

# FUTURE LAND USE ELEMENT SUPPORT DOCUMENT

## I. INTRODUCTION

The purpose of the Future Land Use Element for the City of Pembroke Pines is the designation of future land use patterns as reflected in the Goals, Objectives and Policies, and as depicted on the future land use map. The Future Land Use Element also serves to link the balance of the elements of the City's Comprehensive Plan.

The Data Requirements section identifies existing land uses within the community, population characteristics, and growth trends. This section was updated during the 2000 amendment cycle by Ordinance No. 1362 with respect to the following properties which were annexed into the City of Pembroke Pines: the Waldrep Dairy property, an approximate 265 acre site located between University Drive and NW 72<sup>nd</sup> Avenue and between Sheridan and Taft Streets; the Stoneridge Property (Coquina Meadows) an approximate 111 acre site located at the northwest corner of Sheridan Street and Dykes Road (NW 160<sup>th</sup> Avenue); and the Alton property (Academic Village), an approximate 81 acre site located at the northeast corner of Sheridan Street and NW 172<sup>nd</sup> Avenue. The City of Pembroke Pines Future Land Use Map was updated to include the above-mentioned properties (see City of Pembroke Pines Future Land Use Map, FLU – Appendix – Maps). On September 15, 2003, the City of Pembroke Pines annexed a 2-acre parcel of property known as the Taft Street Baptist Church. Ordinance No. 1467 adopted a small-scale land use plan map amendment for the Taft Street Baptist Church property from Low 5 Residential (Unincorporated Broward County) to Low 5 Residential (City). No changes to the Support Documents of the City's Comprehensive Plan Elements were necessary. The annexed properties are shown on the City's Future Land Use Plan Map (FLU – Appendix – Maps), and included in the 10 year projected wastewater and water use tables (Tables 2-7 and 2-4 - included within the 10-Year Water Supply Facilities Work Plan. In 2005, two areas at the northwest section of the City of Pembroke Pines and southwest section of the Town of Southwest Ranches in the vicinity of 196<sup>th</sup> Avenue and Sheridan Street were de-annexed from each municipality and re-annexed into the other municipality or swapped. Annexation data for this 31.5 acre area is included in a proposed land use plan amendment application that has been transmitted to the Department of Community Affairs and is pending adoption (DCA 08-1AR (Laguna Isles Clubhouse).

The Support Document includes a review and status of the availability of facilities and services to serve the existing land uses, permitted uses for the City of Pembroke Pines Future Land Use Plan, redevelopment issues, and flood and drainage considerations.

The Adoption Document which includes the goals, objectives and policies section follows the Support Document and will help insure commitment to long-term programs. All of the objectives are followed by an evaluation measure. The evaluation measures which were previously located in the Monitoring section of the adopted 1990 Comprehensive Plan were relocated and either retained or updated. FLU Policies 5.1, 5.2, and 5.5 were previously submitted to DCA in May 1999, as part of the School Collocation Amendment (DCA Reference No. 99PS1), and were adopted by the City Commission on August 18, 1999 (Ordinance No. 1310). The associated data and analysis for the school collocation policies was also previously submitted to DCA in May (located under the Community Facilities section "D"). The Adoption Document is followed by the Implementation Regulations and Procedures section which includes a subsection for definitions.

The Permitted Uses of the Analysis Requirements section, and the Goals, Objectives, and Policies section were updated pursuant to the recommendations of the Broward County Planning Council (BCPC) in their review of the City's recertification request of the Future Land Use Element, which was adopted December 15, 1999 (see Broward County Planning Council Review of Proposed Pembroke Pines Future Land Use Element Text, dated April 26, 2000 – FLU – Appendix – Page 1). The purpose of BCPC's recertification review is to identify text and goals, objectives, and policies required to bring the City's Future Land Use Element into substantial conformity with the Broward County Land Use Plan.

The Permitted Uses of the Analysis Requirements section, and the Goals Objectives, and Policies section were updated pursuant to the recommendations of the BCPC in their review of the City's recertification request of the Future Land Use Element which was adopted December 18, 2002 by Ordinance No. 1433 (see Broward County Planning Council Provisional Recertification Report dated, August 29, 2003, FLU – Appendix – Page 2). The update included removing electrical power plants as a permitted use within the Residential, Commercial, Office Park, Industrial, Employment Center-Low, Employment Center, and Utilities land use categories. In addition, the permitted uses section was updated with respect to the Residential, Industrial, Employment Center-Low, and Employment Center land use categories to be consistent with Broward County Land Use Plan Policy 13.01.10. The permitted uses within the Conservation land use category was updated pursuant to the BCPC recommendation to distinguish between the permitted uses of subcategories "Reserve Water Supply Areas" and "Natural Reservations" consistent with the Broward County Land Use Plan.

In addition to the above, the Local Activity Center land use category, permitted uses, and associated objectives and policies were adopted (Objective XIX and Policies 19.1 – 19.10). The Non-Residential Intensities Table – FLU-3 was updated to include maximum floor area ratios for the local activity center land use category. Adopted Policies 18.7 and 18.8 (compatibility policies) were adopted to be more consistent with the Broward County Land Use Plan.

The Permitted Uses of the FLU Analysis Requirements section was revised with respect to those uses permitted within areas designated Agricultural. In accordance with the recommendations of the Broward County Planning Council and with the Broward County Land Use Plan, neighborhood support businesses and retail facilities up to one acre per 250 acres were deleted as permitted uses as adopted by Ordinance No. 1362 during the 2000 amendment cycle. The following policies were also adopted by Ordinance No. 1362 during the 2000 amendment cycle pursuant to the recommendations of the Broward County Planning Council: FLU Policies 1.16, 18.3, 5.3, 5.4, 7.8, 8.5, and 11.10. In accordance with adopted FLU Policy 15.1, the City proposes to incorporate by reference FLU Policies 5.3, 5.4, 7.8, and 8.5 into the Intergovernmental Coordination Element by amending Table ICE- 4 (ICE - Appendix - Tables - 6).

The following Future Land Use Element objectives and policies were adopted pursuant to the recommendations of the Broward County Planning Council (see Broward County Planning Council Review of Proposed Pembroke Pines Future Land Use Element Text, dated April 26, 2000 – FLU – Appendix – Page 1): FLU Objective III (modification), Policies 3.5 and 3.6, Objective V, Evaluation Measure for Objective V, Policies 5.4 , 5.5 5.6, and 5.7, Objective X, Evaluation Measure for Objective X, Objective XI , Policy 11.3, Objective XIII, Evaluation Measure for Objective XIII, Objective XIV, Evaluation Measure for Objective XIV, Policies 14.1, and 14.2, Objective XV, Evaluation Measure for Objective XV, Policy 15.5, Policy 16.1, Objective XVIII, Evaluation Measure for Objective XVIII, and Policies 18.4, 18.5, and 18.6.

In accordance with Policy 15.3, Table FLU-7 Consistency Matrix - Chapter 187, F.S., Strategic Policy Plan (SFRPC), Broward County Land Use Plan, and City of Pembroke Pines Comprehensive Plan will continue to be updated for all adopted Comprehensive Plan goals, objectives, and policies during the next amendment cycle following adoption (FLU - Appendix - Tables - 6).

Table FLU - 8 List of Changes (FLU - Appendix - Tables - 7) has been updated to reflect the changes and additions to the Comprehensive Plan Elements associated with the EAR amendments as recommended by the EAR adopted February 2006, and as summarized below with respect to the changes to the FLU.

