

# **Comprehensive Plan**

## **FUTURE LAND USE ELEMENT**

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Prepared for  
**The City of Deltona**

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## **INTRODUCTION**

The purpose of the Future Land Use Element is to guide the location, the intensity and timing of land development in the City of Deltona in order to accommodate the physical, social and economic needs of the existing and future residents. There are many factors to be considered when designating future land uses including availability of public facilities and services, environmental concerns, population growth trends and existing development trends. Future growth must be managed so that development occurs in an orderly manner, consistent with the capabilities of public facilities and services and with the function of the natural environment.

The City of Deltona was officially incorporated on December 31, 1995. The City population was estimated to be 56,404 in 1995. The physical size of the City is approximately 38 square miles. There are approximately 37,000 platted single family residential lots; 23,000 single family lots are already developed. According to the University of Florida Shimberg Center for Affordable Housing, the population is projected to increase by 70%, to over 90,000, by the year 2010.

## **REGIONAL SETTING**

The City is situated in the southwest Volusia County area and can be characterized as an “edge city” to the Orlando metropolitan area. The City of Deltona is adjacent to the City of DeBary and Orange City, and in close proximity to the cities of DeLand and Lake Helen. The City of Deltona also abuts the rural communities of Cassadaga, Enterprise and Osteen.

According to Shimberg Center for Affordable Housing the southwest Volusia County area had a 1995 population of approximately 100,000 and a projected increase to approximately 150,000 by the year 2010.

The main transportation network within the City is made up of a series of residential collectors, some of which function as minor arterials. Interstate-4 provides regional transportation access and allows Deltona to be very accessible to the Daytona Beach and Orlando metropolitan area. Deltona is approximately 25 miles from both cities.

From a regional perspective, the US 17-92 corridor is a main hub of commercial activity. This trend of commercial use is evident in the Cities of DeBary, DeLand and Orange City's existing land use pattern; commercial activity also occurs along Enterprise Road and Saxon Boulevard to just east of Interstate 4.

### ***Mackle Brothers Master Plan***

In 1963, the **Mackle Brothers** began construction of the Deltona Lakes subdivision. The subdivision included out-parcels for drainage retention, apartments, churches, parks, commercial centers, an industrial area, a community (civic) center, and a golf course. The community was originally marketed to senior citizens looking for the ideal place to retire. According to the 1970 U.S. Census, the Deltona Census Designated Place (CDP) had just over 4,000 residents and a median age of 62 years. Subsequent to the development of Disney World, and the growth of the regional population, the marketing scheme changed and residential lots were sold to broader interests. In 1974, the Deltona Lakes subdivision was approved as a planned unit development (PUD) by the Volusia County Council. A housing boom occurred in the 1980's; by 1990, the average age of the 51,000 Deltona CDP residents was 35 years old. Before the City incorporated on December 31, 1995, Deltona was recognized as a geographic location by the U.S. Census Bureau. It should be noted that the Deltona CDP is a little larger in geographic size than the actual city boundary.

### ***Development Pattern***

In the City's early phases of development, there were incremental sales and development areas. Sales areas were later offered on a broader basis. A review of the existing vacant land use map 1-2 reveals that development has occurred sporadically. Most of the City has a centralized water system available. While centralized sewer is not as prevalent, most soils are suitable or can be improved for on-site sewage disposal systems (OSSD). Because of the random timing and development pattern for single family homes, sewer provision could not be installed or extended cost effectively and is largely the reason why sewer has not been more extensively utilized for residential lots. While ultimately in-fill of development is important for efficient

service provision, with such a large area developing randomly it is difficult to project when and where service provision should occur.

The road network for the original master plan did not include arterials designed to service the community that would eventually could grow beyond 75,000 or even 50,000. As a result, some of the roadways have become minor arterial roads that service the community. The transportation network can be described as winding or meandering. The roadway network could also be described as disconnected. Disconnected meaning that, virtually no roads traverse the entire length of the city. Howland Boulevard is the only road to travel from the east boundary of the city to the west. All other roads eventually “T” intersect. This traffic pattern is not the most efficient. Roadway efficiency is also reduced by a large number of curb cuts for driveway access. The roads in Deltona can be characterized as being lined with single family residential homes with individual driveways.

### ***Population Trends***

In general, the population of the City is becoming younger and diversifying in ethnicity. The following Table 1-1 summarizes population data from the 1990 U.S. Census for the Deltona CDP.

