

Bradfordville Sector Plan
Chapter 2.0:
Existing Conditions & Trends

2.0 Existing Conditions and Trends

2.1 Natural Features

2.1.1 Topography and Hydrology

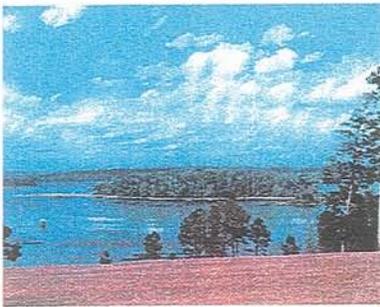


Photo credit: Kevin McGorty

The area of Northeastern Leon County which falls within the Bradfordville Study Area (BSA) is characterized by the rolling red clay hills of the Tallahassee Red Hills physiographic region. The BSA encompasses portions of 3 major lake watersheds. Most of the BSA flows north into Lake Lammonia, a large, shallow, highly vegetated lake which exchanges water with the Ochlochonee River during periods of high water. Approximately 15% of the BSA is contained within the headwaters of two sub-basins of Lake Lafayette, another large, shallow, highly vegetated lake in Southeastern Leon County. Lake Lafayette interacts with the St. Marks River at high water similarly to Lake Lammonia's interaction with the Ochlochonee River. Less than 10% of the BSA flows toward Lake Jackson, a closed basin lake which periodically experiences natural drawdowns into its many sinkholes. Lakes Jackson and Lammonia, and the St. Marks River, have all been designated by the Florida Legislature as Outstanding Florida Waters (OFW) worthy of higher level of environmental protection.



Many small lakes occur in the BSA along the drainage ways to the larger lakes. Many of these lakes were historically forested wetlands which were dredged for agricultural purposes. Some of the lakes were excavated to provide storm water treatment and aesthetic amenities for residential development. The largest of the "small" lakes in the BSA is Lake McBride, which has existed as an open waterbody since at least before 1937, the start of aerial photographic records of the county.

2.1.2 Forests and Habitat

Significant forest and habitat resources in the BSA are not well

Bradfordville Sector Plan
Leon County, Florida



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mapped, due to their existence primarily on large private land holdings (plantations). Although not well mapped, these plantations have not experienced significant changes in land use for many years. Also, large areas of these plantations have been placed in Conservation Easement, with more easements anticipated in the future. Therefore, existing resources on these properties are not seriously threatened by development at this time.

A comprehensive map of wetlands, floodplains, waterbodies, and steep slopes within the BSA is provided as *Figure 1*. Soils near the intersection of Thomasville Road with Bannerman and Bradfordville Roads are shown on *Figure 2*.

2.1.3 Storm Water



The existence of many lakes in the BSA, along with the rolling terrain and predominantly clay soils, make water quality protection the dominant environmental issue in the area. Steep slopes and low permeability clay soils increase storm water runoff from developed sites and make control of erosion and sedimentation from construction sites more difficult. Additionally, the development pattern which has evolved in the area has placed the densest development very close to Lake McBride, one of the area's most sensitive lakes.

In order to protect the unique natural features of the Bradfordville Study Area, environmental standards are proposed to reduce the amount of sediment runoff from construction sites, improve inspection procedures and enforcement of environmental ordinances, and to create a Special Development Zone around Lake McBride to reduce development impact to this particularly sensitive feature. Significantly improved storm water treatment standards are also proposed for the entire BSA, which will prevent new development from adding any additional loading of pollutants to area lakes. These standards were tested for several sites in Bradfordville to determine what (if any) limitations the standards would impose on the allowable impervious area (refer to *Appendix 3*).

The net effect of the revised and additional environmental

Bradfordville Sector Plan
Leon County, Florida

ordinances for the Bradfordville Study Area will be to provide more stringent environmental standards to this area than are required elsewhere in Leon County. In particular, the new storm water treatment standards are considerably more protective than the State of Florida standards for Outstanding Florida Waters (OFW), requiring treatment of up to 50% more water. More significantly, it requires that all of the treated water be retained on site, resulting in no discharge of pollutants from the treated water. This standard provides vastly improved protection compared to the OFW standard which allows treated water to be released into natural waters while it still carries a significant pollution load with it.

2.2 Historic and Archaeological Resources



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The Bradfordville community began to take shape in the late 1820's, becoming firmly established as a plantation community by the 1840's. A number of plantations were established, such as Horseshoe, Pine Hill, Walnut Hill, Edgewood and others. The area grew because of the presence of these large plantations, with cotton as the primary crop. Roadways and even a railroad were constructed to move the cotton to market. Bradfordville flourished as a plantation economy from the 1840's until the Civil War.

