CITY OF WESTLAKE

COMPREHENSIVE PLAN

TECHNICAL DOCUMENT
DATA AND ANALYSIS

2017

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TECHNICAL DOCUMENT | Data & Analysis

ADMINISTRATIVE

2017

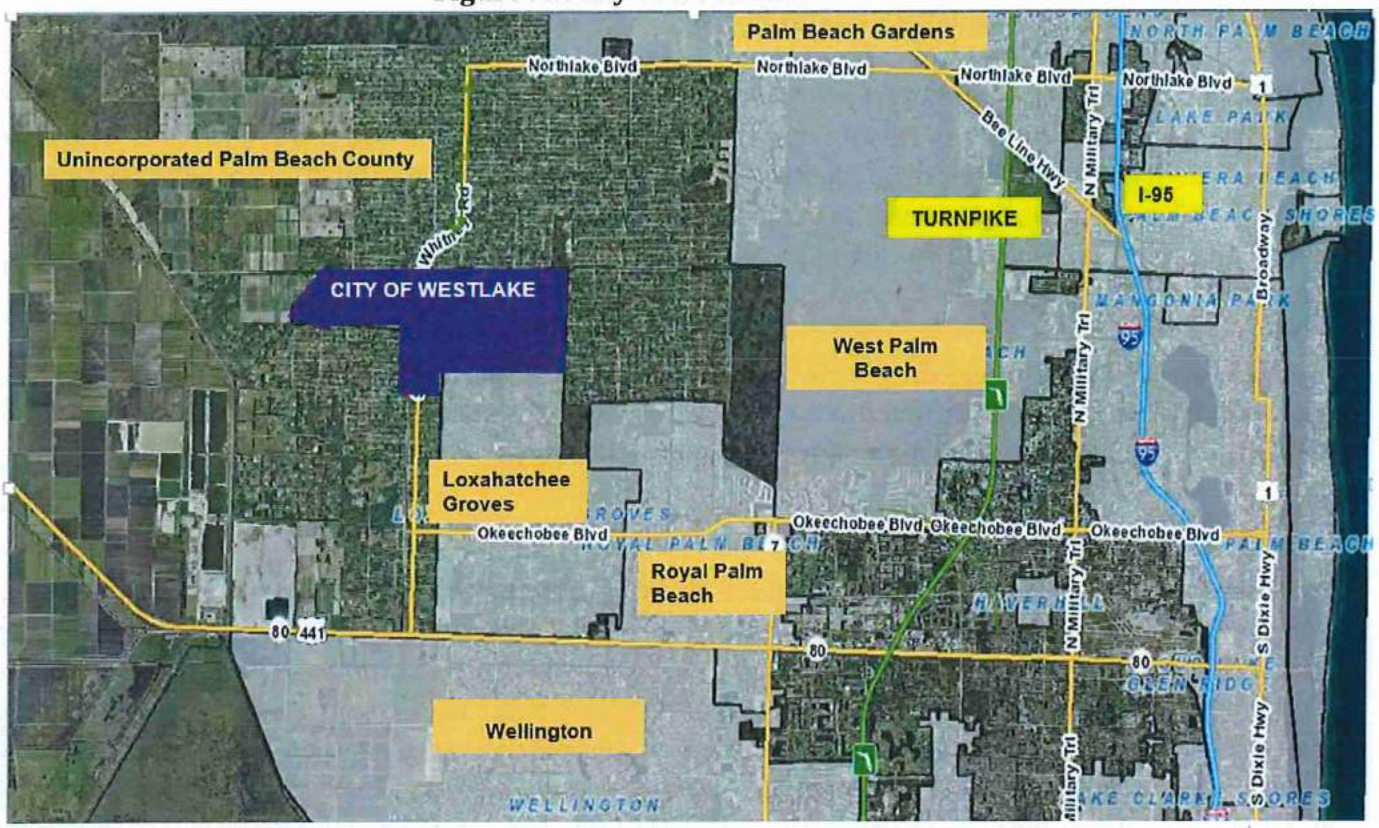
CHAPTER 1. ADMINISTRATIVE ELEMENT DATA AND ANALYSIS

INTRODUCTION

Location

The City of Westlake, which is referred to throughout this Comprehensive Plan as the "City," is located in central Palm Beach County, northwest of the Village of Royal Palm Beach and north of the Village of Wellington and the Town of Loxahatchee Groves. The main access route to the City is Seminole Pratt Whitney Road from either State Road 80 (Southern Boulevard) or Okeechobee Boulevard from the south, or Northlake Boulevard from the north. The City is surrounded by the unincorporated area knowns as the Acreage, the Town of Loxahatchee Groves and a small area of agricultural lands to the west. Some of the land to the west of the City has recently been approved for low-density development by Palm Beach County, including Indian Trails Grove. The land comprising the City has been described as the "hole in the donut" in as much as it is a large, undeveloped parcel surrounded by a sprawling development pattern. Figure 1.1 below illustrates the City's location.

Figure 1.1 City of Westlake Location



History of Incorporation

The City is coextensive with the Seminole Improvement District (SID), which was established in 1970 pursuant to Chapter 70-854, Laws of Florida, codified pursuant to Chapter 2000-431, Laws of Florida. SID is an independent special purpose government formerly known as the Seminole Water Control District, and consists of approximately 4,127 acres of land.

SID is empowered to construct and maintain a number of public works and utilities including water, sewer, drainage, irrigation, water management, parks, recreation facilities, roadways and/or related activities. The majority of the property located within the SID boundary is comprised of the former Callery-Judge Groves property (CJG), which includes roughly 3,788 acres used for active agriculture for over 50 years. The boundary also includes a separate agricultural area known as the Silverlake property, a utility site and a packing plant. In addition, three school sites and a small shopping center site lie within the SID boundary.

In 2016, the City was incorporated pursuant to Section 165.0615, Florida Statutes.

Legal Authority and Purpose

This Plan was developed in compliance with Florida's Community Planning Act, Chapter 163, Florida Statutes, which provides legal standards and guidance to local governments on comprehensive planning. The City's Land Development Regulations and all development orders shall be consistent with the Plan.

The Plan establishes meaningful and predictable standards for the use and development of land and provides meaningful guidelines for the content of more detailed land development and use regulations. The Land Development Regulations that will be adopted within one year of the adoption of this Plan will contain more specific regulations and requirements to implement the Plan and control land development within the City. The statute requires that the Plan guide growth to the directed ends but while also recognizing private property rights and allowing the operation of real estate markets to provide adequate choices.

The Plan is used to address specific growth management issues. Importantly, however, the Plan is not only a regulatory tool to guide growth, but it is a means to achieve community goals. The overall purpose of this Plan is to guide the City in achieving a desirable vision of the future.

Content and Structure of the Plan

The Comprehensive Plan, or "Plan," is a tool for directing growth and development within the City. The comprehensive plan addresses various aspects of future development through a coordinated group of plan elements. These elements address nine subjects: Administration, Future Land Use, Transportation, Infrastructure, Capital Improvements, Housing, Conservation, Recreation and Open Space, and Intergovernmental Coordination. The goals, objectives, and policies of the Future Land Use Element, along with the Future Land Use Map (FLU Map 2.1), describe the types of land uses, the related densities and intensities, and directs the location of development in the City. The Future Land Use Element is both enabled and restricted by the other elements of the Plan, including the Transportation, Infrastructure, Housing, Conservation and Open Space and Recreation Elements, which address, among other things, necessary public

facilities such as transportation and infrastructure, and development goals such as affordable housing and the discouragement of urban sprawl. The Plan also includes a Capital Improvements Element to plan for the provision of public facilities necessary to serve development anticipated pursuant to the Future Land Use Map. Finally, the Intergovernmental Coordination Element addresses coordination with local, regional, and state entities. All elements of the Plan were developed in consideration of existing development, the availability of adequate facilities and services, and the character of the land and water resources on and surrounding the jurisdiction.

PLANNING PERIODS

The Plan provides guidance on development over two planning periods: a short-term period beginning in 2018 and ending in 2023 and a long-term period ending in 2038. However, for the purpose of the Capital Improvements Element, which must be updated annually, the fiscal year, rather than the calendar year, is used. (For example, the short-term planning period ends FY 2022-23, rather than calendar year 2023).

RELATED PLANS AND PROGRAMS

Palm Beach County Comprehensive Plan

The land area located within the City has been the subject of several planning efforts in Palm Beach County over many decades. These studies were focused on addressing the long-standing land use imbalances of central western Palm Beach County, which is dominated by low density, poorly planned, single family residential development.

Some of the land to the west of the City has recently been approved for low-density development by Palm Beach County, including Indian Trails Grove. In its comprehensive plan, Palm Beach County designated much of the Acreage surrounding the City with a future land use designation of 2.5 units per acre, even though the Acreage consists almost exclusively of previously subdivided 1.25 acre lots. Accordingly, the actual land use pattern in the area designated by Palm Beach County's Managed Growth Tier System as "Exurban" is twice as dense as the Tier designation would indicate.

Several studies conducted by Palm Beach County over the years identified development of the former CJG property, which the City occupies today, for much needed non-residential uses to balance land uses in the region.

Loxahatchee Groves Comprehensive Plan

The Town of Loxahatchee Groves became a municipality on November 1, 2006. The Town is the 38th municipality in Palm Beach County.

The Town aspires to be a rural community in the "midst of an urbanizing region" as stated in the "Vision for the Future of the Community" in the "Strategic Plan." The Town's Comprehensive Plan Future Land Use Element provides for a predominantly rural residential setting with Rural Residential 5 (1 dwelling unit per 5 acres) over the majority of the Town. Future commercial development is limited to the southern perimeter

of the Town along the Southern Boulevard corridor, which further supports the need for a commercial center in the City to balance the regional land use pattern.

Seminole Improvement District

The City is coextensive with the jurisdiction of the Seminole Improvement District (SID.) Pursuant to the City charter, the City may not duplicate services provided by SID. The cooperative relationship between the City and SID for provision of those services and facilities is detailed in an Interlocal Agreement, while SID's specific plans for facilities construction, maintenance, and expansion are contained in its Water Control Plan, Seventh Amended, dated October 13, 2015.

Indian Trail Improvement District

The Indian Trail Improvement District (ITID) is an Independent Special District with jurisdiction of properties lying north, south, and east of certain portions of the City. ITID is empowered to, among other things, construct, operate, and maintain works for drainage, water control purposes, and irrigation, and to construct and maintain roadways, natural gas facilities, recreation facilities, and related infrastructure.

Palm Beach County School District

Three Palm Beach County Public Schools – Golden Grove Elementary School, Western Pines Middle School, and Seminole Ridge High School, lie within the boundaries of the City. Two additional schools – Osceola Creek Middle School and Frontier Elementary School - are north of the City, and Loxahatchee Grove Elementary School lies to the south. Currently, students from the City are zoned to attend Gold Grove Elementary and Seminole Ridge High School within the City's boundaries. At the time of adoption of this Plan, no students within the City are zoned for Western Pines Middle School, but students are zoned for Osceola Creek Middle School.

Intergovernmental Plan Amendment Review Committee (IPARC)

The Intergovernmental Plan Amendment Review Committee, or "IPARC" was formed to establish a comprehensive plan amendment coordinated review process in Palm Beach County. A procedure for the coordination of proposed plan amendments was also adopted, including cooperation between affected local governments and service providers. Service providers include some special districts that provide infrastructure services and the School District of Palm Beach County. This process provides opportunities to prevent and resolve potential disputes with minimum overlap or duplication of other existing processes within each participating entity, and aims for an expedited and simplified resolution.

PLAN VISION AND GUIDING PRINCIPLES

Developing a city at this location addresses the need to balance the urban sprawl of the surrounding area with the provision of adequate non-residential uses, at a central location, with the appropriate residential mass to make the city functional and sustainable in the long term. A sustainable community works to use its resources to meet current needs while considering that adequate resources are available for future generations.

The Vision and Guiding Principles of the Plan embrace the following **sustainable community** concept: *An urban area with a long term planning and management vision that incorporates a multi-modal transportation network; walkable, mixed use patterns of development; denser development where infrastructure exists; civic spaces and interconnected open spaces for recreation; economic vitality and job choices; choices in housing price and size; a robust educational system; and a unique identity.* The City's sustainable community concept serves as an umbrella under which all the elements of the Plan are developed.

The Plan is based on data and analysis which includes a vision and guiding principles that provide the general outline for a sustainable community. The adopted provisions of the Plan establish the specific and measurable objectives, policies, and maps that translate the sustainability community concept into an operational plan that can be used to effectively direct growth.

The City's Vision and Guiding Principles describe the future of the City in aspirational terms and are not adopted components of the Plan, but serve to guide the development of the adopted goals, objectives, and policies of the Plan.

Vision for the City

The City will be a vibrant, desirable and welcoming place to live, work and play. The City will support mixed uses and promote safe neighborhoods with access to thriving business districts, employment centers, schools, parks and open spaces. The City will create incentives to promote the development of diverse housing, and will offer public open spaces. An emphasis on the development of complete streets will promote multi-modal transportation opportunities. The City's plans and policies will embrace public participation, encourage a sustainable community, and stimulate a vibrant economy.

The City's Guiding Principles

Build City Character and Identity

The City will promote economic development and provide for attractive public spaces through the coordination of building architecture, site design, and streetscape improvements.

Balance the Central Communities in Palm Beach County

The development of the City will include commercial, employment, and recreational opportunities to help alleviate the existing urban sprawl pattern of development that currently exists in central Palm Beach County.

Promote Mixed-Use Corridor

The Downtown Mixed-Use Category is important to the development of the City as a center of commerce, employment, and services. Activity centers, which will vary in scale, use, and intensity, will be developed within walking distance of residential neighborhoods to provide accessible and convenient opportunities to work, shop, and participate in civic life.

Emphasize Housing Diversity and Livable Neighborhoods

A variety of housing choices will be provided to accommodate a diverse range of residents at varying income levels and at all stages of life, including young adults, families, non-family households, empty nesters, retirees, and seniors. Housing opportunities will include small lots, multi-family housing, and live-work units, in addition to the traditional large, single family homes. Neighborhood commercial centers will offer convenient and walkable amenities to residents by providing retail and service facilities.

Grow A Vibrant Economy

The City will work towards becoming a Sustainable Community with an environmentally, socially, and economically healthy and resilient habitat for existing and future populations. A healthy and sustainable business environment will be promoted through investment in efficient infrastructure, the provision of incentives, and by fostering development of a community that is attractive to employers and their workers. The Plan will seek to enhance the City's competitive advantage and to attract high quality companies, entrepreneurs, and knowledge-based businesses to the area.

Promote Complete Streets, Transportation Choice and Mobility

A safe, reliable, and integrated transportation system that includes multiple modes of transportation including walking, biking, public transit, and motor vehicles will be encouraged within the City. Investment in the transportation system should promote multi-modal travel solutions, especially in the Downtown Mixed-Use Category, around schools, between neighborhoods, and along the gateway corridors.

ADOPTED PROVISIONS

The Plan is comprised of the following nine elements and a Map Series.

- Chapter 1 Administrative Element
- Chapter 2 Future Land Use Element
- Chapter 3 Transportation Element
- Chapter 4 Infrastructure Element
- Chapter 5 Conservation Element
- Chapter 6 Recreation and Open Space Element
- Chapter 7 Housing Element
- Chapter 8 Capital Improvements Element
- Chapter 9 Intergovernmental Coordination Element

The Goals, Objectives and Policies (GOPs) within each element and the Map Series are adopted as part of the Plan. Maps within the Map Series are identified by the element, chapter number and the map number (i.e. FLU Map 2.1). The Data and Analysis summarized for each element in a separate volume is not formally adopted, but supports the GOPs and the maps in the Map Series. Additional data and analysis documentation is available at the City.

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FUTURE LAND USE

2017

CHAPTER 2. FUTURE LAND USE ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Future Land Use Element and Future Land Use Map is to guide the future growth and development of the City. The Future Land Use Map (FLU Map 2.1) designates the distribution, general location, extent, density, and intensity of land uses. The Future Land Use Element includes adopted Goals, Objectives and Policies that govern the development of land depicted on the Future Land Use Map consistent with the City's Vision, Guiding Principles and the other elements of this Plan.

POPULATION PROJECTIONS

Chapter 163.3177(1)(f)3, F.S., requires local government comprehensive plans to be based upon permanent and seasonal population estimates and projections, which shall either be those published by the Office of Economic and Demographic Research (OEDR) or generated by the local government based upon a professionally acceptable methodology. The OEDR issues the projections generated by the Bureau of Economic and Business Research (BEBR.) BEBR makes permanent population projections for counties, but not for municipalities or unincorporated areas. Neither OEDR nor BEBR make seasonal population projections.

Palm Beach County uses the BEBR medium permanent population projection to compute a projection for the unincorporated county. The total county BEBR projection is geographically divided and allocated to small geographic areas called Traffic Analysis Zones (TAZs). There are over 1,700 TAZs in Palm Beach County. The TAZs in each municipality and in the unincorporated area are then combined to make projections for each municipality and the unincorporated area. The allocation of population to each TAZ is based upon projections of dwelling units in each TAZ as well as other demographic factors such as vacancy and seasonal rates. The latest population projection and allocation for Palm Beach County was conducted in 2015 prior to the incorporation of the City (2015 Palm Beach County Population Allocation Model (2015-PBC-PAM).)

Palm Beach County's population grew from 1,131,184 in 2000 to 1,320,134 in 2010 (U.S. Census 2000 DP-1 and 2010 DP-1.) During this decade, the County population grew by 16.7%, averaging 18,895 people each year. Unincorporated Palm Beach County grew 12.7% averaging 6,600 people each year (BEBR Census Summary 2010.) BEBR's latest population estimate for 2016 is 1,391,741, representing an increase of 71,607 persons since 2010. The County is projected to increase its population by 343,359 persons between 2016 and 2040, a 25% increase (BEBR FPS 177.) Table 2.1 shows the latest BEBR projections through 2040 as well as the projections used in the 2015-PBC-PAM. The latest BEBR medium projections published in 2017 are 1,000+ persons higher than the previous BEBR medium projections relied upon by Palm Beach County in 2015.

Table 2.1: Palm Beach County Population Projections

	2010 Census	2016	2020	2025	2030	2035	2040
BEBR FPS-177	1,320,134	1,391,741	1,465,900	1,550,600	1,619,100	1,679,700	1,735,100
Annual Increase		11,935	18,540	16,940	13,700	12,120	11,080
2015-PBC-PAM Projections			1,463,900	1,543,200	1,615,100	1,678,700	Not Available

Source: University of Florida Bureau of Economic and Business Research, Population Projections (FPS 177), U.S. Census Bureau, 2010 Decennial Census, DP-1, 2015-PBC-PAM

The TAZs associated with the City and the surrounding area are shown in Figure 2.1. The 2015-PBC-PAM allocated 4,546 dwelling units associated with the Minto West plan amendment to four TAZs (#1593, #864, #1058, and #1079) for year 2030. As these dwelling units were associated with a specific development approval, no dwelling units were allocated to those portions of the City which are outside of the Minto West development area. The areas within the City which received no allocation of dwelling units include the 119-acre Silverlake property, the 10-acre Grove Marketplace, and the 27-acre packing plant parcel. The Plan allows residential development to occur in each of these areas. The larger geographic area where residential development may now occur, the longer extended planning timeframe to 2038 instead of 2030, and the increased BEBR population projection supports additional development opportunities for dwelling units and associated population. Therefore, the City projects 6,500 units by the year 2038, which corresponds to the long-term planning period. The densities established in the Future Land Use Element will accommodate the increase in dwelling units.

The 6,500 dwelling units are converted to permanent household population as follows. First, the total number of housing units is converted to an estimate of occupied housing units by subtracting units anticipated to be vacant or used for seasonal residents. Second, occupied housing units are converted to household population by applying an average population per household rate (PPH). PPH, vacancy rates, and seasonal housing rates are based upon the surrounding Census County Divisions (CCDs) which have population characteristics expected to be more comparable to the City than the county as a whole. These CCDs are located in the central portion of Palm Beach County between the eastern coastal communities and the western areas. Specifically, the City PPH, vacancy rate and seasonal rate are averages derived from the Royal Palm Beach-West Jupiter, Western Community, and Sunshine Parkway CCDs from the 2010 US Census. Figure 2.2 shows the boundaries of the CCDs. The vacancy rate used for the City is 7.45 percent. The seasonal rate is 5.85 percent. The PPH is 2.65. These rates are kept constant for the planning periods.