The following FLU polices have been updated for the amended planning horizons, 1.13, 1.14, 1, 15, 6.2, and 7.5. New FLU policies include 2.11 which are consistent with the South Florida Regional Planning Council (SFRPC) Strategic Regional Policy Plan Policy 2.4. FLU Policy 5.7 is a new policy which is consistent with the South Florida Regional Policy Plan Policy 5.3. FLU Policies 5.8 and 15.6 are new policies that are consistent with Change No. 83 to Rule 9J-5, FAC. Policy 5.9 is a new policy that is consistent with the Broward County Land Use Plan adopted EAR amendments. Policies 5.10 and 5.11 are new policies recommended by the EAR in the analysis of the major issue relating to school facility coordination. Policy 5.12 is a new policy to address the changes in Chapter 163 relating to school concurrency. Policies 8.6 and 8.7 are new policies consistent with the South Florida Regional Policy Plan Policies 6.3 and 11.5 respectively. Policy 8.8 is a new policy recommended by the EAR in the analysis of the major issue relating to affordable housing. Policies 8.9 and 9.4 are new policies, consistent with the Broward County Land Use Plan adopted EAR amendments. Policy 10.5 is a new policy consistent with the South Florida Regional Policy Plan and State Statutes 163 and 187. Policies 11.1 and 11.12 are new policies consistent with the South Florida Regional Policy Plan Policies 14.9 and 14.11 respectively. Objective XX, Evaluation Measure for Objective XX, and implementing policies 20.1 through 20.3 were adopted to encourage the development of office uses within the City while ensuring the adequacy of public facilities serving the higher intensity office developments. Objectives XXI and XXII, Evaluation Measures for Objectives XXI and XXII, and the associated implementing policies are recommended by the EAR in the analysis of the major issue relating to mixed uses, and are consistent with the Broward County Land Use Plan adopted EAR amendments.

Objective IX and Policies 3.4, 4.7, 9.3, 12.11, 13.2, 15.3, and 15.4 have been updated to provide for the continuation of the objective or policy. Adopted Policy 5.5 was deleted and replaced by adopted Policy 5.6. Objective XIV and Policy 7.7 have been updated pursuant to the EAR recommendations. Policies 8.5 and 19.5 have been updated pursuant to the EAR recommendations and the Broward County Land Use Plan. The Evaluation Measure for Objective IX has been updated pursuant to the EAR recommendation, State Statutes, and the Broward County Land Use Plan. Policy 15.1 has been updated pursuant to the EAR recommendations and State Statutes.

Policies 3.3, 12.1, 13.3 have been updated to reflect correct the City Division name from Engineering to Environmental Services.

The 2002, 2004, and 2005 legislatures established a process for water supply planning, amending Chapters 163 and 373, F.S., to improve the coordination of water supply and land use planning. Senate Bills 360 and 444 strengthened the statutory linkage between the regional water supply plans prepared by the water management districts and local government comprehensive plans. The City of Pembroke Pines falls within the Lower East Coast Regional Water Supply Plan area and is required to ensure that adequate water supplies will be available to meet future demand, by developing a 10-year water supply facilities work plan (WSFWP). The WSFWP includes alternative water supplies, water reuse and conservation programs as required by State Statute, and are incorporated into the City's Comprehensive Plan through the Potable Water Supply and Water Resource Management Coordination sub-element of the Infrastructure Element. Amendments were made to the goals, objectives, and policies section and Support Document of this element, along with Infrastructure, Conservation, Capital Improvements, and Intergovernmental Coordination Elements addressing water supply planning requirements. Cross-reference notations have been added for all applicable amendments to the elements' goals, objectives and policies sections.

Future Land Use Element changes include Proposed Policies 7.9 (cross reference existing IE Policy 8.7), 10.6 (cross reference IE Policy 9.3, CE Policy 2.18, and ICE Policy 1.9) and 11.13 (cross reference IE Policy 9.8, and ICE Policies 1.9 and 2.11). Existing FLU Objectives X (cross reference IE Objective IX) and XI were updated pursuant to the above requirements. Existing FLU Policies 12.1 and 13.3 are consistent with water supply planning requirements. In response to DCA's Objection, Recommendation and Comment report dated August 6th, 2008, FLU Policies 7.10, 7.11, 11.13, and 11.14 were added.

The work plan is required to be updated within 18 months after the SFWMD updates the regional supply plan. The SFWMD updated the Lower East Coast Regional Water Supply Plan in September 2013; therefore, the City is required to adopt the updates by March 2015. The updates include text amendments to the Future Land Use, Infrastructure and Conservation Elements and the City's 10 year water supply facilities work plan which was adopted by the City Commission in 2009 (Ordinance No. 1632). FLU Policies 7.7 and 10.5 were updated. The SFWMD updated the Lower East Coast Regional Water in November 2018; therefore the City is required to adopt the updates by May 2020; however, due to Covid-19, the City's work plan was delayed. The updates for 2020 include text amendments to the Future Land Use, Infrastructure and Conservation Elements as well as the City's 10 Year water supply facilities work plan. The majority of changes were related to updating the planning horizons.

The 2010 proposed changes include the reformatting of all elements into a support document and an adoption document. During the last EAR amendment process, DCA recommended the Comprehensive Plan Elements be reformatted into two documents, adoption and support documents. The adoption documents will typically consist of the goals, objectives and policies sections; permitted uses, non-residential intensity standards and future land use map of the Future Land Use Element; and the Ten Year Water Supply Facility Plan of the Infrastructure Element. The support documents typically consist of the data and analysis, implementation, and introduction sections of each element. Therefore, the permitted uses and non-residential intensity standards of this element have been deleted from this document and relocated to the Adoption Document of the Future Land Use Element. In addition to the above, the City is proposing a new residential land use category (High 25-50) subject to certain criteria which were developed to implement the City's redevelopment concepts for the eastern section of the city and to direct higher density residential toward areas where infrastructure exists and in closer proximity to public transit.

Proposed Policy 5.13 was added to be consistent with the Broward County Land Use plan adopted policy regarding the coordination of the county with the School Board on impacts resulting from land use plan amendment applications to the RAC, LAC, TOD and TOC categories.

On September 13, 2018, the Broward County Commission adopted the Broward Next Land Use Plan, which was an effort by the County to comprehensively update the County's land use planning program within the context of meeting the regional challenges of the county's future and anticipated population growth. The only portions of the City's future land use element affected by the proposed county changes is with respect to the County's Flexibility Zones and Rules which facilitates the arrangement of densities and intensities within the City boundaries. Prior to adoption of Broward Next, all municipalities in the county were divided into Flexibility Zones based on location and the physical attributes including street boundaries of each zone. Within each zone, the number of available reserve units which could be assigned to a non-residentially designated parcel of land was tabulated at 2 percent of total number of units permitted by land use designation. The total number of reserve units available for assignment for all the Flexibility Zones was 396. The Flexibility rules also provided a process for conversion of land use from residential to commercial and from commercial to residential without the need to apply for a land use plan amendment. The City of Pembroke Pines was divided into 13 Flexibility Zones. After adoption of Broward Next, municipalities were given the option of collapsing all the zones into one Unified Flexibility Zone.

On April 12, 2018, the Broward County Planning Council accepted the City's request to collapse all the zones into one Unified Flexibility Zone. The adopted county changes also updated the definitions of reserve units, flexibility units and flexibility zones. Therefore, the proposed changes to the City's Future Land Use Element includes the updated definitions and references to same within the permitted uses sections of residential,

commercial, office park, industrial, employment center, community facilities, special residential facilities, and rural ranches land uses as well as Policy 8.5 and 8.9 as follows

Policy 8.5 The City may utilize available flexibility units as bonus density to facilitate the provision of affordable housing in the city and county consistent with the requirements and definitions contained within the “Administrative Rules Document: Broward County Land Use Plan.” Bonus density allocated for affordable housing may exceed 100% of the maximum number of dwelling units indicated for the parcel by the city and county land use plan maps provided such bonus allocation is consistent with the requirements and definitions contained within the “Administrative Rules Document: Broward County Land Use Plan.”

