



ISB Pedestrian Connectivity & Safety Assessment Study Existing Conditions Summary Report

Prepared for:
Florida Department of Transportation District 5, Deland, FL



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1 INTRODUCTION

The Pedestrian Connectivity and Safety Assessment Study (PCSA) is a Florida Department of Transportation (FDOT) project in collaboration with the River to Sea Transportation Planning Organization (R2CTPO), Votran, City of Daytona Beach, Volusia County, International Speedway Boulevard (ISB) Coalition and other stakeholders in the study area.

The major purpose of the PCSA is to identify the existing pedestrian facilities along United States Highway (US) 92/State Road (SR 600)/International Speedway Boulevard (ISB), as well as along any neighboring roadways that connect to specific pedestrian-generating development, and determine/prioritize the improvements needed for enhanced pedestrian connectivity and safety.

Closely coordinated with the ongoing efforts of the Volusia County ADA Transition Plan, the study will proceed through a phased series of tasks, as shown below, and culminate in a Final Report summarizing the results of the evaluation and the decision-making process leading to the identification and prioritization of recommended improvement strategies. This Existing Conditions Summary Report describes the data analysis efforts including a review of relevant background data collected; an evaluation of the physical and transportation characteristics of the study area (such as existing and future land uses, zoning, accessibility, environmental constraints, pedestrian and bicycle accessibility, safety, and existing and future transportation systems and proposed improvements), planned and programmed projects, historical crash data, and issues/opportunities impacting pedestrian connectivity within the study area.

- **Existing Conditions Summary Report**
- Field Evaluation Report
- Development of Draft and Final Report

1.1 Project Overview and Study Area

The core study area includes the geographic area generally bounded on the west by Interstate (I)-95; on the east by SR 5A/Nova Road; on the north by Dunn Avenue; and on the south by a boundary that extends ¼-mile south of ISB. The study area also includes the Volusia County Health Department which is located in the Daytona Business Park, off of Bill France Boulevard and just north of Dunn Avenue. The Project Study Area is depicted in Figure 1.

Development of the study is being assisted by a Project Coordination Team (PCT) which was assembled to provide feedback throughout the study progress and to identify any outstanding issues concerning the study. The PCT consists of representatives from: FDOT District 5; the City of Daytona Beach; Volusia County; Votran; R2CTPO; ISB Coalition; and the Daytona Beach International Airport (DBIA).

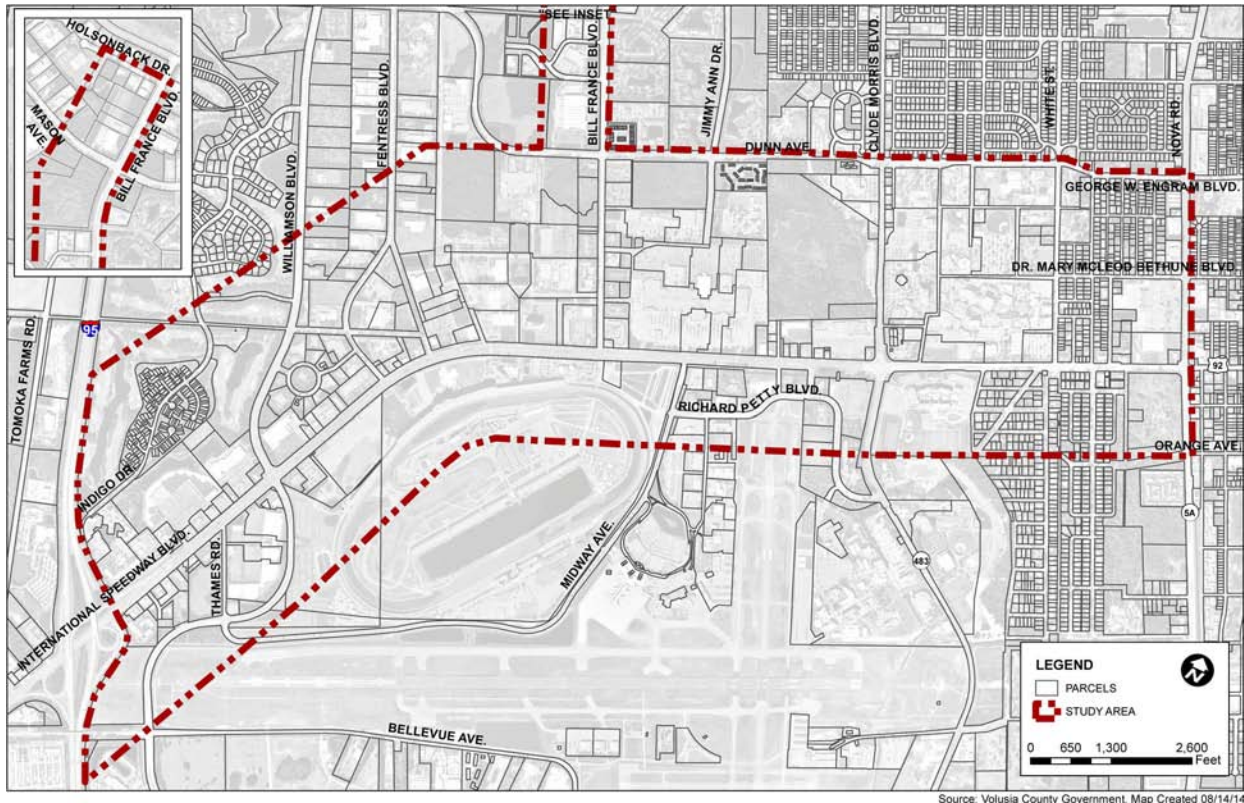


Figure 1: Project Study Area

2 BACKGROUND DATA ANALYSIS

Background data was obtained to document the transportation, land use and environmental information pertinent to the development of the PCSA. Listed below are reports, studies, data and other information that may be useful in later phases of the PCSA.

2.1 ADA Transition Plan

The American Disabilities Act (ADA) of 1990 is a civil rights statute which prohibits discrimination against persons with disabilities. The purpose of the Volusia County ADA Transition Plan is to provide the county with a framework for bringing pedestrian facilities into compliance with this legislation. Table 1 on page 4 summarizes the recommendations from the ADA Transition Plan that apply to right-of-way within the study area.

2.2 Aerial Photography

Aerial photography (2012) was obtained from the City of Daytona Beach Geographic Information System (GIS) for the study area.

2.3 Existing Projects/Transportation Plans or Studies

2.3.1 2035 Long Range Transportation Plan – VTPOⁱ

As a requirement for receiving state and federal funds, the Long-Range Transportation Plan (LRTP) is the guiding document that identifies the “cost-feasible” transportation projects that may be pursued by the TPO through the Year 2035. The LRTP, adopted on September 28, 2010 and most recently amended on February 26, 2014, includes a broad range of multi-modal transportation projects to achieve a well-balanced transportation system.

2.3.2 2012-2021 Transit Development Plan Major Update – Votran

The Transit Development Plan (TDP) is a required 10-year plan that serves as the vision for a public transit service provider; it is updated every 5 years. The TDP must be consistent with the Florida Transportation Plan, approved local government comprehensive plans, and the TPO Long-Range Transportation Plan and is the source for determining the projects and priorities for the public transportation component of the Transportation Improvement Plan (TIP). The TDP includes a 10-year implementation plan with agency strategies and policies, maps indicating areas to be served along with the types and levels of service, monitoring programs to track performance, and a 10-year financial plan.

Table 1 – ADA Transition Plan Recommendations

Street Name	Description	Barrier	Recommended Correction	Priority	Priority Code	Estimated Pedestrian Traffic
Richard Petty Blvd (Midway Ave - Clyde Morris Blvd.)	Detection Pads, Obstructions, Sidewalk Gap	No detection pads at Midway Ave, Hilton Hotel driveway, Embry Riddle driveway; Pedestrian signal pole obstructs sidewalk, northeastern quadrant; Sidewalk ends on west side of Hilton driveway; traffic signal pole obstructs sidewalk access at east and west approaches to main EMRU entrance	Install detection pads at intersection/ driveway sidewalks (18); Construct new sidewalk onto fill gap, approx. 2,300 ft + 11 detection pads and 3 curb ramps; Relocate traffic pole and pedestrian poles to provide full access along segment.	HIGH	1B	HIGH
Dunn Ave. (Bill France Blvd - Clyde Morris Blvd)	Curb Ramp, Detection Pads	Lack of curb ramp at White Fawn Dr, eastern sidewalk approach; No detection pads at Par Brook Ave, Windy Pines Apt driveways, Wood Pine driveway, Jimmy Ann Dr, White Fawn Dr, National Health Care Dr, Health Blvd.	Install curb ramp at White Fawn Dr; Install detection pads at driveway/ intersection crosswalks (20 total)	HIGH	1B	MEDIUM
Orange Ave (Nova Rd - Jean St)	Curb Ramp, Detection Pads, Obstructions, Info Barrier	Electric pole obstructs sidewalk path at Nova Rd intersection; No intersection detection at Nova Rd, Jean St; No existing curb ramp at Jean St; Improper curb ramp and pavement markings at Jean St on eastern approaches; Street light pole obstructs sidewalk path in southeast quadrant, electric pole obstructs path in northwest quadrant of Jean St.	Install detection pads at intersection crosswalks (7 total); Construct curb ramp at Jean St; Reconstruct curb ramps (2) for eastern sidewalk approaches, reconfigure pavement markings to accommodate the proper crosswalk location (in reference to curb ramps); Relocate street light.	MEDIUM	2B	MEDIUM
George W Engram Blvd (Nova Rd - White St)	Detection Pads, Curb Ramp	No detection pads at Auto Parts driveways, Wilson Ave, Jackson Ave, Fletcher Ave, Frederick Ave, Seneca St, Colfax Dr; Improper curb ramp at Frederick Ave western sidewalk approach.	Install detection pads at intersection/driveway crosswalks (17); Reconstruct curb ramp at Frederick Ave to proper ramp width.	MEDIUM	2B	MEDIUM
Dunn Ave (Williamson Blvd - Bill France Blvd)	Detection Pads, Landing Pads, Curb Ramp Flares	No detection pads present at La Costa Ln, Culligan driveways, Omnicare driveways, Fentress Blvd, U.S. Post Office driveways, Bill France Blvd; No existing landing pads at La Costa Ln for both sidewalk approaches; Existing curb ramp flare at Fentress Blvd is not compliant (northwest approach)	Install detection pads at driveway/intersections crosswalks (19 total); Construct proper landing pads at La Costa Ln intersection (2 total); Reconstruct curb ramp at Fentress Blvd for proper flares and to distinguish correct path.	MEDIUM	2B	LOW

2.3.3 Transit Corridor Feasibility Analysis Study – FDOT and Volusia County MPOⁱⁱ

This study, completed in March 2009, assessed the feasibility of potential future transit corridors within Volusia County. The corridors studied included north-south cross-county corridors, east-west cross-county corridors, and corridors considered to be local circulators within various communities.

2.3.4 City of Daytona Beach Area-Wide Traffic Study

This January 2008 study examined existing traffic conditions (Year 2006), projected travel demands (Year 2025), and identified capacity deficiencies for the functionally classified roadway network within the City of Daytona Beach.

2.3.5 International Speedway Boulevard Corridor Transportation Plan – FDOT

This October 2011 transportation study, conducted by FDOT at the request of the ISB Coalition, was initiated to create a transportation vision for the ISB corridor and to develop strategies to support the area's ability to be more economically competitive in the region. While the study was not completed, it contains extensive background traffic and land use data for the ISB corridor.

2.3.6 Transit Alternative Funding Options Study, Technical Memo, Task 1 (November 23, 2010) and Final Report (May 31, 2011) – Votran and VTPO^{Error!}

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This study analyzed alternative revenue strategies for near to medium term implementation of the recommendations contained in the Transit Development Plan, along with other potential service improvements.

2.3.7 Transit Development Design Guidelines – Votran

The report, adopted February 26, 2008, is a comprehensive set of development design standards adopted by the R2CTPO and Votran to provide for the integration of transit service into developing and redeveloping areas. Included are design standards for roadway design, bus stops, shelters, boarding and alighting areas, and other transit infrastructure.

2.3.8 East Side Transit Study Final Report – Votran and Volusia County MPOⁱⁱ

The June 2009 report summarized the analysis conducted for a Comprehensive Operations Analysis (COA) of the eastern and southeastern portions of the Votran service area. It also included recommendations for service improvements over a ten-year period.

2.3.9 Integrated Sustainability Implementation Plan – Votran and Volusia County MPOⁱⁱ

This report, dated August 3, 2010, outlined Votran’s sustainability initiatives and improvements, and detailed a plan for meeting emission reduction targets established in Executive Order 2007-126 and the goals of the Green Volusia Program.

2.3.10 Volusia County Transportation Disadvantaged Service Plan Final Report – Votran

The Transportation Disadvantaged program was established to improve coordination among transportation disadvantaged services sponsored by social and human service agencies. The Transportation Disadvantaged Service Plan (TDSP) provides the service plan for arranging transportation for the transportation disadvantaged. The TDSP is required by the Florida Commission for the Transportation Disadvantaged (FCTD) for each Community Transportation Coordinator (CTC). It also serves as the Locally Coordinated Human Services Transportation Plan (LCHSTP) for Volusia County. In Volusia County, the designated CTC is Votran.

2.3.11 Bicycle and Pedestrian Safety Review Study Implementation Report - Palm Terrace Elementary School (March 2007) – Volusia County MPOⁱⁱ

Completed in 2007, this study provides the City of Daytona Beach with guidelines for improving bicycle and pedestrian safety for students attending Palm Terrace Elementary School. The primary goal of this report was to provide recommendations for safe, connected and well-maintained pedestrian and bicycle facilities to encourage students to walk or ride their bicycles to school. Recommended priority projects include sidewalk improvements to Bill France Boulevard and Dunn Avenue.

2.3.12 Investigation of Potential Local Area Transportation Alternatives for an Aging Population (Elder Transportation Study) – Volusia County MPOⁱⁱ

This November 2006 study examined the socioeconomic and demographic characteristics of an aging population and their potential impacts on public transportation. The report included recommended resources and strategies to meet the mobility needs of an aging population.

2.3.13 Examination of Night Service Alternatives for Volusia County dba VOTRAN

This study investigated the feasibility of Votran providing later evening transit service.

2.3.14 The Volusia County MPOⁱⁱ Bicycle/Pedestrian Plan

The bicycle/pedestrian plan of the R2CTPO, adopted January 25, 2005, includes existing and planned bicycle/pedestrian facilities.

2.3.15 Draft Bicycle Route Map East – Volusia TPO

This document is a map illustrating bicycle routes in East Volusia County. It is dated February 7, 2012.

2.3.16 Bicycle/Pedestrian Feasibility Study, Clyde Morris Boulevard Trail – Volusia County MPOⁱⁱ

The August 2008 study evaluated the feasibility of constructing a continuous bicycle/ pedestrian facility on the west side of Clyde Morris Boulevard between SR 400/Beville Road and US 92/SR 600/International Speedway Boulevard.

2.3.17 Various Presentation Materials

- Votran TDP – Transit Improvements for International Speedway Boulevard: Presentation to ISB Coalition Planning Committee (October 15, 2012)
- SunRail presentations to the R2CTPO

2.4 Existing and Future Land Use

2.4.1 Daytona Beach 2009 Comprehensive Plan

This document includes the adopted 2009 Comprehensive Plan for the City of Daytona Beach, including the Transportation Element and Future Land Use Element Goals, Objectives and Policies and Future Land Use Map (FLUM).

2.4.2 Daytona Beach Zoning Map

This is a map depicting the zoning districts within the City of Daytona Beach. Zoning designations and boundaries are also included within the Daytona Beach GIS system.

2.4.3 Daytona Beach Land Development Code Update

This is an ongoing comprehensive update of the City of Daytona Beach's Land Development Code. It is intended to further implement the City's Comprehensive Plan and Vision Plan with an update of land development regulations including areas such as Zoning Districts, Use Regulations, and Development Standards.

2.4.4 Daytona Beach Vision Plan – 2008 and Beyond

This document represents a community wide planning effort which resulted in a Daytona Beach Vision Plan. It includes a vision statement and implementation strategies within the areas of Quality of Life, Education, Government, Economic Development, Infrastructure and Environment.

2.4.5 Midtown Redevelopment Area Plan

The Midtown Redevelopment Area is a designated Community Redevelopment Area (CRA) located north and south of the ISB corridor between Nova Road and the Florida East Coast (FEC) Railroad. The Midtown Redevelopment Area Plan is the Community Redevelopment Plan, as established through Florida Statutes, for this area.

2.4.6 Volusia County Comprehensive Plan – Adopted 11/13/08

The adopted Comprehensive Plan for Volusia County includes the Transportation Element and Future Land Use Element Goals, Objectives and Policies and Future Land Use Map.

2.4.7 Volusia Smart Growth Implementation Committee, Final Report

This August 2005 report provided recommendations for the implementation of “smart growth” principles within Volusia County.

2.5 Highway and Transit Systems Data

2.5.1 Volusia County 2013 Average Annual Daily Traffic & Historical Counts

Historical traffic counts and other roadway data (number of lanes, posted speed limits, LOS, etc.) for facilities including US 92/SR 600/International Speedway Boulevard, SR 483/Clyde Morris Boulevard, and SR 5A/Nova Road.

2.5.2 Volusia County FY 2013/14 – 2017/18 5-Year Road Program

This is a Volusia County Government list of funded road construction projects in Volusia County, using various revenue sources, for FY 2013/14 through 2017/18.

2.5.3 Volusia County Traffic Signal System Upgrade Report

This August 2010 report identified major upgrades to the County-maintained traffic signal control systems. Projects within the study area include a closed loop signal system on SR 483/Clyde Morris Boulevard.

2.5.4 National Transit Database

The National Transit Database (NTD) is the primary source of information and statistics on transit systems in the United States. Performance, operating, and financial information are collected through an Internet-based reporting system using uniform categories. Detailed statistics and Agency Profiles, with data such as Annual Passenger Miles, Annual Vehicle Revenue Miles, Annual Unlinked Trips, Vehicles Available for Maximum Service, etc. are provided through the online database.

2.5.5 Transportation Improvement Program FY 2013/14 - FY 2017/18 - Volusia TPO

The Transportation Improvement Program (TIP) is a priority list of federal and state funded transportation projects required by Florida Statutes and federal law for the Fiscal Year 2013/14 through 2017/18 time period. The priority list contains required capital and non-capital surface transportation projects, regionally significant projects and projects that implement paratransit plans. Other local or privately funded projects are also included for informational purposes.

2.5.6 Various Votran Website Documents

The Votran.org website features several documents detailing the routes, schedules and services of Volusia County's public transportation system. The following Votran bus routes serve at least a portion of the Pedestrian Connectivity and Safety Assessment study area, operating primarily on 60-minute headways (with 30-minute peak hour headways on selected routes) from Monday through Saturday with some limited evening and Sunday service:

- Route 6 – North Nova
- Route 10 – Medical Center
- Route 11 – Mason Avenue
- Route 18 – International Speedway
- Route 19 – Granada
- Route 60 – East-West Connector

A summary of the service operating characteristics of these routes from the TDP is provided on page 10 in Table 2.

Table 2: Summary of Transit Service Operating Characteristics

Route Number	Route Description	Days of Operation	Service Span	Headways
6	Transfer Plaza to Thompson Creek and Granada	Monday-Friday	6:05 am – 7:33 pm	60 Minutes
		Saturday	6:23 am – 7:33 pm	60 Minutes
		Sunday	6:05 am – 7:18 pm	60 Minutes
10	Medical Center to Volusia Mall/JC Penney	Monday-Friday	6:35 am – 6:50 pm	30 Minutes
		Saturday	6:42 am – 11:50 pm	30 Minutes
		Sunday	7:00 am – 6:41 pm	60 Minutes
11	Mason Ave. to Volusia Mall/I-95	Monday-Friday	6:17 am – 6:53 pm	60 Minutes
		Saturday	6:17 am – 6:50 pm	30 Minutes
18	International Speedway to Florida Hospital/Ormond Memorial	Monday-Friday	7:02 am – 6:50 pm	60 Minutes
		Saturday	6:21 am – 6:53 pm	60 Minutes
19	Florida Hospital/Ormond Memorial to A1A/Granada	Monday-Friday	6:07 am – 6:50 pm	60 Minutes
		Saturday	6:07 am – 6:50 pm	60 Minutes
60	East/West Connector	Monday-Friday	5:20 am – 7:48 pm	60 Minutes
		Saturday	7:01 am – 7:48 pm	60 Minutes

Source: 2012-2021 Transit Development Plan Major Update, Votran (September 2011)

2.5.7 Strategic Intermodal System Highway Connectors Assessment – Daytona Beach International Airport Connector

This 2008 report is an assessment of the DBIA Connector as an Emerging Strategic Intermodal System (SIS) facility, connecting DBIA to I-95. The facility comprises portions of US 92/SR 600/International Speedway Boulevard and Midway Avenue and includes existing and future operating conditions and recommended improvements.

2.5.8 Strategic Intermodal System Highway Connectors Assessment – Daytona Beach Greyhound Bus Terminal Connector

This is a 2008 assessment of the Daytona Beach Greyhound Bus Terminal Connector. The Greyhound bus terminal is an Emerging SIS facility and the Greyhound Bus Terminal Connector includes US 92/SR 600/International Speedway Boulevard within the PCSA study area. Existing and future operating conditions and recommended improvements are provided.

2.6 Existing Right-of-Way and Property Ownership

2.6.1 Existing Right-of-Way

Right-of-way maps, in PDF file format, were obtained from the FDOT for US 92/SR 600/ International Speedway Boulevard, SR 483/South Clyde Morris Boulevard and SR 5A/South Nova Road.

2.6.2 Property Ownership

Parcel data with property ownership information was obtained from the City of Daytona Beach GIS system for the study area.

2.7 Other Miscellaneous Reports and Studies

2.7.1 Daytona Beach International Airport Master Plan Update

The June 2003 DBIA Master Plan Update outlined opportunities for improving both the airfield and other facilities to meet the aviation and transportation needs of the region. The report evaluates the Airport's existing facilities, conditions and activity; provides projections of future activity over a 20-year planning period; and recommends methods of accommodating the projected activity.

2.7.2 Conceptual Plan for Daytona Beach International Airport Circulator

This draft document, dated November 2011, provided conceptual layouts of an interior transportation system for the DBIA to connect each of the internal activity centers. It also identified the locations of intermodal transportation centers that connect the airport with the region and local nodes along US 92/SR 600/International Speedway Boulevard.

2.7.3 Accessing Transit: Design Handbook for Florida Bus Passenger Facilities, Version III

This 2013 publication provides guidelines for physical design criteria to be used in the planning of access improvements to transit facilities in Florida. Of particular note, Chapter 3: Facility Prototypes contains prototypical designs and an inventory of design elements for bus passenger facilities such as Primary Stops, Transit Malls, Transfer Centers, Park-and-Ride Facilities, Intermodal Transfer Centers and Bus Rapid Transit (BRT) facilities. In addition, Chapter 4: Land Use Guidelines describes methods for creating transit supportive development with appropriate types of development and development standards supportive of transit and a multi-modal transportation network.

2.7.4 Statewide Transit Facility Standards, Criteria, and Guidelines

This November 2010 report was prepared as part of the Statewide Transit Accessibility and Facilities Design Course to provide guidance on incorporating transit facilities into roadway, infrastructure and other improvement plans. It also includes standards, criteria and guidelines for implementing the requirements of the Americans with Disabilities Act (ADA).

2.7.5 Transit Facility Handbook

This 2007 handbook provides guidance for the planning and design of transit facilities, activities and services in FDOT Districts One and Seven.

2.7.6 Florida Transit Handbook

This 2012 handbook provides a general overview of public transit in Florida with a synopsis of FDOT's transit resources and a profile of Florida's transit systems.

2.7.7 A Framework for Transit Oriented Development in Florida

This March 2011 publication, prepared for the FDOT and Department of Community Affairs (DCA)ⁱⁱⁱ, provides a framework to address how TOD can be part of the transformation of Florida's existing auto-oriented, largely suburban patterns of development into more compact, livable patterns that support walking, biking, transit and shorter-length auto trips.

2.7.8 Florida TOD Guidebook

This report, prepared for the FDOT and released in December 2012, provides TOD research and case studies as well as TOD Place Type Analysis and model TOD Comprehensive Plan Goals, Objectives and Policies and Land Development Regulations for Florida.

2.8 Comprehensive Plan Goals, Objectives & Policies

While there are many Goals, Objectives & Policies (GOPs), contained within the Comprehensive Plans of the City of Daytona Beach and Volusia County, which may affect pedestrian connectivity, the following GOPs (in whole or part) are particularly applicable for the study area.

