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Introduction

Adopted in 2017, the Plant City Walk-Bike Plan identified the Canal Connector Trail as one of three catalyst projects for Plant City to achieve the City's vision for enhanced walkability and bikeability. Though the city currently has a limited number of active transportation or recreational trail facilities that provide significant regional connectivity, the City would like walking and biking to be a "comfortable and normal part of daily life for people of all ages and abilities."

The benefits of providing trail facilities are well established. Trails provide a safe place for people of all ages and abilities to walk or bike in a space separate from motorized traffic. Trails are critical in providing transportation options for both recreational and functional trips, linking people to key destinations, such as work, parks, shopping, public artwork, and restaurants. Trails can also be popular catalysts for place-making and community revitalization.

The Plant City Canal Trail Feasibility Study will evaluate the feasibility of a trail facility that connects Plant City's business district to McIntosh Preserve. The study will also recommend a preferred alternative to advance to the next project phase using evaluation criteria and public input to rank proposed alignments. This report describes the existing conditions, opportunities and constraints, and the key points of connectivity within the study area.

1.1 Project Description

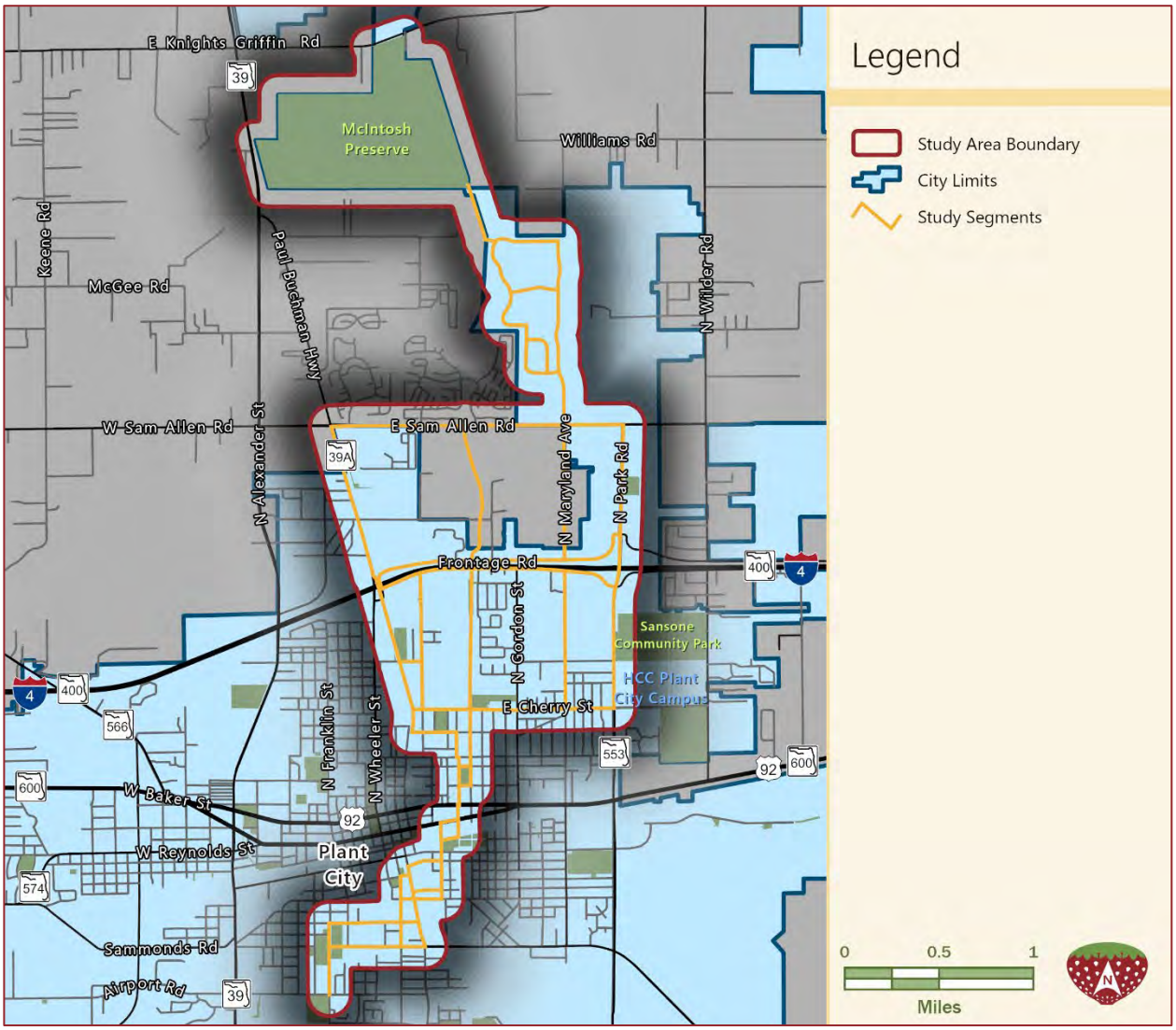
The study will assess the potential impacts, both beneficial and adverse, resulting from potential trail alignments. Initially these evaluations will be at a high level, sufficient to rule out locations that present significant barriers to implementation. Once viable alternatives have been identified, planning, engineering, environmental, and socioeconomic criteria will be used to determine the feasibility of a preferred alternative and its implementation strategy.

The data and information presented in this report will form the foundation for determining the most viable alignments to be considered for the trail.

1.1.1 Study Area

The study area extends from Dr. Hal & Lynn Brewer Park in the south to McIntosh Preserve in the north, linking a number of parks and community destinations together along the way. Starting in the south, the study area is relatively linear between Dr. Hal & Lynn Brewer Park and Cherry Street Park. From Cherry Street Park, the study area widens to include several alignments between SR 39A/Paul Buchman Highway and Park Road across I-4 and north to Sam Allen Road. From Sam Allen Road, the study area narrows once again as it traverses through the North Park Isles neighborhood northward to a connection at the southeast corner of McIntosh Preserve. Much of the study area is located within Plant City limits. The remainder (concentrated in the central portion of the study area) is located within unincorporated Hillsborough County. The study area is shown on **Figure 1**.

Figure 1: Study Area Map



1.1.2 Background

The Canal Connector Trail is envisioned to be the major north-south trail spine extending from south/southwest Plant City, northerly through Midtown and connecting parks and other recreational and public facilities all the way to McIntosh Preserve and providing a major improvement for active transportation in the area.

The 2018 Walk-Bike Plan, included with other previous planning studies in **Appendix A**, recommended approximately 80 miles of new on-street bikeways and about 14 miles of new trails. In combination, these new facilities will significantly increase mobility options and connectivity between neighborhoods, parks and recreational destinations, and the business and public services districts. While the specific alignment may be different from the original Walk-Bike Plan, the connections and key destinations along the trail will be very similar to much of the network elements recommended in the Walk-Bike Plan.

1.2 Study Objectives

The Canal Connector Trail will support a wide range of non-motorized modes of travel and transportation needs for users of all ages and abilities. The trail is intended to meet the needs of both recreational and utilitarian users. The trail environment will be pleasant and safe, inviting the user to take advantage of the facility for its connectivity to strategic origins and destinations within Plant City. The preferred alternative will blend the goals for the city mobility plans and will also provide visitors a means of exploring new parts of the community that can enhance economic development opportunities.

The design and access points to the trail will focus on the need to sustain continuous and alternate modes of human transport, and comply with adopted local land use plans, codes and regulations that encourage development of the infrastructure needed to support trail use.

The study will assess the potential impacts, both positive and negative, that are associated with the alternative trail alignments and design considerations and to identify a preferred location and associated design features. A wide range of considerations will be included in the evaluation and selection process to determine the benefits and desirability of each alignment and functional design element. Compatibility, cost, and constructability will be key components in the identification of the best alignment and trail design element.

1.3 Facility/Corridor Planning Process

The study process includes three primary stages of analysis. The initial stage includes a data collection effort and review of the visioning process and recommendations that were developed under the 2017 Walk-Bike Plan for Plant City. The organization of base data and mapping, field verification of the critical information, and the identification of the opportunities and constraints for alignments are part of this initial stage.

This report is the culmination of the data collection tasks and will be used to inform the next stage, which includes the development of the project purpose and need statement, the production of optional trail design elements and cross sections, the identification of potential alignments, and as a staged deliverable, the recommendation of a preferred alternative.

2

Existing Conditions

Data were collected to determine existing conditions within the study area that would have an impact on selection of the preferred trail alignment. These conditions included community and cultural characteristics, roadway features, right-of-way and easement, traffic conditions, crash data, and environmental concerns.

2.1 Introduction to the Study Area

The study area is shown on **Figure 1** on a previous page. Initially, the study area was identified to terminate just south of US 92 at Samuel W. Cooper Park. However, at the kick-off meeting with Plant City, it was suggested that the southern limits be extended to Dr. Hal & Lynn Brewer Park. This extension would add an important link to the trail and connectivity for the community and increase the length of the trail to approximately 6 miles long, depending on the final alignment north to McIntosh Preserve.

Much of the study area south of Interstate 4 (I-4) has been developed with a significant amount of single-family residential between the western study limit along Buchman Highway/North Wheeler Street and the eastern limit along North Park Road. Commercial and retail development exists along the major roadway corridors including South Collins Street, US 92 (East Baker/East Reynolds), and at the I-4 interchanges with Buchman Highway and North Park Road. North of I-4, there exists a substantial amount of large track agricultural property, some industrial uses between I-4 and Terrace Drive, plans for a regional hospital at Park Road and East Sam Allen Road, and the existing Countrywood community and the developing North Park Isle community. Of special note are the plans approved for the North Park Isle community that include an easement dedicated to providing a trail connection through the community and extending from East Sam Allen Road north to a point less than 2000 feet from the southwest corner of McIntosh Preserve.

2.2 Community and Cultural Characteristics

2.2.1 Demographics

Demographic data from the study area show that this area is generally representative of Plant City and Hillsborough County in terms of labor force participation and percent of foreign-born residents. It is significantly different in education levels and has a higher home ownership rate and slightly older population.

Table 1: Study Area Demographics

	Study Area*	Plant City	Hillsborough County
Total population	10,498	39,437	1,459,762
Percentage age 18 younger	20.8%	25.2%	22.3%
Percentage age 65 and older	20.9%	12.4%	14.3%
Foreign-born population percentage	16.0%	13.4%	17.9%
Percentage of the population with at least a high school degree	84.6%	83.1%	88.9%
Percentage with at least a bachelor's degree	15.4%	22.7%	34.5%
Percentage with at least a master's degree	3.3%	6.5%	12.5%
Labor force participation rate (Employment Rate)	52.0%	64.2%	61.3%
Home ownership rate	71.2%	60.0%	59.3%

*Seven block groups encompassing most of the land area
Source: US Census Bureau, American Community Survey, 2020 5-Year Estimates

2.2.1.1 Age

The study area has a slightly older population than Plant City or Hillsborough County. The study area has fewer young people; roughly 21% of the population is under 18, compared to 25% in Plant City and 22% in Hillsborough County. In addition, the study area has a higher percentage of residents over the age of 65 (21% in the study area, compared to 12% in Plant City and 14% in Hillsborough County).

2.2.1.2 Education

The percentage of residents in the study area who have graduated from high school is about 85%, slightly higher than the average for Plant City (83%) and slightly lower than the average for Hillsborough County (89%). Fewer residents in the study area have a bachelor's degree or higher (15% in the study area, compared to 23% in Plant City and 35% in Hillsborough County).

2.2.1.3 Employment and Housing

The employment rate in the study area (52%) is notably lower than the rates in Hillsborough County (61.3%) and Plant City (64.2%). The study area has a higher rate of home ownership than Plant City and Hillsborough County (71% in the study area compared to 60% in Plant City and Hillsborough County).

2.2.1.4 Equity Analysis

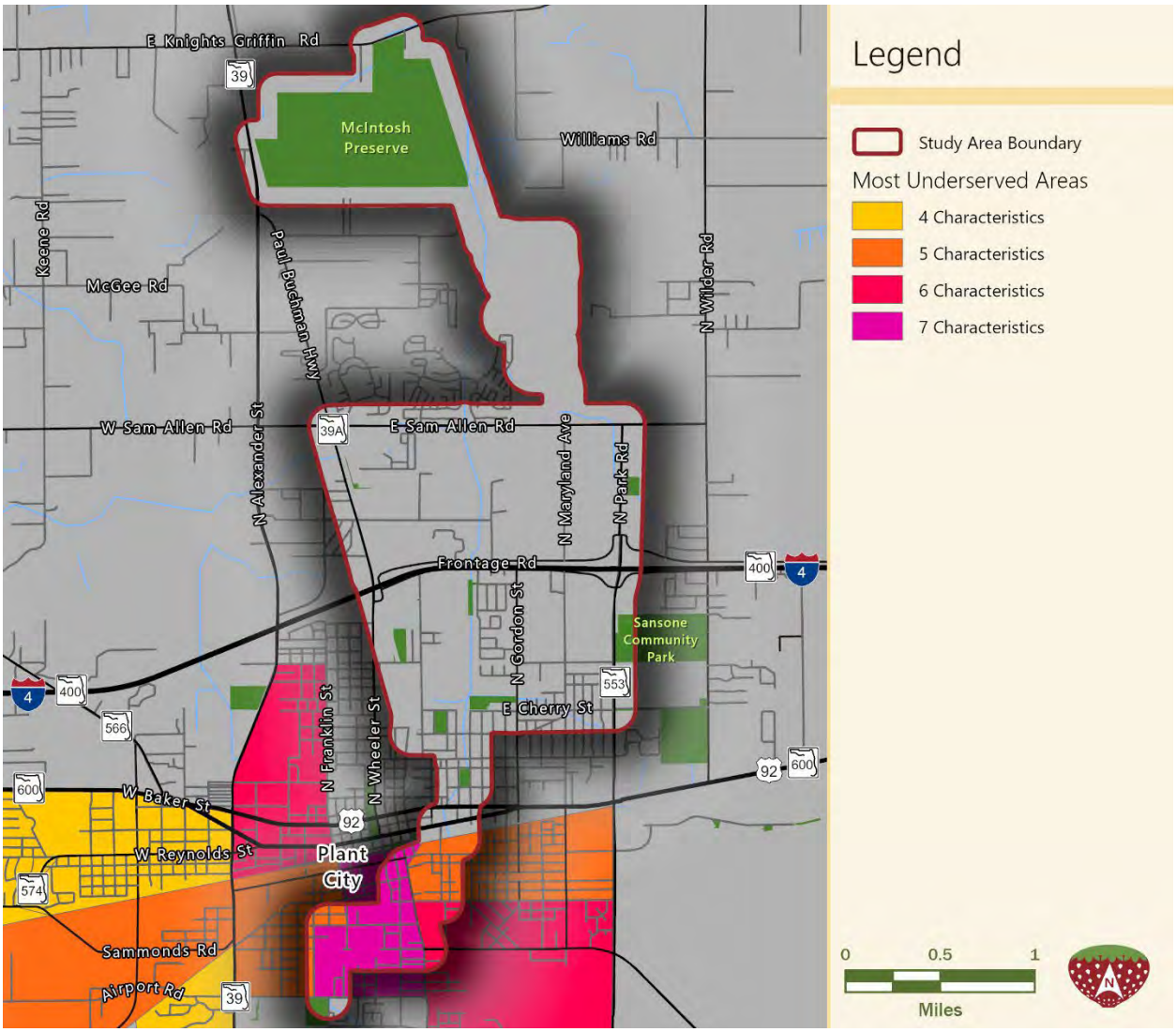
Data available from the Hillsborough TPO's 2021 Nondiscrimination and Equity Plan was used to understand equity considerations within the study area. The data were based on 2018 American Community Survey (5-year) results at the block group level and evaluated for traditionally underserved populations, including communities with concentrations of

- racial and ethnic minorities,
- limited English proficiency populations,
- older adults,
- youth,

- low-income households,
- persons with disabilities,
- persons with low educational attainment,
- zero-vehicle households, and
- female heads of households.

As part of the analysis, the TPO produced an index to show very high concentrations of traditionally underserved areas. This index counts the number of overlapping traditionally underserved populations for which the population of the block group exceeds the 80th percentile of all block groups in the county.

Figure 2: Intersection Map of Most Underserved Areas



As shown in **Figure 2**, the southern portion of the study area, south of US 92, has the most significant concentrations of underserved populations. All block groups in this area have very high (80th percentile or higher) concentrations of low-income households and racial minority populations. In the block group west of Collins Street, there are very high concentrations of ethnic minorities (i.e., Hispanic, or Latino populations), limited English proficiency populations, persons with low educational attainment, and persons with

disabilities. In the block group north of Alabama Street and east of Collins Street, there are very high concentrations of zero-vehicle households and persons with low educational attainment. In the block group south of Alabama Street and east of Collins Street, there are very high concentrations of ethnic minorities, youth populations, and female heads of households.

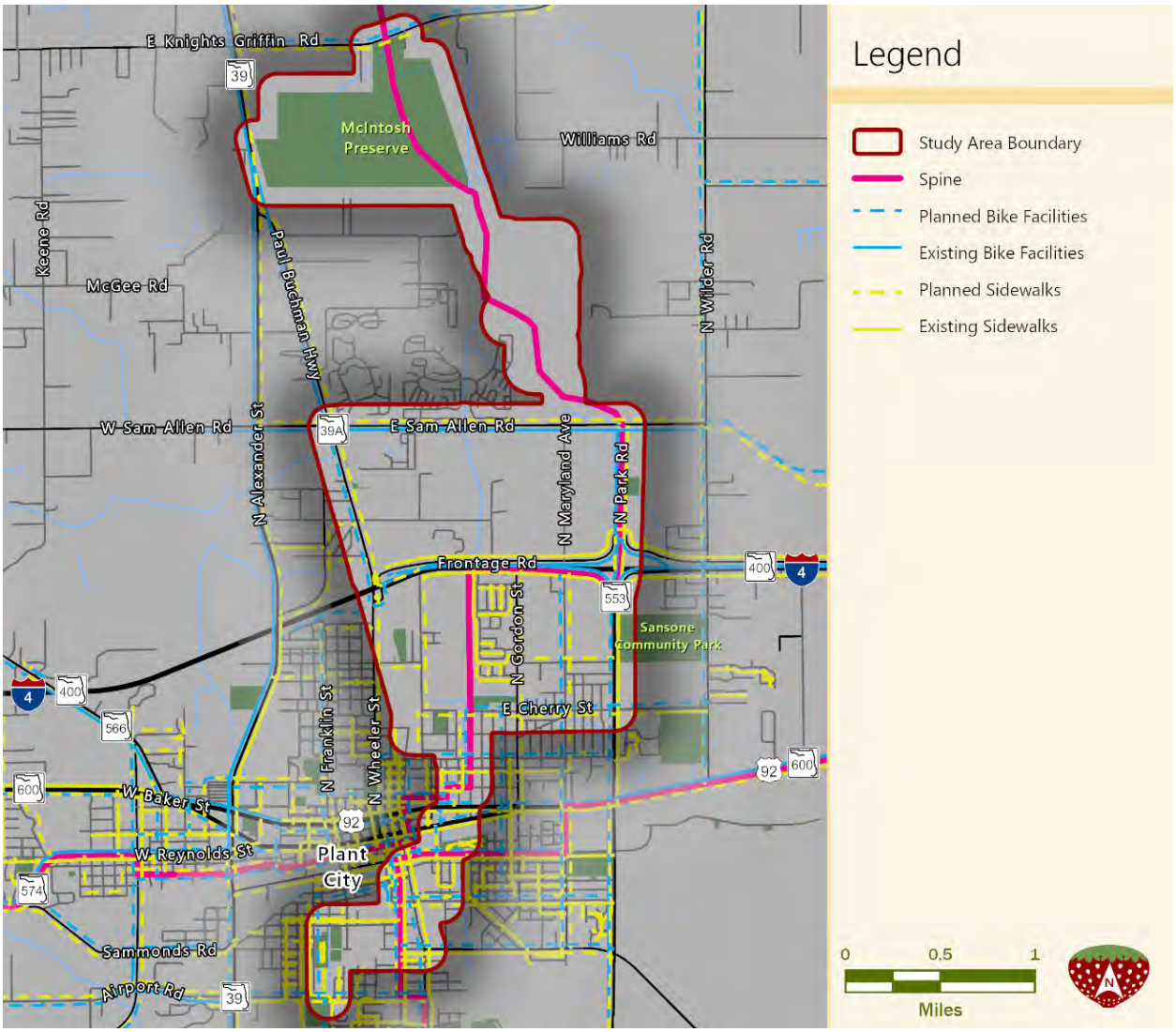
2.2.2 Pedestrian and Bicycle Infrastructure

There is currently fair sidewalk coverage in and around downtown Plant City, but very few bicycle facilities. The Plant City Walk-Bike Plan from 2017 identified corridors that had existing sidewalks and bike facilities as well as corridors on which pedestrian and bicycle facilities were planned to be constructed. Outside of the downtown area, there is currently a scarcity of bike and pedestrian facilities, even on major corridors within the study area. To address this, two central spines were identified in the Walk-Bike Plan to serve as the main north-south and east-west corridors through Plant City, connecting residential areas, parks, schools, and other activity areas throughout the city. The north-south spine would be partially served by the trail proposed in this study.

Along major corridors in the study area, East Sam Allen Road is currently being reconstructed and will have sidewalks and bike facilities along it. North Park Road currently has sidewalks, and bike facilities are proposed to be added in the future. SR 39A/Paul Buchman Highway and SR 39/Alexander Street both have bike facilities along some segments of the road but are proposed to have both sidewalks and bike facilities along the entire corridor. Smaller roadways that are also potential candidates for the trail alignments have planned sidewalks and bike facilities. North Maryland Avenue south of I-4 has planned sidewalks and bike facilities, and North Sharron Avenue south of I-4 has planned sidewalks.

Figure 3 shows existing and planned facilities from the Plant City Walk-Bike Plan. In comparison to the study area, a very significant portion of the spine will fall within those limits and the north and south connecting points are generally consistent. Based on this, the trail addressed by this study would provide almost all of the spine segments north of US 92, and much to the south as well.

Figure 3: Existing/Planned Pedestrian and Bicycle Facilities



2.2.3 Transit Service and Infrastructure

Bus service is not currently provided in Plant City but was from 2001 to 2017. During that time, there was an express route between Plant City and Tampa, and four local routes within Plant City. A study was conducted in 2021 that developed alternatives for transit routes that provide connections to and within Plant City. One route would connect Plant City to Tampa, another route would connect Plant City to Lakeland, and the last route(s) would be circulators within Plant City. At this time no alternative has been selected. The study was conducted when the All for Transportation sales tax had not yet been struck down; it is unclear if this project will move forward without that revenue source.

2.3 Existing Physical Features

2.3.1 Roadway Classifications, Jurisdictions and Posted Speeds

Data on roadway characteristics were gathered from the Hillsborough County Roadways Database and the FDOT Open Data Hub. These data were supplemented with review of imagery for local roads. Characteristics for the major study area roadways are summarized in **Table 2.**

Functional classification is a system used to characterize the operating characteristics of a roadway and is broken into three primary groupings:

- Arterials – higher mobility, limited access to adjacent land uses
- Collectors – balance between mobility and land use access.
- Locals – lower levels of mobility and higher emphasis on access to land uses.

The study area roadway network is comprised of a mixture of roadways with various functional classifications. I-4 is the primary east-west facility in the study area providing regional connectivity and high levels of mobility. I-4 is paralleled by US 92 (principal arterial) to the south, which operates as a one-way pair through much of Plant City. North of I-4, Sam Allen Road and Knights Griffin Road, both major collectors, provide more local east-west connectivity. Within the study area, Paul Buchman Highway/North Wheeler Street and North Park Road, both minor arterials, provide significant north-south connectivity as the only two roadways connecting across I-4. Just west of the study area, North Alexander Street, a principal arterial, provides redundant north-south capacity and an alternative crossing of I-4. South Collins Street is a minor arterial that provides north-south connectivity south of downtown Plant City. Within the study area, Maryland Avenue, Gordon Street, Calhoun Street, and Cherry Street serve as local roadways that provide neighborhood level connections to the collector and arterial network.

Context classifications in the study area vary from C2 - Rural in the northern stretches of the study area, all the way to C4 - Urban General within downtown Plant City. These context classifications are based on the surrounding land uses and determine appropriate characteristics about the roadway, such as the speed limit, lane widths, frequency of driveway access, and the need for bike and pedestrian facilities. A rural context classification indicates higher speeds and less access for driveways, while an urban context classification indicates slower speeds, more access, and a greater need for bike and pedestrian facilities. Context classifications have been established for all non-limited-access state roadways. This classification had not yet been applied to city and county roads at the time of study.

Table 2: Roadway Characteristics

Major Roads	Segment	Context Class	Posted Speed	Jurisdiction	Functional Class
SR 39A/Paul Buchman Hwy	N Alexander St to Sam Allen Rd	C2	55	FDOT	Urban Minor Arterial
	Sam Allen Rd to I-4	C2	45	FDOT	Urban Minor Arterial
	I-4 to W Spencer St	N/A	45	FDOT	Urban Minor Arterial
	W Spencer St to Baker St	N/A	35	FDOT	Urban Minor Arterial
SR 553/N Park Rd	Sam Allen Rd to N Frontage Rd	N/A	45	Hillsborough County	Urban Minor Arterial
	N Frontage Rd to Cherry St	C3C	45	FDOT	Urban Minor Arterial
	Cherry St to Baker St	C3R	45	FDOT	Urban Minor Arterial
N Gordon St	Frontage Rd to E Spencer St	N/A	40	Plant City	Urban Minor Collector
	E Spencer St to Baker St	N/A	30	Plant City	Urban Minor Collector
S Collins St	Reynolds St to Renfro St	N/A	30	Plant City	Urban Minor Arterial
	Renfro St to Alsobrook St	N/A	30	Plant City	Urban Minor Arterial
N Alexander St	Knights Griffin Rd to Paul Buchman Hwy	C3C	50	FDOT	Urban Principal Arterial Other
	Paul Buchman Hwy to I-4	C2	50	FDOT	Urban Principal Arterial Other
	I-4 to Victoria St	C3R	50	FDOT	Urban Principal Arterial Other
	Victoria St to W Grant St	C4	50	FDOT	Urban Principal Arterial Other
	W Grant St to JL Redman Pkwy	C3R	50	FDOT	Urban Principal Arterial Other
US 92/Baker St	N Alexander St to Whitehall St	C2T	40	FDOT	Urban Principal Arterial Other
	Whitehall St to N Illinois St	C2T	35	FDOT	Urban Principal Arterial Other
	N Illinois St to N Gordon St	C2T	40	FDOT	Urban Principal Arterial Other
US 92/Reynolds St	N Alexander St to Reynolds St	C4	35	FDOT	Urban Principal Arterial Other
	N Alexander St to N Howard St	C2T	35	FDOT	Urban Principal Arterial Other
	N Howard St to N Pennsylvania Ave	C2T	30	FDOT	Urban Principal Arterial Other
	N Pennsylvania Ave to N Maryland Ave	C2T	35	FDOT	Urban Principal Arterial Other
N Maryland Ave	S Frontage Rd to Baker St	N/A	30	Plant City	Local
E Cherry St	N Shannon Ave to N Park Rd	N/A	30	Plant City	Local
E Calhoun St	N Wheeler St to N Park Rd	N/A	30	Plant City	Local
E Sam Allen Rd	SR 39/N Alexander St to SR 39A/Paul Buchman Hwy	N/A	45	Hillsborough County	Urban Major Collector
	SR 39A/Paul Buchman Hwy to N Park Rd	N/A	40	Hillsborough County	Urban Major Collector
Knights Griffin Rd	SR 39/Paul Buchman Hwy to Bailey Rd	N/A	50	Hillsborough County	Rural Major Collector
	Bailey Rd to N Wilder Rd	N/A	55	Hillsborough County	Rural Major Collector

2.3.2 Right-of-Way & Easements

Right-of-way along possible trail alignments was estimated from parcel data available from the Hillsborough County Property Appraiser. The Appraiser's Office records do not show easements on private property in the database, and a review of individual plat pages may still need to occur to determine their presence. Estimated rights-of-way for major roadways are shown on **Figure 4**. Major property owners are shown on **Figure 5**.

Figure 4: Property Ownership/Right-of-Way

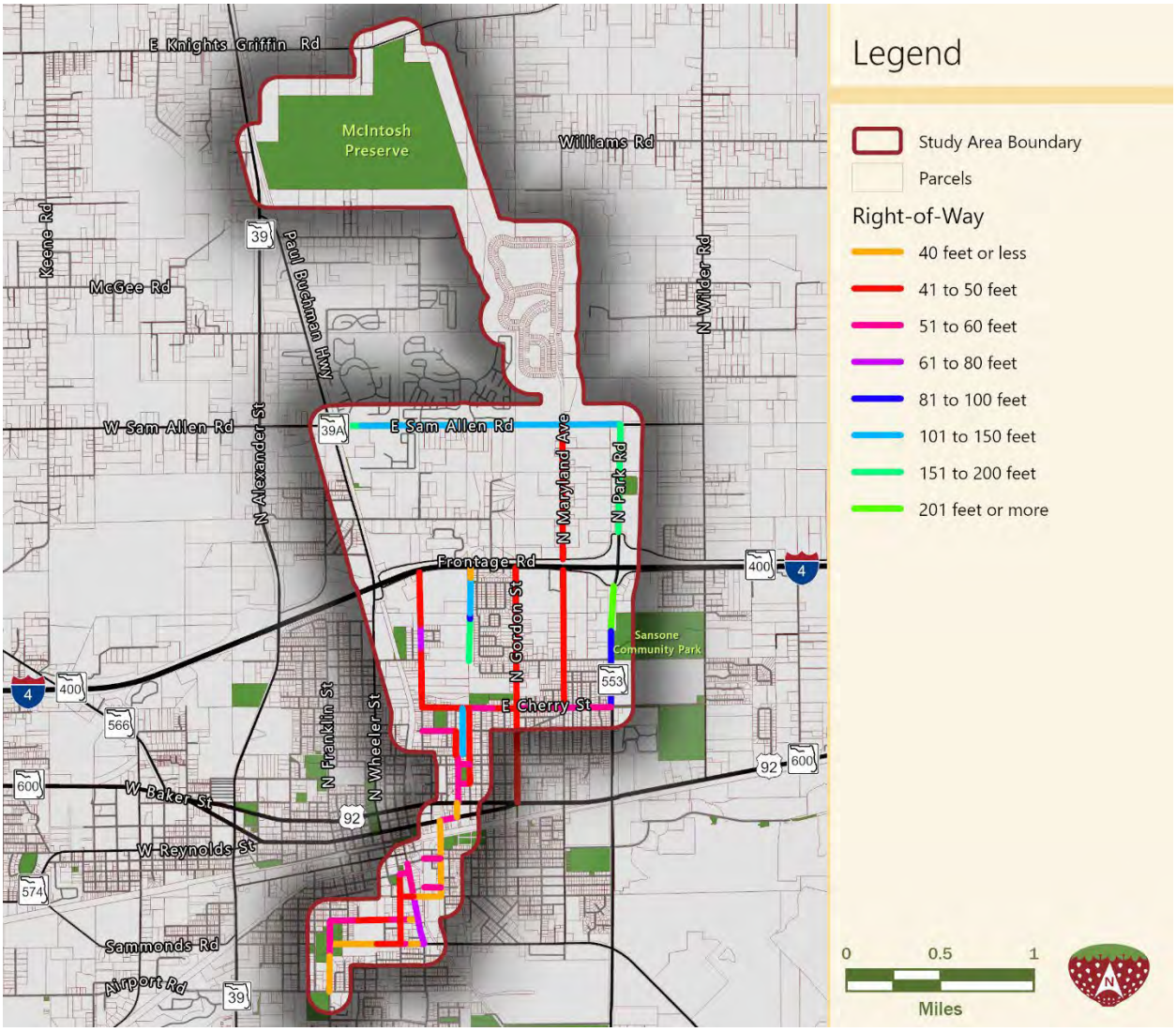
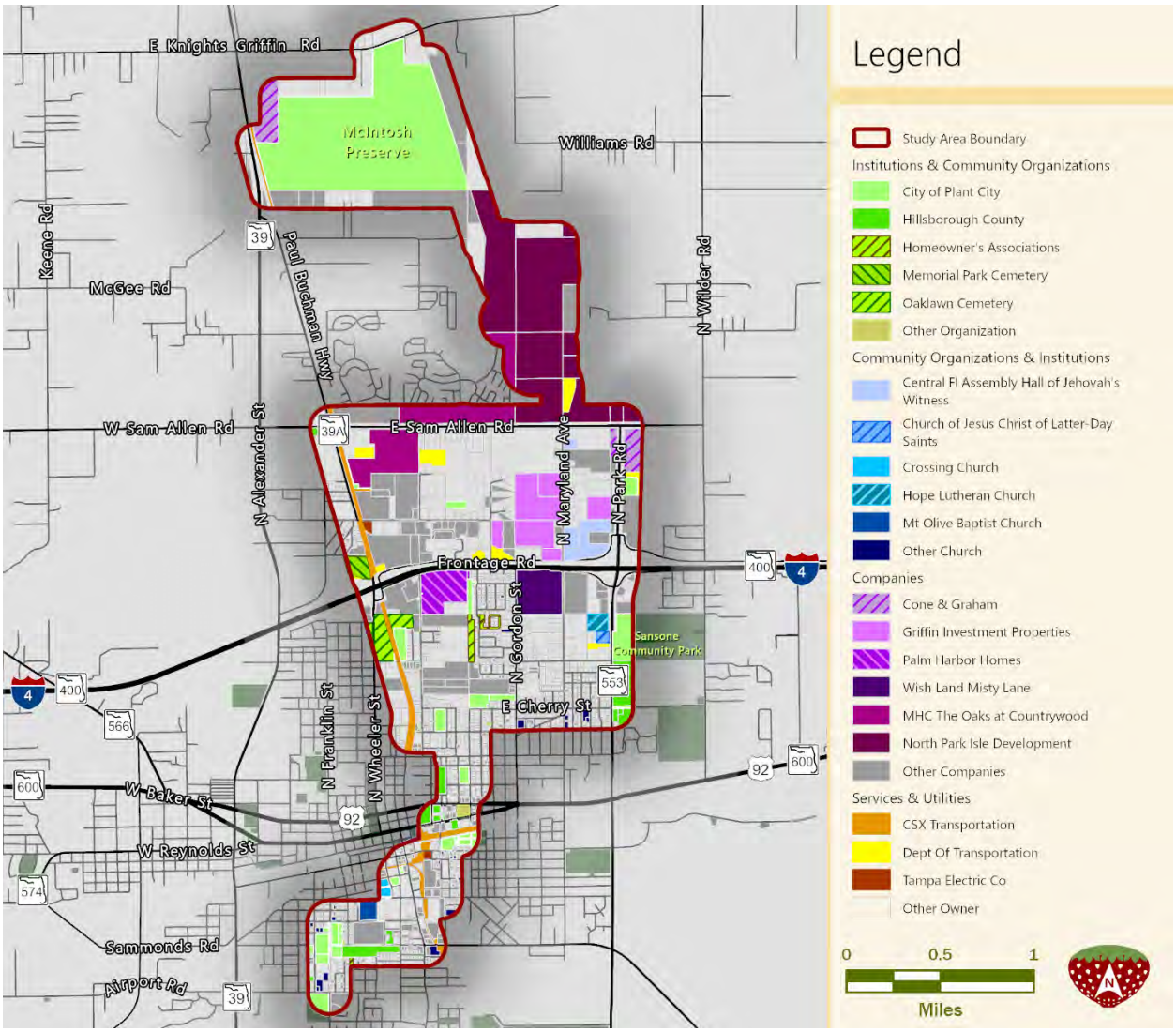


Figure 5: Major Property Ownership



2.3.3 Typical Sections

Typical section data was gathered from Straight Line Diagrams (SLDs) for state roads and supplemented with review of aerial imagery for local roads. Typical sections for roadway in the study area are summarized in **Table 3**.

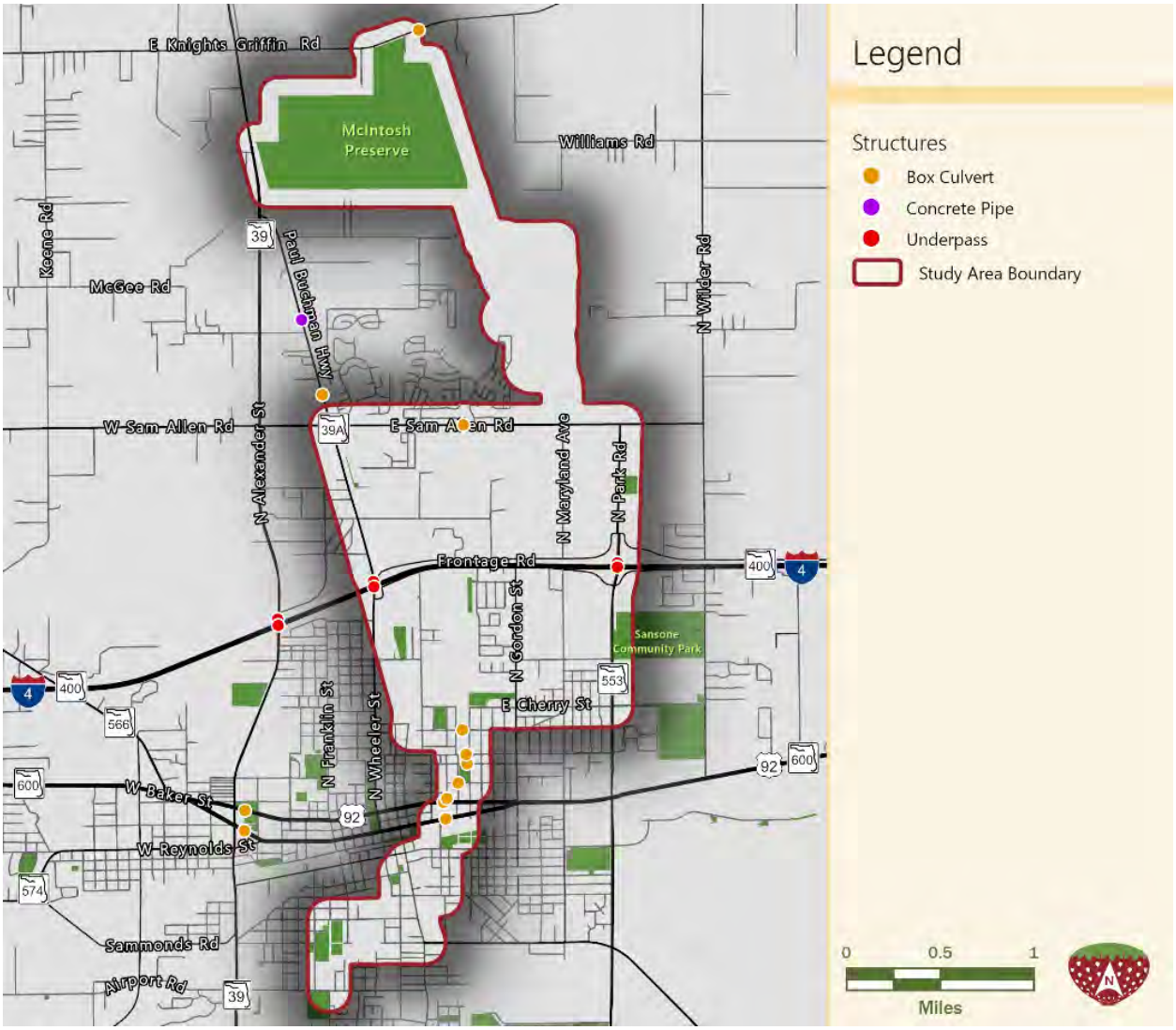
Table 3: Typical Sections Major Roadways

Major Roads	Segment	Number of Lanes	Lane Width (ft)	Divided/ Undivided	Curbed/Flush Shoulder	Multimodal Facilities
SR 39A/Paul Buchman Hwy	Alexander St to Sam Allen Rd	2	12	U	Flush	None
	Sam Allen Rd to Oakland Heights Ave	2	12	U	Flush	None
	Oakland Heights Ave to I-4	2	12	U	Flush	None
	I-4 to Baker Street	2	12	U	Flush	None
SR 553/N Park Rd	Sam Allen Rd to N Frontage Rd	4	11.5	D	Flush	Sidewalk, Bike Lane
	N Frontage Rd to S Frontage Rd	4	12	D	Flush	Sidewalk
	S Frontage Rd to Baker St	6	11.5-13	D	Curb	Sidewalk
N Gordon Street	S Frontage Rd to 1,225' S of S Frontage Rd	2	10.5	U	Flush	Sidewalk
	1,225' S of S Frontage Rd to E Tomlin St	2	10.5	U	Flush	None
	E Tomlin St to E Baker St/E Reynolds St	2	10.5	U	Flush	Sidewalk
S Collins St	Reynolds St to Alabama St	2	11	U	Curb	Sidewalk
	Alabama St to W Grant St	4	10.5	U	Curb	Sidewalk
N Alexander St	Knights Griffin Rd to I-4	4	12	D	Flush	Bike Lane
	I-4 to Thonotosassa Rd	4	12	D	Curb	Sidewalk, Bike Lane
	Thonotosassa Rd to W Dr MLK Jr Blvd	4	12	D	Curb	Sidewalk
	W Dr MLK Jr Blvd to Plantation Blvd	4	12	D	Curb	None
	Plantation Blvd to Mendosa Rd	4	12	D	Curb	Sidewalk
	Mendosa Rd to JL Redman Pkwy	4	12	D	Flush	Sidewalk
US 92/Baker St	N Gordon St to Whitehall St	2	11.5-12	U	Curb	Sidewalk
	Whitehall St to Dort St	2	11.5	U	Flush	Sidewalk, Bike Lane
	Dort St to Alexander St	2	11.5	U	Curb	Sidewalk, Bike Lane
	Alexander St to N Mobley St	2	12	U	Flush	Sidewalk, Bike Lane
US 92/Reynolds St	N Mobley Rd to N Thomas St	2	12	U	Curb	Sidewalk
	N Thomas St to Railroad Tracks	2	10-10.5	U	Curb	Sidewalk
	Railroad Tracks to N Gordon St	2	10.5-12	U	Curb	Sidewalk
E Sam Allen Rd	Paul Buchman Hwy to N Park Rd	4	12	D	Curb	Sidewalk, Bike Lane
E Knights Griffin Rd	Paul Buchman Hwy to N Wilder Rd	2	11.5	U	Flush	None
N Shannon Ave	S Frontage Rd to Palm Cove Living	2	11	U	Curb	None
	Palm Cove Living to E Calhoun St	2	9	U	Flush	None
N Maryland Ave	E Baker St to E Calhoun St	2	10.5	U	Flush	Sidewalk
	E Calhoun St to S Frontage Rd	2	10.5	U	Flush	None
E Cherry St	N Shannon Ave to N Park Rd	2	10	U	Flush	None
E Calhoun St	N Wheeler St to N Collins St	2	12	U	Curb	Sidewalk
	N Collins St to Railroad Tracks	2	9.5	U	Flush	Sidewalk
	Railroad Tracks to N Park Rd	2	10.5-11	U	Flush	None

2.3.4 Structures

Data on structures were sourced primarily from Straight Line Diagrams (SLDs) for state roads. These data were supplemented with review of aerial imagery to identify additional structures on primary local roads. SLDs for all state roads are located in **Appendix B**. As shown in **Figure 6**, overpasses are present at the I-4 interchanges at Paul Buchman Highway and North Park Road, and box culverts are generally located where primary study area roadways intersect the East Canal.