Policy 8.9 – For land use plan amendments which propose to add 100 or more residential dwelling units to the existing densities approved by the city and county land use plans (does not apply to the allocation of flexibility units), the city will coordinate and cooperate with the county to implement the city’s policies, methodology, and programs to achieve and/or maintain a sufficient supply of affordable housing. The City will be required to demonstrate compliance with this policy at the time of the county’s consideration of the applicable land use plan amendments.

Planning Horizons – The FLU planning horizons are 2015 and 2025.

Service Area – The FLU service area consists of the entire City of Pembroke Pines.

## II. EXISTING LAND USE DATA REQUIREMENTS

The City of Pembroke Pines was incorporated in 1960 and consists of approximately 34 sq. miles (22,215 acres). Pembroke Pines is one of thirty (30) incorporated municipalities within Broward County. It is situated six miles southwest of Fort Lauderdale/Hollywood International Airport, 26 miles north of Miami, and 35 miles south of Boca Raton. Adjacent to Pembroke Pines are the cities of Hollywood, Miramar, Cooper City, and the towns of Davie and Southwest Ranches, and the unincorporated area of Broward County. The City is bounded by major arterial roadways on all four sides and bisected from east to west by Pines Boulevard. Interstate-75 (I-75) transects the City north/south through the western 1/3 of the City and provides ready access to Dade County, Collier County, the Sawgrass Expressway, and other parts of Broward County.

At the time of Comprehensive Plan adoption in 1990, approximately 35% of the City was built with more than 65% of the City vacant. In 2005, approximately 95% of the City was built with 5% of the City vacant. Table FLU-1 (Appendix-Tables) and Map No. FLU-7 (Appendix-Maps) outline the current distribution of existing land uses within the community.

The following will further analyze the different characteristics of the existing land uses within the community as of 2005 with observations on the future growth and development of the community.

### A. Residential

In 1995, residential development represented approximately 10,500 acres of the City's 22,176 total acres or 47% of the City's total acres. Of this amount, the predominate type of residential development was single family which represented approximately 84% of the residential component of the built environment within Pembroke Pines. The balance of the residential component primarily consisted of a variety of townhouse, garden apartments and mid-rise condominiums. The multi-family category grew by 713 acres, from 841 in 1984 to 1,554 acres in 1995. The multi-family category represented approximately 4% of the City's total acreage and 24% of all residential designated land in 1984, and 7% of the City's total acreage and 15% of all residential designated land in 1995. Although the multi-family

category grew in number of acres and as a percentage of the City's total acreage, it decreased as a percentage of the City's residential designated lands. At the time of adoption of the EAR in 2006, single family uses increased from 40 percent in 1995, to 45 percent. Multi-family uses increased from 7 to 12 percent, while mobile home uses remained the same and special residential facilities increased from .02 to 5 percent. Single family uses represents approximately 77 percent of the total existing residential development, while multi-family uses represents approximately 20 percent total existing residential development with mobile homes and special residential facilities representing the remaining 3 percent of total existing residential development.

B. Commercial

The commercial component of the existing land use within the City consisted of approximately 940 acres in 1995 which represented only 4% of the City's total acreage. In 1984, commercial land uses consisted of approximately 330 acres and accounted for approximately 1.5% of the City's total acreage. Commercial land uses primarily consist of retail sales, but also includes some wholesale trade, offices, restaurants, service outlets, automobile service facilities and automobile dealerships, and the like. With the development of I-75 and the improvement of the major roadways in the area, commercial activity has increased. Construction of two regional malls (Pembroke Lakes Mall at the northeast corner of Flamingo Road and Pines Boulevard and Westfork Plaza at the northeast corner of Dykes Road and Pines Boulevard) have been completed. Commercial activity as well as other uses continues to occur on Pines Boulevard, which is the major east/west thoroughfare through the City. At the time of adoption of the EAR in 2006, commercial uses increased from 4 percent in 1995 to 6.5 percent of existing development in the City of Pembroke Pines.

In 1984, twenty-six (26) separate commercial centers containing approximately 1,600,000 sq. ft. of retail space were located within the City. Seventeen of the twenty-six centers were neighborhood or community centers. Twelve of the centers were located east of University Drive and the City's most concentrated area of commercial activity was at the intersection of University Drive and Pines Boulevard. In 1984 there was over 1,000,000 sq. ft. of retail and office space within a ½ mile of the intersection, with 300,000 additional sq. ft. planned. All of these centers have been completed and many have undergone renovation and upgrades as part of their continued efforts to attract new businesses to the centers. By 1988, commercial development increased to approximately 470 acres or 2% of the City's total acreage. Since 1988, the City has added another concentrated area of commercial activity with the completion of the Pembroke Lakes Regional Mall in the vicinity of Flamingo Road and Pines Boulevard and Westfork Plaza in the vicinity of Dykes Road and Pines Boulevard. By 2005, several commercial centers were developed with a major center currently under construction east of I-75 and south of Pines Boulevard (Shops at Pembroke Gardens). Commercial development comprises approximately 1,438 acres of the City's total acreage.

The following defines the three basic commercial center categories:

1. Neighborhood Center which provides convenience goods on a daily basis and typically serves an area up to a mile in radius. Typical characteristics include:

Average gross leasable area  
(GLA) = 50,000 sq. ft.  
GLA range = 100,000 sq. ft.  
Parcel size = 3 - 10 acres  
Trade area = 2,000 - 20,000 people

2. Community Centers provide a much wider array of goods and services and typically include junior department stores, specialty discount centers. They oftentimes have a food and drug store combination. Typical characteristics include:

Average gross leasable area  
(GLA) = 150,000 sq. ft.  
GLA range = 100,000 - 300,000 sq. ft.  
Parcel size = 10 - 30 acres  
Trade area = 40,000 - 150,000 people

3. Regional Centers which provide a wide variety of services and goods and many times include movie theater complexes, major department stores and automotive centers. Typical characteristics include:

Average gross leasable area  
(GLA) = 400,000 sq. ft.  
GLA range = 300,000 - 1,000,000 sq. ft.  
Parcel Size = 50 - 100 acres  
Trade area = 150,000 people

C. Industrial

In 1984 and 1988, there were only seven (7) acres of industrial land within the City of Pembroke Pines, which represented approximately .003% of the City's total acreage. In 1995, there were 47 acres of industrial land within the City which represented approximately .02% of the City's total acreage. FLU Objective II and its implementing policies address the intentions of the City in its economic development efforts. FLU Policy 2.1 reflects the City's desire to attract a more balanced mix of commercial, office and industrial uses. Between 1995 and 2006, industrial land increased from .02 percent to 1.7 percent with approximately 390 acres of the City's total acreage. The Non-Residential Intensities Table (Table FLU-3) includes intensity standards for all non-residential future land use categories.

D. Community Facilities

In 1984, the City of Pembroke Pines had the following four (4) major community facilities with the fifth facility added in 2000:

1&2. North Perry Airport/Broward Community College

This is a Broward County operated General Aviation Airport which encompasses approximately 528 acres located south of Pines Boulevard and east of University Drive. The majority of the site is reserved for airport operations devoted exclusively to private and light business type planes. Aircraft weighing more than 12,500 lbs. and all jet aircraft are restricted from utilizing this airport (Broward County Ordinance No. 91-16).

According to the North Perry Airport Master Plan Update, prepared by Leigh Fisher Associates, December 1996, North Perry is operated by the Broward County Aviation Department and is classified by the Federal Aviation Administration (FAA) as a basic utility reliever airport for the Fort Lauderdale-Hollywood International Airport. The primary activities at North Perry include recreational flying, flight training, and business flying. A complete description of the airport facilities and services is included in the Transportation Element. FLU Policy 18.1 and TE Policy 2.4.3. reflect the City's current and updated strategies of coordinating with the Broward County Aviation Department in the regulation of land uses surrounding the airport.