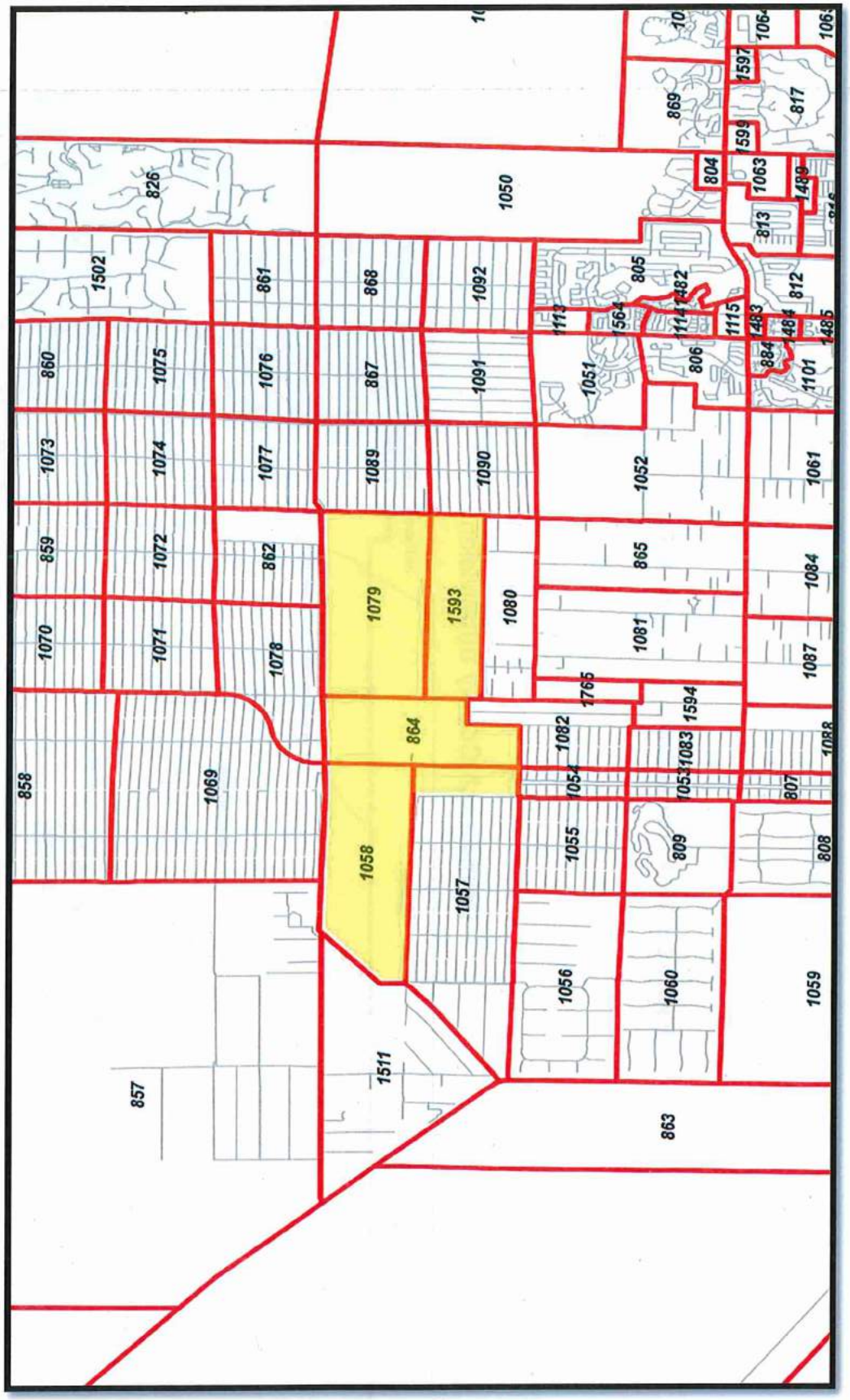


Figure 2.1: Traffic Analysis Zones Map

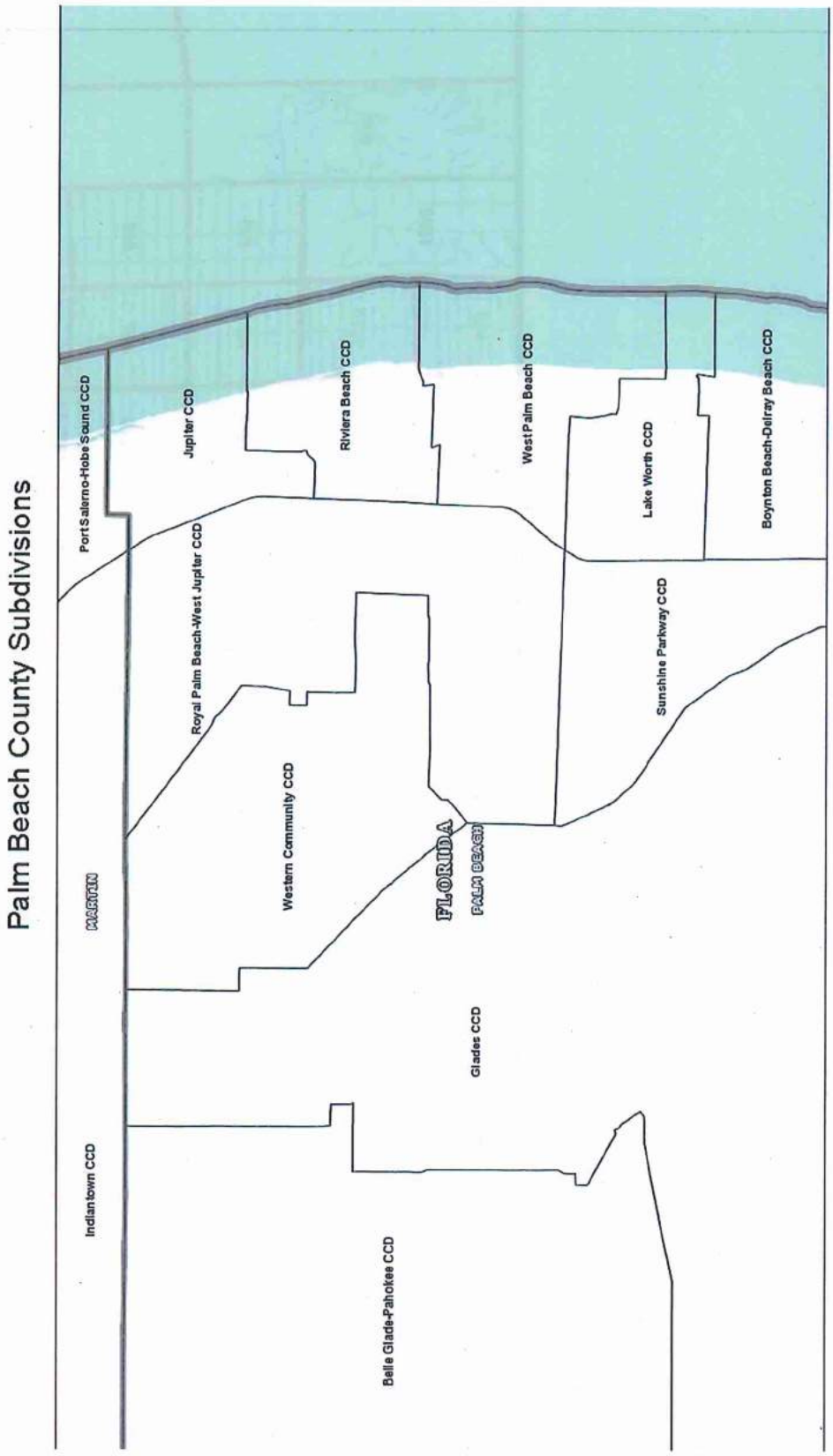


Figure 2.2: 2010 Census County Divisions (CCDs)

In addition to the permanent household population, some persons may live in group quarters (e.g. nursing homes.) The percent of permanent population expected to live in group quarters is zero in year 2023. However, a group quarters population is projected for 2038 by using the average group quarters rate from the same surrounding CCDs. The average group quarters rate is 0.642% which equates to 96 persons in 2038.

The permanent population estimate for 2018 and projections for years 2023 and 2038 are provided in Table 2.2A based on the anticipated development of housing units and assumptions for group quarters populations.

Table 2.2A: City Permanent Population Projections

Year	Total Housing Units	Permanent Population	Group Quarters Population	Population
2018	150	298	0	298
2023	1,575	3,619	0	3,619
2038	6,500	14,934	96	15,030

The seasonal population projection is based on the seasonal housing rate of 5.85% of projected housing units as well as the plan for a 150-room hotel. An estimate of 2 persons per seasonal house or hotel room is assumed. The seasonal projection is shown in Table 2.2B below.

Table 2.2B: City Seasonal Population Projections

Year	Housing Population	Hotel Population	Total Seasonal
2018	0	0	0
2023	184	300	484
2038	761	300	1,061

The total population projection, consisting of both permanent and seasonal residents is shown in Table 2.3.

Table 2.3: City Total Population Projection

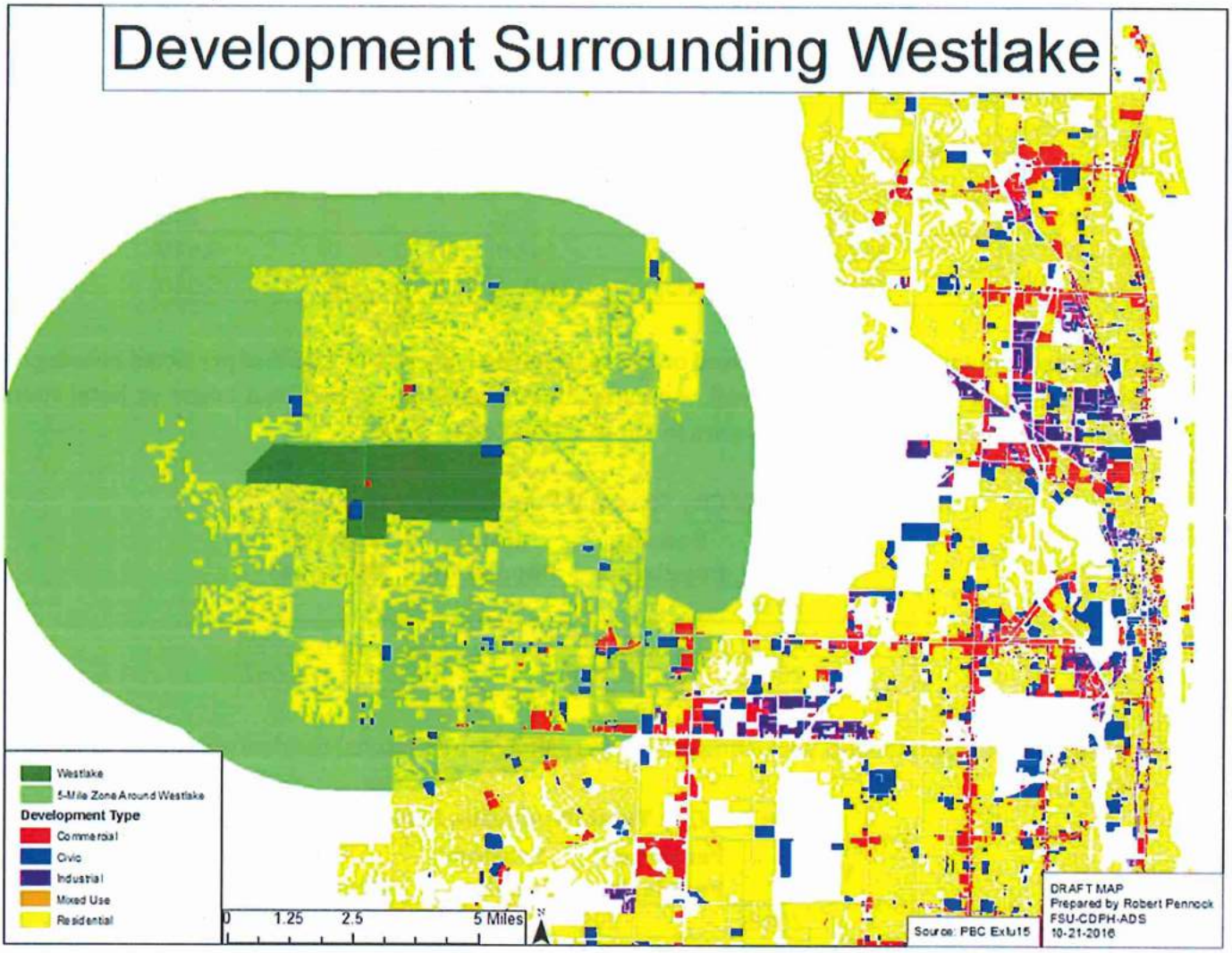
Year	Permanent Population	Seasonal Population	Total Population
2018	298	0	298
2023	3,619	484	4,103
2038	15,030	1061	16,091

NON-RESIDENTIAL ANALYSIS

Within the central area of the County there is a limited amount of commercial (office and retail) uses, and virtually no existing industrial or employment uses. Currently, existing and approved non-residential uses, which total approximately 389,000 square feet, can be found at the intersection of Seminole-Pratt Whitney Road and Orange Boulevards, the Grove Market on Seminole-Pratt Boulevard, and throughout Loxahatchee

Groves. Figure 2.3 shows the scant amount of non-residential development in a five-mile zone surrounding the City. Additionally, the Loxahatchee Groves Plan directs all future commercial development to the Southern Boulevard corridor which is the farthest removed from the City.

Figure 2.3: Development Surrounding the City.



Non-residential land use demand is based on the ratio of number of square feet of non-residential use per capita. In the absence of data for the City planning jurisdiction, average ratios for Palm Beach County were calculated based on actual 2015 data for Palm Beach County and were then applied to the projected population of the City for the long term planning period. The City of Westlake Comprehensive Plan provides for increased amounts of non-residential, which will serve the City and which will also contribute to balancing the deficit in the surrounding area as shown in Table 2.4.

Table 2.4: Non-Residential Demand and Potential Surplus Supply

	City Demand for Long Term Planning Period		Downtown Mixed-Use Supply Scenario			
Land Use	Average County Square Feet Per Capita	Square Footage Demand Based on Average County Square Feet Per Capita	Percent of Downtown Mixed-Use Acreage	Average FAR	Square Footage Supply In Downtown Mixed-Use	Surplus Square Footage Available in Downtown Mixed-Use to Serve Deficit in Surrounding Area
Commercial	120.9	1,804,876	40%	1.0	6,683,846	4,878,970
Industrial	39.4	588,073	15%	1.0	2,506,442	1,918,370
Civic	49.1	732,610	16%	1.0	2,673,539	1,940,929

Note:

Civic includes education

Commercial includes office, hotels, and medical uses such as hospitals and medical offices

Data Sources: 2015 Palm Beach County Exlu GIS, 2015 Palm Beach County Population Allocation Model, City of Westlake Comprehensive Plan, Palm Beach County Comprehensive Plan.

The maximum FAR in Downtown Mixed-Use is 3.0. This calculation assumes an average FAR of 1.0 and the mid-point of allowable acreage percentages.

ANALYSIS OF LAND NEEDED TO ACCOMMODATE PROJECTED POPULATION

The Residential (1 & 2) and Downtown Mixed-Use Future Land Use categories established by policy in this Element and shown on the Future Land Use Element Map (FLU Map 2.1) will accommodate the projected population. Table 2.5 shows the estimated acreage for each of the land use categories.

Table 2.5: Vacant Lands with Future Land Uses

Future Land Use of Vacant Lands	Acres	% of Total Vacant Lands	Potential Dwelling Units	Potential Additional Population
Residential	3,293	80%	5,700	13,180
Downtown Mixed-Use	565	14%	800	1,850
Civic	192	5%	N/A	N/A
Open Space and Recreation and	77	2%	N/A	N/A
Total	4,127	100%		

An analysis of existing and potential commercial development in the five-mile area surrounding the City shows a substantial deficit of square footage of non-residential uses to serve the projected population for the area in 2035, as shown in Figure 2.3. This deficit can be substantially offset by potential development in the City as shown in the table below:

Table 2.6: Demand for Commercial in 5-Mile Area Surrounding the City for 2035 (Excluding the City)

Land Use	Average County Sq. Ft. per Capita	Sq. Ft. Demand Based on Avg. County Sq. ft. per Capita	Existing and Potential Future Sq. Ft. w/in 5-mi Perimeter	Deficit w/in 5-mi Perimeter	City Downtown Mixed-Use Sq. Ft. Available in Downtown Mixed-Use to serve Deficit in Surrounding Area	% of Commercial Demand Deficit of Surrounding 5-mile Area Served by the City
Commercial	120.9	16,180,195	6,687,881	9,492,315	4,878,970	51%
Project Population for Area is:		133,879				

Data Sources: 2015 Palm Beach County Exlu GIS, 2015 Palm Beach County Population Allocation Model, Palm Beach County Comprehensive Plan and Loxahatchee and Royal Palm Beach Comprehensive Plans.

Since 2015, Palm Beach County has adopted other land use changes in the general area including Indian Trails Grove, which includes low-density residential and small amounts of retail/office which further contribute to the imbalance of land uses in the area. Indian Trail Grove does not provide for industrial or employment development. The City will help to mitigate this newly created imbalance.

JOB CREATION, CAPITAL INVESTMENT, AND ECONOMIC DEVELOPMENT

The Future Land Use Element accommodates the previously approved Minto West development as well as allowing for additional future long-term development. By providing for significant development of commercial, office, medical, civic, educational, and light industrial uses, the Plan provides opportunities for job creation, capital investment, and economic development. The non-residential development envisioned and encouraged by the Plan will serve to remediate the existing urban sprawl pattern and the current scarcity of non-residential uses throughout the central western communities of Palm Beach County.

EXISTING AND FUTURE LAND USE CONDITIONS

Existing Land Use

The City is located approximately two miles north of Okeechobee Boulevard, west of 140th Avenue North, and south of 60th Street North in Palm Beach County. Seminole Pratt Whitney Road bisects the property located within the city limits. The City boundary is approximately two miles in its longest north-south dimension and five miles in its longest east-west dimension.

The majority of the lands located within the City are agricultural fields (improved pasture, row crops, active citrus groves, tree nurseries and fallow crop land), which include an extensive system of agricultural irrigation ditches and surface water conveyances. The M-Canal abuts the northwest and north boundary of the City. Built parcels within the City include a utility site, packing plant, shopping center, and three schools (an Elementary, Middle and High School).

Table 2.7: Existing Land Uses

Existing Land Use	Acreage	% of Total Area
Agriculture	3,900	94%
Commercial	49	1%
Educational	118	3%
Recreation / Open Space	0	0%
Residential Single Family	55	1%
Vacant	0	0%
Right-of-way	5	1%
Total	4,127	100%

Future Land Use

The Future Land Use Element identifies land use designations and permitted development density and intensity coordinated with, the topography and soil characteristics; the location of natural, cultural and historic resources; and the availability of public facilities and services within the City. The Future Land Use Element includes a Future Land Use Map (FLU Map 2.1) depicting the location of uses within the City's jurisdictional limits.

Land Use Categories

The land use categories in the Future Land Use Element define the amount, type, and nature of future development that is allowed in a given location within the City. Each of the Plan land use categories shall be implemented by corresponding zoning districts in the Land Development Regulations. The Land Development Regulations will implement the Plan through more specific regulations governing permitted and conditional uses, site development standards, and performance criteria.

Each of the residential land use categories includes a range of allowable density. The maximum density defines the maximum number of dwelling units per gross acre that development can occur within the specific land use category.

Building intensity for nonresidential land uses are measured by floor area ratio (FAR). FAR is the ratio of total net floor area of a building to the total lot area. Where a mix of uses is required, as within the Downtown Mixed-Use, density and intensity shall be calculated using a combination of FAR and density. Residential density calculations will be based on the gross acreage and the non-residential portions will be based on FAR.

The future land use categories within the City are follows:

Table 2.8: Future Land Uses

Future Land Use	Acreage	% of Total Area
Residential-1	1,875	45%
Residential-2	1,304	32%
Downtown Mixed-Use	560	14%
Civic	185	4%
Open Space and Recreation*	77	2%
Total	4,127**	100%

**A portion of the residential area will be allocated for open space and recreation.*

***An additional 126 acres, 3% of the site, consisting of ROW is included in the overall property boundary that is not accounted for within the Future Land Use designations.*

Solar Energy Overlay

The Plan includes a Solar Energy Overlay in the southwestern area of the City to allow the development of Primary Solar Facilities. The City may, if feasible, establish incentives to encourage the development of Primary Solar Facilities to promote a sustainable community.

Redevelopment

At the time of this Plan preparation, the majority of the lands are either vacant and/or in agricultural use. The existing developed areas may require evaluation for their potential redevelopment in the future.

Land Cover, Natural Resources and Cultural and Historic Resources

The lands located within the City Limits have a long and consistent history of agricultural use which has resulted in the elimination of all native and natural habitat features. There are no environmentally sensitive lands identified within the City. FLU Map 2.2 depicts existing land uses within the City. Minerals and soils within the City are depicted on FLU Map 2.3. Floodplain designations within the City are depicted on FLU Map 2.4. FLU Map 2.5 shows that there are no existing or planned public potable wellfields, cones of influence, or wellhead protection areas within the City. Similarly, FLU Map 2.6 shows that there are currently no wetlands within the City. Additional analyses regarding land cover and natural resources within the City are found in the Conservation Element data and analyses.

There are no known cultural or historic resources located within the boundaries of the City as determined by the Division of Historical Resources in its letter dated June 25, 2015, from the State Historic Preservation Officer. Should cultural or historic resources be identified in the future, appropriate policies will be applied.

Facilities Analysis

Traffic Circulation

The current traffic circulation network within the City consists of Seminole Pratt-Whitney Road, from just north of Sycamore Drive West to just south of 60th Street North. The existing traffic circulation system is illustrated in T.E. Map 3.1. A full analysis of the existing traffic circulation system is provided in the Transportation Element data and analysis. Existing land uses are adequately served by the existing traffic circulation system, and all roads are functioning within the adopted level of service standards. Therefore, there are no traffic circulation system roadway improvements required to meet existing land use needs.

The future traffic circulation network will provide adequate capacity on roadways located within the City. Seminole Pratt Whitney Road is a County maintained road that currently functions as an urban minor arterial roadway. Urban minor arterial roadways provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts (Interstates, Freeways, and Principal arterials), and offer connectivity to the higher arterial system. In an urban context, they interconnect and augment the higher arterial system, provide intra-community continuity and carry local bus routes. Through both the 2023 and 2038 planning periods, Seminole Pratt Whitney Road will continue to serve as an urban minor arterial at its adopted level of service.

A system of major collector roads, including Persimmon Boulevard and Town Center Parkway, will connect to Seminole Pratt Whitney Road, and will provide access into and through the City. Roadways functionally classified as urban major collector roads are intended to distribute and channel trips between local roads and arterials, usually over a distance of greater than three-quarters of a mile. These urban major collector roads will be connected to future land uses by a network of local roads, which network will be determined as the City develops. These road are classified as local roads by default. That is, any road that is not an arterial or collector road is by definition a local road. Except for Seminole Pratt Whitney Road, the City has jurisdiction over all other roads located within the City boundaries. Through both the 2023 and 2038 planning periods, the City's collector and local roads will operated at their adopted levels of service.

A detailed analysis of future roadway conditions, needs, and plans for future transportation facilities is provided in the data and analysis for the Transportation Capital Improvement Elements.

Hurricane Evacuation Routes

There are no designated hurricane evacuation routes within the City. Seminole Pratt-Whitney Road provides access from the City to the designated hurricane evacuation route at US 441.

Future designation of evacuation routes within the City is not anticipated. However, it is essential to ensure the safe evacuation of residents within the City, if required, by monitoring routes connecting the City to

designated evacuation routes. Maintaining capacity on Seminole Pratt Whitney Road at an acceptable level of service will facilitate the evacuation of City residents if necessary.

Public Transit

Public transit service in Palm Beach County is provided by Palm Tran. There is currently no fixed-route transit service within the City.

As the City population grows, the viability of expanding transit service will increase, especially as commercial and other non-residential uses develop along Seminole Pratt Whitney Road. The City will regularly coordinate with Palm Tran, especially during updates of the Palm Tran Transit Development Plan (TDP), to ensure that transit needs of City residents are evaluated and appropriately serviced as the community

Wasterwater

SID will be the retail provider of wastewater service to the City pursuant to an Interlocal Agreement between the two entities. Adequate wastewater capacity exists to serve the projected population through the 2023 and 2038 planning periods. SID will plan and construct wasterwater lines and liftstations to connect new development with the county's wastewater treatment plan. A detailed analysis and projections for wastewater is provided in the data and analysis for the Infrastructure and Capital Improvement Elements.

Solid Waste

The Solid Waste Authority of Palm Beach County is the agency responsible for managing the solid waste disposal and recycling programs within Palm Beach County, including the City. The Solid Waste Authority integrated solid waste management system includes 334 acre landfill, a 2,000 ton per day waste energy facility, a recovered materials processing facility, a biosolid pelletization facility, a vegetative waste processing operation, household hazardous collection facilities and 6 transfer facilities. The SWA's 2017 Landfill Depletion Model projects sufficient landfill capacity through the 2038 planning period with the current lifespan of the facility projected to extend from 2038 to 2051 depending upon various demand and operational assumptions. This projection is based upon countywide growth projections. Based on the average solid waste generation rate for the county as a whole, the City is establishing a solid waste level of service standard of 7.02 pounds per capita per day, which can be maintained through both the 2023 and 2038 planning periods. Further details and analysis of the solid waste service is provided in the Infrastructure Element data and analysis.

Drainage

SID provides and maintains drainage facilities for the City pursuant to an Interlocal Agreement between the two entities. SID's adopted work plan provides for the drainage system to be developed in phases as development occurs within the City. As currently planned, the drainage system will consist of approximately 607 acres of lakes and will accept runoff from common areas, collector roads, and residential and non-residential development areas. FLU Map 2.4 shows the Federal Emergency Management Agency flood designations within the City. The master water management system will continue to discharge into the M-2 Canal. Drainage for the City can be maintained through the 2023 and 2038 planning periods. The City is located within the SFWMD C-51 Basin and is subject to the SFWMD C-51 Basin Criteria in addition to other

stormwater regulations. The data and analysis for the Infrastructure and Capital Improvement Elements. provides further details on stormwater facilities including the established level of service standards.

Potable Water

SID will be the retail provider of potable water within the City pursuant to an Interlocal Agreement between the two entities. This ensure adequate potable water is available to serve the projected population for through the 2023 and 2038 planning periods. Detailed analysis and projections related to potable water facilities and services is provided in the data and analysis for the Infrastructure and Capital Improvement Elements.

Reuse Water

SID will be the retail provider of potable water within the City pursuant to an Interlocal Agreement between the two entities. A separate interlocal agreement between SID and Palm Beach County for the purchase of bulk reuse water, dated April 20, 2010, gives SID a "prior reserve capacity" of reuse water to be provided by the county. The amount of reuse water is contingent upon the amount needed by Florida Power and Light. The agreement calls for the county to make available 2.85 MGD of reuse water in 2017, which is scheduled to increase to 3.85 MGD by 2025. SID will not produce its own reuse water, but will receive reuse water pursuant to this agreement with the county. At this time, a re-pump and storage facility and some transmission pipes are connected and in operation. Further expansion of the distribution system within the City will occur as the City develops. Additional analysis on reuse water supply and demand projections is provided in the data and analysis for the Infrastructure and Capital Improvement Elements.

Parks and Recreation

There are no existing parks within the City. A district park is planned within the City to serve future residents. The park is indicated on the Future Land Use Map (FLU Map 2.1) on the west side of Seminole Pratt Whitney Road, immediately south of the Seminole Ridge Community High School and is comprised of approximately 50 acres.

As development of the City occurs, a range of parks from tot-lots and village greens, to neighborhood parks and passive parks, will be distributed within or near neighborhoods. Pedestrian and bicycle trails will be provided throughout the City.

The City is currently serviced by, the following Palm Beach County regional and district parks and beaches: Okeeheelee North Park (regional), Phil Foster Park (beach) and Seminole Palms Park (district).

