4.5 Right of Way

The existing right of way width along Old U.S. 441 is not consistent throughout the corridor. Based on available information in the Lake County Geographic Information System (GIS), which rely on property ownership information on file with the Lake County Property Appraiser, as well as as-built documentation of the corridor made available by FDOT, City of Tavares and Lake County Public Works, width of available right of way is summarized as follows:

- Disston Avenue to Dora Avenue varies from 50 to 90 feet
- Dora Avenue to east of Campbell Drive 90 feet
- East of Campbell Drive to west of Lakeview Street Typically 66 feet
- West of Lakeview Street to east of Lakeview Street Typically 40 feet
- East of Lakeview Street to CR 19A Typically 66 feet -- Railroad R/W 100 feet
- CR 19A to Heim Road (3 lanes) Typically 66 feet -- Railroad R/W 50 feet
- Heim Road to Dora Way 50 feet -- Railroad ROW 100 feet
- Dora Way to McDonald Street 60 feet -- Railroad 50 feet



4.6 Drainage Features

The proposed trail is located within the Upper St. Johns hydrologic basin as shown in Figure 13. This basin is broken down into three sub-basins, which include (from west to east): Dora Canal, Lake Sanders Outlet

and Lake Saunders Outlet. Storm runoff from the study area drains to these branches through sheet flow in the existing conditions. The topography of the area is also shown in Figure 14.

4.7 Structures

One existing structure is located within the study area and is a railroad trestle over Oakland Drive. The trestle was built in 1887, along with the railroad corridor between Tavares and Mount Dora. The trestle is owned by CSX Transportation and is not programmed for rehabilitation (repairs) or replacement.

4.8 Lighting / Aesthetics

Lighting is present along portions of Old U.S. 441 within the study area. Light poles are generally spaced between 200 feet and 230 feet apart between Disston Avenue and Anderson Drive on the north side of Old U.S. 441 west of Dora Avenue and on the south side east of Dora Avenue. Light poles are spaced between 120 feet and 230 feet apart from Eudora Road to Heim Road, on the north side of Old U.S. 441. From Heim Road to Oakland Drive, light poles are spaced between 140 and 220 feet apart on the south side of Old U.S. 441. Between Oakland Drive and McDonald Street, historic replica light poles are spaced approximately 150 feet apart on the south side of Old U.S. 441. East of McDonald Street, historic replica light poles are located on both sides of Old U.S. 441 and spaced 70 feet apart.

Figure 13: Drainage Basins

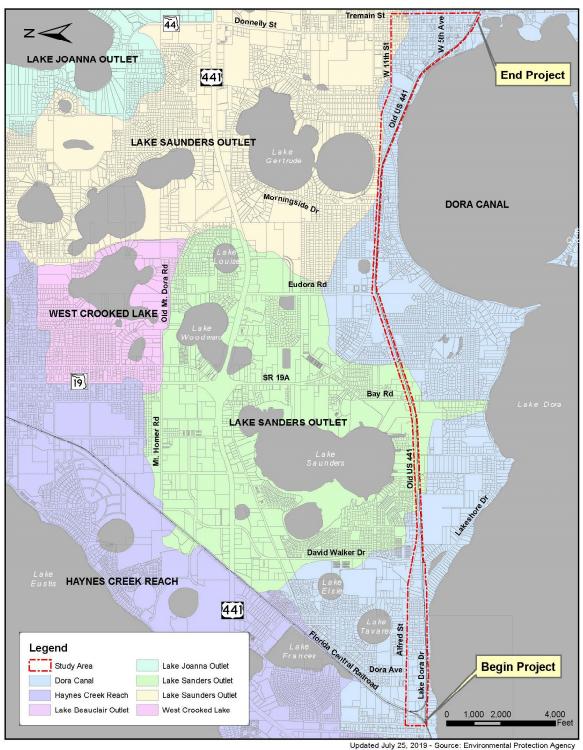
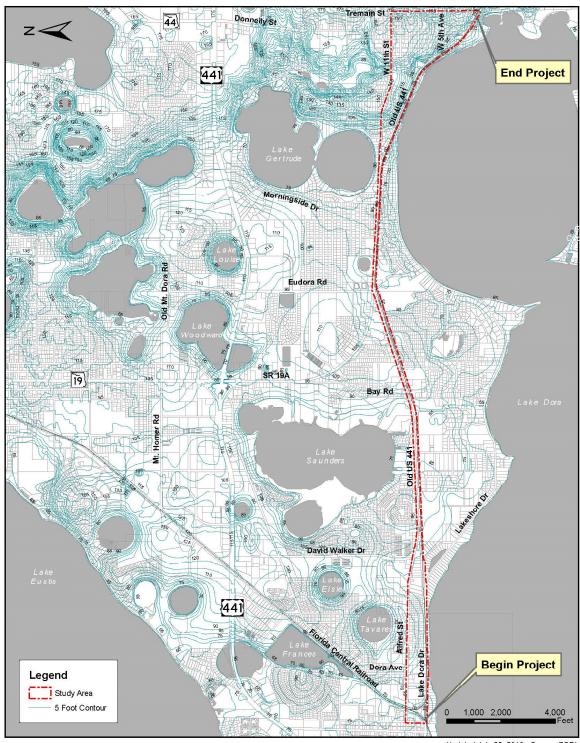


