

LEGEND

Existing Land Use

- Vacant / Unclassified
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Light Commercial
- Heavy Commercial
- Light Industrial
- Heavy Industrial
- Institutional
- Transportation / Utilities
- Recreation / Conservation
- Agricultural
- Water

Data Sources:
 COUNTY GOVERNMENTS: ORANGE CO, OSCEOLA CO, BREVARD CO (2016)
 LOCAL GOVERNMENTS: CITIES OF ST. CLOUD; BELLE ISLE, TITUSVILLE, MELBOURNE, COCOA, WEST MELBOURNE (2016)

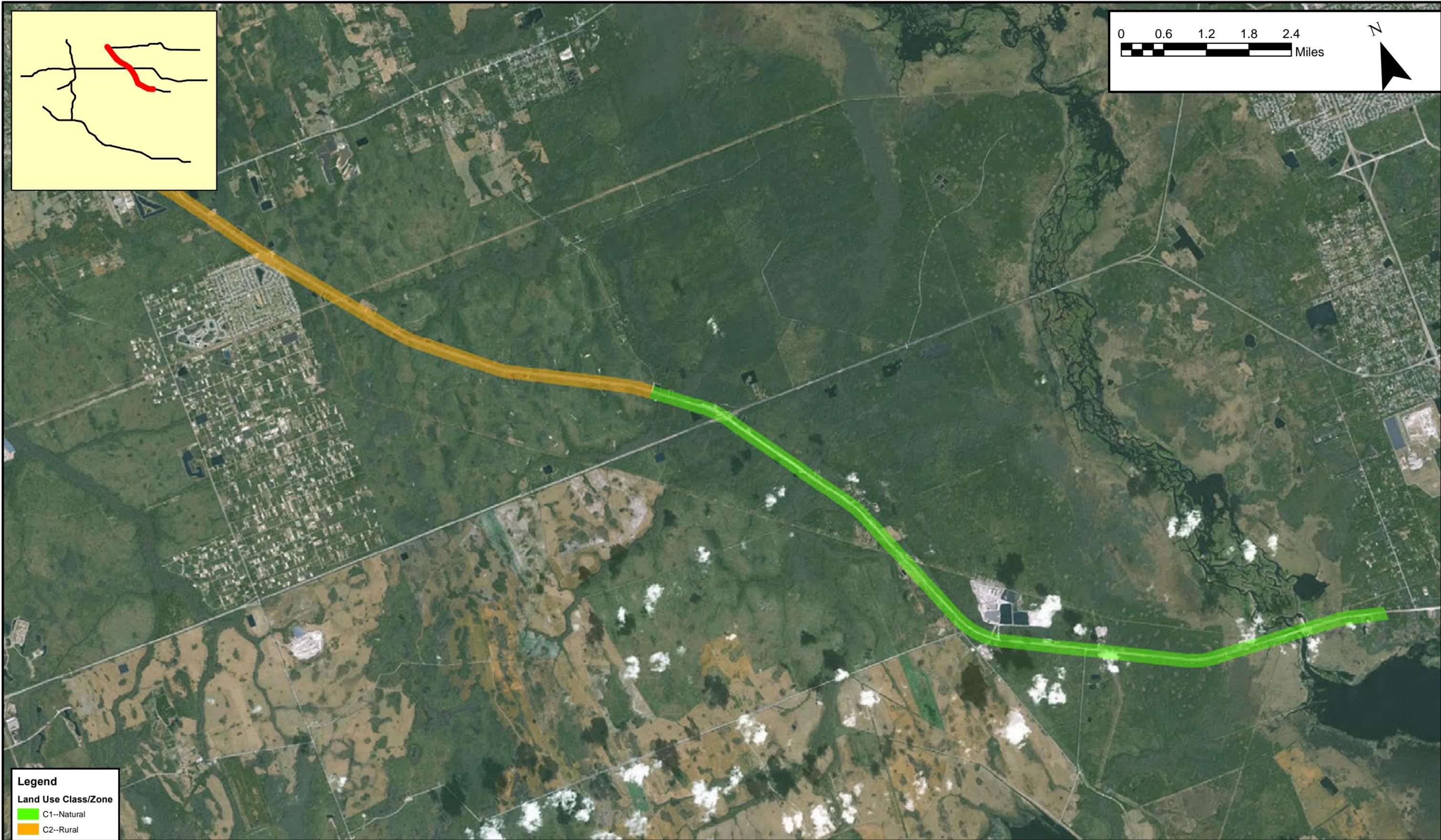
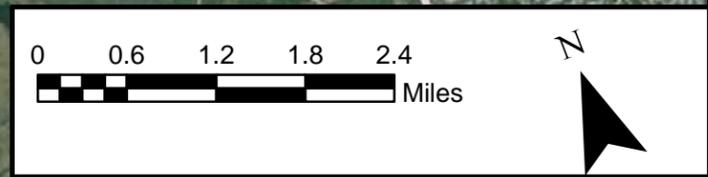
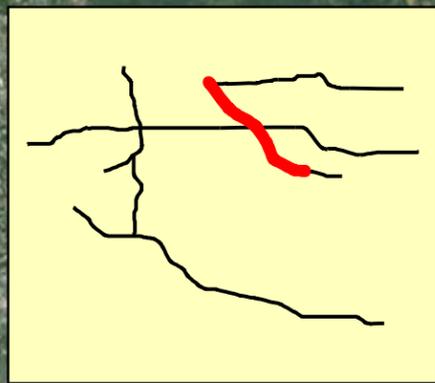


East Central Florida Corridor Evaluation Study



**Corridor C
Land Use**

**FIGURE
4.2-5
SEGMENT C2**



Legend
Land Use Class/Zone
C1--Natural
C2--Rural



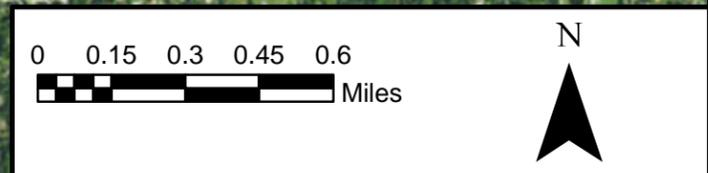
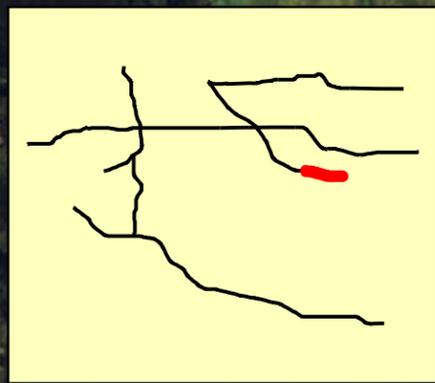
East Central Florida Corridor Evaluation Study



Corridor C Context Zone

FIGURE
4.2-6

SEGMENT C1



Legend
Land Use Class/Zone

- C2--Rural
- C4--General Urban Residential



4.3 Roadway Characteristics/Operations

4.3.1 Jurisdiction and Classification

Corridor C is currently owned and operated by the Florida Department of Transportation. The Roadway Functional Classification is primarily Principal Arterial-Other Rural, with an Urban status between SR 524 to I-95 in the Brevard County, approximately 1.7 miles. Corridor C is not part of the SIS.

4.3.2 Typical Section and Posted Speed

Corridor C, SR 520 is a single continuous segment with a minimum right-of-way width of 200 feet. The typical section consists of four 12-foot through lanes, a 40-foot median (20 feet between edges of curbs sloped at 1:6 to a ditch, with an eight-foot paved interior shoulder on each side), and 10-foot paved outside shoulders. Corridor C consists of four through-lanes of traffic for the entirety of its length.

As shown in Figure 4.3-1, the origin of Corridor C is at an intersection with SR 50 near Bithlo, where SR 520 begins. The maximum speed limit of the road in this area is 55 mph. As the corridor passes through rural, undeveloped land in eastern Orange County, the limit increases to 65 mph. The speed lowers down to 55 mph again where the corridor intersects with SR 528, but increases back to 65 mph, at CR532. It reduces back to 45 mph and comes back to 55 mph, which is maintained until the terminus of the road study area.

4.3.3 Traffic Volumes

Annual Average Daily Traffic (AADT) and Level of Service (LOS) 2015 on both segments of Corridor C are shown on Table 4.3-1 and on Figure 4.3-1.

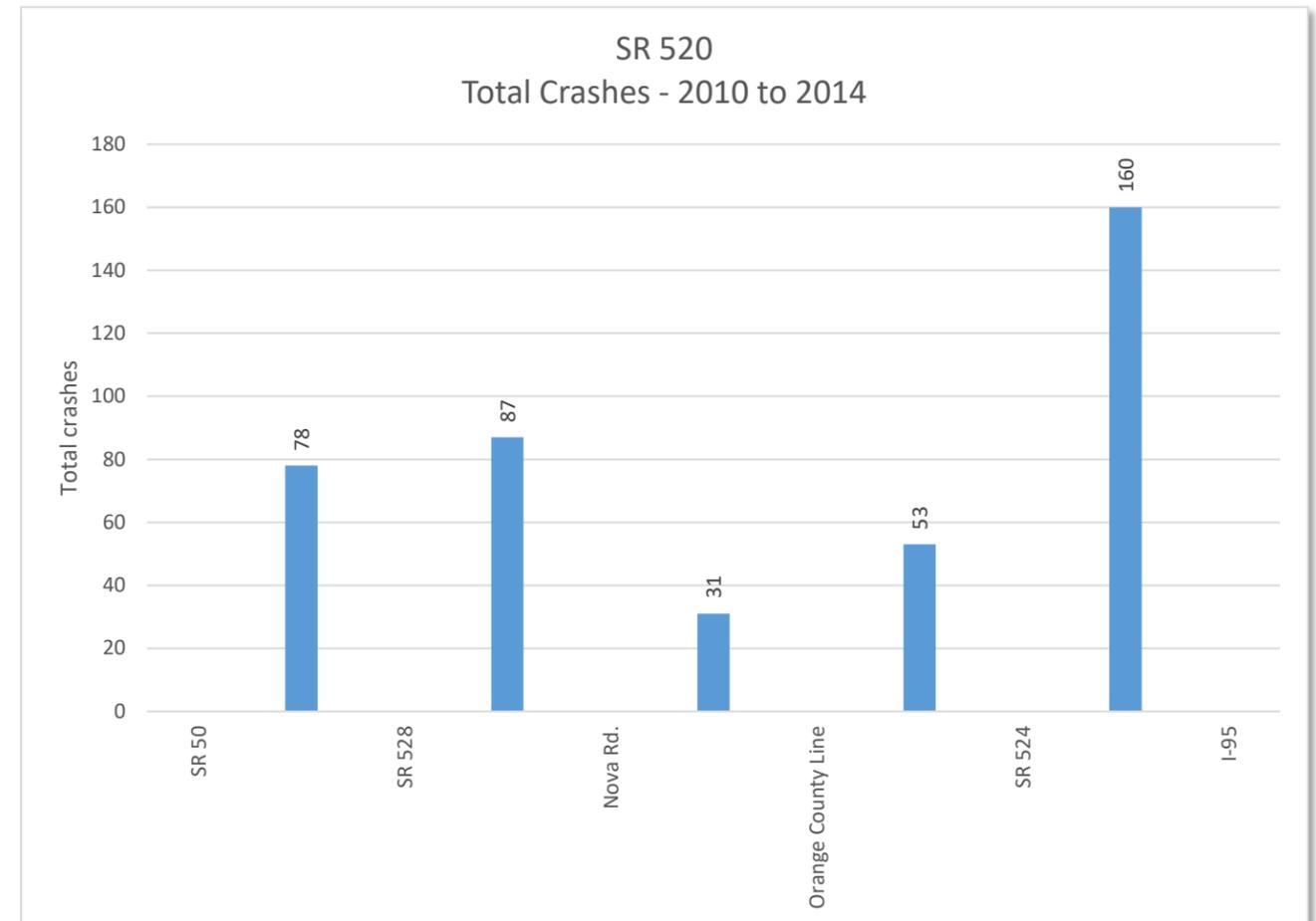
Table 4.3-1: Corridor C Annual Average Daily Traffic and Level of Service 2015

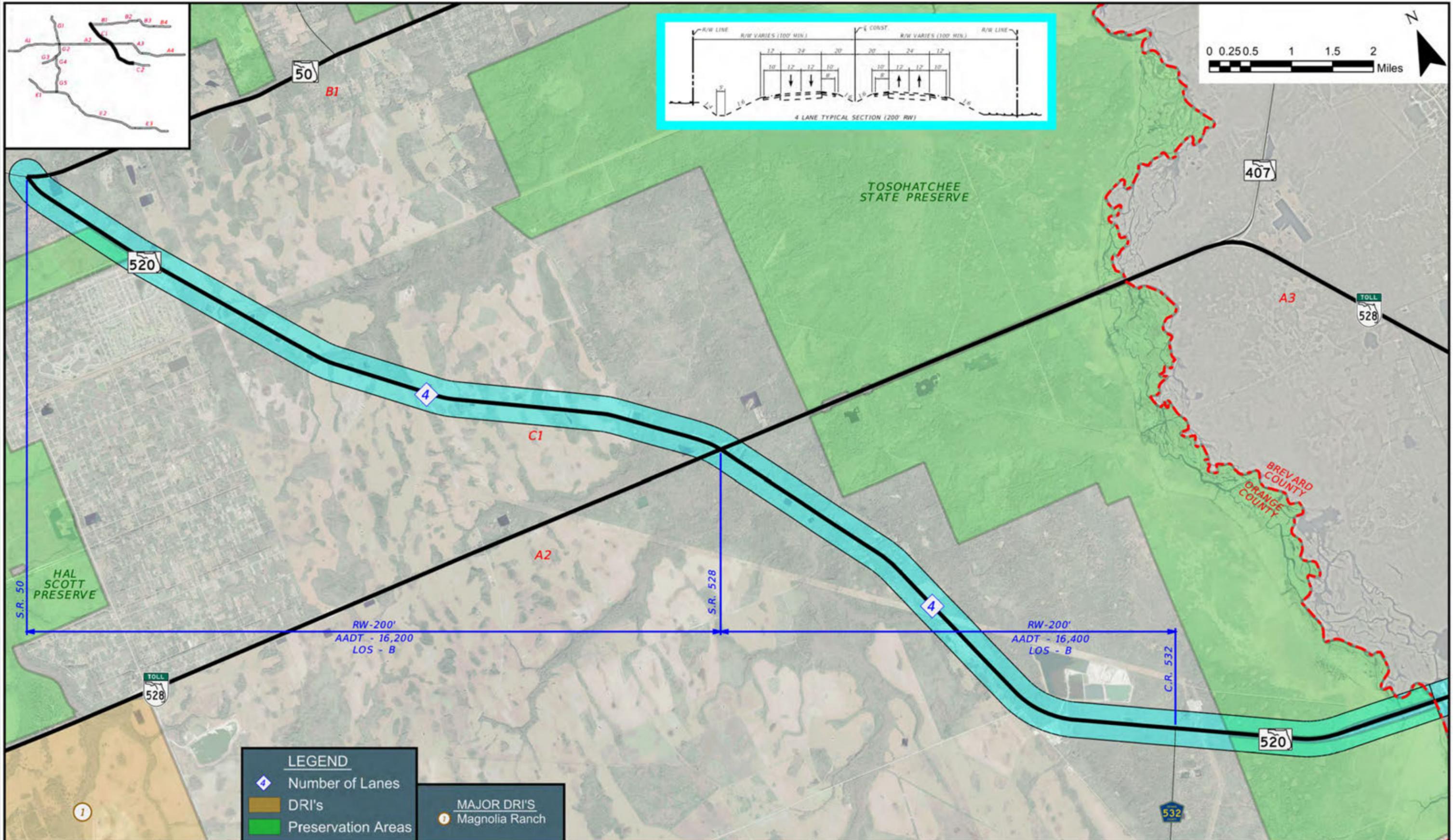
Roadway	Corridor Section	Count Location	AADT	LOS	Speed
SR 520	C1	SR 50 - SR 528	16,200	B	55-65
	C1	SR 528 - CR 532	16,400	B	55-65
	C1/C2	CR 532 - SR 524	16,400	B	55
	C2	SR 524 - I-95	20,100	C	45-55

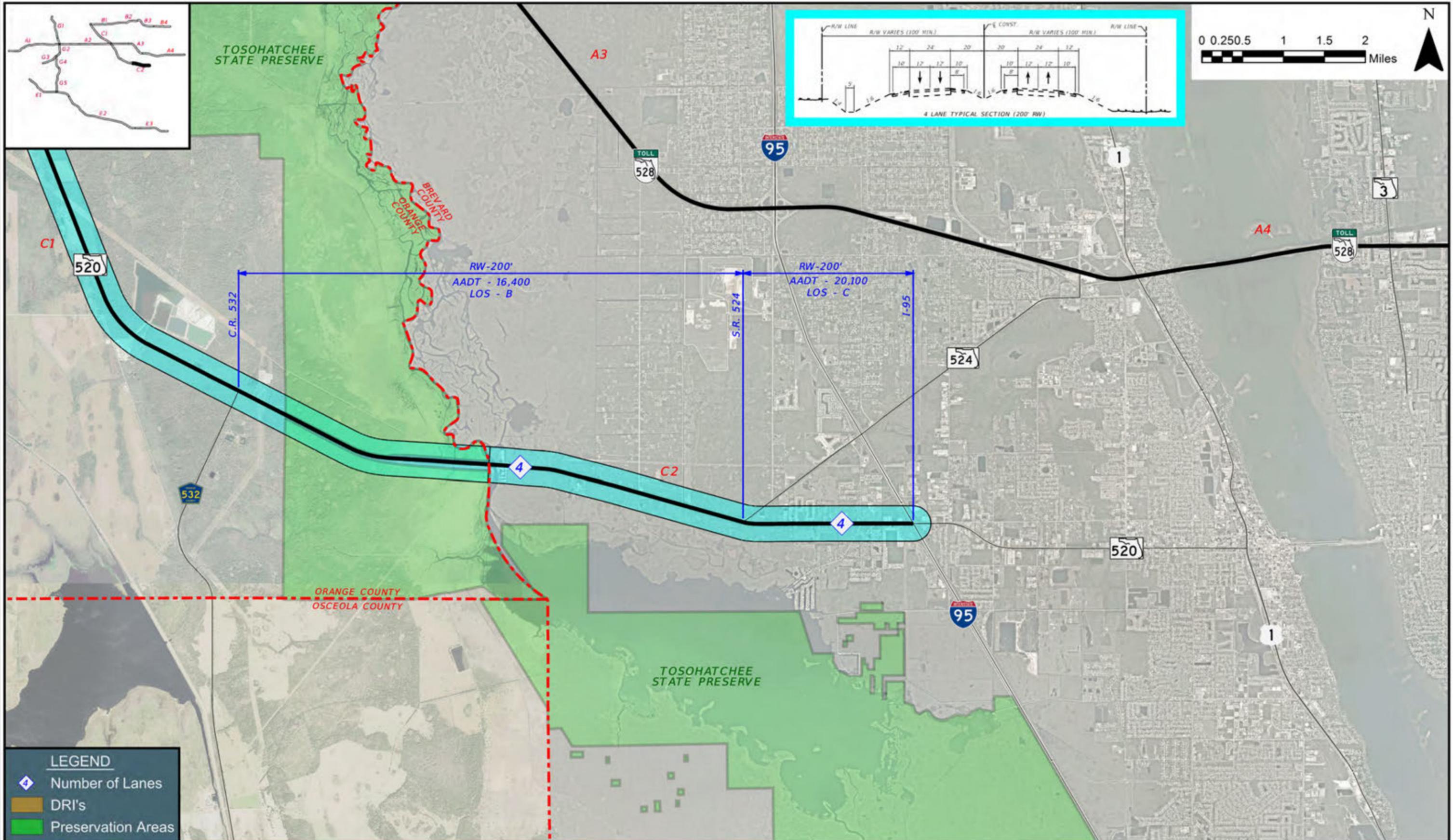
4.3.4 Safety and Crash Data

The following bar chart summarizes the total crashes for SR 520 for the five-year period between 2010 and 2014. As shown, the highest number of crashes between any two interchanges occurred between SR 524 and I-95 interchanges. The majority of these crashes at any interchange occurred at the I-95 interchange with a total of 120 accidents. Out of this total, there were: 58 rear end collisions; 45 angle crashes; and the rest a mix of sideswipes, left-turns and unknowns. The other crashes were spread fairly evenly between the length of the corridor with small concentrations at the SR 528 interchange and the intersection at Satellite Boulevard.

Corridor C SR 520 Total Crashes – 2010 to 2014







LEGEND

- ◆ Number of Lanes
- DRI's
- Preservation Areas

4.4 Railroad Crossings

There is no existing railroad infrastructure within the study area.

4.5 Engineering and Site Characteristics

As noted previously, one of the key benefits of this phase of the study is that it provides an opportunity to plan on a holistic, system-level, while also providing an opportunity to collect data, conduct analyses, and develop packages of projects and strategies to move into future project development. Engineering analyses and documentation of site characteristics is a required step in the PD&E process. The following section provides the results of the ECFCEs Engineering and Site Characteristics analyses.

4.5.1 Structures

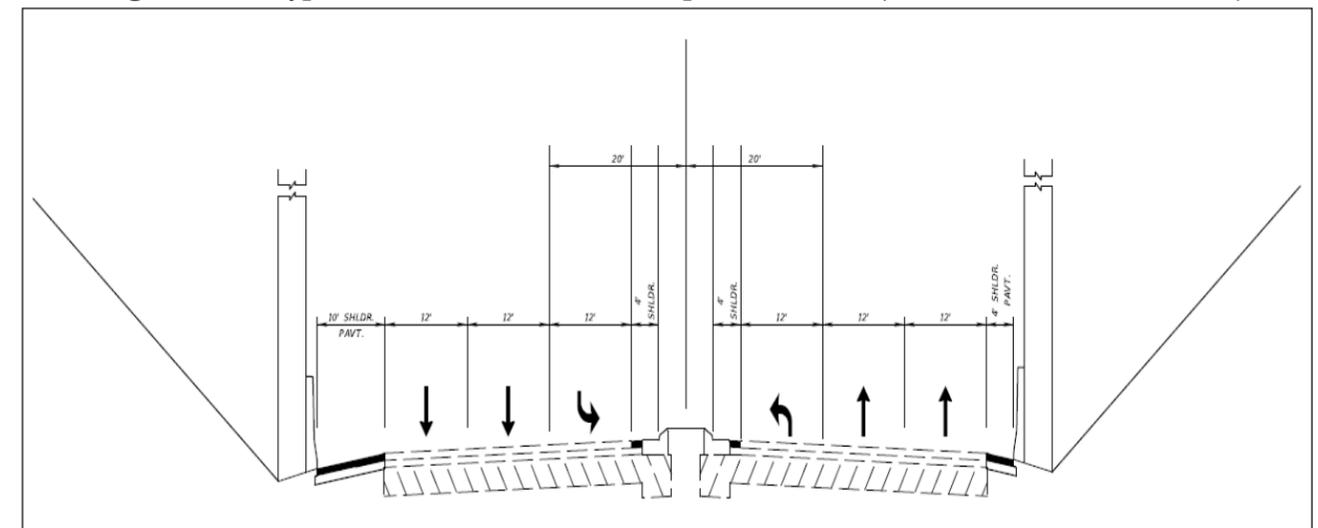
Corridor C has seven (7) crossings with bridges or underpasses. At these locations, there are 13 structures. This section focusses on underpasses only. Corridor C underpasses at two locations, Beachline Expressway (SR 528) and I-95. Information was collected from FDOT Straight Line Diagrams, FDOT Bridge Reports, and Google Maps.

SR 520 Underpass at SR 528 (Structure #s 750226 and 750132)

- Two structures at the interchange.
- Structure #750226 has a vertical clearance of 16.7 feet.
- Structure #750132 has a vertical clearance of 16.2 feet.



Figure 4.5-1: Typical Section at SR 520 Underpass at SR 528 (Structure #s 750226, 750132)

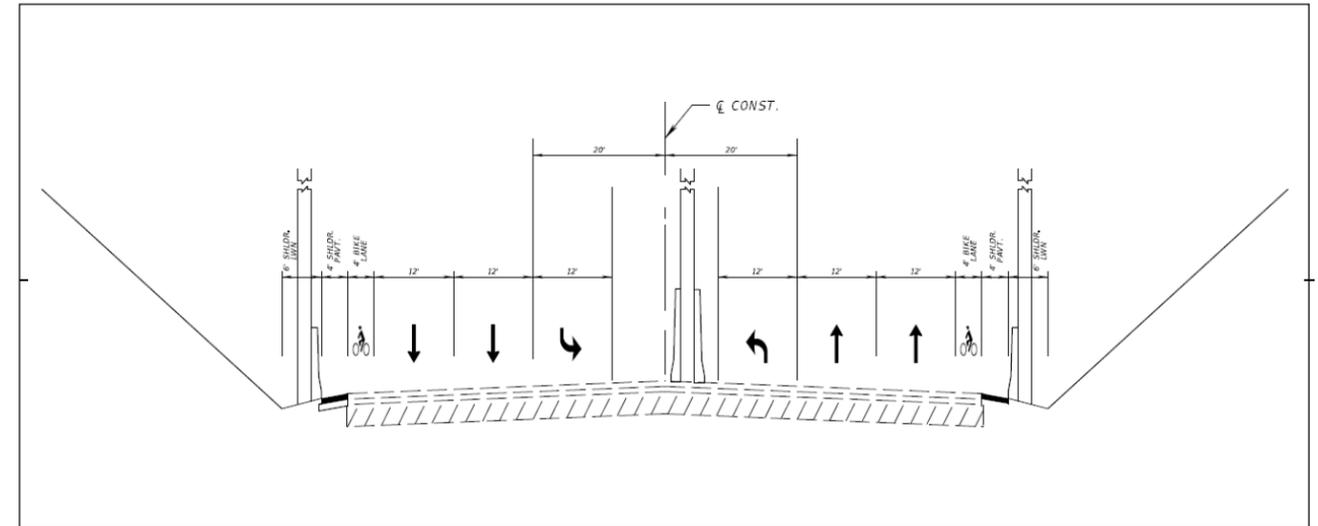


SR 520 underpass at I-95 (Structure #s 700052, 700127)

- Two structures at the interchange.
- Structure #700052 has a vertical clearance of 15.8 feet.
- Structure #700127 has a vertical clearance of 15.7 feet.



Figure 4.5-2: Typical Section at SR 520 Underpass at I-95 (Structure #s 700052, 700127)



Sufficiency Rating for Bridges

Sufficiency Rating is essentially an overall rating of a bridge's fitness for the duty that it performs based on factors derived from over 20 NBI data fields. Ratings reported in this report are based on the FDOT's 2017 3rd Quarter Bridge Information Report. The designation of a bridge as Structurally Deficient (SD) or Functionally Obsolete (FO) has impact on decisions for bridge maintenance, rehabilitation or replacement. According to the FHWA Highway Bridge Replacement and Rehabilitation Program (23 CFR 650.409), highway bridges are considered eligible for rehabilitation or replacement with a sufficiency rating of less than 50.0. Highway bridges with a sufficiency rating of 80.0 or less will be eligible for rehabilitation. Ratings are on a scale of 1 to 100, with 100 considered as an entirely sufficient bridge, usually new. The Sufficiency Rating for each bridge along Corridor C is identified on Table 4.5-1.

Table 4.5-1: Corridor C Sufficiency Ratings for Bridges

Roadway Name	County	Roadway ID	Interchange/Intersection	Structure #	Sufficiency Rating (%)
SR 520	Orange	75140000	SR 50	750951	85.6 – FO
SR 520	Orange	75140000	SR 528	750226 750132	93.5 – FO 93.5 – FO
SR 520	Orange	75140000	Second Creek	750371 750516	94.4 99.5
SR 520	Orange	75140000	Jim Creek	750372 750517	93.8 99.4
SR 520	Orange	75140000	Wildlife Crossing	750510 750511	99.5 99.5
SR 520	Brevard	70100000	St. Johns River Bridge	700200 700217	97.5 96.5
SR 520	Brevard	70100000	I-95	700052 700127	96 96

4.5.2 Drainage

In Orange County, Corridor C is contained mostly in the Upper St. Johns River Basin with only the most northerly portion of the corridor lying in the Middle St. Johns River Basin. These surface water management basins are defined by the Florida Department of Environmental Protection (FDEP). Stormwater in this portion of the Middle St. Johns River Basin generally flows east to west to the Econlockhatchee River which flows into the St. Johns River, while stormwater in the Upper St. Johns River Basin generally flows east to the St. Johns River. There are 16 major (greater than five-foot diameter pipe equivalent opening) drainage crossings, including two bridges, three bridge culverts, and 11 box culvert crossings in the Orange County portion of the corridor. Figure 4.5-3 depicts the drainage crossing locations. Table 4.5-2 denotes impaired drainage basins, as defined by FDEP, through which the corridor passes. The northwest tip of Corridor C, at the interchange with SR 50, lies within the St. Johns River Water Management District’s designated Econlockhatchee River Hydrologic Basin.

Table 4.5-2: Corridor C Orange County, Impaired Waterbodies

Waterbody Name	Group Name	Water Body ID	Impairment Parameter
Long Branch	Middle St. Johns River	3030	Fecal Coliform
St. Johns River above Puzzle Lake (South Segment)	Upper St. Johns River	28395	Dissolved Oxygen

Corridor C in Brevard County passes from northwest to southeast through the FDEP-defined Upper St. Johns River Basin. Stormwater in the Upper St. Johns River Basin within this corridor generally flows east into the St. Johns River. The Brevard County portion of Corridor C includes one major drainage crossing, a bridge. Figure 4.5-3 depicts the drainage crossing locations. Table 4.5-3 denotes impaired drainage basins, as defined by FDEP, through which the corridor passes.

Table 4.5-3: Corridor C Brevard County, Impaired Waterbodies

Waterbody Name	Group Name	Water Body ID	Impairment Parameter
Lake Poinsett Outlet	Upper St. Johns River	2893K1	Fecal Coliform
St. Johns River above Puzzle Lake (South Segment)	Upper St. Johns River	28395	Dissolved Oxygen

4.5.3 Utilities

With the exception of its southern terminus near I-95 at Cocoa West, the corridor primarily traverses rural areas and does not include a significant amount of utilities within the right-of-way. The few found within or crossing the corridor are generally for long distance transmission rather than local distribution due to the sparse population. At a few locations, the number of utilities in the corridor increases and becomes more diverse as the development density escalates. The most common types of utilities include:

- Electric transmission and distribution, primarily aerial.
- Potable Water and sanitary sewer mains from local municipalities.
- Communications lines are located throughout in various forms. This includes aerial and underground transmission and distribution lines for telephone, cable television and internet services. Fiber optic cables, mainly underground, are attributed to multiple communications and internet providers. In many instances, several communications lines would appear in a particular segment of the corridor in different aspects and locations.
- Gas transmission pipelines cross the corridor at several locations.

The initial listing of utilities within the corridors were obtained employing the Sunshine State One-Call system. Those utilities having a major presence in the study areas were contacted to verify the location and configuration of their facilities. The significant utilities are summarized for each of the corridor’s counties.