Figure 6: Structures

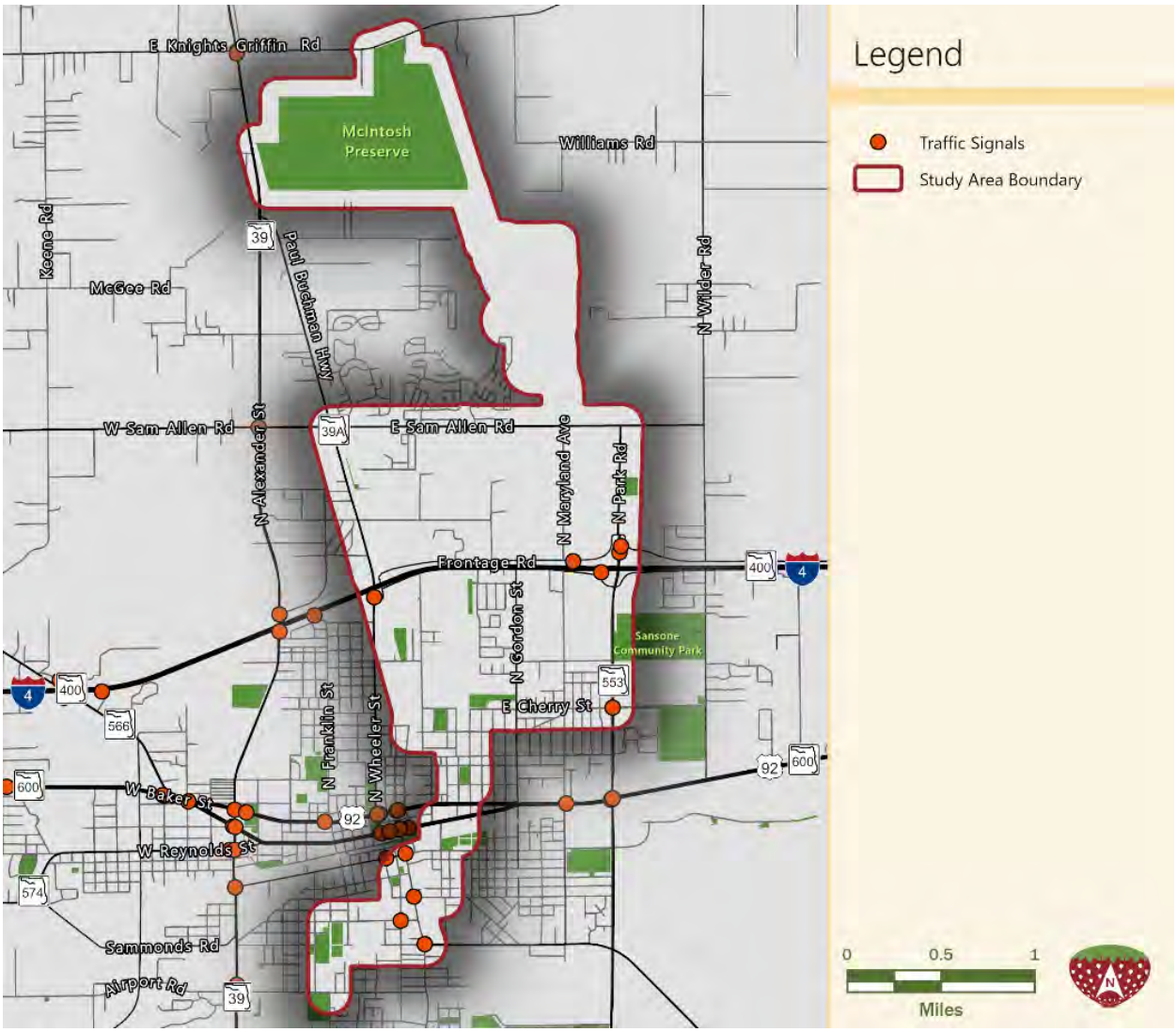


2.3.5 Existing Intersections

Signalized intersection data were gathered from the FDOT Open Data Hub and supplemented with a review of aerial imagery. As shown in **Figure 7**, there are nine signalized intersections within the study area. Those intersections are as follows:

- South Collins Street & Alsobrook Street
- South Collins Street & East Alabama Street
- South Collins Street & West Martin Luther King Jr. Boulevard
- South Evers Street & West Ball Street
- North Park Road & East Cherry Street
- North Park Road & South Frontage Road
- North Park Road & I-4 WB Ramps
- Paul Buchman Highway & Sam Allen Road
- Paul Buchman Highway & South Frontage Road

Figure 7: Major Intersections



2.3.6 Utilities

A Sunshine811 ticket was processed April 2022 to identify a list of potential utility providers within the study area. **Table 4** lists the potential utilities companies within the study area. Utility companies were not contacted to confirm the list as a part of the existing conditions assessment. Once an alignment for the trail is determined, the utility companies could be contacted to verify the location and content of the utilities.

Table 4: Utility Providers

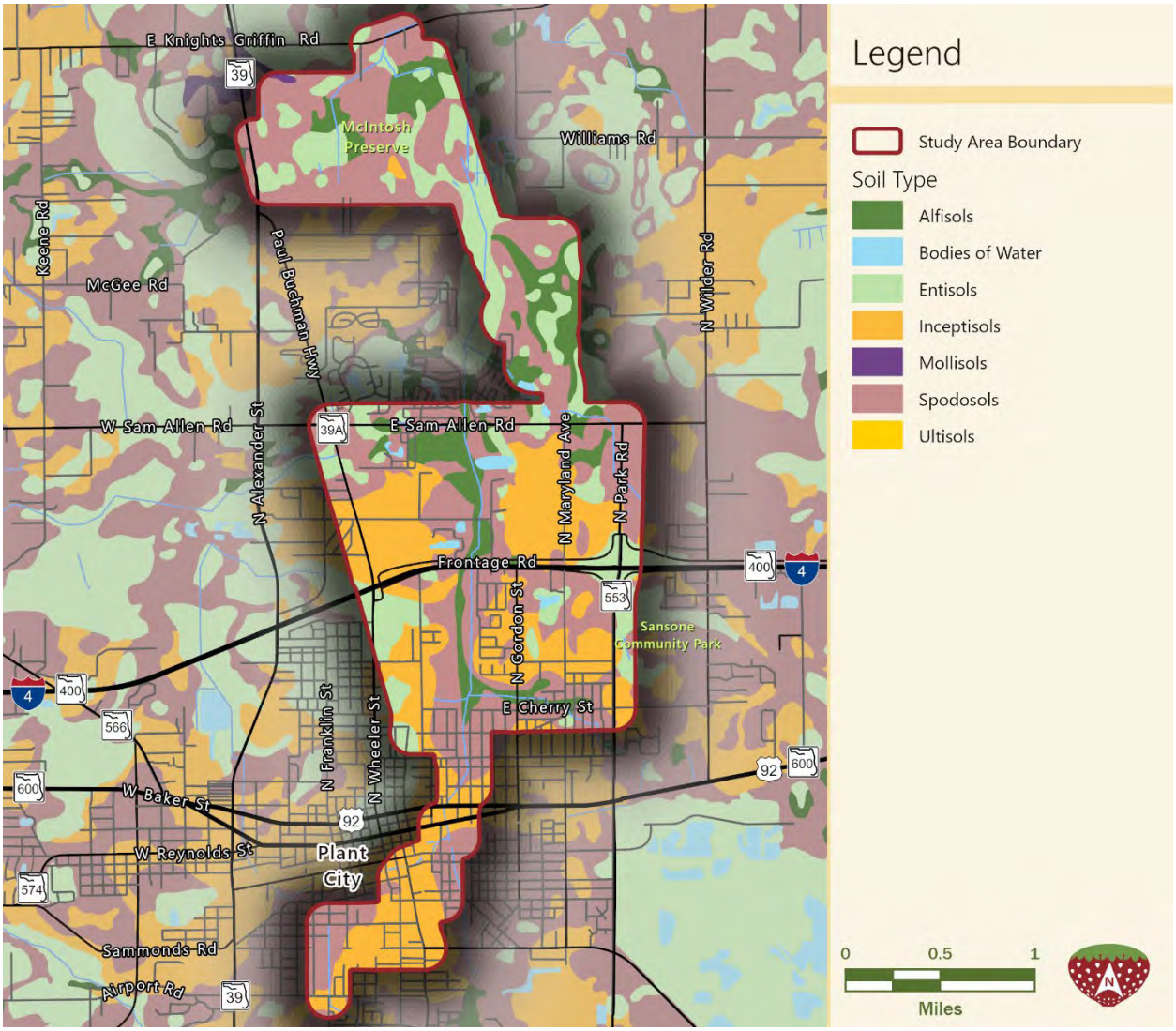
Utility Name	Code	Type
AT&T	ATTF01	COMMUNICATION LINES, FIBER
CHARTER COMMUNICATIONS	BH1271	CABLE
CHARTER COMMUNICATIONS	BH1272	CABLE
CHARTER COMMUNICATIONS	BP1780	CATV, FIBER
BLACK & VEATCH TAMPA 1F	BV2267	FIBER
FLORIDA PUBLIC UTILITIES	CFLGAS	GAS
KINDER MORGAN / CENTRAL FLORIDA PIPELINE	CFPIPL	FUEL OIL PIPELINE
CITY OF PLANT CITY TRAFFIC DEPARTMENT	CP2372	ELECTRIC, TRAFFIC SIGNALS
CITY OF PLANT CITY	CPC588	FIBER, SEWER, TRAFFIC LIGHTS, WATER
FLA. GAS TRANS.-LAKELAND	FGT05	GAS
FLA. GAS TRANS.-SAFETY	FGT09	GAS
FLORIDA GAS TRANSMISSION-FT MYERS	FGT11	GAS
ZAYO GROUP / FORMERLY LIGHTWAVE, LLC	FLW941	FIBER
FRONTIER COMMUNICATIONS	GT1722	CATV, COMMUNICATION LINES
HILLSBOROUGH COUNTY TRAFFIC SERVICE UNIT	HCR409	STREETLIGHTS, TRAFFIC SIGNALS
HILLSBOROUGH COUNTY WATER RESOURCE SERVICES	HCW906	WATER
CENTURYLINK	HW1474	FIBER
CENTURYLINK	L3C900	FIBER
COMCAST COMMUNICATIONS/PREV LK CNTY CBLV	LCA395	CATV
CITY OF LAKELAND ELECTRIC	LLELEC	ELECTRIC
CITY OF LAKELAND WATER	LLWATR	WATER
CITY OF LAKELAND WASTEWATER	LLWWTR	WASTEWATER
MCI	MCIU01	COMMUNICATION LINES, FIBER
CROWN CASTLE NG	NN1882	FIBER
PASCO COUNTY UTILITIES	PASCO	RECLAIMED WATER, SEWER, WATER
TECO PEOPLES GAS- LAKELAND	PGSLL	GAS
UNITI FIBER LLC	SL1086	FIBER
UNITI FIBER LLC	SL2333	FIBER
CITY OF TAMPA SEWER	TAMPS1	SEWER
TRANSCORE FL DEPT OF TRANS DISTRICT 7 ITS	TC2329	ELECTRIC, FIBER
TAMPA ELECTRIC COMPANY	TECO01	ELECTRIC
TECO FIBER	TF1649	FIBER
SPRINT	USSP01	FIBER
TAMPA BAY WATER	WCRW01	WATER

Source: Sunshine811

2.3.7 Soils

Data from the Natural Resources Conservation Service (NRCS) Soils Survey database were collected for the study area and mapped, as shown on **Figure 8.** Except for some locations that have both Alfisols and Entisols, often associated with deciduous forests and areas of sandy minerals low in organic matter, the majority of the study area consists of Ultisols and Spodosols, indicating weathered soil conditions and high acidity and low in natural fertility. While certain areas of the study area present soils conditions that are not conducive to vertical building construction without soil enhancement or replacement, there appear to be minimal obstacles to the construction of a trail along any of the potential alignments.

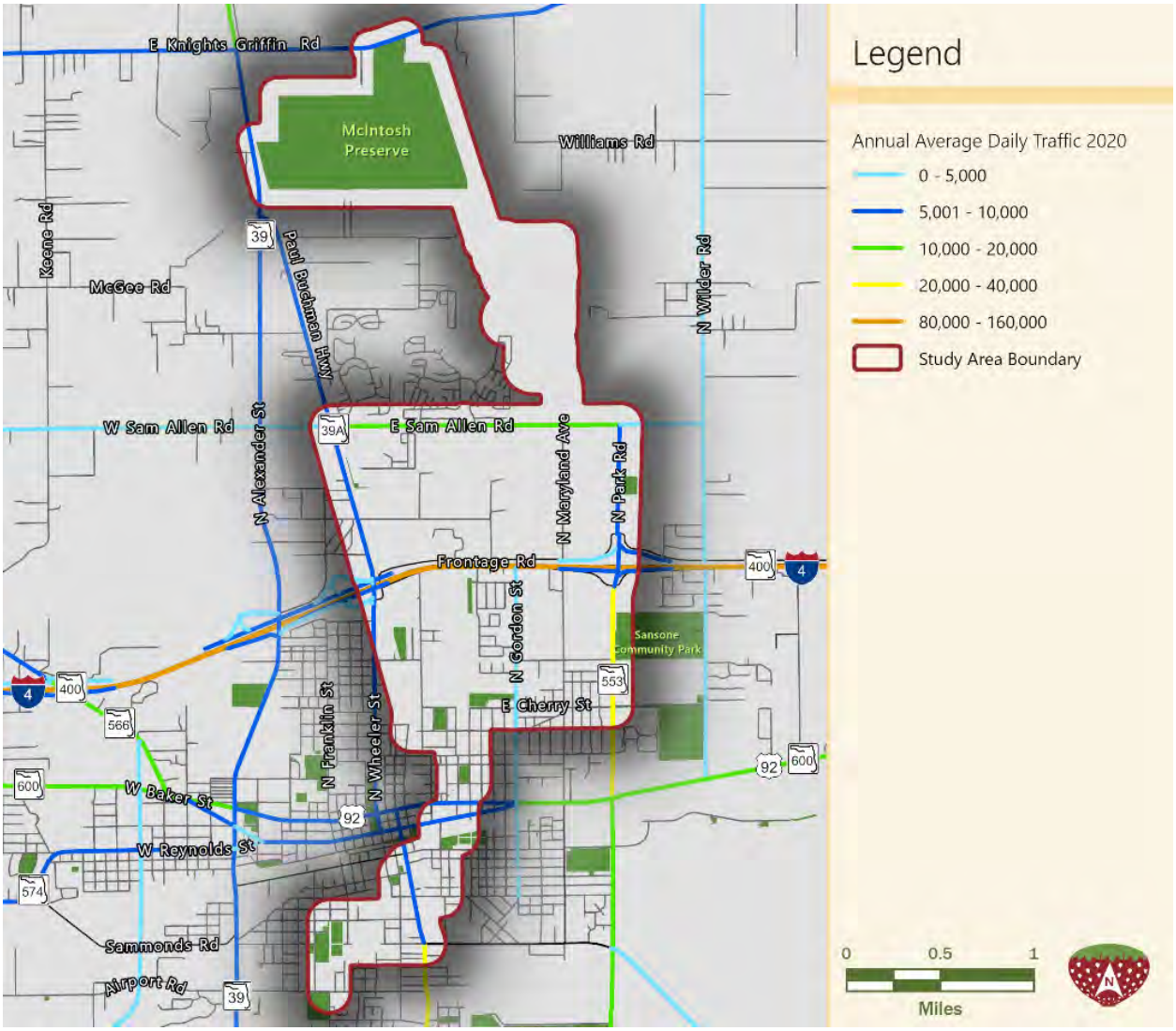
Figure 8: Study Area Soils



2.4 Existing Traffic Conditions

Figure 9 shows daily traffic volumes from Florida Traffic Online for the year 2020. Within the study area, limited-access I-4 carries a substantial amount of traffic. SR 553/North Park Road south of I-4 had the highest traffic volumes of any surface road, followed by East Sam Allen Road, which is currently being widened to four lanes with construction expected to be completed by Summer 2022. No other study area roadways carry daily traffic volumes more than 10,000 vehicles.

Figure 9: Daily Traffic Volumes



Capacity and level of service (LOS) for major study area roadways are summarized in **Table 5**. Capacity and LOS for roadways were calculated using the 2020 Quality/Level of Service Handbook from FDOT. All roadways performed satisfactorily with their adopted LOS. Only SR 39A/Paul Buchman Highway from I-4 to Baker Street had a LOS of D; all other roadway segments performed at LOS C.

Table 5: Existing Roadway Capacity Analysis

Roadway	Speed Limit	No. of Lanes	Adopted LOS	Daily MSV	2020 AADT	K Factor	D Factor	Pk Hr Pk Dr	PHPD MSV	LOS
SR 39A/Paul Buchman Hwy										
Alexander St to Sam Allen Rd	55	2	D	15,045	5,400	9.0%	58.1%	282	748	C
Sam Allen Rd to Oakland Heights Ave	45	2	D	14,160	5,500	9.0%	58.1%	288	704	C
Oakland Heights Ave to I-4	45	2	D	15,045	6,400	9.0%	58.1%	335	748	C
I-4 to Baker St	35	2	D	12,580	6,600	9.0%	58.1%	345	638	D
SR 553/N Park Rd										
Sam Allen Rd to I-4	45	4	D	41,790	5,900	9.0%	58.1%	309	2,100	C
N Frontage Rd to S Frontage Rd	45	4	D	41,790	6,400	9.0%	58.1%	335	2,100	C
I-4 to Baker St	45	6	D	62,895	22,000	9.0%	58.1%	1,150	3,171	C
N Gordon St										
Frontage Rd to Baker St	40	2	E	11,232	850	9.0%	58.1%	44	-	C
S Collins St										
Alsobrook St to Reynolds St	35	4	E	30,420	8,100	9.0%	58.1%	424	1,530	C
SR 39/N Alexander St										
JL Redman Pkwy to Knights Griffin Rd	50	4	D	41,790	5,400	9.0%	58.1%	282	2,100	C
E Sam Allen Rd										
Alexander St to N Park Rd	40	2	E	11,232	6,900	9.0%	58.1%	361	-	C
Knights Griffin Rd										
SR 39/Paul Buchman Rd to N Wilder Rd	50	2	D	23,400	11,000	9.0%	58.1%	575	1,160	C

Source: 2020 Quality/Level of Service Handbook from FDOT

2.5 Safety and Crash Data

Crash data from 2016 to 2020 were analyzed to determine crash trends. The data were pulled from FDOT District 7's Crash Data Management System. Only crashes that occurred within the study area were analyzed and mapped in **Figure 10**. Crashes that occurred on I-4 were excluded, except for one pedestrian crash.

There were 791 crashes that occurred within the study area from 2016 to 2020. Study area crashes were concentrated at the I-4 interchanges of SR 39A/Paul Buchman Highway and SR 553/North Park Road. There were also significant concentrations of crashes along South Collins Street and US 92/East Baker Street.

The breakdown of crash types is shown in **Table 6**. There were five crashes that involved pedestrians, and 10 that involved bicyclists. There were two fatal pedestrian crashes and no fatal bicycle crashes. Almost 75% of bicycle and pedestrian crashes resulted in fatalities or injuries, compared to only 24% for all other crash types.

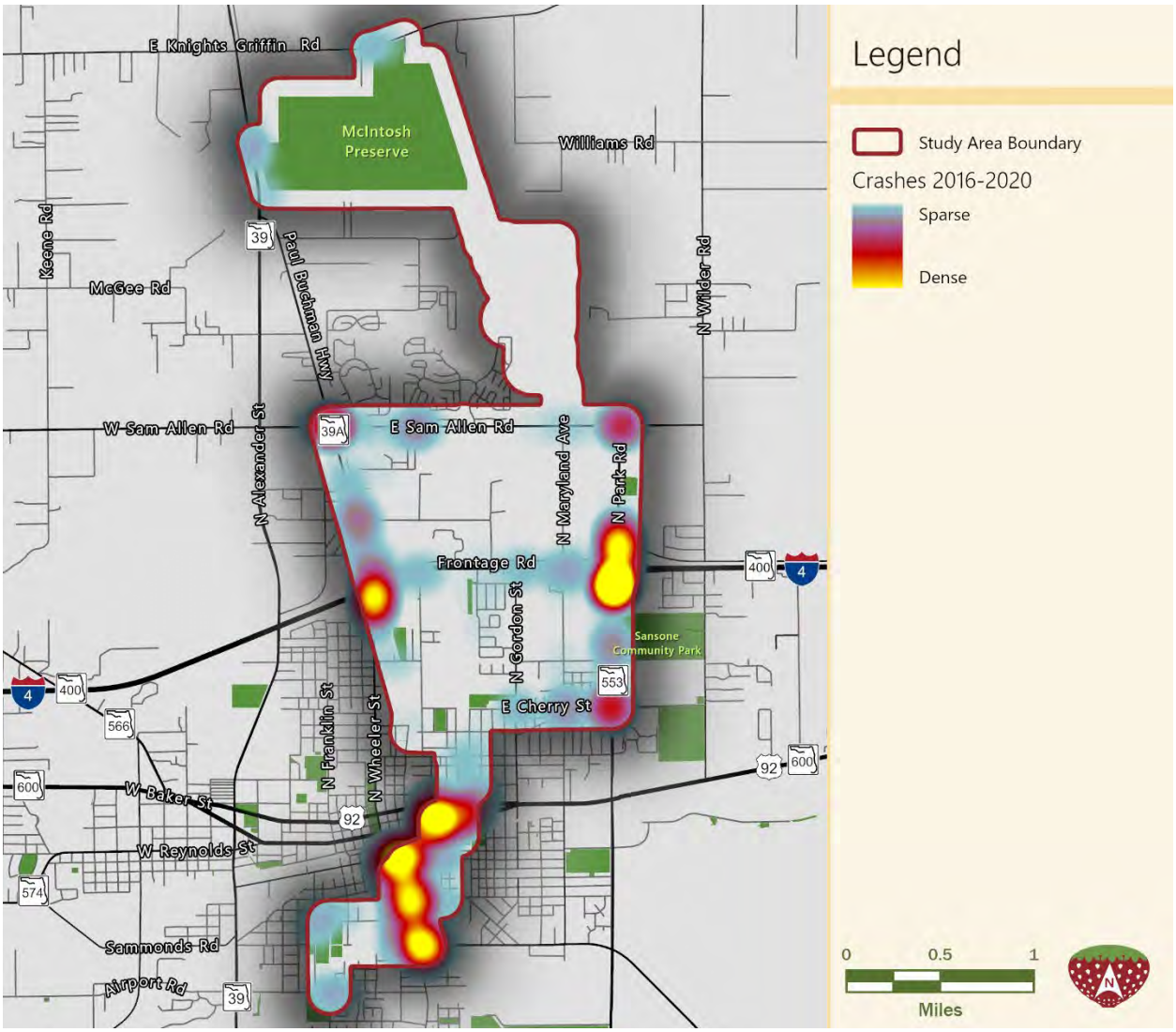
Table 6: Number of Crashes by Crash Type

Crash Type	2016	2017	2018	2019	2020	5-year Total
Angle	67	60	46	77	66	316
Rear End	32	35	29	34	27	157
Left Turn	18	17	21	24	22	102
Hit Fixed Object	16	10	17	16	24	83
Sideswipe	7	7	11	9	14	48
Run Off Road	6	4	6	2	0	18
Head On	6	3	2	3	0	14
Single Vehicle	2	3	3	2	0	10
Bike	2	0	1	1	6	10
Unknown	1	5	1	0	2	9
U-Turn	3	1	1	4	0	9
Right Turn	4	1	1	0	0	6
Hit Non-Fixed Object	0	0	0	2	2	4
Pedestrian	0	2	0	1	2	5
Total	164	148	139	175	165	791

Source: Crash Data Management System

A heat map, shown in **Figure 10,** was developed to identify study area locations with a higher concentration of crashes. Based on this evaluation, particular attention must be given to improving safety at locations where the alignments parallel or cross the major study area roadways, particularly at the I-4 underpasses, US 92 and along South Collins Street.

Figure 10: Crash Heat Map



2.6 Environmental Characteristics

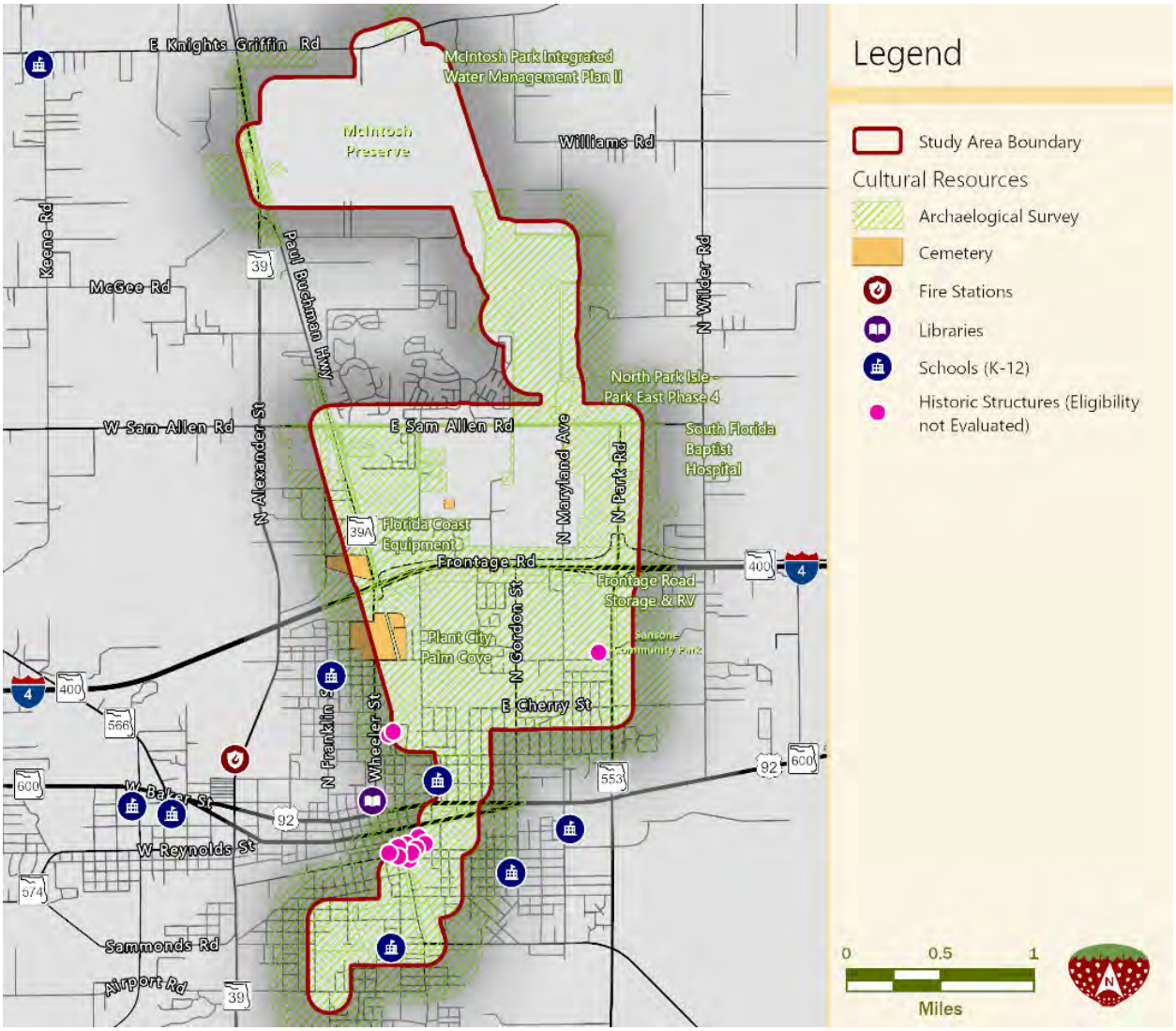
2.6.1 Cultural Resources

Data were obtained from the Florida Division of Historical Resources for potential historical and cultural resources within the study area that are recorded in the Florida Master Site File (FMSF). A total of eight structures near or in the study area are categorized as eligible or "likely eligible" for inclusion in the National Register of Historic Places. These structures are in the vicinity of McCall Park in Plant City (near intersection of Dr. Martin Luther King Boulevard and South Collins Street). Development in this area should "seek ways to avoid, minimize or mitigate" any adverse effects on these historic properties including consultation with the State Historic Preservation Office (SHPO). An additional nine structures are categorized as "not evaluated" or "insufficient information". Historical structures are expressed as point data for all 17 structures. **Figure 11** reflects this information.

A total of four cemeteries are located within the study area.

In addition to historic structures and cemeteries, a total of 27 archeological surveys have been previously conducted within the study area, mostly associated with previous development projects in the area. A request was submitted to the Florida Division of Historical Resources for the reports associated with these surveys. Report titles and publication dates were included in the request. The information received is also reflected on **Figure 11**.

Figure 11: Cultural Resources



2.6.2 Threatened and Endangered Species

As most of the study area has already been converted to residential or agricultural land use, wildlife is generally not expected to pose a significant constraint to the selection of a trail alignment. No bald eagle nests are currently documented as occurring within the study area, or within a 330-ft buffer of the area assumed for construction of paved trails. The closest eagle nests are north of McIntosh Preserve.

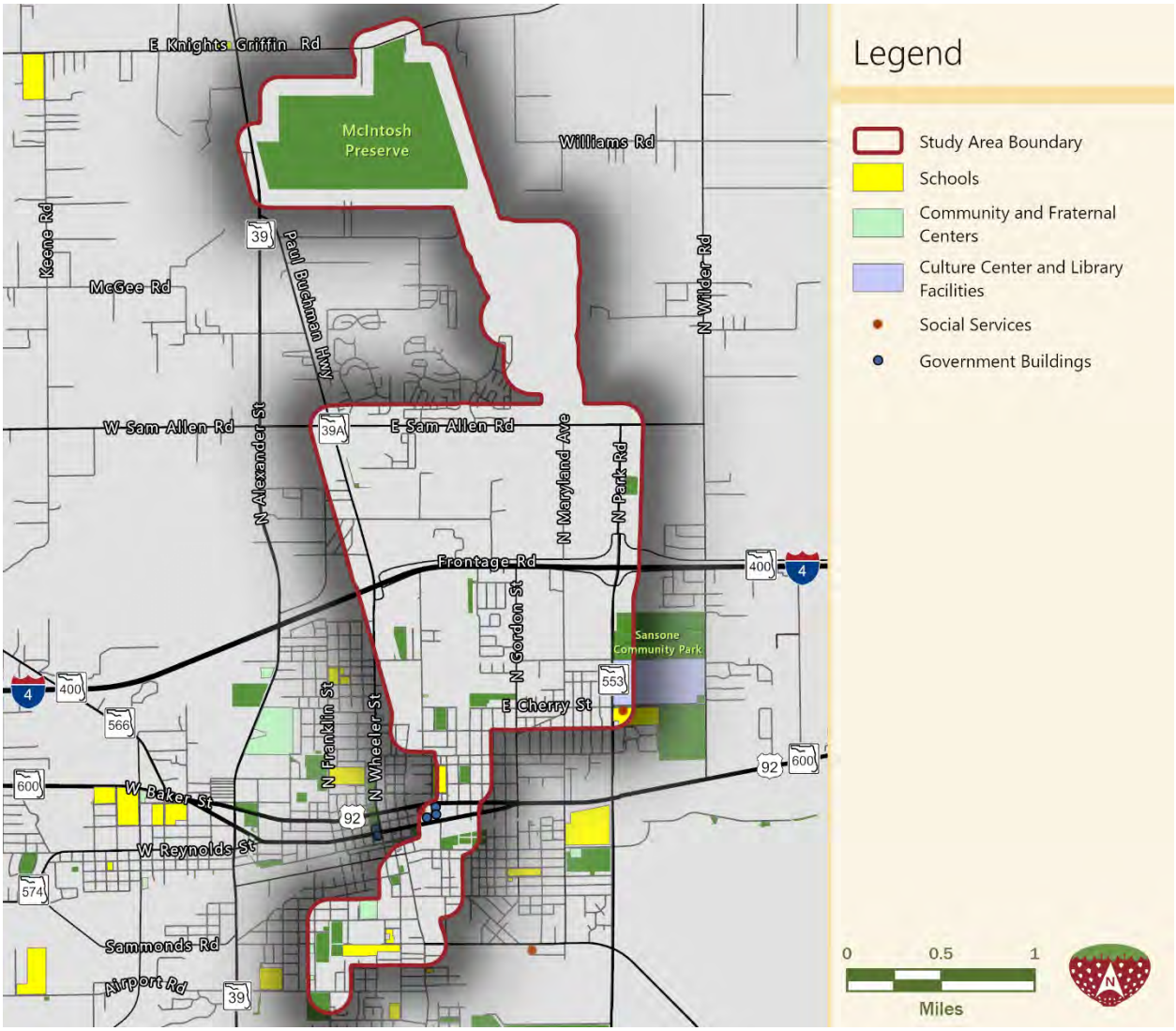
One federally listed species, the wood stork (Mycteria americana), may be relevant to development permitting and design. Each wood stork nesting colony is assigned a core foraging area (CFA) that represents a buffer around the colony, and projects within the CFA must minimize their impacts to wetlands and surface waters to prevent adverse effects to the wood stork per the Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) generally assumes a 0.5-acre impact total to wetlands and/or surface waters within a CFA as the threshold for project effects on wood stork. If impacts to wetlands and surface waters within a CFA exceed 0.5 acres, the USFWS may require an ecohydrological evaluation to assess whether the impacts are to wetlands of the hydropatterns preferred by wood stork, and potentially compensatory mitigation of the proper type. Wood stork nesting colonies in Hillsborough County are assigned a 15-mile CFA buffer, while colonies in Polk County are assigned an 18.6-mile buffer. The study area falls within 15 miles of two Hillsborough County colonies (Cross Creek and Ferman Corporation) and within 18.6 miles of three Polk County colonies (Lake Somerset, Lone Palm, and Mulberry Northeast). Consequently, it is recommended that impacts to wetlands and surface waters (including ponds and conveyances) be as minimized as possible (i.e., below 0.5 acres) to avoid wood stork impacts and subsequent agency consultation.

One state-listed species, the gopher tortoise (Gopherus polyphemus), is also a current candidate for federal protection. Both live individuals, as well as their burrows, are protected under State law. From a brief desktop review, gopher tortoise suitable habitat appears minimal due to poorly drained soils and previous land use conversion in most of the study area. Based on land cover and soils, some areas with the most potential (though low to moderate overall) for gopher tortoises or their burrows include the vicinity of Maryland Avenue to Park Road in the first half-mile north of I-4. It is recommended that a brief (i.e., <100%) gopher tortoise burrow survey be conducted during the alignment selection phase, and/or just prior to project construction.

2.6.3 Community Destinations

For the purposes of this study, community destinations include schools, libraries, cultural centers, community centers, civic centers, social services, and government buildings. These are land uses that are important to connect to residential areas as well as each other. Community destination data was gathered from the University of Florida GeoPlan Center. **Figure 12** shows the community destinations in the study area. Schools in the study area include the Hillsborough Community College (HCC) – Plant City Campus, Jackson Elementary School, and Burney Elementary School. There is a cluster of government buildings in downtown Plant City. These include the Plant City Courthouse and the Plant City Community Resource Center.

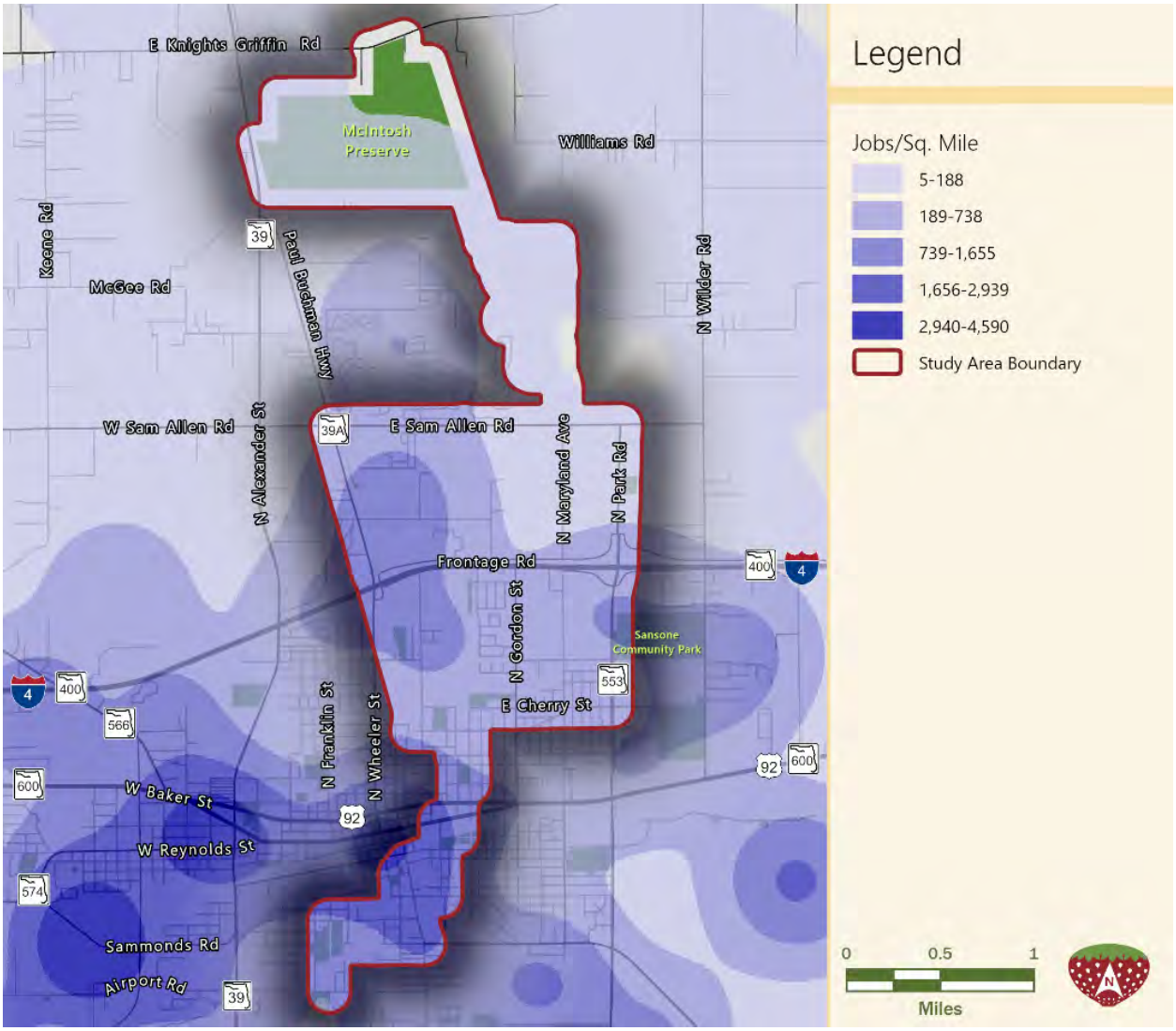
Figure 12: Community Destinations



2.6.4 Major Employers and Activity Centers

Employment data were retrieved from OnTheMap, with 2019 being the most recent year available. As shown in **Figure 13**, employment is concentrated in the southwest of the study area around downtown Plant City. There are other concentrations of employment near the I-4 and SR 39A/Paul Buchman Highway interchange, as well as east of SR 553/North Park Road.

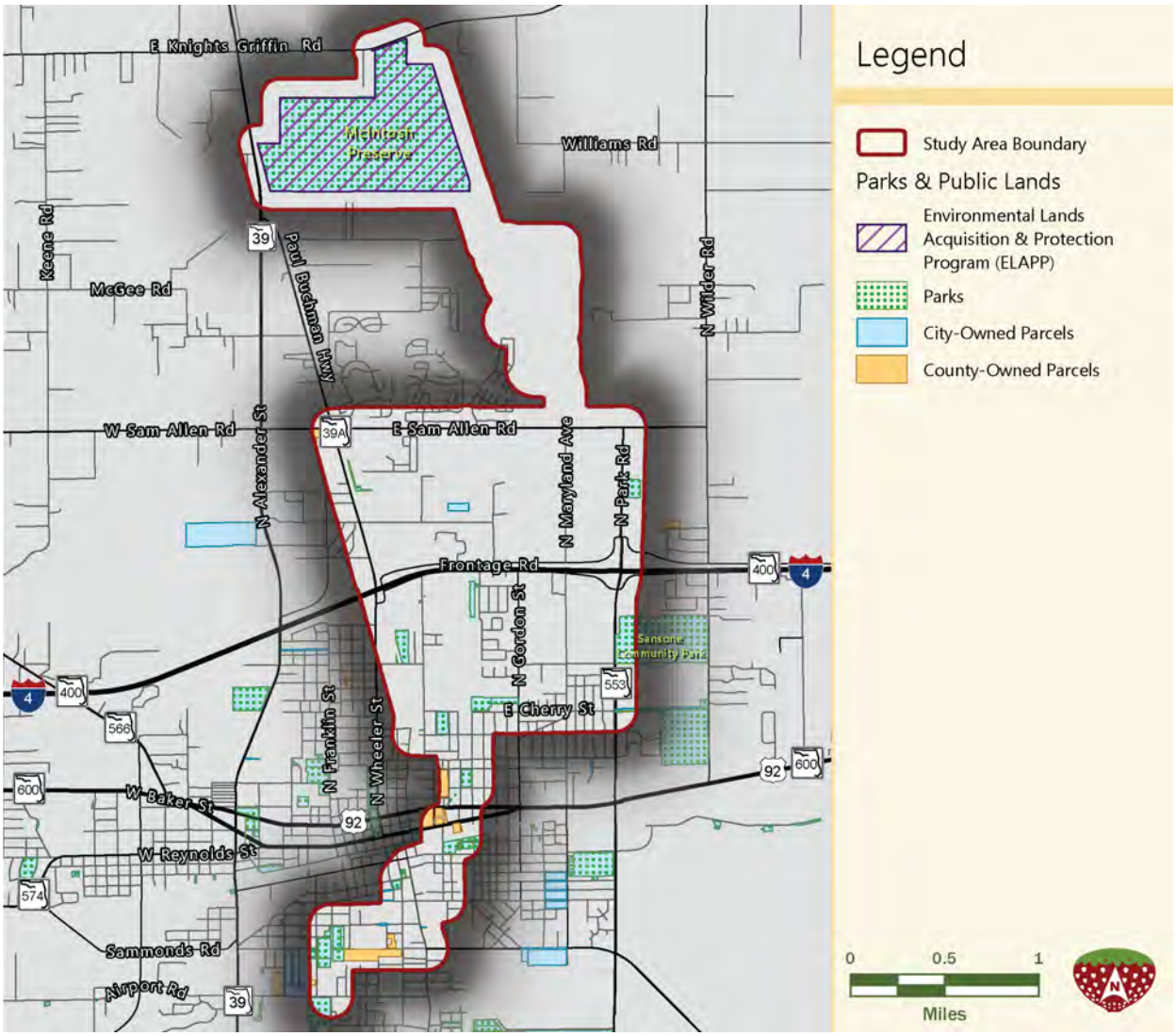
Figure 13: Employment Centers



2.6.5 Parks, Public and Protected Lands

Parks, public parcels, and protected lands are shown in **Figure 14**. Protected lands are represented by the Environmental Lands Acquisition & Protection Program (ELAPP). The only ELAPP land in the study area is McIntosh Preserve which is owned by Plant City and operated as a park. McIntosh Preserve and Mike E. Sansone Community Park are the largest parks in the study area. Other notable parks in the study area from north to south include Cherry Street Park, Gilchrist Park, Samuel W. Cooper Park, Marie B. Ellis Park, Ronald L. Snowden Park, and Dr. Hal & Lynn Brewer Park.

Figure 14: Parks and Public Lands



2.6.6 Wetlands

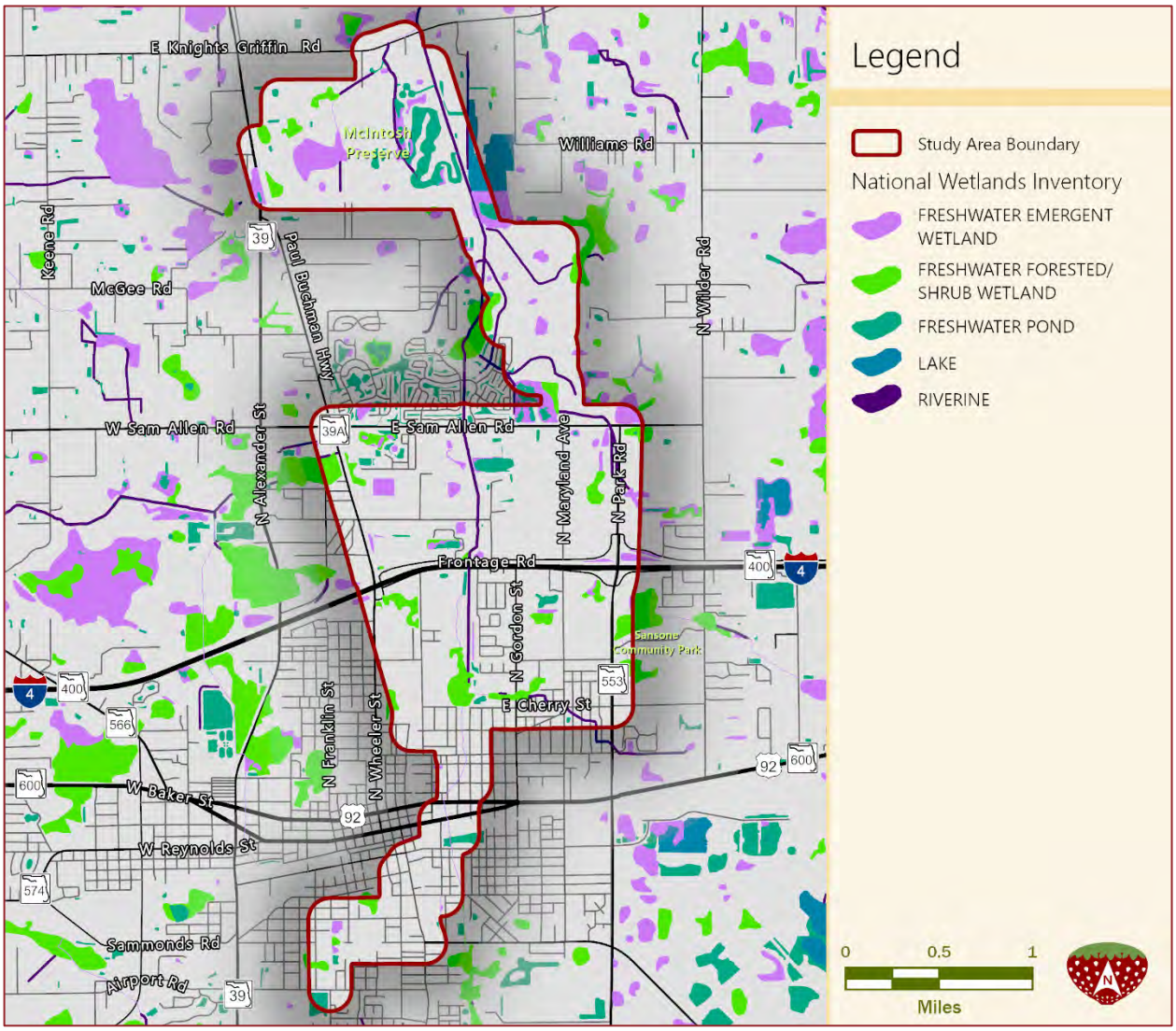
The federal National Wetlands Inventory (NWI), mapped in **Figure 15**, is somewhat outdated and does not represent an accurate indication of wetlands and other surface waters in the study area. To supplement the NWI, land cover data were obtained from the Southwest Florida Water Management District (SWFWMD) and Florida Fish and Wildlife Conservation Commission (FFWCC), and broad-level review of the resulting datasets was conducted. A total of 248 wetlands and other surface water polygons are present within (or within 1,000-ft) of the study area. "Other surface waters" include ponds or other drainage features to which impacts would require permitting but may be exempt from compensatory mitigation (absent listed species concerns).