Figure 14: Topography

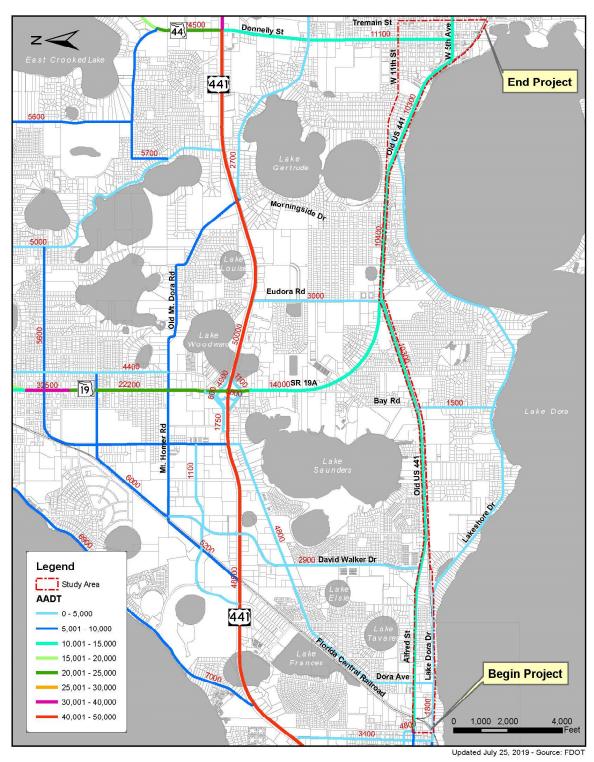


Updated July 25, 2019 - Source: FGDL

4.9 Existing Traffic Data and Characteristics

The Annual Average Daily Traffic (AADT) for the study area is illustrated in Figure 15. The Old U.S. 441 corridor is a two-lane collector in an urban area from Disston Avenue in Tavares to C.R. 19A. Along this segment, the AADT was approximately 10,300 vehicles, according to FDOT 2018 AADT data. Between C.R. 19A and Tremain Street in Mount Dora, Old U.S. 441 is a minor arterial in an urban area with an AADT of approximately 10,400 vehicles. Pedestrian and bicycle count data was not available along the corridor, however cyclist and pedestrians were observed along Old U.S. 441 primarily in the downtown areas of Tavares and Mount Dora during field review.

Figure 15: Annual Average Daily Traffic (AADT)



4.10 Existing Operational Analysis (LOS)

Level of Service (LOS) measures the travel delay of vehicles and provides a "grade" based on the delay, as shown in Figure 16. An "A" grade represents free flowing traffic, while "F" is considered failing and highly congested. The LOS for Old U.S. 441 varies between LOS B and LOS C, as illustrated in Figure 17. The corridor LOS were obtained from the Lake Sumter MPO Transportation Management System (TMS).

Figure 16: Level of Service Examples





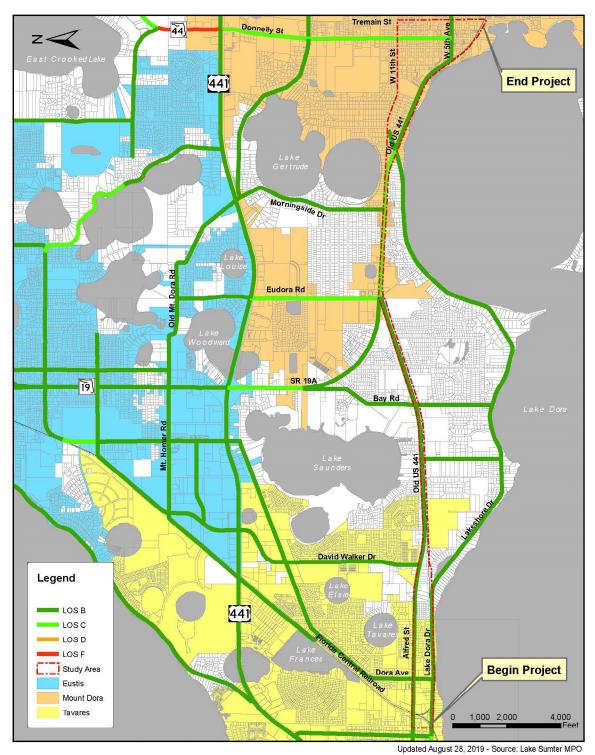


A/B

C/D

E/F

Figure 17: Corridor Level of Service (LOS)



