EXISTING CONDITIONS REPORT

US 17/92 CORRIDOR PLANNING STUDY

From Ronald Reagan Parkway
to Poinciana Blvd

FDOT

MARCH 1, 2017

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Table of Contents

I. Overview 1
Project 1
Study Area 1
Geographic Setting 1
II. Community Characteristics 2
Introduction 2
Demographics 3
Business and Employment 5
Educational and Community Institutions 6
Leisure and Recreation 6
III. Regulatory Characteristics 9
Existing Land Use 9
Future Land Use 9
Other Plans and Projects 15
IV. Transportation Characteristics 22
Roadway Conditions 22
Traffic Conditions 22
Transit Conditions 31
Safety and Crash Conditions 31
V. Infrastructure Characteristics 39
Utilities 39
Storm Drainage 40
VI. Environmental 47
Introduction 47
Threatened and Endangered Species 48
VII. Issues and Opportunities 51
Introduction 51
VIII. Appendices 55

List of Figures

Figure 1: Study Area Location 1
Figure 2: Study Area Geographic Setting 2
Figure 3: Study Area Population 3
Figure 4: Median Age of the Study Area Population 3
Figure 5: Housing Units in the Study Area 4
Figure 6: Household Income of the Study Area 4
Figure 7: Employed Population by Industry of the Study Area 5
Figure 8: Bicycle and Pedestrian Facilities 7
Figure 9: Existing Land Use Map 9
Figure 10: Zoning Map 13
Figure 11: Future Land Use Map 15
Figure 12: SunRail Poinciana Station Visualization 17
Figure 13: Bicycle & Trail Facilities - 2040 18
Figure 14: I-4 Poinciana Parkway Connector 20
Figure 15: BK Ranch Property 21
Figure 16: Sabal Trail Transmission 21
Figure 17: Right-of-Way & Typical Sections Map 25
Figure 18: Roadway Sections 1 27
Figure 19: Roadway Sections 2 29
Figure 20: Existing Transit Map 33
Figure 21: Bicycle and Pedestrian Involved Crashes 35
Figure 22: All Crashes 35
Figure 23: Crashes by Time of Day 36
Figure 24: Crashes by Month 36
Figure 25: Crash Types by Intersection 38
Figure 26: Wetland Areas Map 43
Figure 27: Floodzone Areas Map 45
Figure 28: Threatened or Endangered Species Map 49
Figure 29: Issues & Opportunities Map 53

List of Tables

Table 1: AM Intersection Level of Service (LOS) 17
Table 2: PM Intersection Level of Service (LOS) 21
Table 3: Yurning Movement Counts – Peak Hours 57
Table 4: 2015 FDOT Annual Classification Counts 58
Table 5: Average Crashes by Month & Type 59
Table 6: Average Crashes by Type & Location (2011 to 2015) 59
Table 7: Average Crashed by Time of Day (2011 to 2015) 60

EXISTING CONDITIONS REPORT

I. Overview

Project

The Florida Department of Transportation is working in collaboration with local and regional agency partners such as Osceola and Polk counties, MetroPlan Orlando, and LYNX to conduct a corridor planning study for a portion of US 17/92 in the vicinity of the future Poinciana SunRail station. The study will involve a community-based evaluation to determine how best to meet the needs of current and future users, and to establish a long-term plan to guide the evolution of the corridor.

Study Area

The study area (see Figure 1) is a five and one-half mile long section of US 17/92 in Osceola and Polk counties, from Ronald Reagan Parkway to Poinciana Boulevard (near the new Poinciana SunRail station). Intercession City, an unincorporated community, is in the eastern portion of the corridor. US 17/92 is a two-lane principal arterial with four-foot paved shoulders and open drainage within a varied right-of-way.

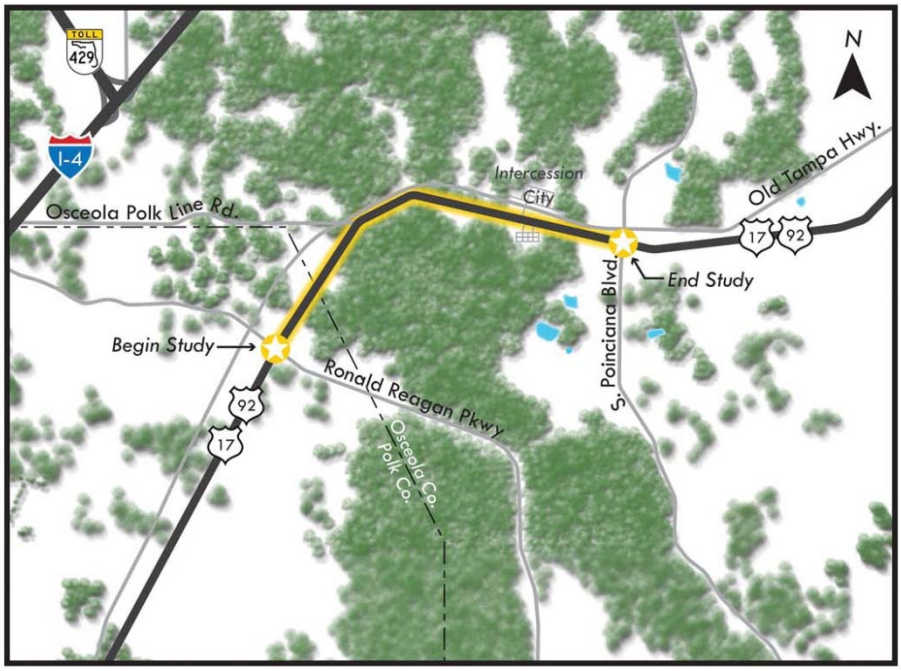

Figure 1: Study Area Location

Geographic Setting

The study area is located within the central Florida region (see Figure 2) serving as a primary gateway into Kissimmee and the US 192 tourist areas from the

southwest – from US 27 and the Four Corners area, Poinciana, Davenport, and Haines City. It is easily accessible from both I-4 and SR 429. The planned Poinciana Parkway Connector, which will connect I-4 to the Poinciana Parkway, intersects US 17/92 within the study area. The proposed roadway is part of the Osceola County Expressway Authority (OCX) Master Plan for a beltway system, which connects the southern half of the greater Orlando area. Central Florida Expressway Authority (CFX) has entered into an interlocal agreement with OCX to transfer lead of the OCX Master Plan development activities to CFX.

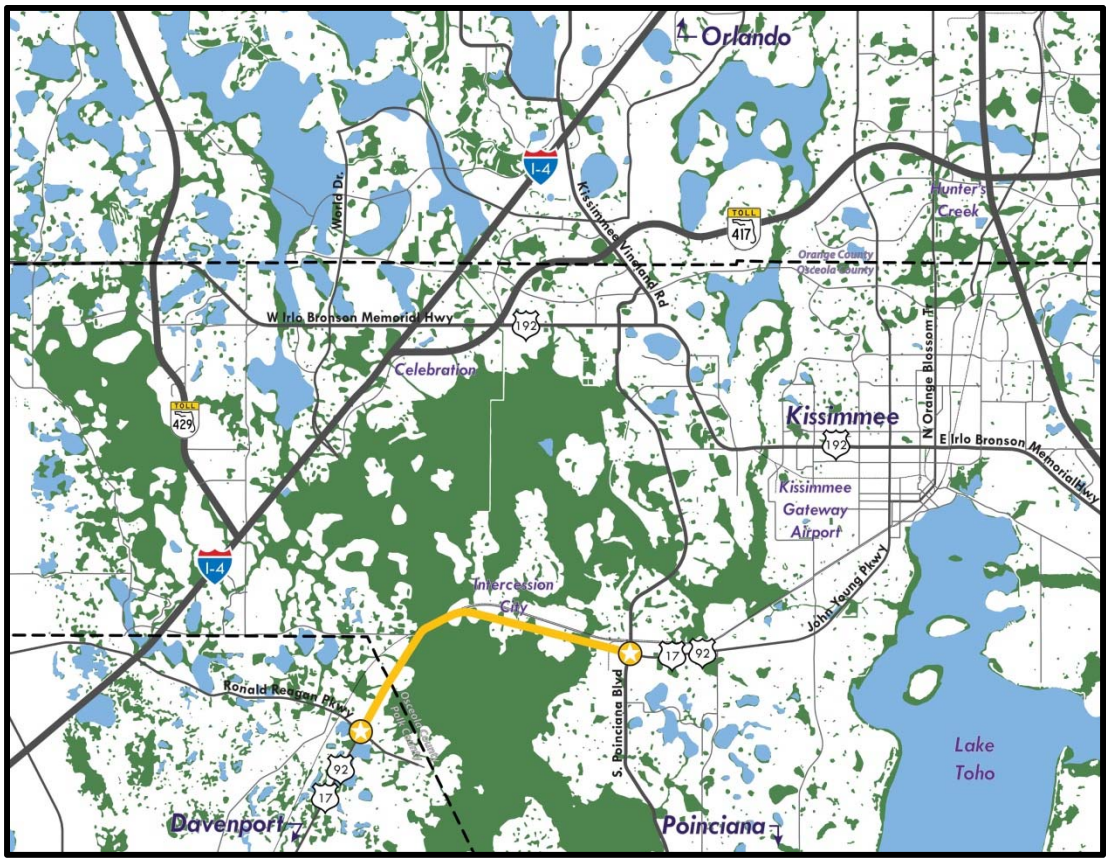

Figure 2: Study Area Geographic Setting

II. Community Characteristics

Introduction

The study area generally encompasses the area within a quarter mile of US 17/92 from Ronald Reagan Parkway to South Poinciana Boulevard – an area approximately 3.0 square miles in size contained primarily within Osceola County, with approximately 20% of the area in Polk County.

Demographics

Demographic data describing the study area were obtained from ESRI, a national provider of geographic and demographic data. Unless otherwise noted, the data represent estimates by ESRI for 2016.

The current population of the study area is estimated to be 822 persons. It should be noted this estimate and historical Census counts reflect the full-time population; part-time or seasonal residents are not included. This current population estimate represents a 158 percent increase from the 2000 population of 319 persons and a four percent increase from the 2010 population of 788 persons. ESRI projects the population in 2021 will be 985 persons, representing an annual growth rate of just under four percent.

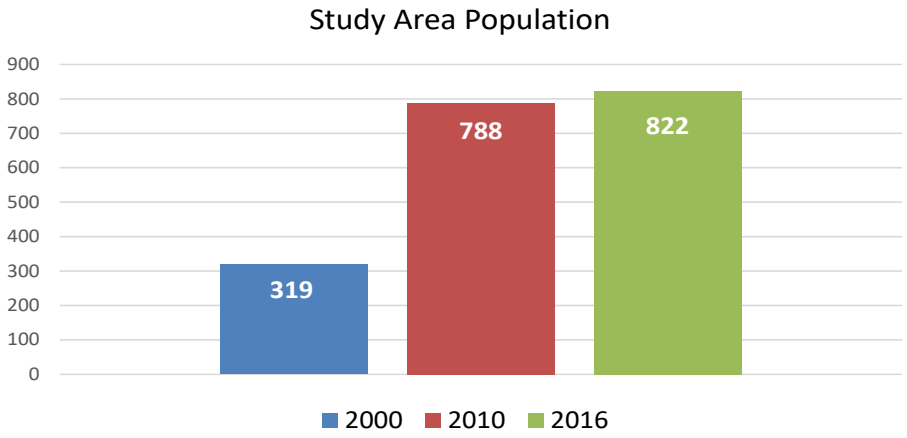

Figure 3: Study Area Population

The median age of the study area population is 37 years, with approximately one third of the population (34 percent) under the age of 25 and about 14 percent 65 or older. The population has aged slightly since 2010, when 36 percent were under 25 and 12 percent were 65 or older.

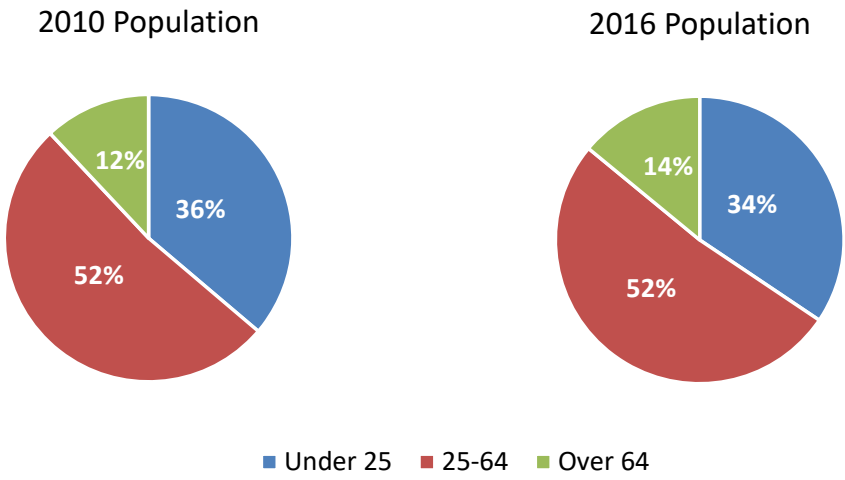

Figure 4: Median Age of the Study Area Population

There are 334 households in the study area, and the average household size is 2.45 persons. A total of 78 percent of the households are families, meaning they contain two or more people related by blood or marriage. ESRI estimates there are 444 housing units in the study area, with 244 (55 percent) owner-occupied, 90 (20 percent) renter-occupied, and 110 (25 percent) vacant. Like the Census, ESRI classifies seasonally occupied units as vacant. According to Census estimates, there was no growth in housing units from 2010 to 2016, although there was a slight increase in the proportion of owner occupied units, down two percentage points from 57 percent in 2010.