The number of seasonal housing totaled 598 units in the 1990 census. A CDP per housing unit average of 2.45 residents, the seasonal population was estimated at approximately 1,465 persons in 1990.

## **EXISTING DATA ANALYSIS**

### ***Population Projections***

There are several methodologies to perform population projections. Population projections are used as a planning tool to anticipate the need for services and facilities before the existing facilities become overburdened. Some services and facilities needs such as a traffic signal can be identified and funded relatively quickly. However, other improvements such as road widening or extensions may have financial implementation constraints such that they may take a decade

or more to fund and construct. Population figures are primarily derived from past development trends and can also be altered by a number of economic, social and political forces that can not be predicted. Table 1-2 portrays population projections as prepared by the Shimberg Center for Affordable Housing:

The City of Deltona is projected to grow by 85% between 1990 and 2010. The regional growth rate is projected to be 87%. This is almost double what Volusia County as a whole is projected for the same period a total of 44%. Rapid growth can be very difficult to predict or maintain. It should be noted that, according to the 1980 and 1990 U.S. Census, the Deltona area population tripled from just over 15,000 to 48,901. The number of issued building permits has averaged over six hundred per year according to the Volusia County Building Department.

### ***Existing Land Uses And Conditions***

The land area of the City is dominated by the Deltona Lakes Planned Unit Development (PUD). The Deltona Lakes PUD is mainly comprised of single family residential parcels with more than 35,000 single family lots. According to the Property Appraiser's tax rolls, the City is approximately 38 square miles, of which 8.4 square miles are water bodies. Table 1-3 summarizes existing land use as of January 1995.

With over 23,000 developed residential units, residential land use dominates the City's development pattern. Some 12,000 vacant platted single family lots remain from the Deltona Lakes PUD. Arbor Ridge subdivision was recently platted and contains approximately 400 residential lots. The development pattern has been on a first come first serve basis with the remaining residential lots; barring environmental or required service(s) constraints, residential construction will occur on an at-large basis.

Commercial land uses currently total less than one percent (1%) of all developed land in Deltona. Commercial uses are located along main thoroughfares like Deltona Boulevard, Providence Boulevard, Saxon Boulevard and Howland Boulevard. Presently, there are less than three acres of commercial servicing every 1,000 persons in Deltona. The regional commercial average is approximately six acres of commercial servicing every 1,000 persons.

Existing industrial land uses as identified by the Property Appraiser's Tax Rolls total 13.6 acres. This equates to less than a quarter acre of industrial use per 1,000 persons. The regional average is approximately four acres per 1,000 persons. The southwest activity center includes land zoned for industrial use and the property appraiser's tax rolls identifies an additional 61 acres of vacant industrial property. The (Volusia County) southwest activity center is located in the northwestern portion of the City, east of Interstate 4 and north and south of Howland Boulevard.

According to the property appraiser's tax rolls, agriculture is another relatively nominal use with only 146 acres. Three parcels make up 120 acres, or just over 80% of those acres.

Recreation and public/semi-public uses include golf courses, parks, schools, government buildings and conservation lands. There are eight elementary schools, three middle schools and two high schools serving Deltona. There are also 41 park sites in Deltona. This category was combined because there were inconsistencies in the identification of the existing use. Schools for example were classified interchangeably with education or public land and parks too were classified as either public or recreational. There is only one golf course in the City, which is a private course. The Property Appraiser's Office lists the golf course as recreational.

While vacant land areas are located throughout the city, the majority is platted as single family residential lots. There are also several out parcels from the Deltona PUD that can accommodate future commercial, industrial and residential uses. While there are some local site specific development limitations, available vacant land is developable.

The other land use category represents land that was described as road and utility easements.

The existing land use Maps 1-2 and 1-3 display existing vacant land and non-residential uses. The majority of the City is single-family residential, so a comparison of the vacant residential "blank" areas, with the non-residential land use map, represent existing residential areas.

The Volusia County Future Land Use Map 1-4 portrays the location of all future land uses. The vast majority of the County's plan shows Deltona as urban low density use. The County had intended an activity center to be located in the northwest portion of the City and commercial

and higher density uses be located at major local intersections. Volusia County did not include all the existing developed commercial areas on the Future Land Use Map. These commercial areas are consistent with the Deltona Lakes planned unit development that are permissible in low intensity designation.