4.11 Crash Data

Crash data was collected along Old U.S. 441 starting at Wooton Park in Tavares and ending at Tremain Street in Mount Dora for the most recent five-year period (2014-2018) using Signal Four Analytics. The crash summary spreadsheet is included as Appendix B. This section summarizes the crash statistics and includes an analysis of the data for high frequency crash locations within the study corridor. Figure 18 summarizes crash frequency and crash type by year from 2014 to 2018.

Crashes by Severity (2014-2018)

40

Injury Property damage
29
21

30
20
26
23
10
10
10
10
12

2014
2015
2016
2017
2018
YEAR

Figure 18: Crashes by Severity (2014-2018)

Source: Signal Four Analytics

The corridor wide crashes for the five-year period are displayed in Figure 19 by type and severity.

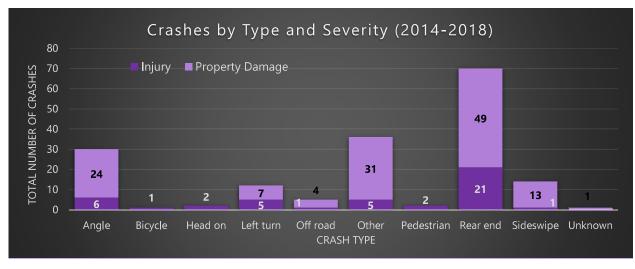


Figure 19: Crashes by Type and Severity (2014-2018)

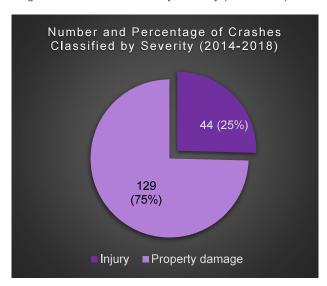
Source: Signal Four Analytics

The most common types of crashes on Old U.S. 441 are rear-end (40% of all crashes), other crashes (21%) and angle crashes (17%). Pedestrian and bicyclist accidents account for 2% of all crashes. The locations with the highest incidents of pedestrian and bicyclist crashes include the following:

- Pedestrian:
 - Old U.S. 441 and Heim Road (1,000 feet offset east at 7:00 a.m.)
 - Old U.S. 441 and Main Street (100 feet offset west at 9:12 p.m.)
- Bicyclist:
 - West 11th Avenue and North Alexander Street (at intersection at 4:30 p.m.)

The corridor crash severity is broken down by total accidents and percentage in Figure 20.

Figure 20: Number and Percentage of Crashes Classified by Severity (2014-2018)



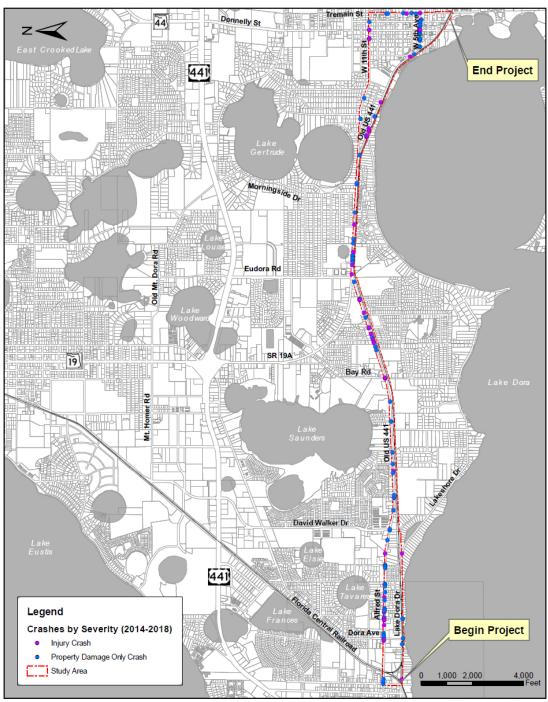
Source: Signal Four Analytics

Additional significant findings include the following:

- 73% of crashes occur during daylight hours
- Night crashes, without lighting, account for 3% of all crashes
- Wet surface conditions accounted for 12% of all crashes
- 88% of crashes occurred in dry surface conditions

The crash severity and locations maps are included as Figure 21 and Figure 22.