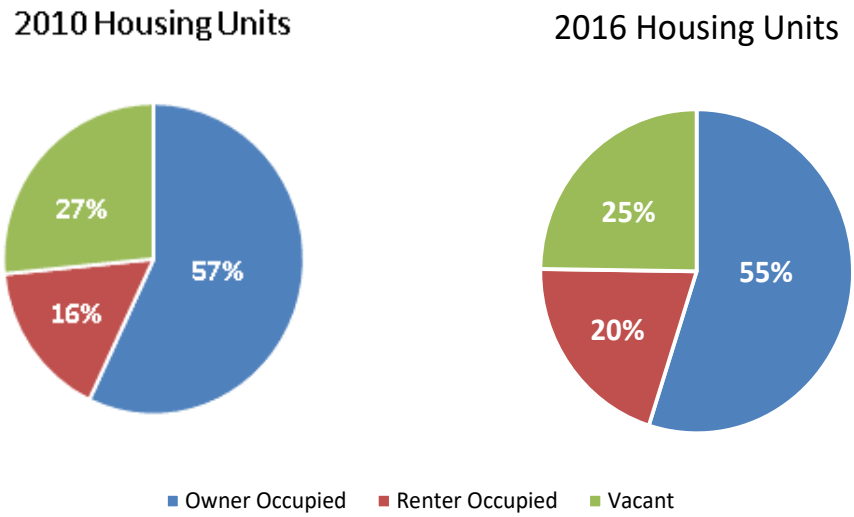

Figure 5: Housing Units in the Study Area

The median household income in the study area is $42,000, while the average household income is $55,000. Households earning less than $25,000 per year make up 24 percent of the study area total, while households earning more than $100,000 per year make up 12 percent of the total.

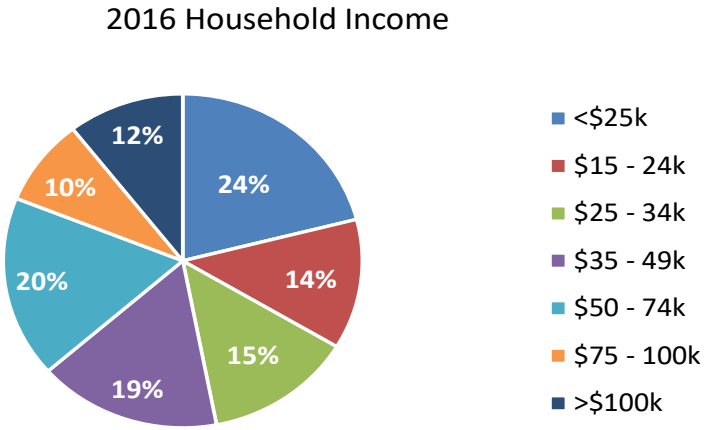

Figure 6: Household Income of the Study Area

Approximately 83 percent of the population age 25 or older have a high school degree, and 24 percent have attained at least an associate's degree or higher. An estimated 18 percent of the adult population does not have a high school diploma and 4 percent have a graduate or professional degree. Over half of the population age 16 or older (52 percent) work in white collar occupations (management, financial, professional, sales, or administrative), and 61 percent work in service industries, regardless of occupation. Of the remaining 39 percent of the workforce, 40 percent work in the retail industry. The current unemployment rate is estimated at 7.7 percent.

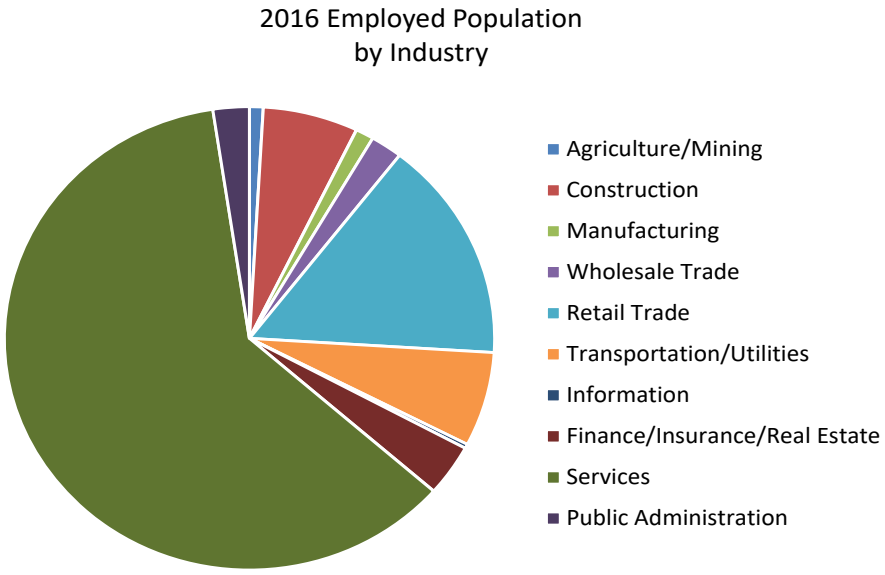

Figure 7: Employed Population by Industry of the Study Area

Business and Employment

According to data from 2016 Infogroup, there are an estimated 34 businesses in the study area. These businesses are comprised of a variety of industry sectors, with the largest shares in services industries (32 percent), retail trade (12 percent), and construction (12 percent).

The businesses in the study area employ 560 people. Wholesale trade is the largest industry employer, as it employs 35 percent of the eligible workforce. The next largest employment sector is education institutions and libraries (19 percent), followed by retail trade (10 percent), and manufacturing (10 percent). The study area is fairly balanced in terms of jobs and households, with a jobs to housing ratio of 1.7.

Educational and Community Institutions
Community institutions in the study corridor include the following:

- Civic and governmental institutions
  - Intercession City Civic Center
  - U.S. Post Office (Intercession City and Davenport)
- Service and non-profit institutions
  - Central Florida Community Breadbasket
  - Oasis Adolescence Residential Camp (Aspire Health Partners)
- Religious Institutions
  - Albir Islamic Association
  - Church of God and Pillar of Zion
  - G5 Church
  - Higher Ground Church
  - Iglesia Evangelica el Tabor
  - New Destiny Assembly of God
  - St. Nicholas Anglican Church
  - Victory Baptist Church
- Schools
  - Loughman Oaks Elementary School
  - Reedy Creek Elementary School
  - Horizon Middle School
  - Poinciana High School
  - Davenport School of the Arts
  - Renaissance Charter School

Leisure and Recreation
Although there are limited bicycle and pedestrian amenities on the periphery of the study area (see Figure 8), most of the corridor lacks multimodal facilities. The four-foot paved shoulder is often used as a bicycle lane, although its condition varies greatly and there are no signage or pavement markings indicating its use as a bicycle lane.

Parks and open spaces in the study corridor and surrounding areas include the following:

- Shelby Cox Memorial Park, 5618 Old Tampa Highway, Intercession City: one-acre park offers active play areas, a basketball court, and playground.
- Oren Brown Community Park, 3511 Baker Drive, Kissimmee: 32-acre park, located approximately three miles east of the study corridor, offers active play areas, 3 softball fields, 2 soccer fields, playground, pavilion/picnic area, concession stand, and restrooms.
- Shingle Creek Regional Park/Bass Road Location, 925 S. Bass Road, Kissimmee: 40-acre park, located approximately four miles northeast of the study corridor, offers a fenced dog park, hiking trail with exercise equipment, pavilion, and playground

BICYCLE & PEDESTRIAN FACILITIES MAP

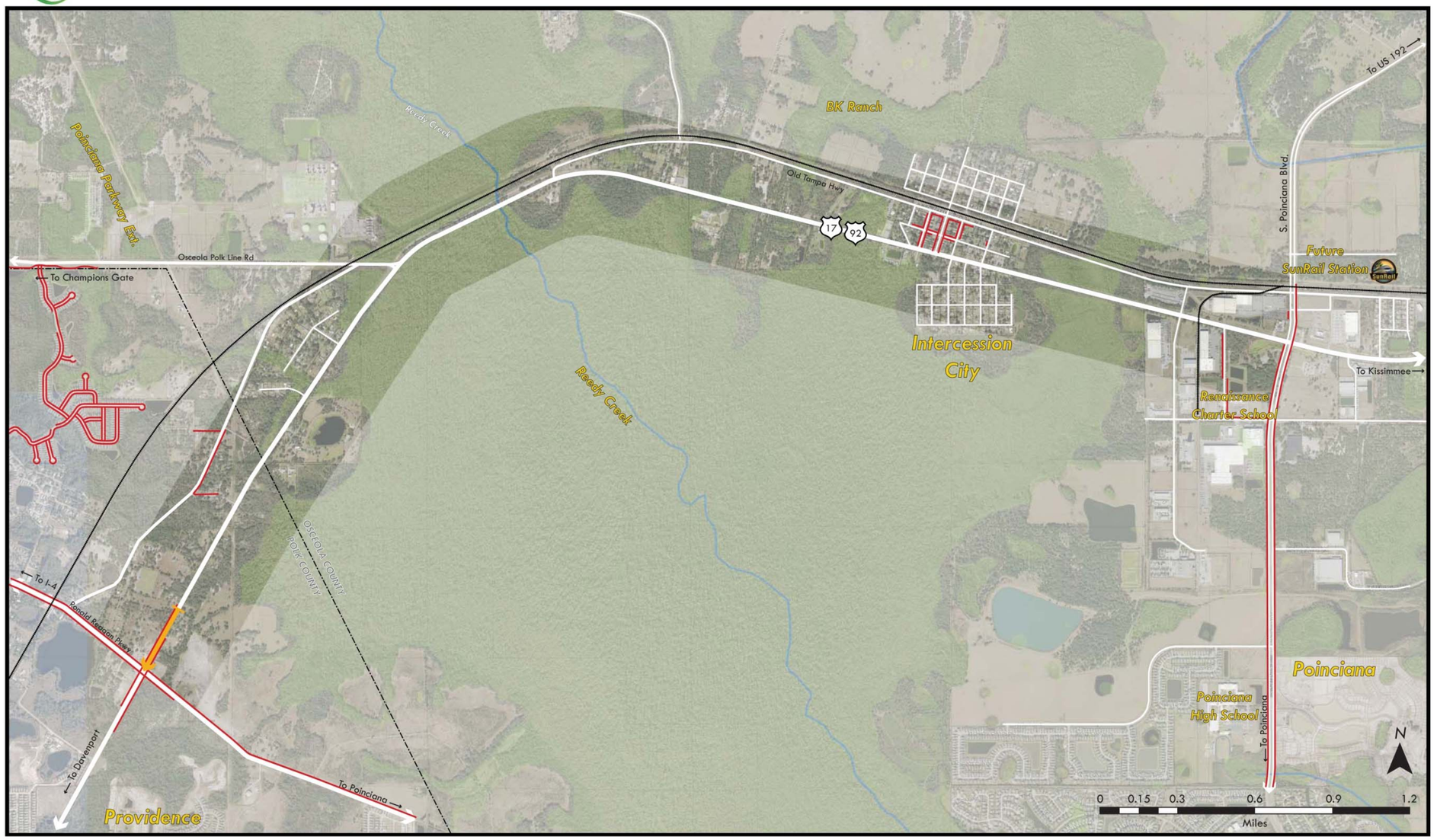

Figure 8: Bicycle & Pedestrian Facilities Map

US 17/92 CORRIDOR STUDY

January 2017

Legend

- Existing Sidewalks
- Existing Bicycle Facilities

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III. Regulatory Characteristics

Existing Land Use

Existing land uses in the area are primarily residential, commercial, industrial, and conservation (see Figure 9). There are a series of development nodes along the corridor separated by large areas of vacant land or conservation open spaces.

From east to west along the corridor, the nodes can be generally summarized as follows:

- **US 17/92 and Poinciana Boulevard intersection** - This area has the most development activity along the corridor. In addition to the SunRail station under construction, there are a variety of commercial uses (Home Depot, Wawa, Circle K, 7-11 and Poinciana CommerCenter East) and industrial uses (Gatorade Kissimmee, Jeld Wen, Vistar Roma of Orlando, and SMI Steel Fabricators of Florida).
- **Intercession City** – This unincorporated community consists primarily of residential parcels, with several small commercial uses (Circle K, Family Grocery and Sunshine Appliance) and community uses (post office, civic center, community breadbasket, churches and park).
- **US 17/92 and Old Tampa Highway intersection** – This area contains a mix of small and large rural residential parcels, with some scattered commercial (Furniture Gallery, Central Plumbing and Aspire Health Campus). The KUA Cane Island Power Park is accessed from this node.
- **US 17/92 from Osceola Polk Line Road to Ronald Reagan Parkway intersection** – This area consists primarily of residential parcels, with several small commercial uses (Sonoco and Hungry Howie's) and community uses (churches). There is also a Duke Energy facility and large utility substation in the node.

Figure 10 shows the generalized zoning for Osceola County and Polk County along the study corridor.

Future Land Use

The generalized future land use for Osceola and Polk counties is shown in Figure 11. The future land use along the corridor does not vary much from current zoning, except for the BK Ranch property, which is discussed elsewhere in this report.