In the northeast portion of the airport is a branch of the Broward Community College called the Judson A. Samuels South Campus. The campus can accommodate 22,000 students each year. This particular facility attracts approximately 7,000 to 8,000 day and evening students drawing from both Dade and Broward County. This has had ancillary impacts on service needs in the surrounding area as well as on housing and construction needed to meet the college environment needs.

3. South Florida State Hospital

This facility consists of nearly 290 acres and is located on the opposite side of University Drive from North Perry Airport. The State of Florida owns the property and leases land to both the City of Pembroke Pines Senior Apartments and to Douglas Gardens North, which provides both assisted and independent living residential units. Both facilities provide affordable housing to low income senior residents through HUD's Section 8 housing program. The City's apartment site is planned to expand by 200 units during the next 2 years and Douglas Gardens North is also planning for expanded facilities and services for the City's senior population.

4. Walter C. Young Human Resource Center

The City of Pembroke Pines is also fortunate to have a unique facility known as the Walter C. Young Human Resource Center which is actually six (6) centers in one. This is a joint development of City, County, School Board and State of Florida funding, and the following activities and amenities are provided at this facility:

- a. A full service auditorium/theater with adjoining music and art suites to seat 650 people.

- b. Recreation center with both indoor and outdoor sports activities. This includes a gymnasium, tennis/racquetball courts, football/soccer/baseball/softball fields, a running track, swimming pool and toddler's outdoor play area.
- c. Learning resources center, which offers a full service middle school library and a full service branch of the Broward County Library System, a professional library, conference rooms, a dark room and a media production lab.
- d. Counseling/Community Service - A daycare facility, senior center and a wide variety of guidance and social service programs are provided.
- e. A middle school with academic classrooms, science and skills development laboratories and exceptional educational programs under the Broward County School System and Broward Community College administration.
- f. An administrative center to coordinate the entire complex.

#### 5. Academic Village

At the Florida State University (FSU) Charter School campus (Sheridan Street and 172<sup>nd</sup> Avenue), the City of Pembroke Pines has partnered with FSU to produce the Pembroke Pines Charter School Florida State University Campus and elementary school facility which is a Professional Development School to promote learning, research and collaboration. The site also consists of a 142,000 square foot Charter High School, a 91,300 square foot regional library, a 24,800 square foot community college facility, and a 15-acre outdoor education and wetlands open space facility. The Charter High School and all other associated Academic Village development has been in operation since August 2000.

Pembroke Pines is home to three university campuses, one community college with two campuses, three high schools with one additional high school under construction, six middle schools, and thirteen elementary schools. The above mentioned includes four Charter Elementary Schools, two Charter Middle Schools and one Charter High School, all of which are owned and operated by the City of Pembroke Pines.

FLU Objective IV addresses the intentions of the City in its efforts to continue to ensure adequate land for community facilities. FLU Objective V addresses the coordination of land use planning with the provision of public education facilities.

FLU Policies 5.1, 5.2, and 5.5 were adopted by Ordinance No. 1310 pursuant to previous legislation concerning school collocation (DCA reference No. Pembroke Pines 99PS1). Chapter 163.3177(6) (a) requires local governments to include school location criteria in their comprehensive plans. The purpose of the criteria is to encourage the location of schools near urban areas and to collocate them with parks, libraries and community facilities to the extent possible. In addition, land use elements are required to designate land use categories where public schools are an allowable use.

In accordance with the Broward County Charter, public school facilities and facility site location services are provided by the Broward County School Board and in the case of Charter Schools, by the City of Pembroke Pines. FLU Objective V was adopted pursuant to the recommendations of the Broward County Planning Council to ensure through the future land use planning process and coordination with the Broward County School Board, that public elementary and secondary school facilities will be available to meet the current and future needs of the City's school population. Under Objective V of the City of Pembroke Pines Future Land Use Element (FLUE), Policy 5.1 provides for the City to coordinate with the Broward County School Board in encouraging the location of schools proximate to urban residential areas to the extent possible and to collocate public facilities, such as parks, libraries and community centers with schools to the extent possible. Policy 5.2 provides for the City to review the school location criteria as adopted by the Broward County School Board and include the criteria appropriate for the City of Pembroke Pines as an amendment to the City's Comprehensive Plan upon its availability and subject to the requirements of Chapter 163, Florida Statutes and 9J-5, FAC.

FLU Policies 5.3 and 5.4, and 5.6 were adopted pursuant to the recommendations of the Broward County Planning Council and further the City's intergovernmental coordination activities with respect to the provision of public schools. Previously adopted Policy 5.5 was deleted and replaced by the same policy as 5.6. Previous Policy 5.6 is replaced by Previous Policy 5.7. FLU Policy 5.7 is a new policy which is consistent with the South Florida Regional Policy Plan Policy 5.3. FLU Policies 5.8 and 15.6 are new policies that are consistent with Change No. 83 to Rule 9J-5, FAC. Policy 5.9 is a new policy that is consistent with the Broward County Land Use Plan adopted EAR amendments. Policies 5.10 and 5.11 are new policies recommended by the EAR in the analysis of the major issue relating to school facility coordination. Policy 5.12 is a new policy to address the changes in Chapter 163 relating to school concurrency.

Section 163.3177(6) (a), Florida Statutes also requires the designation of land use categories where public schools are an allowable use. The Future Land Use Element of the City's Comprehensive Plan currently lists public schools as an allowable use under the following land use designations:

- a. Residential
- b. Rural Ranches
- c. Commercial
- d. Office Park
- e. Industrial
- f. Employment Center
- g. Employment Center - Low
- h. Community Facilities
- i. Agriculture
- j. Regional Activity Center
- k. Local Activity Center
- l. Transit Oriented Corridor
- m. Transit Oriented Development
- n. Mixed Use Residential

Since the majority of the City's land use designations currently permit public schools, the permitted uses section of the City's Land Use Element is in compliance with Section 163.3177(6) (a).

FLU Policy 5.5 provided that the City will incorporate Policies 5.1 and 5.2 of the FLUE into the City's Intergovernmental Coordination Element (ICE). The ICE, which was adopted by the City Commission on 12/20/2000 (Ordinance No. 1362), incorporated by reference the above-mentioned policies and therefore, this policy was deleted. Updated Policy 15.1 provides for the City to incorporate all updated objectives and policies which require coordination with other governmental entities in the City's Intergovernmental Coordination Element (ICE) during the amendment cycle following the update.

The City updated the map series to include community facilities such as schools and public health facilities as recommended by the EAR, adopted February 2006. FLU Policy 4.7 provides for continuous updates to the map series consistent with the update to the Broward County map series

- E. Recreation/Conservation

The City contains a substantial amount of recreational and conservation uses. The conservation area is the State of Florida's first wetlands bank which consists of approximately 460 acres. This area has been dedicated to the City of Pembroke Pines by the Chapel Trail development in the western portion of the community. FLU Policies 2.7, 2.9, 3.3, 3.4, and 11.4 and ROS Policies 1.4, 2.3, and 3.4, have been adopted pursuant to the recommendation of the EAR to promote and protect the Chapel Trail Preserve as a tourist attraction and valuable environmental resource. ROS Policy 1.5 promotes public access to the area pursuant to adopted Resolution No. 3127. The preserve area is 460 acres and therefore can be considered a regional park that serves the residents of more than one city.

The City also contains a high percentage of parks including two regional parks operated by Broward County. C.B. Smith Park has both active and passive recreational opportunities for the community and the adjacent cities, and is located at Flamingo Road and Pines Boulevard and consists of 320 acres. In addition, Broward County operates an active recreational park immediately north of the City at Douglas Road known as Brian Piccolo Park which consists of approximately 189 acres. The recreational facilities existing within the community are outlined in the Recreation and Open Space Element of the Comprehensive Plan.

