1.3 EXTENT OF VACANT AND DEVELOPABLE LAND [163.3191(2)(b)]

PURPOSE

The intent of this section is to determine if there is enough land currently designated with urban/transitional land uses on the County Future Land Use Map (FLUM) to support the expected BEBR median range population projection for the year 2025. In order to ascertain if there is enough urban land currently designated on the FLUM to support the expected population, the County must review the character, use and constraints of existing land resources within the County that are currently designated with appropriate land uses on the FLUM. Land uses that are considered appropriate to support future growth include the Rural (R), Low Impact Urban (LIU), Urban Low Intensity (ULI), Urban Medium Intensity (UMI), and Urban High Intensity (UHI) categories. The intent is to maximize existing urban and transitional (rural) land uses on the FLUM that are currently vacant. There is recognition that non-urban areas will carry some of the population, but these areas will only be populated at very low densities and will not be served by central water and sewer, or substantial transportation services. The Rural category was determined to be appropriate to carry some of the expected population because the Rural designation is sometimes considered a transitional land use designation between urban uses and areas that are more agrarian or remote. Rural areas were included in the original population methodology used to formulate the existing FLUM.

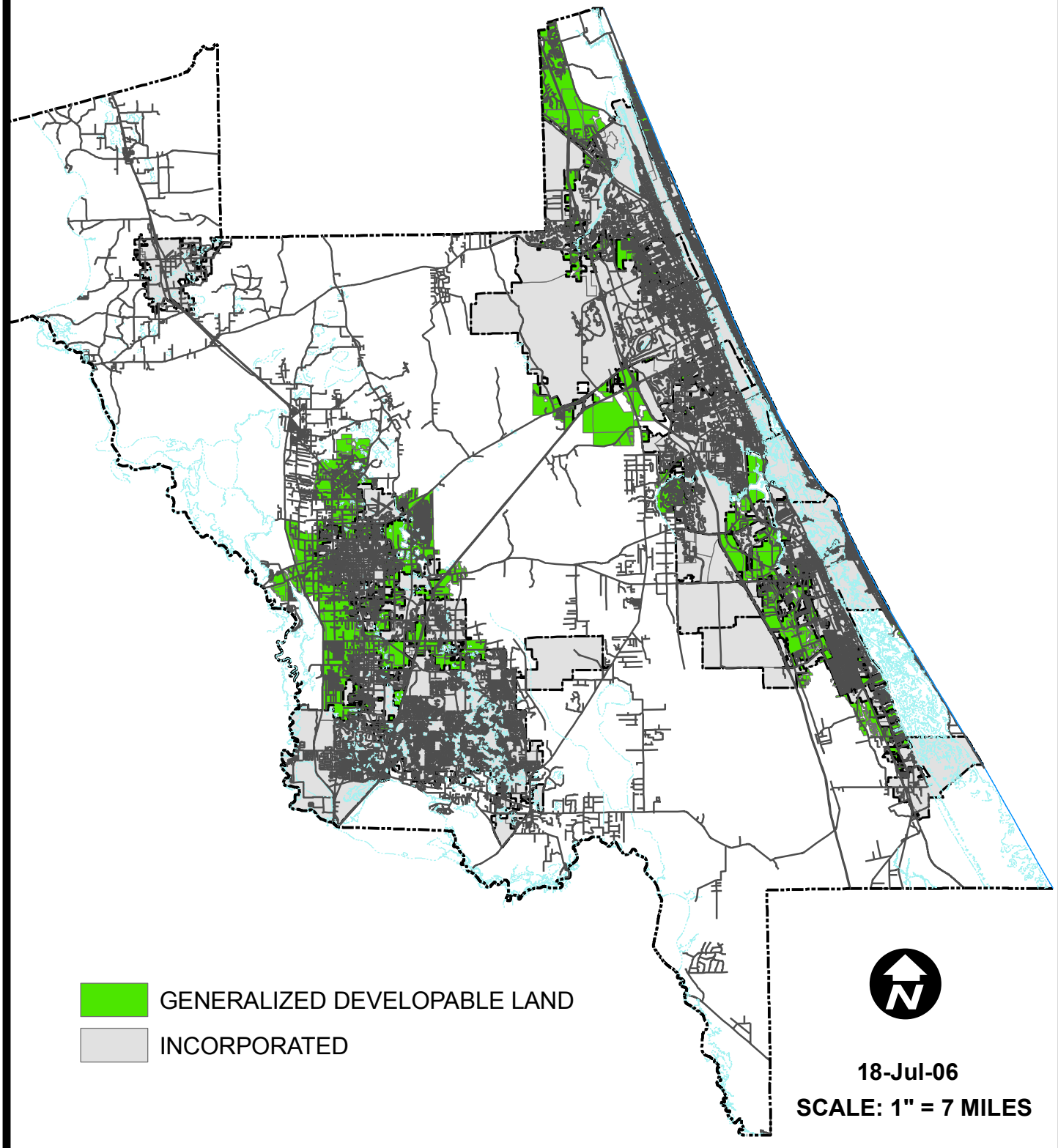
METHODOLOGY

Vacant land uses were quantified to determine the use and characteristics of vacant acreage within the County. The vacant land use data was derived from County Property Appraiser land use property class code data. The Property Appraiser land use property class code data is based on an inventory of land uses that are used in part to assess taxable value. The property class code system is established by State law but codes have been modified, or created by Property Appraiser staff, to reflect situations that are unique or cannot otherwise be categorized within the existing code system. The Property Appraiser code data is periodically field verified and updated. However, in an attempt to document a wide range of land use types, the existing land use code system has become very detailed. The Property Appraiser nomenclature consists of 99 codes. Therefore, the Property Appraiser material has been streamlined to present the data in a manner that would allow for an analysis of vacant land and land use types relating to this report. For the purposes of this report, the Property Appraiser codes have been compressed into 12 categories. The following data, including acreage figures, only covers the unincorporated County area.

VACANT LAND AVAILABILITY