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Figure 9: Existing Land Use Map

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Figure 10: Zoning Map

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Figure 11: Future Land Use Map

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Other Plans and Projects

The **SunRail Poinciana Station** is under construction on +/-25 acres north of the CSX railroad tracks and east of Poinciana Boulevard, a site briefly used as an Amtrak station in the mid 1970's. The station will have a park-and-ride lot and bus drop off (see Figure 12), and is scheduled to open for service in mid-2018. The combination of industrial uses, jobs, and vacant land give the areas adjacent to this station many development options, including Transit Oriented Development (TOD) potential.

Figure 12: SunRail Poinciana Station Visualization

Osceola County is preparing for growth around the SunRail station by developing **TOD** design guidelines intended to promote sustainable land use practices to help connect activity centers within Osceola County and the region. Although the standards are still being developed, three place types - with varying land uses, densities and intensities - are being considered for their impact of the study area:

- TOD 1: within ¼ mile of station
- TOD 2: within ½ mile of station
- TOD 3: within 1 mile of station

Development north of the railroad tracks will be required to design to the TOD guidelines, while it will be optional for development south of the tracks.

The **Osceola County Comprehensive Plan** Transportation Element indicates several proposed on-street and off-street bicycle and trail facilities through the study corridor (see Figure 13) that will help complete multimodal networks and improve connectivity to a variety of destinations. It should be noted that facilities have been proposed on both US 17/92 and Old Tampa Highway.

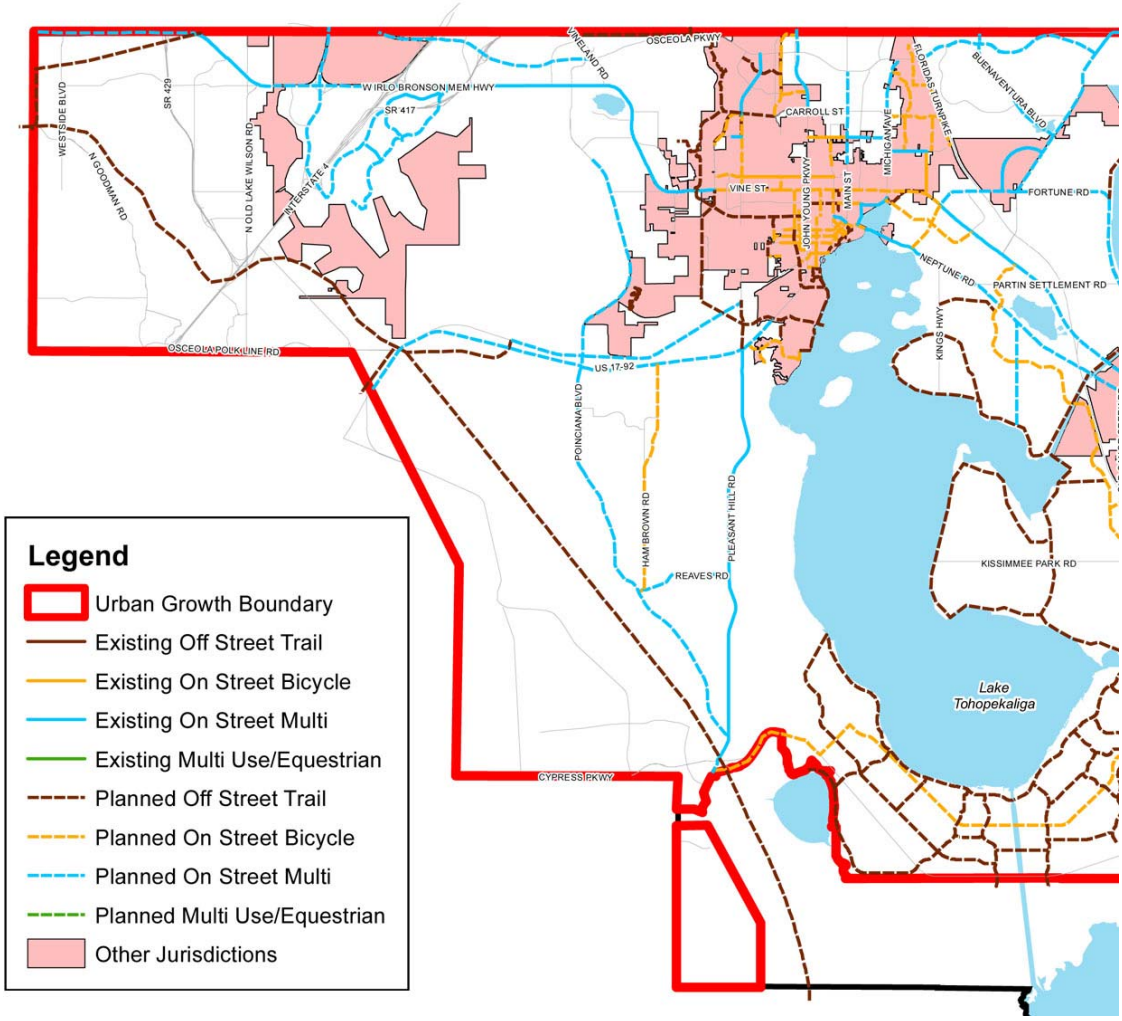

Figure 13 – Bicycle and Trail Facilities - 2040

The South Florida Water Management District (SFWMD), in addition to their regulatory functions, purchases and manages land under two programs – **Save Our Rivers** and **Preservation 2000**. Save Our Rivers, created by the Florida Legislature in 1981, enables the District to acquire lands for water management, water supply, and the conservation, protection, and appropriate use of water resources (including wetlands). It is funded by the State's documentary tax stamps (recording fees). Preservation 2000, initiated in 1990, provides additional funds to the Save Our Rivers program. As part of the process in acquiring lands, the District considers the property's management challenges, surface and

groundwater systems, and the formation of corridors for the critical interaction of wildlife populations. The Kissimmee River Basin is an important area in the District's land acquisition and management plan.

The **Kissimmee River Restoration Project (KRRP),** a partnership between the SFWMD and the U.S. Army Corps of Engineers, was authorized by Congress in the 1992 Water Resources Development Act to restore the historic configuration and integrity of the river. As part of this project, the SFWMD is developing a series of water reservation rules for the Kissimmee Chain of Lakes and the Kissimmee River (and associated floodplain), which sets aside water for the protection of fish and wildlife. When the rule is in place, volumes and timing of water at specific locations will be protected for the natural system ahead of new consumptive uses, such as urban water supply wells and development. When the project is complete, more than 40 square miles of river ecosystem will be restored, including almost 25,000 acres of wetlands and approximately 44 miles of river channel, some of which is critical habitat for endangered or threatened species. Three construction phases are now complete, and continuous water flow has been re-established to 24 miles of the river. Seasonal rains and flows now inundate the floodplain in the restored areas. The entire KRRP is currently projected to be complete by 2019.

FDOT is currently conducting a PD&E Study of the **I-4 Poinciana Parkway Connector** to evaluate alternatives for connecting Interstate 4 to the greater Poinciana area, enhancing mobility, improving traffic operations, and promoting regional linkages, as well as supporting economic development and enhancing emergency response and evacuation times. The recommended corridors (see Figure 14) cross the western portion of the study corridor. The PD&E Study is scheduled for completion in 2020.

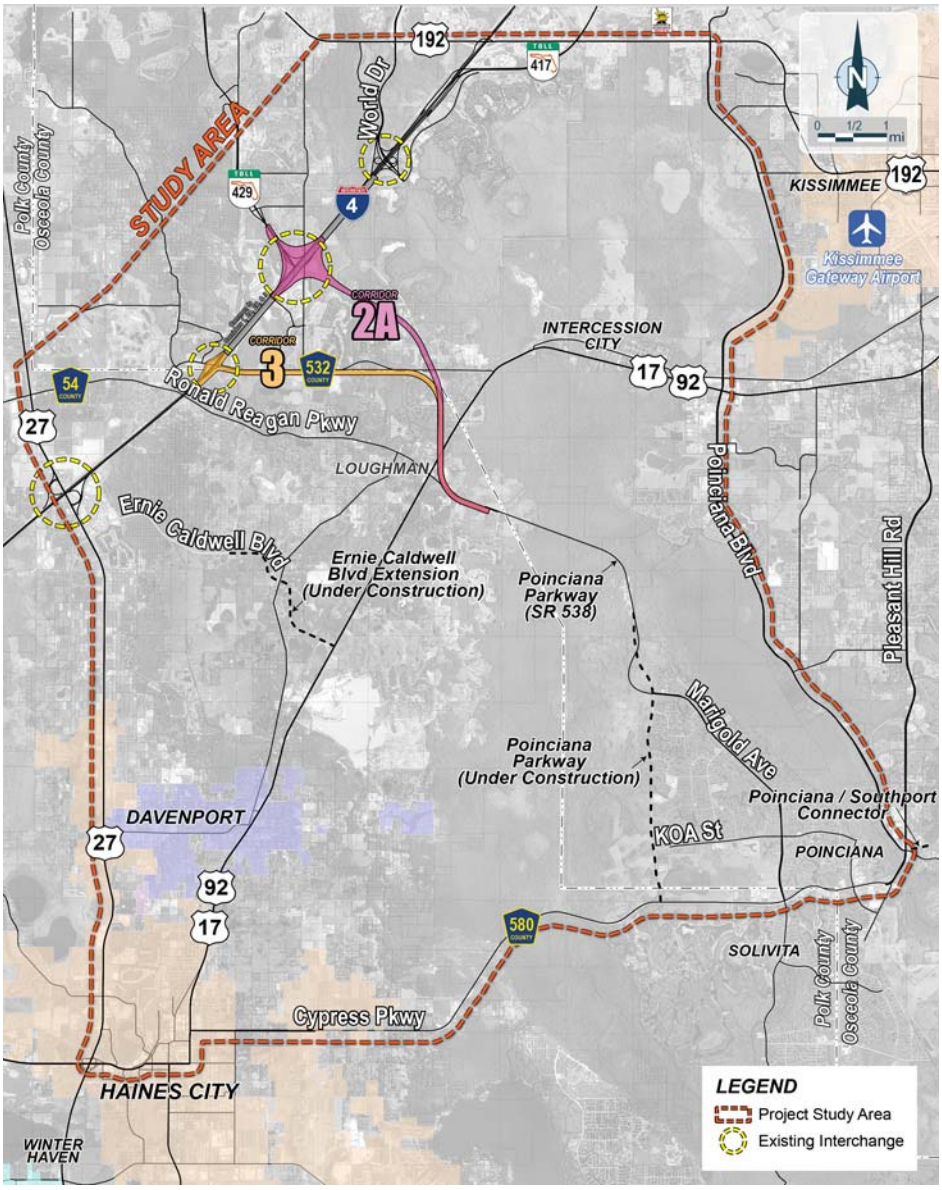

Figure 14: I-4 Poinciana Parkway Connector

BK Ranch is a 961-acre property abutting the northern portion of the study corridor (see Figure 15). The property is located within the Urban Infill Area of the Urban Growth Boundary and currently has Industrial and Low Density Residential FLUM designations, but an application has been submitted to Osceola County to change the FLUM designation to Mixed Use (MX) to support a master plan at buildout, which includes approximately 2,200 residential units and 280,000 SF of commercial/office/industrial and 15,000 SF of civic uses.

Figure 15: BK Ranch Property

Sabal Trail Transmission is a 515-mile natural gas pipeline project running from Alabama to Florida. A portion of the pipeline will be in the study area (see Figure 16). Sabal Trail will increase reliability of the region's energy delivery system and accommodate power generation needs for both Florida Power and Light and Duke Energy. The pipeline will be able to transport over one billion cubic feet of natural gas daily to local distribution companies, individual users, and natural gas-fired power generators. The project is under construction and was originally scheduled for completion by June 2017; however, this date may be pushed back due to delays from activist blockades and environmental issues.

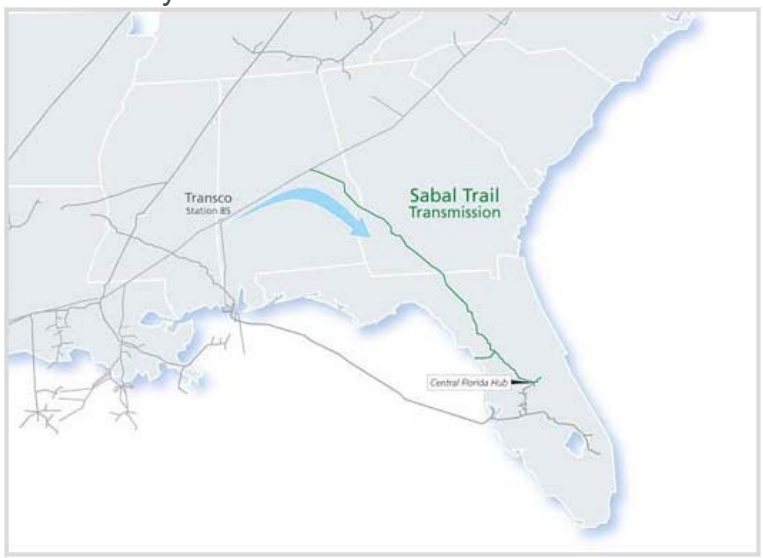

Figure 16: Sabal Trail Transmission

Best Foot Forward is a coalition of civic leaders, public safety officials, engineers, educators, transportation planners, advocates and concerned citizens launched by Bike/Walk Central Florida in response to a national study that determined the road network in Metro Orlando made it the most dangerous place in the country for people walking. Best Foot Forward's mission is to explore options for promoting pedestrian safety and to improve walkability throughout the region. While it began in Orange County in 2012, it is now expanding its efforts into Osceola County. According to statistics compiled by MetroPlan Orlando, 204 people were hit by vehicles in Osceola County during 2015-2016, including 22 fatalities. Osceola County officials hope the program will reduce that number.

