TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Data Inventory and Analysis

TAVARES

America's Seaplane City

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COMPREHENSIVE PLAN 2040

Land Use Element

Data Inventory and Analysis

America's Seaplane City

Purpose

The purpose of the Future Land Use Element is the designation of future land use patterns as reflected in the goals, objectives and policies contained in the City of Tavares Comprehensive Plan. It is the foundation of the entire Plan, as it pulls together portions of the other elements and establishes the planning framework which is the foundation for the City's development through 2040.

This Element is comprised of a series of tools that direct future development including: the Future Land Use Map (FLUM), land use designations, and more importantly the overarching, goals, objectives, and policies. The FLUM is a regulatory tool and serves as the basis for the City's implementing zoning map and land development regulations. The element, along with the other elements of the Comprehensive Plan, provide long-term guidance to elected officials who must make decisions regarding land use, infrastructure, and capital budgeting. As a result, the Future Land Use Element provides the foundation for implementation of the City's vision for years to come.

Existing Land Use Conditions

In order to better guide and direct future land uses within the City of Tavares, it is necessary to first gain an understanding of present land use patterns. The existing 2019 land uses were determined by their Florida Department of Revenue Land Use Codes and may not precisely reflect what is 'on the ground' but provide insight into the current conditions and development patterns of the City. Also note that the Florida Department of Revenue and the City of Tavares may have different datasets (parcels vs. polygon shapes) resulting in a difference between the total acreages listed in Table 1-1 and subsequent tables.

To provide a basis for analysis these existing land uses have been further grouped into the following distinct categories which include their definitions from the Florida Department of Revenue.

Agriculture: Property used for production of food, feed, and fiber commodities, livestock and poultry, bees, fruits and vegetables, and sod, ornamental, nursery, grazing farm animals and horticultural crops that are raised, grown, or produced for commercial purposes.

Commercial: Business property, such as supermarkets, shopping centers, office buildings, medical centers, hotels, theaters, RV parks, financial institutions, stores, etc. which are intended to operate with a profit.

Residential: Property zoned for single-family homes, mobile homes, retirement homes, multifamily apartments and co-ops.

Government: All property owned by or leased to the Government or acquired by the Government under the terms of the contract. Not subject, in whole or in part, to Ad Valorem property taxes. Examples include forests, parks, public schools, county hospitals, military buildings etc.

Industrial: Property used for industrial purposes. Types of industrial property include heavy manufacturing buildings, light manufacturing buildings, packing plants, mineral processing plants, warehouses, wineries, sawmills etc.

Institutional: Property which is not strictly commercial, industrial, agricultural, or residential, but which serves some public purpose, even if privately owned. Examples include private schools, private hospitals, orphanages, cemeteries, sanitoriums, nursing homes etc.

Other: Includes property such as mining land, railroad land, utilities, wasteland, submerged land, private wetlands, etc.

The current distribution of existing land uses is shown in Table 1-1. A detailed depiction of existing land uses (**Map 1.1)**, was developed depicting the current land use patterns in the City of Tavares as of 2019.

Table 1-1: Existing Land Uses in the City of Tavares

Existing Land Use	Acres	% of Total Acres
Agriculture	2,466.54	30.61%
Residential	2,063.69	25.61%
Commercial	876.47	10.88%
Government	1,394.98	17.31%
Industrial	201.86	2.50%
Institutional	445.17	5.52%
Miscellaneous	609.96	7.57%
TOTAL	8,058.66	100.00%

Source: City of Tavares, Lake County Property Appraiser

Vacant Land Analysis

An analysis of vacant and developable land was conducted based on the Florida Department of Revenue's land use codes as of July 2019. It is important to note that many of these parcels may be in the development application process or under development, exist as remnant parcels, etc., and therefore actual vacant land supply may be less than reported. The vacant lands within the City of Tavares are also displayed on **Map 1.1**.

To understand the type of impact these vacant lands could have on the cityscape if eventually developed, it is useful to view what Future Land Use Categories they fall in. This analysis is displayed in **Table 1-2** and was done by analyzing the relationship between the City's future land use designations and parcel data obtained from the City of Tavares and the Lake County Property Appraiser. It is important to note that there may be a small margin of error reflected in the data due to the differences in the GIS layers and datasets used for the analysis.

According to the analysis conducted, approximately 37.6 % of vacant land in the City is designated for suburban and low density residential. The Lakeside Mixed Use category accounts for 39.2% of the vacant acreage.

Table 1-2: Vacant Acreage by Future Land Use Category

Future Land Use Designation	Acres	% of Total Vacant Acreage
Suburban	732.21	20.9%
Suburban Expansion	-	-
Low Density	585.53	16.7%
Moderate Density	109.24	3.1%
Medium Density	194.88	5.6%
High Density	20.84	0.6%
Mobile Home	12.01	0.3%
Mixed Use Neighborhood	66.50	1.9%
Mixed Use Commercial	57.22	1.6%
Lakeside Mixed Use	1374.07	39.2%
Commercial	217.43	6.2%
Commercial Downtown	8.61	0.2%
Public Facilities/ Institutional	0.48	0.0%
Industrial	86.06	2.5%
Conservation	40.47	1.2%
Total	**3505.56**	**100%**

Source: Lake County Property Appraiser and the City of Tavares

Future Land Use Designations

The 2040 Future Land Use Map (FLUM), **Map 1.2**, designates future land uses within the existing Tavares City limits through the 2040 planning horizon. The 2040 FLUM reflects the consolidation of multiple land use categories from the previous FLUM. Lands previously as designated Suburban Expansion will now be designated as Low Density; lands previously designated as Moderate Density will now be designated as Medium Density; and the Mixed Use Neighborhood and Mixed Use Commercial categories have been consolidated into one Mixed Use category. **Table 1-3** shows the distribution of future land uses in the City.

Table 1-3: Future Land Use

Future Land Use Designation	Acres	% of Total Acreage
Suburban	868.90	11.08%
Low Density	1987.40	25.35%
Medium Density	606.92	7.74%
High Density	120.45	1.54%
Mobile Home	515.76	6.58%
Mixed Use	368.85	4.70%
Lakeside Mixed Use	1386.29	17.68%
Commercial	622.18	7.94%
Commercial Downtown	54.60	0.70%
Public Facilities/Institutional	618.48	7.89%
Industrial	312.05	3.98%
Conservation	378.14	4.82%
Total	**7,840.02**	**100%**

Interlocal Service Boundary Agreement (ISBA)

The City of Tavares is party to an Interlocal Service Boundary Agreement (Ordinance No. 2015-8) with Lake County. This agreement addresses the annexation of non-contiguous properties, annexation and maintenance of right-of-way, development applications, land development regulations, comprehensive plan provisions, solid waste service, fire hydrants, sharing of equipment and resources, fire and rescue services, E-911 system, and addressing standards. Because land within the ISBA is within the City's service area and may be potentially annexed in the future, it is important to depict the future land uses designated by Lake County within the ISBA. **Map 1.3** and **Table 1-4** depict the future land uses of County land within the ISBA.

Table 1-4: Lake County Future Land Uses within ISBA

Lake County Future Land Use Designation	Lake County Acreage within ISBA	% of Total County Acreage
Rural	1602.91	23.21%
Rural Transition	3064.15	44.37%
Urban Low	801.77	11.61%
Urban Medium	209.29	3.03%
Urban High	210.39	3.05%
Regional Commercial	2.01	0.03%
Regional Office	148.92	2.16%
Industrial	258.95	3.75%
Public Service Facility & Infrastructure	448.53	6.49%
Recreation	111.85	1.62%
Conservation	47.49	0.69%
Total	**6,906.3**	**100%**

Sources: Lake County, Kimley-Horn and Associates

Population and Projections

Based comments provided by the Comprehensive Plan Committee, there was concern the BEBR Medium projections and those provided by the Shimberg Center for Housing Studies/Florida Housing Data Clearinghouse for the City in 2040 were lower than what may be anticipated based on current growth trends in the City, Lake County, and the region at-large.

Table 1-5 includes population projections for the City's based on the most recent BEBR High population projections for Lake County by the *Bureau of Economic and Business Research in Projections of Florida Population by County, 2020–2045, with Estimates for 2018 (April 2019)*. The projected populations for the City of Tavares were calculated by multiplying the Lake County projection for each horizon year by the average City share of the County population (5.10%) derived from the most recent set of projections from the Shimberg Center for Housing Studies/Florida Housing Data Clearinghouse in 2016. Using this methodology, the projected population for the City in 2040 would be 29,254.

Table 1-5: Population Projections

Year	Population	% Increase
2010*	13,951	-
2016**	15,995	14.65%
2020***	19,258	20.40%
2025***	21,944	13.95%
2030***	24,508	11.68%
2035***	26,940	9.92%
2040***	29,254	8.59%

*Source: *2010 U.S. Census; **Florida Housing Data Clearinghouse (FHDC), 2016, ***Kimley-Horn and Associates*

Development Potential/Build Out Analysis

To better understand the current level of development potential and the ability of the City of Tavares to absorb projected growth, a build-out analysis was performed utilizing the currently adopted FLUM and vacant/developable lands. Maximum densities and intensities were assigned to each future land use designation as documented in **Table 1-6**. The acreages of vacant parcels within these future land use designations were used to roughly calculate the most dense and intense development that Tavares could potentially expect. This analysis assumes maximum build out and vacant land acreage is based on data retrieved from the Florida Department of Revenue.

The build out analysis shows that the currently adopted FLUM allows for a maximum construction of approximately 13,259 dwelling units and approximately 8.9 million square feet of non-residential floor area. It should be noted that some properties may not be developable and that current development practices are not developing at a maximum density or maximum FAR (i.e. maximum FAR may be 0.50 but some are developing at 0.25 FAR).

The maximum construction of residential dwelling units is 13,259 according to the build out analysis. Using BEBR's 2018 household size of 2.42 people per dwelling unit, the City of Tavares could expect to absorb 32,087 people under the current FLUM's residential designations that have been identified as vacant or developable utilizing the Florida Department of Revenue's data. Therefore, the Comprehensive Plan is providing an adequate supply of residential lands to accommodate anticipated population growth through the planning period.

Table 1-6: Build Out Analysis

				Development Potential	
Future Land Use Category	**Acreage**	**Maximum Density (du/acre)**	**Maximum Intensity (FAR)**	**Residential Units**	**Non-residential SF**
Suburban	732.21	3.0	-	2,197	-
Suburban Expansion	-	4.0	-	-	-
Low Density	585.53	5.6	-	3,279	-
Moderate Density	109.24	10.0	-	1,092	-
Medium Density	194.88	12.0	-	2,339	-
High Density	20.84	25.0	-	521	-
Mobile Home	12.01	8.7	-	105	-
Mixed Use Neighborhood	66.50	12.0	0.20	399	289,676
Mixed Use Commercial	57.22	25.0	0.35	572	523,458
Lakeside Mixed Use	1374.07	Maximum 2,500 units	Maximum 2,500,000 SF	2,500	2,500,000
Commercial	217.43	-	0.35		3,314,979
Commercial Downtown	8.61	25.0	1.00	215	375,033
Public Facilities/ Institutional	0.48	-	0.50	-	10,560
Industrial	86.06	-	0.50	-	1,874,340
Conservation	40.47	1.0 (provided conservation easement granted	-	40	-
Total	**3505.56**			**13,259 units**	**8,888,046 SF**

Source: Florida Department of Revenue and the City of Tavares

Economic Development Strategy

In February 2019, the City prepared an update to its Economic Development Strategy (see attachment). The Economic Development Strategy is both geographical (**Map 1.4**) and component-specific with an emphasis on growing existing businesses and cultivating entrepreneurship. Goals, objectives, and policies have been included the 2040 Comprehensive Plan to support the City's Economic Development Strategy.

Downtown Tavares

In 2017, the City prepared the Downtown Tavares Master Plan 2017-2023 update, with the plan's primary goal being to establish a vision and strategy for how future growth should occur in the underdeveloped areas of Downtown Tavares. The Downtown Master Plan is organized by six overall themes, including, Land Use and Development Characteristics; Urban Design and Historic Preservation; Circulation and Mobility; Public Facilities and Amenities; Environment; and Economic Development. The 2040 Comprehensive Plan includes goals, objectives, and polices intended to be supportive of the implementation of the Downtown Master Plan.

Tavares Seaplane Base Airport Master Plan

Contributing the City's moniker of "America's Seaplane City", the Tavares Seaplane Base is an integral part of the City's history and identity, as well as part of the City's plans for the future. The Tavares Seaplane Base & Marina (FA1) is a seaplane airport and recreational boating marina located on the Lake Dora waterfront in the heart of Wooton Park in Downtown Tavares. The Tavares Seaplane Base Airport Master Plan (prepared by AVCON, Inc.) was completed in December 2017. The plan includes an inventory of existing conditions, environmental considerations (including compatible land use), forecasts of aviation activity, facilities requirements, evaluation of alternatives, and Seaplane Base Layout Plan, and capital improvement program. The 2040 Comprehensive Plan was developed with consideration of the Airport Master Plan and includes goals, objectives, and policies supportive of its implementation.

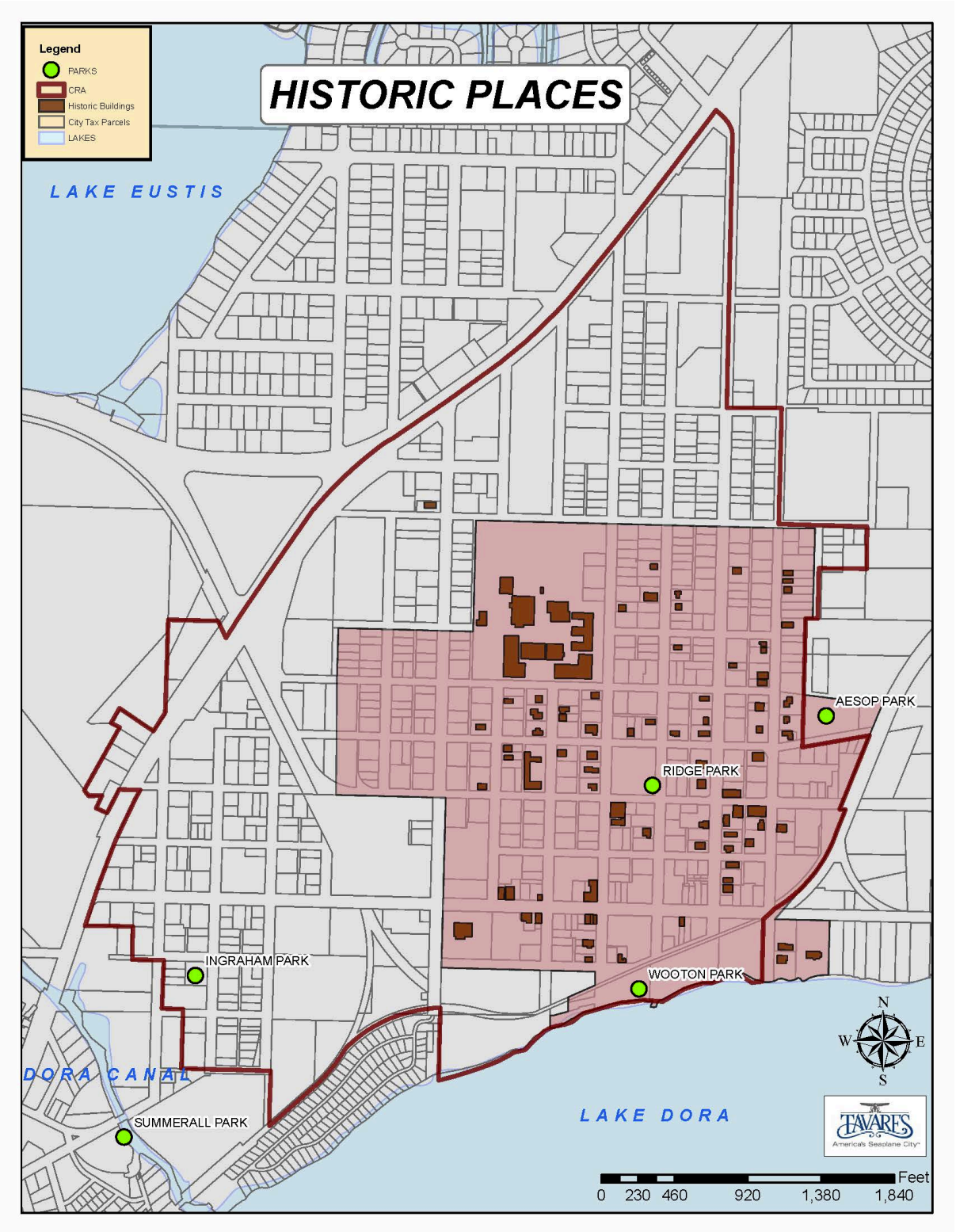
Historic Resources

Tavares has a number of historic resources within its City boundaries, including two structures on the National Register of Historic Places:

- Harry C. Duncan House at 426 Lake Dora Drive
- Lake County Courthouse at 315 West Main Street

The historic resources in the City are mainly concentrated near Downtown Tavares and are illustrated on **Figure 1.1** in addition to the City's Downtown Historic Overlay District. The City established the district to protect and preserve many of the City's historic resources. As shown in Fig.3.1, the district is roughly bounded by Givens Street to the north, Pulsifer Avenue to the west, Disston Avenue to the east, and Ruby Street and Wooton Park to the south. The overlay district identifies design standards and procedures, special provisions for administration and enforcement, and design standards for properties in the historic district.