Additional analyses of parks and open space facilities serving the City is included in the Recreation and Open Space Element data and analysis.

Public Schools

Three public schools exist within the City boundaries including Golden Grove Elementary School, Western Pines Middle School, and Seminole Ridge High School. The City lies within the district boundaries of Golden

Grove Elementary and Seminole Ridge High. In 2017, the School District adopted a new district for Western Pines Middle School, which excludes students from the City. Therefore, students within the City will be served by Osceola Creek Middle School, which is located to the northwest of the City. There is sufficient capacity at schools within and adjacent to the City to serve the City's student population through the 2023 planning period. The City will coordinate with the School District to ensure capacity exists to serve the City's population thought the 2038 planning period.

CITY OF WESTLAKE

TECHNICAL DOCUMENT

Data & Analysis

TRANSPORTATION

2017

CHAPTER 3. TRANSPORTATION ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Transportation Element is to plan for a safe, convenient multimodal transportation system, coordinated with the Future Land Use Map and Map Series and designed to support all elements of the Plan. This element addresses the transportation facilities which are to be provided within the City. These include:

- Roads
- Bicycle and Pedestrian Facilities
- Mass Transit

Each of these facility types are analyzed below separately.

TRAFFIC CIRCULATION NETWORK

Existing Traffic Circulation

There is limited existing development within the City's limits. Existing development is primarily located along Seminole Pratt Whitney Road. This development includes a high school, a community shopping center, and a produce packing plant. The middle and elementary schools located in the northeast corner of the City are served by 140th Avenue North and 60th Street North. Both 140th Avenue North and the existing sections of 60th Street North are located outside of the City. The remainder of the land within the City limits is currently in agricultural use.

The current traffic circulation network within the City consists of Seminole Pratt Whitney Road, from just north of Sycamore Drive West to just south of 60th Street North. This road link is currently under construction to be widened to a four lane divided facility. The existing traffic circulation system is illustrated in TE Map 3.1. The existing functional classification of the road network is also illustrated in TE Map 3.1, as is the existing road network jurisdiction. Palm Beach County has jurisdiction over County roads, including Seminole Pratt Whitney Road, which bisects the City. The existing level of service on Seminole Pratt Whitney Road was determined using the FDOT generalized level of service tables for peak hour and peak direction. The existing road level of service is illustrated in TE Map 3.2. The roads indicated to be "Level D or Better" became operational as of November 1, 2017; therefore, precise level of service for these roads is not available. The existing road characteristics are summarized in Table 3.1 below.

Table 3.1: Existing (2016) Peak Hour Peak Direction LOS

Road Name	From	To	Lanes	Adopted LOS	Road Classification	Peak Hour Peak Direction Capacity	2016 Peak Hour Peak Direction Volume	Current LOS
Seminole Pratt-Whitney Road	N. of Sycamore Drive West	Seminole Ridge Community High School north entrance	4LD	D	Urban Minor Arterial	2,000	999	C
Seminole Pratt-Whitney Road	Seminole Ridge Community High School north entrance	S. of 60th Street North	4LD	D	Urban Minor Arterial	2,000	999	C

Source: FDOT LOS Tables (12/18/12) and FDOT Transportation Statistics Office

As shown in Table 3.1, existing land uses are adequately served by the existing traffic circulation system, and all roads are operating within the adopted level of service standards. Therefore, there are no traffic circulation system road improvements required to meet existing land use needs.

Future Traffic Circulation

Through the 2023 and 2038 planning periods, it is estimated that the resident permanent population will grow to 298 and 15,030 people, respectively. Residential uses will be located throughout the City, with single-family detached housing located further east and west of Seminole Pratt Whitney Road, and higher density housing located closer to and within the Downtown Mixed Use area planned along Seminole Pratt Whitney Road.

It is also estimated that, in addition to existing non-residential uses (two schools, a shopping center, and a produce packing plant), there will be additional non-residential uses constructed during the 2023 and 2038 planning periods, including commercial, office, industrial, and civic uses. Non-residential uses will be located primarily within the Downton Mixed Use Future Land Use Category located along either side of Seminole Pratt Whitney Road.

The future traffic circulation network will provide adequate capacity on roads located within the City to meet the projected population and residential and non-residential development. Seminole Pratt Whitney Road is a County maintained road that currently functions as an urban minor arterial road. Urban minor arterial roads provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts (Interstates, Freeways, and Principal arterials), and offer connectivity to the higher arterial system. In an urban context, they interconnect and augment the higher arterial system, provide intra-community continuity and carry local bus routes. Through the planning periods, Seminole Pratt Whitney Road will continue to serve as an urban minor arterial.

In addition to the existing urban minor arterial road, Seminole Pratt Whitney Road, a system of major collector roads, including Persimmon Boulevard and Town Center Parkway, will connect to Seminole Pratt Whitney Road and will provide access into and through the City. Roads functionally classified as urban major collector roads are intended to distribute and channel trips between local roads and arterials, usually over a distance of greater than three-quarters of a mile.

These urban major collector roads will be connected to future land uses by a network of local roads, which network will be determined as the City develops. These roads are classified as local roads by default. That is, any road that is not an arterial or collector road is by definition a local road. Except for Seminole Pratt Whitney Road, the City has jurisdiction over all other roads located within the City boundaries.

TE Map 3.4 illustrates the 2038 Future Traffic Circulation Network which will accommodate traffic circulation through the 2038 planning period. TE Map 3.5 depicts the 2038 Future Functional Classification of the City's roads. Estimated future right-of-way required for the Future Traffic Circulation Network has been determined based on typical cross-sections, and is also illustrated on TE Map 3.5. Table 3.2, below, summarizes the road characteristics and road levels of service for the future functionally classified road system.

Table 3.2: Year 2038 Peak Hour Peak Direction LOS

Road Name	From	To	Lanes	Adopted LOS	Road Classification	Peak Hour Peak Direction Capacity	2038 Peak Hour Peak Direction Volume	2038 LOS
Seminole Pratt-Whitney Road	N. of Sycamore Drive West	Persimmon Boulevard	6LD	D	Urban Minor Arterial	3,020	2,141	C
Seminole Pratt Whitney Road	Persimmon Boulevard	S. of 60th Street North	4LD	D	Urban Minor Arterial	2000	1,843	C
East Town Center Parkway	Seminole Pratt Whitney Road	West Roundabout	2LU	D	Urban Major Collector	675	570	D
East Town Center Parkway	West Roundabout	60th Street N.	4LD	D	Urban Major Collector	1,800	864	C
Southeast Town Center Parkway	Seminole Pratt Whitney Road	West Roundabout	2LU	D	Urban Major Collector	675	448	D
Southwest Town Center Parkway	West Town Center Parkway	Seminole Pratt Whitney Road	2LU	D	Urban Major Collector	675	223	C
West Town Center Parkway	Western Terminus	Southwest Town Center Parkway	2LU	D	Urban Major Collector	675	95	C
West Town Center Parkway	Southwest Town Center Parkway	Seminole Pratt Whitney Road	2LU	D	Urban Major Collector	675	340	D
Persimmon Boulevard	Seminole Pratt Whitney Road	Persimmon East	4LD	D	Urban Major Collector	1,800	1,014	C
Persimmon/ Town Center Connector	Persimmon Boulevard	East Town Center Parkway	2LD	D	Urban Major Collector	709	423	D

Source: FDOT LOS Tables (12/18/12)

The City's future traffic circulation network will be developed in coordination with the plans of the Florida Department of Transportation (FDOT), Palm Beach County, and the Palm Beach Metropolitan Planning Organization (MPO).

Within the next five years (through 2023), it is anticipated that there will be some residential development in areas east of Seminole Pratt Whitney Road. A portion of the future major collector road network will be required to accommodate this development. TE Map 3.6 illustrates the required traffic circulation network through the 2023 planning period. TE Map 3.8 depicts the 2023 Future Functional Classification Right-of-Way required for the 2023 Future Traffic Circulation Network. The road characteristics and level of service for Year 2023 is summarized below in Table 3.3:

Table 3.3: Year 2023 Peak Hour Peak Direction LOS

Road Name	From	To	Lanes	Adopted LOS	Road Classification	Peak Hour Peak Direction Capacity	2023 Peak Hour Peak Direction Volume	2023 LOS
Seminole Pratt-Whitney Road	N. of Sycamore Drive West	Persimmon Blvd	4LD	D	Urban Minor Arterial	2,000	1,735	C
Seminole Pratt Whitney Road	Persimmon Blvd	East Town Center Parkway	4LD	D	Urban Minor Arterial	2,000	1,716	C
Seminole Pratt Whitney Road	East Town Center Parkway	60th Street	4LD	D	Urban Minor Arterial	2,000	1,737	C
East Town Center Parkway	Seminole Pratt Whitney Road	Eastern Terminus	2LU	D	Urban Major Collector	675	578	D
Persimmon Blvd	Seminole Pratt Whitney Road	Eastern Terminus	2LU	D	Urban Major Collector	832	385	C

Source: FDOT LOS Tables (12/18/12)

While Traffic Circulation Network is expected to meet adopted level of service standards in both the 2023 and 2038 planning periods given the planned future development of the City, changes to planned developments could occur over time that, if not monitored, result in transportation deficiencies. For this reason, the City will implement a Mobility System to review proposed development projects with respect to transportation standards. The Mobility System will be implemented through the Land Development Regulations that will specify development review

procedures and transportation mitigation options, including proportionate share for new development. The Mobility System will also provide for regular and periodic monitoring of transportation facilities by the City to ensure that adopted transportation standards are maintained.

Finally, to provide for flexibility in development and to respond to long-term changes in the needs of the City's residents, the Land Development Regulations may provide for a land use equivalency process, through which exchanges of different land uses, consistent with the Future Land Use Map, may be accomplished so long as the proposed development does not result in additional transportation impacts.

EVACUATION ROUTES

There are no existing designated evacuation routes within the City. However, Seminole Pratt Whitney Road provides access to the designated evacuation route at US 441.

Future designation of evacuation routes within the City is not anticipated. However, it is essential to ensure the safe evacuation of residents within the City, if required, by monitoring routes connecting the City to designated evacuation routes. Maintaining capacity on Seminole Pratt Whitney Road at an acceptable level of service will facilitate the evacuation of City residents if necessary.

PUBLIC TRANSIT

Public transit service in Palm Beach County is provided by Palm Tran. There is currently no fixed-route service within the City.

Americans with Disabilities Act (ADA) paratransit services are provided through Palm Tran Connection. This service is provided within 3/4 miles of a Palm Tran fixed-route bus service. Since no part of the City is currently within 3/4 mile of a Palm Tran fixed-route, Palm Tran Connection ADA paratransit services are not currently available within the City.

Transportation Disadvantaged services in Palm Beach County are also provided by Palm Tran Connection. Service is available to anywhere within Palm Beach County, including the City, for qualifying individuals.

As the City population grows, the viability of expanding transit service will increase, especially as commercial and other non-residential uses develop along Seminole Pratt Whitney Road. The City will regularly coordinate with Palm Tran, especially during updates of the Palm Tran Transit Development Plan (TDP), to ensure that transit needs of City residents are evaluated and appropriately serviced as the community grows.

AVIATION

No airports, aviation facilities or other aviation-related developments currently exist or are proposed within the City. The closest airstrip is approximately 6.03 miles to the south in a fly-in fly-out residential neighborhood called the Wellington Aero Club. Palm Beach International Airport is

approximately 11.3 miles southeast of the City and North Palm Beach County Airport is approximately 6.27 miles to the Northeast. The William P. Gwinn Airport, a private airport, is approximately 9.9 miles north of the City. A site plan has been approved for an additional airstrip approximately 8 from the City on Flying Cow Ranch Road. These measurements are based on the City border closest to the respective airports. Therefore, no airports are within or immediately adjacent to the City, and there are no issues concerning land use compatibility with airports.

PORTS

The City does not contain and is not adjacent to any coastal areas or natural water bodies. The Port of Palm Beach is approximately 13.13 miles to the east of the City.

BICYCLE AND PEDESTRIAN FACILITIES

A multi-modal path has been constructed along both sides of Seminole Pratt Whitney Road from the southern City boundary to the northern entrance of Seminole Ridge Community High School and from the northern entrance of Seminole Ridge Community High School to the northern City boundary, on the east side of Seminole Pratt Whitney Road. There are existing bike lanes along Town Center Parkway in addition to a multi-modal path in the parkway area along the road. Existing bicycle and pedestrian facilities are depicted on TE Map 3.3.

The City envisions a multi-modal transportation system that appropriately utilizes a combination of roads, public transit, bicycle and pedestrian facilities, and other elements of complete streets to serve its residents and visitors to the City. As part of the City's overall vision, non-motorized transportation will continue to be accommodated and encouraged to reduce the need for motorized transportation within the City, especially between residential and non-residential uses. As the City develops, a robust bicycle/pedestrian network is planned to accommodate non-motorized uses along the future traffic circulation network. This network will include dedicated bicycle facilities, sidewalks, and multi-modal paths. The pedestrian and bicycle facilities plan through the 2023 planning period is depicted on TE Map 3.9. TE Map 3.7 illustrates the future bicycle and pedestrian network along collector and arterial roads through the 2038 planning period.

As part of the recreational amenities with the City, trails and other facilities may be established both along the road network and in non-developed/open space areas. The City will take steps to ensure that where trails and other transportation facilities are co-located, appropriate design measures are taken to facilitate the safety of all travelers. This will also apply where trails cross other transportation facilities.

CITY OF WESTLAKE

TECHNICAL DOCUMENT

Data & Analysis

INFRASTRUCTURE

2017

CHAPTER 4. INFRASTRUCTURE ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Infrastructure Element is to identify and describe the necessary public facilities and services needed to accommodate the City's population through the 2023 and 2038 planning periods. This element addresses the public facilities provided within the City which include:

- Potable Water
- Wastewater
- Solid Waste
- Drainage
- Ground Water Recharge

The Seminole Improvement District (SID) is the exclusive retail provider of potable water, reuse water, and wastewater facilities in the City, and is empowered to construct and maintain the facilities related to those services and drainage. Pursuant to the City Charter, the City may not duplicate services provided by SID. The relationship between the City and SID for provision of those services and facilities is detailed in the Interlocal Agreement, while SID's specific plans for facilities construction, maintenance, and expansion are contained in its Water Control Plan dated October 13, 2015 and its Water, Wastewater and Reuse Utilities Master Plan dated April 29, 2015. The SID utility service area is depicted on INF Map 4.1.

POTABLE WATER

SID is the retail provider of potable water within the City. There is an Interlocal Agreement between SID and Palm Beach County, dated April 18, 2006, which provides that SID can purchase bulk water from the County at a rate of up to 5.0 MGD for the next thirty (30) years with provisions to extend the agreement for 50 or more years. SID and Palm Beach County have invested in significant infrastructure in the City's area to provide potable water service. The development of the City will not require additional capacity to provide potable water to the City; rather it utilizes existing excess capacity from existing infrastructure. SID maintains water distribution facilities for service within the City and will expand internal potable water distribution lines concurrent with development within the City.

The City's level of service standard for potable water is 110 gallons per capita per day (gpd) for residential uses and 150 gallons per 1,000 sq. ft. per day for non-residential uses with the following exceptions. Schools have a level of service standard of 18 gpd per student. Hotels have a level of service standard of 100 gpd per room. Parks have a level of service standard of 10 gpd per visitor. The per-capita level of service will be applied to dwelling units using a 2.65 average population per household (PPH) unless it can be demonstrated that a different PPH is applicable. The City will continue to coordinate with SID to monitor and evaluate future operating demands as the City increases utility users and to adjust the level of service standard if needed through the planning periods.

The table below provides an analysis of potable water demand over the short and long-term planning periods. The first section identifies the level of service standards used for the planning analysis. The second section identifies existing and projected population and uses that require potable water. Existing non-residential square footages include the Grove Market commercial area and the packing house parcel which includes industrial and office uses. Square footage numbers are from the Palm Beach County property appraiser parcel database. Existing student numbers are based on school capacity numbers from the Palm Beach County School District 2016/17 Work Plan and anticipated students from a potential new school. New development square footage, hotel rooms, and college students are based on the Minto West development order. Projections of recreation and park day time visitors are based on averages derived from the National Recreation and Park Association 2016 study of park usage entitled "NRPA Americans' Engagement with Parks Survey." The third section computes the current and projected demand for the 2023 and 2038 planning periods.

The anticipated facilities needed for the 2023 and 2038 planning periods are identified in Table 4.1 and are also depicted on INF. Map 4.2 and INF. Map 4.6.

Table 4.1: Potable Water Analysis

Potable Water Level of Service			
	Gallons Per Da		
Per Person	110		
Per square foot for Commercial, Civic, and Industrial	0.15		
Per Student	18		
Per Hotel Room	100		
facilities	10		
Demand Generators			
	2018	2023	2038
population)	298	3,803	15,791
Industrial S.F.	180,581	180,581	180,581
S.F.	75,000	650,000	2,200,000
S.F.	255,581	830,581	2,380,581
K-12 Students	4,463	4,463	5,433
College Students	0	0	3,000
Total Students	4,463	4,463	8,433
Hotel Rooms	0	150	150
Recreation and Park Daytime Visitors	0	650	2,600
Demand Projections			
	2018	2023	2038
population)	32,780	418,330	1,737,010
Total Commercial, Civic, and Industrial	38,337	124,587	357,087
Total Students	80,334	80,334	151,794
Hotel Rooms	0	15,000	15,000
Recreation and Park Day Time Visitors	0	6,500	26,000
Total Demand (Gallons Per Day)	151,451	644,751	2,286,891

The City will adopt a Water Supply Facilities Work Plan for the City that will identify water resource development and water supply development options consistent with the Lower East Coast Regional Water Supply Plan. The City is required to update the Infrastructure Element within 18 months of any update to the Lower East Coast Regional Water Supply plan by the South Florida Water Management District (SFWMD).

WASTEWATER

SID is the retail provider of wastewater services to the City. SID has an Interlocal Agreement with Palm Beach County (the same interlocal agreement that addresses potable water) to purchase wastewater capacity at a rate up to 4.0 MGD. SID and Palm Beach County have invested in significant infrastructure in the Westlake area to provide wastewater service. The development of the City will not require additional capacity to provide wastewater service to the City, rather it will utilize existing excess capacity, thereby discouraging urban sprawl. SID has decommissioned its wastewater treatment facility but maintains pump stations, force mains, collection facilities and interconnects to the County system for wastewater service within the City. The City will coordinate with SID to expand internal wastewater distribution lines concurrent with development within the City.

The City's level of service standard for wastewater is 100 gallons per capita per day (gpd) for residential uses and 150 gallons per 1,000 sq. ft. per day for non-residential uses with the following exceptions. Schools have a level of service standard of 18 gpd per student. Hotels have a level of service standard of 100 gpd per room. Parks have a level of service standard of 10 gpd per visitor. The per-capita level of service will be applied to dwelling units using a 2.65 average population per household (PPH) unless it can be demonstrated that a different PPH is applicable. The City will continue to coordinate with SID to monitor and evaluate future operating demands as the City increases utility users and to adjust the level of service standard if needed through the planning periods.

The table below provides an analysis of wastewater demand over the 2023 and 2038 planning periods. The first section identifies the level of service standards used for the planning analysis. The second section identifies existing and projected population and uses that require wastewater service. Existing non-residential square footages include the Grove Market commercial area and the packing house parcel which includes industrial and office uses. Square footage numbers are from the Palm Beach County property appraiser parcel database. Student numbers are based on school capacity numbers from the Palm Beach County School District 2016/17 Work Plan and anticipated students from a potential new school. Projections of recreation and park day time visitors are based on averages derived from the National Recreation and Park Association 2016 study of park usage entitled "NRPA Americans' Engagement with Parks Survey." The third section computes the current and projected demand for the 2023 and 2038 planning periods. The anticipated infrastructure facilities needed for the 2023 and 2038 planning periods are identified in Table 4.1 and also depicted on INF Map 4.2 and INF Map 4.5.

Table 4.2: Wastewater Analysis

Wastewater Level of Service Standard			
	Gallons Per Day		
Per Person	100		
Per square foot for Commercial, Civic, and Industrial	0.15		
Per Student	18		
Per Hotel Room	100		
Per visitor of park and recreation facilities	10		
Demand Generators			
	2018	2023	2038
Population (excluding hotel population)	298	3,803	15,791
Existing Commercial, Civic, and Industrial	180,581	180,581	180,581
New Commercial, Civic, and Industrial S.F.	75,000	650,000	2,200,000
Total Commercial, Civic, and Industrial S.F.	255,581	830,581	2,380,581
K-12 Students	4,463	4,463	5,433
College Students	0	0	3,000
Total Students	4,463	4,463	8,433
Hotel Rooms	0	150	150
Recreation and Park Daytime Visitors	0	650	2,600
Demand Projections			
	2018	2023	2038
Population (excluding hotel population)	29,800	380,300	1,579,100
Total Commercial, Civic, and Industrial	38,337	124,587	357,087
Total Students	80,334	80,334	151,794
Hotel Rooms	0	15,000	15,000
Recreation and Park Day Time Visitors	0	6,500	26,000
Total Demand (Gallons Per Day)	148,471	606,721	2,128,981

REUSE WATER

SID will provide development within the City with reuse water for irrigation. If reuse is not available from the County, irrigation may be supplemented by canal water as allowed by permit with the South Florida Water Management District.

An interlocal agreement between SID and Palm Beach County for the purchase of bulk reused water dated April 20, 2010 gives SID a "prior reserve capacity" of reuse water to be provided by the county. The amount of reuse water is contingent upon the amount needed by Florida Power and Light. The agreement calls for the county to make available 2.85 MGD of reuse water in 2017, which is scheduled to increase to 3.85 MGD by 2025. SID will not produce its own reuse water, but will receive reuse water pursuant to this agreement with Palm Beach County. At this time, a re-pump and storage facility and some transmission pipes are connected and in operation. Further expansion of the distribution system within the City will occur as the City develops.

The anticipated infrastructure facilities d for the 2023 and 2038 planning periods are depicted on INF Map 4.2 and INF Map 4.4.

SOLID WASTE

The Solid Waste Authority (SWA) of Palm Beach County is a dependent special district which is responsible for managing solid waste disposal and recycling programs within Palm Beach County pursuant to a Special Act of the Florida Legislature in 2001. The SWA integrated solid waste management system includes a 334 acre landfill, a 2,000 ton per day waste to energy facility, a 3,000 ton per day mass burn waste-to-energy plant, a recovered materials processing facility, a biosolid pelletization facility, a vegetative waste processing operation, household hazardous collection facilities and 6 transfer facilities.

The SWA's 2017 Landfill Depletion Model projects sufficient landfill capacity through the 2038 planning period with the current lifespan of the facility projected to extend from 2038 to 2051 depending upon various demand and operational assumptions. This projection is based upon countywide growth projections. Based on the average solid waste generation rate for the county as a whole, the City is establishing a solid waste level of service standard of 7.02 pounds per capita per day, which can be maintained through both the 2023 and 2038 planning periods.

DRAINAGE

SID manages drainage throughout the City. The land area of the City is currently drained through the M-2 Canal. The ultimate discharge point for the area is the South Florida Water Management District C-51 Canal. There are numerous agricultural ditches and canals currently running through the City. The system was created for citrus agricultural use and provided both irrigation water supply and flood control within the area. Permits for peak discharge up to 2-inches in 24 hours via M-2 Canal to C-51 Canal are in place for SID, which can accommodate the City's future land uses shown Future Land Use Map (FLU Map 2.1).

SID will continue to provide drainage for the City. SID's master drainage management plan currently provides for a drainage system which will consist of an extensive lake system to be constructed in phases to accept runoff from common areas, collector roads, and residential and non-residential development areas. The water management system will continue to discharge into the M-2 Canal.

Drainage for the City can be maintained through the 2023 and 2038 planning periods. The anticipated infrastructure facilities needed for the 2023 and 2038 planning periods is depicted on INF Map 4.3 and INF Map 4.7.