Figure 21: Crashes by Severity (2014-2018)



Updated September 6, 2019 - Source: Signal 4 Analytics

44) 441 **End Project** Morningside Dr Bay Rd 441 Legend Crash Locations & Types (2014-2018) Vehicular Crash Begin Project Pedestrian Crash Bicycle Crash Study Area

Figure 22: Crashes by Location and Type (2014-2018)

Updated September 6, 2019 - Source: Signal 4 Analytics

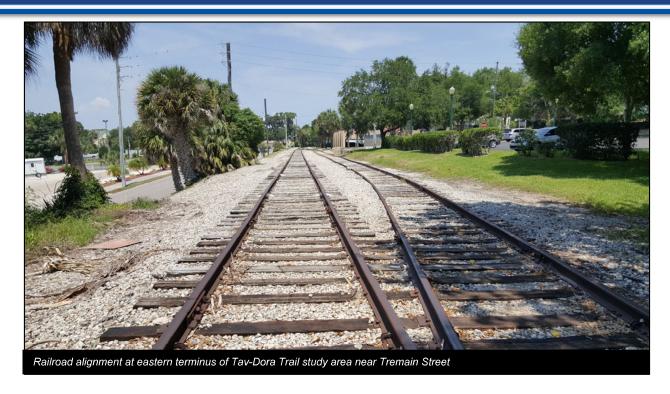
4.12 Utilities / Railroads

CSX Transportation owns and leases the railroad corridor paralleling Old U.S. 441 to the Florida Central Railroad (FCEN). The railroad segment consists of standard gauge tracks and wooden ties over gravel ballast with a passing siding between Donnelly Street and Tremain Street in Mount Dora. Originally called the Sanford and Lake Eustis Railroad, this railroad was built in 1887 between Sanford and Tavares. In 1902, it was purchased by the Atlantic Coast Line (ACL) railway. In 1967, the ACL merged with the Seaboard Air Line (SAL) railroad to become the Seaboard Coast Line (SCL) railroad. In 1980, the SCL merged with the Chessie System, forming CSX. In 1986, CSX leased the track to the FCEN. While passenger rail service is no longer provided, due to the condition of the aging infrastructure, the railroad is considered an active line for freight and railcar storage and includes a railroad trestle. At Oakland Drive, the railroad crosses over the street on an elevated historic railroad bridge. According to a 2012 Cultural Resource Evaluation conducted for the adjacent proposed Wekiva Trail, this railroad segment and railroad bridge are both likely eligible for inclusion in the National Register in the areas of Community Planning and Development, Commerce, and Transportation. In addition, several utilities are located within the study area, as summarized in Table 1 below:

Table 1: Utilities located within the Study Area

Service Area Name	Contact	Phone Numbers	Utility Type
City of Tavares	Christopher Abbott	(352) 742 - 6222	Water, Sewer
City of Tavares - Sewer	Christopher Abbott	(352) 742 - 6222	Water, Sewer
City of Tavares	Alex Patton	(352) 742 - 6425	Fiber
Duke Energy	Stephanie Olmo	(407) 905 - 3376	Electric
Lake County Board of County Commissioners	Ed Couey	(352) 343 - 9760	Fiber, Telephone
Century Link	Network Relations	(877) 366 - 8344 x2	Fiber
Comcast Communications /Previously Lake County Cable	Wade Mathews	(352) 516 - 3824	CATV
City of Mounty Dora	Paul Lahr **	(352) 735 - 7151 x1823	Reclaimed Water, Water, Sewer, Storm Water
City of Mounty Dora Electric Utility	Paul Lahr **	(352) 735 - 7151 x1823	Electric
City of Mounty Dora Fiber Utility	Paul Lahr **	(352) 735 - 7151 x1823	Fiber
City of Mounty Dora Traffic Signals	Paul Lahr **	(352) 735 - 7151 x1823	Traffic Signals
Summit Broadband	Lester Guthrie	(407) 996 - 1183	Fiber, Telephone
TECO Peoples Gas – Eustis	Joan Domning	(813) 275 - 3783	Gas
Sumter Electric Cooperative Inc	Tracey Cottrell	(352) 569 - 9665	Electric
CenturyLink Winter Garden	Ty Leslie	(407) 814 - 5293	Fiber, Telephone
CenturyLink - Ocala	Kirby Smith	(352) 326 - 1722	Fiber, Telephone

Source: Sunshine OneCall (Sunshine 811)