Polk County is working on an alignment study for **Lake Wilson Road** (US 192 to Osceola Polk Line Road) to improve the roadway from 2 lanes to either 4 or 5 lanes. This study will have an impact on how traffic moves through the study area.

IV. Transportation Characteristics

Roadway Conditions

The US 17/92 corridor is functionally classified as a Principal Arterial between CR 54 (Ronald Reagan Parkway) and Poinciana Boulevard. The corridor is two-lanes undivided with a posted speed limit of 55 mph west of Intercession City and 45 mph east of Intercession City. The characteristics of the entire corridor are relatively homogeneous throughout the entire length (see Figures 17 - 19)

Traffic Conditions

The study corridor includes three signalized intersections and two two-way stop controlled intersections. Based on traffic counts conducted by the Florida Department of Transportation, trucks make up approximately 8.8% of daily traffic to the west of Old Tampa Highway and approximately 11.5% of daily traffic to the east of Old Tampa Highway. The FDOT traffic count data is provided in Appendix A. The results of a Synchro analysis of these intersections are provided in Table 1 and 2 for the AM and PM Peak Hours respectively. With the exception of the CR 54 intersection during the AM peak hour and CR 532 (Osceola Polk Line Road) during the PM peak hour, the intersections are currently performing at an acceptable level of service during the AM and PM peak hours.

The level of service at CR 54 is primarily governed by the NB approach, specifically the left turn movements, which make up 66% of all northbound movements in the AM peak hour and 48% of all northbound movements in the PM peak hour. The level of service at CR 532 is primarily governed by the EB approach during the PM peak hour, specifically the left turn movements, which make up 94 percent of EB movements.

Table 1: AM Intersection Level of Service (LOS)

AM Peak Hour					Approach			
Intersection	Type	Max VC	Delay (s)	LOS	NB	SB	EB	WB
US17/92 @ CR 54	Signalized	2.37	255	F	F	D	B	C
US17/92 @ CR 532	Signalized	0.69	15	B	B	A	C	
US17/92 @ Old Tampa Hwy	TWSC*	0.31	20	C		C		
US17/92 @ Tallahassee Blvd	TWSC*	0.13	21	C		C		

*HCM 2010 TWSC Analysis - maximum delay and LOS provided

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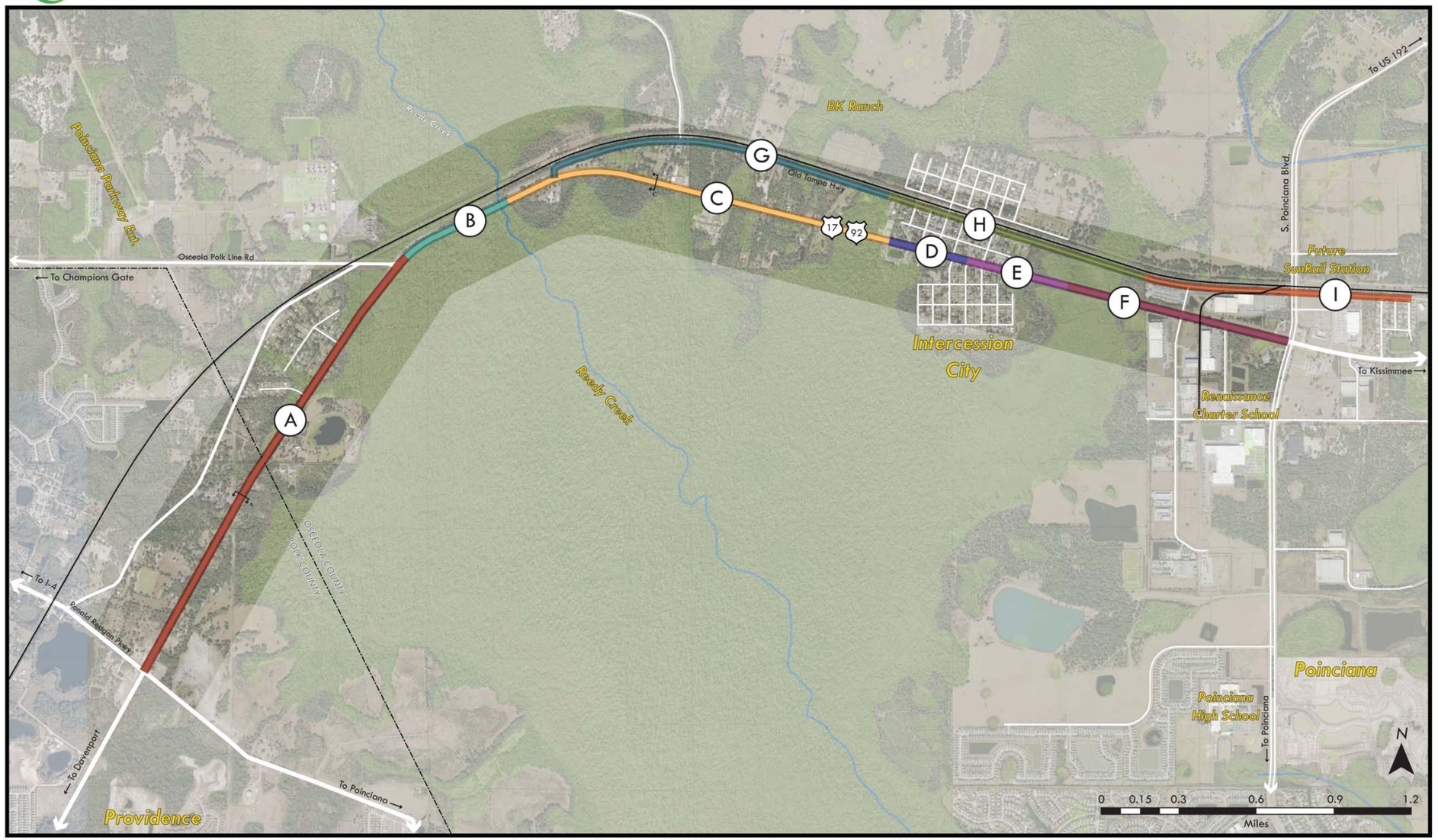
RIGHT-OF-WAY & TYPICAL ROADWAY SECTIONS MAP



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January 2017

Legend

- Section A: 100' R.O.W.
- Section B: 250' R.O.W.
- Section C: 100' R.O.W.
- Section D: 100' R.O.W.
- Section E: 100' R.O.W.
- Section F: 200' R.O.W.
- Section G: 30' R.O.W.
- Section H: 95' R.O.W.
- Section I: 58' R.O.W.

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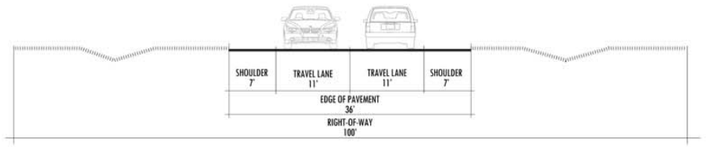
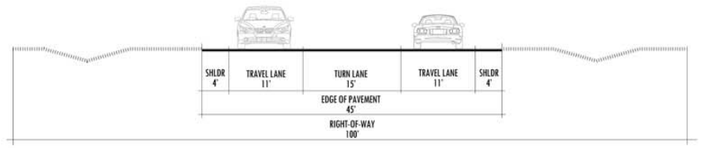
ROADWAY SECTIONS

A. 17/92 SOUTHWEST OF REEDY CREEK BRIDGE

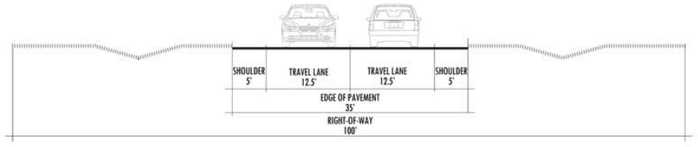


B. 17/92 REEDY CREEK BRIDGE

C. 17/92 BETWEEN REEDY CREEK BRIDGE & INTERCESSION CITY



D. 17/92 INTERCESSION CITY



E. 17/92 EAST OF INTERCESSION CITY

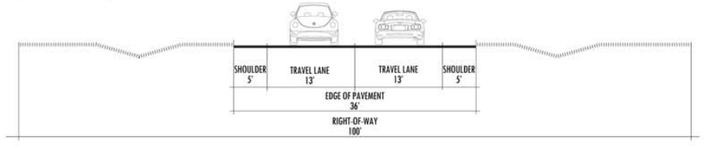


Figure 18 – Roadway Sections 1

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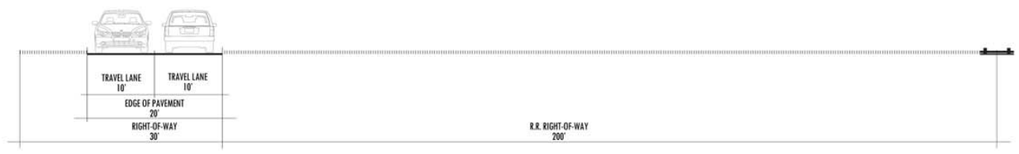
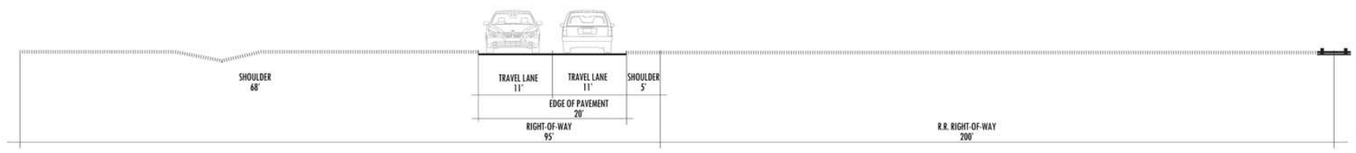
ROADWAY SECTIONS

F. 17/92 EAST OF INTERCESSION CITY, 200' R.O.W.

G. OLD TAMPA HIGHWAY



H. OLD TAMPA HIGHWAY AT INTERCESSION CITY



I. OLD TAMPA HIGHWAY AT PEPSI/GATORADE

Figure 19: Roadway Sections 2

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Table 2: PM Intersection Level of Service (LOS)

PM Peak Hour					Approach			
Intersection	Type	Max VC	Delay (s)	LOS	NB	SB	EB	WB
US17/92 @ CR 54	Signalized	1.17	54	D	F	D	B	C
US17/92 @ CR 532	Signalized	1.22	56	E	B	B	F	
US17/92 @ Old Tampa Hwy	TWSC*	0.57	28	D		D		
US17/92 @ Tallahassee Blvd	TWSC*	0.19	18	C		C		

*HCM 2010 TWSC Analysis - maximum delay and LOS provided

Transit Conditions

The study area is covered by two LYNX services (see Figure 20):

- Route 306 Disney Springs Direct: This is a select service route only operating twice a day (every day) – leaving the Poinciana Walmart at 6:15 AM and arriving at the Hilton Bonnet Creek Resort at 7:15 AM, with a stop in between at the Disney Springs Transfer Center. In the evening the route reverses, leaving the Bonnet Creek Resort at 5:05 PM and arriving at the Poinciana Walmart at 6:05 PM.
- NeighborLink 604 Intercession City-Campbell City: NeighborLink provides transportation anywhere within the designated service area or to a LYNX local bus stop (for this route – Link 26 at the intersection of Orange Blossom Trail and Pleasant Hill Road). Passengers must call at least two hours in advance of travel to schedule their trip. The service runs 6-10 AM and 3-7 PM weekdays only.
- Osceola County is currently coordinating with LYNX and FDOT for additional service in the area to begin when SunRail Phase II begins operations.

Safety and Crash Conditions

Data for 928 crashes within ½ mile of the corridor was obtained from the Signal 4 Analytics database for a 5-year period between 2011 and 2015. During these five-year period along the corridor, there were 436 crashes including 165 crashes with an injury, 7 crashes involving a pedestrian/bicyclist, and 3 fatalities including one pedestrian.

Figure 21 below shows the locations of all crashes over the past five years. Clusters of crashes are evident near major intersections, particularly near Poinciana Blvd, and along the corridor through Intercession City. Figure 22 shows crashes involving bicyclists or pedestrians along the corridor. These crashes are primarily concentrated in Intercession City and near Poinciana Blvd.

