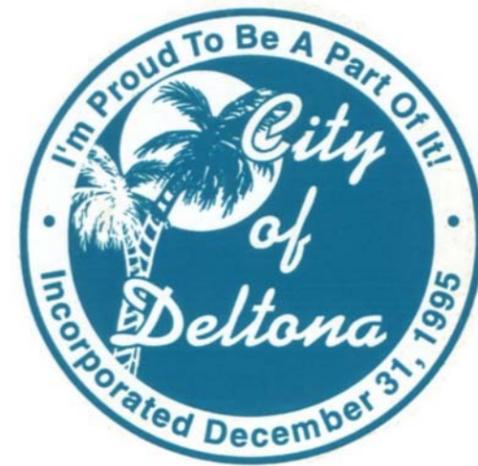


City of DELTONA

URBAN DESIGN MASTER PLAN
Adopted August 4, 2008



**CITY OF DELTONA
URBAN DESIGN MASTER PLAN**



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*Adopted
August 4, 2008*

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The Consultant Team and City staff would like to express our gratitude to all the residents, property owners, interested parties and local officials who participated in the Community Strategic Planning and Visioning Forum, and the subsequent task forces to create a unique and desirable community in which to live, work and play.

Special thanks to Bell David Planning Group, Patricia Bidol-Padva and the Corradino Group for conducting the community visioning forum and the task force workshops, and preparing the *Destination Deltona Community Strategic Plan* to identify the key initiatives to guide the City of Deltona in creating its "Vision for the Future."



*Technical support provided by the
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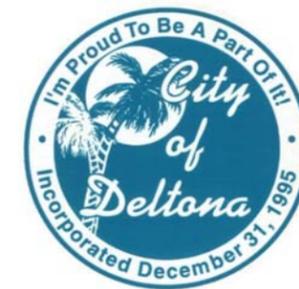
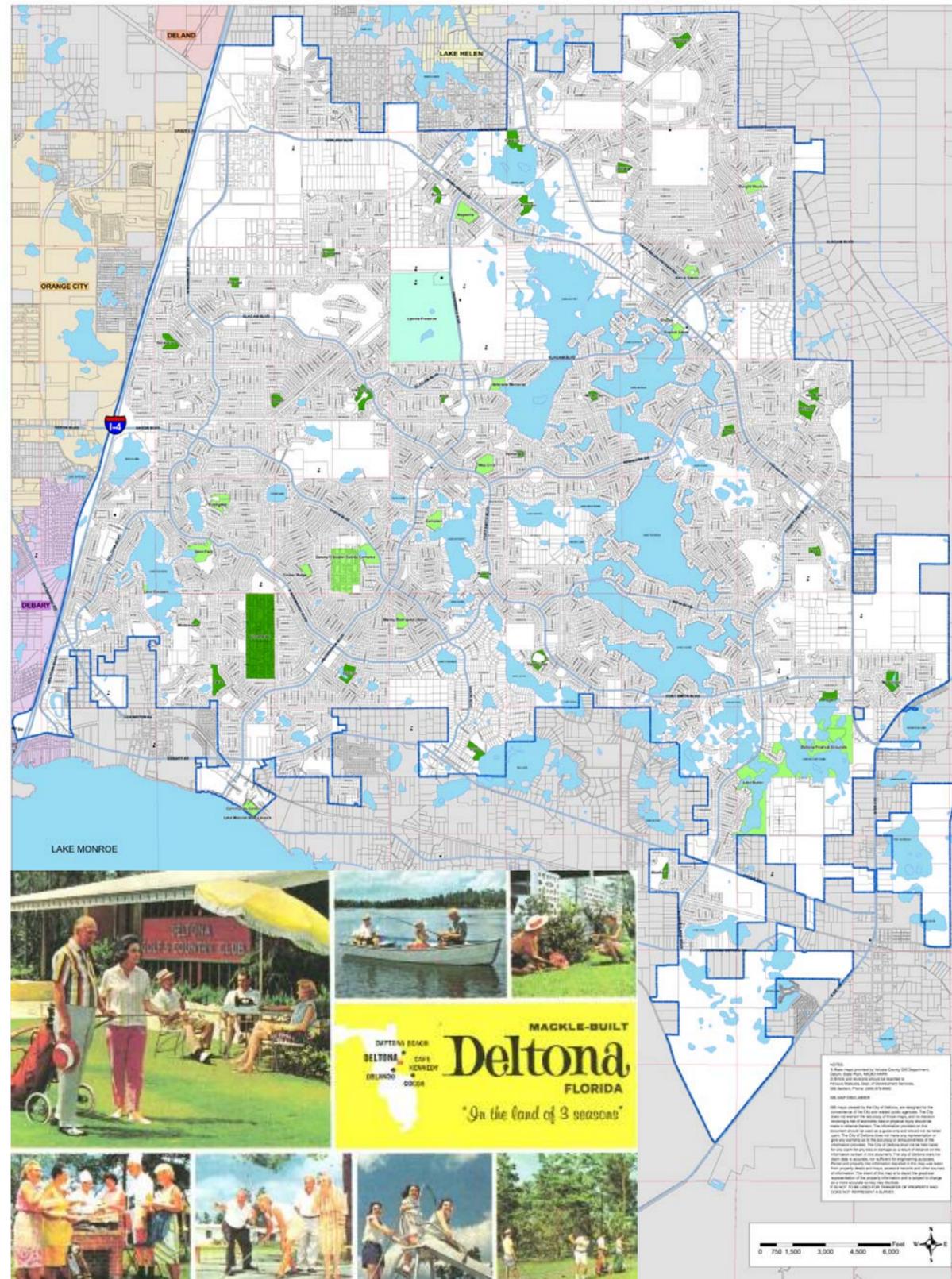


Figure 1: City of Deltona



1.0 INTRODUCTION

1.1 Background

Deltona began in 1962 as a planned community developed by the Mackle Brothers. In 1974, Volusia County approves the Deltona Lakes PUD which contained over 35,000 single-family lots and set the groundwork for the future community structure. The PUD was essentially a subdivision plan with only limited attention to commercial, civic and other non-residential land uses. By 1995, the desire to incorporate the community as a City had grown to the point where residents voted to make Deltona its own City, and a new government opened for business on December 31, 1995 (see Figure 1).

Today, the City of Deltona is the largest municipality within Volusia County with over 85,000 residents in a 46 square mile area consisting of numerous lakes and a variety of natural resources and communities, including scrublands, sand pine communities, pine flatwoods, mixed forested hardwoods and wetlands and serves as a bedroom community for commuters to the Orlando Metropolitan Area. People moving to the Orlando Metropolitan Area for work found Deltona to offer affordable housing located relatively close to area employment centers.

Despite its assets, the City of Deltona faces a number of challenges, such as:

- Lack of commercial uses and employment base that characterizes full service communities
- Provision of services and infrastructure to serve residents and businesses
- Maintaining and enhancing the natural and built environment in the face of continued growth and development

These challenges prompted the City to bring together residents, business owners, community leaders and other stakeholders to create a shared vision for the future. On December 18, 2006, the City of Deltona adopted a twenty year vision that would guide the City's future.

Vision Deltona 2026

"Deltona is a premiere City that takes pride in our neighborhoods and embraces the diversity of our residents. The caring community provides a high quality of life where the people live, work and play in a safe and secure environment. With an appreciation for our history, and our location along the St. John's River, we ensure a sustainable future through the careful stewardship of our resources."

This vision statement was evaluated by the participants during the visioning forum, as part of the "Destination Deltona" strategic planning process that was held on August 11, 2007. The overriding objective from all involved is "Keep the City beautiful, safe, well informed and prosperous." On February 18, 2008, the City Commission approved the *Destination Deltona Community Strategic Plan* to guide the City's future.

1.2 Purpose and Intent of the Deltona Urban Design Master Plan

Urban design refers to the appearance, arrangement and functionality of towns and cities, and in particular the shaping and uses of urban public space. Public space includes the totality of spaces used freely on a day-to-day basis by the general public, such as streets, plazas, parks and public infrastructure. Some aspects of privately owned spaces, such as building facades, seating areas or parking areas, also contribute to the way public spaces are experienced and used.

The purpose of the *Urban Design Master Plan* is to promote and foster a public realm that attracts people to live, work and play. The intent is to establish and enhance Deltona as a sustainable community with an identifiable aesthetic character as emphasized in the City's vision and to clearly articulate the goals and objectives identified in the *Destination Deltona Community Strategic Plan*.

The *Urban Design Master Plan* establishes a "Nature" theme to embrace the natural resources of Deltona; to promote a holistic approach to redevelopment; and to create a citywide "Green" identity. In addition, it recommends specific programs, projects and initiatives necessary to address the economic development, quality of life and sense of community/place making issues, as identified in the

Figure 2: Existing Land Uses



Scrublands



Elkcum Lakes



Commercial Corridor – West Saxon Boulevard



Commercial Corridor – Deltona Boulevard



Commercial Corridor – State Road 415



Single Family Homes fronting on Deltona Boulevard



Single Family Homes at the intersection of Providence Boulevard and Fort Smith Boulevard

Destination Deltona Community Strategic Plan. Finally, a conceptual cost estimate and phasing plan are provided detailing project priorities and funding sources to achieve the vision and to guide the City's future. The phasing plan is based on 20 years to correspond with *Vision Deltona 2026* and is divided into *Short-Range Actions (2008-2013)*; *Mid-Range Actions (2014-2019)*; and *Long Range Actions (2020-2026)* to prioritize funding allocations.

2.0 ASSESSMENT OF EXISTING CONDITIONS

2.1 Land Use Assessment

This analysis evaluates the impacts of the City's existing land use patterns on its urban design characteristics. From its conception, Deltona was envisioned as a suburban community of single-family homes within a 27 square mile area consisting of numerous lakes and a variety of natural resources and communities, including scrublands, sand pine communities, pine flatwoods, mixed forested hardwoods and wetlands.

The primary housing type was planned to be single-family dwellings. Limited provision was made for incorporating other housing types and supporting land uses, such as commercial, industrial and civic activities. The suburban neighborhoods sprawled over more than 30 square miles dominated by single-family lots and residential streets (see Figure 2).

As the City's population increased, the demand for commercial services grew along with it. The City's core has remained predominately single-family residential neighborhoods while commercial services have largely been located on the fringe, often adjacent to unincorporated county areas or in the adjacent cities of Debarry and Orange City. The existing intensive commercial development on West Saxon Boulevard has been fueled by the market demand located in Deltona. The emerging commercial development located along State Road 415 is also being driven by the demand for services and commercial development within Deltona (see figure 2).

The community does have limited interior convenience and neighborhood level commercial services, but the continuing public commentary about the need for better shopping emerges in nearly every community forum. As with the residential development, the commercial development that has occurred is lower intensity and rather widely dispersed along a road network that has had to grow as an arterial network at the same time the land uses were being developed. Since most roads began as essentially residential streets, it is common to see single-family housing with frequent driveway cuts fronting on major collector and arterial roads (i.e., Deltona Boulevard, Howland Boulevard, Elkcum Boulevard and Providence Boulevard). Non-residential development often emerges within an area of single-family housing without a clear reason as to why that particular site developed as a non-residential use (see Figure 2).

The community visioning efforts have repeatedly identified the need to reevaluate the City's suburban geography to create a unique identity and a desirable community to live, work and play through preserving the natural resources; developing compact mixed-use urban form; and establishing a strong downtown and employment centers. *Section 4.0 Implementation Strategies* provides action steps to address the land use issues through *Section 4.1 Citywide Identity* and *Section 4.2 Land Use Programming*.

2.2 Parks and Recreation

The City has 14 community parks, 26 neighborhood parks, 5 tot lots and 1 urban open space. Some of these parks are considered active parks with ball fields, basketball courts, soccer fields, volleyball courts, football fields, tennis courts, horseshoe pitches, racquetball courts, fishing docks, shuffleboard courts, splash pads, nature/walking trails, restroom facilities, concession stands, pavilions, picnic areas, playgrounds and/or neighborhood centers. The City has a nature preserve called the Lyonia Preserve consisting of 380 acres to showcase the scrub ecosystem.

The City is currently working on a *Parks and Recreation Master Plan*. A draft has recently been completed and will likely be adopted simultaneously with the *Urban Design Master Plan*. The guiding principles of the *Parks and Recreation Master Plan* are as follows.

Figure 3: City Parks



Campbell Park



Manny Rodriguez Park



Dewey O. Boster Sports Complex

- Every resident can walk safely to a significant green space.
- Every resident has equitable access to a community center.
- All residents are served by a central sports complex.
- Every resident can walk or bicycle to an interconnected, citywide network of sidewalks, bike lanes and multi-purpose trails.
- All residents are served by major and secondary civic gathering spaces.

A well-planned park system increases the quality of life of its residents and the economic benefits of local parks and recreation encompass attracting investments, boosting tourism and safeguarding the environment (see Figure 3). *Section 4.0 Implementation Strategies* provides action steps to address the parks and recreation enhancements through *Section 4.2.1 Natural Environment* and *Section 4.2.2 Parks and Recreation Facilities*.

2.3 Heritage and Cultural

Deltona is one of the most ethnically diverse communities in Volusia County. The City is 28% percent Hispanic and about 9.5% African-American. While the African-American population is about on par with the countywide average, the Hispanic population is more than double the county average (28% to 10%). Nearly half of the county's Hispanic residents live in Deltona.

Of Deltona

Past visioning efforts and the new Destination Deltona program have pointed to the need to create a sense of place or a "brand" for the City. Residents and officials note the difficulties in furthering a sense of community when residents frequently have to leave the community to work, shop and dine. The City makes a concerted effort to provide a variety of community events as a vehicle to create community and offer opportunities for social connections.

Having a centralized heritage and cultural center and a central park for outdoor festivities will encourage extensive public participation to enrich the heritage and cultural diversity of Deltona and Volusia County. The City has an Arts and Historical Center on Deltona Boulevard which they offer classes, a recording studio, art exhibits and local performances (see Figure 4). However, Deltona, Enterprise and surrounding areas still lack a place to show-case and increase the awareness of the artistic talents of local residents. *Section 4.0 Implementation Strategies* provides action steps to address the heritage and cultural activities through *Section 4.2.2 Parks and Recreation Facilities* and *Section 4.2.7 Heritage and Cultural Facilities*.

2.4 Public Safety

The City provides its own fire protection services and contracts with the Volusia County Sheriff for law enforcement. The fire department operates from four stations with annual calls for service running between 7,500 and 8,000 calls in recent years. The City also has the old Fire Station 61 site to provide fire and safety education to the community (see Figure 5).

Currently, Deltona contracts law enforcement services with the Volusia County Sheriff's Office. This relationship has existed since the City's incorporation in 1995. Deputies assigned to the City respond to all calls for service on a 24-hour, seven-day-a-week basis. Crime statistics show a general decline over the past few years with Part 1 report crimes at about 2,000 incidents for 2006. Such an arrangement reduces the overhead costs to the City for providing police protection and law enforcement services. The challenge for the City is determining if that relationship continues to provide the level of service demanded from residents and business owners and weighing the cost-to-benefit ratio of either alternative.

Having a centralized public safety facility to combine Fire, Emergency Medical Service and Police Departments, and facilitate as an emergency operations and training center will better serve Deltona and Volusia County in meeting their public safety goals. *Section 4.0 Implementation Strategies* provides action steps to address the public safety improvements through *Section 4.2.8 Public Safety Facility*.

Figure 4: Deltona Arts and Historical Center



Figure 5: Deltona Fire Department Training Facility



Figure 6: Existing Transit Shelters and Stops



2.5 Multi-Modal and Pedestrian Access

There are currently three transit routes that service Deltona as part of the West Volusia line, namely: Route 20, providing service between DeLand, Orange City and Deltona, and Routes 21 and 22, both providing service between portions of Debarry and Deltona. These routes currently service several major potential generators of pedestrian traffic, such as City Hall, Deltona Regional Public Library and Daytona Beach Community College. These routes may better serve existing and potential customers with additional shelters and sidewalk improvements along those routes (see Figure 6). Decorative transit shelters are planned along the bus routes and they need to be consistent with the citywide "Nature" theme.

The City of Deltona recognizes that pedestrian access is an issue. The City is in the process of determining existing sidewalk locations and deficiencies, in an effort to encourage more pedestrian friendly facilities (see Figure 7). There is \$4,200,000 in the City's Capital Improvement Program (CIP) for sidewalk improvements, beginning with \$640,000 in the 2007/2008 budget. Future developments, such as the proposed State Road 472 Activity Center located in the southeast quadrant of I-4 and Howland Boulevard are anticipated to be major generators of employment, and may justify additional transit routes and improvements to pedestrian access. Any revisions or additions to existing transit routes will require close coordination with the Volusia County Transit Authority (VOTRAN).

As Deltona becomes more urbanized, the need for public transit and pedestrian connectivity will become more of a viable option to commute within the City. *Section 4.0 Implementation Strategies* provides action steps to address the public transit system and pedestrian access through *Section 4.1.2 Cohesive Design (Transit Shelter Location and Amenities)*, *Section 4.2.2 Parks and Recreation Facilities (Connectivity to Parks)*, *Section 4.2.3 Neighborhood Residential (Neighborhood Safety)*, *Section 4.2.6 Educational Facilities* and *Section 4.3 Roads and Transportation (Public Transit)*.

2.6 Roadway Network

Due to the initial residential nature of the City and the design of the roadway network, the designation of roadways as arterial, collector and local is rather arbitrary (see Figure 8 on Page 6). Many of the roadways within the City that once only served residential traffic now serve as collector or even arterial roads as commercial development has occurred along State Road 415, West Saxon Boulevard and the cities of Debarry and Orange City.

The City is currently refining their thoroughfare plan. As part of this *Urban Design Master Plan*, an analysis of 37 intersections within the City was performed (see Appendix A). This was done in order to assess existing conditions and to determine both short term (year 2015) and long term (year 2025) conditions. Mitigation improvements for those intersections that are projected to fall below the adopted Level of Service were provided.

In addition, an assessment of the roadway operating conditions is underway as part of the City's concurrency analysis. Existing lane calls, posted speed, design factors, count data, level of service and available capacity have all been collected and documented. The following roadways are currently funded in the City's CIP and are under construction.

- Howland Boulevard from Elkcam Boulevard to State Road 415; widen from 2-Lane to 4-Lane
- Ft. Smith Boulevard entire length; widen from 2-Lane to 3-Lane
- Normandy Boulevard from Saxon Boulevard to Firwood Drive; widen from 2-Lane to 4-Lane

Future funding for roadway improvements should be guided by the thoroughfare plan described above. The City's CIP contains over \$24,000,000 in the 2009/2010 budget, \$9,800,000 in 2010/2011, and none in 2011/2012 indicating a commitment to fast track as many improvements as possible.

Another community concern is navigating through the roadway network due to unidentifiable landmarks. This problem has become less acute in these times where global positioning systems (GPS) are widely available in private vehicles and where internet websites readily provide detailed mapped driving instructions. Nevertheless, a clearly defined wayfinding directional system could be a significant tool in helping residents, visitors and casual travelers navigate more easily through the City and access important commercial and civic destinations.