The following table lists the primary utilities acknowledging a presence in Orange County as well as their general locations:

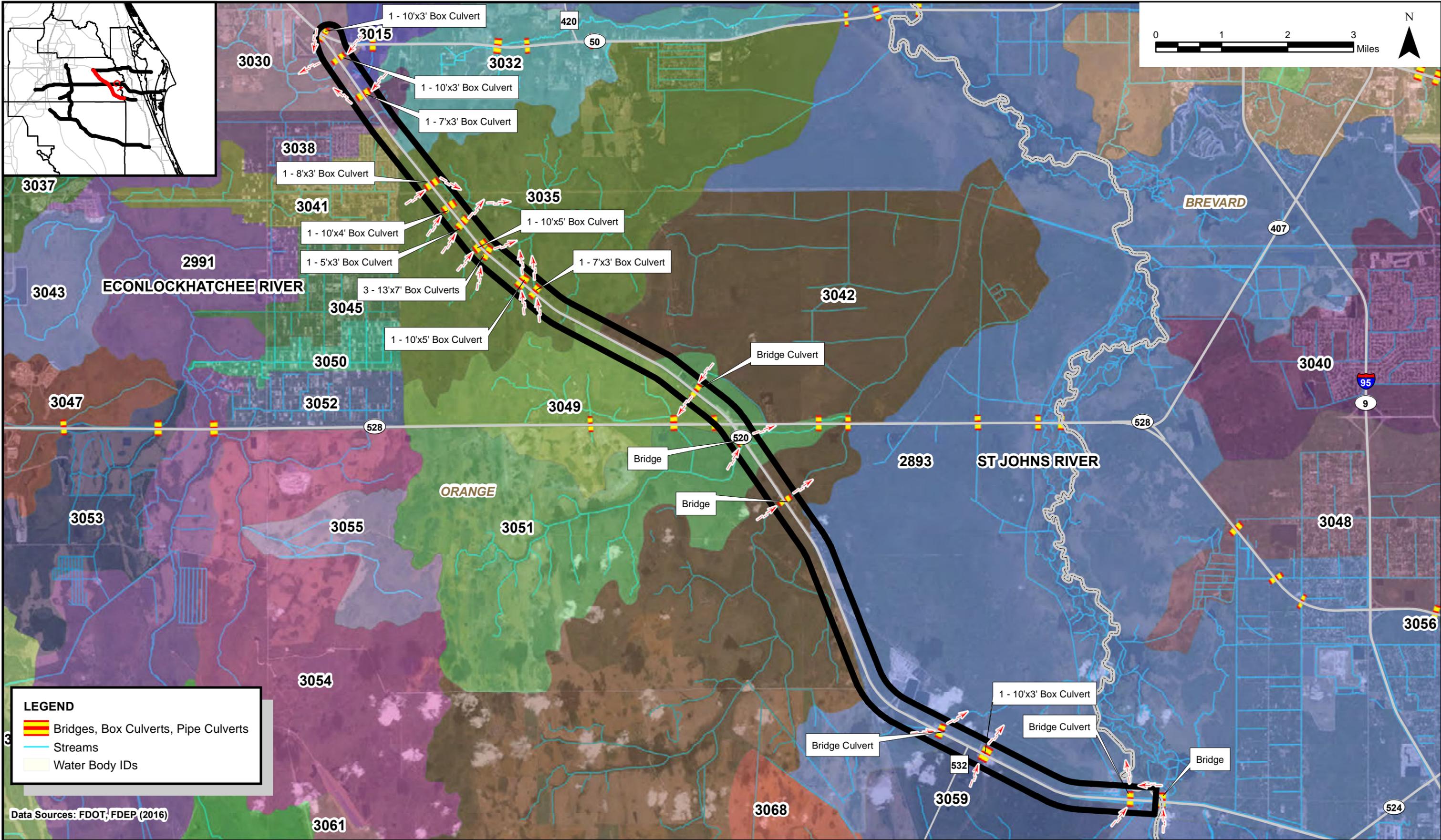
Table 4.5-4: Corridor C Orange County, Primary Utilities

Utility Name	Utility Type	Parallel or Crossing	Roadway	Cross Road/Extent
AT&T	COMM/ Fiber	Crossing	SR 520	SR 528
Florida Gas Transmission	Gas	Crossing	SR 520	South of SR 528
Florida Power & Light	Electric - OH	Crossings (4)	SR 520	Between SR 50 & SR 528, Between SR 528 & SR 532, East of SR 532, County line
Florida Power & Light	Electric - OH	Parallel	SR 520	West of SR 532 to County Line
Level 3 Communications	Fiber	Crossings (2)	SR 520	Yates Rd, James Creek Rd
Level 3 Communications	Fiber	Parallel	SR 520	James Creek Rd
Orlando Utilities Commission	Electric - OH (Abandoned)	Parallel	SR 520	Between SR 50 and SR 528
Verizon Business	COMM/Fiber	Parallel	SR 520	SR 50 to County Line

The following table lists the primary utilities acknowledging a presence in Brevard County as well as their general locations:

Table 4.5-5: Corridor C Brevard County, Primary Utilities

Utility Name	Utility Type	Parallel or Crossing	Highway of Corridor	Cross Road/Extent
Charter Communications	Internet/CATV/ Phone/Fiber	Parallel	SR 520	County Line to I-95
Florida Gas Transmission	Gas	Crossing	SR 520	I-95
Florida Power & Light	Electric - OH	Crossing	SR 520	West of I-95
Verizon Business	COMM/Fiber	Parallel	SR 520	County Line to SR 524



LEGEND

-  Bridges, Box Culverts, Pipe Culverts
-  Streams
-  Water Body IDs

Data Sources: FDOT, FDEP (2016)



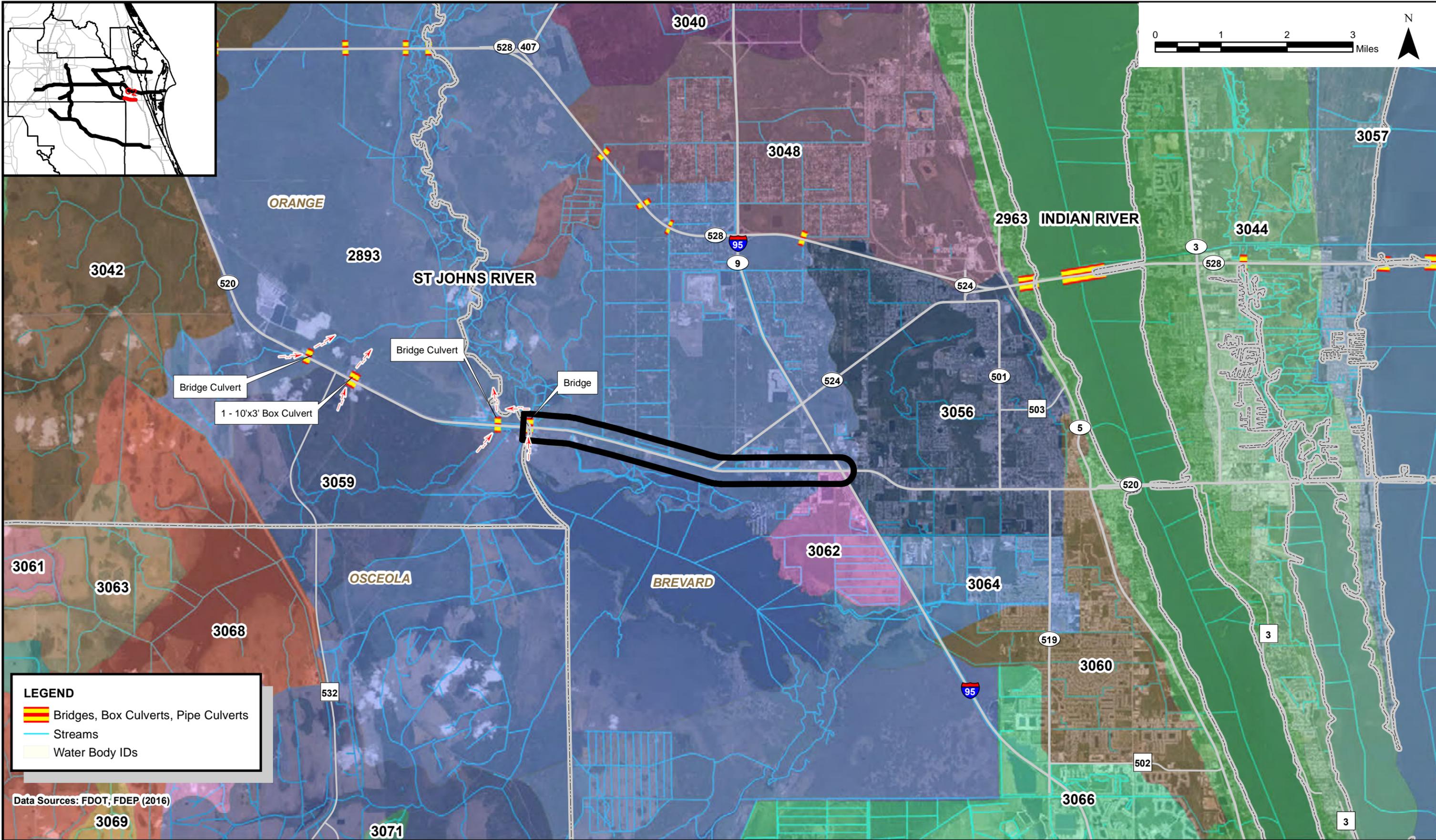
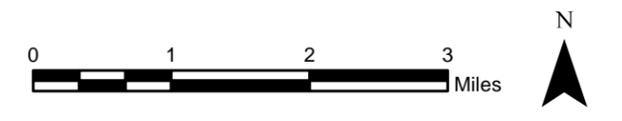
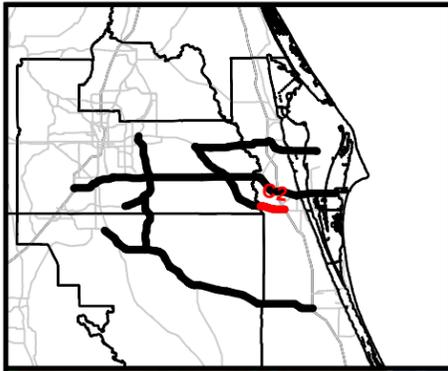
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Corridor C
Existing Drainage Conditions

FIGURE
4.5-3

SEGMENT C1



LEGEND

-  Bridges, Box Culverts, Pipe Culverts
-  Streams
-  Water Body IDs

Data Sources: FDOT, FDEP (2016)



East Central Florida Corridor Evaluation Study



Corridor C
Existing Drainage Conditions

FIGURE
4.5-3
 SEGMENT C2

4.6 Environmental Characteristics

4.6.1 Wetlands

Corridor C is notable for going through sections of Florida managed lands, predominantly the Tosohatchee Wildlife Management Area. These acres are almost exclusively on the south side of the Segment C2 buffer. Wetlands are most prevalent in Segment C1, largely comprised of freshwater forested/shrub wetlands. Freshwater emergent wetlands make up the majority of the remaining wetland acres, primarily around the St. Johns River (Table 4.6-1 and Figure 4.6-1).

Table 4.6-1: Corridor C Wetlands

Segment	Wetland Type	Acres
C1	Freshwater Emergent Wetland	113.50
	Freshwater Forested/Shrub Wetland	250.68
	Freshwater Pond	25.93
	Riverine	15.98
C2	Freshwater Emergent Wetland	89.18
	Freshwater Pond	7.30
	Riverine	8.02

4.6.2 Floodplains

As shown in Figure 4.6-2, both segment buffers traverse wetlands and the 100-year floodplain. Flood zone acres are greatest in Segment C1, particularly where the buffer crosses the St. Johns River at the county boundary (Table 4.6-2).

Table 4.6-2: Corridor C Flood Zones

	Flood Zone	Acres
C1	A	167.36
	AE	203.42
C2	A	9.2
	AE	296.35

4.6.3 Historic and Cultural Resources

Historic resources in Corridor C include five archaeological sites and 15 recorded surveys. The archaeological sites along Corridor C are located on the west side of the roadway both north and south

of the intersection with James Creek Road. Three overlapping sites are located mostly under and to the west of the existing roadway north of the intersection with Taylor Creek Road (Figure 4.6-3). Due to the large number of historical features, the corresponding table can be found in Appendix E.

4.6.4 Threatened and Endangered Species

Corridor C goes through consultation areas for the Caracara, Florida grasshopper sparrow (Segment C1), red-cockaded woodpecker (Segment C1), scrub jay, and snail kite. Corridor C also notably crosses through wood stork core foraging area and critical habitat for the West Indian Manatee. Three black bear nuisance reports and one bear road kill have been reported in the buffer for Segment C1 (Table 4.6-3 and Figure 4.6-4).

Table 4.6-3: Corridor C Biological Evaluation

Feature	Acres	
	C1	C2
Atlantic Coast Plants Consultation Area	0	0
Audubon's Crested Caracara Occurrences in Florida (1992-2009)	0	0
Bald Eagle Nesting Territories	0	0
Black Bear Range	0	0
Black Bear Road Kills	1	0
Caracara Consultation Area	2207.06	602.24
Critical Habitat for the Reticulated Flatwoods Salamander and Frosted Flatwoods	0	0
Critical Habitat in Florida for the West Indian Manatee - 2005	0.15	3.76
Crocodile Consultation Area	0	0
Ecosystem Management Areas	2,207.06	602.24
FWC 1999 Wading Bird Rookery Surveys	0	0
FWC Black Bear Nuisance Reports	3	0
Final Designation of Critical Habitat in Florida for the Elkhorn and Staghorn Corals - 2009	0	0
Final Designation of Critical Habitat in Florida for the Smalltooth Sawfish - 2009	0	0
Florida Forever BOT Projects	0	0
Florida Grasshopper Sparrow Consultation Area	656.09	0
Florida Managed Areas	245.47	28.42
Florida National Wildlife Refuges	0	0
Florida Panther Mortality (1972 through August 2010)	0	0
Florida Sand Skink and Blue-tailed (Bluetail) Mole Skink Suitability	0	0
Florida State Parks	0	0
Freshwater Mussels Critical Habitat	0	0
Gopher Tortoise Relocation Permit Recipient Sites in Florida	0	0
Gulf Sturgeon Critical Marine Habitat	0	0
Gulf Sturgeon Critical Riverine Habitat	0	0
Lake Wales Ridge Plants Consultation Area	0	0
Manatee Consultation Area	0	0

Feature	Acres	
	C1	C2
National Park Projects	0.17	37.58
National Parks and Seashores	0	0
Okeechobee Gourd Consultation Area	0	0
Panther Consultation Area	0	0
Panther Zones	0	0
Piping Plover Locations	0	0
Piping Plover Consultation Area	0	0
Piping Plover Critical Habitat	0	0
Public Land	249.28	31.28
Rare and Imperiled Fish	0	0
Red-Cockaded Woodpecker Consultation Area	2,064.70	0
Red-cockaded Woodpecker Active and Inactive Occurrences in Florida - 2005	0	0
Sand Skink Consultation Area	0	0
Scrub Jay Consultation Area	2,208.83	602.72
Scrub Jay Occurrences in Florida (1992-1993)	0	0
Short-Tailed Hawk and Swallow-Tailed Kite Nests	0	0
Snail Kite Consultation Area	2,207.06	602.24
Snail Kite Critical Habitat	0	0
Snail Kite Priority Management Zones	0	0
Snowy Plover Nest Locations 2006	0	0
TNC Ecological Resource Conservation Areas	1,363.40	432.24
Wood Stork Core Foraging Areas	2,207.06	602.24
Wood Stork Nests	0	0

4.6.5 Noise Evaluation

The Segment C1 buffer in rural Orange County includes a number of potential noise sensitive receptors. There are 256 residential parcels in the Segment C2 buffer, largely on the north side of the corridor as I-95 is approached from the west (Table 4.6-4 and Figure 4.6-5).

Table 4.6-4: Corridor C Potential Noise Sensitive Receptors

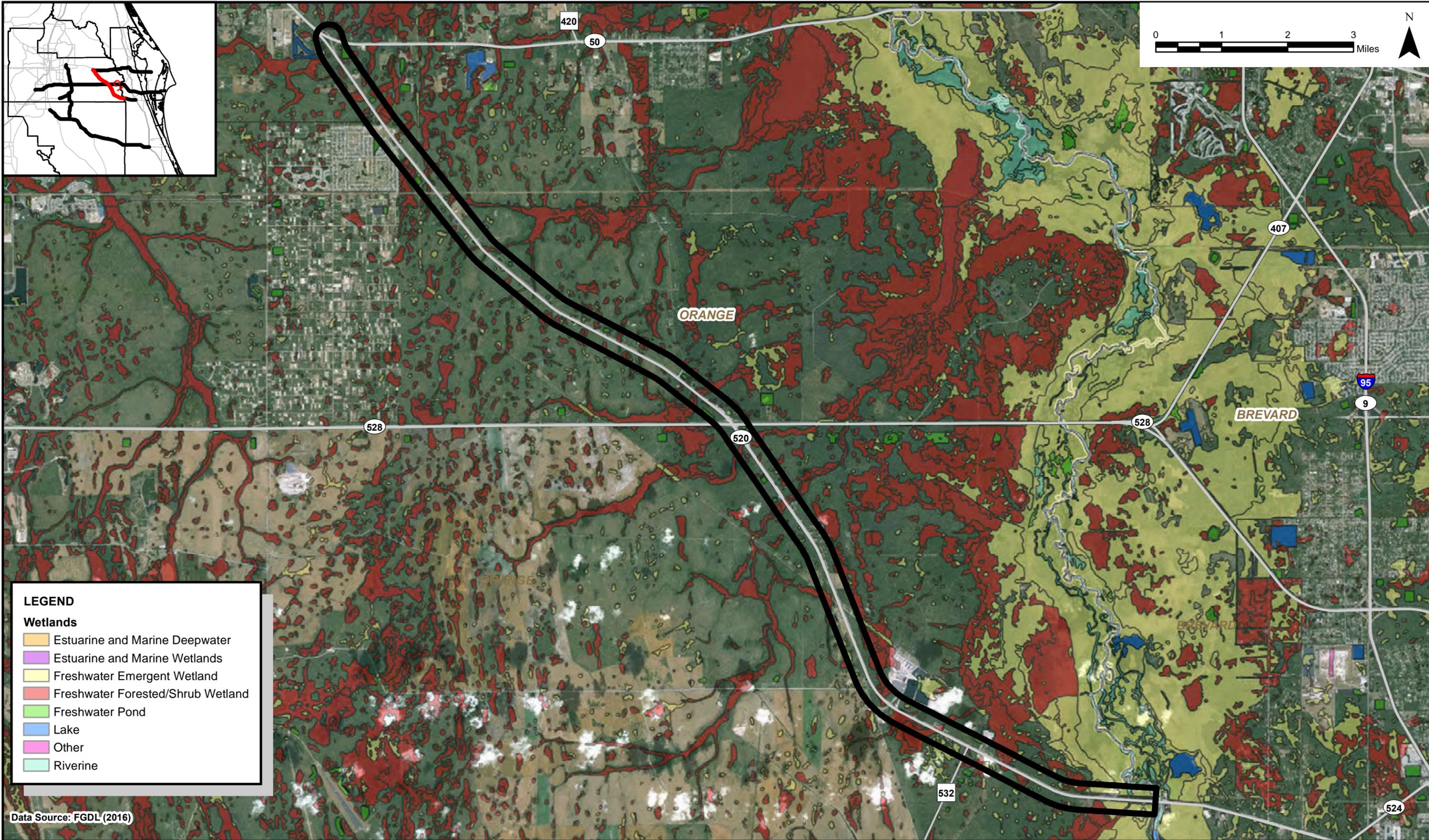
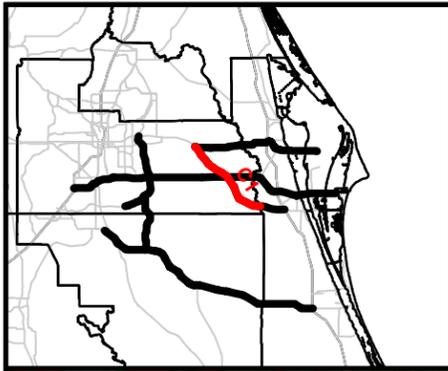
Segment	Type	Name	Count
C1	Florida Managed Areas	Pine Lily Preserve	
	Florida Managed Areas	Tosohatchee Wildlife Management Area	
	Florida Managed Areas	Orange County - Hal Scott Preserve Conservation Easement	
	Florida Managed Areas	Hal Scott Regional Preserve And Park	
	School	Wedgfield Montessori Exchange	
	Housing Parcels	Single Family Residential	24
	Housing Parcels	Manufactured Home	3
	Housing Parcels	Multi-Family Residential	2
	C2	Florida Managed Areas	Tosohatchee Wildlife Management Area
Florida Managed Areas		Canaveral Marshes Conservation Area	
Marine Facility		F. Burton Smith Regional Park	
Marine Facility		James G. Bourbeau Memorial Park	
Marine Facility		Leroy Wright Recreation Area	
Group Care		Einstein Montessori Academy	
Housing Parcels		2 Residential Units	3
Housing Parcels		3 or 4 Living Units	1
Housing Parcels		Single Family Residential	63
Housing Parcels		Mobile Homes	14
Housing Parcels		Manufactured Housing Park	1
Housing Parcels		Condominiums	174

4.6.6 Contamination

The density of potential sources of contamination sites is predominantly at the end of Segment C2 and includes four fuel stations/convenience stores (Table 4.6-5 and Figure 4.6-6).

Table 4.6-5: Corridor C Potential Sources of Contamination

Segment	Type	Name
C1	DEP Cleanup Site	Timesaver Food Store #57
C2	DEP Cleanup Site	Kwik Stop
	DEP Cleanup Site	Sunshine Food Mart #26
	DEP Cleanup Site	Sunshine Food Mart #167
	DEP Cleanup Site	Former Chevron

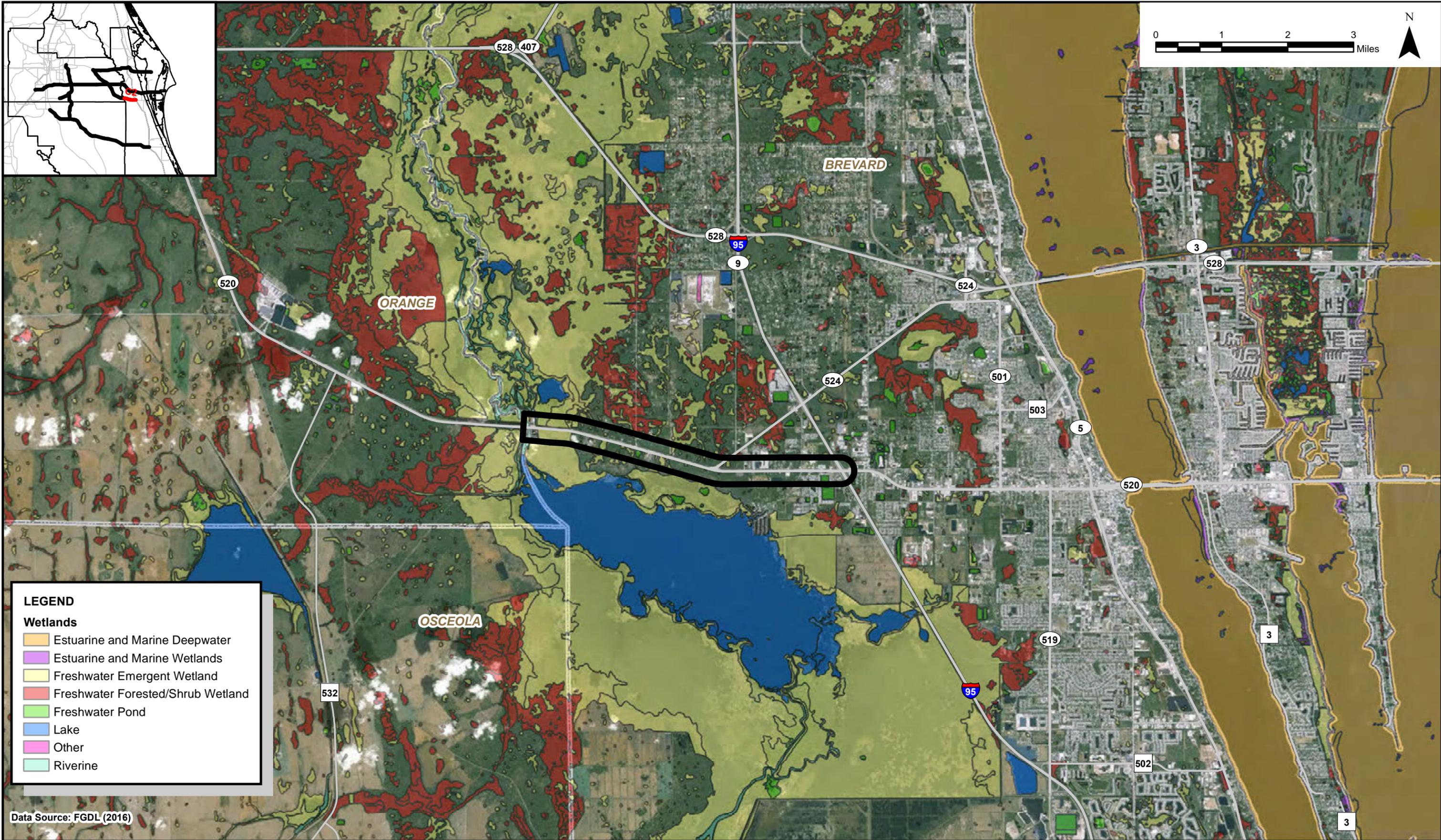


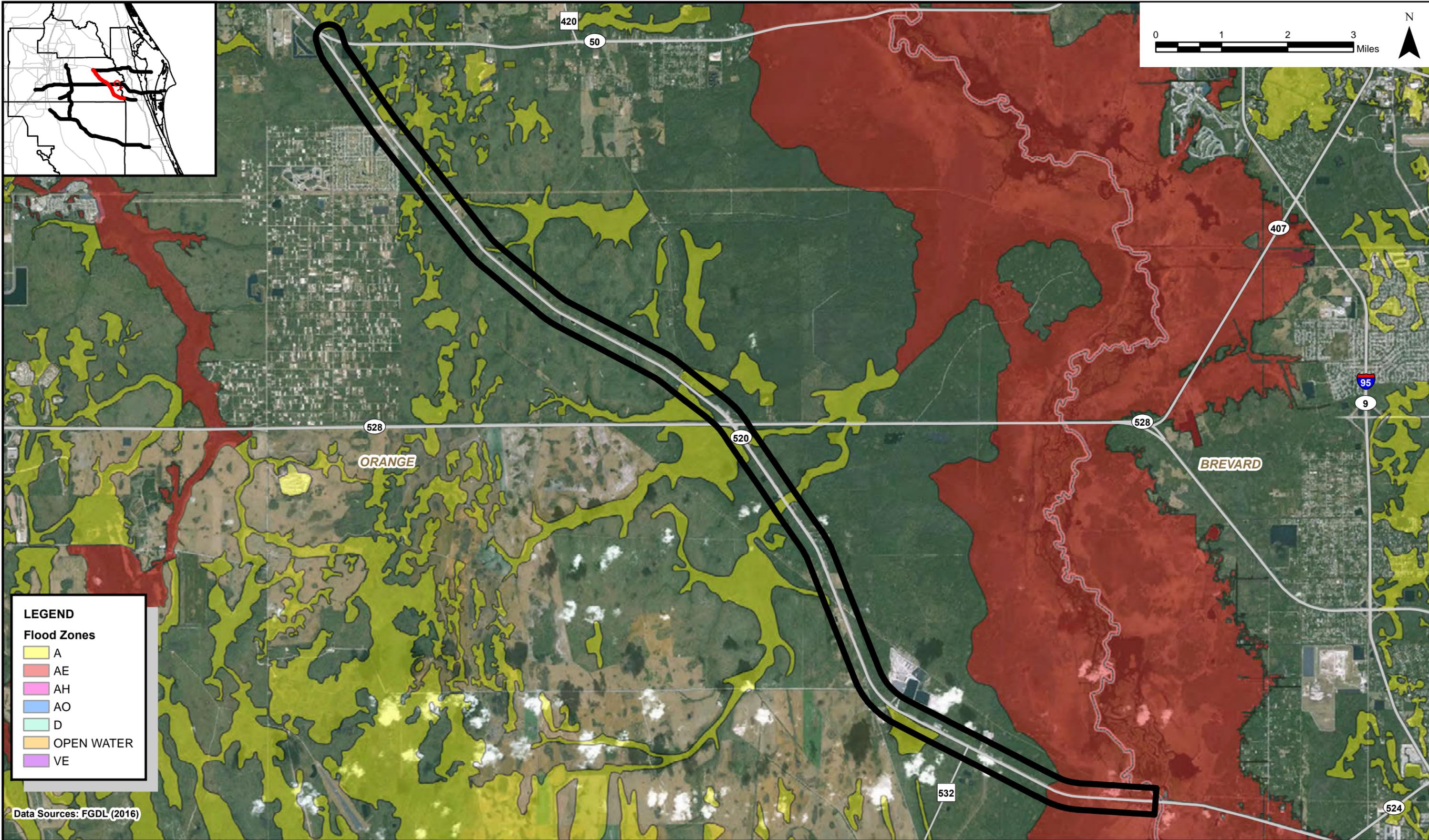
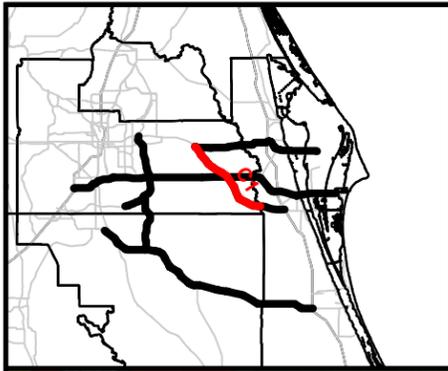
LEGEND

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetlands
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Data Source: FGDL (2016)





LEGEND

Flood Zones

- A
- AE
- AH
- AO
- D
- OPEN WATER
- VE

Data Sources: FGDL (2016)

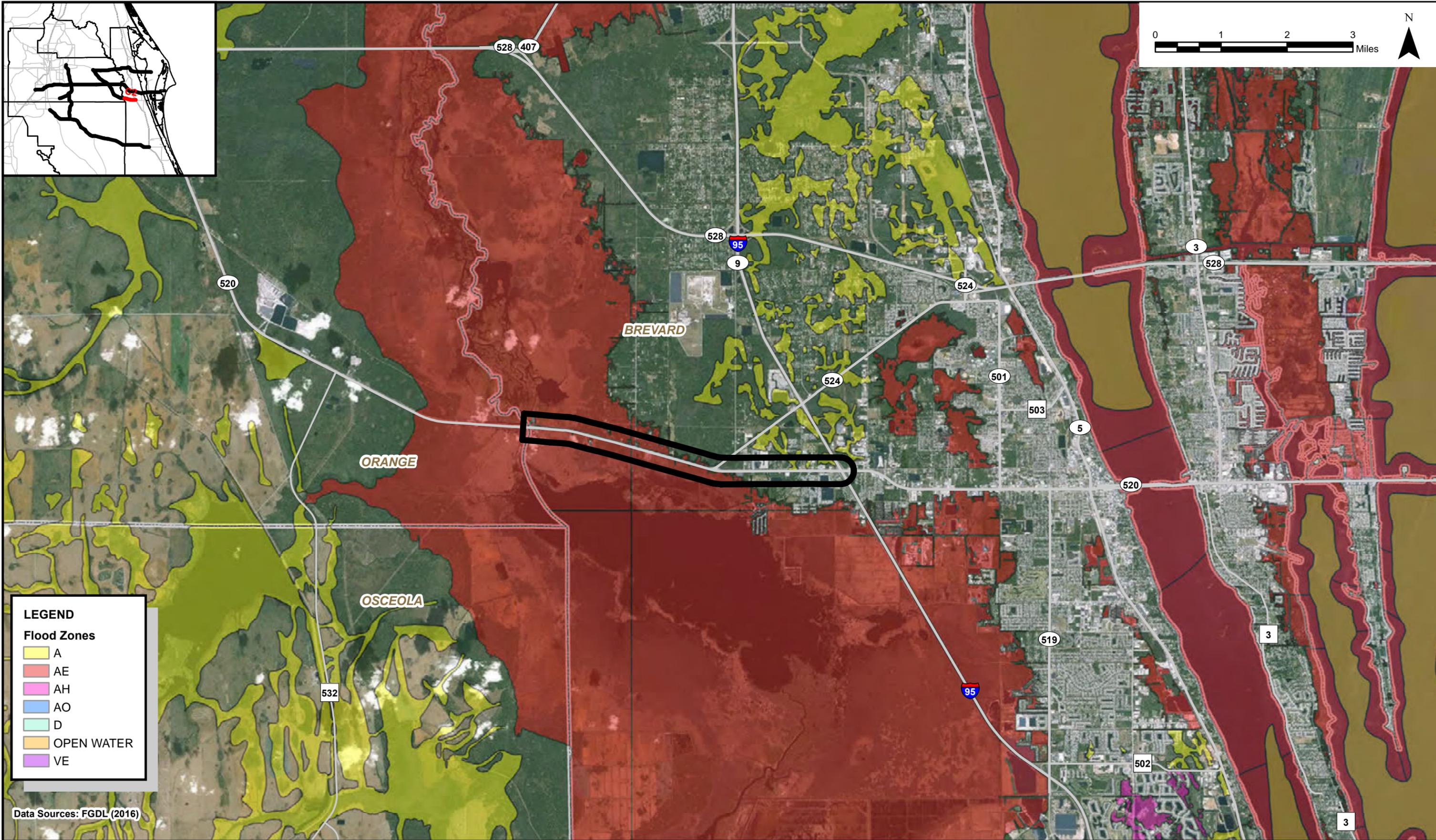
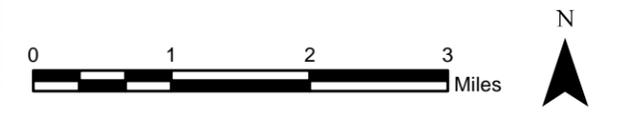
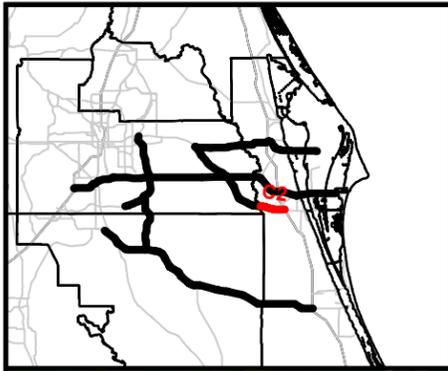


East Central Florida Corridor Evaluation Study



Corridor C Flood Zones

FIGURE
4.6-2
SEGMENT C1



LEGEND

Flood Zones

Yellow	A
Red	AE
Pink	AH
Blue	AO
Light Green	D
Orange	OPEN WATER
Purple	VE

Data Sources: FGDL (2016)



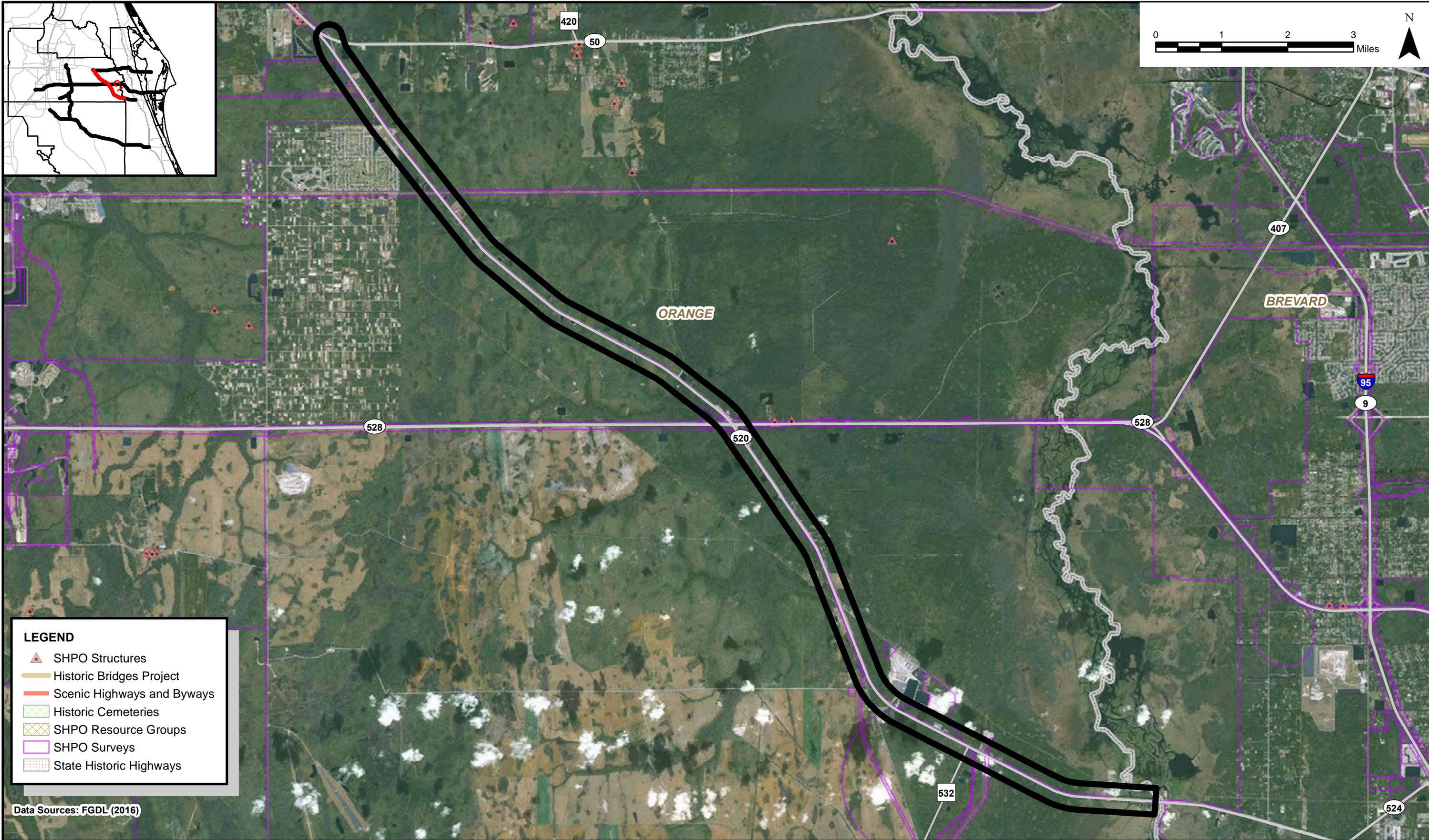
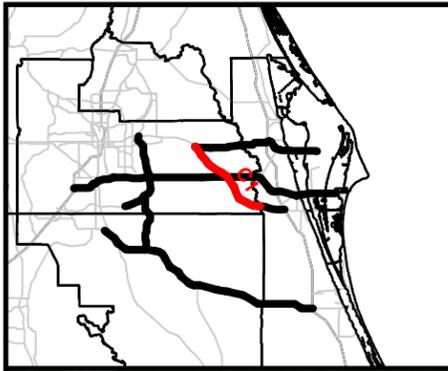
East Central Florida Corridor Evaluation Study