The Civil War and Reconstruction brought important changes to the Bradfordville area. In the 1870's, wealthy northern industrialists, with their relatives, friends, and business associates, began to purchase large tracts of land from local families, often redefining the old plantation boundaries. These vast land holdings were soon converted to hunting plantations and winter homes. Thomasville Road was built, and Bradfordville and Bannerman Roads soon followed. The area around the intersection of these roads developed and expanded, serving as the community's meeting place, a place to socialize and to exchange goods. At its height, the area contained a variety of residences, churches, a school house and a general store.

Today, only a small number of structural symbols remain to indicate Bradfordville's rich historic past. They include the old school house, several churches, various structures at the Horseshoe Plantation, and a number of cemeteries. There are also some remains of the past agricultural history. For example, a structure that served as an office for a tobacco broker has been converted into a residence. The foundation of the adjoining tobacco warehouse also survived.

Bradfordville Sector Plan
Leon County, Florida

Perhaps many of the greatest historical resources of the area – the archaeological resources– are yet to be discovered. Well before European settlers came into the area, there was a rich history of Native American occupation. However, only a small portion of the archaeologically significant areas have been surveyed to date. The Leon County Bicentennial Survey Report, completed in 1988, resulted in in the recording of 51 sites in the Bradfordville area. Some additional surveys have been done since then, but these have been limited to specific areas and have resulted in only a handful of archaeological site additions to the Master Site File. Because of its historical role as a crossroads, Bradfordville has a high potential for archaeological resources. If these resources are to be preserved, care must be taken as development of the area proceeds.

2.3 Land Use



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The current land use pattern in the Bradfordville Study Area is primarily characterized by the contrast between predominantly rural uses and character in the northeastern half of the study area, and a rapidly developing suburban pattern of land use in the remaining portion of Bradfordville.

As shown in *Figure 3*, approximately 70 percent of the total land in the BSA remains in large, single-ownership land holdings devoted to hunting plantations and farms, with only a few, very minor concentrations of low and very-low density residential uses, as well as scattered agricultural and silvicultural uses. The area is, for the most part, rural in character to the east of Killearn Lakes on the west side of Thomasville Road, and to the north of Bradfordville Road on the east side of the same road – essentially corresponding with the present position of the USA boundary. The bulk of this area is designated as “Rural” in the Future Land Use and Zoning maps. In addition, the County has recently adopted an Agriculture/Silviculture/ Conservation overlay for a substantial portion of this land use district as an additional level of protection for existing rural uses.

The area located immediately outside of the Urban Services Area boundary on the east side of Thomasville Road is characterized by a pattern of large-lot, low-density residential as well as open space which is still evocative of a rural character community. However, the Comprehensive Plan indicates that extension of urban services into the fringe may be programmed during the later period of the Plan’s Year 2020 horizon. In addition, clustering incentives that allow the preservation of open space are only provisional in that, as the USA is expanded, these spaces might be given up to accommodate additional development, up to a suburban density of 1 du/acre. It is clear that this area, while outside of

Bradfordville Sector Plan
Leon County, Florida

the USA for the planning horizon, is considered as a “land bank” in anticipation of future adjustments to the USA boundary and staged urbanization to a suburban character.

In the southwestern half of the study area, the land use pattern is virtually set by suburban uses, although some significant undeveloped tracts remain interspersed with existing uses. Low- and medium-density residential subdivision activity is occurring at a steady rate throughout Killlearn Lakes and other areas within the Urban Services Area. Residential uses, mostly detached single family homes, comprise approximately 20% of the total land in the BSA – although they occupy about 80% of land within the USA. Most of these developments, designated as Residential Preservation in the zoning map, (*Figure 4*), are either approaching buildout, or will reach that point by the end of the planning horizon. The majority of future development in this area is expected to be infill.



Commercial development is limited mainly to the intersection of Thomasville Road and Bannerman and Bradfordville Roads. Several undeveloped parcels around this intersection are planned for retail commercial development. Community input suggested that there is also increasing concern that the Thomasville Road corridor south of this intersection will evolve into a pattern of strip commercial development consistent with the Comprehensive Plan’s “Suburban Corridor” designation. The Thomasville Road improvements were cited as one factor that could increase the conversion of land for this type of use in the future.

With a projected population growth of almost 8,000 through the year 2020, plentiful vacant land, and an expanding perception of the Bradfordville study area as a desirable place to live, it is anticipated that development pressures for all land use will continue to intensify. To preserve the rural area from these pressures, the focus of land use planning will have to shift from new, greenfield development to infill and redevelopment activities within the boundary of the Urban Services Area.