Figure 1.1 – Historic Resources in Tavares



Source: City of Tavares

List of Historical Buildings – Source: City of Tavares

- 426 LAKE DORA DR
- 102 W MAIN ST
- 103 W MAIN ST
- 101 W MAIN ST
- 107 W MAIN ST
- 201 W MAIN ST
- 202 W MAIN ST
- 220 W MAIN ST
- 225 W MAIN ST
- 314 E ALFRED ST
- 102 E ALFRED ST
- 107 S DISSTON AV
- 111 S DISSTON AV
- 411 N DISSTON AV
- 412 N DISSTON AV
- 420 N DISSTON AV
- 203 N ST CLAIR ABRAMS AV
- 204 N ST CLAIR ABRAMS AV
- 210 N ST CLAIR ABRAMS AV
- 216 N ST CLAIR ABRAMS AV
- 215 N ST CLAIR ABRAMS AV
- 302 N ST CLAIR ABRAMS AV
- 323 N ST CLAIR ABRAMS AV
- 207 N ROCKINGHAM AV
- 317 W MAIN ST
- 126 S NEW HAMPSHIRE AV
- 118 S NEW HAMPSHIRE AV
- 305 N NEW HAMPSHIRE AV
- 315 N NEW HAMPSHIRE AV
- 321 N NEW HAMPSHIRE AV
- 405 N NEW HAMPSHIRE AV
- 421 N NEW HAMPSHIRE AV
- 311 N JOANNA AV
- 324 N JOANNA AV
- 403 N JOANNA AV
- 411 N JOANNA AV
- 414 N JOANNA AV
- 421 N JOANNA AV
- 303 TEXAS AV
- 324 TEXAS AV
- 405 TEXAS AV
- 805 N SINCLAIR AV
- 214 E MAIN ST and 216
- 226 W MAIN ST
- 215 N DISSTON AV
- 214 N DISSTON AV
- 320 E ALFRED ST and 322 324 326
- 404 N DISSTON AV
- 415 N DISSTON AV
- 503 N DISSTON AV
- 507 N DISSTON AV
- 517 N DISSTON AV
- 525 N DISSTON AV
- 600 N DISSTON AV
- 622 N DISSTON AV
- 624 N DISSTON AV
- 704 N DISSTON AV
- 108 N ST CLAIR ABRAMS AV
- 114 N ST CLAIR ABRAMS AV
- 122 N ST CLAIR ABRAMS AV
- 303 N ST CLAIR ABRAMS AV
- 403 N ST CLAIR ABRAMS AV
- 409 N ST CLAIR ABRAMS AV
- 423 N ST CLAIR ABRAMS AV
- 512 N ST CLAIR ABRAMS AV
- 704 N ST CLAIR ABRAMS AV
- 312 N ROCKINGHAM AV
- 413 N ROCKINGHAM AV
- 520 N ROCKINGHAM AV
- 610 N ROCKINGHAM AV
- 611 N ROCKINGHAM AV
- 612 N ROCKINGHAM AV
- 703 N ROCKINGHAM AV
- 107 E RUBY ST
- 214 N NEW HAMPSHIRE AV
- 603 N NEW HAMPSHIRE AV
- 610 N NEW HAMPSHIRE AV
- 410 N JOANNA AV
- 318 TEXAS AV
- 420 TEXAS AV
- 315 W MAUD ST
- 323 N DISSTON AV
- 109 E CAROLINE ST
- 203 E CAROLINE ST

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Transportation and Mobility Element

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Contents

1.0 INTRODUCTION 1

2.0 EXISTING CONDITIONS 1

2.1 Roadways 1

2.1.1 Functional Classification 1

2.1.2 Level of Service 3

2.2 Pedestrian Facilities 5

2.2.1 Sidewalks and Trails 5

2.2.2 Pedestrian Level of Service 5

2.3 Bicycle Facilities 7

2.3.1 Bicycle Lanes, Shared Lanes, Paved Shoulders and Trails 7

2.3.2 Bicycle Level of Service 7

2.4 Transit Service 9

2.4.1 LakeXpress 9

2.5 Alternative Mode of Transportation 10

2.5.1 Golf Cart Ordinance 10

3.0 TRENDS 11

3.1 Population 11

3.2 Historic Traffic Volumes 12

3.3 Travel Demand Model Review 14

3.4 Projected Growth Rates 14

4.0 FUTURE CONDITIONS 15

4.1 Planned Improvements 15

4.1.1 Roadway Improvements 15

4.1.2 Pedestrian Improvements 15

4.1.3 Bicycle Improvements 15

4.2 2023 Conditions 16

4.2.1 2023 Roadway Conditions and City's Plans 16

4.2.2 2023 Pedestrian Conditions 16

4.2.3 2023 Bicycle Conditions 16

4.3 2040 Conditions 20

4.3.1 2040 Roadway Conditions.....20
4.3.2 2040 Pedestrian Conditions.....20
4.3.3 2040 Bicycle Conditions.....21

Tables

Table 1: Number of Lanes and Functional Classification 2

Table 2: 2018 Roadway Level of Service 4

Table 3: Pedestrian Level of Service Thresholds 5

Table 4: 2018 Pedestrian Level of Service 6

Table 5: Bicycle Level of Service Thresholds 7

Table 6: 2018 Bicycle Level of Service 8

Table 7: Bus Stops Headway Summary 9

Table 8: Population Trends and Projections 11

Table 9: Growth Rates 13

Table 10: 2023 Roadway Level of Service 17

Table 11: 2023 Pedestrian Level of Service 18

Table 12: 2023 Bicycle Level of Service 19

Table 13: 2040 Roadway Level of Service 22

Table 14: 2040 Pedestrian Level of Service 23

Table 15: 2040 Bicycle Level of Service 24

Appendices

Appendix A: LakeXpress Bus Route Map and Schedule

1.0 INTRODUCTION

This document provides the relevant data, inventory, and analysis of transportation conditions in support of the City's Transportation Element of their Comprehensive Plan, as described in Florida Statutes (FS) 163.3177(1)(f). This information was considered in developing the Goals, Objectives, and Policies in the City's Transportation and Mobility Element.

2.0 EXISTING CONDITIONS

The existing condition within the City of Tavares was identified in this document, including an inventory of sidewalks, trails, bicycle facilities, transit service, golf cart paths, roadway laneage, functional classification, and traffic counts.

This information was used to identify existing levels of service for each mode of travel – pedestrian, bicycle, transit, and roadway.

2.1 Roadways

The City of Tavares is served by a network of state, county, and local roads. **Table 1** summarizes the number of lanes and functional classification of the critical roadways within the City. This information is also illustrated on **Map 2.1**: Existing Roadway Network, **Map 2.2**: Functional Classification.

2.1.1 Functional Classification

All roadways within the City of Tavares are assigned a Functional Classification based on the agreement of FDOT, Lake-Sumter MPO, and the Federal Highway Administration (FHWA). Functional classification is the process when streets and highways are grouped into classes, or systems, according to the character of service they provide. The designation of functional classification is made at least once every ten years following the decennial Census. Five functional classification categories are common to roads:

- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Table 1: Number of Lanes, Functional Classification and Jurisdiction

Roadway	From	To	No. Lanes	Functional Classification	Maintaining Agency
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500A / Old 441	2	Collector	County
CR 19 / Dora Avenue	CR 500A / Old 441	David Walker Road	2	Collector	County
CR 19 / Dora Avenue	David Walker Road	US 441	2	Collector	County
CR 448	SR 19	CR 561	2	Major Collector	County
CR 448	CR 561	Lake Industrial Boulevard	2	Major Collector	County
CR 448	Lake Industrial Boulevard	Orange County Line	2	Collector	County
CR 452 (St Clair Abrams Ave)	US 441	CR 500A	2	Collector	County
CR 452 (St Clair Abrams Ave)	CR 500A	CR 542 / East Main Street	2	Collector	County
CR 452 (Main Street)	SR 19	St. Clair Abrams Avenue	2	Collector	City
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	2	Collector	County
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	2	Collector	County
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	2	Collector	County
CR 500 A / Old 441	SR 19	Dora Avenue	2	Minor Arterial	County
CR 500 A / Old 441	Dora Avenue	Bay Road	2	Principal Arterial	County
CR 561	SR 19	CR 448	2	Major Collector	County
CR 561	CR 448	CR 48	2	Major Collector	County
David Walker	Old US 441 / CR 500A	CR 19A	2	Collector	County
Dead River Road	West Termini	SR 19	2	Collector	County
Lake Eustis Drive	US 441	Clay Boulevard	2	Collector	County
Lane Park Cutoff	SR 19	CR 561	2	Collector	County
Woodlea Road	Lane Park Road	SR 19	2	Collector	County
City Roads					
Old 441 / CR 500A	US 441	SR 19	4	Principal Arterial	City
Wells Avenue	SR 19	Lake Avenue	2	Collector	City
Mt Homer Road	CR 19 A	US 441	2	Collector	City
Mt Homer Road	US 441	David Walker Drive	2	Collector	County
State Roads					
SR 19	US 441	CR 500A/Lake Shore Boulevard	4	Minor Arterial	State
SR 19	CR 500A/Lake Shore Boulevard	CR 452 (Main Street)	4	Minor Arterial	State
SR 19	CR 452 (Main Street)	CR 561	4	Minor Arterial	State
SR 19	CR 561	Lake Harris North End	2	Minor Arterial	State
US 441 / SR 500	CR 473	Old US 441 / CR 500A	6	Principal Arterial	State
US 441 / SR 500	Old US 441 / CR 500A	SR 19 / Duncan Drive	6	Principal Arterial	State
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	6	Principal Arterial	State
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	6	Principal Arterial	State

2.1.2 Level of Service

Level of service (LOS) is a quantitative stratification of quality of service established in the Highway Capacity Manual, published by the Transportation Research Board. The LOS quality of service is divided into six letter grades, A through F, with A being the best and F being the worst. It is important to note that LOS for urban roadways, which are controlled by signals is based on average travel speeds over a distance of 0.5 to 2 miles. Recognizing that it is costly to measure average travel speeds, traffic volumes are often used as a surrogate for the average travel speeds, based on models that FDOT has developed to correlate traffic volumes with the projected travel speeds.

The Transportation Management System (TMS) Segment Report from Lake-Sumter Metropolitan Planning Organization (MPO) provides adopted LOS, Maximum Service Volumes (MSV), and peak hour volume data for the roadway segments within Lake and Sumter County. Peak hour direction LOS capacities are based on the FDOT 2013 Quality/Level of Service Handbook.

Previously, the City held public hearings to identify the standard LOS for all roads. Currently, the City has established a LOS standard of D for all roads within the City, as stated in the Lake-Sumter MPO Lake County TMS Segment Report. The existing levels of service for roadways within the City of Tavares are identified in **Table 2** and illustrated on **Map 2.3**. All roadways currently operate at LOS D.

Table 2: 2018 Roadway Level of Service

Roadway	From	To	No. of Lanes	2018 AADT	Max Service Volume	2018 Peak Hour Vol.	V/C	LOS
County Roads								
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	2	1,782	675	106	0.16	C
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	2	4,919	675	258	0.38	C
CR 19 / Dora Avenue	David Walker Road	US 441	2	3,711	675	180	0.27	C
CR 448	SR 19	CR 561	2	4,947	792	236	0.30	C
CR 448	CR 561	Lake Industrial Blvd	2	9,953	1,190	446	0.37	C
CR 448	Lake Industrial Boulevard	Orange County Line	2	7,479	430	362	0.84	C
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	2	3,741	675	224	0.33	C
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	2	3,741	675	224	0.33	C
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	2	7,659	675	442	0.65	D
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	2	2,897	675	172	0.25	C
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	2	1,440	675	92	0.14	C
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	2	1,440	675	92	0.14	C
CR 500 A / OLD 441	SR 19	Dora Avenue	2	9,562	750	502	0.67	D
CR 500 A / OLD 441	Dora Avenue	Bay Road	2	9,461	880	472	0.54	C
CR 561	SR 19	CR 448	2	14,040	792	616	0.78	C
CR 561	CR 448	CR 48	2	9,245	792	449	0.57	C
David Walker	OLD US 441 / CR 500A	CR 19 A	2	2,900	675	141	0.21	C
Dead River Road	West Termini	SR 19	2	6,830	675	333	0.49	D
Lake Eustis Drive	US 441	Clay Boulevard	2	6,831	675	330	0.49	C
Lane Park Cutoff	SR 19	CR 561	2	1,984	675	185	0.27	C
Woodlea Road	Lane Park Road	SR 19	2	3,078	675	171	0.25	C
City Roads								
Old 441 / CR 500 A	US 441	SR 19	4	14,500	2,000	707	0.35	C
Wells Avenue	SR 19	Lake Avenue	2	961	675	89	0.13	C
Mt Homer Road	CR 19 A	US 441	2	262	675	20	0.03	C
Mt Homer Road	US 441	David Walker Drive	2	1,954	675	117	0.17	C
State Roads								
SR 19	US 441	CR 500 A / Lake Shore Blvd	4	17,700	1,630	863	0.53	D
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	4	17,700	1,630	863	0.53	D
SR 19 [2]	CR 452 (Main Street)	CR 561	4	33,000	2,000	1,610	0.81	C
SR 19 [3]	CR 561	Lake Harris North End	2	33,000	880	727	0.83	C
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	6	44,000	3,020	2,146	0.71	C
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	6	28,000	3,020	1,366	0.45	C
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	6	48,500	3,020	2,366	0.78	C
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	6	48,500	3,020	2,366	0.78	C

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

2.2 Pedestrian Facilities

2.2.1 Sidewalks and Trails

Lake-Sumter MPO maintains an inventory of sidewalks and trails within the City. Most of the roads classified as collectors and have sidewalks on both sides of the road. Major roads such as SR 19 and US 441 are classified as multimodal corridors based on Lake-Sumter MPO. A trail can be found along US 441 crossing SR 19 and ending at W Maud St. Planned trails are projected along CR 19 A, CR 448, Woodlea Rd, and adjacent to the railroad tracks. **Map 2.4** shows the existing sidewalks and trails within the City.

2.2.2 Pedestrian Level of Service

As stated in the transportation element, an ordinance to install sidewalks in new developments was established with the intent to provide sidewalks throughout the City. As shown on **Map 2.4**, sidewalks are available in most of the City of Tavares.

Currently, the City does not have a LOS Standard for pedestrian facilities. As part of the update to the Transportation Element, a LOS C for all pedestrian facilities within the City is recommended to continue the ongoing effort to provide pedestrian accessibility throughout the City.

Pedestrian Level of Service thresholds are based on the FDOT 2013 Quality Level of Service Handbook. Pedestrian LOS is based on the number of motorized vehicles within the roadway during the peak hour peak direction (PHPD) and sidewalk coverage. Other factors with default values such as distance between the sidewalk and the road, existence of barriers, and roadway vehicle speeds are implied in the pedestrian LOS thresholds provided by FDOT. **Table 3** shows the pedestrian level of service thresholds.

Table 3: Pedestrian Level of Service Thresholds

Sidewalk Coverage	B	C	D	E
	Peak Hour Peak Direction Volumes			
0 - 49%	-	-	140	480
50 - 84%	-	80	440	800
85 - 100%	200	540	880	>1,000

The existing levels of service for pedestrian facilities within Tavares are identified in **Table 4** and illustrated on **Map 2.5**. All roadways within the City have an existing pedestrian LOS of 'D' or better per the standard above, except for the following segments:

- CR 448 – Lake Industrial Blvd to Orange County Line
- CR500 A/Old US 441 – Dora Ave to Lake Ave
- CR 561 – SR 19 to CR 448
- CR 561 – CR 448 to CR 48
- Lake Eustis Dr – US 441 to Clay Blvd
- Woodlea Rd – Lane Park Rd to SR 19
- SR 19 – CR 452 (Main Street) to Lake Harris North End

- US 441/SR 500 – CR 473 to David Walker Dr

SR 19 and US 441/SR 500 provides 100% coverage throughout the City; however, the vehicular volumes on these roads are high enough to have a negative impact on pedestrian LOS along these facilities.

Table 4: 2018 Pedestrian Level of Service

Roadway	From	To	Sidewalk Coverage	2018 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	100%	106	B
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	100%	258	C
CR 19 / Dora Avenue	David Walker Road	US 441	100%	180	B
CR 448	SR 19	CR 561	100%	236	C
CR 448	CR 561	Lake Industrial Blvd	100%	446	C
CR 448	Lake Industrial Boulevard	Orange County Line	4%	**362**	**E**
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	100%	224	C
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	100%	224	C
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	100%	442	C
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	100%	172	B
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	92	D
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	92	D
CR 500 A / OLD 441	SR 19	Dora Avenue	100%	502	C
CR 500 A / OLD 441	Dora Avenue	Bay Road	18%	472	E
CR 561	SR 19	CR 448	39%	616	**F**
CR 561	CR 448	CR 48	0%	449	E
David Walker	OLD US 441 / CR 500A	CR 19 A	100%	141	B
Dead River Road	West Termini	SR 19	100%	333	C
Lake Eustis Drive	US 441	Clay Boulevard	0%	330	E
Lane Park Cutoff	SR 19	CR 561	100%	185	B
Woodlea Road	Lane Park Road	SR 19	38%	171	E
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	707	D
Wells Avenue	SR 19	Lake Avenue	100%	89	B
Mt Homer Road	CR 19 A	US 441	70%	20	C
Mt Homer Road	US 441	David Walker Drive	0%	117	D
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	863	D
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	863	D
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	1,610	**F**
SR 19 [3]	CR 561	Lake Harris North End	28%	727	**F**
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	2,146	**F**
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	1,366	**F**
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	2,366	**F**
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	2,366	**F**

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

2.3 Bicycle Facilities

2.3.1 Bicycle Lanes, Shared Lanes, Paved Shoulders and Trails

Lake-Sumter MPO maintains an inventory of bicycle facilities and bicycling routes within the City. The most common and popular routes within the City are SR 19, CR 448, CR 561, CR 452, and Lake Eustis Drive. An existing paved multi-use trail, Tav-Lee Trail, is located along on US 441. **Map 2.6** shows the existing bicycle facilities within the City.

2.3.2 Bicycle Level of Service

Section E of the Transportation Element describes the convenience of utilizing bicycles as a mode of transportation throughout the City and Florida. At the time of the element adoption, no routes were designated as bike routes within the City, and bicycles were only limited to City streets. Three classes of bikeways are identified: Class I, II, and III. Class I are bikeways completely separated from the right-of-way. Class II exclusive or semi-exclusive use of bicycle. And Class III are shared roadways.

Level of Service is based on FDOT 2013 Q/LOS Handbook determined by the traffic volume and paved shoulder or bicycle lane coverage. It is intended to establish the bicycle level of service for the roadways within the City to continue with the ongoing effort to provide an alternative mode of transportation. A LOS Standard of C is recommended for bicycle facilities within the City. **Table 5** shows the bicycle level of service thresholds.

Table 5: Bicycle Level of Service Thresholds

Paved Shoulder/ Bicycle Lane Coverage	B	C	D	E
0 - 49%	-	150	390	1,000
50 - 84%	-	340	1,000	>1,000
85 - 100%	470	1,000	>1,000	-

The existing level of service for bicycle facilities within Tavares are identified in **Table 6** and illustrated on **Map 2.7.** All roadways within the City have an existing bicycle LOS of 'D' or better per the standard above, except for the following segments:

- CR 542 (East Main Street) – SR 19 to St. Clair Abrams Avenue
- CR 500 A / Old US 441 – SR 19 to Dora Avenue
- CR 500 A / Old US 441 – Dora Avenue to Bay Road

Table 6: 2018 Bicycle Level of Service

Roadway	From	To	Paved Shoulder/ Bike Lane Coverage	2018 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	0%	106	C
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	0%	258	D
CR 19 / Dora Avenue	David Walker Road	US 441	0%	180	D
CR 448	SR 19	CR 561	50%	236	C
CR 448	CR 561	Lake Industrial Blvd	100%	446	B
CR 448	Lake Industrial Boulevard	Orange County Line	100%	362	B
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	0%	224	D
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	0%	224	D
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	0%	442	E
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	0%	172	D
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	92	C
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	92	C
CR 500 A / OLD 441	SR 19	Dora Avenue	0%	502	E
CR 500 A / OLD 441	Dora Avenue	Bay Road	0%	472	E
CR 561	SR 19	CR 448	100%	616	C
CR 561	CR 448	CR 48	100%	449	B
David Walker	OLD US 441 / CR 500A	CR 19 A	0%	141	C
Dead River Road	West Termini	SR 19	7%	333	D
Lake Eustis Drive	US 441	Clay Boulevard	0%	330	D
Lane Park Cutoff	SR 19	CR 561	0%	185	D
Woodlea Road	Lane Park Road	SR 19	0%	171	D
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	707	C
Wells Avenue	SR 19	Lake Avenue	0%	89	C
Mt Homer Road	CR 19 A	US 441	0%	20	C
Mt Homer Road	US 441	David Walker Drive	0%	117	C
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	863	C
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	863	C
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	1,610	D
SR 19 [3]	CR 561	Lake Harris North End	100%	727	C
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	2,146	D
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	1,366	D
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	2,366	D
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	2,366	D

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

2.4 Transit Service

2.4.1 LakeXpress

LakeXpress provides commuter bus service for Lake County. There are currently seven (7) bus routes. Route 1 (Leesburg to Eustis) passes through the City of Tavares. **Table 7** shows the bus route schedule with its respective headway. The bus service is provided from Monday through Friday from 6:00 AM to 8:00 PM. Appendix A provides the LakeXpress bus route map and schedule.