2.8.1 City of Daytona Beach Comprehensive Plan (Adopted 2009)

Future Land Use Element

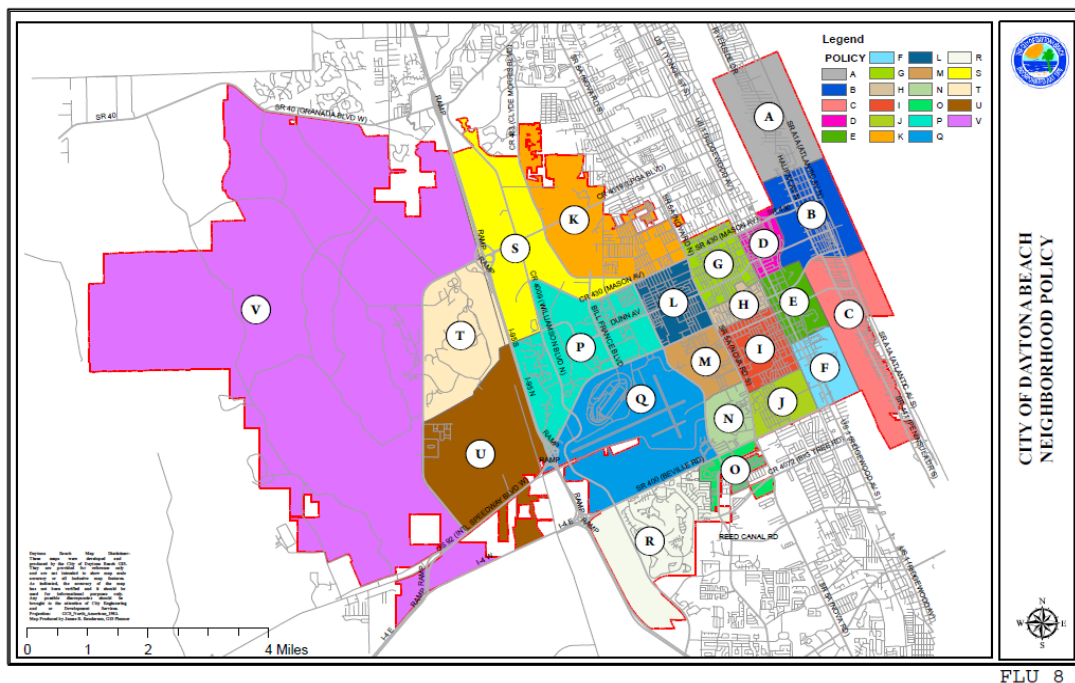
Objective 1.7 Airport Land Use - Maintain compatibility between airport operations and the City's Future Land Use Plan Map.

Policy 1.7.1 - Ensure the City maintains land development regulations that prohibit the further development of high concentrations of population residing within airport approach and take-off zones. The City has provided in its zoning regulations, a provision to limit the extent of development activity in locations which are affected by the 65 LDN noise contour created by the Airport in order to avoid unsuitable or incompatible land uses.

Policy 1.7.2 - The City shall maintain in its Land Development Code noise abatement requirements for residential developments where mandated by the Federal Government within the Daytona Beach International Airport 65 LDN or higher noise contour.

NEIGHBORHOOD DEVELOPMENT POLICIES

The following neighborhood-specific land use and revitalization policies constitute a supplement to the preceding policies and are hereby adopted as part of this plan {City of Daytona Beach Comprehensive Plan}. FLU 8 is a map that identifies neighborhood boundaries. Such boundaries are hereby adopted as part of this plan. The future land use boundaries in many of the neighborhoods illustrated on the Future Land Map are generalized graphic representation of where land uses should occur and may be moved up to 600 feet either direction of the limits shown on the Future Land Use Map to protect the environment, to accommodate property lines, rights-of-way, easements, to correspond to major physical or man-made boundaries (including, but not limited to roads, canals, power transmission corridors, etc.), or to adjust to actual jurisdictional boundaries.



NEIGHBORHOOD L

Development Policies:

(c) Issue: The City has maintained a policy to protect property along West International Speedway Boulevard, between Clyde Morris Boulevard and Nova Road, as an attractive entrance way to the City.

(1) Policy: The City identifies this segment of West International Speedway Boulevard as a scenic thoroughfare. Any future rezoning along this street segment shall be limited to large lot office with special setback and front yard landscaping requirements. Said requirements shall have a minimum 40-foot landscaped front yard. In addition, the City shall require the D.O.T. to landscape the medians on West International Speedway Boulevard.

NEIGHBORHOOD M

Development Policies:

(b) Issue: Airport property fronting on Clyde Morris Boulevard was development for non-residential activities.

(1) Policy: The City shall require the preservation of a 500' buffer strip between the Highlands area and the Embry-Riddle Aeronautical University property, as shown on the Airport Master Plan, to provide for a separation of the residential area from non-residential developments.

(d) Issue: Nova Road north of Bellevue Avenue has been the subject area for rezoning requests to allow automotive uses. This type of rezoning has created unsightly areas such as exist on West International Speedway Boulevard and mason Avenue.

(1) Policy: The non-BA zoning shall be maintained and requests for automotive zoning shall not be encouraged.

(e) Issue: West International Speedway Boulevard is developed primarily as single-family with deep landscaped front yards. This contributes to the attractive image of this segment of West International Speedway Boulevard. There have been requests to rezone this area to more intensive uses.

(1) Policy: This segment of West International Speedway Boulevard shall be designated a scenic thoroughfare. Future rezoning of this land shall be limited to large parcel office developments and a scenic setback will be maintained.

(g) Issue: Clyde Morris Boulevard is an attractive non-commercial thoroughfare located on the western border of Neighborhood M.

(1) Policy: This segment of Clyde Morris Boulevard shall be designated a scenic thoroughfare and requirements for the landscaping of frontages shall be established. Densities and the heights of structures shall be limited to ensure that future development is compatible with the Airport impacts.

(h) Issue: There is undeveloped property located on the north side of Bellevue Avenue west of Nova Road that is zoned single-family and is within the flight path. There is little incentive to develop the property for single-family residential uses.

(1) Policy: The City shall maintain the special use process that permits certain non-residential uses in the residential zones within the 65 LDN or greater noise contour for the Daytona Beach Airport, while insuring nearby established residential areas are protected.

NEIGHBORHOOD P

Development Policies:

(b) Issue: The lands between the industrial park and Williamson Boulevard shall serve to provide a buffer to the Indigo residential area.

(1) Policy: The area to the east of Williamson Boulevard, north of International Speedway and south of Mason Avenue shall be preserved for a variety of multi-family, professional office and light industrial uses. Marginal access roads and other designs shall be required in order to limit the number of access points.

(c) Issue: The multifamily residential land north of the Volusia Mall is attractive to commercial interests. The land is beginning to develop as residential, providing locations for residents in close proximity to the City's expanding employment areas, west of Bill France Boulevard.

(1) Policy: The City shall preserve the large area north of the Volusia Mall as a nearby residential area for employees of the City's major industrial parks to the west.

(e) Issue: West International Speedway Boulevard just east of the I-95 interchange is one of the most heavily traveled roads in the east central Florida region. The initial image of the Daytona Beach area is presented by this road.

(1) Policy: The City shall ensure that large medians are preserved and shall provide attractive landscaping within these medians. The City shall continue to accept contributions from the community to maintain this beautification.

(f) Issue: The industrial park along West International Speedway Boulevard, opposite the Speedway, at Industrial Parkway, has experienced vacancies. What should be the future development for this area, which is along US 92, the Gateway to the entire Halifax Area? How can the City ensure the area be redeveloped in a safe, orderly and attractive manner?

(1) Policy: The commercial retail areas on US 92, as shown on the Future Land Use Map, shall be limited to Planned Commercial Zoning Districts (PCD). In addition, to discourage the appearance of small lots with individual businesses and sign clutter, and as a general guideline there shall be no more than one out parcel per 300 feet of frontage on US 92. As part of the PCD, signage shall be limited to monument signs. Access shall be limited to Industrial Parkway with possibly right turn, ingress/egress on US 92. Other issues to be resolved include the design of Industrial Parkway to serve the area, upgraded architecture, and high quality landscaping.

(g) Issue: The Volusia Medical Park Subdivision has an Office Transitional future land use designation. The single-family and multi-family uses surrounding the subdivision could be adversely impacted by uses permitted within these categories.

(1) Policy: The City shall not rezone the Volusia Medical Park subdivision to a zoning category that would permit the more intense uses which could negatively impact the surrounding residential uses.

(i) Issue: The area surrounding the intersection of US 92 and Clyde Morris continues to expand as local institutions, job centers, and other retailers in the vicinity continue to grow. The large, undeveloped property located north of the US 92/Clyde Morris intersection directly across from Halifax Hospital presents an opportunity for the development of uses that complement the surrounding urban areas in an efficient manner.

Policy: The approximately 77.5-acre undeveloped property located on North Clyde Morris Boulevard north of the US 92/Clyde Morris intersection directly across from Halifax Hospital

shall be developed under the Mixed-Uses future land use and subject to maximum entitlements shown in the following trip generation chart. Development of the property shall be limited to the uses and maximum entitlements for each land use shown in the chart, which are based on the lower value of either 90% of the pre-Mixed-Use (Hospital) amendment P.M. Peak Hour Trip figure for the property (3,586) or the Peak Hour Water and Sewer GPD at the pre-Mixed Use (Hospital) amendment rate of 1,479,000 GPD. Total development of the property shall permit a mix of the uses shown on accompanying chart, but in no event shall total development create impacts that exceed the P.M. Peak Hour Trip figure of 3,586 or the Peak Hour Water and Sewer GPD of 1,479,000 GPD. Development limitations due to P.M. Peak Hour Trips and water/sewer use shall be calculated using the following chart:

EQUIVALENCY MATRIX & MAXIMUM DENSITY/INTENSITY
BASED ON INDIVIDUAL LAND USE

Land Use	1	2	3	4	5	6
Land Use	Average Daily Flow Coefficient(1)	Maximum Units Governed by Water/Sewer(1)	P.M. Peak Hour Equation/Rate(2)	Maximum Units Governed by Traffic	Maximum Units Allowed	Units
Multi-Family	309	1,598	$T=0.55(X)+17.65$	6,488	1,598	DU
Hotel	100	4,930	$T=0.59(X)$	6,078	4,930	Rooms
Hospital	243	2,026	$T=1.14(X)$	3,146	2,026	KSF
Comm. College	10	49,385	$T=0.12(X)$	29,883	29,883	Students
Retail/Comm.	100	4,930	$\ln(T)=0.67\ln(X)+3.37$	1,322	1,322	KSF
Office	100	4,930	$T=1.12(X)+78.81$	3,131	3,131	KSF
Medical/Office	100	4,930	$\ln(T)=0.88\ln(X)+1.59$	1,798	1,798	KSF
Bus./Flex Space	100	4,930	$\ln(T)=0.92\ln(X)+0.78$	3,130	3,130	KSF

(1) Based on average peak flow of 493,000 GPD and peak flow of 1,479,000 (peak=3.0).

(2) Use of Equation vs. Rate determined by ITE R² value.

Notes: Maximum intensity does not account for pass-by reduction.

Column 2, Maximum Units (Water/Sewer) = 493,000 GPD/Column 1 Average Daily Flow (e.g. 493,000 GPD/309=1,598)

Column 5, Maximum Units Allowed = Smaller of Column 2 Maximum Units (Water/Sewer) and Column 4 Maximum Units (Traffic)

NEIGHBORHOOD Q

Development Policies:

(a) Issue: The Daytona Beach International Airport, the major user of land in Neighborhood Q, has a tremendous impact on the City and is a major activity supporting the City's economy.

(1) Policy: Future plans for development of major airport facilities shall be reviewed by the City to ensure that the impact on surrounding areas will not be adverse. Existing agreements with the County regarding land development shall maintain our review of development projects.

(2) Policy: In order to allow for the development of Airport property for other than Airport usage, the City will require the County to submit Airport master plans to the City for review, prior to County Council adoption. The City will review such plan to ensure that future development on Airport property do not adversely impact adjacent City neighborhoods or the City's capacity to service such developments.

(b) Issue: The City must continue to provide available sites for industrial expansion and ensure that a level of competition exists for industrial promotional activities.

(1) Policy: Property directly south of Bellevue Avenue (south of the airport) should be developed as a combination of light industrial warehousing, and office uses. The M-4 (Industrial Park) category is suitable. Between this area and the planned residential along Beville Road, there should be a buffer area.

(c) Issue: The Beville Road area is a prime growth area. Pressures to develop land adjacent to this major arterial are intense.

(1) Policy: The north side of Beville Road, generally between Clyde Morris Boulevard and the entrance to Pelican Bay development, shall be developed as office and/or medium density residential use.

(2) Policy: The City shall permit a single shopping center meeting community shopping center standards around the lake at the northeast intersection of Beville Road and Williamson Boulevard.

(3) Policy: In order to reduce the potential for future traffic problems along Beville Road, the City shall not zone property in a manner that promotes small lot development. The area adjacent to Beville Road west of Williamson Boulevard is suitable for Interchange Commercial and PCD zoning. This zoning shall minimize small lot development.

(4) Policy: Neighborhood retail centers shall be limited to the intersections of Yorktown Boulevard and Beville Road.

(5) Policy: Commercial development along Beville Road, west of Clyde Morris Boulevard shall be encouraged to be part of a larger PUD and not in the form of strip commercial.

(6) Policy: Maintain limited access to properties abutting Beville Road by requiring access to such properties from intersecting collector roads, where it is possible to do so, encouraging frontage or marginal access roads.

(7) Policy: The City shall maintain Clyde Morris Boulevard, Beville Road, Williamson Boulevard and Hancock Boulevard as scenic thoroughfares with special requirements for landscaped front yards.

(8) Policy: Along Beville Road, from Williamson Boulevard intersection west to I-95, lands may be set aside for large parcel interchange commercial.

(d) Issue: A large area of land southwest of the Daytona International Airport is underdeveloped and under the same ownership. This area is a prime area for economic growth, with excellent access to the regional transportation network and high visibility from I-95. The development of this area must consider airport noise impacts, the proximity of single-family residential areas to the south, appearance, and the need for adequate infrastructure, access, and internal traffic circulation.

(1) Policy: As shown on the Generalized Future Land Use Map, the areas identified as "commercial/mixed use" along both sides of Williamson Boulevard, north of Beville Road, are appropriate for retail, tourist accommodation, office transitional, and multi-family residential land uses. No truck stop will be located in this area. Agriculture shall be a permitted use.

(2) Policy: Generally, intersections with Beville Road should be coordinated so that a few major entrances (signalized where appropriate) are coordinated with existing major entrances on the south side. A single major intersection should be planned to accommodate the areas on both sides of Beville Road, west of Williamson, subject to FDOT approval. The City will help coordinate entrances and intersections with FDOT (for Beville Road) and Volusia County (for Williamson Boulevard).

(3) Policy: This area represents a gateway entrance to the City. All adjacent developments should be designed with a compatible appearance (including compatible architecture and landscaping scheme) and so as to be functionally integrated. A consistent, well landscaped corridor should be developed along Beville Road and Williamson Boulevard in conjunction with the development of individual projects.

(4) Policy: Developments immediately north of Beville Road and east of Williamson Boulevard should be designed to be generally compatible with the appearance of existing residential and office development on the south side of the highway, including scale, architectural compatibility, and landscaping compatibility.

(5) Policy: Residential uses should not generally be permitted in areas subject to the LDN 65 or higher noise contour. All developments on the north side of Beville Road should be designed with consideration of appropriate noise mitigation techniques, as appropriate.

(6) Policy: Individual development proposals shall be reviewed through the planned development process to ensure the provisions of the Plan are met and to address design issues peculiar to each project. This should not, however, be interpreted as requiring all development to be carried out under a single large planned development zoning.

(e) Issue: The boundaries of land use classifications may have to be adjusted as the final actual alignment of the runway and the ownership boundaries for the airport are determined.

(1) Policy: Once the final boundaries of the airport acquisition are determined, the City will process a plan amendment to reflect boundaries on the Future Land Use Map (FLUM).

(f) Issue: Efforts by the City to establish appropriate policies for land use and development should not interfere with acquisition of areas for airport expansion.

(1) Policy: The commercial/mixed use area at the southeast corner of the Bellevue Avenue Extension/Williamson Boulevard intersection may be developed pursuant to the development standards established under the County plan for the Halifax Activity Center.

Transportation Element (Traffic Section)

GOAL 1 – To promote safe and efficient traffic circulation serving existing and future land uses.

OBJECTIVE 1.3 Level-of-Service Standards. The City's Land Development Code shall include a simple and expeditious concurrency management system that will ensure that adopted levels of service are maintained.

Policy 1.3.6 – In coordination with the FDOT, the MPO, Volusia County and the ECFRPC, the following State maintained thoroughfares are designated as constrained:

US 92 from Williamson Blvd. to US 1 (SIS)

Policy 1.3.7 – On State and County roads designated as constrained, the State and Volusia County will maintain the existing road; however the State and County shall not schedule improvements to increase the number of through lanes. The City shall closely monitor the traffic volumes on designated constrained facilities and at the time a constrained facility reaches its maximum acceptable level-of-service, the City shall not allow further development which cannot provide acceptable mitigative measures to the adverse traffic impacts of the proposed development. The City may also develop appropriate mitigation for such roadways including improved transit service, Transportation Demand strategies, and Transportation System Management strategies.

OBJECTIVE 1.4 Improvement Project Schedules – In order to correct existing and projected roadway deficiencies, undertake appropriate roadway projects according to short term (five-year) timeframe and a long-term timeframe (2025).

Policy 1.4.1 – In order to correct existing roadway deficiencies, through the MPO urge Volusia County and the State of Florida to undertake the following projects as soon as funding is available.

1) SR 483/Clyde Morris Boulevard from US Highway 92 to Beville Road. The segment was identified to operate below the adopted LOS “D” standard based on existing conditions. The roadway segment is classified as a four-lane primary arterial with a maximum volume to capacity ratio of 1.07.

Transportation Element (Mass Transit Section)

GOAL 3 – The City will work to establish a role for The City of Daytona Beach within a regional commuter rail system.

OBJECTIVE 3.1 Regional Commuter Rail System – The City shall encourage participation in a regional commuter rail system as part of a citywide, multi-modal transportation system.

Policy 3.1.1 – The City shall support efforts by the State of Florida to develop a regional commuter rail system that will operate along the east coast of Florida, with a station located in The City of Daytona Beach.

Transportation Element (Aviation Section)

GOAL 1 – To realize the Daytona Beach International Airport’s facilities to adequately serve the future needs of the Airport service area.

OBJECTIVE 1.1 Land Use – Maintain review of developments on Airport property in accordance with an interlocal agreement with Volusia County. All development shall be consistent with the City’s Comprehensive Plan for this area, which shall reflect updated Airport master plans provided such plans are coordinated with City.

Policy 1.1.1 – The City shall expand its Airport Interlocal Agreement with Volusia County to require a review and comment on all future land uses at the Daytona Beach International Airport to ensure the consistency with all elements of the City’s Comprehensive Plan.

Policy 1.1.2 – This agreement shall specify that any impact on surrounding City infrastructure caused by Airport expansion activities shall be mitigated, as indicated in the Airport Master Plan and Airport DRI, through County improvement to the impacted infrastructure; this shall include run-off impact on natural resources.

OBJECTIVE 1.2 Surface Transportation – Through attendance at the Metropolitan Planning Organization meetings, participation with the Technical Coordinating Committee and expansion of the interlocal agreements with Volusia County, (See Policy 1.1.1 and 1.1.2) the City will cooperate with these agencies to coordinate surface transportation to the Airport. This coordination will further the Goals, Objectives and Policies contained in the City’s Traffic and Mass Transit Elements.

Policy 1.2.1 – To maintain Level of Service standards on the three principal access roads to the airport: Clyde Morris Boulevard, Williamson Blvd. and International Speedway Blvd. in accordance with the Traffic Section of the Transportation Element.

Policy 1.2.2 – As a member of the Volusia County MPO the City shall support the maintenance of an accurate traffic model and necessary road improvement projects to ensure roadways do not fall below the transportation level of service standards as contained in this plan.

Policy 1.2.3 – Through the MPO, urge VOTRAN maintain its Route 9 bus service to the Airport.

2.8.2 Volusia County Comprehensive Plan

Transportation Element

GOAL 2.1 – Volusia County shall provide a coordinated multimodal transportation system to serve current and future land uses and population needs. The multimodal transportation system will discourage urban sprawl and encourage energy efficient land use patterns.

OBJECTIVE 2.1.1 – Volusia County shall implement programs to provide a safe, convenient, and energy efficient multimodal transportation system, thereby reducing vehicle miles traveled and greenhouse gas emissions.

Policy 2.1.1.6 – Volusia County shall consider multimodal terminals and access to multimodal facilities, where applicable, in its assessment of future transportation needs.

Policy 2.1.1.7 – Volusia County shall coordinate and cooperate with the FDOT, the Volusia County MPO, MetroPlan Orlando, VOTRAN, LYNX, and other agencies to support state-wide high-speed, regional commuter, and/or light rail in Volusia County.

Policy 2.1.1.11 – Volusia County will continue to work with VOTRAN in providing public transportation service to passengers to and from the Daytona Beach International Airport.

Policy 2.1.1.20 – Volusia County shall continue to coordinate with the FDOT, the Volusia County MPO, and VOTRAN in the placement of Park-n-Ride lots.

OBJECTIVE 2.1.5 – Volusia County shall coordinate with and assist the Volusia County MPO, VOTRAN, and the Daytona Beach International Airport to provide efficient public transportation services based upon existing and proposed major trip generators and attractors, safe and convenient public transportation terminals, land uses, passenger amenities, and accommodation of the special needs of the transportation disadvantaged.

Policy 2.1.5.2 – Volusia County shall continue to work to develop strategies to address intermodal terminals and access to aviation, rail, and seaport facilities.

OBJECTIVE 2.1.6 – Volusia County shall coordinate with the Volusia County Metropolitan Planning Organization (MPO) and other related agencies to achieve and maintain levels of service on the thoroughfare system as well as for mass transit services.

Policy 2.1.6.7 – Volusia County shall coordinate with the FDOT and local jurisdictions seeking Level of Service variances on the constrained facilities below:

SR 5A (Nova Road) – SR 400 (Beville Road) to Brentwood Drive (Policy Constrained)

OBJECTIVE 2.1.10 – Encourage bicycle and pedestrian activity throughout Volusia County.

Policy 2.1.10.5 – Volusia County shall integrate bicycle (i.e. bicycle racks on buses, secure bicycle storage lockers, and park and ride lots), and pedestrian features into transit planning.

2.9 Local Events Impact & Summary

The City of Daytona Beach hosts many events throughout the year attracting an influx of tourist within and around the PCSA study area. Major events impacting the study area include Bike Week, Biketober Fest and several NASCAR events. Visitors attending activities associated with major local events bring business to restaurants, hotels, and retail stores as well as increased automobile and pedestrian traffic within study area. A summary of major local events impacting the study area is shown below:

City of Daytona:

- Bike Week: a ten-day annual festival, including motorcycle racing, concerts, parties and street festivals during the first full week of March. Approximately 500,000 people attend the event (next is scheduled for March 6-15, 2015).
- Biketoberfest: a four-day annual event, attracting 125,000 motorcyclists; typically held the weekend immediately following Columbus Day (next is scheduled for October 16-19, 2014).

Daytona International Speedway:

- Rolex 24 at Daytona: a 24-hour sports car endurance race, associated with the IMSA/TUDOR United SportsCar Championship as part of Speedweeks. It is typically held either the last weekend of January or first weekend of February (next is scheduled for January 24-25, 2015) and attracts over 50,000 spectators.
- Daytona 500: A NASCAR Sprint Cup Series motor race, held the last Sunday in February (next is scheduled for February 22, 2015) which attracts more than 100,000 spectators.
- Daytona Supercross: An AMA event in association with Bike Week, held the first Saturday in March (next is scheduled for March 7, 2015).
- Subway Firecracker 250 and Coke Zero 400 (race and fireworks): The Coke Zero 400 is an annual NASCAR Sprint Cup Series stock car race held the first Saturday in July. It is held in tandem with the Firecracker 250, a NASCAR Nationwide Series race, which occurs the prior evening (next is scheduled for July 4-5, 2014). These races attract over 100,000 spectators annually.
- Daytona Turkey Run – The world’s largest car show and swap meet is held annually on the track at Daytona International Speedway. The four-day event begins on Thanksgiving Day and has an estimated 65,000 spectators in attendance. There is a Spring Turkey Run as well in late March with an estimated 30,000 spectators in attendance.

To handle the demand for increased parking during special events, the Daytona International Speedway maintains several parking lots within and adjacent to the PCSA study area. Figure 2 identifies the location of special event parking within the vicinity of Daytona International Speedway. Free event parking is available in Lot 7, at the corner of Bill France Boulevard and SR 483/Clyde Morris Boulevard and in Lot 10 off Williamson Boulevard and Bellevue Avenue. Additional parking for ADA permit holders is available at: a) the IMC lot across US 92/SR 600/International Speedway Boulevard, near Turn 4 grandstands, accessible at the intersection of US 92/SR 600/International Speedway Boulevard and Daytona Boulevard; b) Turn 1 Plaza, at the

intersection of US 92/SR 600/International Speedway Boulevard and Turn One Boulevard; c) Lot 6, accessible through Gate 50 from Midway Boulevard. Additional parking can be reserved at Daytona Beach International Airport.