Wetlands and surface waters are expressed as polygon data. Polygons that would likely qualify as wetland under State definition are designated as "Wetland" in the "Type" field, while other surface waters are designated as "Water Body".

Within the study area, there are over 1,000 acres of land within the most recent mapping of the 100-year floodplain (Flood Zone A/AE) by the Federal Emergency Management Agency (FEMA). All floodplain in the study area is represented on the Digital Flood Insurance Rate Map (DFIRM) with ID number 12057C-NFHL. This map was updated very recently, on March 15, 2022. Development within the floodplain may be subject to floodplain compensation requirements. Impacts to wetlands within the floodplain may entail additional permitting jurisdiction and corresponding effort. The floodplain extent is expressed as polygon data.

There are a total of six pending Environmental Resource Permits (ERP) in the study area. If these occur in areas optimal for trail alignment, the permit applications and project designs should be briefly examined to ensure compatibility with project design. Pending ERPs may include construction of development or wetland mitigation that would affect design of concurrent projects. The pending ERPs are provided as polygon data, roughly corresponding with the corresponding project boundaries. The ERP application ID is identified for each site in the study files. Based on these data, wetlands should not present significant issues in trail selection.

Figure 15: Wetlands

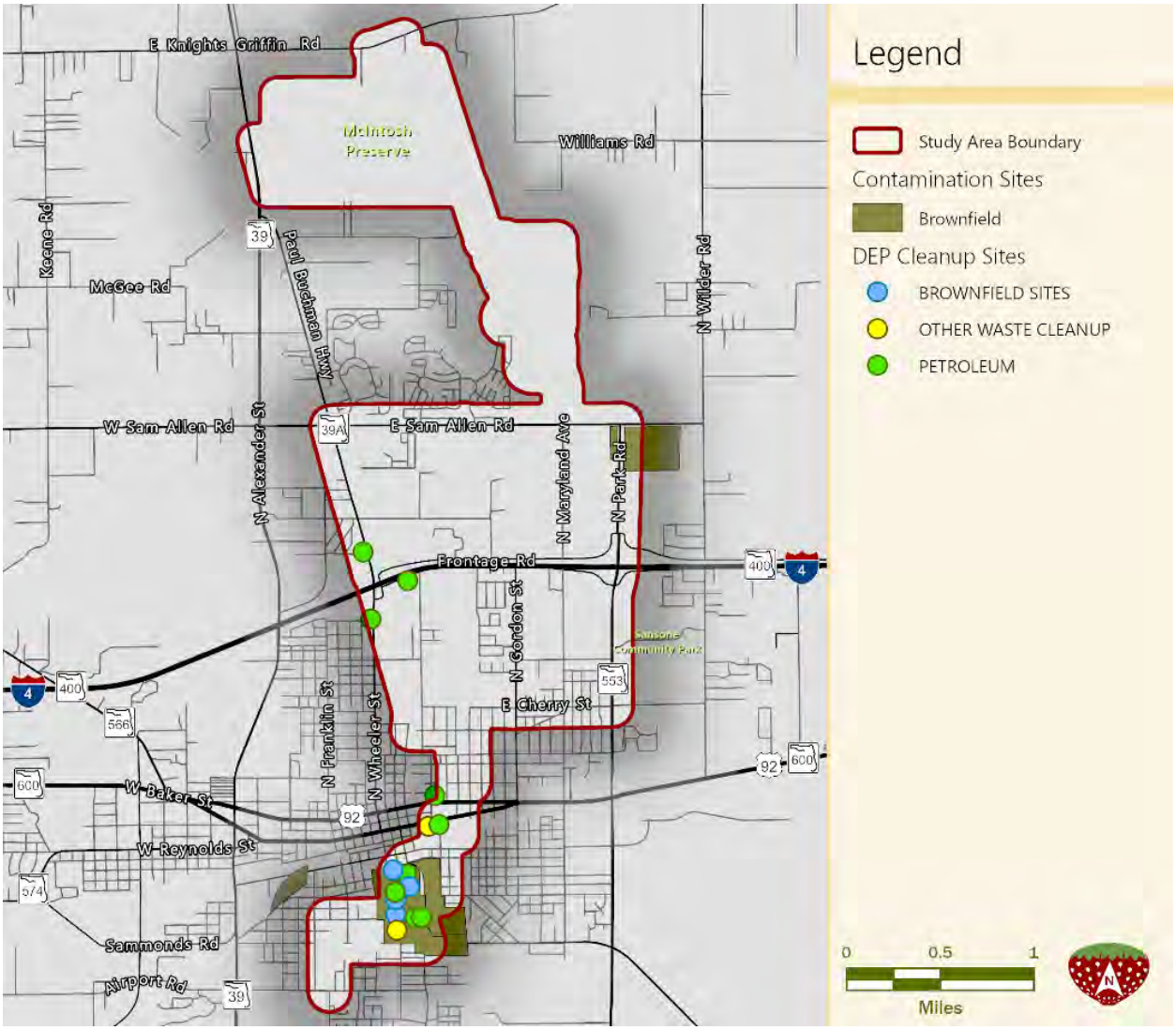


2.6.7 Contamination

Site location data were obtained from the Florida Department of Environmental Protection (FDEP) for areas within the study boundary for which re-use or redevelopment may be complicated by actual or perceived environmental contamination. Those data are mapped on **Figure 16**. There are 16 known contamination sites within the study area where cleanup has not yet been completed. Each of these sites corresponds with a property or facility contaminated by a previous land use or hazardous material storage. Land purchase or construction within these sites could involve complications related to remediation. The most common contaminant is petroleum. Contamination sites are expressed as point data.

There are also four Brownfield Areas that intersect the study area: Midtown Brownfield Area, Lincoln Park Brownfield Area, Plant City Industrial Area, and South Florida Baptist Hospital Economic Enhancement Area. These are areas that historically or currently contained numerous contamination sites but were designated by local government through resolution to be cleaned up and/or redeveloped through incentive of the Florida Brownfields Redevelopment Act. Brownfield Areas are expressed as polygon data.

Figure 16: Contamination Sites



3

Issues and Opportunities

3.1 Issues

3.1.1 Right-of-Way

In the southern portions of the study area, where local roads will provide most of the alignment options, narrow rights-of-way in residential neighborhood pose a potential challenge. Ample right-of-way exists along many of the major roadways but some restrictions there may still dictate a reduced trail width.

Although right-of-way availability must be considered in comparison of the final alignments and typical section design, based on aerial and ground observation of potential restrictions, these considerations will not impact the selection of viable alternatives to advance in the next study phase.

3.1.2 Environmental Constraints

Natural environmental constraints are very few in the study area. Due to the urban nature of the developed condition, there are no threatened or endangered species that would present a major constraint to trail development.

Although there do exist some isolated wetlands and ravines that could fall within the limits of an alignment, none are so significant as to substantially reduce the viability of an alignment. A more detailed evaluation of the impact on wetlands, if any, will be considered during the next study phase.

3.1.3 Utilities

There are at least two dozen active utility providers in the area. These utilities include telecommunications, power, gas, potable water, and sanitary sewer, along with private fiber optic providers. Until more specific alignment options are identified, the project team will rely on field observations to determine any obstacles related to utility locations, size, and scale, that would impact selection of an alignment or particular segment for the potential trail.

3.1.4 Intersections and Crossings

The development of an urban trail usually requires consideration of design treatments at major intersection and mid-block crossing locations that prioritize efficiency and safety for trail users.

The traffic volume and crash data collected for this report does reveal that while the daily traffic volumes on the area roadway network are not excessive, there are some points of congestion that will need to be considered. More importantly, there is a history of multiple crashes at intersections and on roadway segments that are initially included in the set of possible trail alignments. These factors will be key considerations in the comparative evaluation and selection of viable trail alternatives and alignments.

3.1.5 Natural and Man-made Barriers

Within the study area, there are very few if any natural barriers that would prohibit the development of the trail facility. The man-made barriers are those that will influence trail selection based on the practicality, the viability to address, the cost and the reasonableness of developing a trail in unison with that infrastructure.

These manmade barriers do include the existence of utilities, especially those with significant above ground infrastructure (poles/towers), drainage structures (bridges and box culverts), cultural or historic structures, major highway crossings, railroads, and of real significance for this project, the barrier created by I-4 and the limited opportunities to use an existing interchange to pass through the limited access right-of-way. As an alternative, a possible overpass may be both difficult to develop due to the length and area needed for transitions to grade, and the associated cost for a structure that would be elevated over hundreds of feet of interstate highway.

3.2 Opportunities

3.2.1 Previous Plans

Previous plans have identified the need and provided much of the groundwork necessary to support the development of a trail within the study area connecting key community features. In certain parts of the study area, strides have already been made to support the development of this proposed trail. For example, Plant City has already constructed segments of what will likely be incorporated into the selected trail alignment or they have obtained a commitment for improvements and/or access through development that will connect to McIntosh Preserve.

These plans and those associated with the Midtown Redevelopment Vision Plan support and will assist in defining the location and connectivity that is provided by the future trail.

3.2.2 Connections to Amenities

As noted in previous sections, there are many amenities that the trail facility can connect to. These include schools, parks, community centers, cultural centers, and government services. There are a total of nine parks that can be tied into a potential trail alignment: McIntosh Preserve, Mike E. Sansone Park, Cherry Street Park, Plant City Dog Park, Gilchrist Park, Samuel W. Cooper Park, Marie B. Ellis Park, Ronald L. Snowden Park, and Dr. Hal & Lynn Brewer Park. Additionally, there are three schools along potential trail alignments: Hillsborough Community College (HCC) – Plant City Campus, Jackson Elementary School, and Burney Elementary School. In addition to being a school, HCC has many other amenities on campus like vocational rehabilitation, truck driving school, community gardens, and an event hall. Other services that can be connected to with a potential trail alignment are the Plant City Community Resource Center and Plant City

Courthouse on Michigan Avenue. Another important amenity to connect to is employment – the trail would connect employment centers near downtown with residential areas to the north.

3.2.3 Connecting Underserved Communities

Analysis available from the Hillsborough TPO's 2021 Nondiscrimination and Equity Plan shows that underserved communities are concentrated in the southern end of the study area – south of Reynolds Street. The trail would allow for better connectivity within the underserved community as well as better connections to amenities and opportunities farther north in the study area.

3.2.4 Noted Opportunities for Public Engagement

Hillsborough TPO (TPO) staff will attend requested events in Plant City between June 2022 and August 2022 to obtain feedback on the proposed alternatives from community groups and the public.

This will include outreach to churches, homeowners' associations (HOAs), and other groups to request that they include a survey link in any newsletters or emails they may routinely send to membership. If further engagement is requested by these groups, TPO staff may provide in-person presentations on an as needed basis.

TPO staff will also conduct several focus groups in communities of concern to gain further opinions and insights about the proposed route(s) These sessions may be in partnership with churches, HOAs, and other groups.

TPO staff will use social media and internal contact lists to disseminate the survey. To ensure feedback is received in the study area, geofencing and targeted advertisements may be used to target residents of the study area.

Finally, TPO staff will coordinate with Plant City, making use of existing newsletters and communication methods to get the work out on the project and solicit feedback. This may include presentations to City Boards, Commission, and Committees as requested.

A

Planning Documents


Hillsborough MPO
Metropolitan Planning
for Transportation
INTERSTATE
4
CITY OF PLANT CITY
1885
FLORIDA
Plant City
Walk-Bike Plan

PLANT CITY WALK-BIKE PLAN

PREPARED FOR:

Hillsborough MPO
Metropolitan Planning
for Transportation

Hillsborough MPO
601 E. Kennedy Blvd
Tampa, FL 33602
813.272.5940

PREPARED BY:

ATKINS

alta
PLANNING + DESIGN

JUNE 2017

TABLE OF CONTENTS

1.0 INTRODUCTION

The City of Plant City aspires to create a safer, more convenient, and more enjoyable place for residents and visitors to walk and bike. To achieve this aspiration, Plant City, in conjunction with the Hillsborough Metropolitan Planning Organization (MPO), commissioned the following Plant City Walk-Bike Plan ("Plan"), which is a city-wide comprehensive bicycle and pedestrian master plan. The Plan was developed by Atkins in partnership with Alta Planning + Design ("Project Team"). The Project Team worked in partnership with the City and MPO to develop a comprehensive and feasible Plan that provides connections to local and regional destinations including parks, schools, and surrounding destinations in the region.

The purpose of the Plant City Walk-Bike Plan is to accomplish the following: synthesize Plant City's previous planning efforts, identify opportunities to fill in pedestrian and bicycle network gaps, and develop priority project concepts that will move projects from idea to implementation. This purpose was accomplished through public outreach and coordination via community and steering committee meetings, a walking and biking system assessment and evaluation, the development of recommendations, and an implementation plan.

The Plan begins by establishing a vision for a bikeable and walkable Plant City, accompanied by goals and objectives to achieve that vision. Subsequently, the Plan provides a community profile and a summary of the community involvement efforts. Additionally, the walking and biking system assessment and evaluation is described, which consisted of: a review of existing plans, a walk friendly and bicycle friendly community assessment, and an existing conditions analysis of bikeway and walkway networks is described. The final element of the Plan presents the recommendations and implementation strategies for Plant City. The recommendations include the development of an initial bicycle and pedestrian network, infrastructure recommendations and policies, support facility recommendations, and catalyst project concepts. The implementation strategies provide a funding plan and general timeline for walking and biking facility expansion and improvement within the City.

Overall, the Plant City Walk-Bike Plan provides a guide for Plant City and its partners to achieve their goals of creating a place where residents and visitors can walk and bike.

Collins Street Mural. Source: Plant City Government website.

1.1 VISION, GOALS, AND OBJECTIVES

This plan establishes a vision for a walkable and bikeable Plant City, with achievable goals and objectives to realize that vision. The vision, goals, and objectives provided guidance for the development of recommendations for this plan, and should function as guideposts for plan implementation.

Vision Statement

Walking and riding a bike in Plant City is a comfortable and normal part of daily life for people of all ages and abilities.

This is the future envisioned by the Plant City Walk-Bike Plan, and it signifies an evolution in the way that Plant City accommodates people who walk and bike.

Several key themes are embedded in this vision, including comfort, daily life, and all ages and abilities.

- **"Comfortable"** suggests walking and/or biking are safe, convenient, and attractive travel options for people in Plant City.
- **"Daily life"** means that walking and biking are not niche activities, but are instead desirable for a variety of trip purposes.
- **"All ages and abilities"** means that the emphasis is on planning, designing, and building walking and biking facilities that will be used by a range of people throughout Plant City.

Goals & Objectives

The following goals and objectives provide the steps in the process towards realizing the vision:

- Achieve **Bicycle Friendly and Walk Friendly Community** status.
- Adopt a **Complete Streets Policy.**
- Continue the **Safe Routes to Schools Program** with both infrastructure and policy elements.
- Develop a **downtown wayfinding plan and bicycle user map.**
- Research and pursue additional **grant** opportunities to improve biking and walking safety.

Plant City village green. Source: Consultant Team.

1.2 COMMUNITY PROFILE

The community profile provides context for the character and identity of the area. An understanding of the existing community composition is essential to the development of a Plan that will suit the specific needs of Plant City. The following community profile describes the community demographics, recent bicycle and pedestrian crash data, and community involvement in the Plan.

Community Demographics

The community demographics section provides a selection of data derived from the US Census that is relevant to the development of a bicycle and pedestrian plan. The selected data includes age characteristics, median income, households with vehicles, and commute to work.

Total Population

Plant City is home to a population of approximately 36,000. The Plant City population comprises approximately three percent of the total population of Hillsborough County of 1,302,884. According to the Bureau of Economic and Business Research (BEBR) though the University of Florida, the population of Hillsborough County is projected to grow by eight percent by 2020, and by 25 percent by 2030.

Age Characteristics

Age is an important variable for biking and walking as it influences associated health characteristics which can severely impact transportation choices. Typically, around 30 percent of a community's residents do not drive due to age (this includes all of those under 16 and 15 percent of those over age 65), income, or physical disability. For example, people who are 65 and older are typically driving less, while those in the millennial generation are increasingly favoring non-automotive modes of transportation. Providing active transportation options encourages healthy lifestyles and can cost less than driving. The graph series in Figure 1.1 through Figure 1.3 illustrate the age characteristics of Plant City, Hillsborough County, and Florida.

To summarize, sixty percent of Plant City's population is between age 20 and 64, and 29 percent under the age of 20. The people within these age categories are the most likely to change their travel habits, and may be willing to make more trips by biking and walking. Additionally, eleven percent of Plant City's population is over the age of 65, which is the age when driving may no longer be a safe option for commuting or travelling. This population could also see considerable improvements in the type of commute or travel choices depending on location and safety.

When compared to Hillsborough County and Florida, Plant City's age cohorts are most similar to the County's, whereas the overall population in Florida is generally much older. Almost one in five people in Florida are over 65. Eighty-one percent of the population is under 65.

Figure 1.1 Plant City Age Characteristics, 2015

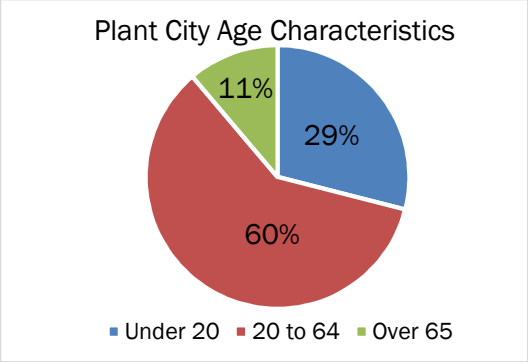


Figure 1.2 County Age Characteristics, 2015

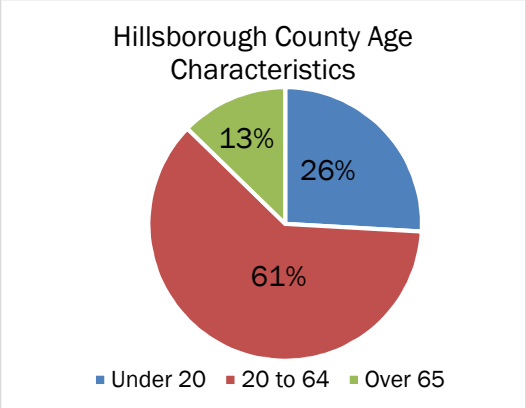
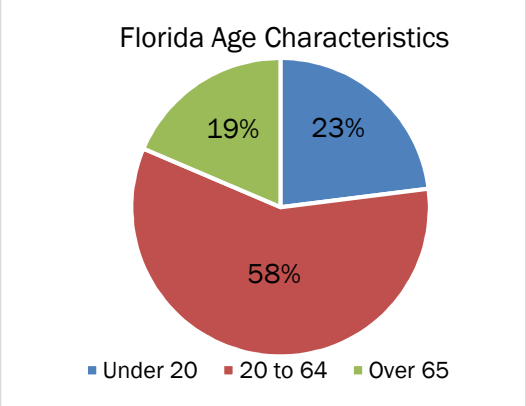


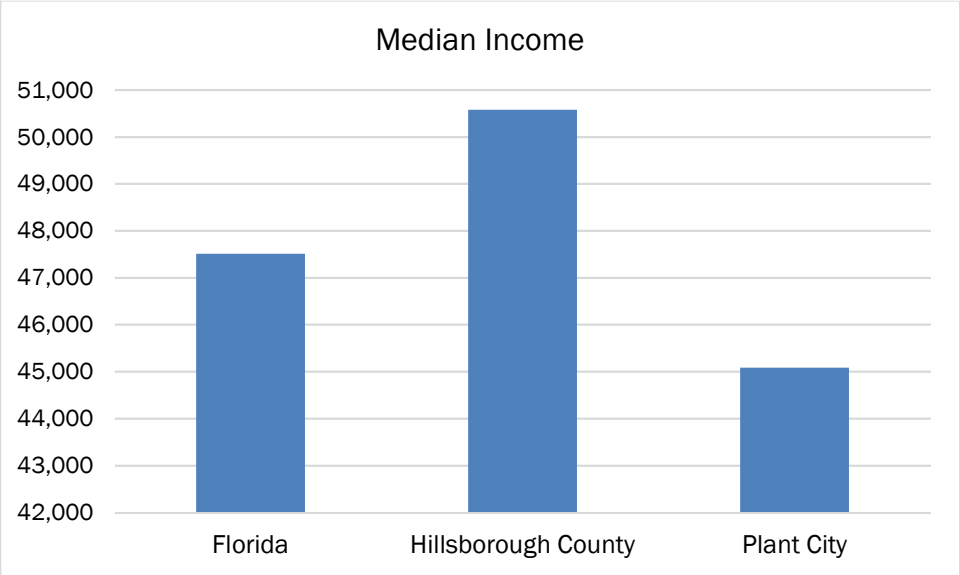
Figure 1.3 Florida Age Characteristics, 2015



Median Income

The median income for Plant City in 2015 was less than Hillsborough County and Florida. As demonstrated in Figure 1.4, Plant City's median income is approximately $2,500 less than Florida, and is approximately $5,000 less than the median income for Hillsborough County.

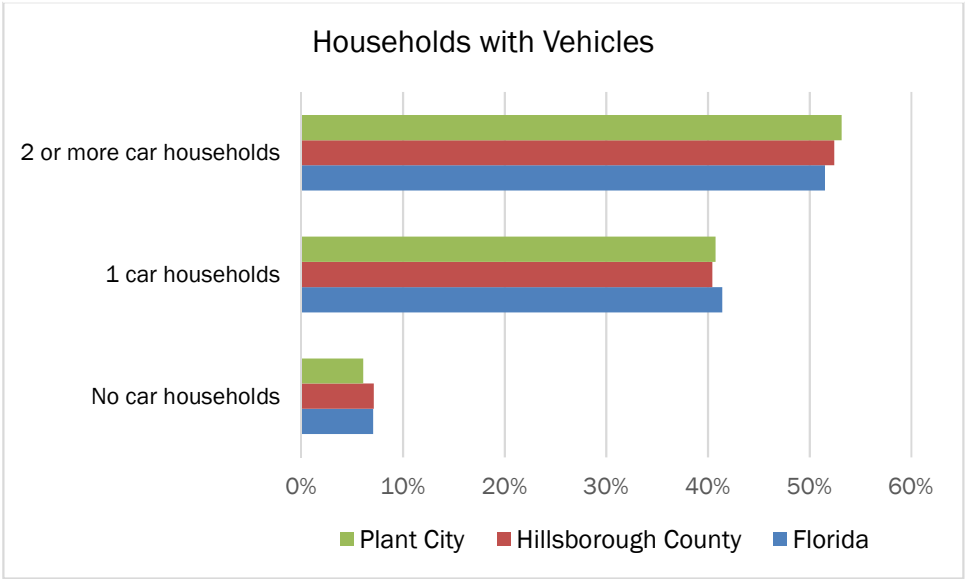
Figure 1.4 Median Income Comparisons, 2015



Households with Vehicles

According to the US Census 2015 estimates, the households with vehicles characteristics are comparable throughout Plant City, Hillsborough County, and Florida. Approximately half of the households across the three geographies have two or more cars; approximately 40 percent of the households have one car, and around seven percent of the households have no cars.

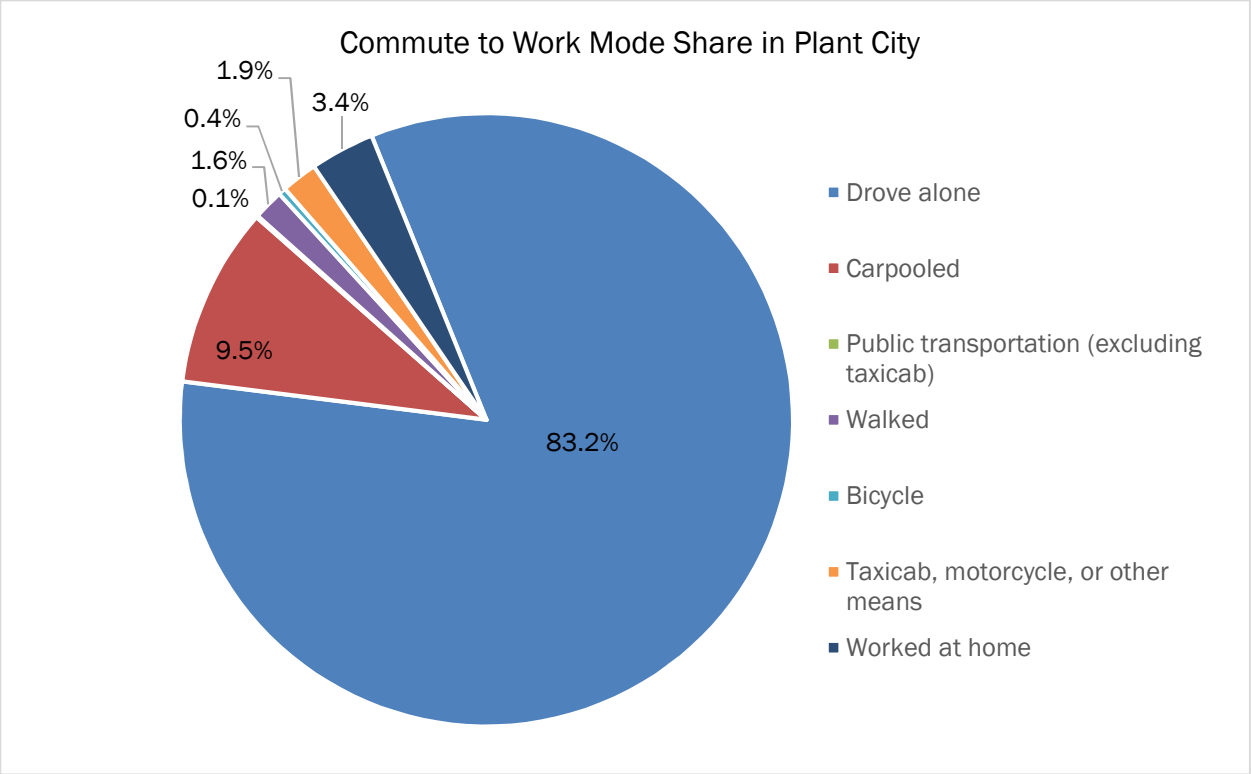
Figure 1.5 Households with Vehicles Comparison, 2015



Commute to Work

How a community commutes to work gives a snapshot of how a community travels in general. As demonstrated in Figure 1.6, 83 percent of the Plant City population in 2015 drove alone on their commute to work. This is representative of a typical community where commuters are likely to venture longer distances to larger urban areas to perform their daily jobs. Additionally, just under ten percent of the population carpooled in 2015. Walking or using a biking collectively make up just under 2 percent of the means of commuting to work.

Figure 1.6 Commute to Work, 2015



Source: United States Census Bureau; American Community Survey Five Year Estimates, 2015

Bicycle and Pedestrian Crash Data

Crash data was collected and analyzed for Plant City from 2011 to 2016 using the Signal-4 Analytics database. In this period, a total of 115 crashes involved people biking or walking. Eleven of these crashes resulted in fatalities. Many of the crashes that occurred within the City were clustered in high speed, high traffic roadway corridors and their adjacent neighborhoods. The three most significant crash locations were on James L. Redman Parkway approaching Alexander Street, Alexander Street by Plant City High School, and three blocks north and south of Thonotosassa Road (US 92). Figure 1.8 on the following page illustrates the overall crash locations in the City.

Bicycle Crashes

A total of 57 crashes involved bicyclists, of which two in fatalities. The two fatal bicycle fatalities occurred on Park Road and James L. Redman Parkway.

Pedestrian Crashes

A total of 64 crashes occurred involving pedestrians, resulting in the death of eight people. Three of these fatalities occurred within a mile of one another. These three clustered fatalities were located at:

- Turkey Creek Road, just north of SR 574
- SR 574, just east of Turkey Creek Road
- SR 574, between Elnor Street and Reynolds Street

Crash Rate

Comparing crash rates illustrates differences between Plant City and the surrounding area. As displayed in Figure 1.7, the rate of crashes per 1,000 people was more frequent in Plant City from 2011 to 2016 than Hillsborough County. Additionally, crashes in the City were more likely to result in fatalities. However, Hillsborough County was more likely to have crashes that involved pedestrians, or crashes that involved bicyclists and pedestrians that resulted in serious injuries.

Figure 1.7 Crash Rate

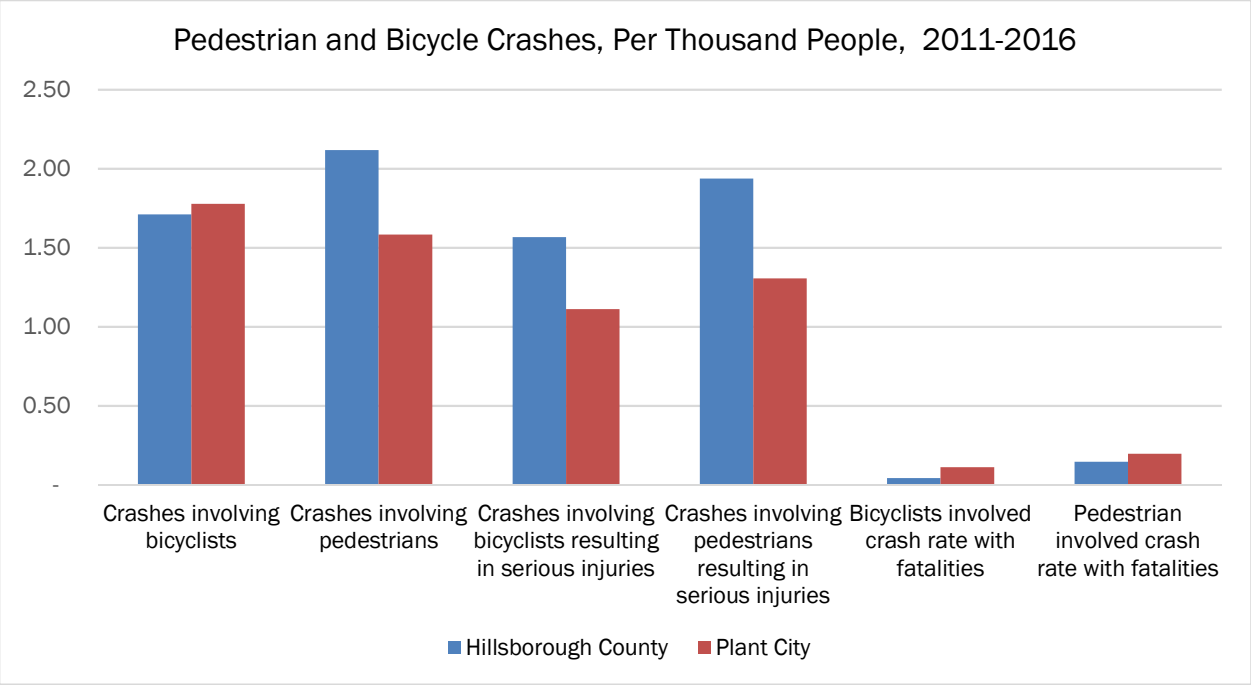
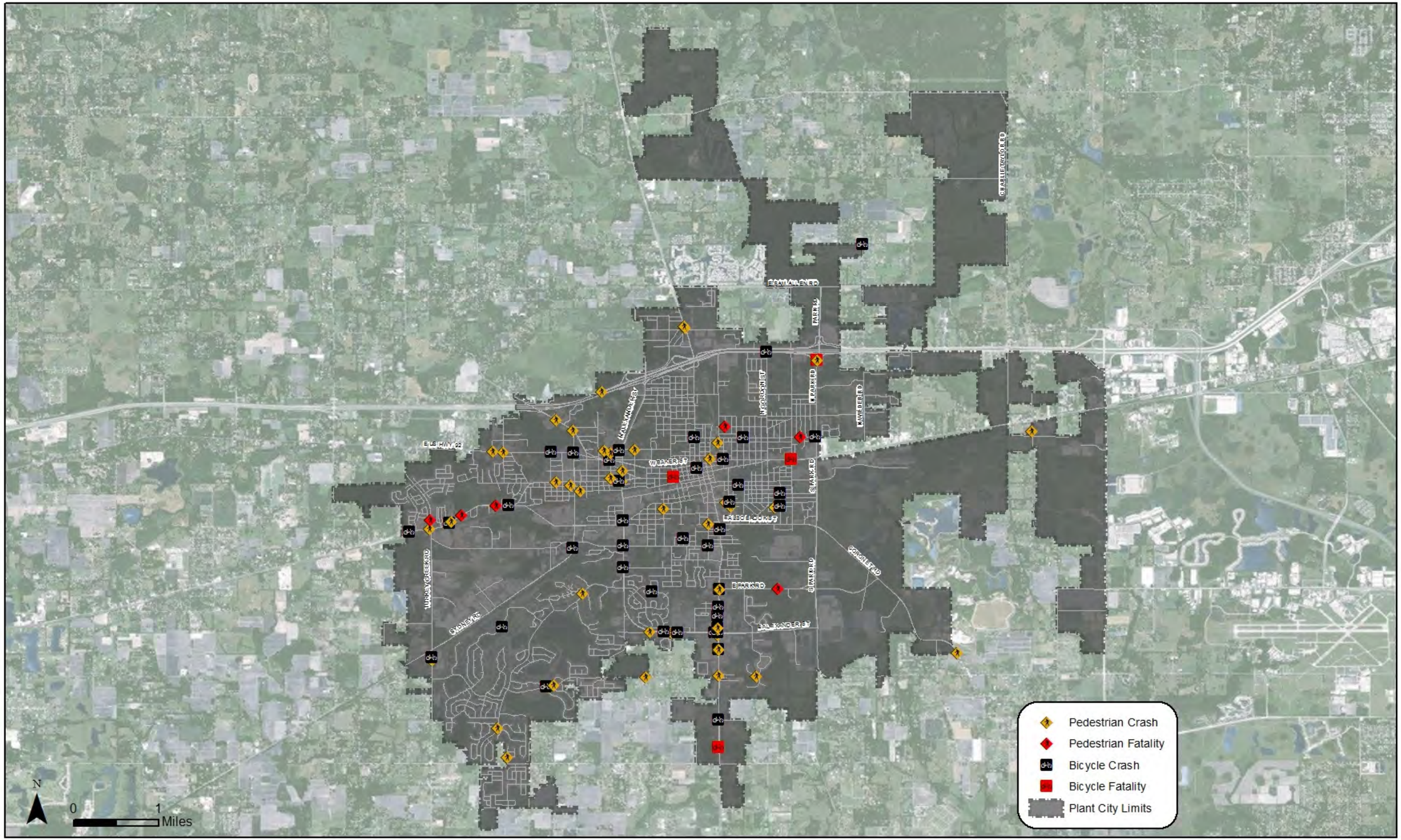


Figure 1.8 Bicycle and Pedestrian Crash Locations



Hillsborough MPO
Metropolitan Planning for Transportation

Bicycle and Pedestrian Crashes

1.3 COMMUNITY INVOLVEMENT IN THE PLAN

Community involvement was central to the development of this Plan. Input from the community guided the study team towards policy and development regulations involving infrastructure elements including trails, sidewalks, and bikeways. Community feedback was received during steering committee meetings, an open house, and other public events. Strong interest in the plan was shown at each meeting, with nearly 40 people attending the open house, consistent participation from the steering committee, and iterative dialogue throughout the plan's development. Key themes that were identified during the community involvement meetings are outlined at the end of this section.

Community open house. Source: Consultant team.

Technical Steering Committee Meetings

Three technical steering committee meetings were held over the course of the plan development. The technical steering committee consisted of staff from various City departments, including Planning & Zoning, Engineering, Community Development, and Parks and Recreations. A direct outcome of the steering committee was an increase in non-infrastructure recommendations provided within this report. The study team was directed to emphasize consideration given to the lighting and safe crossings of major roadways such as West Reynolds Street and East Baker Street (US Highway 92) through Downtown, Alexander Street, and James L. Redman Parkway.

Community Open House

The City and MPO hosted a community open house on the evening of Thursday, February 2, 2017 from 4:30 PM to 7:30 PM at the Bruton Memorial Library. City staff, representatives from the Hillsborough MPO, and members of the Atkins consultant team hosted the meeting. The open house format allowed the public to attend at their convenience to review the bicycle and pedestrian networks, provide comments, and learn the next steps of the plan development. The structure of the open-house included:

- A sign-in table and location map for the participants to pin their home or work location within the City.
- A PowerPoint presentation summarizing the study and various bicycle and pedestrian information running on a loop.
- An exhibition of maps including existing bicycle and pedestrian conditions and the bicycle network.
- "Thought Boards" presenting four questions for the meeting participants to respond to via post-it notes.
- A large map of the City for participants to provide comments on regarding bicycle and pedestrian needs.
- Comment forms for participants to contribute any additional remarks.
- A board displaying examples of bicycle and pedestrian improvements.

Open House Participants

Approximately forty (40) people attended the open house, with thirty (30) participants who signed in on the attendance sheet. A general map of Plant City was included at the sign-in sheet table where participants could pin the location of their home or work. Twenty-four (24) of the participants pinned their locations on the map:

- 9 within the Walden Lake area
- 6 around central Plant City/Downtown
- 2 along Trapnell Road, southeast of Plant City
- 2 located northeast of Plant City
- 1 near Cherry Street/HCC
- 1 off Maryland Avenue
- 1 along Martin Luther King Boulevard and Forbes Road
- 1 off Turkey Creek just west of the City
- 1 off Keene Road

Open House Maps

An exhibition of maps was included in the open house for the community to react to, such as suggesting edits, changes, or include additional information. The five maps presented were:

- *Existing Pedestrian Conditions Map*
  - Showed the existing sidewalk network along major roads.
- *Pedestrian Clusters around Points of Interests (POIs)*
  - POIs included schools, library, hospital, churches, retail corridors, and parks.
  - Clusters indicated quarter mile and half mile radii from the POI to demonstrate 5-minute and 10-minute walking distances.
- *Existing Bicycle Conditions Map*
  - Showed existing bicycle lanes and paved shoulders.
- *Bicycle Clusters around POIs Map*
  - POIs were the same as on the pedestrian maps
  - Clusters indicated three quarter-mile and one and half-mile radii from the POIs to demonstrate 5-minute and 10-minute bike rides.
- *Bicycle Network Map*
  - Presented a draft bicycle network.

Community Open House. Source: Consultant Team.

During the open house, participants indicated three POIs that should be added to the maps. The three locations were the Boys and Girls Club, the YMCA, and the Strawberry Festival Grounds.

Open House Thought Boards

Four questions were displayed on two boards for meeting participants to respond to via post-it notes. The questions were:

- *What does Plant City mean to you? (Describe in one word or phrase)*
  - The most common responses were “friendly” and “community”.
- *What are the top three places you go to most in Plant City?*
  - Common responses were “Downtown”, “church”, and “park”.
- *What is your biggest concern regarding bicycle and pedestrian mobility in Plant City?*
  - Top responses were “lighting”, “safety”, and “connectivity”.
- *What should be the number one bicycle and/or pedestrian priority project for Plant City?*
  - Popular responses were “lighting”, “crosswalks” and “trails”.

Open House General Comment Map

A large map of Plant City was placed on a table for the participants to write comments on using post-its and markers. Comments received on this map included:

- Notation of high traffic areas.
- Facility location prioritization.
- Requests to connect Walden Lake to Downtown.
- Notation of specific areas for lighting improvements.
- Requests for trails and trailheads.

Comment Forms

Forms were provided for participants to write any additional comments. The comment forms received are summarized as follows:

- Listed additional connectivity points.
- Noted that it was difficult to find safe places to run.
- Noted lack of sidewalks and lack of connectivity of sidewalks.
- Requested a sidewalk maintenance plan.
- Education on leash laws in rural areas.
- Requested road widening on Mudlake Road.
- The need for connecting areas north of I-4 to the rest of the City.
- Requests to include code regulations to require developers to build connecting sidewalks and trails for new developments.

Community open house. Source: Consultant Team.

Community Key Themes

During public and stakeholder input sessions, participants answered questions relating to frequently visited places, community values, and about safety for biking and walking. These themes represent the community priorities for establishing a safer and more convenient biking and walking system in Plant City, and should be used when prioritizing master plan implementation decisions.

Maintaining the City Character

Residents want to maintain the character of Plant City. Participants overwhelmingly responded that their community is a friendly place. Participants characterized the people of the City as polite, and the community as having a historic charm. They also noted that the downtown has potential for growth, and an attractive historic character. Participants also described the rapid development occurring in the areas around town, especially in the northeast portions of the City. They pointed out the hometown appeal of Plant City that brings many new residents and visitors every year.

Downtown Plant City. Source: Plant City Government website.

Improving Bicycle and Pedestrian Mobility and Access

Another consistent theme found throughout the planning process was a concern for bicycle and pedestrian safety, mobility, and accessibility. Participants noted concerns for safety when walking or biking, a desire for better connections between points of interest and residences, and lighting in low visibility areas. Additional concerns raised include safe routes to schools, safe crossings, wayfinding signage, and physical separation of people driving motor vehicles from those who are walking or using a bike.

Connecting Residences with Destinations

Plant City residents want to have better bicycle and pedestrian connections to local destinations. The charming downtown includes a number of destinations that residents frequently visit, including the library, many shops, churches, and McCall Park. Plant City has several parks inside and outside of the downtown core that cater to the recreational and leisure needs of the community. Furthermore, the major commercial corridors and along James L. Redman Parkway have gained traction in bringing residents to the larger stores found in Plant City.

Plant City Water Tower. Source: Plant City Observer.

Build a Network for Walking and Biking

The lack of an overall network for biking and walking has created a culture where people believe the car is the only safe means to get from one place to another. Residents suggested that the City should build a network that connects destinations and promote these non-motorized options. Citizens stated that if given the opportunity, they would walk or bike more to destinations to save on the cost of driving and improve their health.

2.0 WALKING AND BIKING SYSTEM ASSESSMENT AND EVALUATION

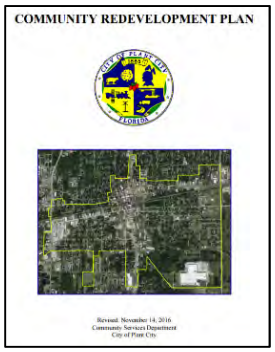
The second component of the Plant City Walk-Bike Plan is a walking and biking system assessment and evaluation. This assessment and evaluation consists of a review of existing plans, a walk friendly and bicycle friendly community assessment, and an existing conditions analysis reviewing current bikeway and walkway networks.

2.1 REVIEW OF EXISTING PLANS

Since 2000, Plant City has adopted several plans and initiatives that relate to the walking and biking environment. The Project Team reviewed these plans to ensure accuracy with existing plans and initiatives, and to also provide historical context of the City's future needs. The seven studies reviewed are listed below, and summarized in this section.

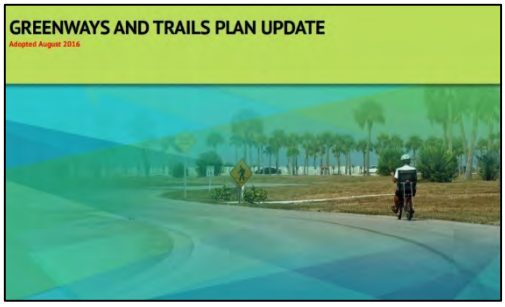
- Plant City Community Redevelopment Plan (2016)
- Hillsborough MPO Greenways and Trails Update (2016)
- Imagine 2040: Plant City Comprehensive Plan (2016)
- Plant City Recreation and Open Space Plan (2009)
- Northeast Plant City Area Master Plan (2008)
- Midtown Redevelopment Vision Plan (2007)
- Plant City Multimodal Transportation Needs Plan (2000)

Plant City Community Redevelopment Plan (2016)



The Plant City Community Redevelopment Plan was updated in November 2016. The plan encourages development and redevelopment of office and commercial activity centers as pedestrian places. Furthermore, the plan promotes rejuvenation of the central core. Examples of central core rejuvenation were: providing more housing opportunities, increasing density, and encouraging pedestrian movement within the downtown core. The plan also desires to increase the availability of the parks within redevelopment area boundaries, improve existing sidewalks, and construct new sidewalks to provide better connectivity.