Table 7: Bus Stops Headway Summary

Route	Weekday	
	Hours	Headway
4 - Lake Square Mall (US. Highway 441)	6:18 AM - 7: 18 PM	1-hr
5 - Main St. (Lake County Judicial Center)	6:58 AM - 6: 58 PM	1-hr
6 - Main St. (Lake County Government Complex)	6:40 AM - 6:40 PM	1-hr
7 - Waterman Hospital (U.S. Highway 441)	6:50 AM - 7:50 AM	1-hr

2.5 Alternative Mode of Transportation

2.5.1 Golf Cart Ordinance

The City of Tavares has approved an ordinance to provide the use of neighborhood electric vehicles (NEV), such as golf carts and low-speed vehicles, on any road with posted speed limit 35 MPH or less. The use of golf carts is meant to increase the transportation options in the City in an ecologically and convenient manner. Operations of golf carts are not allowed to operate on or cross state highways, such as SR 19 and US 441. A special exception was obtained by the City to cross SR 19 only at Dead River Road. **Map 2.8** shows the golf cart paths within the City.

3.0 TRENDS

3.1 Population

Based on projections provided by the Bureau of Economic and Business Research (BEBR), the 2019 population within the City of Tavares was 17,777, and the population of Lake County was 357,247, as shown in **Table 8**.

Since 1995 the City of Tavares has experienced an annual growth rate ranging from 1.82% to 2.73%. Over the same period, Lake County has experienced an annual growth rate from 2.07% to 2.98%. Although no official projection for the City of Tavares is available, a projection for the City for Tavares was calculated by multiplying the Lake County projection for each horizon year by the average City share of the County population (5.10%) derived from the most recent set of forecasts from the Shimberg Center for Housing Studies/Florida Housing Data Clearinghouse in 2016. Based on this assumption, the City of Tavares, Lake County, is projected to experience annual growth rates ranging from 2.93% to 4.17% between 2020 and 2040.

Table 8: Population Trends and Projections

Year	City of Tavares		Lake County		Source
	Population [1]	Growth Rate	Population	Growth Rate	
2040	29,254	2.93%	573,900	2.76%	BEBR
2035	26,940	3.03%	528,500	2.82%	BEBR
2030	24,508	3.16%	480,800	2.88%	BEBR
2025	21,944	3.35%	430,500	2.93%	BEBR
2020	19,258	4.17%	377,800	2.88%	BEBR
2019	17,777	2.73%	357,247	2.07%	BEBR
2010	13,951	2.57%	297,047	2.97%	Census
2000	10,828	2.76%	221,661	2.82%	Census
1995	9,448	1.82%	192,892	2.98%	Census

Notes: 1. City of Tavares population from 2020 to 2040 estimated based on BEBR High projection for Lake County and the average City share of the County population (5.10%).

3.2 Historic Traffic Volumes

Historic traffic volumes were obtained from FDOT and 2018 Lake County Annual Traffic Counts Report for roads within the City of Tavares. Non-state roads were identified in the Lake County's traffic count station. State road traffic counts were obtained from 2018 FDOT Traffic Online (FTO), such roads include SR-19, US-441/SR 500, and David Walker Road. Traffic counts covered range from five years, from 2014 to 2018.

Historical trends, the University of Florida's Bureau of Economic and Business Research (BEBR) high growth rate, Lake County's 5-Year trend, and FDOT Historic AADT growth rate were referenced and reviewed to determine the appropriate growth rate that reflects the City of Tavares growth, as shown in **Table 9**.

Table 9: Growth Rates

Roadway	From	To	FDOT Rate	Lake County Rate	Model Rate	2023 BEBR High	2040 BEBR High
County Roads							
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	0.66%	8.88%	127.54%	2.95%	2.76%
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	-0.36%	0.25%	49.46%	2.95%	2.76%
CR 19 / Dora Avenue	David Walker Road	US 441	-2.44%	10.09%	55.95%	2.95%	2.76%
CR 448	SR 19	CR 561	14.75%	13.23%	12.81%	2.95%	2.76%
CR 448	CR 561	Lake Industrial Blvd	6.71%	6.89%	-4.66%	2.95%	2.76%
CR 448	Lake Industrial Boulevard	Orange County Line	-2.79%	7.87%	9.98%	2.95%	2.76%
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	6.86%	-1.63%	-26.61%	2.95%	2.76%
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	6.86%	-1.63%	17.84%	2.95%	2.76%
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	1.71%	-10.28%	51.68%	2.95%	2.76%
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	-1.79%	8.34%	124.86%	2.95%	2.76%
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	-3.05%	-1.44%	97.91%	2.95%	2.76%
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	-3.05%	-1.44%	97.75%	2.95%	2.76%
CR 500 A / OLD 441	SR 19	Dora Avenue	9.50%	-12.74%	0.16%	2.95%	2.76%
CR 500 A / OLD 441	Dora Avenue	Bay Road	8.91%	5.00%	-9.28%	2.95%	2.76%
CR 561	SR 19	CR 448	9.87%	7.84%	8.03%	2.95%	2.76%
CR 561	CR 448	CR 48	4.80%	5.75%	29.41%	2.95%	2.76%
David Walker	OLD US 441 / CR 500A	CR 19 A	4.38%	-	-74.54%	2.95%	2.76%
Dead River Road	West Termini	SR 19	0.04%	2.10%	0.00%	2.95%	2.76%
Lake Eustis Drive	US 441	Clay Boulevard	7.36%	5.83%	4.56%	2.95%	2.76%
Lane Park Cutoff	SR 19	CR 561	3.39%	5.58%	0.00%	2.95%	2.76%
Woodlea Road	Lane Park Road	SR 19	-6.64%	32.82%	0.00%	2.95%	2.76%
City Roads							
Old 441 / CR 500 A	US 441	SR 19	0.23%	-	-13.06%	2.95%	2.76%
Wells Avenue	SR 19	Lake Avenue	0.77%	1.97%	0.00%	2.95%	2.76%
Mt Homer Road	CR 19 A	US 441	-1.96%	-2.58%	364.71%	2.95%	2.76%
Mt Homer Road	US 441	David Walker Drive	8.66%	11.19%	53.82%	2.95%	2.76%
State Roads							
SR 19	US 441	CR 500 A / Lake Shore Blvd	1.55%	-	27.97%	2.95%	2.76%
SR 19	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	4.40%	-	-7.58%	2.95%	2.76%
SR 19	CR 452 (Main Street)	CR 561	4.40%	-	6.73%	2.95%	2.76%
SR 19	CR 561	Lake Harris North End	4.92%	-	0.66%	2.95%	2.76%
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	1.16%	-	14.08%	2.95%	2.76%
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	-3.85%	-	29.05%	2.95%	2.76%
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	-1.01%	-	5.57%	2.95%	2.76%
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	-1.01%	-	-2.58%	2.95%	2.76%

3.3 Travel Demand Model Review

The latest travel demand model for Lake County, Central Florida Regional Planning Model (CFRPM) Version 6 was reviewed for its accuracy in replicating the 2010 condition (base year). Limited traffic counts were obtained within the model. Only seven segments out of 33 contained traffic counts. Due to the limited data and poor accuracy, growth rates were calculated based on the traffic growth on each roadway. However, model growth rates were not considered in the analysis due to poor data.

3.4 Projected Growth Rates

After reviewing both the historical growth rates and the projected model growth rates, BEBR High was identified to be used in projecting future conditions, shown in **Table 9**. The growth rates used for the 2023 and 2040 analysis year were 2.95% and 2.76%, respectively.

4.0 FUTURE CONDITIONS

4.1 Planned Improvements

4.1.1 Roadway Improvements

Based on the FDOT 5-year work program and Lake-Sumter MPO, the following roadways improvements are planned for the City of Tavares.

- Road widening to 4-lanes of SR 19 from CR 48 to CR 561 – Planning/Preliminary Engineering
- Bridge Replacement of SR 19 at Little Lake Harris Bridge – Under Construction
- Roundabout at Old US 441 (E Alfred St) / CR 19A (Dora Ave)

4.1.2 Pedestrian Improvements

The City of Tavares has identified pedestrian improvements in the Capital Improvement Program (CIP). Pedestrian improvements include repair/replace sidewalks throughout the City.

4.1.3 Bicycle Improvements

Lake County Trails Master Plan identifies existing trails, trails undergoing planning stages, and trails with complete study. Planned trails include:

- Wekiva Trail Extension
- Sugar Loaf Mountain Trail
- North Lake Phase 1

4.2 2023 Conditions

4.2.1 2023 Roadway Conditions and City's Plans

Year 2023 conditions were projected using the growth rates identified in **Table 9**. The resulting roadways level of service are summarized in **Table 10** and illustrated on **Map 2.9**. All roadways are projected to operate at LOS D or better in 2023.

4.2.2 2023 Pedestrian Conditions

The projected 2023 levels of service for pedestrian facilities within Tavares are identified in **Table 11** and illustrated on **Map 2.10**. In 2023, all pedestrian facilities within the City are planned to provide 85 to 100% sidewalk coverage with the exception of the following road segments:

- CR 448 – Lake Industrial to Boulevard to Orange County Line
- CR 452 (Lake Dora Drive) - Dora Avenue to Lake Avenue
- CR 452 (Lake Dora Drive) - Lake Avenue to Bay Road
- CR 500 A / Old US 441 – Dora Ave to Bay Road
- CR 561 – SR 19 to CR 448
- CR 561 – CR 448 to CR 48
- Lake Eustis – US 441 to Clay Boulevard
- Woodlea Road – Lane Park Road to SR 19
- Mt Homer Road – CR 19 A to US 441
- Mt Homer Road – US 441 to David Walker Drive
- SR 19 – CR 561 to Lake Harris North End

SR 19 and US 441/SR 500 provides 100% coverage throughout the City; however, the vehicular volumes on these roads are high enough to have a negative impact on pedestrian LOS along these facilities.

4.2.3 2023 Bicycle Conditions

The projected 2023 levels of service for bicycle facilities within Tavares are identified in **Table 12** and illustrated on **Map 2.11**. In 2023, all bicycle facilities within the City are planned to operate at an acceptable condition with the exception of the following road segments:

- CR 542 (East Main Street) – SR 19 to St. Clair Abrams Avenue
- CR 500 A / Old US 441 – SR 19 to Dora Avenue
- CR 500 A / Old US 441 – Dora Avenue to Bay Road

Table 10: 2023 Roadway Level of Service

Roadway	From	To	No. of Lanes	2018 AADT	Max Service Volume	2023 Peak Hour Vol.	V/C	LOS
County Roads								
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	2	1,782	675	123	0.18	C
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	2	4,919	675	298	0.44	C
CR 19 / Dora Avenue	David Walker Road	US 441	2	3,711	675	208	0.31	C
CR 448	SR 19	CR 561	2	4,947	792	273	0.34	C
CR 448	CR 561	Lake Industrial Blvd	2	9,953	1,190	516	0.43	C
CR 448	Lake Industrial Boulevard	Orange County Line	2	7,479	430	419	0.97	C
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	2	3,741	675	259	0.38	C
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	2	3,741	675	259	0.38	C
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	2	7,659	675	511	0.76	D
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	2	2,897	675	199	0.29	C
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	2	1,440	675	106	0.16	C
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	2	1,440	675	106	0.16	C
CR 500 A / OLD 441	SR 19	Dora Avenue	2	9,562	750	581	0.77	D
CR 500 A / OLD 441	Dora Avenue	Bay Road	2	9,461	880	546	0.62	C
CR 561	SR 19	CR 448	2	14,040	792	712	0.90	C
CR 561	CR 448	CR 48	2	9,245	792	519	0.66	C
David Walker	OLD US 441 / CR 500A	CR 19 A	2	2,900	675	164	0.24	C
Dead River Road	West Termini	SR 19	2	6,830	675	385	0.57	D
Lake Eustis Drive	US 441	Clay Boulevard	2	6,831	675	382	0.57	D
Lane Park Cutoff	SR 19	CR 561	2	1,984	675	214	0.32	C
Woodlea Road	Lane Park Road	SR 19	2	3,078	675	198	0.29	C
City Roads								
Old 441 / CR 500 A	US 441	SR 19	4	14,500	2,000	818	0.41	C
Wells Avenue	SR 19	Lake Avenue	2	961	675	103	0.15	C
Mt Homer Road	CR 19 A	US 441	2	262	675	23	0.03	C
Mt Homer Road	US 441	David Walker Drive	2	1,954	675	135	0.20	C
State Roads								
SR 19	US 441	CR 500 A / Lake Shore Blvd	4	17,700	1,630	999	0.61	D
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	4	17,700	1,630	999	0.61	D
SR 19 [2]	CR 452 (Main Street)	CR 561	4	33,000	2,000	1,862	0.93	C
SR 19 [3]	CR 561	Lake Harris North End	2	33,000	880	841	0.96	D
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	6	44,000	3,020	2,482	0.82	C
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	6	28,000	3,020	1,580	0.52	C
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	6	48,500	3,020	2,736	0.91	C
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	6	48,500	3,020	2,736	0.91	C

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

Table 11: 2023 Pedestrian Level of Service

Roadway	From	To	Sidewalk Coverage	2023 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	100%	123	B
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	100%	298	C
CR 19 / Dora Avenue	David Walker Road	US 441	100%	208	C
CR 448	SR 19	CR 561	100%	273	C
CR 448	CR 561	Lake Industrial Blvd	100%	516	C
CR 448	Lake Industrial Boulevard	Orange County Line	4%	**419**	**E**
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	100%	259	C
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	100%	259	C
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	100%	511	C
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	100%	199	B
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	106	D
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	106	D
CR 500 A / OLD 441	SR 19	Dora Avenue	100%	581	D
CR 500 A / OLD 441	Dora Avenue	Bay Road	18%	546	**F**
CR 561	SR 19	CR 448	39%	712	**F**
CR 561	CR 448	CR 48	0%	519	**F**
David Walker	OLD US 441 / CR 500A	CR 19 A	100%	164	B
Dead River Road	West Termini	SR 19	100%	385	C
Lake Eustis Drive	US 441	Clay Boulevard	0%	382	E
Lane Park Cutoff	SR 19	CR 561	100%	214	C
Woodlea Road	Lane Park Road	SR 19	38%	198	E
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	818	D
Wells Avenue	SR 19	Lake Avenue	100%	103	B
Mt Homer Road	CR 19 A	US 441	70%	23	C
Mt Homer Road	US 441	David Walker Drive	0%	135	D
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	999	E
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	999	E
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	1,862	**F**
SR 19 [3]	CR 561	Lake Harris North End	28%	841	**F**
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	2,482	**F**
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	1,580	**F**
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	2,736	**F**
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	2,736	**F**

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494

Table 12: 2023 Bicycle Level of Service

Roadway	From	To	Paved Shoulder/ Bike Lane Coverage	2023 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	0%	123	C
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	0%	298	D
CR 19 / Dora Avenue	David Walker Road	US 441	0%	208	D
CR 448	SR 19	CR 561	50%	273	C
CR 448	CR 561	Lake Industrial Blvd	100%	516	C
CR 448	Lake Industrial Boulevard	Orange County Line	100%	419	B
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	0%	259	D
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	0%	259	D
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	0%	511	E
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	0%	199	D
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	106	C
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	106	C
CR 500 A / OLD 441	SR 19	Dora Avenue	0%	581	E
CR 500 A / OLD 441	Dora Avenue	Bay Road	0%	546	E
CR 561	SR 19	CR 448	100%	712	C
CR 561	CR 448	CR 48	100%	519	C
David Walker	OLD US 441 / CR 500A	CR 19 A	0%	164	D
Dead River Road	West Termini	SR 19	7%	385	D
Lake Eustis Drive	US 441	Clay Boulevard	0%	382	D
Lane Park Cutoff	SR 19	CR 561	0%	214	D
Woodlea Road	Lane Park Road	SR 19	0%	198	D
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	818	C
Wells Avenue	SR 19	Lake Avenue	0%	103	C
Mt Homer Road	CR 19 A	US 441	0%	23	C
Mt Homer Road	US 441	David Walker Drive	0%	135	C
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	999	C
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	999	C
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	1,862	D
SR 19 [3]	CR 561	Lake Harris North End	100%	841	C
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	2,482	D
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	1,580	D
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	2,736	D
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	2,736	D

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

4.3 2040 Conditions

4.3.1 2040 Roadway Conditions

Year 2040 conditions were projected using the growth rates identified in **Table 9**. The resulting roadway levels of service are summarized in **Table 13** and illustrated on **Map 2.12**.

All roadways are projected to operate at LOS D or better in 2040 except for the following:

- CR 448 – Lake Industrial Blvd to Orange County Line, projected to operate at LOS D (v/c = 1.53)
- CR 561 – SR 19 to CR 448, projected to operates at LOS F (v/c = 1.41)
- SR 19 – CR 452 (Main Street) – CR 561, projected to operates at LOS F (v/c = 1.46)
- SR 19 – CR 562 to Lake Harris North End, projected to operates at LOS F (v/c = 1.50)
- US 441/SR 500 – CR 473 to Old US 441/CR 500 A, projected to operates at LOS F (v/c = 1.29)
- US 441/SR 500 – SR 19/Duncan Drive to CR 452/Lake Eustis Drive operates at LOS F (v/c = 1.43)
- US 441/DR 500 – CR 453/Lake Eustis Drive to David Walker Drive operates at LOS F (v/c = 1.43)

Improvements are planned for SR 19 from CR 48 to CR 561, the widening of the road will increase from 2-lane to 4-lane.

4.3.2 2040 Pedestrian Conditions

The projected 2040 levels of service for pedestrian facilities within the City of Tavares are identified in **Table 14** and illustrated on **Map 2.13**. All roadways within the City are planned to operate at an acceptable LOS except for those segments that experience a significant increase in traffic and segments with little no sidewalk coverage.