The Future Land Use Map should reflect the desired land use for the City's future.

### ***Historical Resources***

There are no local archaeological sites or historic structures listed in the National Register of Historic Places. Similarly, there are no archaeological sites or historic structures listed in the Florida Master Site Files. However, in the surrounding communities there are several listed archaeological sites and historic structures in both incorporated and unincorporated areas. The City is relatively young, with over 98% of the structures being built after 1960, according to the 1990 U.S. census information.

While there are no archaeological sites currently listed, archaeological sites may exist that have not been identified or reported. In addition, the Property Appraiser's information identifies 110 structures built prior to 1940. These structures have not been identified on a historic property survey. These structures would need to be located in the out parcels of the Deltona Lakes subdivision. It should be noted that the rural communities of Enterprise and Osteen are located adjacent to the southern boundary of the City and do have structures listed on the Florida Master Site File. Generally, structures older than fifty years of age could be listed in the Florida Master Site Files as long as the architectural integrity of the structure has been maintained.

### ***Commercial And Industrial Land Use By Population***

When comparing the cities of Deltona, DeLand, DeBary and Orange City populations to the combination of commercial and industrial uses, the difference between Deltona and other local governments is substantial. Table 1-4 indicates that the City of Deltona's existing commercial and industrial uses have a lower usage rate than other incorporated areas in the southwest Volusia area. This is due to historic development trends and the lack of allocation of commercial and industrial land uses in Deltona.

The City should strive to meet commercial and industrial needs within its jurisdiction. Table 1-5 represents needs based upon population for both commercial and industrial uses. The intent of commercial and industrial allocation on the Future Land Use Map is to provide long-term (year 2020) opportunities, to be consistent on a regional scale with other local governments and provide market flexibility. The planning horizon is the year 2020 and the projected population is approximately 114,000 persons. The City in order to be consistent with the regional average for commercial (8 acres per 1,000 persons) and industrial (4 acres per 1,000 persons) uses and to provide additional market flexibility of 25% would equate to the allocation of 1,140 acres of commercial and 570 acres of industrial to be shown on the future land use map. There is a strong desire to maintain the residential character of the community especially within the Deltona PUD. There is not presently enough land to accommodate these acreage allocations within the City based upon permitted land uses within the PUD and appropriate remaining non-PUD parcels of the City. Annexation may accommodate some of the recognized need but the City should consider compatibility and potential impacts to adjacent jurisdictions and communities.

### ***Generalized Natural Resources Conditions***

The majority of the City has already been planned and developed as a large single-family planned unit development. The remaining natural resources exist as undeveloped out parcels from the Deltona Lakes sub-division and around the lakes of Deltona. Relative to the entire municipal land area, the amount of existing wetlands and floodplains is a relatively small portion of the City.

The “Generalized Development Suitability” Map 1-1, as prepared by the Volusia County Growth Management Department, suggests a high to very high development suitability potential. However, most of the Deltona area has been determined to be in an aquifer recharge zone that provides more than 12 inches of rainfall per year to the Floridan Aquifer as determined by the St. Johns River Water Management District. The utilization of on-site sewage disposal systems may have water quality implications in the future.

## **Rivers And Lakes**

The City contains more than one hundred lakes, totaling over eight (8) square miles. One of the unique lake features in Deltona are that lake levels have a tendency to fluctuate. Information compiled by the St. Johns River Water Management District, from 1991 to early March 1997, shows that some of the lake elevations have changed by as much as eight feet. In the six years of review, some of the lakes had high and low elevation differences of more than ten feet. Related environmental information is presented in greater detail in the Conservation Element and the Stormwater sub-element.

## **Floodplains**

The undulating topography of Deltona forms several drainage basins and flood zones are located generally adjacent to lake and wetland areas. Related environmental information is presented in detail in the Conservation Element and the Stormwater sub-element.

## **Wetlands**

Wetland areas also are generally located in and around lake water bodies. The types of wetlands in Deltona include bay swamp, bottom land swamp, cypress swamp and freshwater marsh. Due to changes in elevation, the soils are fairly well drained. Related environmental information is presented in greater detail in the Conservation Element and the Stormwater sub-element.

## **Aquifer Recharge Area**

Portions of the City of Deltona are situated above the Volusia County (Florida Aquifer) Sole Source Aquifer, a water source considered by the State Environmental Regulatory Commission to be the only feasible supply of water to much of the local population. It is estimated by the St. Johns River Water Management District that Deltona receives more than 12 inches of recharge water per year. Related environmental information is presented in detail in the Natural Groundwater and Aquifer Recharge Sub-Element.