ROS Policy 3.3 and the City's map series (FLU-6) has been updated for parks and submitted with the 2007 EAR Amendments, pursuant to FLU Policy 4.7. FLU Policy 4.3 and ROS Policy 3.1 amended the adopted level of service standard for the provision of park and recreational land from 10 total acres per thousand population for all types of park facilities to 10 total acres per thousand population to be achieved by providing 7 acres per thousand in neighborhood and community type park facilities and 3 acres per thousand in regional type park facilities. ROS Policy 4.5 relating to the timing of development with needed park and recreational land facilities was adopted pursuant to the recommendation of the EAR, adopted in 1995, and as required by Chapter 163, FS, and Rule 9J-5, FAC. Policy 1.7 is intended to improve access to all park facilities within the City of Pembroke Pines.

#### F. Historic Resources

The 1990 adopted Comprehensive Plan identified the following Historical/Archaeological sites: Buzzards Roost (8BD00092); Seminole Rock Pit (8BD00019); Houdaille Mound (8BD00021); Snake Creek (8BD00013); 8BD00086; and 8BD002139. As noted in the Conservation Element, the City has not yet identified any historic resources. The data on the above archaeological sites was updated and submitted with the Intergovernmental Coordination Element during the 2000 amendment cycle (Map No. CE-2, CE – Appendix – Maps – Page 3), and the map will continue to be updated on an as needed basis in accordance with CE Policy 4.17. FLU Policies 11.1 and 11.8 were adopted and provide for the protection of any historic resources identified in the future. FLU Policy 11.10 was adopted pursuant to the recommendation of the Broward County Planning Council to further the City's activities with respect to the protection of historic resources.

#### G. Natural Resources

The City is an inland community with no coastline or beaches and all rivers, lakes and water bodies which have been identified on the natural resource maps have been updated pursuant to FLU Policies 3.4, and 11.9, and CE Policy 4.15 (see Map No. FLU-5, City of Pembroke Pines Natural Resources, FLU-Appendix-Maps-6 and Map No. CE-1, Wetland Map, CE-Appendix-Maps-2). There are from time to time isolated wetlands which are identified and reviewed by the U.S. Army Corps of Engineers and the Florida Department of Environmental Protection, but due to the diking of the Everglades in the early part of the 20th century, there had been a gradual natural decline of all wetlands within the community. These same agencies including the South Florida Water Management District continue to regulate wetlands and review wetland mitigation plans designed to preserve existing sites or to minimize the negative impacts of development on existing wetland communities. CE Policies 2.15 was updated and 2.16 was adopted for the purpose of protecting and preserving the Biscayne Aquifer as recommended by the EAR (adopted 2006), and Chapter 163, State Statutes relating to the 10-Year water supply planning requirements, and are consistent with the Broward County Conservation Element EAR amendments for the unincorporated area.

The only mineral resources within the community were the road and building materials products which were excavated from rock pits in various parts of the community. These rock pits are no longer in operation. FLU Objective XI and Policies 11.4, 10.1, 11.5, 11.6, and 11.7, and CE Objective IV and Policies 4.3, 4.4, and 4.7 reflect ongoing activities in the protection, maintenance, and preservation of the City's natural resources. CE Policies 4.19, 4.20, and 4.21 further enhance the City of Pembroke Pines objective to protect, maintain and preserve the City's natural resources.

##### 1. Climate

The climate in the City of Pembroke Pines is characterized by long, warm, humid summers and mild winters. The climate is considered one of the most important natural resources of the City as well as of the State of Florida. The Atlantic Ocean moderates the maximum temperatures in the summertime as well as to a certain extent the minimal temperature in the wintertime. It is considered a humid subtropical type climate. Rainfall also has a significant impact on the area with precipitation occurring during all seasons; however, a rainy season of five months is considered from June through October and this brings nearly 65% of the annual rainfall for the area. Average rainfall is approximately 64 inches. Most summer a rainfall comes from showers and thunderstorms which are of short duration. A 24- hour maximum rainfall of 9 inches is expected to occur in one year of every ten years on average.

Tropical storms have a hazardous influence on the area, but they occur on irregular intervals. On the average, hurricane force winds occur one year in seven. In August 1992, one of the most damaging and most expensive natural disasters in United States history struck the State of Florida with a direct hit to several cities in southern Dade County which are within one hour driving distance of the City of Pembroke Pines.

According to the National Hurricane Center, in Dade County, up to one-quarter million people were left homeless. According to the Internet article "Residents Piecing Together Lives Five Years After Hurricane Andrew," August 24, 1997, News-Journal Corporation, the following statistics on the effects of the hurricane on Dade County's population were collected and included the following: Nearly 140,000 homes were either damaged or destroyed; more than 8,000 businesses were affected that employed more than 50,000 people; 20 percent of the pre-storm businesses were not able to reopen; 95 percent of the 840 nurseries were destroyed; 65 schools and 8 hospitals were damaged; and Dade County's population dropped from 2,000,555 in prestorm 1992 to 1,943,442 in 1993 (decrease of 57,113 or approximately 3 percent). The City anticipated the 2000 US Census data to reflect significant changes in population characteristics and trends as a result of Hurricane Andrew (see discussion below under Population Projections).

The prevailing wind direction is southeasterly from March through September and northwesterly to easterly for the other months. The wind velocity generally ranges from 12 to 20 miles/hour during the day and usually drops below 10 miles/hour at night. Average humidity is generally pretty high, approximately 87% early in the morning to about 60% in the early afternoons.

2. Physiography and Drainage

Pembroke Pines is nearly level in topography. The soils are generally sandy and underlain by limestone, which is porous, allowing water to move through it laterally for long distances. The major drainage basins affecting Pembroke Pines are the North New River Canal which is situated in Davie and the C-9 Canal which is on the Dade County line to the south. Both of these canals are under the management and control of the South Florida Water Management District. FLU Policies 12.1 and 13.1 were adopted to reflect ongoing drainage and stormwater management activities. Infrastructure Element (IE) Policy 5.3 addresses the criteria that continue to be used by the various governmental agencies to protect property from potential hazardous flooding conditions. CE Policy 2.14 provides for the City to continue to implement land development regulations to protect property from flood damage. FLU Policy 13.2 and IE Policy 2.15 provide for the City to continue to update its map series to include flood plains/flood zones on an as needed basis following the update to the Broward County map series.

3. Soil

The following information includes a description of the soils commonly found in the City of Pembroke Pines (see Map No. FLU-5 - City of Pembroke Pines Natural Resources, FLU - Appendix - Maps - 6). There are seventeen different soil types within the City of Pembroke Pines and these are noted on Table FLU-2 below.

Table FLU-2  
DATA REQUIREMENTS

Soil Legend

Ao	Arents, Organic Substratum - Urban Land Complex
Ba	Basinger Fine Sand
Da	Dania Muck
Ha	Hallandale Fine Sand
Hb	Hallandale - Urban Land Complex
Hm	Hallandale and Margate Soils
Ia	Immokalee Fine Sand
Ir	Immokalee, Limestone Substratum - Urban Land Complex
Iu	Immokalee - Urban Land Complex
La	Lauderhill Muck
Ma	Margate Fine Sand
Mu	Margate - Urban Land Complex
Pm	Plantation Muck
Pp	Pompano Fine Sand
Sa	Sanibel Muck
Ud	Udorthents
Un	Udorthents, Shaped
Ur	Urban Land
W	Water

The predominate soil types within Pembroke Pines include the following:

- a. Immokalee - Urban Land Association
- b. Hallandale - Margate Association
- c. Lauderhill - Dania Association

The Immokalee Urban Land Association consists of poorly drained, nearly level sandy soils that are more than 80 inches deep; most have a dark, organic coated sub-soil and some have areas that have been modified for urban use. This association is typified by the eastern portion of Pembroke Pines and consists of approximately 20% of the land area.