Figure 7: Pedestrian Access Improvements



Normandy Boulevard – Lack of Sidewalk

Fort Smith Boulevard – Lack of Sidewalk

Figure 8: Deltona's Roadway Network

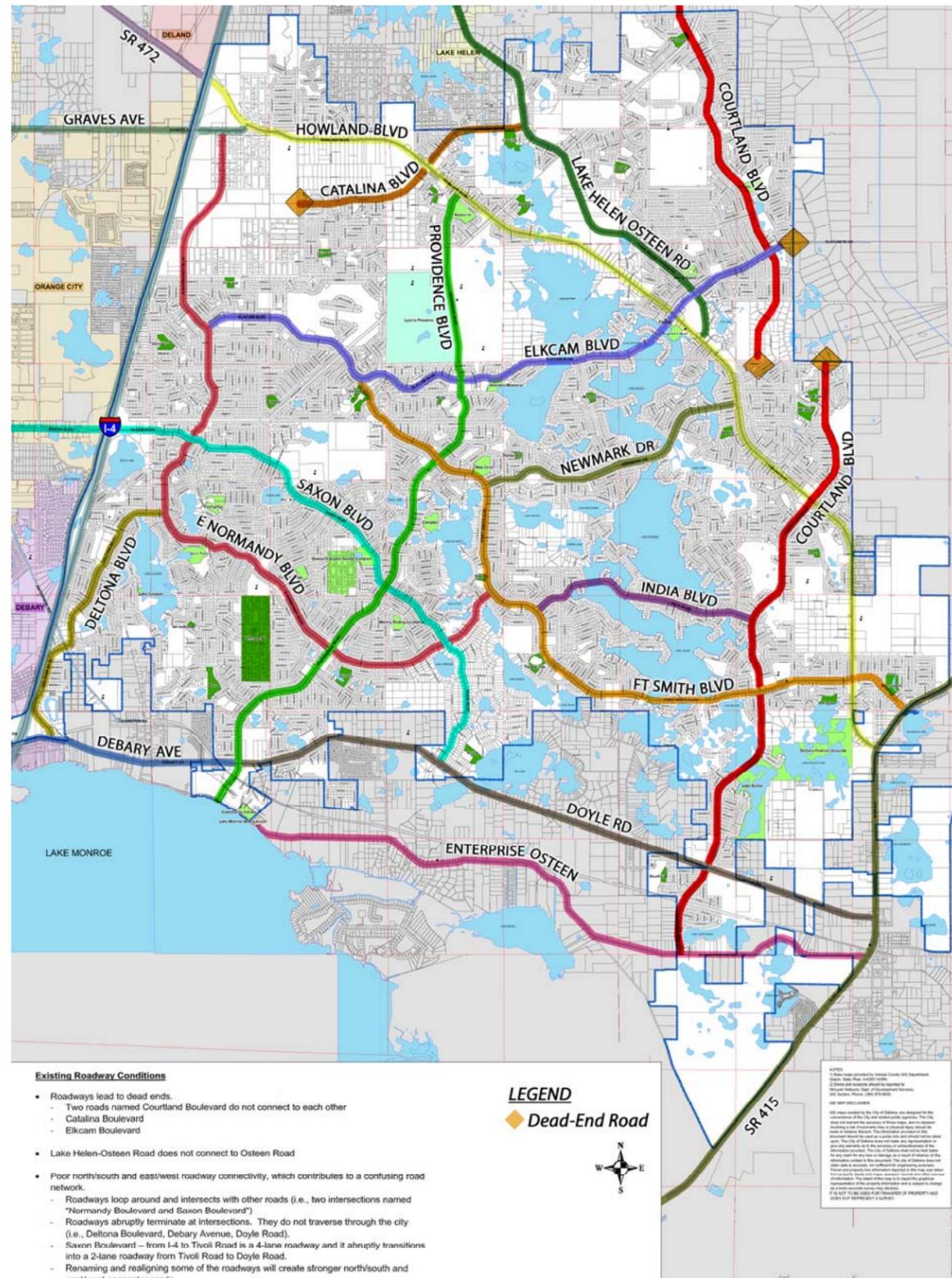


Figure 9: On-Site Parking



Intersection of Normandy Boulevard and Saxon Boulevard



Deltona Boulevard

Figure 10: Existing Infrastructure and Utilities



Lift Station at Graves Avenue



Retention Pond adjacent to Providence Boulevard

The ability to travel easily from place to place within the City of Deltona, and to and from destinations is a critical factor in establishing and maintaining a good quality of life and creating a sense of place. Further roadway studies, improvements and aesthetic enhancements are necessary to maintain roadway operations and to meet the demand of future developments. *Section 4.0 Implementation Strategies* provides action steps to address the aesthetics and roadway issues through *Section 4.1.2 Cohesive Design* and *Section 4.3 Roads and Transportation*.

2.7 Parking Facilities

There are currently no public or private parking facilities in the City. Each development, public or private, is required to meet the City's minimum parking requirements for that particular land use (see Figure 9). Consequently, there are no perceived deficiencies that need to be addressed. Future developments, such as the proposed Activity Center located in the southeast quadrant of I-4 and Howland Boulevard will require substantial parking accommodations. There may also be locations for park and ride garages as part of updates to the region's transit program.

As new developments occur, providing public park and ride garages, consolidating parking lots and cross-access easements, and limiting parking in front of businesses will reduce vehicular travel on the roadways and create pedestrian-friendly streets that are not dominated by parking lots. *Section 4.0 Implementation Strategies* provides action steps to address parking facilities through *Section 4.1.2 Cohesive Design (Private Urban Design Standards)* and *Section 4.3 Roads and Transportation (Parking Facilities)*.

2.8 Infrastructure and Utilities

The City is served by two water and sewer systems. The primary system is owned and operated by the City following its purchase from a private provider, and the second system, which is located in the northwestern section of the City, is owned and operated by Volusia County. Water is generally available throughout the City, but sewer is available in only selected areas. Much of the residential development in the City was done using an on-site sewage disposal system with about 80% of the City's homes currently using on-site sewage disposal system. The City's comprehensive plan contains a complete discussion of the operating statistics for the water and sewer services and the potential for concern about groundwater contamination from the large volume of septic tanks in the City. The key development issues related to the urban design program include:

- Obtaining an adequate consumptive use permit for the potable water services necessary to support the planned growth, especially within the Activity Center area
- Providing for the extension of water and sewer service to the activity center area which is currently within the service area of the Volusia County managed system
- Where retrofits are planned to extend sewer service to existing developed areas, these improvements can be coordinated with planned street design improvements
- Upsizing water lines and installing sewers in conjunction with the roadway infrastructure projects

Stormwater drainage in the City falls into one of three land-locked basins named after key lakes in the basin. These are Lake McGarity, Lake Theresa and Lake Gleason. The natural systems generally do not have outfalls causing wide fluctuations in lake levels within the basins. The lakes typically have gentle slopes and wide littoral zones in their natural setting, and the lakes and newer stormwater management facilities tend to dry out for rather long periods of time when rainfall is below normal levels. The original development plans called for the interconnection of the lake systems with the addition of a positive outfall to Lake Monro. Only one of these outfalls was constructed with the initial development. Urban construction was allowed to occur in the flood plain areas of the lakes and consequently severe storms and extended wet periods can result in localized flooding conditions (see Figure 10). The CIP does not include any funds for renewal and replacement of stormwater facilities, but does include over \$13,000,000 in stormwater upgrades. Proper landscaping of existing larger ponds should be considered to create community amenities. However, large scale wet retention ponds within the State Road 472 Activity Center may not be appropriate due to the existing topographic terrain. It may be necessary to distribute stormwater retention into small facilities with individual developments that will have a smaller visual impact.

Figure 11: Citywide "Nature" Theme



Scrubland - Lyonia Preserve

Scenic Corridor - Lakeshore Drive

Lakes - Elkcam Boulevard

Boat Dock - Lake Monroe

Figure 12: Deltona Economic Strategies



State Road 472 Activity Center



Infrastructure and utilities are important to the development of any community to provide sufficient water and sewer capacity to meet current and future needs for sustained economic growth. *Section 4.0 Implementation Strategies* provides action steps to address the water and sewer issues through *Section 4.4 Infrastructure and Utilities*.

3.0 VISION AND INITIATIVES

3.1 City's Vision

Having a unified theme and cohesive design for a municipality or a particular area creates a unique identity and a durable, safe and attractive environment to celebrate local heritage, to reinforce a sense of place and economic vitality, and to promote visual continuity in an effort to enhance desirable destinations for visiting, working, playing and living.

Over the years, the City of Deltona brought together residents, business owners, community leaders and other stakeholders to create a shared vision for the City - "*Vision Deltona 2006*". The community's desire to maintain the natural resources; protect the wildlife; maintain clear and clean lakes; and promote a holistic approach to development lead to the obvious creation of a citywide "*Nature*" theme to promote a "*Green*" identity to distinguish Deltona from the rest of Volusia County. By validating themselves as an environmentally sensitive community through branding, regulatory policies and cohesive design, the City of Deltona will encourage positive growth and economic development (see Figure 11).

3.2 Key Initiatives

On February 18, 2008, the City Commission approved the *Destination Deltona Community Strategic Plan* to create a shared vision and to guide the City's future. Based on the visioning forum outcomes, a series of broad goals and objectives were identified to address three key initiatives: 1) Economic Development; 2) Quality of Life; and 3) Sense of Community/Placemaking to guide the City in creating its "*Vision for the Future*." Based on these three key initiatives, implementation strategies are recommended to identify specific programs, projects and action steps, as well as funding allocations and a phasing plan.

3.2.1 Economic Development

Over the last two years the City of Deltona has developed and initiated a detailed implementation plan for economic development within the City. The *Destination Deltona Community Strategic Plan* is the key document establishing a vision and series of goals for economic development as one of three community issues. This *Urban Design Master Plan* is supported by a Strategic Economic Plan that establishes a more detailed implementation program for an initial five-year period. The City has published pamphlets entitled "*Discover Deltona*" and "*Doing Business in Deltona*" which provide some basic information about the community and how to establish a business in the City by providing direct links to the staff and available services, and information and links to local, state and county economic development incentive and assistance programs (see Figure 12).

The vision for economic development emphasizes the creation of employment and enhancement of the retail and commercial base for the City. During the "*Destination Deltona*" strategic planning workshops, the participants identified key goals and general strategies to improve the economic development of Deltona.

1. Create an economic development theme or brand for the City.
2. Provide economic and regulatory incentives to attract employers and businesses, create new jobs, assist small business and foster the establishment and growth of local business.
3. Establish employment development areas and identify commercial corridors to foster business development, create opportunities to live and work in the same areas and provide a definite plan for growth.
4. Maintain the City's small-town ambiance and natural aesthetics (no high rises), and protect the natural environment.

Figure 13: Quality of Life Services



Roadway Improvements – Elkcarn Boulevard



Improve Transit Facilities



Public Safety Training

Figure 14: Creating a Sense of Community/Place Making



Mixed-Use Development



Office Center



Industrial Park



Multi-Family Residential



Public Gathering Areas



Compact Schools

Section 4.0 Implementation Strategies provides action steps to address the Economic Development initiatives through Section 4.1 Citywide Identity and Section 4.2 Land Use Programming.

3.2.2 Quality of Life

A high quality of life is necessary to attract and retain residents within the City. Property values remain stable, a sense of community develops and strengthens, businesses remains strong and other positive economic indicators are indicative of a community that has succeeded in providing a good quality of life for its residents. Maintaining and improving levels of service for key facilities and services is integral in maintaining the City's quality of life. Some of these facilities and services are provided by the City such as parks and fire rescue, while others, such as police and schools are provided by other agencies. It is important for the City to maintain active partnerships with these outside agencies to ensure the quality of life in Deltona is maintained and improved.

During the "Destination Deltona" strategic planning workshops, the participants identified key facilities and services necessary to maintain and improve the quality of life (see Figure 13).

1. Improve roadways and transportation
2. Enhance infrastructure and utilities
3. Maintain and improve public safety
4. Develop premier passive and active recreational facilities
5. Enhance social services
6. Maintain code enforcement

Section 4.0 Implementation Strategies provides action steps to address the Quality of Life initiatives through Section 4.2.5 Social Facilities, 4.2.8 Public Safety Facility, Section 4.3 Roads and Transportation and Section 4.4 Infrastructure and Utilities.

3.2.3 Sense of Community/Place Making

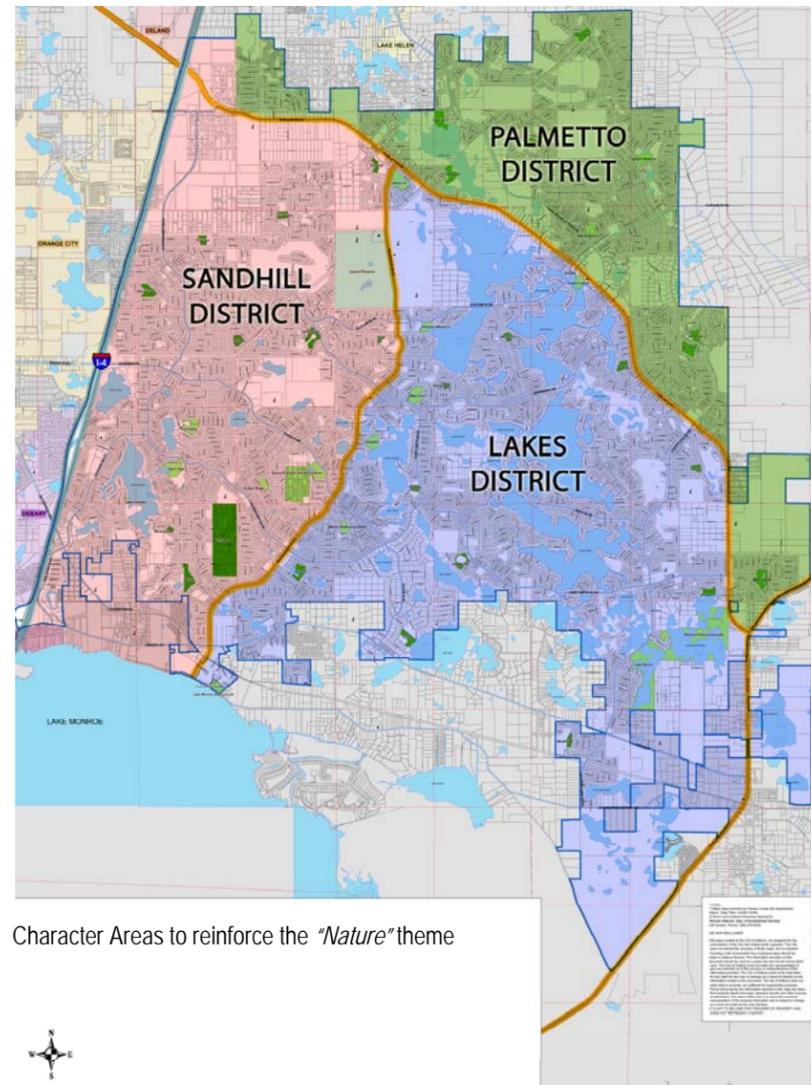
The desire to create a unique and desirable community and a cohesive design through appearance, arrangement and functionality of land uses, and in particular the shaping and uses of urban public and private spaces contribute to where people want to live, work and play.

During the "Destination Deltona" strategic planning workshops, the participants identified key strategies to create a sense of community/place making (see Figure 14).

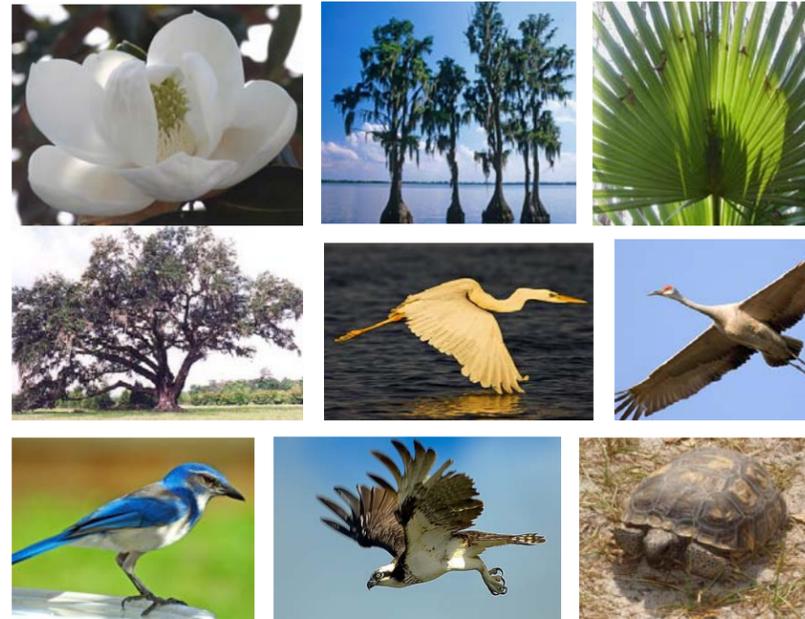
1. Create a unifying and unique theme for the City.
2. Develop a strong downtown and activity centers to create destination places.
3. Encourage compact, mixed-use developments for neighborhood commercial and alternative housing units.
4. Provide multi-family housing in appropriate locations to serve as transitional areas between single-family and commercial uses.
5. Improve landscaping and streetscaping.
6. Develop building design standards.
7. Enhance gateways and wayfinding signs.
8. Provide heritage and cultural activities.
9. Enhance educational facilities.

Section 4.0 Implementation Strategies provides action steps to address the Sense of Community/Place Making initiatives through Section 4.1 Citywide Identity and Section 4.2 Land Use Programming.

Figure 15: Nature Theme and Branding



Character Areas to reinforce the "Nature" theme



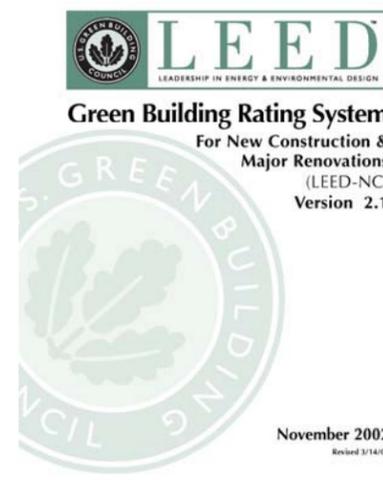
Create Identity Icons based on Local Environmental Elements



Coordinate with West Volusia County Chamber of Commerce



Promote a Holistic Approach to Development



November 2002 Revised 3/14/03

4.0 IMPLEMENTATION STRATEGIES

The following section identifies specific programs, projects and action steps to implement the vision of the City of Deltona as a desirable destination for visiting, working, playing and living by addressing the three key initiatives: 1) Economic development; 2) Quality of life; and 3) Sense of community/place making from the *Destination Deltona Community Strategic Plan*. These action steps are based on 20 years to correspond with *Vision Deltona 2026* and are divided into *Short-Range Actions (2008-2013)*; *Mid-Range Actions (2014-2019)*; and *Long Range Actions (2020-2026)* to allocate funding sources and to phase in the programs and projects.

4.1 Citywide Identity

Creating a unique identity and promoting a cohesive design will enhance the City's image as a destination for visiting, working, playing and living. During the various visioning workshops, the community expressed the desire to embrace the City's natural resources and promote a holistic approach to development, which led to the "Nature" theme. Based on local environmental elements, three character areas were developed; 1) Sandhill; 2) Palmetto; and 3) Lakes (see Figure 15). These areas will provide a unique branding to be incorporated into various design elements, such as gateways, public signage and streetscaping; and marketing/promotional materials to reinforce the citywide identity.

4.1.1 Nature Theme and Branding

The creation of an economic development theme or brand will reinforce the economic vitality of the City. Promoting a "Green" identity to distinguish Deltona from the rest of Volusia County as an environmentally sensitive community will encourage positive growth and economic development for the City (see Figure 15).

During the "Destination Deltona" strategic planning workshops, the participants expressed the need to maintain the natural aesthetics; protect the natural environment; attract new businesses; and develop marketing tools.

ACTION STEPS

A. Nature Theme Short to Long - Range Action Steps (2008 - 2026)

- Adopt the "Nature" theme to create a citywide "Green" identity to preserve the natural resources and promote a holistic approach to development.
- Work with the West Volusia Chamber of Commerce to establish Deltona as an environmentally friendly destination by creating a clear brand identity to emphasize the nature-based recreational opportunities and eco-friendly development standards.
- The City may use the national accepted Leadership in Energy and Environmental Design (LEED) rating system created by the Florida Green Building Destination for building and neighborhood design.
- Incorporate Green Building initiatives into the City's Land Development Regulations.
- Become a member of the Florida Green Building Coalition, Inc.
- Provide incentive programs to residents and the private sector in practicing green development (i.e., density and intensity bonuses, reduction in impact fees, Green Building matching grant and technical assistance for National Funding Program).
- Ensure compliance through development review and during the site inspection process.

B. City Branding Short - Range Action Steps (2008 - 2013)

- Develop a "Nature" design theme to speak to the community's identity or brand.
- Create publications and brochures to communicate the branding of the "Nature" theme.
- Develop advertising and marketing strategies to communicate the City's "Green" identity and the holistic approach to redevelopment.

Figure 16: Design Standards



Pavers

Traffic Signals

Decorative Element

Street Lighting

Landscaping

Site Furnishings

4.1.2 Cohesive Design

Having a cohesive design for the City of Deltona will strengthen the citywide *"Nature"* theme by visually unifying the public and private spaces to create a unique identity, and a durable, safe and attractive environment to reinforce economic vitality, a sense of place, and visual continuity in an effort to enhance desirable destinations for visiting, working, playing and living (see Figure 16).

During the *"Destination Deltona"* strategic planning workshops, the participants expressed the need to improve gateways, streetscaping and wayfinding; and to develop site and architectural design standards.

A. Design Standards *Short - Range Action Steps (2008 – 2013)*

- Complement existing design standards in the Land Development Regulations and develop a user-friendly Urban Design Pattern Book. The following framework shall be used to develop the public and private urban design standards.

Public Urban Design Standards

The Public Urban Design Standards focus on strengthening the citywide *"Nature"* theme by visually unifying the streetscape elements within the right-of-ways, such as: crosswalk/intersection treatments, decorative paving, traffic signals, lighting, landscaping, site furnishings, transit facilities, public signage and gateways, and articulated features.