The City residents utilize groundwater from the Floridan Aquifer and ~~has~~ there are several consumptive use well sites in the City. Wellhead protection should be a priority, especially with excellent aquifer recharge soils. The County's wellhead protection regulation prohibit hazardous waste users and restrict land uses to primarily residential within 200 feet of a wellhead for consumptive use. A second wellhead protection zone also prohibits hazardous waste users; but does permit more conditional uses between 200 feet to 1,000 feet of the wellhead for all permitted consumptive use wells.

### **Minerals And Soils**

The City presently does not have any active sand and gravel operations occurring in the City. According to property appraiser existing land use information, there are only 1.139 acres of land with "sub-surface rights".

### **Land Use Analysis**

There are numerous variables that affect land use and development. Generally, there are four primary competing influences that can affect land development, to include: natural environmental resources and conditions; physical or built environment; economic environment; and social environment. These competing influences affect the location and allocation of land use with some issues more predominant than others. Some of the city issues identified stem from previous community meetings, vision sessions, population projections and potential impacts to adopted Levels Of Service in the City.

Generally the land development issues are but not limited to:

- I. Growth in population.
- II. Maintain and enhance residential character and property value.
- III. Improve compatibility between different types of land uses.
- IV. Efficient and cost effective provision of infrastructure
- V. Conserve natural resources

- VI. In-fill, defined land use pattern
- VII. Provide appropriate opportunities for redevelopment
- VIII. Diversify the tax base to provide for services and facilities without placing an undue burden on businesses and residents.
- IX. The need for local autonomy in a regional economy.
- X. Nurture and orchestrate a diverse and vibrant economic and social structure.

### **Growth in Population**

The Shimberg Center for Affordable Housing has projected population growth to increase by 60%, by 2010 or to 90,589 persons. By the year 2020, the City of Deltona is projected to grow 103%, or to 114,700 persons. The City will need to plan and prepare for managed growth. Impacts to infrastructure based upon these population projections will overwhelm most of the existing infrastructure before the year 2020. While the rate of growth can be slowed, growth will continue to occur within the City. The City will need to strive to accommodate growth and establish the means necessary to manage it.

### **Maintain Residential Character**

There was a great deal of public sentiment expressed during the vision meetings that the (single-family) residential character of Deltona should be maintained. Approximately 85% of the City is the Deltona Lakes Planned Unit Development, (PUD) which is predominantly single-family residential homes. There are a number of out parcels both internal and external to the Deltona Lakes PUD. The concerns expressed were that these out parcels could negatively impact the residential character of Deltona. There is a strong desire to preserve the present lifestyle.

What is unknown is how more than 50,000 new residents will impact the present lifestyle. As Deltona's population grows, multi-family residential, commercial and industrial pressures will increase. Redevelopment of existing single-family residential areas to other land uses may alter the character of the community as it evolves.

### **Improve Compatibility Between Different Types of Land Uses**

Compatibility issues are a dominant theme of discussion at most public hearings discussing zoning changes. This typically includes the perception of what a building might look like, the type of operation, hours of operation, the potential destruction of the natural environment or the amount of new traffic being generated. The City provides for location standards, separation, and buffering regulations in goals, objectives and policies in the comprehensive plan and within the land development code. Compatibility of new development with surrounding uses will need to be given special attention. The City should require all future utilities to be placed underground and should consider opportunities for placing existing above ground utilities underground when such areas are redeveloped or improved.

### **Efficient and Cost Effective Provision of Infrastructure**

Discussions about future growth and development have included funding of roads, water and sewer. With rapid population growth, efficient and cost-effective provision of infrastructure is the key to protecting the quality of life for the City. The provision of infrastructure includes maintained and improved transportation corridors; sufficient recreation facilities; safe, efficient and cost effective provision of potable water; sanitary sewer; solid waste and drainage. The provision of infrastructure must be in place or concurrent with development. The existing infrastructure facilities need to be routinely evaluated to promptly determine when and where deficiencies may be developing to maintain the adopted Level Of Service. Where potential deficiencies have been identified, appropriate short and long term solutions should be evaluated. Alternatives should include cost and funding source options. The process to divert future deficiencies include identifying a funding source(s), the cost and timing of design and engineering, construction, and maintenance. For those services that are not provided directly by the City, communication and coordination mechanisms need to be established to develop mutual cooperation.