Corridor C Flood Zones

**FIGURE
4.6-2**

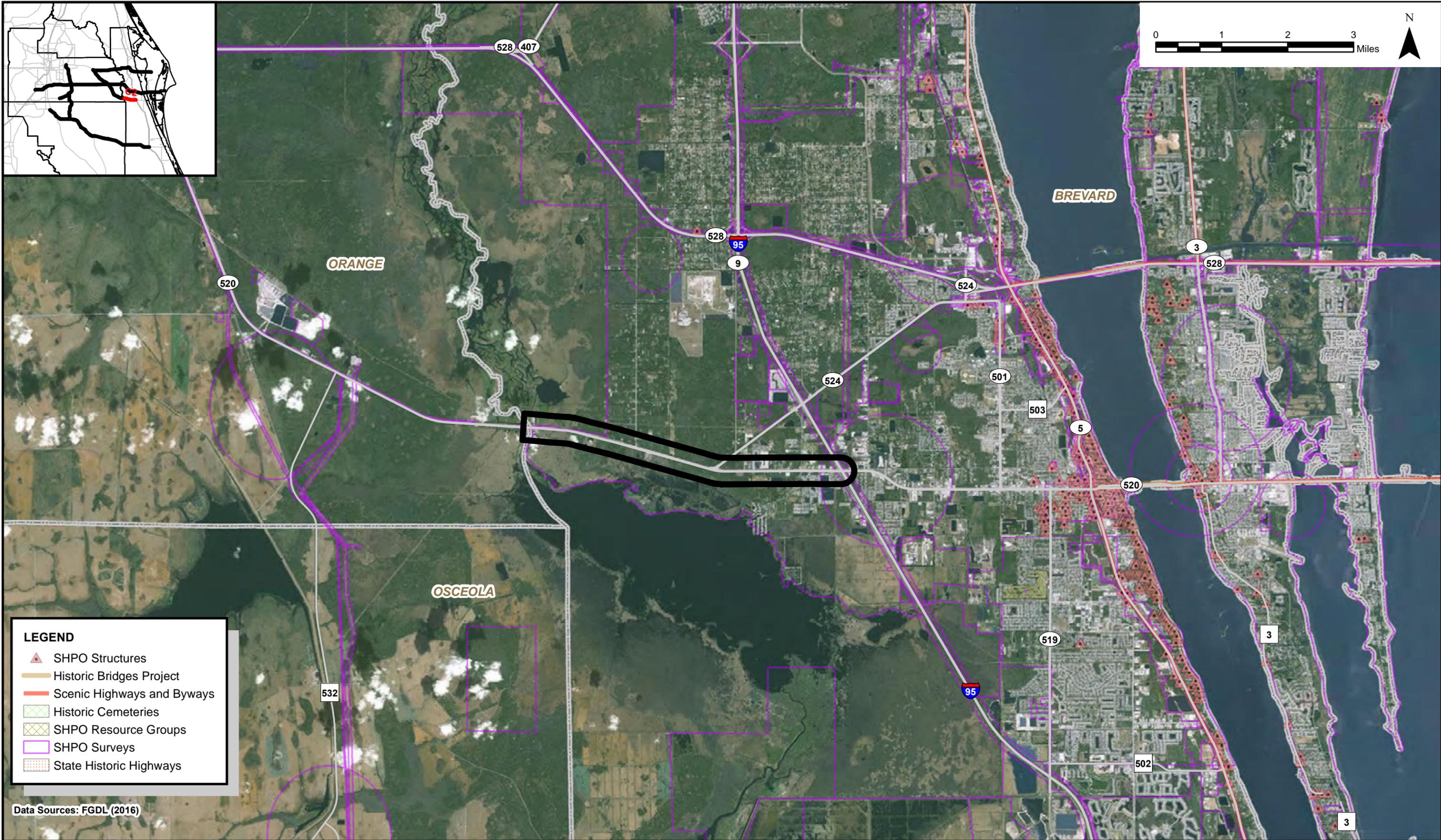
SEGMENT C2



LEGEND

-  SHPO Structures
-  Historic Bridges Project
-  Scenic Highways and Byways
-  Historic Cemeteries
-  SHPO Resource Groups
-  SHPO Surveys
-  State Historic Highways

Data Sources: FGDL (2016)

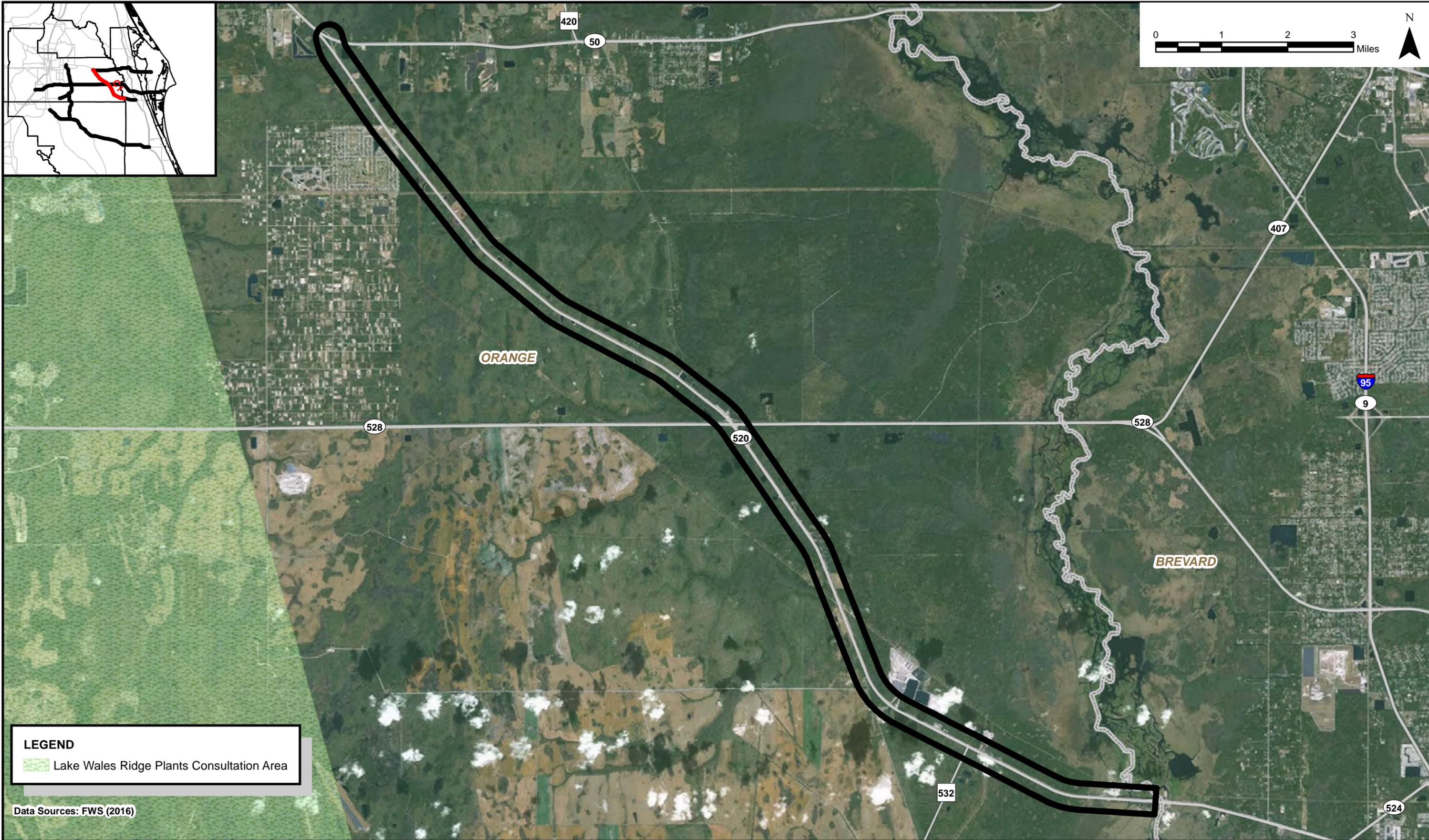
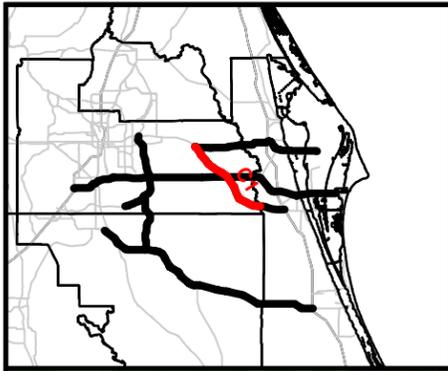


LEGEND

- ▲ SHPO Structures
- Historic Bridges Project
- Scenic Highways and Byways
- ▨ Historic Cemeteries
- ▨ SHPO Resource Groups
- ▭ SHPO Surveys
- ▨ State Historic Highways

Data Sources: FGDL (2016)





LEGEND
 Lake Wales Ridge Plants Consultation Area

Data Sources: FWS (2016)

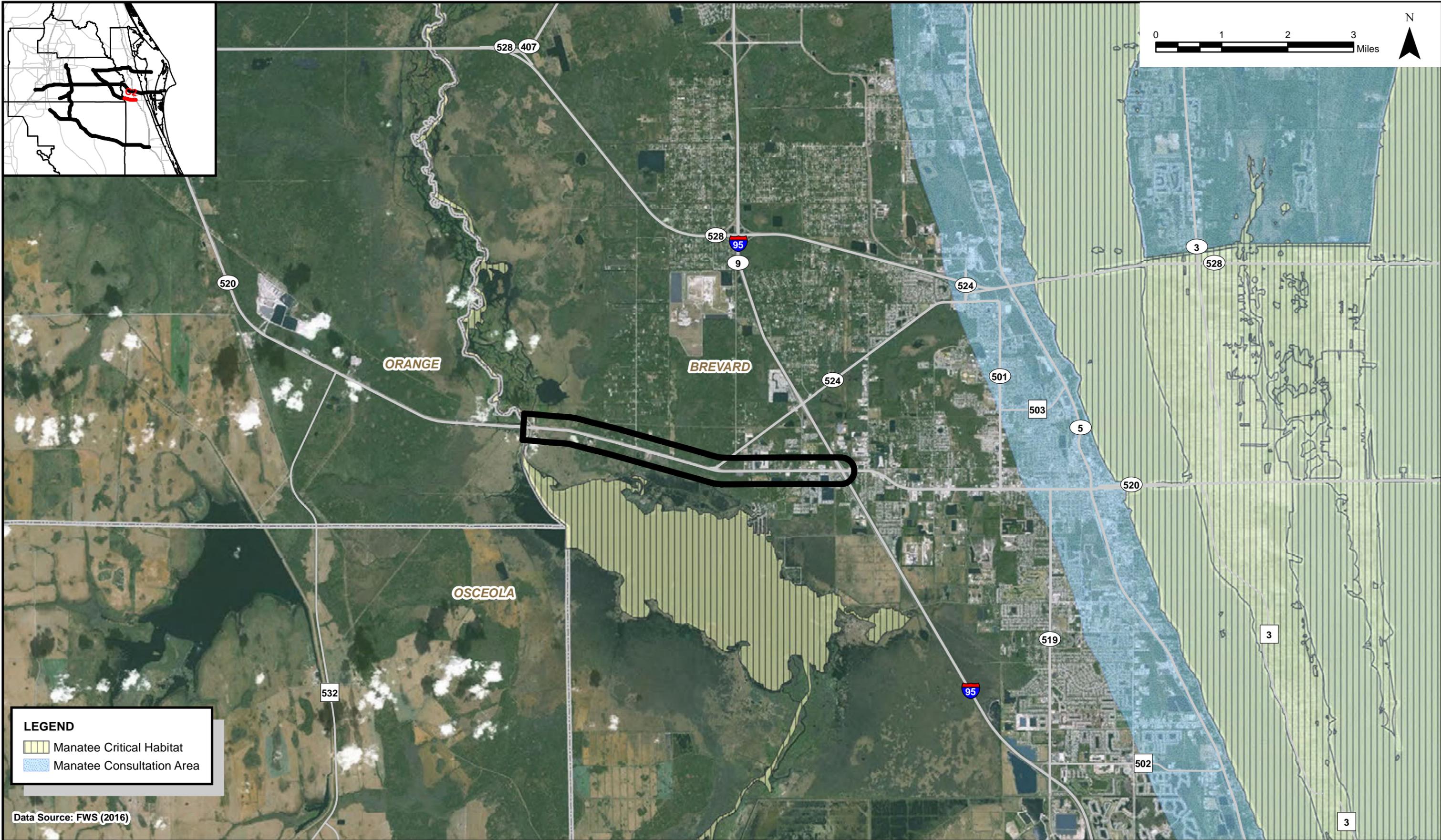
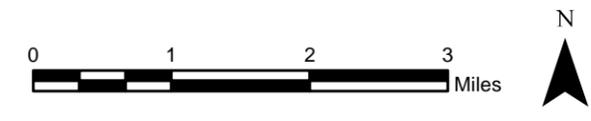
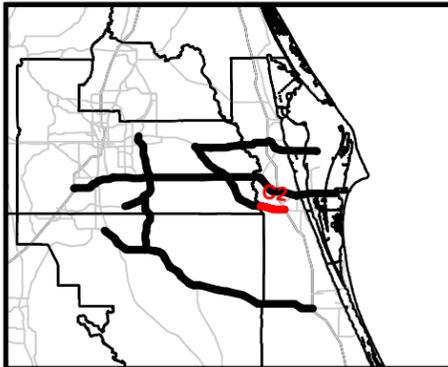


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species (Plants)

FIGURE
4.6-4
 SEGMENT C1



LEGEND

-  Manatee Critical Habitat
-  Manatee Consultation Area

Data Source: FWS (2016)

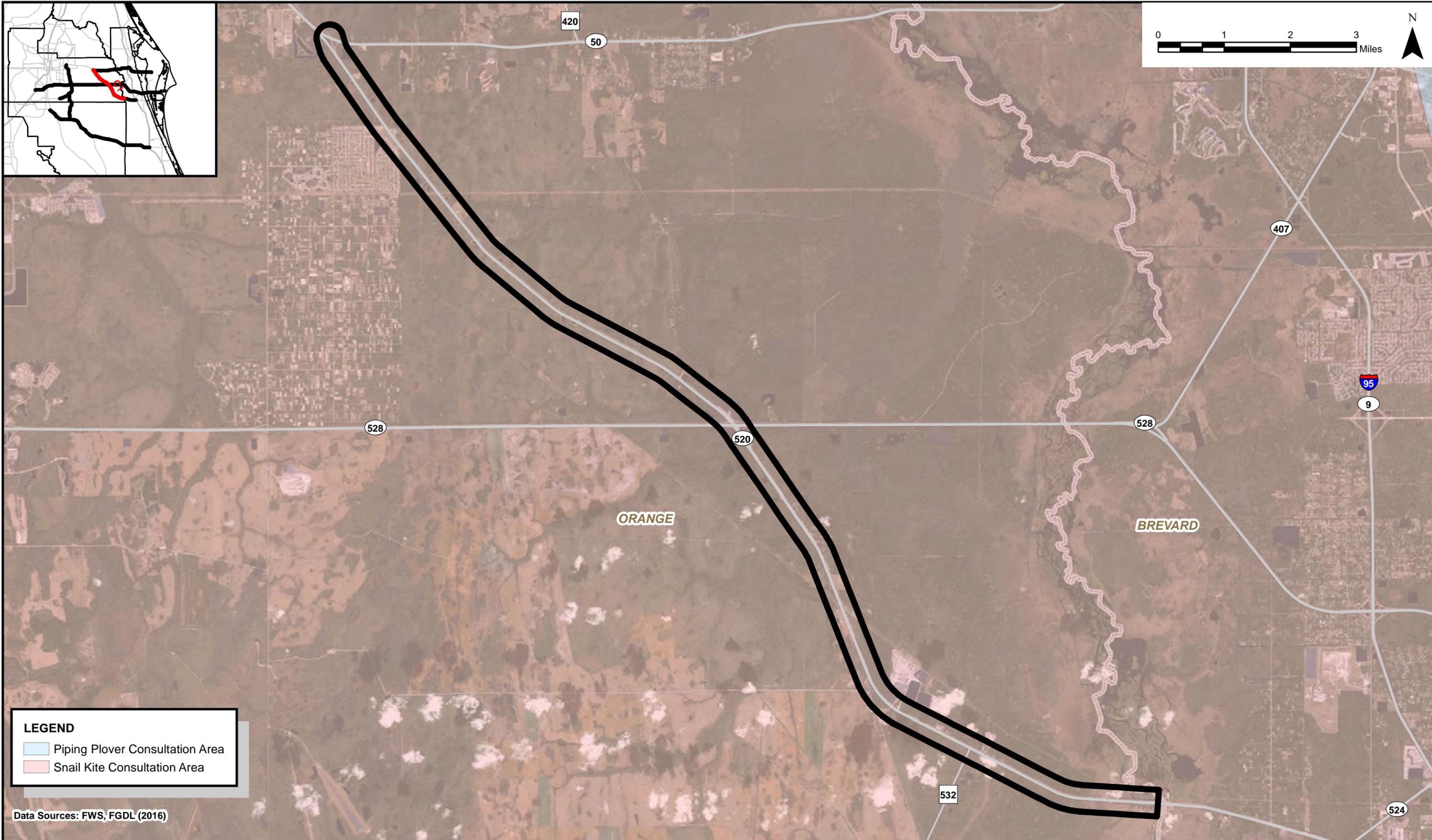
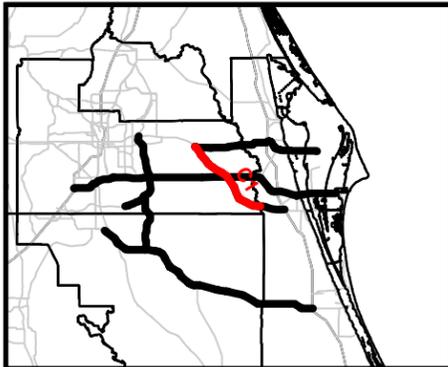


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species (Manatee)

FIGURE
4.6-4
SEGMENT C2



LEGEND

-  Piping Plover Consultation Area
-  Snail Kite Consultation Area

Data Sources: FWS, FGDL (2016)

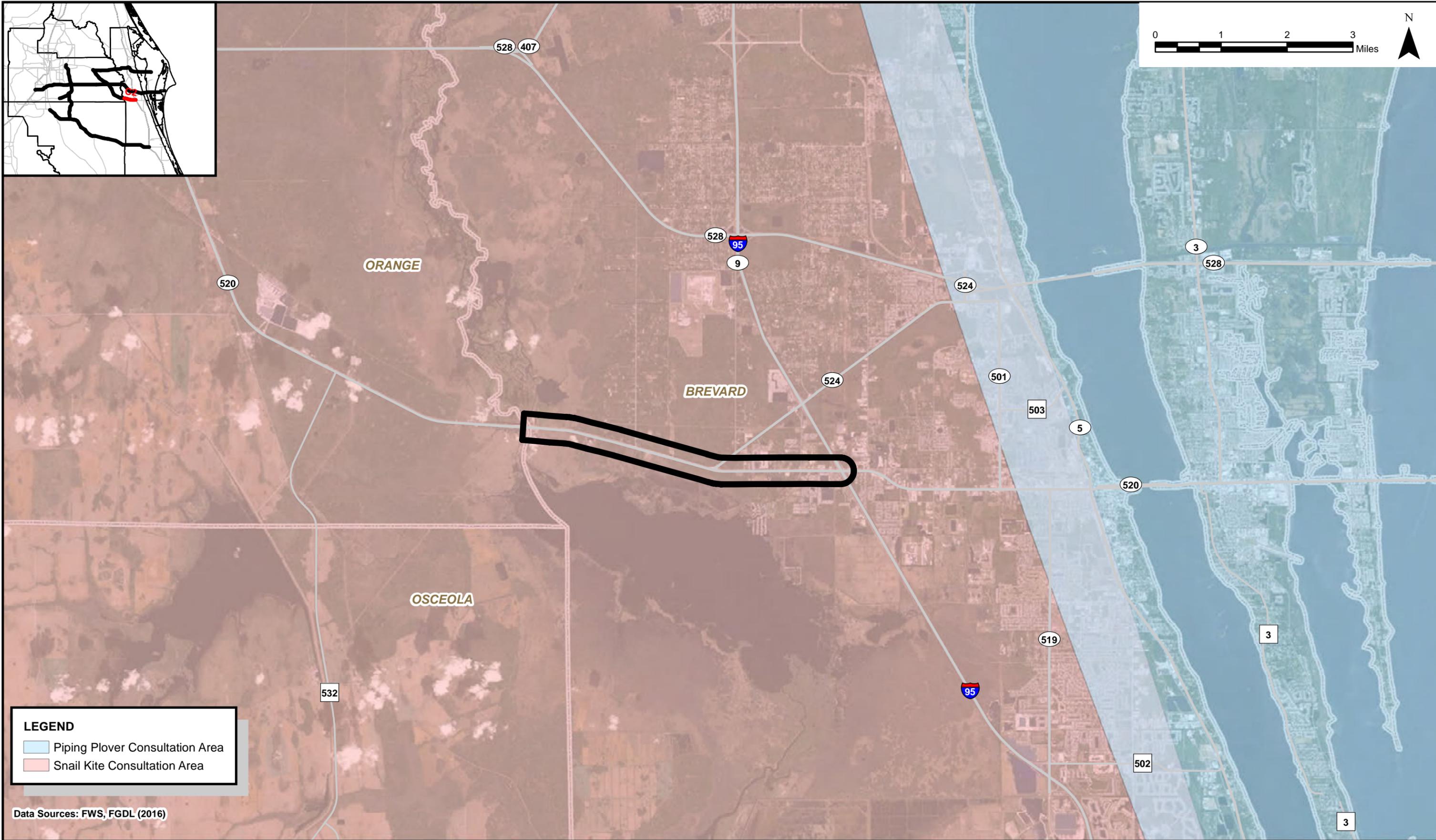
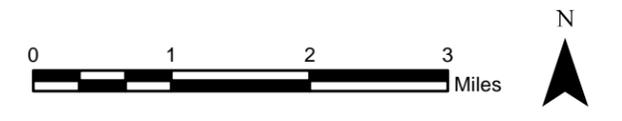
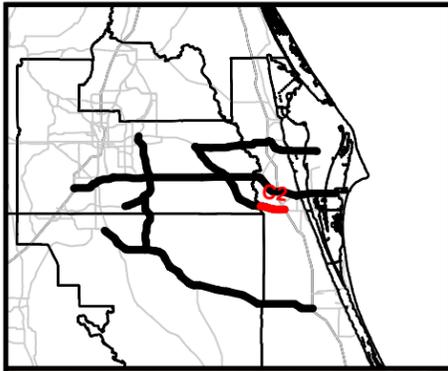


East Central Florida Corridor Evaluation Study



**Corridor B
Threatened and Endangered Species
(Piping Plover and Snail Kite)**

**FIGURE
4.6-4
SEGMENT C1**



LEGEND

- Piping Plover Consultation Area
- Snail Kite Consultation Area

Data Sources: FWS, FGDL (2016)

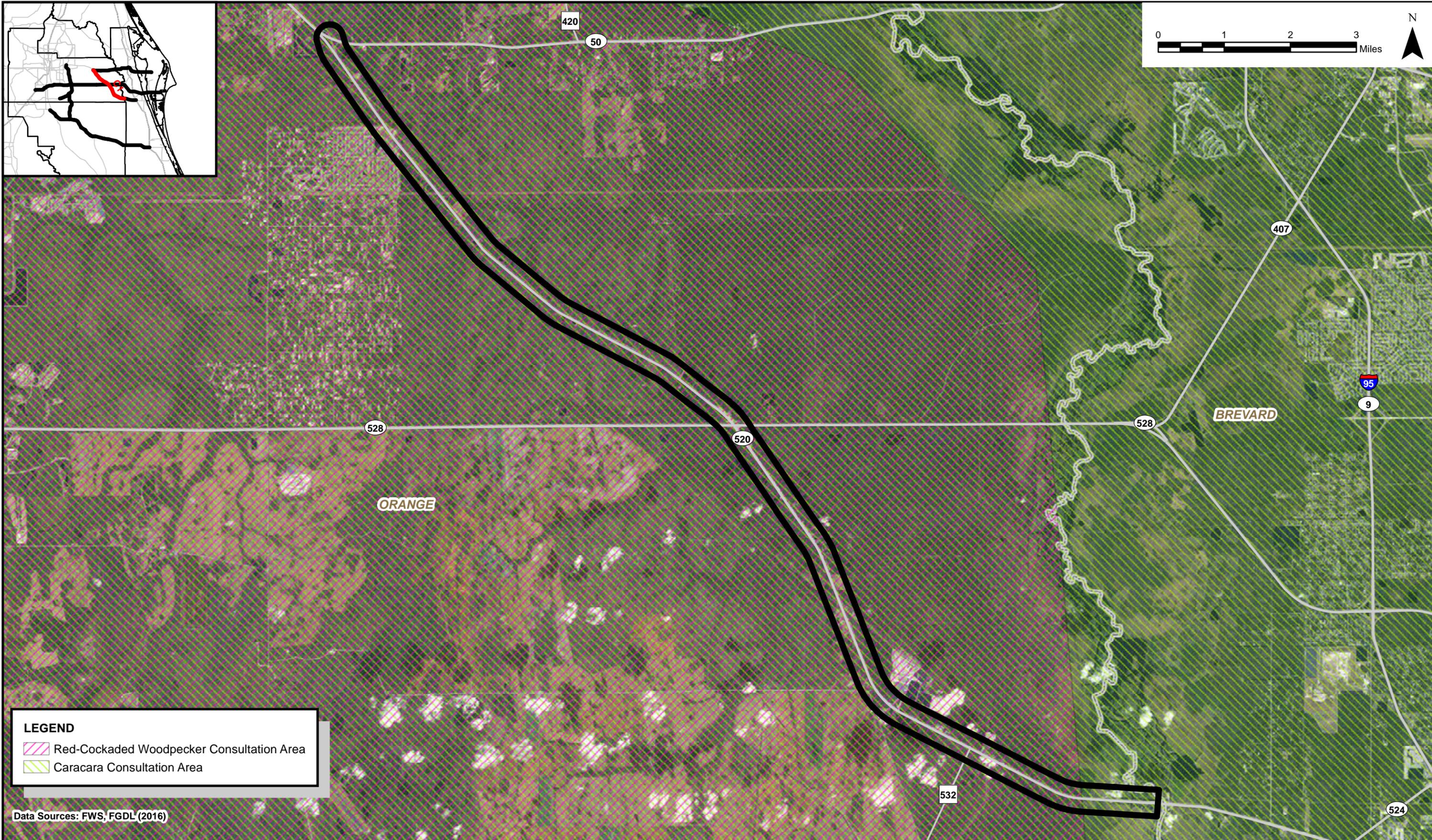
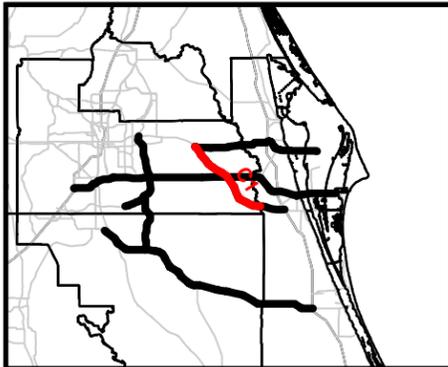


East Central Florida Corridor Evaluation Study



Corridor B
Threatened and Endangered Species
(Piping Plover and Snail Kite)

FIGURE
4.6-4
SEGMENT C2



LEGEND

- Red-Cockaded Woodpecker Consultation Area
- Caracara Consultation Area

Data Sources: FWS, FGDL (2016)

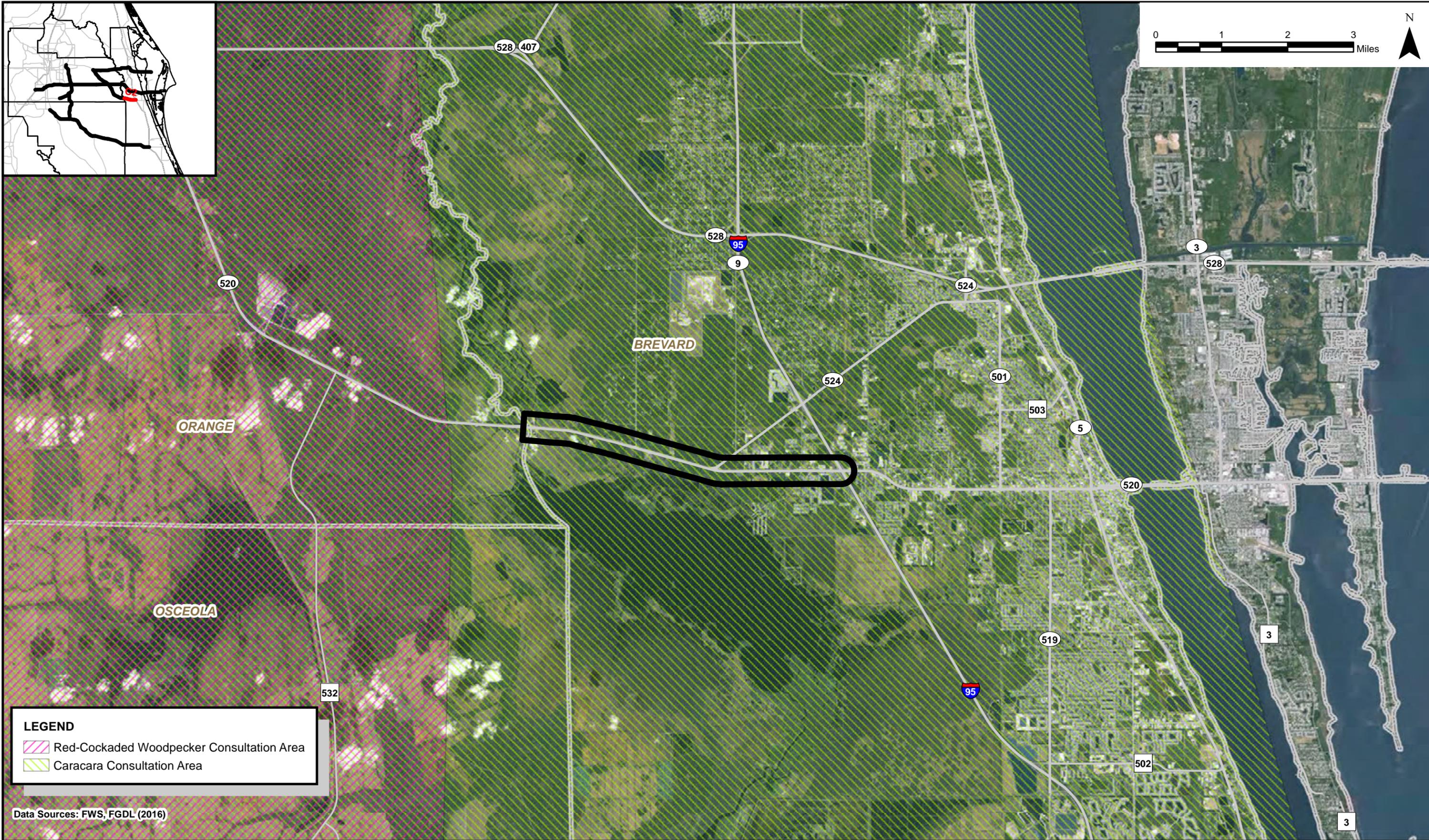
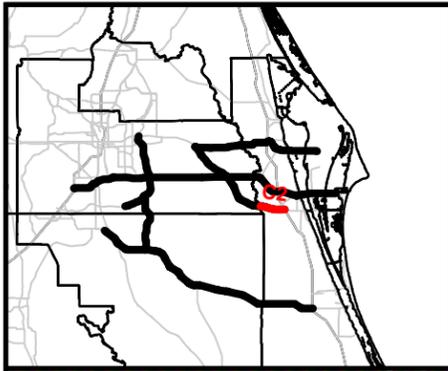


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Red-Cockaded Woodpecker and Caracara)

FIGURE
4.6-4
SEGMENT C1



LEGEND

- Red-Cockaded Woodpecker Consultation Area
- Caracara Consultation Area

Data Sources: FWS, FGDL (2016)