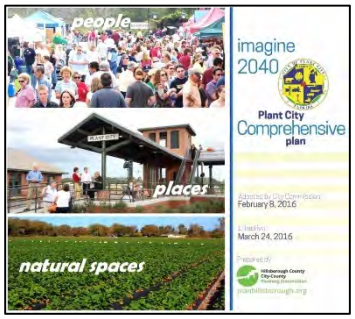
Hillsborough MPO Greenways and Trails Update (2016)



The Hillsborough MPO Greenways and Trails update unified the Hillsborough County Greenways Master Plan (1995) and the City of Tampa's Greenways and Trails Master Plan (2000). The document provided best practices for infrastructure elements such as wayfinding and pavement markings. Additionally, the document proposed a trail system called the Plant City Connector, which would connect Plant City to the trail systems in Polk and Pasco County. It was noted that this facility is not elibile for SunTrail funding. Further details regarding the Plant City Connector are:

- Promotes a child-friendly environment, increases safety and mobility of those dependent on non-automotive forms of transportation.
- Represents an opportunity for the MPO and Plant City to collaborate.
- The next steps include coordination with Plant City, Hillsborough County, and neighboring counties to develop specific trail alignments and conduct preliminary engineering studies.

Imagine 2040: Plant City Comprehensive Plan (2016)

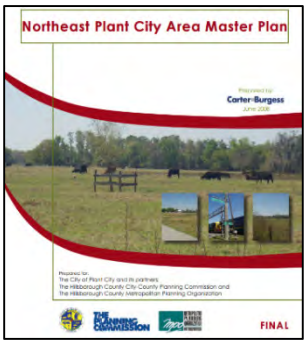


The most recent update to the Plant City Comprehensive Plan was adopted in February 2016. The plan identified that a better correlation was needed between land use patterns to encourage more bicycle and pedestrian usage. The plan also requires new DRIs and other large developments to provide bicycle and pedestrian amenities. Included with the plan is a bicycle level of service map and a multi-use trails and sidepaths map. Additionally, the plan identified bicycle and pedestrian crash clusters, recommended a series of bicycle and pedestrian projects, and stated that trails and sidepaths identified in the 2040 LRTP should be implemented.

Plant City Recreation and Open Space Plan (2009)

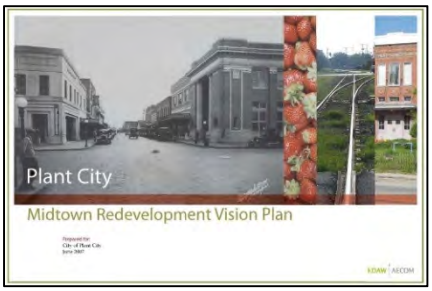
The Plant City Recreation and Open Space Plan was adopted in July 2009. In regards to bicycle and pedestrian planning, this plan indicated that Plant City should work with the state and county on all road improvement projects to ensure the inclusion of bicycle and pedestrian facilities. Additionally, the plan recognized that some areas should be retrofit to better serve for bicyclists, pedestrians, and people with a disability.

Northeast Plant City Area Master Plan (2008)



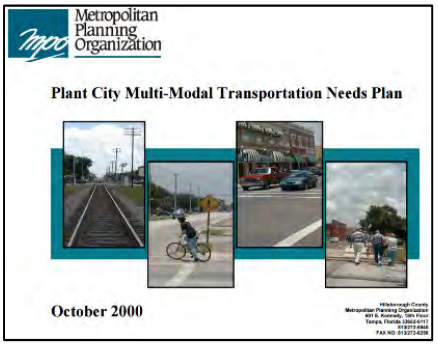
The Northeast Plant City Area Master Plan was adopted in June 2008. The plan was undertaken to address anticipated growth in the area, to ensure that adequate public services and facilities will be provided, and to ensure that the area is well integrated into Plant City. This area plan encourages mixed use development patterns and multimodal transportation systems. Additionally, this plan promotes land use scenarios that show a series of greenways connecting residential and non-residential areas and the implementation of pedestrian and bicycle facilities on new roadway construction.

Midtown Redevelopment Vision Plan (2007)



The Midtown Redevelopment Vision Plan was commissioned to identify options and community preferences for the physical environment of Midtown. The plan was adopted in June 2007. Community preferences identified in this plan include: more mixed use redevelopment, an increase in maximum density and height, elimination of building setback lines, creation of a central civic space, the improvement of streets and sidewalks, the widening of existing sidewalks, and the implementation of complete street concepts on all area roadways.

Plant City Multimodal Transportation Needs Plan (2000)



The Plant City Multimodal Transportation Needs Plan was adopted in 2000. Identified issues include: neighborhood access around rail lines, excess downtown vehicular traffic, truck traffic downtown, transportation disadvantaged needs, connectivity and continuity of bicycle and pedestrian facilities, and goods movement needs of industrial development areas. The plan also identified specific pedestrian and bicycle needs. The pedestrian needs included mobility considerations such as new sidewalks, sidewalk maintenance, and safety improvement programs. The identified bicycle needs included the need for a separate, comprehensive bicycle plan and strategies for bicycle safety and mobility.

2.2 Walk Friendly and Bicycle Friendly Community Needs Assessment

A Walk Friendly Community (WFC) and Bicycle Friendly Community (BFC) assessment was conducted by the Project Team based on data collected, interviews with stakeholders, and on the WFC and BFC application criteria. The assessment was used to identify existing policy, regulatory needs, infrastructure needs, and gaps related to walking and biking in Plant City. This section provides an overview of the WFC and BFC programs, conducts a needs assessment via a 'scorecard', and summarizes the findings of the assessment.

Walk Friendly and Bicycle Friendly Community Programs

The Walk Friendly Community (WFC) program is a national initiative led by the Pedestrian and Bicycle Information Center (PBIC) intended to encourage communities to improve their local pedestrian environments. Similarly, the Bicycle Friendly Community (BFC) program led by the League of American Bicyclists is intended to help communities make bicycling a viable transportation and recreation option regardless of age. Both programs incorporate assessments that are useful for discovering where a community stands with respect to pedestrian and bicycling facilities and activities. The WFC and BFC assessments recognize existing successes in communities as well as provide a framework for those communities trying to achieve higher walking and bicycling rates.

Both assessments address the "Five Es": engineering, education, evaluation, enforcement, and encouragement. The engineering category refers to infrastructure-related elements (e.g., bike lanes, sidewalks, ADA accommodations, etc.), while the other four Es refer to non-infrastructure efforts such as safety campaigns, planning, and evaluation. Comprehensive pedestrian and bicycle plans should address all five Es to effectively advance pedestrian and bicycling activities in a community. Communities seeking status as WFC and BFC must make relevant advances in each of the Five Es.

Becoming a Walk Friendly Community

Communities wishing to become a WFC must apply to Walk Friendly Communities via an online application. The WFC Assessment Tool available on the website includes questions related to the Five Es and other relevant community information. After an application is submitted, a multi-person review panel scores the applications, and then WFC award designations are announced.

Becoming a Bicycle Friendly Community

Communities wishing to become a BFC must submit an application to the League of American Bicyclists that answers questions related to the Five Es and provides other relevant community information. After an application is submitted, a local review is conducted to obtain local feedback and followed by the review by a panel of national bicycle professionals. Communities designated a BFC will receive an award and two Bicycle Friendly Community road signs.

WFC and BFC Scorecards

The Project Team developed walking and biking scorecards based on WFC and BFC application criteria. The results of the scorecards were used to identify the next steps for Plant City to achieve WFC and BFC recognition. The Project Team assessed Plant City for each of the Five Es based on the field observations and research conducted by the Project Team, and input from the steering committee for WFC and BFC eligibility. The results of the assessment are displayed in Table 2.1 and Table 2.2.

Scorecard Findings

For both walking and biking, Plant City has infrastructure, policies, or programs in place to become a WFC or BFC. However, Plant City scored low on each assessment based on the WFC and BFC scorecards.

WFC Scorecard

Plant City scored a 13 out of a possible 21 points on the WFC scorecard. Points were scored in all five categories. The score shows that Plant City may soon be ready to apply, but also has improvements that should be made before becoming a designated Walk Friendly Community. However, several WFC elements are already in place, and in a relatively short time frame, Plant City can make significant progress towards becoming a WFC.

BFC Scorecard

Plant City scored a 10 out of a possible 19 points on the BFC scorecard. Points were counted in the Education, Evaluation, Enforcement, and Encouragement categories. No points were recorded in the Engineering category. The score shows that Plant City has some improvements to make before becoming a designated Bicycle Friendly Community, particularly related to infrastructure for biking. However, several BFC elements are already in place for Plant City, and, in a relatively short time frame, Plant City can make significant progress towards becoming a BFC.

WFC and BFC Conclusion

The results of the WFC and BFC assessment demonstrate that Plant City may be ready to apply for WFC or BFC in the near future, particularly after the adoption of this Plan. The City should also take significant steps towards implementing the needed improvements to achieve the designation for either program. The recommendations for this Plan, when implemented, will position Plant City to apply for and receive WFC and BFC designations.

Table 2.1 WFC Scorecard

Question	Yes	No	Notes
Engineering			
Does your community have a comprehensive, connected and well-maintained pedestrian network?	0	**1**	Foremost reason why the City requested a Bike/Pedestrian Plan from the MPO.
Is there a Complete Streets Ordinance or another policy that mandates the accommodation of pedestrians on all road projects?	0	**1**	Implementing a complete street project on Collins Street. Most of the regulated roads in the City are under the jurisdiction of Hillsborough County and FDOT.
Has your community adopted an ADA Transition Plan for the public right of way? *If yes, provide more info (e.g., what year was the plan adopted, provide a copy of the plan, what has been implemented, etc.)*	1	**0**	Reviewing all intersections for compliance with ADA
Does your community have a policy requiring sidewalks on both sides of arterial streets?	1	**0**	Required of new development in Plant City.
Does your community have a policy requiring sidewalks on both sides of collector streets?	1	**0**	Required of new development in Plant City.
Does your community require sidewalks to be constructed or upgraded with all (or the majority of) new private development?	**1**	0	
Engineering Score Total	**4/6**		
Education			
Is there a community-wide Safe Routes to School Program that includes pedestrian education?	1	0	Participation in this program is through the MPO's School Transportation Working Group.
Are there pedestrian education courses available for adults In the community?	0	**1**	Not to our knowledge.
Does your community educate motorists and pedestrians on their rights and responsibilities as road users?	0	**1**	Not to our knowledge. Maybe DMV.
Education Score Total	**1/3**		
Evaluation			
Is there a specific plan or program to reduce pedestrian/motor vehicle crashes?	1	0	As part of planning processes and committees of the MPO. Staff proposed the concept of Vision Zero to City Commission in March 2017.
Does your community have a current comprehensive pedestrian plan or pedestrian safety action plan?	0	**1**	Foremost reason why the City requested a Bike/Pedestrian Plan from the MPO.

Question	Yes	No	Notes
Is there a pedestrian advisory committee that meets regularly?	**1**	0	Yes, as part of the MPO's BPAC.
Does your community have a pedestrian program manager?	1	0	City Engineer
Has your community established a connectivity policy, pedestrian-friendly block length standards and connectivity standards for new developments, or convenient pedestrian access requirements?	1	0	Provisions are noted in Plant City's Parking and Subdivision Regulations.
Is your community served by public transit, and if so, what route planning/trip information is provided for transit passengers?	0	**1**	
Evaluation Score Total	**4/6**		
Enforcement			
Do law enforcement officers receive training on the rights and responsibilities of all road users?	1	0	
Does your community have law enforcement or other public safety officers on foot?	1	0	Limited times and areas.
Do local ordinances promote safety and accessibility for pedestrians?	1	0	Vision Zero was endorsed by the City Commission in March 2017.
Enforcement Score Total	**3/3**		
Encouragement			
Does the community celebrate pedestrians with special events or media outreach?	0	**1**	
Does the community host any major community pedestrian events?	0	**1**	Not as the primary purpose, usually a walk in support of a charity event.
Is there an active pedestrian advocacy group in the community?	1	**0**	Yes, as part of the MPO's BPAC.
Encouragement Score Total	**1/3**		
Walk Friendly Total (21 points possible)	**13/21**		

Table 2.2 BFC Scorecard

Question	Yes	No	Notes
Engineering			
Does your community have a comprehensive, connected and well-maintained bicycling network?	0	**1**	The reason why the City requested a Bike/Pedestrian Plan from the MPO.
Is bike parking readily available throughout the community?	0	**1**	Limited.
Is there a complete streets ordinance or another policy that mandates the accommodation of cyclists on all road projects?	0	**1**	Implementing a complete street project on Collins Street. Most of the regulated roads in the City are under the jurisdiction of Hillsborough County and FDOT.
Does your community require bike lanes to be constructed or upgraded with all (or the majority of) new private development?	0	**1**	Limited, provisions are noted in Plant City's Parking and Big Box Regulations. Most of the regulated roads in the City are under the jurisdiction of Hillsborough County and FDOT.
Engineering Score Total	**0/4**		
Education			
Is there a community-wide Safe Routes to School Program that includes bicycle education?	1	**0**	Participation in this program is through the MPO's School Transportation Working Group.
Are there bicycling education courses available for adults In the community?	0	**1**	Not to our knowledge.
Does your community educate motorists and cyclists on their rights and responsibilities as road users?	0	**1**	Not to our knowledge. Maybe DMV.
Education Score Total	**1/3**		
Evaluation			
Is there a specific plan or program to reduce cyclist/motor vehicle crashes?	1	0	As part of planning processes and committees of the MPO. Staff proposed the concept of Vision Zero to City Commission in March.
Does your community have a current comprehensive bicycle plan?	0	**1**	Foremost reason why the City requested a Bike/Pedestrian Plan from the MPO.
Is there a bicycle advisory committee that meets regularly?	1	0	Yes, as part of the MPO's BPAC.
Does your community have a bicycle program manager?	1	0	City Engineer
Has your community established a connectivity policy, bicycle-friendly block length standards and connectivity standards for new developments, or convenient bicycle access requirements?	0	**1**	
Evaluation Score Total	**3/5**		

Enforcement			
Do law enforcement officers receive training on the rights and responsibilities of all road users?	1	0	
Does your community have law enforcement or other public safety officers on bikes?	1	0	Limited - Special Events.
Do local ordinances promote safety and accessibility for bicyclists?	1	0	Vision Zero was endorsed by the City Commission in March.
Enforcement Score Total	**3/3**		
Encouragement			
Does your community have an up-to-date bicycle map?	0	1	No City maintained maps. The MPO has regional maps that address bicycling.
Does the community celebrate bicycling during National Bike Month with community rides, Bike To Work Day, or media outreach?	1	0	For the first time in March 2017.
Does the community host any major community cycling events or rides?	1	**0**	YMCA
Is there an active bicycle advocacy group in the community?	1	0	Yes, as part of the MPO's BPAC.
Encouragement Score Total	**3/4**		
Bicycle Friendly Total (19 points possible)	**10/19**		

2.3 Existing Conditions Analysis

The Project Team conducted a field review of the existing bikeway and walkway networks. The field review determined the adequacy of existing facilities based on safety, connectivity, completeness of network, destination connectivity, barriers and constraints, and ultimately the ability to serve the needs of different types of bicyclists and pedestrians. The results of the field review of existing sidewalks and bicycle facilities are summarized in this section.

Existing Walkway Network

Plant City began requiring sidewalks in 2001 through subdivision regulations, influencing the existing walkway network. The existing walkway network was mapped using GIS software in collaboration with Plant City staff and the Project Team. The resulting map is displayed in Figure 2.3. Existing sidewalks are displayed in a solid yellow line, and existing trails are displayed in a dashed yellow line. As indicated on the map, most of Plant City's sidewalks are located within the core of the city. The downtown area contains a substantial network of sidewalks and some crossings. However, these facilities are somewhat aged and beginning to show wear, impacting overall network accessibility. Major roadways, where sidewalks are needed most, have gaps where no sidewalks exist. In many neighborhoods around Plant City, sidewalks were not constructed during land development, or were only constructed on one side of the street. Examples of existing sidewalk and crossing conditions are displayed in Figure 2.1 and Figure 2.2.

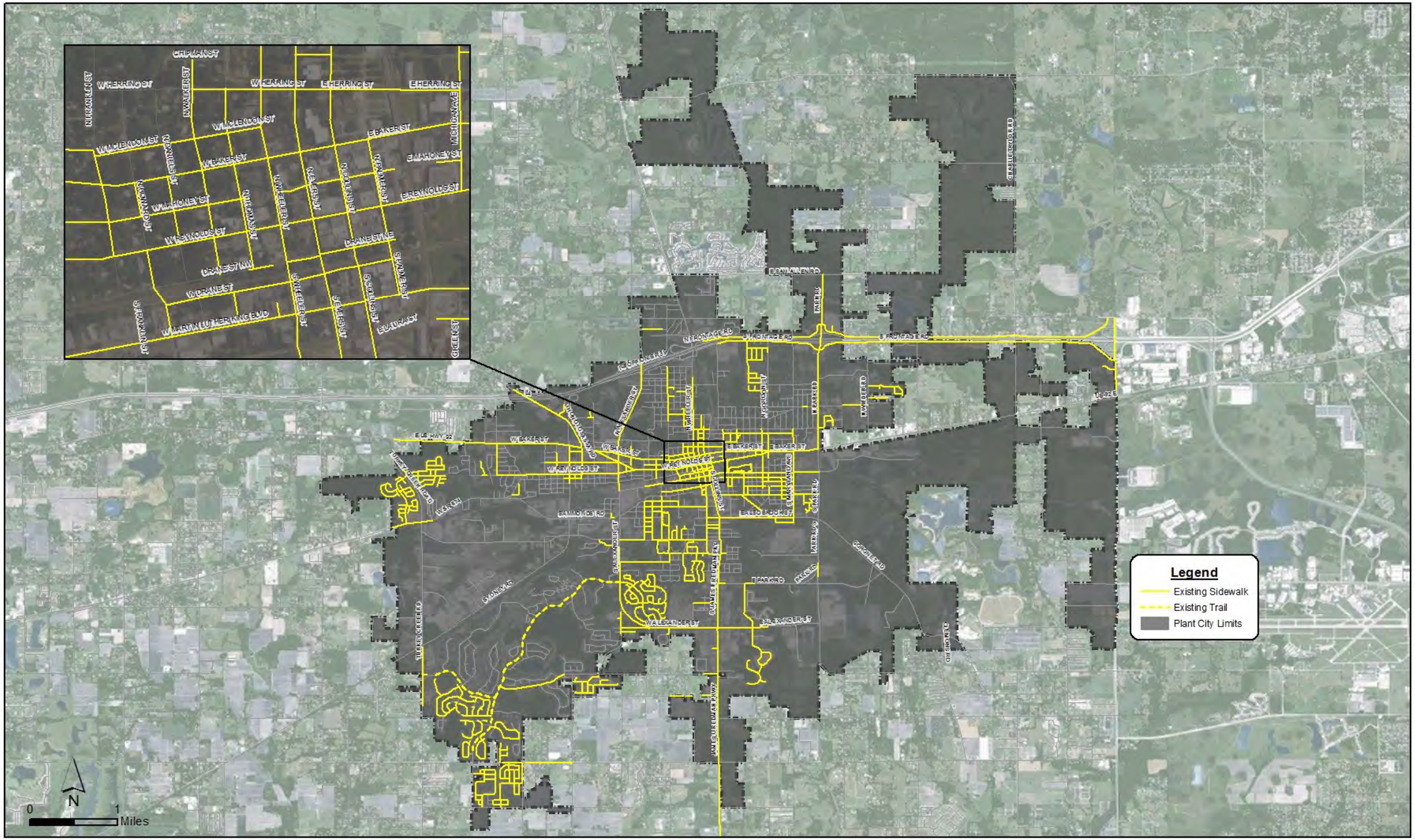
Figure 2.1 Mendonsa Road sidewalk. Source: Project Team.

Figure 2.2 Intersection of James L. Redman Parkway and Alexander Street. Source: Project Team.

The sidewalk on the southern side of Mendonsa Road connects a suburban area to a major transportation corridor. Collector roads and arterials should have sidewalks on both sides of the roadway for pedestrian safety and access.

The intersection of James L. Redman Parkway and Alexander Street makes for an uncomfortable walking experience from one corner to the next. Overall, the intersection has 27 total vehicular travel lanes plus one bike lane, making for significant distances from one corner to the next. Additionally, during the field review, it was observed that many vehicles making right turns on red do not yield to pedestrians.

Figure 2.3 Pedestrian Network



Hillsborough MPO
Metropolitan Planning for Transportation

Existing Pedestrian Network

City of Plant City
Bicycle and Pedestrian Master Plan

Existing Bikeway Network

The existing bikeway network was mapped using GIS software with layers from FDOT, Hillsborough County, and Plant City. The results of the mapping process are displayed in Figure 2.6 on the following page. Existing on-road bikeway facilities displayed by a solid yellow line include bike lanes and paved shoulders. The existing off-road facilities displayed in by a dashed yellow line include paved trails.

The existing bikeway network is located primarily outside of the core of the City. Additionally, most of the destinations likely to generate biking trips such as parks, schools, and Downtown, are within a five to ten-minute bike ride (less than 2 miles) of where people live. Expanding the bikeway and trail network will provide opportunities to safely and conveniently connect people by bike to these popular destinations. Most of the facilities in are traditional bike lanes, either four feet or five feet in width, with a few larger buffered bike lanes, such as the ones recently completed as part of the resurfacing of Thonotosassa Road. Examples of existing bicycle infrastructure are displayed in Figures 2.4 and 2.5.

Figure 2.4 Thonotossassa Road bike lane. Source: Google maps.

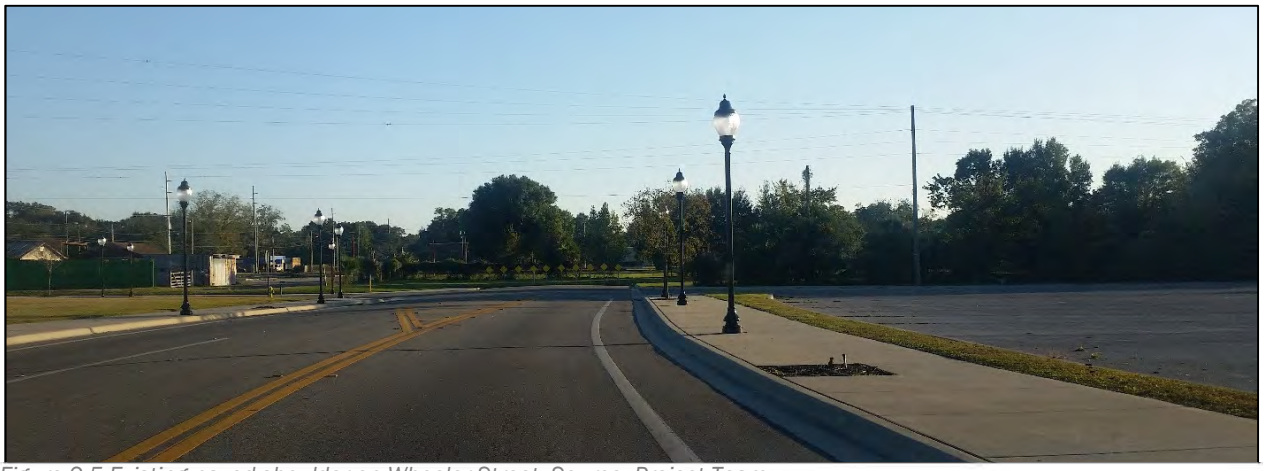
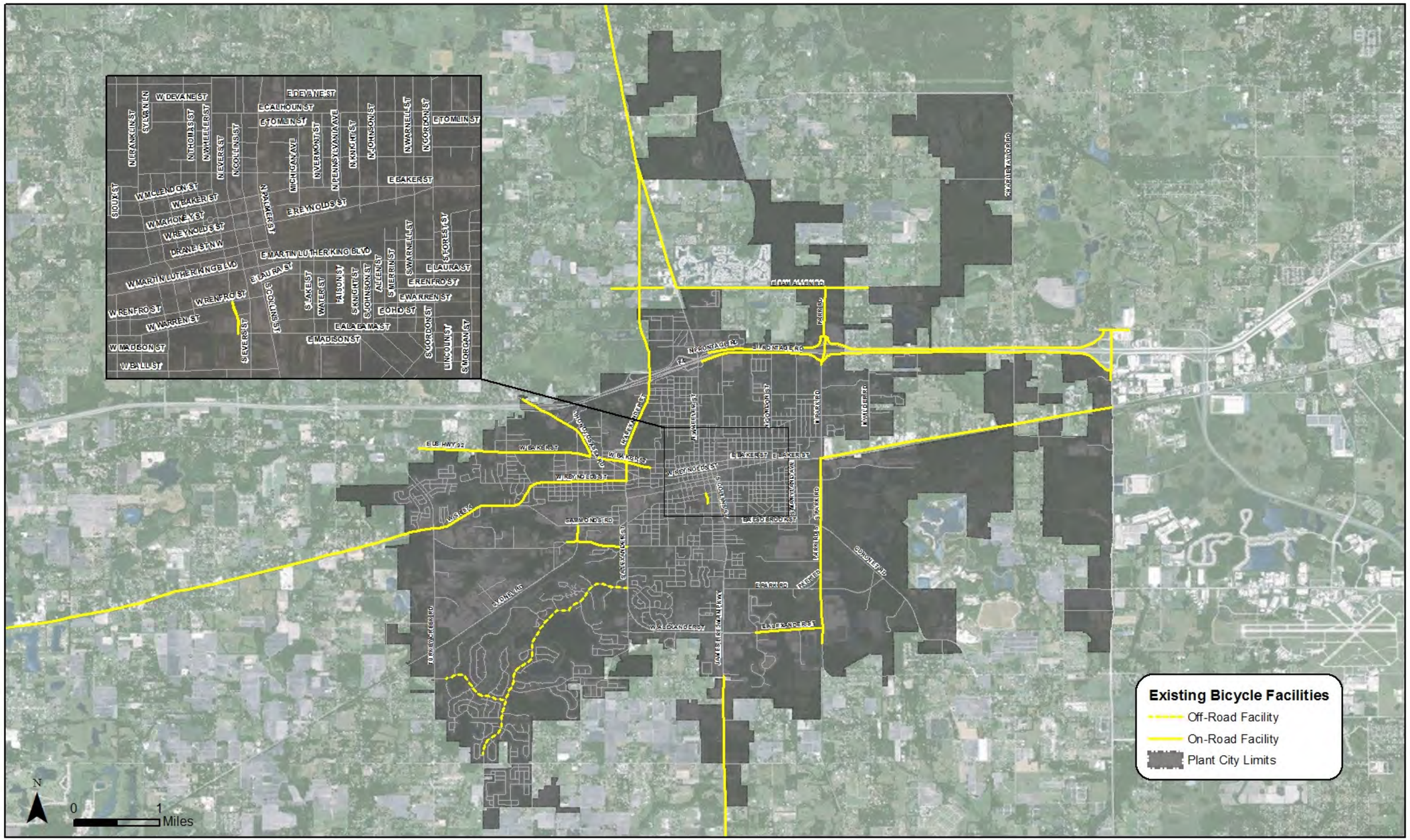


Figure 2.5 Existing paved shoulder on Wheeler Street. Source: Project Team..

Figure 2.6 Existing Bicycle Network



Hillsborough MPO
Metropolitan Planning for Transportation

Existing Bicycle Network

Existing Trail Network

The existing trails within Plant City are located within parks as walkways, or in neighborhoods such as Walden Lake. The trails are indicated as dashed lines on the existing pedestrian and bicycle network maps in Figure 2.3 and Figure 2.6. While these trails are recreational amenities, they lack the use or connectivity to serve a transportation function. Photos of the existing trails are displayed in Figure 2.7 and Figure 2.8.

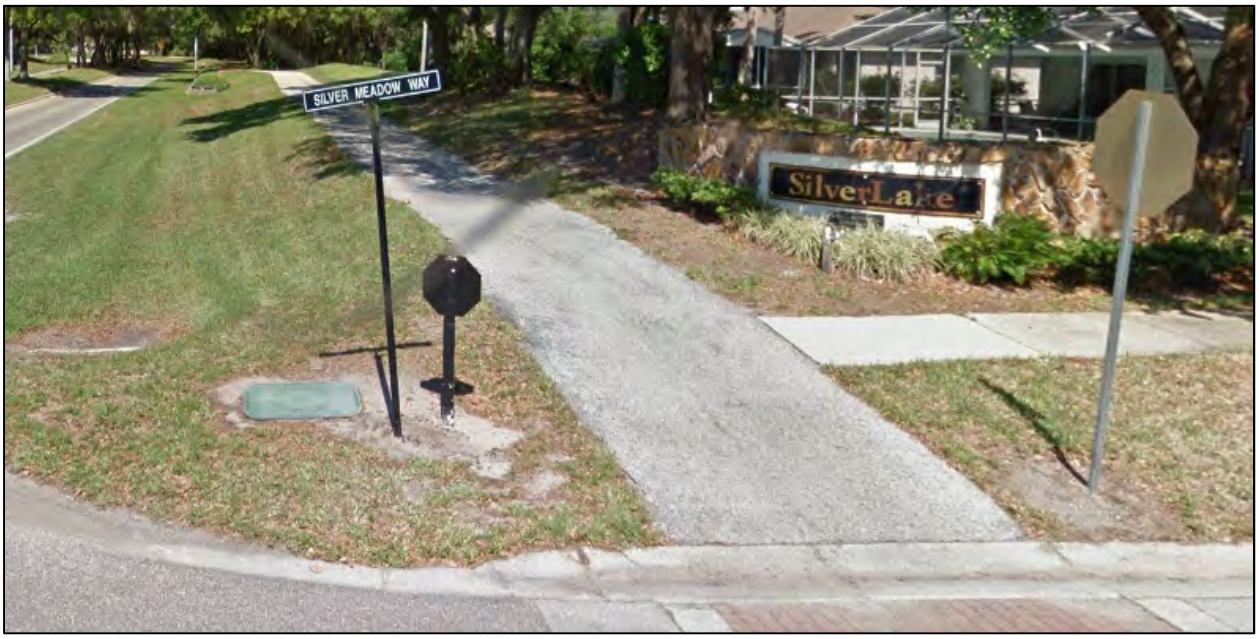


Figure 2.7 Walden Lake trail. Source: Google maps.

Figure 2.8 Walden Lake trail. Source: Google maps.

3.0 RECOMMENDATIONS

A comprehensive set of infrastructure improvements, policy changes, and programs are recommended in this section that will increase the safety, convenience and enjoyment of bicycling and walking in Plant City. These recommendations were developed based on the existing conditions assessment, field observations, previous studies, along with stakeholder and community input.

Furthermore, these recommendations work towards the realization of the Vision and Goals for the Plant City Walk Bike Plan. Careful coordination should be conducted with stakeholders in the area, including the Hillsborough MPO, Hillsborough County, and FDOT to ensure consistency with other planning efforts. Coordination efforts are especially important, since consistency and reliability is critical for all system users.

The central recommendations of this study are the development of an initial bicycle and pedestrian network. The initial bicycle network; with a highlighted central spine for Plant City that connects residential areas, parks, schools, and activity areas; will form the backbone of the system. The initial pedestrian network focuses on filling in gaps around the City center, and connecting neighborhoods to points of interest. Included with the network recommendations are additional infrastructure recommendations for bicycles, pedestrians, and trails.

The next set of recommendations focuses on infrastructure and support facilities. The infrastructure segment describes different types of bikeway, walkway, and trail improvements that can be implemented along the networks and throughout the City. The recommended support facility is bikeshare. The bikeshare section reviews bikeshare system types and offers recommendations on how Plant City may implement their own system.

After the network and infrastructure recommendations, three catalyst projects are identified, one each for the bicycling, pedestrian, and trail categories. These catalyst projects are intended to kick-start the walking and biking efforts of the community, and serve as examples of future improvements throughout the City. The priority projects include a keystone trail beginning in Downtown Plant City, intersection safety improvements at a high-profile intersection, and an initial bicycle network grid.

The final set of recommendations focuses on programs, policies, and strategies that encourage, enforce, and educate those in the community about walking and biking. They are divided into general and specific policy categories.

3.1 Bicycle and Pedestrian Networks

The establishment of bicycle and pedestrian networks is a central element of the Plan. These networks provide the guidelines in which infrastructure should be developed, and planning and policy efforts focused. The networks were created on the premise of connecting residential areas, parks, schools, and activity areas. The location of the parks and schools was available using City and County information, but the activity areas were realized through stakeholder and community meetings. Existing infrastructure, planned projects, and field review were also taken into account throughout the development of the networks. Existing and future trails are depicted on both maps, as trails serve people walking and people biking.

Bicycle Network

The bicycle network is centered on the long-term development of a spine network for bicycles. Historically, Plant City first developed around the railroad, with Henry Flagler and Henry Plant both constructing routes through the City. The Atlantic Coast Line (ACL) and Seaboard Coast Line (SCL) crossed each other on the southeast edge of downtown, where a central passenger station was built. Paying homage to the Plant City's rail heritage, two spine network routes have been developed, one serving east-west movement and the other facilitating north-south movement. The two routes cross each other just outside the Robert W. Willaford Railroad Museum (restored train station) in Downtown. Implementation of two of the catalyst projects (minimum bicycle grid and Canal Connector Trail further detailed in the Catalyst Project section) serve as components of the long-term spine network. Figure 3.1 displays the spine network in orange, existing facilities in yellow, and other recommended facilities in light blue.

The bicycle network recommendations include nearly 80 miles of new on-street bikeways and 14 miles of new trails. These additional routes will dramatically increase Plant City's bicycle network connectivity. The recommended bikeways and trails provide for a comprehensive, safe and logical network that connects downtown Plant City to the area's schools, parks, neighborhoods, and commercial corridors. Further, the network facilitates connections to adjacent communities. The complete bicycle network is shown in Figure 3.2.

Figure 3.1 Spine Network

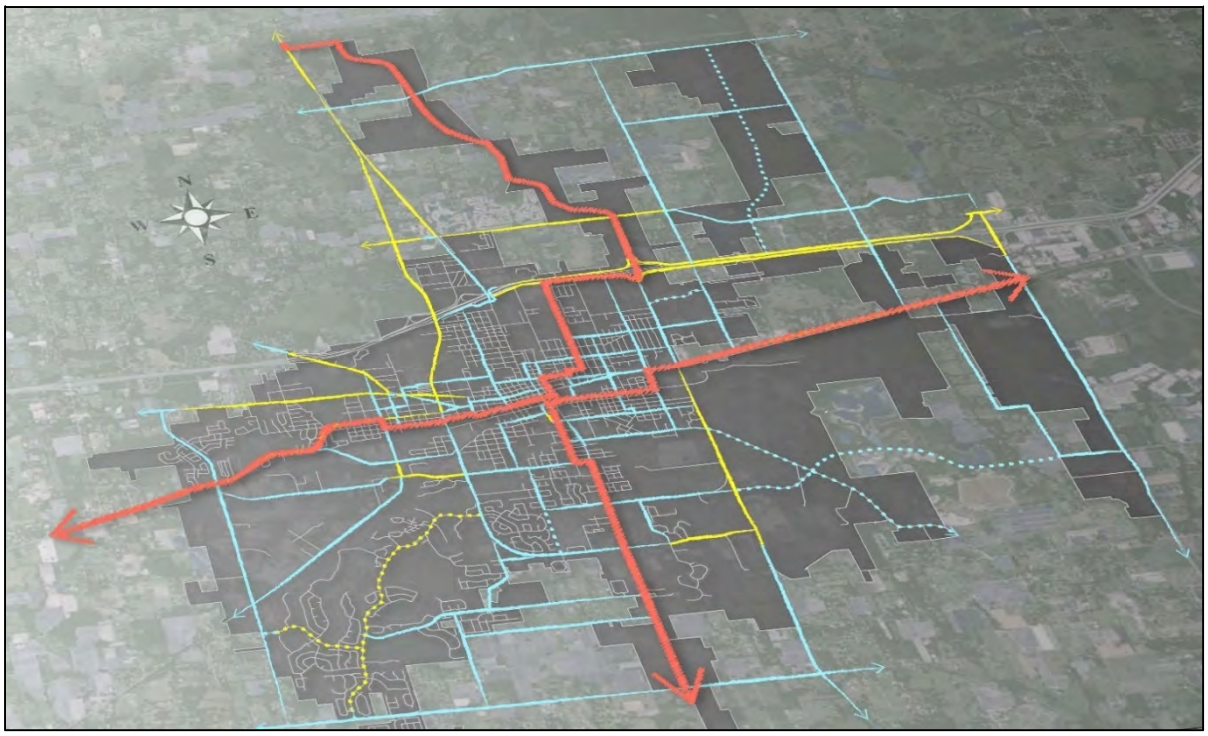
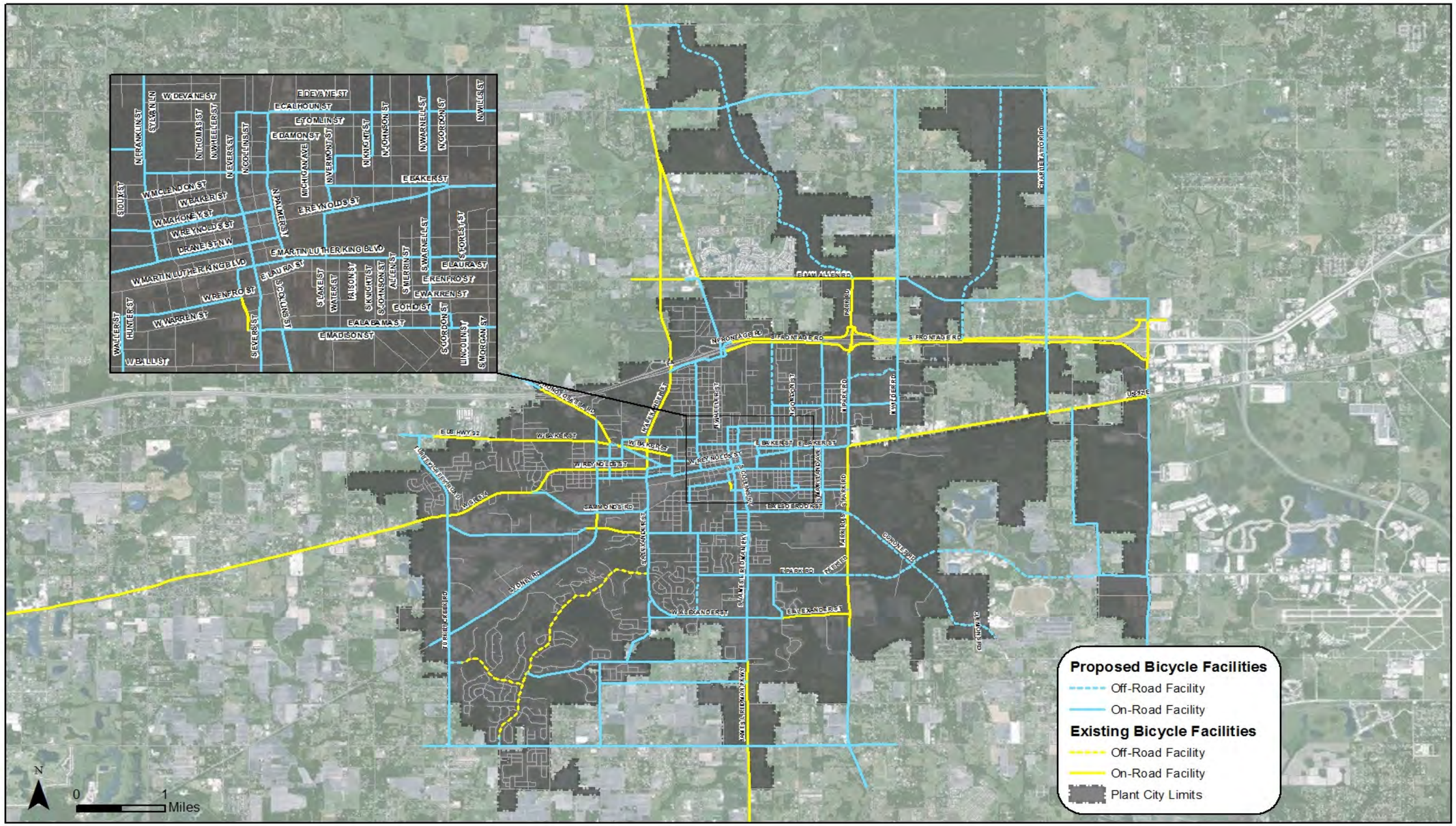


Figure 3.2 Bicycle Network



Hillsborough MPO
Metropolitan Planning for Transportation

Proposed Bicycle Network

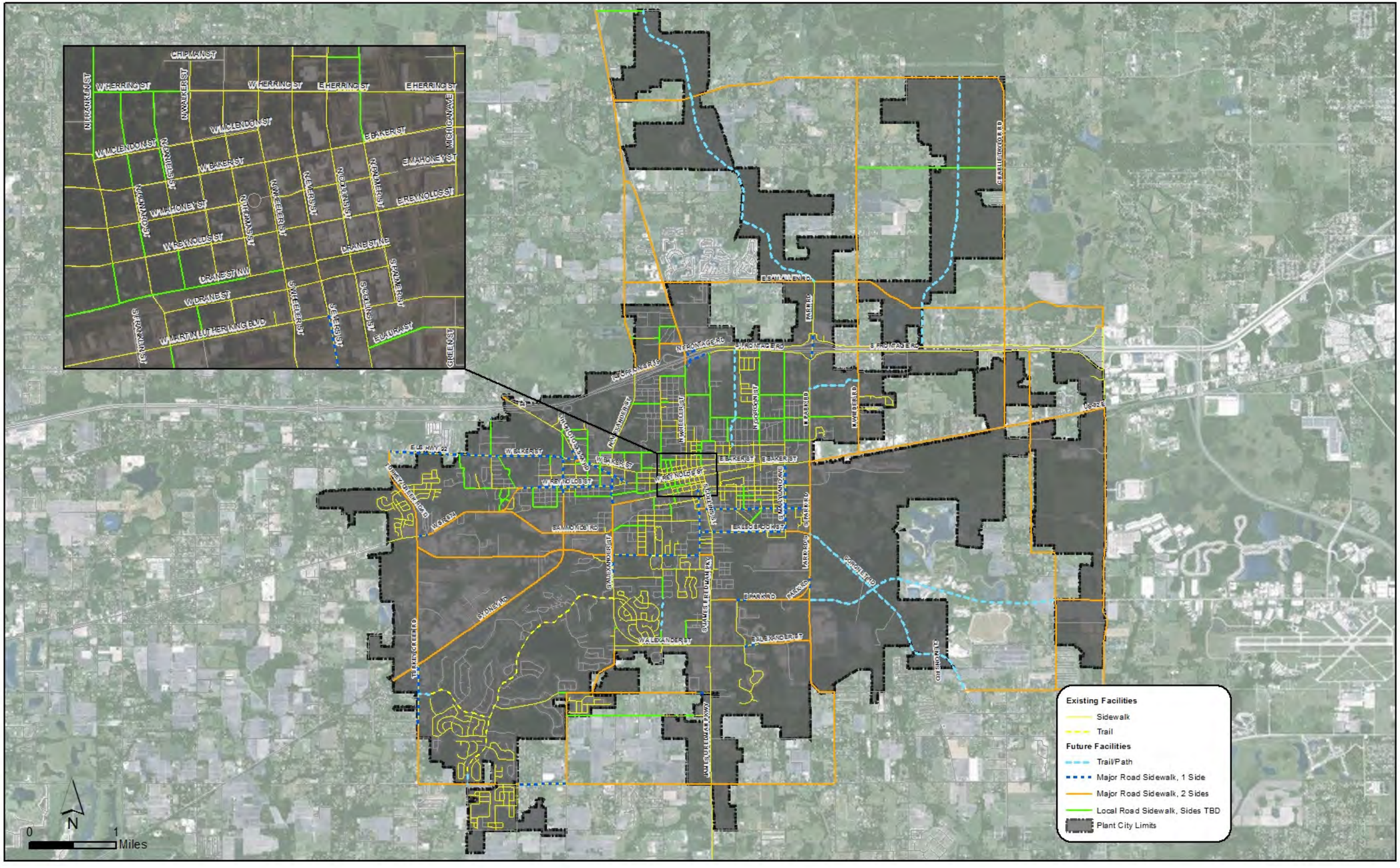
Pedestrian Network

The focus of the pedestrian network is on providing access via the appropriate facilities to destinations such as parks and schools, and along major corridors. The planning process identified both existing and potential areas for new sidewalks within Plant City. The goal of the pedestrian network is to create a connected network of walkways that facilitate people walking for transportation and recreation. These improvements in walking infrastructure will need to be coordinated between different departments, jurisdictions and property owners.

The pedestrian network map provides an overview of the pedestrian network recommended for Plant City. The network was created in close collaboration with City and MPO staff, and community and steering committee input. The map is displayed on the following page in Figure 3.3. The pedestrian network includes the existing sidewalk and trail facilities shown in yellow. The future facilities are divided into four categories based on the type of infrastructure needed: trail/path (light blue); major road sidewalk, one side (darker blue); major road sidewalk, two sides (orange); local road sidewalk, to be determined (TBD, green). The major road sidewalk, one side is shown as a dashed line in order to see the existing sidewalk underneath, in yellow.

Many of the local roads (non-collector/arterial facilities) are two-lane low volume / low speed facilities. The exact configuration of sidewalks on these roadways will be determined in the future by the City. Assuming that sidewalks are provided on one-side, the Plan identifies nearly 21 miles of new sidewalk facilities on local roads.