Table 1.3A shows existing and vacant land acreage for all of unincorporated Volusia County based on the 12 categories analyzed for this report. Map Figure 1.3 depicts generalized vacant land resources within unincorporated Volusia County.

MAP FIGURE 1.3
GENERALIZED DEVELOPABLE LAND



18-Jul-06

SCALE: 1" = 7 MILES

PREPARED BY: VOLUSIA COUNTY GROWTH & RESOURCE MANAGEMENT DEPARTMENT

Table 1.3A: Existing and Vacant Land (Unincorporated Volusia County)

Land Use Category	Acreage
Agriculture	191,626
Vacant Commercial	1,438
Existing Commercial	1,132
Environmental	555
Vacant Industrial	433
Existing Industrial	678
Vacant Non-Agriculture	32,438
Public/Institutional/Utility	9,164
Recreation	1,054
Vacant Residential	60,020
Existing Residential	50,636
Other	166,008

Source: Volusia County Property Appraiser GIS (Acreage figures are rounded to the nearest whole number).

For the purpose of this analysis, five categories will be reviewed to determine appropriateness for supporting new growth and development. The five categories are vacant commercial, vacant industrial, vacant residential, agriculture and existing residential 10-acres in size, or greater.

Vacant Commercial areas are lands that are deemed by the County Property Appraiser Office to be suitable for commercial uses. Reasons for determining that a particular parcel should be considered commercial by the Property Appraiser Office is that the parcel is zoned commercial; the parcel is near commercial areas; the price paid for the property was at a rate indicative of a commercial property; all of the above. However, not all Vacant Commercial property, as designated on the County Future Land Use Map (FLUM), is captured by the Property Appraiser data due to the fact that not all property zoned for commercial uses receives a Vacant Commercial property class code. For example, a single-family dwelling on a commercial zoned parcel may be considered by the Property Appraiser as an existing single-family residential use. In addition, the Vacant Commercial property class code acreage figure only captures raw, undeveloped property. There may be developed commercial areas that are vacant shopping centers that are not classified as Vacant Commercial. However, Vacant Commercial areas will not be counted to support the projected population.

The same information for Vacant Commercial is applicable to the Vacant Industrial category. These are areas that are located within industrial areas, or areas that are zoned for industrial uses. Vacant Industrial areas could support further industrial development but will not be assessed as eligible to support future residential growth.

Vacant Residential can include small, undeveloped vacant lots within existing subdivisions, and even larger parcels that are 10 to 20 acres in size. Other parcels lumped in the Vacant Residential column represent large tracts of vacant land that are not taxed at an agricultural rate.