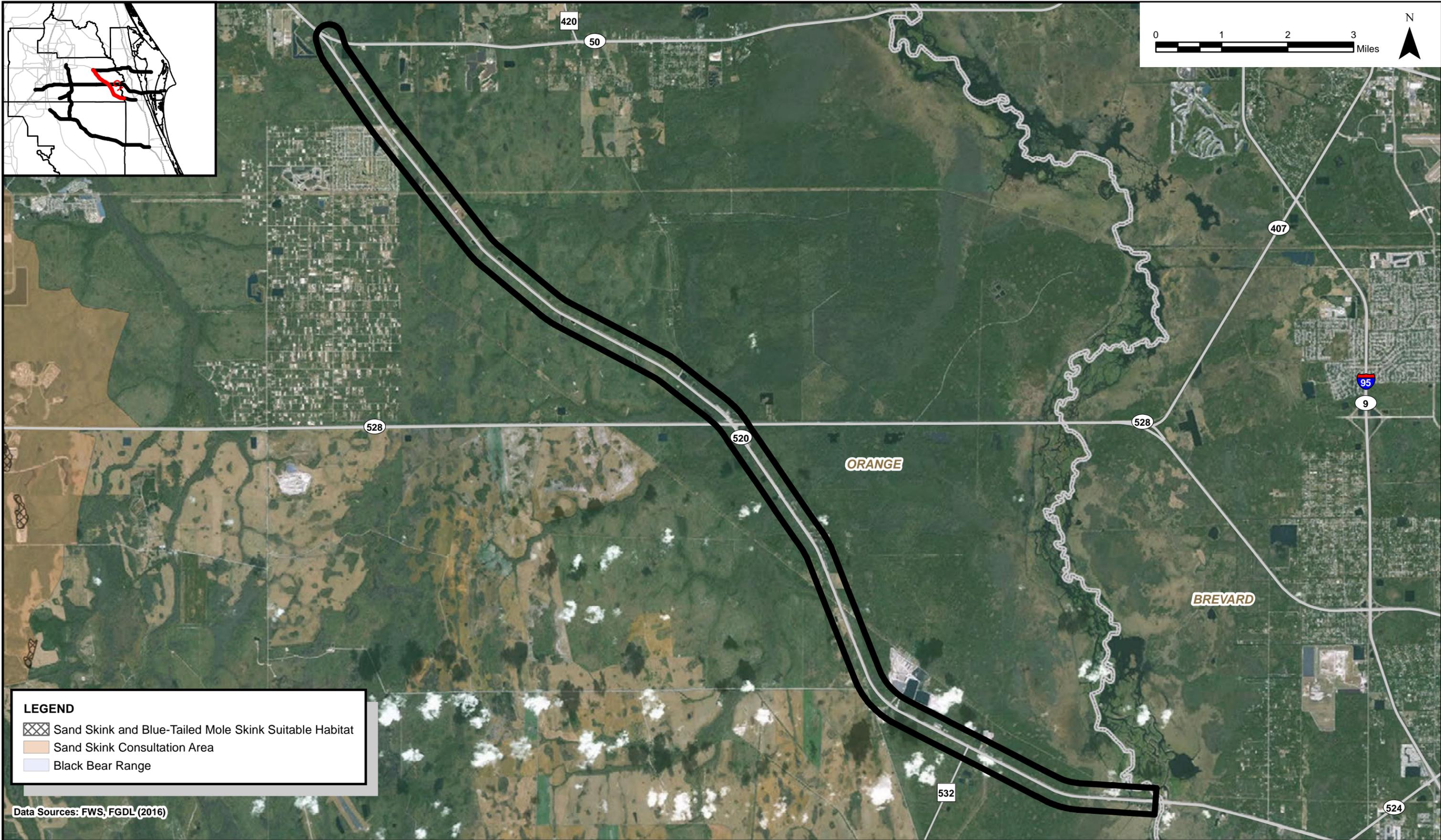
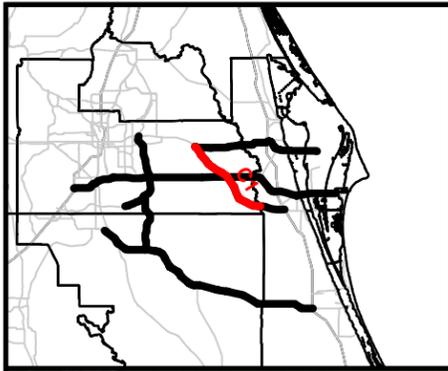


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Red-Cockaded Woodpecker and Caracara)

FIGURE
4.6-4
SEGMENT C2



LEGEND

- Sand Skink and Blue-Tailed Mole Skink Suitable Habitat
- Sand Skink Consultation Area
- Black Bear Range

Data Sources: FWS, FGDL (2016)

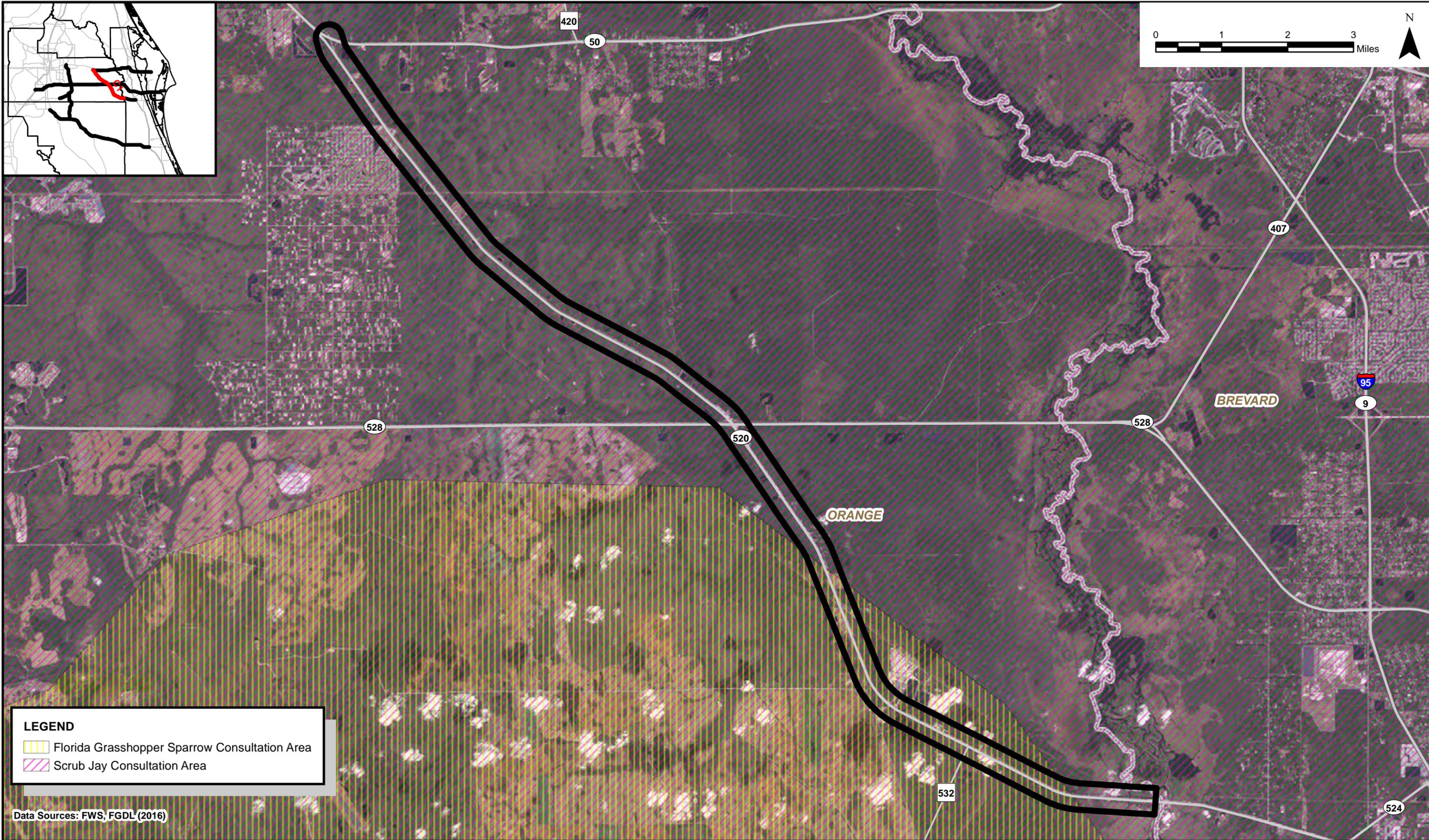
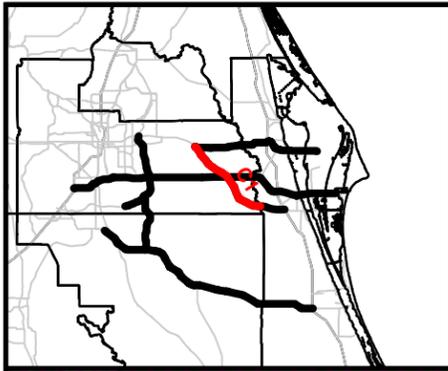


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Sand Skink, Blue-Tailed Mole Skink and Black Bear)

FIGURE
4.6-4
SEGMENT C1



LEGEND

- Florida Grasshopper Sparrow Consultation Area
- Scrub Jay Consultation Area

Data Sources: FWS, FGDL (2016)

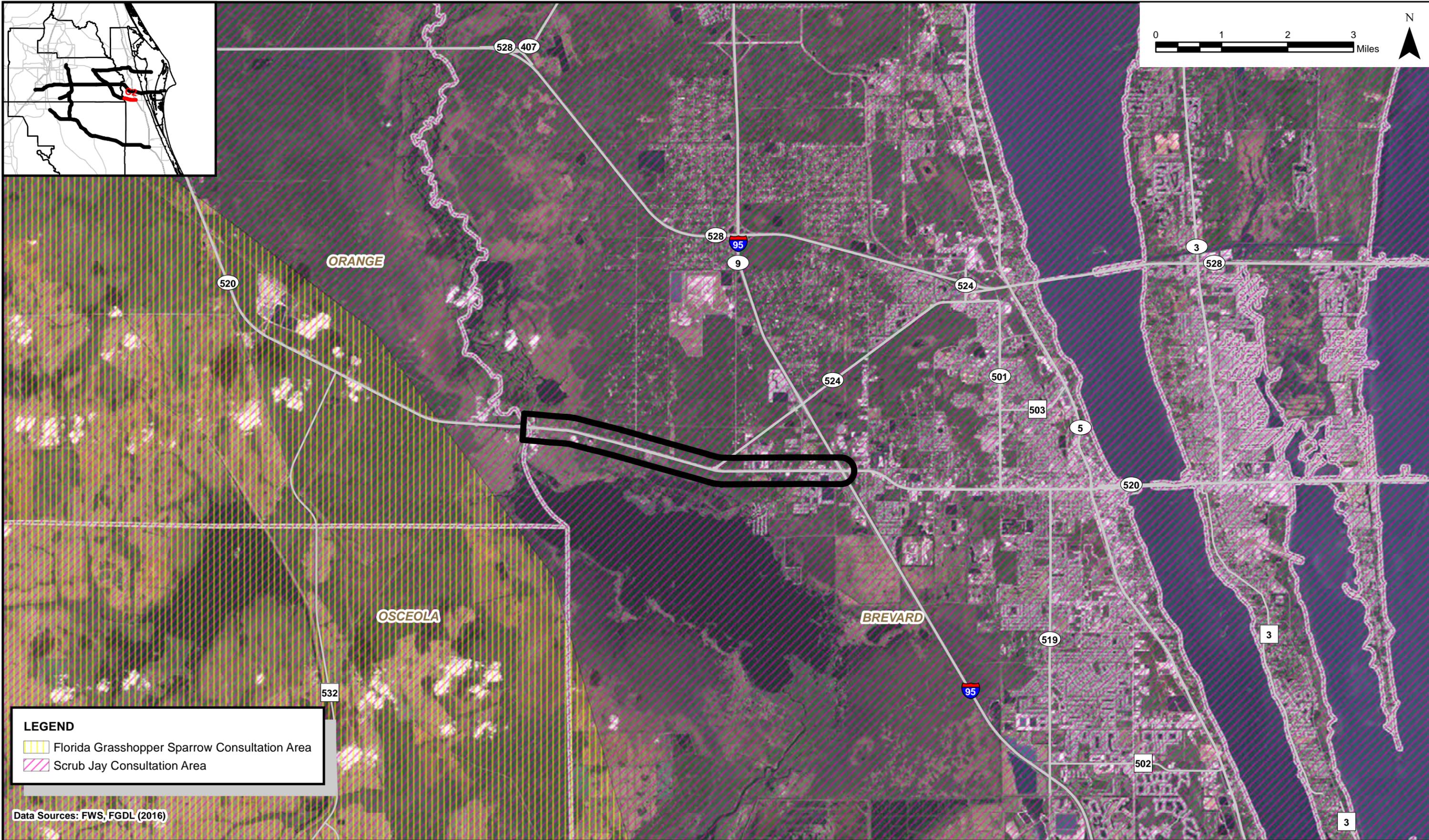
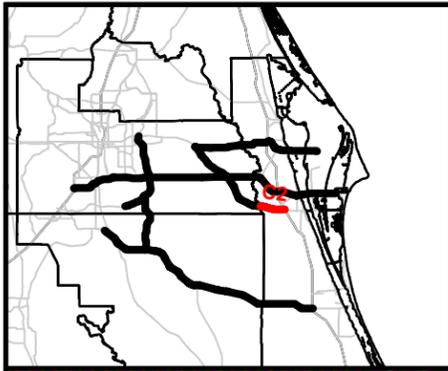


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Grasshopper Sparrow and Scrub Jay)

FIGURE
4.6-4
SEGMENT C1



LEGEND

-  Florida Grasshopper Sparrow Consultation Area
-  Scrub Jay Consultation Area

Data Sources: FWS, FGDL (2016)

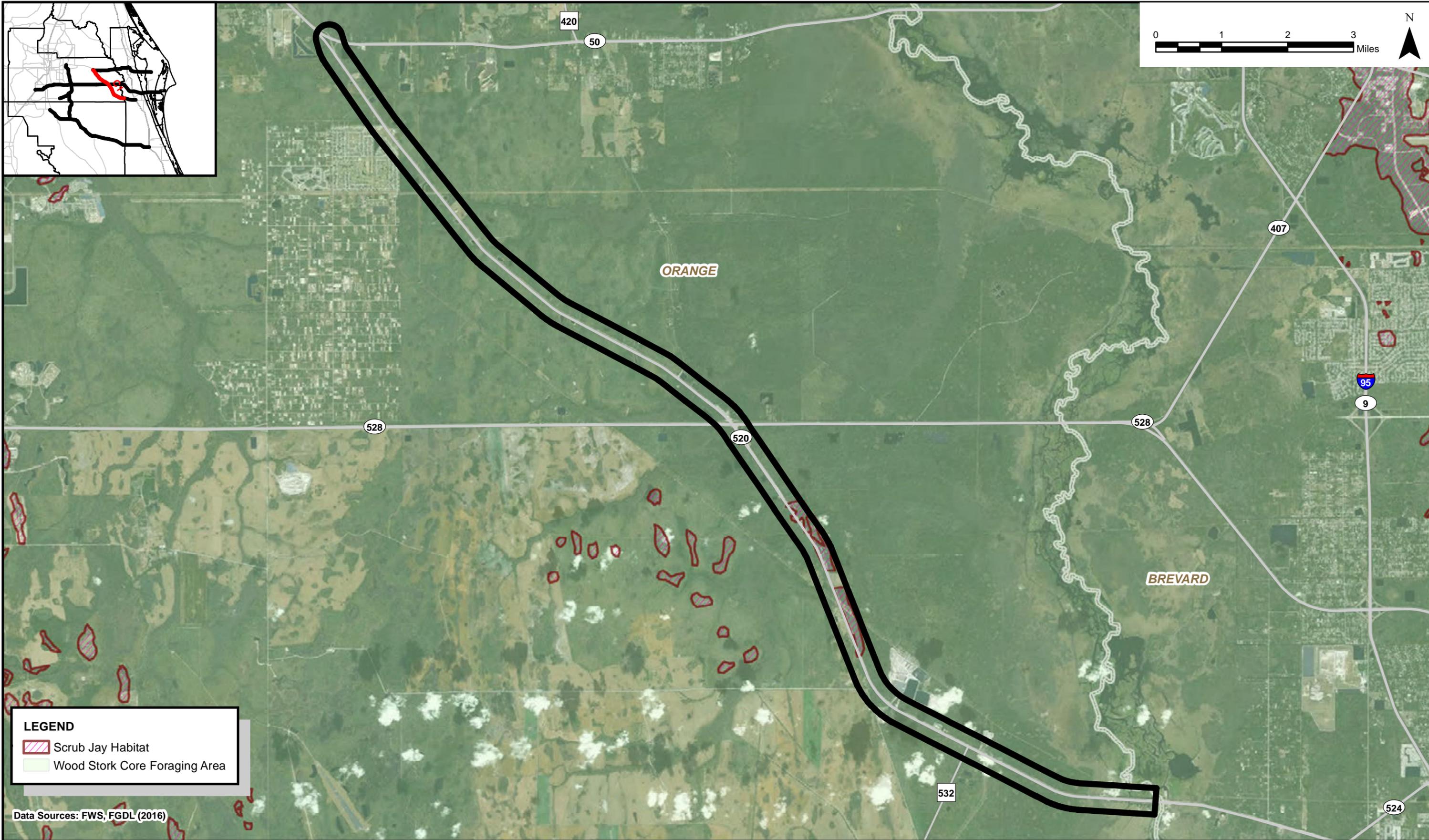
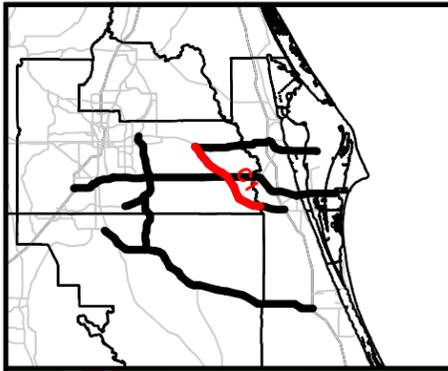


East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Grasshopper Sparrow and Scrub Jay)

FIGURE
4.6-4
SEGMENT C2



LEGEND

- Scrub Jay Habitat
- Wood Stork Core Foraging Area

Data Sources: FWS, FGDL (2016)



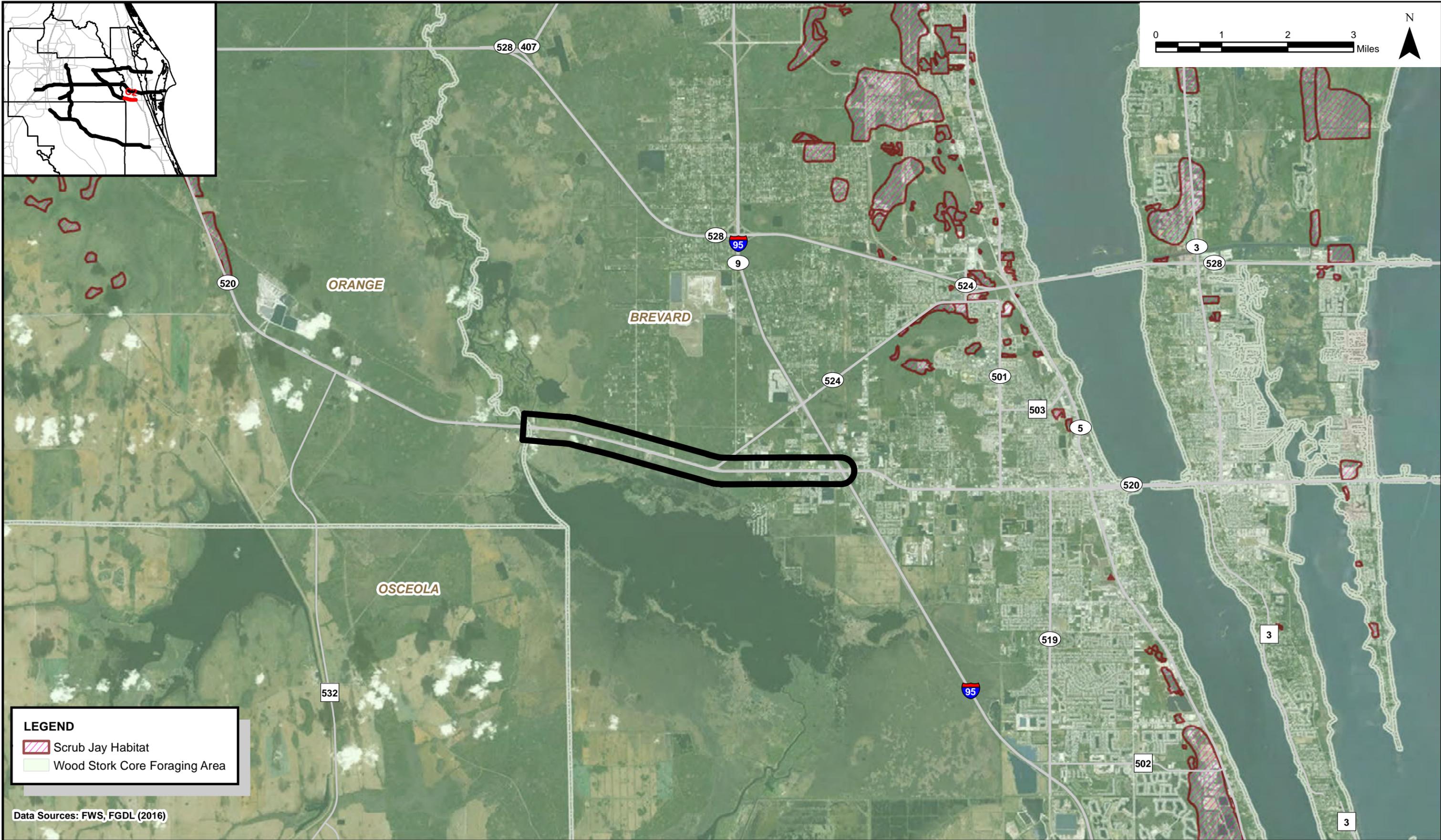
East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Scrub Jay and Wood Stork)

FIGURE
4.6-4

SEGMENT C1



LEGEND

-  Scrub Jay Habitat
-  Wood Stork Core Foraging Area

Data Sources: FWS, FGDL (2016)



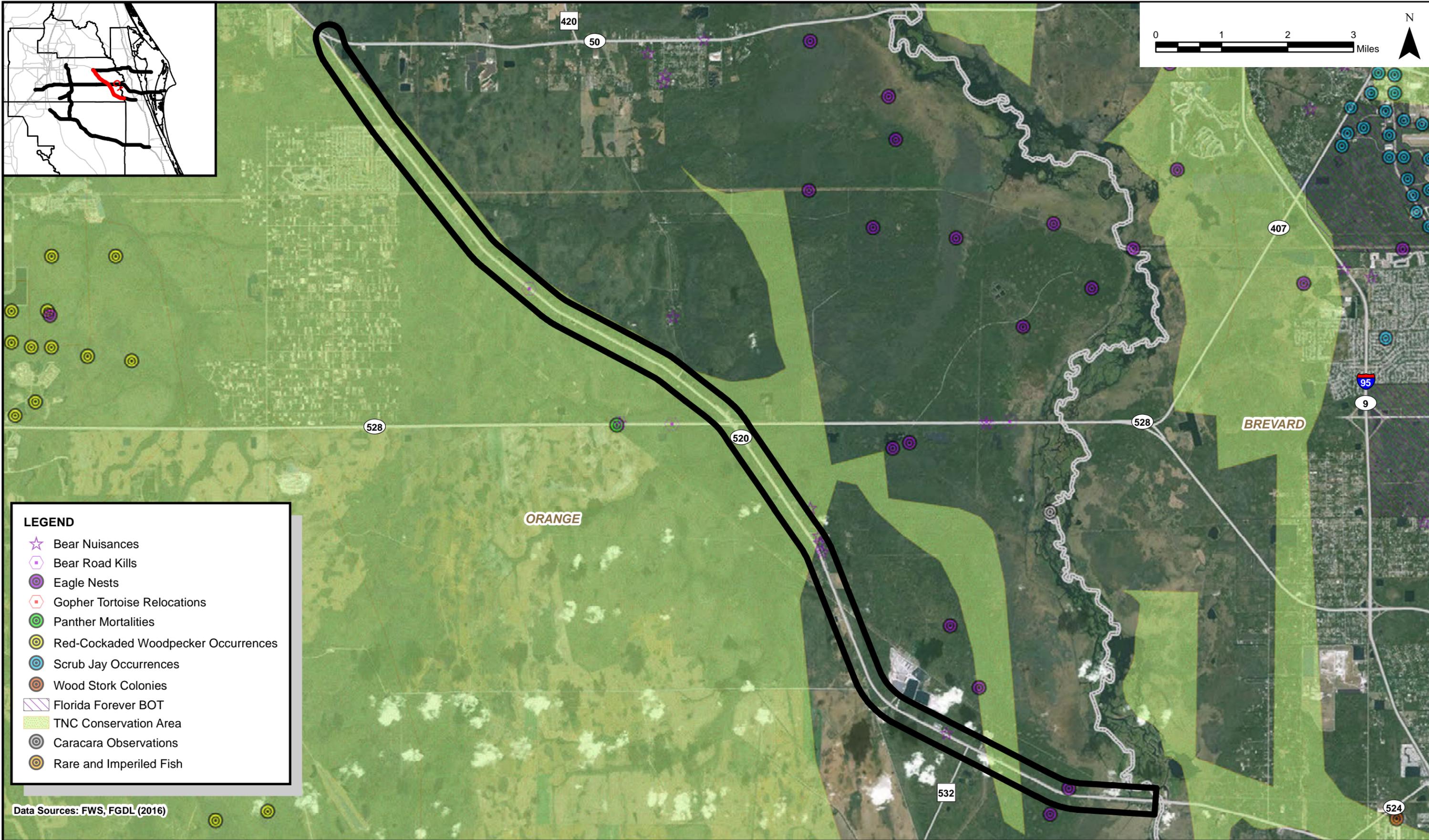
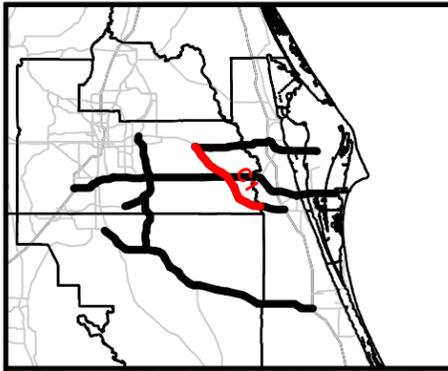
East Central Florida Corridor Evaluation Study



Corridor C
Threatened and Endangered Species
(Scrub Jay and Wood Stork)

FIGURE
4.6-4

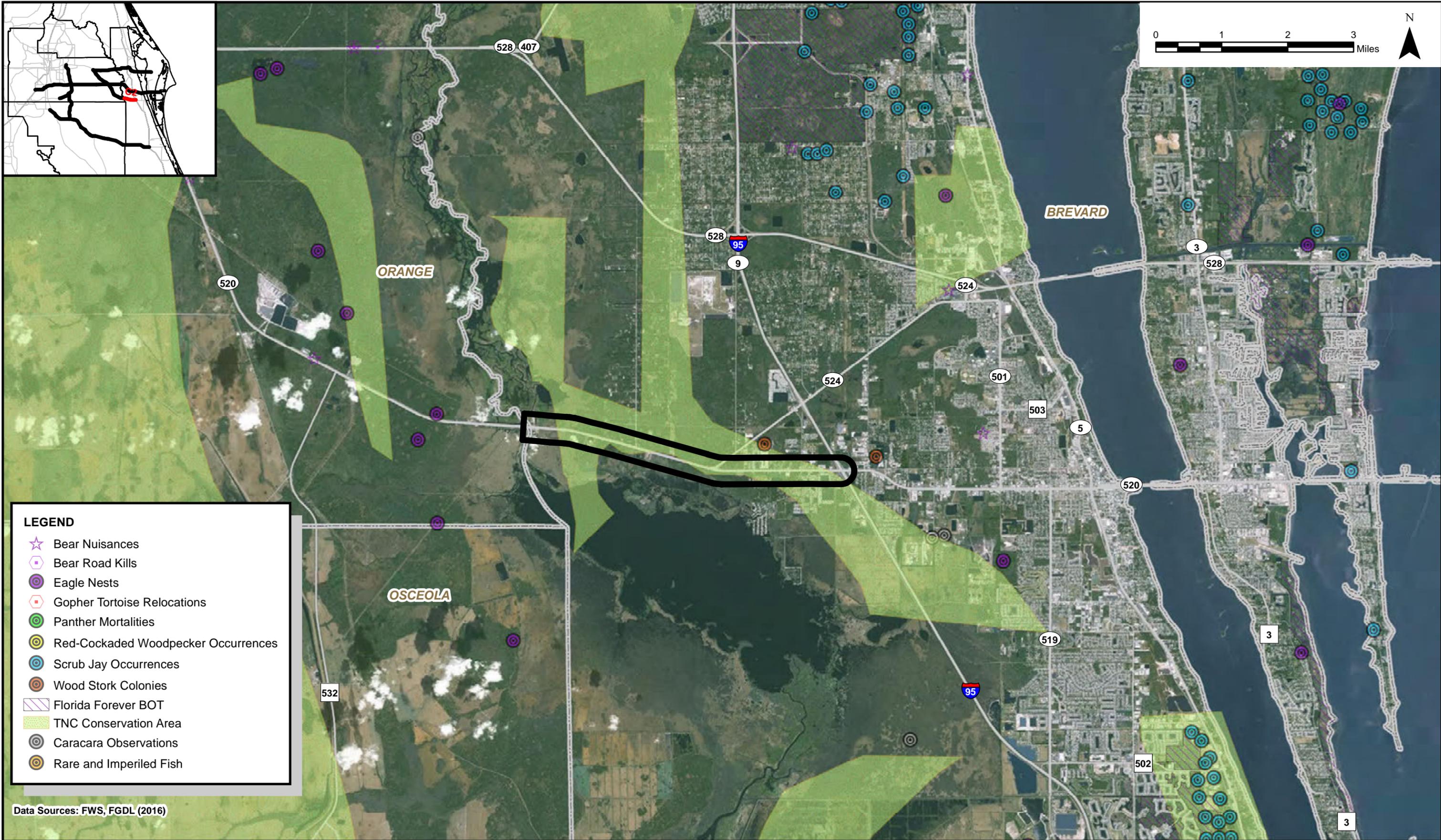
SEGMENT C2



LEGEND

- ☆ Bear Nuisances
- ◻ Bear Road Kills
- Eagle Nests
- ◻ Gopher Tortoise Relocations
- Panther Mortalities
- Red-Cockaded Woodpecker Occurrences
- Scrub Jay Occurrences
- Wood Stork Colonies
- ▨ Florida Forever BOT
- TNC Conservation Area
- Caracara Observations
- Rare and Imperiled Fish

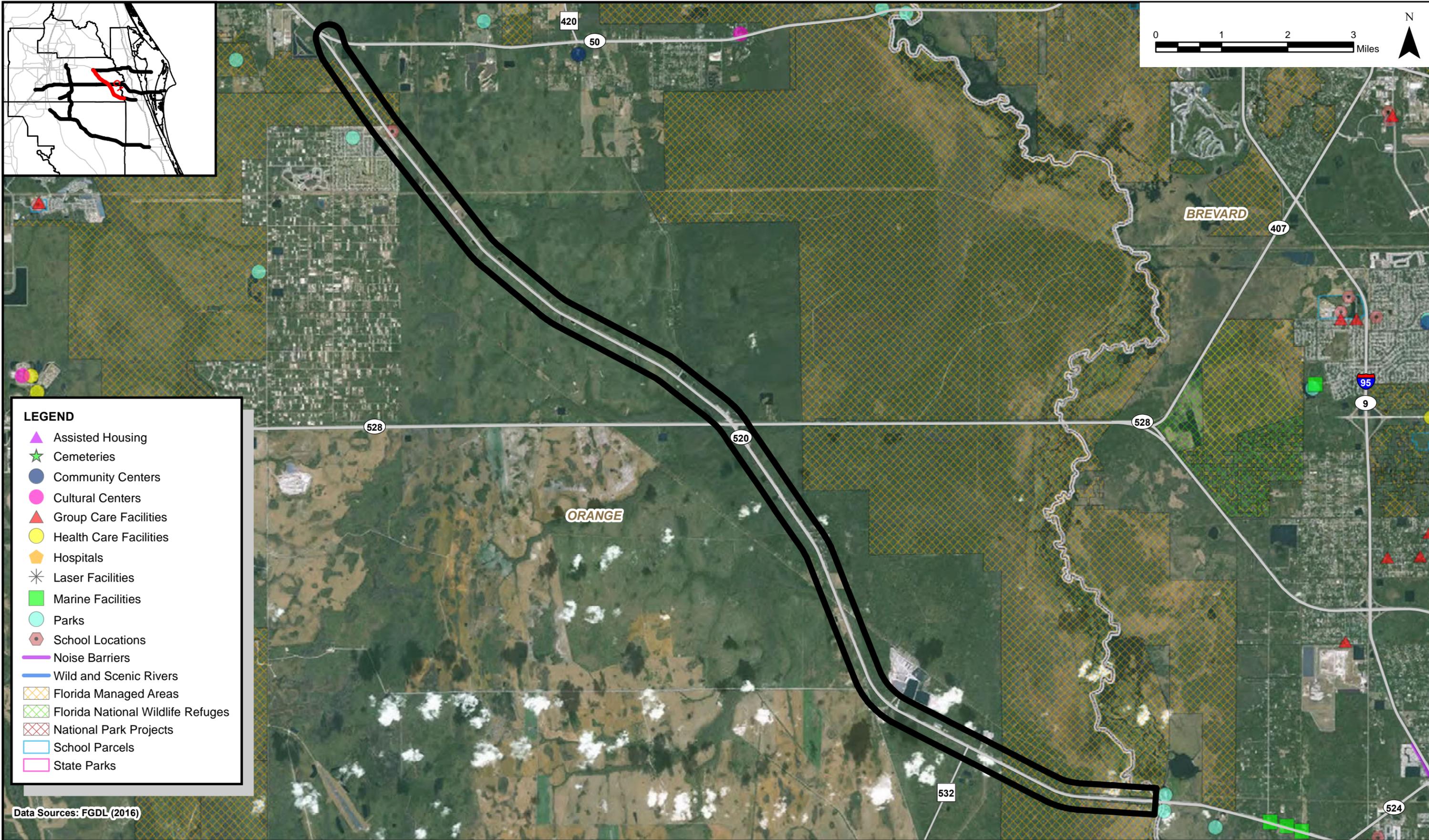
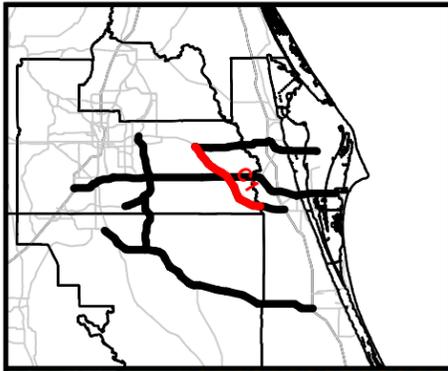
Data Sources: FWS, FGDL (2016)