In addition, public gathering areas, such as parks, plazas, courtyards, etc. shall also incorporate the *"Nature"* theme through the use of decorative paving, landscaping, lighting, site furnishings and signage.

Urban design efforts, such as intersection treatments, public gathering areas and landscaping may be the responsibility of private entities as part of their redevelopment project.

Paving – The paving pattern for intersection treatments shall be colored concrete with broom finish and concrete banding. Identity icons at the center area of the primary intersections may be created by sandblasting into the colored concrete. Decorative pavers (brick, concrete pavers, integral color concrete, ceramic tiles, stamped concrete, etc.) shall be considered for walkways, courtyards, seating areas, parks, plazas, etc.).

Traffic Signals – All signalized intersections shall have decorative mast arms, unless waived by the City's Development Review Committee (DRC). The design, location and specifications for the traffic signal mast arms shall comply with Florida Department of Transportation (FDOT) regulations. The color shall be dark green, Sherwin Williams, English Ivy #2935. Decorative elements of flora and fauna shall be incorporated into the mass arms.

Lighting – The streetlights shall be a semi-nautical theme to represent the numerous lakes and natural resources of Deltona. The streetlights shall have a dark green powder coat finish along primary, secondary and tertiary corridors. Pedestrian scale lighting may be used in residential neighborhoods, public gathering areas and urban centers to create pedestrian-friendly streets and an intimate ambience.

Landscaping – The landscaping shall emphasize the *"Nature"* theme by using plant materials that are *"Water-Wise"*, *"Florida Friendly Landscape"* or *"Xeriscape"* to unify the gateways, intersections and roadways; develop pleasant/attractive parks and public gathering areas; and create aesthetically pleasing wet/dry retention ponds.

Site Furnishings – A family of site furnishings (benches, trash receptacles, planters, bicycle racks and bollards) shall be consistent with the *"Nature"* theme and strategically located in high pedestrian activity areas, so as not to impede pedestrian movement. The site furnishings shall have a dark green powder finish, except for the concrete planters which shall have a natural stone finish.

Figure 16: Design Standards



Transit Shelter Location



Public Wayfinding Signage

Transit Shelter Location – Transit stops with the highest usage along the bus routes and within the employment development areas shall provide shelters consisting of a bench and a trash receptacle located at back of sidewalk or back of curb. Avoid locating the shelter directly on the sidewalk or overhanging a nearby sidewalk.

Public Wayfinding Signage – Wayfinding and public signs will help motorists, pedestrians, and bicyclists to better navigate their way to various destinations of interest within Deltona. Designing the signs to relate to the “Nature” theme will reinforce the City’s image/brand of a “Green” identity and the character areas (see Figure 15 on Page 9). The public signage shall be consistent with the “Nature” theme by using identity icons from the primary intersections and erected on decorative poles with inter-changeable fascia plates. Banners may be attached to light poles and/or vertical monument signs. The location of public signs shall comply with the intersection approach and advance sign requirements/criteria of FDOT.

Gateways – Gateway signs located at key entry points to the City of Deltona will let people know that they are entering the City. Having the gateways consistent with the “Nature” theme using identity icons from the primary intersections will strengthen the sense of uniqueness; make a good first impression to attract visitors and businesses to the area.

The primary gateways shall be located at the following key locations.

- A. Howland Boulevard and Graves Avenue
- B. Interstate 4 and Saxon Boulevard
- C. Deltona Boulevard and Debary Avenue
- D. Howland Boulevard and State Road 415

The gateways shall be divided into two tiers, a vertical marker at the above noted intersections to identify the city boundaries and a monument welcome sign further down the roadway. Reader boards may be installed on the monument signs to provide public event notifications. The location of public signs shall comply with the intersection approach and advance sign requirements of FDOT.

Private Urban Design Standards

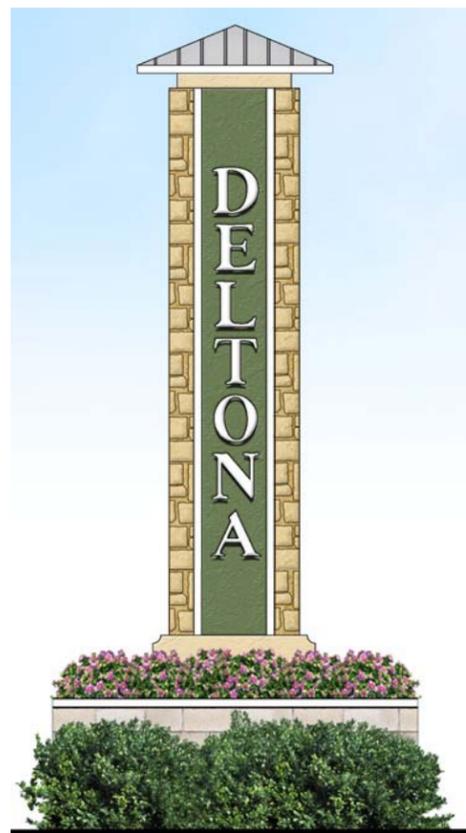
The application of the Private Urban Design Standards is intended for public buildings, shopping centers, multi-tenant commercial centers, big box retail, mixed use commercial, office centers, light industrial/flex space complexes and individual stores or freestanding buildings. These standards are focused on guiding new and existing property owners to develop their property in a manner consistent with the City’s architectural styles of Mediterranean, Florida Vernacular and Classical.

Architectural Styles – Additional design standards, such as building materials, exterior colors, architectural details and roof shapes shall complement the existing design ordinance for the three architectural themes of Deltona: Mediterranean, Florida Vernacular and Classical styles that are located in specific areas of the City.

- Florida Vernacular and Mediterranean – Citywide
- Mediterranean – Deltona Activity Center
- Florida Vernacular (Florida Cracker) – Enterprise Commercial Overlay District
- Florida Vernacular – Doyle Road, Debary Avenue and State Road 415
- Classical (Georgian, Colonial, Neo-classical, Victorian and Transitional) – Howland Boulevard

Building Design – The building façade shall be designed to enhance the attractiveness of the City’s streetscape through recesses and projections; and strategic locations of doors, windows, storefronts, awnings, canopies, arcades and signage to provide visual interest from

Architecture Styles



Vertical Marker



Mediterranean



Florida Vernacular



Monument Welcome Sign



Classical

Figure 16: Design Standards



Building Design



Site Design



Transit Shelter Amenities

Signage

Landscaping

the perspective of the pedestrian and the motorist. The building design shall incorporate architectural details of the Mediterranean, Florida Vernacular and Classical styles.

Site Design – The quality of the pedestrian environment shall be a central defining aspect of the site layout and designed to create safe, functional and efficient spaces, as well as aesthetically pleasing surroundings. The site design standards shall address site layout, building placement, outdoor spaces, limited parking in front of buildings, cross-access driveways, drive-thru facilities, loading docks, drop-off zones, walkways, fences and walls, site lighting, site furnishings and site signage to create a high quality experience for the people who work, shop and visit the City of Deltona.

Transit Shelter Amenities – Transit stops with the highest usage along the bus routes and within Activity Center developments shall provide decorative shelters with decorative site furnishings (bench and trash receptacle) located at back of sidewalk or back of curb. Avoid locating the shelter directly on the sidewalk or overhanging a nearby sidewalk. The transit amenities shall be consistent with the “Nature” theme.

Signage – Site signage shall be uncluttered and unified, and at a pedestrian scale. The locations shall comply with the City’s *Sign Code* and *Lighting Ordinance*, and shall be consistent with the architectural style of the building.

Landscaping – The landscaping shall emphasize the “Nature” theme by using plant materials that are “Water-Wise”, “Florida Friendly Landscape” or “Xeriscape” to screen vehicular use areas and to accentuate building entrances and architectural features.

Design Review

The City’s existing DRC shall be responsible for the administration of the Public and Private Urban Design Standards. Development compliance shall be determined by the DRC during the site plan review process.

The City Manager may include a design professional, such as an architect, urban designer or landscape architect as a member of the DRC. If a design professional is not available, the City Manager may contract out a design firm with the above-noted disciplines, as required, to be an extension of staff to review compliance of the Urban Design Public and Private Design Standards.

B. Design Implementation

i. **Gateways Short - Range Action Steps (2008 – 2013)**

- Develop partnerships with adjacent property owners and/or FDOT at the following intersections: 1) Howland Boulevard and Graves Avenue; 2) Interstate 4 and Saxon Boulevard; 3) Deltona Boulevard and Debarry Avenue; and 4) Howland Boulevard and State Road 415 to acquire additional corner clips to locate the boundary markers, welcome signs and landscaping (see Figure 17 on Page 13).
- Design, construct and install the gateways at the four intersections, one per year.

ii. **Intersection Treatments Short to Long - Range Action Steps (2008 – 2026)**

- Design, construct and install primary intersection treatments at: 1) Howland Boulevard and Elkcam Boulevard; 2) Debarry Avenue and Deltona Boulevard; 3) Saxon Boulevard and Deltona Boulevard; 4) Howland Boulevard and State Road 415; 5) Howland Boulevard and Graves Avenue, as first priority projects (see Figure 18 on Page 13).
- Phase-in the remaining four primary intersections to coincide with FDOT roadway/intersection improvements or as funding become available.
- Design, construct and install secondary and tertiary intersection treatments to coincide with FDOT roadway/intersection improvements or as funding become available.

Figure 17: Gateway Locations



Figure 18: Intersection Treatments

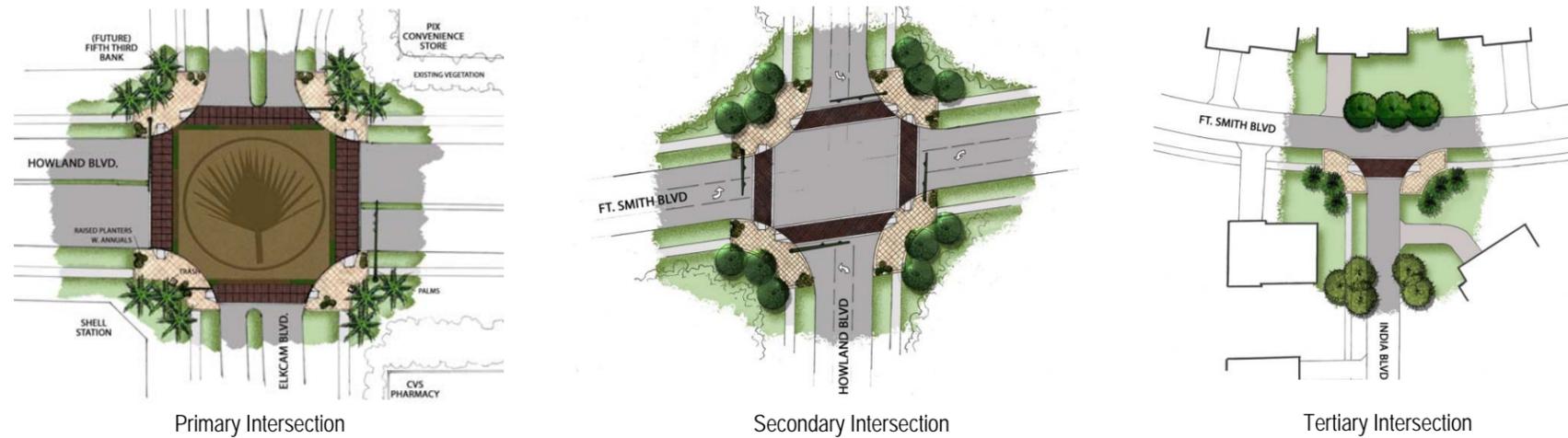
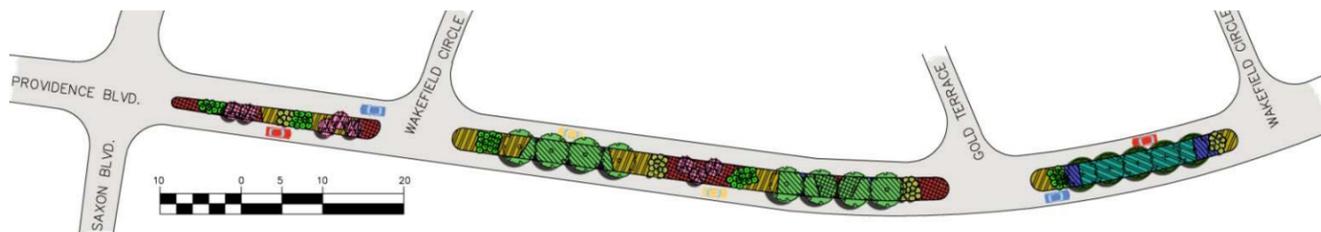


Figure 19: Streetscaping



Median Landscaping

iii. Streetscaping *Short to Long - Range Action Steps (2008 – 2026)*

- Design and install landscape plantings in the medians along Providence Boulevard between Saxon Boulevard and Tivoli Drive and along Howland Boulevard between Interstate 4 and Providence Boulevard (see Figure 19).
- Implement a street tree planting program along primary, secondary and tertiary corridors within the right-of-ways (see Figure 19).
- Develop partnerships with private property owners to acquire any necessary landscape easements along back of sidewalk due to site constraints.
- The City shall install and maintain the landscape materials and irrigation within the right-of-ways and City facilities.

iv. Traffic Signals and Street Lighting *Short to Long - Range Action Steps (2008 – 2026)*

- Install traffic signal mast arms at all signalized intersections, unless waived by the DRC. Priority should be given to primary corridors, then secondary corridors and finally tertiary corridors.
- Install decorative street lights along primary corridors first, then secondary corridors and finally tertiary corridors.
- Develop financial options to either purchase the decorative streetlights or lease the streetlights from Florida Power and Light.
- Develop a banner program on the existing utility poles to be phased-in with the decorative street lighting program.

v. Transit Stop Amenities *Short to Long - Range Action Steps (2008 – 2026)*

- Determine transit stops with high passenger usage along primary, secondary and tertiary corridors for shelter amenities.
- Design and construct the decorative paving and landscape areas for the transit shelter landing area.
- Replace the existing seven (7) shelters with the decorative shelters and site furnishings (see Figure 16 on Page 12).
- Install 12 additional decorative shelters and site furnishings.
- Provide decorative benches and trash receptacles at the transit stops.

vi. Wayfinding Signage *Short to Mid - Range Action Steps (2008 – 2019)*

- Develop a Wayfinding System Plan (location area, design criteria, engineering and sign plan) to be approved by FDOT.
- Install the wayfinding signs along primary corridors first, then secondary corridors and finally tertiary corridors.

4.2 Land Use Programming

To implement the City's vision "...provides a high quality of life where people live, work and play in a safe and secure environment..." the existing land use pattern and regulatory policies need to reflect this desire to create a unique and desirable community through preserving the natural resources; developing a world class park system; enhancing existing residential neighborhoods and providing multi-family housing; and establishing employment development areas and strong downtowns.

Figure 20: Preserving the Natural Resources



Examples of Natural Resource Management

4.2.1 Natural Environment

Our natural areas provide us with clean drinking water, beautiful places to take our families for a swim or nature hike and give us a glimpse into Florida's natural heritage. Unfortunately, sprawling development has carved the natural habitat into smaller and smaller pieces, divided by highways or paved over altogether for commercial and residential developments. It is important to protect the environment for current and future generations.

During the "Destination Deltona" strategic planning workshops, the participants expressed concerns for the natural environment.

- Maintain natural preserves
- Protect wildlife – nature & development existing in harmony
- Maintain clear and clean lakes
- Provide botanical gardens and bird sanctuaries

Preserving the City's natural resources requires careful stewardship of the land to create nature-based parks for residents and visitors to enjoy the scenic beauty and to learn about the fragile ecosystem (see Figure 20).

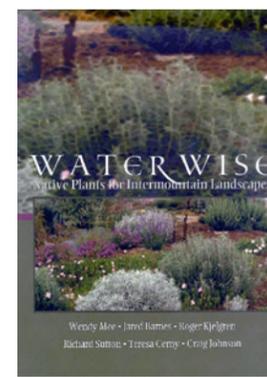
ACTION STEPS

A. Preservation of Natural Resources *Short to Long - Range Action Steps (2008 – 2026)*

- Inventory, monitor and periodically update a mapping inventory of ecological communities and wildlife species to identify environmentally sensitive lands.
- Protect critical habitats through acquisition, establishment of public or private conservation easements or purchase of development rights.
- Develop private partnerships and apply for various funding sources such as: Florida Recreation Development Assistance Program, Land and Water Conservation Fund and Volusia County ECHO Grants.
- Establish design and development review standards for structures and infrastructures which may impact critical habitats such as clustering of dwelling units, mixed-use developments and compact urban form.

B. Management/Mitigation Plans *Short to Long - Range Action Steps (2008 – 2026)*

- Develop a management plan to preserve the ecological communities and a mitigation plan for critical habitat which is unavoidably altered.
- Implement a maintenance program to enhance the ecological communities, such as:
 - removal of dead and/or overly mature Sand Pines (*Pinus clausa*);
 - reinforce the varying types of native ecosystems through careful placement and selection of appropriate plant materials;
 - minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters;
 - prevent the disposal of landscape waste into the storm drain system by collecting and properly disposing of clippings and cuttings; and
 - educate and train municipal maintenance crews on use of pesticides and in pesticide application techniques, and good horticultural practice techniques.
- Update the City's plant list to include "Water-Wise", "Xeriscape" and "Florida-Friendly" plants that are associated with the various ecological communities within the City.



Examples of Public Education

Figure 21: Parks and Recreation Facilities



Examples of Nature-Based Parks



City's Active Park - Dupont Lakes Park



City's Dog Park - Keyville Dog Park



City's Community Park - Campbell Park



Enhance Park Entry Signs

C. Public Education *Short to Long - Range Action Steps (2008 – 2026)*

- Develop a website and/or publications to educate the public in "Water-Wise" landscape maintenance using native plants, "Xeriscaping" principles and minimal dependence on irrigation systems.
- Encourage private landowners to either remove dead or overly mature Sand Pines (*Pinus clausa*) or allow City maintenance crew access to do so.
- Design, construct and install nature trails and/or flora/fauna interpretation stations to existing and future passive and nature-based parks by applying for various funding sources such as: Florida Recreation Development Assistance Program, Land and Water Conservation Fund, and Volusia County ECHO Grants.

4.2.2 Parks and Recreation

A well-planned park system increases the quality of life of its residents and property values of nearby land uses as well as providing areas for wellness and fitness. For many years, parks and recreation departments all over the country understood the benefits of viable parks and recreation programming. According to the Nationwide Study of the *Perceptions of the American Public*, the economic benefits of local parks and recreation encompass attracting investments, boosting tourism and safeguarding environment (see Figure 21).

During the "Destination Deltona" strategic planning workshops, the participants identified the need to meet the social and recreational needs of all City residents.

- Embrace the natural resources through more nature-based parks
- Provide opportunities for more neighborhood and active recreational facilities
- Develop a world class park system
- Coordinate citywide events at parks and appropriate locations

These social and recreational needs coincide with the *Deltona Parks and Recreation Master Plan* to create a world class park system that will distinguish Deltona from other cities in Volusia County.

ACTION STEPS

A. Additional Park and Recreation Facilities *Short to Long - Range Action Steps (2008 – 2026)*

- Identify environmentally sensitive lands for nature-based parks through acquisition, establishment of public or private conservation easements or purchase of development rights. Funding may be through private partnerships and/or various grants/programs such as: Florida Recreation Development Assistance Program, Land and Water Conservation Fund, and Volusia County ECHO Grants.
- Provide development incentives for private developers to incorporate recreational facilities into their development (i.e., waving permitting fees, providing tax breaks and intensity/density bonuses).
- Develop a central park in the State Road 472 Activity Center, as part of the civic hub to promote community outdoor festivities.
- Open dialogue with the Volusia County School Board on joint-use agreements for sharing multi-use active recreational facilities.

B. Park and Recreation Enhancements *Short to Long - Range Action Steps (2008 – 2026)*

- Improve existing park facilities:
 - Create more central gathering spaces/civic buildings for public events.

Figure 22: Residential Neighborhoods



Howland Boulevard and Elkcarn Boulevard – Implement citywide and neighborhood beautification programs
(Source: Destination Deltona Community Strategic Plan)



Providence Boulevard and East Normandy Boulevard – Develop distinct and interconnected neighborhoods
(Source: Destination Deltona Community Strategic Plan)

- Distribute sport complexes and other special facilities more evenly throughout the City.
- Enhance access to rivers, lakes and streams.
- Incorporate "Water-Wise" and "Xeriscaping" plantings to promote water conservation.
- Integrate lakes, wetlands and other natural areas into the park system.
- Enhance park entrances with unified park and way-finding signage.
- Enhancements may be sought through various funding sources such as: Florida Recreation Development Assistance Program, Land and Water Conservation Fund and Volusia County ECHO Grants.