### **Conserve Natural Resources**

The protection of natural resources rated highly during the visioning process. However, as development pressures increase, the natural resources within Deltona will diminish and the

quality of those resources could be impacted. Deltona has several large surface water bodies in and adjacent to the City. This water quality should be monitored, maintained and improved as deemed necessary.

Groundwater quality is another natural resource that needs to be protected because of the potential impact to the Floridan Aquifer. The Floridan Aquifer is the City's potable water source.

Wetlands, floodplains and environmental habitat have development regulations found both in the goals, objectives and policies of the comprehensive plan and also in the land development code.

### **In-fill Defined Land Use Pattern**

The majority of Deltona is the Deltona Lakes PUD that has approximately 35,000 platted single-family lots, with approximately 12,000 platted, undeveloped lots remaining. The Deltona Lakes PUD has not maintained a phased development program. Thus, development on the unplatted lots occurs in a haphazard development pattern. The timing of development is not dependent on services being extended. This is because the Deltona Lakes PUD has access to potable water and roads.

Approximately 80% of the Deltona Lakes PUD utilizes on-site sewage disposal systems. In-fill development has made the delivery of centralized sewer lines not cost-effective. The cost of connecting to a centralized sewer system has made the concept unpopular. Infrastructure will need to be improved to allow for infill development to continue to build out.

### **Provide Appropriate Opportunities for Redevelopment**

There were discussions during the visioning process that residential uses along major transportation corridors would not be appropriate in the long term. As roads are widened to meet Level Of Service standards, residential homes may not be the most appropriate land use on those transportation corridors. However, this would be contrary to maintaining the residential character. If the land use increases in density or intensity this may impact the residential character of the area. Thus, in the Urban Design Element, special lot and facade

treatments may be necessary to maintain the residential character. The intensity or scale of the development will be evaluated for consistency. Buffering from existing residential homes should be required.

### **Expand the Tax Base to Provide for Services and Facilities**

Approximately 85% of the City is platted single-family residential. Residents have expressed that they do not want to bear the brunt of the tax burden. Generally, developed commercial and industrial land uses generate more tax revenue than single-family residential. Therefore, expanding the tax base to non-residential uses would lessen the tax burden on residential property owners. In addition, these uses provide jobs and generate revenue from outside the City.

The City presently lags far behind other local jurisdictions and the County with the amount of commercial development per 1,000 residents. Presently, commercial development constitutes only 2.5 acres per 1,000 persons. Industrial development constitutes an even smaller ratio, at one-quarter acre of industrial per 1,000 residents. The City could accommodate modest gains in these land use ratios and significant increases in the acreage currently available.

### **The Need for Local Autonomy in a Regional Economy**

The local autonomy in a regional economy reflects that there is a great deal of reliance on surrounding communities for shopping and employment opportunities. There is a strong desire by the residents who participated in the visioning process for Deltona to be a place to work and shop.

### **Nurture and Orchestrate a Diverse and Vibrant Economic and Social Structure**

The City of Deltona was incorporated on December 31, 1995. The first homes were built in the early 1960's. The residents of Deltona are relatively new, with the population doubling during the 1970's and tripling in the 1980's. There is a healthy mix of young and old within the City. In 1990, U.S. Census Bureau reported that approximately 85% of the City was white, 10% Hispanic, and 5% black.

With the majority of the population newly relocated, there is a strong desire to develop a lasting and meaningful sense of community. The residents want to recognize Deltona as a great place to live, work and shop. To do this they want to improve the quality of life. The Urban Design Element establishes new development criteria for future residential, commercial and industrial development. Incentives should be developed to encourage existing development to meet the new urban design standards.

These issues are the umbrella of issues facing the City today. From these general issues, the City needs to provide clear policy directions as to what it would like to accomplish. This can be partially determined through the vision process. However, the timing and funding of policy goals can be difficult to prioritize. The City will need to rely on both public and private mechanisms to achieve policy implementation. This can be accomplished through open communication between other governmental agencies and local jurisdictions. The City must establish needs for land use to satisfy the issues above and achieve the quality of life standards desired. As time changes so will the issues facing the City.