- CR 448 – Lake Industrial to Boulevard to Orange County Line
- CR 452 (Lake Dora Drive) - Dora Avenue to Lake Avenue
- CR 452 (Lake Dora Drive) - Lake Avenue to Bay Road
- CR 500 A / Old US 441 – Dora Ave to Bay Road
- CR 561 – SR 19 to CR 448
- CR 561 – CR 448 to CR 48
- Lake Eustis – US 441 to Clay Boulevard
- Woodlea Road – Lane Park Road to SR 19
- Old US 441 / CR 500 A – US 441 to SR 19
- Mt Homer Road – CR 19 A to US 441
- Mt Homer Road – US 441 to David Walker Drive
- SR 19 – CR 452 (Main Street) to Lake Harris North End
- US 441 / SR 500 – CR 473 to David Walker Drive

4.3.3 2040 Bicycle Conditions

The projected 2040 LOS for bicycle facilities within the City are identified in **Table 15** and illustrated on **Map 2.14**. All bicycle facilities within the City are planned to operate at an acceptable condition except for the following road segments:

- CR 542 (St Clair Abrams Ave) – US 441 to CR 500 A
- CR 542 (St Clair Abrams Ave) – CR 500 A to
- CR 542 (East Main Street) – SR 19 to St. Clair Abrams Avenue
- CR 500 A / Old US 441 – SR 19 to Dora Avenue
- CR 500 A / Old US 441 – Dora Avenue to Bay Road
- Dead Walker – West Termini to SR 19
- Lake Eustis Drive – US 441 to Clay Boulevard

Table 13: 2040 Roadway Level of Service

Roadway	From	To	No. of Lanes	2018 AADT	Max Service Volume	2040 Peak Hour Vol.	V/C	LOS
County Roads								
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	2	1,782	675	193	0.29	C
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	2	4,919	675	377	0.56	D
CR 19 / Dora Avenue	David Walker Road	US 441	2	3,711	675	263	0.39	C
CR 448	SR 19	CR 561	2	4,947	792	345	0.44	C
CR 448	CR 561	Lake Industrial Blvd	2	9,953	1,190	651	0.55	C
CR 448	Lake Industrial Boulevard	Orange County Line	2	7,479	430	658	**1.53**	D
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	2	3,741	675	407	0.60	D
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	2	3,741	675	407	0.60	D
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	2	7,659	675	804	1.19	F
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	2	2,897	675	313	0.46	C
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	2	1,440	675	167	0.25	C
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	2	1,440	675	167	0.25	C
CR 500 A / OLD 441	SR 19	Dora Avenue	2	9,562	750	913	1.22	F
CR 500 A / OLD 441	Dora Avenue	Bay Road	2	9,461	880	859	0.98	D
CR 561	SR 19	CR 448	2	14,040	792	1120	**1.41**	**F**
CR 561	CR 448	CR 48	2	9,245	792	817	1.03	F
David Walker	OLD US 441 / CR 500A	CR 19 A	2	2,900	675	257	0.38	C
Dead River Road	West Termini	SR 19	2	6,830	675	606	0.90	D
Lake Eustis Drive	US 441	Clay Boulevard	2	6,831	675	600	0.89	D
Lane Park Cutoff	SR 19	CR 561	2	1,984	675	337	0.50	D
Woodlea Road	Lane Park Road	SR 19	2	3,078	675	311	0.46	C
City Roads								
Old 441 / CR 500 A	US 441	SR 19	4	14,500	2,000	1287	0.64	C
Wells Avenue	SR 19	Lake Avenue	2	961	675	162	0.24	C
Mt Homer Road	CR 19 A	US 441	2	262	675	36	0.05	C
Mt Homer Road	US 441	David Walker Drive	2	1,954	675	213	0.32	C
State Roads								
SR 19	US 441	CR 500 A / Lake Shore Blvd	4	17,700	1,630	1,570	0.96	D
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	4	17,700	1,630	1,570	0.96	D
SR 19 [2]	CR 452 (Main Street)	CR 561	4	33,000	2,000	2,928	**1.46**	**F**
SR 19 [3]	CR 561	Lake Harris North End	2	33,000	880	1,322	**1.50**	**F**
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	6	44,000	3,020	3,904	**1.29**	**F**
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	6	28,000	3,020	2,485	0.82	C
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	6	48,500	3,020	4,304	**1.43**	**F**
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	6	48,500	3,020	4,304	**1.43**	**F**

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

Table 14: 2040 Pedestrian Level of Service

Roadway	From	To	Sidewalk Coverage	2040 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	100%	193	B
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	100%	377	C
CR 19 / Dora Avenue	David Walker Road	US 441	100%	263	C
CR 448	SR 19	CR 561	100%	345	C
CR 448	CR 561	Lake Industrial Blvd	100%	651	D
CR 448	Lake Industrial Boulevard	Orange County Line	4%	**658**	**F**
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	100%	407	C
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	100%	407	C
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	100%	804	D
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	100%	313	C
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	167	E
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	167	E
CR 500 A / OLD 441	SR 19	Dora Avenue	100%	913	E
CR 500 A / OLD 441	Dora Avenue	Bay Road	18%	859	F
CR 561	SR 19	CR 448	39%	1,120	F
CR 561	CR 448	CR 48	0%	817	F
David Walker	OLD US 441 / CR 500A	CR 19 A	100%	257	C
Dead River Road	West Termini	SR 19	100%	606	D
Lake Eustis Drive	US 441	Clay Boulevard	0%	600	F
Lane Park Cutoff	SR 19	CR 561	100%	337	C
Woodlea Road	Lane Park Road	SR 19	38%	311	E
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	1,287	F
Wells Avenue	SR 19	Lake Avenue	100%	162	B
Mt Homer Road	CR 19 A	US 441	70%	36	C
Mt Homer Road	US 441	David Walker Drive	0%	213	E
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	1,570	F
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	1,570	F
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	2,928	F
SR 19 [3]	CR 561	Lake Harris North End	28%	1,322	F
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	3,904	F
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	2,485	F
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	4,304	F
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	4,304	F

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494

Table 15: 2040 Bicycle Level of Service

Roadway	From	To	Paved Shoulder/ Bike Lane Coverage	2040 PHPD	LOS
County Roads					
CR 19 / Dora Avenue	Lake Dora Drive	CR 500 A / Old 441	0%	193	D
CR 19 / Dora Avenue	CR 500 A / Old 441	David Walker Road	0%	377	D
CR 19 / Dora Avenue	David Walker Road	US 441	0%	263	D
CR 448	SR 19	CR 561	50%	345	D
CR 448	CR 561	Lake Industrial Blvd	100%	651	C
CR 448	Lake Industrial Boulevard	Orange County Line	100%	658	C
CR 452 (St Clair Abrams Ave)	US 441	CR 500 A	0%	407	E
CR 452 (St Clair Abrams Ave)	CR 500 A	CR 542 / East Main Street	0%	407	E
CR 452 (East Main Street)	SR 19	St. Clair Abrams Avenue	0%	804	E
CR 452 (Main Street)	St. Clair Abrams Avenue	Dora Avenue	0%	313	D
CR 452 (Lake Dora Drive)	Dora Avenue	Lake Avenue	0%	167	D
CR 452 (Lakeshore Drive)	Lake Avenue	Bay Road	0%	167	D
CR 500 A / OLD 441	SR 19	Dora Avenue	0%	913	E
CR 500 A / OLD 441	Dora Avenue	Bay Road	0%	859	E
CR 561	SR 19	CR 448	100%	1,120	D
CR 561	CR 448	CR 48	100%	817	C
David Walker	OLD US 441 / CR 500A	CR 19 A	0%	257	D
Dead River Road	West Termini	SR 19	7%	606	E
Lake Eustis Drive	US 441	Clay Boulevard	0%	600	E
Lane Park Cutoff	SR 19	CR 561	0%	337	D
Woodlea Road	Lane Park Road	SR 19	0%	311	D
City Roads					
Old 441 / CR 500 A	US 441	SR 19	100%	1,287	D
Wells Avenue	SR 19	Lake Avenue	0%	162	D
Mt Homer Road	CR 19 A	US 441	0%	36	C
Mt Homer Road	US 441	David Walker Drive	0%	213	D
State Roads					
SR 19	US 441	CR 500 A / Lake Shore Blvd	100%	1,570	D
SR 19 [1]	CR 500 A / Lake Shore Blvd	CR 452 (Main Street)	100%	1,570	D
SR 19 [2]	CR 452 (Main Street)	CR 561	100%	2,928	D
SR 19 [3]	CR 561	Lake Harris North End	100%	1,322	D
US 441 / SR 500	CR 473	Old US 441 / CR 500 A	100%	3,904	D
US 441 / SR 500	Old US 441 / CR 500 A	SR 19 / Duncan Drive	100%	2,485	D
US 441 / SR 500	SR 19 / Duncan Drive	CR 452 / Lake Eustis Drive	100%	4,304	D
US 441 / SR 500	CR 452 / Lake Eustis Drive	David Walker Drive	100%	4,304	D

Notes: [1] AADT from adjacent segment, FDOT count station 115125
[2] AADT from adjacent segment, FDOT count station 110049
[3] AADT from FDOT count station 110494
* Segment improvement, widening to 4-lanes by FDOT (Unfunded for construction)

Appendix A

LakeXpress Bus Route Map and Schedule

ROUTE 1

Leesburg to Eustis

LakeXpress

The Way to Go

Eastbound | Route 1

Leesburg to Eustis

U.S. Highway 27 *(14th St.)* & Citizens Blvd. **X** *Transfer to Routes 1A & 2*	LRMC *(Leesburg Regional Medical Center, Lake St.)*	Lake-Sumter State College	Lake Square Mall *(U.S. Highway 441)*	Main St. *(Lake County Government Complex)*	Waterman Hospital *(U.S. Highway 441)*	Lake Tech *(Kurt St.)*	Cardinal Ave. & Orange Ave.
1	**2**	**3**	**4**	**6**	**7**	**9**	**10**
6:00	6:05	6:25	6:35	6:40	6:50	6:55	7:14
7:00	7:05	7:25	7:35	7:40	7:50	7:55	8:14
8:00	8:05	8:25	8:35	8:40	8:50	8:55	9:14
9:00	9:05	9:25	9:35	9:40	9:50	9:55	10:14
10:00	10:05	10:25	10:35	10:40	10:50	10:55	11:14
11:00	11:05	11:25	11:35	11:40	11:50	11:55	**12:14**
12:00	**12:05**	**12:25**	**12:35**	**12:40**	**12:50**	**12:55**	**1:14**
1:00	**1:05**	**1:25**	**1:35**	**1:40**	**1:50**	**1:55**	**2:14**
2:00	**2:05**	**2:25**	**2:35**	**2:40**	**2:50**	**2:55**	**3:14**
3:00	**3:05**	**3:25**	**3:35**	**3:40**	**3:50**	**3:55**	**4:14**
4:00	**4:05**	**4:25**	**4:35**	**4:40**	**4:50**	**4:55**	**5:14**
5:00	**5:05**	**5:25**	**5:35**	**5:40**	**5:50**	**5:55**	**6:14**
6:00	**6:05**	**6:25**	**6:35**	**6:40**	**6:50**	**6:55**	**7:14**

Westbound | Route 1

Eustis to Leesburg

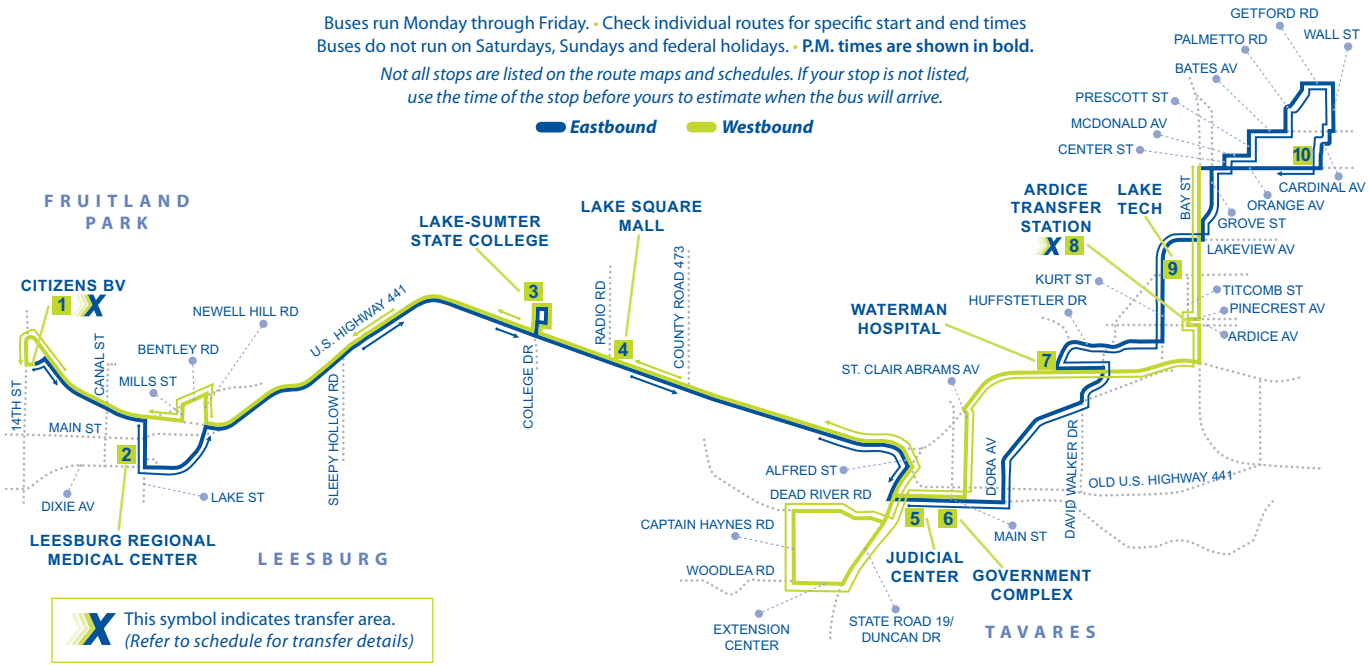
Cardinal Ave. & Orange Ave.	Ardice Transfer Station *(Ardice Ave.)* **X** *Transfer to Routes 3 & 4*	Waterman Hospital *(U.S. Highway 441)*	Main St. *(Lake County Judicial Center)*	Lake Square Mall *(U.S. Highway 441)*	Lake-Sumter State College	U.S. Highway 27 *(14th St.)* & Citizens Blvd. **X** *Transfer to Routes 1A & 2*
10	**8**	**7**	**5**	**4**	**3**	**1**
				6:18	6:25	6:50
			6:58	7:18	7:25	7:50
7:19	7:38	7:50	7:58	8:18	8:25	8:50
8:19	8:38	8:50	8:58	9:18	9:25	9:50
9:19	9:38	9:50	9:58	10:18	10:25	10:50
10:19	10:38	10:50	10:58	11:18	11:25	11:50
11:19	11:38	11:50	11:58	**12:18**	**12:25**	**12:50**
12:19	**12:38**	**12:50**	**12:58**	**1:18**	**1:25**	**1:50**
1:19	**1:38**	**1:50**	**1:58**	**2:18**	**2:25**	**2:50**
2:19	**2:38**	**2:50**	**2:58**	**3:18**	**3:25**	**3:50**
3:19	**3:38**	**3:50**	**3:58**	**4:18**	**4:25**	**4:50**
4:19	**4:38**	**4:50**	**4:58**	**5:18**	**5:25**	**5:50**
5:19	**5:38**	**5:50**	**5:58**	**6:18**	**6:25**	**6:50**
6:19	**6:38**	**6:50**	**6:58**	**7:18**	**7:25**	**7:50**
7:19	**7:38**	**7:50**				

EUSTIS

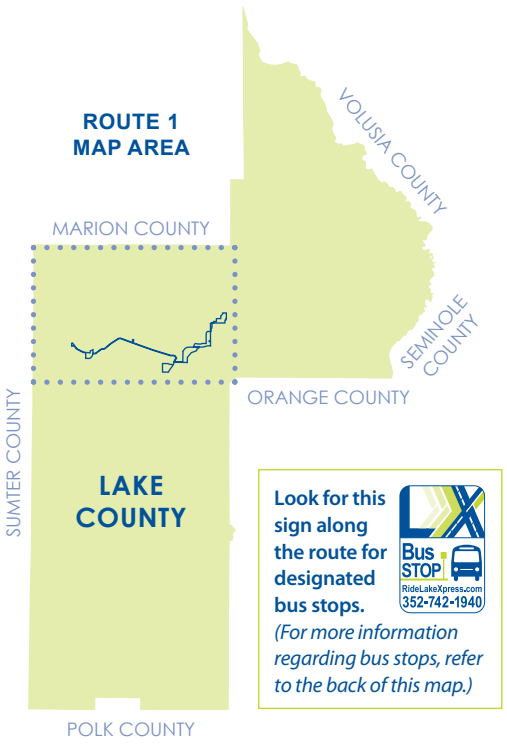
Buses run Monday through Friday. • Check individual routes for specific start and end times
Buses do not run on Saturdays, Sundays and federal holidays. • **P.M. times are shown in bold.**

Not all stops are listed on the route maps and schedules. If your stop is not listed, use the time of the stop before yours to estimate when the bus will arrive.

Eastbound ***Westbound***



X This symbol indicates transfer area. *(Refer to schedule for transfer details)*



Look for this sign along the route for designated bus stops. *(For more information regarding bus stops, refer to the back of this map.)*

Bus STOP RideLakeXpress.com 352-742-1940

R1 EN | V/2 | 11.18 | 10K

General Information

LakeXpress – Lake County's fixed-route bus service provides public transportation in two areas of the county. In the northern portion of the county, services are provided along the U.S. Highway 441 corridor, including the municipalities of Eustis, Fruitland Park, Lady Lake, Leesburg, Mount Dora, Tavares and Umatilla. Service also connects to Orange County via LYNX in Zellwood. Additionally, fixed-route service is provided in South Lake County along State Road 50 with connection to Orange County via LYNX Link 105 in Winter Garden. For more information about LakeXpress call 352-742-1940 or visit www.ridelakexpress.com.

LYNX Information – Transferring to and from LakeXpress Route 4 to LYNX Link 44 and LakeXpress Route 50 West to LYNX Link 105, is free with a valid transfer pass. For more information regarding LYNX fares and service, call LYNX 407-841-LYNX (5969) or visit www.golynx.com. Comments, concerns and complaints may be made by contacting LakeXpress at 352-742-1940, or by visiting www.ridelakexpress.com.

Title VI Information – Any person who believes they have been discriminated against while receiving transportation service may file a complaint with the Title VI Specialist at 352-323-5733.

Lost and found – LakeXpress is not responsible for articles left on the bus. Found items will be turned over to Lake County Transit Management. All lost and found items will be subject to Florida Statute 705.103 and will be held for 90 days. Call 352-742-1940 to inquire about lost items on a LakeXpress buses.

Hours of Operation – 6 a.m.-8 p.m. Buses do not run on Saturdays, Sundays and the following federal holidays:

- New Year's Day
- Martin Luther King Jr. Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

LAKE COUNTY
FLORIDA
COMMUNITY SERVICES DEPARTMENT
Transit Division

Fares & Passes

Bus Fares	Full Fare	Half Fare
One Way Trip	$1	.50
Daily Pass	$3	$1.50
30-Day Pass	$30	$15
10-Ride Pass	$8	$4
Transfer Pass*	Free	Free

**Transfers may only be used to complete a one way trip.*

1. Passes at half price are available for:

- **Seniors** 60 years or older
- **Medicare cardholders**
- Individuals who receive **Supplemental Security Income** *(SSI)* based on disability, or **Social Security Disability** *(SSD)* benefits
- **Veterans** with a valid DD214 card
- **Individuals with a disability** *(buses are equipped with lifts)*.

2. Children under 5 years of age that are accompanied by a fare-paying chaperone ride for free.

3. Students with a valid school issued photo ID ride free.

Bus passes may be purchased from the bus drivers, Lake County Transit Division, Tavares Utilities Department, and the following libraries: Fruitland Park, Lady Lake, Leesburg, Marion Baysinger, and Cooper Memorial. For detailed information on these locations, visit www.ridelakexpress.com or call 352-742-1940.

All purchases are final and non-refundable. Passes cannot be transferred. Copying or other reproduction of LakeXpress passes is prohibited. A valid identification is required for all discounted fares. Drivers will punch the pass at the time of first use. Date punched reflects expiration date. Exact change is required for all fares.