The Hallandale - Margate Association consists of poorly drained, nearly level sandy soils that are less than 6 inches deep to hard limestone. This soil type is in the east central portion of the City and only consists of approximately 10% of the land area.

The Lauderhill Dania Association is the largest association within the City and this consists of very poorly drained, nearly level, organic soils that are less than 4 inches deep to hard limestone. This association presents approximately 70% of the land area.

FLU Objective XI and CE Objective III reflect ongoing activities relating to the protection and maintenance of minerals and soils. CE Policies 3.1 and 3.2 reflect the implementation of applicable land development regulations to ensure the continued protection of soil resources.

#### 4. Wellfields

The Broward County Water Management Division was responsible for the development of a comprehensive future wellfield study. This study identified sites for future wells to serve the future population. Map FLU-2 (Appendix) identifies wellfields and wellhead protection areas in accordance with the Broward County Department of Planning and Environmental Protection Semi-Annual Inventory Report on Contaminated Locations in Broward County, July 1998. FLU Objective X and the Evaluation Measure for FLU Objective X were adopted pursuant to the recommendations of the Broward County Planning Council. FLU Policy 10.1, CE Objective II and CE Policy 2.1 reflect the City's ongoing activities relating to the protection of wellfields. CE Objective II has been updated to ensure that conservation activities are also consistent with the adopted Regional Water Supply Plan for our region. FLU Policy 10.2 provides for the protection of potable water wellfields by designating appropriate activities and land uses within wellhead protection areas. FLU Policies 10.3 and 10.4, IE Policies 2.10 through 2.12, and CE Policies 2.7 through 2.11 were adopted pursuant to the 1995 EAR recommendations as strategies to further protect and utilize the quantity and quality of water resources within the community, and to be more consistent with the policies of the Broward County Department of Planning and Environmental Protection. IE Policy 2.10 and CE Policy 2.8 have been updated with the 2007 EAR amendments to reflect the completion of the septic tank inventory. IE Policy 10.5 and CE Policy 2.13 were adopted to address a concern of the SFRPC which was identified during the 1995 EAR sufficiency review, and have been updated with respect to including the data and analysis associated with the effects of saltwater intrusion on the status of water quality on groundwater resources within the 10-Year Water Supply Plan which will be adopted within 18 months of adoption of the Regional Water Supply Plan.

## H. Population Projections

Population projections have been updated utilizing Broward County staff projections, and are included in the EAR, adopted February 2006. Population projections prepared by the Florida Housing Data Clearinghouse, University of Florida (fka Shimberg Data Center) were utilized to update the Housing Element. The City anticipated that the 2000 US Census data would reflect the effects of Hurricane Andrew on the migration of households from Dade County to Broward County as well as the housing construction costs which were affected by more restrictive South Florida Building Code provisions. Since the City of Pembroke Pines is located in closer proximity to Dade County than the majority of cities in the county, the omission of the effects of Hurricane Andrew on the population count, median income level, household size, and housing construction costs were of particular concern.

The EAR, adopted February 2006, included an analysis of issues determined to be of major importance by the City's Local Planning Agency during the conduction of Scoping Meetings pursuant to Chapter 163.3191, F.S. One of these issues included Managing and Directing Population Growth. According to the adopted EAR, population growth in the city as well as in the county continues to be driven by net migration. People are attracted to the South Florida Region by external factors such as the climate, economy, and lifestyle. As mentioned above and within the climate section of the adopted Future Land Use Element, increases in certain demographic categories were anticipated due to the effect of Hurricane Andrew on the migration of households from Dade to Broward County. The average household size increased from 2.4 in 1995 to 2.6 in 2000 (an increase of 7.6 percent). In 2000, the City's population grew to 137,427, and in 2005, the City's population was projected to be 157,711, a growth rate of 13 percent since 2000. The County's population grew to 1,621,387 in 2000, to a projected 1,790,180 in 2005, or a 9 percent growth rate since 2000. The City of Pembroke Pines experienced more significant rates of growth from 1990 to 1995 (34 percent) while during this same period, the County's population grew by about 8 percent. Although the City's projected rate of growth exceeds the county's, the differences in the two rates have been significantly reduced.

## I. Affordable Housing

As mentioned in the Housing Element, the data indicates there is a need for affordable housing for all household income levels. In order to address these needs and Chapter 163, F.S., and Rule 9J-5, FAC requirements, many modifications were adopted to the Housing Element goals, objectives, and policies during the 1999 EAR amendment and update process. FLU Objective VIII was adopted to be more consistent with the goal, objectives and policies of the Housing Element. FLU Policy 8.3 was adopted in accordance with the South Florida Regional Planning Council's recommended policies and is consistent with HE Objective VI. FLU Policy 8.4 was adopted pursuant to the recommendation of the 1995 EAR and is consistent with HE Policy 2.6. FLU Policy 8.5 and HE Policy 3.10 were adopted pursuant to the recommendations of the Broward County Planning Council to further the City's activities relating to the provision of affordable housing units; however both policies have been updated consistent with the 2006 adopted EAR recommendations and the Broward County Land Use Plan EAR amendments. On March 21, 2007, the City Commission adopted Ordinance No. 1575 that provides a tiered approach in addressing affordable housing needs by creating an affordable housing program, a housing trust fund, and an independent/outside housing study authorized to conduct an analysis of the City of Pembroke Pines' affordable housing needs. The ordinance also provides for a system of monitoring and review with a second tier that may, in the future, incorporate the findings of the affordable housing study as recommended by the City Commission.

HE Policies 1.8 through 1.14, 2.8, and 3.14 through 3.18 are adopted pursuant to the 2006 adopted EAR recommendations and are consistent with the Broward County EAR amendments. HE Policy 3.12 is adopted pursuant to the 2006 adopted EAR recommendations and SFRPC Strategic Regional Policy Plan Policy 6.3. HE Policies 3.13, 7.4 and 7.5 are adopted pursuant to the 2006 adopted EAR recommendations.

Affordable Workforce Housing was also identified as a major issue by the City's Local Planning Agency during the conduction of scoping meetings as required by Chapter 163.3191, F.S. According to the 2006 adopted EAR, the data indicates that the current affordable housing deficits are significantly less than what was projected for 2005 during the 1999 Ear amendment process. However, there is no dispute that the demand for affordable housing remains significantly higher than the supply. This issue is discussed further in the vacant land analysis section of this element as well as the Housing Element Support Document.

## J. Quality Development and Concurrency Management System

The adopted goal of the FLU takes into account all of the elements of the Comprehensive Plan in order to continue to promote quality development in the City. FLU Objective I and FLU Policies 1.12, 1.13, 1.14, and 4.4 were adopted pursuant to the recommendation of the 1995 EAR to further the City's current activities relating to the promotion of quality development. FLU Policies 1.13 and 1.14 have been updated with the 2007 EAR amendments to reflect the current planning horizons. FLU Policies 1.16 and 18.3 were adopted pursuant to the recommendations of the Broward County Planning Council to continue the City's current activities relating to the potentially adverse impacts of industry (1.16) and the reduction of incompatible uses (18.3). FLU Policy 1.11 was adopted pursuant to the recommendation of the 1995 EAR and reflects ongoing activities of the City to promote quality development through its subdivision requirements. FLU Policy 12.10 was also adopted pursuant to the recommendation of the 1995 EAR to reflect ongoing annexation activities which promote quality development by reducing urban sprawl.

In addition to the above, FLU Objective XVIII, the Evaluation Measure for FLU Objective XVIII, and implementing FLU Policies 18.4, 18.5, and 18.6, were adopted pursuant to the recommendations of the Broward County Planning Council to further the City's efforts to encourage the elimination or reduction of existing incompatible land uses and prevent future incompatible land uses.