The City is located within the SFWMD C-51 Basin and is subject to the SFWMD C-51 Basin Criteria in addition to other stormwater regulations. The proposed minimum building floors will be designed at or above the higher of the peak stage in the 100-year, 3-day, zero discharge design storm or the SFWMD's C- 51 Basin 100-year stage. As set forth in Table 4.3A below, flood protection within the City will be provided for various storm events based on the rainfall depths provided by the isoheytal graphs in the SFWMD's Environmental Resource Permit Applicant's Handbook Volume II.

Table 4.3A Level of Service Standard

Storm Event	Intensity of Rainfall Depth (in.)	Drainage Level of Service
10 year-1 day	7.4	Local Roads and Parking Lots
25 year-3 day	12	Arterial Roads, Perimeter Berm, and Peak Discharge
100 year-3 day, zero discharge	14	Finished Floors

Source: Isoheytel Graphs SFWMD's Environmental Resource Permit Applicant's Handbook Volume II

The South Florida Water Management District (SFWMD) maintains and implements design elevation guidelines for buildings and roadway construction that address possible flooding, as illustrated in the Table 4.3B below.

Table 4.3B Level of Service Standard

Elevation (NAVD 88)	Drainage Level of Service
18.23	Local Road Crown
18.23	Parking Lots
19.23	Arterial Road Crown
19.83	Finished Floors

Source: SFWMD Conceptual Permit 50-0021-S

GROUND WATER RECHARGE

The City is located within the jurisdiction of the SFWMD, and more specifically, within the SFWMD Lower East Coast (LEC) Planning Area. The principal ground water resource for the LEC Planning Area is the Surficial Aquifer System. The extensive water management and lake system within the City will provide for recharge of the local surficial aquifer consistent with the requirements of the SFWMD.

CITY OF WESTLAKE

TECHNICAL DOCUMENT | Data & Analysis

CONSERVATION

2017

CHAPTER 5. CONSERVATION ELEMENT DATA AND ANALYSIS

INTRODUCTION

This Element addresses the conservation, use, and protection of natural resources in the City, including air, water, water recharge areas, wetlands, waterwells, estuarine marshes, soils, beaches, shores, floodplains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, marine habitat, minerals, and other natural and environmental resources to the extent they existing within the City, including factors that affect energy conservation.

NATURAL RESOURCES

The City is centrally located in the interior of Palm Beach County, almost equidistant from the Intracoastal Waterway and Atlantic Ocean to the east and Lake Okeechobee to the West. Thus, the City does not have any marine habitat, beaches, fisheries, estuarine marshes, harbors, bays or shorelines within its jurisdiction.

Lands within the City have been in active agriculture for over 50 years, which has resulted in the removal of most natural features and habitat within the City, including wildlife habitat and wetlands. Further, though silviculture has been conducted on the property, there is no naturally occurring forest habitat within the City.

The City's climate, soils and minerals, air, floodplains, water resources, ground water recharge areas, land cover, natural habitats including wetlands, wildlife, and other environmentally sensitive lands are analyzed in detail below.

Climate

The climate of an area affects the amount and type of development, including building practices and structural and design features. Use of climate-appropriate practices supports the efficient use of energy sources, greenhouse gas reduction, and overall resource conservation. The U.S. Department of Energy has designated Building America climate regions based on the International Energy Conservation Code (IECC). Palm Beach County is in the Hot-Humid climate region. *(Building America Best Practice Series. Volume 7.3. Guide to Determining Climate Regions by County. U.S. Department of Energy. August 2015).*

The National Climate Data Center provides the normal weather variables for temperature and precipitation for Palm Beach County International Airport. The normal temperatures and precipitation amounts will be slightly different for the City, however that data is not currently available. These normal variable are shown in Table 5.1 and Figures 5.1 and 5.2 below. It should be noted that there is some evidence that the summer season may slowly become hotter and longer due to global warming. ("A brief update: Sea Level Rise and Climatic Trends, SFWMD Palm Beach County Water Resources Task Force, April 16, 2015).

Table 5.1: Temperature (°F) and Precipitation (Inches) by Month at Palm Beach County International Airport

Month	Precipitation (Inches)	Minimum Temperature	Average Temperature	High Temperature
January	3.13	56.8	65.7	74.6
February	2.82	59.1	67.8	76.5
March	4.59	62.2	70.5	78.7
April	3.66	65.8	73.8	81.7
May	4.51	71	78.4	85.7
June	8.3	74.3	81.4	88.4
July	5.76	75.5	82.7	89.9
August	7.95	75.9	83	90.1
Septembe	8.35	75.2	81.8	88.3
October	5.13	71.7	78.3	84.9
Novembe	4.75	65.5	72.8	80.1
Decembe	3.38	60	68.1	76.2

Source: National Climate Data Center

Figure 5.1: Temperature (°F) by Month at Palm Beach County International Airport

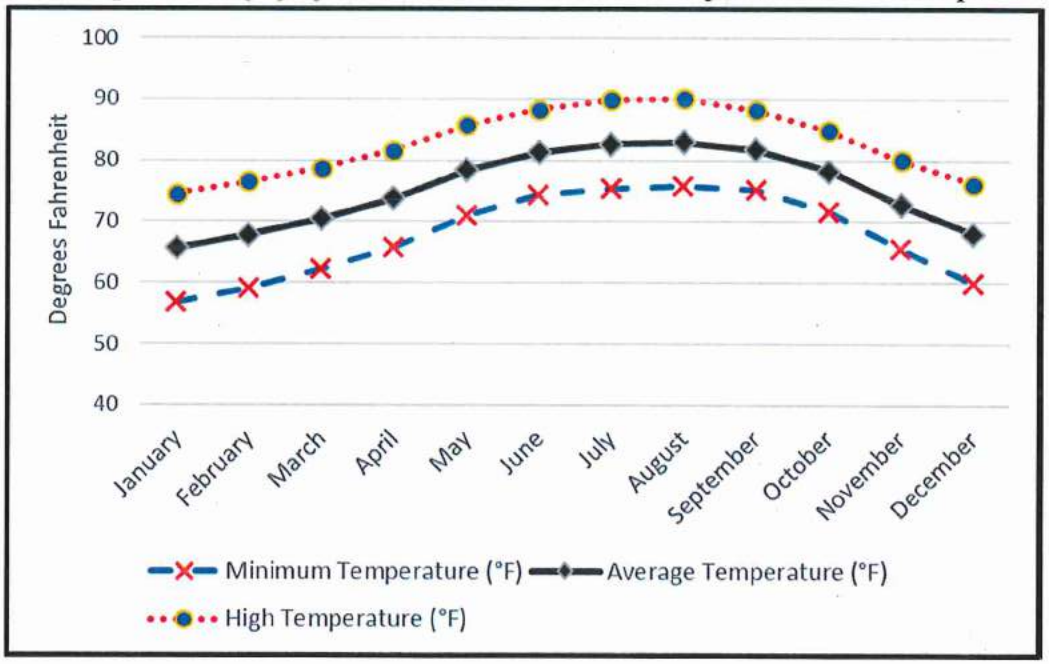
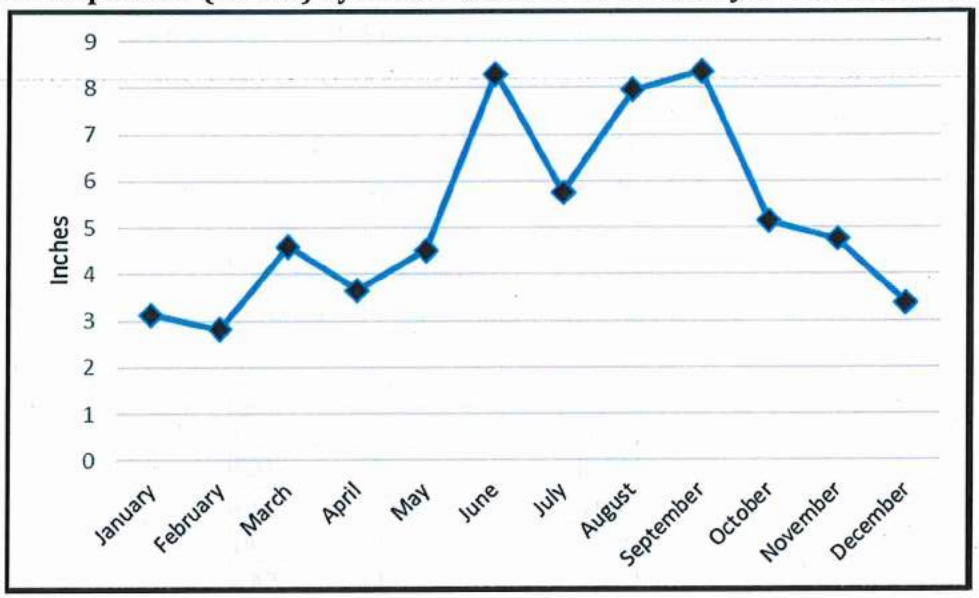


Figure 5.1: Precipitation (Inches) by Month at Palm Beach County International Airport



Useful measures for considering the impact of the climate, as well as month-to-month weather conditions, on energy cost and conservation are "heating degree days" and "cooling degree days." The National Weather Service of the National Oceanic and Atmospheric Administration provides the following explanation.

> *A "degree day" is a unit of measure for recording how hot or how cold it has been over a 24-hour period. The number of degree days applied to any particular day of the week is determined by calculating the mean temperature for the day and then comparing the mean temperature to a base value of 65 degrees F. (The "mean" temperature is calculated by adding together the high for the day and the low for the day, and then dividing the result by 2.)*
>
> *If the mean temperature for the day is, say, 5 degrees higher than 65, then there have been 5 cooling degree days. On the other hand, if the weather has been cool, and the mean temperature is, say, 55 degrees, then there have 10 heating degree days (65 minus 55 equals 10).*
>
> *Why do we want or need to know the number of "degree days?" It is a good way to generally keep track of how much demand there has been for energy needed for either heating or cooling buildings. The cooler (warmer) the weather, the larger the number of "heating (cooling) degree days"... and the larger the number of heating (cooling) degree days, the heavier the demand for energy needed to heat (cool) buildings.*
> https://www.weather.gov/ffc/degdays

Palm Beach County has a high number of cooling degree days, days for which air conditioners must be running and where improved building insulation, materials, design, orientation, and vegetation can reduce energy use and costs.

The Florida Climate Center, Office of the State Climatologist at Florida State University provides data on heating and cooling degree days for the West Palm Beach International Airport. These are shown in Table 5.3 below. There are 4,255 degree days for the Palm Beach County International Airport.

Table 5.3: 1981-2010 Degree Days for Palm Beach County International Airport

	Heating Degree Days	Cooling Degree Days
January	86	108
February	48	127
March	24	193
April	4	267
May	0.5	414
June	0	490
July	0	549
August	0	558
September	0	502
October	1	413
November	11	245
December	59	155

Source: Florida Climate Center

People, buildings, and infrastructure are also affected by severe weather conditions. Palm Beach County has been affected by several hurricanes, flooding events, and severe wind events in recent years. Hurricane events include Irma in 2017, Wilma in 2005, and Jeanne and Frances in 2004. Flooding conditions have occurred due to unusual convergences of rain producing conditions, such as occurred in January of 2014 (https://www.weather.gov/mfl/palm_beach_flood_010914). High wind events such as tornadoes are relatively rare, but do occur (https://www.weather.gov/mfl/pb_tornado).

Climate related events such as sea level rise may also affect Palm Beach County in the long-term future. All of Florida will be impacted directly or indirectly if the high sea level rise forecasts are realized. According to the South Florida Water Management District (SFWMD), sea level rise may affect flood control, water supply, natural systems, and water quality. Key vulnerabilities include reduced flood discharge capacity, reduced flood capacity in secondary canal systems, saltwater intrusion, and inundation of coastal wetlands and changes in ecology.

Fortunately for the City, Palm Beach County is in relatively better condition than other counties in southeast Florida due to its topography and the existence of fewer waterways west of the Intercoastal Waterway. ("Vulnerability Analysis for Southeast Florida to Sea Level Rise." "Climate Change and Sea Level Rise Planning and Adaptation Strategies." SFWMD. 2010; and "A brief update: Sea Level Rise and Climatic Trends," SFWMD Palm Beach County Water Resources Task Force. April 16, 2015). Due to the City's location west of the coastal area, it is less likely to experience direct inundation from sea level rise that may occur in the coastal communities, especially along waterways. ("Analysis of the Vulnerability of Southeast Florida to Sea Level

Rise." Southeast Florida Regional Compact Climate Change.) Several resources are available regarding this issue and may be found at www.flseagrant.org/climate-change/sea-level-rise/ and https://coast.noaa.gov/digitalcoast/stories/slr.html.

Soils and Minerals

The general distribution of soils within the City is shown on FLU Map 2.3, which is based on the soil survey of Palm Beach County conducted by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service. (www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=FL).

The survey identifies the following soil series in the City: Arents-Urban Land Complex (0 To 5 % Slopes), Arents-Urban Land Complex (Organic Substratum), Boca Fine Sand, Chobee Fine Sandy Loam, Floridana Fine Sand, Hallandale Fine Sand, Okeelanta Muck, Pineda Fine Sand, Pinellas Fine Sand, Riviera Fine Sand, Riviera Fine Sand (Depressional), Tequesta Muck, Wabasso Fine Sand and Water. The USDA describes these soils as follows:

Arents-Urban Land Complex – This complex consists of nearly level, somewhat poorly drained, sandy soils and urban land overlying organic soils. These areas were formerly organic marshes and swamps that were filled for urban use. This complex is primarily in the vicinity of Lake Mangonia and Clear Lake in the Palm Springs area, but it is also in a few places along the Intracoastal Waterway. Arents consist of lawns, vacant lots, undeveloped areas, and other open land. Urban land consists of areas covered by streets, side- walks, driveways, houses, and other structures.

Boca Fine Sand – The Boca series consists of moderately deep, poorly drained and very poorly drained, moderately permeable soils in low broad flats, poorly defined drainage-ways and depressions of the flatwoods and adjacent tidal flats. They formed in sandy and loamy marine sediments deposited over limestone bedrock.

Chobee Fine Sandy Loam –The Chobee series consists of very deep, very poorly drained, slowly to very slowly permeable soils in depressions, flats, and occasionally on river flood plains in the lower Coastal Plain. They formed in thick beds of loamy marine sediments.

Floridana Fine Sand – The Floridana series consists of very deep, very poorly drained, slowly to very slowly permeable soils on low broad flats, flood plains, and in depressional areas. They formed in thick beds of sandy and loamy marine sediments.

Hallandale Fine Sand – The Hallandale series consists of shallow, poorly and very poorly drained, rapidly permeable soils formed in thin deposits of marine sandy materials over limestone. They occur on broad low flats, sloughs, shallow depressions, and adjacent tidal areas in Peninsular Florida. They are saturated during the summer rainy season and after periods of heavy rainfall in other seasons.

Okeelanta Muck – The Okeelanta series consists of very deep, very poorly drained, rapidly permeable soils in large fresh water marshes and small depressional areas. They formed in decomposed hydrophytic non-woody organic material overlying sand.

Pineda Fine Sand – The Pineda series consists of deep and very deep, poorly and very poorly drained, very slowly permeable soils in depressions, low hammocks, poorly defined drainageways, broad low flats, and flood plains. They formed in thick beds of sandy and loamy marine sediments on the lower Coastal Plain.

Pinellas Fine Sand – The Pinellas series consists of very deep, poorly drained, very rapid to rapidly permeable soils on flats that border sloughs and depressions. They formed in sandy marine sediments over loamy sediments.

Riviera Fine Sand – The Riviera series consists of nearly level, poorly drained soils that have a loamy subsoil. These soils are on broad, low areas and in depressions. They formed in beds of sandy and loamy marine sediment.

Tequesta Muck – The Tequesta series consists of nearly level, very poory drained soils that have a thin organic layer overlying a mineral soil that has a sandy surface layer, a sandy subsurface layer and a loamy subsoil. Tequesta Muck is on broad, low flats and in marshes and depressions.

Wabasso Fine Sand – The Wabasso series consists of nearly level, poorly drained, sandy soils that have a black, weakly cemented sandy layer over loamy material. These soils are in broad, flatwoods areas. They formed in thick beds of sandy marine sediment and the underlying loamy material. Wabasso fine sand is found in broad, flatwoods areas.

There are no areas within the City known to have experienced soil erosion problems. In addition, there are no known sources of commercially valuable minerals or there is no mining of mineral deposits within the City. Mining is not allowed by the Plan.

Air

Air quality within the City is generally good. Based upon ambient air quality monitoring conducted by the Florida Department of Environmental Protection (FDEP) and documented in the 2012 Florida Air Monitoring Report, Palm Beach County is an attainment area for five of the six major air contaminants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), particulate matter (PM), and sulfur dioxide (SO2). The attainment area designation indicates that the concentrations of major pollutants are within the acceptable limits set by the FDEP and the U.S. Environmental Protection Agency (EPA).

Palm Beach County is classified as an attainment/maintenance area for the pollutant ozone (O3). A maintenance area is an area previously classified as non-attainment, which has successfully reduced air pollutant concentrations to below the standard, but must maintain some of the non-attainment area plans to stay in compliance with the standards. However, the U.S. Environmental Protection Agency (EPA) reports

that "the 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005." (https://www3.epa.gov/airquality/greenbook/ancl.html).

Therefore, although the most recent data available from FDEP indicates a level of ozone comparable to the level in 2012, the previous standards no longer exists.
(see http://www.dep.state.fl.us/air/air_quality/techrpt/quick/Quicklook-2015-q1-q3.pdf).

Palm Beach County is no longer classified as a nonattainment area for any of these air pollutants, i.e. it is an attainment area for classified pollutants. The Palm Beach County Health Department also monitors ambient air quality and regulates mobile and stationary sources of air pollution. It also administers the asbestos and open burning regulations and implements Pollution Prevention (P2) programs.

Floodplains

A floodplain is a strip of relatively flat land bordering a stream channel that is inundated at times of high water. (https://water.usgs.gov/water-basics_glossary.html). In undeveloped areas typically adjacent to natural water bodies, flooding may occur with such frequency so as to create and support floodplain ecosystems. However, in the City, such natural flow regimes have been replaced by a managed drainage system that regulates water levels and flows. Natural floodplains do not exist in the City.

In developed and developing areas like the City, flooding may occur from rainfall events. Areas that may be inundated by a 100-year storm event have been delineated by the Federal Emergency Management Agency as part of the National Flood Insurance Program. These areas are designated as Special Flood Hazard Areas (FLU Map 2.4) on the Flood Insurance Rate Map (FIRM). The FIRM (dated October 5, 2017) shows that portions of the City are within the AE special flood hazard area which is subject to inundation by the 1% annual chance flood. There is a 1 percent chance of the 100-year flood (also known as the base flood) being equaled or exceeded in any given year. The AE area designation means that a base flood elevation (BFE) has been determined. The BFE is the computed elevation to which floodwater is anticipated to rise during the base flood (100-year flood). The BFE is used in conjunction with the federal flood insurance program. The BFE for the AE area in the City is 18.5 feet (referenced to the North American Vertical Datum of 1988). The City has adopted minimum development elevations as part of its stormwater level of service standards. These elevations exceed the BFE in order to protect development from flooding events.

The areas designated AE by FEMA include the man-made swales, ditches, and canals that had been used for agricultural irrigation and surface water management. There are also some farm fields that were at lower lying elevations and some stormwater retention/detention areas. As development of the City proceeds, these lower lying areas are anticipated to be reconfigured, either filled or transformed into an urban stormwater management system of connected lakes. In the future, the current AE designations will have less relevance to future flooding concerns.

Water Resources

There are no natural rivers, bays, or lakes, in the City. All surface waters in the City are manmade and consist of ditches, swales, canals, and retention/detention ponds in association with either the previous agricultural operations or existing development. These existing features are anticipated to be substantially replaced and/or modified as urban development replaces the existing agricultural uses.

The City bisects the M-2 Canal to the west. The existing drainage facilities, constructed and maintained by SID, consist of a perimeter canal, numerous primary canals, lateral canals, internal culverts, and control structures. The proposed stormwater management system for the City will consist of a network of inlets, culverts, lakes, created shallow vegetated areas, and outfall structures. Water quality treatment will be provided on-site in the lakes and shallow vegetated areas. Discharges will be directed to the M-2 Canal, which flows into the C-51 Canal. The stormwater management system will be designed to meet the requirements of the SFWMD C-51 Basin Rule.

There are no natural springs or potable water wells within the City. As agricultural use are converted to urban development water demand will diminish, as residential and commercial uses demand less water than agriculture.

Ground Water Recharge

The City is regulated by the SFWMD. The City is located within the SFWMD's Lower East Coast (LEC) Planning Area. The principal ground water resource for the LEC Planning Area are the Surficial Aquifer System. The extensive water management and lake system within the City has been permitted by the SFWMD and will provide for recharge of the local surficial aquifer as required by District regulations.

Water Conservation and Reuse Water

The City will use reuse water from SID for landscape irrigation. If reuse is not available from the County, it will be supplemented with surface water as allowed pursuant to SID's permit with the South Florida Water Management District. The existing permitted water use allocation (3,000 MGD) can cover the reuse needs of the entire City if reuse is not available from the County.

LAND COVER

Natural Habitats

The historical agricultural use of land that now comprises the City resulted in the elimination of all native and natural habitat features. The entire City has been altered for agricultural use, originally for citrus production. The clearing, ditching, and crop activities of the past 50 plus years have erased any natural systems that would have occurred historically on the site. The more recent conversions to varied agricultural uses in the City have continued this condition. As a result, there is less than one acre of native habitat or natural features within the City.

Wetlands

The agriculture improvements and operations that have been conducted for the past 50 plus years have resulted in no naturally occurring wetlands within the City. There are approximately 258.5± acres of surface waters existing today throughout the City, which consist of man-made swales, ditches, and canals that are currently used or were previously used, for agricultural irrigation at the site, and for surface water management. The swales primarily consist of very shallow depressional areas which can either contain shallow standing water or no water. The ditches primarily consist of unvegetated water areas with steep-sided unvegetated banks that experience frequently fluctuating water levels depending on on-site agricultural irrigation activities and surface water management. The canals primarily consist of unvegetated, deep water areas with steep-sided unvegetated banks.

During the permitting process for the Minto development, Minto purchased 5.90 freshwater herbaceous federal credts from the Loxahatchee Mitigation Bank in conjunction with the Army Corps of Engineers (ACOE) Permit No. SAJ-2004-07618, which mitigates for wetlands on the property at the time of the permit.

Uplands

As noted earlier, due to previous agricultural activities, no existing native habitats or natural features exist within the City. The agricultural activities since 1964 and 1968 eliminated any native upland habitats or natural features that may have been present on the property prior to agricultural development.

Although there are areas within the City in which native vegetation can be found, these are limited to tree nursery and pine plantation areas where native species are being cultivated for commercial sale or uses. They do not constitute forests, native habitats or natural features as they are monotypic single species stands under cultivation for production of landscape vegetation or silviculture production.

WILDLIFE

Protected Species

Wildlife is a valuable resource within the Palm Beach County area. Although there are no naturally occurring wetlands or preferred habitat for wetland-dependent endangered or threatened wildlife species or species of special concern within the City, man-made ditches, canals, and excavated ponds can support a large number of wildlife species. To date, there are no threatened or endangered species living within the City.

Invasive Species

South Florida has become an inviting destination for some undesirable species that threaten to undermine the health of the environment. More than an inconvenience, invasive plants and animals can greatly alter the native landscape, adversely impact native wildlife, destroy agricultural crops and threaten public health.

Invasive Plants

Non-native invasive plants were brought into Florida through a variety of methods. Not all non-native plants are as harmful to the ecosystems of Florida as others. Those that begin to cause widespread ecological damage to the native plant and animal communities are called invasive. These non-native invasive plants grow quickly, produce abundant seeds, have no natural enemies, flourish in a wide range of soil conditions, and prevent native species from growing. These invaders destroy natural habitat, out competing native plants for space, soil, sunlight, air, and water. This loss of habitat impacts Florida wildlife. Local and State governments are also affected, spending millions annually to control these invasive non-native plants and to restore natural habitat which has been impacted due to their prolificacy.

Having been in active agriculture over the past 50 years, there are few invasive species remaining within the City. The Plan requires removal of all invasive plant species found during the process of approving new development within the City.