LEGEND

- ☆ Bear Nuisances
- ◊ Bear Road Kills
- Eagle Nests
- ◻ Gopher Tortoise Relocations
- Panther Mortalities
- Red-Cockaded Woodpecker Occurrences
- Scrub Jay Occurrences
- Wood Stork Colonies
- ▨ Florida Forever BOT
- TNC Conservation Area
- Caracara Observations
- Rare and Imperiled Fish

Data Sources: FWS, FGDL (2016)



LEGEND

- ▲ Assisted Housing
- ★ Cemeteries
- Community Centers
- Cultural Centers
- ▲ Group Care Facilities
- Health Care Facilities
- ◆ Hospitals
- ✱ Laser Facilities
- Marine Facilities
- Parks
- ◆ School Locations
- Noise Barriers
- Wild and Scenic Rivers
- Florida Managed Areas
- Florida National Wildlife Refuges
- National Park Projects
- School Parcels
- State Parks

Data Sources: FGDL (2016)

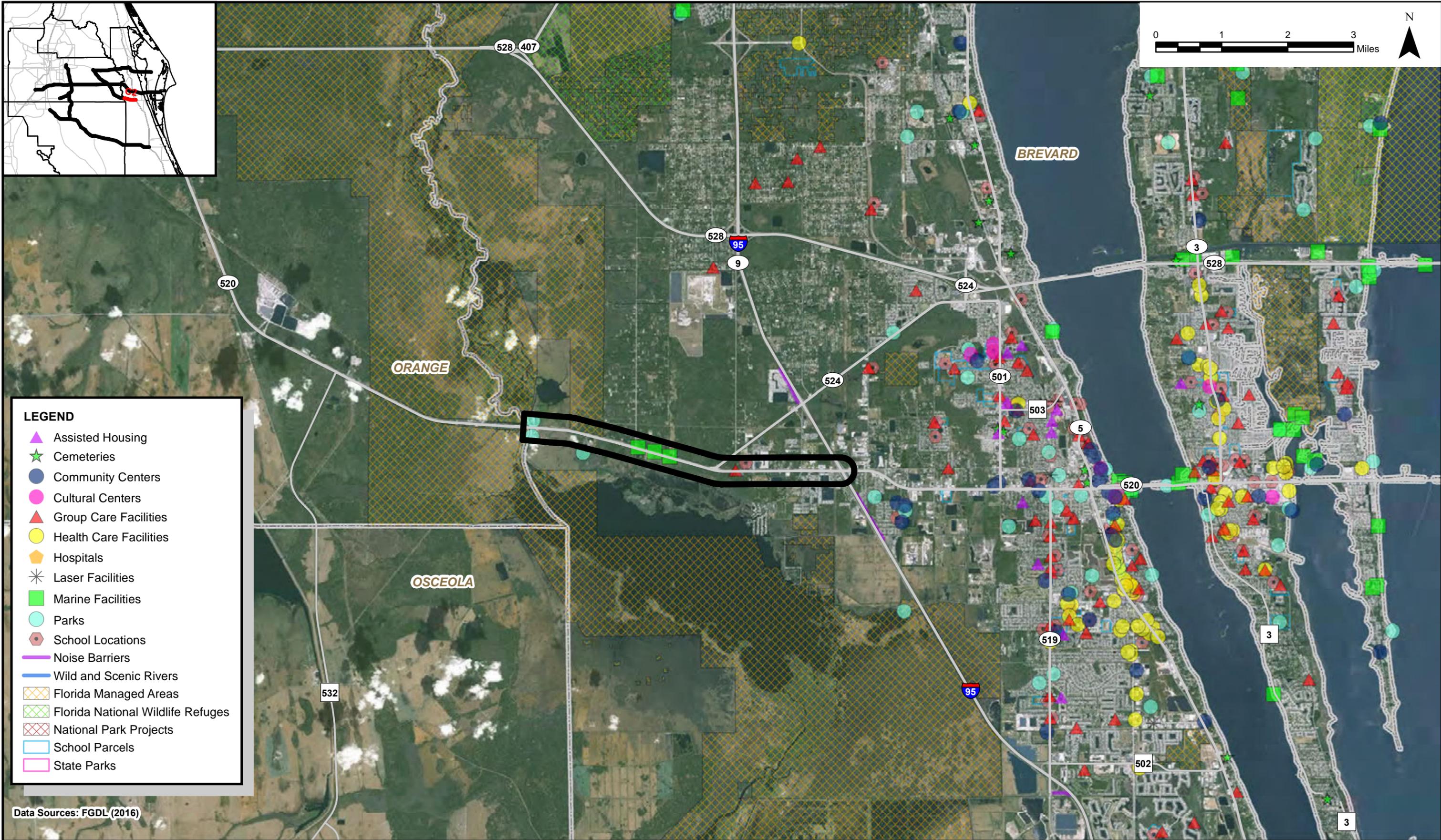


East Central Florida Corridor Evaluation Study



Corridor C Noise Evaluation

**FIGURE
4.6-5**
SEGMENT C1

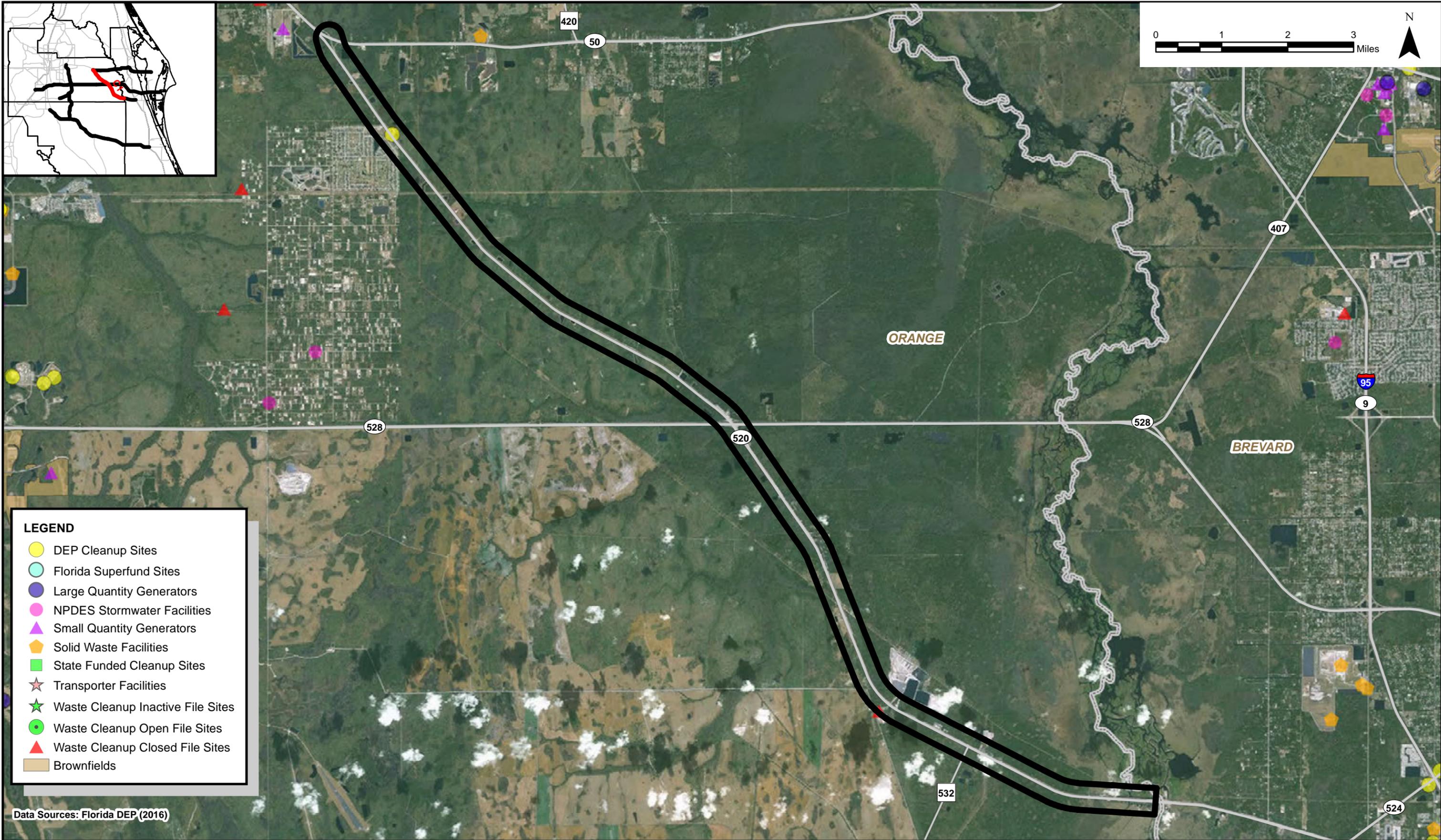


LEGEND

- ▲ Assisted Housing
- ★ Cemeteries
- Community Centers
- Cultural Centers
- ▲ Group Care Facilities
- Health Care Facilities
- ⬠ Hospitals
- ✱ Laser Facilities
- Marine Facilities
- Parks
- ⬠ School Locations
- Noise Barriers
- Wild and Scenic Rivers
- ▨ Florida Managed Areas
- ▨ Florida National Wildlife Refuges
- ▨ National Park Projects
- School Parcels
- State Parks

Data Sources: FGDL (2016)





LEGEND

- DEP Cleanup Sites
- Florida Superfund Sites
- Large Quantity Generators
- NPDES Stormwater Facilities
- ▲ Small Quantity Generators
- ◆ Solid Waste Facilities
- State Funded Cleanup Sites
- ★ Transporter Facilities
- ★ Waste Cleanup Inactive File Sites
- Waste Cleanup Open File Sites
- ▲ Waste Cleanup Closed File Sites
- Brownfields

Data Sources: Florida DEP (2016)



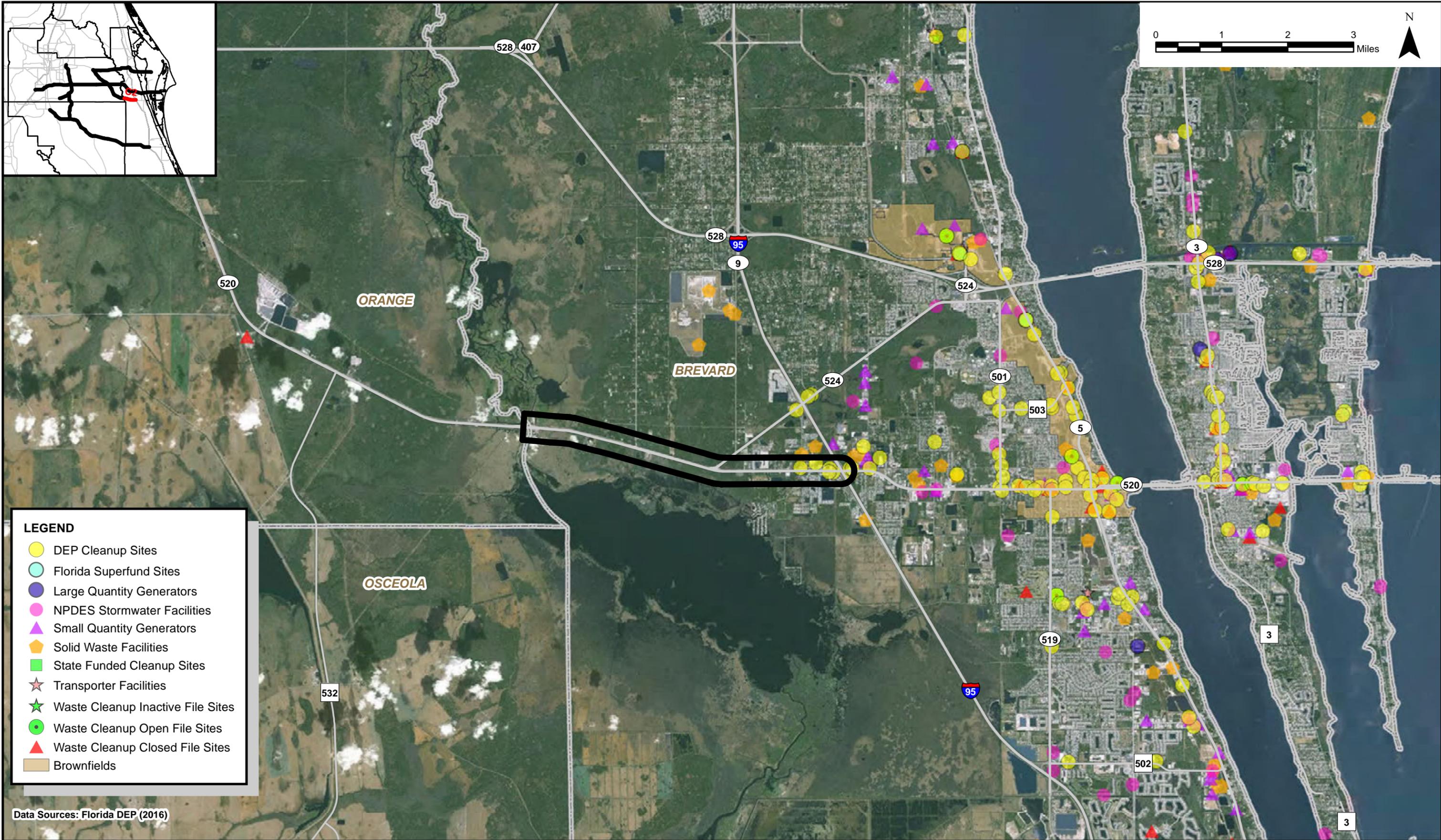
East Central Florida Corridor Evaluation Study



Corridor C
Potential Sources of Contamination

FIGURE
4.6-6

SEGMENT C1



5

Corridor E: US 192

Table 5.1-1: Corridor E Segment Lengths

Segment	Length (miles)
E1	13.6
E2	22.8
E3	9.9
<i>Corridor E</i>	<i>46.3</i>

5.1 General Corridor Overview

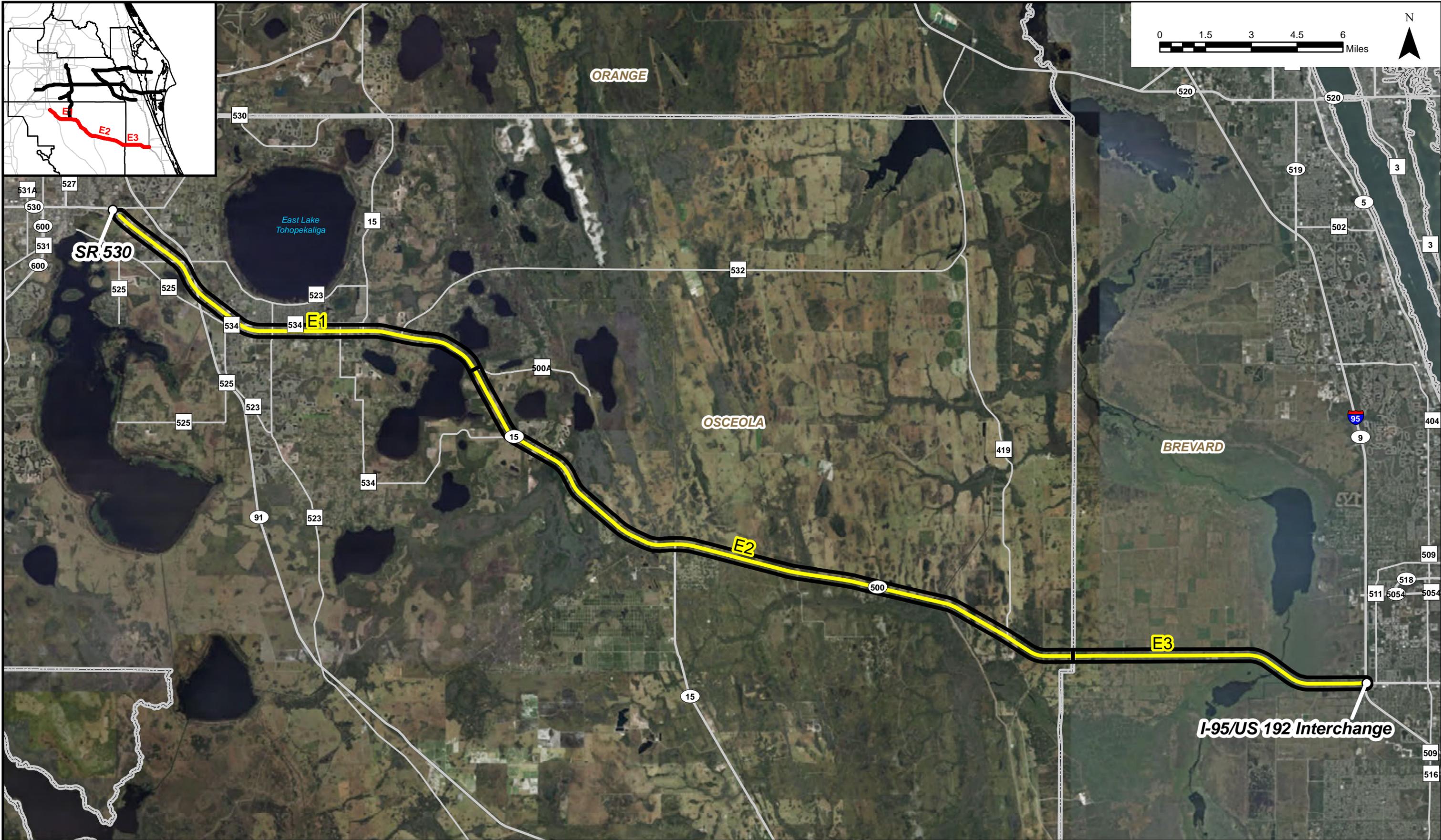
Corridor E, US 192 (E Irlo Bronson Memorial Highway) is a multimodal highway corridor serving commuter, tourist, commercial, and goods mobility. This corridor serves a high percentage of tourism-related traffic as it accesses the attractions in and around southern Orlando, as well as the high-tech industries clustering in and around southern Brevard and Orange counties. This corridor also serves nearby agricultural and commercial land uses.

As shown in Figure 5.1-1, US 192 is the major corridor connecting southern Brevard County to Orange and Osceola counties today. It serves as a high-tech corridor for workforce commuting between Palm Bay and Medical City. The existing facility runs from US 27 in Lake County through northern Osceola and southern Brevard counties to SR A1A in Indianatlastic. Currently, US 192 from Kissimmee and St. Cloud to Melbourne is the only corridor directly connecting Osceola County and southern Brevard County. It is state highway-owned and operated by FDOT and there is no limited-access connection from Orange County to southern Brevard County.

Corridor E runs from CR 530 in Osceola County to the I-95 interchange in Brevard County. Corridor E is divided into three segments: E1, E2, and E3. Segment E1 spans the northernmost portion of the corridor, in the urban area of Osceola County from CR 530 to Old Melbourne Highway/CR500A. Segment E2 constitutes “rural” roadway in Osceola County running from Old Melbourne Highway to the Osceola/Brevard County line. Segment E3 constitutes the entirety of “rural” roadway in Brevard County from the Osceola/Brevard County line to the I-95 interchange. The lengths of Corridor E segments are listed in Table 5.1-1.

Throughout the Existing Conditions Analysis, the Study Team met with the PAG and stakeholders as part of an extensive coordination process to collect the appropriate available data and inventory physical characteristics of transportation facilities and the natural environment within the corridor. These discussions provided the Study Team with a greater understanding of the community characteristics to help identify potential issues and opportunities in the region. The major issues and opportunities identified are directly related to effectively accommodating a coastal evacuation for southern Brevard County. US 192 is the primary evacuation route in that area and a potential reliever when SR 528 and SR 520 are congested. In addition, the following issues/opportunities were discussed.

- Upon buildout of the Northeast District Master Plan and the North Ranch Sector Plan, US 192 will serve commuters from these developments. According to the *Florida 2070: Mapping Florida’s Future – Alternative Patterns of Development in 2070* (2016), US 192 will be vital in providing the necessary connections for significant job growth in the region from these anticipated developments.
- Agriculture is still a major contributor of services and freight in the region, producing truck traffic along the corridor.
- PAG members envision US 192 as a multimodal corridor, including local and commuter transit that connects major urban centers in the North Ranch and Northeast District.
- Major interchange improvement at Ellis Road/I-95 will alter traffic in the area.
- US 192 is a primary evacuation route for southern Brevard County.



5.2 Community Characteristics

5.2.1 Demographics

The total population for all Census Block Groups in the Corridor E is 68,137. The majority of census block groups for Segment E1 have population densities above the Florida average of 346.16 people per square mile. The poverty rates for Corridor E block groups ranged between 2.1% and 34.9%. Each segment includes at least one block group with a poverty rate higher than the statewide average of 11.97%, and the majority of block groups in Segments E1 and E2 are above the statewide average. The percent of population identifying as minority for block groups in Corridor E range from 7.9% to 73.3%. Percent of the population with limited English proficiency (LEP) in block groups for Corridor E range from 0.0% to 11.0%. A minority of census block groups in Segments E1 and E2 have LEP population percentages above the statewide average of 6.4%. Demographics data can be found in Table 5.2-1 and Figure 5.2-1, Figure 5.2-2, Figure 5.2-3 and Figure 5.2-4 below.

Table 5.2-1: Corridor E Demographics

Segment	Block Group	Population				Median Age	Percent Poverty	Median HH Income	Percent Disabled	No Vehicle	LEP Percent
		Total	Density	Minority	5-17 & 65 and Over						
E1	12-097-0436001	5,399	404.42	1,317	1,906	41	12.2%	\$ 53,635	15.1%	1.6%	0.6%
	12-097-0437002	3,371	256.74	898	1,471	41	18.8%	\$ 51,491	13.4%	6.8%	5.6%
	12-097-0434001	912	3,965.22	258	278	31	31.1%	\$ 45,431	5.2%	10.4%	2.1%
	12-097-0433021	12,586	1,095.39	4,760	3,853	38	9.5%	\$ 55,597	12.2%	3.4%	5.3%
	12-097-0432031	4,945	3,169.87	2,375	1,932	41	16.8%	\$ 42,351	10.4%	5.1%	4.2%
	12-097-0432041	2,190	1,990.91	817	711	34	38.7%	\$ 40,188	3.0%	6.4%	1.4%
	12-097-0435004	1,304	4,075.00	270	322	48	26.2%	\$ 29,254	28.4%	17.1%	1.0%
	12-097-0435002	277	1,978.57	28	78	34	12.1%	\$ 75,489	8.2%	15.2%	0.0%
	12-097-0438001	3,840	13.89	875	1,422	41	8.6%	\$ 66,833	14.0%	4.9%	1.4%
	12-097-0435005	1,915	5,471.43	474	479	36	25.4%	\$ 40,711	12.2%	12.0%	3.9%
	12-097-0438002	747	3.85	112	167	41	15.3%	\$ 70,577	0.0%	0.0%	8.0%
	12-097-0429001	9,328	1,039.91	6,834	3,347	35	21.1%	\$ 47,085	2.8%	7.0%	11.0%
	12-097-0429002	6,966	1,329.39	4,364	1,941	29	18.1%	\$ 40,179	6.3%	6.3%	6.4%
	12-097-0434004	791	2,929.63	177	211	47	19.6%	\$ 50,114	12.7%	3.3%	1.5%
	12-097-0434002	1,260	5,040.00	213	416	29	10.6%	\$ 57,500	8.8%	0.0%	0.0%
12-097-0433011	1,108	105.62	87	406	54	11.3%	\$ 41,971	8.2%	4.1%	0.0%	
Total	56,939	1,416.47	23,859	18,940	37.5	16.4%	\$ 49,127	10.0%	5.4%	5.0%	
E2	12-009-0713012	2,956	10.03	747	1,234	49	2.1%	\$ 77,297	6.7%	3.9%	1.2%
	12-097-0438001	3,840	13.89	875	1,422	41	8.6%	\$ 66,833	14.0%	4.9%	1.4%
	12-097-0438002	747	3.85	112	167	41	15.3%	\$ 70,577	0.0%	0.0%	8.0%
	12-097-0438004	2,268	10.78	332	609	47	34.9%	\$ 35,428	29.0%	1.8%	1.3%
Total	56,939	1,416.47	23,859	18,940	37.5	16.4%	\$ 49,127	10.0%	5.4%	5.0%	
E3	12-009-0650011	1,285	829.03	105	419	51	12.2%	\$ 47,829	5.9%	4.4%	0.0%
	12-009-0713011	1,603	341.06	129	530	46	4.1%	\$ 95,188	5.5%	1.7%	0.7%
	12-009-0713012	2,956	10.03	747	1,234	49	2.1%	\$ 77,297	6.7%	3.9%	1.2%
	12-009-0646011	3,086	1,881.71	606	989	39	4.5%	\$ 45,050	15.9%	1.4%	0.0%
Total	8,930	40.19	1,587	3,172	45.3	4.7%	\$ 63,434	9.5%	2.7%	0.5%	

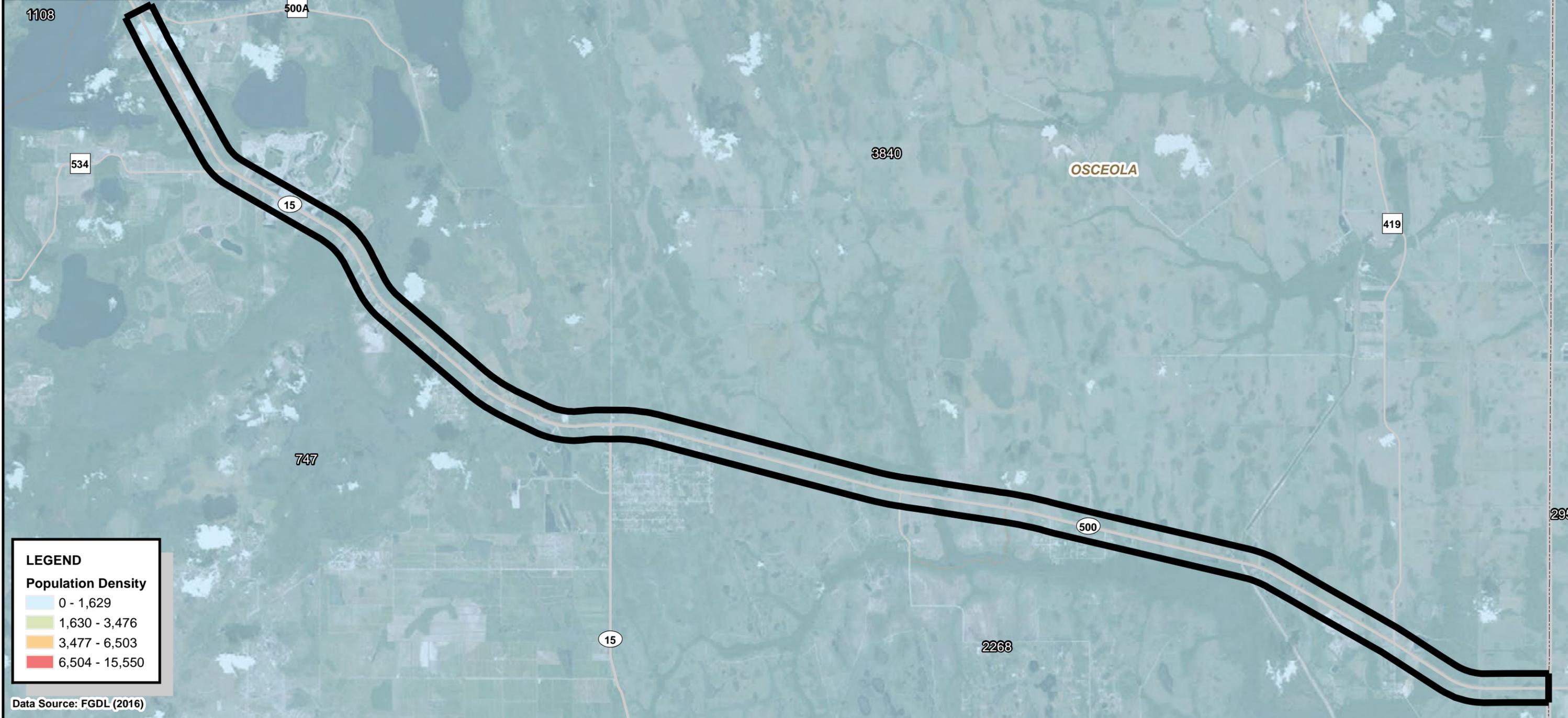
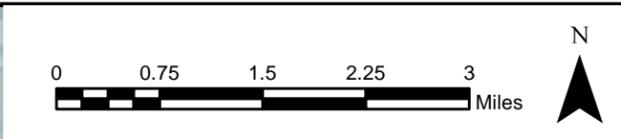
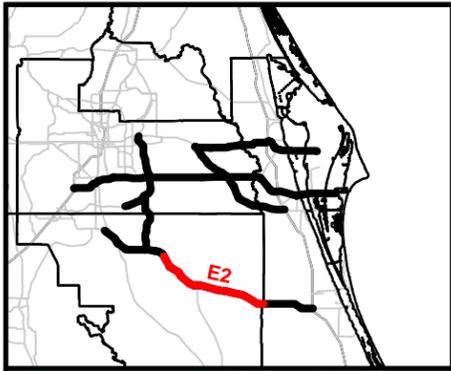


LEGEND

Population Density

0 - 1,629
1,630 - 3,476
3,477 - 6,503
6,504 - 15,550

Data Source: FGDL (2016)



LEGEND	
Population Density	
Light Blue	0 - 1,629
Light Green	1,630 - 3,476
Light Orange	3,477 - 6,503
Red	6,504 - 15,550

Data Source: FGDL (2016)

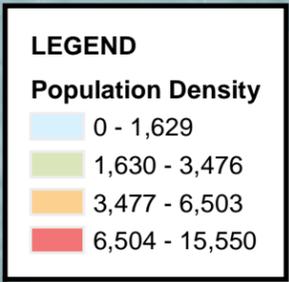
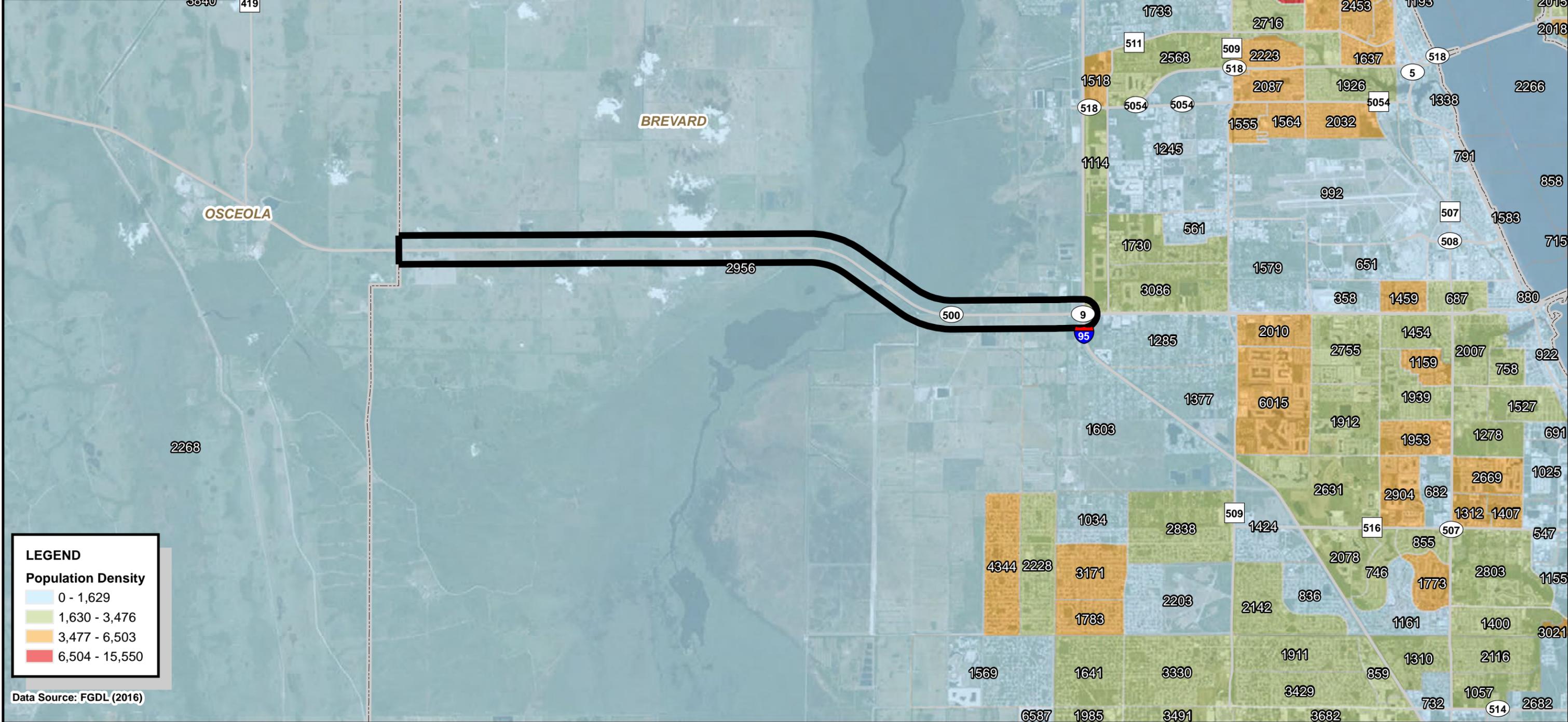
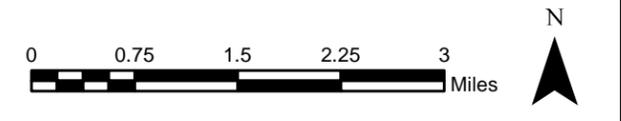
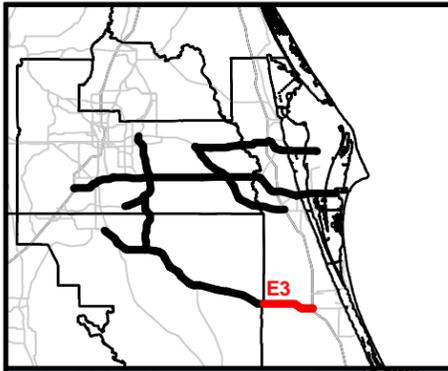


East Central Florida Corridor Evaluation Study



Corridor E Population Density

FIGURE 5.2-1
SEGMENT E2



Data Source: FGDL (2016)