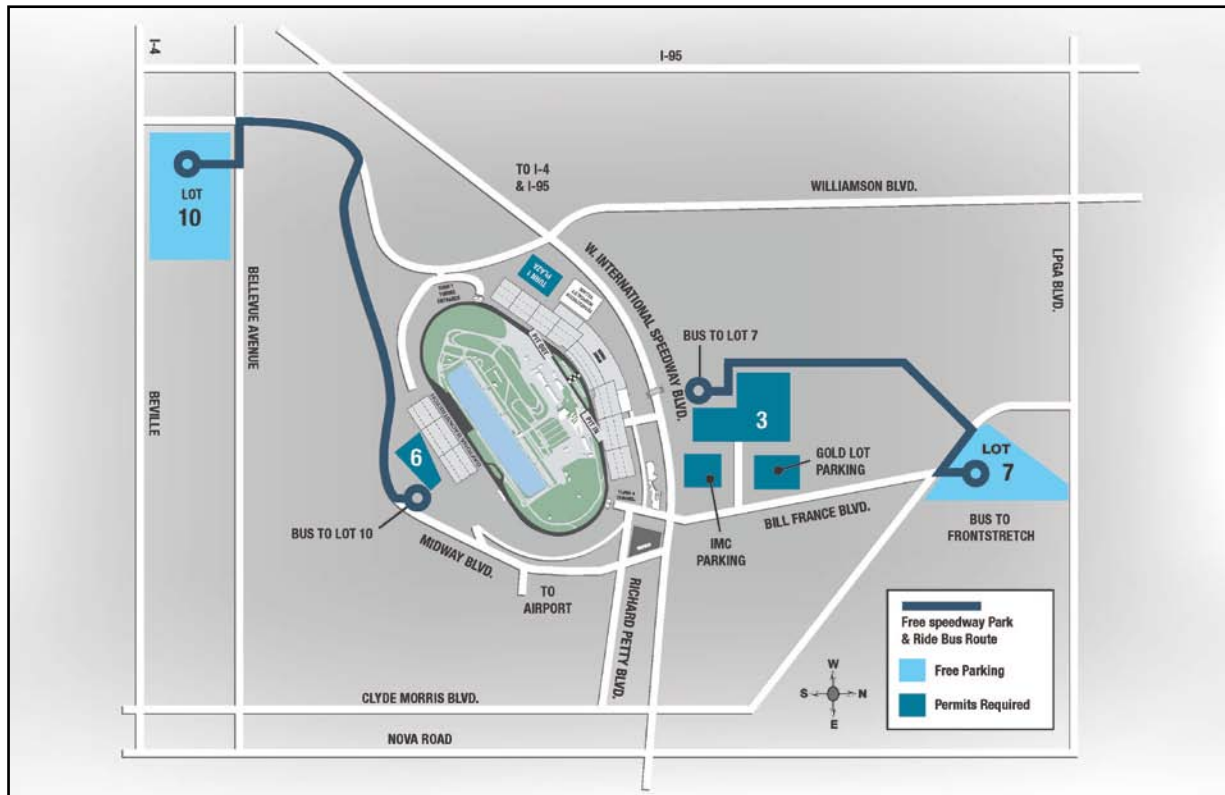


Figure 2: Daytona International Speedway Event Parking Map

Source: Daytona International Speedway

2.10 Travel Demand Characteristics

In order to identify and support the study area's multi-modal needs, it is important to develop an understanding of how the key land uses within the study area interact with each other. This includes an understanding of existing travel characteristics and an estimation of current mode split for vehicular traffic as well as bicyclists, pedestrians and transit riders.

US 92/SR 600/International Speedway Boulevard is a key east-west regional arterial linking I-95 to major tourist destinations, other transportation modes, educational and health care facilities, local businesses, and residential areas. It's under the jurisdiction of the FDOT and is designated throughout the PCSA study area as a part of the FDOT's Strategic Intermodal System (SIS). SIS facilities promote high volume, fast moving vehicular traffic making regional trips. US 92/SR 600/International Speedway Boulevard and a portion of Midway Avenue serve as a SIS Connector to Daytona Beach International Airport within the PCSA study area. As transportation alternatives are developed and evaluated, it will be important to understand vehicle travel patterns and to differentiate local versus regional travel.

This portion of US 92/SR 600/International Speedway Boulevard provides access to Daytona Beach International Airport, Embry-Riddle Aeronautical University, Volusia Mall, and numerous retail and office development for the region. It serves as a major attraction, employment, and educational center for the City of Daytona Beach and Volusia County. FDOT's 2011 *ISB Corridor Transportation Plan Report* used Bluetooth technology throughout the study area to gain an understanding of existing travel data and characteristics, including automobile and person trip data, trip lengths and purpose (local or regional). Automatic Traffic Recorder (ATR) count data for 24-hour traffic volume counts was collected for seven (7) days (Monday, April 5, 2010 through Sunday, April 11, 2010). Figure 3 illustrates the location of Bluetooth stations used to collect data. Although the *ISB Corridor Transportation Plan Report* evaluated three segments of US 92/SR 600/International Speedway Boulevard between I-95 and SR A1A/Atlantic Avenue, the PCSA study area shares the same boundary as Segment 1 in Figure 3.

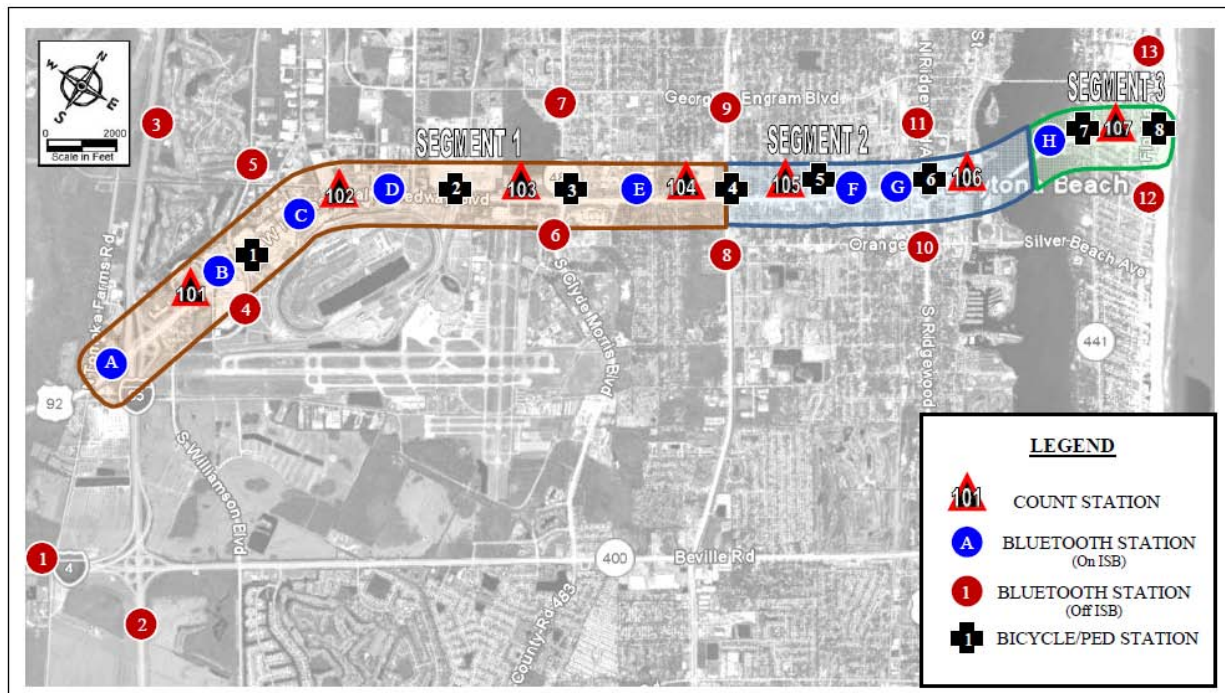


Figure 3: ISB Corridor Bluetooth and Bicycle/Pedestrian Count Station Locations

Source: *ISB Corridor Transportation Plan Report*

In addition, video data collection equipment was utilized to document the existing bicycle and pedestrian vehicle/person trips along the US 92/SR 600/International Speedway Boulevard corridor. Locations for the video data collection were based on field observations of bicycle and pedestrian activity. Video data collection was conducted for 13 hours from 6:00 AM to 7:00 PM on Tuesday, April 6, 2010. This time period was selected to correspond with the span of service during which Votran provides weekday bus transit service along the ISB corridor. Major intersections were targeted in order to capture bicycle and pedestrian travel both along the corridor and across it. The bicycle and pedestrian counts were summarized in terms of Annual Average Daily Traffic

(AADT) at the locations where the automobile/truck vehicle counts were conducted. Figure 4 summarizes trips by mode for each ISB Corridor Transportation Plan segment. The PCSA study area aligns with Segment 1 of the *ISB Corridor Transportation Plan Report*. Segment 1 Bicycle/Pedestrian Stations were located along ISB at the intersections of Williamson Boulevard, Midway Avenue, SR 483/Clyde Morris Boulevard, and SR 5A/Nova Road.

According to the *ISB Corridor Transportation Plan Report*, 99.28% of the person trips along US 92/SR 600/International Speedway Boulevard within the study area (Segment 1 in Figure 4), are made by Auto/Truck Mode, 0.35% by Transit Mode, 0.10% by Bicycle Mode, and 0.27% by Pedestrian Mode. Many trips to this area are regional in nature while the adjacent land uses are typically autocentric. Automobile traffic counts are the highest along the corridor between I-95 and Williamson Boulevard. This may be due to this segment serving as a critical link between land uses paralleling I-95, along Williamson Boulevard, and access to the nearest I-95 interchange at US 92/SR 600/International Speedway Boulevard.

Corridor Segment	Vehicle Trips		Person Trips by Mode						Mode Split (Percentage)			
	Auto Trips	Truck Trips	Auto Trips 1.339/Veh	Truck Trips 1.339/Veh	Transit Trips (Persons)	Bicycle Trips (Persons)	Pedestrian Trips (Persons)	Total Person Trips	% Auto/ Truck Mode	% Transit Mode	% Bicycle Mode	% Pedestrian Mode
Segment 1	35,040	1,759	46,918	2,355	175	50	133	49,631	99.28%	0.35%	0.10%	0.27%
Segment 2	19,535	688	36,158	921	276	61	177	27,591	98.14%	1.00%	0.22%	0.64%
Segment 3	9,612	280	12,870	375	259	49	1,146	14,699	90.11%	1.76%	0.33%	7.80%

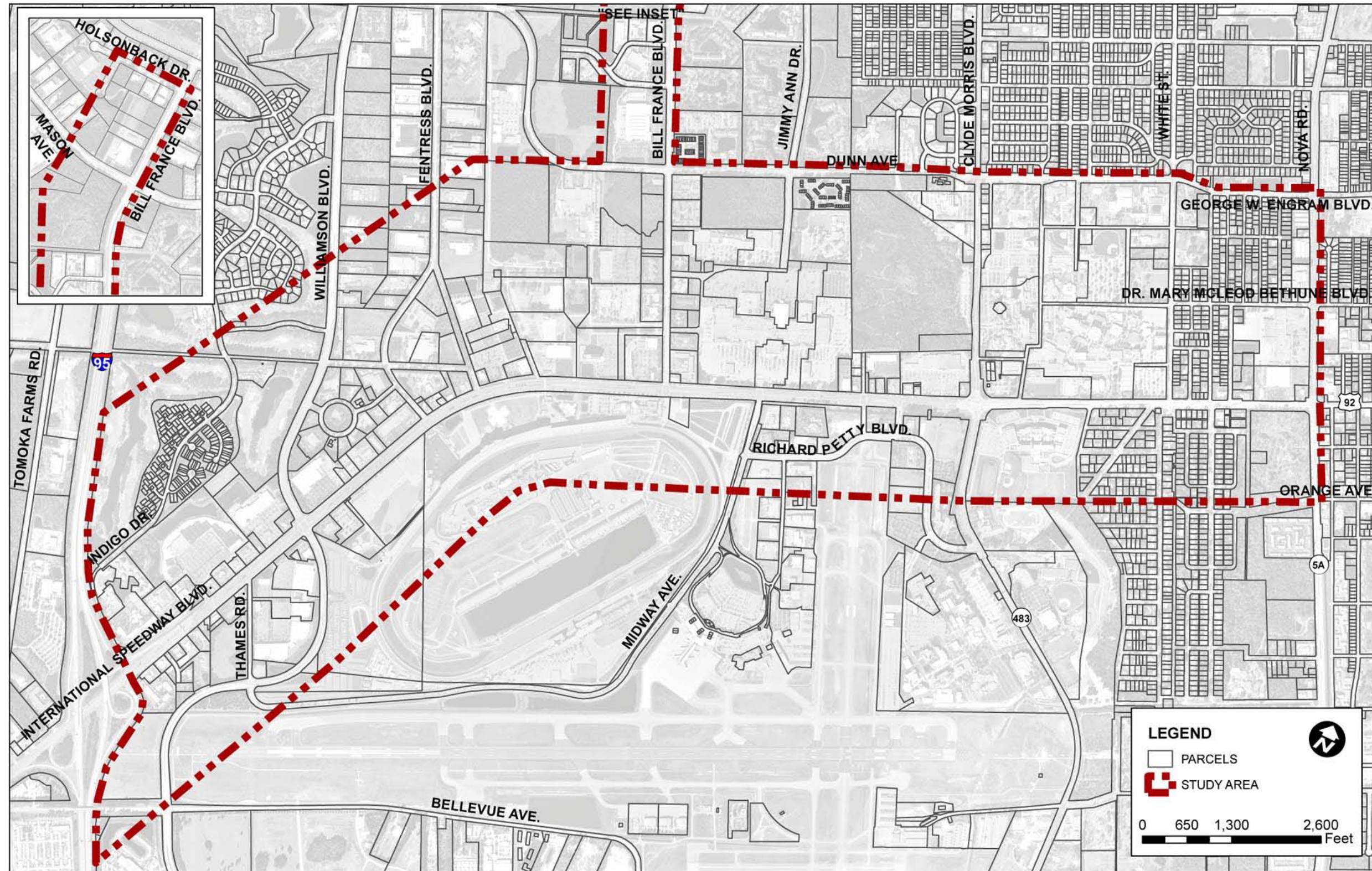
Figure 4: Summary of Average Daily Trips by Mode

Source: *ISB Corridor Transportation Plan Report*

3 STUDY AREA PHYSICAL CHARACTERISTICS

The existing land uses within the study area are diverse with urban, suburban and rural uses and large areas of undeveloped land. These uses include a regional shopping mall and other large commercial establishments, a regional hospital and major medical facilities, three universities and colleges, attractions including Daytona International Speedway, Daytona Beach International Airport, recreational areas such as Tusawilla Park, and residential areas with a wide mixture of densities and property values.

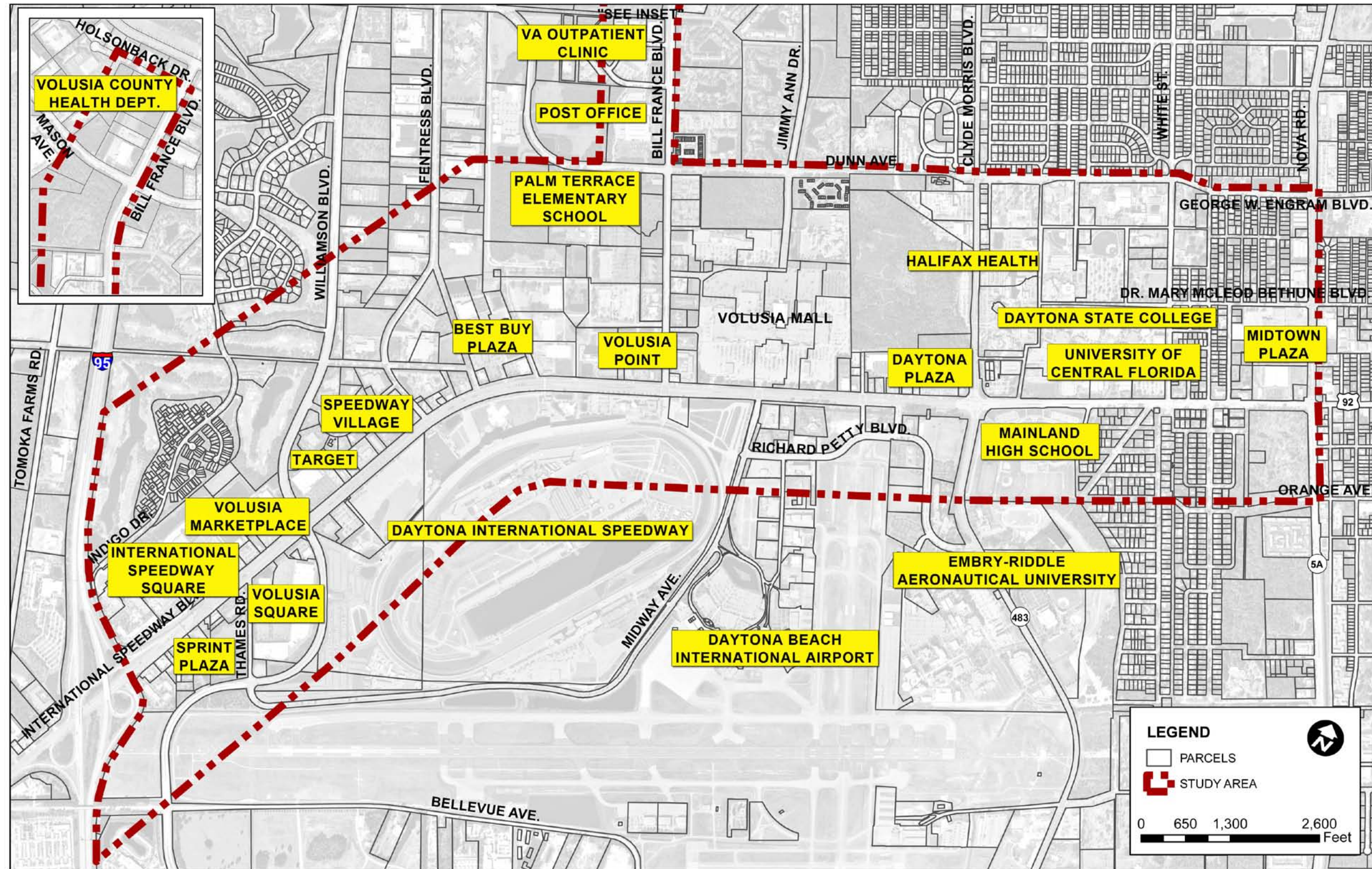
In order to gain a better understanding of the land use, population, demographic, environmental and transportation system characteristics within the study area, a series of Geographic Information Services (GIS) maps were developed and are included as Figures 5 through 36. A description is included on each map, detailing key features. As the project progresses, GIS will also be a useful tool for identifying long-range livability, multimodal, and safety needs using factors such as land use and zoning compatibility, accessibility, environmental issues, safety, and transportation conditions.



Source: Volusia County Government. Map Created 08/14/14

This map illustrates the US 92/ISB study area and parcel boundaries as obtained from the City of Daytona Beach GIS. The GIS parcel layer includes data for parcel ID, address, property ownership, and other parcel information.

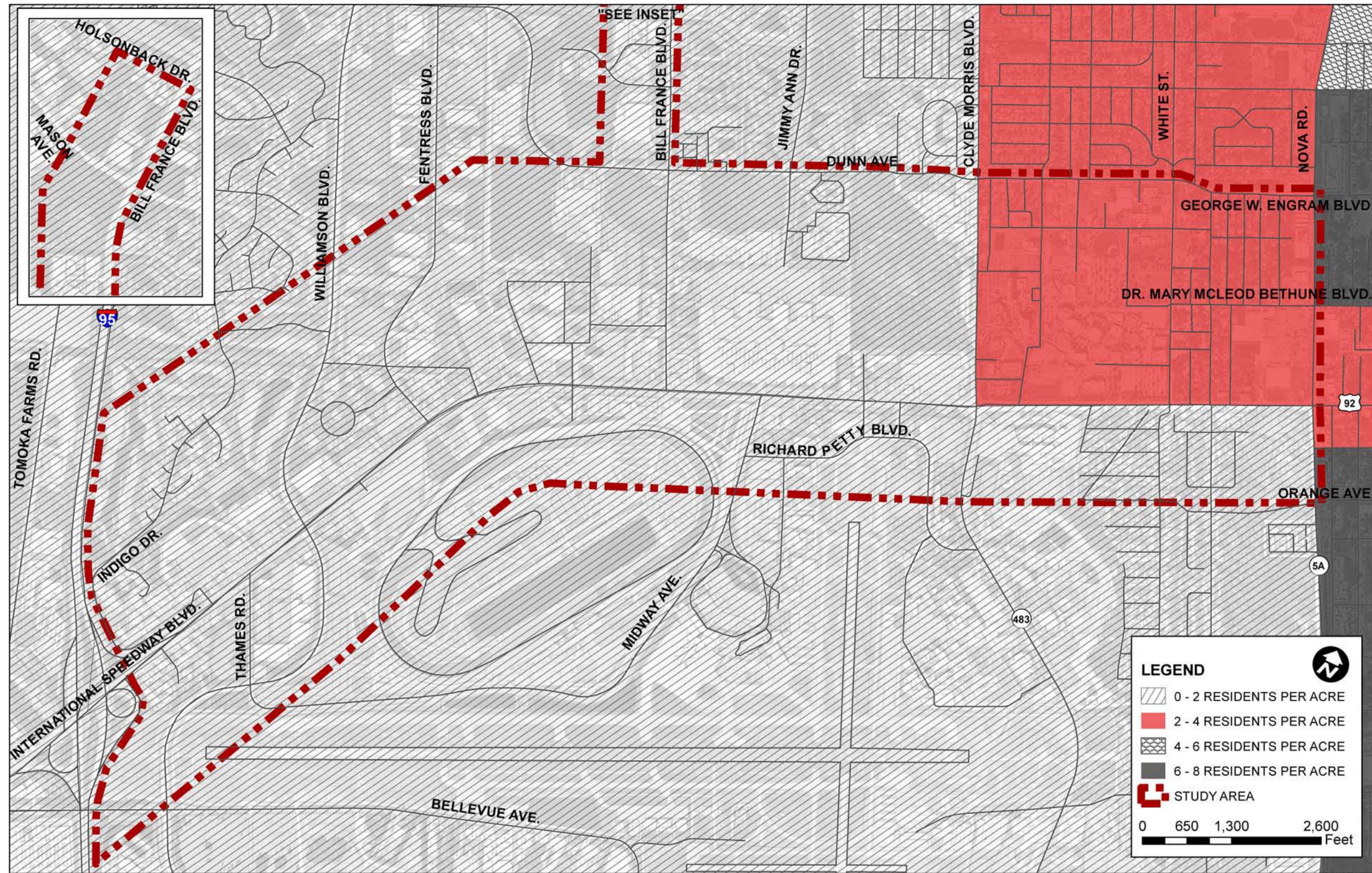
Figure 5: Study Area and Parcel Map



Source: Volusia County Government. Map Created 08/14/14

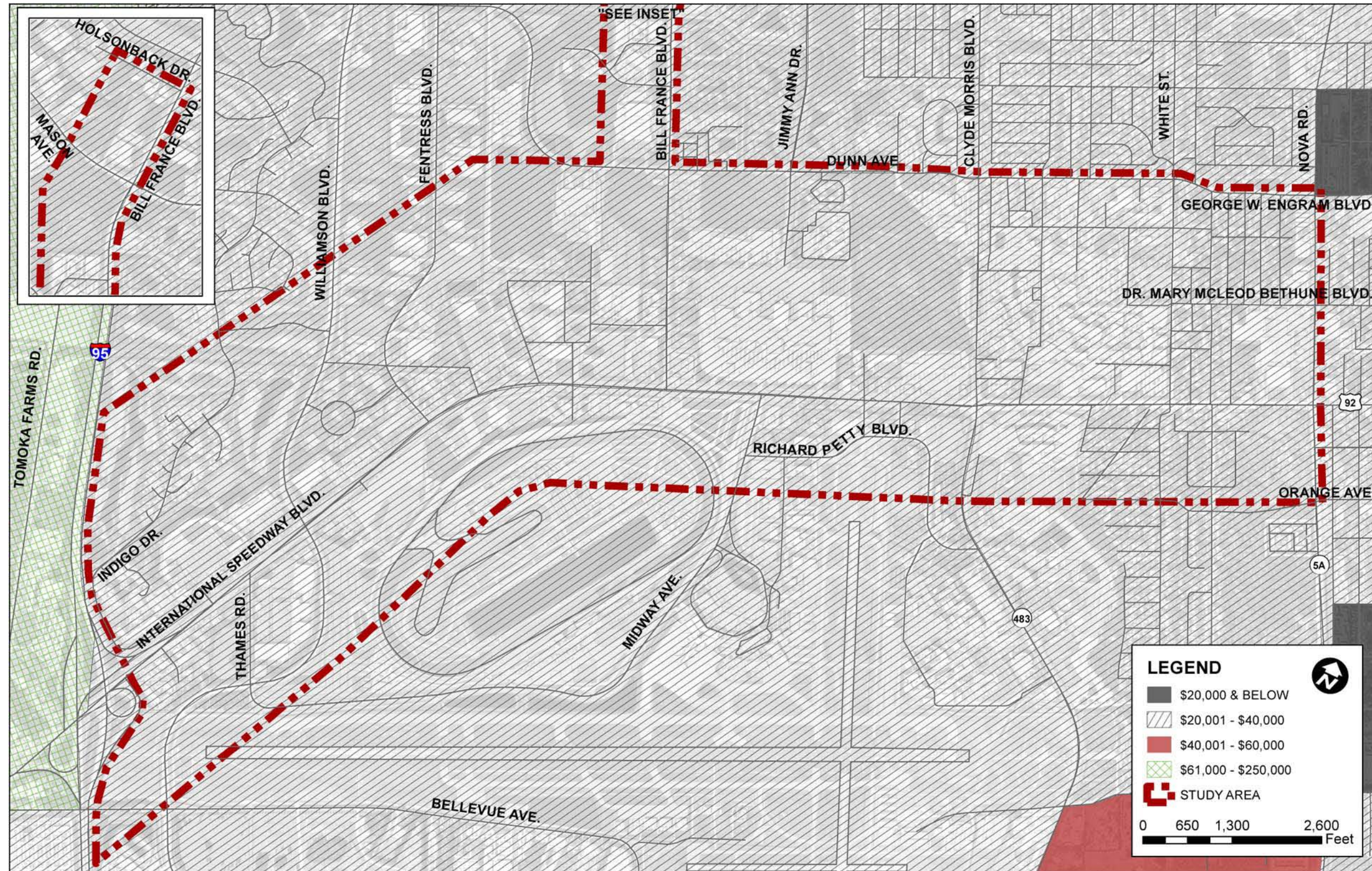
This map depicts centers of activity within the study area. Major trip generators and attractors include the Daytona International Speedway, Daytona Beach International Airport, major retail centers, hospital facilities, and colleges and universities.