FLU Objective VII regarding the maintenance of the City's concurrency management system was adopted pursuant to the recommendation of the 1995 EAR, and is more consistent with the requirements of Chapter 163, FS, and Rule 9J-5, FAC. FLU Policy 7.1, IE Policies 2.6, 6.4, and 8.8, and CIE Policy 2.1 regarding the timing of development orders and permits and the availability of needed facilities and services were adopted pursuant to the recommendation of the 1995 EAR, and as required by Chapter 163, FS, and Rule 9J-5, FAC. CIE Policy 2.5, regarding the timing of development orders and permits and the availability of needed facilities and services were adopted pursuant to the recommendation of the 1995 EAR and as required by Chapter 163, FS, and Rule 9J-5, FAC. FLU Policies 7.2, 7.3, 7.4, and 7.5 were adopted pursuant to the recommendation of the EAR to further the City's current activities relating to concurrency management. FLU Policy 7.8 was adopted pursuant to the recommendation of the Broward County Planning Council and was similarly intended to further the City's activities relating to concurrency management. FLU Policies 7.2, 7.3 and 7.5 are consistent with IE Policies 2.5, 2.6, 2.7, 4.7, 4.8, 4.9, 6.3, 6.4, 6.5, 8.7, 8.8, and 8.9, as updated. CIE Policy 2.5 has been updated pursuant to the 2006 adopted EAR recommendations and State Statutes. In addition, TE Evaluation Measure for Objective 2.1 and its implementing policies have been updated pursuant to the 2006 adopted EAR recommendations, DOT review comments during the EAR process, and the Broward County Transportation Element adopted EAR amendments.

K. Coordination and Consistency

FLU Objective XV and the Evaluation Measure for FLU Objective XV were adopted pursuant to the recommendations of the Broward County Planning Council. Implementing policies for the objective include adopted Policies 15.1, 15.2, 15.3, and 15.4. FLU Policies 15.2 and 15.3 (relating to the coordination and both internal and interagency consistency of the City's Comprehensive Planning process with the plans of other agencies) were adopted pursuant to the recommendations of the 1995 EAR and requirements of Chapter 163, FS, and Rule 9J-5, FAC. FLU Policy 15.1 has been updated pursuant to the 2006 adopted EAR recommendations and provides for the City to incorporate all Future Land Use Element objectives and policies which require coordination with other governmental

agencies in the City's Intergovernmental Coordination Element (ICE) during the next available amendment cycle. The ICE was adopted by the City Commission on 12/20/2000 (Ordinance No. 1362), and has incorporated by reference and will continue to incorporate all applicable FLU objectives and policies pursuant to updated FLU Policy 15.1 (Table ICE-4 - ICE - Appendix - 6). FLU Policies 15.3 and 15.4 have been updated to reflect their continuation pursuant to the 2006 adopted EAR recommendations and State Statutes. FLU Policy 15.5 is an implementing policy under FLU Objective XV and was adopted pursuant to the recommendations of the Broward County Planning Council. Policy 15.6 is adopted pursuant to the 2006 adopted EAR recommendations and Rule 9J-5, FAC, Change No. 83

TE Objective 2.2. and its implementing policies further coordination efforts between land use and transportation planning. Coordination efforts are especially significant given the shift from roads to public transit by the County and from the Florida Interstate Highway System to Strategic Intermodal Systems (SIS) by the State of Florida Department of Transportation.

Objective XVII continues to provide for the City to coordinate future land uses by encouraging the elimination of uses that are inconsistent with any interagency hazard mitigation reports in accordance with Chapter 163, FS, and Rule 9J-5, FAC. FLU Evaluation Measure Objective XVII was adopted for monitoring purposes. Policy 17.1 provides for the City of Pembroke Pines to work with Broward County and other governmental agencies to coordinate post-disaster redevelopment and hazard mitigation plans. The South Florida Building Code (Broward County Edition) also sets minimum standards for structures to withstand stress loading due to flooding, wind and other natural hazards associated with hurricanes. Policy 17.2 provides for the City of Pembroke Pines Building Division to continue to enforce the provisions of the South Florida Building Code as amended (Broward County Edition). Policy 17.3 provides for the City of Pembroke Pines to coordinate with Broward County's post disaster mitigation efforts to incorporate appropriate interagency hazard mitigation report recommendations into the future land use planning process.

### III. ANALYSIS REQUIREMENTS

This segment of the Future Land Use Plan relates to a review and analysis of the availability of facilities and services to serve the existing land uses which are included in the Data Requirements section of the Future Land Use Plan and also for land for which development orders have been issued. The types of services that are reviewed in this segment include: transportation, sanitary sewer, solid waste, drainage, potable water and natural groundwater aquifer recharge. See Table FLU-4 (Appendix) for a comprehensive listing of existing and proposed facility levels of service.

#### A. Transportation

The Transportation Element of the Comprehensive Plan identifies the existing transportation system within the community and region. The expansion of Pines Boulevard from the Turnpike to Flamingo Road, the construction of I-75 through the City, and the connection of I-75 with the State Road 84/I-595 highway have greatly improved the regional aspects of transportation capabilities to serve the Pembroke Pines community. The expansion of Flamingo Road from a two-lane to a six-lane facility has provided relief for University Drive which had been operating at overcapacity. The area of the City in the vicinity of University Drive is now included within an area designated for transit concurrency by Broward County (Southwest District).

Public transit service to the community is primarily operated by the Broward County Mass Transit Division, who makes adjustments in the service requirements of the community to more adequately meet the growing demands. Supplementing this service is the community bus shuttle service provided by the Community Services Department which provides public transit services for the elderly and transportation disadvantaged.

The City of Pembroke Pines has and will continue to participate in Highway Beautification agreements with Broward County and the State of Florida Department of Transportation (see City of Pembroke Pines TE Policy 2.2.3.). It has also fostered the development of quality communities in the western reaches of the City as an attractively landscaped boulevard.

The majority of roadways in the City's Transportation system are either county, state or federal highways and accordingly, those agencies have the primary responsibility for funding, maintaining and upgrading those highways (See TE Table 2-1, TE Appendix). It was noted in the Intergovernmental Coordination Element that the City of Pembroke Pines will continue to work closely through its representation on the Metropolitan Planning Organization (MPO) to insure proper coordination with those agencies. This participation also helps to prioritize improvements to roadways based on local needs to serve the future growth and development of the community. See 2.1.14. for strategies the City proposes to implement in conjunction with Broward County to address overcapacity roadway segments and roadway segments approaching overcapacity. The balance of the roads within the City of Pembroke Pines are of secondary nature and are maintained either by the City, or are private roads that are maintained by the developments for which they serve. The Transportation Element indicates there are no secondary local roads which exceed an acceptable level of service at the present time or are anticipated to exceed an acceptable level of service over the short term or long term planning horizons.

The vast majority of eastern Pembroke Pines is already largely developed with the exception of the City Center development and the expansion plans for the South Florida State Hospital land. Data on the City's recently annexed areas at the northwest section of the City will be submitted during the next available amendment cycle. All future secondary roadway transportation facilities for any vacant parcels will continue to be borne by developers.

The update to the Transportation Element recognizes the shift in the transportation network from roadways to public transit consistent with the County's Transportation Element. Five of the seven segments identified as overcapacity are located with the County's Transit Concurrency District and these segments are funded for public transit improvements. Improvements to the two identified segments that are located within the County's roadway concurrency district are funded and currently under construction. Revised data on these links will be incorporated into the transportation element upon the update to the county's data.