C. Connectivity to Parks *Short to Long - Range Action Steps (2008 – 2026)*

- Improve pedestrian connectivity to the parks through networks of unified streets, transit facilities, and greenways and trails.

4.2.3 Residential Neighborhoods

As the City gets older, neighborhoods require concentrated efforts in order to maintain a strong community through aesthetic improvements; better pedestrian connectivity to the community; and diversity of housing types.

The City's residential neighborhoods tend to get good ratings in the various visions and community surveys that have taken place in the last few years; however, there are some common themes that have emerged regarding desired neighborhood improvements. These include:

- Improved street lighting
- Interconnected sidewalk networks
- Provision of parks and green space close to homes
- Improved public access to lakes
- Landscaping improvements to roads and community entrances

Providing a diversity of housing types, particularly multi-family and mixed-use residential will increase residential opportunities; stimulate new construction or rehabilitation of existing vacant and underutilized land to increase and improve housing opportunities; assist in directing future population growth to designated mixed-use centers, thereby reducing development pressure on single-family residential neighborhoods; and achieve development densities which require less infrastructure and is more conducive to transit use (see Figure 22).

During the "Destination Deltona" strategic planning workshops, the participants identified the need to provide multi-family housing at appropriate locations and as transitional areas between single-family and commercial uses; and compact mixed-use development as the City's preferred form of development and redevelopment.

ACTION STEPS

A. Beautification Programs *Short to Long - Range Action Steps (2008 – 2026)*

- Implement citywide and neighborhood beautification programs.
- Educate residents about property and building maintenance standards and building codes as a mechanism to prevent future code violations.
- Develop a façade and landscape improvement grant program for residential properties.
- Develop a community grass roots assistance program to assist elderly and disabled property owners in eliminating code violations.
- Implement a multi-year street tree planting program.

Figure 23: Create Strong Downtowns



Howland Boulevard & Catalina Boulevard
(Source: Destination Deltona Community Strategic Plan)

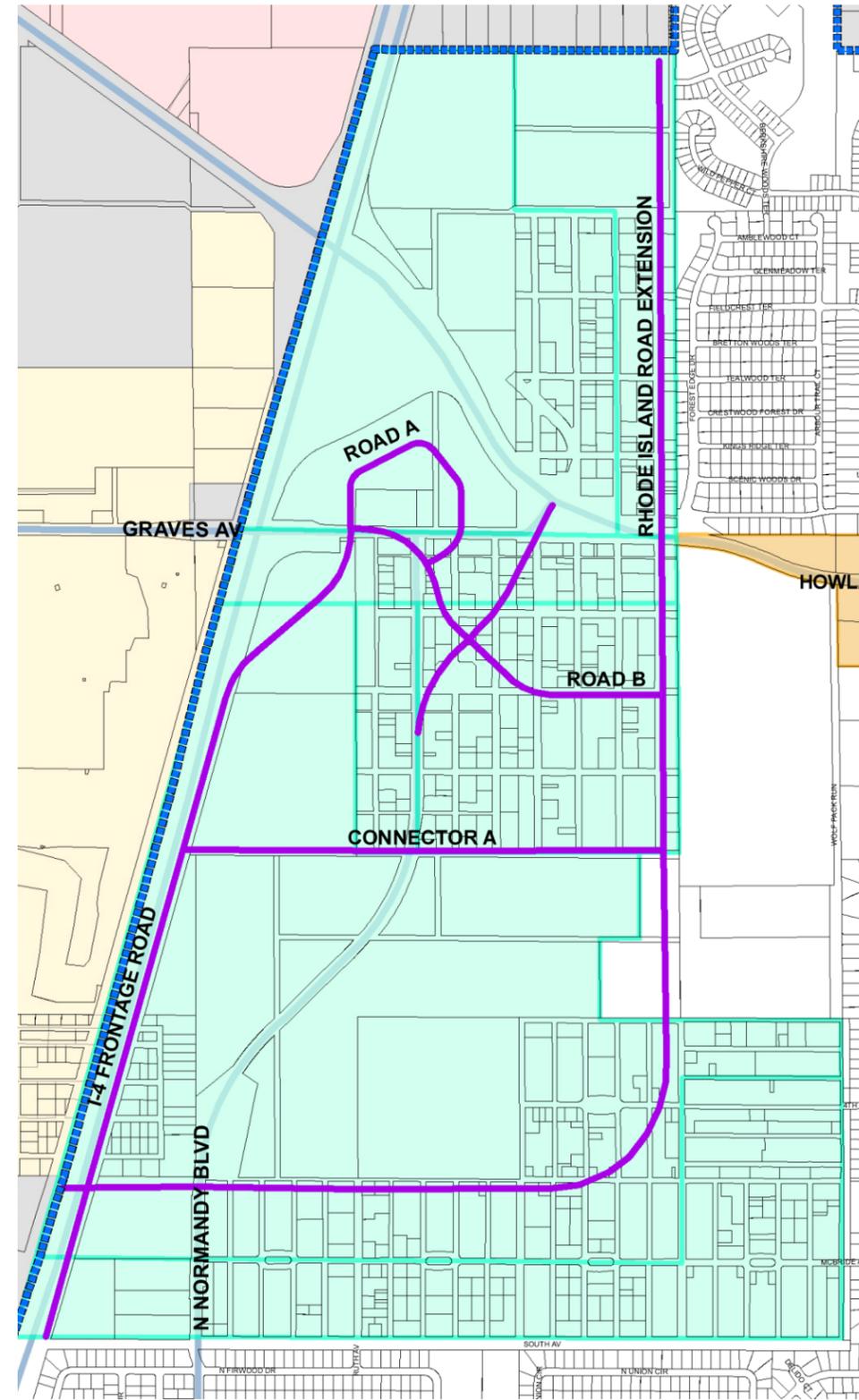


Courtland Boulevard & Doyle Road
(Source: Destination Deltona Community Strategic Plan)



Howland Boulevard & Courtland Boulevard
(Source: Destination Deltona Community Strategic Plan)

Figure 24: Employment Development Areas



State Road 472 Activity Center
(Source: City of Deltona)

B. Neighborhood Safety *Short to Long - Range Action Steps (2008 – 2026)*

- Conduct a neighborhood sidewalk and street lighting assessment to determine areas of deficient sidewalks and lighting, particularly to schools, parks, civic facilities, commercial and employment areas.
- Implement a multi-year sidewalk and street lighting program.

C. Residential Diversity *Short to Long - Range Action Steps (2008 – 2026)*

- Incorporate multi-family and mixed-use residential policies into the Land Development Code.
- Develop residential transition areas to protect adjacent single-family neighborhoods from commercial intrusion.
- Permit multi-family and/or mixed-use residential uses within the employment development areas.
- Develop design standards for multi-family and mixed-use residential developments.
- Support multi-family and mixed-use residential developments through development incentives, such as density or intensity bonuses to increase the number of units or increase the floor area ratio and/or reduction in impact fees.

4.2.4 Strong Downtown and Employment Development Areas

Strips of commercial development are scattered throughout the City with no sense of a strong downtown to attract people to live, work and play; and lack of planned commercial and industrial areas have limited job opportunities within the community. In addition to the need for improved shopping opportunities, community visioning efforts have repeatedly identified the need for local employment opportunities and economic development as a key goal.

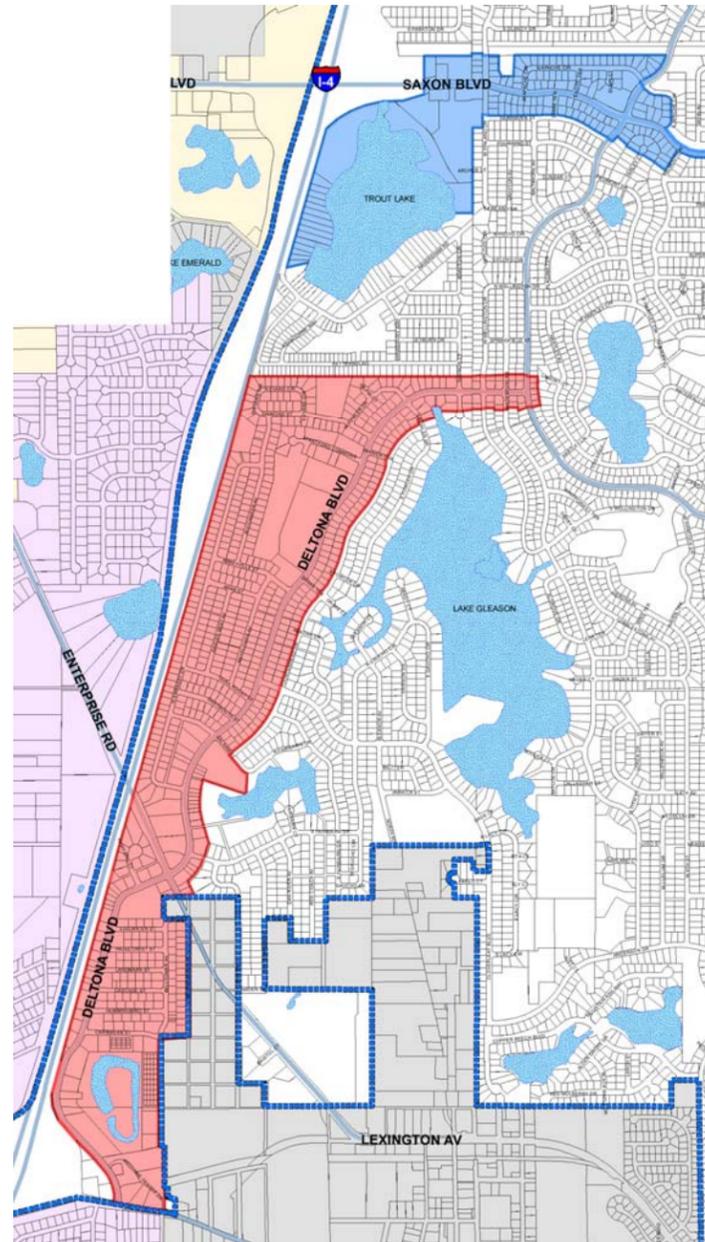
- Development of a strong downtown and activity centers that include the full range of employment, retail, services and community-serving uses in a designated unified area.
- Identify compact, mixed-use development as the City's preferred form of development and redevelopment.
- Providing a traditional City core will create a destination place for people to gather, shop, dine, live and work.

The *Destination Deltona Community Strategic Plan* identified three key areas to foster business development and create opportunities to live and work in the same area: 1) Howland Boulevard and Catalina Boulevard; 2) Courtland Boulevard and Doyle Road; and 3) Howland Boulevard and Courtland Boulevard (see Figure 23). In addition, the *Strategic Economic Plan* identifies three (3) key potential employment areas for the City to develop an office/light industrial park to promote economic growth: 1) State Road 472 Activity Center; 2) the Deltona Boulevard/Saxon Boulevard redevelopment area; and 3) State Road 415 commercial corridor (see Figure 24 and on Page 18).

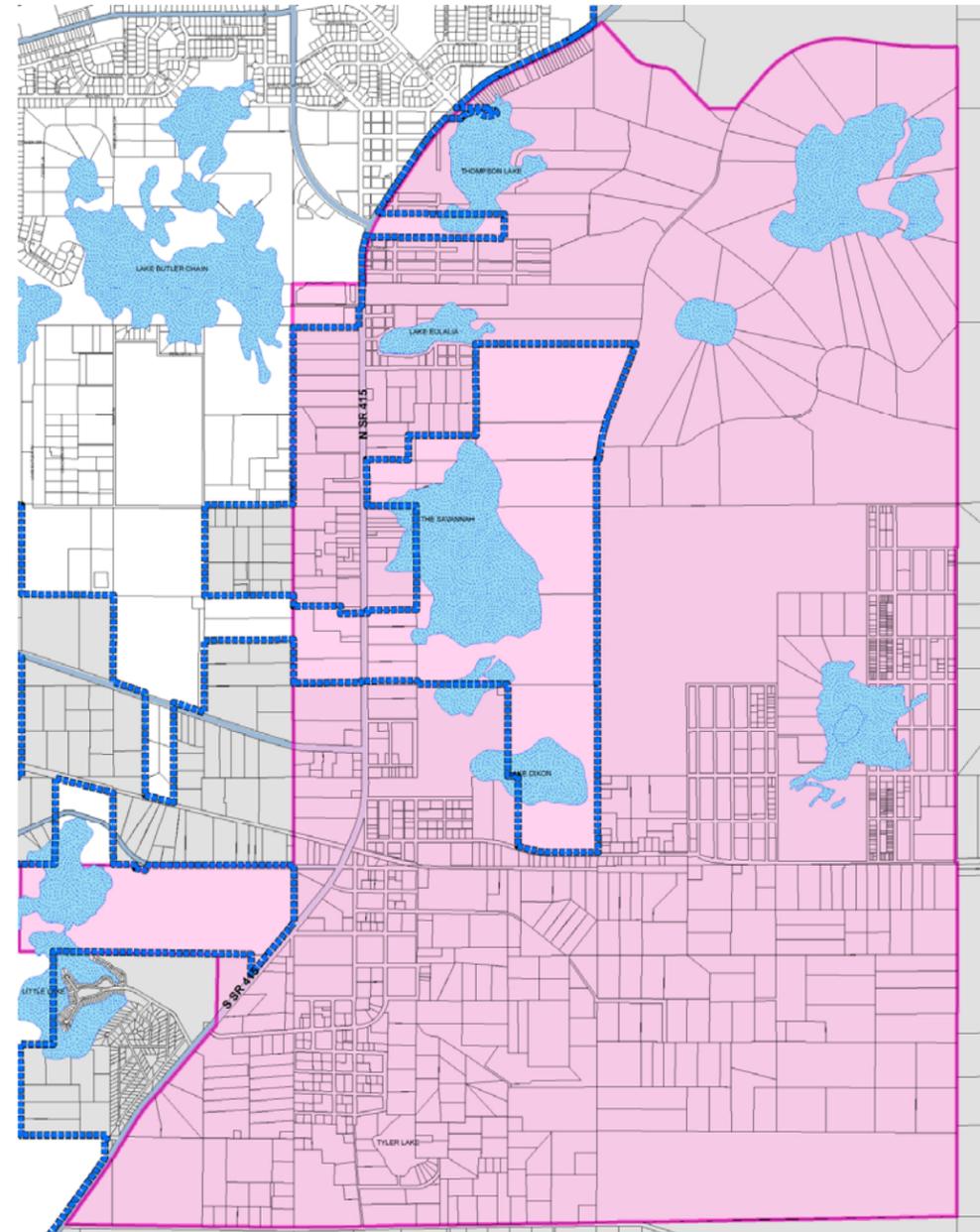
State Road 472 Activity Center

The State Road 472 Activity Center has the most potential to impact the economic development plans of the City. The Activity Center in total is the subject of an approved Development of Regional Impact (DRI) that resulted from a collaboration of Volusia County and affected municipalities. The Deltona portion of the Activity Center covers approximately 900 acres of developable land divided into two districts. The Workplace District proposes approximately 3.0 million square feet of light industrial, 3.4 million square feet of office and 237,000 square feet of retail. The East Center District includes about 1.55 million square feet of retail, 960,000 square feet of office and 226 hotel rooms. The DRI contains a methodology to allow conversion between uses, and as expressed in the City's comprehensive plan, there is a desire to modify the plan to include more of a mixed-use development as suggested by the Destination Deltona goals.

Figure 24: Employment Development Areas (continue)



Deltona/Saxon Boulevard Redevelopment Area
(Source: City of Deltona)



SR 415/Howland Boulevard Commercial Corridor
(Source: City of Deltona)

In response to the direction from the *Destination Deltona Community Strategic Plan*, three Activity Center concepts were developed and evaluated for content, projected employment and taxable values. Each of the design concepts incorporates retail commercial, office, light industrial and hotel uses as envisioned by the original DRI program, but the concepts also incorporate housing and mixed-use development options, civic facilities and an elementary school site. The conceptual road network provided in the original DRI has also been reworked to maintain the original traffic service plan while adjusting the road network to more efficiently serve the modified land use arrangements (see Figure 25 on Page 19 and Appendix B).

In support of the State Road 472 Activity Center the *Strategic Economic Plan* identifies five objectives and ten strategies that address issues from resolving concurrency concerns to marketing, public support and infrastructure funding. All of these objectives and strategies continue to apply with any of the three concepts discussed above.

Deltona/Saxon Boulevard Redevelopment Area

The Deltona Boulevard-Saxon Boulevard area is the oldest commercial area in the City. It has been supplanted as the primary gateway into the City and has a number of the land use and platting issues that affect many areas of the City where smaller residential lots have been converted to uses for which they were not originally designed. The area has older buildings and in some cases obsolete business site designs that are in need of redevelopment.

While problems are apparent, the area does have an inventory of smaller local businesses and a core of community facilities such as the post office and sheriff's office that attract patrons. The area serves a significant residential market area, and while it may no longer be the primary gateway into Deltona, the area is still significant as a commercial corridor and community entrance.

State Road 415/Howland Boulevard Commercial Corridor

The State Road 415 corridor at Howland Boulevard is the fourth concentrated commercial area identified in the *Strategic Economic Plan*. This commercial area will provide retail service, office and employment opportunities for the eastern portion of Deltona and nearby unincorporated areas including Osteen. The area has ample available land and direct connections to the Orlando metropolitan area with the planned widening of State Road 415.

Potential development may hinder from anti-growth sentiment in the area and ongoing political conflicts with Volusia County. The City and County have been working on a joint planning agreement to direct future development in the area. As a relatively green field area for commercial development, the City should apply the gateway, wayfinding and commercial area design themes and standards suggested for the City as a whole.

ACTION STEPS

A. Development Strategies *Short to Long - Range Action Steps (2008 – 2013)*

- Continue to develop marketing tools for business and industrial recruitment.
- Provide economic and regulatory incentives in the recruitment of businesses and industries (i.e., waving permitting and impact fees, providing tax breaks and intensity/density bonuses).
- Identify parcels suitable for land assemblage (i.e., vacant lands, underutilized and outdated building patterns, and severe incompatible land uses).
- Update the Land Development Code to create a step down approach from west to east of the City to protect residential neighborhoods by having mid-rise buildings along Interstate 4 to low-rise buildings towards the single-family residential neighborhoods.
- Incorporate mixed land use policies into the Land Development Code.
- Develop partnerships with private property owners to aggregate suitable parcels.

Figure 25: State Road 472 Activity Center Concepts



Total square footage/units

| | |
|-----------------------------|---|
| OFFICE | 3,000,000 SF |
| RETAIL | 2,600,000 SF |
| HOTEL | 300 rooms |
| LIGHT INDUSTRIAL/FLEX SPACE | 2,780,000 SF |
| RESIDENTIAL | 2,140 units |
| MIXED USE | 2,325,000 SF (Included in office/retail and residential totals) |
| TOTAL PARKING SPACES | 39,952 |
| TOTAL EMPLOYMENT | 23,937 |
| TOTAL TAXABLE VALUE | \$1,080,000,000 |

SR 472 Activity Center – Concept 1



Total square footage/units

| | |
|-----------------------------|---|
| OFFICE | 3,700,000 SF |
| RETAIL | 1,300,000 SF |
| HOTEL | 300 rooms |
| LIGHT INDUSTRIAL/FLEX SPACE | 2,600,000 SF |
| RESIDENTIAL | 2,400 units |
| MIXED USE | 2,200,000 SF (Included in office/retail and residential totals) |
| TOTAL PARKING SPACES | 35,600 |
| TOTAL EMPLOYMENT | 23,900 |
| TOTAL TAXABLE VALUE | \$1,200,000,000 |

SR 472 Activity Center – Concept 2



Total square footage/units

| | |
|-----------------------------|---|
| OFFICE | 4,400,000 SF |
| RETAIL | 2,200,000 SF |
| HOTEL | 300 rooms |
| LIGHT INDUSTRIAL/FLEX SPACE | 2,600,000 SF |
| RESIDENTIAL | 2,000 units |
| MIXED USE | 2,100,000 SF (Included in office/retail and residential totals) |
| TOTAL PARKING SPACES | 41,000 |
| TOTAL EMPLOYMENT | 29,000 |
| TOTAL TAXABLE VALUE | \$1,230,000,000 |

SR 472 Activity Center – Concept 3

Figure 26: Strategies for the Employment Development Areas



State Road 472 Activity Center – Create a Civic Hub



Deltona Boulevard – Prepare a Redevelopment Plan



Saxon Boulevard – Enhance Gateway Feature



State Road 415/Howland Commercial Center – Minimize impact to the natural environment

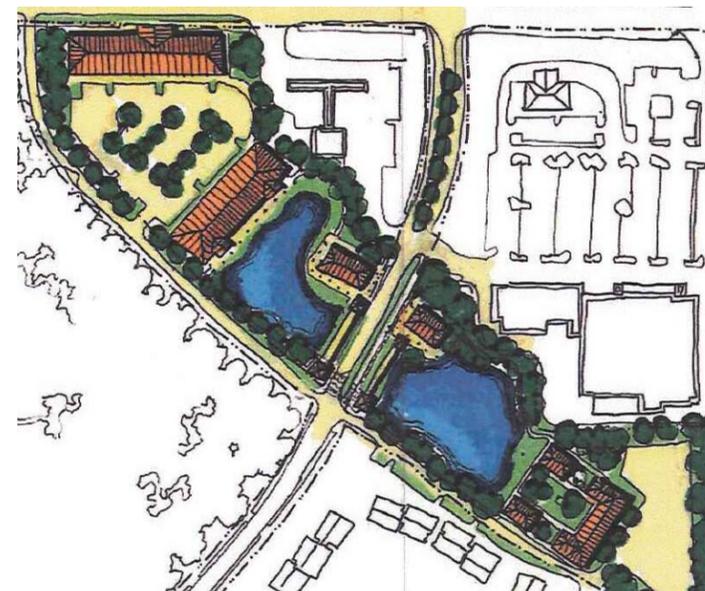


State Road 415/Howland Boulevard – Create a gateway Feature

Figure 27: Social Service Facilities



Expansion of Library with amphitheater



Community Center - Providence Boulevard and Debarry Avenue
(Source: Destination Deltona Community Strategic Plan)

B. State Road 472 Activity Center *Short - Range Action Steps (2008 – 2013)*

- Review the DRI to determine the appropriate reallocation of land uses according to the formula in the DRI to permit the inclusion of multi-family housing and mixed-use development as directed by the comprehensive plan and in conformance with the preferred development concept.
- Develop a plan and program for determination of a civic hub (i.e., City Hall, public safety facility, heritage and cultural center, social service center, etc.) to be located within the Activity Center and prepare a conceptual design for the civic core.
- Adopt roadway design standards that establish the character of the preferred Activity Center design concept (see Figure 26).