Invasive Animal Species

Invasive animal species are not native to Florida and are introduced by human activity. They are brought in either intentionally as ornamentals or pets, or accidentally, as hitchhikers that arrive at airports, seaports or through the mail. Species have always moved around the globe, and the majority is not problematic. It is today's enormous volume of global trade and travel that provides an unprecedented opportunity for species to invade. One-third of all plant species in Florida are now exotic.
(https://nps.gov/ever/learn/education/upload/2008-Florida-invaders-For-web.pdf)

Having been in active agriculture over the past 50 years, there is no natural habitat for either native or invasive species within the City. Nonetheless, the Plan requires removal of all invasive animal species found during the process of approving new development within the City.

ENVIRONMENTALLY SENSITIVE LANDS

Environmentally sensitive lands have not been identified within the City. As previously described, the majority of the lands have been utilized for agriculture purposes resulting in the elimination of all native and natural habitat features. Therefore 163.3177(6)(d)2.h., Florida Statutes is not applicable. Environmentally sensitive lands have not been designated within the City.

CITY OF WESTLAKE

TECHNICAL DOCUMENT | Data & Analysis

RECREATION AND OPEN SPACE

2017

CHAPTER 6. RECREATION AND OPEN SPACE ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Recreation and Open Space Element is to foster recreation uses and open space that will support the local population, and provide for the creation of natural features; tree-lined parkways, streets and trails; parks; and lakes and canals. The recreation uses and open space provided for in this element may also foster a sense of place in the community. Furthermore, this element is intended to guide the decision making process relative to recreation facilities, facility development, and programs, including ongoing funding and maintenance, to meet the recreational needs of the residents throughout the planning periods.

Example of a passive park gathering space

Recreation areas and open spaces provide opportunities for social interaction, enable healthy and active lifestyles, and contribute to the overall urban form. The City will have a community park in addition to neighborhood parks. The parks will consist of active and passive recreation opportunities.

The public parks and recreation facilities will remain under control of SID in the short-term planning period.

CITY PARKS

Neighborhood Parks

The neighborhood park is a "walk to" park generally located along streets where people can walk or bicycle without encountering heavy traffic. Because the service areas of a neighborhood park and an elementary school often coincide, it is desirable for the neighborhood park to physically join the elementary school when feasible. Both park and school serve the same basic population, share compatible land uses, and maintain recreation facilities that are of mutual benefit.

Community Parks

A community park is a "ride to" park located near major streets or arterials. Multi-modal access to community parks is strongly encouraged. Multi-modal access can be enhanced by bike paths and pedestrian walkways. Typical facilities found in community parks include both passive and active recreation opportunities such as playground areas, recreation buildings, sports fields, paved multipurpose courts, picnic areas, open or free play areas, swimming pools, and landscaping. Adequate off-street parking may be needed to contain parking overflow.

OPEN SPACE

Open space exists principally to intersperse congested urban environments with aesthetically pleasing buffer areas, and to provide passive recreation opportunities. These areas are typically located within built-up areas and, in some cases, may offer benches, commemorative structures, or art in public places.

PALM BEACH COUNTY

Palm Beach County School District Lands

Not classified as park, lands owned and maintained by the Palm Beach County School District are still considered as part of the City's recreation and open space system. School lands contain baseball, soccer, and football fields, tennis courts, and indoor recreation facilities that are or may be available by the public. Because the service areas of a neighborhood park and an elementary school often coincide, it is desirable for the neighborhood park to physically join the elementary school when feasible. Both park and school serve the same basic population, share compatible land uses, and maintain recreation facilities that are of mutual benefit.

Palm Beach County Regional and District Parks

In addition to the anticipated community and neighborhood parks mentioned above, the following Palm Beach County regional and district parks and beaches will also service City residents. Palm Beach County recognizes three types of parks: regional, district, and beach parks, which are generally described as follows. Palm Beach County Regional Parks are the largest class of parks in Palm Beach County, and generally exceed 200 acres in size and provide access to a substantial natural or manmade resource base. Palm Beach County Regional Parks typically provide passive recreational facilities, and to a lesser degree, active regional facilities. Palm Beach County District Parks are generally greater than 25 acres in size and primarily provide active recreational opportunities, but can also include passive recreational facilities. District Park recreational facilities can included lighted fields or course, exercise trails, support facilities such as restrooms, concessions, and parking, and may also include recreation centers, competitions pools, golf courses, boat ramps, and docks. Palm Beach County Beach Parks are generally greater than 2 acres in size and front the Atlantic Ocean, or its inlets, and provide public beach access, and may include recreational facilities necessary to support beach access and activities, play areas, picnic areas, and parking.

Okeeheelee Park

Seminole Palms Park

Phil Foster Park

Okeeheelee Park is a 1,702 acre regional park located at 7715 Forest Hill Boulevard, west of West Palm Beach, Florida. The facility is open from sunrise until sunset and includes baseball fields, bike paths, a BMX track, a boating area, a dog park, an equestrian center and trail, a golf course, mountain biking paths, multi-purpose fields, a nature center, picnic areas and pavilions, a playground, softball field, tennis courts, and volleyball courts. Seminole Palms Park is a 70 acre District Park located at 151 Lamstein Lane, Royal Palm Beach, Florida. The facility is open from sunrise to sunset and includes baseball fields, multi-purpose fields, picnic areas, playgrounds, softball fields, and a water park. Phil Foster Park is a 14 acre beach located at 900 E Blue Heron Boulevard, Riviera Beach, Florida. The facility is open sunrise to sunset and offers beach frontage, docks and ramps, fishing platforms, picnic areas, a fishing pier, a playground, restrooms, and showers.

CITY OF WESTLAKE

TECHNICAL DOCUMENT | Data & Analysis

HOUSING

2017

CHAPTER 7. HOUSING ELEMENT

CHAPTER 7. HOUSING ELEMENT DATA AND ANALYSIS

INTRODUCTION

At the time of municipal incorporation in 2016, the City of Westlake had a population of only six persons residing in four housing units. A windshield survey showed that those existing units are structurally sound, contain plumbing and kitchen facilities, and have electrical and utility services. Those existing housing units do not represent the anticipated housing development of the City over the planning period.

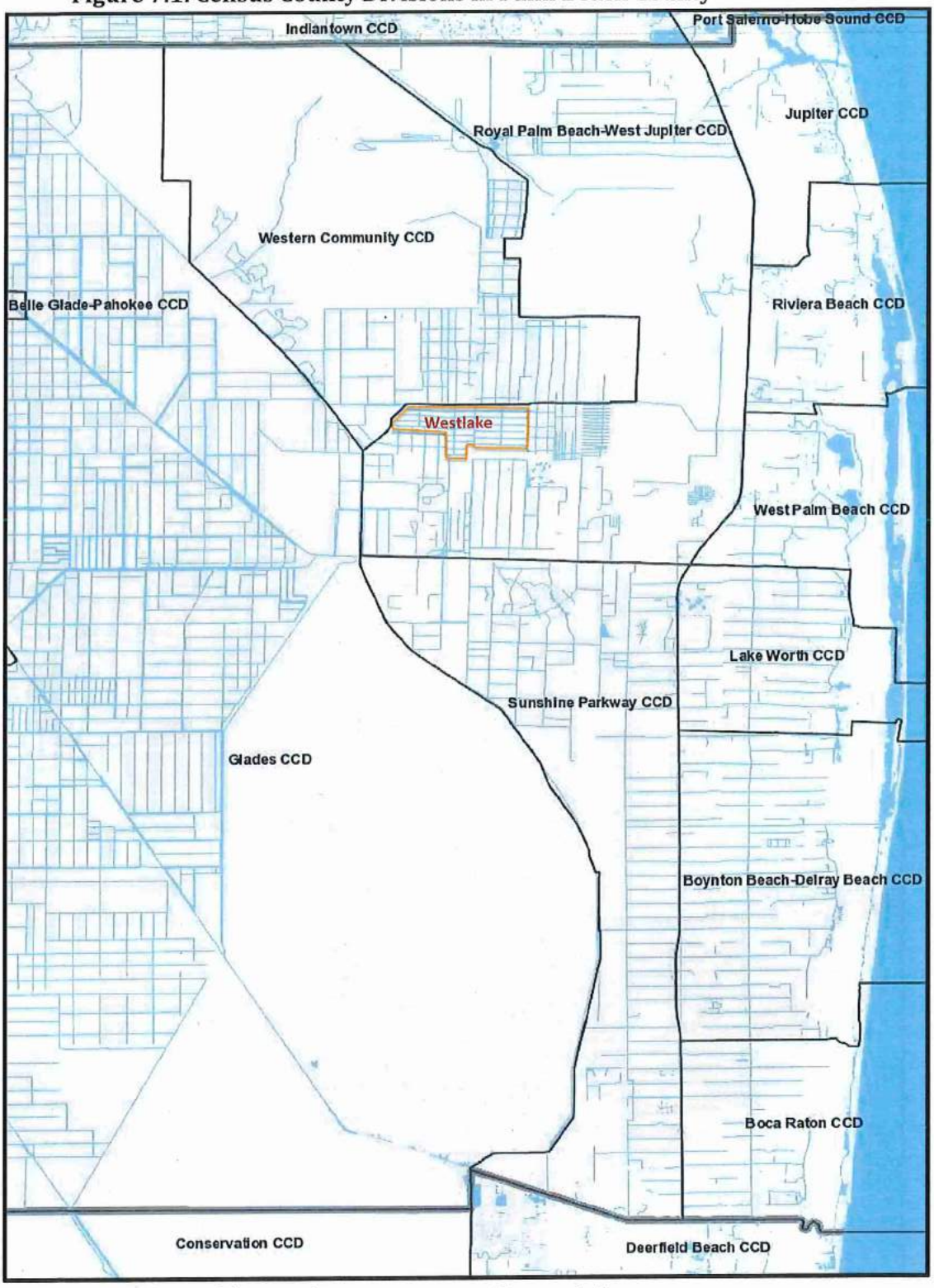
It is anticipated that by the end of 2018, there will be approximately 150 housing units built within the City of Westlake. By 2023, 1,575 housing units are projected and by 2038, 6,500 housing units are projected. This initial Housing Element focuses on the provision of adequate and affordable housing for those anticipated future residents of the City.

The City of Westlake is planned to serve unmet land use and development needs in the vicinity which is characterized by low-density residential uses. The future population and housing conditions in the City will not match the nearby area and are envisioned to complement the development profile of the central county area. Therefore, it shall be assumed that the City will contain housing more similar to the broader housing conditions in the surrounding Census County Divisions (CCDs), than housing conditions of the immediately surrounding communities of the Acreage (a Census Designated Place, CDP) with an estimated 2017 population of about 38,000 persons; the Town of Loxahatchee Groves with an estimated 2017 population of about 3,300; or Palm Beach County as a whole.

The City of Westlake is located within the Royal Palm Beach-West Jupiter CCD, as are the two closest municipalities of Loxahatchee Groves and Royal Palm Beach. The Acreage is located along the northern, eastern and southwestern borders of the City. The Western Community CCD is located to the north and the Sunshine Parkway CCD is located to the south. Figure 7.1 shows these CCDs. These three CCDs exclude the older communities in the eastern portion of the county, including the higher density housing near the coast, which do not reflect the type and style of housing expected in the City. The three CCDs also exclude the communities located near Lake Okeechobee.

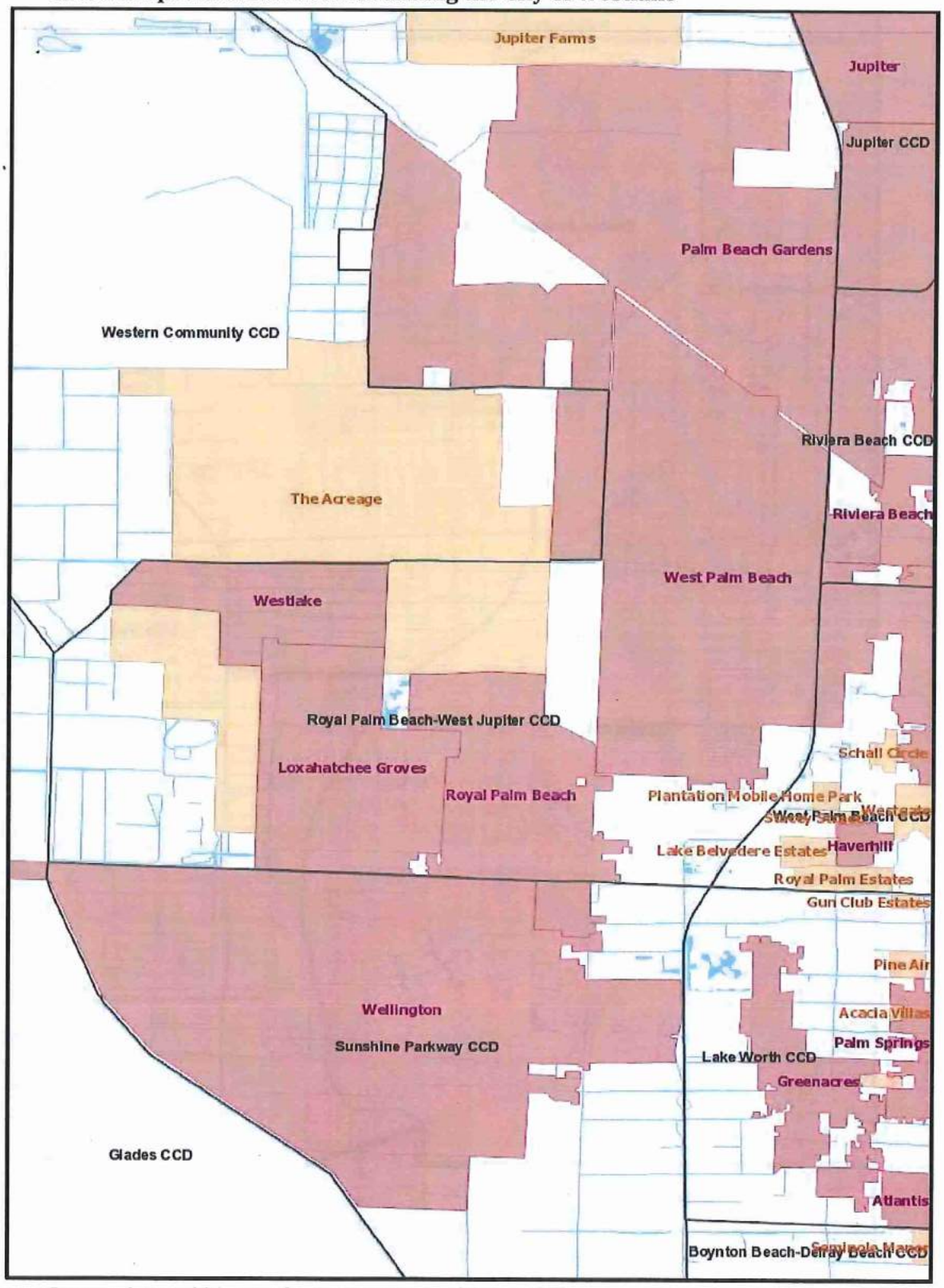
Housing data and analysis for these three CCDs will be combined and be used as a temporary substitute measures for future City housing conditions. The use of the combined CCDs serves to moderate the differences in housing and household characteristics that exist within the CCDs. The data which follows will illustrate the significant variation among some of the sub-areas included within the three CCDs. Figure 7.2 shows these Census areas and incorporated places surrounding the City.

Figure 7.1: Census County Divisions in Palm Beach County



Source: https://tigerweb.geo.census.gov/tigerweb/

Figure 7.2: Census County Divisions, Census Designated Places, and Incorporated Places Surrounding the City of Westlake



Source: https://tigerweb.geo.census.gov/tigerweb/

Florida Housing Data Clearinghouse information has not been compiled by the *Shimberg Center for Housing Studies* for the City of Westlake. The City will update the data and analysis in the future when the *Shimberg Center for Housing Studies* has provided the data. Also, once substantial housing development occurs within the City, this data and analysis section will be updated to use City-specific data. At this time, however, the best available data is provided by the 2010 Decennial Census and the 2015 5-Year American Community Survey (ACS). The 2010 Census is an actual count whereas the ACS is based on a sample survey. All data presented here from the ACS has statistically calculated margins of error. Both data sources are used. The 2010 Census generally has more accurate information with regard to people, housing, and households, but does not include other data, e.g. income and housing costs, which is only available from the ACS. Since the data are not City data, but are used to represent future City conditions, descriptive statistics, such as averages or percentages are more useful than actual numbers. For example, the number of occupied housing units in the three CCDs is not relevant whereas the percentage of housing units that are occupied can be useful for planning purposes.

EXISTING HOUSING CONDITIONS

Housing Characteristics – Type of Housing

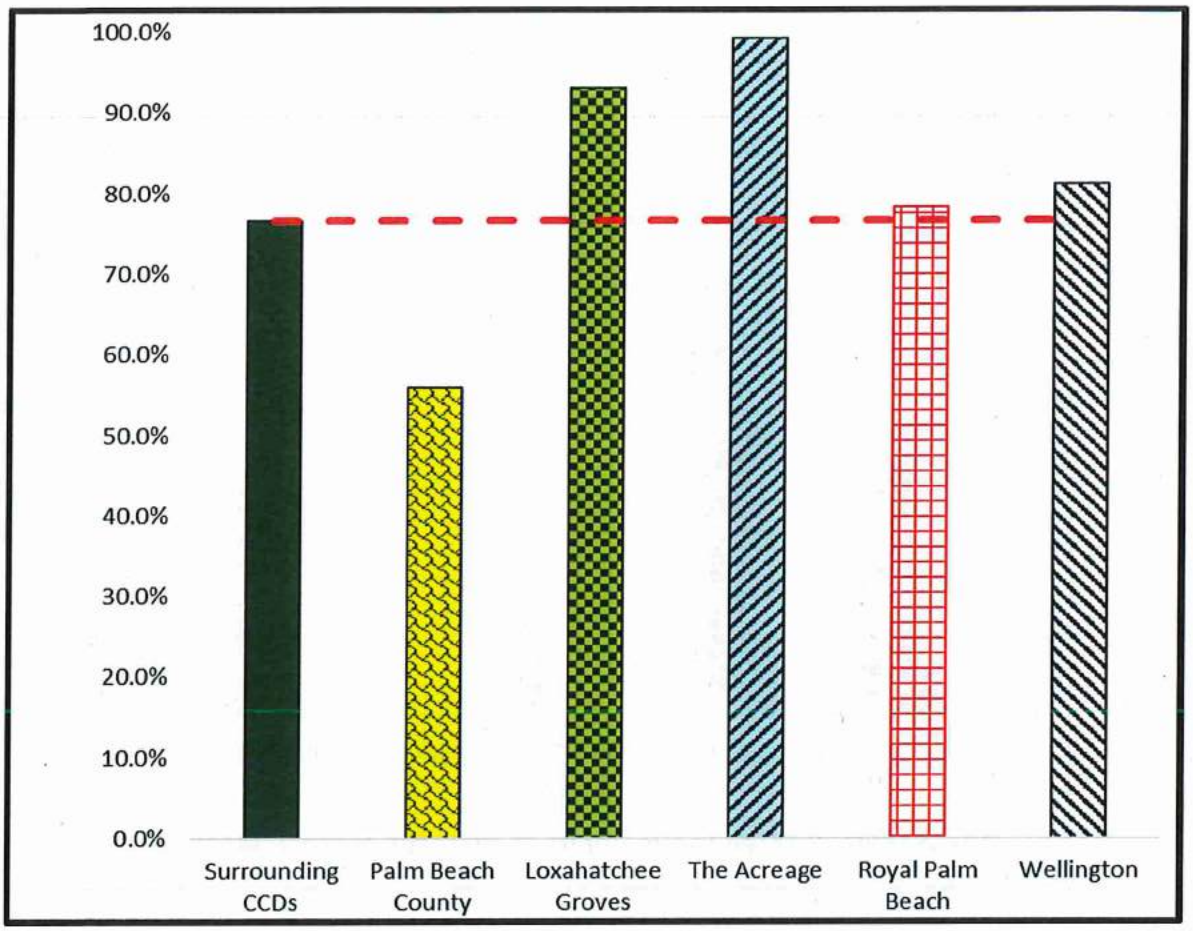
Within the surrounding CCDs, as shown in Table 7.1, single-family houses (one-unit, detached and attached) constitute 77 percentage of the total number of housing units, which is higher than the countywide percent of 56 percent. The surrounding CCDs have the highest percentage of single family houses of all CCDs in the county. However, there is also considerable variation of housing type within the surrounding CCDs. For example, the adjacent communities of Loxahatchee Grove and the Acreage have much higher percentages of single-family houses, with 93 percent and 99 percent of their housing stock in single-family houses, respectively. Royal Palm Beach and Wellington have 78 percent and 81 percent of their housing stock in single-family houses, respectively. Conversely, the Glades and West Palm Beach CCDs have the lowest percentages of single family houses in the county, at 22 and 38 percent, respectively. Thus, while the percent of single-family houses in the surrounding CCDs is higher than the county as a whole, it is much lower than the percentage in the nearest communities. Figure 7.3 is a column chart that compares the single-family house percentages in the proximate geographic areas.

Table 7.1: Type of Housing Including the Percentage of Total Housing Units by Number of Units in Structure

	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage	Royal Palm Beach	Wellington
Type of Unit / Units in Structure						
One-Unit Dettached	66.5%	45.9%	92.6%	99.1%	70.8%	73.0%
One-Unit Attached	10.1%	10.1%	0.5%	0.2%	7.4%	8.2%
Two-Units	1.3%	3.1%	0.0%	0.0%	1.3%	3.1%
Three or Four	4.6%	7.2%	0.0%	0.0%	4.1%	5.1%
Five to Nine	4.8%	6.2%	0.6%	0.0%	6.0%	3.8%
Ten to Nineteen	4.0%	6.2%	0.0%	0.0%	7.3%	2.7%
Twenty or more	7.3%	18.5%	0.0%	0.1%	2.3%	3.0%
Mobile Home	1.4%	2.8%	6.1%	0.6%	0.7%	0.8%
Other (Boat, RV, Van, etc.)	0.0%	0.0%	0.4%	0.0%	0.0%	0.1%

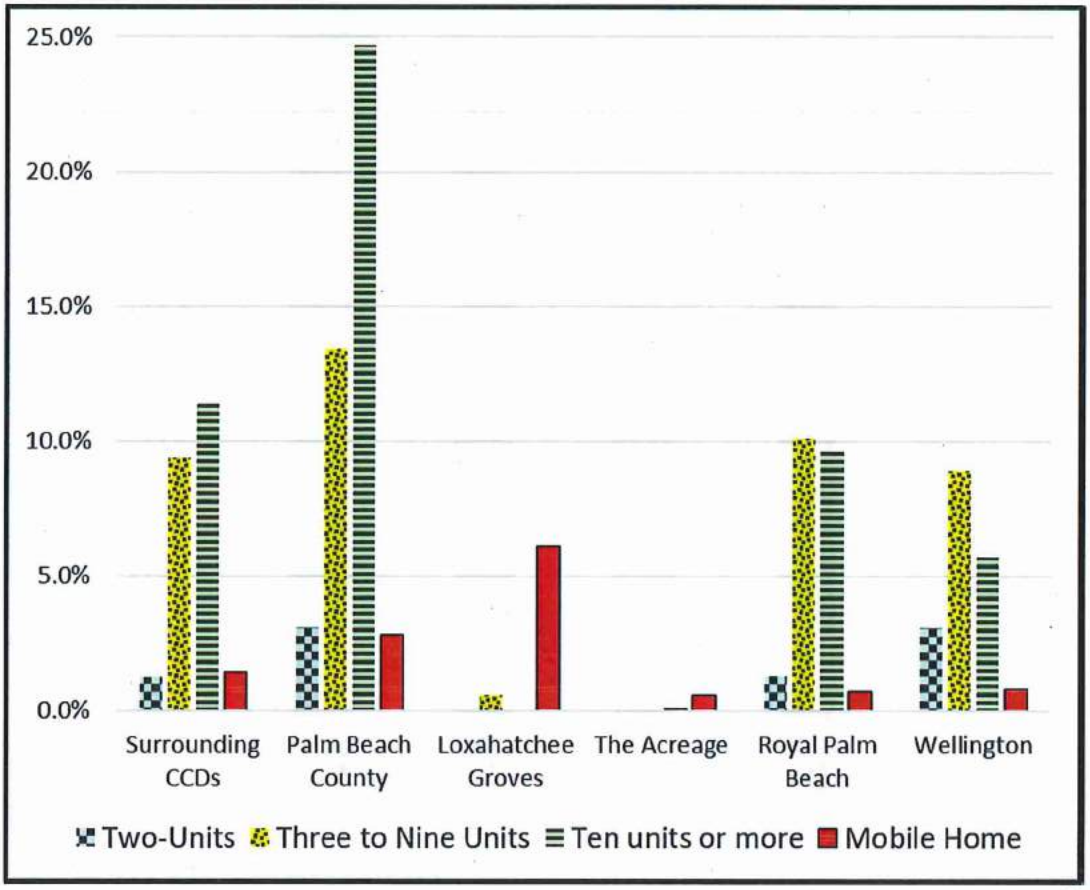
Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics

Figure 7.3: Percentage of Total Housing Units in One-Unit Structures (Both Detached and Attached)



About 22 percent of housing units in the surrounding CCDs are multi-family. This is also higher than the corresponding percentages in the Acreage, Loxahatchee, Royal Palm Beach and Wellington. Mobile homes constitute 1.4 percent which is a higher percentage than the Acreage, Royal Palm Beach, and Wellington. Figure 7.4 is a column chart that compares multi-family and mobile home housing unit percentages in the various geographic areas. The chart clearly shows the scarcity of multi-family housing in the two adjacent communities of the Acreage and Loxahatchee Groves.