Figure 3.3 Pedestrian Network



Hillsborough MPO
Metropolitan Planning for Transportation

Proposed Pedestrian Network

City of Plant City
Bicycle and Pedestrian Master Plan

3.2 Infrastructure and Support Facilities

The infrastructure and support facilities element provides recommendations for bikeways, walkways, and trails. Building upon the bicycle and pedestrian networks, this section provides applicable facility options for bicycle and pedestrian improvements. The facility options are divided into bicycling, pedestrian, and trail facilities.

Bicycling Recommendations

The two types of bicycling recommendations provided in this section are infrastructure development and bicycling support facilities. The infrastructure development element provides guidance implementing the initial bicycle network. The bicycling support facilities details bikeshare opportunities for Plant City.

Infrastructure Development

The focus of bikeway network development should be on creating safe, low-stress bikeways for a wide range of users. Selecting the best bikeway facility type for a given roadway can be challenging, due to the range of factors that influence bicycle users' comfort and safety. In some cases, there is no single correct facility, and the selection of an appropriate bikeway must balance traffic conditions, land use context, and implementation cost.

Typically, as vehicle speeds and volumes increase along the roadway, so too should the provision of dedicated space exclusively for people biking, as well as increased physical separation (horizontal and vertical) between vehicles and people biking. Other factors beyond speed and volume which affect facility selection include traffic mix of automobiles and heavy vehicles, the presence of on-street parking, available roadway or roadside space, intersection density, surrounding land use, transit stops, transit frequency, and roadway sight distance.

The overall goal of the on-street bicycling infrastructure recommendations is to provide guidelines for implementing the initial bicycle network. Some facilities may be constructed as part of roadway projects, while others could be retrofits for facilities with adequate right-of-way through roadway reconfiguration projects. Generally, on-street bikeway implementation should be considered as a routine part of capital roadway projects, resurfacing projects, or as standalone re-striping projects.

Bicycle Facility Selection Chart

As a starting point to identify a preferred facility, the bicycling facility selection chart in Figure 3.4 on the following page provides a tool to determine the recommended type of bikeway to be provided in particular roadway speed and volume situations. To use this chart, identify the appropriate number or lanes, daily traffic volume, and travel speed on the existing or proposed roadway, and locate the facility types indicated by those key variables. The previously mentioned other factors beyond speed and volume are not included in the facility selection chart, but should always be considered in the facility selection and street design process. The darker colors indicate the ideal range for the facility. The lighter colors represent a less-than-ideal range for the facility, but the facility would still be considered acceptable. Examples and descriptions of the facility types are provided in Figure 3.5 through Figure 3.8.

Figure 3.4 Bicycle Facility Selection Chart

Bicycle Facility Types

Several different kinds of bikeways are recommended in this chapter. Brief descriptions are provided here. Consistent with bicycle facility classifications throughout the nation, these bicycle facility design guidelines identify the following classes of facilities by degree of separation from motor vehicle traffic.

- *Bike Boulevard* - Low-volume and low-speed street that has been optimized for bicycle travel through a combination of speed and volume management strategies, wayfinding signage, shared-lane markings, and major-minor intersection crossing treatments.

Figure 3.5 Example bicycle boulevard in Berkeley, CA.

- *Bike Lane* - A portion of the roadway that has been designated by striping, signing, and marking for the preferential and exclusive use of bicyclists.

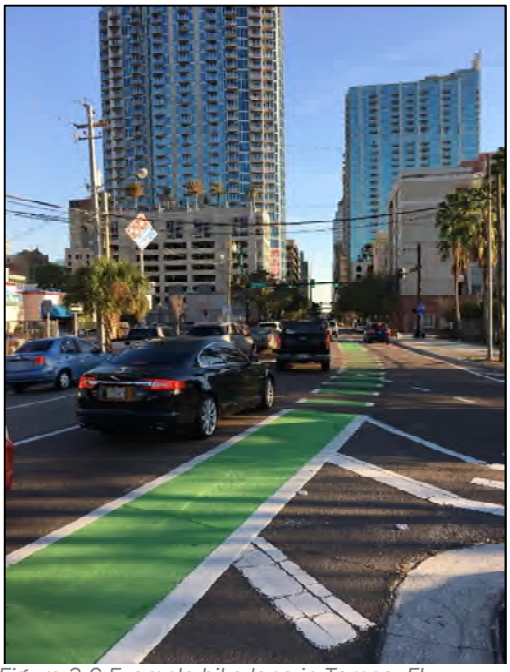


Figure 3.6 Example bike lane in Tampa, FL.

- *Buffered Bike Lane* - Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space, separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.

Figure 3.7 Example buffered bike lane in Fairfax, VA.

- *Cycle Track* - Also known as protected bike lanes, cycle tracks provide physical separation from motor vehicle traffic through the use of a raised curb, flexible bollards, trees, parked cars, planter boxes, or other elements.

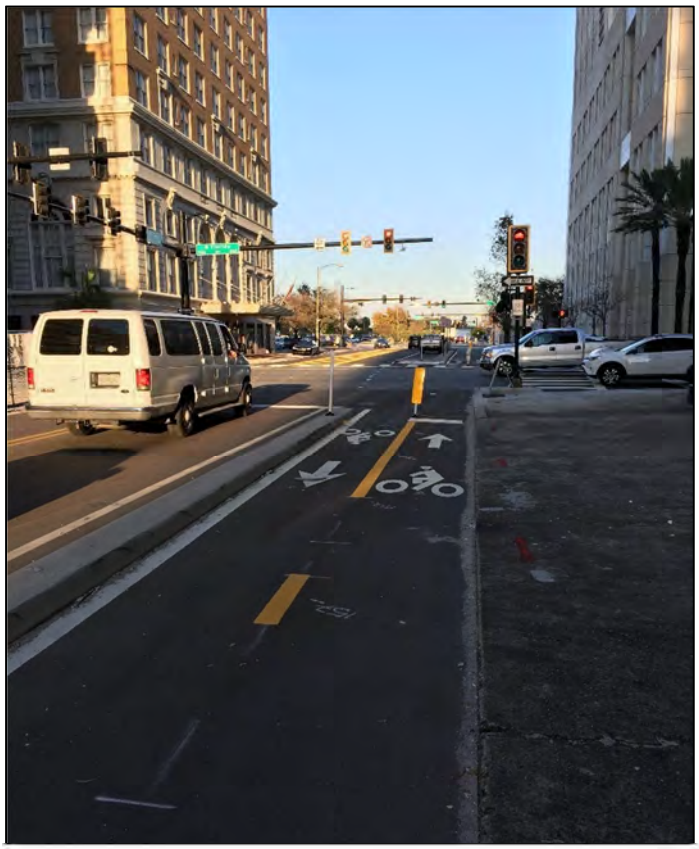


Figure 3.8 Cycle track on East Cass Street, Tampa, FL.

Bike Share

Bike share systems allow people to make short, spontaneous trips. Bike share users typically check out a bike at a station using a kiosk, ride for a short period of time (around 30 minutes or less), and return the bike to another station in the system. Most systems employ a pricing schedule that encourages short, frequent trips and discourages bikes being in use for long periods of time, rather than longer-term rentals that can be accomplished through a bicycle shop.

Bike share systems implement a variety of strategies for success. Different topographies, institutional capacities, and user bases demand different types of systems and technologies. While individual city's systems vary from one context to another, the Institute for Transportation and Development policy have shared characteristics of most successful systems include:

- Networks with dense coverage, averaging about a fifth of a mile between stations.
- Bicycles that are comfortable, aimed towards commuting with parts that discourage theft and resale.
- A secure locking system that easily check bicycles into and out of the system.
- A wireless tracking system, such as radio-frequency identification devices (RFIDs), that locates where a bicycle is picked up and returned and identifies the user.
- Real-time monitoring of station occupancy rates through wireless communications, such as general packet radio service (GPRS).
- Real-time user information through various platforms, including the web, mobile phones and/or on-site terminals.
- Pricing structures that incentivize short trips helping to maximize the number of trips per bicycle per day, especially during peak travel times or other strategic times.

There are three major planning phases for a bicycle share system necessary and undertaken in succession to create a system:

1. A **Feasibility study** should be conducted to define how conceivable a bike share system would be to implement. This study would consider the potential demand for a system, and preliminary financial and institutional resources that need to be considered. This includes the necessary analysis to see what capital, fiscal impacts and types of technologies would be necessary to implement the system.

Figure 3.9 Example bikeshare facility.

2. **Detailed planning and design** would follow a feasibility study that indicates a system would be able to support a successful venture by either the public or private sectors, or a partnership between the two. This phase would identify the number and size of stations, along with their associated hardware and software.

3. The final step is to **create the business and financial plans**, including advertisements, permitting and contracting with firms to implement the system.

Bike Share Considerations for Plant City

There are a growing number of bike share systems developing in communities near Plant City. Lakeland and Tampa both have systems that were developed independently of one another. Additionally, the University of South Florida has implemented a campus bike share system to discourage driving single occupancy vehicles across campus. Bike share systems can be implemented by either public entities or by private operators. Plant City should consider investing in the initial system through capital improvements of the system, permitting, and other considerations, depending upon the nature of the agreement with the service provider.

Station-Based System

Station placement is a key component of bicycle share systems. Stations (or docks) placed outside of a reasonable distance from one station to another will leave riders discouraged, while stations too close together may not encourage people to use the system. The City should evaluate commercial, institutional, recreational, and residential areas with popular destinations, such as the Downtown, hotels, hospitals, and parks, for future bike share locations. Additional consideration could be given to temporarily locating stations at major local events, such as the Florida Strawberry Festival. If the City pursues a bikeshare system with stations, it is recommended that several stations be placed Downtown, potentially at the Robert W. Willaford Railroad Museum, near City Hall and the Bruton Memorial Library, the County services building, and the 1914 PCHS Community Building.

Free-Floating System

Plant City could also consider the implementation of a free-float system offered by many bicycle share companies. Instead of a station-based system, these bicycles operate using GPS, allowing users to lock the bike at any public rack within a designated area when complete. These systems typically incorporate partnerships with local businesses or not-for-profits. Major partners or sponsors could include a downtown chamber of commerce, restaurants, and other businesses interested in contributing to the ongoing assistance in maintaining the system.

Other strategies could include encouraging temporary bike rental services for major events such as the Strawberry Festival, or pop-up bikeway projects to encourage people to bike rather than drive once in Plant City. By providing bicycles and bikeway projects, the city could alleviate downtown congestion, and increase economic stimulus in the downtown area during events.

Figure 3.10 Spartanburg, SC Bicycle Share System.

Cities with bike share systems that share some similar characteristics with Plant City include:

- Macon, GA (population 93,000)
- Gainesville, FL (population 127,000)
- Lakeland, FL (population 101,000)
- Charleston, SC (population 130,000)
- Spartanburg, SC (population 38,000)

Plant City may consider reaching out to various service providers and discussing the system's potential and future ventures.

Pedestrian Infrastructure Recommendations

The pedestrian infrastructure recommendations focus on promoting walkability by implementing the pedestrian network. This section provides guidance on pedestrian facility types.

Pedestrian Facility Implementation Contexts

Pedestrian infrastructure should be implemented in context with the surrounding area. The four context examples provided are neighborhood streets, major roads, rural shoulders, and streetscapes.

- *Neighborhood Streets* – Neighborhood streets should have sidewalks on at least one side where densities are up to three dwelling units per acre. On streets with higher density or streets with non-residential land uses, the City should require or prioritize sidewalks on both sides of the street.

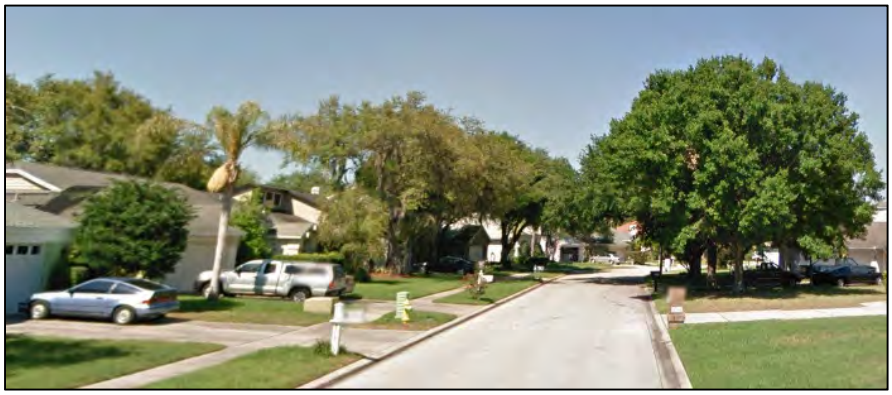


Figure 3.11 Walden Lake sidewalk, Plant City. Source: Google maps.

- *Major Roads* – Along major roadways (collector streets and above), sidewalks should be provided on both sides of the roadways.

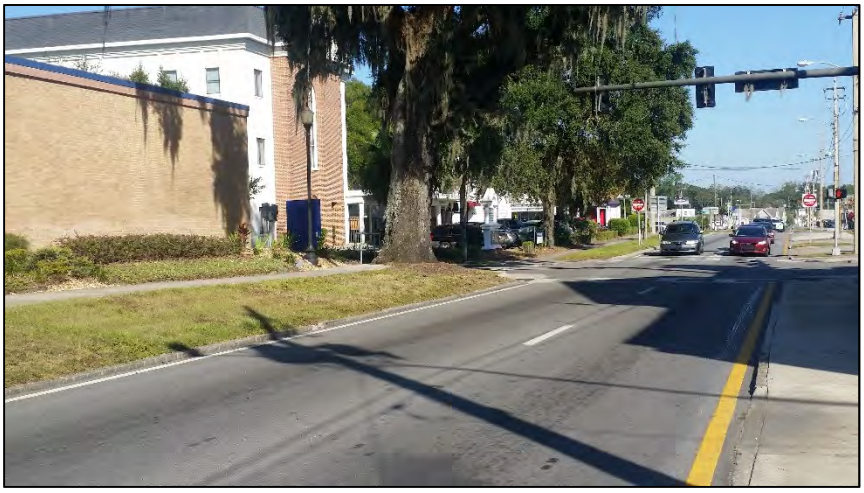


Figure 3.12 Major road with sidewalks on both sides. Source: Project Team.

- *Rural Shoulder* – In rural areas, a paved shoulder can provide space for people walking outside of the roadway when there are no sidewalks. However, a shoulder is often inadequate for people who are walking along roadways with speeds above 30 miles per hour. In this instance, dedicated pedestrian facilities should be located adjacent to the roadway.

Figure 3.13 Rural shoulder example. Source: ruraldesignguide.com

- *Streetscape Elements* – A landscape buffer should also be provided to plant shade trees and to create separation between vehicles and people walking along Neighborhood Streets and Major Roads. Pedestrian-scale lighting is also critical along major roads, neighborhood streets, and at intersections.

Figure 3.14 Pedestrian scale lighting, downtown Plant City. Source: Project Team.

Facility Implementation

Many of these facilities can be implemented during routine resurfacing projects. Coordination between departments, jurisdictions, and property owners, can help to determine the necessary steps to implement a facility during resurfacing or road widening projects.

Trails Infrastructure Recommendations

The overall goal for the trail infrastructure recommendations is to increase health, physical activity, and wellness within Plant City and the region, and to connect neighborhoods to local destinations and rural areas. The proposed trails in Plant City detailed in the bicycle and pedestrian network maps will provide an off-street alternative to on-street bikeways and walkways, and will provide a network that can accommodate all ages and abilities of cyclists and pedestrians. The trail recommendations envisioned in this plan combine recreation and transportation enhancements in one investment.

Trails allow for two-way, off-street bicycle use that may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. These facilities are frequently found in parks, along rivers, and in greenbelts or utility corridors where there are few conflicts with motorized vehicles. Trail facilities can also include amenities, such as lighting, signage, and fencing (where appropriate). Key features of trails include:

- Frequent access points from the local road network.
- Signs to direct users to and from the trail.
- A limited number of at-grade crossings with streets or driveways.
- Terminating the trail where it is easily accessible to and from the street system.
- Separate treads for pedestrians and bicyclists when heavy use is expected.

Trail Facility Types

There are three main types of trail facilities: multi-use or shared paths, sidepaths, and neighborhood accessways.

- *Multi-Use (or Shared-Use) Paths in Independent Right-of-Way (ROW)*
  These paths, located in independent rights of way, are trails that are separate from a roadway and generally follow natural features such as a water way or ridge; utility corridors, such as a powerline easement; or along a railroad corridor, such as a rail-with-trail route. These corridors offer excellent transportation and recreation opportunities, particularly for users of all skill levels preferring separation from traffic.

- *Sidepath*
  A sidepath is a type of shared use path that is located within a road corridor's right of way, yet still is at least 10 feet wide and has protection from the roadway. A sidepath typically has more interaction with traffic through curb cuts for businesses and residences. This sub-type of multi-use path is more common in urban and suburban contexts due to right-of-way constraints. Sidepaths should give special consideration to the size (length) and number of curb cuts, roadway crossings, and landscaping.

- *Neighborhood Accessways*
  Neighborhood accessways provide residential areas with direct bicycle and pedestrian access to parks, trails, greenspaces, and other recreational areas. They most often serve as small trail connections to and from the larger trail network, typically having their own rights-of-way and easements. Additionally, these smaller trails can be used to provide bicycle and pedestrian connections between dead-end streets, cul-de-sacs, and access to nearby destinations not provided by the street network.

3.3 Priority Catalyst Projects

The Project Team identified three priority catalyst project recommendations for Plant City to implement. These projects are intended to kick-start the walking and biking focus of Plant City. The projects include an iconic trail beginning in Downtown, an initial bicycle network grid, and intersection safety improvements. They are meant to serve as examples for future improvements throughout Plant City.

Canal Connector Trail

Plant City currently lacks recreational trails that could fit into a regional context. The creation of a high-quality iconic trail will activate community space, create a community-oriented place and provide new open space for City or County programs, along with a place to recreate or commute to work. Therefore, a trail project was identified by the Project Team named the Canal Connector Trail. The Canal Connector Trail extends the on-street system connecting residential communities, commercial areas, and points of interest to a key recreational route for cyclists and pedestrians. Activities could be held on native landscaping, farmer's markets, and walking or biking programs. Trailheads could be developed at South Frontage Road and in Gilchrist Park, as well as a midpoint stop at Cherry Street. An existing photo of the proposed trailhead location is provided in Figure 3.15, and a rendering of the potential trailhead is provided in Figure 3.16. The land required for much of this trail project is already owned by Plant City and would require minimal right-of-way acquisition to construct.

Additionally, it is recommended that the Canal Connector Trail feature the following trail amenities:

- 12 foot (minimum width) shared-use path.
- Native landscaping.
- Safe, logical transition from on-street bikeways to trail.
- Pedestrian-scale lighting.
- "Eyes on the Trail" and other crime prevention through environmental design principles.
- Neighborhood access points.
- Shaded seating and water fountains.

Figure 3.15 Canal Connector Trailhead, current condition.

Figure 3.16 Canal Connector Trailhead, rendering.

US 92 and Alexander Parkway Safety Improvements

An additional catalyst project is completing safety improvements at the intersection of US 92 and North Alexander Street. At this intersection, people walking must cross multiple lanes of traffic with frequent turning vehicles. Also, due to the intersection configuration, crossing from one side of the road to another may require waiting for the signal to change twice. Improving this intersection will not only enable pedestrians to utilize safer crossings and provide higher visibility of pedestrians to those driving, but will set an example for other improvements around the City. Figure 3.17 provides a before and after rendering of the intersection improvements.

Before:

The image on the left represents a snapshot of the existing conditions present along North Alexander Street. This area has been the location of a number of bicyclist and pedestrian crashes of varying causes.

After:

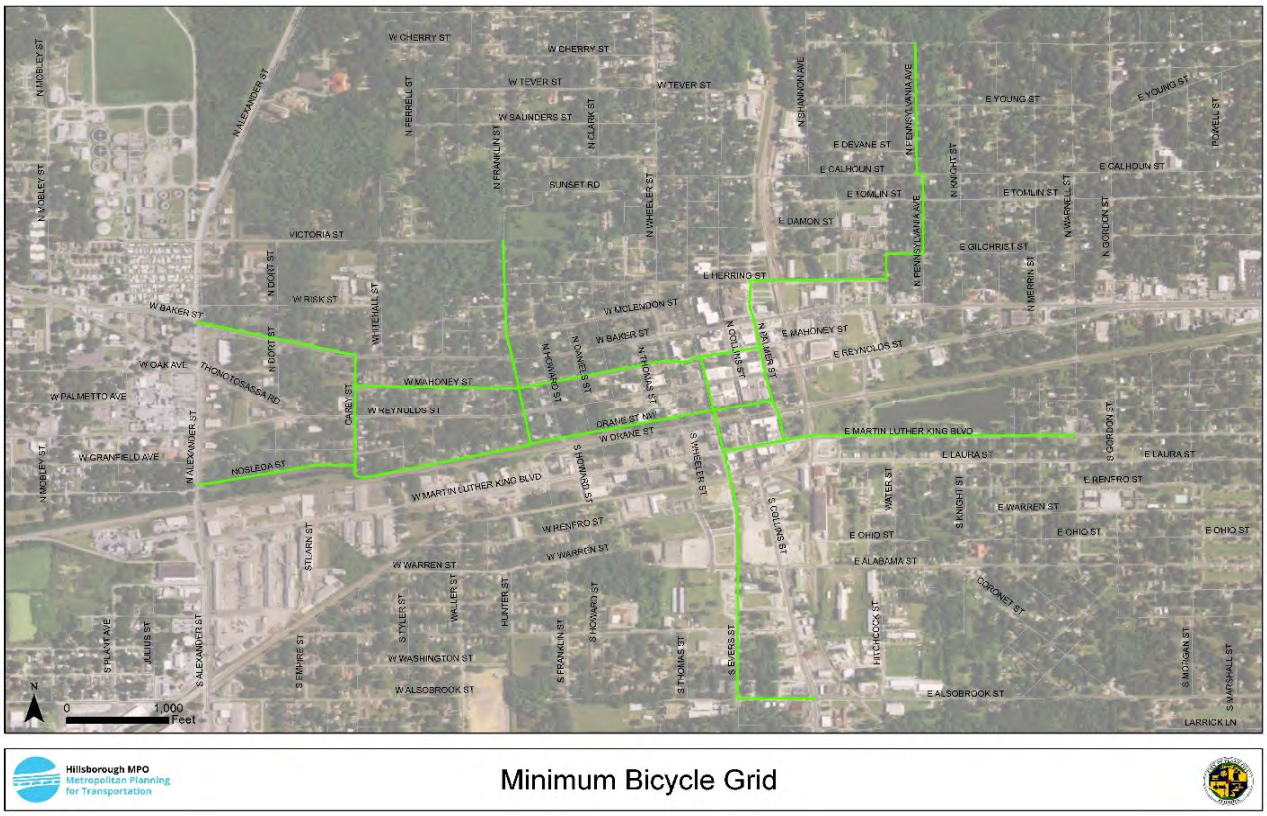
The image on the right represents a re-conceptualized North Alexander Street to be more bicycle and pedestrian friendly. This includes the addition of improved pedestrian crossings, ramps, streetscaping, and other treatments. The improvements also include bicycle facilities such as marked crossings, bike boxes, and landscaping.

Figure 3.17 Intersection Safety Improvement Renderings: Before and After

Create Minimum Bicycle Grid

The final catalyst project is the establishment of a minimum bicycle grid that would connect the four quadrants of the City. The network envisioned would be a mixture of on-street and off-street facilities. For people who are biking across town, this grid provides people with options for each direction of travel, while enabling the use of lower speed, lower vehicle volume roads. Additionally, the grid would tie into other facilities such as sidewalks, trails and other bikeways identified in this Plan. These facilities are key to providing people with safe, comfortable facilities as Plant City grows. This grid is displayed in Figure 3.18.

Figure 3.18 Minimum Bicycle Grid



Minimum Network

It is recommended that the grid network be implemented primarily through bicycle boulevards. Elements such as traffic calming, pavement marking, curb extensions and landscaping are examples of improvements that can promote for additional safety, function, and aesthetics of the roadway.

A rendering of sample minimum network improvements along Palmer Street in Downtown displayed in Figure 3.19 through 3.21 demonstrate how roads within the grid network may look in the future. Palmer Street was chosen as it is one of four areas where initial improvements would connect people's homes with destinations in the Downtown. The rendered bicycle boulevard improvements include:

- An intersection enhancement at Baker Street and Palmer Street, which would alert drivers that bicyclists may be crossing.
- On-street pavement markings and signs to improve visibility also prepare drivers to be particularly cautious as this area is giving priority to people who are biking.

Some of the streets comprising the Minimum Bicycle Grid are brick-laid. Note that many bicycle facilities in European cities such as Amsterdam are comprised of bricks, cobblestones, etc. While generally this should not be a problem for slow-speed riding in Plant City, minimal modifications to materials used on some streets may be desirable. Completion of the Minimum Bicycle Grid in the core of Plant City will provide the foundation for implementing the larger bicycle network detailed in Section 3.1.

Figure 3.19 Bicycle Boulevard Rendering, Current

Figure 3.20 Bicycle Boulevard Rendering 1

Figure 3.21 Bicycle Boulevard Rendering 2

3.4 Programs and Policy Recommendations

Programs and policies help guide the vision towards reality through a policy framework and programmatic support for walking and biking. The establishment of policies and procedures help set precedent for roadway projects and desired future conditions. Programs help people understand how to safely use the transportation system that may have undergone changes such as bicycle boulevards or other safety improvements. Programs also encourage people to think about walking or biking where they may have traditionally only considered driving. These recommendations should be considered as individual steps that should be taken in careful coordination across the City departments and with other stakeholders in the area such as Hillsborough County and Hillsborough MPO. The two types of policies recommended are general policies and specific policies.

General Policies

Adopt a Complete Streets Policy

As described by Smart Growth America, Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right-of-way to enable safe access for all users. This means that every transportation project will make the street network better and safer for drivers, pedestrians, and bicyclists, making the City a better place to live.

Therefore, Plant City should adopt a Complete Streets Policy to ensure that roadway improvements consider the movement and enjoyment of all road users. The City has already made great strides towards Complete Streets with the recent study of Collins Street from Baker Street to Alexander Street. This study considered the transfer of ownership of a segment of the roadway to the City and the construction of a bypass to move heavy vehicle traffic off of the corridor. The study also considered how to create more friendly spaces for people to walk and bike in the corridor through roadway reconfiguration.

Implement "Alert Today, Alive Tomorrow" Campaign

The Alert Today Alive Tomorrow campaign is an effort to inform and provide activities to Florida's most dangerous places to bike or walk. The program uses television, radio, social media, transit advertising, local education, and enforcement activities in an effort to reduce the number of crashes in high risk areas. Hillsborough County ranked within the top ten counties for serious injuries and fatalities for biking and walking. Plant City should consider becoming more involved with this campaign to improve safety and access state resources in an effort to reduce the number of serious injuries and fatalities in Plant City.

Continue Implementing Safe Routes to Schools

Safe Routes to Schools (SRTS) is a movement to ensure that all students have safe and convenient biking and walking routes to schools. The movement includes many concepts for increasing the number of youth who bike or walk to school. These concepts are infrastructure improvements and programs geared toward encouragement of non-automotive means of getting to school and safe roadway use. FDOT has a strong Safe Routes to Schools Program that funds projects locally. Plant City should consider funding future needs identified within this plan and in other areas as development occurs through this FDOT program. Additionally, Bike Walk Tampa Bay has regional contacts that offer safety lessons through partners that could help facilitate lessons in Plant City.

Develop a Pedestrian and Cyclist Wayfinding System

Plant City should develop a wayfinding program that defines routes and identifies a sense of place for users to safely and comfortably walk or bike to key destinations in the community. Wayfinding systems encourage people who bike and walk to take routes other than those that they would normally drive. These walking

and biking routes typically have lower vehicular speeds and cars on the road, with additional facilities and considerations given to people who are not in automobiles. A wayfinding system may also help visitors from out of town who bike or walk better orient themselves to points of interest around town while not increasing the number of cars on the road.

Create a Downtown Pedestrian and Bicycle User Map to Guide Visitors to Destinations
In addition to a wayfinding system, the City should develop a pedestrian and bicycle user map focused on Downtown. User maps are important for visitors or people who want to walk or bike to local destinations. User maps also help orient visitors to important destinations within the City, such as parks, schools, the hospital, and Downtown.

Undertake a Bike Share Pilot Program
Bike share can provide visitors in Downtown an opportunity to visit cultural destinations and businesses by bike. Plant City should discuss lessons learned with the Cities of Lakeland and Tampa, and with bike share vendors about implementing a pilot project. This project would be small in scale, with one to two stations, to test the use of bike share as a tourism and economic development tool.

Specific Policies
These polices pertain to standards that may be potentially adopted to promote a more bikeable and walkable Plant City.

Gaps in the sidewalk network should be closed.
The sidewalk network should be complete and connected.

Priority pedestrian areas should be universally accessible.
Sidewalks and crossings should be ADA compliant and adequately maintained.

Sidewalks should be on both sides of the roadway.
Pedestrians should have access and a pathway on both sides of all collector and arterial streets and on local streets with commercial land uses or residential densities above three dwelling units per acre.

Frequent and safe street crossings should be provided.
Pedestrians should be able to cross safely and frequently along streets. Crossing should be marked or signalized to provide a safe crossing.

Bridges and underpasses should provide sidewalks on both sides of the roadway.
Pedestrians should be able to cross under or over canals and interstates on both sides of the roadway.

Policy and regulatory tools should be developed that require or incentivize the construction, reservation, or dedication of trail corridors in conjunction with new development.
Plant City will find development of a trail system in the City limits and to connecting communities difficult without strong requirements in place that ensure the required right of way, landscaping, and trail protections can be put in place to develop a system.

Consider dedicating staff time, funding, or other resources towards the development of feasibility studies and implementation plan for the Plant City Trail System.
The City should commission trail feasibility studies that include elements of public input, right of way review, preliminary environmental and engineering design, amenities, wayfinding and branding, landscaping, cost estimates, and other important elements of a successful trail.

4.0 IMPLEMENTATION PLAN

The City of Plant City is well positioned to make long strides in pedestrian and bicycle facilities through these actions and recommendations. Implementing the recommendations within this Plan will require leadership and dedication to bicycle, pedestrian, and trail facility development. Equally critical, and perhaps more challenging, will be meeting the need for a recurring source of revenue. Even small amounts of local funding could be very useful and beneficial when matched with outside sources. Most importantly, the City and MPO need not accomplish the recommendations of this Plan by acting alone; success will be realized through collaboration with regional and state agencies, the private sector, and non-profit organizations.

Given the constant change in funding availability at local, state, and federal levels, it is difficult to know what financial resources will be available at different time frames during the implementation of this Plan. However, there are still important actions to take in advance of major investments, including key organizational steps, the initiation of education and safety programs, and the development of strategic, lower cost infrastructure improvements. Following through on these priorities will allow the key stakeholders to prepare for the development of larger walkway or bikeway projects over time, while taking advantage of strategic opportunities as they arise.

4.1 FUNDING STRATEGY

Typically, cities have access to five funding sources that are key for implementing planning efforts:

- *Capital Budgets*: Regularly scheduled capital improvement budgets allow for projects to be done in a collaborative manner between agencies and regular spending.
- *Departmental Budgets*: City departments could share staff and financial resources to take mutual steps towards implementing projects with budgets, technical resources, and staff time.
- *Fees*: User or impact fees are key strategies to funding projects in the city budgets.
- *Fundraising Campaigns*: Frequently, the private and not-for-profit sectors are willing to assist the City with clearly defined, well-marketed campaigns to improve safety.
- *Grants:* Multiple grant resources are conducted throughout the year that could be identified and frequently used to implement elements of this Plan.

4.2 ESTIMATING PROJECTS

It is difficult to accurately estimate project costs in a high-level plan such as this one. However, many of these projects can be implemented during routine resurfacing projects. Further study is needed on specific roadways to determine whether sidewalks should be provided on one side or both, whether bicycle facilities are on-road or off-road, and whether the provision of side paths offsets the need for sidewalks and bike lanes. As such, generalized cost-per-mile information from FDOT is provided for different types of facilities. The cost estimates include:

- Sidewalks (5’ on one side) = $200,000
- Bike lanes (5’ on both sides) = $180,000
- Buffered bike lanes (7’ on both sides) = $260,000
- Multi-use trail (12’ off-road on one side) = $420,000
- Pedestrian-activated signal = $20,000
- Crosswalk = $3,000

This plan recommends construction of sidewalks on many local streets. As most are two-lane facilities with low traffic volumes, sidewalks could be constructed on just one side in some instances. The City should

consider setting aside at least $200,000 per year for sidewalk construction on local roads. Based on the cost estimates above, this would allow for completion of the local road needs identified within twenty years.

4.3 Implementation Roles

The following chart depicts the various agencies and stakeholders who will be involved in implementation of this plan. Continued coordination and collaboration among the groups is essential to the Plan's success.

4.4 Implementation Timeframe

The timeline for recommendations varies for different facilities and programmatic improvements. Thus, improvements should be considered on a short term to long term basis depending on available funds and staff resources. These recommendations include priority projects for walking, biking, and trail systems and policies or programs that could also be adopted. Projects implemented in the short term will generally have the highest visibility and help provide people with tangible benefits as components of the Plan. They also provide a sense of guidance and direction showing that Plant City aims to be more pedestrian and bicycle friendly in realizing the vision.

Short-term recommendations include:

- Implement safety improvements in high pedestrian crash areas.
- Designate the Minimum Bicycle Grid network.
- Advance development of the Canal Trail through design and land acquisition.
- Construct sidewalks on local streets near the downtown core, schools, and parks.
- Continue promoting and facilitating Safe Routes to Schools.
- Adopt a Complete Streets policy.
- Implement an “Alert Today, Alive Tomorrow” campaign.
- Develop a pedestrian and bicycle wayfinding system.
- Create a downtown pedestrian and bicycle user map to guide visitors to destinations.
- Undertake a bike share pilot program.

Longer term recommendations include the provision of pedestrian and bicycle facilities on all collector and arterial roadways and completion of the spine network. These projects will require collaboration with the County, MPO, and FDOT to ensure that programmed projects include appropriate considerations for biking and walking.

Midtown Redevelopment Vision Plan

Prepared for:
City of Plant City
June 2007

EDAW | AECOM

Acknowledgements

City of Plant City

Mayor and Commissioners

Rick A. Lott, Mayor

Robert P. Brown, Vice-Mayor

Mary Yvette Thomas Mathis, Commissioner

William D. Dodson, Commissioner

Daniel D. Raulerson, Commissioner

Other

John L. Dicks, former Mayor

Greater Plant City Chamber of Commerce

City Staff

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Phillip R. Scearce. AICP, Principal Planner

Executive Summary

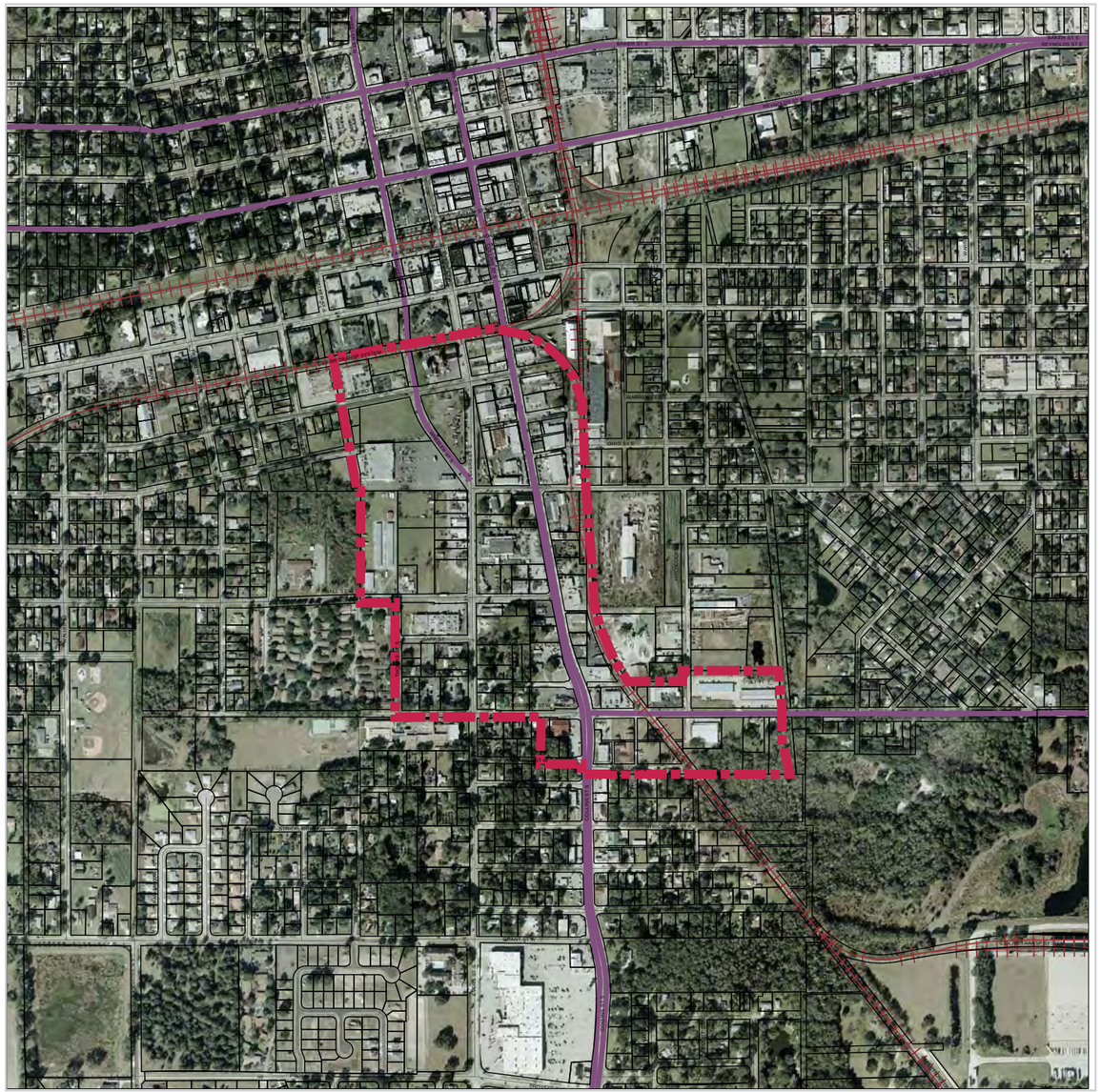
Plant City, Florida has experienced significant growth from 1997 until recently, the spring of 2007. Most of this growth has occurred in a typical residential subdivision pattern. City leaders have recognized that an opportunity now exists to encourage some of the City's future development to take place within an area near downtown known as Midtown.

Midtown today is a collection of under-utilized assets. The streets are poorly laid out in some cases, and some of the existing buildings are worn and deteriorated. Furthermore, many of the uses currently in Midtown are oriented toward heavy commercial or industrial activity, which do not complement the City's adjacent downtown. Finally, the owner of at least one large heavy commercial use actively seeks to relocate their business out of Midtown. That owner cites concerns about transportation constraints and the need for more space as the primary reasons for relocating in the near future.

City leaders believe Midtown of the future holds genuine promise as a mixed-used, pedestrian-friendly area with multiple options for residential, business, and entertainment. A revitalized Midtown will boast a village green and businesses that offer neighborhood-oriented goods and services. Also part of the Midtown experience will be businesses that offer support services for downtown and beyond. Residential units also are expected to attract those who want or need to be near downtown offices and retail shops.

Achieving such significant progress toward Midtown's redevelopment takes more than a wish and a prayer, however. The City's efforts begin – but certainly will not end – with the vision plan outlined in the following pages. The plan is presented along with an analysis of the pre-existing conditions, definition of desired outcomes, and a list of necessary implementation steps. Both literally and figuratively, over the next several years the plan will help shape the vision into reality.

Table of Contents



Midtown Redevelopment District

1.1 Opportunity

Plant City continues to experience strong residential growth in 2007. Much of this growth has taken the form of suburban subdivisions, complete with winding roads and landscaped cul-de-sacs. In contrast, Plant City's historic downtown (including the 85 acres south of downtown known as Midtown) has not seen significant residential construction. Downtown is primarily composed of offices, antique shops, churches, and a few home-town restaurants. Midtown is home mostly to commercial businesses with a scattering of single-family homes.

City leaders believe Midtown could be – and should be – a more dynamic, mixed-use area that complements downtown. Redevelopment of Midtown presents a major opportunity to encourage some of the City's future growth to occur in an urban shape and form. With the right policies, projects, and programming, Midtown has the potential to become a pedestrian-oriented place offering a variety of residential, retail, office, and recreation spaces.

A key element in Midtown's redevelopment is articulating a consensus vision about what those 85 acres near downtown should look like in the future. That vision will guide – and provide a foundation for – the journey toward successful redevelopment.

1.2 Scope and Process

The City initially considered commissioning a market study to determine the economic viability of Midtown's redevelopment. City leaders ultimately decided that the first step toward redevelopment should be to identify options and community preferences for Midtown's physical environment. The result would be a "vision" for the community's future illustrated through text and graphics. This document represents the vision for Midtown.

To help define this vision the City selected EDAW, a private firm specializing in planning, landscape architecture, and urban design.

EDAW's scope of work for the Midtown Redevelopment Vision Plan included:

- Review and analyze available information
- Document existing conditions
- Meet with key stakeholders
- Identify redevelopment concepts
- Hold a visioning session to obtain community input
- Develop and present Redevelopment Vision Plan to the City Commission
- Finalize and document the Plan

1.3 Guiding Principles

EDAW identified a number of planning principles that were critically important in developing the vision for Midtown. These "guiding principles" include the following:

Walkable design

- Studies show people generally willing to walk about 1500 feet
- Need to provide housing, work, commercial, and entertainment options within this distance
- Need to bring uses close to sidewalk with different architectural styles meant to be experienced up close

Sense of place

- A feeling that a neighborhood has boundaries, a center and distinctive characteristics – key element is buildings built to the front property line
- Successful placemaking design should celebrate local history, climate, ecology, and building practice

Mixed-use development

- Mixed retail, office, residential, civic, educational, office uses in neighborhood or same building to create synergy, walkability.
- Mix of housing types creates economic balance
- An inviting mix of restaurants and retail are required to achieve economic vibrancy

Incorporation of Civic/Green Space

- Serve as traditional centerpieces for neighborhoods
- Proven generators of economic value and redevelopment

Sustainability

- Walkable/bikeable communities reduce fuel consumption, pollution
- Green space and trees are required - rather than discretionary - elements

2.1 Site Visit

Creating this vision plan began with the EDAW team and City staff touring the Midtown area by foot and by car. A photographic site inventory of existing conditions was developed for use as a resource during the analysis phase of this effort.

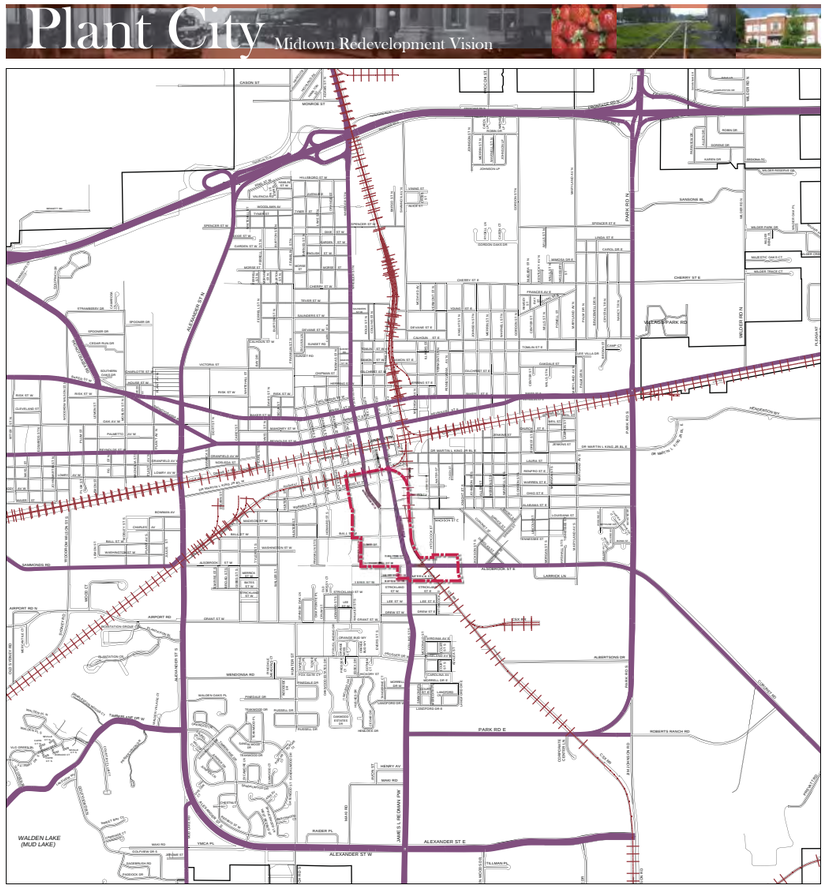
As shown in selected photographs at left, existing conditions in Midtown generally consist of substantially under-utilized commercial areas. Tree cover is largely absent or inadequate. The architectural character of the area is limited; some buildings are deteriorated and worn. Together these characteristics give the impression of an unappealing and uninviting pedestrian environment.