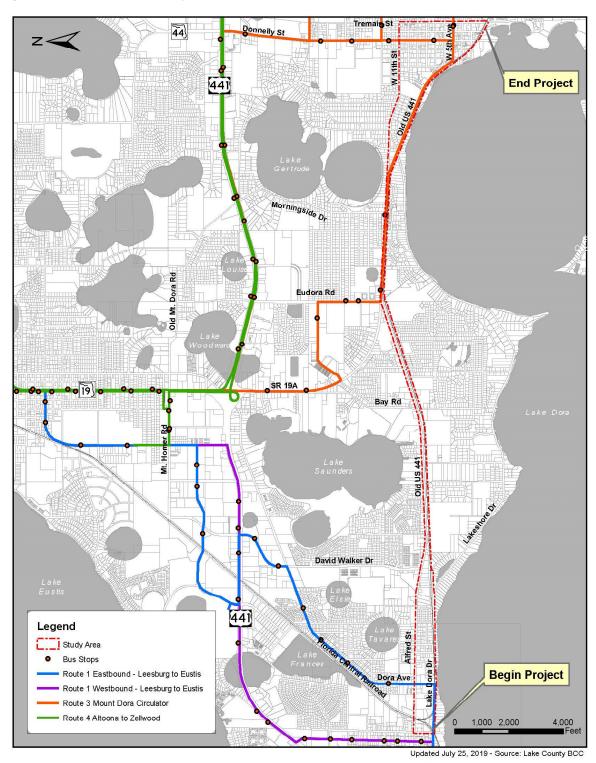


4.13 Transit Data / Routes

Transit along the corridor is served by the LakeXpress. There are two routes that operate within the study area; Route 1 and Route 3. Following is a summary of both routes, also illustrated in Figure 23.

- Route 1 is an eastbound route that travels from Leesburg to Eustis. This route serves the very
 western end of the study corridor and travels along Lake Dora Drive and Dora Avenue. Route 1
 transit stops are located just outside of the study area and operates on one-hour headways.
- Route 3 is the Mount Dora Circulator, which serves Old U.S. 441 along the eastern portion of the study area, from Eudora Road to Tremain Street. Route 3 also runs along Donnelly Street. Route 3 operates on one-hour headways, with three transit stops inside of the study area (Stops 6, 9 and 10). Stops 6 and 9 are located near the Mount Dora City Hall and Stop 10 is located at Eudora Road and Brown Avenue. Figure 23 illustrates the transit routes and stops in the study area.

Figure 23: Transit Routes and Stops



4.14 Existing and Planned Trails

Figure 24 illustrates the existing and planned trails within the Tav-Dora Trail study area. A description of existing and planned trails within the Tav-Dora Trail study area is provided below.

4.15.2 Lake-Wekiva Trail

The Wekiva Trail will connect Mount Dora to Seminole County. This trail is being built in phases by the FDOT in conjunction with the construction of the Wekiva Parkway. At about 15 miles in length, this trail provides connections to much of the Lake County Trail Network as well as the West Orange Trail. North/south trails connecting to the Wekiva Trail include Neighborhood Lakes Trail as well as the trails proposed by the City of Mount Dora. Trailheads are proposed in Mount Dora, at the Wolf Branch Sink Preserve, in East Lake Park, and along the Neighborhood Lakes Trail. An overpass will be constructed over U.S. 441.

4.15.3 Mount Dora Trails

The Mount Dora Trails is an existing and proposed interconnected network of trails and dedicated bicycle facilities within the City of Mount Dora. This network is intended to enhance the community by providing people of all ages with an attractive, safe, and accessible place for recreation and transportation. Existing trail facilities include a cycle track along the Tremain Street corridor and the Palm Island Park Trails adjacent to Lake Dora near the Tav-Dora Trail corridor planning study's eastern terminus.