Bus Stops

Passengers may board and exit the bus at designated LakeXpress bus stop locations along the routes. Passengers may depart the bus by using the pull cord or notifying the driver of their desired drop-off location. The driver will determine the most safe and convenient location to allow passengers to board or exit the bus.

Lake County Connection

Americans with Disabilities *(ADA)* – Lake County Connection is Lake County's complementary ADA and Transportation Disadvantaged public transportation service for qualified individuals.

Lake County Connection is a door-to-door service primarily intended for persons with disabilities, senior citizens and other individuals who are transportation disadvantaged and who meet the eligibility requirements. The service is provided for individuals who do not have access to any other means of transportation, including LakeXpress bus service. For more information, contact Lake County Connection at 352-742-2612 or log on to www.lakecountyfl.gov/LCC.

On The Bus

- Exact fare or a pass is required for all trips. Drivers do not carry change.
- Standing is permitted behind the white line only. When standing, hold on to the handrail or seat handle while the bus is in motion.
- No eating, drinking, smoking or littering is allowed on buses.
- Keep all bus stop areas free from litter.
- All passengers must wear shirts and shoes.
- Priority seating in the front section of the buses is reserved for disabled persons and elderly riders. Flip-type seats are for people using wheelchairs.
- Please speak quietly while using cell phones.
- No soliciting, disruptive behavior, fighting or vandalism.
- While on the bus, it is prohibited to play radios or other sound devices without earphones.
- Service animals are allowed for riders with disabilities. There is no added fare.

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Housing Element

Data Inventory and Analysis

TAVARES

America's Seaplane City

Purpose

Pursuant to the requirements of Chapter 163 of the 2019 Florida Statutes, the Housing Element consists of a data inventory and analysis (DIA) that influences the overarching goals, objectives, and policies that will guide housing development within the City of Tavares. The City's housing trends and needs are evaluated in this analysis in order to ensure a proper mix of housing types are available to accommodate diverse housing needs achieve a livable community.

Housing Inventory and Existing Housing Characteristics

This section deals with the characteristics and conditions of the existing housing stock in the City. In order to compile this analysis, the primary sources of data include the U.S. Census Bureau and the American Community Survey (ACS). These specific resources were applied as they comprise some of the most current and accurate information available.

Tables 3-1 through 3-15 of this section provide an inventory and comparison of housing characteristics for the City of Tavares and Lake County. Data appearing for Lake County represents the entire county, including all unincorporated and incorporated areas as well as Tavares.

Dwelling Units by Structure Type

A comparison of dwelling units by structure type for the City of Tavares when compared to Lake County is displayed in **Table 3-1**. Single-family detached homes make up the majority of the inventoried housing units within Tavares and Lake County. Notably, mobile home unites make up nearly 30% of the housing units in the City.

Table 3-1: Dwelling Units by Structure

Dwelling Units	Tavares		Lake County	
	Units	Percent	Units	Percent
Single Family	4,529	53.9%	101,792	67.3%
1-unit, detached	4,159		98,164	
1-unit, attached	370		3,628	
Multi-Family	1,338	15.9%	19,564	13.0%
2 units	234		2,418	
3 or 4 units	323		3,889	
5 to 9 units	194		3,629	
10 to 19 units	14		4,535	
20 or more units	447		5,093	
Mobile Home	2,516	29.9%	29,421	19.4%
Other (Boat, RV, Van, Etc.)	26	0.3%	518	0.3%
Total	8,409		151,295	

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Households by Tenure

A comparison between owner-occupied dwelling units and renter-occupied dwelling units in Tavares and Lake County is presented in **Table 3-2.** As depicted below, approximately 71% of the City's occupied dwelling units are occupied by the owner as compared to 73.5% in the County. The City also has a slightly larger percentage of renter-occupied units at 29.1% as compared to 26.5% in Lake County.

Table 3-2: Dwelling Units by Tenure

Tenure	Tavares		Lake County	
	Units	Percent	Units	Percent
Owner-occupied	4,785	70.9%	93,644	73.5%
Renter-occupied	1,968	29.1%	33,797	26.5%
Total Occupied Housing Units	6,753	100%	127,441	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Housing Vacancy

Based on the 2013-2017 American Community Survey (ACS) 5-year Estimates, the City experienced a vacancy rate of 19.6% for all housing units, with many of those units being for seasonal, recreational, or occasional use. The County had a slightly lower 15.7% vacancy rate. **Table 3-3** shows the number of vacant housing units according to the circumstances creating vacant units.

Table 3-3: Vacancy Status of Housing Units

Vacant Housing Units	Tavares		Lake County	
	Units	% of total housing units	Units	% of total housing units
Total Housing Units	8,409	100%	151,295	100%
Total Vacant Housing Units	1,656	19.6%	23,854	15.7%
Vacant Units For Rent	185	2.2%	2,874	1.9%
Rented, Not Occupied	-	-	440	0.3%
For Sale Only	161	1.9%	2,856	1.9%
Sold, Not Occupied	62	0.7%	1,188	0.8%
For Seasonal, Recreational, or Occasional Use	1,181	14%	13,306	8.8%
Vacant Units for Migrant Workers	-	-	-	-
Other Vacant Units	67	0.8%	3,190	2.1%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Housing Age

Table 3-4 compares the age of year-round housing units in the City of Tavares and Lake County. The highest percentage of year-round housing unit construction in both the City and County took place between 2000-2009. As denoted below, a majority of Tavares's housing stock (59.5%) was constructed between 1980-2009, with 27.7% constructed between 2000-2009.

Table 3-4: Dwelling Units by Age of Construction

Year Structure Built	Tavares		Lake County	
	Units	Percent	Units	Percent
2014 or Later	199	2.4%	2,834	1.9%
2010-2013	188	2.2%	4,338	2.9%
2000-2009	2,331	27.7%	44,717	29.6%
1990-1999	1,034	12.3%	33,616	20.9%
1980-1989	1,642	19.5%	26,519	17.5%
1970-1979	1,392	16.6%	19,800	13.1%
1960-1969	837	10.0%	7,619	5.0%
1950-1959	556	6.6%	7,340	4.9%
1940-1949	93	1.1%	2,535	1.7%
1939 or Earlier	137	1.6%	3,997	2.6%
Total	8,409	100%	151,295	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Monthly Housing Rent

Table 3-5 compares the monthly gross rents for specified renter-occupied housing units in the City with the Lake County totals for the year 2017. The median gross rent in the City of Tavares is approximately $899 as compared to $979 in the County according to 2017 ACS Survey.

Table 3-5: Gross Rent

Gross Rent	Tavares		Lake County	
	Units	Percent	Units	Percent
Less than $500	143	7.3%	1,981	5.9%
$500-$999	994	50.5%	14,991	44.4%
$1,000-$1,499	546	27.7%	11,029	32.6%
$1,500-$1,999	69	3.5%	3,050	9.0%
$2,000-$2,499	55	2.8%	567	1.7%
$2,500-$2,999	-	-	244	0.7%
$3,000 or More	-	-	352	1.0%
No Cash Rent	125	6.4%	1,583	4.7%
Total	1,968	100%	33,797	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Monthly Cost of Owner-Occupied Units

The monthly owner costs with a mortgage are shown in **Table 3-6**. This provides context in terms of the value of owning a home and affordability of owning a home when compared to renting.

Table 3-6: Owner Costs

Owner Costs (with a mortgage)	Tavares		Lake County	
	Housing units with a mortgage	Percent	Housing units with a mortgage	Percent
Total Owner-Occupied Units with a Mortgage	1,948	100%	49,712	100%
Less than $200	0	0.0%	0	0.0%
$200 to $399	17	0.9%	320	0.6%
$400 to $599	110	5.6%	1,941	3.9%
$600 to $799	296	15.2%	5,964	12.0%
$800 to $999	174	8.9%	6,959	14.0%
$1,000 to $1,499	883	45.3%	18,264	36.7%
$1,500 to $1,999	321	16.5%	9,847	19.8%
$2,000 to $2,499	79	4.1%	3,297	6.6%
$2,500 to $2,999	31	1.6%	1,770	3.6%
$3,000 or more	37	1.9%	1,350	2.7%
Median (dollars)	1,168	1,168	1,238	1,238

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Value of Owner-Occupied Housing Units

The median home value in Tavares is $146,000 as compared to $169,400 in Lake County (2017 dollars). The owner-occupied units by value are shown in **Table 3-7.**

Table 3-7: Owner-Occupied Units by Value

Owner-Occupied Units by Value	Tavares		Lake County	
	Units	Percent	Units	Percent
Less than $50,000	944	19.7%	13,100	14.0%
$50,000 to $99,999	1,129	23.6%	14,618	15.6%
$100,000 to $149,999	861	18.0%	16,659	17.8%
$150,000 to $199,999	983	20.5%	19,535	20.9%
$200,000 to $299,999	648	13.5%	18,311	19.6%
$300,000 to $499,999	167	3.5%	8,274	8.8%
$500,000 to $999,999	42	0.9%	2,475	2.6%

$1,000,000-$1,499,999	-	-	355	0.4%
$1,500,000-$1,999,999	-	-	86	0.1%
More than $2,000,000	-	-	231	0.2%
Total	4,785	100%	93,644	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Household Income

The median household income levels for Tavares compared to Lake County are show in **Table 3-8**. The median household income for the City is lower than that of Lake County but the per capita income for the City is greater than Lake County.

Table 3-8: Household Income

Household Income	Tavares	Lake County
Median Household Income in past 12 months (2017 Dollars)	$41,550	$49,734
Per Capita Income (2017 Dollars)	$25,991	$24,758
Persons in Poverty, in percent	11.6%	12.8%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Ratio of Income to Housing Cost

The ratio between housing costs and income within Tavares and Lake County are denoted in **Table 3-10** and **Table 3-11** below. Affordable housing is determined by comparing the cost of housing to household income. Florida Statutes defines affordable housing as monthly rents or monthly mortgage payments including taxes, insurance, and utilities do not exceed 30 percent of the median adjusted gross annual income for households.

Rent-to-Income Ratio

Rent as a percentage of income for Tavares compared to Lake County is shown in **Table 3-9**. According to Census data 48.3% of renters in Tavares are paying less than 30% of household income in rent. In Lake County, 50% of renters are paying more than 30% of their income for housing.

Table 3-9: Rent-to Income Ratio

Gross Rent as a Percentage of Household Income	Tavares		Lake County	
	Renter-Occupied Units	Percent	Renter-Occupied Units	Percent
Less than 30%	950	48.3%	14,697	43.5%
30-49.9%	459	23.3%	9,288	27.5%

50% or More	423	21.5%	7,618	22.5%
Not computed	136	6.9%	2,194	6.5%
Total Renter-Occupied Units	1,968	100%	33,797	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Mortgage Costs to Income Ratio

The monthly mortgage costs-to-income ratio for both Tavares and Lake County are shown in **Table 3-10**. The highest percentage of owners with and without a mortgage in both Tavares and Lake County are paying less than 30% of their income for housing.

Table 3-10: Costs to Income Ratio

Owner Costs (with and without a mortgage)	Tavares		Lake County	
	Units	Percent	Units	Percent
With Mortgage, Less than 30%	1,237	26.1%	33,602	36.3%
With Mortgage, More than 30%	711	15.0%	15,884	17.1%
Without Mortgage, Less than 30%	2,478	52.3%	37,651	40.6%
Without Mortgage, More than 30%	309	6.5%	5497	5.9%
Total	4,735	100%	92,634	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Cost Burden

Table **3-11** depicts cost burden by income for renter-occupied households, while **Table 3-13** depicts cost burden by income for owner-occupied households. Cost-burdened households pay more than 30 percent of income for rent or mortgage costs. Data for this section has been supplied by the Florida Housing Data Clearinghouse. Based on 2016 estimates, the data indicates that 2,378 (33.6%) households within the City (owner- and renter-occupied) paid more than 30% of income for housing. This contrasts with the 12.2% of County households that paid more than 30% of income for housing.

Table 3-11 – Renter Households, Cost Burden by Income, 2016

Renter-Occupied Households, 2016		Housing Cost Burden		
Geography	Household Income	30 % or less	30.1-50%	More than 50%
Tavares	30% AMI or less	26	13	350
Tavares	30.1-50% AMI	94	50	223

Tavares	50.1-80% AMI	77	214	62
Tavares	80.1-120% AM	325	44	-
Tavares	more than 120% AMI	288	24	-
Lake County	30% AMI or less	690	338	4074
Lake County	30.1-50% AMI	1053	1565	3736
Lake County	50.1-80% AMI	1442	4154	1064
Lake County	80.1-120% AM	4101	1748	241
Lake County	more than 120% AMI	6480	498	169

Source: Lake County and City of Tavares data taken from Shimberg Center – Florida Housing Data Clearinghouse

Table 3-12 – Owner-Occupied Households, Cost Burden by Income, 2016

Owner-Occupied Households, 2016		Housing Cost Burden		
Geography	Household Income	30 % or less	30.1-50%	More than 50%
Tavares	30% AMI or less	-	72	259
Tavares	30.1-50% AMI	297	253	100
Tavares	50.1-80% AMI	719	172	90
Tavares	80.1-120% AM	979	206	23
Tavares	more than 120% AMI	1889	211	12
Lake County	30% AMI or less	470	753	4454
Lake County	30.1-50% AMI	3554	2300	3215
Lake County	50.1-80% AMI	9774	3210	2787
Lake County	80.1-120% AM	15652	4903	1832
Lake County	more than 120% AMI	43217	5438	769

Source: Lake County and City of Tavares data taken from Shimberg Center – Florida Housing Data Clearinghouse

Cost Burden of Households with Householder Age 65 and Older

According to the Florida Housing Data Clearinghouse, an estimated 3,614 households Tavares were headed by a person age 65 or older in 2016. In Tavares, 3,022 of these householders own their homes, while 592 were renters. In the City, 31.5% householders over 65 paid more than 30 percent of income for rent or mortgage cost in 2016.

Table 3-13 - Households with Householder Age 65 and Older, Cost Burden by Tenure and Income, 2016 Estimate (Summary)

Geography	Tenure	Household Income	30% or less	30.1-50%	More than 50%
Tavares	Owner	30% AMI or less	-	46	135

Tavares	Owner	30.1-50% AMI	235	182	49
Tavares	Owner	50.1-80% AMI	526	100	47
Tavares	Owner	80.1-120% AM	643	88	10
Tavares	Owner	more than 120% AMI	895	61	5
Tavares	Renter	30% AMI or less	14	6	106
Tavares	Renter	30.1-50% AMI	51	14	94
Tavares	Renter	50.1-80% AMI	19	66	36
Tavares	Renter	80.1-120% AM	33	17	-
Tavares	Renter	more than 120% AMI	59	17	-
Lake County	Owner	30% AMI or less	214	412	1783
Lake County	Owner	30.1-50% AMI	2578	1482	1204
Lake County	Owner	50.1-80% AMI	6507	1499	1048
Lake County	Owner	80.1-120% AM	9102	1551	441
Lake County	Owner	more than 120% AMI	16088	1038	192
Lake County	Renter	30% AMI or less	265	137	797
Lake County	Renter	30.1-50% AMI	437	278	1002
Lake County	Renter	50.1-80% AMI	205	745	405
Lake County	Renter	80.1-120% AM	284	371	175
Lake County	Renter	more than 120% AMI	773	276	89

Source: Lake County and City of Tavares data taken from Shimberg Center – Florida Housing Data Clearinghouse

Inventory of Standard/Substandard Units

The Census provides indicators for substandard housing by measuring overcrowding and the lack of complete plumbing, kitchen, or heating equipment. Overall substandard housing makes up a very small percentage of the overall occupied units in both the City and the County. An analysis of substandard housing is displayed in **Table 3-14**.

Table 3-14: Substandard Housing

Substandard Housing	Tavares		Lake County	
	Units	Percent of Total Occupied Units	Units	Percent of Total Occupied Units
Overcrowded (1.01 or More Persons per Room)	143	2.1%	2,763	2.2%
No Fuel Used	101	1.5%	1,050	0.8%
Lacking Complete Kitchen Facilities	178	2.1%	1,969	1.3%

Lacking Complete Plumbing Facilities	-	-	562	0.4%
Total	422		4,375	0.03%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Government Subsidized Housing

The following are government subsidized housing resources that can be utilized by the City of Tavares.

- **Florida Housing Finance Corporation**: a public corporation of the State of Florida that offers homeownership programs, multifamily development programs, predevelopment and demonstration project loans, and technical assistance for local governments.
- **Lake County SHIP Home Purchase Program**: Lake County offers assistance to help extremely low, very low, low and moderate income households purchase homes. The program is funded through the State Housing Initiatives Partnership (SHIP). The funds can be used for down payments, closing costs for new homes, or for existing homes that have been or will be repaired within twelve months of transfer of title. The maximum purchase price for new and existing homes is $180,000. Up to $5,000 of the assistance can be used for repairs to existing homes. The amount of SHIP assistance available varies by income category.
- **Community Development Block Grant:** provides funds through the Small Cities Program for capital improvements.
- **Section 8:** provides rental subsidies to very low, low, and moderate-income households. The rental limits are set each year by the U.S. Department of Housing and Urban Development (HUD).

Housing for Special Needs

Special housing needs are necessary for the elderly, children, and those who have physical or emotional needs that require special residential accommodations. Such residential accommodations may or may not demand on-site professional medical assistance, twenty-four hour assistance, or other special facilities. In some cases, special housing situations can involve a group of unrelated residents that share living accommodations because their physical or emotional needs require special services or assistance from other group members.

The City of Tavares recognizes the importance of providing housing for special needs. The State of Florida has adopted laws that control local government regulation of certain residential facilities serving special needs groups. These laws ensure that there are adequate sites for group homes in every community throughout the State (Chapter 419, F.S.). Special housing accommodations for Tavares's residents can include nursing homes and group homes. Group

homes can be further defined as a community residential home, adult family care homes, assisted living facilities, and family foster homes. These special housing facilities are generally defined as follows:

Nursing Homes: Any institution, building residence, private home or other place, whether operated for profit or not, which provides 24-hour nursing care, personal care, or custodial care for persons not related to the owner or manager by blood or marriage. The person under such care resides overnight at the home. See Section 400.021(12) F.S.

Assisted Living Facilities: A facility designed to provide personal care services in the least restrictive and most home-like environment. These facilities can range in size from one resident to several hundred and may offer a wide variety of personal and nursing services designed specifically to meet an individual's personal needs. See Section 400.402, F.S.

Adult Family Care Homes: A full-time, family-type living arrangement, in a private home, under which a person who owns or rents the home provides room, board, and personal care, on a 24-hour basis, for no more than five disabled adults or frail elders who are not relatives. See Section 400.618, F.S.

Community Residential Home: A dwelling unit licensed to serve clients of the Department of Children and Family Services, which provides a living environment for seven to fourteen unrelated residents who operate as the functional equivalent of a family, including such supervision and care by supportive staff as may be necessary to meet the physical, emotional, and social needs of the residents. See Section 419.001, F.S.

Family Foster Home: A private residence in which children who are unattended by a parent or legal guardian are provided 24-hour care. Such homes include emergency shelter family homes, family foster group homes, and specialized foster homes for children with special needs. A person who cares for a child of a friend for a period not to exceed 90 days, a relative who cares for a child and does not receive reimbursement for such care from the state or federal government, or an adoptive home which has been approved by the department or by a licensed child-placing agency for children placed for adoption is not considered a family foster home. See Section 409.175 FS.