C. Deltona/Saxon Boulevard Redevelopment Area *Short to Mid - Range Action Steps (2008 – 2019)*

- Prepare a Redevelopment Plan to highlight overall character/desired aesthetics and different land use/development options.
- Improve the Saxon Boulevard gateway into the City.
- Modernize the streetscape appearance and design of both Saxon and Deltona Boulevards.
- Create and implement design standards for the redevelopment of existing business, the design of infill projects and conversion of residential uses to business activities.
- Explore the option to acquire/assemble properties, where the City becomes the master developer in which the City seeks request for proposals from private developers to implement a mixed-use development (see Figure 26).

D. State Road 415/Howland Boulevard Commercial Corridor *Short to Mid - Range Action Steps (2008 – 2019)*

- Prepare a Master Plan to establish land use arrangements and circulation network.
- Implement gateway design features at State Road 415 and Howland Boulevard and State Road 415 and Doyle Road.
- Establish design and development review standards for structures and infrastructures which may impact critical habitats (i.e., clustering of dwelling units, mixed-use developments, compact urban form, etc.) (see Figure 26).

4.2.5 Social Facilities

By taking a proactive approach in providing social facilities, the City of Deltona may mitigate “risky” youth behaviors and enhance the quality of life for seniors. These social facilities will provide a place for young people to learn skills and attributes to engage in positive, healthy behaviors and provide seniors with an environment that enables them to live independently and maintain a healthy and active lifestyle in their own community (see Figure 27).

During the “Destination Deltona” strategic planning workshops, the participants identified the need to develop and fund a centrally located social service hub within the City that provides for a concentration of services and facilities integral to quality of life and the public health, safety and welfare.

ACTION STEPS

A. Social Facilities *Short to Mid - Range Action Steps (2008 – 2019)*

- Develop partnerships with private social service providers and Volusia County to develop a centralized social service hub at Providence Boulevard and Debarry Avenue and/or the State Road 472 Activity Center.

Figure 28: Planning Framework for “Smart Schools”



Provide Multi-Use Fields



Integrate Multi-Use Facilities (YMCA)



Provide Neighborhood Access

- Provide incentive programs (i.e., reducing the land price, waving permitting fees, providing tax breaks, intensity/density bonuses) to developers to integrate social facilities into their project, such as community centers, music and arts facilities, recreational parks, assisted living facilities, medical/wellness centers, etc.
- Explore the option to acquire properties, where the City becomes the master developer in which the City seeks request for proposals from private developers to implement a centralized social service facility.

4.2.6 Educational Facilities

Realizing public schools as public infrastructure is an important element to enhance the educational needs of the community. The quality of cities depends, in part, on the quality of schools and likewise, the quality of schools depends on the quality of cities. Promoting high-quality education and public school activities are essential to urban vitality (see Figure 28).

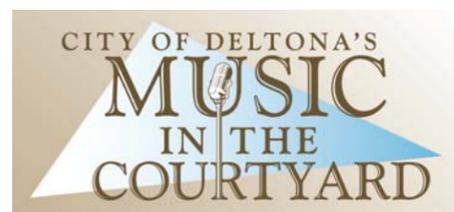
The *Destination Deltona Community Strategic Plan* specified the importance of educational facilities and to ensure the availability of adequate and appropriate sites for the development of new school facilities. With today's funding constraints for public schools, the need to locate and build smarter schools and provide joint-use facilities is more imperative than ever.

ACTION STEPS

A. Local Collaboration Short to Long - Range Action Steps (2008 – 2026)

- Develop a partnership with the Volusia County School Board in developing a policy framework to create “Smart Schools” to encourage walking and biking to schools.
 - a. Build smaller schools
 - b. Eliminate minimum acreage standards for school sites
 - c. Preserve and renovate existing neighborhood schools
 - d. Locate schools on walkable roads
 - e. Increase “pedestrian route directness” around schools
 - f. Upgrade inadequate sidewalks
 - g. Encourage and support walking and biking to school (i.e., *Safe Routes to School* programs)
 - h. Do not base school siting decisions on desire for massive athletic facilities

Figure 29: Centralized Arts, Heritage and Cultural Center



Coordinate Events in a Centralized Facility



4.2.7 Heritage and Cultural Facilities

Heritage and cultural activities assist in the celebration of shared experiences, traditions, identities, struggles and aspirations. More importantly, these activities' primary goal is to build and sustain a sense of community. Having a centralized heritage and cultural center and a central park for outdoor festivities will allow citizens and visitors to “connect the dots” between the arts, culture and heritage to better understand quality of life issues in meaningful ways (see Figure 29).

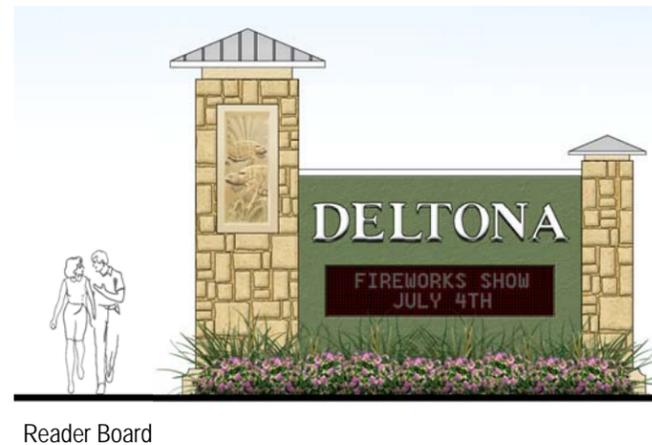
The *Destination Deltona Community Strategic Plan* identified the need to provide better facilities for community level festivals and functions that will encourage extensive public participation to enrich the heritage and cultural diversity of the City and to utilize the City's public information to keep residents apprised of community events.

ACTION STEPS

A. Heritage and Cultural Center Short to Mid - Range Action Steps (2008 – 2019)

- Centrally locate the arts, heritage and cultural center in the State Road 472 Activity Center as part of the civic hub.

Figure 30: Event Notification



Reader Board



Banners

- Develop partnerships with private organizations and Volusia County to develop a centralized regional arts, heritage and cultural center.
- Explore the option to acquire properties, where the City becomes the master developer in which the City seeks request for proposals from private developers to build the heritage and cultural center.

B. Event Notification *Short - Range Action Steps (2008 – 2013)*

- Install additional reader boards as part of the welcome sign at gateway locations to inform the public of heritage and cultural events.
 - i. Deltona Boulevard and Debary Avenue
 - ii. Howland Boulevard and State Road 415
- Implement a signage and banner program to promote heritage and cultural events (see Figure 30).

4.2.8 Public Safety Facility

Having a centralized public safety facility will better meet the needs of Deltona residents during emergency/disaster situations. The facility may combine Fire, Emergency Medical Service and Police Departments, and facilitate as an emergency operations and training center to effectively and efficiently serve Deltona and Volusia County in saving lives (see Figure 31).

The *Destination Deltona Community Strategic Plan* identified the need to provide the most advanced emergency medical and fire protection; and concentration of services and facilities to improve public health, safety and welfare.

ACTION STEPS

A. Facility Development *Short to Mid - Range Action Steps (2008 – 2019)*

- Develop a partnership with Volusia County to integrate emergency services and the shared cost for the development and operation of a centralized public safety facility.
- Centrally locate a public safety facility in the State Road 472 Activity Center along a major arterial road (i.e., Howland Boulevard or Deltona Boulevard) to be highly visible, as part of the civic hub.
- Develop partnerships with private property owners to aggregate suitable parcels for buildings and training grounds.
- Continue to maintain the City's high level of advanced training and skills for emergency medical and firefighting personnel.

4.3 Roads and Transportation

The ability to travel easily from place to place within the City of Deltona, and to and from destinations is a critical factor in establishing and maintaining a good quality of life. Further roadway studies and improvements are necessary to maintain roadway operations and to meet the demand of future developments.

As Deltona becomes more urbanized and congested, the need to improve roadway safety, public transit, pedestrian access and bicycle lanes are essential to help residents, visitors and casual travelers to navigate more easily through the City and access important commercial and civic destinations. In addition, providing locations for park and ride lots/garages as part of the regional transit system and consolidating parking lots will reduce vehicular travel on the roadways to prevent congestion.

During the *"Destination Deltona"* strategic planning workshops, the participants identified improvements to roadways, sidewalk and greenway connections, bicycle lanes, public transit and parking facilities.

Figure 31: Centralized Public Safety Facility



Example of a Centralized Public Safety Facility



Training Facility



Partnering with Volusia County Sheriff Department

Figure 32: Roadway Hierarchy



Figure 33: Example of a Bike/Pedestrian Trail



Figure 34: Decorative Transit Shelter



Figure 35: Example of a Park and Ride Garage



ACTION STEPS

A. Roadway Improvements Short - Range Action Steps (2008 – 2013)

- Refine the City's Thoroughfare Plan to assess existing intersection conditions to identify mitigation improvements for those intersections that are projected to fall below the adopted Level of Service (see Appendix A).
- Complete the assessment of the roadway operating conditions as part of the City's concurrency analysis by analyzing existing lane calls, posted speed, design factors, count data, level of service and available capacity.
- Prioritize streetscape improvements and public urban design standards based on the roadway hierarchy (see Figure 32).
- Implement a multi-year street construction, improvement, resurfacing, repair, traffic calming, traffic signalization projects.

B. Pedestrian Access Short to Long - Range Action Steps (2008 – 2026)

- Conduct a finding study to determine existing sidewalk locations and deficiencies.
- Develop a citywide bicycle circulation system to commercial and civic destinations.
- Implement a multi-year sidewalk and bike lane construction projects (see Figure 33).

C. Public Transit Short to Mid - Range Action Steps (2008 – 2019)

- Coordinate with Votran to provide additional bus routes to service the employment development areas.
- Design and install decorative transit shelters at high pedestrian areas along primary, secondary and tertiary corridors (see Figure 34 and Appendix C).

D. Parking Facilities Short to Long - Range Action Steps (2008 – 2026)

- Develop partnerships with developers and Votran to incorporate public parking garages, and park and ride facilities in the employment development areas (see Figure 35).
- Provide economic and regulatory incentives (i.e., waiving permitting and impact fees, providing tax breaks and intensity/density bonuses) to incorporate public parking garages, and park and ride facilities in the development plans.
- Develop site design standards to consolidate parking lots and provide cross-access easements.

4.4 Infrastructure and Utilities

Infrastructure and utilities are important to the development of any community. Without an adequate water and sewer network, residential, commercial and industrial growth will be inhibited. Providing sufficient water and sewer capacity to meet current and future needs is an important ingredient for sustained economic growth for the City of Deltona. Having the infrastructure in place for the employment development areas will attract developers to the City, as it demonstrates that there is sufficient water and sewer capacity to handle any type of development projects.

The City needs to enhance stormwater facilities by installing wetland plantings around the perimeter of existing and future wet and dry retention ponds to be aesthetically pleasing and where possible, to provide pedestrian access to visually and functionally be part of the citywide amenities (see Figure 36 on Page 24).

The *Destination Deltona Community Strategic Plan* identified the need to upgrade the existing infrastructure to encourage growth and attract development to the City.

Figure 36: Examples of Wet and Dry Retention Ponds



Wet Retention Ponds



Dry Retention Ponds



ACTION STEPS

A. Water and Sewer Improvements *Short to Long - Range Action Steps (2008 – 2026)*

- Obtain and adequate consumption use permit for potable water services.
- Coordinate with planned street design improvements to upsize the water lines and retrofit the sewer lines.
- Provide for the extension and upgrade of water and sewer lines to the employment development areas.
- Provide economic and regulatory incentives (i.e., waiving permitting and impact fees, providing tax breaks and intensity/density bonuses) to upgrade the infrastructure adjacent to the development project.

B. Stormwater Enhancements *Short to Long - Range Action Steps (2008 – 2026)*

- Design and install wetland plantings along the top embankments of the existing dry retention ponds along Providence Boulevard.
- Develop design standards for wet and dry retention ponds, such as:
 - wetland plant list
 - planting design
 - natural shapes/shorelines
 - fountains or water features for wet retention ponds

5.0 COST ESTIMATES AND PHASING

The following estimated costs and phasing plan provides detailed project priorities and funding allocations to achieve the *Vision Deltona 2026* to “keep the City beautiful, safe, well informed and prosperous”, establish a “Nature” theme to enhance the natural resources of Deltona to promote a citywide “Green” identity; and address the economic development, quality of life and sense of community/placing making issues identified in the *Destination Deltona Community Strategic Plan*.

There are alternative funding sources through partnerships, grants and development assistance programs in which the City needs to seek out to leverage some on the initial costs.

A. General Funding Sources

- Utility Franchise Fees
- General Fund
- Revenue Bonds (*must be tied to a revenue source such as utility collections, gas tax, etc.*)
- General Obligation Bonds (*require a voter referendum*)
- Community Development Block Grant
- Tax Increment Financing (*with an approved CRA*)
- Impact Fees (*only for capital costs associated with new growth*)
- Gas Taxes (*use only for street lighting, resurfacing and other road maintenance activities*)

B. Florida Department of Environmental Protection Funding Programs

- Water Management Districts Land Acquisition Program Grants
- Statewide Surface Water Restoration and Wastewater Projects
- State Revolving Fund Loan Program

C. Florida Division of Forestry

- Urban and Community Forestry Grant Programs

D. Florida Division of Recreation and Parks Funding Programs

- Florida Recreation Development Assistance Program (FRDAP)
- National Recreational Trails Fund Program
- Urban Park and Recreation Recovery Program
- Land and Water Conservation Fund Grants

E. Florida Governor’s Office

- Economic Development Transportation Fund
- Brownfield Redevelopment Grants

F. Florida Department of Community Affairs

- Florida Forever Act
- Community Revitalization – Urban Infill and Revitalization Program

G. Florida Department of Transportation

- Florida Highway Beautification Council Grants

H. Florida Department of State

- Division of Cultural Affairs Grants

I. Others

- Donations from Foundations
- Fundraising Events
- Volunteer Programs such as Adopt - A- Park; Adopt - A- Road; Adopt - A-Lake, etc.
- Gift Catalog where the City offers selections of site furnishings, planting materials, etc. for purchase from neighborhood associations, business owners, etc.

The following chart provides estimated costs for implementing the citywide identity; land use programming; roads and transportation; and infrastructure and utilities. The phasing plan is based on 20 years to correspond with *Vision Deltona 2026* and is divided into *Short-Range Actions (2008-2013)*; *Mid-Range Actions (2014-2019)*; and *Long Range Actions (2020-2026)* to prioritize funding allocations.

The City’s 5-year CIP (2008-2012) is estimated at \$109,731,731 for roads and streets (46.9%); stormwater (11.9%); vehicles (7%); land and buildings (25.3%); equipment (2.7%); and parks and recreation (6.2%). The estimated cost to implement the short-range projects (2008 – 2013) and programs specified in the *Urban Design Master Plan* is approximately \$118,713,322. The difference between the two amounts is \$8,981,591, which could be attainable, since the *Urban Design Master Plan’s* short-range timeline has one more year ending in 2013 than the City’s CIP ending in 2012; and with supplemental funding through various partnerships, and matching grants and programs, as listed above, to augment the remainder of the balance.

The proposed projects and phasing plan provide a guide for the City to allocate future CIP funding and as development opportunities arise, the City need to continue with their economic strategies and pursue all available grants and programs, as previously listed to leverage additional funds to make *Vision Deltona 2026* a reality.

| | SHORT-RANGE ACTION | MID-RANGE ACTION | LONG-RANGE ACTION |
|--|------------------------|------------------------|------------------------|
| PROPOSED PROJECTS | 2008-2013 | 2014-2019 | 2020-2026 |
| CITYWIDE IDENTITY | | | |
| 1. NATURE THEME AND BRANDING | | | |
| A. Become a member of the Florida Green Building Coalition, Inc. | \$ 2,500.00 | \$ 2,500.00 | \$ 3,000.00 |
| B. Provide incentive programs to residents and business owners to practice green development | \$ 500,000.00 | \$ 500,000.00 | \$ 500,000.00 |
| C. Develop advertising /marketing strategies to promote the holistic approach to development | \$ 100,000.00 | \$ 60,000.00 | \$ 30,000.00 |
| D. Create publications and brochures to promote the branding of the "Nature" theme | \$ 50,000.00 | \$ 40,000.00 | \$ 30,000.00 |
| SUB-TOTAL | \$ 652,500.00 | \$ 602,500.00 | \$ 563,000.00 |
| 2. COHESIVE DESIGN | | | |
| A. Develop a citywide urban design pattern book ^A | \$ 74,400.00 | | |
| SUB-TOTAL | \$ 74,400.00 | | |
| B. Design and construct the gateways (one per year)¹ | | | |
| i. Howland Boulevard and Graves Avenue | \$ 60,000.00 | | |
| ii. Interstate 4 and Saxon Boulevard | \$ 69,000.00 | | |
| iii. Deltona Boulevard and Debary Avenue | \$ 79,350.00 | | |
| iv. Howland Boulevard and State Road 415 | \$ 91,252.00 | | |
| SUB-TOTAL | \$ 299,602.00 | | |
| C. Design and construct intersection treatments (hardscape & landscape)² | | | |
| i. Primary intersections (9) ^B | \$ 960,000.00 | \$ 921,600.00 | |
| ii. Secondary intersections (16) | \$ 580,000.00 | \$ 696,000.00 | \$ 1,002,240.00 |
| iii. Tertiary intersections (9) | | \$ 400,000.00 | \$ 384,000.00 |
| SUB-TOTAL | \$ 1,540,000.00 | \$ 2,017,600.00 | \$ 1,386,240.00 |
| D. Install traffic signal mast arms³ | | | |
| i. Primary intersections | \$ 1,528,000.00 | \$ 1,833,600.00 | \$ 1,069,600.00 |
| ii. Secondary intersections | \$ 600,000.00 | \$ 360,000.00 | \$ 1,680,000.00 |
| iii. Tertiary intersections | | \$ 676,800.00 | \$ 1,184,400.00 |
| SUB-TOTAL | \$ 2,128,000.00 | \$ 2,870,400.00 | \$ 3,934,000.00 |

Notes:

1. One gateway per year with 20% inflation
 2. One intersection per year with 20% inflation for mid-range and long-range estimates
 3. Source: City Thoroughfare Plan to determine candidate intersections, adjusted FDOT LRE costs for mast arm signalization with 20% inflation
- A. Completed May 2008
- B. Construction drawings completed May 2008 – Howland Boulevard and Elkcam Boulevard

| | SHORT-RANGE ACTION | MID-RANGE ACTION | LONG-RANGE ACTION |
|---|------------------------|------------------------|-------------------------|
| PROPOSED PROJECTS | 2008-2013 | 2014-2019 | 2020-2026 |
| E. Implement a decorative street lighting program ⁴ | | | |
| i. Primary corridors | \$ 3,652,180.00 | \$ 4,382,616.00 | \$ 5,259,139.20 |
| ii. Secondary corridors | \$ 2,049,110.00 | \$ 2,458,932.00 | \$ 2,950,718.40 |
| iii. Tertiary corridors | \$ 1,934,730.00 | \$ 2,321,676.00 | \$ 2,786,011.20 |
| SUB-TOTAL | \$ 7,636,020.00 | \$ 9,163,224.00 | \$ 10,995,868.80 |
| F. Design and install plantings in the medians | | | |
| i. Providence Boulevard between Saxon Boulevard and Tivoli Drive ^C | \$ 250,000.00 | | |
| ii. Howland Boulevard between Interstate 4 and Providence Boulevard | \$ 752,000.00 | | |
| SUB-TOTAL | \$ 1,002,000.00 | | |
| G. Implement a street tree planting program (canopy, understory & palm trees) ⁵ | | | |
| i. Primary corridors | \$ 785,000.00 | \$ 942,000.00 | \$ 1,130,400.00 |
| ii. Secondary corridors | \$ 440,000.00 | \$ 528,000.00 | \$ 633,600.00 |
| iii. Tertiary corridors | \$ 415,000.00 | \$ 498,000.00 | \$ 597,600.00 |
| SUB-TOTAL | \$ 1,640,000.00 | \$ 1,968,000.00 | \$ 2,361,600.00 |
| I. Design and install public wayfinding signage | | | |
| i. Prepare a wayfinding system plan | \$ 40,000.00 | | |
| ii. Primary intersections | \$ 250,000.00 | | |
| iii. Secondary intersections | | \$ 150,000.00 | |
| iv. Tertiary intersections | | \$ 100,000.00 | |
| SUB-TOTAL | \$ 290,000.00 | \$ 250,000.00 | |
| LAND USE PROGRAMMING | | | |
| 1. NATURAL ENVIRONMENT | | | |
| A. Inventory, monitor and update of ecological communities and wildlife species | \$ 100,000.00 | \$ 60,000.00 | \$ 60,000.00 |
| B. Acquisition of critical habitats | \$ 1,000,000.00 | \$ 750,000.00 | \$ 500,000.00 |
| C. Develop private partnerships and apply for various grants from government entities | \$ 500,000.00 | \$ 400,000.00 | \$ 250,000.00 |
| D. Develop management and mitigation plans | \$ 50,000.00 | \$ 30,000.00 | \$ 30,000.00 |
| E. Implement a maintenance program to enhance the ecological communities | \$ 1,000,000.00 | \$ 600,000.00 | \$ 600,000.00 |
| F. Develop training programs for City maintenance crews on proper horticultural practices | \$ 100,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| G. Develop publications to educate the public on xeriscaping, water-wise and fire-wise landscaping | \$ 100,000.00 | \$ 70,000.00 | \$ 70,000.00 |
| SUB-TOTAL | \$ 2,850,000.00 | \$ 2,010,000.00 | \$ 1,610,000.00 |

Notes:

- 4. Use 20% inflation factor for mid-range and long-range estimates
- 5. Use 20% inflation factor for mid-range and long range estimates
- C. Median landscape plan completed May 2008 – Providence Boulevard (Saxon Boulevard to Tivoli Drive)

| | SHORT-RANGE ACTION | MID-RANGE ACTION | LONG-RANGE ACTION |
|--|------------------------|-------------------------|------------------------|
| PROPOSED PROJECTS | 2008-2013 | 2014-2019 | 2020-2026 |
| 2. PARKS AND RECREATION FACILITIES | | | |
| A. Design, construct and install nature trails and/or interpretive stations to passive and nature-based parks ⁶ | \$ 2,500,000.00 | \$ 1,500,000.00 | \$ 1,500,000.00 |
| B. Develop a Central Park at the State Road 472 Activity Center | | \$ 5,000,000.00 | |
| C. Provide development incentives to integrate recreational facilities into private development | \$ 500,000.00 | \$ 300,000.00 | \$ 200,000.00 |
| D. Enhance existing park amenities (i.e., gathering spaces, landscaping, signage, access) ⁶ | \$ 3,500,000.00 | \$ 2,000,000.00 | \$ 200,000.00 |
| E. Improve park connectivity through networks of greenways and trails | \$ 2,000,000.00 | \$ 5,000,000.00 | \$ 8,000,000.00 |
| SUB-TOTAL | \$ 8,500,000.00 | \$ 13,800,000.00 | \$ 9,900,000.00 |
| 3. RESIDENTIAL NEIGHBORHOODS | | | |
| A. Implement a property maintenance educational program | \$ 50,000.00 | \$ 30,000.00 | \$ 30,000.00 |
| B. Provide an assistance program to bring properties into code compliance (seniors and disabled) | \$ 100,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| C. Develop a façade and landscaping improvement matching grant program | \$ 300,000.00 | \$ 300,000.00 | \$ 200,000.00 |
| D. Develop private partnerships and provide economic incentives for multi-family and mixed-use housing | \$ 200,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| SUB-TOTAL | \$ 650,000.00 | \$ 530,000.00 | \$ 430,000.00 |
| 4. STRONG DOWNTOWNS AND EMPLOYMENT DEVELOPMENT AREAS | | | |
| A. Develop marketing tools for business recruitment | \$ 150,000.00 | \$ 100,000.00 | \$ 50,000.00 |
| B. Develop private partnerships and provide economic incentives for business recruitment | \$ 200,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| C. Update land use and zoning districts to foster business development ^D | \$ 100,000.00 | \$ 60,000.00 | |
| D. Develop an inventory system to identify developable areas | \$ 25,000.00 | | |
| E. Create Redevelopment Plans for the three Employment Development Areas | \$ 90,000.00 | | |
| F. Acquire properties to initiate Employment Development Centers | \$ 2,000,000.00 | \$ 2,000,000.00 | \$ 1,000,000.00 |
| SUB-TOTAL | \$ 2,565,000.00 | \$ 2,260,000.00 | \$ 1,150,000.00 |
| 5. SOCIAL FACILITIES^E | | | |
| A. Develop private partnerships and provide economic incentives for neighborhood social facilities | \$ 200,000.00 | \$ 200,000.00 | |
| B. Acquisition of property for a centralized facility (land & building) | | \$ 5,500,000.00 | |
| SUB-TOTAL | \$ 200,000.00 | \$ 5,700,000.00 | |
| 6. EDUCATION FACILITIES | | | |
| A. Coordinate with sidewalk and bicycle lane improvements to establish a safe route to school program | \$ 50,000.00 | \$ 50,000.00 | \$ 30,000.00 |
| SUB-TOTAL | \$ 50,000.00 | \$ 50,000.00 | \$ 30,000.00 |

Note:

6. Source (short-range): 5-year CIP

D. Updates underway by Duncan Associates

E. Social facilities may be integrated with the public safety facility

| | SHORT-RANGE ACTION | MID-RANGE ACTION | LONG-RANGE ACTION |
|---|--------------------------|--------------------------|--------------------------|
| PROPOSED PROJECTS | 2008-2013 | 2014-2019 | 2020-2026 |
| 7. HERITAGE AND CULTURAL FACILITY | | | |
| A. Develop private partnerships and provide economic incentives for a centralized facility | | \$ 200,000.00 | |
| B. Acquisition of property for a centralized facility (land & building) | | \$ 6,000,000.00 | |
| C. Install additional reader boards to the welcome signs | \$ 20,000.00 | | |
| D. Implement a signage/banner program | \$ 100,000.00 | | |
| SUB-TOTAL | \$ 120,000.00 | \$ 6,200,000.00 | |
| 8. PUBLIC SAFETY FACILITY^F | | | |
| A. Develop private partnerships and provide economic incentives for a centralized facility | | \$ 200,000.00 | |
| B. Acquisition of property for a centralized facility (land & building) ⁷ | | \$ 6,000,000.00 | |
| SUB-TOTAL | | \$ 6,200,000.00 | |
| ROADS AND TRANSPORTATION | | | |
| A. Conduct and refine roadway studies/plans ⁸ | \$ 3,300,000.00 | \$ 4,000,000.00 | \$ 4,800,000.00 |
| B. Design and construct roadway safety improvements (i.e., sidewalks, bicycle lanes, traffic calming and signalization, asphalt resurfacing) ⁹ | \$ 15,000,000.00 | \$ 18,000,000.00 | \$ 21,600,000.00 |
| SUB-TOTAL | \$ 18,300,000.00 | \$ 22,000,000.00 | \$ 26,400,000.00 |
| C. Design and install decorative transit shelter amenities¹⁰ | | | |
| i. Decorative Transit Shelters and Amenities | \$ 105,000.00 | \$ 90,000.00 | \$ 90,000.00 |
| ii. Decorative Benches and Trash Receptacles at Transit Stops | \$ 110,800.00 | \$ 110,800.00 | \$ 110,800.00 |
| SUB-TOTAL | \$ 215,800.00 | \$ 200,800.00 | \$ 200,800.00 |
| D. Develop private partnerships and provide economic incentives for public garages/park and ride facilities | \$ 200,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| SUB-TOTAL | \$ 200,000.00 | \$ 100,000.00 | \$ 100,000.00 |
| INFRASTRUCTURE AND UTILITIES | | | |
| A. Provide for the extension of water and sewer to the SR 427 Activity Center ¹¹ | | \$ 65,880,000.00 | |
| B. Obtain an adequate consumption use permit for potable water services ¹² | \$ 14,900,000.00 | \$ 17,880,000.00 | \$ 21,460,000.00 |
| C. Retrofit to extend sewer to existing developed areas ¹³ (coordinate with planned street design improvements) | \$ 41,900,000.00 | \$ 50,280,000.00 | \$ 60,340,000.00 |
| D. Upsizing water lines ¹⁴ (coordinate with planned street design improvements) | \$ 13,000,000.00 | \$ 15,600,000.00 | \$ 18,720,000.00 |
| SUB-TOTAL | \$ 69,800,000.00 | \$ 149,640,000.00 | \$ 100,520,000.00 |
| TOTAL | \$ 118,713,322.00 | \$ 225,562,524.00 | \$ 159,581,508.80 |

Notes:

- 7. Source (short-range): 5-year CIP
- 8. Source (short-range): 5-year CIP, assume 5% of road construction estimate; use 20% inflation factor for mid-range and long-range estimates
- 9. Source (short-range): 5-year CIP, use 20% inflation factor for mid-range and long-range estimates
- 10. Total 19 shelters and 151 stops with a bench and trash receptacle
- 11. LRTP assumes mid-range road improvements; use same values of stormwater + wastewater as CIP with 20% inflation
- 12. Source (short-range): 5-year CIP (category water); use 20% inflation factor for mid-range and long-range estimates
- 13. Source (short-range): 5-year CIP (category wastewater); use 20% inflation factor for mid-range and long-range estimates
- 14. Source (short-range): 5-year CIP (category stormwater); use 20% inflation factor for mid-range and long-range estimates
- F. Social facilities may be integrated with the public safety facility

APPENDICES

APPENDIX A: Roadway Analysis

Table 1
City of Deltona
Transportation Concurrency Analysis Spreadsheet

| Deltona Traffic Station ID # | Road Name | Limits (from-to) | Roadway Prioritization | Link Length (in miles) | E+C No. of Lanes | Adopted LOS | Daily Capacity | Peak Hour Capacity | 2007 AADT | 2007 Daily LOS | 2007 Peak Hour | | | Available Pk. Hr. Capacity |
|------------------------------|----------------------|---------------------------------------|------------------------|------------------------|------------------|-------------|----------------|--------------------|-----------|----------------|----------------|-----------|---------------|----------------------------|
| | | | | | | | | | | | Volume | V/C Ratio | Peak Hour LOS | |
| DLT-1 | I-4 | Dirksen Dr. to Saxon Blvd. | NA | 2.85 | 6 | D | 103,600 | 10,050 | 101,894 | D | 8,335 | 0.829 | D | 1,715 |
| DLT-2 | | Saxon Blvd. to SR 472 | NA | 3.15 | 6 | D | 103,600 | 10,050 | 91,093 | D | 7,451 | 0.741 | C | 2,599 |
| DLT-3 | | SR 472 to Orange Camp Rd. | NA | 2.15 | 6 | D | 103,600 | 10,050 | 61,880 | C | 5,062 | 0.504 | B | 4,988 |
| DLT-4 | SR 415 | SR 44 to Ft. Smith Blvd. | NA | 5.6 | 2 | C | 12,700 | 1,100 | 9,925 | C | 970 | 0.882 | C | 130 |
| DLT-5 | | Ft. Smith Blvd. to Howland Blvd. | NA | 5.9 | 2 | D | 21,300 | 2,060 | 7,973 | C | 779 | 0.378 | C | 1,281 |
| DLT-6 | | Howland Blvd. to Bowen Ln. | NA | 0.75 | 2 | D | 21,300 | 2,060 | 11,771 | C | 1,150 | 0.558 | C | 910 |
| DLT-7 | | Bowen Ln. to Doyle Rd. | NA | 0.75 | 2 | D | 21,300 | 2,060 | 14,460 | C | 1,413 | 0.686 | C | 647 |
| DLT-8 | | Doyle Rd. to Enterprise-Osteen Rd. | NA | 0.35 | 2 | C | 15,000 | 1,450 | 16,739 | D | 1,635 | 1.128 | D | -185 |
| DLT-9 | | Enterprise-Osteen Rd. to Seminole Co. | NA | 4 | 2 | C | 14,900 | 1,440 | 16,739 | D | 1,635 | 1.136 | D | -195 |
| DLT-10 | SR 472 | CR 4101 to I-4 | NA | 0.65 | 4 | D | 61,800 | 5,870 | 30,226 | B | 2,953 | 0.503 | B | 2,917 |
| DLT-11 | Captain Dr. | Lake Helen-Osteen Rd. to Urmey Ave. | NA | 0.5 | 2 | C | 3,840 | 360 | 5,236 | D | 512 | 1.422 | D | -152 |
| DLT-12 | | Urmey Ave. to Courtland Blvd. | NA | 1 | 2 | C | 3,840 | 360 | 2,420 | C | 236 | 0.657 | C | 124 |
| DLT-13 | Catalina Blvd. | Wolf Pack Run to Sedgefield Ave. | Tertiary | 1 | 2 | E | 10,080 | 960 | 4,116 | D | 402 | 0.419 | D | 558 |
| DLT-14 | | Sedgefield Ave. to Howland Blvd. | Tertiary | 1 | 2 | E | 10,080 | 960 | 4,116 | D | 402 | 0.419 | D | 558 |
| DLT-15 | | Howland Blvd. to Sixma Rd. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 15,799 | F | 1,544 | 1.608 | F | -584 |
| DLT-16 | | Sixma Rd. to Lake Helen-Osteen Rd. | Tertiary | 0.4 | 2 | E | 10,080 | 960 | 9,401 | E | 919 | 0.957 | E | 41 |
| DLT-17 | Cloverleaf Blvd. | Deltona Blvd. to Jamaica St. | NA | 0.5 | 2 | E | 10,080 | 960 | 5,431 | D | 531 | 0.553 | D | 429 |
| DLT-18 | | Jamaica St. to Anderson Dr. | NA | 0.5 | 2 | E | 10,080 | 960 | 4,144 | D | 405 | 0.422 | D | 555 |
| DLT-19 | | Anderson Dr. to Providence Blvd. | NA | 1 | 2 | E | 12,600 | 1,200 | 2,943 | C | 288 | 0.24 | C | 912 |
| DLT-20 | Courtland Blvd. | Beckwith St. to Flynn St. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 1,907 | C | 186 | 0.194 | C | 774 |
| DLT-21 | | Flynn St. to Captain Dr. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 7,975 | D | 779 | 0.812 | E | 181 |
| DLT-22 | | Captain Dr. to Gimlet Dr. | Tertiary | 0.75 | 2 | E | 10,080 | 960 | 5,111 | D | 499 | 0.52 | D | 461 |
| DLT-23 | | Gimlet Dr. to Elkcam Blvd. | Tertiary | 0.75 | 2 | E | 10,080 | 960 | 9,975 | E | 975 | 1.015 | F | -15 |
| DLT-24 | | Elkcam Blvd. to Puerto Rico Dr. | Tertiary | 0.75 | 2 | E | 10,080 | 960 | 4,331 | D | 423 | 0.441 | D | 537 |
| DLT-25 | | Tallywood Dr. to Newmark Dr. | Tertiary | 0.25 | 2 | E | 10,080 | 960 | 1,907 | C | 186 | 0.194 | C | 774 |
| DLT-26 | | Newmark Dr. to Sanborn Ln. | Tertiary | 0.55 | 2 | E | 10,080 | 960 | 4,577 | D | 447 | 0.466 | D | 513 |
| DLT-27 | | Sanborn Ln. to Howland Blvd. | Tertiary | 0.45 | 2 | E | 10,080 | 960 | 5,973 | D | 584 | 0.608 | D | 376 |
| DLT-28 | | Howland Blvd. to Post Court | Secondary | 0.5 | 2 | E | 10,080 | 960 | 10,195 | F | 996 | 1.038 | F | -36 |
| DLT-29 | | Post Court to India Blvd. | Secondary | 0.7 | 2 | E | 10,080 | 960 | 12,066 | F | 1,179 | 1.228 | F | -219 |
| DLT-30 | | India Blvd. to Maltby Dr. | Secondary | 0.3 | 2 | E | 10,080 | 960 | 6,972 | D | 681 | 0.71 | D | 279 |
| DLT-31 | | Maltby Dr. to Ft Smith Blvd. | Secondary | 0.4 | 2 | E | 10,080 | 960 | 12,711 | F | 1,242 | 1.294 | F | -282 |
| DLT-32 | | Ft Smith Blvd. to Larchmont Dr. | Secondary | 1 | 2 | E | 10,080 | 960 | 11,351 | F | 1,109 | 1.155 | F | -149 |
| DLT-33 | | Larchmont Dr. to Doyle Rd. | Secondary | 0.8 | 2 | E | 10,080 | 960 | 6,377 | D | 623 | 0.649 | D | 337 |
| DLT-34 | | Doyle Rd. to Staten Dr. | Secondary | 0.4 | 2 | E | 10,080 | 960 | 3,106 | C | 303 | 0.316 | C | 657 |
| DLT-35 | | Staten Dr. to Enterprise-Osteen Rd. | Secondary | 0.5 | 2 | E | 10,080 | 960 | 2,402 | C | 235 | 0.244 | C | 725 |
| DLT-36 | Deltona Blvd. | Normandy Blvd. to Gaynor Ct. | Primary | 0.15 | 4 | E | 25,200 | 2,400 | 14,802 | D | 1,446 | 0.603 | D | 954 |
| DLT-37 | | Gaynor Ct. to Abbeyville St. | Primary | 0.6 | 4 | E | 25,200 | 2,400 | 14,312 | D | 1,398 | 0.583 | D | 1,002 |
| DLT-38 | | Abbeyville St. to Balsam St. | Primary | 0.5 | 4 | E | 25,200 | 2,400 | 14,285 | D | 1,396 | 0.582 | D | 1,004 |
| DLT-39 | | Balsam St. to Enterprise Rd. | Primary | 0.5 | 4 | E | 25,200 | 2,400 | 18,396 | D | 1,797 | 0.749 | D | 603 |
| DLT-40 | | Enterprise Rd. to Hummingbird St. | Primary | 0.35 | 2 | E | 10,080 | 960 | 15,305 | F | 1,495 | 1.558 | F | -535 |
| DLT-41 | | Hummingbird St. to DeBary Ave. | Primary | 0.5 | 2 | E | 10,080 | 960 | 12,174 | F | 1,189 | 1.239 | F | -229 |
| DLT-42 | Dirksen/DeBary/Doyle | Palm Rd. to WB I-4 Ramps | Primary | 0.2 | 2 | E | 12,480 | 1,184 | 13,433 | F | 1,312 | 1.108 | F | -128 |
| DLT-43 | | WB I-4 Ramps to EB I-4 Ramps | Primary | 0.2 | 4 | E | 32,900 | 3,120 | 22,142 | D | 2,163 | 0.693 | D | 957 |
| DLT-44 | | I-4 to Deltona Blvd. | Primary | 0.1 | 4 | E | 32,900 | 3,120 | 31,651 | E | 3,092 | 0.991 | E | 28 |
| DLT-45 | | Deltona Blvd. to Enterprise St. | Primary | 0.65 | 4 | E | 32,900 | 3,120 | 21,480 | D | 2,099 | 0.673 | D | 1,021 |
| DLT-46 | | Enterprise St. to Main St. | Primary | 0.15 | 4 | E | 32,900 | 3,120 | 20,591 | C | 2,012 | 0.645 | C | 1,108 |
| DLT-47 | | Main St. to Broadway St. | Primary | 0.4 | 4 | E | 32,900 | 3,120 | 22,509 | D | 2,199 | 0.705 | D | 921 |
| DLT-48 | | Broadway St. to Providence Blvd. | Primary | 0.4 | 4 | E | 32,900 | 3,120 | 22,603 | D | 2,208 | 0.708 | D | 912 |
| DLT-49 | | Providence Blvd. to Garfield Rd. | Primary | 1.2 | 2 | E | 12,480 | 1,184 | 12,593 | F | 1,230 | 1.039 | F | -46 |
| DLT-50 | | Garfield Rd. to Saxon Blvd. | Primary | 1.5 | 2 | E | 12,480 | 1,184 | 10,231 | D | 1,000 | 0.844 | D | 184 |
| DLT-51 | | Saxon Blvd. to Sheryl Dr. | Primary | 2 | 2 | E | 12,480 | 1,184 | 9,501 | D | 928 | 0.784 | D | 256 |
| DLT-52 | | Sheryl Dr. to Courtland Blvd. | Primary | 0.55 | 2 | E | 12,480 | 1,184 | 8,506 | D | 831 | 0.702 | D | 353 |
| DLT-53 | | Courtland Blvd. to Bull Run Ave. | Primary | 0.7 | 2 | E | 12,480 | 1,184 | 5,845 | C | 571 | 0.482 | C | 613 |
| DLT-54 | | Bull Run Ave. to SR 415 | Primary | 0.8 | 2 | E | 12,480 | 1,184 | 5,984 | C | 585 | 0.494 | C | 599 |
| DLT-55 | Elkcam Blvd. | Normandy Blvd. to Ft. Smith Blvd. | Secondary | 1.5 | 2 | E | 12,600 | 1,200 | 10,153 | E | 992 | 0.827 | E | 208 |