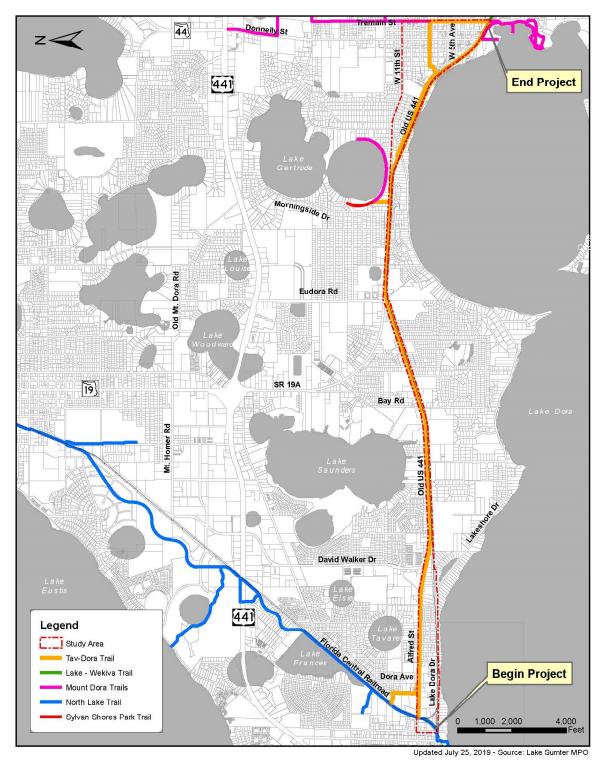
4.15.4 North Lake Trail

The North Lake Trail (Phase 1) is a proposed trail currently in the planning phase. The North Lake Trail, Phase I begins at the Tavares Station Trailhead near Wooton Park in Tavares and ends just north of Farran Park in Eustis. The trail connects the communities of Tavares and Eustis. This planned 4.35-mile shared-use trail is the first phase of the North Lake Trail. When completed, the North Lake Trail will become part of the regional River to Hills Trail and provide Lake County access to the Ocala National Forest.

4.15.5 Sylvan Shores Park Trail

The Sylvan Shores Park Trail is an existing trail within the City of Mount Dora Trail network. It runs parallel to the south shore or Lake Gertrude from Gertrude Place to Avalon Way.

Figure 24: Existing and Planned Trails



5.0 Environmental Setting

The existing environmental setting is comprised of natural, cultural, social, and physical resources. The features identified within each of these four categories are described in the following sections.

5.1 Natural Resources

The natural resources along the study corridor include wetlands and floodplains.

5.1.1 Wetlands and Floodplains

Several lakes are located within the study area, which increases the occurrence of wetlands and floodplains. The wetlands and floodplains analyses were performed in geographic information systems (GIS) using Federal Emergency Management Agency (FEMA) and National Wetlands Inventory (NWI) data, and the resulting map is shown in Figure 25.

5.2 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) requires that historic and archaeological resources be considered in project planning for federally funded or permitted projects. Cultural resources or historic properties include any, "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP)."

Any historic resources or archaeological sites that have been identified within the study area by the Florida Division of Historic Resources, are shown in Figure 26. The highest concentrations of historic structures are seen in Downtown Mount Dora, Downtown Tavares, and in vicinity of Old U.S. 441 at C.R. 19A.



Figure 25: Wetlands and Floodplains

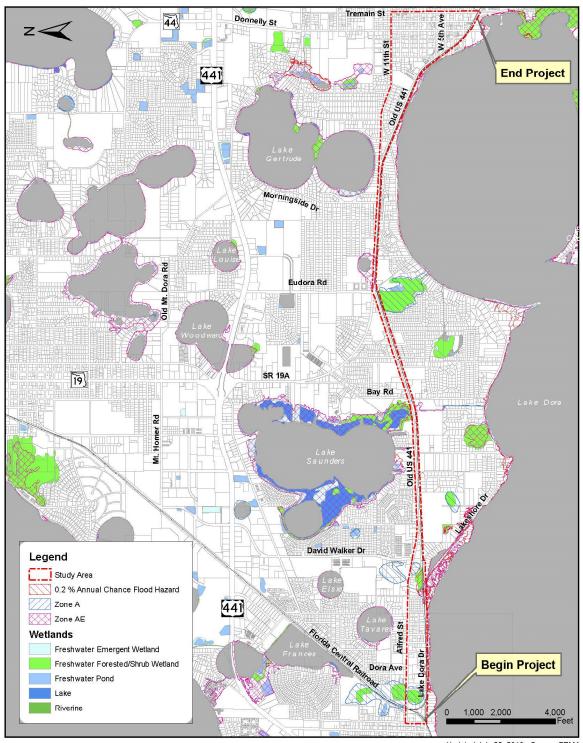
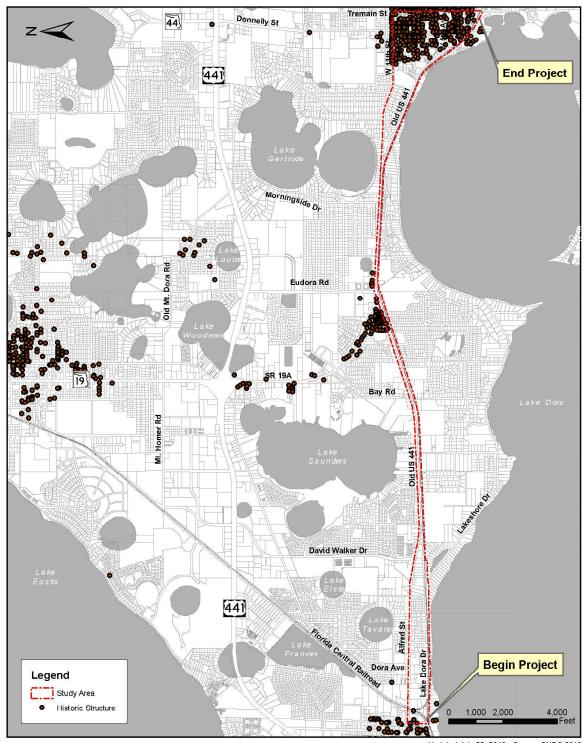


Figure 26: Historic and Archaeological Sites



5.3 Social Resources

Figure 27 depicts the locations of the community services and social resources within the study area, as described throughout the remainder of this section. Figure 29 identifies areas of public and privately-owned lands.