Agriculture land includes property that is taxed at an agricultural rate. Agricultural uses include everything from planted pine trees, established on large tracts of land, to a small-scale plant nursery. In order to determine an appropriate agricultural tax rate Property Appraiser staff reviews the agricultural use on a site-specific basis. Property Appraiser staff also assess areas of the agricultural lands that are not suitable due to environmental constraints at an agricultural rate. Areas that are not suitable for agricultural uses that are taxed at an agricultural rate are typically assigned a "wasteland" designation. "Wasteland" areas are usually wetlands that cannot be cultivated. The Agriculture class acreage figures do not include the "wasteland" acreage, because "wasteland" areas were not considered to be suitable for development. ("Wasteland" acreage is lumped under the Environmental classification.) Historically, Agriculture areas have been converted to non-agricultural development for numerous reasons, including location next to existing urban areas, and the fact that some farmland may not be associated with natural resource constraints (listed species habitat, wetlands, trees, etc.). Land categorized as Agriculture in the Property Appraiser land use code data may be considered as land suitable to support projected growth.

The Existing Residential category includes larger acreage-oriented residential lots that could be subdivided to support more development. Therefore, all parcels that are 10 acres in size or larger, considered to be Existing Residential by the Property Appraiser, will be quantified and may be considered suitable to support future residential density.

Growth in Volusia County and much of Florida has been, and will continue to be, dominated by residential uses. Other land use types such as commercial, and to a certain extent industrial, are directly proportional to the amount of residential development. The allocation of future land uses in the County is population driven. Allocating enough land to support a projected population in a manner that is environmentally appropriate, and makes efficient use of existing infrastructure, is the basic tenet of the County's Future Land Use program. As has been stated, analyzing if there is enough existing vacant residential land to support the projected population is the prime objective of this section of the EAR. Therefore, the categories that have the most capacity to support future, projected residential development include Vacant Residential, Agriculture lands, and parcels 10 acres or larger that are assigned the Existing Residential classification. To ascertain if there is enough land on the FLUM designated for the future projected residential development, the vacant land resources need to be compared with the existing urban land uses that are depicted on the FLUM.

VACANT LAND CARRYING CAPACITY

The categories that have the most capacity to support residential development include Vacant Residential, parcels 10 acres or larger that are assigned the Existing Residential classification and Agriculture lands.

Vacant Residential, parcels 10 acres or larger that are assigned the Existing Residential classification, and Agriculture land, were overlaid with Future Land Use (FLU) information to determine whether the vacant urban residential land uses, as illustrated on the FLUM, will support the 2025 unincorporated population projection, as has been stated. The following FLU categories are considered appropriate to support the projected population within unincorporated Volusia County: Rural, LIU, ULI, UMI, and UHI. Acreage figures for vacant land and wetlands by the above-referenced FLU

categories were determined. Wetland acreage was subtracted from the gross acreage figures for each FLU category to determine the net vacant land acreage. The net vacant land acreage for each FLU category and the aggregate wetland acreage were then multiplied by the allowable development density level (maximum allowable density) to determine the potential net density of the available vacant lands.

The allowable gross density for wetlands is one dwelling unit per 10 acres, as provided in Policy 12.2.3.7 (unless it is contained inside an Environmental Systems Corridor, then it is one dwelling unit per 25 acres. Land within the ESC was not counted to support the projected population).

The potential net density for each FLU category was then multiplied by the average amount of people that reside in a typical home to determine the population carrying capacity of the available vacant land (See Tables 1.3C Vacant Residential, 1.3D Existing Residential 10 acres in size or greater, and 1.3E Agriculture Land). (As per the US Census, the average number of people that reside in a typical home in Volusia County is 2.32 people per household).

2025 Unincorporated Volusia County Population Projections

Volusia County's unincorporated population in 2000 was divided into six planning regions. The six planning regions are the Northwest, Central West, Southwest, Central, Northeast and Southeast region. These population numbers are for the unincorporated area only. The 2025 population projections for the unincorporated area are based on the growth rate from the 2000 Census to the 2005 BEBR estimates.