Figure 7.4: Percent of Total Housing Units in Multi-Unit Structures and Mobile Homes



Housing Characteristics – Age of Housing

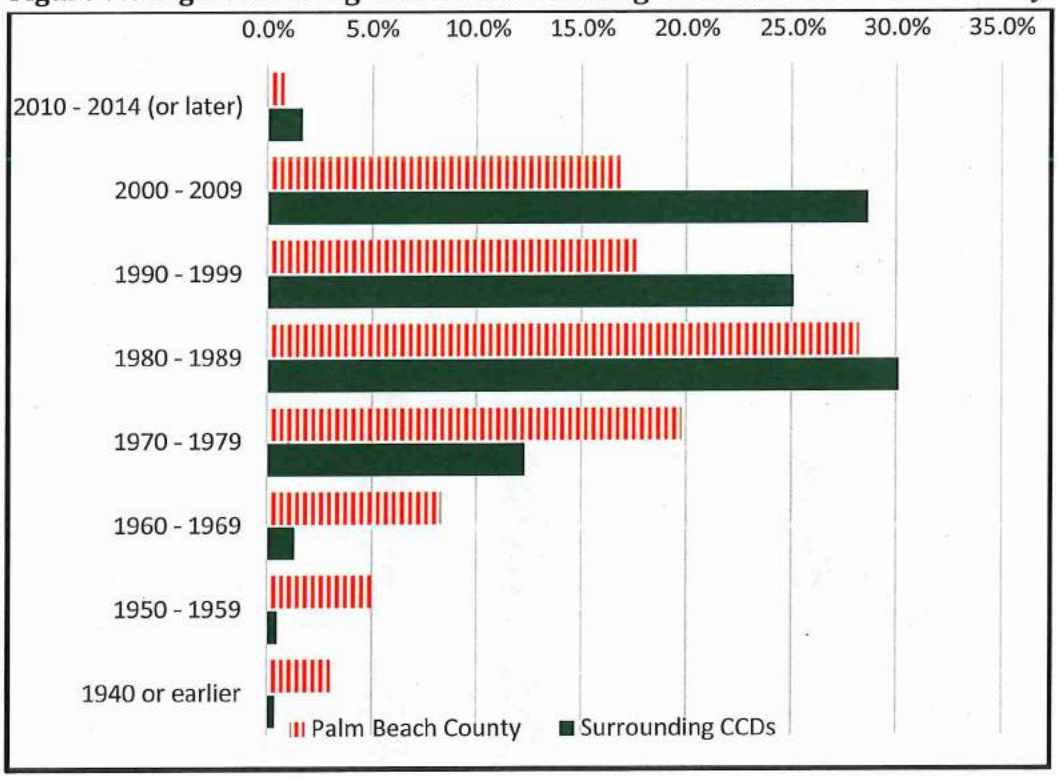
The age of the housing stock in the surrounding CCDs are presented in Table 7.2. This data shows that housing in the three surrounding CCDs is newer than housing in the county as a whole. About 64 percent of housing in Palm Beach County was built since 1989 whereas about 85 percent of housing in the surrounding CCDs was built since 1989. Figure 7.5 charts the age of housing. The housing in the City will be newly built, and will conform to the latest Florida Building Code and therefore, is likely to remain in good condition for the duration of the planning period.

Table 7.2: Age of Housing Units

Year Structure Built	Surrounding CCDs	Palm Beach County
Built 2014 or later	0.2%	0.1%
2010 - 2013	1.5%	0.8%
2000 - 2009	28.6%	16.9%
1990 - 1999	25.1%	17.7%
1980 - 1989	30.1%	28.2%
1970 - 1979	12.3%	19.8%
1960 - 1969	1.3%	8.3%
1950 - 1959	0.5%	5.1%
1940 - 1949	0.1%	1.3%
1939 or earlier	0.3%	1.7%

Source: U.S. Census, ACS_15_5YR_B25034

Figure 7.5: Age of Housing Units in Surrounding CCDs and Palm Beach County



Housing Characteristics: Average Household Size

The 2010 Census defines a household as all the people who occupy a housing unit such as a house or apartment as their usual place of residence. A household may be a family household or a non-family household which may include someone living alone or two or more non-related persons, e.g., roommates. Average household size (also referred to as Population Per Household or PPH) is presented for the three surrounding CCDs as well as Palm Beach County and other nearby areas in Table 7.3. The 2.65 PPH for the surrounding CCDs is lower than all of the surrounding communities, but higher than the county's PPH. Figure

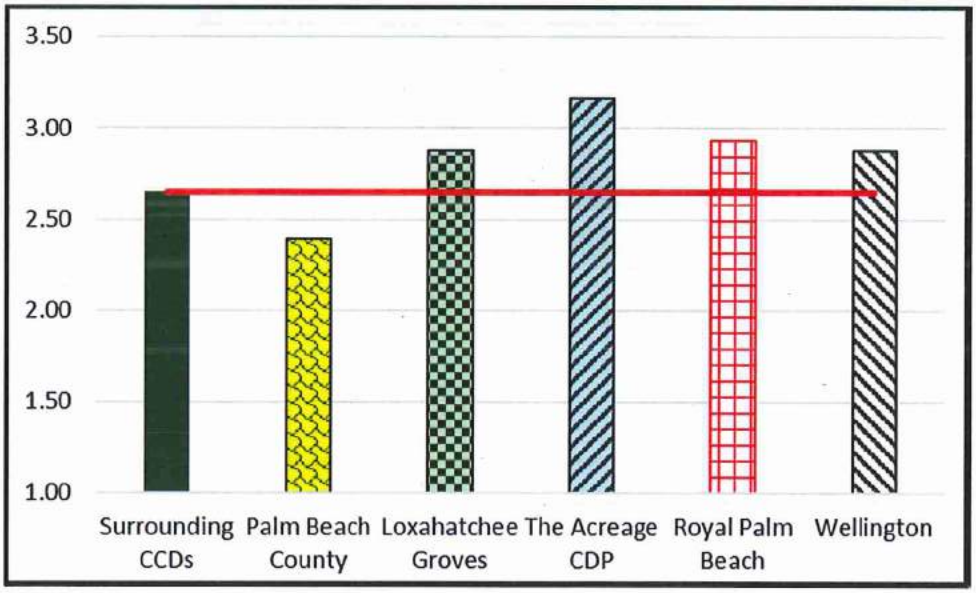
7.6 charts the PPHs for easy comparison. Table 7.3 also shows average household size based on tenure, i.e. owner and renter housing, which is addressed in the next section.

Table 7.3: Average Household Size -Population Per Household (PPH)

	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
All Occupied Housing Units	2.65	2.39	2.88	3.17	2.93	2.87
Owner Occupied Housing Units	2.63	2.34	2.87	3.15	2.87	2.85
Renter Occupied Housing Units	2.75	2.5	2.92	3.39	3.25	2.97

Source: U.S. Census: DEC_10_DP1

Figure 7.6: Average Household Size – Average Population Per Household (PPH)



Housing Characteristics - Tenure

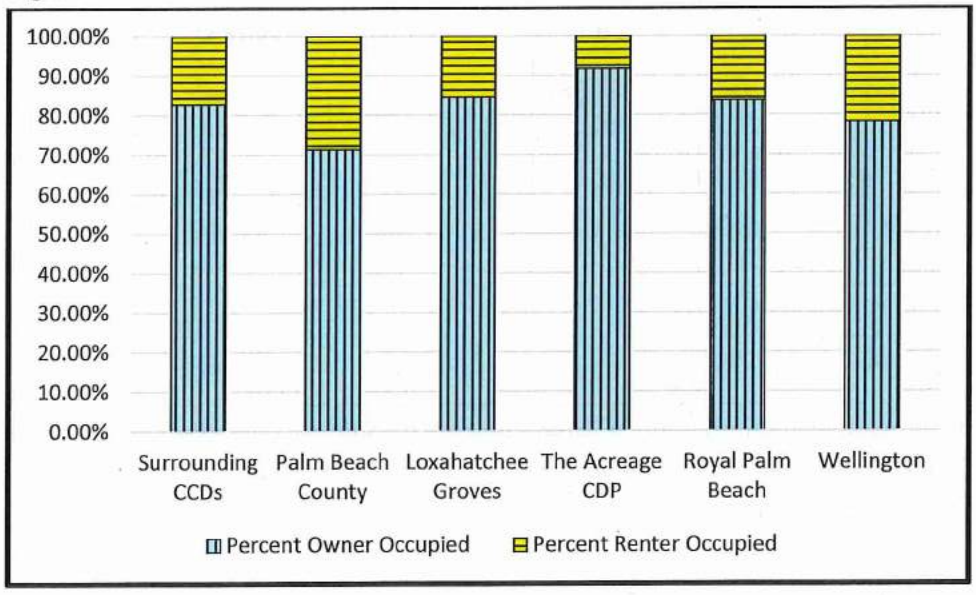
Tenure "refers to the distinction between owner-occupied and renter-occupied housing units." (U.S. Census) Table 7.4 shows a significant difference in the percent of renter households for the county as a whole compared to the central county area (the surrounding CCDs.) In particular, the percentages of rental housing in the Acreage, Loxahatchee Groves, and Royal Palm Beach are much lower than the county as a whole. These differences are charted in Figure 7.7. It is frequently observed that owning a house is an aspiration of most Americans – part of the "American Dream." However, for many, renting is a much more affordable option. Rental housing (e.g., apartments) are clearly a necessary part of the affordable housing market and are specifically allowed under the Plan.

Table 7.4: Household Characteristics –Tenure, Percent Owned and Rented

	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Owner Occupied	82.88%	71.38%	84.62%	91.80%	83.80%	78.31%
Renter Occupied	17.12%	28.62%	15.38%	8.20%	16.20%	21.69%

Source: US Census DEC_10_SF1_SF1DP1

Figure 7.7: Tenure – Percent Owned and Rented



Housing Characteristics – Occupancy and Vacancy

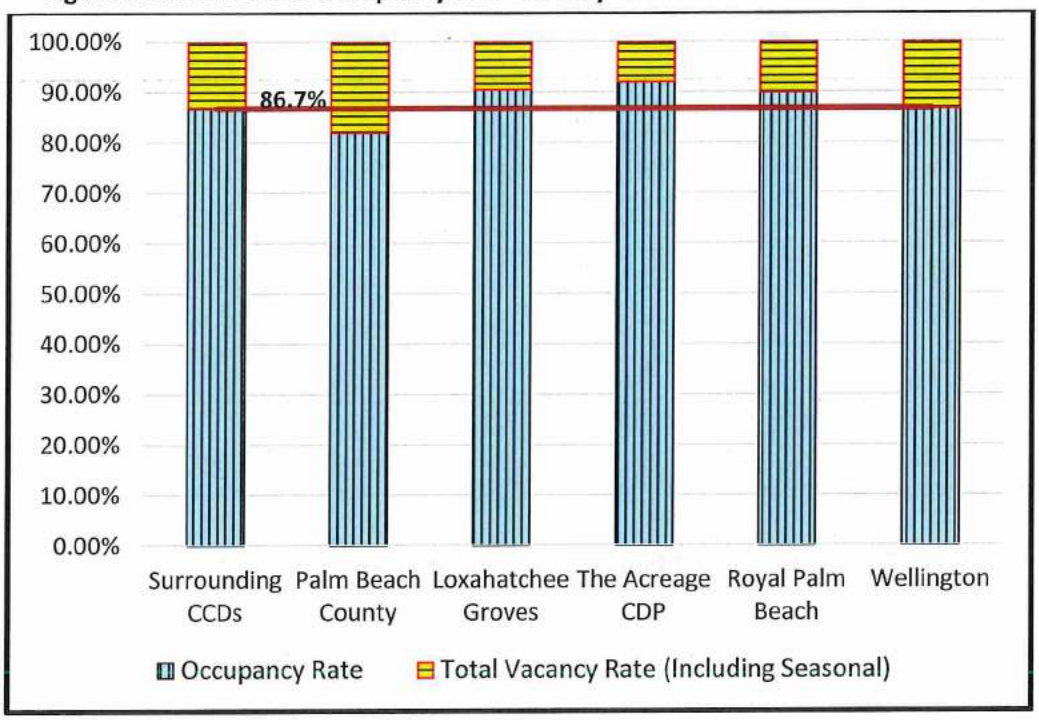
Household occupancy and vacancy rates are shown in Table 7.5 and charted in Figure 7.8. The occupancy rate of about 87 percent for the surrounding CCDs is the percent of all housing units that are occupied. The total vacancy rate of about 13 percent for the surrounding CCDs includes vacancies for rent; rented but not occupied; for sale only; sold but not occupied; for seasonal, recreational, or occasional use; and vacancies for other reasons. The seasonal vacancy rate of almost 6 percent for the surrounding CCDs is a part of the total vacancy rate and has also been listed separately in order to project the seasonal population living in housing units. The number of occupied housing units equals the number of households. The occupancy rate for the three surrounding CCDs as well as for Loxahatchee Groves, the Acreage, and Royal Palm Beach is higher than the county as a whole. The corresponding vacancy rates are lower, especially for the nearest residential areas. This reflects a tighter residential real estate market for this part of the county relative to the county as a whole. In other words, demand for housing is higher relative to available supply compared to the rest of the county.

Table 7.5: Occupancy and Vacancy Rates

	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
All Housing Units						
Occupancy Rate	86.70%	81.89%	90.43%	91.91%	89.90%	86.66%
Total Vacancy Rate*	13.30%	18.11%	9.57%	8.09%	10.10%	13.34%
Vacancy Rate Excluding Seasonal	7.45%	9.06%	8.02%	7.39%	7.86%	6.69%
Owner Housing						
Homeowner Vacancy Rate*	2.77%	3.37%	1.68%	2.62%	2.64%	2.43%
Renter Housing						
Rental Vacancy Rate*	10.91%	12.28%	6.08%	5.24%	10.81%	11.32%

Notes: The homeowner vacancy rate is based on units for sale only and does not count other vacancies.
The rental vacancy rate is based on units for rent and does not count other vacancies.
Source: US Census DEC_10_SF1_SF1DP1

Figure 7.8: Household Occupancy and Vacancy Rates



Housing Costs

Gross rent is defined by the US Census as "the amount of the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid for by the renter (or paid for the renter by someone else). Gross rent is intended to eliminate differentials which result from varying practices with respect to the inclusion of utilities and fuels as part of the rental payment."

Table 7.6 lists the percentage of rental households by gross rent ranges. While each geographic area has a unique gross rent distribution, the data show that a higher percentage of rental households in the Acreage, Royal Palm Beach, and Wellington pay gross rent above $1,000 per month than do rental households in the three CCDs. The gross rent distribution in the three surrounding CCDs depicts a more normal distribution curve than the other communities, indicating a more diverse rental housing profile than any of the other areas, which all have higher gross rent peaks, albeit in different gross rent ranges. The median gross rent for the three CCDs falls in-between the median value for Royal Palm Beach and Wellington. See Figure 7.9 for charted values.

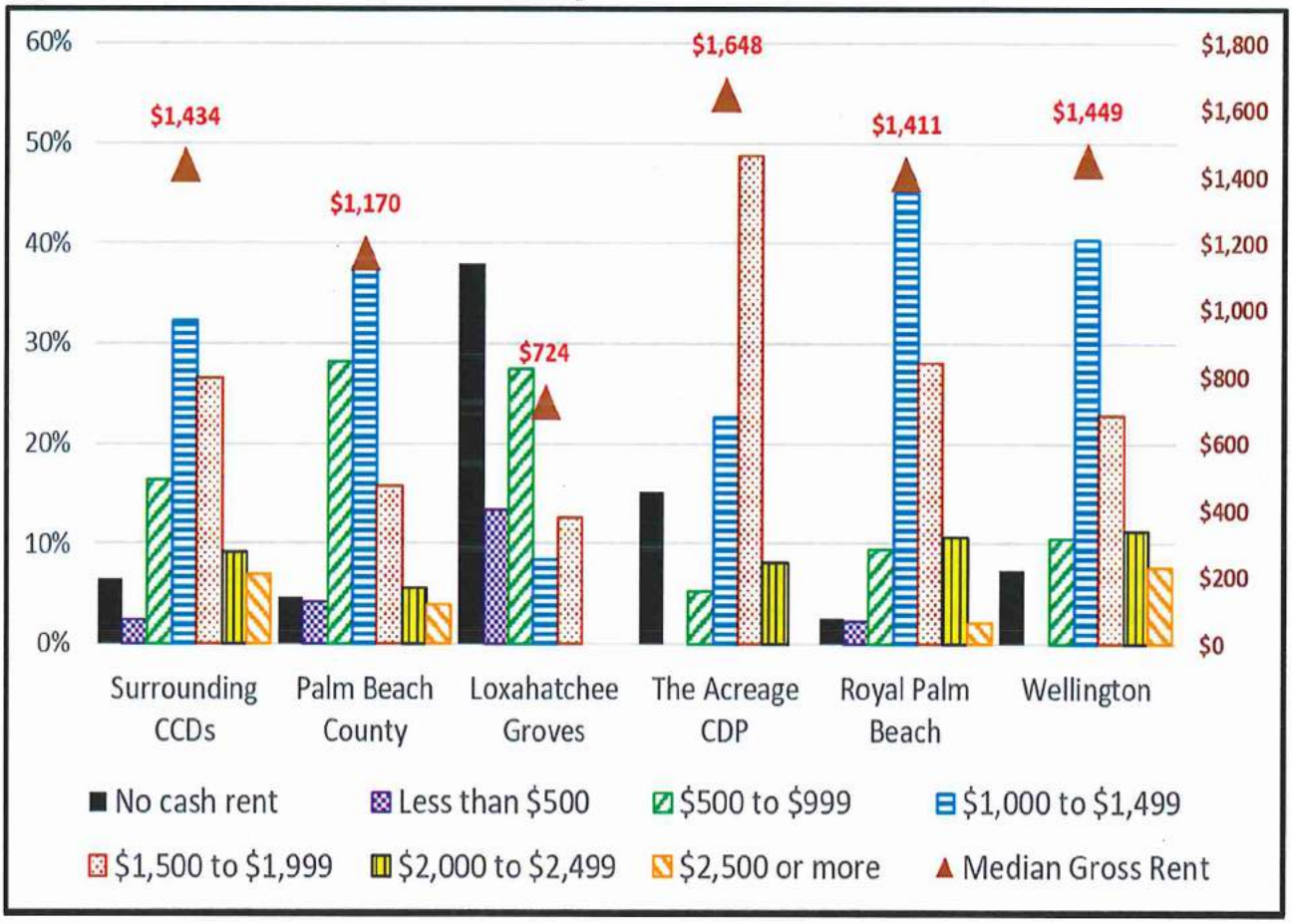
Table 7.6: Percent of Rental Households By Gross Rent and Median Rent

Monthly Gross Rent	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
No cash rent	6.4%	4.6%	38.0%	15.1%	2.6%	7.4%
Less than $500	2.5%	4.3%	13.4%	0.0%	2.2%	0.0%
$500 to $999	16.3%	28.3%	27.5%	5.2%	9.4%	10.5%
$1,000 to $1,499	32.2%	37.6%	8.5%	22.7%	45.0%	40.3%
$1,500 to $1,999	26.5%	15.7%	12.7%	48.7%	28.0%	22.8%
$2,000 to $2,499	9.2%	5.6%	0.0%	8.2%	10.7%	11.3%
$2,500 or more	6.9%	3.9%	0.0%	0.0%	2.0%	7.7%
Median Gross Rent	$1,433	$1,170	$724	$1,648	$1,411	$1,449

Source: U.S. Census, ACS_15_5YR_B25063 and ACS_15_5yr_DP04

Notes: Percentages include units that paid no rent. Median gross rent excludes units for which no rent was paid. Median gross rent for surrounding CCDs calculated from data using linear interpolation.

Figure 7.9: Percent of Rental Households by Gross Rent and Median Rent



Housing value data for Palm Beach County and the surrounding CCDs are presented in Table 7.7. The median values of owner-occupied units of the surrounding CCDs in the 2015 5-Year Estimate was $257,942, as

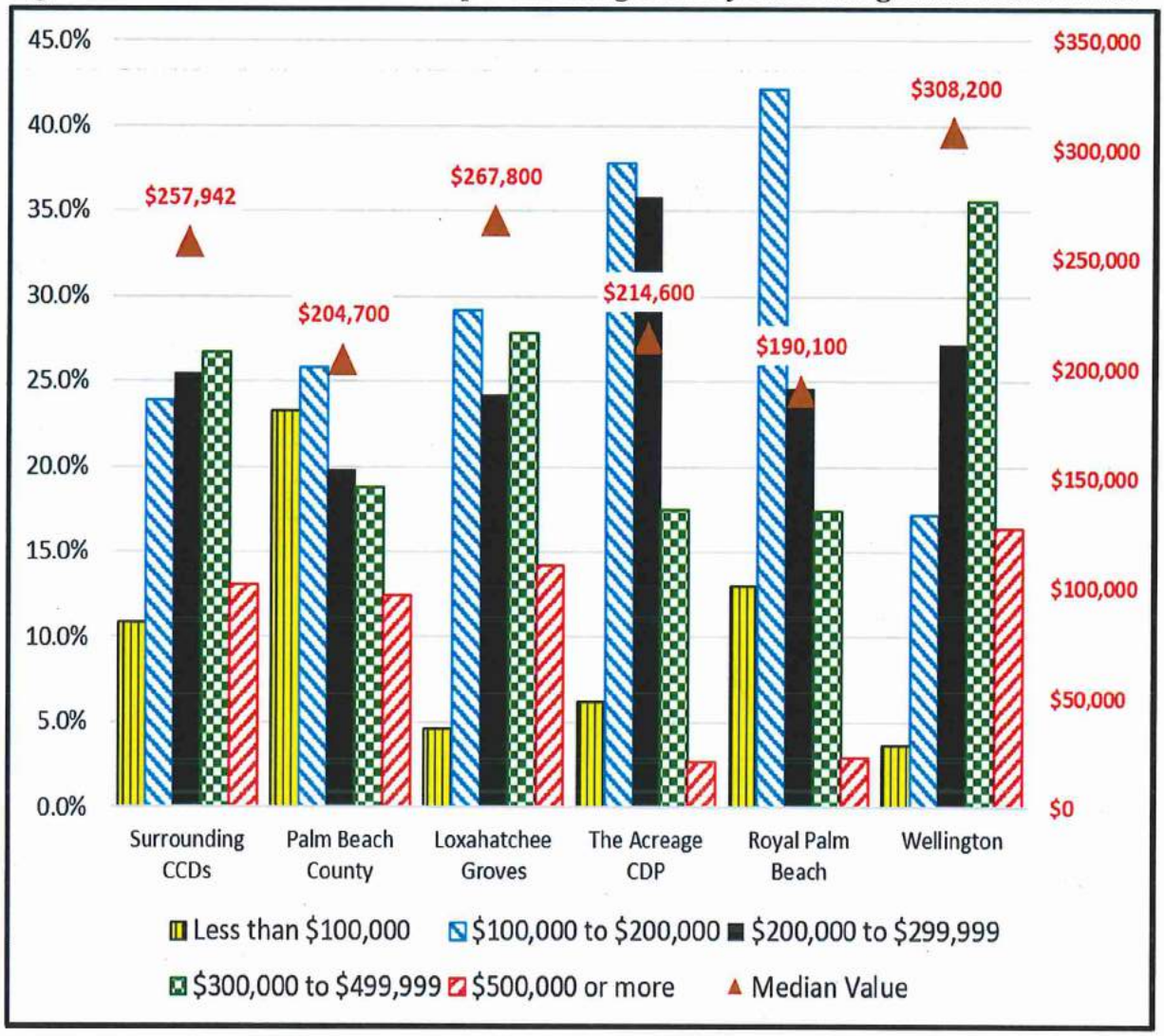
compared to $204,700 for Palm Beach County. The median value of the three CCDs is lower than Loxahatchee Groves and Wellington, but higher than Royal Palm Beach and the Acreage. Figure 7.10 charts the data.