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EXISTING TRANSIT MAP

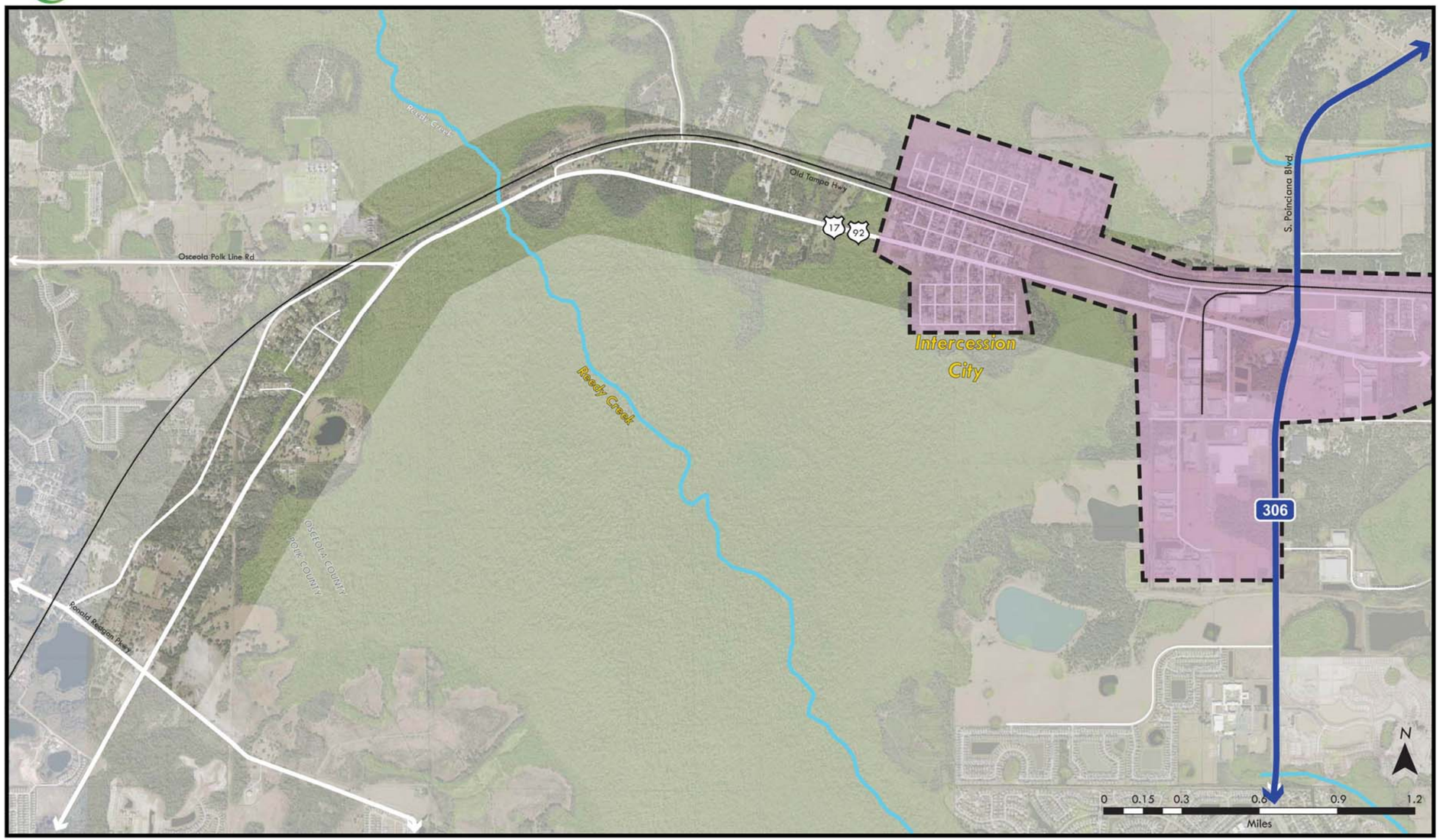

Figure 20: Existing Transit Map

US 17/92 CORRIDOR STUDY

November 2016

Legend

- LYNX Select Service Route
- LYNX Neighborhood Link 604

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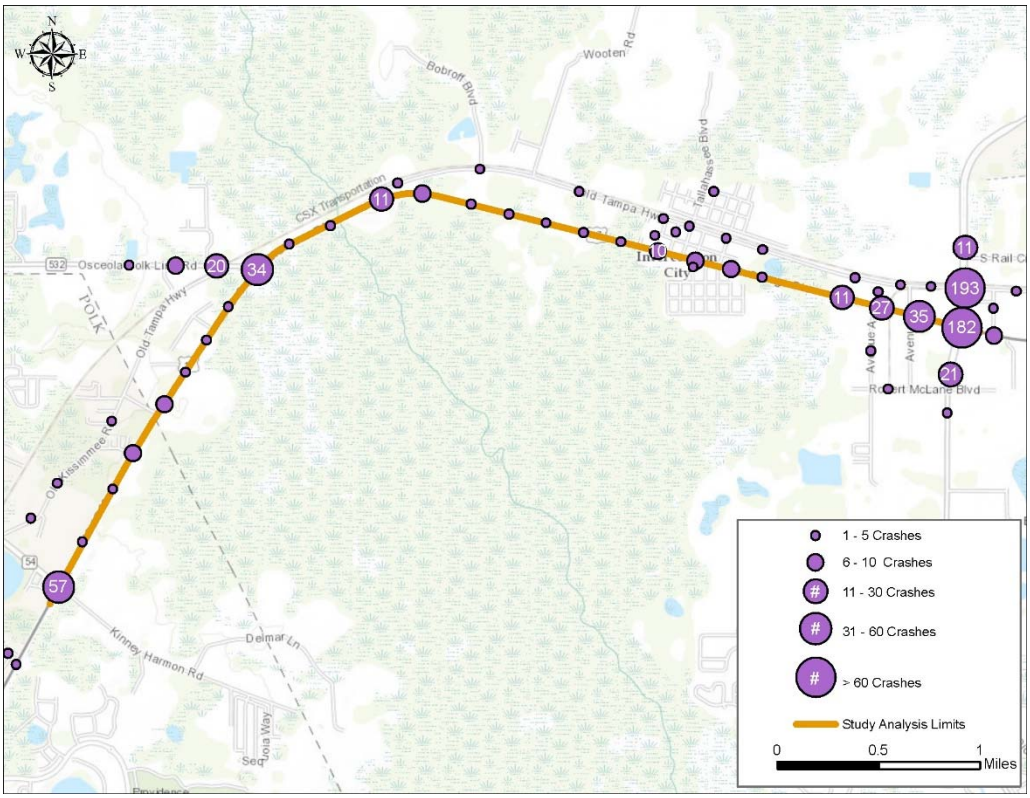


Figure 21: All Crashes

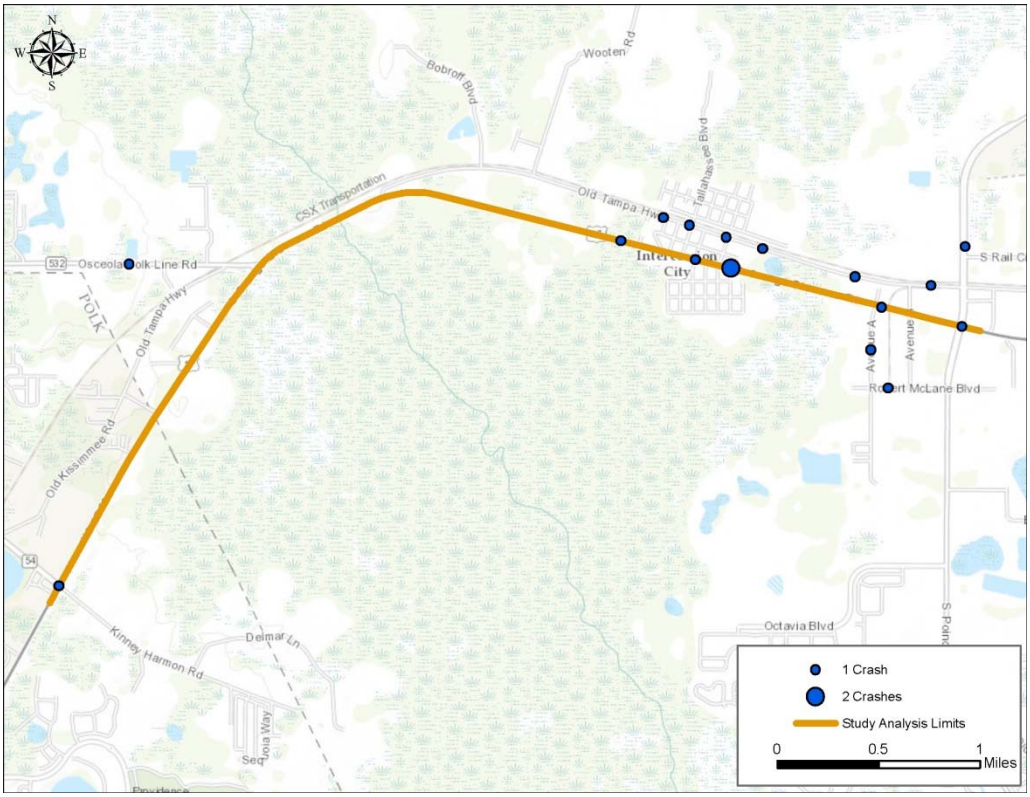


Figure 22: Bicycle and Pedestrian Involved Crashes

Figures 23 and 24 below present the distribution of crashes on the corridor by month and by time of day. Figure 23 indicates there is a relatively even distribution of crashes throughout the year with no clear seasonal peaking. Figure 24 indicates clear peaking in crashes by time of day with the highest proportion of crashes occurring during the PM peak between 3:00 PM and 6:00 PM and a relatively smaller peak between 6:00 AM and 9:00 AM.