Figure 6: Activity Centers Map



This map depicts population density (Residents per Acre) based on 2010 U.S. Census Bureau Shapefile and data at the Census Block Group level. The densest section of the study area is north of US 92/SR 600/ISB and east of SR 483/Clyde Morris Blvd. Anchored by Halifax Health, Daytona State College, University of Central Florida and Daytona Plaza, this section of the study area is primarily residential and features a traditional grid street network.

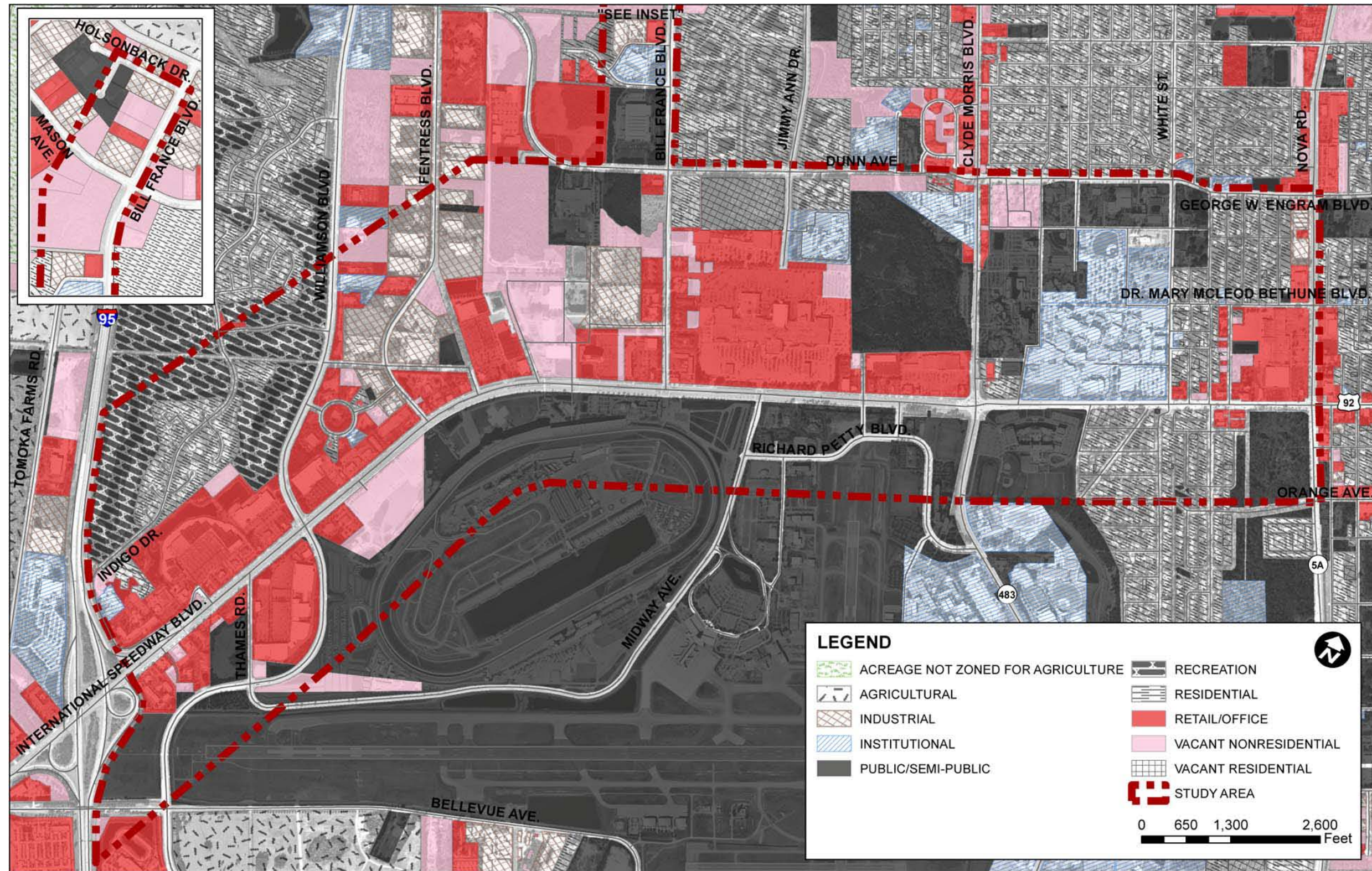
Figure 7: Population Density Map



Source: U.S. Census Bureau. Map Created 08/14/14

This map depicts median household income (2010 Adjusted Dollars) from the 2010 U.S. Census at the Census Block Group level. The median household income within the entire study area ranges from \$20,001 to \$40,000.

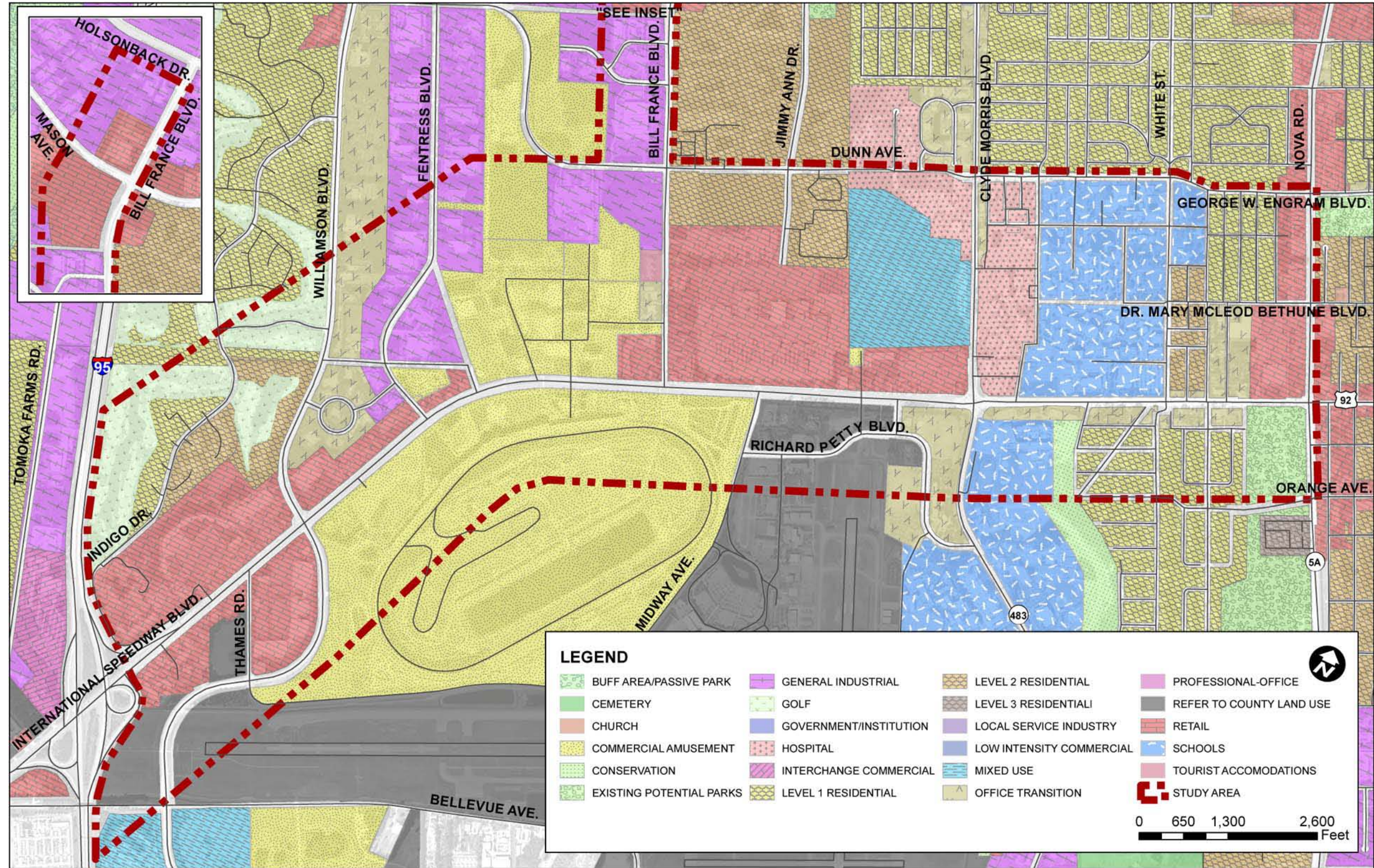
Figure 8: Median Household Income Map



Source: University of Florida GeoPlan Center. Map Created 08/14/14

As depicted in this existing land use map, the study area west of SR 483/Clyde Morris Blvd is dominated by large scale retail/office land use, north of US 92/SR 600/ISB. South of US 92/SR 600/ISB, land use is dominated by two major Public/Semi-Public land uses: the Daytona International Speedway and Daytona Beach International Airport. East of SR 483/Clyde Morris Blvd, the study area features a mix of land uses, including Residential, Retail/Office, and Institutional. Industrial uses within the study area are within the vicinity of Fentress Blvd and Bill France Blvd.

Figure 9: Existing Land Use Map



Source: City of Daytona Beach. Map Created 08/14/14

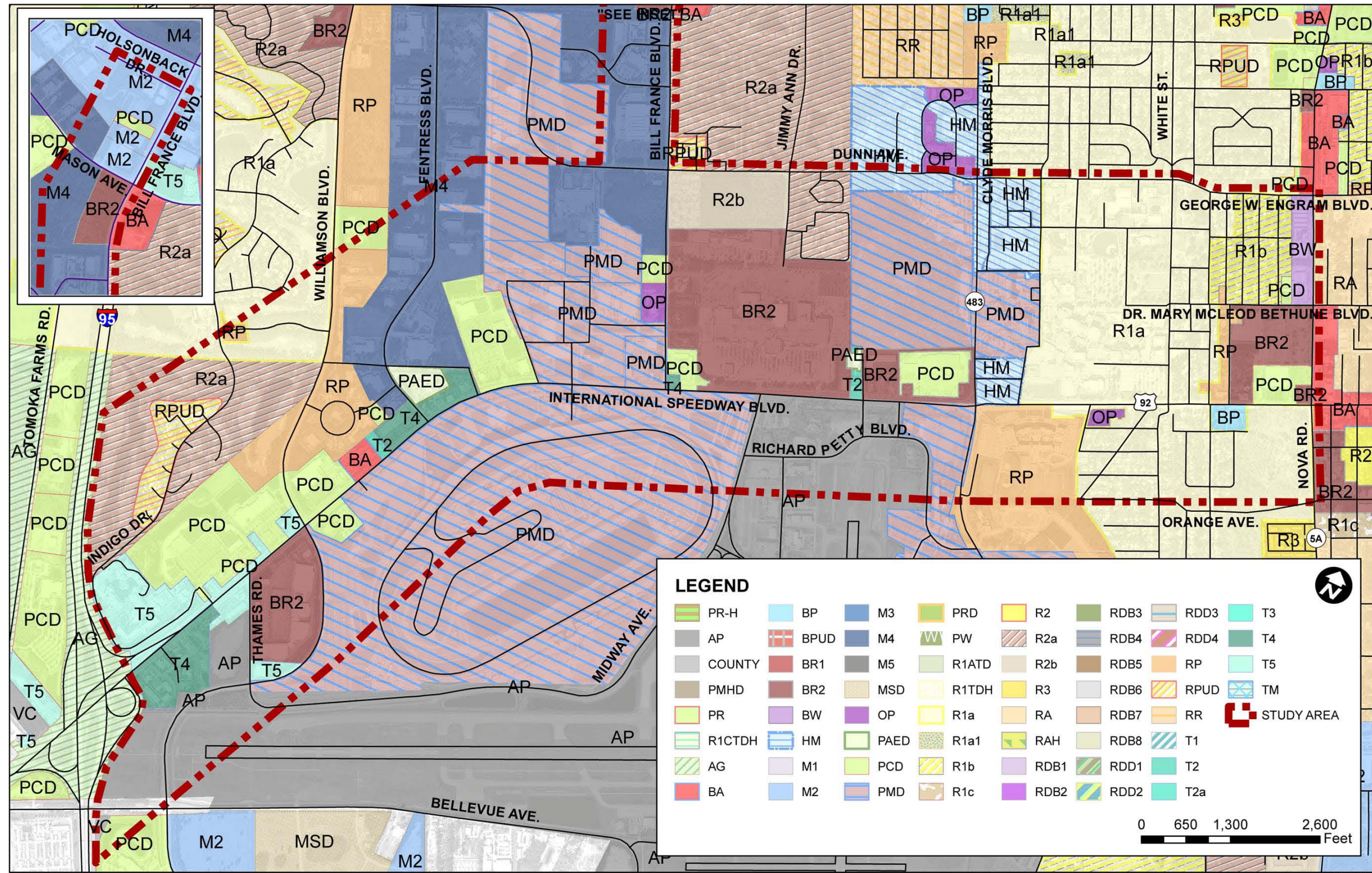
The 2030 Future Land Use Map includes the currently adopted future land use categories from the City of Daytona Beach Comprehensive Plan.

Figure 10: 2030 Future Land Use Map

FUTURE LAND USE CATEGORY	ZONING DISTRICTS	F.A.R	Max DUPA	TOTAL ACREAGE
Level 1 Residential (1 to 8)	R-1a, R-1b, R-PUD, AG (as a holding category)	1.1	8.0	5714.0
Level 2 Residential (9 to 20)	RR, R-2, R-2a, RA, R-PUD, AG (as a holding category)	1.1	20.0	2538.0
Level 3 Residential (21 to 40)	R-2b, R-3, R-PUD, AG (as a holding category)		40.0	204.0
Mixed Use	R-2, R-2a, R-3, RA, RP, BP, OP, T-1, T-2, T-3, BR-2, R-PUD, PCD, M-4, AG	25.0	25.0	1327.0
Office Transitional	RP, OP, AG (as a holding category)	3.0	40.0	851.0
Redevelopment	RDB, RDD		40.0	571.0
Commercial Amusement	AE, PAED	3.0	40.0	582.0
Tourist Accommodations	T-1, T-2a, AG (as a holding category)	3.0	40.0	242.0
Retail	T-2, BR-2, T-3, T-4, BA, T-5, AG (as a holding category) BP, SI, PCD	3.0	40.0	1345.0
Interchange Commercial	R-1a, R-1b, R-PUD, AG (as a holding category)		40.0	364.0
Local Service Industry	BW, M-1 (In limited older areas), AG (as a holding category)	1.0		145.0
General Industrial	M-2, M-3, M-4, AG (as a holding category)	0.7		2891.0
Government Administration	AG (as a holding category). Public uses permitted in all FLU categories.	3.0		146.0
Airport	Public use permits	20.0		1076.0
Schools	Public use permits			507.0
Hospital	HM	0.6		201.0
Church	Special use permits	0.5		38.0
Cemetery	Special use permits			85.0
Conservation	AG or as part of a Planned District	0.1		8060.0
Low Intensity Urban	R-PUD, AG, PCD	1.0	1.0	5505.0
Urban Transitional	AG (as a holding category), Planned Districts	0.5	0.5	396.0
Golf				1185.0
Existing / Potential Parks				348.0
Business Area PP				332.0

This chart, from the 2011 International Speedway Boulevard Corridor Transportation Plan Report, provides the existing City of Daytona Beach future land use designations, compatible zoning districts for those designations, and land development regulations associated with those designations.

Figure 11: Future Land Use Matrix



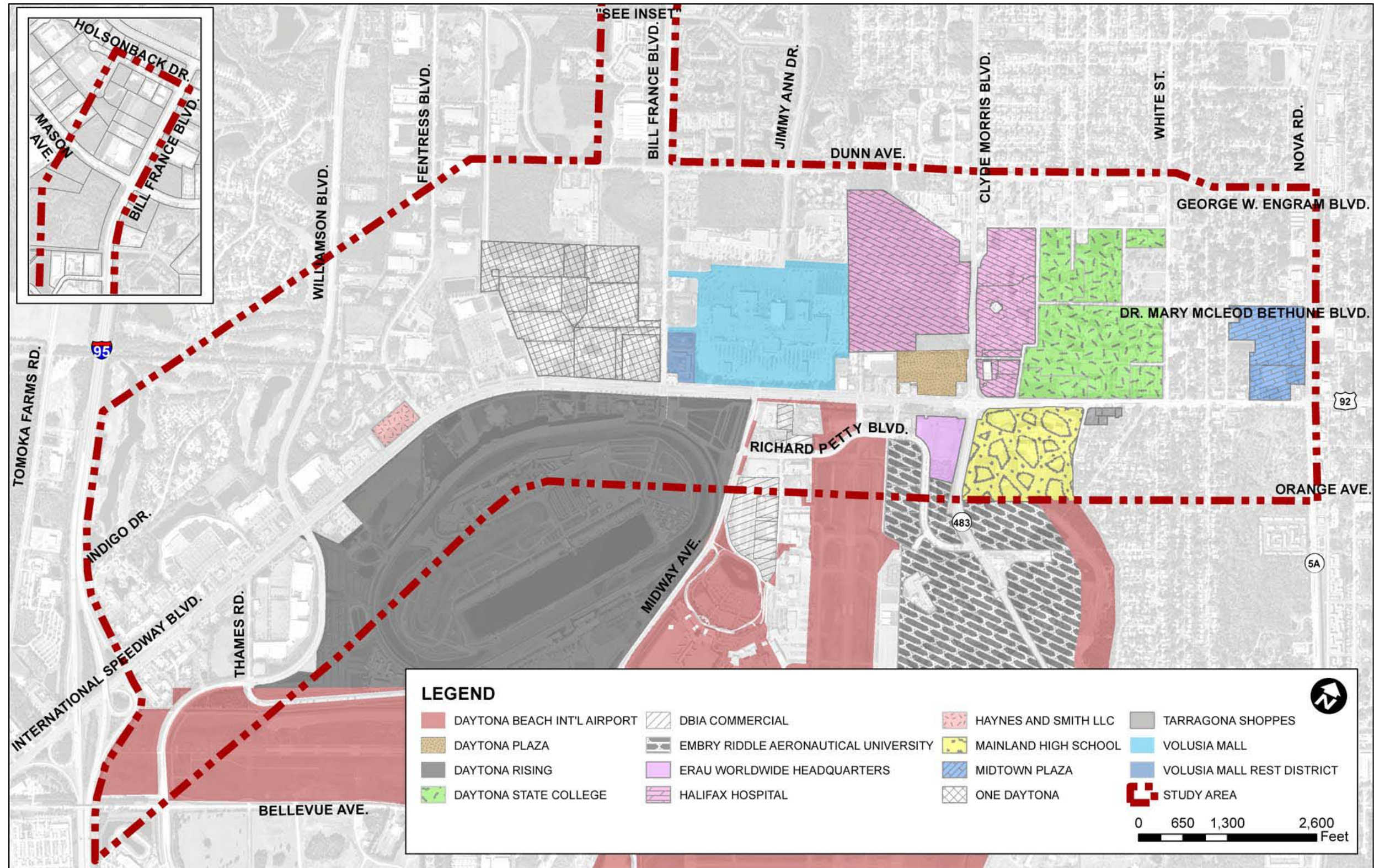
This map depicts the existing zoning classifications within the study area as designated by the City of Daytona Beach. Within the study area, the area west of SR 483/Clyde Morris Blvd has limited residential zoning districts, mainly the Indigo Lakes community along Williamson Blvd and multi-family development along Dunn Ave.

Figure 12: Zoning Map

Zoning District	District Abbreviation	Minimum Front Setback	Maximum Building Height	Max. Dwelling Units/Acre	Maximum Floor Area Ratio	Maximum Lot Coverage
	PCS					
Planned Redevelopment-H	PR-H					
Planned Commercial Development-H	PCD-H	25'	none	N/A	varies	50%
Amusement Entertainment	AE	25'	35'	40	3	50%
Agriculture	AG	75'	3 stories	0.2 (1 S.F./5 acres)	0.6	20%
Business Automotive	BA	min. from st. centerline, 25' (Res. Only)	None	40	3	35% (residential only)
Business Professional	BP	min. from st. centerline, 25' (Res. Only)	None	40	3 (Retail), 25(MU)	35% (residential only)
Business Retail	BR1	min. from st. centerline, 25' (Res. Only)	None	40	??	35% (residential only)
Shopping Center	BR2	min. from st. centerline, 25' (Res. Only)	None	40	3 (Retail), 25(MU)	35% (residential only)
Business Warehouse	BW	min. from st. centerline, 25' (Res. Only)	None	40	1	35% (residential only)
Highway Interchange District	HID	50'	None	20 (Res. Only)	??	50%
Hospital Medical	HM	30'	None	N/A	0.6	35%
Local Industry	M1	None	None	N/A	1	None
Light Industry	M2	50'	None	N/A	0.7	60%
General Industry	M3	50'	None	N/A	0.7	70%
Industrial Park	M4	75' (<2acres), 100' (2 acres or more)	None	40 (MU only)	0.7 (GI), 25 (MU)	60%
Major Sports District	MSD	25' (stadium/Race Track), 50' (all others)	35' (BP only)	N/A	N/A	40%, 50% (stad/track)
Office Professional	OP	30'	35'	40 (OT), 25 (MU)	3 (OT), 25 (MU)	35%
Planned Amusement/Entertainment	PAED	10'	35'	N/A	3	30% min for land/water
Planned Commercial Development	PCD	25'	none	N/A	varies	50%
Planned Master Development	PMD	varies	varies	varies	varies	varies
Planned Redevelopment	PRD	varies	varies	varies	varies	varies
Public Waterfront	PW	varies	varies	varies	varies	varies
Planned Mobile Home	PMH	25'	25' (mobile homes), 35'		1.2	40%
Planned Recreational Vehicle Park	PRV					
	R1ATD					
	R1CTDH					
	R1TDH					
Single Family	R1a	30'	35'		1.05	35%
Single Family	R1a1	25'	35'		1.05	35%
Single Family	R1b	25'	35'		1.05	35%
Single Family	R1c	25'	35'		1.05	35%
Multi Family	R2	25'	35'	12	1.05	35%
Multi Family	R2a	25'	35'	12	1.05	35%
Multi Family	R2b	25'	35'	20	1.05	35%
Multi Family	R3	25'	None	40		35%
Multi Family	RA	25'	None	18		35%
	RAH					
Hotel, Mixed Use	RDB1	20'	none	40		60%
Specialty Retail	RDB2	none	35'	20		none
Gateway Residential Mixed Use	RDB3	none	35'	20		none
Boardwalk Amusement	RDB4	none	27' above mean sea level	40		none
Atlantic Avenue Retail	RDB5	10'	none	40		60%
Surfside Village	RDB6	25'	35'	6 (S.F.), 12 (M.F.)	1.05	35%
Riverfront Lodging	RDB7					
Pub., Pri. Ent., parking & mixed uses	RDB8	20'	35'	20	1.8	60%
Beach Street Retail	RDD1	none	40'	40		none
Central Business Mixed Use	RDD2	none	none	20		none
Commercial	RDD3	none	75'	20		none
Business, Motor Vehicle Mixed Uses	RDD4	none	none	40		none
Residential, Professional	RP	25'	35'	20	1.05	35%
Residential Planned Unit Development	RPUD	20' (residential only), 25'	35' (S.F. only)	varies	varies (1.2 S.F.)	40%
Multi Family	RR	20'	35'	9	1.05	35%
Tourist Accomodation	T1	None; 25' Oceanfront	None	40	3, 25 (MU)	60%(oceanfront)
Tourist, office & restaurant	T2	20'	None	40	3, 25 (MU)	
Tourist & office	T2a	20'	None	40	3	60%
Tourist, office & retail	T3	10'	None	40	3, 25 (MU)	60%
Tourist, office, retail & auto	T4	10'	None	40	3	60%
Tourist, Highway Interchange	T5	50' (major), 20' (minor)	None	20		60%