**Table 1
City of Deltona
Transportation Concurrency Analysis Spreadsheet**

| Deltona Traffic Station ID # | Road Name | Limits (from-to) | Roadway Prioritization | Link Length (in miles) | E+C No. of Lanes | Adopted LOS | Daily Capacity | Peak Hour Capacity | 2007 AADT | 2007 Daily LOS | 2007 Peak Hour | | Available Pk. Hr. Capacity | |
|------------------------------|-------------------------------|---|------------------------|------------------------|------------------|-------------|----------------|--------------------|-----------|----------------|----------------|-----------|----------------------------|---------------|
| | | | | | | | | | | | Volume | V/C Ratio | | Peak Hour LOS |
| DLT-56 | | Ft. Smith Blvd. to Providence Blvd. | Secondary | 1 | 2 | E | 12,600 | 1,200 | 7,158 | D | 699 | 0.583 | D | 501 |
| DLT-57 | | Providence Blvd. to Acadian Dr. | Primary | 0.15 | 2 | E | 12,600 | 1,200 | 11,751 | E | 1,148 | 0.957 | E | 52 |
| DLT-58 | | Acadian Dr. to Montecito Ave. | Primary | 0.9 | 2 | E | 12,600 | 1,200 | 11,587 | E | 1,132 | 0.943 | E | 68 |
| DLT-59 | | Montecito Ave. to Howland Blvd. | Primary | 1 | 2 | E | 12,600 | 1,200 | 5,591 | D | 546 | 0.455 | D | 654 |
| DLT-60 | | Howland Blvd. to Lake Helen-Osteen Rd | Secondary | 0.15 | 2 | E | 12,600 | 1,200 | 6,068 | D | 593 | 0.494 | D | 607 |
| DLT-61 | | Lake Helen-Osteen Rd to Otis Ave. | Secondary | 0.5 | 2 | E | 12,600 | 1,200 | 4,736 | C | 463 | 0.386 | D | 737 |
| DLT-62 | | Otis Ave. to Courtland Blvd. | Secondary | 0.2 | 2 | E | 12,600 | 1,200 | 5,119 | D | 500 | 0.417 | D | 700 |
| DLT-63 | | Courtland Blvd. to Riverhead Dr. | NA | 0.5 | 2 | E | 12,600 | 1,200 | 592 | C | 58 | 0.048 | C | 1,142 |
| DLT-64 | Enterprise Rd. | Highbanks Rd. to Deltona Blvd. | NA | 0.5 | 4 | E | 32,900 | 3,120 | 14,372 | C | 1,404 | 0.45 | C | 1,716 |
| DLT-65 | | Deltona Blvd. to Bristol Court | NA | 0.6 | 2 | E | 15,600 | 1,480 | 6,436 | C | 629 | 0.425 | C | 851 |
| DLT-66 | Enterprise Rd./Lexington Ave. | Bristol Court to Main St. | NA | 0.5 | 2 | E | 12,480 | 1,184 | 5,345 | C | 522 | 0.441 | C | 662 |
| DLT-67 | Eustace Ave. | Catalina Blvd. to Seagate Dr. | NA | 0.35 | 2 | C | 3,840 | 360 | 2,468 | C | 241 | 0.67 | C | 119 |
| DLT-68 | | Seagate Dr. to Providence Blvd. | NA | 0.5 | 2 | C | 3,840 | 360 | 3,639 | C | 356 | 0.988 | C | 4 |
| DLT-69 | Fort Smith Blvd. | Elkcam Blvd. to Ingram Terr. | Secondary | 0.5 | 2 | E | 10,080 | 960 | 3,160 | C | 309 | 0.322 | C | 651 |
| DLT-70 | | Ingram Terr. to Providence Blvd. | Secondary | 0.5 | 2 | E | 12,600 | 1,200 | 3,020 | C | 295 | 0.246 | C | 905 |
| DLT-71 | | Providence Blvd. to Newmark Dr. | Secondary | 0.5 | 2 | E | 12,600 | 1,200 | 11,901 | E | 1,163 | 0.969 | E | 37 |
| DLT-72 | | Newmark Dr. to Marlow St. | Secondary | 0.5 | 2 | E | 10,080 | 960 | 7,576 | D | 740 | 0.771 | D | 220 |
| DLT-73 | | Marlow St. to Normandy Blvd. | Secondary | 0.35 | 2 | E | 10,080 | 960 | 6,454 | D | 631 | 0.657 | D | 329 |
| DLT-74 | | Normandy Blvd. to Potomac Ave. | Primary | 0.35 | 2 | E | 10,080 | 960 | 14,262 | F | 1,393 | 1.451 | F | -433 |
| DLT-75 | | Potomac Ave. to India Blvd. | Primary | 0.2 | 2 | E | 10,080 | 960 | 15,887 | F | 1,552 | 1.617 | F | -592 |
| DLT-76 | | India Blvd. to Eldron Ave. | Primary | 1.1 | 2 | E | 10,080 | 960 | 7,154 | D | 699 | 0.728 | D | 261 |
| DLT-77 | | Eldron Ave. to Courtland Blvd. | Primary | 1.15 | 2 | E | 10,080 | 960 | 6,496 | D | 635 | 0.661 | D | 325 |
| DLT-78 | | Courtland Blvd. to Cloudcroft Dr. | Secondary | 0.4 | 2 | E | 10,080 | 960 | 7,567 | D | 739 | 0.77 | D | 221 |
| DLT-79 | | Cloudcroft Dr. to Howland Blvd. | Secondary | 0.35 | 2 | E | 10,080 | 960 | 7,388 | D | 722 | 0.752 | D | 238 |
| DLT-80 | | Howland Blvd. to Orchard Dr. | Secondary | 0.35 | 2 | E | 10,080 | 960 | 3,949 | D | 386 | 0.402 | D | 574 |
| DLT-81 | | Orchard Dr. to SR 415 | Secondary | 0.2 | 2 | E | 10,080 | 960 | 3,482 | C | 340 | 0.354 | C | 620 |
| DLT-82 | Graves Ave. | Kentucky Ave. to Howland Blvd. | Tertiary | 0.9 | 2 | E | 15,600 | 1,480 | 11,791 | D | 1,152 | 0.778 | D | 328 |
| DLT-83 | Howland Blvd. | I-4/SR 472 to Wolf Pack Run | Primary | 0.4 | 4 | E | 32,900 | 3,120 | 37,093 | F | 3,624 | 1.162 | F | -504 |
| DLT-84 | | Wolf Pack Run to Red Fox Run | Primary | 0.3 | 4 | E | 32,900 | 3,120 | 32,092 | E | 3,135 | 1.005 | F | -15 |
| DLT-85 | | Red Fox Run to Catalina Blvd. | Primary | 0.85 | 4 | E | 32,900 | 3,120 | 32,772 | E | 3,202 | 1.026 | F | -82 |
| DLT-86 | | Catalina Blvd. to Bluffview Circle | Primary | 0.25 | 4 | E | 32,900 | 3,120 | 24,224 | D | 2,367 | 0.759 | D | 753 |
| DLT-87 | | Bluffview Circle to Providence Blvd. | Primary | 0.1 | 4 | E | 32,900 | 3,120 | 25,484 | D | 2,490 | 0.798 | D | 630 |
| DLT-88 | | Providence Blvd. to Adelia Blvd. | Primary | 0.5 | 2 | E | 15,600 | 1,480 | 15,440 | E | 1,509 | 1.019 | F | -29 |
| DLT-89 | | Adelia Blvd. to Elkcam Blvd. | Primary | 1.6 | 2 | E | 15,600 | 1,480 | 16,189 | F | 1,582 | 1.069 | F | -102 |
| DLT-90 | | Elkcam Blvd. to Lake Helen-Osteen Rd. | Primary | 0.3 | 4 | E | 32,900 | 3,120 | 19,195 | C | 1,875 | 0.601 | C | 1,245 |
| DLT-91 | | Lake Helen-Osteen Rd. to Day Rd. | Primary | 0.2 | 4 | E | 32,900 | 3,120 | 22,130 | D | 2,162 | 0.693 | D | 958 |
| DLT-92 | | Day Rd. to Newmark Dr. | Primary | 0.5 | 4 | E | 32,900 | 3,120 | 20,566 | C | 2,009 | 0.644 | C | 1,111 |
| DLT-93 | | Newmark Dr. to Roble Ln. | Primary | 0.75 | 4 | E | 32,900 | 3,120 | 17,374 | C | 1,697 | 0.544 | C | 1,423 |
| DLT-94 | | Roble Ln. to Courtland Blvd. | Primary | 0.4 | 4 | E | 32,900 | 3,120 | 13,980 | C | 1,366 | 0.438 | C | 1,754 |
| DLT-95 | | Courtland Blvd. to Fish Hawk Rd. | Primary | 1.25 | 4 | E | 32,900 | 3,120 | 11,733 | C | 1,146 | 0.367 | C | 1,974 |
| DLT-96 | | Fish Hawk Rd. to Ft Smith Blvd. | Primary | 0.55 | 4 | E | 32,900 | 3,120 | 10,436 | C | 1,020 | 0.327 | C | 2,100 |
| DLT-97 | | Ft Smith Blvd. to Tabb Dr. | Primary | 0.25 | 4 | E | 32,900 | 3,120 | 8,384 | C | 819 | 0.263 | C | 2,301 |
| DLT-98 | | Tabb Dr. to SR 415 | Primary | 0.4 | 4 | E | 32,900 | 3,120 | 8,068 | C | 788 | 0.253 | C | 2,332 |
| DLT-99 | Humphrey Blvd. | Newmark Dr. to Varsity/O' Bannion Terr. | NA | 1 | 2 | C | 3,840 | 360 | 3,381 | C | 330 | 0.918 | C | 30 |
| DLT-100 | | Varsity/O' Bannion Terr. to India Blvd. | NA | 0.5 | 2 | C | 3,840 | 360 | 1,849 | C | 181 | 0.502 | C | 179 |
| DLT-101 | India Blvd. | Fort Smith Blvd. to Humphrey Blvd. | Tertiary | 2 | 2 | E | 10,080 | 960 | 6,106 | D | 597 | 0.621 | D | 363 |
| DLT-102 | | Humphrey Blvd. to Courtland Blvd. | Tertiary | 0.06 | 2 | E | 10,080 | 960 | 4,459 | D | 436 | 0.454 | D | 524 |
| DLT-103 | Lake Helen-Osteen Rd. | Captain Dr. to Yorkshire Dr. | Tertiary | 0.2 | 2 | E | 10,080 | 960 | 8,819 | E | 862 | 0.898 | E | 98 |
| DLT-104 | | Yorkshire Dr. to Catalina Blvd. | Tertiary | 0.2 | 2 | E | 10,080 | 960 | 9,017 | E | 881 | 0.918 | E | 79 |
| DLT-105 | | Catalina Blvd. to Haulover Blvd. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 10,313 | F | 1,008 | 1.05 | F | -48 |
| DLT-106 | | Haulover Blvd. to Elkcam Blvd. | Tertiary | 1.75 | 2 | E | 10,080 | 960 | 8,341 | E | 815 | 0.849 | E | 145 |
| DLT-107 | | Elkcam Blvd. to Howland Blvd. | Tertiary | 0.4 | 2 | E | 10,080 | 960 | 3,628 | C | 354 | 0.369 | C | 606 |
| DLT-108 | Lakeshore Dr. | Main St. to Broadway St. | NA | 0.5 | 2 | E | 10,080 | 960 | 2,428 | C | 237 | 0.247 | C | 723 |
| DLT-109 | | Broadway St. to Providence Blvd. | NA | 0.2 | 2 | E | 10,080 | 960 | 2,295 | C | 224 | 0.234 | C | 736 |
| DLT-110 | | Providence Blvd. to Green Springs Rd. | Tertiary | 0.45 | 2 | E | 9,600 | 920 | 3,450 | C | 337 | 0.366 | C | 583 |

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City of Deltona
Transportation Concurrency Analysis Spreadsheet

| Deltona Traffic Station ID # | Road Name | Limits (from-to) | Roadway Prioritization | Link Length (in miles) | E+C No. of Lanes | Adopted LOS | Daily Capacity | Peak Hour Capacity | 2007 AADT | 2007 Daily LOS | 2007 Peak Hour | | | Available Pk. Hr. Capacity |
|------------------------------|-----------------------|---|------------------------|------------------------|------------------|-------------|----------------|--------------------|-----------|----------------|----------------|-----------|---------------|----------------------------|
| | | | | | | | | | | | Volume | V/C Ratio | Peak Hour LOS | |
| DLT-111 | Main St. (Enterprise) | Enterprise Rd. to DeBary Ave. | NA | 0.35 | 2 | E | 10,080 | 960 | 4,967 | D | 485 | 0.506 | D | 475 |
| DLT-112 | | DeBary Ave. to Lakeshore Dr. | NA | 0.2 | 2 | E | 10,080 | 960 | 2,764 | C | 270 | 0.281 | C | 690 |
| DLT-113 | Newmark Dr. | Ft Smith Blvd. to Montecito Ave. | Tertiary | 1.2 | 2 | E | 10,080 | 960 | 8,066 | E | 788 | 0.821 | E | 172 |
| DLT-114 | | Montecito Ave. to Humphrey Blvd. | Tertiary | 0.4 | 2 | E | 10,080 | 960 | 7,305 | D | 714 | 0.743 | D | 246 |
| DLT-115 | | Humphrey Blvd. to Cofield Dr. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 7,046 | D | 688 | 0.717 | D | 272 |
| DLT-116 | | Cofield Dr. to Howland Blvd. | Tertiary | 0.4 | 2 | E | 10,080 | 960 | 6,731 | D | 658 | 0.685 | D | 302 |
| DLT-117 | | Howland Blvd. to Courtland Blvd. | NA | 0.75 | 2 | E | 10,080 | 960 | 6,875 | D | 672 | 0.7 | D | 288 |
| DLT-118 | Normandy Blvd. | Graves (old Howland) to Rhode Island Ave. | Primary | 1.25 | 2 | E | 12,600 | 1,200 | 6,786 | D | 663 | 0.552 | D | 537 |
| DLT-119 | | Rhode Island Ave. to Firwood Ave. | Primary | 1.25 | 2 | E | 12,600 | 1,200 | 6,786 | D | 663 | 0.552 | D | 537 |
| DLT-120 | | Firwood Ave. to Elkcam Blvd. | Primary | 0.5 | 4 | E | 25,200 | 2,400 | 6,439 | C | 629 | 0.262 | C | 1,771 |
| DLT-121 | | Elkcam Blvd. to Sullivan St. | Primary | 0.3 | 4 | E | 25,200 | 2,400 | 13,100 | D | 1,280 | 0.533 | D | 1,120 |
| DLT-122 | | Sullivan St. to Saxon Blvd. | Primary | 0.7 | 4 | E | 25,200 | 2,400 | 1,755 | C | 171 | 0.071 | C | 2,229 |
| DLT-123 | | Saxon Blvd. to Merrimac St. | Primary | 0.5 | 3 | E | 12,600 | 1,200 | 12,775 | F | 1,248 | 1.04 | F | -48 |
| DLT-124 | | Merrimac St. to Deltona Blvd. | Primary | 0.2 | 3 | E | 12,600 | 1,200 | 11,071 | E | 1,082 | 0.901 | E | 118 |
| DLT-125 | | Deltona Blvd. to Lombardy Dr. | Secondary | 0.6 | 3 | E | 12,600 | 1,200 | 12,843 | F | 1,255 | 1.046 | F | -55 |
| DLT-126 | | Lombardy Dr. to Tivoli Dr. | Secondary | 0.5 | 3 | E | 12,600 | 1,200 | 14,445 | F | 1,411 | 1.176 | F | -211 |
| DLT-127 | | Tivoli Dr. to Norwood | Secondary | 0.45 | 3 | E | 12,600 | 1,200 | 12,069 | E | 1,179 | 0.983 | E | 21 |
| DLT-128 | | Norwood to Aaron Dr. | Secondary | 0.3 | 3 | E | 12,600 | 1,200 | 8,947 | D | 874 | 0.728 | D | 326 |
| DLT-129 | | Aaron Dr. to Providence Blvd. | Secondary | 0.15 | 3 | E | 12,600 | 1,200 | 9,129 | D | 892 | 0.743 | D | 308 |
| DLT-130 | | Providence Blvd. to Goldcoast Dr. | Secondary | 0.5 | 2 | E | 12,600 | 1,200 | 8,662 | D | 846 | 0.705 | D | 354 |
| DLT-131 | | Goldcoast Dr. to Saxon Blvd. | Secondary | 0.5 | 2 | E | 12,600 | 1,200 | 7,640 | D | 746 | 0.622 | D | 454 |
| DLT-132 | | Saxon Blvd. to Paco Court | Secondary | 0.15 | 2 | E | 12,600 | 1,200 | 11,527 | E | 1,126 | 0.938 | E | 74 |
| DLT-133 | | Paco Court to Echo Court | Secondary | 0.4 | 2 | E | 12,600 | 1,200 | 12,420 | E | 1,213 | 1.011 | F | -13 |
| DLT-134 | | Echo Court to Ft Smith Blvd. | Secondary | 0.2 | 2 | E | 12,600 | 1,200 | 12,221 | E | 1,194 | 0.995 | E | 6 |
| DLT-135 | Providence Blvd. | Howland Blvd. to Eustice St. | Primary | 0.2 | 2 | E | 15,600 | 1,480 | 10,021 | D | 979 | 0.662 | D | 501 |
| DLT-136 | | Eustice St. to Elkcam Blvd. | Primary | 1.5 | 2 | E | 15,600 | 1,480 | 13,354 | D | 1,305 | 0.882 | D | 175 |
| DLT-137 | | Elkcam Blvd. to Monticello St. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 16,690 | F | 1,631 | 1.102 | F | -151 |
| DLT-138 | | Monticello St. to Ft Smith Blvd. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 15,494 | E | 1,514 | 1.023 | F | -34 |
| DLT-139 | | Ft Smith Blvd. to Tivoli Dr. | Primary | 0.05 | 4 | E | 32,900 | 3,120 | 22,112 | D | 2,160 | 0.692 | D | 960 |
| DLT-140 | | Tivoli Dr. to Page Dr. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 11,251 | D | 1,099 | 0.743 | D | 381 |
| DLT-141 | | Page Dr. to Saxon Blvd. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 10,577 | D | 1,033 | 0.698 | D | 447 |
| DLT-142 | | Saxon Blvd. to Lambert St. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 10,557 | D | 1,031 | 0.697 | D | 449 |
| DLT-143 | | Lambert St. to Normandy Blvd. | Primary | 0.3 | 2 | E | 15,600 | 1,480 | 11,302 | D | 1,104 | 0.746 | D | 376 |
| DLT-144 | | Normandy Blvd. to Sacramento St. | Primary | 0.25 | 2 | E | 15,600 | 1,480 | 15,616 | F | 1,526 | 1.031 | F | -46 |
| DLT-145 | | Sacramento St. to Tyler Ave. | Primary | 0.15 | 2 | E | 15,600 | 1,480 | 13,637 | D | 1,332 | 0.9 | D | 148 |
| DLT-146 | | Tyler Ave. to Anderson Dr. | Primary | 0.4 | 2 | E | 15,600 | 1,480 | 13,038 | D | 1,274 | 0.861 | D | 206 |
| DLT-147 | | Anderson Dr. to Fisher Dr. | Primary | 0.25 | 2 | E | 15,600 | 1,480 | 11,332 | D | 1,107 | 0.748 | D | 373 |
| DLT-148 | | Fisher Dr. to Doyle Rd. | Primary | 0.3 | 2 | E | 15,600 | 1,480 | 13,671 | D | 1,336 | 0.902 | D | 144 |
| DLT-149 | Reed Ellis Rd. | Enterprise-Osteen Rd. to midpoint | NA | 1.05 | 2 | E | 9,600 | 920 | 1,829 | C | 179 | 0.194 | C | 741 |
| DLT-150 | | midpoint to SR 415 | NA | 1.05 | 2 | E | 9,600 | 920 | 1,784 | C | 174 | 0.189 | C | 746 |
| DLT-151 | Saxon Blvd. | I-4 to Finland Dr. | Primary | 0.35 | 4 | E | 32,900 | 3,120 | 46,258 | F | 4,519 | 1.449 | F | -1,399 |
| DLT-152 | | Finland Dr. to Normandy Blvd. | Primary | 0.35 | 4 | E | 32,900 | 3,120 | 41,212 | F | 4,026 | 1.291 | F | -906 |
| DLT-153 | | Normandy Blvd. to Urbana Ave. | Primary | 0.5 | 4 | E | 32,900 | 3,120 | 26,526 | D | 2,592 | 0.831 | D | 528 |
| DLT-154 | | Urbana Ave. to Tivoli Dr. | Primary | 0.75 | 4 | E | 32,900 | 3,120 | 21,178 | C | 2,069 | 0.663 | D | 1,051 |
| DLT-155 | | Tivoli Dr. to Page Dr. | Secondary | 0.5 | 2 | E | 15,600 | 1,480 | 11,315 | D | 1,105 | 0.747 | D | 375 |
| DLT-156 | | Page Dr. to Providence Blvd. | Secondary | 0.4 | 2 | E | 15,600 | 1,480 | 11,419 | D | 1,116 | 0.754 | D | 364 |
| DLT-157 | | Providence Blvd. to Waycross Cir. | Secondary | 0.3 | 2 | E | 10,080 | 960 | 10,663 | F | 1,042 | 1.085 | F | -82 |
| DLT-158 | | Waycross Cir. to Normandy Blvd. | Secondary | 0.4 | 2 | E | 10,080 | 960 | 8,103 | E | 792 | 0.825 | E | 168 |
| DLT-159 | | Normandy Blvd. to Coble Dr. | Secondary | 0.5 | 2 | E | 10,080 | 960 | 6,033 | D | 589 | 0.614 | D | 371 |
| DLT-160 | | Coble Dr. to Doyle Rd. | Secondary | 0.5 | 2 | E | 10,080 | 960 | 7,027 | D | 687 | 0.715 | D | 273 |
| DLT-161 | Tivoli Dr. | Normandy Blvd. to Bailey Ave. | Tertiary | 0.1 | 2 | E | 10,080 | 960 | 4,095 | D | 400 | 0.417 | D | 560 |
| DLT-162 | | Bailey Ave. to Saxon Blvd. | Tertiary | 0.5 | 2 | E | 10,080 | 960 | 4,525 | D | 442 | 0.46 | D | 518 |
| DLT-163 | | Saxon Blvd. to Baton Dr. | Tertiary | 0.25 | 2 | E | 10,080 | 960 | 12,272 | F | 1,199 | 1.249 | F | -239 |
| DLT-164 | | Baton Dr. to April Ave. | Tertiary | 0.4 | 2 | E | 10,080 | 960 | 12,508 | F | 1,222 | 1.273 | F | -262 |
| DLT-165 | | April Ave. to Providence Blvd. | Tertiary | 0.2 | 2 | E | 10,080 | 960 | 12,204 | F | 1,192 | 1.242 | F | -232 |