Table 1-5 illustrates projected land use needs based on population and proposed acreage to meet those needs. The projected population for the year 2010 is 90,589. The residential land use needs determined by the Shimberg Center for Affordable Housing would be an additional 11,238 single-family and 338 multi-family dwelling units by the year 2010. The total number of single family residential dwelling units would be 32,500 and multi-family dwelling units would be 971. In addition, the City needs to capture a larger percentage of commercial and industrial uses. This would not only expand the tax base, but it also would reduce transportation trip lengths and support more mode choices.

The desired residential acreage was determined by assuming approximately 3.5 dwelling units per acre single family and 10 dwelling units per acre multi-family. For commercial and industrial land use, the 1990-1995 regional average for incorporated areas was approximately 8.5 acres and 4.5 acres, respectively, per 1,000 persons. With 2.6 acres of commercial and only a quarter acre of industrial, Deltona lagged behind the region. The desired acreage is to increase commercial use to four (4) acres commercial and two (2) acres industrial use per 1,000 persons.

# **ANALYSIS OF AVAILABLE SERVICES AND FACILITIES**

## ***Traffic Circulation***

The City of Deltona was designed as a large single family subdivision with linear curved roads. There are approximately ten primary and secondary roadways that carry the bulk of the local trips: Providence Boulevard, Howland Boulevard, Saxon Boulevard, Courtland Boulevard, Fort Smith Boulevard, Deltona Boulevard, Normandy Boulevard, Elkcam Boulevard, Newmark Drive and Tivoli Drive. Since few of these roadways traverse the entire length of the City, many trips are segmented. Because of the curvilinear nature of the roadways, some roads may start out traveling east/west but end traveling due north south. In one case, Normandy Boulevard is intersected twice by Saxon Boulevard. For a visitor in Deltona, the local road network can be somewhat confusing.

The county maintained roads are Doyle/DeBary Road, Enterprise Road, Howland Boulevard, Lake Helen Osteen Road, Providence Boulevard and Saxon Boulevard. Through interlocal agreement, the City also contracts maintenance work with the County for other roadways. The County has adopted level of service (LOS) "E" for every roadway within Deltona. State Route 415/County Route 415, which is only in the Deltona for approximately a quarter mile, has a LOS of "D". With few exceptions, Deltona is generally well within the County's adopted level of service "E". There are a couple short segments that are below the LOS of "E". They are Howland Boulevard west of Wolf Pack Run to Interstate 4, Providence Boulevard north of Tivoli Drive to Fort Smith Boulevard and Saxon Boulevard from west of Normandy Boulevard north to Tivoli Drive. However, each segment has been identified in the County's five year capital improvement plan to be improved.

According to the Volusia County Capital Improvement Programs 96-97, the following road improvements are scheduled by the County through the year 2001:

- XI. Normandy Boulevard 2-lane extension from North Firwood to Howland Boulevard.

- XII. Howland Boulevard 4-laning from east of Wolf Pack Run to Providence Boulevard.
- XIII. Saxon Boulevard 5-laning from east of Normandy Boulevard to northwest of Tivoli Road.
- XIV. Providence Boulevard 5-laning from north of Tivoli to south of Fort Smith Boulevard.

The Volusia County Metropolitan Planning Organization (MPO) identified several road improvements in their 2020 Transportation Plan Update. Specifically, DeBary Avenue from I-4 to west of Providence Boulevard, and Saxon Boulevard from Interstate 4 to Normandy Boulevard are identified as candidate corridors for congestion management study." Both roadway segments are projected to be over capacity by the year 2000. The study recommendation is to evaluate short- and long-term solutions to prevent the roadways from exceeding capacity.

Finally, according to the MPO 2020 Transportation Plan Update the following roadway segments will exceed the adopted or planned level of service capacity by the year 2020:

- XV. Enterprise Road, from Interstate 4 to Deltona Boulevard with an LOS of F and four lanes considered.
- XVI. Fort Smith Boulevard, from Providence Boulevard to Helena with an LOS of E and two lanes considered.
- XVII. Howland Boulevard, from Catalina Boulevard to Providence Boulevard with an LOS of E and four lanes considered.
- XVIII. Howland Boulevard, from Providence Boulevard to Elkcam Boulevard with an LOS of E and two lanes considered.
- XIX. Providence Boulevard, from Anderson to Tyler with an LOS of E and four lanes considered.

- XX. Providence Boulevard, from Dunlap Drive to Elkcarn Boulevard with an LOS of E and four lanes considered.
- XXI. Saxon Boulevard, from Interstate 4 to Normandy Boulevard with an LOS of E and six lanes considered.