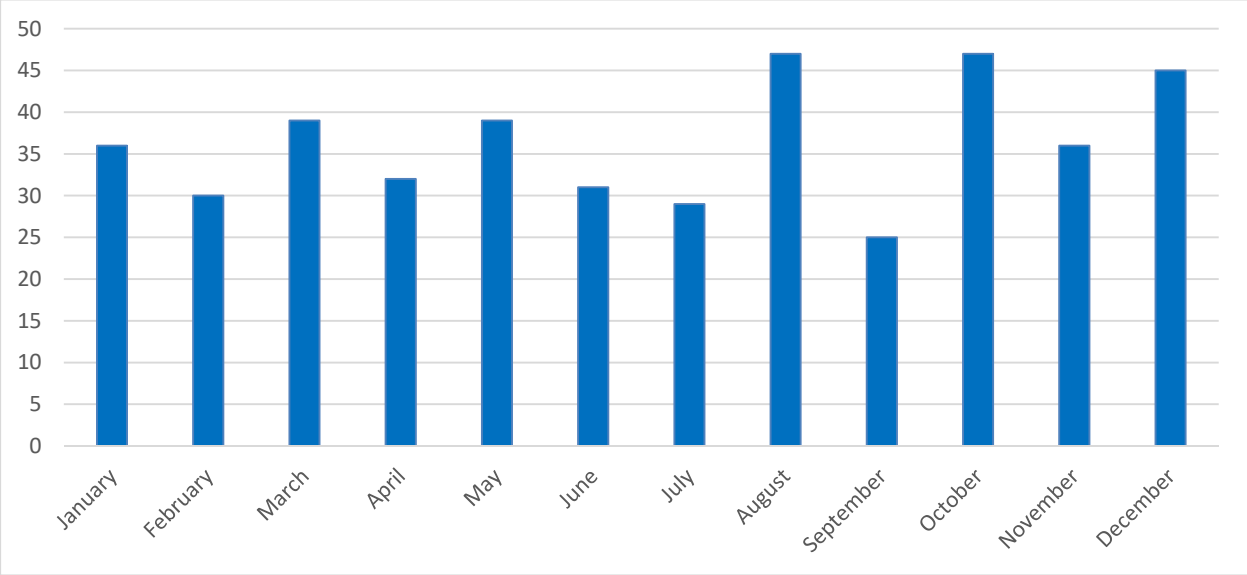


Figure 23: Crashes by Month

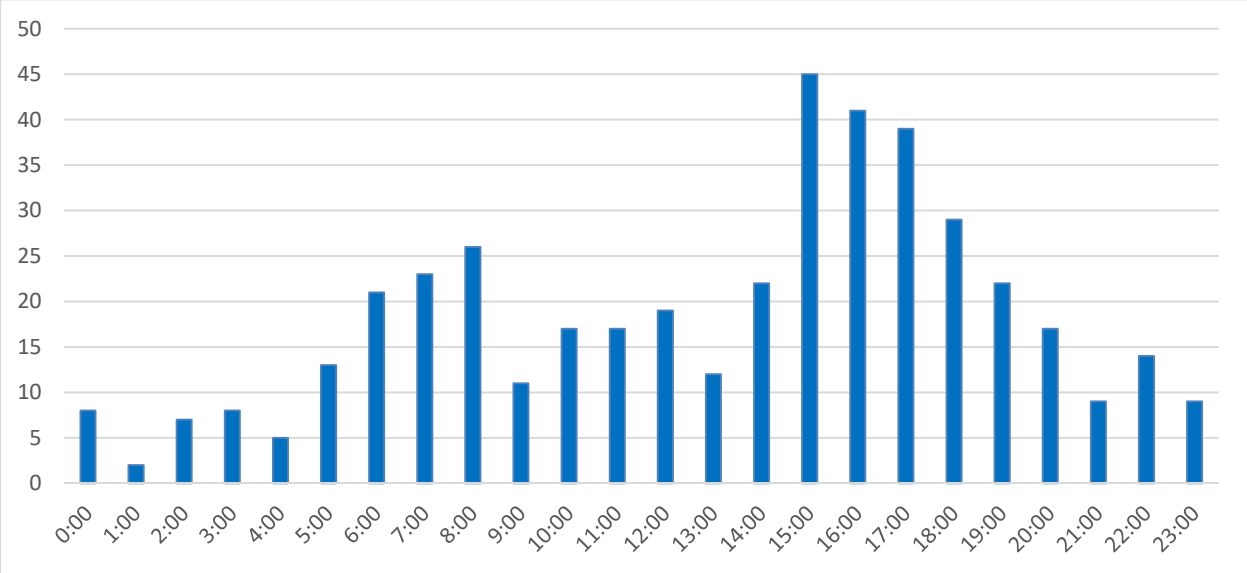


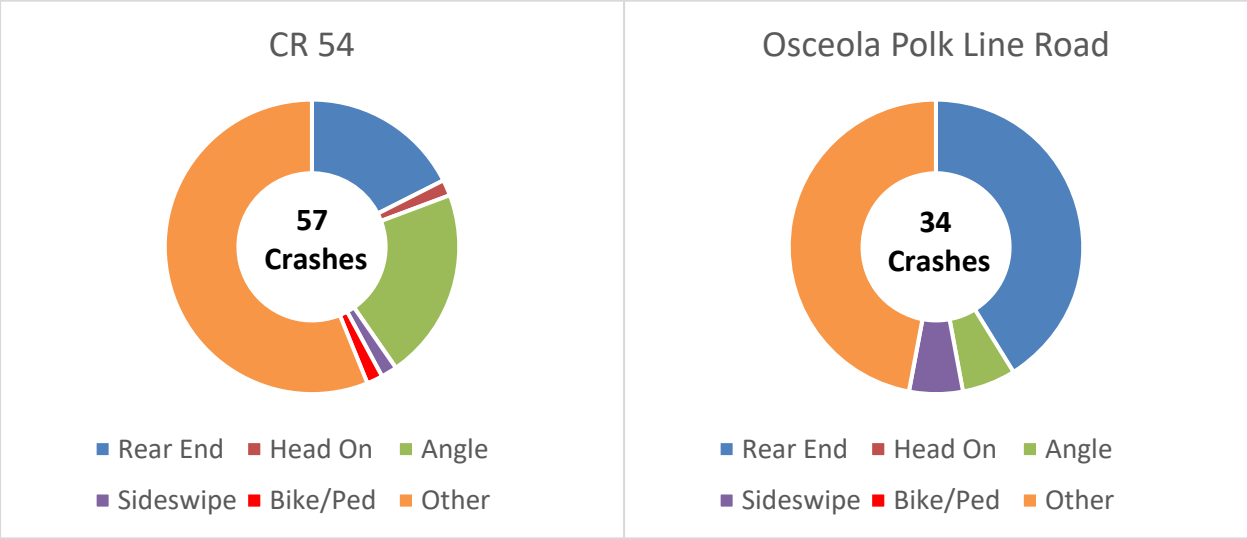
Figure 24: Crashes by Time of Day

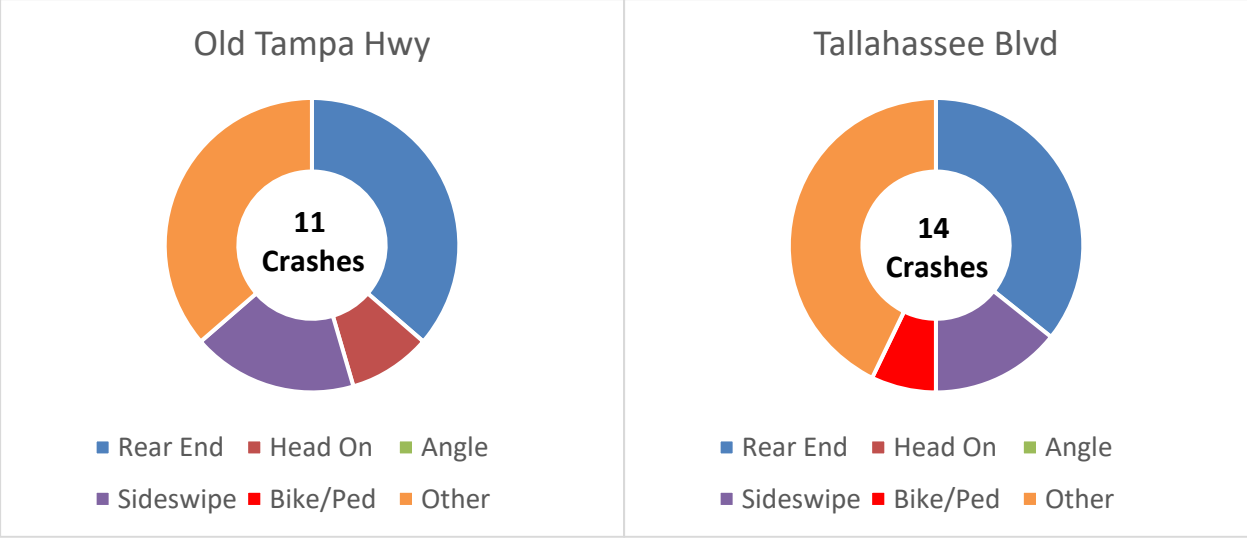
Figure 25 presents the types and proportions of crash types at the major intersections along the study corridor. The major crash types include:

- Rear end
- Head on
- Angle

- Sideswipe
- Other

At each intersection, including the grouping of all non-intersection crashes together, the primary crash type is rear end, followed by sideswipe and other. Other crash types include: right-turn, left-turn, rollover, off-road, animal, and unknown.





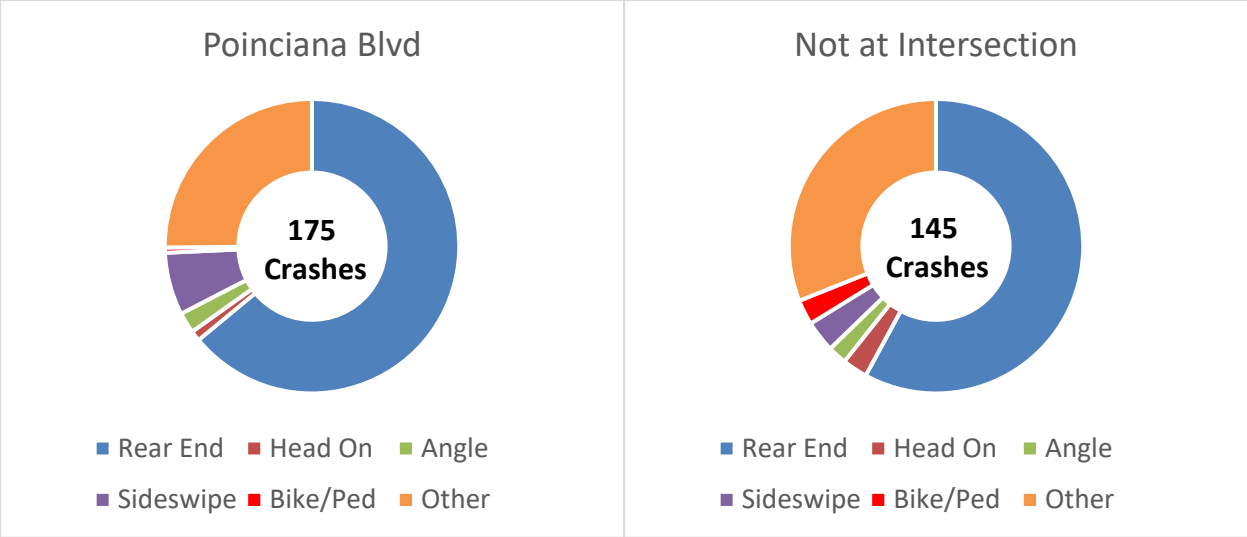


Figure 25: Crash Types by Intersection

V. Infrastructure Characteristics

Utilities

Utility providers identified in the study (through a Sunshine State One Call of Florida, Inc. design ticket) include the following:

- **American Traffic Solutions**
  (communications/electric)
  Santiago Martinez
  480.596.4595
- **Centurylink**
  (phone/fiber optic)
  Ty Leslie
  407.814.5293
- **Charter Communications**
  (CATV, phonelines – fiber)
  Marvin Usry, Jr.
  407.532.8509
- **Comcast Communications**
  (CATV)
  Wade Mathews
  352.516.3824
- **Duke Energy**
  (electric)
  Megan Vonstetina
  727.893.9394
- **Frontier Communications**
  (cable/fiber/phone)
  Carlos Bates
  941.906.6709
- **Kinder Morgan/Central Florida**
  (gas pipeline)
  Mark Clark
  813.781.1718
- **Level 3 Communications**
  (fiber optic)
  Network relations
  877.366.8344
- **MCI**
  (communications/fiber optic)
  Dean Boyers
  972.729.6322
- **Osceola County Traffic**
  (fiber/traffic signal lights)
  Rick Cole

407.343.7147

- **TECO Peoples Gas Orlando**
  (gas)
  Deborah Frazier
  407.420.6609
- **Toho Water Authority Zone 1**
  (wastewater/reclaimed water)
  Jeffrey Jimenez
  407.572.7472
- **Toho Water Authority Zone 2**
  (water/sewer/reclaimed water)
  Butch Lanaville
  407.518.2264
- **Toho Water Authority Zone 4**
  (water/sewer/reclaimed water)
  Carlos Santiago
  407.944.5057
- **Transtate Industrial Pipeline Systems Inc.**
  (gas)
  Tom Ulmer
  772.778.2255
- **Wiltel Communications, LLC**
  Tech on duty
  877.366.8344

Storm Drainage

The study area is located within the Reedy Creek Watershed, which covers approximately 150 square miles of land in northwest Osceola County and neighboring Polk, Orange, and Lake counties. The major stream in the Watershed is Reedy Creek, which is a tributary to the Kissimmee River, entering the system at Lake Cypress after passing through Lake Russell. Several streams contribute flow to Reedy Creek, including Bonnet Creek and Davenport Creek.

Reedy Creek Watershed is part of the urban portion of the Kissimmee River Basin - an area encompassing almost 3,000 square miles in the central Florida peninsula and includes more than two dozen lakes in the Kissimmee Chain of Lakes, their tributary streams, and associated marshes and wetlands. The Basin is approximately 105 miles long and forms the headwaters of Lake Okeechobee and the Everglades. Natural areas cover a large portion of the Kissimmee River Basinincluding three state parks, two state forests, and the Disney Wildlife Preserve.

The existing stormwater system along the US 17/92 corridor can be characterized as rural, with open swale drainage that carries runoff to the wetlands surrounding Reedy Creek (see Figures 26 and 27). Stormwater runoff

is a major contributor of surface water pollution, including runoff from both urban areas and agricultural lands. Follow-up coordination with FDOT, County, and other agency staff will take place to identify any known drainage problem areas along the US 17/92 corridor and urban areas within the contributing watershed.

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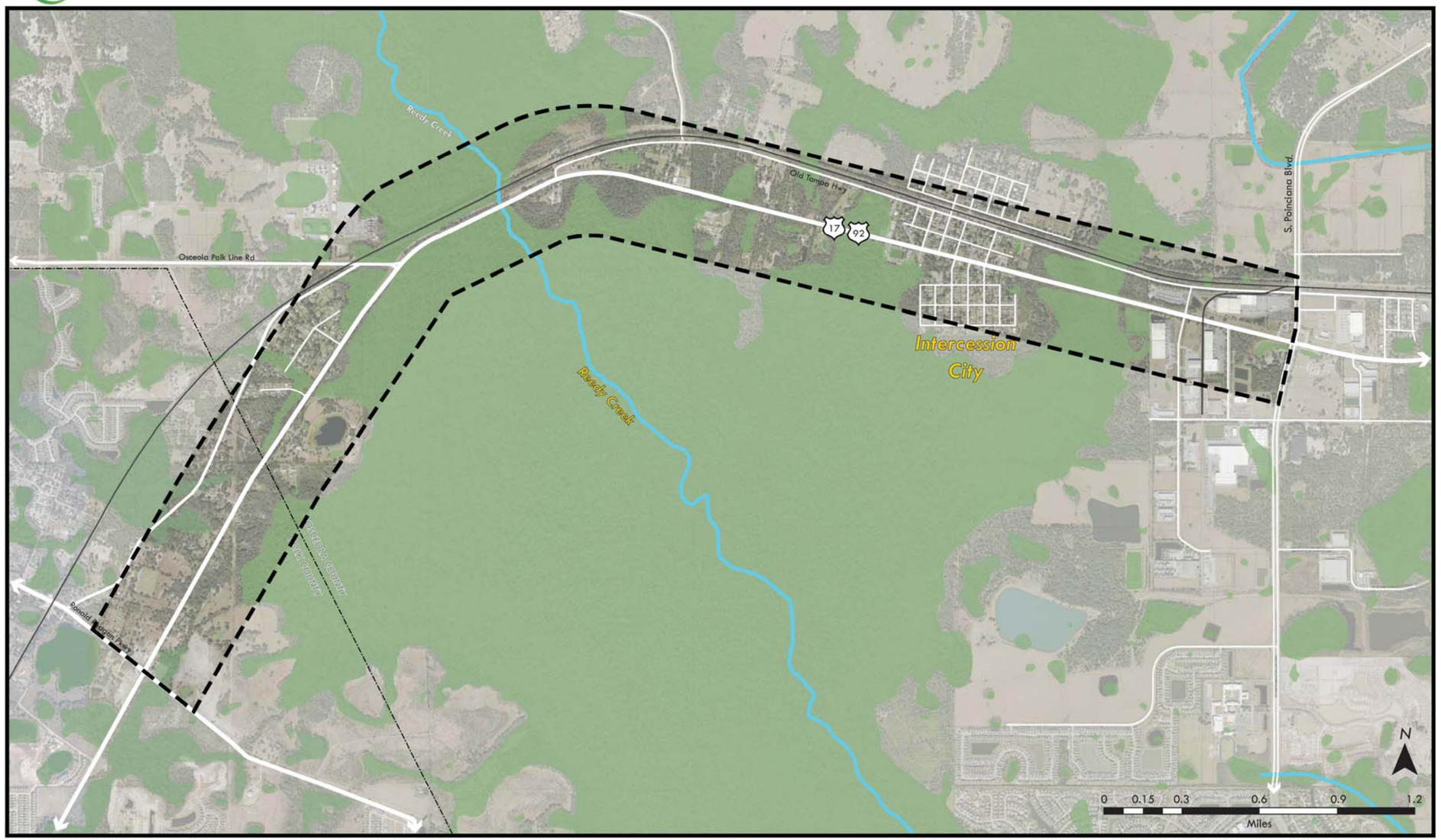
WETLAND AREAS