Assisted Housing Inventory

Based on data from the Florida Housing Data Clearinghouse, **Table 3-15** lists assisted living facilities located within or close to the City of Tavares.

Table 3-15: Assisted Housing Inventory, 2019

Development Name	Street Address	City	Zip Code	County	Housing Program(s)	Total Units	Assisted Units
CAROLINE COURT APARTMENTS	1000 E Caroline St	Tavares	32778	Lake County	Rental Assistance/HUD	40	40
COLONIAL PINES APTS	895 MANSFIELD ROAD	Tavares	32778	Lake County	Housing Credits 9%;Rental Assistance/RD;Section 515	30	30

Colony West	750 West Main Street	Tavares	32778	Lake County	Housing Credits 9%;Rental Assistance/RD;Section 515	18	18
Lake Point Senior	1821 Dora Avenue	Tavares	32778	Lake County	Housing Credits 9%	160	160
Lakebreeze	1575 Merry Rd.	Tavares	32778	Lake County	Housing Credits 9%;Rental Assistance/RD;Section 515	36	36
SIERRA VILLAGE APTS	51 SIERRA DR	Tavares	32778	Lake County	Rental Assistance/RD;Section 515	50	50

Source: Shimberg Center – Florida Housing Data Clearinghouse

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Public Facilities Element

Data Inventory and Analysis

TAVARES

America's Seaplane City

The Public Facilities Element addresses the physical capacity and condition of the City's hard infrastructure system (sanitary sewer, potable water, solid waste, drainage and aquifer recharge). In order to maintain the physical capacity of its infrastructure system, the City of Tavares has adopted Level of Service (LOS) standards in the Comprehensive Plan and Land Development Regulations. The City ensures that these standards are met through: Concurrency Management, which requires that the infrastructure needed to serve new development and redevelopment is in place prior to or at the time of development; capital improvement projects, and; coordination with others service providers, such as Lake County.

Sanitary Sewer

The Tavares Wastewater Division operates one water reclamation facility and the old Caroline facility, which has been converted into a .5MGD master lift station. The recently expanded Woodlea Road Water Reclamation Facility is an extended aeration facility with pretreatment screening, aeration, clarification, filtration, chlorination and sludge treatment.

The Woodlea Road facility presently has a capacity of 3.0 million gallons a day with the ability to upgrade to a 3.5mgd facility with some additional process control equipment. The City's Five-Year Capital Improvements Program has identified projects for the design and construction of an expansion and upgrades to the Woodlea facility over the short-term planning horizon.

The City's current wastewater demand is approximately 1.5 million gallons per day. The City's adopted Level of Service standard for sanitary sewer is 250 gallons per day per equivalent residential unit, and it is anticipated that the City's facilities will adequately meet future demand.

The treated wastewater is pumped to rapid infiltration basins for disposal, which are rotated on a weekly basis. Laboratory testing of all generated waste (liquid and solid) is conducted on site to meet state and federal Regulations. Activities include, weekly, quarterly and yearly sampling of the treated water, groundwater, and treated waste sludge for compliance.

The City currently maintains and operates 70 lift stations throughout the City. Lift stations are regional pumping stations designed to pump wastewater from smaller areas to the wastewater treatment facilities. The City is planning to electronically monitor all lift stations to maintain continuous to preserve and protect the public health and environment. Modifications are ongoing at the facility to help maintain existing energy rates or chemical costs.

In 2016, the City completed a program of improvements to the wastewater collection systems within the City's Community Redevelopment Area (CRA), which included 37,000 linear feet of new potable water distribution piping, 17,000 linear feet of new force mains, and gravity sewer pipes. An additional 25,000 linear feet of gravity sewer pipes and 145 manholes were also rehabilitated with cast-in-place lining.

In 2018, the City completed a Peninsula Area Expansion Report (prepared by WSP) to hydraulically evaluate the necessary facilities to extend the City's water, wastewater, and reclaimed water services for this potential area of annexation.

The plan was developed by estimating current and future water demands, wastewater flows, and reclaimed water demands, performing a hydraulic evaluation of these utilities' systems that will connect to the City's existing systems, determining the current and future level of service, and developing future projects with associated costs to serve the long-term needs of the City.

Potable Water

The City's existing potable water supply, treatment, and distribution facilities consist of seven (7) raw water supply wells, four (4) water treatment plants (WTP), three (3) water storage facilities, and a network of transmission and distribution mains. These facilities all have fluoridation, disinfection and onsite generators for continuous operation even during catastrophic events.

The City also recently installed 70 new water sampling taps throughout the City to improve water quality testing. Water is sampled monthly to meet the requirements of the FDEP. The department also has a meter change out program that schedules the replacement of older water meters to provide for better water conservation and accurate readings. The City has an active Water Conservation Program that meets the requirements of the St. Johns River Water Management District.

This element also contains the adopted 10-Year Water Supply Facilities Work Plan (prepared by SMW GeoSciences, May 21, 2008) that identifies needed water supply facilities for a ten-year period (**see Appendix**). Chapter 163, Part II, F.S., requires local governments to prepare and adopt Work Plans into their Comprehensive Plans within 18 months after the water management district approves a regional water supply plan.

On a regional level, the City falls within the St. Johns River Water Management District (SJRWMD) and within the SJRWMD's Central Springs East Coast (CSEC) Planning Area. To date, a RWSP for the CSEC area has not been finalized or adopted. The City will monitor the development of the CSEC RWSP and update the 10-year Water Supply Facilities Work Plan within 18 months of adoption per state statutes.

The City of Tavares maintains an updated Capital Improvements Program (CIP) in the Capital Improvements Element of the Comprehensive Plan. This CIP is updated annually and lists all capital projects in the City including those regarding potable water supply.

The withdrawal of ground and surface waters as a source of raw supply water for treatment is governed and permitted by the St. Johns River Water Management District (SJRWMD). In December 2012, the City received Consumptive Use Permit (CUP) 2-069-2765-7 which authorizes, as limited by the permit conditions, the use of 1,554.54 mgy (4.259 mgd) of ground water from the Floridan aquifer via five, existing Upper Floridan Aquifer wells and two existing Upper/Lower Floridan Aquifer wells for household, commercial/industrial, irrigation, water utility, and unaccounted for type uses to serve a projected population of 21,412 in year 2032.

Water Demand and Capacity Analysis

Per the Water Supply Facilities Work Plan, the City of Tavares' 2007 year-end potable water demand was 1,102.35 mgal (3.02 mgd) based on water use data (EN-50) submitted to the St. Johns River Water Management District. This serviced 5,635 residential accounts, computing to a population of approximately 16,091 inclusive of master metered accounts.

Water demand projections for the City were determined by calculating the product of the City's average historical gross per capita from 2004 through 2007 and the population projections generated in conjunction with the City and the SJRWMD. The City's projected 5 (2013) and 10-year (2018) annual water demand were calculated to be 1,304.56 mgal (3.57 mgd) and 1,448.36 mgal (3.97 mgd), respectively. The anticipated projected population for each of these years is 21,369 (in 2013) and 23,725 (in 2018), respectively.

Based on the analysis performed in the Water Supply Facilities Work Plan, the City's existing water supply facilities are sufficient to meet the projected 5 and 10-year water demands. The existing well production capacity exceeds both projected water demands and generates a raw water production surplus of 8.71 mgd and 8.31 mgd respectively (see **Table 4-1**). Since the analysis did not indicate a deficit in well production capacity with water demand, the reduction of groundwater demand via reclaimed water and conservation practices was not included in the analysis.

These surpluses were determined in 2008 utilizing population projections for 2013 and 2018 that are considerably higher than current estimates of a City population of 17,777 in 2019 (University of Florida, Bureau of Economic & Business Research). It is anticipated that the City's potable water system will have the production and treatment capacity to provide adequate levels of service through the 2040 Comprehensive Plan horizon.

Table 4-1: Potable Water Capacity Analysis

City of Tavares	2007	2010	2013	2018
Total Water Demand (mgd)	3.02	3.34	3.57	3.97
Total Well Production Capacity (mgd)	9.40	12.28	12.28	12.28
Total Treatment Capacity (mgd)	11.05	13.57	13.57	13.57
CUP Allocation (mgd)	3.17	3.54	-	-
Well Production Capacity Surplus (mgd)	*6.38*	*8.94*	*8.71*	*8.31*
Treatment Capacity Surplus (mgd)	*8.03*	*10.23*	*10.00*	*9.60*

Source: City of Tavares 10-Year Water Supply Facilities Work Plan

Stormwater/Drainage

The City's adopted Level of Service standards for stormwater drainage are:

> Bridges. Hydraulic Profile shall be below the top cord of the bridge for the 50-year, 24-hour storm.
>
> Stormwater detention and retention ponds, which are contributory to land-locked areas with no positive outlet, shall be designed so that the post-development volume of direct runoff does not exceed the pre-development volume runoff for the 25-year, 96-hour storm.
>
> Canals, ditches, or culverts external to the development, and stormwater detention or retention basins which are not part of a project that is contributory to a land-locked area with no positive outlet, shall be designed for the 25-year, 24-hour storm.
>
> Stormwater flooding for arterial and collector roadways shall not exceed one-half (1/2) of the roadway width. For local roads, stormwater flooding shall not exceed the crown of the road for the 10-year, 24-hour storm.
>
> Storm sewers and roadside swales shall be designed such that the hydraulic gradient is 1.0 foot below the gutter line or edge of pavement for arterial roadways; and 0.5 feet below the gutter line or edge of the pavement for collector and local roadways for the 10-year, 24-hour storm.

The City's Stormwater Division provides maintenance and construction of the drainage facilities throughout the City. Street sweeping ensures the reduction or elimination of dirt or leaves that enter the drainage system. Leaves and grass create organics that create algae blooms in out lakes and are not aesthetically pleasant to view and are bad for the aquatic life. Drainage facilities are man-made structures designed to collect, divert or discharge stormwater such as ditches, culverts, and retention ponds. The City routinely cleans the ditches and culverts and mows the retention ponds to ensure that the city's stormwater management functions properly. The City is presently working to reduce or eliminate flooding areas.

In 2019, the City completed the 8-acre Tavares Ecological Park which was designed to filter pollutants before stormwater is discharged to Lake Dora. The park also includes paved trails, bridges, and other amenities. Other stormwater improvements were implemented downtown, including the replacement of 50-year old drainage pipes and outfalls to resolve the flooding issues that had plagued Ruby Street during heavy rains.

The City intends to pursue the development of a new Stormwater Master Plan.

<u>Programmed Stormwater Improvement Projects through FY 2023-2024</u>

The City's Five-Year Capital Improvements Program has identified the following stormwater improvement projects:

- Downtown CRA Stormwater Upgrades - $6,250,000
- Sinclair Avenue Drainage Improvements (Construction) - $500,000
- Dykes Drive Drainage Improvements (Design) - $80,000
- Banning Beach Drainage Improvements (Design) - $45,000

Solid Waste

The City of Tavares Solid Waste Division provides for the collection and disposal of solid waste material with in the City. Collection is provided twice per week for residential municipal solid waste accounts and once per week for bulk, yard waste, and residential recycling. Curbside recycling collections and commercial dumpster collections are provided by the City's franchised hauler. Solid Waste services are funded solely by commercial franchise fee revenue and monthly customer user fees.

The City utilizes a contracted facility for the disposal of municipal solid waste which has adequate capacity to serve the City's residents in the short term and long term planning periods.

Should extensive redevelopment or future annexations cause a significant increase in the City's solid waste production, new service and collection equipment may be required. The current level of service standard of 4.57 pounds per resident should be maintained.

City of Tavares
Lake County, Florida

Exhibit 4-1
10-year Water Supply Facilities Work Plan

Prepared by,

SMW GeoSciences, Inc.
1411 Edgewater Drive Suite #103
Orlando, Florida
(407) 426-2836

May 21, 2008

1.0 INTRODUCTION

According to the State Legislature (ss. 163.3177 and 163.3191), local governments are required to revise the Potable Water element of their Comprehensive Plan to include a Water Supply Facilities Work Plan for at least a 10-year planning period. The work plan must include:

- A projection of the local government's needs for at least a 10-year period;
- Identification and prioritization of the water supply facilities and sources of water that will be required to meet those demands; and
- Inclusion of the capital projects identified as needed for the first 5 years, including financially feasible revenue sources, in the 5-Year Schedule of Capital Improvements.

In addition to the above, local governments are required to revise their comprehensive plan to incorporate selected alternative water supply project(s) that are identified in the regional water supply plan(s) or otherwise proposed by the local government.

Pursuant to the requirements imposed by the State Legislature, the City of Tavares has retained SMW GeoSciences, Inc. (SMW) to assist in preparation of the City's 10-Year Water Supply Facilities Work Plan (Work Plan). Per s. 163.3177(6)(c), the Work Plan is intended to be updated every five years within eighteen months after the water management district governing boards approve updated regional water supply plans, or if needed, as future needs and plans change.

2.0 SERVICE AREA

The City of Tavares, located in central Lake County, Florida, is surrounded by three Lakes: Lake Harris, Lake Eustis and Lake Dora. A location map of the City is shown as **Figure 1**. The city's current potable water service area boundary is illustrated as **Figure 2**. The City currently has no joint planning agreements with Lake County or adjacent cities and utilities.

3.0 WATER SOURCES

Groundwater is currently the only water source for the City of Tavares. Groundwater wells extract from the Floridan aquifer to supply potable water to city customers. The City is permitted to withdraw groundwater through the Consumptive Use Permitting Program of the St. Johns River Water Management District (SJRWMD).

4.0 WATER PRODUCTION/TREATMENT PLANTS

The City of Tavares supplies potable water to its city customers from four water treatment plants (WTP):

- WTP #1 on Disston Avenue and Main Street;
- WTP #2 on Ingraham Avenue;
- WTP #3 on Dead River Road; and
- WTP #4 on Slim Haywood Road (also known as Lane Park WTP).

WTP #1 and WTP #4 are currently the primary water treatment plants for supplying potable water to city customers. WTP #2 and WTP #3 are currently only utilized as emergency backups. However, it is anticipated that both WTP #2 and WTP #3 will be upgraded to also supply potable water to city customers regularly in late 2008. The location of each water treatment plant is illustrated in **Figure 3.**

4.1 WTP #1, DISTON AVENUE AND MAIN STREET

Water treatment plant #1 is located in downtown Tavares at the intersection of Disston Avenue and Main Street. The water treatment plant contains two existing Upper Floridan aquifer wells for public supply type use: well #3 and well #4. Well information for WTP #1 is provided in **Table 1**. WTP #1 is a chlorination and fluoridation system. The plant includes a 1.0 mgal concrete ground storage tank with aerator, a high service pump station and an auxiliary power generator. The treatment capacity of the plant is 5.76 mgd.

Table 1
WTP #1 Well Information

Well Number	GRS Station ID	Casing Diameter (inches)	Casing Depth (ft)	Total Depth (ft)	Pump Capacity (gpm)	Date Drilled	Existing/ Proposed	Type Use
3	10110	12	98	223	2,000	1953	Existing	Public Supply
4	10111	12	226	417	2,000	1959	Existing	Public Supply

4.2 WTP #2, INGRAHAM AVENUE

Water treatment plant #2 is located on Ingraham Avenue at the elevated tower site. The WTP contains one Upper Floridan aquifer well for public supply type use. Well information for WTP #2 is provided in **Table 2**. WTP #2 is a chlorination and fluoridation system. The treatment capacity of the plant is 0.648 mgd.

Table 2
WTP #2 Well Information

Well Number	GRS Station ID	Casing Diameter (inches)	Casing Depth (ft)	Total Depth (ft)	Pump Capacity (gpm)	Date Drilled	Existing/ Proposed	Type Use
5	10112	12	138	494	925	1963	Existing	Public Supply

4.3 WTP #3, DEAD RIVER ROAD

Water treatment plant #3 is located on Dead River Road. The water treatment plant contains one Upper Floridan aquifer well for public supply type use. Well information for WTP #3 is provided in **Table 3**. WTP #3 is a chlorination and fluoridation system. This plant has no storage facilities; therefore, treated water is discharged directly into the distribution system. The treatment capacity of the plant is 1.4 mgd.

Table 3
WTP #3 Well Information

Well Number	GRS Station ID	Casing Diameter (inches)	Casing Depth (ft)	Total Depth (ft)	Pump Capacity (gpm)	Date Drilled	Existing/ Proposed	Type Use
6	10113	12	198	447	1,600	1973	Existing	Public Supply

4.4 WTP #4, SLIM HAYWOOD (LAND PARK WTP)

Water treatment plant #4 is located on Slim Haywood Road. The water treatment plant currently includes two Upper Floridan aquifer wells for public supply type use; however, only one well is currently active, well #7. The other well, well #8, has been constructed but is not currently utilized. The well is proposed to come online once the proposed plant expansions occur in late 2008. Well information for WTP #4 is provided in **Table 4**. WTP #4 is a chlorination and fluoridation system and includes a 500,000 gallon concrete ground storage tank, a high service pump station and an auxiliary power generator. WTP #4 was constructed to service the area of town located west of the Dora Canal. The treatment capacity of the plant is 3.24 mgd. At build out, the plant is anticipated to have a treatment capacity of 5.76 mgd.

Table 4
WTP #4 Well Information

Well Number	GRS Station ID	Casing Diameter (inches)	Casing Depth (ft)	Total Depth (ft)	Pump Capacity (gpm)	Date Drilled	Existing/ Proposed	Type Use
7	10114	16	320	850	2,500	1995	Existing	Public Supply
8	35546	16	352	850	2,000	2006	Existing	Public Supply

5.0 WASTEWATER TREATMENT PLANTS

The City currently operates one wastewater treatment plant (WWTP), the Woodlea Road Water Reclamation Facility. The location of the wastewater treatment plant is shown in **Figure 4**. The City's former wastewater treatment plant, the Caroline Street WWTP, was dismantled when the Woodlea Road Water Reclamation Facility was expanded in 2001. A new pump station is now constructed at the Caroline Street WWTP. Presently, wastewater delivered to the Caroline pump

station is pre-screened for treatment and then pumped, approximately 2 miles, to the Woodlea Road Water Reclamation Facility where it is treated.

6.0 RECLAIMED WATER FACILITY

The Woodlea Road Water Reclamation Facility (aka Woodlea Road WWTP) is designed with a treatment capacity of 3.0 mgd but is currently only permitted to treat 1.99 mgd. The facility is capable of providing advanced treatment and high level disinfection to wastewater so that effluent from the wastewater treatment plant meets the requirements of public access reuse. However, there are currently no reuse connections to the facility. The City is also currently in the process of modifying their facility permit to increase their permitted capacity and to include distribution of public access reuse water.

7.0 PERMITTED GROUNDWATER ALLOCATIONS

The City of Tavares is currently authorized to supply water within its service area under Consumptive Use Permit (CUP) No. 2765, issued February 8, 2005. CUP No. 2765 allocates the City a combined maximum annual groundwater withdrawal for the potable water supply system of 1,291.01 mgal (3.537 mgd) in 2010; the CUP expires on October 7, 2010. The City of Tavares' potable water supply system allocation is shared between their four well fields (WTP #1, WTP #2, WTP #3 and WTP #4). The CUP also annually allocates 10.32 mgal (0.028 mgd) of groundwater for irrigation of the City's Woodlea Road Sports Complex. The source of groundwater for this use is from a separate well, well #1, which does not interconnect with those supplying the potable water system. When reclaimed water becomes available, the City will convert the water source for well #1 from groundwater to reclaimed water. The Woodlea Raod Sports Complex is the City's top priority for receiving reuse water.