Figure 13: Daytona Beach Zoning Matrix

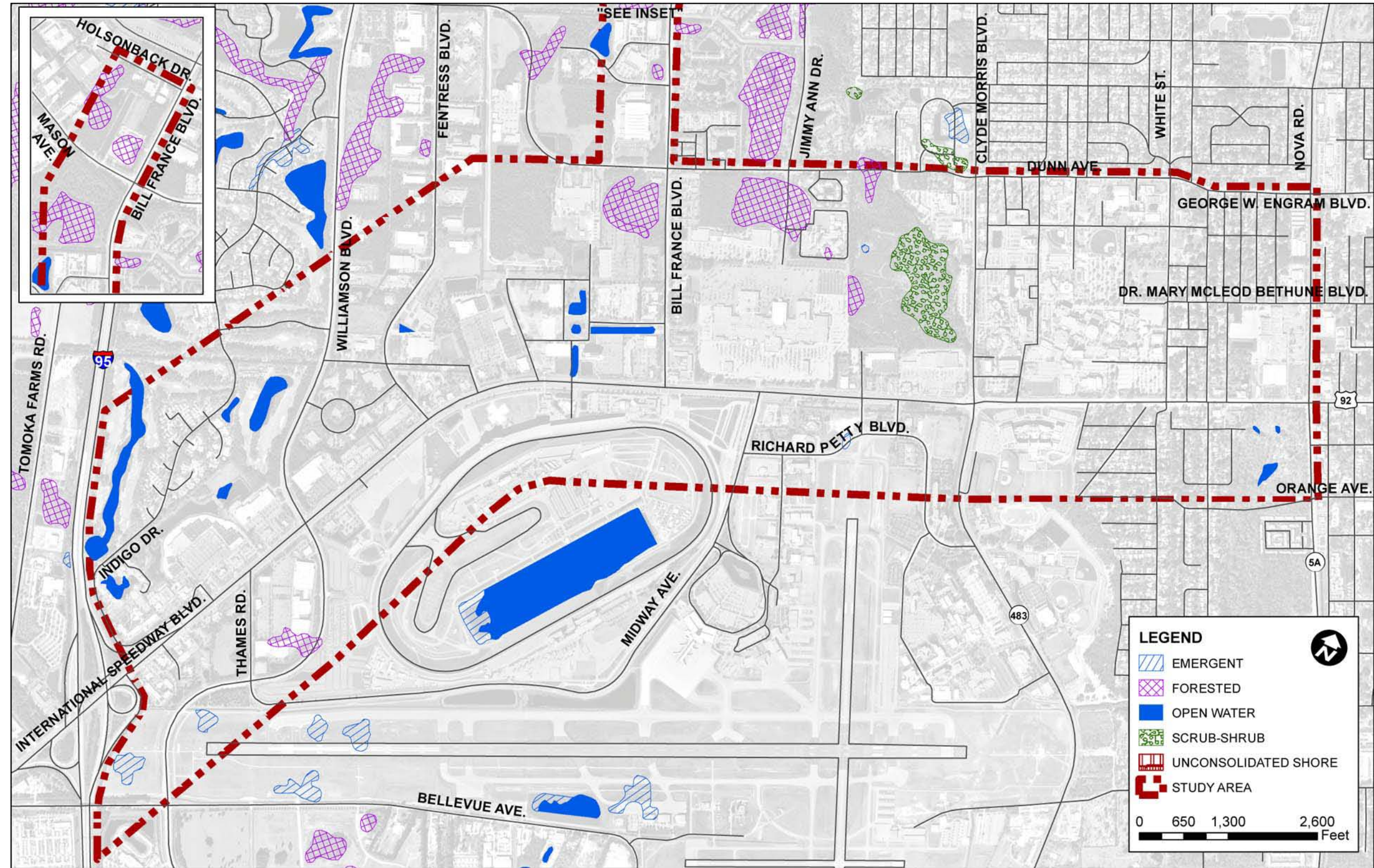
This is a description of the zoning district classifications for the City of Daytona Beach from the 2011 International Speedway Boulevard Corridor Transportation Plan Report. This chart provides the existing City of Daytona Beach zoning districts and performance standards and criteria associated with each district including minimum front building setbacks, maximum building height, maximum dwelling units/acre, maximum floor area ratio, and maximum lot coverage.



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts private development projects that are planned or under construction within the study area. Daytona Rising, the expansion of the Daytona International Speedway, dominates much of the study area. Retail infill projects include One Daytona and Tarragona Shoppes. Major retail centers, such as the Volusia Mall, Midtown Plaza, Daytona Plaza, and Haynes and Smith LLC, will be undergoing renovation. Additional expansion on the campuses of the Daytona Beach International Airport, Embry-Riddle Aeronautical University, Daytona State College, and Halifax Health are anticipated.

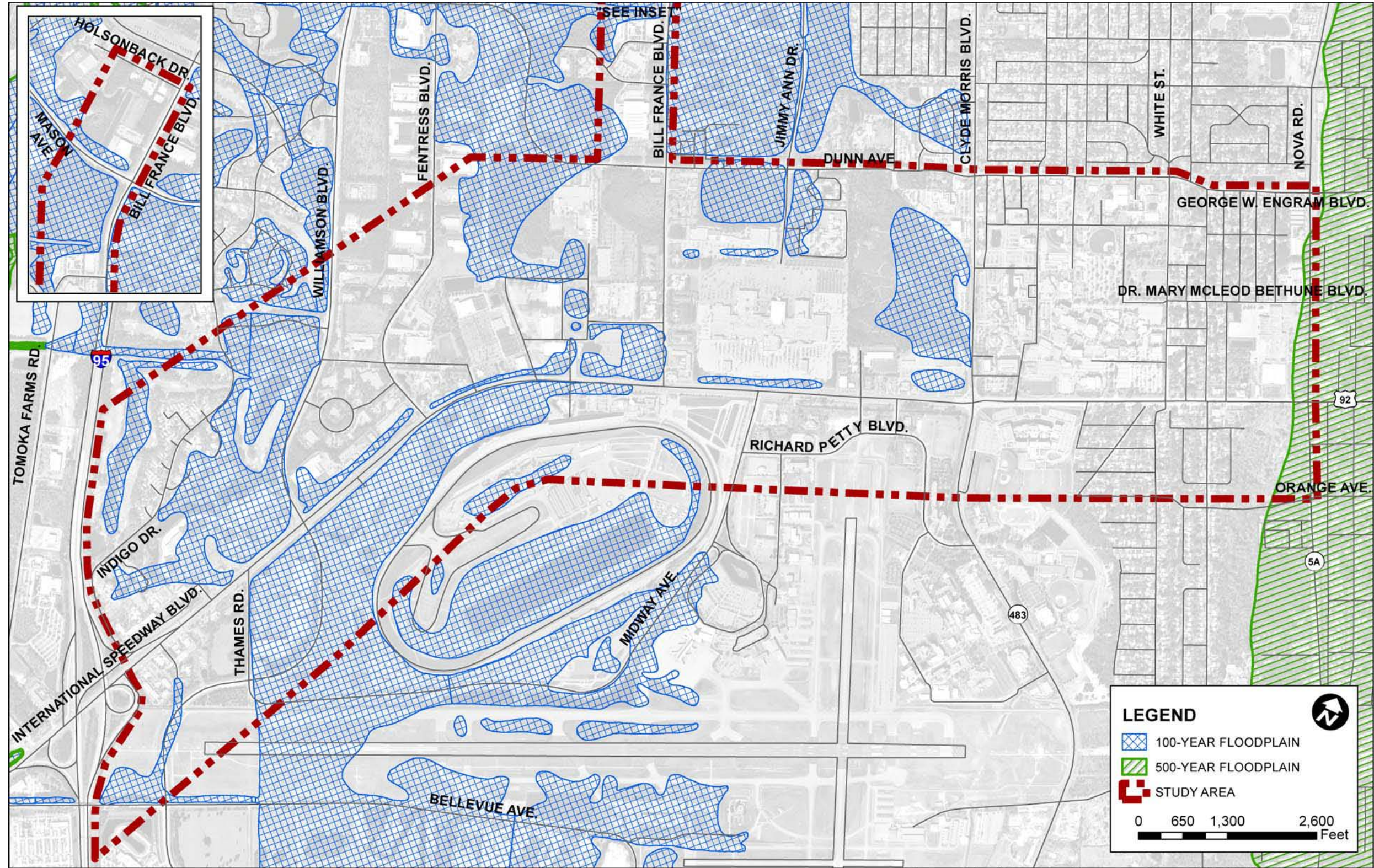
Figure 14: Planned Projects Map



Source: Federal Emergency Management Agency (FEMA). Map Created 08/14/14

This map illustrates the wetlands within the study area as defined by the St. Johns River Water Management District. While the majority of the study area consists of uplands, small isolated sections of Forested and Scrub-Shrub wetlands exist in the vicinity of Dunn Ave. Emergent wetland areas are present within the vicinity of Daytona Beach International Airport’s Runway 07L. In addition, several small storm-water retention ponds and man-made lakes are located within the study area.

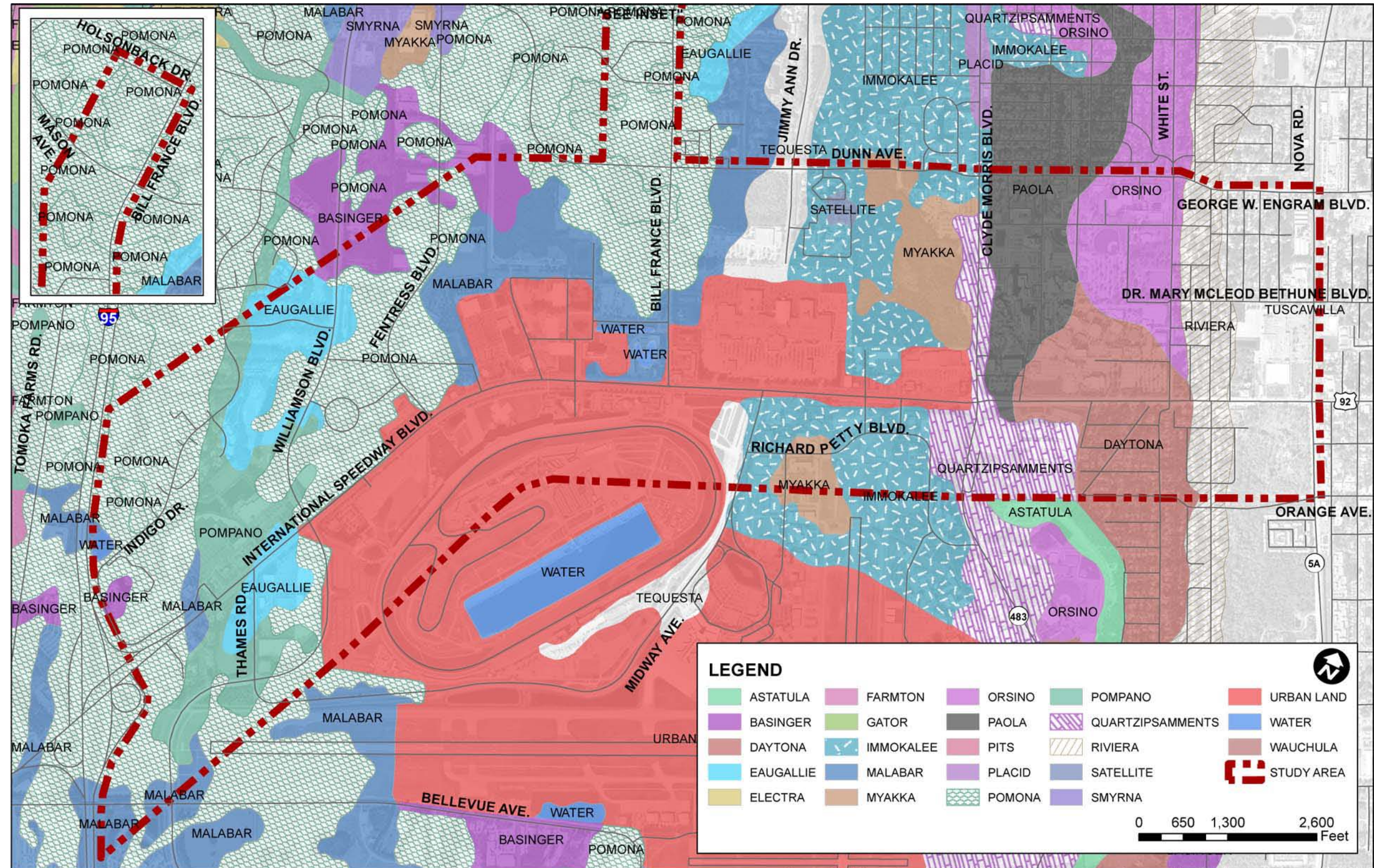
Figure 15: Wetlands Map



Source: Federal Emergency Management Agency (FEMA). Map Created 08/14/14

The Federal Emergency Management Area (FEMA) 100-year and 500-year floodplain areas are shown. A significant amount of property within the study area, west of SR 483/Clyde Morris Blvd, falls within the 100-Year Floodplain. Identified pedestrian improvement sites within the floodplains may require additional analysis to determine the extent of any mitigation required for construction in these areas.

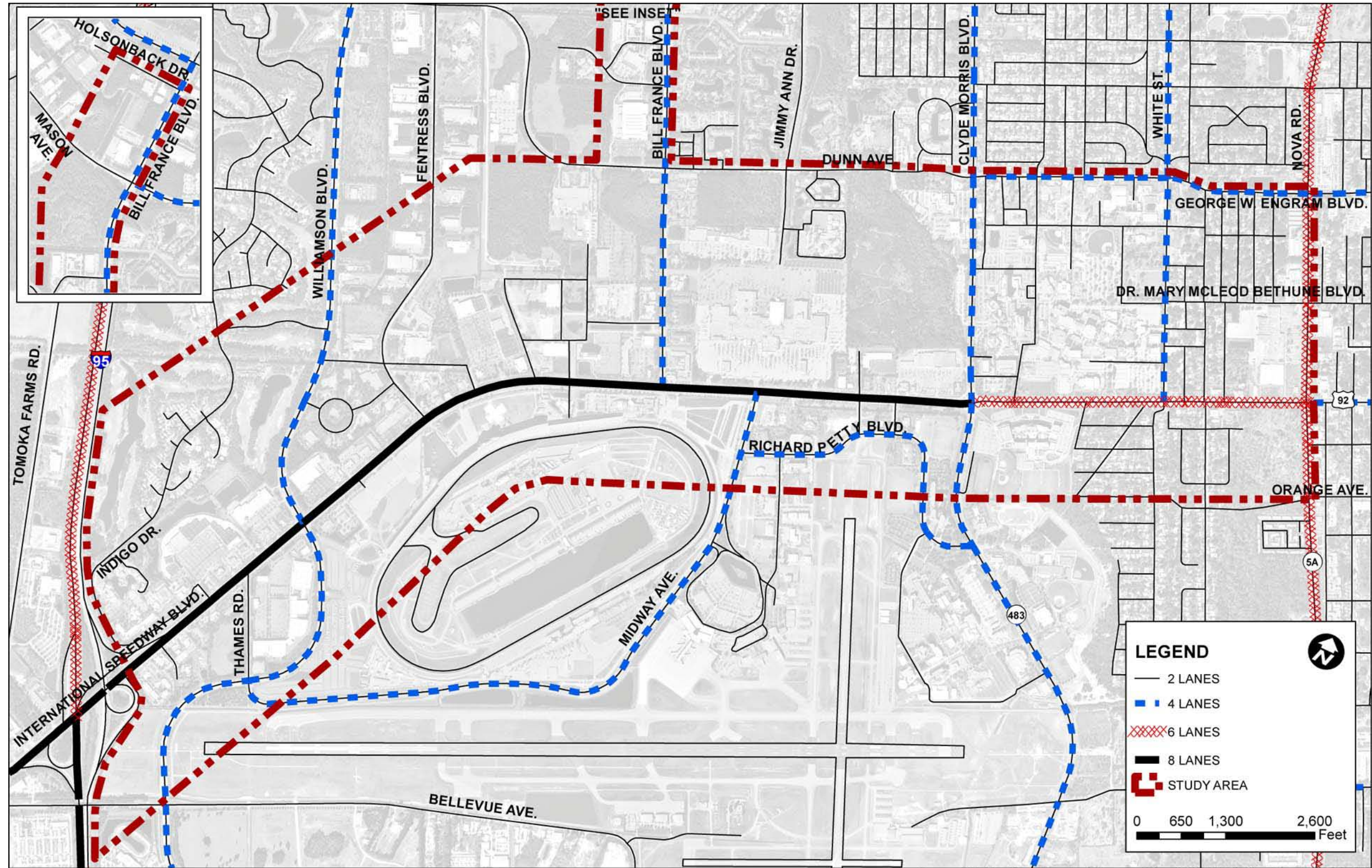
Figure 16: Flood Hazard Zones Map



Source: U.S. Department of Agriculture, Natural Resources Conservation Service. Map Created 08/14/14

This map identifies existing soil conditions within the study area as defined by U.S. Department of Agriculture, National Resources Conservation Service. Pomona, Urban Land, and Daytona soil types are the most dominant soil types within the study area.

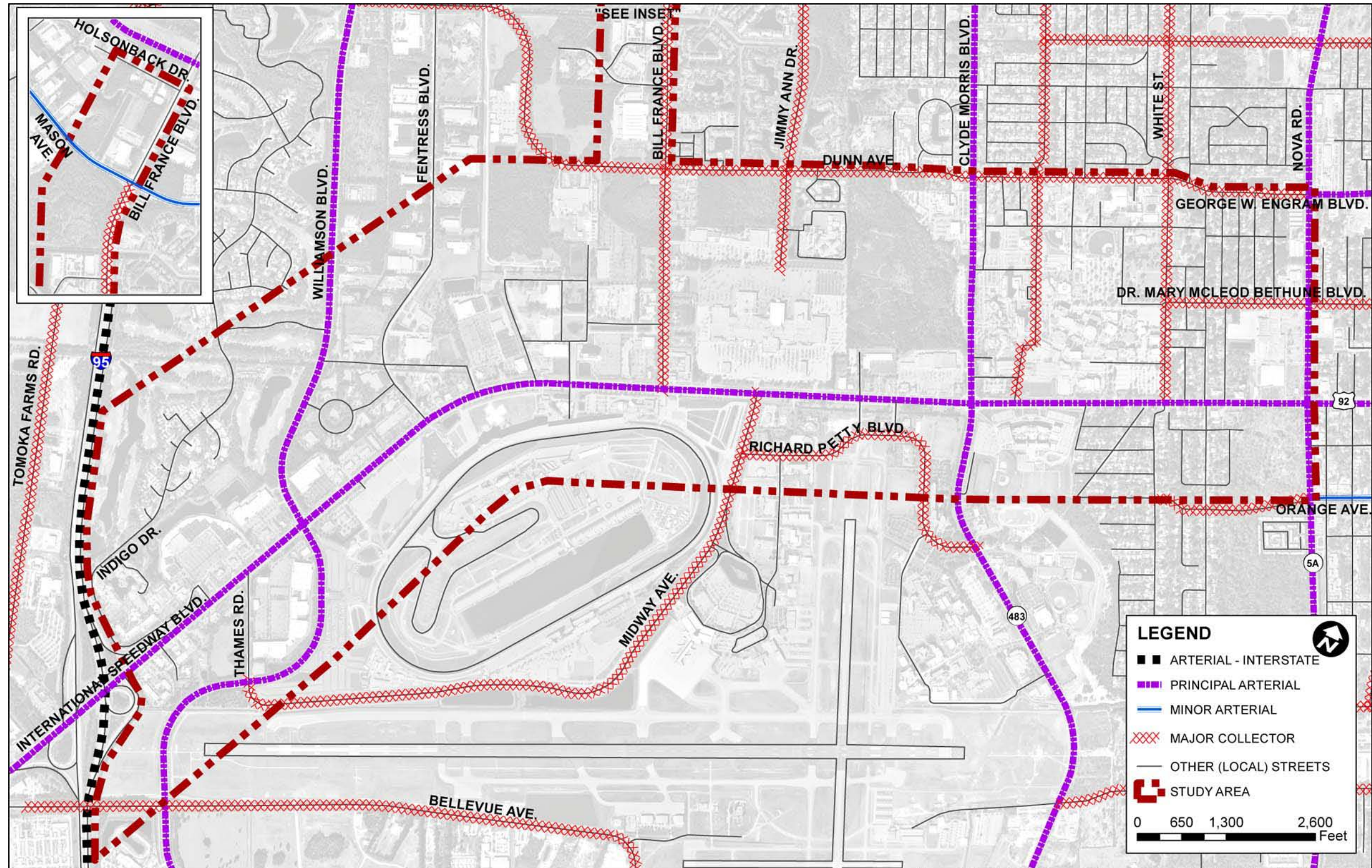
Figure 17: Soils Map



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

This map depicts the existing number of lanes for the major roadway network. US 92/SR 600/ISB varies between 6 lanes and 8 lanes from Tomoka Farms Rd to SR 5A/Nova Rd. SR 5A/Nova Rd is a 6-lane roadway within the study area. Major 4-lane facilities within the study area include SR 483/Clyde Morris Blvd, Williamson Blvd, Bill France Blvd, Midway Ave, Richard Petty Blvd, White St, and Dunn Ave.

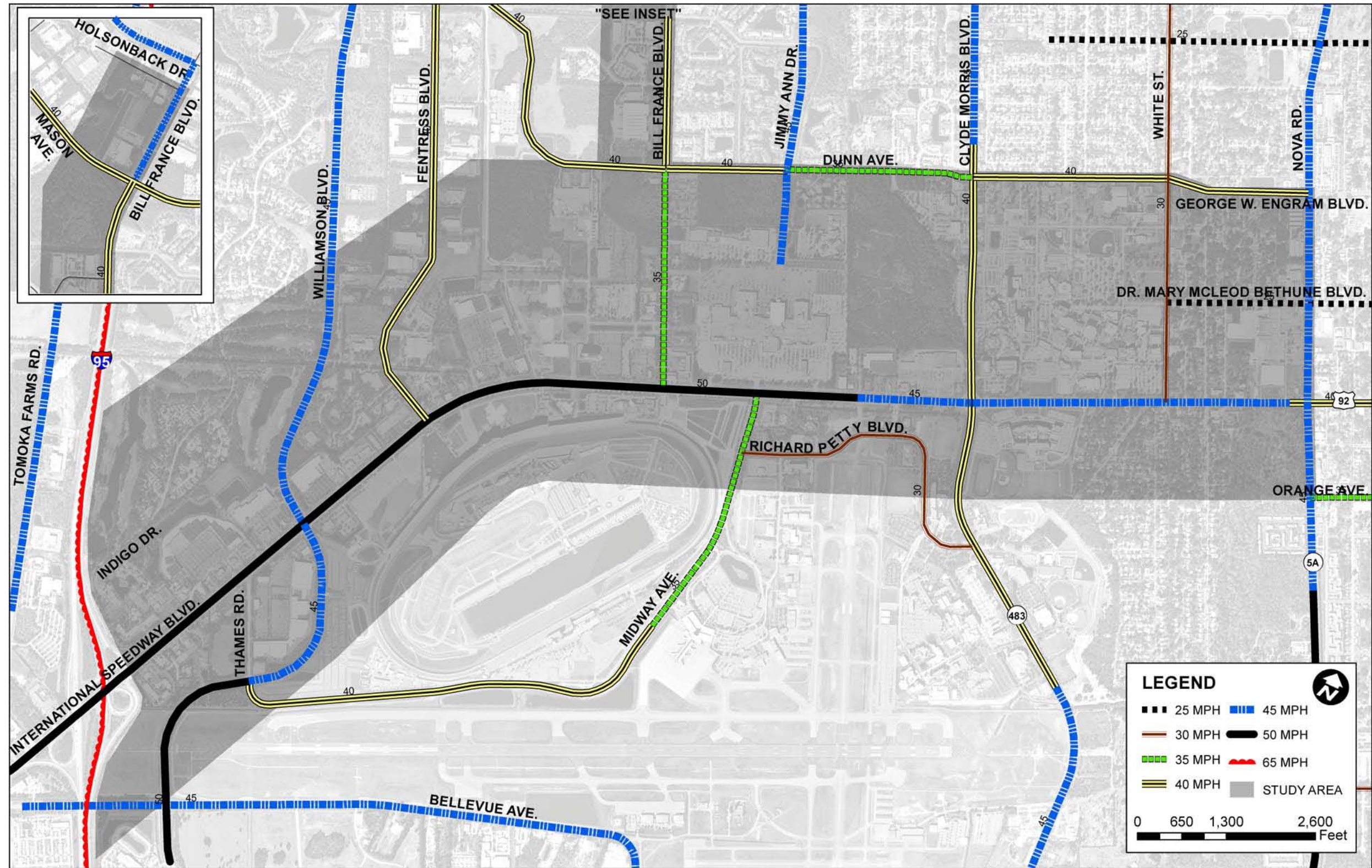
Figure 18: Existing Roadway Network Map



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

The roadway classifications of the major roadway network, such as Interstate, Principal Arterial, Minor Arterial and Major Collector, are illustrated. Principal Arterials within the study area include US 92/SR 600/ISB, Williamson Blvd, SR 483/Clyde Morris Blvd, and SR 5A/Nova Rd.