Table 7.7: Percent of Owner Occupied Housing Units by Value Range and Median Value

Value Range	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Less than $50,000	4.4%	9.1%	2.5%	1.8%	3.5%	1.9%
$50,000 to $99,999	6.4%	14.2%	2.1%	4.4%	9.5%	1.7%
$100,000 to $149,999	9.9%	12.9%	12.2%	12.5%	17.8%	6.1%
$150,000 to $199,999	14.0%	12.9%	17.0%	25.3%	24.4%	11.0%
$200,000 to $299,999	25.5%	19.8%	24.2%	35.8%	24.6%	27.2%
$300,000 to $499,999	26.7%	18.8%	27.8%	17.5%	17.4%	35.6%
$500,000 to $999,999	11.2%	8.8%	13.4%	2.6%	2.1%	13.5%
$1,000,000 or more	2.0%	3.6%	0.8%	0.1%	0.7%	2.9%
Median Value	$257,942	$204,700	$267,800	$214,600	$190,100	$308,200

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics and B25075
Median value for surrounding CCDs calculated from data using linear interpolation.

Figure 7.10: Percent of Owner Occupied Housing Units By Value Range and Median Value



Comparative monthly owner cost data for Palm Beach County is presented Tables 7.8 and 7.9. According to the US Census, "selected monthly owner costs (SMOC) are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees." Selected monthly owner costs (SMOC) is divided into housing units with a mortgage and housing units without a mortgage. Countywide, 56.6 percent of owner-occupied housing units have mortgages. Within the three CCDs, that percentage rises to 66.1 percent. Over 71 percent of owner occupied housing in the surrounding municipalities and the Acreage have mortgages. In other words, more owner-occupied houses are still paying off mortgages in the central portion of Palm Beach County compared to the county as a whole.

The median SMOC for houses with a mortgage in the three CCDs is $1,976 which is higher than the overall county, Royal Palm Beach and the surrounding Acreage community; but it is lower than Loxahatchee Groves, and Wellington. The median SMOC for houses without a mortgage in the three CCDs is $671 which is higher than the nearby communities, except for Wellington, which has a median SMOC for houses without of mortgage of $766.

Table 7.8: Percent of Owner Occupied Units with a Mortgage Within Selected Monthly Owner Costs (SMOC) and Median SMOC

Percent of Units within SMOC Range, and Median SMOC	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Less than $500	0.9%	1.4%	0.5%	0.2%	0.9%	0.9%
$500 to $999	7.9%	14.3%	1.7%	6.2%	9.9%	4.2%
$1,000 to $1,499	19.0%	24.9%	13.8%	23.7%	28.3%	13.1%
$1,500 to $1,999	23.3%	22.3%	32.7%	29.4%	26.7%	23.2%
$2,000 to $2,499	19.5%	14.4%	18.7%	23.3%	22.9%	21.1%
$2,500 to $2,999	11.6%	8.7%	15.2%	8.8%	6.8%	14.5%
$3,000 or more	17.8%	14.0%	17.4%	8.3%	4.4%	23.2%
Median (dollars)	$1,976	$1,693	$2,036	$1,825	$1,738	$2,206

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics and B25078.
Median SMOC for surrounding CCDs calculated from data using linear interpolation.

Figure 7.11 graphically compares the surrounding CCDs with the county and nearby communities.

Figure 7.11: Percent of Owner Occupied Units with a Mortgage Within Selected Monthly Owner Costs (SMOC) and Median SMOC

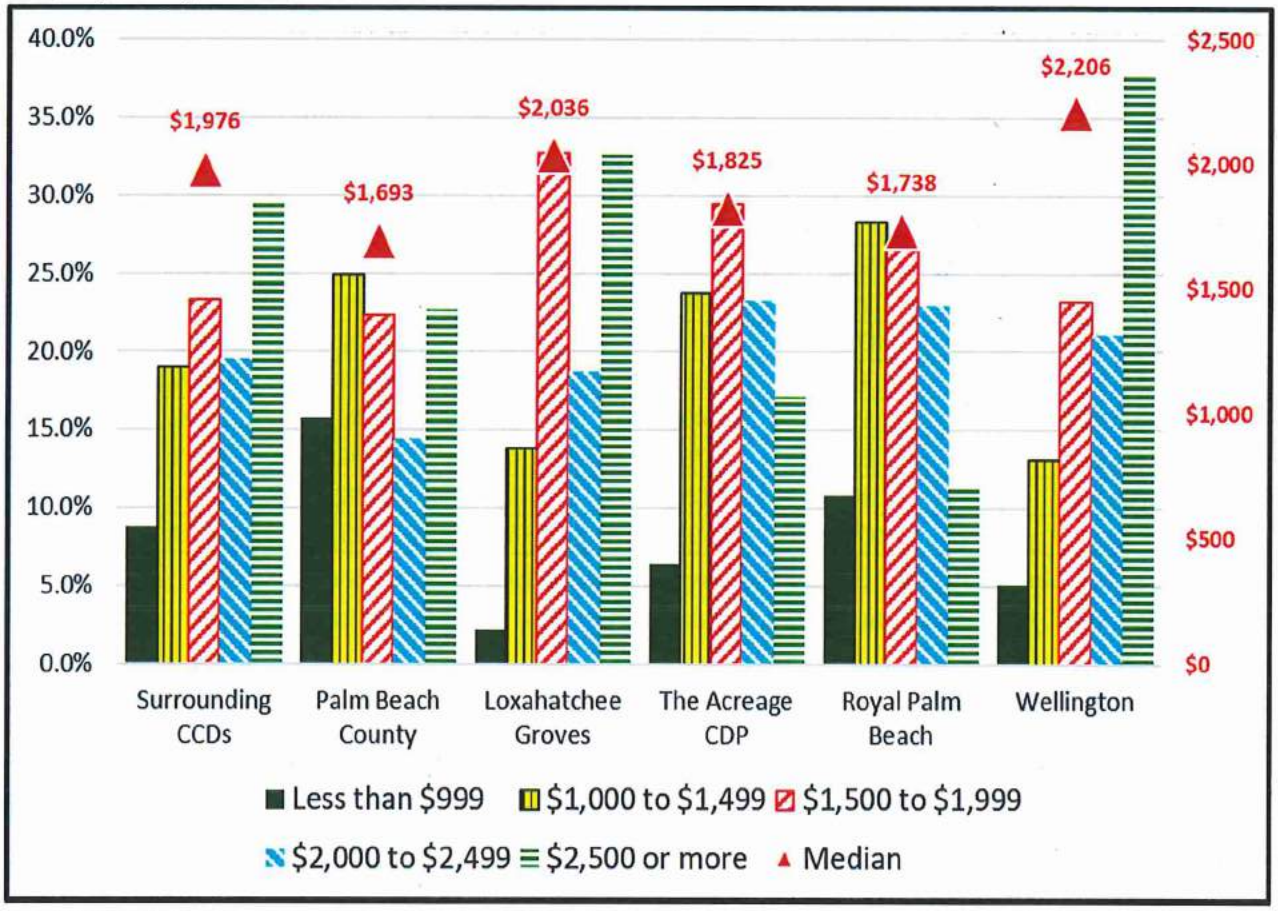


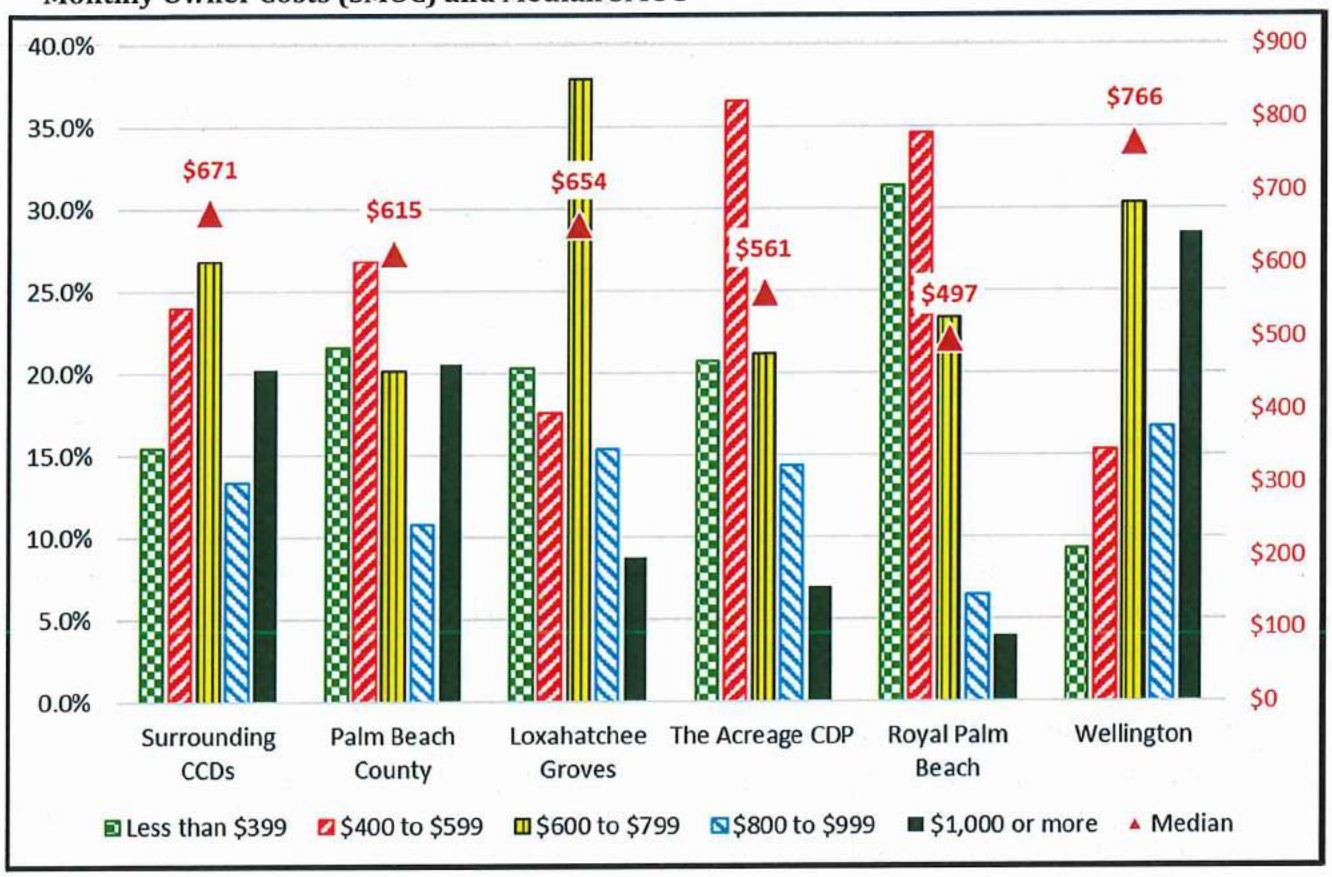
Table 7.9: Percent of Owner Occupied Units without a Mortgage Within Selected Monthly Owner Costs (SMOC) and Median SMOC

Percent of Units within SMOC Range, and Median SMOC	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Less than $250	4.9%	7.3%	6.2%	6.3%	13.8%	2.4%
$250 to $399	10.6%	14.3%	14.1%	14.4%	17.6%	6.9%
$400 to $599	24.0%	26.8%	17.6%	36.6%	34.6%	15.3%
$600 to $799	26.8%	20.2%	37.9%	21.2%	23.4%	30.3%
$800 to $999	13.4%	10.8%	15.4%	14.4%	6.5%	16.7%
$1,000 or more	20.3%	20.6%	8.8%	7.0%	4.0%	28.5%
Median (dollars)	$671	$615	$654	$561	$497	$766

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics and B25078.
Median SMOC for surrounding CCDs calculated from data using linear interpolation.

Figure 7.12 graphically compares the surrounding CCDs with the county and nearby communities.

Figure 7.12: Percent of Owner Occupied Units with a Without a Mortgage Within Selected Monthly Owner Costs (SMOC) and Median SMOC



EXISTING HOUSEHOLD CHARACTERISTICS

Household Size

In a previous section the average household size or person per household (PPH) was described and enumerated in Table 7.3. Table 7.10 below provides the distribution of households based on the number of persons in each household. About 21 percent of households have only one person in the surrounding CCDs compared to about 30 percent countywide. In other words, there is a smaller percentage of single person household in the three CCDs than in the county as a whole. The surrounding CCDs have a larger percentage of households with three or more persons. Almost 44 percent of households in the surrounding CCDs have three or more persons compared to about 34 percent countywide. Households are larger in the surrounding CCDs than in the county as a whole. Households may be defined as family households (persons related to the head of the household [householder] by birth, marriage, or adoption) or as non-family households. About 74 percent of all households in the surrounding CCDs are family households compared with about 63 percent countywide.

Table 7.10: Household Size

Persons in Household	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
1	20.8%	30.1%	20.5%	11.1%	16.9%	15.9%
2	35.7%	36.3%	31.9%	28.8%	29.1%	32.1%
3	17.1%	13.8%	16.7%	21.4%	20.6%	19.7%
4	16.0%	11.1%	14.2%	21.6%	19.2%	19.6%
5	6.8%	5.1%	9.1%	10.0%	9.0%	8.5%
6	2.4%	2.1%	4.8%	4.4%	3.3%	3.0%
7 or more	1.2%	1.6%	2.7%	2.6%	1.9%	1.2%

Source: U.S. Census: DEC_10_SF1_H13

Household Income

Household income varies significantly across the county. The estimated annual household income in the surrounding CCDs is $72,620 compared to a countywide median of only $53,363. The median income in all of the nearby communities is higher than the countywide average. Figure 7.13 compares the median incomes of these communities and the county.

Table 7.11: Annual Household Income

Household Income Range	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Less than $10,000	3.9%	6.5%	5.9%	3.1%	3.8%	3.7%
$10,000 to $14,999	3.1%	5.1%	1.8%	1.5%	2.2%	2.3%
$15,000 to $24,999	7.8%	11.1%	10.2%	5.1%	9.9%	6.3%
$25,000 to $34,999	7.7%	10.7%	8.6%	6.4%	8.2%	6.4%
$35,000 to $49,999	11.7%	13.7%	6.0%	13.7%	10.4%	11.2%
$50,000 to $74,999	17.0%	17.3%	20.7%	19.0%	21.0%	15.3%
$75,000 to $99,999	14.2%	11.2%	16.0%	20.1%	16.0%	15.9%
$100,000 to $149,999	17.6%	12.6%	17.4%	19.7%	18.5%	20.2%
$150,000 to $199,999	8.1%	5.2%	6.8%	6.9%	5.7%	9.1%
$200,000 or more	8.8%	6.6%	6.7%	4.6%	4.2%	9.5%
Median household income (dollars)	$72,620	$53,363	$69,394	$76,508	$66,915	$81,047
Mean household income (dollars)	$99,648	$82,436	$93,063	$88,115	$84,002	$103,779

Source: ACS_15_5YR_DP03 and B19001. Mean and medians calculated from data.

Figure 7.13: Annual Household Median Income

Household Age

Household age is based on the age of the head of household who is called the householder. An examination of household age is different from an examination of the age structure of all persons in a place. Table 7.12 below proves the household age profile for the surrounding CCDs and nearby communities. The household age profile is also provided for owner occupied households and renter occupied households.

Table 7.12: Age of Householder

Householder Age Range	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage CDP	Royal Palm Beach	Wellington
Owner occupied:						
15 to 24 years	0.6%	0.7%	0.7%	0.9%	0.7%	0.7%
25 to 34 years	5.7%	6.0%	4.4%	6.6%	9.1%	5.8%
35 to 44 years	17.0%	13.5%	15.0%	23.9%	21.7%	19.7%
45 to 54 years	25.1%	19.8%	29.8%	36.8%	28.1%	30.1%
55 to 59 years	10.8%	9.5%	15.6%	12.3%	11.7%	12.9%
60 to 64 years	10.1%	9.8%	11.1%	8.1%	8.1%	10.5%
65 to 74 years	15.2%	17.6%	16.5%	8.3%	10.8%	12.2%
75 to 84 years	10.6%	15.8%	5.7%	2.7%	6.9%	6.2%
85 years and over	4.8%	7.2%	1.2%	0.4%	2.9%	1.8%
Renter occupied:						
15 to 24 years	5.7%	8.1%	5.9%	6.1%	5.6%	4.9%
25 to 34 years	22.3%	23.9%	24.7%	23.2%	25.1%	22.6%
35 to 44 years	25.6%	21.0%	15.9%	28.4%	29.9%	30.5%
45 to 54 years	20.6%	18.7%	29.4%	24.7%	21.3%	24.7%
55 to 59 years	6.7%	6.7%	9.4%	6.7%	5.9%	6.6%
60 to 64 years	4.9%	5.2%	5.9%	4.2%	4.0%	3.8%
65 to 74 years	6.2%	6.5%	5.9%	3.9%	4.1%	3.9%
75 to 84 years	4.6%	5.1%	2.4%	2.5%	2.7%	2.0%
85 years and over	3.5%	4.7%	0.6%	0.4%	1.5%	1.1%
All Households (Owner and Renter)						
15 to 24 years	1.5%	2.8%	1.5%	1.3%	1.5%	1.6%
25 to 34 years	8.6%	11.1%	7.5%	8.0%	11.7%	9.5%
35 to 44 years	18.5%	15.7%	15.1%	24.3%	23.0%	22.1%
45 to 54 years	24.3%	19.5%	29.8%	35.8%	27.0%	28.9%
55 to 59 years	10.1%	8.7%	14.7%	11.8%	10.8%	11.6%
60 to 64 years	9.2%	8.5%	10.3%	7.8%	7.4%	9.1%
65 to 74 years	13.6%	14.4%	14.8%	7.9%	9.7%	10.4%
75 to 84 years	9.6%	12.8%	5.2%	2.7%	6.2%	5.3%
85 years and over	4.6%	6.5%	1.1%	0.4%	2.7%	1.7%

Source: U.S. Census: DEC_10_H17

Housing Affordability

The Shimberg Center for Housing Studies at the University of Florida analyzes housing affordability in terms of cost burden which is based on the "[p]ercentage of household income spent for mortgage costs or gross rent. According to the Center and U.S. Department of Housing and Urban Development (HUD) assistance programs, households spending more than 30 percent of income for these housing costs are considered to be "cost-burdened." Households spending more than 50 percent are considered to be "severely cost-burdened." Housing is generally considered to be affordable if the household pays less than 30 percent of income." An analysis of community housing affordability utilizes an Area Median Income (AMI) measure and this measure is computed by the Shimberg Center for Housing Studies and applied to each community. Such an analysis is not available for the City and there is no significant population or housing yet to conduct such an analysis. In lieu of the Shimberg analysis, this Housing Element has examined averages for the surrounding CCDs as a means to generally estimate housing conditions and affordability for the future.

Gross rent as a percentage of income (GRAPI) provides a measure of housing affordability for rental units from which cost burden may be examined. GRAPI is a computed ratio of monthly gross rent to monthly household income (U.S. Census). Table 7.13 provides the GRAPI for the three surrounding CCDs, county, and surrounding communities. About 57 percent of renters pay more than 30 percent of their household income for gross rent and those households would be considered cost burdened, i.e. those households would not have affordable housing. Since those households are unavoidably paying more for housing, they are paying less for other necessities of life. These high percentages are not unique to the surrounding CCDs. Palm Beach County as a whole has a higher percentage of renters that are cost burdened, at about 60 percent.

Table 7.13: Percent of Occupied Rental Units within GRAPI Ranges

Percent of Household Income	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage, CDP	Royal Palm Beach	Wellington
Less than 15.0%	8.2%	8.1%	5.7%	13.6%	8.4%	3.6%
15.0% to 19.9%	10.6%	9.6%	21.6%	8.9%	18.3%	10.5%
20.0% to 24.9%	12.5%	11.4%	11.4%	11.8%	10.5%	17.2%
25.0% to 29.9%	11.8%	10.6%	3.4%	10.2%	12.4%	10.6%
30.0% to 34.9%	9.4%	8.8%	14.8%	4.6%	9.6%	8.3%
35.0% or more	47.4%	51.6%	43.2%	51.0%	40.7%	49.8%

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics

Selected monthly owner costs as a percentage of income (SMOCAPI) provides a measure of housing affordability for owner occupied housing. SMOCAPI is a computed ratio of selected monthly owner costs to monthly household income (U.S. Census). Tables 7.14 and 7.15 provides the SMOCAPI for the three surrounding CCDs. About 41 percent of housing units with a mortgage are cost burdened. About 19 percent of housing units without a mortgage are cost burdened. Once again, housing affordability is a widespread

problem. Palm Beach County and the nearby communities have higher or comparable percentages as can be seen in the tables below.

Table 7.14: Percent of Owner Occupied Housing Units within SMOCAPI Ranges within the three surrounding CCDs

Percent of Household Income	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage, CDP	Royal Palm Beach	Wellington
Less than 20.0%	30.7%	30.6%	27.8%	28.4%	34.6%	30.6%
20.0% to 24.9%	16.0%	14.5%	15.3%	18.2%	17.6%	16.4%
25.0% to 29.9%	11.4%	10.8%	8.5%	11.2%	8.7%	13.1%
30.0% to 34.9%	8.3%	8.3%	5.8%	10.0%	9.6%	7.5%
35.0% or More	33.5%	35.8%	42.5%	32.2%	29.5%	32.4%

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics

Table 7.15: Percent of Owner Occupied Housing Units without a Mortgage within SMOCAPI Ranges within the three surrounding CCDs

Percent of Household Income	Surrounding CCDs	Palm Beach County	Loxahatchee Groves	The Acreage, CDP	Royal Palm Beach	Wellington
Less than 10.0%	35.5%	31.9%	44.4%	39.9%	40.4%	37.6%
10.0% to 14.9%	19.7%	18.2%	10.3%	15.8%	19.4%	17.8%
15.0% to 19.9%	11.6%	12.3%	6.7%	12.7%	9.4%	10.0%
20.0% to 24.9%	7.9%	8.4%	13.0%	8.9%	8.3%	6.4%
25.0% to 29.9%	6.1%	6.3%	9.4%	6.7%	6.4%	6.1%
30.0% to 34.9%	4.2%	4.3%	0.9%	1.3%	2.5%	6.1%
35% or more	14.9%	18.6%	15.2%	14.8%	13.7%	16.0%

Source: U.S. Census, ACS_15_5yr_DP04 Selected Housing Characteristics

Although housing cost burden numbers linked to the Area Median Income (AMI) are not available for the City, the numbers are available for the county and nearby communities. In Palm Beach County, about 20 percent of owners and about 24 percent of renters were cost burdened in 2015. Further, an additional 20 percent of owners and about 32 percent of renters were severely cost burdened. (http://flhousingdata.shimberg.ufl.edu/a/profiles?action=results&nid=5000

Table 7.16: 2015 Palm Beach County Household Income and Cost Burden

Household Income as Percentage of Area Median Income	Amount of Income Paid for Housing					
	0-30%		30-50%		50% or More	
	Units	Percent	Units	Percent	Units	Percent
<=30% AMI	6,307	8.6%	7,686	10.4%	59,655	81.0%
30.01-50% AMI	14,173	19.6%	22,400	31.0%	35,627	49.3%
50.01-80% AMI	38,899	39.8%	35,259	36.1%	23,520	24.1%
80.01+% AMI	258,340	78.0%	57,623	17.4%	15,201	4.6%
Total	317,719	55.3%	122,968	21.4%	134,003	23.3%

Source: Florida Housing Data Clearinghouse, 2015

Table 7.17: 2015 Number and Percent of Households By Amount of Income Paid for Housing in Palm Beach County by Tenure

Tenure	Amount of Income Paid for Housing		
	0-30%	30-50%	50% or more
Owner	246,122 (59.7%)	84,201 (20.4%)	81,827 (19.9%)
Renter	71,597 (44.0%)	38,767 (23.9%)	52,176 (32.1%

)Source: Shimberg Center for Housing Studies, 2015

HOUSEHOLD CHARACTERISTICS AND DEMAND PROJECTIONS

Housing Demand

Future housing demand is frequently projected based on historical trends. In the case of the City, this approach is not possible. However, housing projections may be made based on the same assumptions used to project the permanent resident population through the use of reasonable factors such as household age, income, and size. Table 7.18 provides projections based on the surrounding CCD data.