2.2 Context Analysis

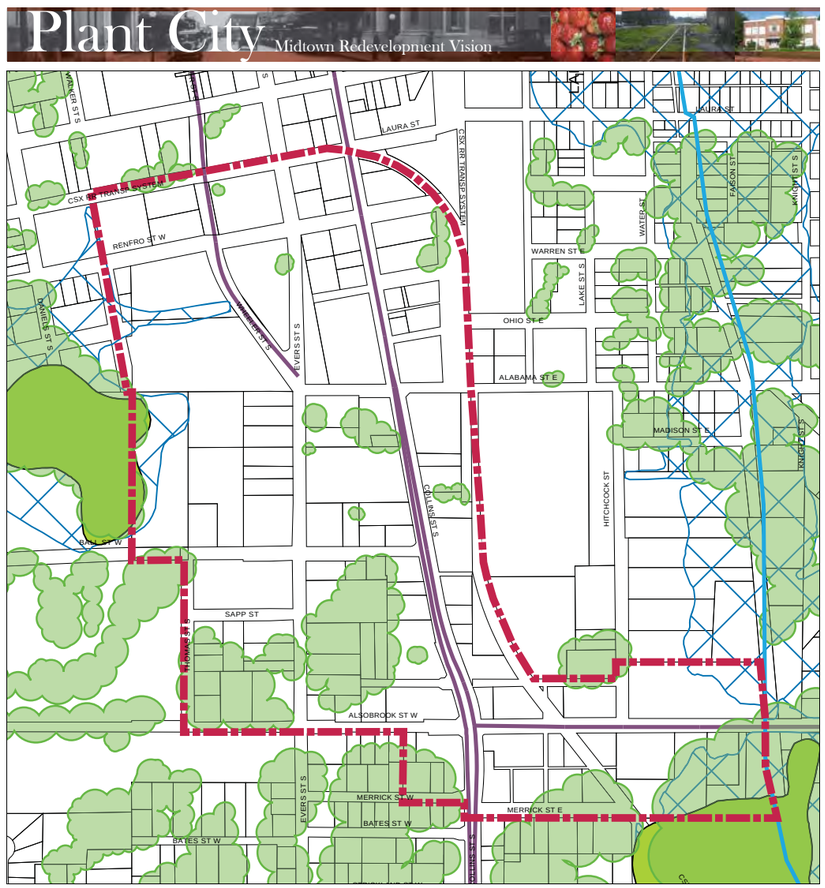
The next step was to obtain comprehensive information from geographic information systems (GIS) maintained by the City and the Hillsborough County City/County Planning Commission. Maps of the Midtown area were drawn to show the relationship of existing and future land uses, zoning, and City-owned properties, among other things. These maps were enlarged and mounted on foam boards to use during stakeholder meetings and a planned visioning charrette. As shown on the pages immediately following, Midtown maps include:

- Area Context
- Environment
- Infrastructure
- Property parcels
- Zoning
- Existing Land Use

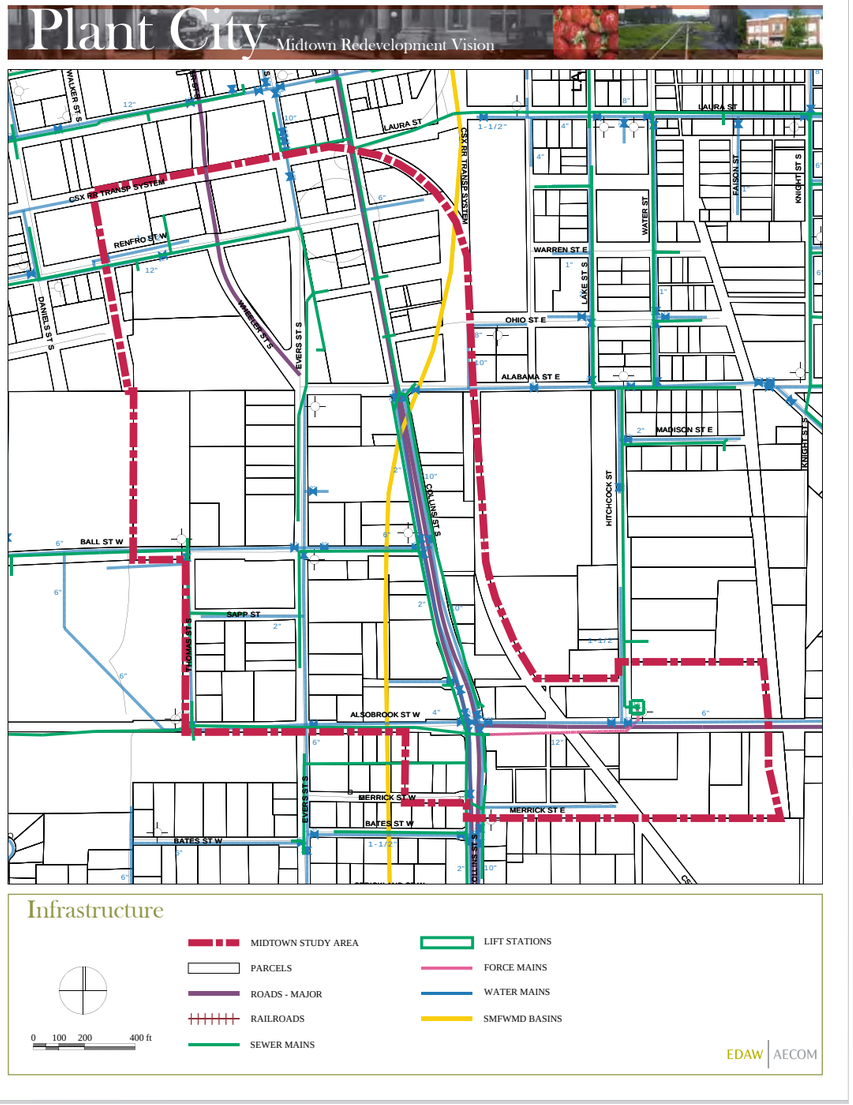
Area Context



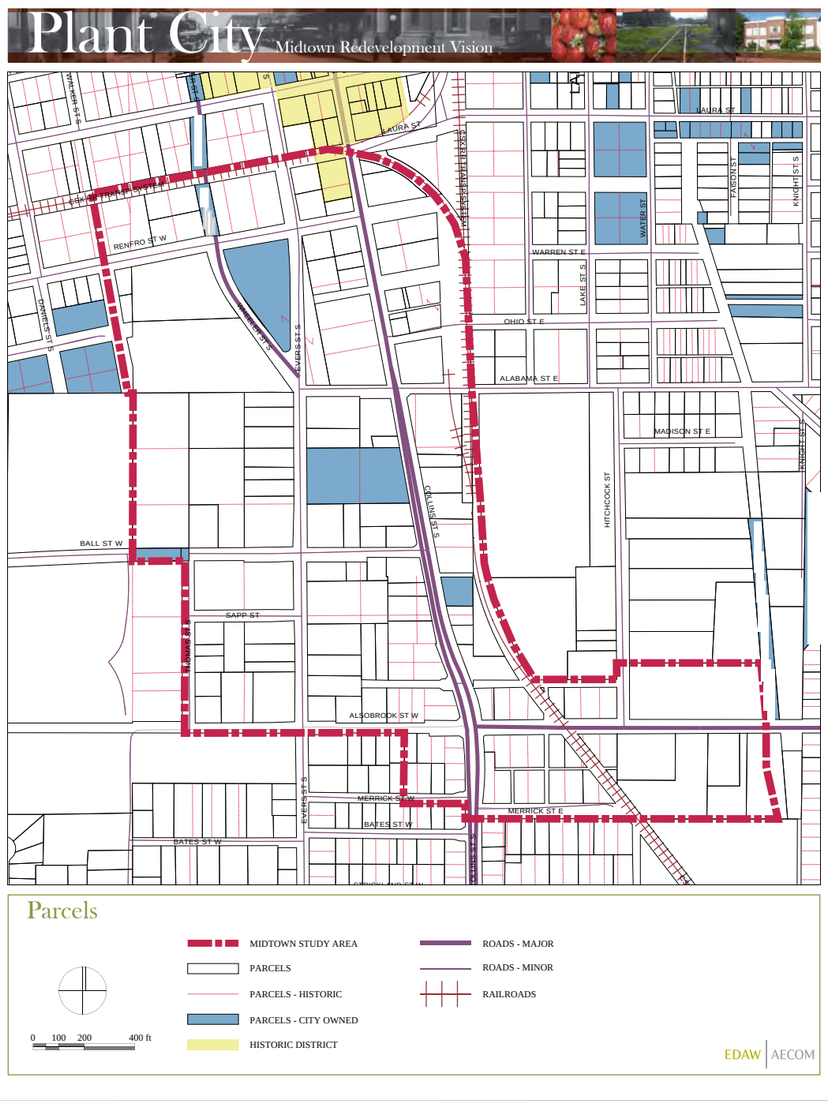
Environment



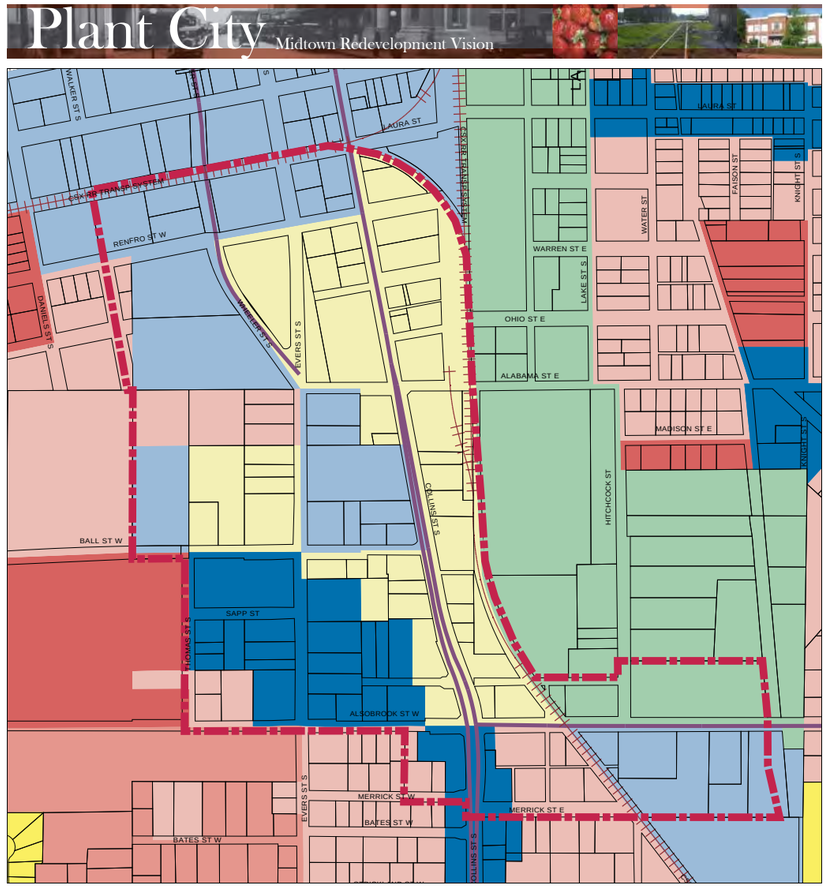
Infrastructure



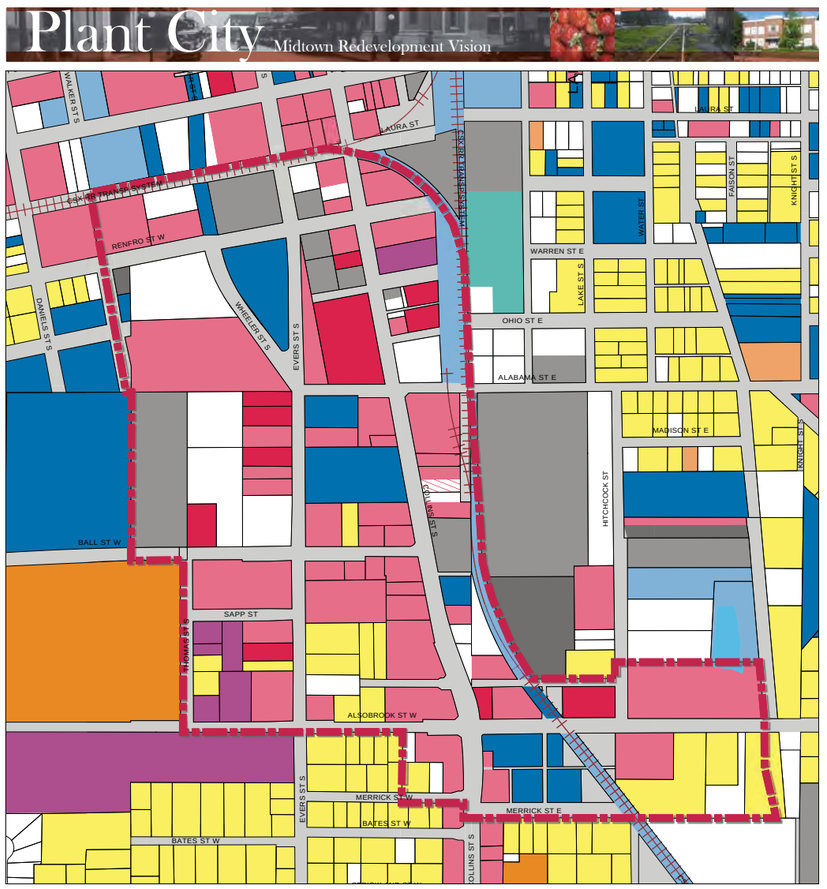
Parcels



Zoning



Existing Land Use



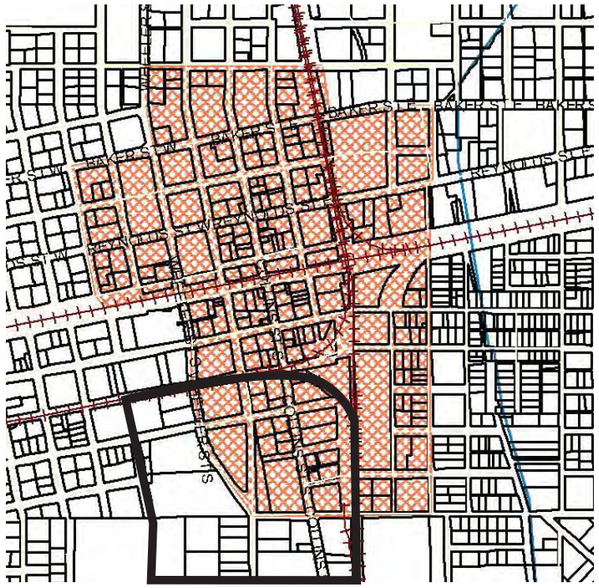
2.2 Context Analysis contd.

Additional background information about the Midtown area was drawn from other sources and is summarized below. The maps to the left illustrate the most important elements drawn from these background sources.

Future Land Use

Future Land Use

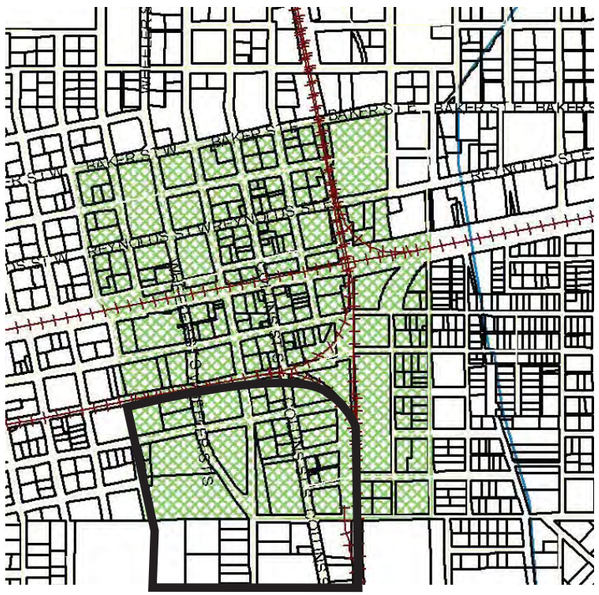
Most of Midtown is designated for commercial use on the City's current future land use map. This type of land use classification allows a mix of uses, including residential, office, and commercial uses. The number of dwelling units in this classification is limited to 20 per acre. A floor-area ratio (FAR) is established at 0.35, which means that the total square feet of building space cannot be greater than 35% of the total square footage feet of the lot upon which the building sits. A small area of the southwest corner of Midtown is classified for residential use. The residential density allowed (20 DU/acre) is the same as for most commercial areas of Midtown. Office and light commercial uses are designated for the southern end of the area, near Alsobrook and Collins Streets. This classification allows 16 dwelling units per acre with a 0.35 FAR. Lastly, the current future land use map designates the southeastern corner of Midtown as industrial. A 0.50 FAR is allowed under this classification.



Parking Exempt Area

Parking Exempt Area

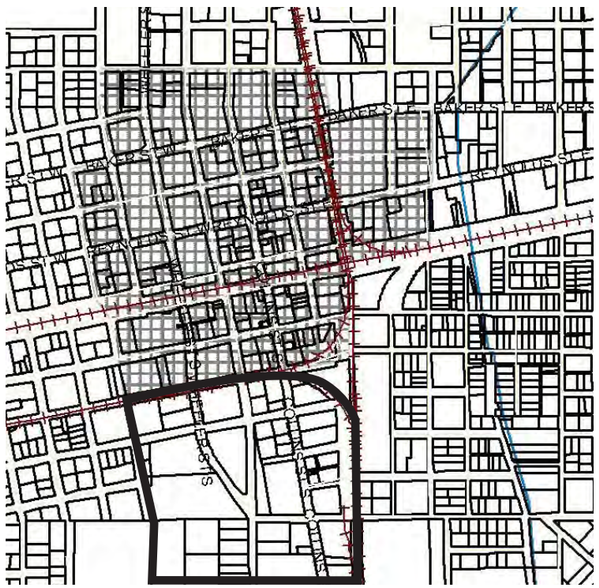
The City currently exempts some of northern Midtown from the general parking regulations in the City's zoning code. The rationale for this exemption area is that it is very difficult to renovate historic buildings or to construct new buildings within the existing urban street grid, while still meeting "modern" parking standards intended for suburban development. The exemption area is designed to ease redevelopment in the downtown area. Even so, a minimum number of parking spaces must be supplied within the exemption area, depending upon specific land uses.



Landscape Exempt Area

Landscape Exempt Area

The northern portion of Midtown is also exempt from the City's general landscaping regulations. Landscaping required in the City's zoning code is geared more toward suburban development, which has larger open areas to work with. The exempt area reduces landscaping requirements because space is limited by both the downtown street grid and the placement of downtown buildings in relation to property lines.



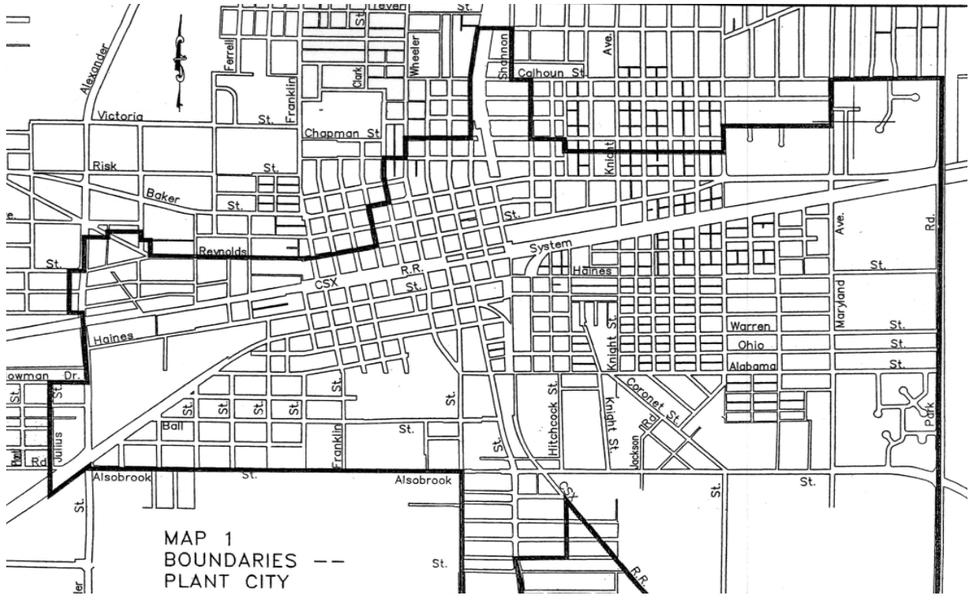
Historic Downtown

Historic Downtown

Special land use and zoning regulations apply to new developments in the historic downtown which includes the northern section of Midtown. One key feature is the building height limitation of 70 feet, provided the building is mixed use and meets architectural appropriateness standards (special parking requirements also must be met).

Laura Street Study Area

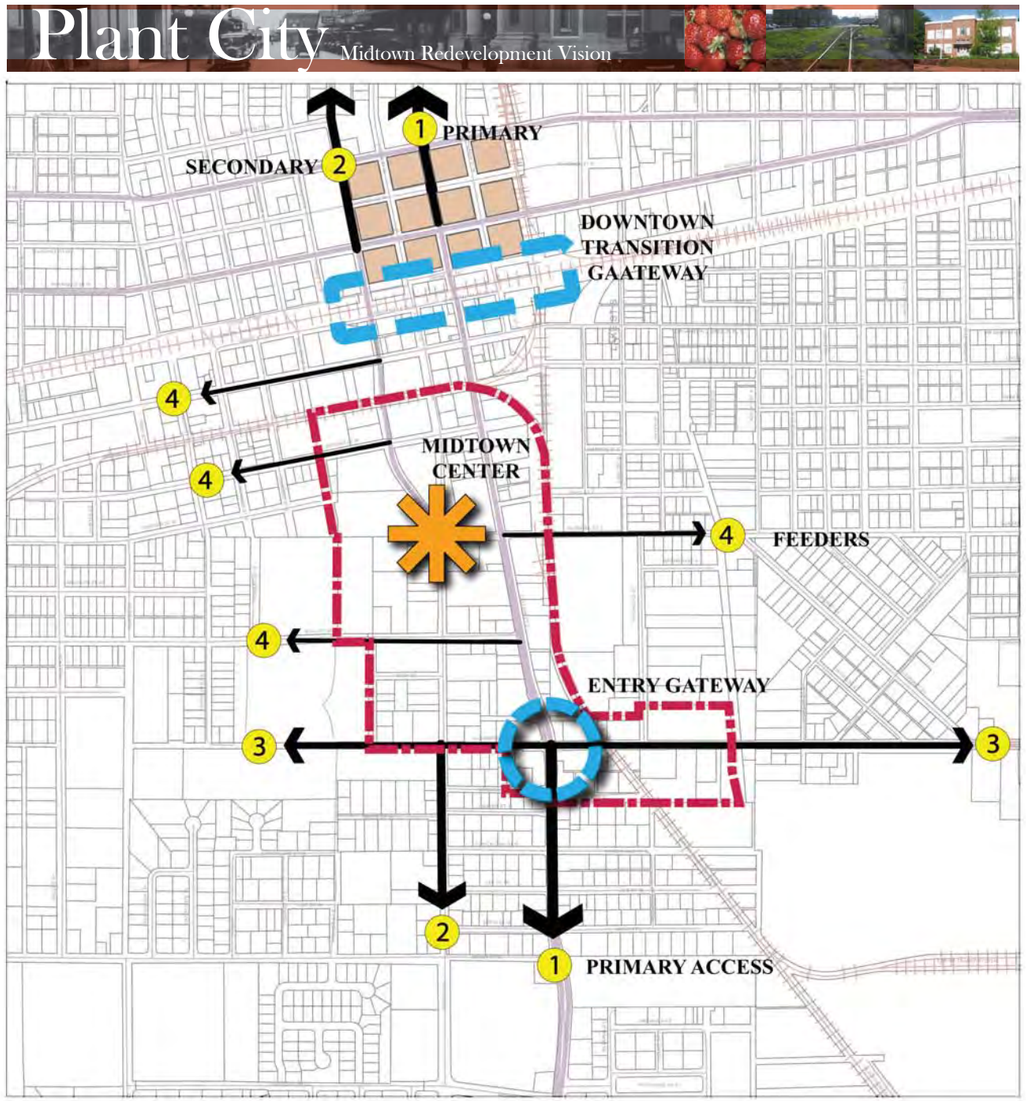
Decades ago Laura Street was the central spine of the African-American community. Like many other such communities throughout Florida, the neighborhood declined as local retailers left and homes deteriorated. To reverse the decline the City hired a private consultant to create a revitalization plan that outlined steps for improving the community. The Laura Street corridor has seen significant progress, but more work remains to be done. Because Laura Street is located northeast of Midtown, a unique opportunity exists to link revitalization efforts for the cumulative benefit of both areas and the City as a whole.



Community Redevelopment Area

The Plant City Community Redevelopment Area includes most of the Midtown study area and may provide a funding mechanism over time as property values increase.

The City established a Community Redevelopment Agency (CRA) in 1981 to address slum and blight conditions in the downtown core. Adjacent residential areas were included in the CRA as was the rest if Midtown. The objectives of the CRA plan are consistent with the "guiding principles" of this Midtown Vision Plan. The CRA plan calls for mixed-use development, parks and green space, and walkable design. Thus, CRA funds may be expended in effort to revitalize Midtown.



2.3 Strengths - Opportunities - Constraints

Developing a viable redevelopment vision cannot be done effectively without understanding a study area's strengths, weaknesses, and constraints. To this end, EDAW reviewed data collected during site visits; information from the sources described earlier also was used to define a context for preparing the redevelopment vision.

Midtown's current physical environment reveals strong ties to industrial and commercial uses. Some of the challenges are readily apparent: Railroad tracks bound the north and east sides of the district; wetlands lie to the southeast and northwest; the existing street grid is poorly designed; sidewalks are narrow or non-existent in some key areas.

On the plus side: The City owns significantly-sized parcels in the district that could be made available for redevelopment; the district has good access links to other parts of the City; a large quasi-industrial business has outgrown its current location and wants to relocate; and multiple Midtown property owners have expressed interest in improving their properties.

The collation of all this information is a graphic depiction (see illustration at left) of the opportunities to be mindful of when redevelopment occurs.

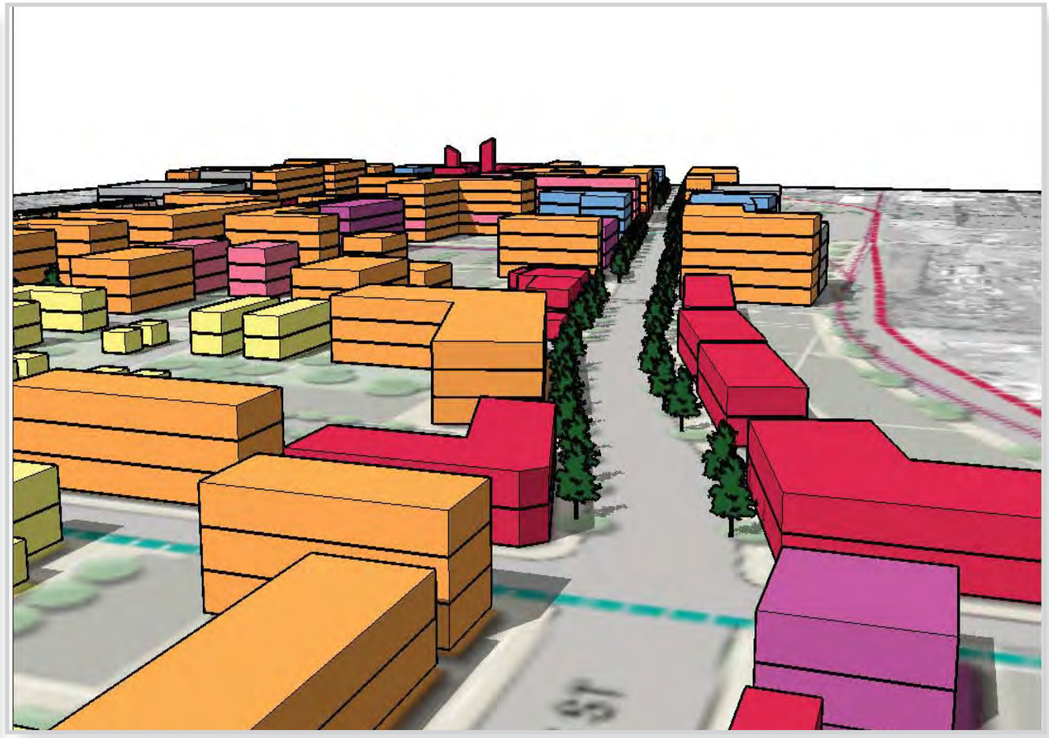
2.4 Preliminary Stakeholder Input

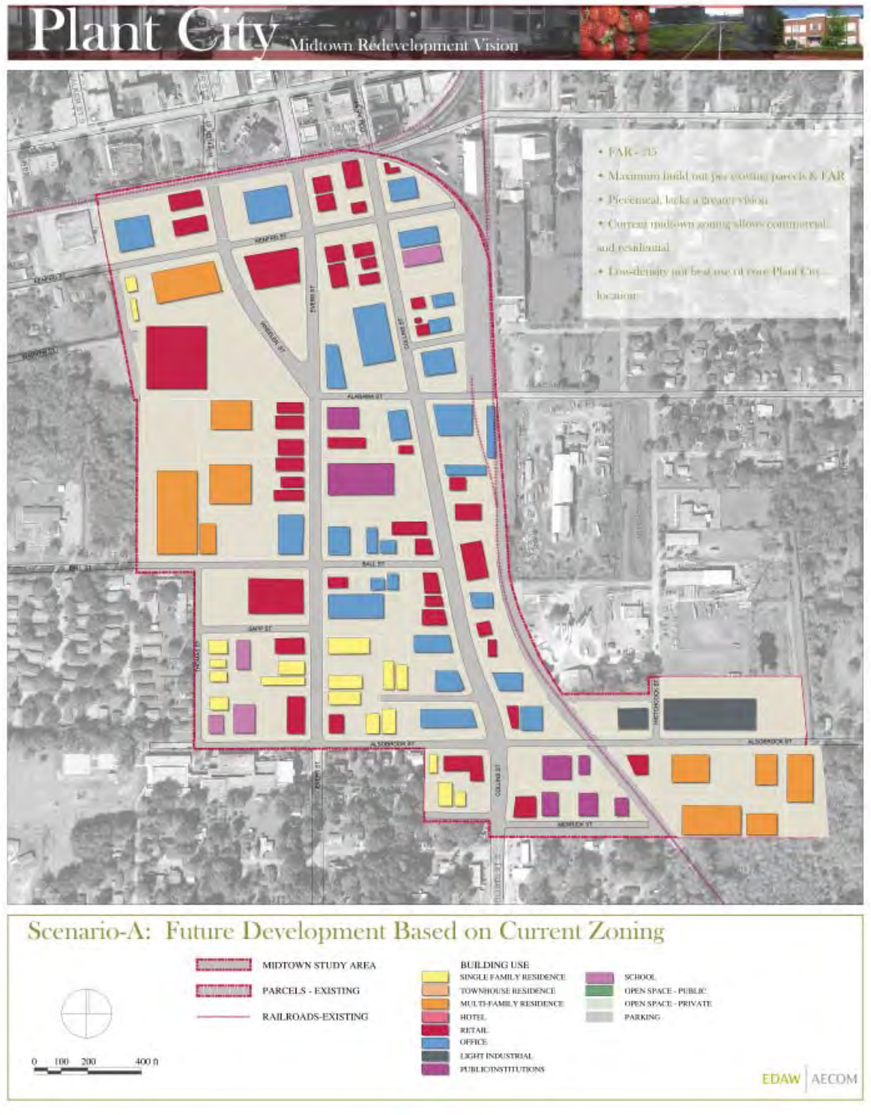
As a final step of the analysis phase of the study, preliminary interviews with key stakeholders were held to identify their concerns and desires regarding the redevelopment of Midtown. The following shared primary input emerged from the interviews:

- Attract economic and residential development
- Increase maximum density and height
- Develop mixed uses
- Need anchor attractions, entertainment, and retail
- Create civic/green spaces
- Do not harm existing downtown
- Protect and enhance Plant City historic character

3.0 redevelopment scenarios

Based on the information obtained in the analysis phase, three redevelopment scenarios were drafted to illustrate varying degrees of density, green space, mixed use, and City investment. A plan view was developed for each scenario, followed by an interactive three-dimensional imaging model that allows a user to virtually explore the scenarios and become familiar with the effect of different density, height, and use criteria. Uses were proposed with the goal of obtaining a favorable balance of types of use.

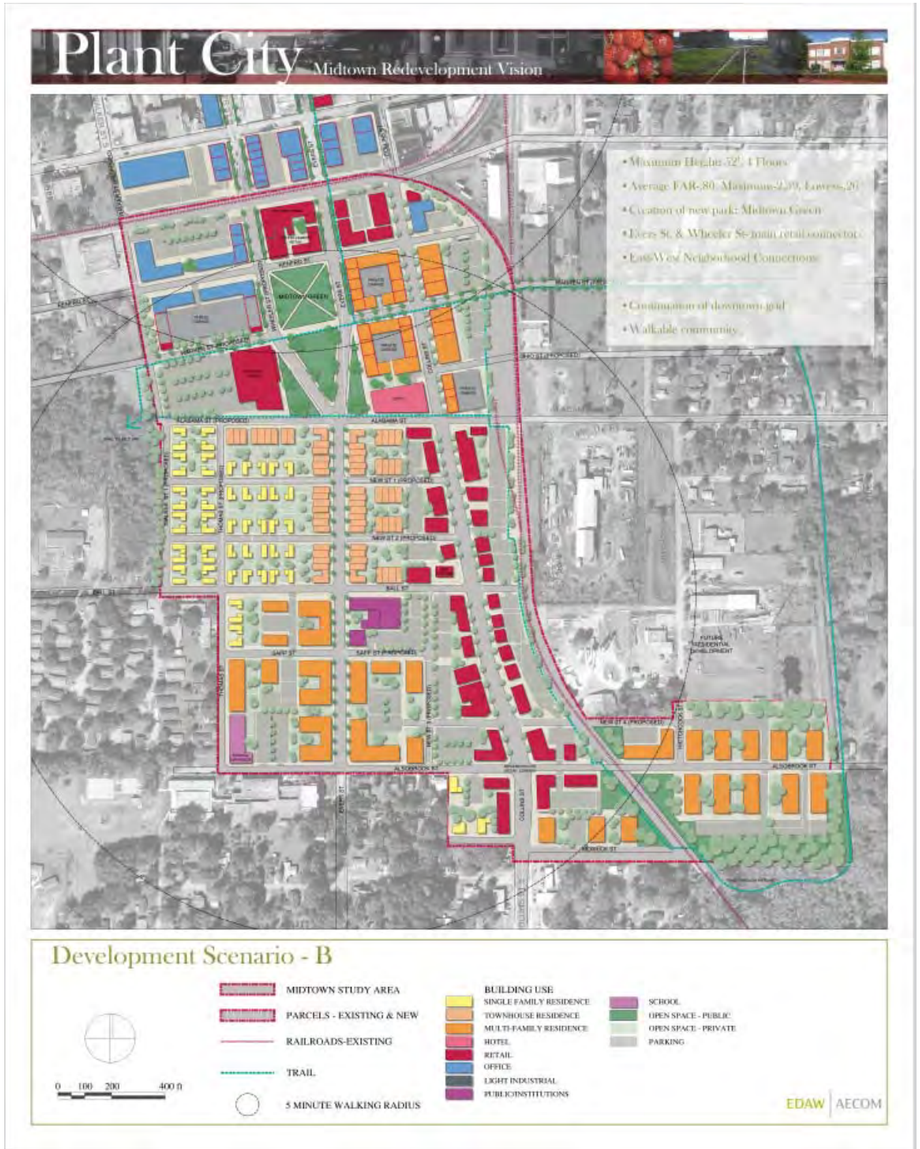




3.1 scenario a

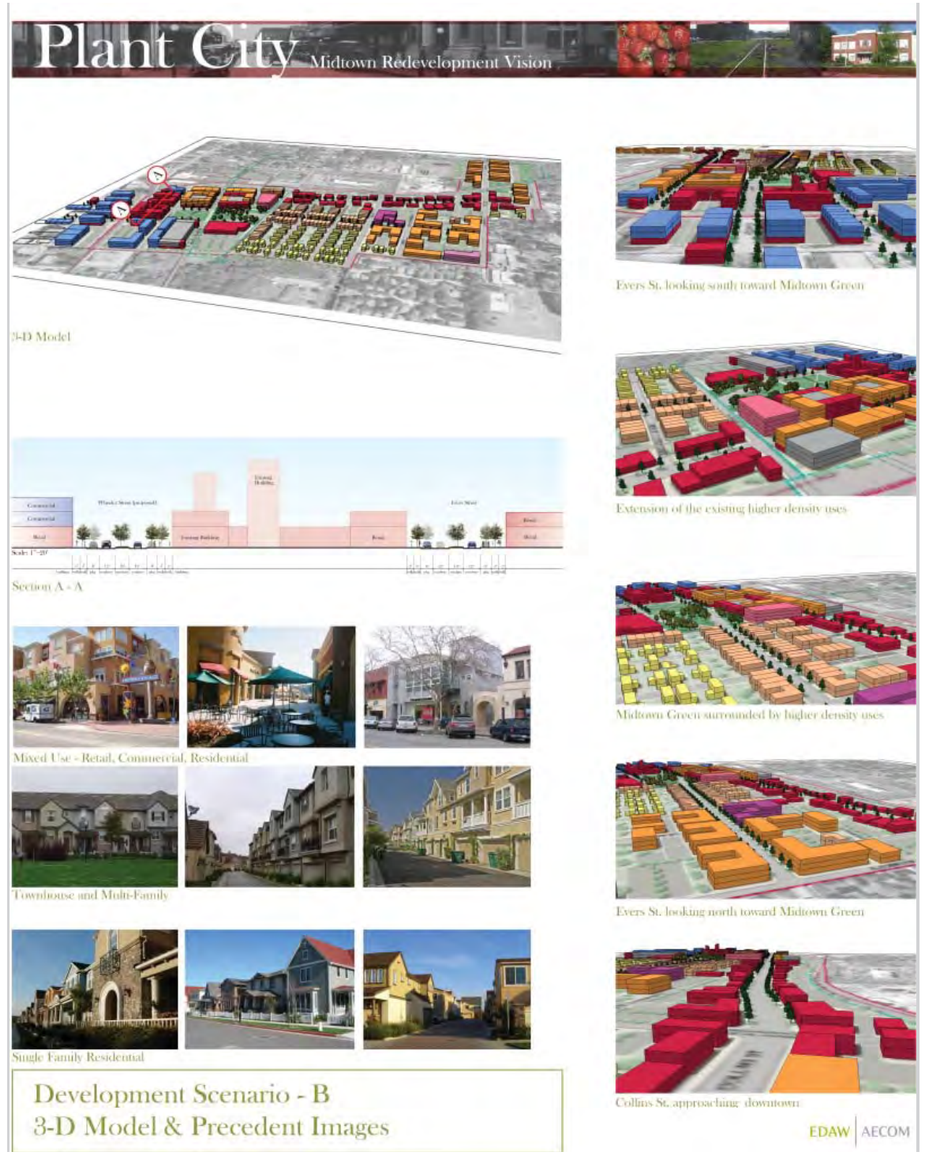
- FAR: .35
- Maximum build-out per existing parcels and FAR
- Piecemeal, lacks a greater vision
- Current zoning allows commercial and residential
- Low density not best use of core Plant City location

Scenario A was developed based on a maximum buildout of existing parcels and FAR and retention of the existing street grid with minimal City investment. It includes a balance of mixed uses but generally reflects a piecemeal approach not in keeping with a larger vision for Midtown. The densities achieved are not viewed as the best use of the core Midtown location and are insufficient to achieve desired civic and economic vibrancy.

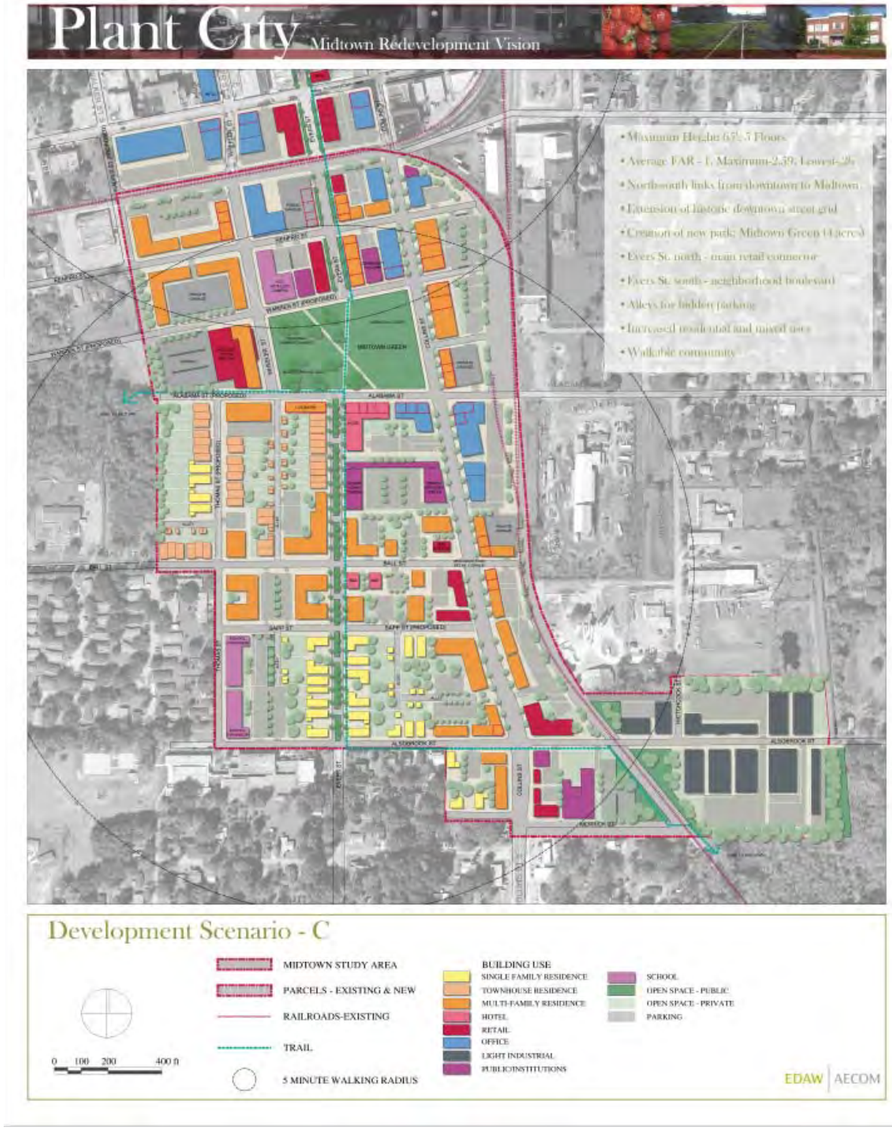


3.2 scenario b

- Maximum Height: 52', 4 Floors
- Average FAR .8, range 2.59 - .26
- New park: Midtown Green
- Evers Street & Wheeler Street connectors
- East-West Connections
- Continuation of downtown grid
- Walkable community



Scenario B was developed based on a maximum height of 4 stories and an average FAR of 0.8. North-south and east-west connections have been established or enhanced and the downtown grid has been extended. A new city park - Midtown Green - has been created to provide civic and green space and an organizational center for the new community. A balance of uses in keeping with a larger vision for Midtown are reflected, and the proposed densities and uses create the foundation of a walkable community.

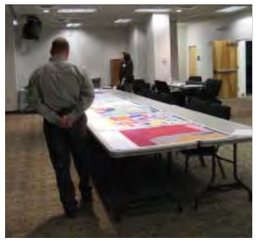


3.3 scenario c

- Maximum Height: 65', 5 Floors
- Average FAR - 1, Range: 2.59-.26
- North-south links from downtown to Midtown
- Extension of downtown street grid
- Creation of new park: Evers Street north - main retail connector
- Evers Street south - neighborhood boulevard
- Alleys for hidden parking

Scenario C was developed based on a maximum height of 5 stories and an average FAR of 1.0. As in Scenario B, north-south and east-west neighborhood connections have been established or enhanced and the downtown grid extended. A larger new Midtown Green park has been created and larger buildings are able to accommodate a greater mixture of uses in one location. The additional density and concentration of mixed uses further contributes to the creation of a viable walkable community. As in Scenario B, setbacks are eliminated to create an urban street fabric and character. Land use area and FAR figures by block are presented in the table on the following page.

Midtown Visioning Charrette



Residents, Business Owners Discuss Midtown Visions

Tampa Tribune, Nov 18, 2006

"More than 40 residents, including business owners from the area south of historical downtown, attended."

"One of the most well-received concepts: ensure the architecture of historical downtown buildings influenced the architecture of midtown."

"Business owners seemed receptive of the idea and were relieved when Mayor John Dicks told them that the city would not use eminent domain."

MIDTOWN
PUBLIC-PARTICIPATION VISIONING CHARRETTE

DATE: TUESDAY, NOVEMBER 14TH
TIME: 6:00 PM to 9:00 PM
WHERE: CITY OF PLANT CITY – CITY HALL AUDITORIUM
ADDRESS: 302 W. REYNOLDS STREET
PURPOSE: PUBLIC PARTICIPATION DESIGN EXERCISE

On the evening of November 14th, the City of Plant City will hold a public visioning charrette to obtain public input as part of the process to build community consensus on a redevelopment vision and guiding plan for the Midtown redevelopment area. The Midtown area is an area located directly south of the City's central business district, and is that area generally bounded by the east/west CSX railroad tracks located between Dr. MLK and Renfro Street on the north; by the north/south CSX railroad tracks running parallel and east of Collins Street on the east; by Alsobrook & Merrick streets on the south; and by Thomas & Walker streets on the west. Please see the map on the reverse side.