It should be noted that projected LOS determinations were based on several factors. Two critical factors are roadway improvements and population projections. Many of the roadway segments were evaluated at an improved status. Many of these improvements have not been programmed or funded, a common practice for projects beyond the five-year planning horizon. In terms of the 2020 Traffic Analysis Zones population projections used in this study, the Deltona population is projected to be approximately 72,000 persons by the year 2020. This population projection is below the Shimberg Center projections of approximately 90,000 by 2010. A proposed plan implementation activity is that the discrepancies between two projections should be re-evaluated to better understand future LOS implications.

### **Potable Water**

Volusia County maintains the Deltona North water and waste facility, which serves the northern portion of the City. The Deltona North water plant current usage is 0.533 million gallons per day (mgd).

Volusia County has a single service area for potable water and sanitary sewer. There are 3,792 residents (an estimated 1,750 equivalent residential units (ERU) served by Volusia County. An ERU also can be a commercial, industrial and institutional connection. The County LOS for potable water systems is 300 gallons per day per ERU. The current water usage is 0.533 mgd with an available capacity of 1.0 mgd. With 1.0 mgd available the County can service another 3,333 ERUs or approximately 5,000 total ERUs. The population projections call for an approximate 70% increase in the total population by the year 2010. The County also requires that capital funding for new and expansion projects begin to be set aside when a facility reaches 80% of capacity. There are no plans for expansion; however, the facility could be expanded if necessary. The anticipated life of the well facilities are unknown.

The majority of this area is served by Florida Water Services Corporation (FWSC), a private water provider. Utilizing thirty-five raw water wells, there were 25,195 equivalent residential connections served by FWSC in 1995. The current average daily flow is 10.6 mgd or approximately 45% of capacity. The current potable water system buildout capacity is 35,000 ERUs. According to FWSC projected peak flows, the water plant system capacity would be reached by the year 2010. There are no plans for expansion; however, the facility could be expanded if necessary, and the City should consider owning and operating its own water and sewer facility to service the needs of its residents. The anticipated life of the existing raw water well facilities is unknown.

### **Sanitary Sewer**

Volusia County and Florida Water Services Corporation currently provide sanitary sewer service in the City of Deltona. The City should consider owning and operating its own water and sewer facility to service the needs of its residents. Their combined service provides treatment of 1.009 Million Gallons per Day (mgd) for 13,277 residents in 1995, according to the Domestic Wastewater Treatment and Reuse Inventory in the St. Johns River Water Management District. There is available capacity of 0.3 mgd for the County's Deltona North facility.

The Florida Water Services Corporation has the capacity to serve 1.4 mgd and in 1995 was treating 0.975 mgd in the Deltona Lakes facility. There is 0.425 mgd of capacity remaining. There were 5,075 ERU in 1995. At the present time, approximately 80% of City residents use a on-site sewage disposal system. With 0.425 mgd available and applying the County's LOS of 284 gallons per day per unit the capacity would be reached without improvements at 6,570 ERUs. Florida Water Services Corporation projects that they will be serving that number of ERUs by the year 2019.

### **Solid Waste**

Volusia County operates one solid waste landfill site and is known as the Tomoka Farms Landfill. The Tomoka Farms Landfill is located in eastern Volusia County. The landfill complex consists of approximately 3,500 acres. Most of this land is intended to buffer the landfill. Because of Tomoka Farms landfill's proximity to the Daytona Beach International

Airport the landfill is restricted to a maximum of 125 feet above sea level. The current landfill phase or “cell” has about 10 more feet of height left before it will be closed. However, the County is about to open a 38 acre cell that will be on line well before the closing of the existing cell. Based on solid waste stream projections, the next cell will last until the year 2040. The level of service standard established by the County is 8.6 pounds per person per day.

## **Drainage**

The soils in Deltona are generally well drained. Over 90 percent of the soils are in the Orsino unit or Astatula-Tavares unit. These soils consist of broad or undulating high ridges of excessive to moderately drained soils. Localities flooding problems have been identified as an issue within Deltona. There are four basic flooding problems identified. The first is standing water on roadsides, sidewalks and driveways. This is due to several factors, such as inadequate swale size and slope, coupled with high groundwater table. The second cause of flooding are localized depressions with no direct stormwater outlet. The problem is especially noticeable during periods with excessive rainfall amounts. This type of flooding is managed only by post storm infiltration or evaporation. A third problem is undersized culvert(s) under roadways that causes flooding during extreme storm events. Finally, due to slope factors, high water velocities can cause erosion and even pipe failure.