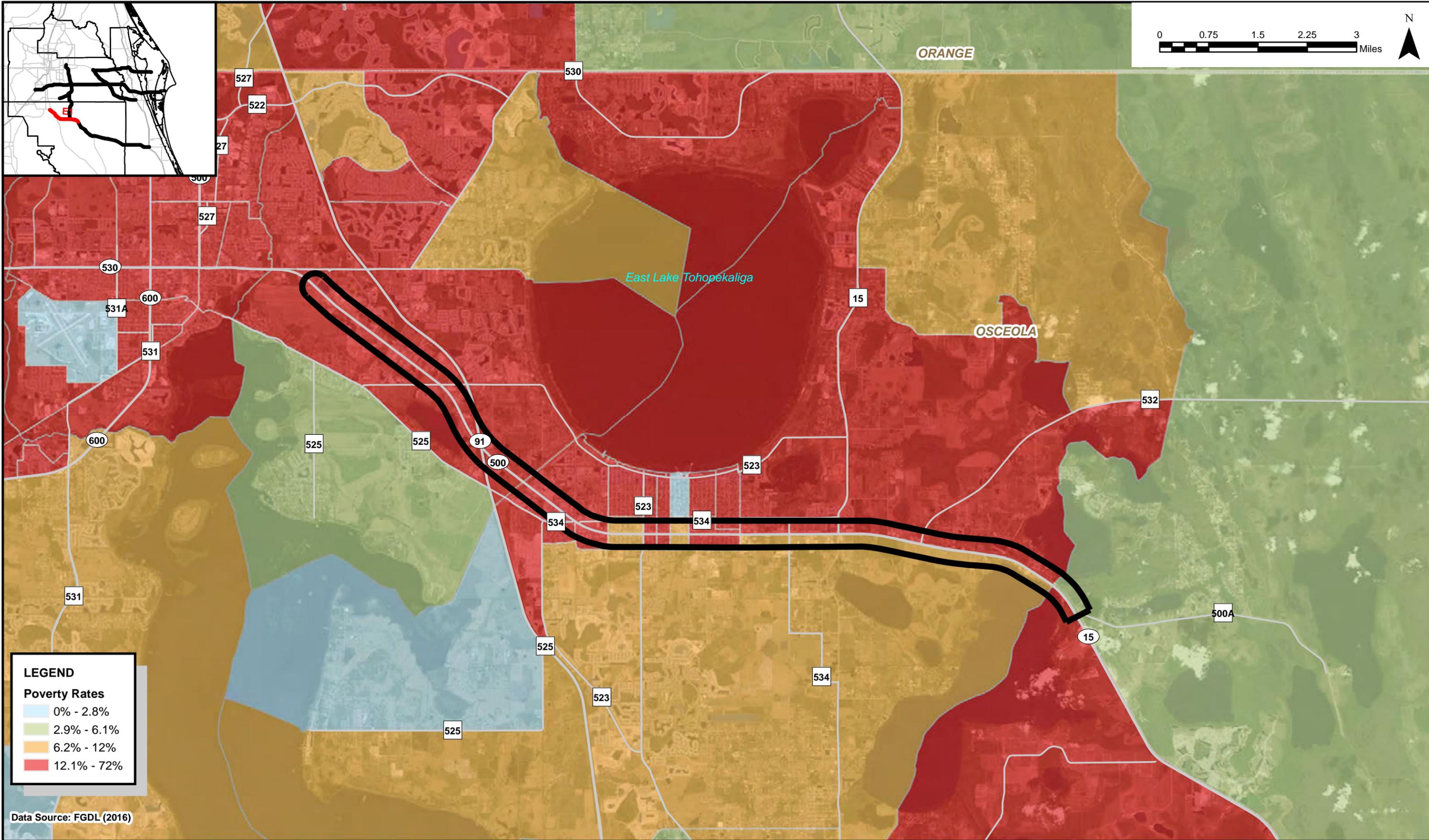
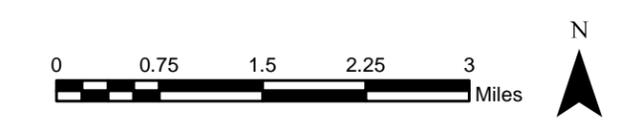
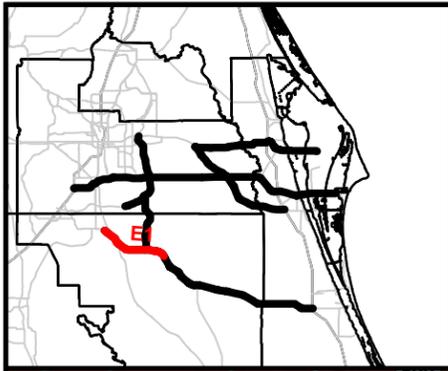


East Central Florida Corridor Evaluation Study



**Corridor E
Population Density**

**FIGURE
5.2-1
SEGMENT E3**



LEGEND

Poverty Rates

- 0% - 2.8%
- 2.9% - 6.1%
- 6.2% - 12%
- 12.1% - 72%

Data Source: FGDL (2016)

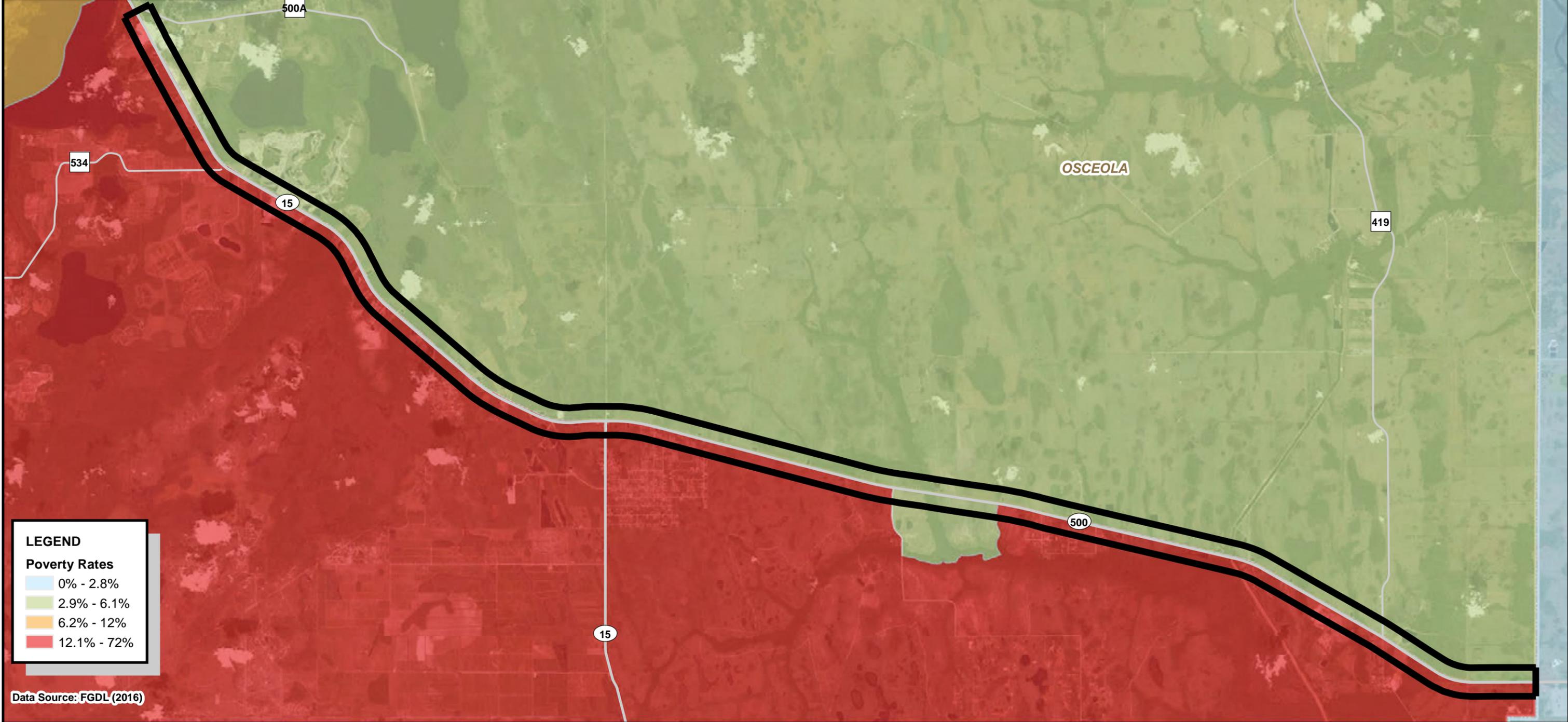
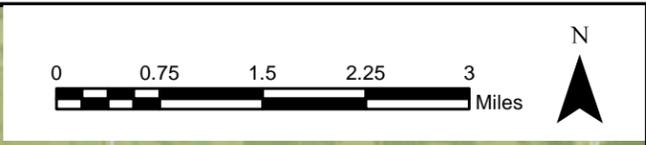
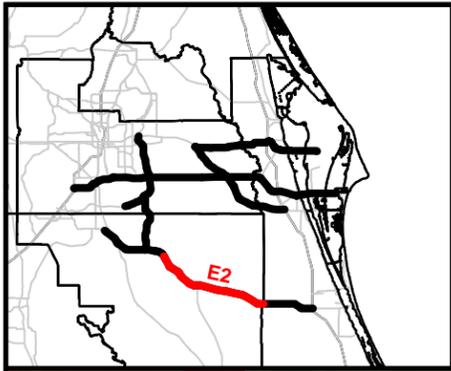


East Central Florida Corridor Evaluation Study



Corridor E Household Poverty Rates

FIGURE
5.2-2
SEGMENT E1



LEGEND
Poverty Rates

- 0% - 2.8%
- 2.9% - 6.1%
- 6.2% - 12%
- 12.1% - 72%

Data Source: FGDL (2016)

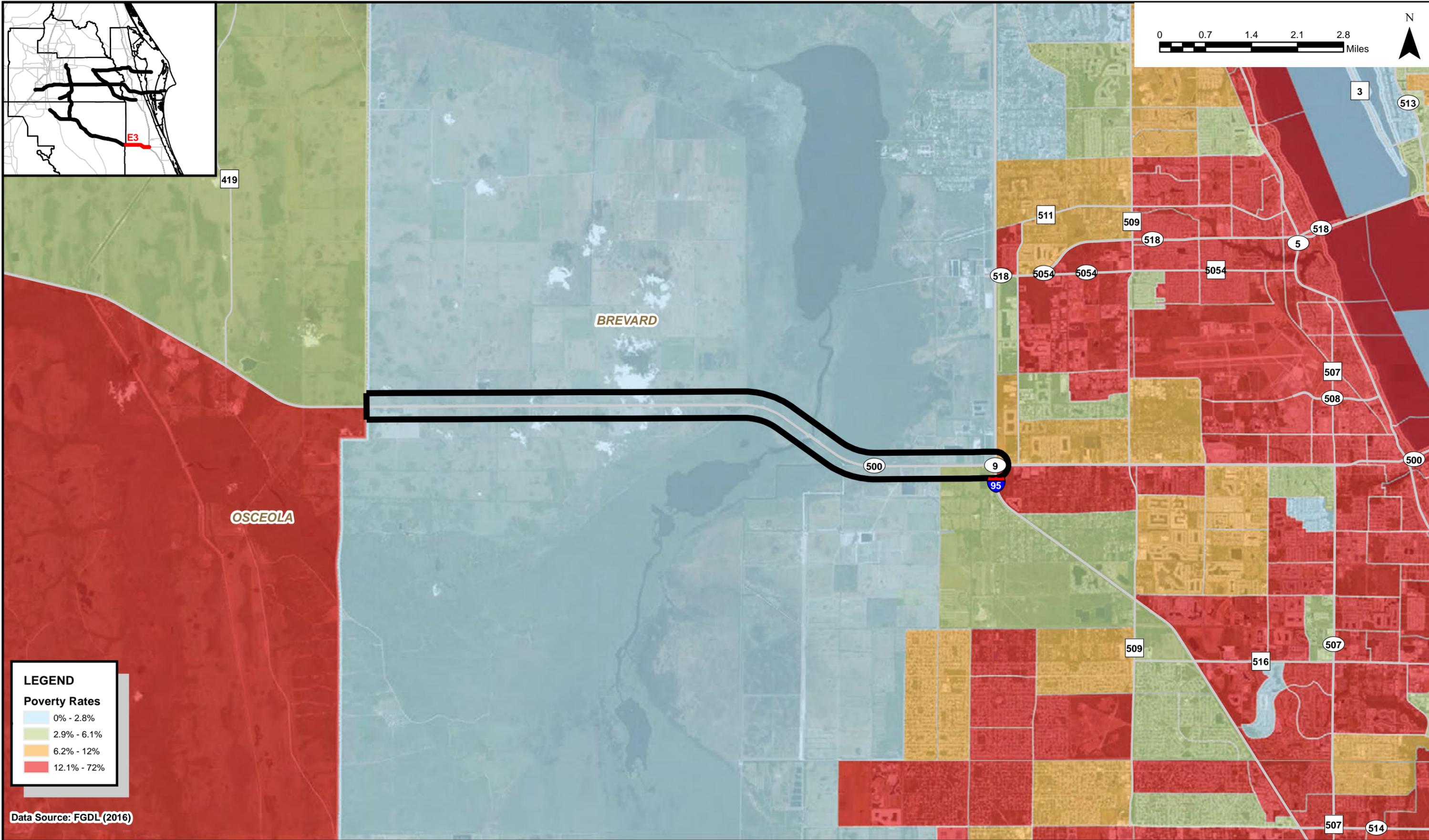
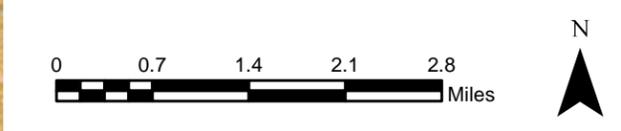
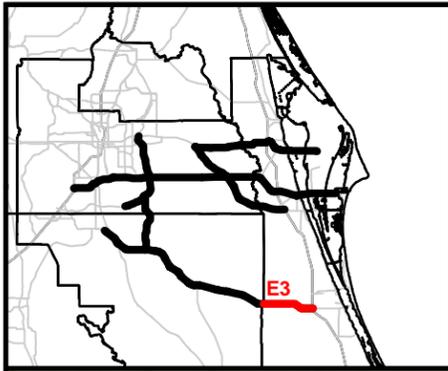


East Central Florida Corridor Evaluation Study



Corridor E Household Poverty Rates

FIGURE
5.2-2
SEGMENT E2



LEGEND

Poverty Rates

0% - 2.8%
2.9% - 6.1%
6.2% - 12%
12.1% - 72%

Data Source: FGDL (2016)

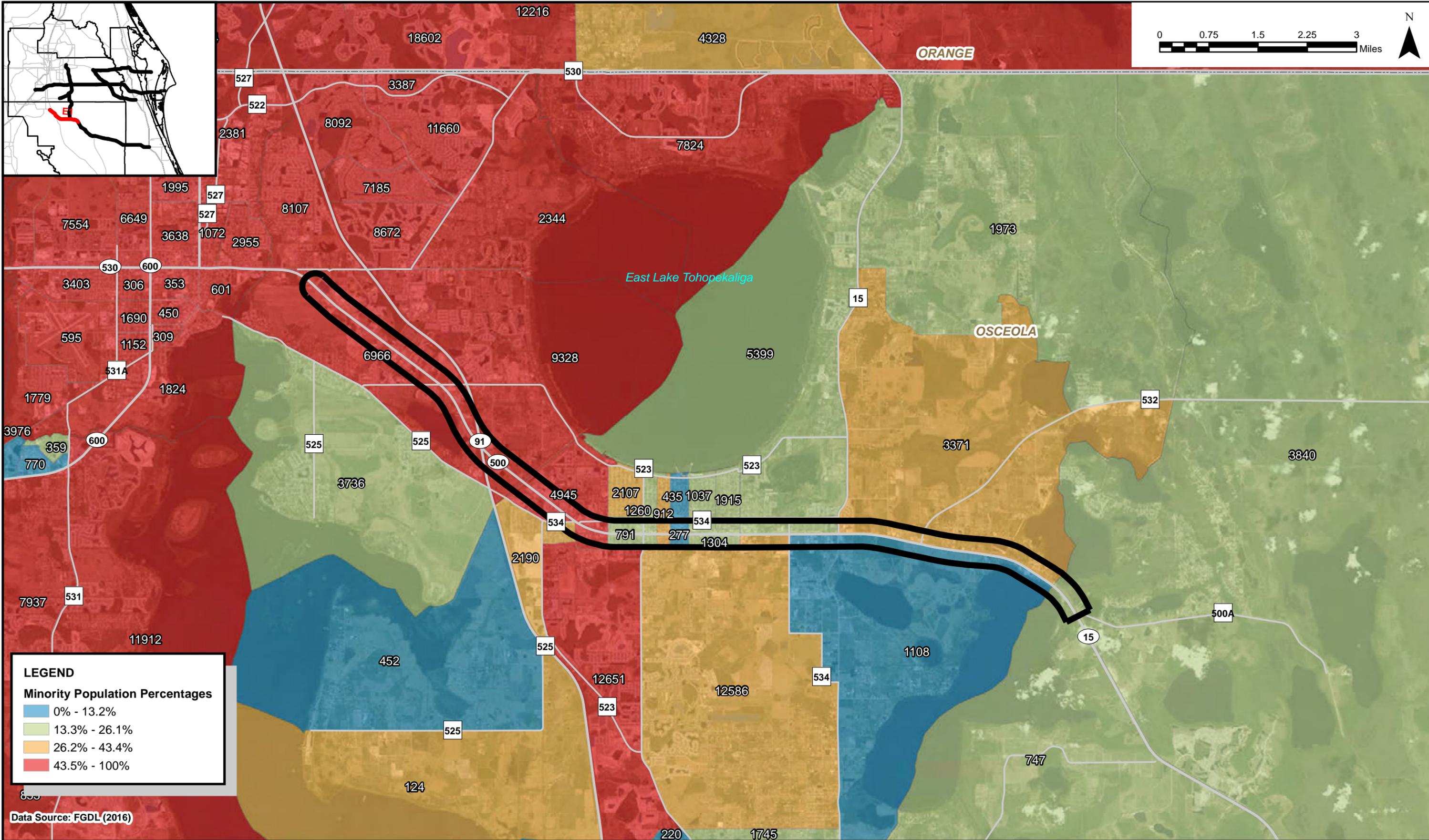
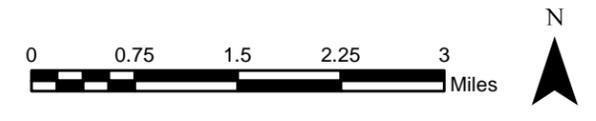
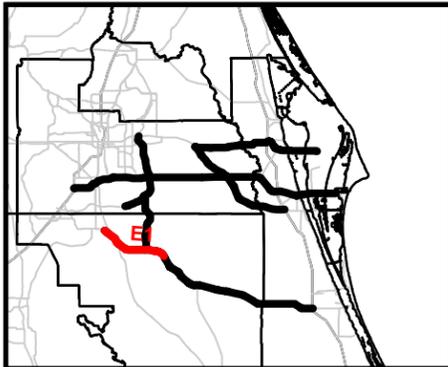


East Central Florida Corridor Evaluation Study



Corridor E Household Poverty Rates

FIGURE
5.2-2
SEGMENT E3



LEGEND

Minority Population Percentages

Blue	0% - 13.2%
Light Green	13.3% - 26.1%
Orange	26.2% - 43.4%
Red	43.5% - 100%

Data Source: FGDL (2016)

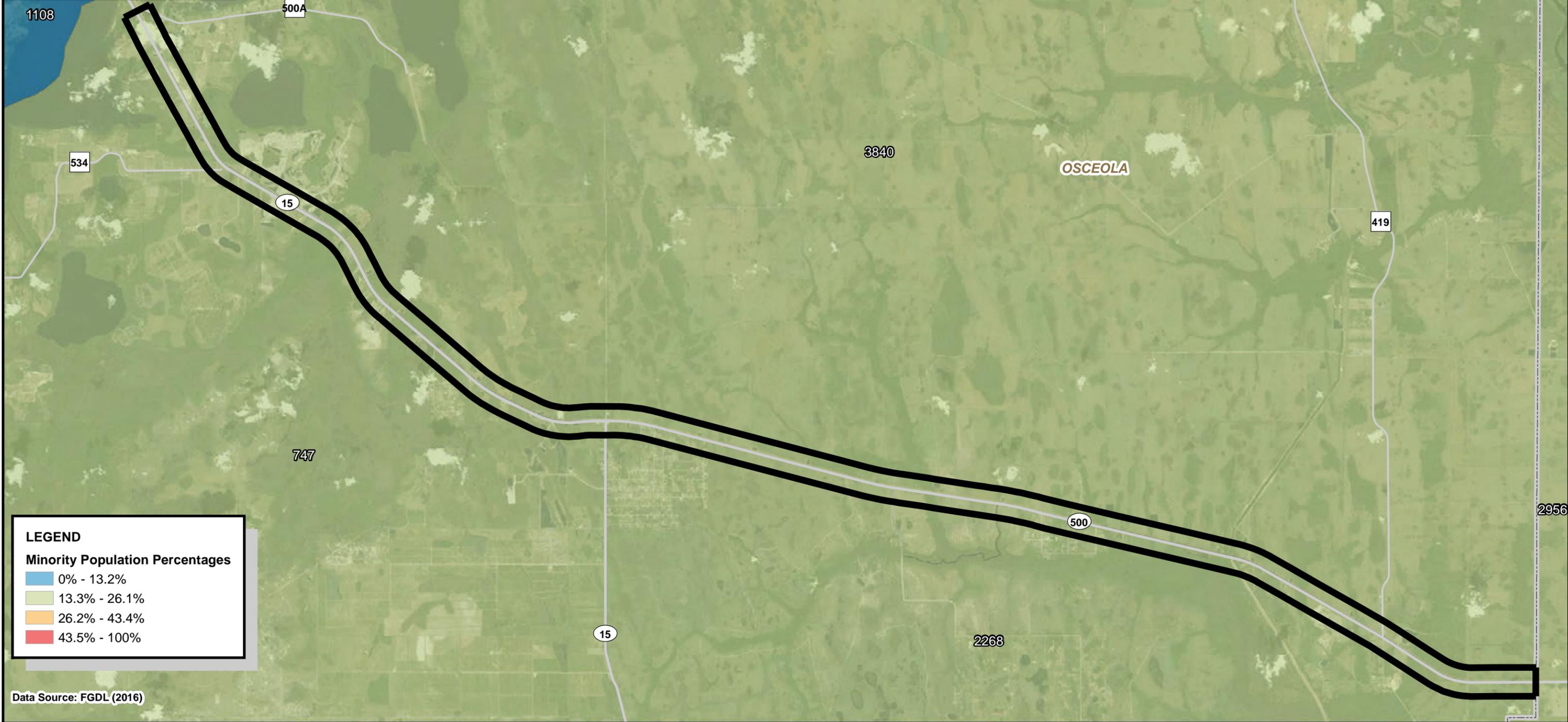
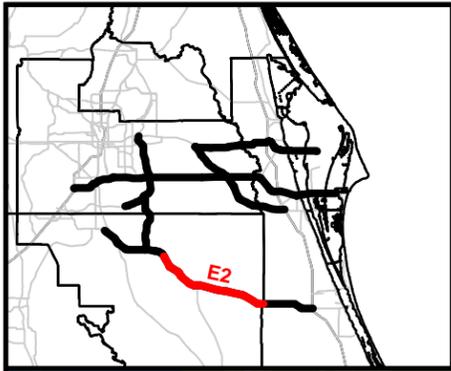


East Central Florida Corridor Evaluation Study



Corridor E Minority Population

FIGURE
5.2-3
SEGMENT E1

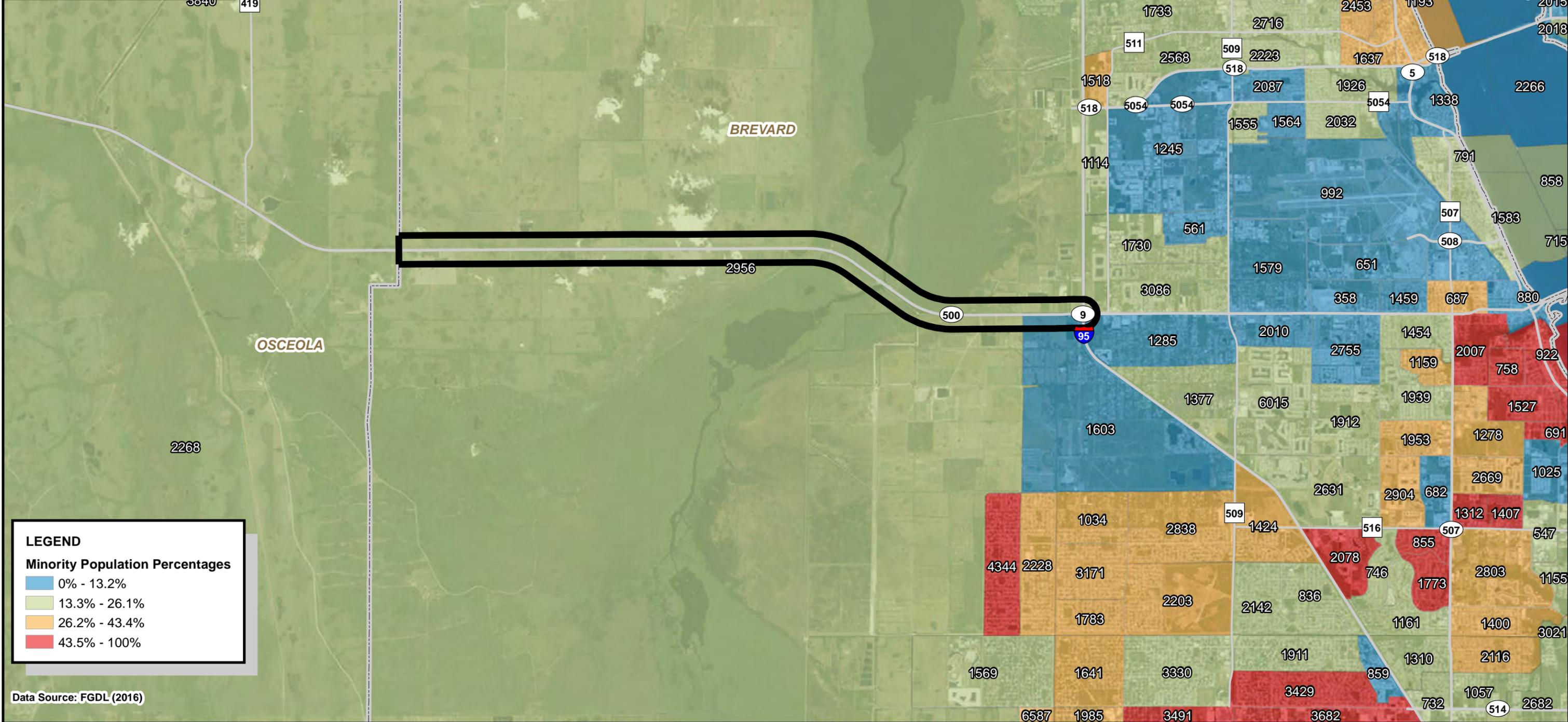
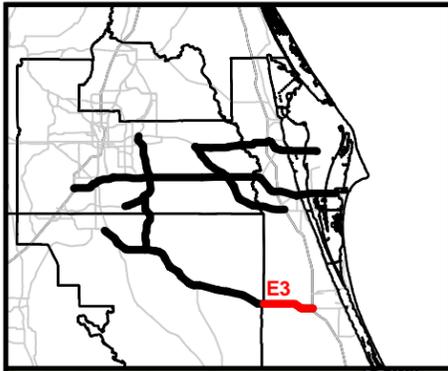


LEGEND
Minority Population Percentages

0% - 13.2%
13.3% - 26.1%
26.2% - 43.4%
43.5% - 100%

Data Source: FGDL (2016)

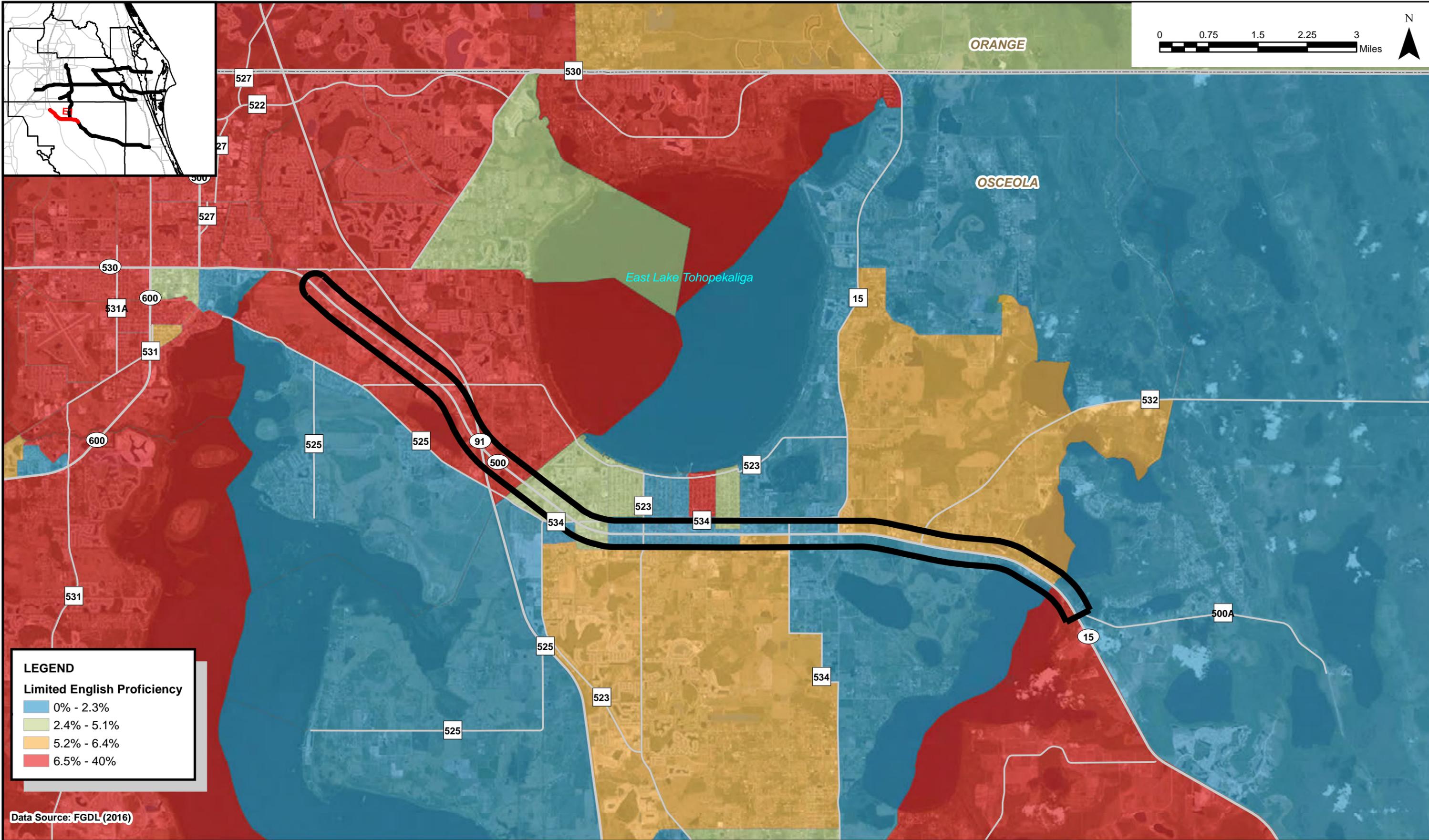
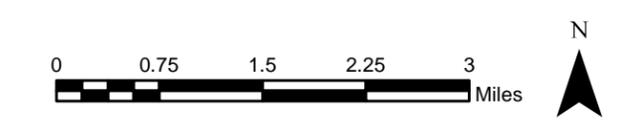
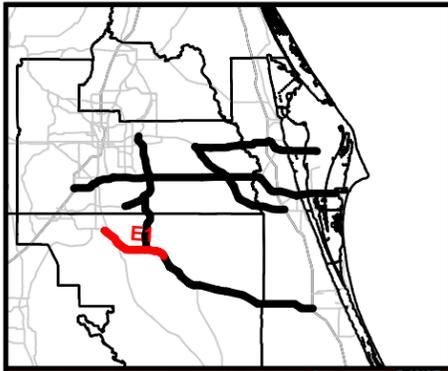




LEGEND
Minority Population Percentages

- 0% - 13.2%
- 13.3% - 26.1%
- 26.2% - 43.4%
- 43.5% - 100%

Data Source: FGDL (2016)



LEGEND

Limited English Proficiency

Blue	0% - 2.3%
Green	2.4% - 5.1%
Yellow	5.2% - 6.4%
Red	6.5% - 40%

Data Source: FGDL (2016)