The City has hired the international planning and urban design firm EDAW to study the options for redeveloping Midtown into a vibrant, walkable, mixed-use neighborhood. EDAW is tasked with completing a Midtown Redevelopment Vision Plan that identifies a consensus-based physical-redevelopment plan and a strategy for implementing the plan. At the Charrette EDAW will provide information on various redevelopment options and obtain community input on issues, including land use, building heights and residential densities, civic and green-space opportunities, and architecture and urban design considerations.

You are cordially invited and strongly encouraged to attend this visioning design charrette for an opportunity to have input into this process which is sure to have an influence on the city's future. If you have any questions concerning this charrette, please contact the city by e-mailing randers@plantcitygov.com or telephoning 813-659-4231.

char·rette [sh*uh*-**ret**]
–noun – An intense period of design activity.

Any collaborative session in which a group of individuals draft a solution to a design problem.

Charrettes typically involve an intense meeting or meetings, involving municipal officials, developers, and local property owners and residents. A charrette promotes joint ownership of solutions and attempts to develop a consensus solution to planning needs.

Charrette Program

A "visioning charrette" was held on November 14, 2006, to obtain public input on the three redevelopment scenarios created by EDAW. Visioning charrettes typically are defined as highly-interactive public meetings to discuss and explore development options for a defined area. The charrette began with City leaders welcoming the crowd and EDAW explaining the purpose and scope of the visioning initiative. EDAW staff discussed the strengths, weaknesses, and opportunities in redeveloping Midtown; guiding principles for good urban planning and design also were outlined.

Charrette attendees were then invited to review the three different redevelopment scenarios (Scenarios A, B, and C, presented on previous pages), which were mounted on large foam presentation boards. Laptop computers also were positioned near Scenarios B and C so that attendees could view 3-D "fly over" perspectives for each of those two redevelopment options.

Charrette Public Input

Attendees spent considerable time reviewing each redevelopment scenario. EDAW staff and City staff were available to answer questions and explain the different scenarios. As part of the visioning exercise, attendees were asked to jot comments on cards or Post-It® notes. Attendees were asked to place Post-It® notes directly on the scenario foam board that it related to; comment cards could be dropped off in a box by the exit.

A review of the comments showed strong general support for the building heights and residential densities depicted in Scenario C. Other input is highlighted below:

- Desire for mixed-use, higher density, and the addition of civic greenspace
- Concerns about eminent domain
- Concerns about parking and the ability of the market to support the new space
- Discussion of possibility of building a new library facility in the Midtown area
- Concern about stormwater impact

The charrette closed with an assurance that the input obtained would be used to develop a final redevelopment vision. In response to a question about the use of eminent domain to acquire property for redevelopment, City officials assured the attendees that such action was not contemplated as a way to implement the vision plan.

Plant City Midtown Redevelopment Vision

3-D Model



Midtown Green



Mixed Use - Retail, Commercial, Residential

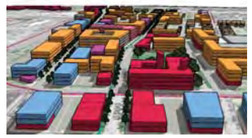


Townhouse and Multi-Family

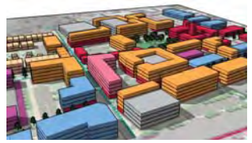


Single Family Residential

FDevelopment Scenario - D
3-D Model & Precedent Images



Evers St. looking south toward Midtown Green



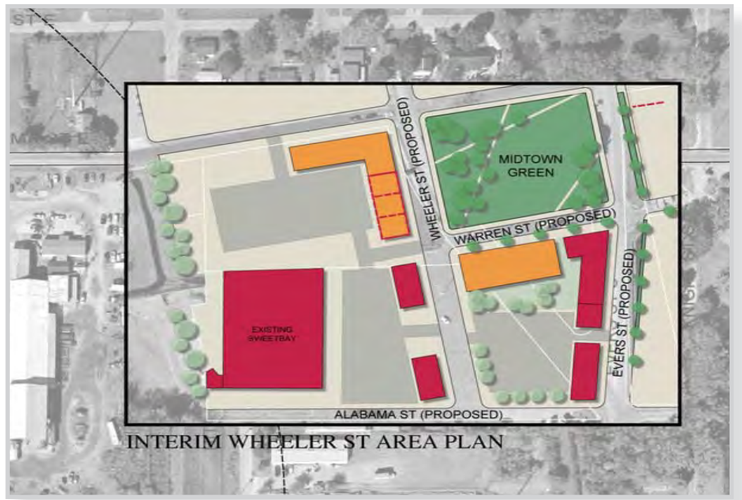
Extension of the existing higher density uses

Midtown Green surrounded by higher density uses

Evers St. looking north toward Midtown Green

Collins St. approaching downtown

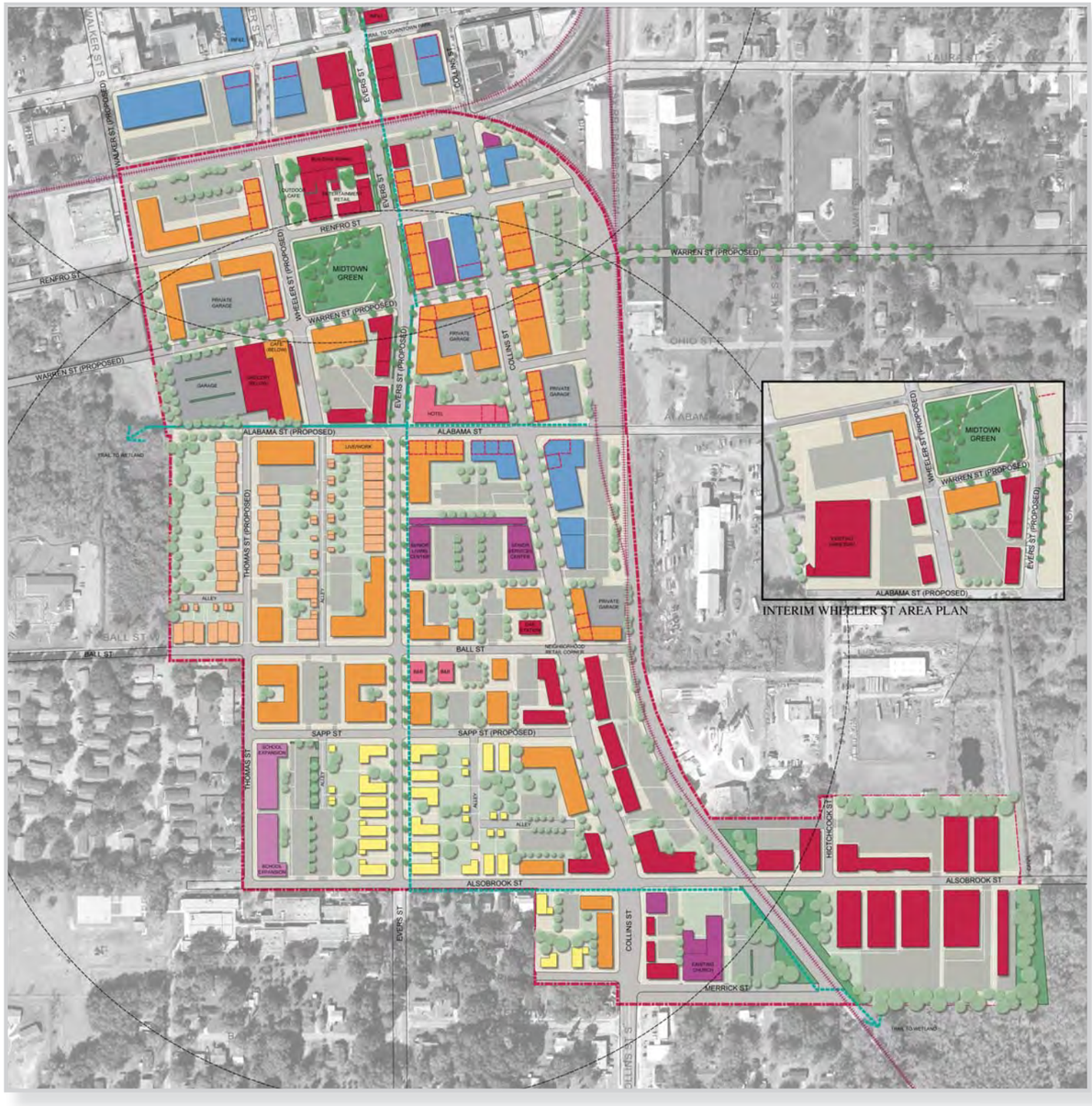
EDAW | AECOM



INTERIM WHEELER ST AREA PLAN

midtown redevelopment vision plan

5.0 vision plan



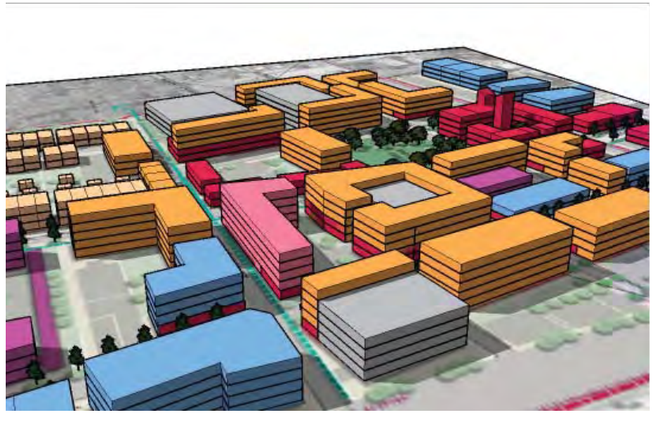
Midtown Redevelopment Vision Plan

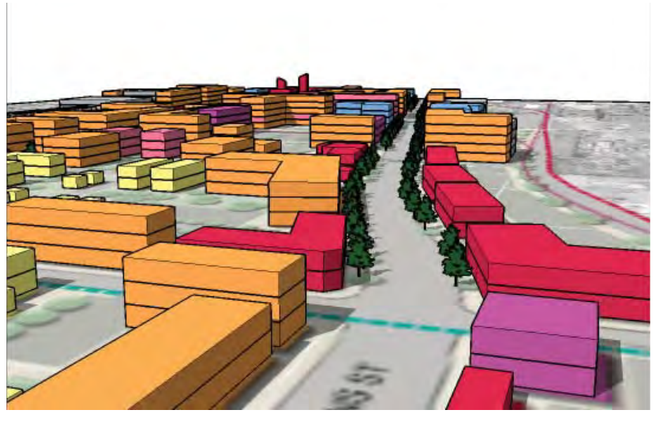
The Midtown Redevelopment Vision Plan documented on the following pages was created as a result of extensive data collection, significant public input, and the application of sound urban planning and design principles. The recommended vision plan actually is a fourth redevelopment option – "Scenario D" – and is based loosely upon Scenario C shown in previous pages. This final vision plan took rough form after incorporating comments from the public and from City staff following the charrette. Additional shaping of the plan occurred after EDAW presented a draft of Scenario D to the City Commission on March 12, 2007.

As shown in an overview to the left and in more detail on subsequent pages, the recommended vision plan champions a pedestrian-friendly and mixed-use neighborhood that creates a definite "sense of place" in the City. The City can use this the plan to stimulate new development in a desired location and in a desired form.

The plan calls for residential townhouses and multi-family buildings to help support a recommended increase in retail, commercial, and office space. A village green is recommended for passive recreation and to anchor neighborhood coffee shops, bookstores, and other neighborhood-oriented businesses. Offices that draw customers from a larger City-wide or regional service area also are part of the mix, right alongside businesses that provide essential services to other businesses both in Midtown and in historic downtown.

Midtown can be successfully revitalized by leveraging its proximity to Plant City's traditional downtown and by capitalizing on the redevelopment of vacant or underutilized properties. Indeed, by building upon the urban fabric already existing around it, Midtown offers a sense of place more authentic than is evident in suburban communities using faux architecture to create "instant history." A redeveloped Midtown is the real deal.





5.1 Key Elements

The Midtown Redevelopment Vision Plan includes the following key elements:

Increase Density and Height

The plan advocates a substantial increase in height and density for future development. Current development patterns are not sufficient for Midtown to realize the goal of creating a pedestrian-friendly, mixed-use neighborhood.

According to comments gathered at the charrette and via discussions with City Commissioners and staff, general support exists for a maximum building height of four to five stories in a redeveloped Midtown. The most significant increase in height and density should occur at the northern end of Midtown. This area reaches southward from downtown to Alabama Street; also included is the section from Alabama Street south to Ball Street, between Evers Street on the west and Collins Street on the east.

Height and density should taper down from the area described above as a transition to lower-density residential areas outside Midtown to the west, south, and east.

Three-dimensional renderings are shown at left to present views of buildings constructed as recommended in the plan.

Eliminate Required Building Setback Lines

New buildings should be constructed at the front property line and adjacent to a sidewalk. The urban areas in today's great cities were originally planned that way years ago; such an archetype represents a true urban form essential for creating a sense of place and an appealing street environment for pedestrians.

This type of building placement now exists in the downtown and northern Midtown. It should be replicated throughout Midtown to help knit Midtown together with downtown.

5.1 Key Elements (cont'd.)

Create Central Green Civic Space & Parking Area

Just as building to the property line is a traditional urban feature, so too is a civic-oriented village green. Many communities throughout Florida again are incorporating this important "place maker" into their redevelopment plans. Midtown also should create a defined green area. The green will serve not only as a refreshing and inviting people place, but also as a magnet to attract and anchor neighborhood businesses and residences. Trees and vegetation native to Florida can be used to make the green more attractive and to help meet sustainability needs.

The proposed village green is rectangular in shape and is located in the northern end of Midtown (just south of Renfro Street and west of Evers Street). This location was chosen because of several important planning considerations in the visioning process. First, the proposed location is near the geographic midpoint of the entire downtown/Midtown area, which makes it accessible by pedestrian from both areas. Second, the true form of urban green space requires well-designed buildings arrayed around it. The advantage of the proposed village green location is that three of its four sides are either vacant land or will be available for redevelopment within the next few years. Finally, the City currently owns the parcel recommended for the village green, which is a key factor in selecting that location.

Creating an optimal green space, however, will require some streets to be realigned. These include straightening Evers Street southward from Renfro Street; straightening Wheeler Street southward from Renfro Street; and extending Warren Street westward from Collins Street. Once these are completed, another parcel is created south of the proposed village green. This parcel can be configured to include new commercial buildings and public surface parking.

Encourage Diverse Uses & Housing Types

A fourth primary element in the plan emphasizes mixed-use development. This type of development also is a traditional urban form. It promotes a walkable, pedestrian-friendly atmosphere by locating residential uses alongside neighborhood service businesses and attractions. Co-location of uses reduces the need for neighborhood residents to access necessary goods and services via automobile.

The plan thus calls for a broad mix of residential, office, commercial, retail, entertainment, and other uses. Outdoor dining also is included as a recommendation. Outdoor cafés shaded with canopies or trees invite people out "on the street" and helps create a more vibrant pedestrian



Single Family Residential



Townhouse and Multi-Family



Mixed Use - Retail, Commercial, Residential

environment. However, successfully attracting more pedestrian activity also means emphasizing both public safety and a clean, well-maintained streetscape (no trash, litter, or debris).

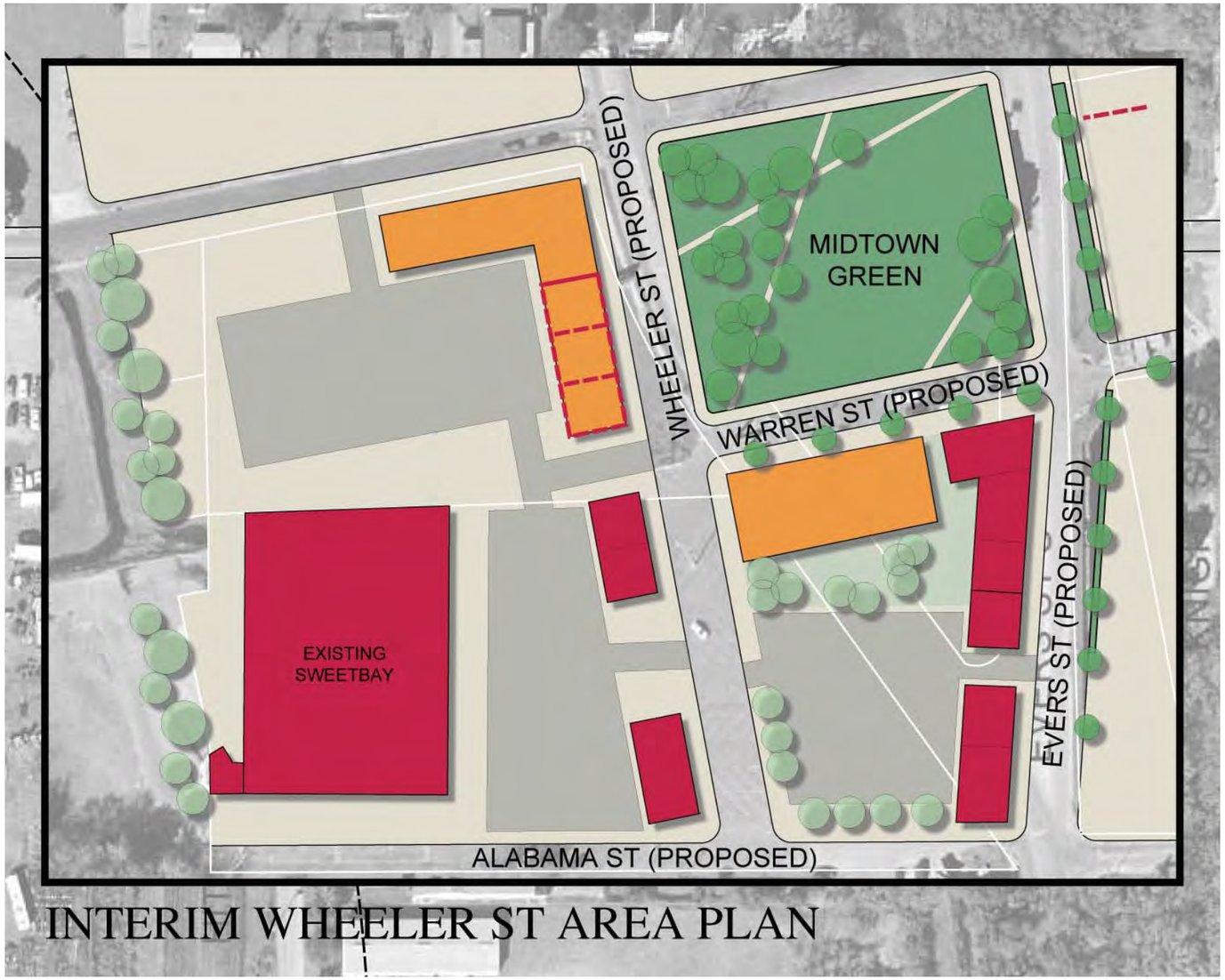
As for housing, the plan calls for different residential types and price ranges. These include townhouses, apartments, artist lofts, and zero-lot line single-family homes. The townhouses are expected to be either condominiums or rental properties; the apartments and lofts likely will be geared toward the rental market; and the single-family homes are expected to be resident-owned, which vests residents' interest in the neighborhood's long-term viability.

Improve Streets & Sidewalks

Well designed streets are an essential part of any successful redevelopment plan. As previously discussed, some Midtown street layouts will need to be reconfigured to take full advantage of the other steps recommended in this vision plan. The following street projects will strengthen Midtown's connection to other City areas and will create a more typical urban pattern in the district:

- Straighten Wheeler Street to remove the existing awkward and unsafe intersection at Alabama Street
- Extend Warren Street to the east and west
- Extend Alabama Street to the east
- Extend Thomas Street north to Alabama Street
- Extend Sapp Street east to Collins Street
- Realign Evers Street to create eastern edge of Midtown Green

In addition to street changes, the plan recommends widening sidewalks and installing trees along some key, high-visibility stretches of roadway. Roads identified for such streetscaping are Wheeler, Evers, and Collins Streets; the block surrounding the village green also should be streetscaped. This will set the tone for creating a pedestrian-friendly environment. It also will strongly signal the City's intent to invest in this revitalization initiative, which in turn is expected to draw private investment into Midtown.

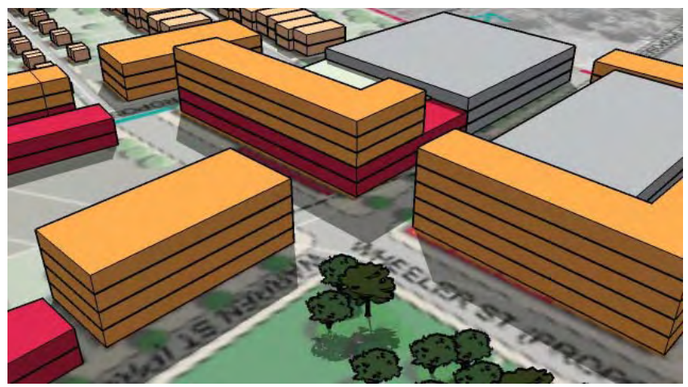


5.2 Wheeler Street Interim Plan

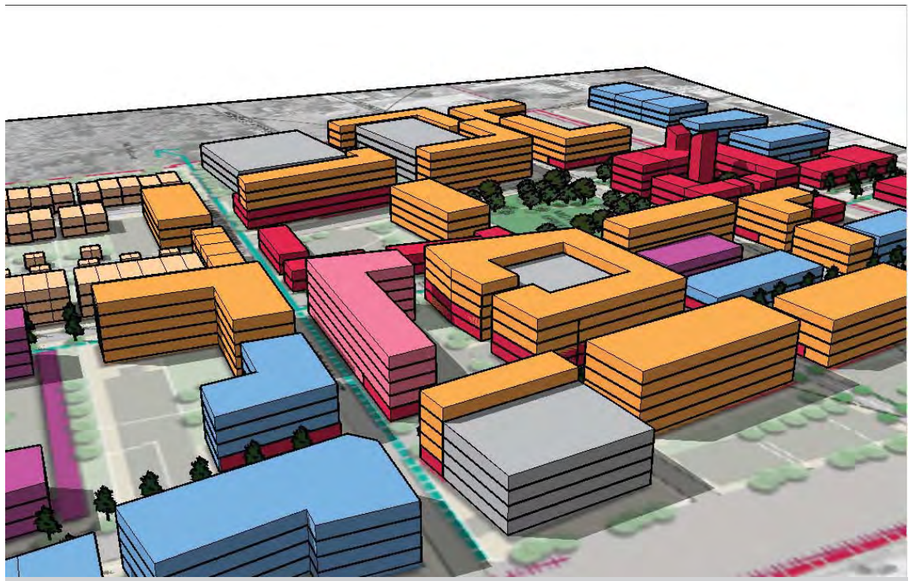
The vision plan includes a recommendation for future construction of a grocery store on Wheeler Street. Specifically, the plan calls for the new store to be located at the east property line along the street.

The grocery store currently located on that parcel does not fulfill that recommendation. It is instead located near the parcel's west property line, with parking in front of the building. That existing parking lot extends to the eastern property line on Wheeler Street. The vision plan also recommends extending Warren Street westward, which would extend a roadway through the northwest corner of the existing grocery. Considering that the grocery store recently signed a new lease and was remodeled, it appears unlikely that such a significant change in site location will occur soon.

Therefore, an interim plan is included here to guide redevelopment activity in this specific area of Midtown. Wheeler Street still should be straightened as recommended earlier. Alabama Street should extend westward until it reaches the rear of the Sweetbay grocery. The Sweetbay parcel should be allowed to have additional out-buildings located on its parcel, without penalty for any loss of parking. Finally – perhaps in exchange for land necessary to straighten Wheeler Street – the City may consider granting additional development rights to the Sweetbay property owner on the new parcel to be created east of the grocery. This new parcel will be created by extending Warren Street across City-owned land (which also creates the village green directly north of the new parcel).

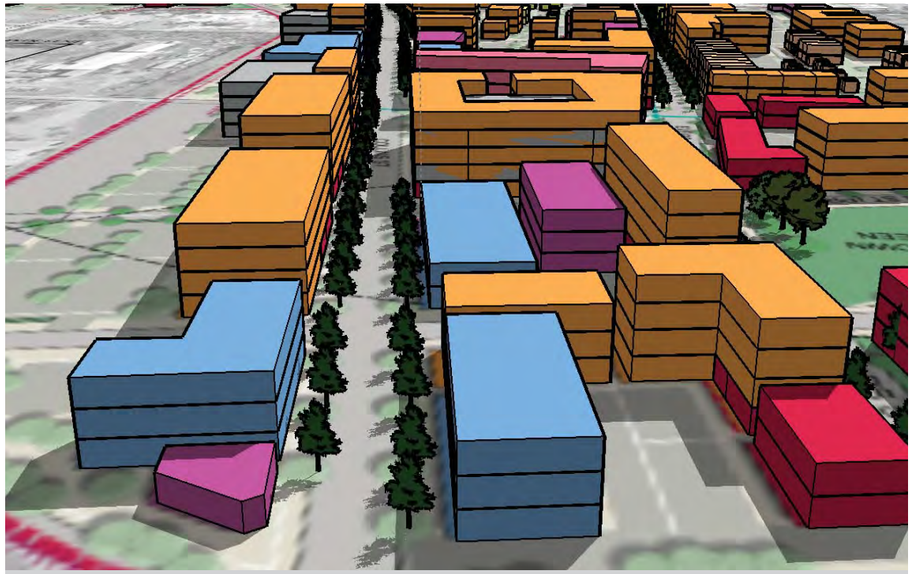


5.2 Interim wheeler street area plan

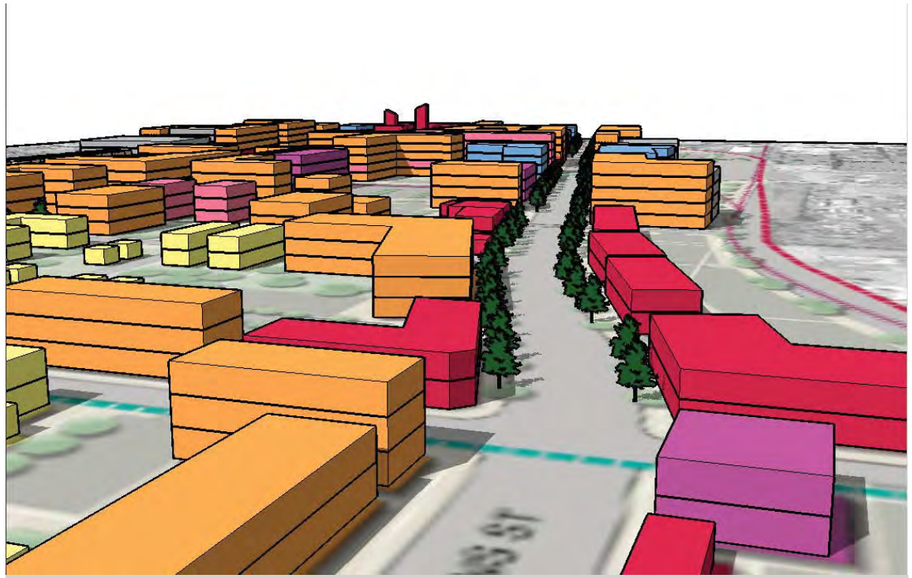


West view on Alabama Street

South view on Evers Street



South view on Collins Street



North view on Collins Street at Alsobrook Street

5.3 three dimensional views

6.0 implementation

6.1 Implementation

A redevelopment initiative like the one contemplated in the Midtown vision plan must have a forward-thinking implementation strategy in order to be successful. Such a strategy relies on four key actions – regulations, incentives, capital improvements, and marketing. These are outlined below.

6.1 Regulations and Policy

Regulations will help translate Midtown's vision into reality. The City should revise its land development regulations (LDRs) to require specific performance for mix of uses, parking, building height, building placement, landscaping, etc. These regulations would apply to all new development and redevelopment projects in Midtown.

Modifications to the City's current LDRs relating to Midtown should include:

1) *Mix of Uses* – Buildings of three or more stories should include multiple uses. For example, a three-story building might include office or retail on the ground floor with residential uses on the second and third floor. Multi-family residential structures should be required to have some portion of the ground floor allocated for supportable neighborhood retail uses. The City also should consider requiring that new single-story buildings proposed in higher-density areas must be constructed to support additional future floors, which then might be added later to meet plan goals.

2) *Parking* – A combination of parking on streets, in public and private surface lots, and (eventually) multi-deck parking garages will be needed to ensure adequate parking exists in a redeveloped Midtown. The plan shows locations for some of those parking features. To a large extent, the parking areas and building locations, sizes, and uses are only a graphic representation of the desired development pattern. Please note that the development pattern shown does not constitute a guarantee that adequate parking exists for any specific project. More detailed parking requirements should be included in the City's Midtown LDRs; actual parking needs will be evaluated as projects are submitted for review. The City also should consider extending the parking exemption area southward to cover potions of Midtown with high commercial densities.

6.1 Regulations and Incentives contd.

3) Building Height – Portions of Midtown are recommended to have higher densities of residential and commercial uses. Accommodating those higher densities will mean allowing higher finished building heights. The allowable building height north of Alabama Street should be no lower than 55 feet by right (height incentives for mixed-use buildings also shoulld be established. South of Alabama Street the building height should be limited to 45 feet (mixed-use incentives should be considered). Single-family structures would remain limited to 35 feet as currently allowed under the City's zoning code.

4) Building Placement – All new construction – except for single-family houses – should be oriented so that the building front is built up to the property line (which typically is the right-of-way). A sidewalk should be located between the building front and the street itself; a narrow strip of grass or other vegetation also can be used between the sidewalk and the street. This traditional urban pattern creates a more pedestrian-friendly environment. Other regulations should be established for proportionate building mass and scale which are compatible with the rest of downtown. Those regulations would change in proximity to residential neighborhoods to the west, south, and east.

5) Landscaping – The landscaping exemption area currently present in much of the downtown should be extended southward to Alabama Street. The exemption area does not mean that no landscaping would be allowed or permitted, but that the landscaping within the exemption area should be suitable for an urban environment. Grass and ornamental trees or shrubs should be used where appropriate to soften the appearance of the built environment.

6.0 implementation

6.2 Incentives

The City may want to consider using incentives to encourage or induce development according to the vision plan. Some methods successfully used by other jurisdictions include density bonuses, tax credits, fee waivers, establishment of concurrency exception areas, expedited plan and permit reviews, etc. Without discussing each of these in great detail, the intent is to obtain desired development by reducing the cost of that development incurred by property owners and developers. There may be a short-term cost to the City, but the long-term gain in property values should more than offset those short-term costs.

6.3 Capital Improvements

Several key capital projects will demonstrate the City's commitment to revitalizing Midtown. As shown by the redevelopment experiences of other Florida cities in the past two decades, these capital projects also will help attract private investment in new buildings, attractions, and parking. These projects should be included in the City's capital improvement program and pursued with all due speed. Several of these have been discussed previously and are included in the list below:

- Create Midtown Green, reconfigure Wheeler and Evers Streets, and Warren and Renfro Streets around the park, adding sidewalk cafe space and street trees
- Create surface parking on reconfigured rectangle between Warren, Wheeler, Evers, and Alabama Streets
- Complete streetscape improvements on Evers and Collins Streets
- Extend Alabama, Warren, Sapp, Thomas, and Walker Streets
- Complete streetscape improvements on remaining streets to add street trees and crosswalks

6.4 Marketing and Programming

A vision plan that is kept on a shelf and not widely disseminated would be a waste of the City's time, energy, and money. Attracting the interest of property owners and developers is critically important in soliciting project proposals and – ultimately – seeing the plan come to life. The following items should be prepared for use as marketing materials to the development community and property owners:

- Midtown Redevelopment Vision Plan
- Midtown Brochure/CD
- City Project Sheet and Map
- Private Sector Projects Sheet and Map
- Cooperative Property Advertising
- Summary of Development Incentives
- Midtown Website

As the initial infrastructure and building projects begin and are completed, the City should consider creating special events or festivals to focus even more attention on the revitalization efforts occurring in Midtown. These efforts can help define the identity of Midtown.

6.5 Next Steps

Although the vision plan will not be implemented overnight, several key actions should be taken to initiate the redevelopment process. Some of these actions are simple; some are complex or expensive. Nonetheless, successfully revitalizing Midtown requires measured progress toward implementing the vision plan. Specific timelines are not included because the City must determine available funding sources and project costs.

(At the time this document went to press, the Florida legislature was crafting a property tax plan that may impact the City's ability to fund this type of redevelopment project. The City will need to evaluate the implications of the legislature's plan in order to prioritize the steps listed below.)

The following steps are critical for implementing this vision plan:

- Adopt policy and regulatory changes
- Begin marketing efforts
- Reconfigue Wheeler Street to enable the construction of Midtown Green and adjacent improvements

With the completion of these steps, Midtown will be well on its way toward attaining its unique redevelopment potential.

6.0

B

Straight Line Diagrams (Roadway Characteristics)

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/05/2020	05/22/2020				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12		CR 39/SR 39A	HILLSBOROUGH	07	10 200 000	1 OF 2

0.0 1.0 2.0

ROADWAY FEATURES

92 / 600 REYNOLDS ST (1-WAY EB) 92 / 600 — 0.000

LANE WIDTHS ARE AVERAGED — 000.0

INVENTORY DIRECTION = N

ASSOCIATED STATION EXCEPTION
SEE ROADWAY ID: 10090000
MP 15.444 TO MP 15.546

0.102 **ACTIVE OFF THE SHS**
(MP 0.000 TO MP 1.171)

N WHEELER ST=>|<=PAUL S BUCHMAN HWY

1.171 INSIDE CITY AND URBAN
* PLANT CITY
* TAMPA-ST PETERSBURG
|<=N WHEELER ST
|<SR 39A

10190150 NB OFF 10190152 NB ON 10190135 EB ON 10190136 EB OFF 1.123 1.225 1.254 10190141 10190140 1.314 1.340 1.346 1.350 1.242 10190400 FRNT RD 1.307 #606 #605 1.348 INTERSTATE 4 400 FM

MEMORIAL PARK CEMETERY ENTR 1.414

PAUL S BUCHMAN HWY

MONROE ST 1.460 6017 1.499 39A W TERRACE DR 1.666 E TERRACE DR 1.686 HILMER AVE 1.783 HEIGHTS AVE OAKLAND 1.847 CAMPBELL AVE 1.899 1.936 INSIDE URBAN, OUTSIDE CITY * TAMPA-ST PETERSBURG

62.0' - 25.0'
1 - 12.0' RDWY - LT
1 - 13.0' RDWY - RT
27.0' CB&VEG MED
2 - 1.0' PVD INSHLD1
2 - 0.0' RC INSHLD2
2.0' C&G SHLD1 - LT
8.0' LWN SHLD1 - RT
1.171

82.0' - 26.0'
2 - 13.0' RDWY
32.0' TFSP MED
11.0' WARN INSHLD1 - RT
2 - 12.0' LWN SHLD1
1.242

68.0' - 27.0'
1 - 12.0' RDWY - LT
1 - 15.0' RDWY - RT
15.0' CB&VEG MED
2 - 0.0' RC INSHLD1
2 - 3.0' PVD SHLD1
8.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT
1.348

45.0' - 25.0'
2 - 12.5' RDWY
2 - 4.0' PVD SHLD1
2.0' LWN SHLD2 - LT
10.0' LWN SHLD2 - RT
1.407

55.0' - 25.0'
2 - 12.5' RDWY
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
10.0' LWN SHLD2 - RT
1.480

48.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
4.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT
1.686

50.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
6.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT
1.783

ROADWAY COMPOSITION

1.171 28/FC-4 / 28/FC-4 — 1.407 28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=14°38'00.00" D=2°00' PC=1,304 PI=1,374 PT=1,442

Δ=2°00'00.00" D=0°40' PC=1,644 PI=1,672 PT=1,701

PC=1,778 PI=1,806 PT=1,835 Δ=2°00'00.00" D=0°40'

B=N00°01'00"E — B=N14°37'00"W — B=N16°37'00"W — B=N14°37'00"W

STRUCTURE DESCRIPTION

1.303 #0606 89.8' UP 1.320 1.334 #0605 89.8' UP 1.351

DISTRICT USE

0.000 FM# 257839-15201 (MP 0.000 - MP 3.237) 2006 - ADD LANES & RECONSTRUCT
0.000 FM# 255852-15201 (MP 0.000 - MP 1.235) 2004 - RESURFACING
0.000 FM#424225-15201 (MP 1.922-MP 3.802)
0.000 2012-INTERSECTION IMPROVEMENT & ADD TURN LANES

1.166 FM# 257839-15201 (MP 1.166 - MP 2.364)
1.166 2006 - ADD LANES & RECONSTRUCT

1.407 FM# 419258-15201 (MP 1.407 - MP 10.907)
1.407 2009 - RESURFACING

1.320 FM# 255685-15201 (MP 1.320 - MP 4.445)
1.320 2003 - RESURFACING

SIS

FUN CLASS

1.171 URBAN MINOR ART

SPEED LIMIT

1.171 45MPH

2.0 3.0 4.0 5.0

INSIDE URBAN, OUTSIDE CITY
* TAMPA-ST PETERSBURG

PAUL S BUCHMAN HWY

0066 2.160 W SAM ALLEN RD 2.204 580 2.179 E SAM ALLEN RD 2.204 580 6005 2.300

PECAN LN 2.462 JOE MCINTOSH RD 2.489 SUNDIAL LP 2.542 SUNDIAL LP 2.579 SUNDIAL LP 2.602 MCGEE RD 2.716 39A

SPREADING OAKS DR 3.063 CHAPMAN RD 3.100 JOE MCINTOSH RD 3.245

ROADWAY FEATURES

45.0' - 24.0'
2 - 12.0' RDWY
9.0' PVD MED
2 - 4.0' PVD SHLD1
2 - 2.0' C&G SHLD2
2.089

50.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
6.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

86.0' - 37.0'
1 - 12.0' RDWY - LT
2 - 12.5' RDWY - RT
12.0' PVD MED
7.0' PVD SHLD1 - LT
8.0' PVD SHLD1 - RT
10.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT
2.204

54.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
10.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT
2.374

69.0' - 24.0'
2 - 12.0' RDWY
13.0' PVD MED
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2
2.592

56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2
2.786

PHYSICALLY DELETED
(MP 3.249 TO MP 3.361)

INACTIVE
(MP 3.364 TO MP 3.493)

PHYSICALLY DELETED
(MP 3.493 TO MP 4.272)

OUTSIDE CITY & URBAN
|<=PAUL BUCHMAN HWY
|<SR 39

PAUL BUCHMAN HWY

4.272 KNIGHTS GRIFFIN RD 4.272 KNIGHTS GRIFFIN RD 39 PERIGRINE DR 4.766

110.0' - 36.0'
2 - 12.0' RDWY - LT
1 - 12.0' RDWY - RT
44.0' VEG MED
2 - 6.0' PVD SHLD1
12.0' LWN SHLD2 - LT
6.0' LWN SHLD2 - RT
4.375

56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2
4.595

114.0' - 36.0'
2 - 12.0' RDWY - LT
1 - 12.0' RDWY - RT
40.0' TFSP MED
6.0' PVD INSHLD1 - LT
9.0' PVD INSHLD1 - RT
2 - 7.0' PVD SHLD1
2 - 12.0' LWN SHLD2
4.272

104.0' - 24.0'
2 - 12.0' RDWY
44.0' VEG MED
2 - 6.0' PVD SHLD1
2 - 12.0' LWN SHLD2
4.455

ROADWAY COMPOSITION

2.000 28/FC-4 / 28/FC-4 — 2.089 28/FC-4 — 2.374 28/FC-4 — 2.592 28/FC-4 — 2.786 28/FC-4

4.272 28/FC-12.5 / 28/FC-12.5 — 4.595 28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=1°26'00.00" D=0°08' PC=4,463 PI=4,565 PT=4,667

PC=4,734 PI=4,836 PT=4,938 Δ=1°26'00.00" D=0°08'

B=N08°38'00"W — B=N10°04'00"W — B=N08°38'00"W

STRUCTURE DESCRIPTION

2.367 1 - 8' X 6' X 50' CBC

2.784 1 - 36" X 54" CC

DISTRICT USE

2.589 FM# 403765-15201 (MP 2.589 - MP 2.787)
2.589 2004 - INTERSECTION IMPROVEMENT

4.445 FM# 255684-15201 (MP 4.445 - MP 10.910)
4.445 1998 - RESURFACING

SIS

FUN CLASS

2.000 URBAN MINOR ART — 3.097 URBAN PRIN ART OTHER

4.272 RURAL PRIN ART OTHER

SPEED LIMIT

2.000 45MPH — 2.327 55MPH

4.272 55MPH — 4.544 60MPH

Version: 1.4.2.27 05/22/2020

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/05/2020	05/22/2020				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12		CR 39/SR 39A	HILLSBOROUGH	07	10 200 000	2 OF 2

5.0 6.0 7.0 8.0

ROADWAY FEATURES

OUTSIDE CITY & URBAN

PAUL BUCHMAN HWY

LANIER RD 5.035 | HUNTER RD 5.288 | VARN RD 5.688 | HIDDEN POND RD 6.424 | BRUTON RD 6.560 | LIGHTNING ROD LN 6.889 | MORICZVILLE LN 7.447 | DAVIES COUNTRY TRL 7.641 | PATRINOSTRO RD 7.905

HUNTER RD 5.288 | CANDIS RD 5.930

39

LANE WIDTHS ARE AVERAGED

INVENTORY DIRECTION = N

5.000 - 6.363: 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.363 - 6.669: 70.0' - 24.0'
2 - 12.0' RDWY
14.0' PVD MED
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.669 - 6.998: 53.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
9.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

6.998 - 8.500: 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

ROADWAY COMPOSITION

5.000 - 6.393: 28/FC-4

6.393 - 6.669: 28/FC-4 / 28/FC-4

6.669 - 8.500: 28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

STRUCTURE DESCRIPTION

5.012 — 2 - 3' X 6' X 90' CBC

6.522 — 1 - 3' X 7' X 92' CBC

7.859 — 1 - 4' X 7' X 118' CBC

DISTRICT USE

6.050 FM# 255744-15201 (MP 6.050 - MP 6.450)
6.050 1997 - ADD LEFT TURN LANES

SIS

FUN CLASS

5.000 - 6.000: RURAL PRIN ART OTHER

SPEED LIMIT

5.000 - 6.500: 60MPH

9.0 10.0

ROADWAY FEATURES

OUTSIDE CITY & URBAN

PAUL BUCHMAN HWY

CREEK | CREEK | TOLLAR RD 8.859

ENTR 8.512 | BLACKWATER | BLACKWATER

39

HERON | #0038 | BRANCH 10.132

5603 10.800

PASCO CO LINE 10.910 | COUNTY LINE RD

ULTRALIGHT AIRPORT

LANE WIDTHS ARE AVERAGED

INVENTORY DIRECTION = N

8.500 - 10.811: 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

10.811 - 10.910: 70.0' - 24.0'
2 - 12.0' RDWY
13.0' PVD MED
4.0' PVD SHLD1 - LT
5.0' PVD SHLD1 - RT
2 - 12.0' LWN SHLD2

NET ROADWAY ID LENGTH: 8.716

END MP: 10.910

ROADWAY COMPOSITION

8.500 - 10.811: 28/FC-4

10.811 - 10.910: 28/FC-4 / 28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