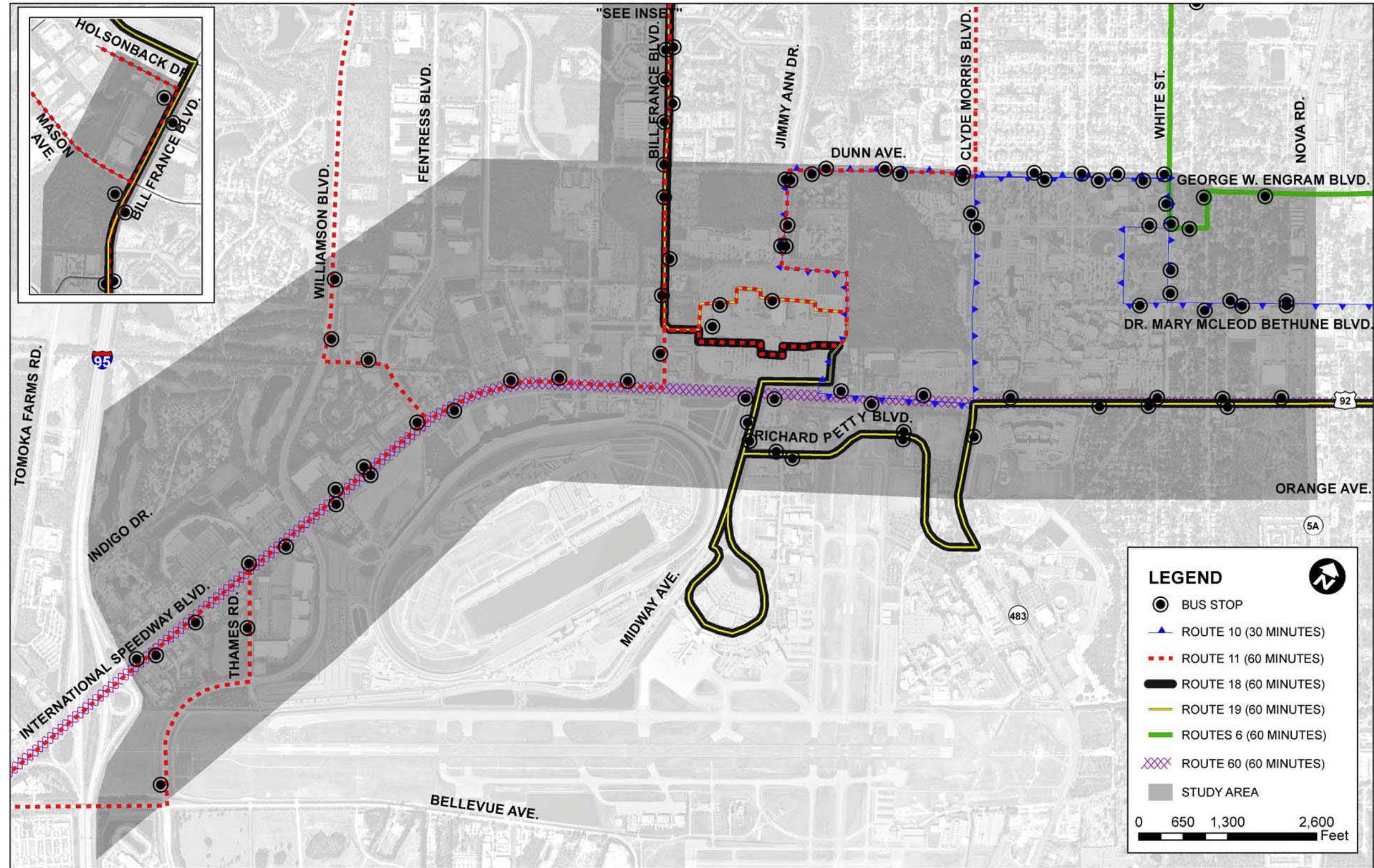
Figure 19: Roadway Classifications Map



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

This map depicts the various speed limit zones of the roadway classification system within the study area as set by FDOT District 5. The majority of roadway facilities within the study area fall within the 36-45mph speed limit zone. US 92/SR 600/ISB has a maximum speed limit of 50 mph west of SR 483/Clyde Morris Blvd.

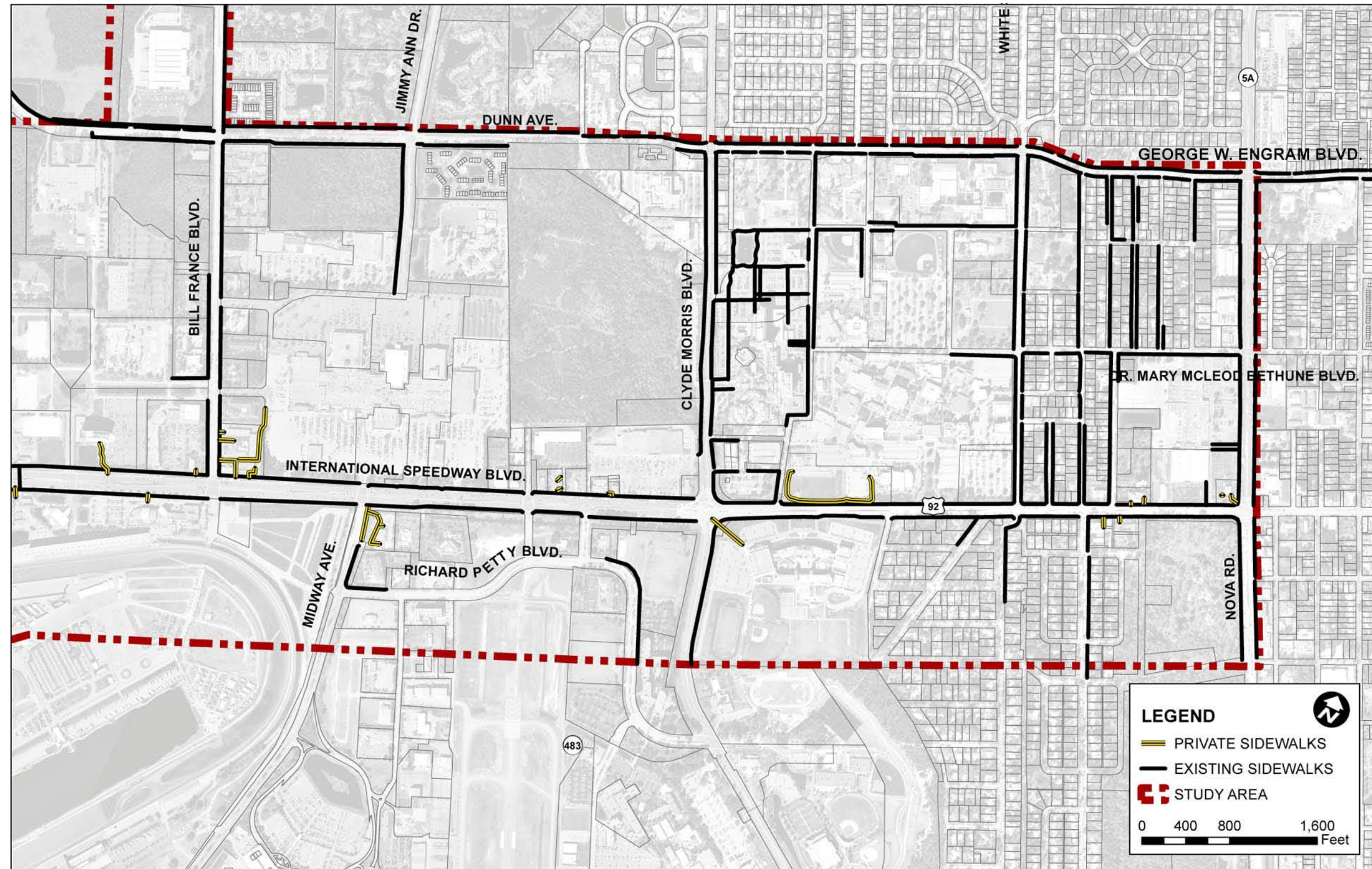
Figure 20: Maximum Speed Limits Map



Source: Ghyabi & Associates. Map Created 08/14/14

This figure identifies existing transit routes and bus stop locations within the study area are depicted. Six Votran routes currently provide coverage within the study area. Four of the six routes provide service to Volusia Mall. Only one bus route (Route 10) provides 30 minute headways.

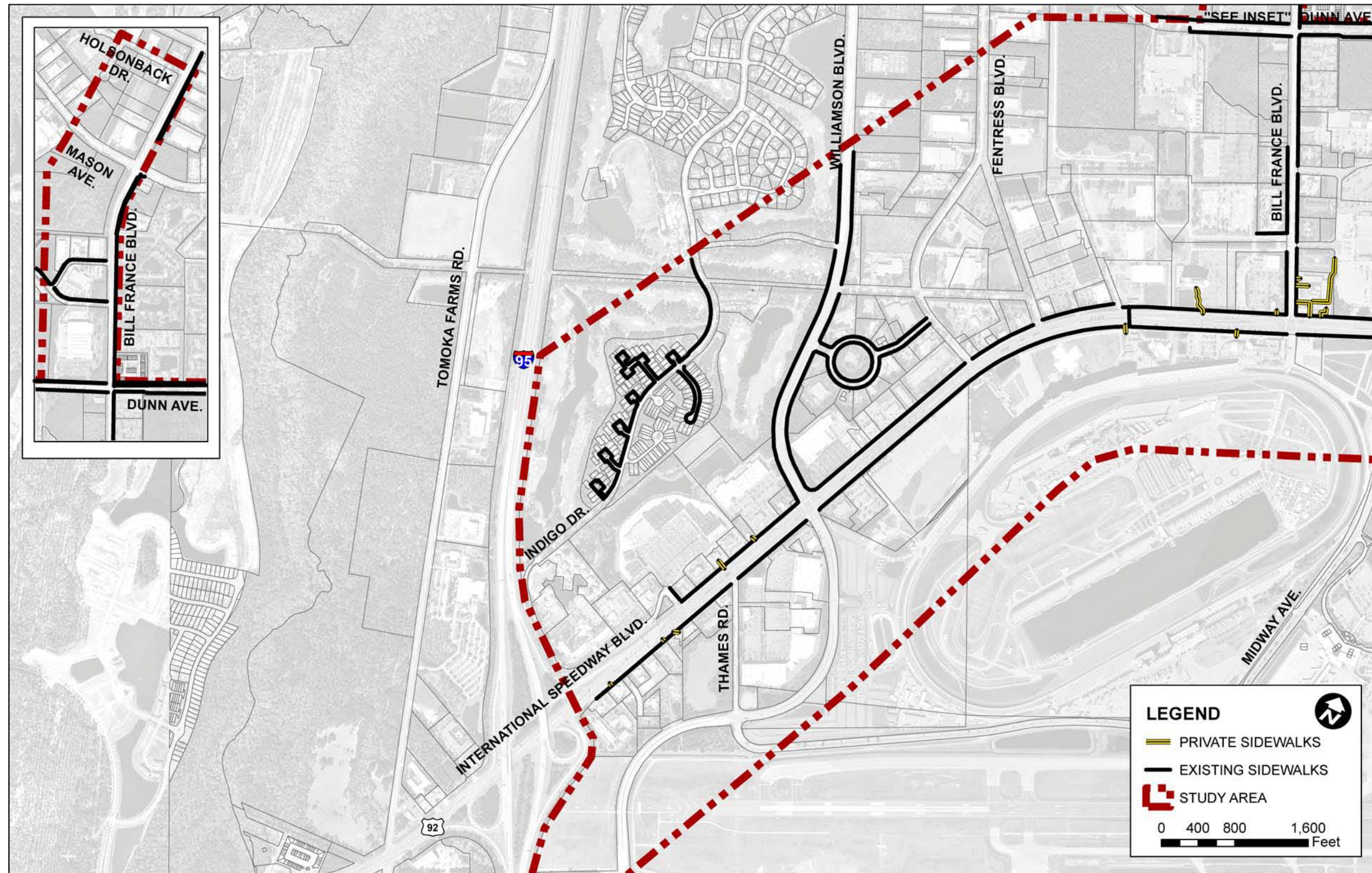
Figure 21: Existing Transit Network Map



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the existing sidewalk facilities in the study area. While US 92/SR 600/ISB has 100% sidewalk coverage, significant gaps exist on stretches of Bill France Blvd, Midway Ave, Richard Petty Blvd, and SR 483/Clyde Morris Blvd. There is also limited connectivity (via private sidewalks) between public sidewalks and adjacent land uses.

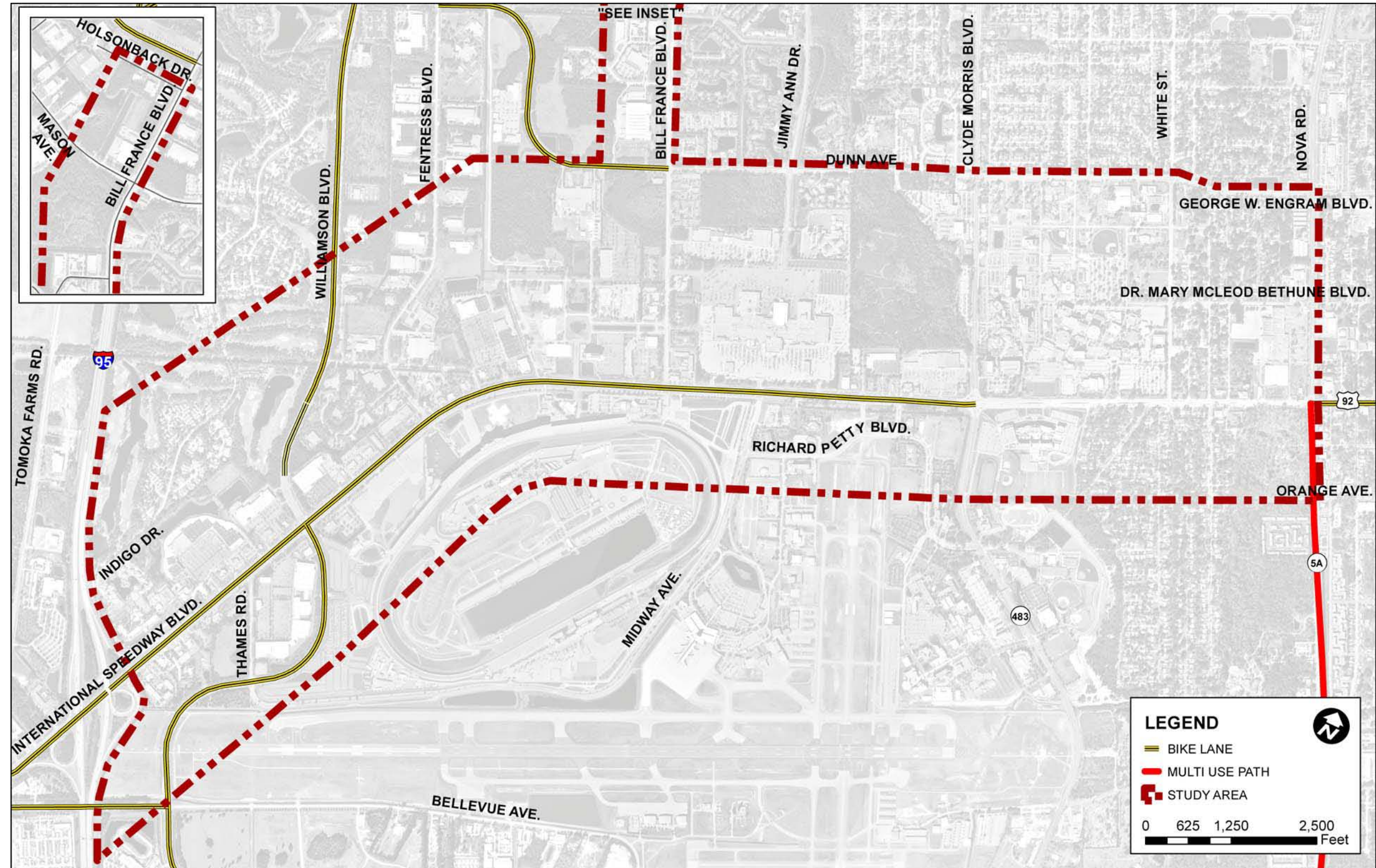
Figure 22: Existing Pedestrian Network Map (SR 5A/Nova Rd to Bill France Blvd)



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the existing sidewalk facilities in the study area. While US 92/SR 600/ISB has 100% sidewalk coverage, significant gaps exist on stretches of Bill France Blvd, Midway Ave, Richard Petty Blvd, SR 483/Clyde Morris Blvd, and Williamson Blvd. There is also limited connectivity (via private sidewalks) between public sidewalks and adjacent land uses. No sidewalk facilities are present on Fentress Blvd.

Figure 23: Existing Pedestrian Network Map (Bill France Blvd to I-95)



Source: Ghyabi & Associates. Map Created 08/14/14

The existing bike lanes or paved shoulders and multi-use paths in the study area are depicted. Bike lane facilities are provided within the study area along US 92/SR 600/ISB, Williamson Blvd and portions of Bellevue Ave and Dunn Ave. A multi-use path is provided adjacent to SR 5A/Nova Rd, south of US 92/SR 600/ISB. Overall, significant connectivity gaps exist within the bicycle network.

Figure 24: Existing Bicycle Network



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the location of marked and other pedestrian crossings within the study area. The majority of xings within the study area are unmarked.

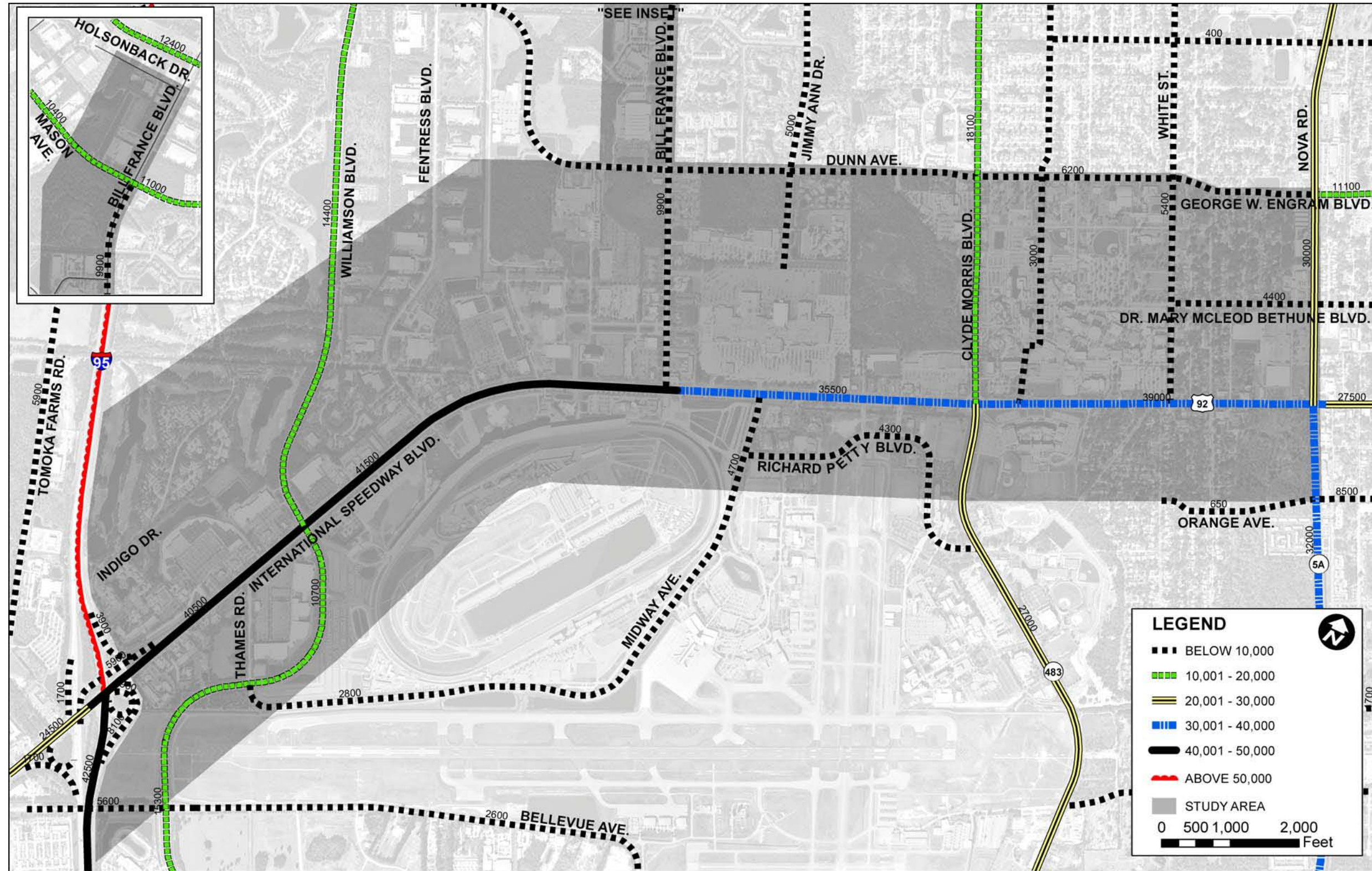
Figure 25: Marked Crosswalks and Other Xing Locations (SR 5A/Nova Rd to Bill France Blvd)



Source: Ghyabi & Associates . Map Created 08/14/14

This map depicts the location of marked and other pedestrian crossings within the study area. The majority of crossings within the study area are unmarked. In particular, US 92/SR 600/ISB, west of SR 483/Clyde Morris Blvd, contains a significant number of unmarked crossings at access points to adjacent land uses.

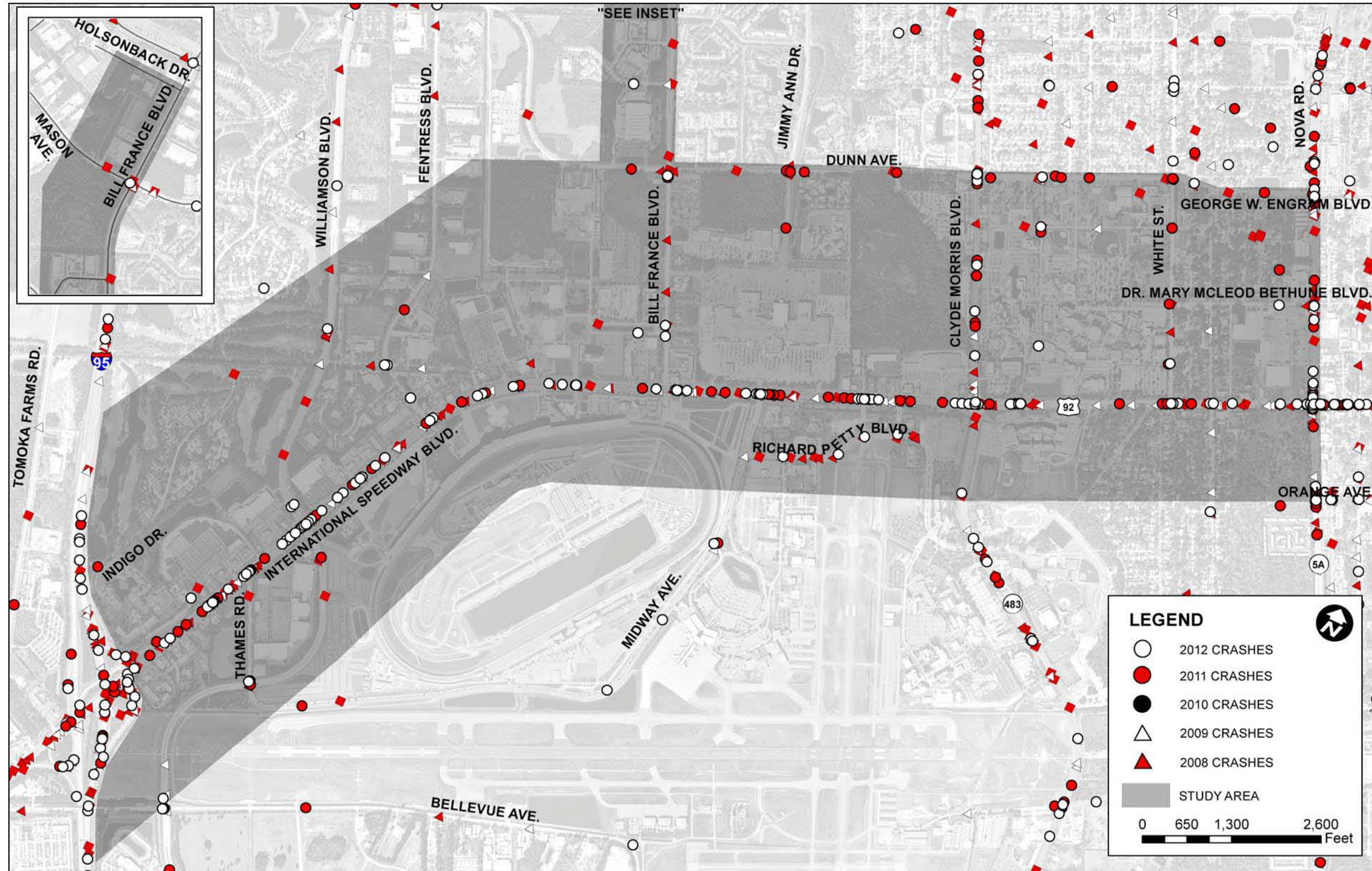
Figure 26: Marked Crosswalks and Other Xing Locations (Bill France Blvd to I-95)



The 2012 AADT volumes, as provided by the FDOT, are shown on this map. The highest measured AADT volumes within the study area are on US 92/SR 600/ISB between I-95 and Bill France Blvd and between SR 483/Clyde Morris Blvd and SR 5A/Nova Rd.

Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

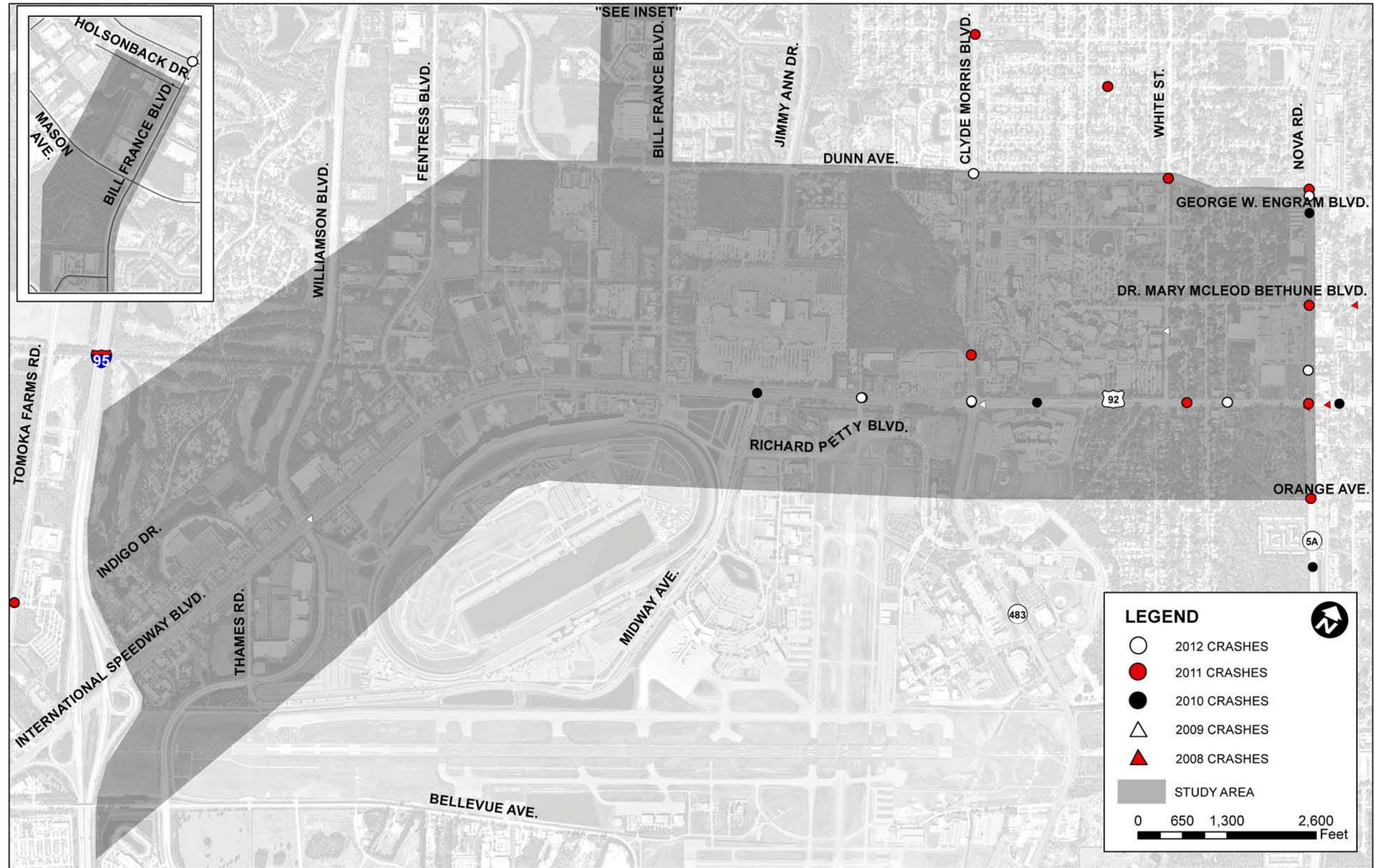
Figure 27: 2012 Annual Average Daily Traffic (AADT)



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

This map depicts the locations of automobile crashes within the study area for the 2008 - 2012 time periods. Each crash is represented on the map by a circle. A reportable crash is a collision with at least one of the following results: Property damage exceeding \$1,000, Personal injury and/or Fatality. The majority of automobile crashes within the study area occur along US 92/SR 600/ISB. The highest concentration of crashes occur at intersections with SR 5A/Nova Rd, SR 483/Clyde Morris Blvd, and Williamson Blvd. Additional high crash locations within the study area occur along SR 5A/Nova Rd at Dunn Ave and Orange Ave, and along SR 483/Clyde Morris Blvd at the campuses of Halifax Health and Embry-Riddle Aeronautical University.

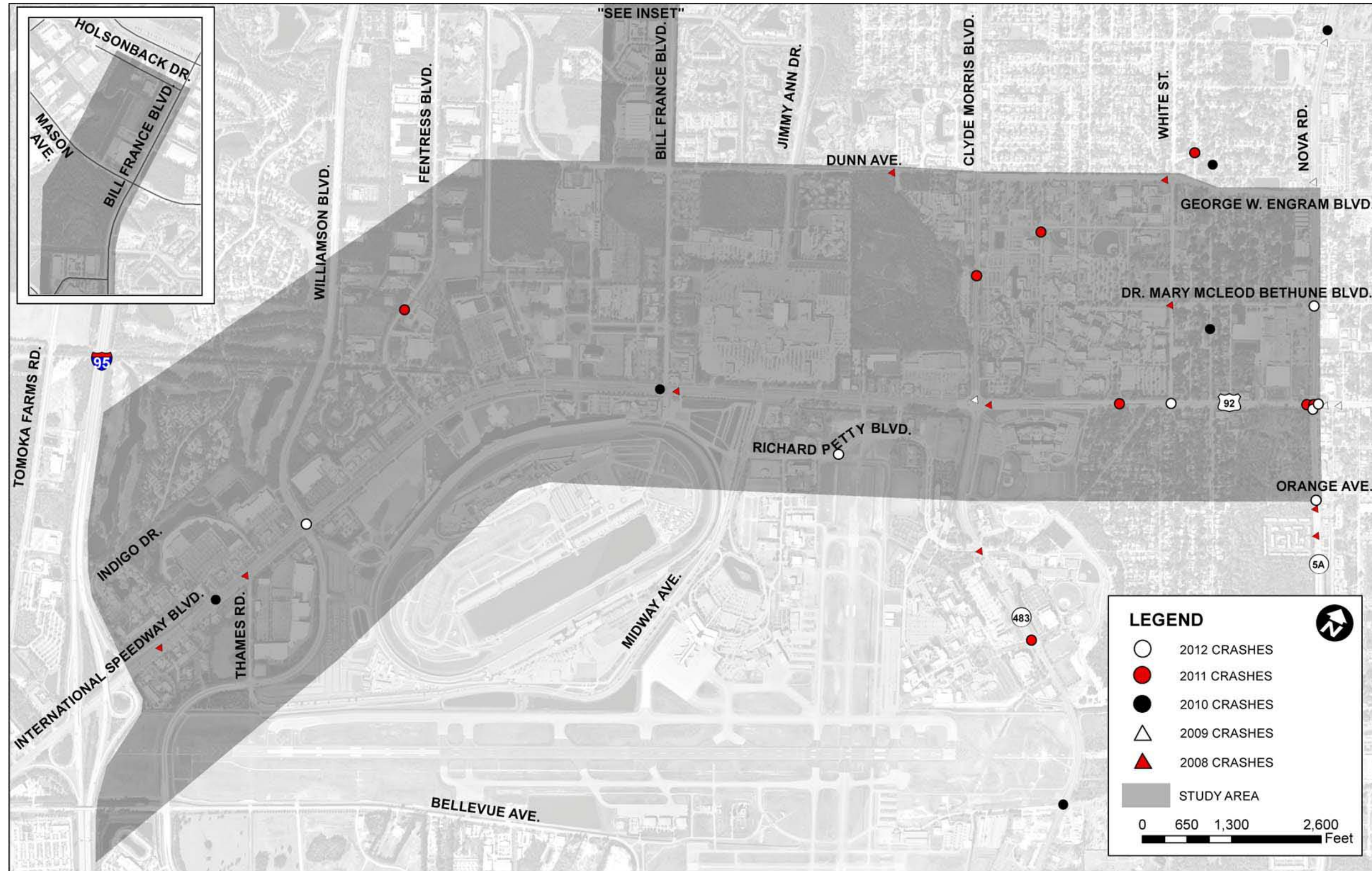
Figure 28: Automobile Crashes Map



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

This map depicts the locations of bicycle crashes within the study area for the 2008-2012 time periods. All bicycle crashes, between 2008 and 2012, have occurred east of Midway Ave, within the vicinity of major medical and educational land uses within the study area.

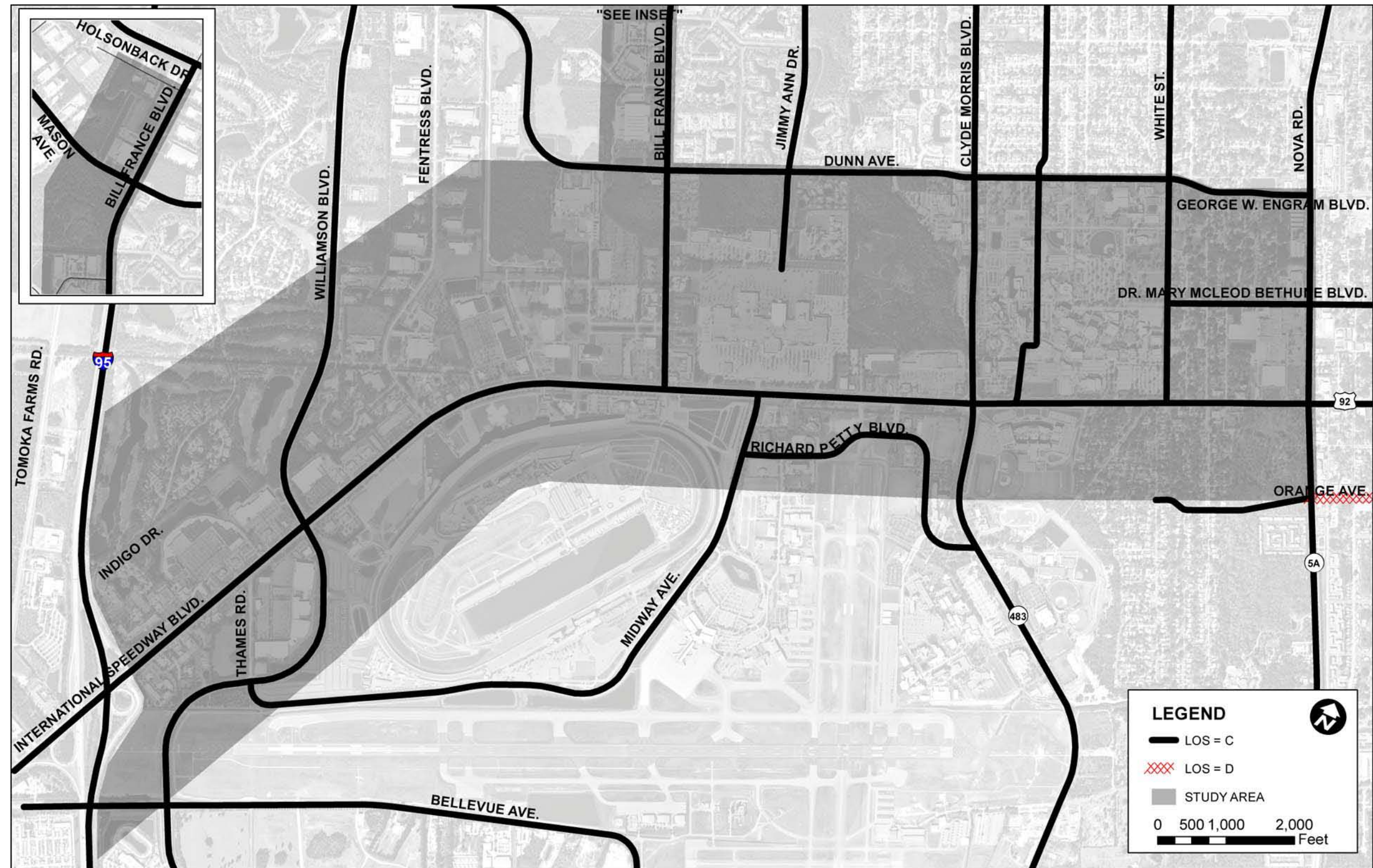
Figure 29: Bicycle Crashes Map



Source: Florida Department of Transportation (FDOT) D5. Map Created 08/14/14

The locations of pedestrian crashes within the study area for the 2008-2012 time periods are depicted in this map. The majority of single location incidents occurred along the SR 5A/Nova Rd corridor.

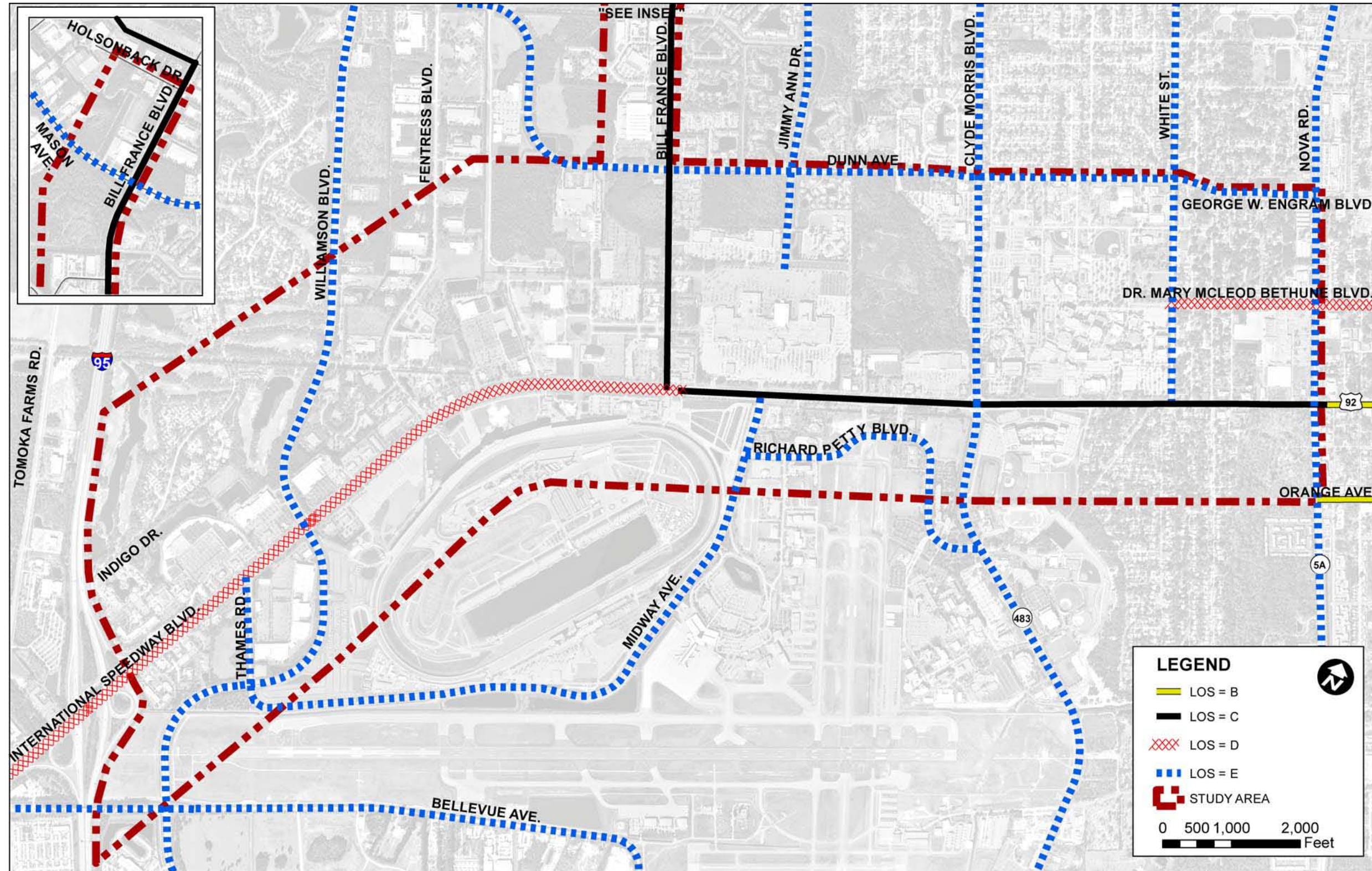
Figure 30: Pedestrian Crashes Map



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the level of service (LOS) for existing roads, which is based on factors such as roadway classification, number of lanes, speed limit, and the annual average daily traffic (AADT). The majority of roads within the study area are at LOS C, which is indicative of stable traffic flow.

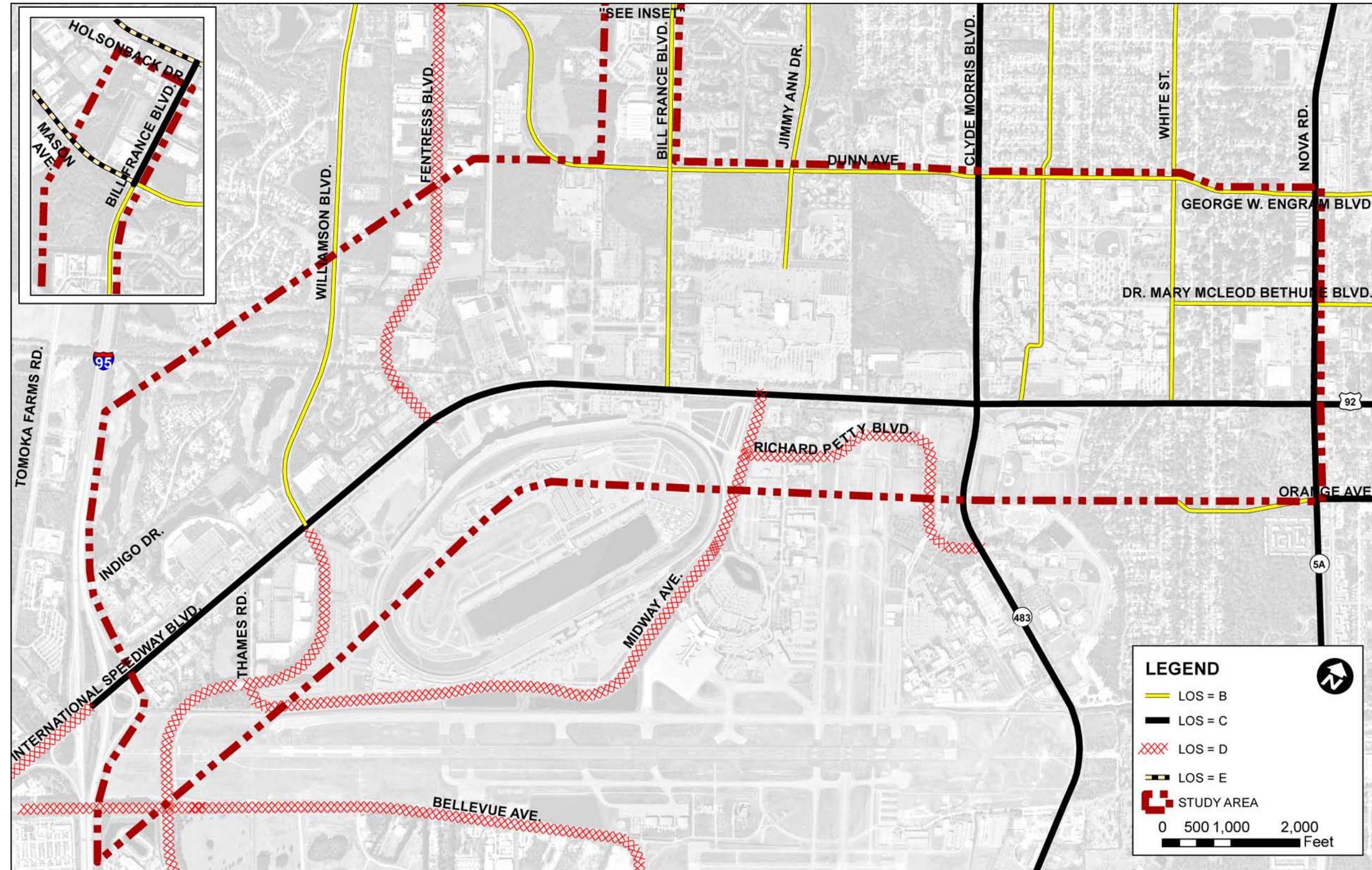
Figure 31: Automobile Level of Service (LOS) Map



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the level of service (LOS) for existing transit route headways, which is based on the number of lanes, AADT, and amount of sidewalk coverage along transit routes. Service provided along Bill France Blvd and US 92/SR 600/ISB operates at LOS C. The majority of transit routes along roadway segments within the study area operate at or below LOS D.

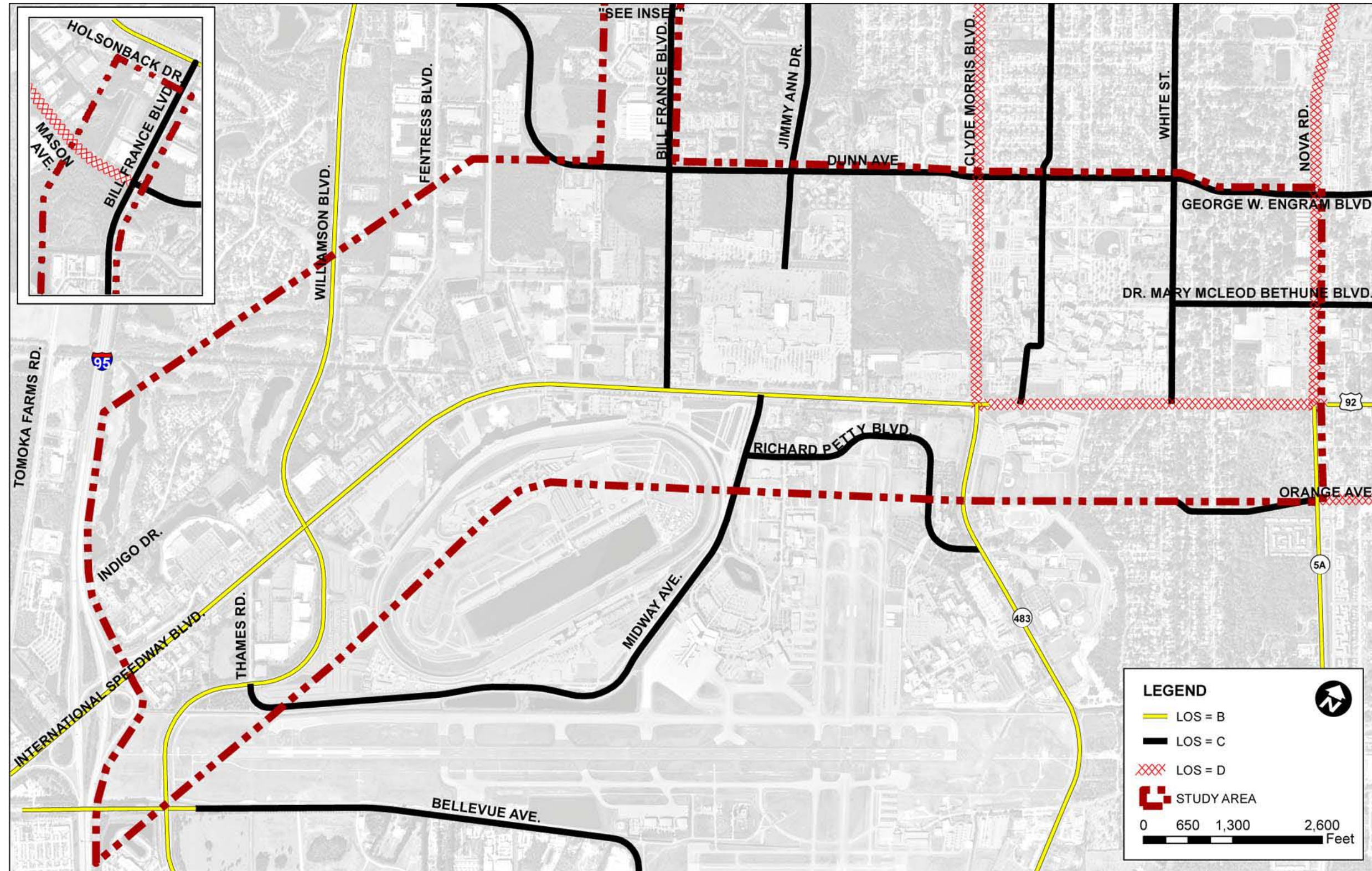
Figure 32: Transit Level of Service (LOS) Map



Source: Ghyabi & Associates. Map Created 08/14/14

This map depicts the level of service (LOS) for existing sidewalk facilities and multi-use paths within the study area. Factors used to assess pedestrian LOS include AADT, number of lanes, and percent of sidewalk coverage. Within the study area, Williamson Blvd (north of US 92/SR 600/ISB), Bill France Blvd, White St, Dunn Ave, and Dr. Mary McLeod Bethune Blvd have a pedestrian LOS of B. US 92/SR 600/ISB, SR 483/Clyde Morris Blvd, and SR 5A/Nova Rd are at LOS C. Midway Ave, Richard Petty Blvd, and Williamson Blvd (south of US 92/SR 600/ISB) operate at LOS D, due to a lack of sidewalk facilities.