Data Source: U.S. Fish and Wildlife Service Environmental Conservation Online System

US 17/92 CORRIDOR STUDY

November 2016

Figure 26: Wetland Areas Map

Wetlands

Project Boundary

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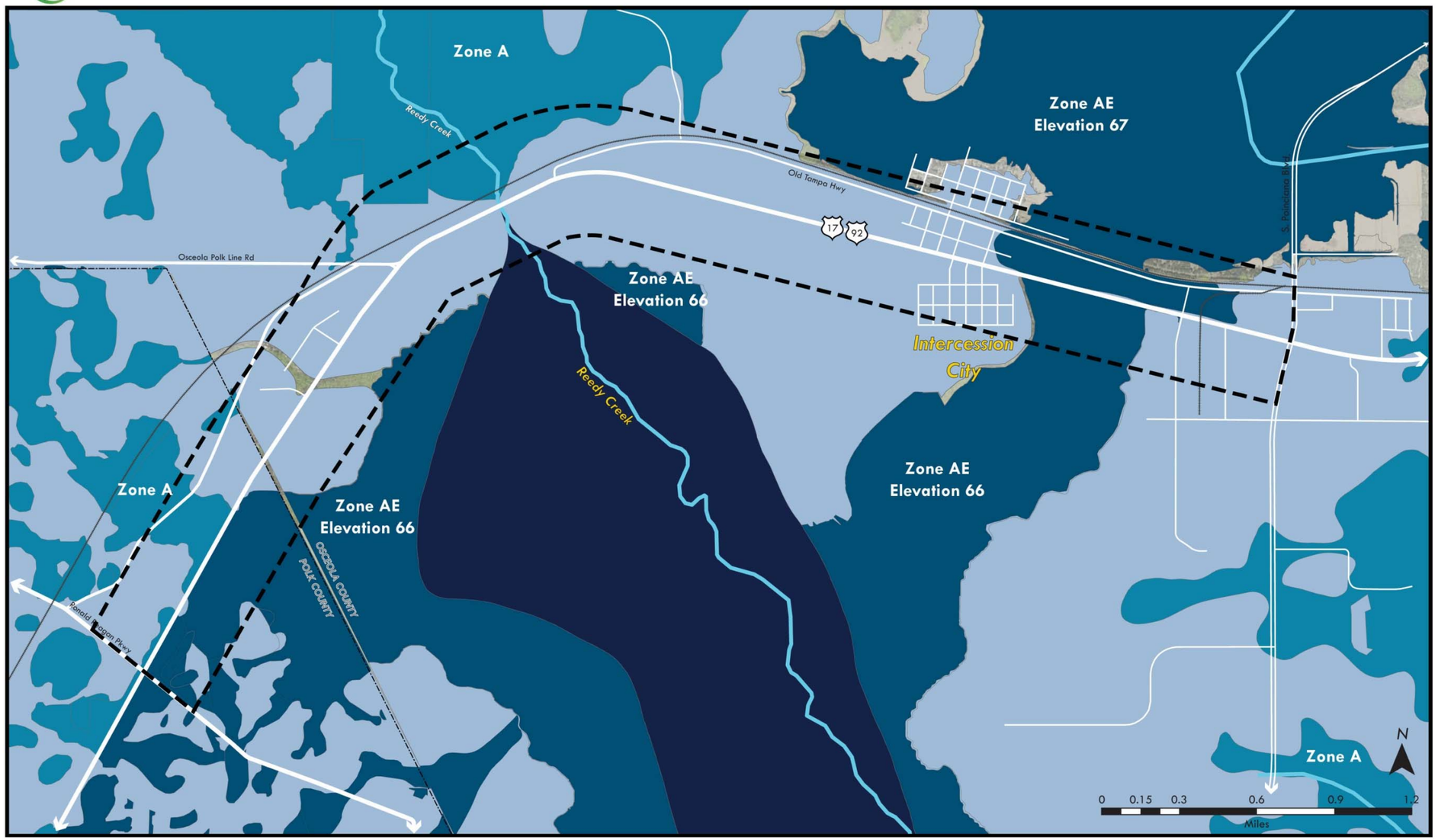
FLOODZONE AREAS



Data Source: FEMA

US 17/92 CORRIDOR STUDY

November 2016

Legend

Figure 27: Floodzone Areas Map

- Zone X - Area of Minimal Flood Hazard
- Zone X - 0.2% Annual Chance of Flood
- Zone A - Area of 100 Year Flood Base Flood Elevation not Determined
- Zone AE - Area of 100 Year Flood Base Flood Elevation Determined
- Floodway Area in Zone AE
- Reedy Creek
- Project Boundary

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VI. Environmental

Introduction

It is important to promote the protection of natural resources. As a growing population and associated development continue to place increasing pressures and demands on the environment, it becomes more important to review and amend regulations and policies to sustain natural resources for both current and future generations. Both Osceola County and Polk County have policies in place to responsibly use, enhance, protect and restore natural resources including air, water, land, wildlife, and habitat. Environmental considerations that may factor into design elements of the corridor study include the following:

- **Groundwater -** Groundwater is the principal source of fresh water in this area. Protection of the quality, quantity and availability of water resources is recognized as one of the highest priorities for both Osceola and Polk counties. There are numerous threats to water resources including contamination, increased demand from residential and agricultural users, and the potential of declining recharge rates. It is recognized water is a public resource essential to the long-term health, safety and welfare of the public. The maintenance and viability of wetlands, lakes, streams, recharge areas, and agricultural activities are of critical importance to the environment
- **Wetlands -** Many wetlands have suffered degradation due to human impacts. The federal government has a “no net loss” wetlands policy. Wetlands provide many important functions such as providing vital fish and wildlife habitats, acting as storage areas for excess surface water and improving water quality as impurities enter the wetland and are filtered through the vegetation. It is important precautions are taken, such as land acquisition, buffers, and stricter development standards, to curb future degradation. In addition, past wetland damage should be mitigated by restoring and creating wetlands to the greatest extent possible.
- **The Reedy Creek Swamp -** The swamp floodplain provides recharge to the Surficial Aquifer, which in turn recharges the Immediate and Floridian Aquifers. The recharge rate from the swamps is relatively low now; however, the long period of inundation in the swamp provides ample opportunities for recharge.
- **Reedy Creek -** The Creek is a seasonally fluctuating black water stream. It remains unchannelized and meanders through a floodplain swamp forest dominated by bald cypress, red maple, and strangler fig. the Reedy Creek Watershed provides a range of habitat types supporting a diversity of species. The use of Reedy Creek by wildlife fluctuates with the seasons and changing water levels. During the winter and spring, water flow slows due to low amounts of rainfall, and may dry up in certain areas. When summer rains begin, the creek swells, rising to depths greater than four-feet.

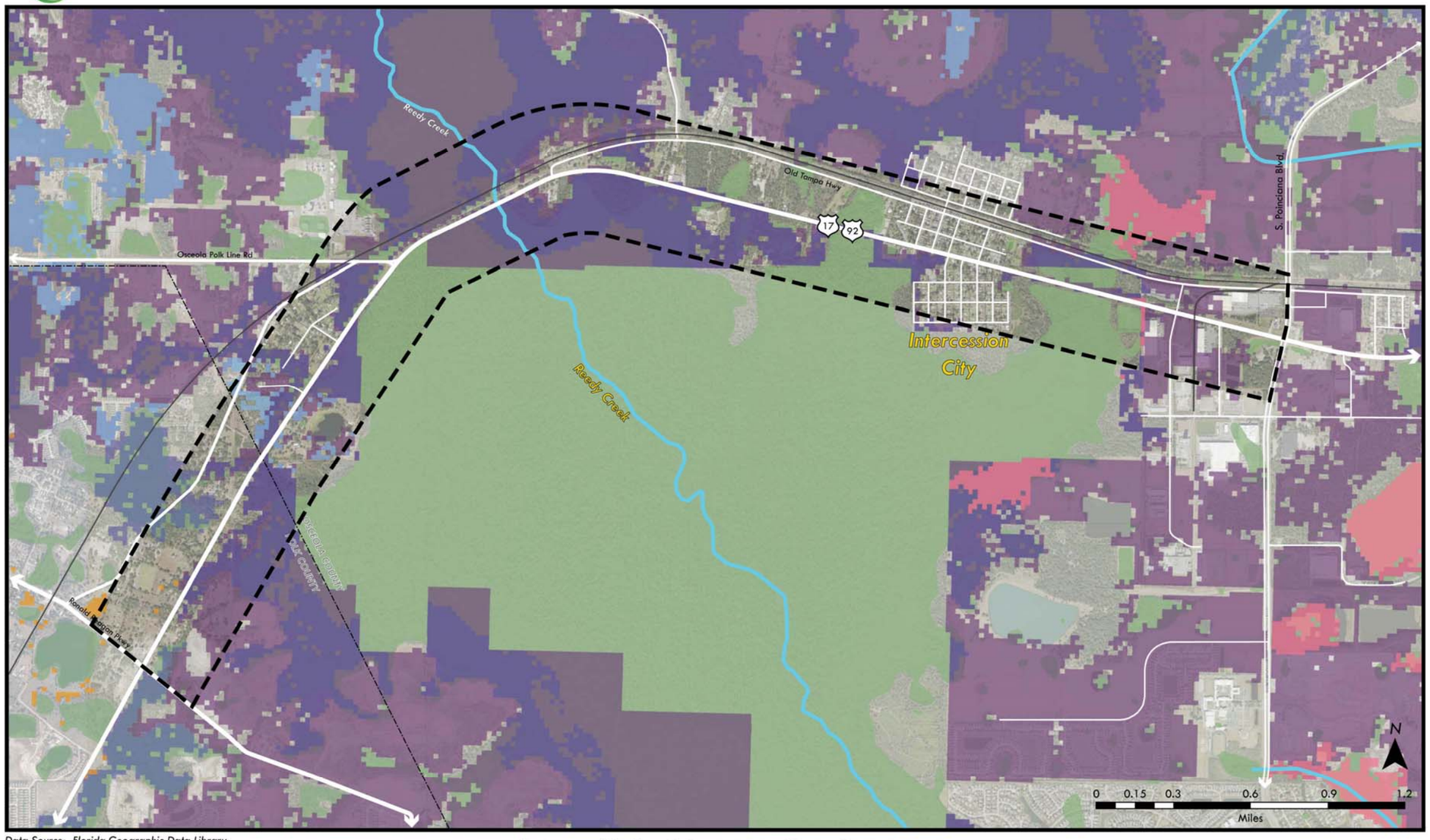
- **Air quality -** The air quality in the area is sufficient. However, with the area's projected population, increased commercial activity and urbanization in surrounding areas, there is a concern of the potential increase in air quality degredation. There are two FDEP air pollution sites in the study area: Duke Energy Intercession City Power Plant and Kissimmee Utilities Cane Island Power Park.

Threatened and Endangered Species

According to SFWMD, the water bodies of the Kissimmee Chain of Lakes and Kissimmee River and floodplain support breeding, shelter, and foraging habitats for 178 species of fish, wetland-dependent wading birds, amphibians, reptiles and mammals, which depend on year-round availability of water for survival. Per data from the Florida Geographic Data Library (see Figure 28), the following threatened and endangered species habitats may be present in the study area:

- **Cooper's Hawk** – Copper's Hawk habitat includes mature forest, open woodlands, and wood edges. They have become increasingly common in suburban areas with tall trees. The primary threat facing Copper's Hawk is degradation and loss of habitat.
- **Florida Scrub Jay** – The Florida Scrub Jay is the only species of bird unique to Florida. They inhabit sand pine and xeric oak scrub and scrubby flatwoods, which occur in some of the highest and driest areas of Florida – ancient sandy ridges running down the middle of the state and sandy deposits along rivers in the interior of the state. Scrub Jays do best in areas that contain large containing quantities of oak shrubs. The primary threats to the Florida Scrub Jay are habitat destruction, fragmentation, and degradation from development and agriculture.
- **Florida Snail Kite** – Within the United States, the Snail Kite is found only in Florida. The species is somewhat nomadic, moving from wetland to wetland in search of snails, but they are regularly seen in the marshes associated with lakes Kissimmee, Okeechobee, and Tohopekaliga. Wetland drainage and development has eliminated or altered much of its shallow freshwater foraging habitat.
- **Sand Skink** – Sand Skinks are endemic to xeric habitats found along the central Florida sand ridges. These habitats include rosemary scrub, scrubby flatwoods, sand pine, and oak scrubs and turkey oak ridge. The Sand Skink is found only in seven Florida counties, including Osceola and Polk. The main threat to the Sand Skink is loss of habitat – over two-thirds of historic xeric habitat has been altered or lost to agriculture or development in Florida.
- **Short-tailed Hawk** – The Short-tailed Hawk is uncommon in Florida, but can be found in patchy woodlands near water, high pine-oak woodlands, and cypress swamps in the central part of the state. It prefers borders between wooded and open areas for both nesting and hunting. The primary threat facing the Short-tailed Hawk is degradation and loss of habitat.