5.3.1 Parks and Recreational Facilities

Parks and recreational facilities in the study area consist of:

- Wooton Park, 100 East Ruby Street, Tavares, FL 32278
- Aesops Park, 501 East Caroline Street, Tavares, FL 32778
- Sylvan Shores Park, Park Avenue and Morningside Drive, Mount Dora, FL 32757
- Donnelly Park, 530 North Donnelly Street, Mount Dora, FL 32757
- Sunset Park, 230 West 4th Avenue, Mount Dora, FL 32757
- Elizabeth Evans Park, 100 North Donnelly Street, Mount Dora, FL 32757

5.3.2 Schools

Schools in the study area include:

- Triangle Elementary School, 1707 Eudora Road, Mount Dora, FL 32757
- Mount Dora Christian Academy, 301 West 13th Avenue, Mount Dora, FL 32757

5.3.3 Churches and Religious Institutions

Churches and religious institutions within the study area include:

- Community Chapel First Church, 3601 West Old U.S. 441, Mount Dora, FL 32757
- Saint Philip Lutheran Church, 1050 Boyd Drive, Mount Dora, FL 32757
- Traditional Congregation of Mount Dora, 848 North Donnelly Street, Mount Dora, FL 32757
- Congregational Church of Mount Dora, 650 North Donnelly Street, Mount Dora, FL 32757
- First Presbyterian Church, 222 West 6th Avenue, Mount Dora, FL 32757
- First United Methodist Church, 439 East 5th Avenue, Mount Dora, FL 32757
- Saint Edward's Episcopal Church, 460 North Grandview Street, Mount Dora, 32757

5.3.4 Fire and Police

The following fire station and law enforcement facilities are located within the study area:

- Tavares Fire Department, 424 East Alfred Street, Tavares, FL 32778
- Tavares Police Department, 201 East Main Street, Tavares, FL 32778
- Juvenile Justice Department, 2739 West Old U.S. 441, Mount Dora, FL 32757
- Mount Dora Fire Department, 1300 North Donnelly Street, Mount Dora, FL 32757
- Mount Dora Police Department, 1300 North Donnelly Street, Mount Dora, FL 32757

5.3.5 Medical and Emergency Operation Facilities

No medical or emergency operation facilities are present within the study area.

5.3.6 Other Public Buildings and Facilities

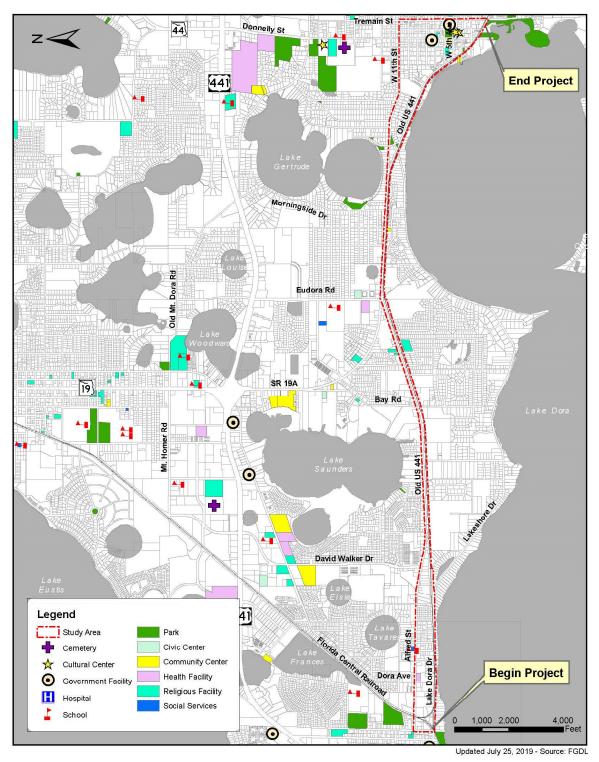
Other public buildings and facilities include:

- Tavares Pavilion on the Lake, 200 South Disston Avenue, Tavares, FL 32778
- United States Postal Service, 711 North Donnelly Street, Mount Dora, FL 32757
- Mount Dora City Hall, 510 North Baker Street, Mount Dora, FL 32757

