public facilities to increase levels of service, and environmental conservation where applicable.

Zoning standards should be a mixture of conventional codes to manage land use intensity, coupled with form-based codes to manage the scale and character of the Housing Node and to ensure that development occurs as planned for the Avenues and Boulevards that serve the Node.

These standards will provide a framework that allows the Planning Commission to review and approve development. A Housing Node will not be successful if every development within it is subject to the planned development district process; rather, multi-family development will require Planning Commission approval under authority granted to it in South Carolina Code Title 6, Chapter 29, Article 7.

Tree canopy is a very high priority in Housing Nodes. A County tree bank should be instituted to allow mitigation of tree removal and replanting within the Housing Node or around it.

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Community-Oriented Corridors in Managed Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Residences	MODERATE-MEDIUM: 4-12 housing units per acre of buildable land, 1-3 stories	VERY HIGH: fronting immediately on road only; alley for parking desirable	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: site planning according to Chapter 7: Community Design.
Retail sales & service (except automobiles & heavy consumer goods); food services (no fast food); pet and animal sales or service; communications & information	LOW: 1 storey, <10,000 SF, may have offices, housing above	VERY HIGH: fronting immediately on road only; alley for parking desirable	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: site planning according to Chapter 7: Community Design.
FIRE, rental & leasing, business, professional, scientific, technical, & personal services; arts;	MEDIUM: 1-3 stories, footprint <20,000 SF	VERY HIGH: fronting immediately on road only; alleys to access enclosed or garaged equipment	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: site planning according to Chapter 7: Community Design.
Miscellaneous institutions	MEDIUM: 1-2 stories, 35 feet tall	VERY HIGH: fronting immediately on road only; alley for parking and pick-up	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: site planning according to Chapter 7: Community Design.
Other functions	Default to standards for areas outside of Nodes and Corridors.			

Automobile-Oriented Corridors in Managed Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
General sales & service; communications & information	MODERATE: 1-2 stories; 35 feet tall, <30,000 SF	VERY HIGH: fronting on road; shared access easements must limit curb cuts	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: landscaping along primary roads, site planning according to Chapter 7: Community Design.
Institutions	MEDIUM: 1-2 stories, 35 feet tall	VERY HIGH: fronting on road; alley for parking and pick-up preferred	MEDIUM: moderate wetland buffering, tree protection during land development	MEDIUM: landscaping along primary roads, site planning according to Chapter 7: Community Design.
Other functions	Default to standards for areas outside of Nodes and Corridors.			

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Build Constrained Growth Areas

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Rural residences	VERY LOW: 3-10 acres per unit (0.1-0.33 units per acre)	LOW: rural roads, unpaved side roads, typically wells and septic	LOW: tree protection during land development	NONE
Village residences	MODERATE: 1-3 housing units per acre of buildable land, 1-3 stories	MEDIUM: interconnected roads and walkways, public water and sewer optional	HIGH: sensitive lands conserved, deep wetland buffering, tree protection during land development	MEDIUM: See Chapter 7: Community Design, and Conservation Community section in this Chapter
Hamlet residences	MODERATE: 1-4 housing units per acre, 1-2.5 stories	LOW: rural roads, unpaved side roads, typically septic, public water is optional	NONE	NONE
Village commercial (general sales & services; communications & information; arts, entertainment, & recreation) and institutional	MODERATE: 1-2.5 stories, may have housing or office above	HIGH: at intersection; alley for parking, pick-up, and access to garaged or covered equipment, community sewer treatment may be desirable	MEDIUM: moderate wetland buffering, tree protection during land development	HIGH: See Chapter 7: Community Design, and Conservation Community section in this Chapter
Highway commercial (general sales & services; transportation & utilities; entertainment & recreation; institutions; construction-related business	LOW: <0.50 impervious surface coverage	MEDIUM: near intersecting arterial or collector roads, typically well and septic	LOW: minimal wetland buffering, tree protection during land development	MEDIUM: setbacks, buffering as necessary to *obscure, mitigate externalities
Mining and extraction establishments; animal production	Functions must be distant and buffered from Conservation Villages. Pre-existing establishment must be planned around.			
Agriculture & forestry	≥12 acres per tract	LOW	VERY LOW: forestry BMPs	MEDIUM: careful buffering against controlled burns, trucking near villages

Constrained Growth Area Notes

The target population density for Constrained Growth Areas is 500 persons per square mile. This is a very low density; however, it is significantly higher than typical rural areas. Proactive conservation measures are necessary to ensure that public facilities are not overwhelmed. Little to no expansion of arterial road and sewer capacity is planned in Constrained Growth Areas. Community treatment of sewage by land application may be desirable for Conservation Communities.

Village residential development must include performance standards that protect 40 to 50 percent

of high ground in Conservation Communities. A conservation easement or, less desirably, deed restrictions must cover the protected land. The intensity of residential use may utilize this conserved acreage to determine development capacity of the tract of land.