THREATENED & ENDANGERED SPECIES' HABITATS



Data Source: Florida Geographic Data Library

Figure 28: Threatened or Endangered Species Map

US 17/92 CORRIDOR STUDY

November 2016

Legend

- Florida Scrub Jay SHCA
- Sand Skink SHCA
- Florida Snail Kite SHCA
- Cooper's Hawk SHCA
- Short-tailed Hawk SHCA
- Wetlands
- Project Boundary

*SHCA denotes a Strategic Habitat Conservation Area

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VII. Issues and Opportunities

Introduction

The issues and opportunities described below and shown graphically on Figure 29 will serve as a baseline to help frame the alternatives and vision for the corridor. They have been identified through stakeholder input, field reconnaissance and corridor analysis, which represent the findings summarized in this report.

The following concerns have been noted along the US 17/92 corridor and adjacent areas:

Pedestrian

- There are long pedestrian crossings at major US 17/92 intersections (Poinciana Boulevard and Ronald Reagan Parkway).
- There are no marked and/or signed pedestrian crossings on US 17/92 in the Intercession City area.
- Lighting is limited, making pedestrians invisible to vehicles in the evening.
- There are limited pedestrian connections to the future SunRail station.

Bicycle

- There are no bicycle facilities (bike lane or signage) along most of US 17/92.
- There are no bicycle facilities (signage or connected routes) along Old Tampa Highway.
- There are safety issues for bicyclists along US 17/92 due to the high traffic volumes and freight traffic.

Transit

- There is a lack of/limited connectivity for the study area from LYNX services.
- How will Polk County connect with new SunRail service, both physically and financially?
- How will the SunRail station park? Are there adequate spaces allotted for an “end-of-the-line” station

Roadway

- There are high volumes of commuter traffic on US 17/92.
- There are high volumes of freight traffic on US 17/92.
- New development in the study area will further increase traffic on US 17/92.

Infrastructure and Development

- There is a lack of certainty about how the area around the new SunRail station will transform in terms of form and function, and how it will be integrated with the existing industrial activities.
- Will new development around the SunRail station require infrastructure upgrades (utilities and roadway)?

Aesthetic
- There is a lack of area identification (both gateways and wayfinding).

Based on the concerns described above, the following opportunities have been identified along the US 17/92 corridor and adjacent areas:

Pedestrian
- New sidewalks to increase multimodal activity and connect uses and destinations.
- New or enhanced pedestrian crosswalks.
- New pedestrian scale lighting.
- There may be right-of-way within the BK Ranch project on the north side of the railroad tracks that could be utilized for a multi-use trail.
- Create a JPA to include multimodal treatments along Old Tampa Highway.

Bicycle
- Bike lanes or signed bike routes along either (or both) US 17/92 and Old Tampa Highway.
- Use of utility corridors or transmission lines for off-road facilities
- New bicycle facilities and amenities.

Transit
- New transit and/or shuttle connections to the Poinciana SunRail station.

Roadway
- Expanding the roadway cross-section with wider and/or new travel lanes.

Infrastructure and Development
- New Transit Oriented Development (TOD) around the SunRail station.

Aesthetic
- New gateways to identify and theme the area.
- New directional signage to guide visitors to destinations.

ISSUES & OPPORTUNITIES MAP

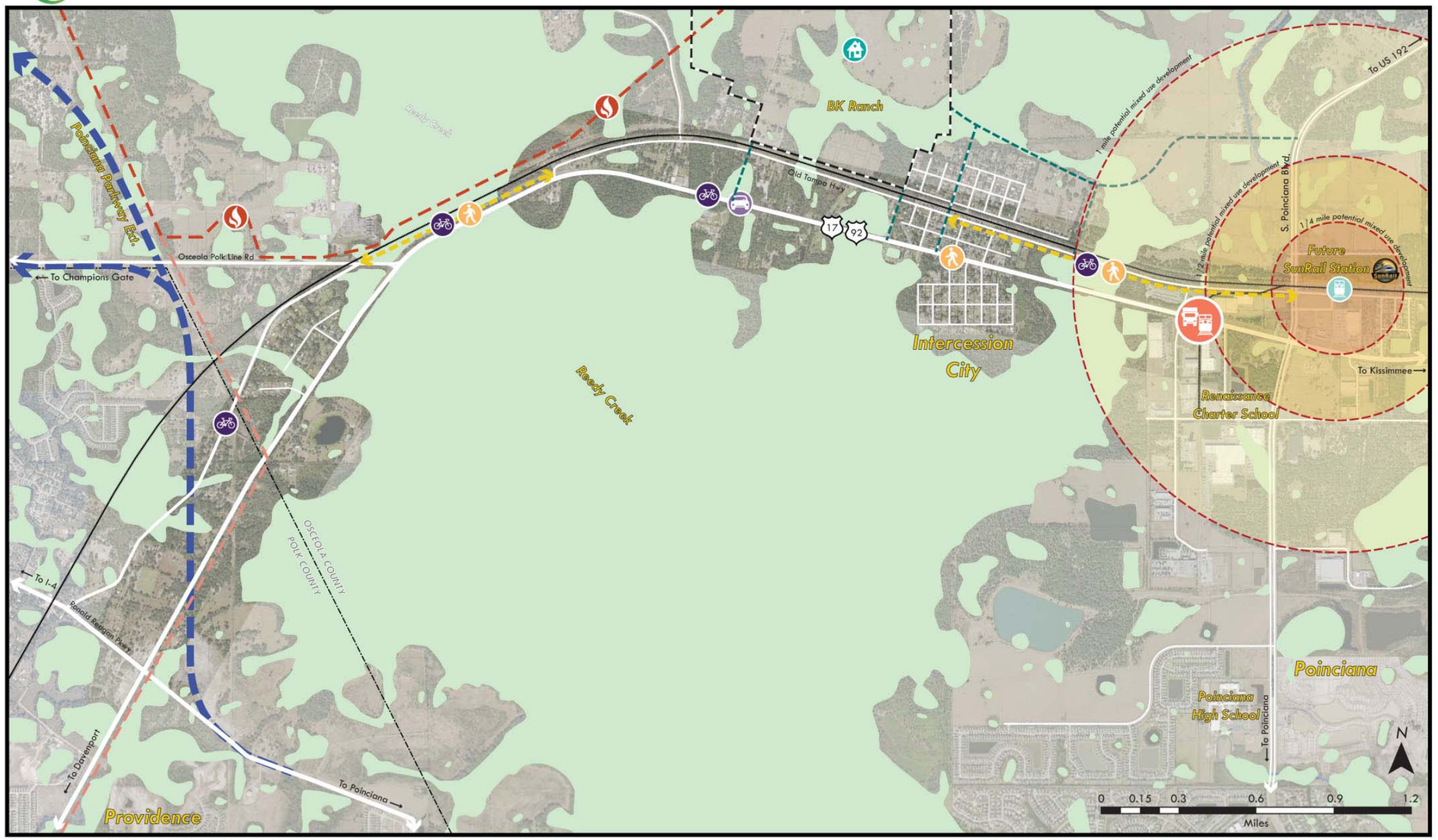

Figure 29: Issues & Opportunities Map

US 17/92 CORRIDOR STUDY

November 2016

Legend

- Proposed Sabal Trail Pipeline
- Freight/Rail Conflicts
- Pedestrian Facilities Needed
- Future SunRail Station
- Proposed Mixed Use Development
- High Traffic Volumes
- Bike Facilities Needed
- Potential Bike Ped Connections
- Proposed Poinciana Parkway Extension
- Proposed Multimodal Corridor
- Proposed Florida Southeast Connector Pipeline

RENAISSANCE PLANNING

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VIII. Appendices

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a. Traffic Counts

Table 3: Turning Movement Counts – Peak Hours

1. US 17/92 at CR 54 (Ronald Reagan Parkway)																
	US 17/92 - Northbound				**US 17/92 - Southbound**				**CR 54 - Eastbound**				**CR 54 - Westbound**			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
AM Peak Hour (0700-0800)	516	255	4	0	21	222	24	0	82	16	239	0	5	44	17	0
PM Peak Hour (1645-1745)	256	272	4	0	19	334	25	0	75	32	385	0	8	15	10	0

2. US 17/92 at CR 632												
	US 17/92 - Northbound				**US 17/92 - Southbound**				**CR 532 - Eastbound**			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
AM Peak Hour (0700-0800)	49	325	0	0	0	241	625	0	380	0	23	0
PM Peak Hour (1645-1745)	27	342	0	0	0	446	510	0	674	0	45	0

3. US 17/92 at Old Tampa Hwy												
	US 17/92 - Eastbound				**US 17/92 - Westbound**				**Old Tampa Hwy - Southbound**			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
AM Peak Hour (0700-0800)	105	603	0	0	0	810	0	0	0	0	99	0
PM Peak Hour (1645-1745)	147	836	0	0	0	764	1	0	1	0	185	0

4. US 17/92 at Tallahassee Blvd												
	US 17/92 - Eastbound				**US 17/92 - Westbound**				**Tallahassee Blvd - Soutbound**			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
AM Peak Hour (0700-0800)	21	583	0	0	1	775	12	0	16	0	15	0
PM Peak Hour (1645-1745)	26	805	1	0	1	695	21	0	13	0	48	0

Table 4: 2015 FDOT Annual Classification Counts

Site 920029 **US-17/92, 0.2 MI. W OF OLD TAMPA HWY**		
Type	**Daily Volume**	**Daily %**
CLASS 1 - Motorcycles	376	1.9%
CLASS 2 - Cars	14,551	75.0%
CLASS 3 - Pick-ups and Vans	2,443	12.6%
CLASS 4 - Buses	174	0.9%
CLASS 5 - 2-axle, single unit trucks	470	2.4%
CLASS 6 - 3-axle, single unit trucks	194	1.0%
CLASS 7 - 4-axle, single unit trucks	36	0.2%
CLASS 8 - 2-axle tractor w/ 1 or 2-axle trailer	300	1.5%
CLASS 9 - 3-axle tractor w/ 2-axle trailer	659	3.4%
CLASS 10 - 3-axle tractor w/ 3-axle trailer	42	0.2%
CLASS 11 - 5-axle, multi-trailer	3	0.0%
CLASS 12 - 6-axle, multi-trailer	0	0.0%
CLASS 13 - Any 7 or more axle	6	0.0%
CLASS 14 - Not used	0	0.0%
CLASS 15 - Other	145	0.7%
Heavy Vehicle	**1,710**	**8.8%**

Site 920029 **US-17/92, 0.009 MI. NE OF POLK CO LINE**		
Type	**Daily Volume**	**Daily %**
CLASS 1 - Motorcycles	23	0.3%
CLASS 2 - Cars	5974	69.5%
CLASS 3 - Pick-ups and Vans	1569	18.2%
CLASS 4 - Buses	35	0.4%
CLASS 5 - 2-axle, single unit trucks	291	3.4%
CLASS 6 - 3-axle, single unit trucks	124	1.4%
CLASS 7 - 4-axle, single unit trucks	52	0.6%
CLASS 8 - 2-axle tractor w/ 1 or 2-axle trailer	134	1.6%
CLASS 9 - 3-axle tractor w/ 2-axle trailer	295	3.4%
CLASS 10 - 3-axle tractor w/ 3-axle trailer	65	0.8%
CLASS 11 - 5-axle, multi-trailer	0	0.0%
CLASS 12 - 6-axle, multi-trailer	0	0.0%
CLASS 13 - Any 7 or more axle	28	0.3%
CLASS 14 - Not used	0	0.0%
CLASS 15 - Other	10	0.1%
Heavy Vehicle	**989**	**11.5%**

b. Accident Data

Table 5: Average Crashes by Month and Type (2011 to 2015)

Month	Total	Bike/Ped	Injury/Fatality
January	36	1	14
February	30	0	14
March	39	0	20
April	32	1	9
May	39	0	15
June	31	0	8
July	29	1	4
August	47	1	20
September	25	0	10
October	47	1	19
November	36	0	10
December	45	2	22
Total	**436**	**7**	**165**

Table 6: Average Crashes by Type and Location (2011 to 2015)

Type	CR 54	Osceola Polk Line Road	Old Tampa Hwy	Tallahassee Blvd	Poinciana Blvd	Not at Intersection	Total
Angle	12	2	0	0	4	3	21
Head On	1	0	1	0	2	4	8
Left Turn	15	10	0	1	27	6	59
Right Turn	3	0	0	0	4	1	8
Rear End	10	14	4	5	112	84	229
Sideswipe	1	2	2	2	12	5	24
Rollover	0	1	0	0	1	4	6
Off Road	6	3	4	2	0	14	29
Other	7	2	0	2	9	16	36
Animal	1	0	0	0	1	2	4
Bicycle	1	0	0	0	1	3	5
Pedestrian	0	0	0	1	0	1	2
Unknown	0	0	0	1	2	2	5
Total	**57**	**34**	**11**	**14**	**175**	**145**	**436**

Table 7: Average Crashes by Time of Day (2011 to 2015)

Time	Total	Bike/Ped	Injury
0:00	8	0	3
1:00	2	0	1
2:00	7	0	4
3:00	8	0	6
4:00	5	0	2
5:00	13	1	5
6:00	21	0	3
7:00	23	0	10
8:00	26	0	6
9:00	11	1	3
10:00	17	0	6
11:00	17	0	8
12:00	19	0	7
13:00	12	0	5
14:00	22	2	9
15:00	45	0	15
16:00	41	0	10
17:00	39	0	17
18:00	29	1	9
19:00	22	0	9
20:00	17	0	8
21:00	9	1	5
22:00	14	1	7
23:00	9	0	7
Total	**436**	**7**	**165**


RENAISSANCE
PLANNING