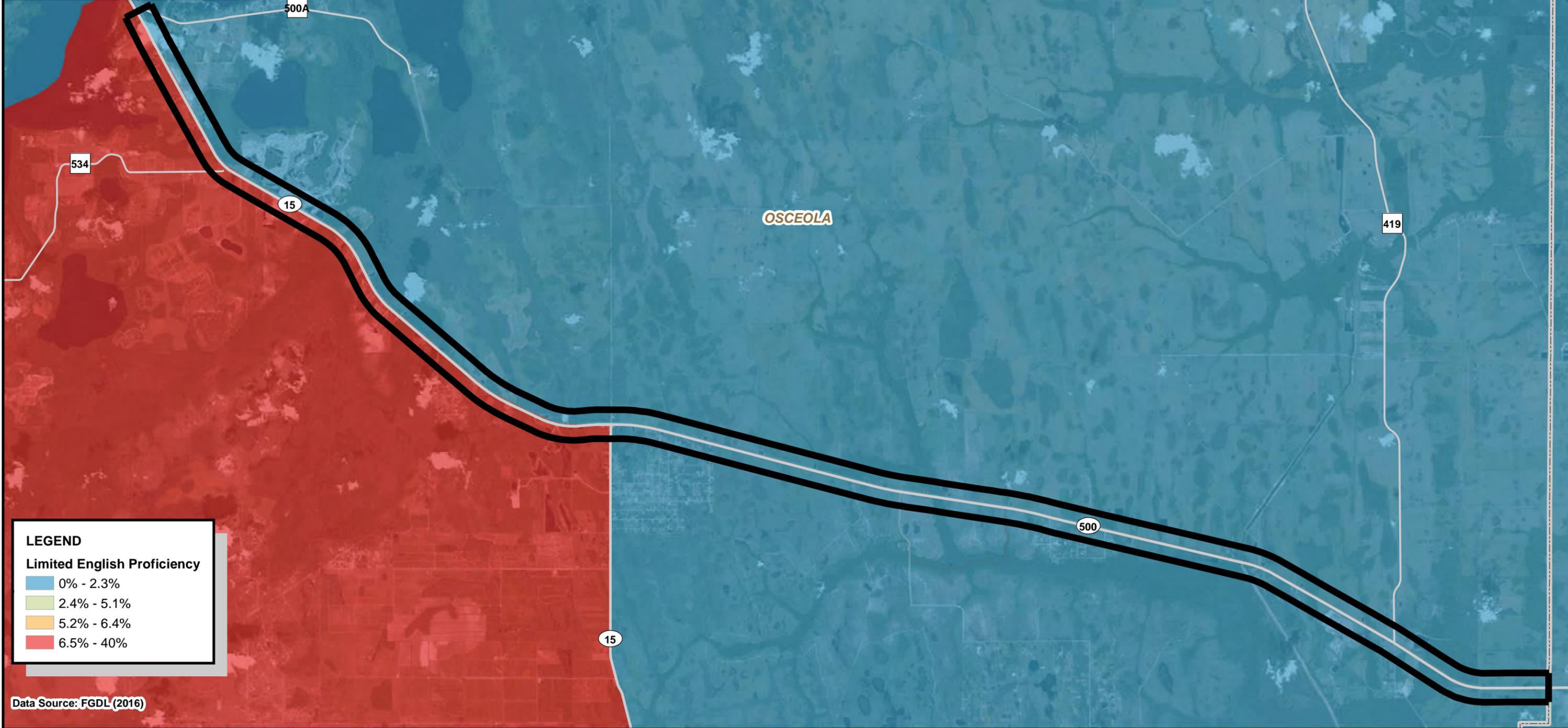
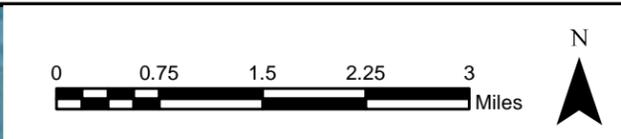
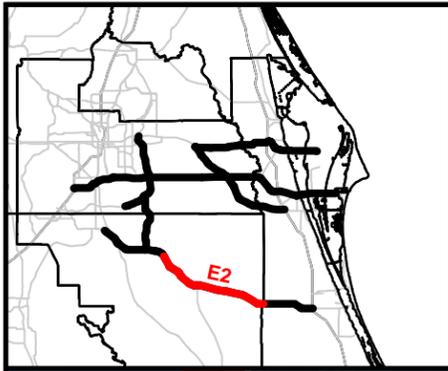


East Central Florida Corridor Evaluation Study



Corridor E Limited English Proficiency

FIGURE
5.2-4
SEGMENT E1



LEGEND	
Limited English Proficiency	
0% - 2.3%	Light Blue
2.4% - 5.1%	Light Green
5.2% - 6.4%	Yellow
6.5% - 40%	Red

Data Source: FGDL (2016)

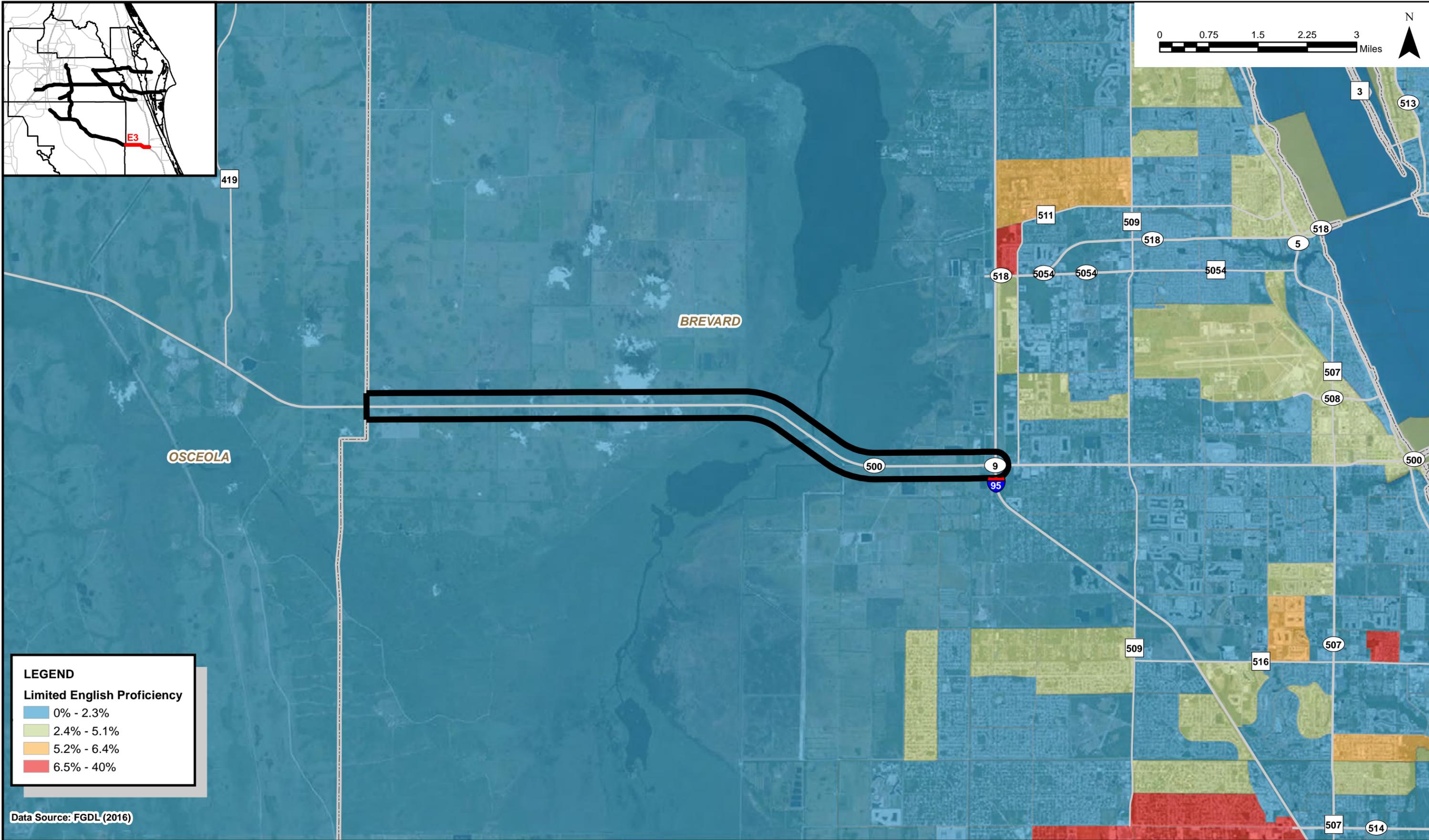
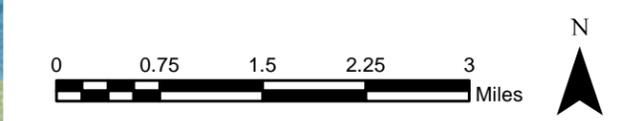
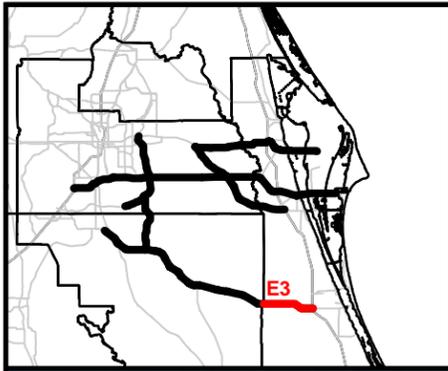


East Central Florida Corridor Evaluation Study



Corridor E Limited English Proficiency

FIGURE
5.2-4
SEGMENT E2



LEGEND
Limited English Proficiency

- 0% - 2.3%
- 2.4% - 5.1%
- 5.2% - 6.4%
- 6.5% - 40%

Data Source: FGDL (2016)



East Central Florida Corridor Evaluation Study



Corridor E Limited English Proficiency

FIGURE
5.2-4
SEGMENT E3

5.2.2 Land Use

As shown in Figure 5.2-5, existing land use along Corridor E is mostly agricultural (46.8%) and vacant/unclassified (29%). No other land use category broke above 10%; however these uses are not representative of Segment E1. Although vacant/unclassified land use still makes up the highest percentage of land use along Corridor E, there are many intensive uses around the center of the City of St. Cloud, including low density residential, and heavy commercial (Table 5.2-2).

Table 5.2-2: Corridor E Land Use

Segment	Land Use	Acres	Percent
Corridor E	Vacant/Unclassified	1,241.07	28.6%
	Low Density Residential	298.70	6.9%
	Medium Density Residential	6.16	0.1%
	High Density Residential	15.45	0.4%
	Mixed Use	38.63	0.9%
	Light Commercial	109.05	2.5%
	Heavy Commercial	193.49	4.5%
	Light Industrial	39.53	0.9%
	Heavy Industrial	2.97	0.1%
	Institutional	317.26	7.3%
	Transportation/Utilities	24.18	0.6%
	Recreation/Conservation	42.47	1.0%
	Agricultural	2,005.18	46.3%
	Water	1.22	0.0%
	Total	4,335.36	100.0%
E1	Vacant/Unclassified	284.82	23.1%
	Low Density Residential	177.63	14.4%
	Medium Density Residential	6.16	0.5%
	High Density Residential	10.89	0.9%
	Mixed Use	32.40	2.6%
	Light Commercial	101.69	8.2%
	Heavy Commercial	190.38	15.4%
	Light Industrial	39.53	3.2%
	Heavy Industrial	2.97	0.2%
	Institutional	169.81	13.8%
	Transportation/Utilities	14.49	1.2%
	Recreation/Conservation	7.57	0.6%
	Agricultural	194.03	15.7%
	Water	1.22	0.1%
	Total	1,233.59	100.0%

Segment	Land Use	Acres	Percent	
E2	Vacant/Unclassified	3.92	0.2%	
	Vacant/Unclassified	656.00	30.3%	
	Low Density Residential	119.22	5.5%	
	High Density Residential	4.56	0.2%	
	Mixed Use	6.23	0.3%	
	Light Commercial	0.78	0.0%	
	Heavy Commercial	1.26	0.1%	
	Institutional	71.19	3.3%	
	Transportation/Utilities	9.25	0.4%	
	Recreation/Conservation	33.28	1.5%	
	Agricultural	1,262.35	58.2%	
	Total	2,168.04	100.0%	
E3	Vacant/Unclassified	296.33	31.7%	
	Low Density Residential	1.85	0.2%	
	Light Commercial	6.58	0.7%	
	Heavy Commercial	1.85	0.2%	
	Institutional	76.26	8.2%	
	Transportation/Utilities	0.44	0.0%	
	Recreation/Conservation	1.62	0.2%	
	Agricultural	548.80	58.8%	
		Total	933.73	100.0%

5.2.3 Community Features

Segment E2 crosses multiple community features east of US 441, including the Triple N Ranch and the Herky Huffman Bull Creek Wildlife Management Areas on the south side of the corridor, the Holopaw State Forest on the north side of the corridor, and six existing trails on either side of the corridor (Table 5.2-3). Segment E3 crosses recreational areas associated with the St. Johns River, including the Sweetwater Boat Ramp park boundary east of the river.

Additionally, field verification identified Harmony High School and Harmony Community Church near the south side of the buffer in the Harmony community east of Arthur J. Gallagher Boulevard. The E2 buffer crosses multiple recreational features east of US 441, including the Triple N Ranch and the Herky Huffman Bull Creek Wildlife Management Areas on the south side of the corridor, the Holopaw State Forest on the north side of the corridor, and six existing trails on either side of the corridor (Table 5.2-3 and Figure 5.3-1). The E3 buffer crosses recreational areas associated with the St. Johns River, including the Sweetwater Boat Ramp park boundary east of the river.

Table 5.2-3: Corridor E Community Features

Segment	Type	Name
E1	Florida Managed Areas	Lake Lizzie Conservation Area
	Parks	Sexton Boat Ramp
	Parks	Veterans Memorial Park
	School Parcels	School District Of Osceola County
	School Parcels	School District Of Osceola County
	School Parcels	School District Of Osceola County
	School Parcels	School District Of Osceola County
	School Parcels	School District Of Osceola County
	School Parcels	Williams Garfield
	School Parcels	1207 Vermont LLC
	Park Bounds	Sexton Boat Ramp
	Park Bounds	Veterans Memorial Park
	E2	Existing Trails
Existing Trails		Triple N Ranch Wildlife Management Area Trail
Existing Trails		Deseret Ranch Trail
Existing Trails		County 419 Trail To Bull Creek Wildlife Management Area Connector
Existing Trails		Deseret Ranch Trail
Existing Trails		Bull Creek Trail
Florida Forever		Osceola Pine Savannas Florida Forever Bot Project
Florida Forever		Big Bend Swamp/Holopaw Ranch Florida Forever Bot Project
Florida Managed Areas		Holopaw State Forest
Florida Managed Areas		Herky Huffman/Bull Creek Wildlife Management Area
Florida Managed Areas		Triple N Ranch Wildlife Management Area
FFWCC Management Areas		Bull Creek WMA
FFWCC Management Areas		Triple N Ranch WMA
School Parcels		School District Of Osceola County
School Parcels	School District Of Osceola County	
E3	Florida Managed Areas	River Lakes Conservation Area
	Florida Managed Areas	Three Forks Conservation Area
	Florida Managed Areas	Kempfer Property Flowage Easement
	FFWCC Management Areas	Upper St. Johns River Marsh WMA
	FFWCC Management Areas	Upper St. Johns River Marsh WMA
	Parks	Sweetwater Boat Ramp (Brevard Airboat Association)
	Parks Bounds	Sweetwater Boat Ramp (Brevard Airboat Association)

Segment E1 in urban Osceola County includes a large number of community services and recreational areas. There are 11 churches, 5 civic centers, the St. Cloud Chamber of Commerce, 17 health care facilities, 1 assisted living facility, 6 schools, 5 mobile home parks, 2 culture centers, and 2 parks. Additionally, there are 663 residential parcels, which are located on either side of the road. Community

features are densely populated and spread throughout the corridor, many of which border the roadway directly.

5.2.4 Context Zone Classification

Corridor E includes nearly every type of context zone along its 46.3 mile stretch between CR 530 and I-95. It includes 13.6 miles of urban and suburban land uses as it passes through portions of Kissimmee and St Cloud before becoming more rural and natural the remainder of the corridor. Segment E1 is wholly contained in the urban and suburban areas of Kissimmee and St. Cloud. As shown in Table 5.2-4, the context zones within this segment include suburban commercial (C3C) and residential (C3R) as well as general urban residential (C4) and urban center (C5) uses.

Table 5.2-4: Corridor E Context Zones

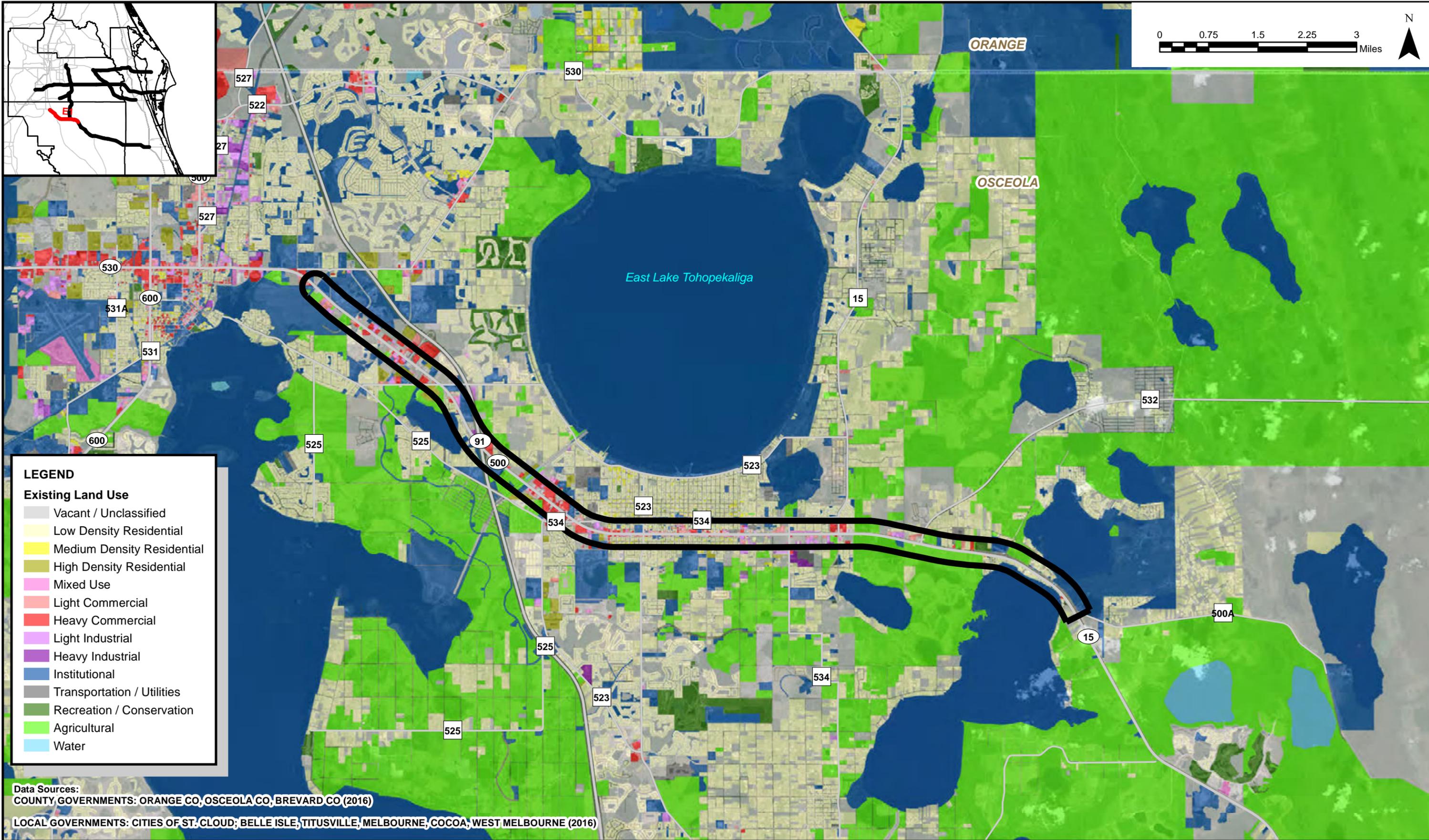
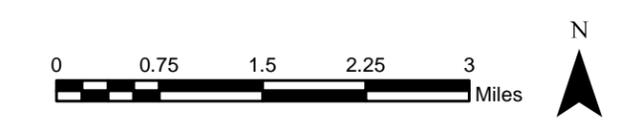
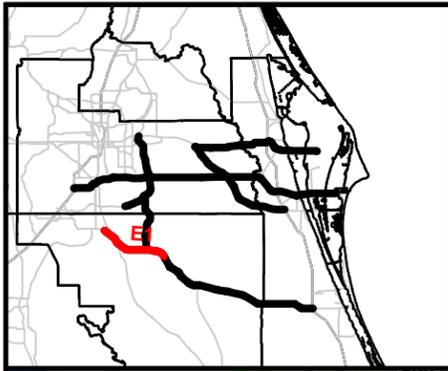
Corridor	US 192				
From	CR 530				
To	I-95				
Distance	46.3 miles				
Segment	Sub-Segment	From	To	Distance (Miles)	Context Zones Existing
E1	1	SR 530	Partin Settlement Road	2.7	C5
	2	Partin Settlement Road	Neptune Road	2.8	C3C
	3	Neptune Road	Hickory Tree Road	4.1	C4
	4	Hickory Tree Road	Old Melbourne Highway	4.0	C3R
E2-1	1	Old Melbourne Highway	Hickory Tree Road	2.5	C2
	2	Hickory Tree Road	.2 mi E of Harmony Square Road	1.4	C3R
	3	.2 mi E of Harmony Square Road	1 mi W of Crab Grass Road	8.4	C2
E2-2	1	1 mi W of Crab Grass Road	Brevard County Line	10.5	C2
E3	1	Brevard County Line	5.7 mi E of Brevard County Line	5.8	C2
	2	5.7 mi E of Brevard County Line	Sweetwater Drive	1.8	C1
	3	Sweetwater Drive	I-95	2.3	C2

5.2.5 Major Developments

As shown in Table 5.2-5, there is one major development along Corridor E, Harmony, for a total of 456.16 acres. The Vacant/Unclassified land use mostly occurs in Segment E2 and coincides with Harmony. Based on Harmony documents, the future land use of this area will be mostly low density residential, conservation/recreation and office commercial. Overall there will be an intensification of use in the central part of Segment E2. All DRIs are shown in Figure 5.3-1.

Table 5.2-5: Corridor E Major Developments

Segment	Name	Acres
E2	Harmony	456.16



LEGEND

Existing Land Use

- Vacant / Unclassified
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Light Commercial
- Heavy Commercial
- Light Industrial
- Heavy Industrial
- Institutional
- Transportation / Utilities
- Recreation / Conservation
- Agricultural
- Water

Data Sources:
 COUNTY GOVERNMENTS: ORANGE CO, OSCEOLA CO, BREVARD CO (2016)
 LOCAL GOVERNMENTS: CITIES OF ST. CLOUD; BELLE ISLE, TITUSVILLE, MELBOURNE, COCOA, WEST MELBOURNE (2016)

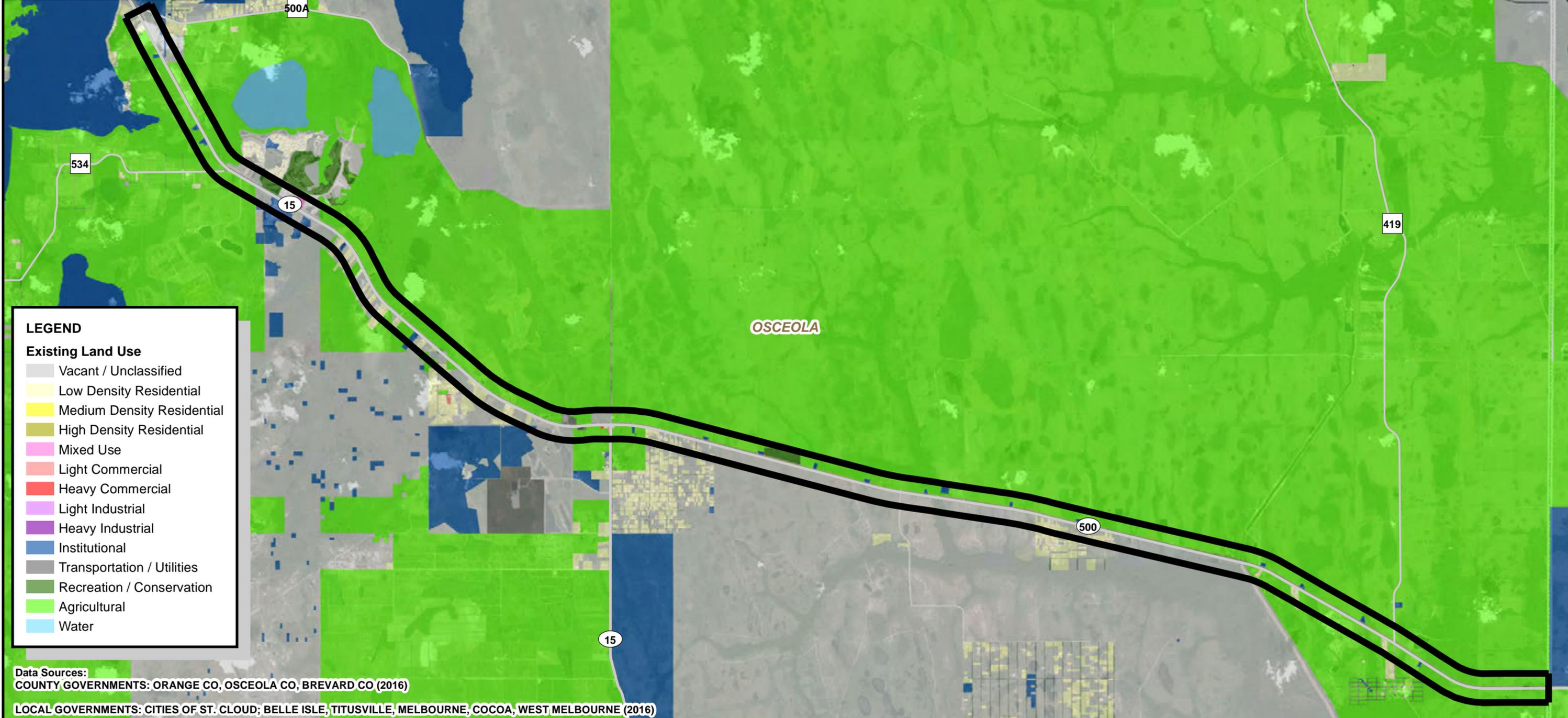
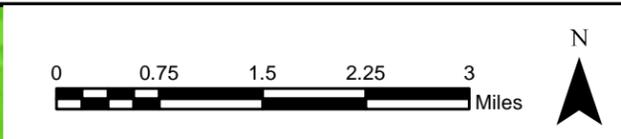
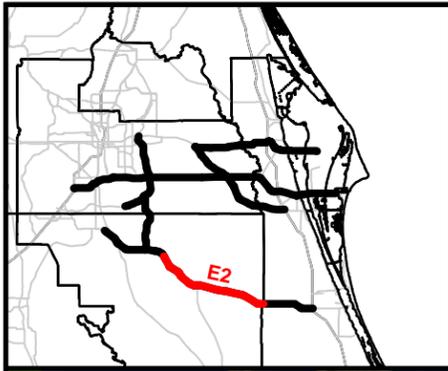


East Central Florida Corridor Evaluation Study



**Corridor E
Land Use**

**FIGURE
5.2-5
SEGMENT E1**



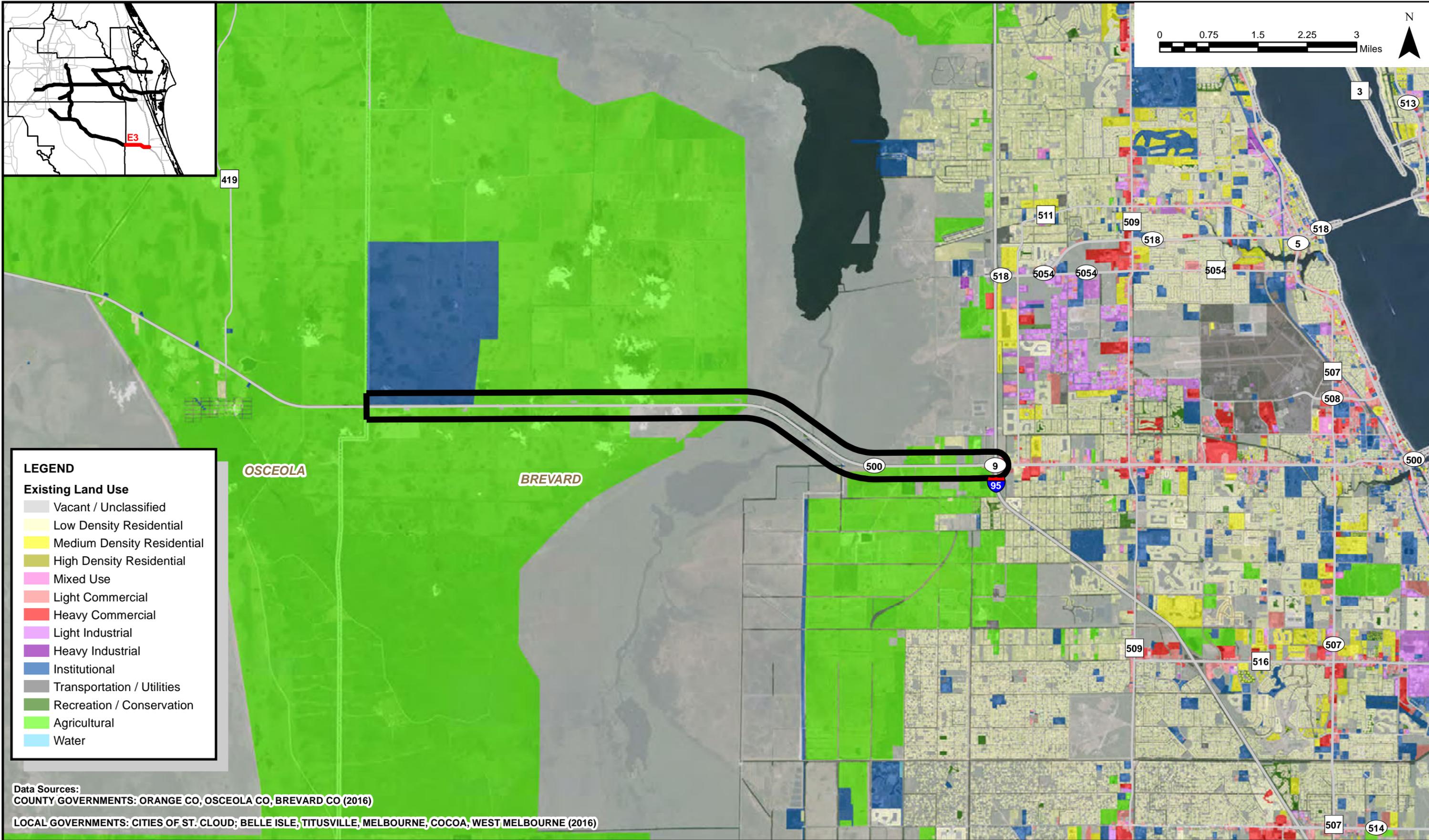
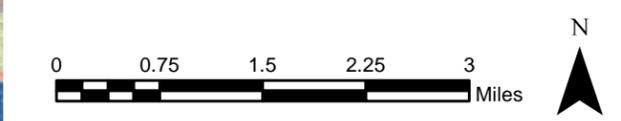
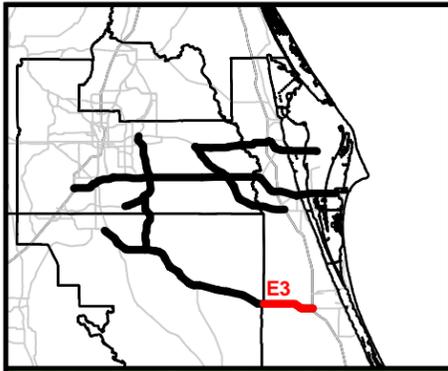
LEGEND

Existing Land Use

- Vacant / Unclassified
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Light Commercial
- Heavy Commercial
- Light Industrial
- Heavy Industrial
- Institutional
- Transportation / Utilities
- Recreation / Conservation
- Agricultural
- Water

Data Sources:
 COUNTY GOVERNMENTS: ORANGE CO, OSCEOLA CO, BREVARD CO (2016)
 LOCAL GOVERNMENTS: CITIES OF ST. CLOUD; BELLE ISLE, TITUSVILLE, MELBOURNE, COCOA, WEST MELBOURNE (2016)



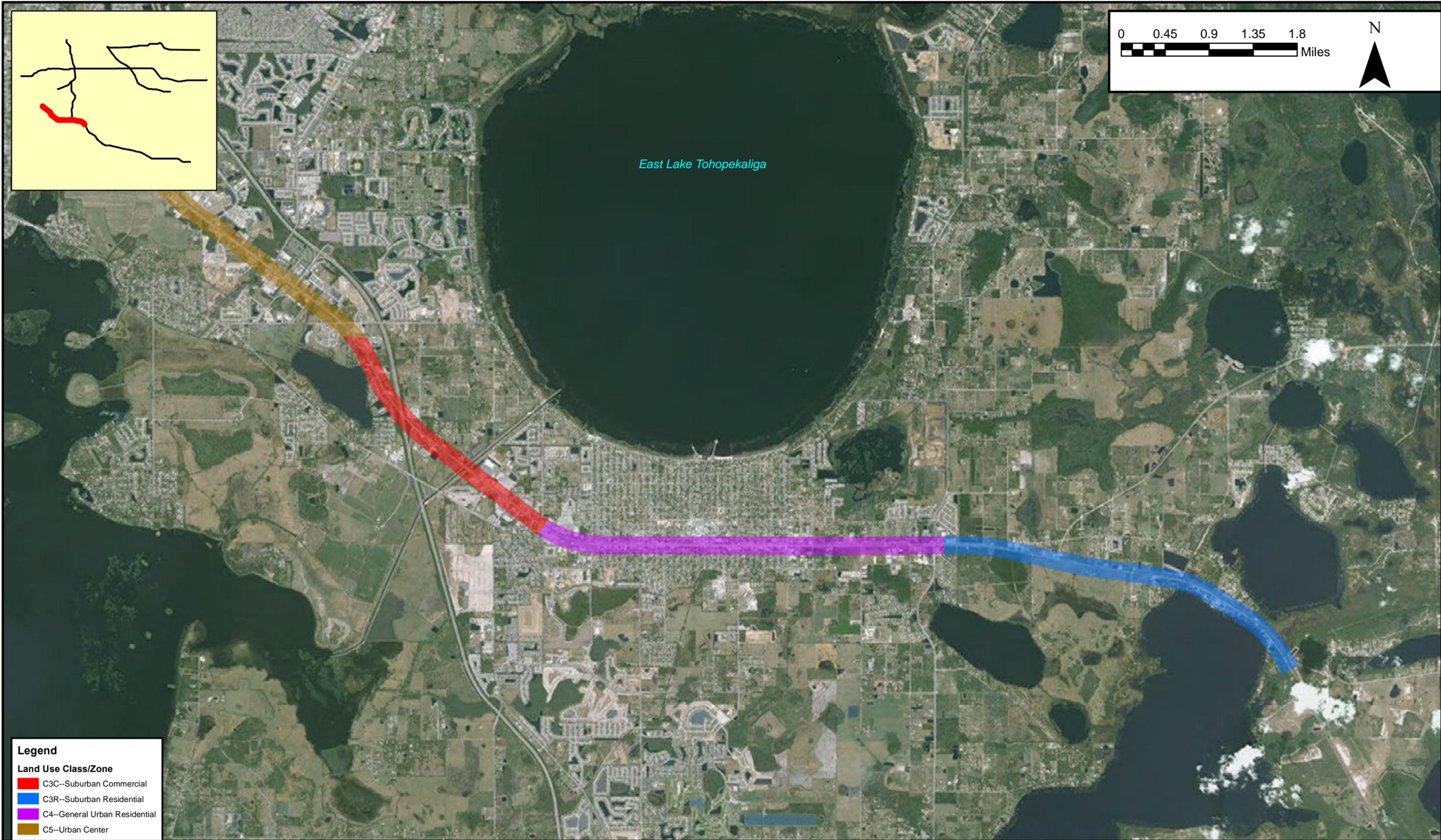
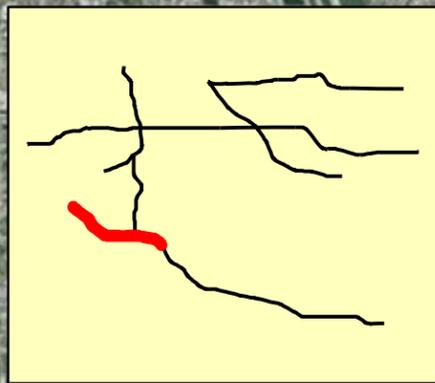