STRUCTURE DESCRIPTION

8.561 — 1 - 40" X 95' CC

8.676 — #0646 — 205.9' BR — 8.715

8.736 — #0647 — 95' BR — 8.754

9.148 — 1 - 4' X 4' X 92' CBC

9.494 — 1 - 4' X 4' X 90' CBC

9.659 — 2 - 7' X 4' X 90' CBC

10.128 — #0038 — 37' CB — 10.135

10.311 — 1 - 4' X 4' X 90' CBC

10.732 — 1 - 4' X 6' X 90' CBC

DISTRICT USE

SIS

FUN CLASS

8.500 - 10.910: RURAL PRIN ART OTHER

SPEED LIMIT

8.500 - 10.910: 60MPH

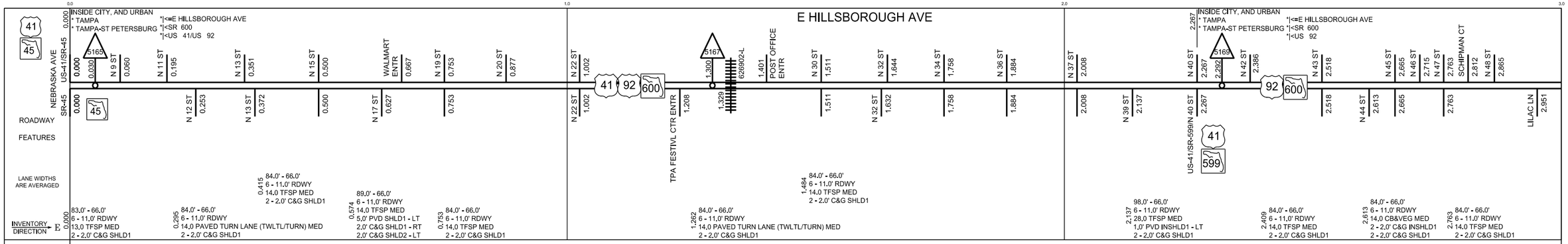
Version: 1.4.2.27 05/22/2020

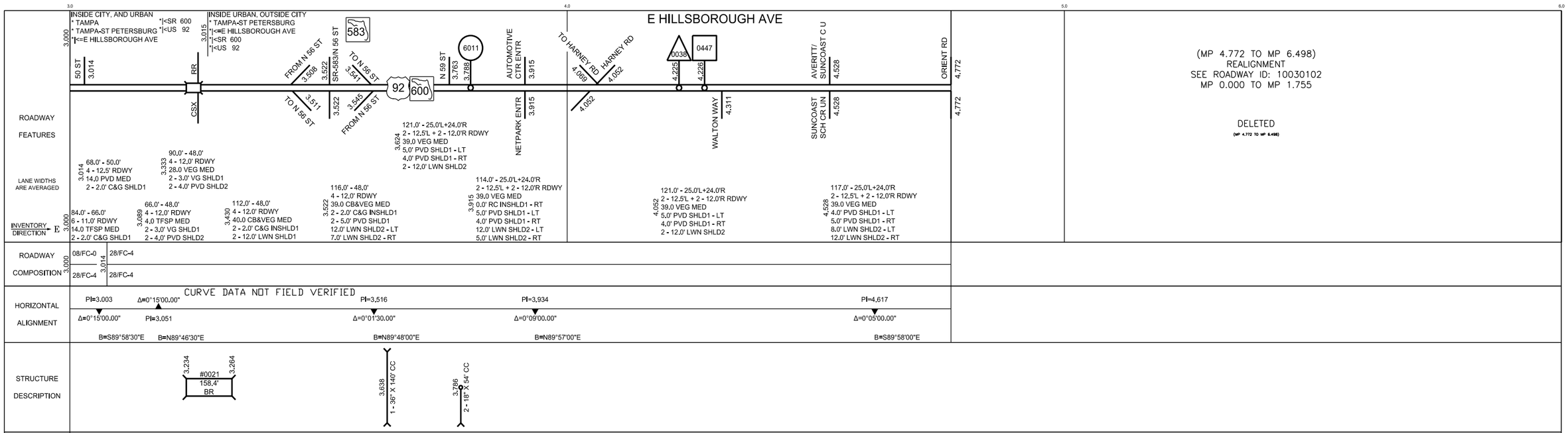
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/10/2020	05/29/2020	000,000	000,025	10/05/2021 CTS	10/15/2021 CTS
BY	FTE/I.Morancie/J.Dormeyer	FTE/K.Anders	001,750	001,775	10/05/2021 CTS	10/15/2021 CTS
			021,523	021,523		02/10/2021 FTE/K.Anders

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 92/US 41	SR 600	HILLSBOROUGH	07	10030000	1 OF 5





Version: 1,4,2,27 10/15/2021

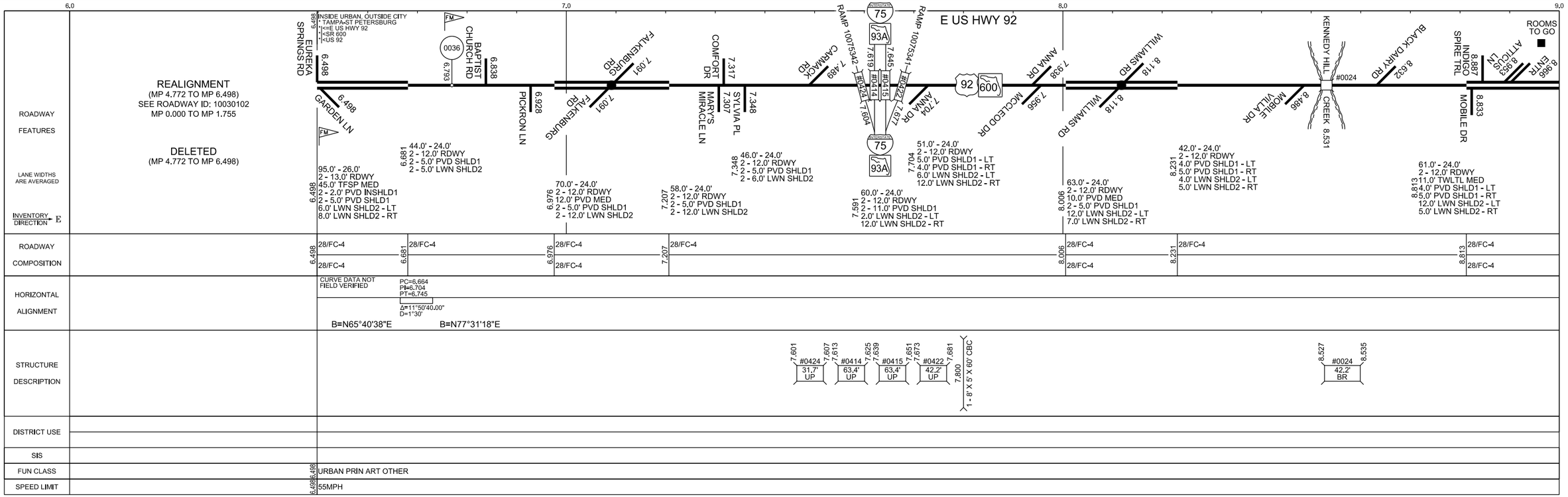
	5 YR INV	SLD REV
DATE	03/11/2020	05/29/2020
BY	FTE / IM-JD	FTE / KA

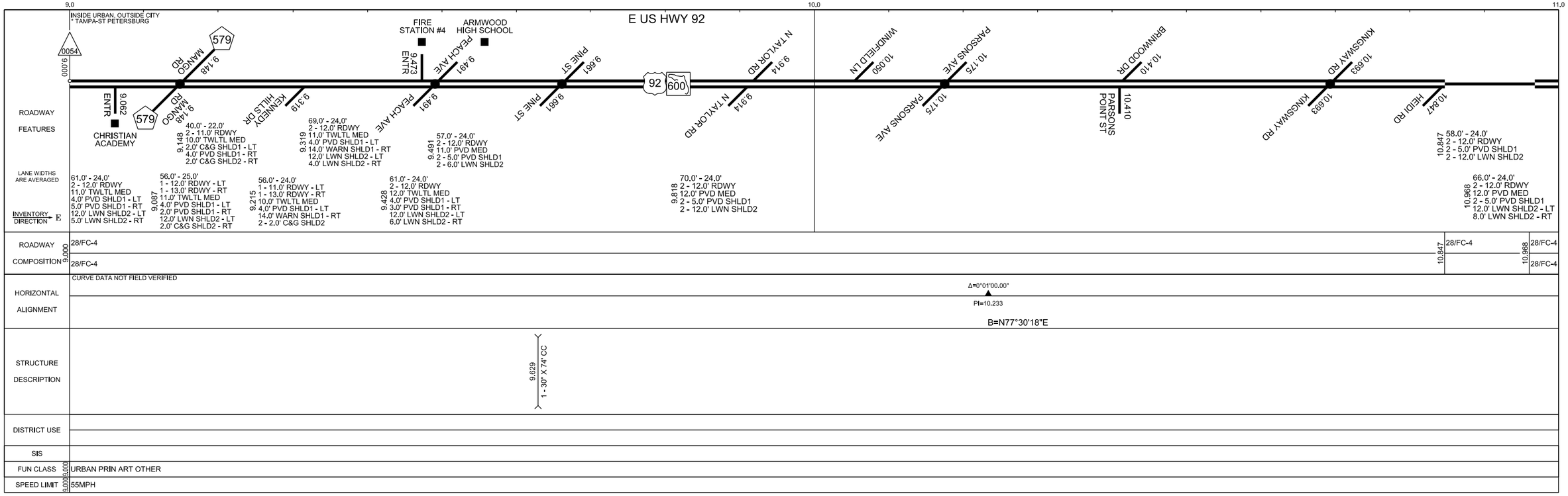
BMP	EMP	INV	SLD REV
000,000	000,025	10/05/2021 CTS	10/15/2021 CTS
001,750	001,775	10/05/2021 CTS	10/15/2021 CTS
021,523	021,523		02/10/2021 FTE/K.Anders

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 92/US 41	SR 600	HILLSBOROUGH	07	10 030 000	2 OF 5





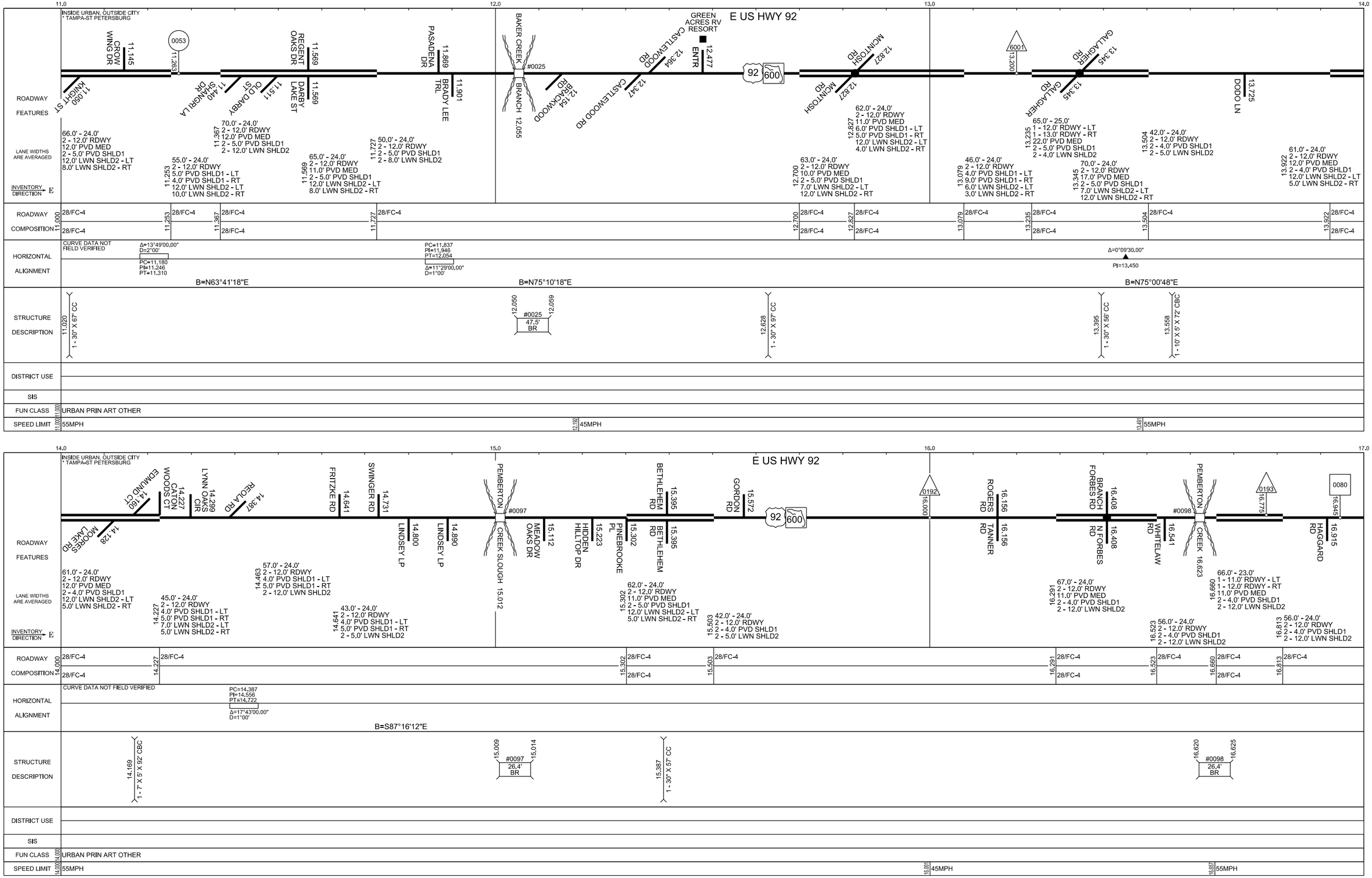
Version: 1.4.2.27 05/26/2020

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/11/2020	05/29/2020	000,000	000,025	10/05/2021 CTS	10/15/2021 CTS
BY	FTE / IM-JD	FTE / KA	001,750	001,775	10/05/2021 CTS	10/15/2021 CTS
			021,523	021,523		02/10/2021 FTE/K.Anders

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 92/US 41	SR 600	HILLSBOROUGH	07	10 030 000	3 OF 5



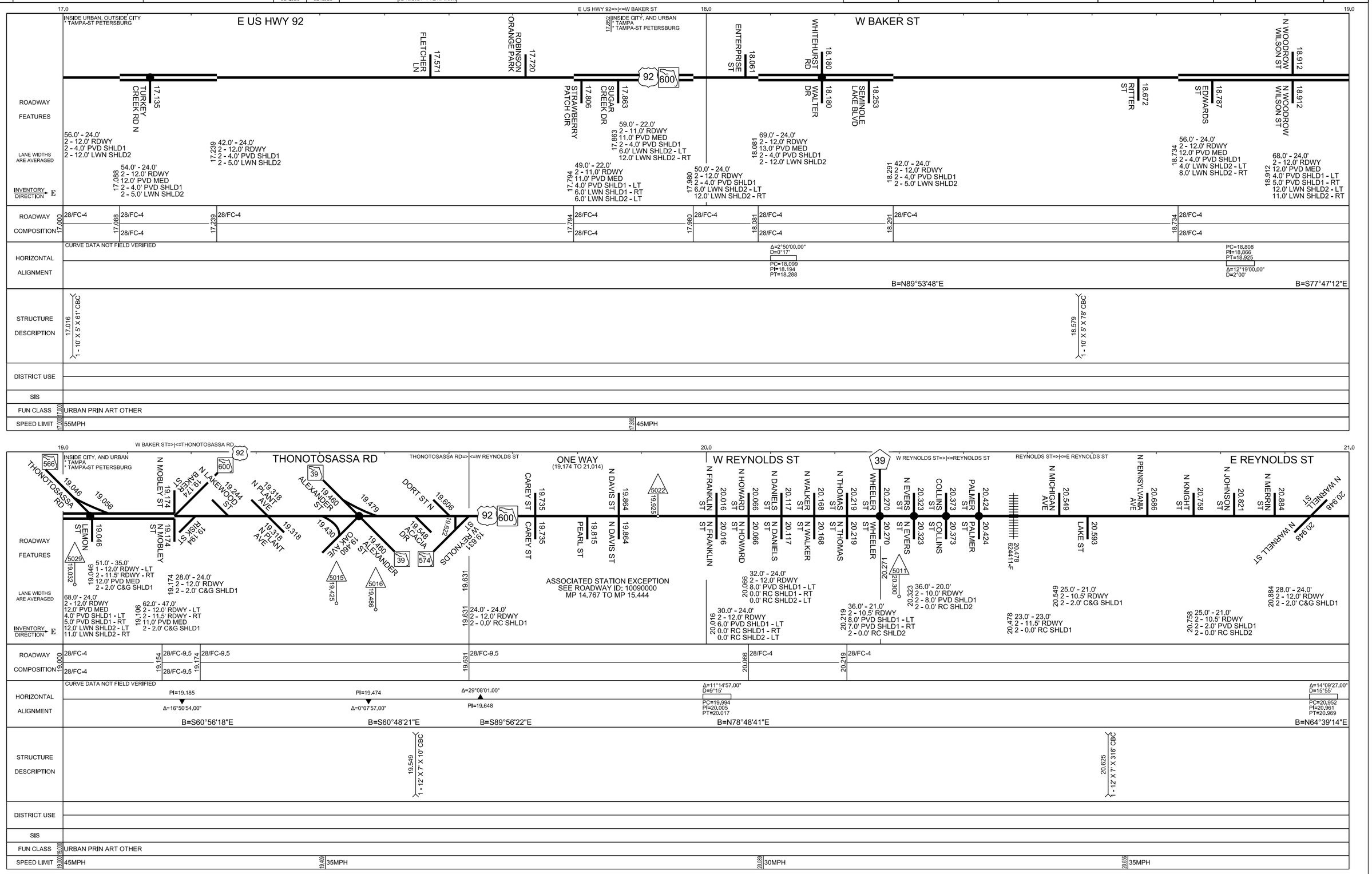
Version: 1.4.2.27 05/26/2020

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/11/2020	05/29/2020	000,000	000,025	10/05/2021 CTS	10/15/2021 CTS
BY	FTE / IM-JD	FTE / KA	001,750	001,775	10/05/2021 CTS	10/15/2021 CTS
			021,523	021,523		02/10/2021 FTE/K.Anders

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 92/US 41	SR 600	HILLSBOROUGH	07	10 030 000	4 OF 5



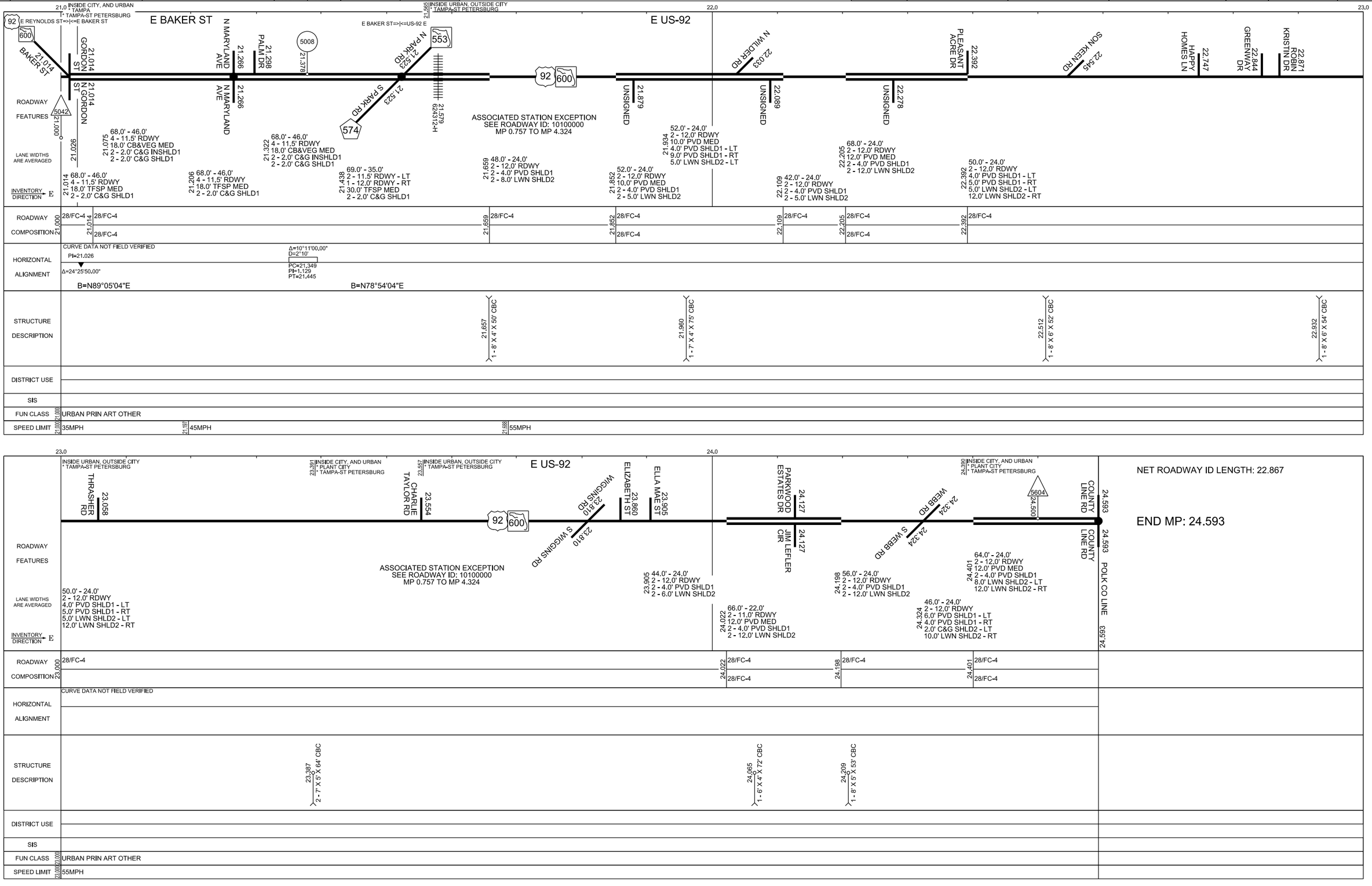
Version: 1.4.2.27 05/26/2020

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/11/2020	05/29/2020	000,000	000,025	10/05/2021 CTS	10/15/2021 CTS
BY	FTE / IM-JD	FTE / KA	001,750	001,775	10/05/2021 CTS	10/15/2021 CTS
			021,523	021,523		02/10/2021 FTE/KAnders

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12	US 92/US 41	SR 600	HILLSBOROUGH	07	10 030 000	5 OF 5



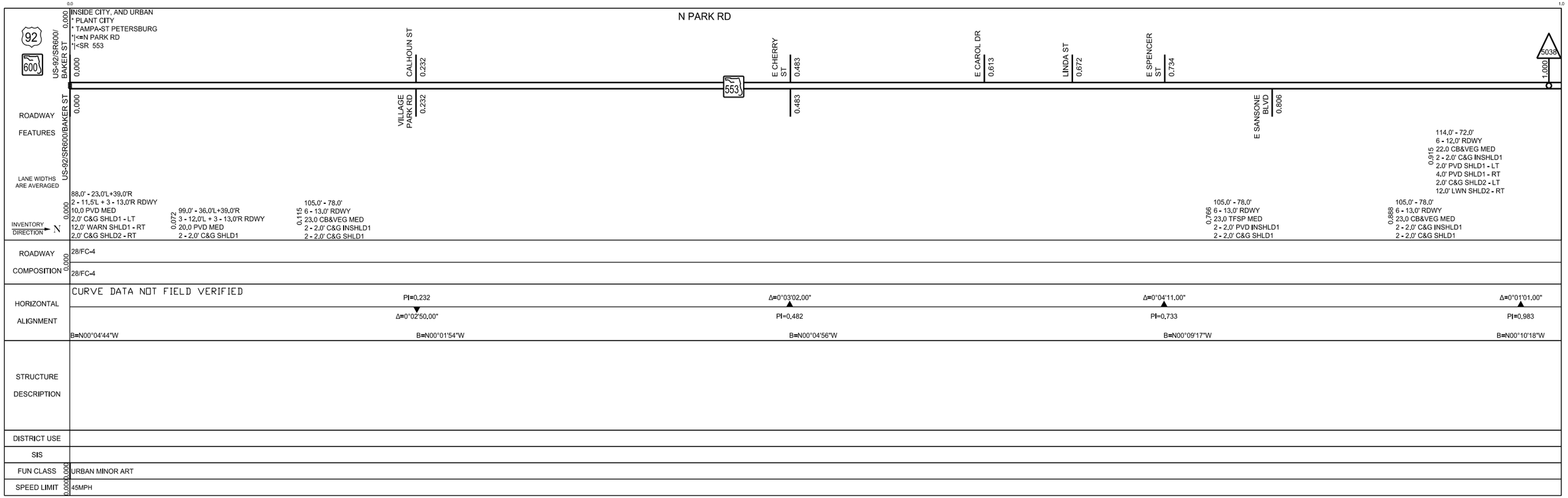
Version: 1.4.2.27 05/26/2020

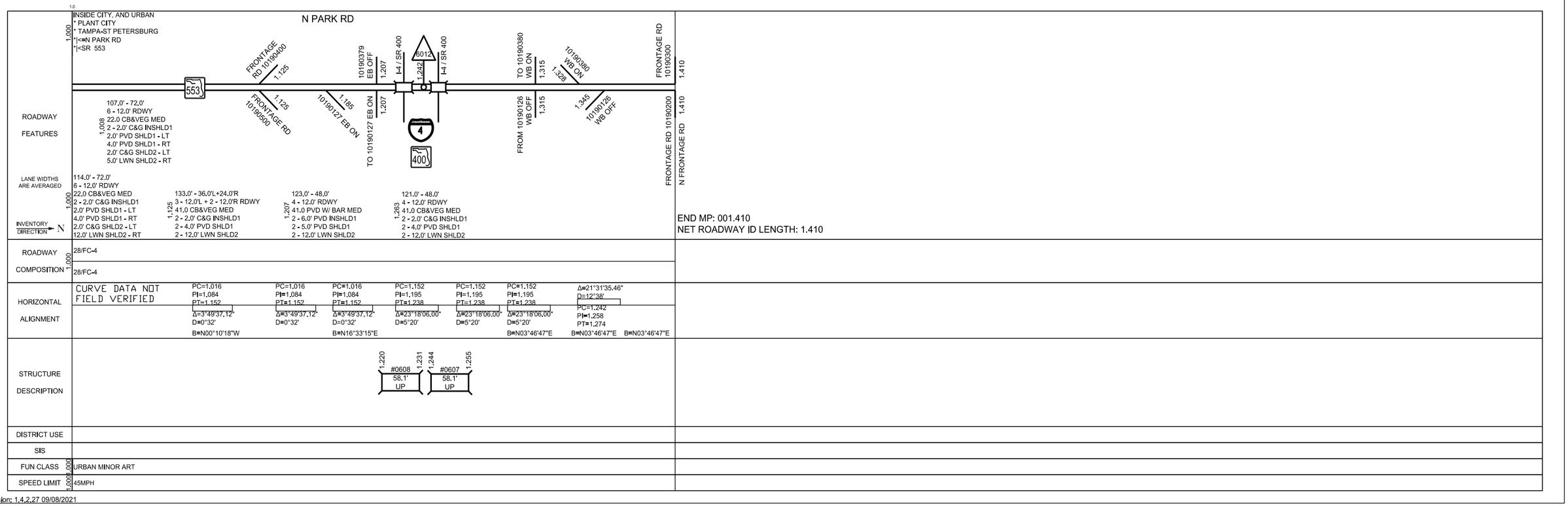
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	10/02/2019	10/22/2019	0.734	0.806	08/30/2021 CTS	09/08/2021 CTS
BY	FTE/I.Morancie/J.Dormeyer	FTE/K.Anders				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02		SR 553	HILLSBOROUGH	07	10030002	1 OF 2





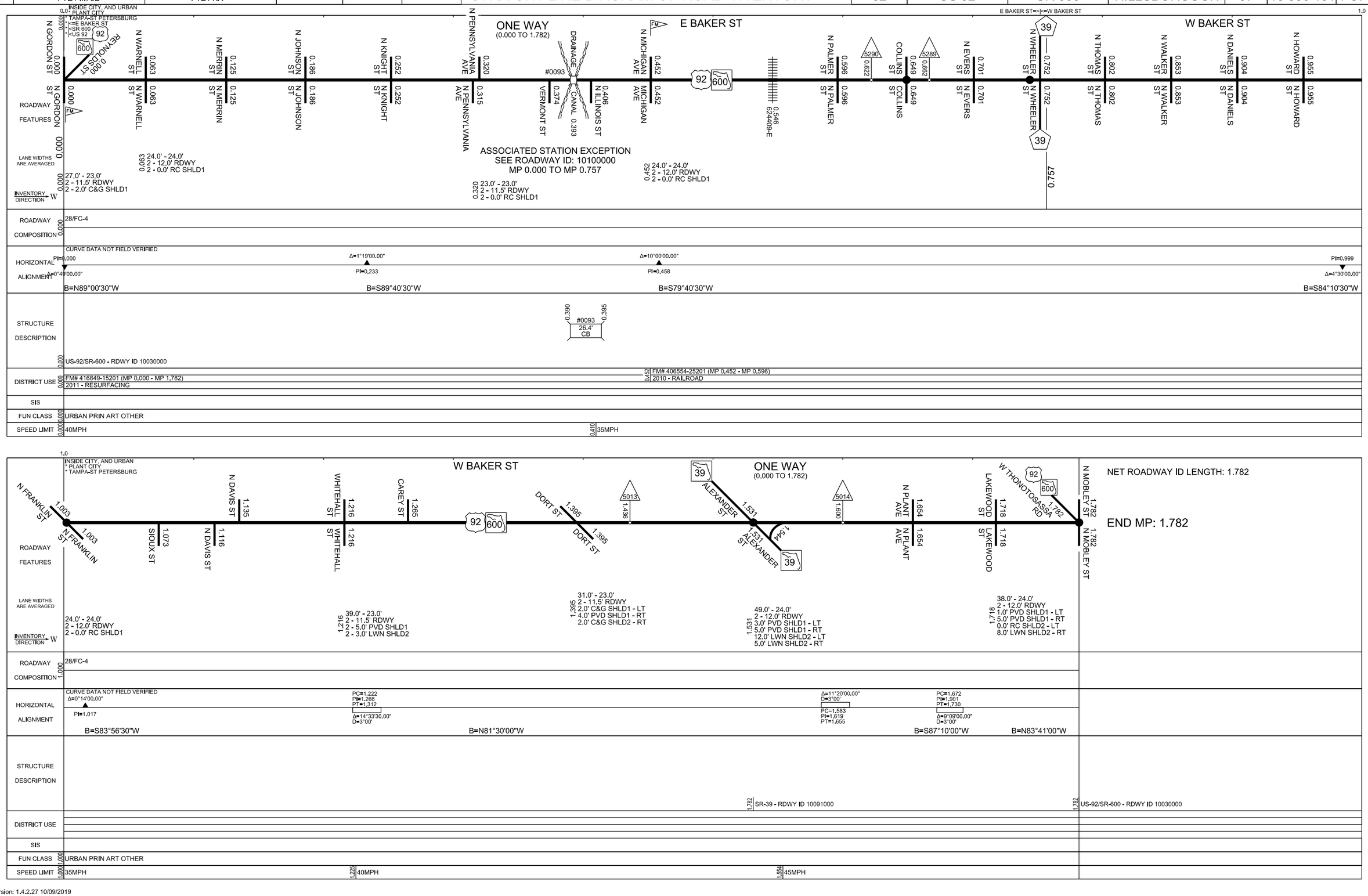
Version: 1.4.2.27 09/08/2021

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	10/02/2019	10/23/2019				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	US 92	SR 600	HILLSBOROUGH	07	10 030 101	1 OF 3



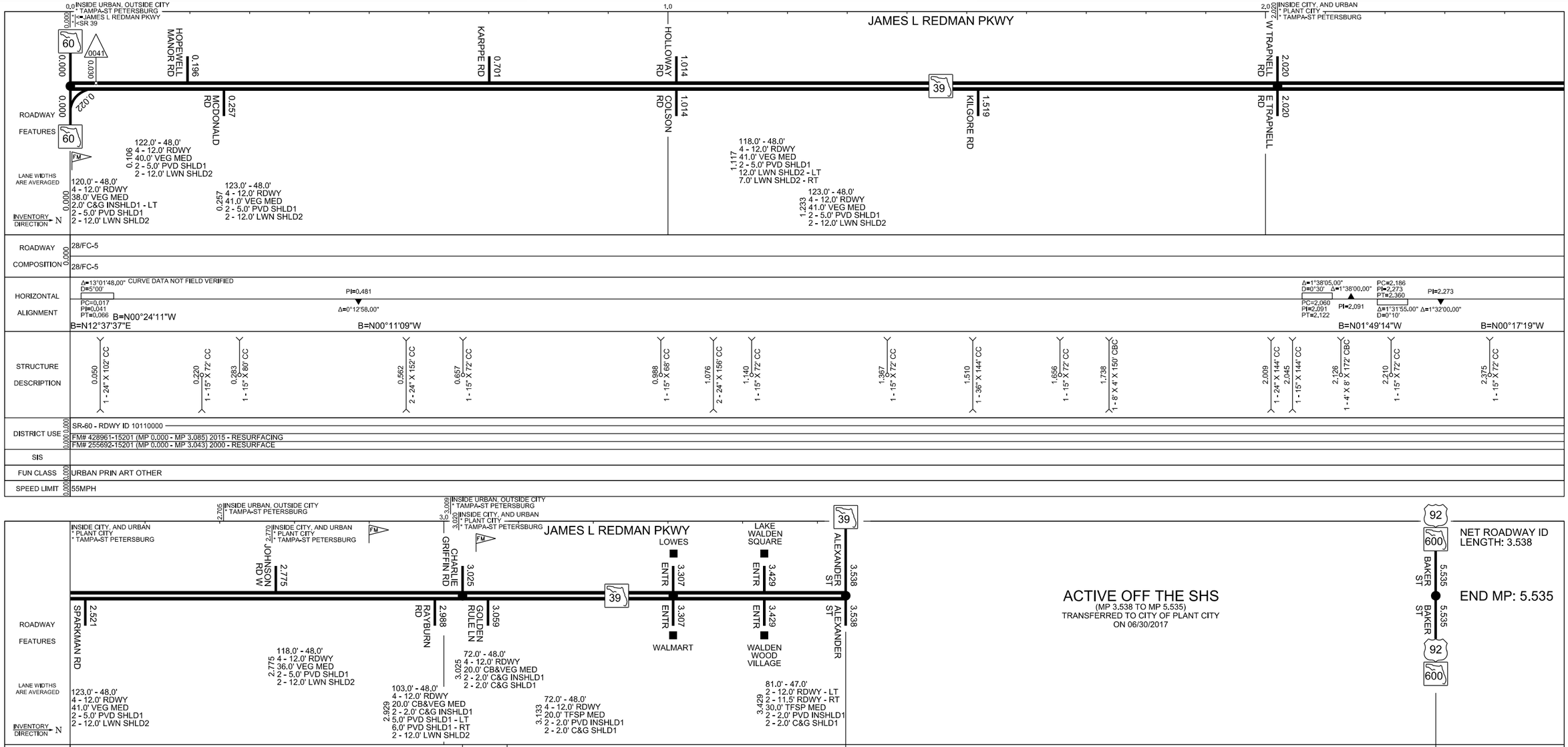
Version: 1.4.2.27 10/09/2019

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	10/01/2019	10/23/2019				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
12		SR 39	HILLSBOROUGH	07	10 070 000	1 OF 2



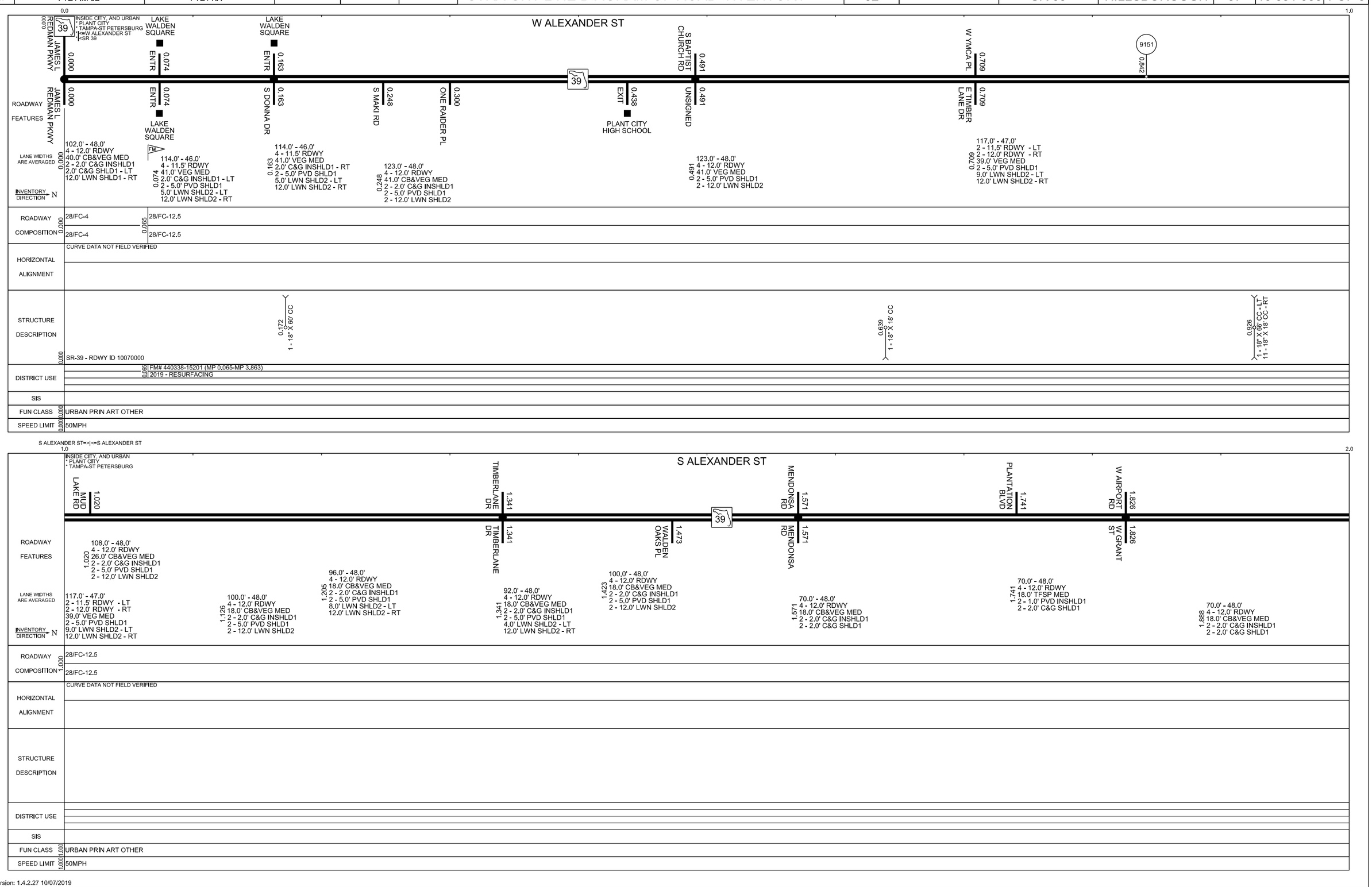
Version: 1.4.2.27 10/08/2019

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	09/09/2019	10/22/2019				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02		SR 39	HILLSBOROUGH	07	10 091 000	1 OF 3



Version: 1.4.2.27 10/07/2019

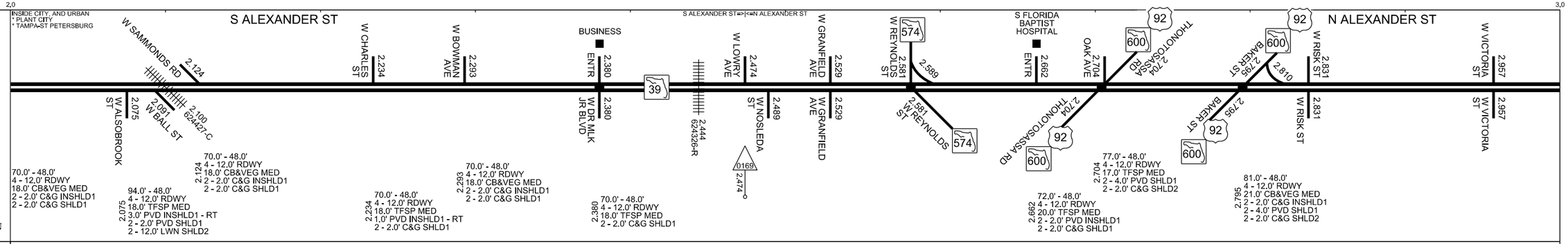
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	09/09/2019	10/22/2019				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

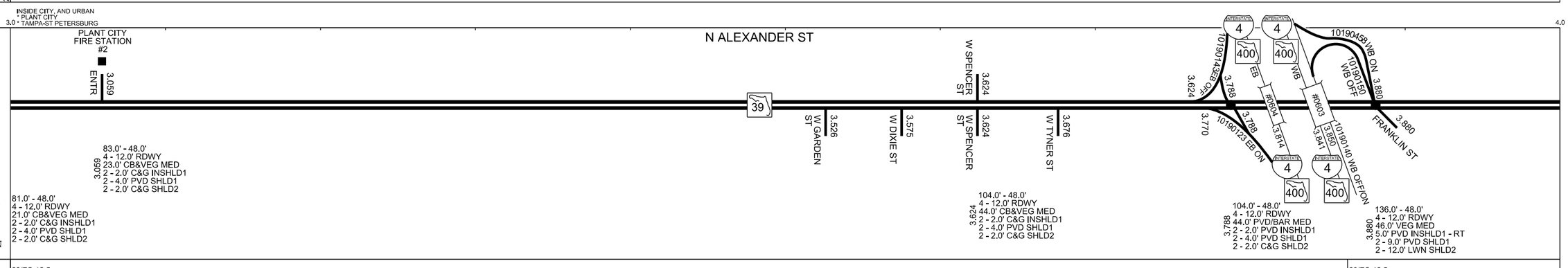
SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02		SR 39	HILLSBOROUGH	07	10 091 000	2 OF 3

2.0



3.0

4.0



Version: 1.4.2.27 10/07/2019

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	09/09/2019	10/22/2019				
BY	FTE / IM-JD	FTE / KA				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02		SR 39	HILLSBOROUGH	07	10 091 000	3 OF 3

4,0 — 5,0

ROADWAY FEATURES

INSIDE CITY, AND URBAN
* PLANT CITY
* TAMPA-ST PETERSBURG (4.013)

4.073 INSIDE URBAN, OUTSIDE CITY
* TAMPA-ST PETERSBURG

4.644 INSIDE URBAN, OUTSIDE CITY
* TAMPA-ST PETERSBURG

N ALEXANDER ST

CASON ST 4.264 — W TERRACE DR 4.418 — 39 — SAM ALLEN RD 4.889 (580) — MCGEE RD 5.386

LANE WIDTHS ARE AVERAGED

136.0' - 48.0'
4 - 12.0' RDWY
46.0' VEG MED
5.0' PVD INSHLD1 - RT
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

4.264 144.0' - 48.0'
4 - 12.0' RDWY
54.0' VEG MED
5.0' PVD INSHLD1 - LT
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

4.645 144.0' - 48.0'
4 - 12.0' RDWY
54.0' VEG MED
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

INVENTORY DIRECTION = N

ROADWAY COMPOSITION (4.000)

28/FC-12.5
28/FC-12.5

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

PC=4.323
PI=4.442
PT=4.558
Δ=18°37'20.00"
D=1°30'

Δ=0°45'00.00"
PI=4.787

B=N17°55'33"W — B=N00°41'47"E — B=N00°03'13"W

STRUCTURE DESCRIPTION

4.470 O 1 - 18" X 54' CC
4.540 O 3 - 36" X 270' CC
4.573 O 1 - 18" X 87' CC
4.599 O 1 - 24" X 72' CC
4.715 O 1 - 18" X 228' CC
4.761 O 1 - 18" X 261' CC
4.880 O 1 - 18" X 69' CC
4.933 O 1 - 18" X 84' CC
5.122 O 1 - 18" X 93' CC
5.228 O 1 - 18" X 81' CC
5.311 O 1 - 18" X 84' CC
5.343 O 1 - 36" X 219' CC

DISTRICT USE

SIS

FUN CLASS (4.000) URBAN PRIN ART OTHER

SPEED LIMIT (4.000) 50MPH — (4.889) 55MPH

6,0 — 6,5

ROADWAY FEATURES

INSIDE URBAN, OUTSIDE CITY
* TAMPA-ST PETERSBURG

N ALEXANDER ST

5.994 PAUL BUCHMAN HWY (39A) — LH DR 6.349 — 39 — MCLIN DR 6.697 — KNIGHTS GRIFFIN RD 6.904

6.877 OUTSIDE CITY & URBAN

NET ROADWAY ID LENGTH: 6.904

END MP: 6.904

LANE WIDTHS ARE AVERAGED

144.0' - 48.0'
4 - 12.0' RDWY
54.0' VEG MED
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.016 144.0' - 48.0'
4 - 12.0' RDWY
54.0' VEG MED
4.0' PVD INSHLD1 - RT
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.349 144.0' - 48.0'
4 - 12.0' RDWY
54.0' VEG MED
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.697 117.0' - 48.0'
4 - 12.0' RDWY
27.0' TFSP MED
14.0' WARN INSHLD1 - LT
3.0' PVD INSHLD1 - RT
2 - 9.0' PVD SHLD1
2 - 12.0' LWN SHLD2

6.783 114.0' - 48.0'
4 - 12.0' RDWY
27.0' TFSP MED
2 - 5.0' PVD INSHLD1
9.0' PVD SHLD1 - LT
6.0' PVD SHLD1 - RT
2 - 12.0' LWN SHLD2

INVENTORY DIRECTION = N

ROADWAY COMPOSITION (5.500)

28/FC-12.5
28/FC-12.5

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=9°40'05.00"
D=1°00'
PC=6.057
PI=6.149
PT=6.240

PC=6.675
PI=6.740
PT=6.804
Δ=1°42'09.00"
D=0°15'

Δ=2°24'01.00"
D=0°25'
PC=6.853
PI=6.879
PT=6.904

B=N09°43'18"W — B=N08°01'09"W

STRUCTURE DESCRIPTION

5.687 O 1 - 18" X 63' CC
6.155 O 1 - 36" X 162' CC
6.364 O 1 - 18" X 81' CC
6.511 O 1 - 18" X 72' CC

DISTRICT USE

SIS

FUN CLASS (5.500) URBAN PRIN ART OTHER — (6.877) RURAL PRIN ART OTHER

SPEED LIMIT (5.500) 55MPH

Version: 1.4.2.27 10/07/2019