Table 1.3B: 2025 Population Projections by Planning Region

Planning Region	2000 Census Population	Regional Percentage	2025 Population Projections by TAZ	Regional Percentage
Northeast	32,318	30.2%	44,536	30.2%
Southeast	13,515	12.7%	18,624	12.7%
Central	7,991	7.5%	11,012	7.5%
Northwest	5,992	5.6%	8,257	5.6%
Central West	31,671	29.6%	43,644	29.6%
Southwest	15,393	14.4%	21,212	14.4%
Total	106,880	100.0%	147,285	100.0%

Sources: Census, BEBR, VCMPO and Volusia County Growth and Resource Management Department

The unincorporated population growth in Volusia County should be slow and steady through the planning time horizon of 2025. The unincorporated area will average 1.2 to 1.3 percent growth per year based on the rate of growth from 2000 to 2005. The areas that will grow the most will be unincorporated areas connected to urban services such as the Central West, Southwest, Northeast and Southeast Planning regions. Population growth in the Northwest and Central Planning regions will primarily be based on the available large acreage of land, notwithstanding the rural and agricultural context of the regions. Since BEBR population estimates include inmates in the population counts, the Central Planning region will have a population increase for institutional population with the building of an additional jail.

Please Note: The County intends on using the Metropolitan Planning Organization's (VCMPO) population projections as part of its EAR update to be consistent with the other 16 municipalities, but with the recognition that current population trends, if continued, may require revision in the future. When the VCMPO numbers are officially approved in November, the County will allocate the population projections between the County and its 16 cities. The VCMPO has done extensive intergovernmental coordination with all of the jurisdictions to arrive at these numbers and to break them down within geographical areas known as Traffic Analysis Zones (TAZ). Traffic Analysis Zones have population and employment counts in each unit or zone that are used to measure traffic along the road network.

Residential Carrying Capacity

As previously described, Vacant Residential land, parcels 10 acres or larger that are assigned the Existing Residential category, and Agriculture Lands (Property Appraiser codes) were analyzed by future land use to determine whether the available land will support the 2025 unincorporated population projection. The following tables show the available land by FLU category, maximum allowable densities per category and the corresponding carrying capacity.

Table 1.3C: Vacant Residential Carrying Capacity

FLU	Acreage	Maximum Allowable Density (DU/acre)	Net Density (DU)	Net Population Carrying Capacity
R	9,640	1	9,640	22,364
LIU	838	1	838	1,943
ULI	5,525	4	22,101	51,275
UMI	828	8	6,626	15,373
UHI	32	20	642	1,489
Wetlands	2,916	0.1	292	677
Total	19,779		40,138	**93,121**

Table 1.3D: Existing Residential (Parcels 10 Acres or Larger) Carrying Capacity

FLU	Acreage	Maximum Allowable Density (DU/acre)	Net Density (DU)	Net Population Carrying Capacity
R	1,215	1	1,215	2,818
LIU	22	1	22	51
ULI	579	4	2,317	5,376
UMI	51	8	406	941
UHI	53	20	1,058	2,454
Wetlands	195	0.1	20	45
Total	2,115		5,037	**11,686**

Table 1.3E: Agriculture Land Carrying Capacity

FLU	Acreage	Maximum Allowable Density (DU/acre)	Net Density (DU)	Net Population Carrying Capacity
R	10,880	1	12,265	28,454
LIU	1,689	1	1,689	3,918
ULI	2,411	4	9,645	22,377
UMI	212	8	1,697	3,936
UHI	5	20	95	220
Wetlands	2,114	0.1	211	491
Total	17,311		25,602	**59,395**

Source: Volusia County Property Appraiser and Growth and Resource Management Department GIS (Acreage figures are rounded to the nearest whole number).

Table 1.3F: Total Net Carrying Capacity

	Population Carrying Capacity
Vacant Residential	93,121
Existing Residential (Parcels 10 Acres or Larger)	11,686
Agriculture Land (Urban on FLUM)	59,395
Total Net Carrying Capacity	164,202
2025 Population Projection	147,285
Additional Capacity	(10%) 16,917

At the maximum allowable densities for the FLU categories Rural, LIU, ULI, UMI and UHI, accounting for wetlands at the allowable density of one dwelling unit per 10 acres, the available Vacant Residential land, parcels 10 acres or larger that are assigned the Existing Residential category, and Agriculture land will support the 2025 unincorporated population projection. As currently designated on the FLUM, the land inventoried has the capacity to support the projected population with a 10 percent cushion of additional carrying capacity.

VACANT LAND NATURAL CHARACTERISTICS

The characteristics of land categorized as Agriculture, Vacant Commercial, Vacant Industrial, Vacant Residential, and parcels 10 acres or larger that are assigned the Existing Residential category were analyzed to determine the suitability of the available vacant land for development. Land characteristics that were examined include wetlands, 100-year flood plain and geological anomalies (sinkholes and severe topography).