Table 18: Household Projections

Projection Year		2023	2038
Housing Units		1,575	6,500
Vacancy Rate		7.45%	7.45%
Seasonal Rate		5.85%	5.85%
Households		1,366	5,636
PPH		2.65	2.65
Household Population		3,619	14,934
Households by Age of Householder			
15 to 24 years	1.5%	20	84
25 to 34 years	8.6%	117	483
35 to 44 years	18.5%	253	1,042
45 to 54 years	24.3%	332	1,370
55 to 59 years	10.1%	138	571
60 to 64 years	9.2%	126	518
65 to 74 years	13.6%	186	769
75 to 84 years	9.6%	131	539
85 years and over	4.6%	63	260
Households by Income Range			
Less than $10,000	3.9%	54	221
$10,000 to $14,999	3.1%	42	174
$15,000 to $24,999	7.8%	107	441
$25,000 to $34,999	7.7%	106	436
$35,000 to $49,999	11.7%	160	662
$50,000 to $74,999	17.0%	233	961
$75,000 to $99,999	14.2%	194	800
$100,000 to $149,999	17.6%	240	991
$150,000 to $199,999	8.1%	110	455
$200,000 or more	8.8%	120	496
Households by Size			
1	20.8%	285	1,175
2	35.7%	488	2,012
3	17.1%	233	961
4	16.0%	218	901
5	6.8%	93	384
6	2.4%	33	137
7 or more	1.2%	16	65

Additional Housing Data and Analysis

Subsidized Housing

There are no rental housing developments within the City using federal, state, or local subsidy programs.

Conventional Rental Housing

There are no conventional rental housing communities within the City.

Group Facilities Homes

There are no group living facilities and homes within the City.

Mobile Home and Recreational Vehicle Parks

There are no mobile home park communities located within the City; however, there are two mobile home units.

Historic Resources

There are no known historically significant housing resources, including homes listed on the State Master Site File within the City of Westlake.

Farmworker Housing

There are no farmworker housing developments within the City.

Addressing Housing Needs

City of Westlake

The City of Westlake is a new city and has very few existing housing units. As the City develops, there will be several measures available to evaluate housing stock and living conditions within the City, including: demographic, economic, social, and structural.

The City of Westlake is offering a unique opportunity for new residents to live, work, and play within one community. The City will contain a multitude of housing types and styles at a variety of price points to satisfy the needs of a diverse community. Residential development of the City is expected to start with single family housing while multifamily housing is anticipated to be built as the economic employment center builds out.

County Housing Programs

As the City grows, the City will evaluate the applicability of housing and community development programs available through county, state, and federal programs.

Housing Delivery Process

Housing stock within the City will be constructed by the private sector and is expected to accommodate projected population growth throughout the future planning periods.

Affordable Housing Assessment

Housing within the City can be more attainable and more affordable for a number of reasons. Because services and infrastructure can be provided more efficiently, the cost of units should be less. Smaller average lot sizes can translate to lower maintenance costs. But most importantly, reduced transportation costs free up financial resources that can be allocated to housing that would not be available in a completely automobile dependent pattern of development.

City Housing Incentive Programs

The City of Westlake is committed to creating affordable and safe housing that meets the needs of residents. Safe and appropriate affordable housing benefits the entire community – socially, economically and environmentally. Housing goals, objectives and policies are tailored to encourage the development of a variety of housing types to accommodate demand generated by population growth, including the accommodation of accessory apartments and mobile homes. In addition, policies to incorporate small-scale special needs and seniors facilities are also included.

As the City develops, it should prepare an affordable housing assessment, to include Shimberg data, at the time of the initial Evaluation and Appraisal Report. This will allow a more direct comparison of the City's housing stock, by price-range, to the ability of households to afford related housing costs.

Workforce and Affordable Housing

The City is committed to the provision of workforce and affordable housing based on statewide guidelines and. These guidelines delineate the basic components of an affordable workforce housing program and applicable income standards. Affordable housing for lower income families follows the state guidelines for affordability found in Chapter 420.0004(3), Florida Statutes.

The City will coordinate with the County, where appropriate, regarding countywide affordable housing programs. Additionally, the City is providing the opportunity for workforce and affordable housing by offering a variety of housing types. An adequate supply of land and density flexibility is designated on the Future Land Use Map to accommodate a variety of housing types to provide opportunities for varying income levels. The City's housing alternatives will meet the diverse needs of the community.

CITY OF WESTLAKE

TECHNICAL DOCUMENT | Data & Analysis

CAPITAL IMPROVEMENTS

2017

CHAPTER 8. CAPITAL IMPROVEMENTS ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Capital Improvements Element is to plan for public facility needs as identified in other Plan elements and to ensure that capital improvements are provided to accommodate growth, correct deficiencies, and replace obsolete or damaged facilities when required.

The Seminole Improvement District (SID) is an Independent Special District empowered by special act (Chapter 2000-431, House Bill No. 1559) to provide infrastructure and facilities within its boundaries, which are coterminous with the boundaries of the City. SID is the exclusive retail provider of potable water, reuse water, and wastewater facilities in the City, and is empowered to construct and maintain the facilities related to those services. SID is also empowered to construct and maintain drainage (stormwater) facilities (including, e.g., canals, levees, lakes, ponds, and other works for water management and control); transportation facilities (including, e.g., roads, bridges, bicycle and jogging paths, transit, landscaping, and other related transportation facilities); and parks and facilities for indoor and outdoor recreation.

SID is also empowered to levy ad valorem taxes, non-ad valorem assessments and collect other fees to recover the cost of providing the forenamed facilities and services. Pursuant to the City Charter, the City may not exercise any function or duplicate services provided by SID until such time as SID is transitioned to a dependent special district. This restriction does not impair the ability of the City to contract for fire rescue or law enforcement. The relationship between the City and SID for provision of capital improvements is detailed in the Interlocal Agreement between the City and SID, while SID's specific plans for facilities construction, maintenance, and expansion are contained in its Water Control Plan dated October 13, 2015. As a result of the cooperative relationship between SID and the City, the Capital Improvements Schedule and Element includes facilities to be constructed, financed, and maintained by SID.

CAPITAL IMPROVEMENT NEEDS

Potable Water and Wastewater

Based on the population projections and a capacity analysis for the short-term planning period there is adequate facility capacity to maintain the adopted level of service standard for potable water supply and wastewater treatment as provided through interlocal agreements between SID and Palm Beach County. SID plans on expanding distribution lines for potable water, and installing collection lines and additional lift stations for wastewater, and beginning the interconnection process of both water and wastewater with the County's lines within the short-term planning period. SID's planned improvements for both potable water and wastewater are listed in the Capital Improvement Schedule and are shown on INF Maps 4.2, 4.5 and 4.6. Pursuant to the Interlocal Agreement, these improvements have and will continue to be provided in order to ensure the achievement and maintenance of the adopted level of service standards for potable water and wastewater. SID is constructing facilities and otherwise facilitating these improvements using non-ad

valorem assessments, developer contributions, and other sources of revenue. Additional details and analyses are provided in the Infrastructure Element.

Transportation

Prior to the incorporation of the City, Palm Beach County adopted a plan amendment providing for the development of 4,546 dwelling units and 2.2 million square feet of non-residential, and other uses. As part of this plan amendment and other approvals, plans were developed and initiated with Palm Beach County to expand Seminole Pratt Whitney Road and begin building a network of collector and local roads to serve the proposed development and to address the county's concurrency requirements. A proportionate share agreement was executed between the developer (Minto) and the county. Those plans and agreements continue in effect and address all transportation needs for the short-term planning period and beyond to encompass the complete Minto development.

The expansion of Seminole Pratt Whitney Road to a four-lane divided highway will be close to completion as of the adoption date of this Plan. Construction of collector roads connecting the first phase of the development to Seminole Pratt Whitney Road is also complete. Other work has begun and will continue throughout the short-term planning period to provide necessary collector roads as well as local roads, for development. The arterial and collector roads planned for the next five years, as well as for the long term planning period are shown in the TE Maps 3.4-3.6 and 3.8. Additionally, related facilities, such as sidewalks and bikepaths are also being constructed in tandem with the roads. These are shown on TE Maps 3.7 and 3.9.

These transportation facilities are being funded by a combination of non-ad valorem assessments and developer contributions. In some instances, the developer is constructing the facilities directly. All work is being conducted in coordination with SID.

The City will coordinate with SID to sufficiently plan for roads associated with future growth during the short term planning period. The anticipated planned improvements for roads are listed in the Capital Improvement Schedule.

Stormwater

Prior to the incorporation of the City, the previous county plan amendment and South Florida Water Management District (SFWMD) Environmental Resource Permits addressed stormwater and drainage facilities. SID and in conjunction with the developer, have begun construction of a new stormwater management system, including extensive surface waters. The development of this stormwater management system will continue on pace with the anticipated expansion of the previously approved development in order to meet the SFWMD permit requirements as well as the adopted level of service standards.

The City will coordinate with SID to plan for the stormwater management system to serve the City during the short term and long term planning periods. SID's planned improvements for stormwater are listed in the Capital Improvement Schedule and are also depicted on INF Map 4.3 and 4.7.

Recreation Facilities

The City will coordinate with SID to sufficiently plan for recreational facilities to serve the City that will be associated with future growth during the short term planning period. Active development of parks is not yet scheduled. The level of service standard for parks is for planning purposes and is not a concurrency requirement.

Reuse Water

SID also plans to supply reuse water for landscape irrigation via an interlocal agreement with Palm Beach County. The reuse distribution pipes will be constructed and put into service in tandem with the water and wastewater distribution and collection pipes. Additional details are provided in the Infrastructure Element. Reuse water does not have an associated level of service standard and is not regulated via concurrency.

Solid Waste

The City will contract with a solid waste provider to collect and appropriately dispose of solid waste including hazardous wastes. The City will not construct or host within its boundaries any solid waste or hazardous waste disposal sites or facilities. As indicated in the Infrastructure Element, the Palm Beach County Solid Waste Authority has projected adequate capacity for solid waste disposal through the long term planning period.

Table 8.1: Capital Improvements Schedule, Fiscal Years 2017-18 – 2022-23

Project	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Fiscal Year 2020-21	Fiscal Year 2021-22	Fiscal Year 2022-23
Potable Water						
Extend water lines	$325,000*	$290,000*	$1,020,000*	$350,000*	$550,000*	$550,000*
Water interconnections with Palm Beach County lines.	$250,000*	$150,000*	$150,000*			
Reuse Water						
Install reuse lines	$220,000*	$197,000*	$370,000*	$128,000*	$200,000*	$200,000*
Wastewater						
Extend wastewater lines	$250,000*	$225,000*	$425,000*	$150,000*	$300,000*	$100,000*
Wastewater interconnections with Palm Beach County lines.	$75,000*	$100,000*	$100,000*			
Drainage						
Construct water management system	$4,800,000*	$1,800,000*	$1,650,000*	$1,650,000*		
Transportation						
Construct 2 lane collector	$1,300,000*	$2,200,000*	$1,320,000*	$450,000*	$500,000*	$550,000*
TOTAL						
	$7,220,000	$4,962,000	$5,035,000	$2,728,000	$1,550,000	$1,400,000

Source: Seminole Improvement District (2016)

*Funded through Seminole Improvement District contributions

REVENUES AND FUNDING SOURCES

SID will be the primary entity, in conjunction with the majority landowner and primary developer, to levy, collect, and apply revenue to the construction and maintenance of capital facilities.

The City has the ability to utilize a variety of revenue sources to finance capital improvement projects. The City's primary revenue sources include ad valorem taxes, electric utility tax, electric franchise fee, permit and other fees and communication tax. These sources are not, however, exhaustive of all resources that the City can consider or utilize should alternatives be found advantageous. The City also has the ability to utilize a variety other revenue sources such as bonds, impact fees, mobility fees and proportionate fair share mitigation and developer contributions. While capital project financing is not limited solely to the sources that are inventoried in this section, these major financial resources provide a basis for assessing the City's capacity to finance capital improvements.

Projected Revenues and Expenditures

Table 8.2a and Table 8.2b projects revenue and expenditures for the short term planning period.

Table 8.2a: Five-Year Projected Revenues

Revenue Source	Fiscal Year 2017-18	Fiscal Year 2018-19 Projected	Fiscal Year 2019-20 Projected	Fiscal Year 2020-21 Projected	Fiscal Year 2021-22 Projected	Fiscal Year 2022-23 Projected
Ad Valorem Taxes	$140,304	$168,365	$202,038	$242,445	$290,934	$349,120
Communications Service Tax	$4,000	$8,000	$10,000	$12,000	$22,000	$56,000
Public Service Tax	$5,000	$15,000	$20,000	$40,000	$103,000	$174,000
FPL Franchise Fee			$9,000	$25,000	$64,000	$109,000
State Revenue Sharing	$673	$2,500	$10,000	$15,000	$170,000	$176,000
Half Cent Sales Tax	$408	$675	$1200	$4,000	$10,000	$26,000
Developer Contributions and Fees	$1,580,967	$4,501,000	$5,201,000	$5,516,000	$4,344,000	$4,413,000
Total						
	$1,731,352	$4,694,865	$5,452,038	$5,854,445	$5,003,934	$5,303,120

Seminole Improvement District Proposed Elector-Initiated Combined Conversion and Incorporation Plan (April 2016).

Data and Analysis Table 8.2b: Five-Year Projected Expenditures

Description	Fiscal Year 2017-18	Fiscal Year 2018-19 Projected	Fiscal Year 2019-20 Projected	Fiscal Year 2020-21 Projected	Fiscal Year 2021-22 Projected	Fiscal Year 2022-23 Projected
Legislative	$34,000	$204,000	$204,000	$204,000	$175,000	$73,000
Other Legislative	$4,000	$28,000	$28,000	$29,000	$30,000	$31,000
Executive	$31,000	$191,000	$197,000	$369,000	$380,000	$391,000
Financial and Administrative	$5,000	$32,000	$33,000	$34,000	$35,000	$36,000
Legal	$13,000	$82,000	$84,000	$87,000	$89,000	$92,000
Planning and Zoning	$25,000	$156,000	$161,000	$165,000	$170,000	$176,000
Building/Code Enforcement			$70,000	$72,000	$74,000	$76,000
Law Enforcement	$16,000	$101,000	$104,000	$107,000	$110,000	$113,000
Other Expenditures	$150,000	$4,775,000	$5,483,000	$5,791,000	$4,600,000	$4,609,000
Total						
	$431,000	$5,933,000	$6,744,000	$7,262,000	$6,087,000	$6,025,000

Seminole Improvement District Proposed Elector-Initiated Combined Conversion and Incorporation Plan (April, 2016) and Water, Wastewater and Reuse Utilities Master Plan (April, 2015).

TIMING AND PRIORITY OF CAPITAL IMPROVEMENT NEEDS

The Plan identifies capital improvements by type, location, cost, and timing and priority of capital improvement needs. The City Council and staff will incorporate the needed improvements within the 5-Year Capital Improvement Schedule as planning proceeds.

MONITORING AND EVALUATION

The Capital Improvements Element requires yearly updates per Chapter 163 of the Florida Statutes. The yearly update will allow the City to assess public facility needs based upon the extent, rate, and projection of development.

The review will also determine if adequate revenues are available to meet the needs. The data regarding the listed improvements will be updated and revised as needed in order to meet the listed capital improvements.

After the review is completed, a summary along with any recommended modifications will be presented to the City Council at an advertised public hearing for adoption and implementation. This will occur when the City is in the process of developing the budget for the next fiscal year. The action of the City Council will be to direct staff implementation of the changes based on the recommended modifications.

CITY OF WESTLAKE

TECHNICAL DOCUMENT | Data & Analysis

INTERGOVERNMENTAL COORDINATION

2017

CHAPTER 9. INTERGOVERNMENTAL COORDINATION ELEMENT DATA AND ANALYSIS

INTRODUCTION

The purpose of the Intergovernmental Coordination element is to ensure appropriate coordination between the City, neighboring jurisdictions and other governmental agencies.

INTERGOVERNMENTAL COORDINATION

Table 9.1 briefly describes the various governmental entities and the subjects of coordination with those entities. Generally, the office with primary responsibility for coordination is the City Manager's office or its representatives. In several instances, the City Council needs to make determinations regarding the continuance of or changes to coordination issues with other agencies or jurisdictions. This table is not intended to be an all-inclusive list of entities with which the City will coordinate.

Table 9.1: Coordinating Agencies

AGENCY	SUBJECT OF COORDINATION
Palm Beach County	
Palm Beach County Government Administration	General Administration
Palm Beach County Building Division	Building Construction
Palm Beach County Engineering and Public Works	ROW Construction, Traffic Concurrency
Palm Beach County Department of Environmental Resource Management	Adopt Department's existing codes and policies and then modify as appropriate for the City
Palm Beach County Division of Emergency Management	Emergency Management
Palm Beach County Fire-Rescue	Fire / Rescue
Palm Beach County Palm Tran	Bus Services
Palm Beach County Parks and Recreation	Recreation
Palm Beach County Property Appraiser	Tax Revenues

AGENCY	SUBJECT OF COORDINATION
Palm Beach County School District	Schools
Palm Beach County Sherriff's Office	Law Enforcement
Palm Beach County Solid Waste Authority	Solid waste and recycling collection services
Palm Beach County Planning and Zoning Division	Planning Activities
Special Districts	
Indian Trail Improvement District	Stormwater Management and Road Maintenance Services in neighboring "Acreage" community
Loxahatchee Groves Water Control District (LGWCD)	Stormwater Management and Road Maintenance Services
Seminole Improvement District (SID)	Stormwater Management and Road Maintenance Services and Water/Sewer/Reuse Other areas as defined in Interlocal Agreement
Florida Departments and Agencies	
Department of Economic Opportunity, Division of Community Planning	Planning Activities
Division of Emergency Management	Emergency Management
Environmental Protection	Water Quality
Florida Department of Transportation	Transportation
Business and Professional Regulation	Various Licenses
South Florida Water Management District	Permitting
State Division of Historic Resources	Historic and Archaeological Resources
Treasure Coast Regional Planning Council	General Planning
United States Departments and Agencies	
US Census Bureau	Census and Surveys

AGENCY	SUBJECT OF COORDINATION
US Army Corps of Engineers	Engineering and Environmental
Environmental Protection Agency	Environmental
US Department of Housing and Urban Development	Affordable Housing
US Postal Service	Address development, mail delivery
Other	
Palm Beach County Metropolitan Planning Organization	Transportation Planning
Palm Beach County League of Cities	Governmental Coordination
Palms West Chamber of Commerce	Economic Development
IPARC (Intergovernmental Plan Amendment Review Committee)	Comprehensive Plan Amendment Coordination

Interjurisdictional Coordination

The City participates in several formal and informal agreements with several agencies. It is common practice for new municipalities to retain County services for the first few years after incorporation, and even indefinitely. The City contracts with the Palm Beach County Fire-Rescue Department and Sheriff's Office (District #4) to provide fire protection and police services.

The City coordinates with neighboring municipalities, special districts, Palm Beach County, and other governmental agencies that provide storm water management, fire and police protection, utilities, and road maintenance services. The most important intergovernmental coordination efforts are with the Seminole Improvement District (SID). The City Charter requires the City to coordinate efforts with SID, which provides potable water, sewer, stormwater management and road maintenance services within the City's municipal boundaries. Coordination between the City and SID is governed by the Interlocal Agreement dated XXX.

The City is not located within any airport hazard area, therefore, no coordination is required pursuant to Fl. Statute 333.03(1)(b).

Comparison with Regional Policy Plan

The Strategic Regional Policy Plan (SRPP) for the Treasure Coast (1995) has been reviewed and considered during the process of writing this Plan. The Plan conforms to the SRPP. Specific Coordination issues in each Plan element were reviewed for interagency coordination needs.

Palm Beach County Intergovernmental Coordination Program

Palm Beach County's coordination program was established through two interlocal agreements that created the Multijurisdictional Issues Forum and the Comprehensive Plan Amendment Coordinated Review Process. The latter is referred to as the IPARC (Intergovernmental Plan Amendment Review Committee). The purpose of IPARC is to provide:

1- Coordination for the review of proposed Plan amendments,
2- Cooperation between affected local governments and service providers, and
3- Opportunities to resolve potential disputes only within the plan amendment process with the least amount of infringement upon existing processes.

The City may participate in the Intergovernmental Plan Amendment Review Committee to coordinate planning activities in the City.

Treasure Coast Dispute Resolution Program

The City will participate in the Dispute Resolution program offered by the Treasure Coast Regional Planning Council (TCRPC). The TCRPC offers a dispute resolution process to reconcile differences between or among local governments, regional agencies, and private interests on planning and growth management issues. The dispute resolution process for the Treasure Coast Region is adopted as Rule 29K-4 of the Florida Administrative Code. The Treasure Coast Regional Planning Council has been trained in mediation and conflict resolution and has access to other resources that can be utilized to address conflicts and resolve disputes.

The School District of Palm Beach County

Coordination with the school district is important as the City's decisions regarding land use and density have an effect on the number and location of schools.

This coordination was formerly accomplished through a mandatory school concurrency process. The Florida Legislature made school concurrency optional in 2011 with the passage of the Community Planning Act. The same year, the original Palm Beach County Interlocal Agreement (ILA) for School Concurrency expired. The School Board, the Board of County Commissioners and the League of Cities charged IPARC with updating the existing ILA. The group opted to implement an alternative to School Concurrency, called the School Capacity Availability Determination (SCAD), and recommended entering into a new interlocal agreement for coordinated planning.

Interlocal Agreement for Coordinated Planning

The revised Interlocal Agreement (ILA) was approved and adopted by the School Board in August 19, 2015 and by the Palm Beach County on December 15, 2015. Several municipalities joined the new ILA. Since then other municipalities have joined the Interlocal Agreement

Local government signatories of the agreement are required to incorporate annually the School Board 5-Year Capital Facilities Plan into their comprehensive plans without any funding obligation as well as coordinate

and share information for planning purposes, including school's population projections and local governments' development and redevelopment proposals. The School Board may appoint non-voting representatives to local governments' land planning agencies, who will attend meetings and public hearing hearings at the discretion of the School Board.

School Capacity Availability Determination (SCAD)

Pursuant to the ILA, School Capacity Availability Determination (SCAD) was established to replace school concurrency. Per the SCAD, School District staff would conduct an analysis regarding the impacts on local schools, including potential boundary changes, and make recommendations that could be incorporated as conditions of development approval, dependent upon local government approving Board. The County was subdivided in 20 Planning Areas as part of the SCAD process. The School District staff has started the implementation of SCAD review process.

The School Capacity Availability Determination (SCAD) process includes all public schools in Palm Beach County. It entails reviewing the impact of the proposed comprehensive plan amendment, rezoning, and/or development order on existing public schools and planned and funded schools.

Different from school concurrency, District staff evaluates through SCAD the direct impacts to schools actually serving the proposed development as well as any planned capacity. SCAD review provides realistic information on impacts to schools. It uses 100% utilization of Florida Inventory of School Houses (FISH) capacity. If capacity is not available at the direct school serving the proposed development then capacity at adjacent schools in the same planning area is reviewed. Complete choice schools are not included in the evaluation for school impacts.