8.0 WATER DEMANDS AND POPULATION

The City of Tavares' 2007 year-end potable water demand was 1,102.35 mgal (3.02 mgd) based on water use data (EN-50) submitted to the St. Johns River Water Management District. This serviced 5,635 residential accounts, computing to a population of approximately 16,091 inclusive of master metered accounts.

Water demand projections for the City were determined by calculating the product of the City's average historical gross per capita from 2004 through 2007 and the population projections generated in conjunction with the City and the SJRWMD. The City's projected 5 (2013) and 10-year (2018) annual water demand were calculated to be 1,304.56 mgal (3.57 mgd) and 1,448.36 mgal (3.97 mgd), respectively. The anticipated projected population for each of these years is 21,369 (in 2013) and 23,725 (in 2018), respectively.

9.0 CAPACITY ANALYSIS

The City of Tavares' water supply facilities were assessed to determine whether the projected 5 and 10-year water demands were attainable with the City's existing water supply infrastructure. Presently, the City water treatment plants have a combined well production capacity of 9.40 mgd. Well production capacity was determined by maximizing daily pumpage for each city well excluding the well with the highest pump capacity. It is important to note that for this calculation well #8 was also excluded in addition to the highest pump capacity since it currently is not online. When well #8 is online, the well production capacity increases from 9.40 mgd to 12.28 mgd. The existing treatment capacity for the combined water treatment plants is 11.05 mgd. When upgrades are completed at the WTP #4, the combined treatment capacity will increase to 13.57 mgd.

Based on the analysis, the City's existing water supply facilities are sufficient to meet the projected 5 and 10-year water demands. The existing well production capacity exceeds both projected water demands and generates a raw water production surplus of 8.71 and 8.31 respectively.

At the end of 2007, the City had a raw water production surplus of 6.38 mgd. A summary of the analysis is provided in **Table 6**. Since the analysis did not indicate a deficit in well production capacity with water demand, the reduction of groundwater demand via reclaimed water and conservation practices was not included in the analysis.

Table 6
Capacity Analysis

City of Tavares	**2007**	**2010**	**2013**	**2018**
Total Water Demand (mgd)	3.02	3.34	3.57	3.97
Total Well Production Capacity (mgd)	9.40	12.28	12.28	12.28
Total Treatment Capacity (mgd)	11.05	13.57	13.57	13.57
CUP Allocation (mgd)	3.17	3.54	-	-
Well Production Capacity Surplus (mgd)	*6.38*	*8.94*	*8.71*	*8.31*
Treatment Capacity Surplus (mgd)	*8.03*	*10.23*	*10.00*	*9.60*

10.0 FUTURE WATER SUPPLY PLANS

In order to conserve groundwater supplies of the Floridan aquifer and offset groundwater withdrawals, the City of Tavares has committed to various alternative water supply plans. These alternative water supply plans include 1) continuation of water conservation practices 2) expansion of their reclaimed water facility 3) participation in a regional alternative water source (AWS) project and 4) evaluation of the availability of local alternative water sources.

10.1 WATER CONSERVATION PRACTICES

The City has implemented a variety of conservation programs to protect the Floridan Aquifer. As time progresses, the city plans to maintain these conservation programs, and where possible, improve upon these efforts.

For the 10-year period of this Work Plan, the City will continue to focus on the following conservation strategies:

- Maintain under the city's CUP allocation issued by the SJRWMD (Conservation element, Objective 5-1.3, Policy 5-1.3.3);
- Coordinate with SJRWMD to implement water conservation efforts to preserve regional water supplies (Conservation element, Objective 5-1.3, Policy 5-1.3.4);
- Conserve potable groundwater and accomplish reasonable reductions in water consumption (Conservation element, Objective 5-1.3, Conservation Policy 5-1.3.5);
- Conversion of potable water to non-potable water for irrigating use where available (Conservation element, Objective 5-1.3, Policy 5-1.3.5b);
- Require the use of water-saving plumbing fixtures in new construction or renovations when available in the local marketplace (Conservation element, Objective 5-1.3, Policy 5-1.3.5c);
- Annually evaluate the performance of its water distribution system for excessive leakage (Conservation element, Objective 5-1.3, Policy 5-1.3.5d);
- Require new development to use and/or preserve drought-resistant vegetation for landscaping (Conservation element, Objective 5-1.3, Policy 5-1.3.5e);
- Inflict a higher water fee for land uses consuming levels which exceed the maximum level of service (Conservation element, Objective 5-1.3, Policy 5-1.3.5f);
- Promote water conservation awareness and the need for water resource protection through public and employee education (Conservation element, Objective 5-1.3, Policy 5-1.3.5g)
- Designate land adjacent to well fields for land uses which create limited impacts on aquifer storage areas (Conservation element, Objective 5-1.3, Policy 5-1.3.7);
- Disallow permit issuance for new development that will result in an increase in demand on water facilities that would create a deficiency (Public Facilities Policy 4-2.1.3);
- Implement provisions in the Land Development Regulations that assure adequate water capacity is available prior to the issuance of a development order or permit (Public Facilities Policy 4-2.3.2); and
- Investigate the use and effectiveness of soil moisture sensors and require them at new developments, if study results are positive.

10.2 REUSE EXPANSION

As previously described, the City is currently expanding their reclaimed water facility and is revising the permitted treatment capacity from 1.99 mgd to 3.0 mgd. It is anticipated that this expansion will facilitate the City's needs within the utility service area through 2018.

For the 10-Year period of this Work Plan, the City will continue to focus on the following water reuse strategies:

- Complete the preliminary design of the City's reclaimed water distribution system by December 2008 (Conservation element, Objective 5-1.3, Policy 5-1.3.2);
- Convert to the use of reclaimed water (for irrigation) at the Woodlea Road Sports Complex when reclaimed water is available;
- Upgrades to the facility, as needed, to meet future demands; and
- Require mandatory connections to the reclaimed system, when reuse becomes available to its customers.

10.3 REGIONAL ALTERNATIVE WATER SOURCE PROJECT

The City of Tavares is participating in a 3-year Preliminary Design Report (PDR) study that will examine alternative water supply sources available to utilities in Lake, Orange and Marion County. The study will determine the most appropriate surface water withdrawal location for the participants and provide a preliminary design for the treatment and transmission infrastructure required to serve participating utilities. Specific project data (location of withdrawal, quality of water provided to utilities, quantity of water available for each utilities, etc.) is not anticipated to be available until the conclusion of the PDR. In the interim, it is not anticipated that the City will receive any water from the AWS project in the next couple of years. Thus, it is not possible to determine the quantity of water that City will receive from AWS or to determine the groundwater offset that will be realized through participation in this regional project.

The City has also hired the engineering firm Malcolm Pirnie, Inc. to conduct a feasibility study for local alternative water sources potentially available to the City for use.

11.0 CAPITAL IMPROVEMENT PLAN

The City of Tavares is currently in process of updating its Five-Year Capital Improvements Plan (CIP) to adequately plan for its future needs. This update will include the following projects, which are necessary to provide adequate water supply for the City's future growth and development. Because the City does not have any projected well or treatment capacity deficiencies, these projects represent the development and expansion of the reuse system, and the provision of alternative water supplies to reduce dependence upon the Floridan Aquifer.

Project Name	**Implementation of Water Reuse System**
Purpose	To develop and expand the use of reclaimed water for irrigation purposes as a means of reducing the demand for potable water
Estimated Project Cost	$12,145,000
Funding Sources	City of Tavares, Developer Agreements, CBIR Grant, SJRWMD Grant, FDEP State Revolving Fund Loan
Schedule	
Planning	2008
Engineering	2008-2009
Permitting	2009
Construction	2010 (Phase I), with additional phases through 2013

Project Name	**Water Treatment Plant Improvements**
Purpose	To complete modifications to the chemical, pumping, and control systems at the City's four water treatment plants to improve operational flexibility and reliability
Estimated Project Cost	$2,300,000
Funding Sources	City of Tavares, FDEP State Revolving Fund Loan
Schedule	
Construction	2008-2009

Project Name	**Alternative Water Supply Study**
Purpose	To identify and evaluate the technical and financial feasibility of alternative water sources to meet future demands
Estimated Project Cost	$100,000
Funding Sources	City of Tavares
Schedule	
Planning	2008-2009

Project Name	**Consumptive Use Permit (CUP) Renewal**
Purpose	To renew the City's CUP with SJRWMD to provide water allocation beyond the current 2010 expiration date.
Estimated Project Cost	$100,000
Funding Sources	City of Tavares
Schedule	
Planning	2008-2009

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Conservation Element

Data Inventory and Analysis

TAVARES

America's Seaplane City

Purpose

The purpose of this element is to promote the conservation, use and protection of natural resources in the City of Tavares. The protection, conservation and promotion of these resources are important for the public welfare now and as the population increases in the City throughout the planning period. All of the natural resources are to be protected and conserved. Serve or provide important functions for the environmental well-being of this community.

This element inventories and evaluates the natural resources within the City. As the population within the City increases, increasing pressure will be placed on the natural resources. This element will examine this issue and propose methods to protect, conserve and safely use these resources. The natural resources examined by this element include water (surface and ground), wildlife, vegetation, minerals, air, and soil. The examination of these resources includes an analysis of how to conserve them and an examination of potential pollution problems in the City.

General Location

The City of Tavares and the service area are located within two geophysiographic areas, the Mount Dora Ridge and the Oklawaha Chain of Lakes.

The Mount Dora Ridge consists of areas with slopes that range from 3 to 20 percent with deep lakes, closed lake basins, low water tables and subsurface drainage. The eastern portion of the ridge lies outside of the Tavares service area and consists mostly of citrus farming operations. The western portion of the ridge includes mainly developed areas and a limited amount of agricultural uses that are being rapidly replaced with commercial and residential uses.

The Oklawaha Chain of Lakes area consists of large lakes including Lake Eustis, Lake Dora and Lake Harris, flat terrain, fully drained soils, high water tables and high surface water run-off. The land area in this geophysiographic area is largely undeveloped except for most of the area within the present Tavares City limits and along the northern portions of SR. 19.

Elevations within the service area range from 63 to 156 feet mean sea level (MSL) near SR. 19 and the Howey-in-the-Hills Bridge at Little Lake Harris. Much of the land with lower elevations within the Tavares city limits has been filled for development. Other portions of this low land have been excavated for canals to create waterfront lots.

Climate

The climate of the City of Tavares is considered subtropical with long, warm humid summers and mild, dry winters. Warm air from the Atlantic Ocean and the Gulf of Mexico and the many inland lakes moderate the climate year round. Long dry periods can be expected throughout the year, but it is more common in the winter and spring. Winds come generally from the south in spring and summer and north in the fall and winter.

Geography

Most of the present developed City is located in the Oklawaha Chain of Lakes area, which is a low area adjacent to a number of lakes. This area has a number of large wetland areas and some reasonably well drained soils. East of the central City is some higher well drained soils and

south is hilly with well drained soils. Almost all of the water flowing into streams and lakes is from run-off. The major wetland areas include land adjacent to the Dora Canal and Lake Harris. Other smaller wetlands are interspersed throughout the City with the majority being hydrologically connected to the three major lakes in the Tavares area.

Surface Waters

Rivers

There are two rivers in the City of Tavares. Both are slow moving rivers that connect major lakes surrounding Tavares. The first river, the Dora Canal is called a canal because of the major straightening and dredging of this river in the late 1800s to make it navigable. This river flows from Lake Dora to Lake Eustis. The second river, the Dead River is also a short river which flows from Lake Harris to Lake Eustis. Lake Eustis flows into Haines Creek and then into Lake Griffin. Lake Griffin then flows into the Oklawaha River and this river then connects with the Cross-Florida Canal and the St. Johns River and into the Atlantic Ocean. **Map 1.5** depicts the waterbodies within the City of Tavares.

Bays

There are no bays located in the City limits or the service area of the City.

Lakes

The following natural lakes are found totally or partially in the Tavares service area.

- Lake Eustis
- Lake Dora
- Lake Frances
- Lake Junietta
- Lake Saunders
- Lake Elsie
- Lake Etowah
- Lake Tavares
- Lake Harris

Lake Dora, Lake Harris and Lake Eustis are part of a chain of lakes and are regulated by control structures. Differences in the amount of lake level fluctuations from lake to lake in a specific area is generally due to the permeability and thickness of the materials beneath the lake, the slope of the land surface adjacent to the lake and the permeability of the land from which run-off runs into the lake. These factors also determine the amount of water that percolates from the Clastic Aquifer to the Floridan Aquifer.

Lakes which do not percolate into the Floridan Aquifer will usually flow into another outlet.

Another issue that contributes to the amount of lake level fluctuations is the relationship between the level of the lake and the potentiometric surface of the Floridan Aquifer. Lakes in recharge areas tend to fluctuate to a greater extent than do lakes in discharge areas. In hilly terrain, the relationship between the lake level and the potentiometric surface can differ greatly

over relatively short distances. If all other factors are equal, a lake that receives water from surface run-off will have a greater range of fluctuation than a lake that receives water from ground water inflow. Lake water fluctuations can easily be altered both intentionally and unintentionally by either control structures or by adjacent land uses.

There are a number of different types of lakeshores. Each has unique attributes that affect access to a lake, the water quality of the lake, the recreational opportunities of a lake and the wildlife habitat of the lake.

The following three types of lakeshores are found on lakes in and surrounding the City.

1. Sloping Swamp Forest

This type of lakeshore is tree-lined lakeward of the mean high water line and has peat deposits. Dead cypress trees are commonly found at the waters edge.

2. Consequent Shoreline

This type of lakeshore is tree lined at the mean high water table with dead upland trees found at the edge of the water.

3. Peat Marsh

This type of lake shore is tree-lined lakeward of the mean high water table and has peat deposits present.

All three of the lakeshore types provide poor swimming accessibility. The sloping swamp forest is associated with cypress domes in its early stages. Consequent shorelines are usually found on younger lakes often created by sinkhole lakes. Peat marsh shorelines develop on lakes or sections of lakes that are subject to very little wave action. Portions of Lake Dora have lakeshores with these characteristics. The majority of the lakes in the City and its service area have lakeshores of the above three types.

Wetlands

Wetlands are also depicted on **Map 1.5**. Wetlands within the City and its service area are of two types. One is hydrologically connected to the navigable lakes and the other are isolated wetlands. Wetlands provide many environmentally important functions. These functions include habitat for many aquatic and land species, water retention, protection of shorelines and water quality enhancement.

Groundwater

The Floridan Aquifer and the Clastic Aquifer provide ground water to the City. The Clastic Aquifer underlies Lake County. The upper part of this aquifer is sandy and the lower part is clay and sand. The lower part confines this aquifer and separates it from the Floridan Aquifer. This upper aquifer is not a reliable source of water but it does store water and provides filtration of water before it seeps into the Floridan Aquifer

The groundwater found in the Clastic Aquifer is less mineralized than the water in the Floridan Aquifer but it is much more easily contaminated by surface activities. Thus, this upper aquifer is quite variable in quality. The Floridan Aquifer is one of the most productive aquifers in the United States. It is also the major source of ground water for Florida. The Floridan Aquifer is located under the City of Tavares, its service area, and all of Lake County.

The degradation of water quality in Tavares may be a concern with the potential for increased growth and urbanization. With an increase in impervious surfaces the more concern there is for pollutants and runoff into water bodies. Improvement of water quality should continue to be a cooperative effort between the City, the County, and the St. Johns River Water Management District (SJRWMD).

Urban run-off is a major contributor of pollutants to the surface waters of the City and Lake County. Utilization of more advanced treatment techniques and stormwater management will assist in decreasing the detrimental effects of pollution on the natural systems of the City.

Floodplains

Flood zones in Tavares are identified on **Map 1.6**. Most of the flood hazard areas are located adjacent to the lakes within and surrounding the City. Some additional flood hazard areas are located adjacent to the Dora Canal and as a part of isolated wetlands areas.

Air Quality

Air quality sampling is the responsibility of the Florida Department of Environmental Protection (FDEP). FDEP does not presently monitor air quality in Tavares area on a regular or periodic basis. Pollution generated from commercial and industrial developments within and adjacent to the City is not anticipated to adversely affect the air quality of the City. Fugitive dust particles from land cleared for development may be experienced by the community, and developers should be requested to quickly replant development areas following clearing. The majority of air pollution in Tavares continues to emanate from automobile emissions.

Commercially Valuable Minerals

There are three commercially valuable minerals in Lake County. They are sand, clay, and peat. The sand in the area is a high enough grade for use in the production of glass and concrete. Clay is used for road construction and peat is used for plant growth. Within the City of Tavares, sand was mined in the area which created Lake Frances. There is no active mineral mining in the City. Within the City's service area some sand mining is being conducted near Astatula, which is expected to continue.

Soil Erosion

Soil types within the City are shown on **Map 1.7**. Wind and water are the major causes of soil erosion. Soil erosion is not known to be a significant issue in the City, though shorelines of lakes should be monitored. The City maintains a shoreline protection ordinance to minimize soil erosion along the City’s lakeshores and shorelines.

Threatened and Endangered Species

Wildlife and plant species which have been listed by the United States Fish and Wildlife Service as being endangered or threatened in Lake County are documented in **Table 5-1**. The Florida Fish and Wildlife Conservation Commission also produces a list of all federal and state listed species in the *Florida's Endangered and Threatened Species List.*

This table is provided as a guide to project planning, and is not a substitute for site-specific surveys. Such surveys may be needed to assess species' presence or absence, as well as the extent of project effects on listed species and/or designated critical habitat.

The following table lists those federally-listed species known to be present in the County.
Code Key: E = Endangered, T = Threatened, CH = Critical Habitat Designated, C = Candidate

Table 5-1: U.S. Fish and Wildlife Service Endangered/Threatened Species in Lake County

Category	Species Common Name	Species Scientific Name	Code
Mammals	West Indian (Florida) Manatee	*Trichechus manatus latirostris*	E/CH
Birds	Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	E
	Florida Scrub-jay	*Aphelocoma coeruluscens*	T
	Wood Stork	*Mycteria americana*	E
	Red-cockaded Woodpecker	*Picoides borealis*	E
Fish	None		
Reptiles	Gopher Tortoise	*Gopherus polyphemus*	C
	Sand Skink	*Neoseps reynoldsi*	T
	Eastern Indigo Snake	*Dymarchon corais couperi*	T
Amphibians	Striped Newt	*Notophthalmus perstriatus*	C
Mollusks	None		
Crustaceans	None		
Plants	Britton's Beargrass	*Nolina brittoniana*	E
	Florida Bonamia	*Bonamia grandiflora*	T
	Pygmy Fringetree	*Chionanthus pygmaeus*	E
	Scrub Plum	*Prunus geniculata*	E
	Lewton's Polygala	*Polygala lewtonii*	E
	Wide-leaf Warea	*Warea Amplexifolia*	E
	Papery Whitlow-wort	*Paronychia chartacea (= Nyachia) pulvinata*	T
	Scrub Wild Buckwheat	*Eriogonum longifolium* var. *gnaphalifolium*	T
	Pigeon Wings	*Clitoria fragrans*	T

Vegetative Communities

Lake County has a sub-tropical climate, which allows for the development of a diverse vegetative and ecological communities, including uplands and wetlands. **Map 5.1** delineates the generalized locations of primary vegetative communities indigenous to Tavares.