## **Parks**

There are 41 County designated park sites in the City. Twelve sites are developed, and total 113 acres. In addition, through an interlocal agreement between Volusia County and the Volusia County School Board, there are 308 acres of school related recreational facilities available (after school hours). There is also a scrub jay management (County) facility that contains 200 acres of passive management lands. These facilities are interwoven with walking trails that are accessible to the public. By using developed Volusia County park lands to measure a level of service (LOS) for parks, Deltona would have a two acres per 1,000 persons LOS. School recreation areas inflate the LOS to 7.4 acres per 1,000 persons.

## **ANALYSIS OF VACANT LAND USE**

According to the Property Appraiser's tax parcel information, the gross acreage of vacant land within the City was 7,739.1 in 1995. The Generalized Development Suitability Map, prepared by Volusia County using FEMA and St. Johns River Water Management District's environmental information, illustrates that the majority of Deltona has mostly positive development suitability factors. Wetlands and floodplains are generally located in and around the water bodies. It should be noted that this map is for study purposes only and that wetlands and low lying areas are also present.

## **DELTONA BUILDING ACTIVITY**

New residential construction is fairly active, averaging well over 500 home starts each year. The building trend has slowed from the beginning of the decade, which included well over 600 homes built each year. Tables 1-6 and 1-7 describe the new construction demolition and building alteration activity. Building alterations are defined as room additions or additions to the living area.

### ***Analysis Need For Redevelopment***

The City of Deltona initially began as the Deltona Lakes subdivision in the 1960's. The housing stock and existing community commercial areas are still relatively young. However, as demonstrated through the community vision workshops, there is a desire to upgrade or enhance the existing commercial and residential areas.

Redevelopment will also occur as a change of land use, with residential uses located along the busier arterials converting to commercial or office type uses over time. Mixed land use development may be appropriate in these areas to minimize compatibility issues with the remaining residential character.

## **Future Land Use Consistency With Zoning Regulations**

Table 1-8 lists the County Future Land Use Designations and the related County Zoning regulations.

### **From the table:**

1. The RPUD or MPUD classification may only be applied to lands designated ESC, FR and A on the Future Land Use Map when the RPUD or MPUD meets the requirements outlined in Policy 1.2.3.3 of the Volusia County Comprehensive Plan, Ordinance 90-10, as amended; or when the lands designated as ESC, FR, and A included within the RPUD or MPUD comprise 25% or less of the land area of the RPUD or MPUD, providing development of areas designated as ESC, FR and A is consistent with the Comprehensive Plan Future Land Use category descriptions.

### **A Group**

This column indicates which zoning categories are assumed compatible. They provide the closest approximation to the Future land Use Category. The existing character of the area is one determinant of the appropriate classification to be accorded an individual premise.

### **B Group**

This column indicates which zoning categories may be considered compatible under certain circumstances. Stricter consistency requirements may be applied or special criteria may be compiled prior to receiving a rezoning. Site conditions in conjunction with the existing character of the surrounding area are the determining factors for rezoning requests.

## **COMMUNITY VISION**

*A residential/neighborhood atmosphere will be the dominant land use characteristic for Deltona in 2017. Neighborhood centers throughout the City will function to serve the citizens needs and will include public plazas, commercial, government, and cultural complexes. A tree-lined road network with wide main roads will serve to connect commercial areas with new industrial areas toward the periphery of the City.*

### **Vision Workshop Results (With Additional Comments)**

Residential/Neighborhood Atmosphere

Town Centers/Cultural Activity Centers - (Make accessible by public transportation)

Lake Access - (Improve boat ramps)

Recreation Facilities - (Develop undeveloped park sites to reflect individual neighborhoods)

Wider Main Roads - (Per MPO plan process Howland, Providence)

Commercial/Industrial Areas - (Howland Boulevard area, Providence Boulevard, South West

Activity Center )- commercial/industrial - Saxon Boulevard - I-4 to Normandy - Professional, Future area - east of current City limits.

(Recreation - Current parks need to be improved with a minimum standard to be developed

Widen Roads - main roads should be wider in anticipation of future needs.

Government/Education Center - various commercial and social activities close by.