Wetland areas were quantified using the County's automated land cover mapping data. The land cover mapping data includes information pertaining to vegetative communities and generalized land uses. In addition, the County also reviewed the extent of the 100-year flood plain. The flood plain areas, like wetlands, were considered to be of questionable suitability to support future growth and development. The extent of the 100-year flood plain was determined using FEMA mapping material. Of the approximately 191,626 acres of Agriculture land, 71,007 acres can be considered wetland and 97,603 acres are located in the 100-year flood plain. Vacant Commercial accounts for 1,438 acres and 13% is wetland, while 14% is within the 100-year flood plain. There are 433 acres of Vacant Industrial land and 18% of it is wetland and 36% of

the area is within the 100-year flood plain. Of the approximately 60,020 acres of unincorporated Vacant Residential land, approximately 23,646 acres consist of wetlands and approximately 30,390 acres are located in the 100-year flood plain. Parcels 10 acres or larger that are assigned the Existing Residential category account for 50,635 acres and 2% is wetland, while 3% is within the 100-year flood plain.

Table 1.3G: Vacant Land Characteristic (Unincorporated Volusia County)

Land Use	Total Acreage*	Wetland Acreage	100-yr Flood Plain Acreage
Agriculture	191,626	71,007 (37%)	97,603 (51%)
Vacant Commercial	1,438	194 (13%)	203 (14%)
Vacant Industrial	433	76 (18%)	158 (36%)
Vacant Residential	60,020	23,646 (39%)	30,390 (51%)
Existing Residential (parcels 10 acres or lager)	50,635	1,262 (2%)	1,393 (3%)

Source: Volusia County Property Appraiser GIS (Acreage figures are rounded to the nearest whole number).

* Please Note: Acreage figures are aggregate figures that include all urban and non-urban FLU'S.

Active sinkholes were identified and mapped using data from the SJRWMD. There were only two sinkholes identified in the eastern area of the County around the Cities of Ponce Inlet and Port Orange. The majority of the sinkholes identified were located in the western area of the County along the DeLand Ridge and the Crescent City Ridge. The DeLand and Crescent City Ridges can be described as relict dune systems that were formed by eolian deposition of sand during a time of much lower sea levels.

Both ridge features are characterized by well-drained soils, a low water table, limited wetlands, and rolling topography. The geological make-up of the ridge areas can be generally described as a layer of sand over a limestone base. The limestone is fractured and sometimes has large caverns. Percolating rainwater can weaken the roof of these caverns. Rainwater is naturally acidic and the reaction with the limestone acts to weaken the rock. When the roof of a cavern is significantly weakened, the weight of the overburden can cause a collapse, filling the limestone cavern with sand. The result from the surface can be a conical shaped depression of various sizes and depths. Sometimes a sinkhole fills with water creating a pond or lake.

The SJRWMD information represents an inventory of sinkholes that have formed over thousands of years. The land coverage of these features amounts to small isolated areas and has very little impact on the amount or availability of vacant land within the County.

ADJACENT LAND USES

Vacant land resources within the County are located over a large area that spans over 1,200 square miles. Most land uses adjacent to vacant land resources are non-urban, agricultural and/or environmental in character. Other non-urban uses include individual homes on large, acreage-oriented parcels located in core agricultural areas and utility

uses such as power line easements. In some cases vacant land is located within, or very near, established urban areas. Urban areas can be described as areas that have a full range of urban uses including residential densities that range from multi-family to suburban style developments. Commercial and industrial uses are also part of the urban landscape. Schools and houses of worship are institutional uses found within urban areas.

URBAN SERVICES

As has been stated, vacant land resources are spread over a large area. Therefore, in most cases services needed to support urban growth and development, including roads and central water and sewer, are not available. The vacant land resources that are best served are located within or near areas that have traditionally been used for urban uses. However, even for vacant land located within or near urban areas a full range of services may not be available. In some cases suitable roads will exist, but there will be no central water and sewer. The existence of roads and central water is more common in urban areas, but sometimes central sewer is not available. The County is responsible for providing and maintaining thoroughfare roads. However, the County is not a large provider of central water and sewer. While the County does have central water and sewer facilities, municipalities tend to be the major provider of central services within existing or proposed urban areas. Therefore, the designation of suitable land within or very near an urban area, such as a city with urban future land uses, can be appropriate.