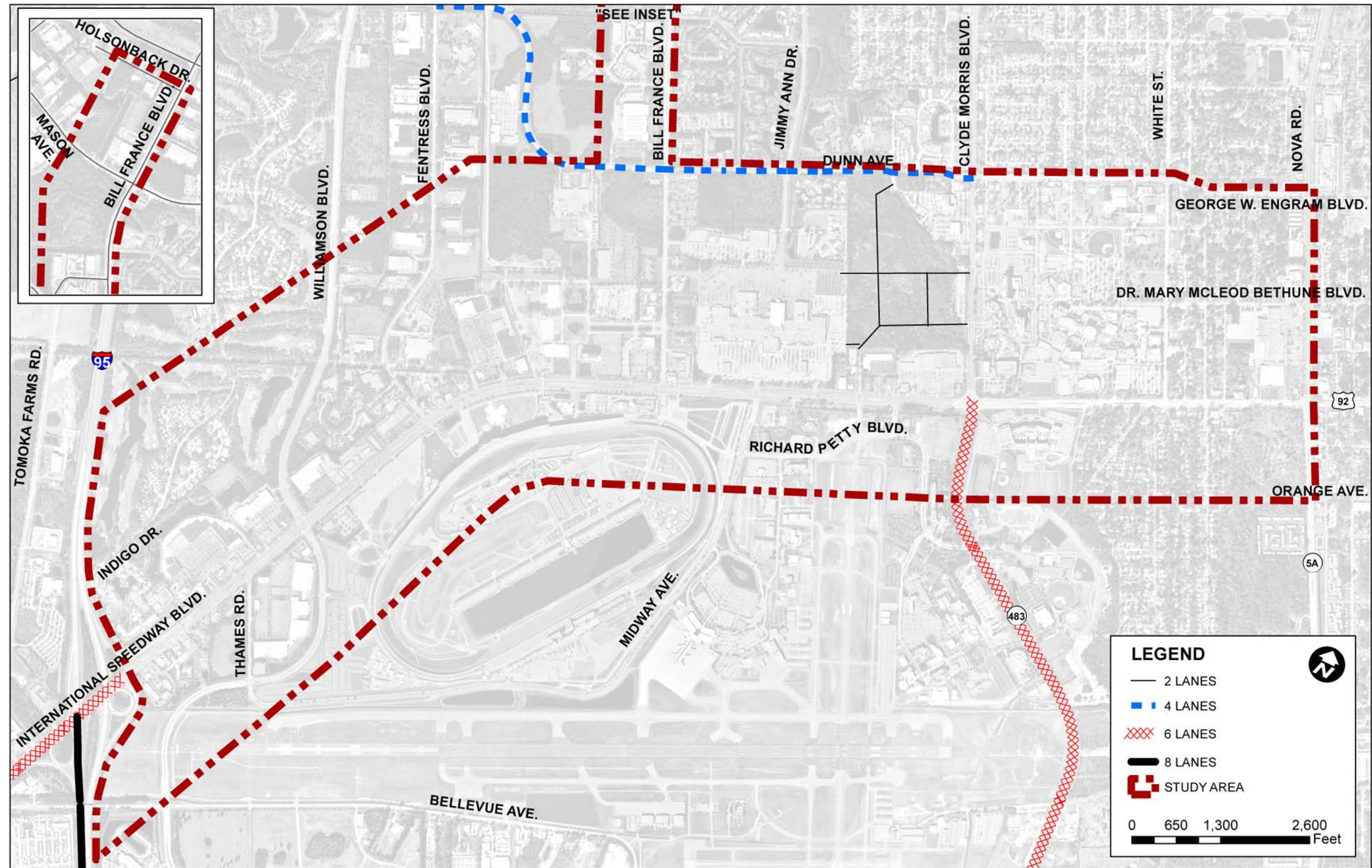
Figure 33: Pedestrian Level of Service (LOS) Map



Source: Ghyabi & Associates. Map Created 08/14/14

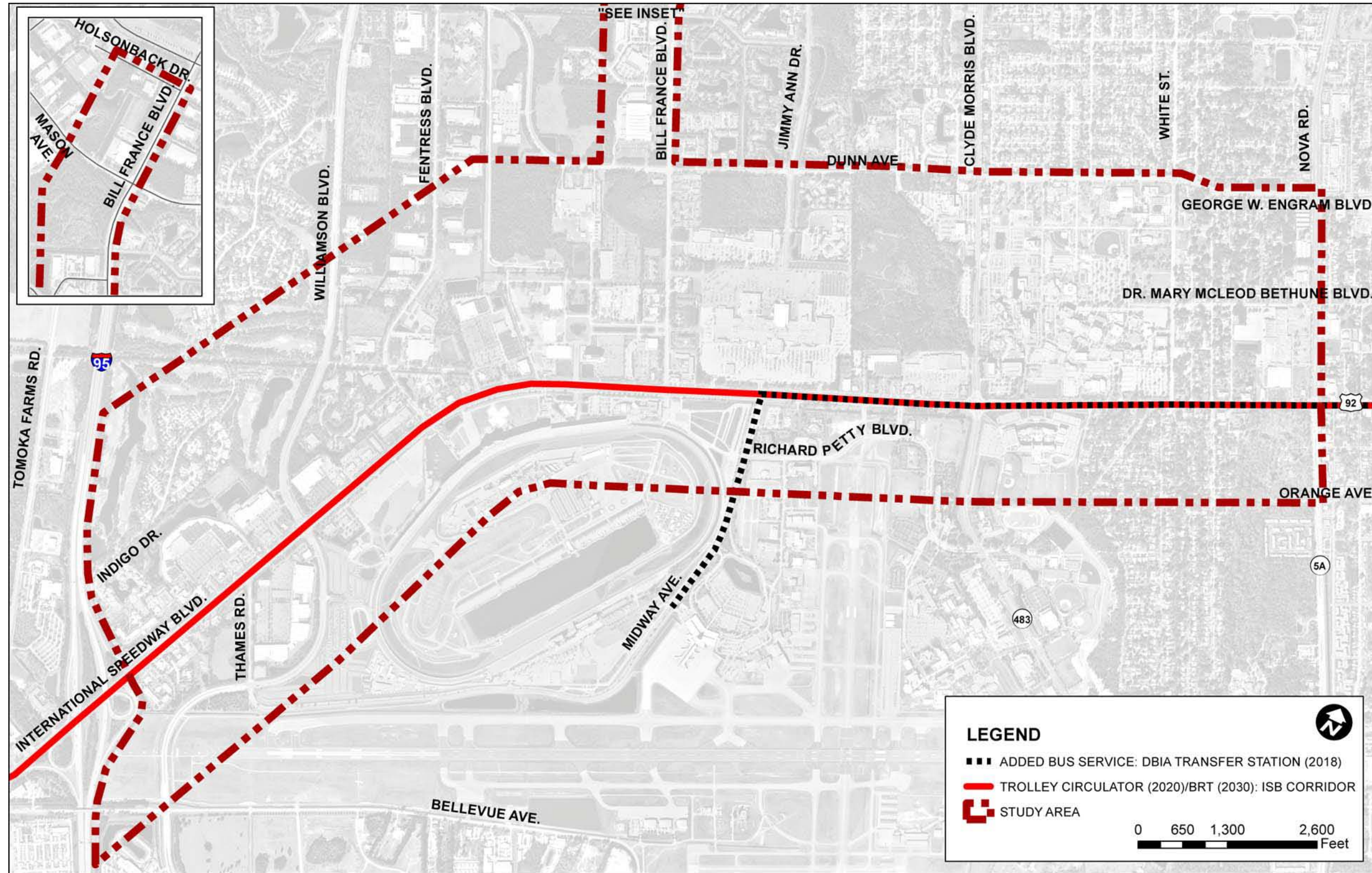
This map rates the level of service (LOS) for the existing bike network within the study area. Bicycle LOS is assessed using the AADT, number of lanes, and percent of paved shoulder/bicycle lane coverage. US 92/SR 600/ISB, west of SR 483/Clyde Morris Blvd, Williamson Blvd, and SR 483/Clyde Morris Blvd (south of US 92/SR 600/ISB) operate at LOS B. US 92/SR 600/ISB, east of SR 483/Clyde Morris Blvd, SR 5A/Nova Rd, and SR 483/Clyde Morris Blvd (north of US 92/SR 600/ISB), operate at LOS D. The remaining arterial and collector roadways within the study area have an LOS C.

Figure 34: Bicycle Level of Service Map



This figure illustrates the identified roadway improvement projects as provided by the River-to-Sea TPO (formerly Volusia TPO) 2035 LRTP. Within the study area, projects include widening SR 483/Clyde Morris Blvd to 6 lanes south of US 92/SR 600/ISB, the reconstruction/widening of the I-95/I-4/US 92/ISB interchange, and the widening of Dunn Ave to 4 lanes between Fentress Blvd and SR 483/Clyde Morris Blvd. In addition, four 2-lane roads, between Volusia Mall and SR 483/Clyde Morris Blvd, are planned as a part of Halifax Health's mixed use development.

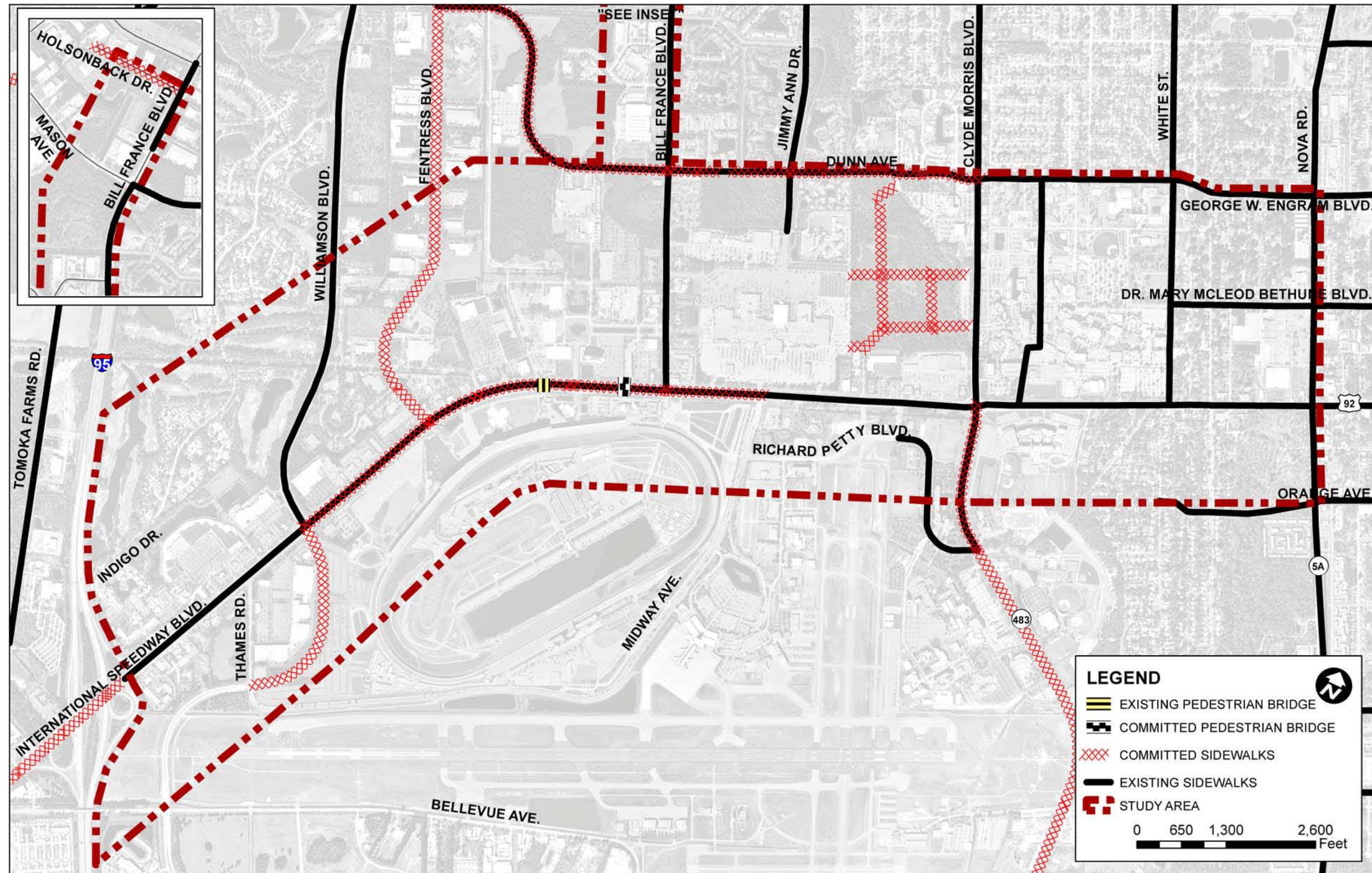
Figure 35: 2035 Road Projects Map



Source: River to Sea TPO. Map Created 08/14/14

This map depicts identified transit improvement projects as provided by the River-to-Sea TPO (formerly Volusia TPO) 2035 LRTP. The projects include a new Premium Transit Corridor on US 92/SR 600/ISB that is the subject of an Alternatives Analysis (AA) to determine the optimal transit mode for the corridor. Also included is additional transit service from the Daytona Beach International Airport along US 92/SR 600/ISB to SR A1A/Atlantic Ave.

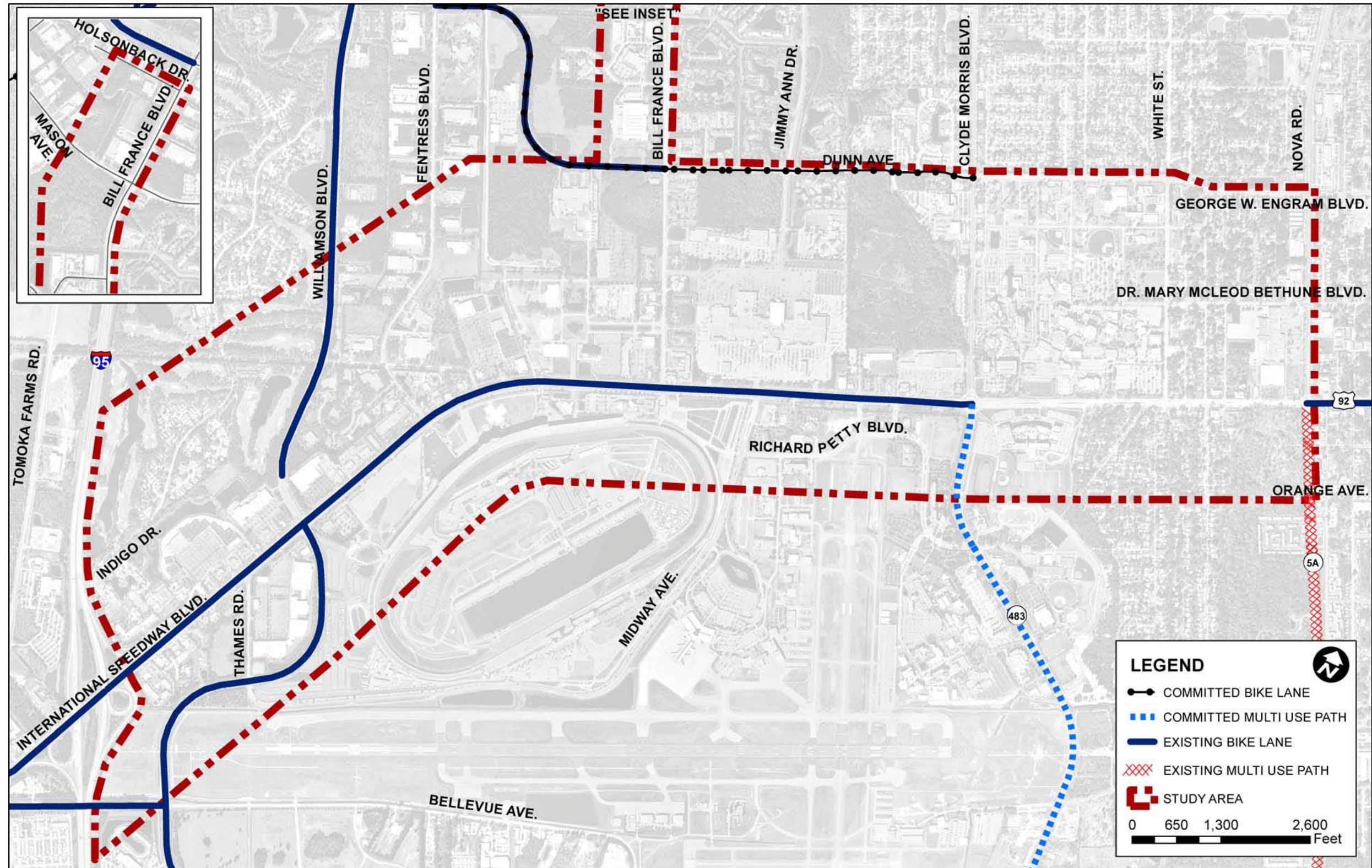
Figure 36: 2035 Transit Projects Map



Source: River to Sea TPO. Map Created 08/14/14

This figure depicts sidewalk improvement projects that are identified in the River-to-Sea TPO (formerly Volusia TPO) 2035 LRTP. Projects include added sidewalks and a multi-use path on SR 483/Clyde Morris Blvd south of US 92/SR 600/ISB, added sidewalks along Dunn Ave, and improved sidewalks and a pedestrian overpass along US 92/SR 600/ISB between Midway Ave and Williamson Blvd.

Figure 37: 2035 Pedestrian Projects Map



The bicycle improvement projects identified in the River-to-Sea TPO (formerly Volusia TPO) 2035 LRTP are depicted in this map. Projects include the construction of a multi-use path along SR 483/Clyde Morris Blvd, south of US 92/SR 600/ISB, and a bike lane along Dunn Ave between SR 483/Clyde Morris Blvd and Bill France Blvd.

Figure 38: 2035 Bicycle Projects Map

4 ISSUES/CONSTRAINTS IDENTIFICATION

4.1 Issues/ Constraints Identification

Data was collected to identify preliminary issues and constraints within the study area. This included issues and constraints based on community, transportation and environmental characteristics obtained through review of previous studies, field reviews, coordination with agencies, previous public workshops/meetings, and other publicly available data sources such as agency GIS resources and the FDOT databases. Some of the issues/constraints identified are listed below:

- On a high speed arterial, such as US 92/SR 600/International Speedway Boulevard, the lack of a physical barrier separating designated bike lane infrastructure from the automobile travel lane can be perceived by bicyclists as dangerous and intimidating. Despite the presence of designated bike lanes along US 92/SR 600/International Speedway Boulevard, between I-95 and SR 483/Clyde Morris Boulevard, during field review bicyclists were observed using the sidewalks.
- Within the study area, there are limited bike parking facilities within the US 92/SR 600/International Speedway Boulevard corridor.
- Shade trees are not present along sidewalks, especially along US 92/SR 600/International Speedway Boulevard, to provide a respite from extreme weather conditions.
- Pedestrians and cyclists utilizing existing facilities within the study area are forced to navigate a significant number of business access drives.
- The majority of crosswalks/driveways in the study area are unmarked. The majority of automobiles observed do not come to a complete stop before making right turns at these unmarked crosswalks/driveways, which creates a hazardous condition for pedestrians.
- At some intersections, such as US 92/SR 600/International Speedway Boulevard at Indigo Drive, the sidewalk is not continuous up to the crosswalk resulting in an unpaved and/or grassy area that must be crossed by pedestrians to continue along the sidewalk.
- There are no pedestrian median refuges at signalized intersections along 8-lane US 92/SR 600/International Speedway Boulevard.
- Sidewalks along US 92/SR 600/International Speedway Boulevard are disconnected from private sector land uses. Very few private developments have sidewalks/crosswalks connecting their business to public sidewalks.

- Many bus stops within the study area lack amenities, such as benches, shelters, bus route maps, trash cans and platforms for riders.

5 NEXT STEPS

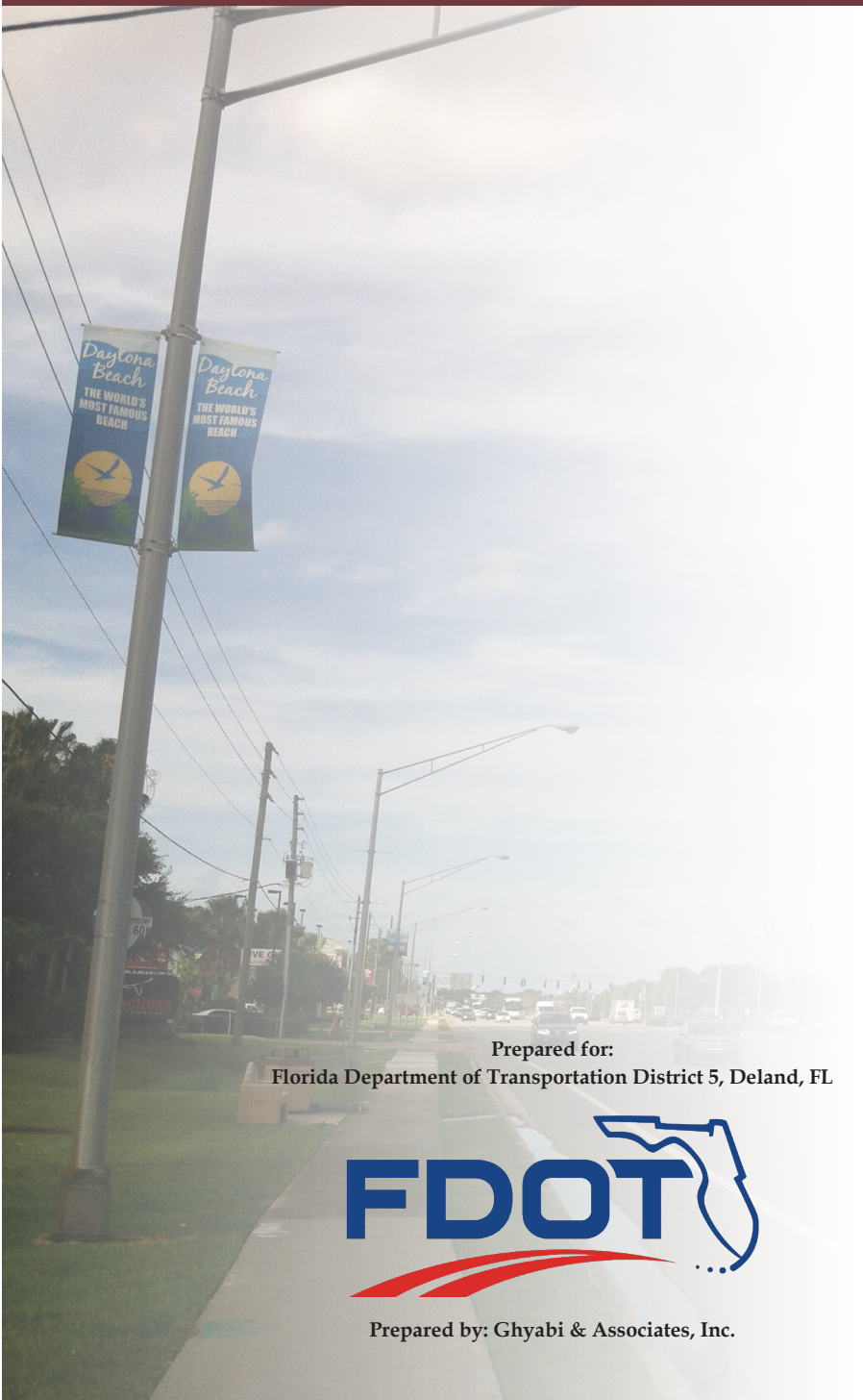
This document has presented a brief summary of the existing conditions and data collection efforts conducted to date.

The next step is to identify, prioritize and advance critical improvements needed for multimodal connectivity and improved accessibility in the study area. Project identification will be accomplished using methodology similar to that for pedestrian roadway safety audits but will emphasize improved transit accessibility and pedestrian and bicycling connectivity in the study area. The project identification will focus on improvements that can better connect origins and destinations within the corridor and are ADA compliant. This phase of the study will be utilized to draft a Field Evaluation Report that will also include a preliminary list of pedestrian connectivity projects to improve accessibility between the origins and destinations within the study area.

ⁱ VTPO has officially changed its name to River to Sea TPO (R2CTPO)

ⁱⁱ Volusia MPO became the Volusia TPO which has since changed its name to River to Sea TPO

ⁱⁱⁱ Florida Department of Community Affairs (DCA) now known as Florida Department of Economic Opportunity (DEO)



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