2.4 Existing and Planned Road Network



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The BSA has an extensive hierarchical roadway network that serves interstate, intrastate, and local needs, as shown on *Figure 5*. The major roadway that traverses the center of the area is Thomasville Road, a primary federal highway that provides interstate service between Florida and Georgia, as well as serving local traffic needs. Thomasville Road, which is classified as a principal arterial, runs generally north and south through the BSA. By virtue of being classified as a Florida Intrastate Highway System (FIHS) road, Thomasville Road has an adopted Level of Service (LOS) of C (on a rating scale of A to F, with A being the best). Within the BSA, Thomasville Road has two primary roads that convey traffic to the eastern portions of the County. One is Velda Dairy, which is classified as a major collector, currently with an adopted LOS of D. The other is Bradfordville Road, which is also classified as a major collector, with an adopted LOS of D. Bradfordville Road is the primary road within the BSA that carries traffic to the east and connects to Centerville Road, a minor arterial which has an adopted LOS of D.

The western portions of the BSA gain primary access to Thomasville Road by way of three major collectors. These include Bannerman Road, Ox Bottom Road, and Kinhega Drive, all of which have an adopted LOS of D. Tekesta Road and Deerlake Road are minor collectors that connect to Bannerman Road and Kinhega Road respectively, with an adopted LOS of D. These roadway facilities serve as the primary access to the Killlearn Lakes neighborhoods. Within the BSA's major roadway network there are many local roads that play a vital role, and complete the overall roadway grid that provides service to a large amount of traffic on a daily basis.

The adopted Year 2020 Long-Range Transportation Plan identifies several projects to improve circulation within the BSA.

Bradfordville Sector Plan
Leon County, Florida

These projects, depicted on *Figure 6*, include:

- **Thomasville Road widening:** There two projects by FDOT to provide additional capacity on this road. The first one involves the construction of six lanes from Woodbine Drive to Kinhega Drive. This project is underway and scheduled for completion in the late summer of 2000. The second project is the construction of four lanes from Kinhega Drive to the Georgia State line. This project, also underway, is scheduled for completion in the fall of 2000.
- **Bannerman Road/Bradfordville Road intersection:** This project calls for the realignment of these two roads to meet at a single intersection. This project was completed as part of the Thomasville Road widening project, and is operational.
- **Kerry Forest Parkway extension:** The other project in the long-range plan is the extension of Kerry Forest Parkway through the Bull Run development, connecting to Ox Bottom Road. The construction of this project is dependent upon an agreement between the City of Tallahassee and the developer.



All proposed developments within the BSA will be required to complete a concurrency management review to ensure that the project's anticipated off-site traffic impacts can be accommodated on all roadways with an adopted LOS. The only exception to this requirement is the Killearn Lakes Development of Regional Impact (DRI). The Killearn Lakes DRI was approved prior to the adoption of the County's Comprehensive Plan and is therefore exempted from the concurrency management provisions that were adopted as a part of that plan.

2.5 Community Facilities and Infrastructure

Infrastructure generally refers to the publicly and privately operated facilities that are required in order to support the existing population, and to provide adequate service for the anticipated population that will occur as the result of growth and development. Generally speaking, infrastructure systems are very capital intensive to establish, and therefore, require appropriate long range planning in order to effectively anticipate the future needs for system expansions required to accommodate population growth at an anticipated level of service delivery.

The full range of typical urban infrastructure includes central water and sewer service, electric utility service, solid waste disposal, storm water management, provision of adequate and safe transportation facilities and services, parks and recreational opportunities, and public safety services (fire and law enforcement). Under the Florida Growth Management Act (Chapter 163, Florida Statutes), local governments are required to establish specific levels of service for the provision of public facilities, and to regulate growth based on the ability of existing or planned infrastructure systems to operate or provide services at the adopted level of service. This system is referred to as concurrency management, or ensuring that infrastructure capacity is available concurrent with the anticipated demand for services associated with new development.

When the County adopted its Comprehensive Plan in 1990, the Plan established an Urban Services Area (commonly called the "USA") within which it is anticipated that development at urban level densities and intensities will occur over the planning time frame established in the Plan. The County's Plan also indicates that the infrastructure required to support typical urban level services will also be provided throughout the USA within the planning horizon of the Plan. The BSA is both inside and outside the USA as established by the Comprehensive Plan. Generally,

Bradfordville Sector Plan Leon County, Florida

in the BSA the USA incorporates the Killlearn Lakes area, Chiles High School, the Bradfordville Publix, and runs east along Bradfordville Road to Centerville Road. The area located to the north of the USA inside the BSA is an area anticipated to remain generally rural without plans for the extension of infrastructure associated with the provision of urban services.