5.3.7 Other Significant Locations

- Tavares Chamber of Commerce, 300 East Main Street, FL 32278
- Golden Triangle Shopping Center, 2751 West Old U.S. 441, Mount Dora, 32757
- Lakeside Inn, 100 Alexander Street, Mount Dora, FL 32757
- Mount Dora Plaza Shopping Center, 2700 West Old U.S. 441, Mount Dora, 32757
- Mount Dora Chamber of Commerce, 341 Alexander Street, Mount Dora, FL 32757
- Mount Dora Community Building, 520 North Baker Street, Mount Dora, FL 32757
- Mount Dora Boating Center and Marina, 148 Charles Avenue, Mount Dora, FL 32757

Figure 27: Cultural and Social Resources



5.4 Physical Resources

5.4.1. Air Quality

Lake County is currently designated as being in attainment for the following Clear Air Act National Ambient Air Quality Standards (NAAQS): ozone, nitrogen oxide, particulate matter (2.5 microns in size and ten microns in size), sulfur dioxide, carbon monoxide, and lead.

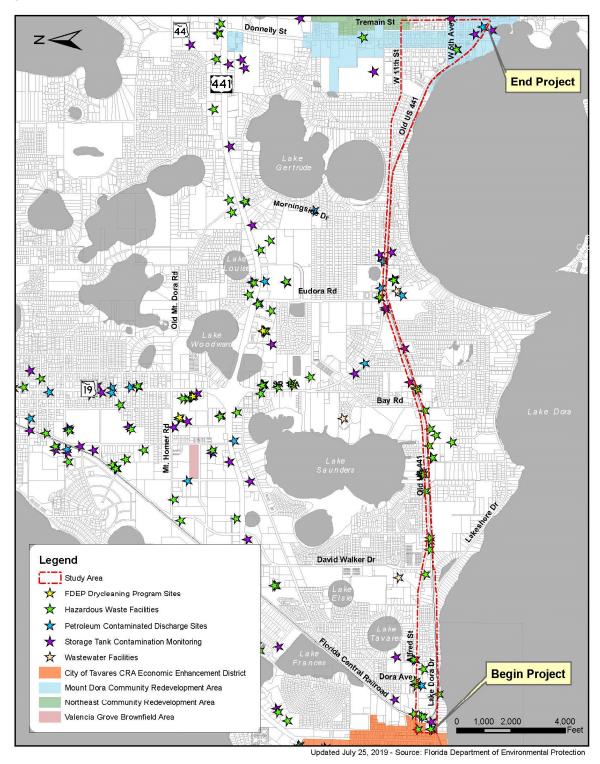
5.4.2 Contamination

Known contaminated locations within the study area were identified using EPA data. Figure 28 identifies the known contaminated site locations.

5.4.3 Soil Types

The Tav-Dora Trail study area consists of the soil types shown in Figure 29. These are predominantly sandy soils with high permeability.

Figure 28: Contamination Sites



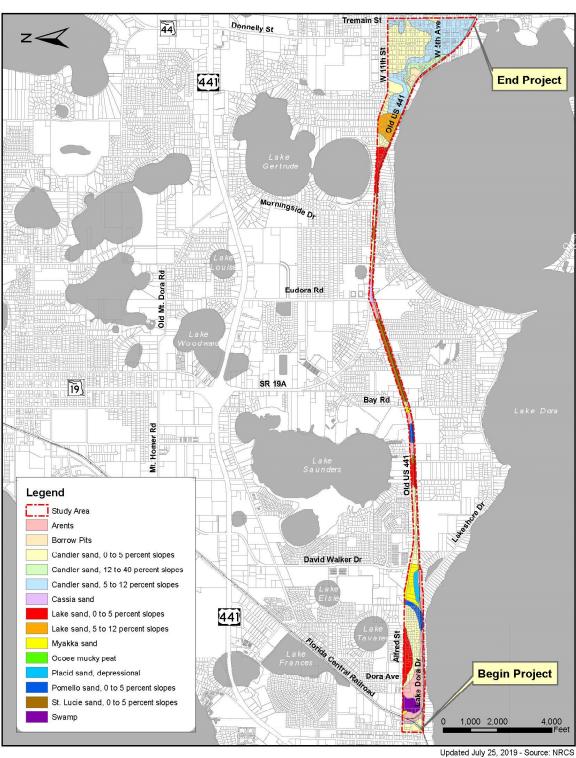


Figure 29: National Resources Conservation Service (NRCS) Soils

Appendices

Appendix A. Pages from Planning Documents

Appendix B. Crash Data Summary