OTHER ISSUES/CONSTRAINTS

A portion of the available vacant land in unincorporated Volusia County is comprised of large antiquated subdivisions with fractured ownership patterns. The County has many antiquated subdivisions some of which date back to the late 19th century. An antiquated subdivision can be described as a tract of land that was platted with lots, roads, and in some cases, recreational areas. The lots were sold to numerous owners but the infrastructure, including roads, central water and sewer, etc., were never constructed to support development of the lots sold. In some cases antiquated subdivisions were platted on land that was not suitable for development. Lots and roads were platted without respect or concern for wetlands, poorly drained soils, flood plains or other development constraints. Currently, County land development regulations do not allow the development of lots within antiquated subdivisions without proper infrastructure like suitable roads.

Based on the fractured ownership pattern, even in situations where there are not significant environmental constraints, developing antiquated subdivision areas is very difficult. In Table 1.3A (Existing and Vacant Land), the Vacant Residential category includes acreage figures from larger antiquated subdivisions. In order to understand how much of the vacant residential acreage is made of these large antiquated subdivisions, vacant residential acreage figures for most of the large antiquated subdivisions that are not eligible for building permits has been identified in Table 1.3H.

Table 1.3H: Vacant Antiquated Subdivisions Not Eligible for Building Permits

Subdivision Name	Vacant Residential Acreage
Aurora Heights	135
Beauty Spot	60
Cape Atlantic Estates	8,285
Carnell	38
Davis Park	447
DeLeon Springs Heights	350
Florida Farm Acres	846
Florida Homeland	215
Hamilton Heights	21
Howe & Curries	3,051
Lake Harney Ranchettes Unrec	756
University Highlands	9,832
West Daytona Acres Unrec	1,609

Source: Volusia County Property Appraiser GIS (Acreage figures are rounded to the nearest whole number).

There are examples where antiquated subdivisions, or portions thereof, have been developed, but the fractured ownership of these antiquated subdivisions can cast doubt on the development prospects of these areas. However, there are methods and scenarios where these old plats could represent opportunities for development. The impetus for effectuating the development of the old subdivisions is mostly market driven. Essentially, as development opportunities become scarcer, investment and development attention will be directed to these antiquated subdivisions. To facilitate development of these plats, private developers would need to broker deals with private landowners to assemble enough land to develop. Realistically though, the development of most antiquated subdivisions will most likely require both a public and private effort.

RECOMMENDATIONS

In summary, there is enough land currently designated with urban uses on the FLUM to support the projected population. One reason why the County still has enough urban land on the FLUM is that during the first planning cycle (1990-1998) the County did not grow as fast as projected. Growth has occurred at a steadier rate in the second planning cycle. This trend is noted in part by the fact that the additional land capacity is 10% compared to the 30% additional land afforded when the Plan was adopted in 1990. Based on the above-referenced data the following recommendations are applicable:

1) There is enough residential designated land on the FLUM to support projected growth. However, there is now a 10% additional capacity to act as a market cushion. In the past the County has operated on a 30% additional land margin. While 30% may be high to act as a market factor, 10% may be a little low and could cause undesirable market impacts. Therefore, there may be some ability to increase density in areas that may warrant such an increase. However, any increase in density needs to be carefully studied to ensure that urban sprawl will not be encouraged and an increase of land use density and intensity is not directed to environmentally sensitive areas of the County. Suggested actions that should be reviewed for potential increases in density include the following:

a) Bethune Beach: The reason Bethune Beach should be reviewed is that the existing development pattern, facilitated by the existing platted condition and related zoning decisions, is developed at a density that is higher than the maximum allowed within the current ULI category designated on much of the Bethune Beach area.

b) DeLeon Springs area: The County has approved several small-scale map amendments in the northeast DeLeon Springs area to change the land use from Agricultural Resource (AR) to Rural (R). These land use changes were approved due to the fact that a good portion of the subject area is subdivided at densities that are more consistent with the Rural designation minimum lot size requirements (ranging from one unit per acre to one unit per ten acres) than the AR density allotment that allows only a 10-acre lot.

c) Increasing the maximum density of the ULI land use from 4 units to 5 units per acre needs to be studied. The intent of increasing density within the ULI is that it would be more consistent with municipal low density urban residential categories that may allow up to six units per acre.

2) Vacant land apart from urban areas should continue to be targeted for low intensity land uses such as Agricultural Resource, Forestry Resource and Environmental Systems Corridor.

3) The County, in conjunction with the municipalities, should continue to extend proper infrastructure to support vacant land that is designated with urban uses in a manner that represents sound, compact growth patterns.