The Comprehensive Plan establishes a level of service for seven public and private infrastructure systems. These include roadways, mass transit (inside the USA only), solid waste, storm water management, parks and recreation, potable water, and sanitary sewer. Following is a general description of each of these infrastructure systems as they presently exist in the BSA, with the exception of the roadway network which is discussed in the previous section. Also, discussed below is a general inventory of facilities and a discussion concerning levels of service.

2.5.1 Mass Transit

Public mass transit service is provided by Taltran. Taltran is a public bus service that is provided by the City of Tallahassee to areas within the City and to a limited area within the unincorporated County, located within the USA. Presently, mass transit service is provided only to a limited area within the BSA. It is anticipated that over time as the area developments and service is warranted, that the City will expand bus service within the BSA. According to the City of Tallahassee's Growth Management Department, the adopted LOS for mass transit service within the USA is presently acceptable under the guidelines established in the Comprehensive Plan.

2.5.2 Parks and Recreation

The County and the City of Tallahassee both provide parks and recreational opportunities that are utilized by the residents of the BSA. The only park facility located within the BSA is the Lake Iamonia boat landing, which is located on Lake Iamonia and also serves as a water-related recreation and park area. Numerous other neighborhood and Countywide park facilities are located in close proximity to the BSA and provide adequate recreation opportunities to the area residents. Presently, both the County and City are maintaining the adopted LOS for Parks and recreation facilities. The City LOS for Countywide parks is 1.22



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acres per 1000 persons population. This equates to a need of about 350 acres for a projected population of 280,000 in 2010. We presently have over 100,000 acres in existing County wide park space including state and federal lands. The County has an LOS of .18 acres per 1000 population for boat landings and water related parks. By the year 2010 there will be a need for approximately 50 acres of this type of park. The County presently has around 48 acres and will be acquiring an additional 43 acres on Lake Jackson which will meet the LOS for this type of use well into the future.

2.5.3 Stormwater Management



Several major County owned and maintained storm water management facilities are located in the BSA. These include the facility located near Lake McBride that was developed in conjunction with the roadway improvements to Thomasville Road, and a facility located to the south of the realigned Bradfordville Road near its intersection with Thomasville Road.

The Killearn Lakes development also incorporates several privately maintained lakes that serve as primary storm water management facilities for the area. The BSA also contains numerous other privately owned and maintained storm water facilities that provide service to the areas current and proposed development.

New development proposed within the BSA will be required to comply with the enhanced storm water management standards that have resulted from the Bradfordville Storm Water Study, which was recently completed. Each new development within the BSA will be required to demonstrate compliance with this new storm water standard prior to final permit approval. Under current County growth management regulations, storm water concurrency would be determined at the time of environmental permitting for a proposed project.

2.5.4 Potable Water

Potable water within the BSA is provided by onsite wells and two primary service providers, the City of Tallahassee and Talquin Electric Cooperative (TEC). For those areas of the BSA located outside of the USA, onsite wells are the primary source of potable water. Inside the USA, central water service is provided by either

Bradfordville Sector Plan
Leon County, Florida

the City of Tallahassee or TEC. Generally, those areas of the BSA that are located within the USA and are presently developed as residential are primarily served by central water systems. The area around Lake McBride and east of Thomasville road along Bradfordville Road is primarily served by individual wells.

All new nonresidential development within the USA will be required to connect to a central water system. The provider will be determined based on the location of the project and the franchise arrangement with the County. According to the City of Tallahassee and TEC, both systems presently have the capacity available to serve the potable water needs of the anticipated future development within the BSA located within the USA.

It is anticipated that onsite wells will remain as the primary source of potable water for those residents located outside of the USA. Prior to the approval of any new development in the BSA, the applicant will be required to demonstrate, through the concurrency management review process, that the service provider can accommodate the anticipated project's demand for potable water.

2.5.5 Sanitary Sewer Service

Sanitary sewer services within the BSA are also provided by onsite systems (septic tanks) and two primary service providers, the City of Tallahassee and TEC. As with the provision of potable water, for those areas in the BSA located outside of the USA, onsite septic tanks are the primary source of sewage disposal. Approximately half of the area presently developed as residential inside the USA is served by central sewer systems, with the remainder of residentially developed property served by onsite septic systems. Older portions of Killlearn Lakes, the area around Lake McBride and most of the USA area in the BSA east of Thomasville road do not have central sewer available.

All new nonresidential development within the USA will be required to connect to a central sanitary sewer system. The provider will be determined based on the location of the project and the franchise arrangement with the County. According to the City of Tallahassee and TEC, both systems presently have the capacity available to serve the sanitary sewer needs of the