The ecological communities associated with the wetlands and uplands found in Tavares and the Tavares service area include the flora and fauna that provide many ecological functions and benefits to the community. Some upland communities provide important aquifer recharge capacities and the wetlands communities provide important ecological functions which affect surface water quality. Both of these communities also serve as noise barriers, reduce pollutants, and modify temperature extremes. Wetlands and uplands communities provide habitat for wildlife and resources for recreation and scientific research.

Conservation and Recreational Uses of Natural Resources

There are many recreational activities that require and use natural resources. These include bicycling, boating, camping, fishing, hiking, horseback riding, hunting, nature study, picnicking, freshwater swimming, and water skiing.

In Tavares there are many opportunities for recreational activities that use natural resources, whereas the loss or reduction of these natural resources would reduce recreational opportunities for residents and visitors.

Water quality, air quality and the amount of open space directly affect the potential for recreational uses of the natural resources of the City and its service area. The retention and continued survival of the vegetation and wildlife in the Tavares service area depends on the treatment the ecosystems that support them is receives.

The waterfront in Tavares is also vital economic activity area within the City. The City has a developed a Downtown Master Plan that encompasses the waterfront area to spur revitalization and redevelopment, and also recognizes the importance of the Tavares Seaplane Base as a critical water dependent facility.

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Recreation and Open Space Element

Data Inventory and Analysis

TAVARES

America's Seaplane City

Purpose

The purpose of the Recreation and Open Space Element is to plan for a comprehensive system of public and private sites for recreation, including, but not limited to, natural reservations, parks and playgrounds, parkways, beaches and public access to beaches, open spaces, waterways, and other recreational facilities.

Existing Facilities

Table 6-1 below provides an inventory of the parks and recreation facilities in the City of Tavares. **Map 6.1** depicts the City's parks and recreation facilities.

Table 6-1: Parks and Recreation Inventory

Park Name	Acres	Facilities	Classification	Water Access
Aesop's Park 501 E. Caroline Street	11.5	Tennis Court Furniture Playground Gardens Restrooms Fishing Pond	Active Based	No
Fred Stover Sports Complex 490 Clifford Street	5.75	Lighted Ball Fields (4) Concession Stand Restrooms Parking Shed Batting Cage Dugouts (8) Trashcans (11) Sunscreens (8) Bleachers (8) Dumpster	Active Based	No
Ingraham Center 317 S. Ingraham Avenue	.5	Civic Center Restrooms Bench Picnic Tables (7) Trashcan	Active Based	No
Ingraham Park 200 S. Ingraham Avenue	.5	Basketball Court Swing Sets Picnic Tables (2)	Active Based	No
Lakeshore Park	.25	Unimproved	Passive	Yes
Magnolia Park 1311 Lake Dora Drive	.25	None	Passive	Yes

Park Name	Acres	Facilities	Classification	Water Access
Ridge Park 121 E. Alfred Street	1	Library Civic Center Shuffleboard Courts (20) Picnic Tables Benches Parking Trashcans (2)	Active Based	No
Shelby Park DOT Acquisition	.1	Dumpster Trashcan	Passive	No
Squibb Park 1800 Dead River Road	122	Board Walk Bench Trashcan	Passive	No
Summerall Bird Sanctuary 1561 Palm Avenue	2	Unimproved	Passive	No
Summerall Park 1001 Wells Avenue	1	Boat Ramp Picnic Shelter Restrooms	Active Based	Yes
Tavares Nature Park 1551 Milwaukee Ave.	101	Benches (2) Picnic Table Picnic Shelter Restrooms	Passive	Yes
Tavares Recreation Park 2030 W. Burleigh Blvd.	4	Boat Ramps (2) Picnic Tables (14) Picnic Shelters (7) Restrooms Parking	Active Based	Yes
Vista Park	.5	Unimproved	Active Based	No
Woodlea Sports Complex 2770 Woodlea Road	10	Concession Stand Parking Restrooms Lighted Ball Fields (6) Skatepark Dugouts (6) Batting Cage Bleachers (6) Dumpster Trashcans (8) Work Shed Pumphouse	Active	No
Woodlea Sports Complex 2770 Woodlea Road	67	Unimproved	Passive	Yes

Park Name	Acres	Facilities	Classification	Water Access
Woodview Park 736 Woodview Drive	.25	Unimproved	Passive	No
Wooton Park 200 S. Rockingham Ave.	3	Playground Gazebo (3) Picnic Shelter (1) Boat Ramps (2) Boat Docks & Pier Restrooms Parking Trashcans	Active Based	Yes

Analysis of Need for Facilities

Using the total 330.6 acres parks and recreation facilities, along with population projections, the City's level of service can be projected through 2040. The LOS standard for publicly-owned recreation lands in Tavares is 1.7 acres per one thousand (1,000) permanent population. As the following table shows, this standard will be met through 2040.

Year	Population	LOS Standard	Acres Required	City Park Acreage	Surplus Acreage
2019	17,777	1.7/1,000	30.22	330.6	300.38
2025	21,944	1.7/1,000	37.30	330.6	293.30
2030	24,508	1.7/1,000	41.66	330.6	288.94
2035	26,940	1.7/1,000	45.80	330.6	284.80
2040	29,254	1.7/1,000	49.73	330.6	280.87

Joint Use Agreement

The City of Tavares has entered into an Intergovernmental Agreement with Lake County Schools (October 17, 2018) for the reciprocal use of facilities. Under this agreement, the City is allowed to utilize the facilities at Tavares High School, Tavares Middle School, Tavares Elementary School, and the School Board Meeting Rooms. The School Board is permitted to utilize Fred Stover Sports Complex, Tavares Civic Center, TRA Meeting Room, Ingraham Community Center, Tavares Nature Park, Aesop's Park Tennis Courts, outside property at Wooton Park.

Parks Master Plan

The City completed a Parks Master Plan in 2008 (prepared by BellomoHerbert) to provide an understanding of the content, condition, use and function of the City's existing recreational facilities; identify the need and potential for expansion of existing facilities; develop a Master Plan for the Woodlea Sports Complex; investigate if additional recreational lands are needed; and identify the best existing and future use of each site. The City is considering updating the Parks Master Plan during the short-term planning horizon.

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Intergovernmental Coordination Element

Data Inventory and Analysis

TAVARES

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The purpose of the Intergovernmental Coordination Element is to provide guidelines and mechanisms for coordination with other governmental agencies in the preparation and revision of comprehensive plans, in the review and approval of new development, and in the provision of services. While the City acknowledges that coordination with other entities is often done through informal processes, it is necessary to have formal mechanisms in place to address specific intergovernmental coordination issues.

The City of Tavares is bordered by the jurisdictions of Lake County, City of Eustis, City of Leesburg, and City of Mount Dora. The continued cooperation and coordination between the City and these jurisdictions will be required as the demands of growth impact the City and the region.

Notably, the City of Tavares is party to an Interlocal Service Boundary Agreement (Ordinance No. 2015-8) with Lake County. This agreement addresses the annexation of non-contiguous properties, annexation and maintenance of right-of-way, development applications, land development regulations, comprehensive plan provisions, solid waste service, fire hydrants, sharing of equipment and resources, fire and rescue services, E-911 system, and addressing standards.

The City of Tavares is also party to two (2) interlocal agreements with Lake County Schools:

- Interlocal Agreement between Lake County and Lake County School Board and Municipalities for School Facilities Planning and Siting (December 26, 2007)
- Intergovernmental Agreement between the City and the Lake County School Board related to shared use of facilities (October 17, 2018)

Goals, objectives, and policies within this plan have been included to reflect necessary coordination with other local, state, and federal agencies, as well as to acknowledge and be consistent with the provisions of aforementioned formalized agreements. These goals, objectives, and policies are found both within the Intergovernmental Coordination Element, as well as within other respective elements in the Comprehensive Plan where applicable.

TAKING FLIGHT

COMPREHENSIVE PLAN 2040

Capital Improvements Element

Data Inventory and Analysis

TAVARES

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The purpose of the Capital Improvement Element is to consider the need for and the location of public facilities as identified in other elements of the comprehensive plan, to estimate the cost of improvements for which the local government has fiscal responsibility, to analyze the fiscal capability of the local government to finance and construct improvements, to adopt financial policies to guide the funding of improvements and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the other comprehensive plan elements. This element also includes the requirements to ensure that the City implements an adequate concurrency management system.

Needed capital improvements are those that are necessary to meet the City's adopted level of service (LOS) standards. LOS are used to indicate whether public facilities are adequate to meet the needs of the City's future populations. LOS is a standardized measure of infrastructure operating conditions and is generally defined with reference to a benchmark; a measure of effectiveness.

The City of Tavares public facilities that require identification and funding are transportation; sanitary sewer; solid waste; drainage; potable water; and recreation.

The City of Tavares utilizes numerous revenue sources to fund operational and capital expenses in the City. The City has employed methods described in this element in addition to its standard annual budgeting procedures to allocate funds for specific purposes. The funding of all capital improvements includes, but may not be limited to, impact fees, property taxes, sales taxes, franchise fees, grants, tax increment financing (TIF) revenue, and other fees and taxes.

Concurrency Management

The intent of the Community Planning Act in Chapter 163 of the Florida Statutes is to utilize and strengthen the existing role, processes, and powers of local governments in the establishment and implementation of comprehensive planning programs to guide and manage future development consistent with the proper role of local government. Pursuant to this act the statutory concurrency requirements are sanitary sewer, solid waste, drainage, and potable water.

The concurrency requirements are applicable to such facilities within the corporate limits of the City of Tavares, and those areas within the unincorporated areas of Lake County that are served by City potable water and sanitary sewer services. A concurrency management system has been established within the City's land development regulations to ensure that all the required public facilities and services are available as required to meet adopted levels of service prior to the issuance of development orders and building permits. This will ensure that development is approved only when it meets concurrency requirements.

The following table lists, and provides a brief description of, capital improvements identified for 2019-2024.

Project	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	Total	Funding Source
Sanitary Sewer								
Woodlea WWTF Expansion / Upgrades Design	-	-	$1,500,000	-	-	-	$1,500,000	Impacts
Woodlea WWTF Expansion / Upgrades Construction	-	-	-	-	-	$8,000,000	$8,000,000	Impacts
ISBA Study: Extension of Sewer Lines	$75,000	$75,000	$50,000	$50,000	-	-	$250,000	Impacts
David Walker 16" Force Main Extension to City Limits	$115,000	-	-	-	-	-	$115,000	Impacts
Lake Frances Estates LS #49 WW Improvements[2]		$5,696,000		-	-	-	$5,696,000	SRF
Lift Station Fencing	$10,000	$10,000	$10,000	-	-	-	$30,000	W/WW RR&I
Low Pressure Sewer System	$25,000	$25,000	$75,000	-	-	-	$125,000	Impacts
Lane Park Expansion	$150,000	-	-	-	-	-	$150,000	Impacts
WM Old 441 David Walker to Bay Expansion	-	-	-	$1,000,000	-	-	$1,000,000	SRF
Pole Barn (Split w/ Water, Sw)	-	$30,000	-	-	-	-	$30,000	W/WW
Pipe bursing at Caroline Plant	-	$25,000	-	-	-	-	$25,000	W/WW RR&I
Pipe Lining Ls 19 Area	$32,000	-	-	-	-	-	$32,000	W/WW
Upgrade Scada System For 10 Liftstations	$200,000	-	-	-	-	-	$200,000	Impacts
Grout Work Ls 19 & 33 Area Test and Seal	$75,000	$50,000	-	-	-	-	$125,000	W/WW RR&I
Water								
Alternative Potable Water Supply WTP #1 Upgrades (design, construct)	-	-	$398,300	$4,350,000	-	-	$4,748,300	Mixed
David Walker 12" Water Main Extension	$400,000	-	-	-	-	-	$400,000	Impacts
Water Main - 1700 ft. Along Lake Dora Ave	-	-	-	$215,000	-	-	$215,000	W/WW RR&I
ISBA Utility Master Plan 448 / 561 / 19	$100,000	$100,000	-	-	-	-	$200,000	Impacts
Lake Frances Water Upgrade LS #49	$1,000,000	-	-	-	-	$1,000,000	$1,000,000	SRF
Distribution Main Upgrades / Relocations	$50,000	$50,000	$50,000	$50,000	$50,000	-	250,000	W/WW RR&I
Water Main - Dora to David Walker along Alfred Street	$400,000	-	-	-	-	-	$400,000	SRF
WM Old 441 David Walker to Bay Expansion	-	-	-	$1,200,000	-	-	$1,200,000	SRF
Lane Park Expansion	-	525,000	-	-	-	-	$525,000	Impacts
Service Line to Warehouse (Split with Water Department)	$5,000	-	-	-	-	-	$5,000	W/WW
Land Acquisition	$300,000	-	-	-	-	-	$300,000	W/WW

Painting of Water Tank	$100,000	-	-	-	-	-	$100,000	W/WW RR&I
Pilot Study - Base Read	$50,000	$75,000	-	-	-	-	$125,000	W/WW
Replacement of Wells 3 & 4 Design	$398,300	-	-	-	-	-	398,300	Impacts
Avalon Booster Pump Station (Temporary)	-	$150,000	-	-	-	-	$150,000	Impacts
Avalon Booster Pump Station (Permanent) - Land Acquisition ($350,000)	-	-	-	-	-	-	-	Impacts
Avalon Booster Pump Station (Permanent) - Design	-	-	$800,000	-	-	-	$800,000	Mixed
Avalon Booster Pump Station (Permanent) - Construction	-	-	-	$4,200,000	-	-	$4,200,000	Mixed
Rehab Water Plant #1 floors	-	$25,000	-	-	-	-	$25,000	W/WW RR&I
Solid Waste								
Solid Waste Joint Use Facility - Design and Construction	-	$8,400,000	-	-	-	-	$8,400,000	Solid Waste
Transportation								
State Road Wayfinding Signs	-	-	$14,000	-	-	-	$14,000	GEN
Comprehensive Plan Update	$150,000	-	-	-	-	-	$150,000	GEN
Tav-Dora Trail (Cost Share with MPO)	$90,000	-	-	-	-	-	$90,000	Grants
Wayfinding Signs Downtown	-	$43,000	-	-	-	-	$43,000	Sales Tax
Sidewalks - Repair, Construction, & Grinding	$5,000	$5,000	$47,500	$45,000	$45,000	-	$147,500	GEN
Alleyway Improvements	-	-	$250,000	$250,000	$250,000	$250,000	$1,000,000	GEN
Road Paving Improvements Construction	$172,000	$225,000	$775,000	$775,000	$775,000	-	$2,722,000	Sales Tax
Pavement Management Plan	-	-	$104,022	-	-	-	$104,022	GEN
Traffic Signal Cabinet Replacements	-	-	$96,000	$55,000	$36,000	$36,000	$223,000	GEN
West Main Street Gateway Feature	-	-	$150,000	-	-	-	$150,000	Mixed
West Main Streetscape - Design & Engineering	-	-	$145,000	-	-	-	$145,000	Mixed
West Main Streetscape - Construction	-	-	$1,240,554	-	-	-	$1,240,554	Mixed
Stormwater								
Downtown CRA Stormwater Upgrades	-	$500,000	$5,750,000	-	-	-	$6,250,000	Mixed
Sinclair Ave Drainage Improvements (Construction)	-	-	$500,000	-	-	-	$500,000	SRF
Dykes Dr Drainage Improvement (Design)	$40,000	$40,000	-	-	-	-	$80,000	Stormwater
Banning Beach Drainage Improvements	$45,000	-	-	-	-	-	$45,000	Stormwater
Public Exercise Stations - Ecological Park	-	$25,000	-	-	-	-	$25,000	Stormwater
Fountains for Ecological Park	-	$20,000	-	-	-	-	$20,000	Stormwater

Demolition of Existing Landscape Chris Daniels Memorial (Stormwater Portion, Split with General Fund)	-	$72,499	-	-	-	-	$72,499	GEN
Parks and Recreation								
Wooton Park West (Fishing Pier)	-	-	$200,000	-	-	-	$200,000	GEN
Wooton Park West Trail Lighting & Electrical Upgrades	-	-	$24,000	-	-	-	$24,000	GEN
Wooton Park West (Open Space Improvement & Landscaping)	-	-	$375,000	-	-	-	$375,000	Mixed
Replace Dugouts at Fred Stover Sports Complex	-	-	-	-	-	$110,000	$110,000	SALES TAX
Replace Fencing at Fred Stover Sports Complex	-	-	-	-	-	$220,000	$220,000	Grants
Tavares Nature Park Security Camera	-	-	$7,000	-	-	-	$7,000	GEN
Tavares Nature Park Restoration	-	-	-	-	-	$10,000	$10,000	GEN
Shuffleboard Courts Roofing or Shade Structure	-	-	-	-	-	$120,000	$120,000	GEN
Woodlea Sports Park BF/MPF/Parking	-	-	-	-	-	$525,000	$525,000	Mixed
Fred Stover Sports Complex Paved Parking Lot	-	-	-	-	-	$51,500	$51,500	GEN
Tavares Nature Park Security Fencing	-	-	-	-	-	$21,000	$21,000	GEN
Small Ingraham Park Picnic Gazebo and Tables	-	-	-	-	-	$7,500	$7,500	GEN
Performing Arts Center/State College Downtown Campus Feasibility Study	$120,000	-	-	-	-	-	$120,000	GEN
Aesop's Park Rubberized Running Trail	-	-	-	-	-	$49,000	$49,000	Grants
Aesop's Park Aeration Fountain	-	-	-	-	-	$10,000	$10,000	Grants
Construct one (1) pickleball court at Ridge Park	-	-	$30,000	-	-	-	$30,000	GEN
Ridge Park Buildout Plan (Senior Center, Pickle & Bocce Ball, Parking)	-	$12,500	-	-	-	-	$12,500	GEN

Level of Service Standards

The City's adopted LOS standards are provided in the table below and in each respective Element (e.g., Transportation & Mobility, Public Facilities, Recreation & Open Space) for each measurable service.

Facility Type	Level of Service Standard
Sanitary Sewer	250 gpd/eru (gallons per day/equivalent residential unit)
Potable Water	325 gpd/eru (gallons per day/equivalent residential unit)
Solid Waste	4.57 LBS. Per Resident Per Day
Stormwater	1. Bridges. Hydraulic Profile shall be below the top cord of the bridge for the 50-year, 24-hour storm. 2. Stormwater detention and retention ponds, which are contributory to land-locked areas with no positive outlet, shall be designed for the 25-year, 96-hour storm. 3. Canals, ditches, or culverts external to the development, and stormwater detention or retention basins which are not part of a project that is contributory to a land-locked area with no positive outlet, shall be designed for the 25-year, 24-hour storm. 4. Stormwater flooding for arterial and collector roadways shall not exceed one-half (½) of the roadway width. For local roads, stormwater flooding shall not exceed the crown of the road for the 10-year, 24-hour storm 5. Storm sewers and roadside swales shall be designed such that the hydraulic gradient is 1.0 foot below the gutter line or edge of pavement for arterial roadways; and 0.5 feet below the gutter line or edge of the pavement for collector and local roadways for the 10-year, 24-hour storm.
Transportation	Principal Arterial – LOS D Minor Arterial – LOS D Collector – LOS D
Recreation	1.7 acres per 1,000 residents