**Table 2
City of Deltona
Thoroughfare Plan Intersection Analysis**

| ID # | Intersection | | Intersection Hierarchy | 2008 PM Pk Hour Level of Service | 2015 PM Pk Hour Level of Service | 2025 PM Pk Hour Level of Service | Proposed Improvement |
|------|----------------------|----------------------|------------------------|----------------------------------|----------------------------------|----------------------------------|--|
| 1 | Courtland Blvd. | India Blvd. | tertiary | C | E | F | Signalization Lengthen LT lanes |
| 2 | Courtland Blvd. | Ft. Smith Blvd. | secondary | B | C | F | |
| 3 | Courtland Blvd. | Doyle Rd. | secondary | B | C | E | |
| 4 | Deltona Blvd. | Enterprise Rd. | primary | C | D | E | |
| 5 | Deltona Blvd. | Debary Ave. | primary | C | C | D | |
| 6 | Elkam Blvd. | Howland Blvd. | primary | C | E | F | Add 2nd EB and WB T, add NB R |
| 7 | Ft. Smith Blvd. | Elkam Blvd. | secondary | C | D | F | |
| 8 | Ft. Smith Blvd. | Newmark Dr. | tertiary | C | E | F | Signalization |
| 9 | Ft. Smith Blvd. | Normandy Blvd. | secondary | F | F | F | Signalization, Add EB R, add NB L |
| 10 | Ft. Smith Blvd. | India Blvd. | tertiary | B | C | F | Signalization, Add SB L Add 3rd EB and WB T, add 2nd EB and WB L, add EB and WB R, add NB and SB R |
| 11 | Finland Dr. | Saxon Blvd. | NA | C | F | F | Add 3rd NB and SB T, add 2nd SB L, add NB and SB R, add WB R and 2nd WB L |
| 12 | Howland Blvd. | Catalina Blvd. | secondary | C | F | F | Add 2nd NB and SB T, add EB L |
| 13 | Howland Blvd. | Newmark Dr. | tertiary | B | D | F | Add SB R |
| 14 | Howland Blvd. | Courtland Blvd. | secondary | B | B | B | |
| 15 | Howland Blvd. | Ft. Smith Blvd. | secondary | B | B | D | Add SB R |
| 16 | Lk. Helen/Osteen Rd. | Catalina Blvd. | tertiary | B | C | F | |
| 17 | Lk. Helen/Osteen Rd. | Elkam Blvd. | tertiary | B | B | C | |
| 18 | Normandy Blvd. | Graves Ave. | secondary | A | A | B | |
| 19 | Normandy Blvd. | Elkam Blvd. | secondary | A | B | D | |
| 20 | Normandy Blvd. | Saxon Blvd. (North) | primary | C | F | F | Add 2nd EB, WB and NB L, Add WB R, Widen Saxon to 8L, Normandy to 4L |
| 21 | Normandy Blvd. | Deltona Blvd. | primary | A | B | D | |
| 22 | Providence Blvd. | Howland Blvd. | primary | B | D | E | Add 2nd WB L |
| 23 | Providence Blvd. | Elkam Blvd. | secondary | C | C | D | |
| 24 | Providence Blvd. | Ft. Smith Blvd. | secondary | B | C | F | |
| 25 | Providence Blvd. | Tivoli Dr. | tertiary | C | D | E | |
| 26 | Providence Blvd. | Saxon Blvd. | secondary | B | C | F | |
| 27 | Providence Blvd. | Normandy Blvd. | secondary | B | C | D | |
| 28 | Providence Blvd. | Doyle Rd/DeBary Ave. | primary | B | C | F | |
| 29 | Saxon Blvd. | Normandy Blvd. E | secondary | A | B | F | |
| 30 | Saxon Blvd. | Tivoli Dr. | secondary | E | F | F | Add EB R, Add NB R, provide SB L pm+pt phase |
| 31 | Saxon Blvd. | Doyle Rd. | secondary | B | B | C | Add WB R, Add 2nd SB L |
| 32 | S.R. 415 | Ft. Smith Blvd. | NA | C | C | F | Change to all way stop Signalization, Add 2nd NB L |
| 33 | S.R. 415 | Howland Blvd. | primary | E | F | F | Signalization |
| 34 | S.R. 415 | Doyle Rd. | No | F | F | F | |
| 35 | S.R. 415 | Enterprise Rd. | No | E | F | F | |
| 36 | S.R. 415 | Reed Ellis Rd. | No | E | F | F | Signalization, Widen SR 415 to 4L |
| 37 | Wolf Pack Run | Howland Blvd. | No | B | F | F | Add 2nd NB L, Widen Howland to 6L |
| #38 | SR 472 | Howland Blvd. | Primary | NA | NA | NA | |
| #39 | I-4 | Saxon | Primary | NA | NA | NA | |
| #40 | Elkam Blvd. | Courtland Blvd. | Tertiary | NA | NA | NA | |

* Not marked in red on Thoroughfare Plan Study Map.
No - Not marked on hhi hierarchy map
Not on Thoroughfare Plan List

APPENDIX B: State Road 472 Activity Center – Development Summary

ACTIVITY CENTER: CONCEPT 1

| | |
|--------------------------|--|
| OFFICE | 144 acres 15% of site(s) for stormwater/landscaping = 22 acres 85% of site(s) for building/parking = 122 acres |
| Development Assumptions | Floorplates: 25,000 – 50,000 SF (4 story building) Parking ratio: 4 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .42 |
| Economic Assumptions | Construction costs: \$150/SF Taxable value: \$100/SF 1 employee/220 SF |
| Estimated Total Capacity | 2,232,000 SF of office 8,928 parking spaces \$223,200,000 in taxable value (2007) 10,145 employees |

| | |
|--------------------------|--|
| RETAIL | 136 acres 15% of site(s) for stormwater/landscaping = 20 acres 85% of site(s) for building/parking = 116 acres |
| Development Assumptions | Floorplates: variable (big box-boutique) Parking ratio: 5 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .36 |
| Economic Assumptions | Construction costs: \$110/SF Taxable value: \$80/SF 1 employee/500 SF |
| Estimated Total Capacity | 1,819,000 SF 9,095 parking spaces \$145,520,000 in taxable value (2007) 3,638 employees |

| | |
|--------------------------|---|
| HOTEL | 11 acres 15% of site for stormwater/landscaping – 1.65 acres 85% of site for building/parking = 9.35 acres |
| Development Assumptions | 300 room hotel 15,000 SF meeting room 1.25 cars/room 45,000 SF floorplate (ground floor) Surface parking: 350 SF/space |
| Economic Assumptions | Construction cost: \$100,000/room Taxable value: \$75,000/room 1 employee/room |
| Estimated Total Capacity | 300 rooms/15,000 SF of meeting space 375 parking spaces \$22,500,000 in taxable value (2007) 300 employees Hotel will only occupy around 4.0 acres so there is site availability for additional use of approximately 5.0+ acres |

| | |
|---|--|
| LIGHT INDUSTRIAL/ FLEX SPACE | 203 acres 15% of site(s) retention/landscaping – 30.45 acres 85% of site(s) for buildings/parking = 172.55 acres |
| Development Assumptions | Floorplates will vary – use .38 FAR for flex space Parking ratio: 4 spaces/1,000 SF Surface parking/truck docks: 400 SF/vehicle to accommodate turning radius for trucks |
| Economic Assumptions | Construction costs: \$90/SF Taxable value: \$65/SF 1 employee/900 SF |
| Estimated Total Capacity | 2,780,000 SF of warehouse/flex space Parking/truck capacity = 11,000 spaces \$180,700,000 of taxable value (2007) 3,088 employees |

| | |
|--------------------------|--|
| RESIDENTIAL | 46 acres 15% of site(s) for retention/landscaping = 7.0 acres 85% of site(s) for building/parking = 39.0 acres |
| Development Assumptions | 35 units/acre 1.75 cars/unit 1,000 SF/unit 350 SF/parking space |
| Economic Assumptions | Construction costs: \$75,000/unit Taxable value rental product: \$60,000/unit Taxable value for sale product: \$175,000/unit |
| Estimated Total Capacity | 1,365 units (rental or for sale) 2,390 parking spaces \$88,725,000 taxable value for rental product (2007) \$238,875,000 taxable value as for sale product (2007) |

| | |
|--------------------------|--|
| MIXED USE | 90 acres 15% of site(s) for retention/landscaping – 13.5 acres 85% of site(s) for buildings and parking = 76.5 acres |
| Development Assumptions | Office/retail/residential mix Floor Area Ratio (FAR): .70 Parking ratio: 3.5/1,000 SF |
| Economic Assumptions | Construction costs: \$220/SF Taxable value: \$180/SF Mix use: 775,000 SF of retail, 775,000 SF of office, 775 residential units Structured parking/three levels |
| Estimated Total Capacity | 2,325,000 SF of development 8,164 parking spaces \$418,500,000 of taxable value (2007) 3,243 retail employment 3,523 office employment |

ACTIVITY CENTER: CONCEPT 2

| | |
|--------------------------|--|
| OFFICE | 177 acres 15% of site(s) for storm water/landscaping = 27 acres 85% of site(s) for building/parking = 150 acres |
| Development Assumptions | Floorplates: 25,000 – 50,000 SF (4 story building) Parking ratio: 4 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .42 |
| Economic Assumptions | Construction costs: \$150/SF Taxable value: \$100/SF 1 employee/220 SF |
| Estimated Total Capacity | 2,744,000 SF of office 10,976 parking spaces \$274,400,000 in taxable value (2007) 12,473 employees |

| | |
|--------------------------|--|
| RETAIL | 64 acres 15% of site(s) for storm water/landscaping = 10 acres 85% of site(s) for building/parking = 54 acres |
| Development Assumptions | Floorplates: variable (big box-boutique) Parking ratio: 5 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .36 |
| Economic Assumptions | Construction costs: \$110/SF Taxable value: \$80/SF 1 employee/500 SF |
| Estimated Total Capacity | 847,000 SF 3,388 parking spaces \$67,760,000 in taxable value (2007) 1,694 employees |

| | |
|--------------------------|---|
| HOTEL | 40 acres 15% of site for storm water/landscaping = 6 acres 85% of site for building/parking = 34 acres |
| Development Assumptions | 300 room hotel 15,000 SF meeting room 1.25 cars/room 45,000 SF floorplate (ground floor) Surface parking: 350 SF/space |
| Economic Assumptions | Construction cost: \$100,000/room Taxable value: \$75,000/room 1 employee/room |
| Estimated Total Capacity | 300 rooms/15,000 SF of meeting space 375 parking spaces \$22,500,000 in taxable value (2007) 300 employees Hotel will only occupy around 4.0 acres so there is site availability for additional use of approximately 5.0+ acres |

| | |
|---|--|
| LIGHT INDUSTRIAL/ FLEX SPACE | 187 acres 15% of site(s) storm water/landscaping = 28 acres 85% of site(s) for buildings/parking = 159 acres |
| Development Assumptions | Floorplates will vary – use .38 FAR for flex space Parking ratio: 4 spaces/1,000 SF Surface parking/truck docks: 400 SF/vehicle to accommodate turning radius for trucks |
| Economic Assumptions | Construction costs: \$90/SF Taxable value: \$65/SF 1 employee/900 SF |
| Estimated Total Capacity | 2,632,000 SF of warehouse/flex space Parking/truck capacity = 10,528 spaces \$171,080,000 of taxable value (2007) 2,924 employees |

| | |
|--------------------------|--|
| RESIDENTIAL | 53 acres 15% of site(s) for storm water/landscaping = 8 acres 85% of site(s) for building/parking = 45 acres |
| Development Assumptions | 35 units/acre 1.75 cars/unit 1,000 SF/unit 350 SF/parking space |
| Economic Assumptions | Construction costs: \$75,000/unit Taxable value rental product: \$60,000/unit Taxable value for sale product: \$175,000/unit |
| Estimated Total Capacity | 1,575 units (rental or for sale) 2,756 parking spaces \$94,500,000 taxable value for rental product (2007) \$275,625,000 taxable value as for sale product (2007) |

| | |
|--------------------------|--|
| MIXED USE | 84 acres 15% of site(s) for retention/landscaping = 13 acres 85% of site(s) for buildings and parking = 71 acres |
| Development Assumptions | Office/retail/residential mix Floor Area Ratio (FAR): .70 Parking ratio: 3.5/1,000 SF |
| Economic Assumptions | Construction costs: \$220/SF Taxable value: \$180/SF Mix use: 500,000 SF of retail, 996,000 SF of office, 775 residential units Structured parking/three levels |
| Estimated Total Capacity | 2,165,000 SF of development 7,578 parking spaces \$389,700,000 of taxable value (2007) 2,000 retail employment 4,500 office employment |

ACTIVITY CENTER: CONCEPT 3

| | |
|--------------------------|--|
| OFFICE | 204 acres 15% of site(s) for storm water/landscaping = 31 acres 85% of site(s) for building/parking = 173 acres |
| Development Assumptions | Floorplates: 25,000 – 50,000 SF (4 story building) Parking ratio: 4 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .42 |
| Economic Assumptions | Construction costs: \$150/SF Taxable value: \$100/SF 1 employee/220 SF |
| Estimated Total Capacity | 3,165,000 SF of office 12,624 parking spaces \$316,500,000 in taxable value (2007) 14,386 employees |

| | |
|--------------------------|--|
| RETAIL | 116 acres 15% of site(s) for storm water/landscaping = 17 acres 85% of site(s) for building/parking = 99 acres |
| Development Assumptions | Floorplates: variable (big box-boutique) Parking ratio: 5 cars/1,000 SF Surface parking: 350 SF/space Floor Area Ratio (FAR): .36 |
| Economic Assumptions | Construction costs: \$110/SF Taxable value: \$80/SF 1 employee/500 SF |
| Estimated Total Capacity | 1,552,000 SF 7,760 parking spaces \$124,160,000 in taxable value (2007) 3,104 employees |

| | |
|--------------------------|---|
| HOTEL | 13 acres 15% of site for storm water/landscaping = 2 acres 85% of site for building/parking = 11 acres |
| Development Assumptions | 300 room hotel 15,000 SF meeting room 1.25 cars/room 45,000 SF floorplate (ground floor) Surface parking: 350 SF/space |
| Economic Assumptions | Construction cost: \$100,000/room Taxable value: \$75,000/room 1 employee/room |
| Estimated Total Capacity | 300 rooms/15,000 SF of meeting space 375 parking spaces \$22,500,000 in taxable value (2007) 300 employees Hotel will only occupy around 4.0 acres so there is site availability for additional use of approximately 5.0+ acres |

| | |
|---|--|
| LIGHT INDUSTRIAL/ FLEX SPACE | 183 acres 15% of site(s) storm water/landscaping = 27 acres 85% of site(s) for buildings/parking = 156 acres |
| Development Assumptions | Floorplates will vary – use .38 FAR for flex space Parking ratio: 4 spaces/1,000 SF Surface parking/truck docks: 400 SF/vehicle to accommodate turning radius for trucks |
| Economic Assumptions | Construction costs: \$90/SF Taxable value: \$65/SF 1 employee/900 SF |
| Estimated Total Capacity | 2,582,000 SF of warehouse/flex space Parking/truck capacity = 10,328 spaces \$167,830,000 of taxable value (2007) 2,869 employees |

| | |
|--------------------------|--|
| RESIDENTIAL | 41 acres 15% of site(s) for storm water/landscaping = 6 acres 85% of site(s) for building/parking = 35 acres |
| Development Assumptions | 35 units/acre 1.75 cars/unit 1,000 SF/unit 350 SF/parking space |
| Economic Assumptions | Construction costs: \$75,000/unit Taxable value rental product: \$60,000/unit Taxable value for sale product: \$175,000/unit |
| Estimated Total Capacity | 1,225 units (rental or for sale) 2,144 parking spaces \$74,500,000 taxable value for rental product (2007) \$214,375,000 taxable value as for sale product (2007) |

| | |
|--------------------------|--|
| MIXED USE | 82 acres 15% of site(s) for retention/landscaping = 12 acres 85% of site(s) for buildings and parking = 70 acres |
| Development Assumptions | Office/retail/residential mix Floor Area Ratio (FAR): .70 Parking ratio: 3.5/1,000 SF |
| Economic Assumptions | Construction costs: \$220/SF Taxable value: \$180/SF Mix use: 609,840 SF of retail, 1,219,680 SF of office, 775 residential units Structured parking/three levels |
| Estimated Total Capacity | 2,134,440 SF of development 7,471 parking spaces \$384,199,200 of taxable value (2007) 2,439 retail employment 5,544 office employment |

APPENDIX C: Transit Stop Locations