Hamlets are small rural neighborhoods or family lands with less than 50 people. They will grow by adding lots of similar size adjacent to the hamlet. This will occur through minor subdivisions for no more than five homes on less than two acres, in which no new public facilities are needed. Performance standards should enable this development to proceed without rezoning.

Build Restricted Growth Areas - Rural

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Rural residences	VERY LOW: 3-10 acres per unit (0.1-0.33 units per acre)	LOW: rural roads, unpaved side roads, typically wells and septic	NONE	NONE
Hamlet residences	MODERATE: 1-4 housing units per acre of buildable land, 1-2.5 stories	LOW: rural roads, unpaved side roads, typically septic, water is optional	NONE	NONE
Hamlet commercial (general sales & services; communications & information; arts, entertainment, & recreation); institutions	LOW: 1-2.5 stories, <20,000 SF, <50% impervious surface coverage	MEDIUM: at intersection or rural roads, typically well and septic	NONE	NONE
Highway commercial (general sales & services; transportation & utilities; entertainment & recreation; institutions; construction-related business	VERY LOW: <30% impervious surface coverage	MODERATE: on rural road near intersection, typically well and septic	NONE	LOW: setbacks, buffering as necessary to obscure, mitigate externalities
Mining & extraction establishments; animal production	Functions must be distant and buffered from Conservation Villages. Pre-existing establishment must be planned around.			
Agriculture & forestry	≥12 acres per tract	LOW	VERY LOW: forestry BMPs	NONE

Restricted Growth Area - Rural - Notes

The target population density for Growth Areas planned to remain rural is 100 persons per square mile, similar to existing conditions. This Restricted Growth Area will inhibit land development, but will be widely permissive regarding an owner's use of land. Noxious uses like landfills, salvage yards, and chemical treatment plants will be allowed by special exception only and located well away from hamlets.

Hamlets, as described on the previous page, are the most typical settlement pattern in rural areas and should be allowed to grow slowly as needed to continue as a community housing a full range of age groups.

Build Restricted Growth Areas - Conservation

Function	Intensity	Access to Infrastructure	Environmental Protection Standards	Design Standards
Rural residences	VERY LOW: 3-10 acres per unit (0.1-0.33 units per acre)	LOW: rural roads, unpaved side roads, typically well & septic	HIGH: sensitive lands conserved, deep wetland buffering, tree protection during land development	NONE
Village residential	MODERATE: 1-2 housing units per acre of buildable land, 1-2.5 stories	MEDIUM: interconnected roads and walkways, typically well & septic	HIGH: sensitive lands conserved, deep wetland buffering, tree protection during land development	MEDIUM: See Chapter 7, and Conservation Community section in this Chapter
Hamlet residences	MODERATE: 1-4 housing units per acre, 1-2.5 stories	LOW: rural roads, unpaved side roads, typically well & septic	NONE	NONE
Village commercial (general sales & services; communications & information; arts, entertainment, & recreation) & institutions	LOW: 1-2.5 stories, <20,000 SF, <50% impervious surface coverage	MEDIUM: at intersection or rural roads, typically well & septic	HIGH: sensitive lands conserved, deep wetland buffering, tree protection during land development	MEDIUM: See Chapter 7, and Conservation Community section in this Chapter

Restricted Growth Area - Conservation - Notes

Conservation Areas, for which a land use table appears next, must be more carefully regulated. The intensity of land use in these Restricted Growth Areas should equate to that found in rural areas. The major difference between the two areas is that Conservation Areas are environmentally and culturally significant landscapes. Proactive conservation measures must be pursued.

First and foremost, Conservation Areas are Sending Areas for the Transfer of Development Rights program discussed at length in Chapter 6. Eligible parcels must be zoned accordingly. One or more rates of transfer must be established while the County redistricts Conservation Areas. The TDR program will help the County achieve larger tract minimums in environmentally sensitive areas.

Development rights will be transferred at a rate no more than one housing unit per four acres of high

ground. In areas farther from Summerville, the transfer rate will be significantly lower, approaching one unit per twelve acres. Any land from which development rights are transferred will be conserved in tracts of twelve acres or larger.

Village residential development will include performance standards that protect at least two-thirds of high ground in portions of the county designated Restricted Growth Area - Conservation. Land development intensity ratios should also exclude wetlands, which are pervasive in Conservation Areas. A conservation easement or, less desirably, deed restrictions must cover the protected land.

The images on the following pages illustrate how this prescribed development pattern conserves significant land area in a small new community. It contrasts with a golf course community built with the same number of residential units. Seamon Whiteside & Associates designed these schemes for BCDCOG's *Growth Options Initiative*.

Plan Foundation 1: Future Land Use