LEGEND

Existing Land Use

- Vacant / Unclassified
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Light Commercial
- Heavy Commercial
- Light Industrial
- Heavy Industrial
- Institutional
- Transportation / Utilities
- Recreation / Conservation
- Agricultural
- Water

Data Sources:
 COUNTY GOVERNMENTS: ORANGE CO, OSCEOLA CO, BREVARD CO (2016)
 LOCAL GOVERNMENTS: CITIES OF ST. CLOUD; BELLE ISLE, TITUSVILLE, MELBOURNE, COCOA, WEST MELBOURNE (2016)

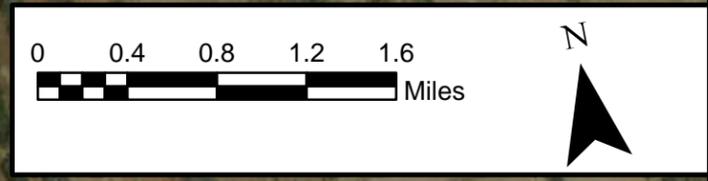
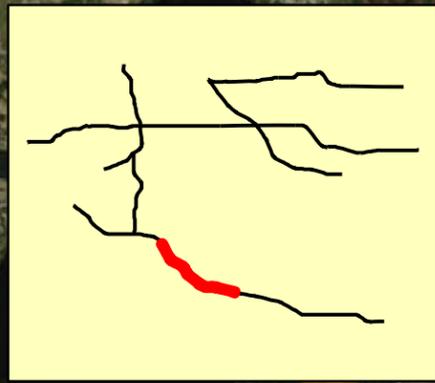


Legend

Land Use Class/Zone

	C3C--Suburban Commercial
	C3R--Suburban Residential
	C4--General Urban Residential
	C5--Urban Center





Legend

Land Use Class/Zone

	C2--Rural
	C3R--Suburban Residential

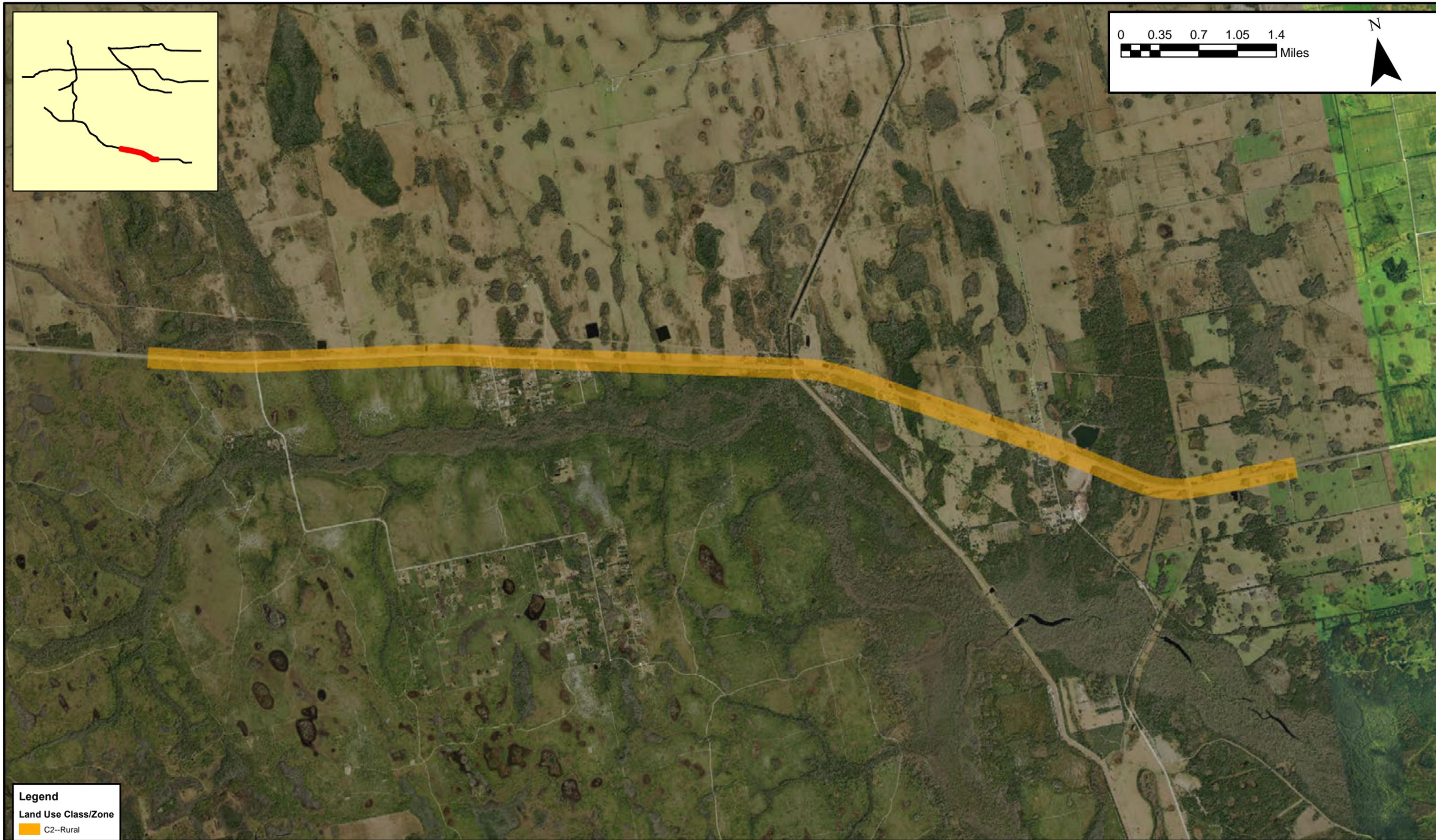
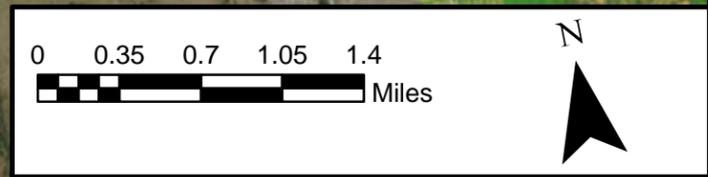
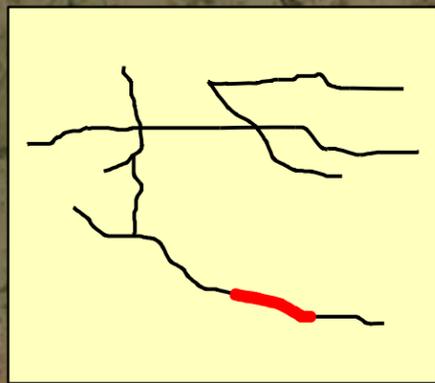


East Central Florida Corridor Evaluation Study



Corridor E Context Zone

FIGURE
5.2-6
SEGMENT E2-1



Legend
Land Use Class/Zone
C2--Rural

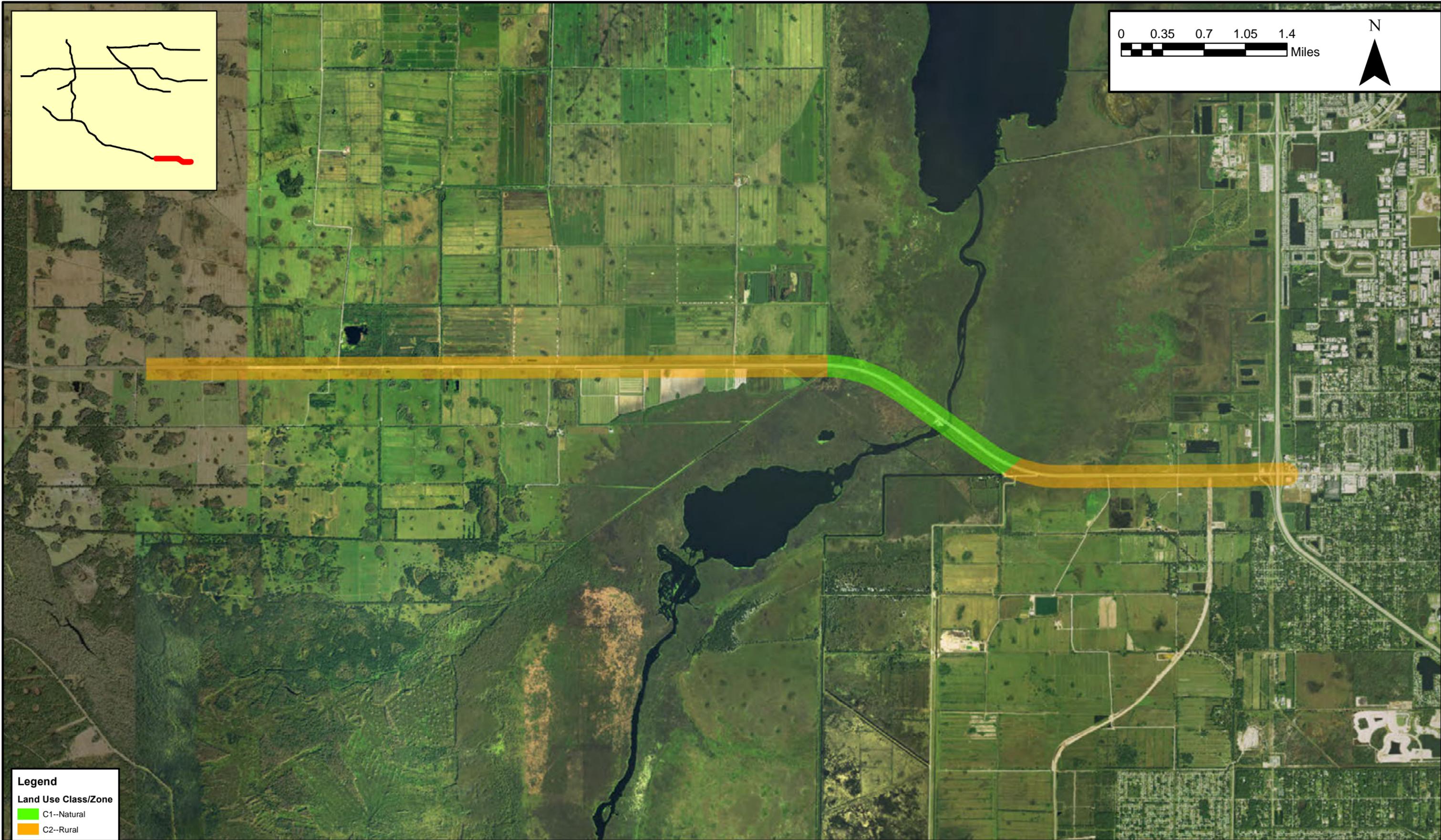
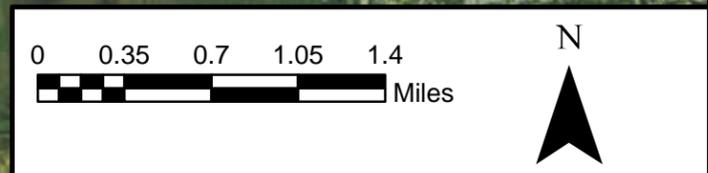
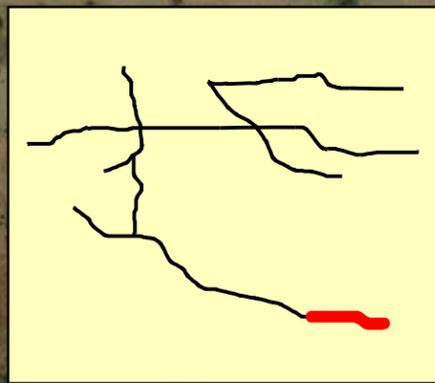


East Central Florida Corridor Evaluation Study



Corridor E
Context Zone

FIGURE
5.2-6
SEGMENT E2-2



Legend
Land Use Class/Zone
C1--Natural
C2--Rural



5.3 Roadway Characteristics/Operations

5.3.1 Jurisdiction and Classification

Corridor E is owned and operated by the Florida Department of Transportation and is designated at the federal level as part of the National Highway System (NHS). Roadway Functional Classification is primarily Principal Arterial-other with a major portion of the corridor designated as Rural from Old Melbourne Highway in Osceola County to just West of I-95 in Brevard County.

5.3.2 Typical Section and Posted Speed

The entire Corridor E is a 200-foot right-of-way. Segment E1 is 6 lanes from CR 530 to the Florida’s Turnpike. Remaining of Segment E1 and Segment E3 consists of four 12-foot lanes, a 40-foot median (20 feet between edges of curbs sloped at 1:6 to a ditch, with an eight-foot paved inside shoulder on each side), and 10-foot paved outside shoulders. The typical section of Segment E2 differs, with a narrower minimum right-of-way width at 120 feet and six 12-foot through lanes. The median is 24 feet wide, generally consisting of turn lanes and raised cement median strips, and there are outside shoulders present, with 10-foot widths.

The Maximum speed on Corridor E varies between 40 mph and 65 mph. Segment E1 has speed limit from 40 mph to 60 mph. Segment E2 starts at 60 mph and reaches 65 mph. Segment E3 from CR 519 starts at 55 mph and reaches 65 mph approaching I-95.

5.3.3 Traffic Volumes

Annual Average Daily Traffic (AADT) and Level of Service (LOS) 2015 on all three segments of Corridor E are shown on Table 5.3-1 and Figure 5.3-1.

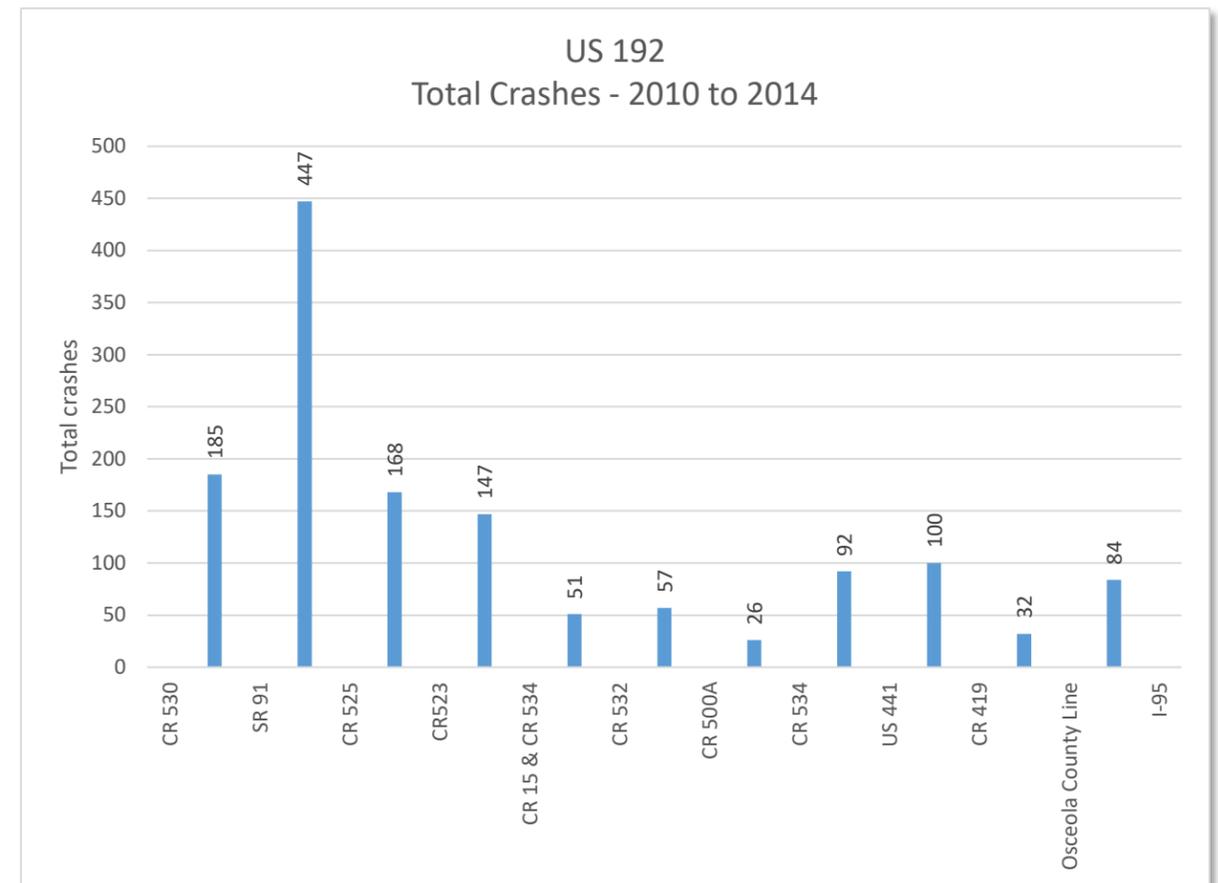
Table 5.3-1: Corridor E Annual Average Daily Traffic and Level of Service 2015

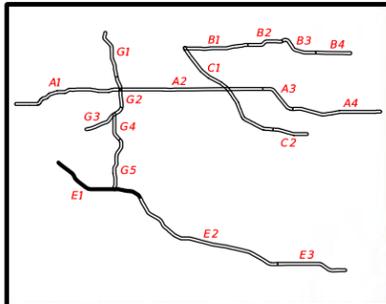
Roadway	Corridor Section	Count Location	AADT	LOS	Speed
US 192	E1	CR 530 – SR 91 (Florida’s Turnpike)	45,000	C	50-55
	E1	SR 91 (Florida's Turnpike) - CR 525	36,500	C	45-55
	E1	CR 525 - CR 523	45,000	F	40-45
	E1	CR 523 - CR 15/534	43,000	C	40-55
	E1	CR 15/534 - CR 532	23,500	B	55
	E1	CR 532 - CR 500A	18,800	D	55-60
	E2	CR 500A - CR 534	13,200	B	60
	E2	CR 534 – SR 15	9,614	B	55-65
	E2	SR 15 - CR 419	6,000	B	65
	E2/E3	CR 419 - I-95	8,100	B	55-65

5.3.4 Safety and Crash Data

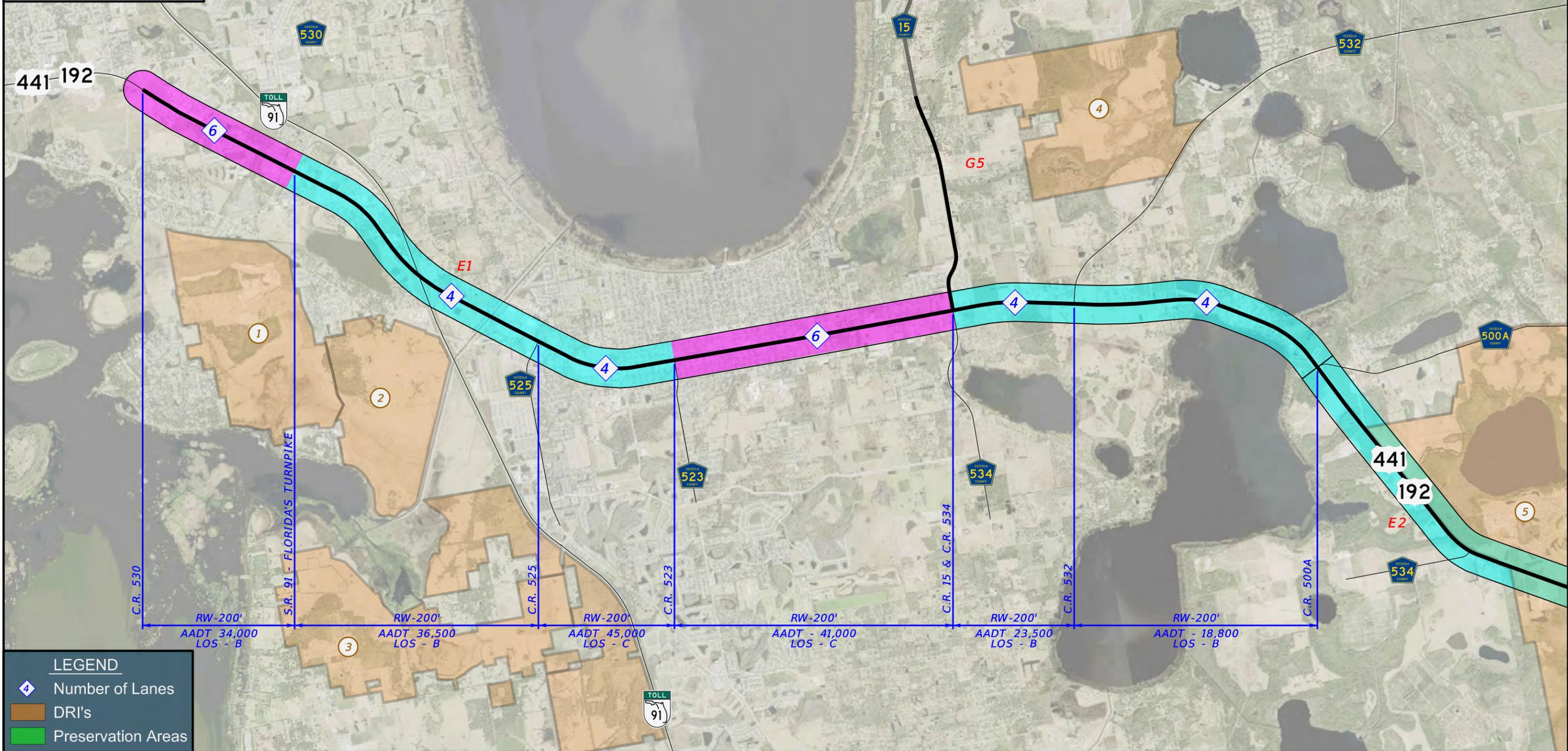
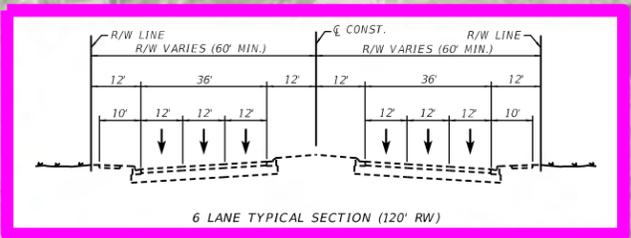
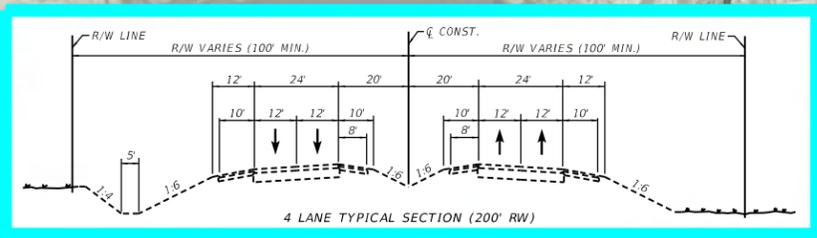
The following bar chart summarizes the total crashes for US 192 for the five-year period between 2010 and 2014. As shown, the highest number of crashes occurred on the four segments between CR 530 and CR 15/CR 534. This is likely due to the higher concentration of population within this area of the corridor. The most crashes take place between Florida’s Turnpike and CR 525. The highest concentration of accidents occurred at or close to the interchange of US 192 and the On/Off Ramp for Florida’s Turnpike at Shady Lane. At this interchange there were 218 accidents occurring within 1,800 feet of this intersection. Within those collisions: 140 were rear ends; 42 were angles; 16 were sideswipes; three were head on; and the rest are unknown. The second highest concentration of collisions occurred within the same limits of the Florida’s Turnpike and CR 525. The second area to note is at the interchange of I-95 and US 192. There were a total of 84 collisions between two vehicles of which: 24 were rear ends; five head on collisions; 33 angle crashes; 10 sideswipes; and the rest are unknown.

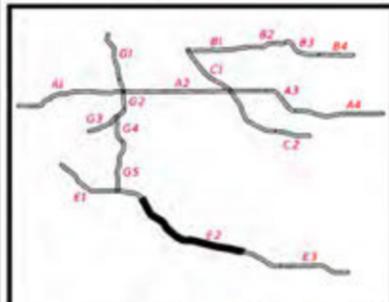
Corridor E – US 192 Total Crashes – 2010 to 2014



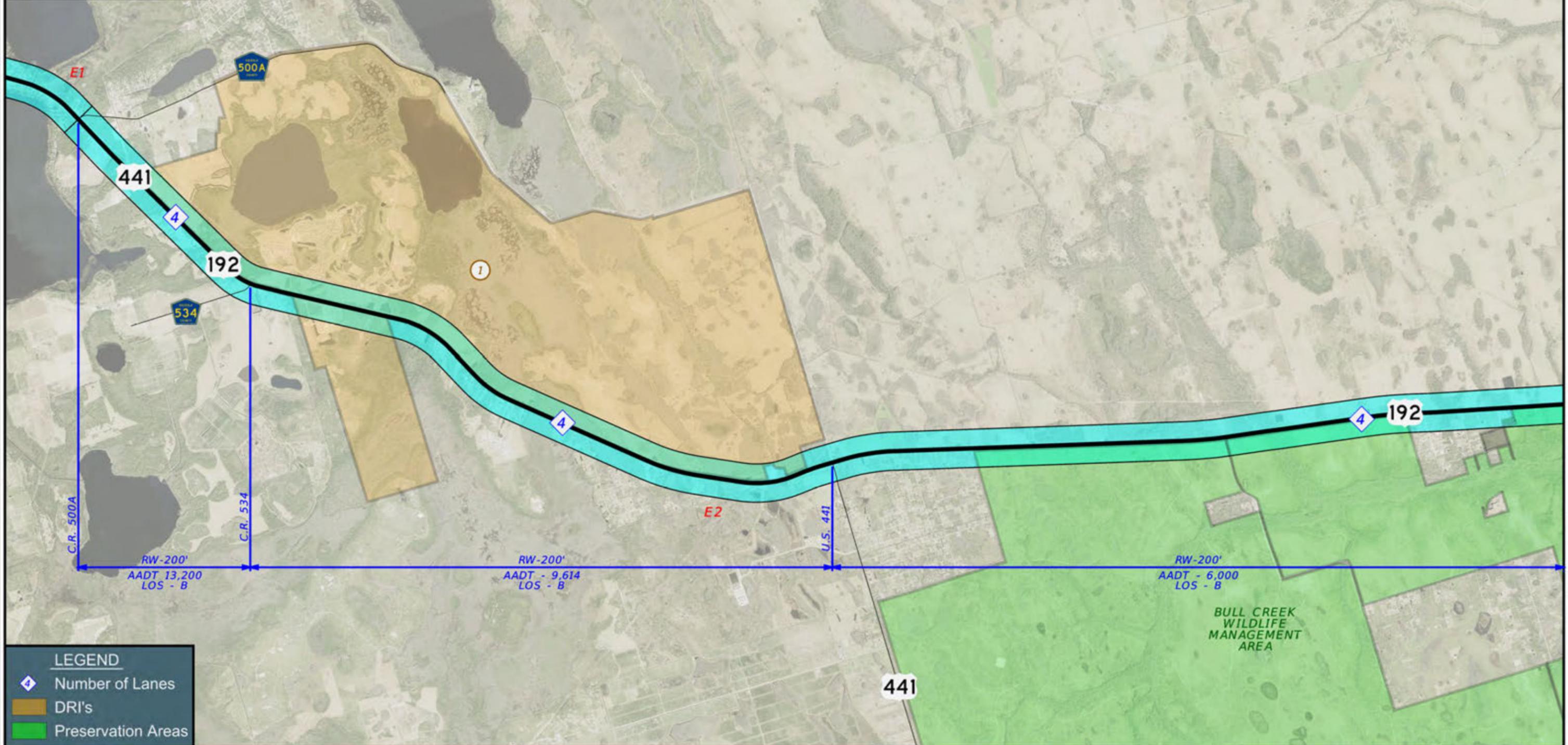
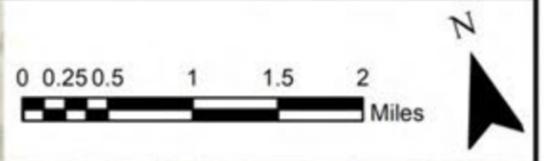
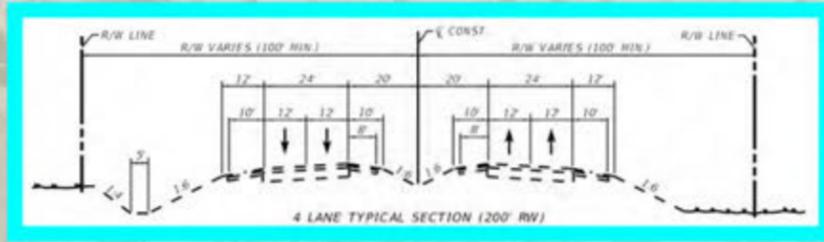


- MAJOR DRI'S**
- ① Toho Preserve
 - ② Tohoqua
 - ③ Edgewater
 - ④ Center Lake
 - ⑤ Harmony





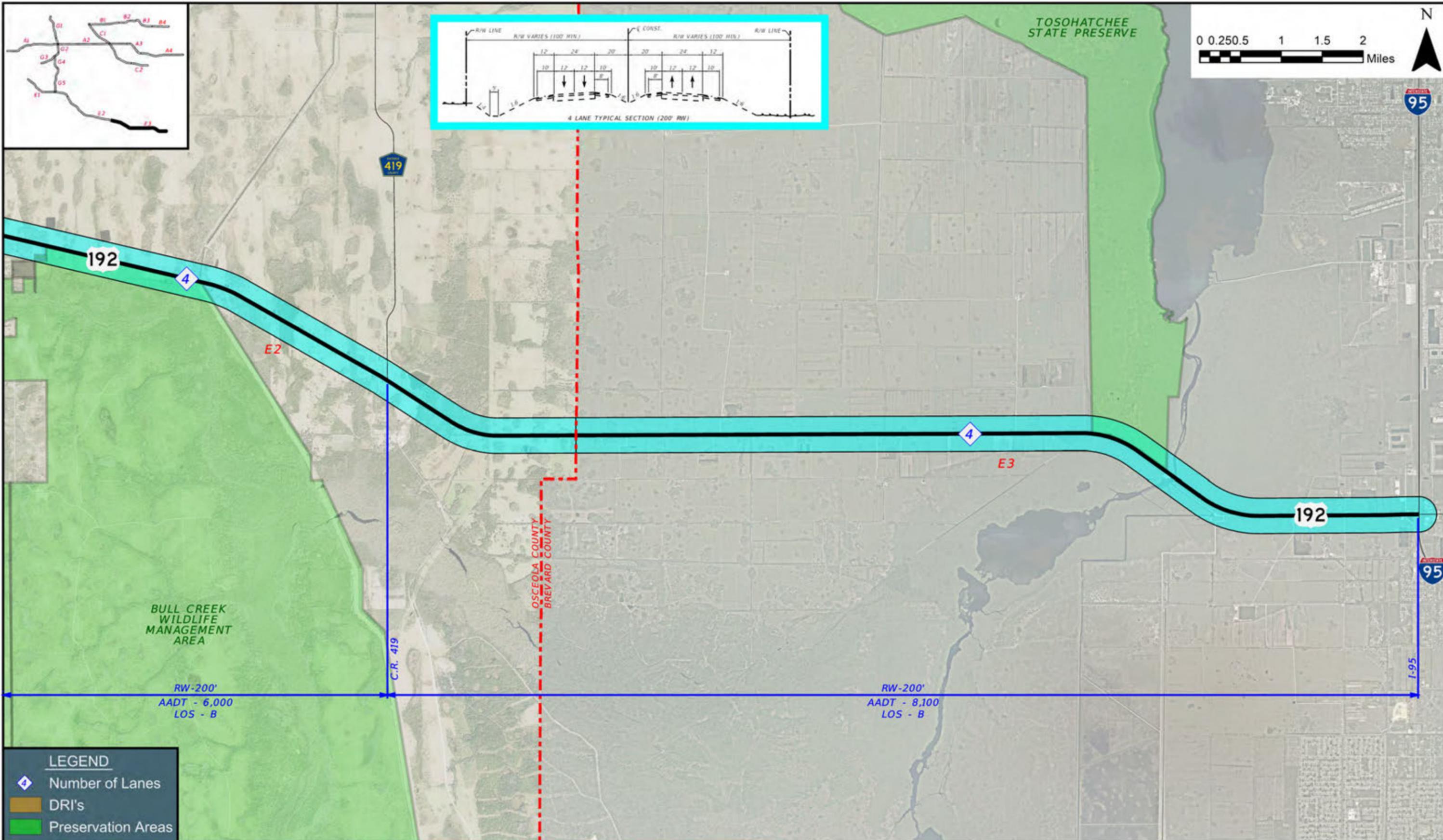
MAJOR DRI'S
Harmony



LEGEND

- Number of Lanes
- DRI's
- Preservation Areas





5.4 Railroad Crossings

There are no rail facilities that cross the corridor right-of-way.

5.5 Engineering and Site Characteristics

As noted previously, one of the key benefits of this phase of the study is that it provides an opportunity to plan on a holistic, system-level, while also providing an opportunity to collect data, conduct analyses, and develop packages of projects and strategies to move into future project development. Engineering analyses and documentation of site characteristics is a required step in the PD&E process. The following section provides the results of the ECFCEs Engineering and Site Characteristics analyses.

5.5.1 Structures

Corridor E has 11 crossings with bridges or underpasses. At these various locations, there are 19 structures. This section focuses on underpasses only. Corridor B underpasses SR 91 (Florida's Turnpike) and I-95. Information was collected from FDOT Straight Line Diagrams, FDOT Bridge Reports, and Google Maps.

US 192 Underpass at SR 91 (Structure #s 920134, 920078)

- Two structures at the interchange
- Structure #920134 has a vertical clearance of 15.9 feet
- Structure #920078 has a vertical clearance of 16.4 feet

This interchange is being reconfigured as part of the US 192 widening project.