Fifteen segments were projected to be overcapacity in the long term planning horizon and of the fifteen; three are located within the standard road concurrency district. Map No. TE-16 (Cost Feasible Highway Plan) shows improvements to two of the road segments (Sheridan Street and Pembroke Road). Interchange Improvements are also programmed for the intersection of Pines Boulevard and I-75. TE Policies 2.1.5., 2.1.6., 2.1.7., and 2.1.11. address the city's concurrency management system for both the standard roadway concurrency and transit concurrency districts when adopted levels of service are exceeded.

## B. Sanitary Sewer Facilities

Sanitary sewer facilities for the City are provided by two (2) entities. The City of Hollywood accepts flows from the City of Pembroke Pines east of Flamingo Road and discharges them into the Atlantic Ocean. The agreement presently in effect with the City of Hollywood provides for adequate sewer service for the existing and planned communities. The western portion of the community which includes the Stoneridge and Alton properties, is served by the City's facility utilizing the method of deep well injection after secondary treatment. The Infrastructure Element will be updated with respect to the annexed and de-annexed properties located in the northwest portion of the city during the next amendment cycle.

In 1986 the City initiated and implemented an aggressive program to provide water and sewer lines to the western limits of the City including the Holly Lakes Mobile Home Park at U.S. 27. This installation was completed and was financed through a bond program with a special assessment for property owners served by this new facility. This has provided the proper sewer service as well as upgrades and expansions in advance of growth and development thereby maintaining a proper level of service for these facilities.

The City of Pembroke Pines Plant is relatively new having been constructed in the mid-1980's. The City anticipates continued opportunity for the proper growth and development of the remaining vacant land in the community over the next 10 – 15 years. The City installed, as previously noted, water and sewer facilities extending out to U.S. 27, and in 1983 passed a resolution which limits the issuance of permits for septic tanks. The City has taken great strides to provide water and sewer service for its entire community well in advance of the development of a significant portion of the community. Addressing the services in this manner will continue to provide for a safer and higher quality environment and greater protection to the natural resources occurring within the community and surrounding communities. The expected life of both the City of Hollywood and Pembroke Pines plants is well beyond the year 2030 horizon, and the adopted level of sanitary sewer services is expected to be maintained to serve the future population of the City through 2015.

## C. Solid Waste

Solid waste generated in Pembroke Pines is collected by All Service Refuse Co., a private solid waste hauler. It is collected twice weekly at the curb and hauled to the Reuter facility located in western Pembroke Pines. This facility was planned to be a final disposal site when the last plan was completed. However, due to concerns about odor, this facility does not operate as originally intended. It presently serves as a transfer facility, with provision for sorting of recyclable materials. Solid waste is disposed of at the Chambers Landfill in Okeechobee. The Chambers Landfill has adequate capacity for at least 20 years. The Chambers contract is in effect until 2008 and will be reviewed and reconsidered after that time. The City's contract with All Service Refuse Co., for collection services runs until April, 2013, with an option to renew.

The City of Pembroke Pines initiated a newspaper recycling program in August 1989. Paper for recycling is collected weekly at the curb. The City's recycling activities also include the collection of plastic, aluminum, steel, and glass which are hauled by BFI to the Reuter transfer station in the City of Pembroke Pines.

The adopted level of solid waste services is expected to be maintained to serve the future population of the City through 2015.

#### D. Potable Water

The City of Pembroke Pines Water Treatment Plant provides potable water for the entire City of Pembroke Pines. The design capacity of the City's system in 1990 was 12 mgd. and the demand for that facility was 8 mgd. with a peak demand of 12 mgd. In 2007, the design capacity of the city's system was 18 mgd.; however the plant is restricted to the 16.29 mgd allowed for by the South Florida Water Management Consumptive Use Permit (CUP). Currently, the demand for this facility is 13.5 mgd. The level of service for that facility meets current standards. The Infrastructure Element has been updated with respect to the annexed and de-annexed properties in the northwest portion of the city and effects on projected water use.

The expansion of the facility provides an adequate supply of water for the existing and projected population of the entire City of Pembroke Pines. Table 2-4 of the proposed 10 Year Water Supply Facility Work Plan (WSFWP) provides an analysis of projected water use through 2040. No shortfalls in water supply are projected through 2040. Adequate water will be available to serve the City's residents through 2040.

#### E. Groundwater Recharge

The City of Pembroke Pines supports and complies with the Broward County Wellfield Protection Ordinance and the expansion of wellfields to provide potable water service for the future residents of Broward County, including the City of Pembroke Pines. Also, the City adheres to strict guidelines and standards for the pre-treatment of all stormwater discharge prior to discharge into the primary drainage system of the community in accordance with the criteria of the South Florida Water Management District, South Broward Drainage District, Central Broward Drainage District, and the Broward County Department of Planning and Environmental Protection. These pre-treatment standards continue to help insure that the aquifer is maintained to acceptable standards.

During the EAR sufficiency review conducted by the South Florida Regional Planning Council (SFRPC), a recommendation was made to add a discussion and data regarding the effects of saltwater intrusion on groundwater resources, wellfield capacities, and levels of service. In addition, the SFRPC indicated the EAR did not contain an assessment and evaluation of whether the wellfield protection ordinance adequately provides and maintains the level of service standards, or the status of water quality in the City's wellfields. IE Policy 10.5 and Conservation Element (CE) Policy 2.13 were adopted to address the SFRPC's recommendations by identifying the City's role as one of coordination only in the implementation of standards that have been adopted by the various Broward County agencies that play a primary role in the protection of groundwater resources. IE Policy 10.5 and CE Policy 2.13 further provides that the City will include an assessment and evaluation in accordance with the data collected from the various governmental agencies as recommended by the SFRPC in the Ten Year Water Supply Work Plan.

**Note: The Permitted Uses Section is being deleted from the support document and added to the adoption document.**

F) Vacant Land Analysis

This section of the Comprehensive Plan examines the character and magnitude of existing vacant undeveloped land to determine the suitability for use. The following major components will be addressed in this analysis:

- 1) Soils
- 2) Topography and Flood Prone Areas
- 3) Wetlands
- 4) Historic Resources
- 5) Water Wellfields

These are the predominant features which have an impact on the suitability of land for development within the City of Pembroke Pines. As noted under Table FLU-1 of the Existing Land Use Data Inventory, in 2005, there were approximately 990 acres of vacant land still remaining within the community. This represented approximately 4% of the total landmass of the City of Pembroke Pines. Tables FLU-5 and 6 describe in greater detail the vacant land distribution. In accordance with FLU Policy 7.7, the City updated the vacant land analysis in coordination with the Transportation Element in order to determine if there are adequate sites at sufficient densities to accommodate identified affordable housing needs and provide direction for amendments to the future land use map and future land use categories to ensure that a sufficient supply of potential affordable housing sites are designated. Results of the analysis are provided in the Housing Element Data and Analysis Requirements section.

#### 1) Soils

The vacant portions of Pembroke Pines primarily contain three (3) soil types including Lauderhill muck, Dania muck, and Margate fine sand. The Lauderhill and Dania muck consist of approximately 80% of the vacant lands, while the Margate fine sand represents the balance within the City.

The Lauderhill and Dania mucks are part of the Lauderhill-Dania association and are representative soils which are located in western Broward County. The Lauderhill-Dania association is specifically found close to the conservation area. The natural vegetation of this area was predominantly sawgrass prior to the diking and general drainage to the area. With the drainage which occurred in the early 1900's, this area has been substantially invaded by melaleuca. These organic muck soils are very poorly drained and nearly level. The depth of the limestone is less than 40 inches. The soil wetness requires water control or drainage for agricultural uses and in order for this association to be used for non-agricultural uses, the organic material must be removed and replaced with fill. Most of these soils require substantial modification to permit their utilization for roads, building sites, sanitary sewer facilities or other urban uses. In the past these types of soil conditions have not been a predominant factor in limiting growth and development within the City. This is because the cost of soil modification has not been so prohibitive to not permit the filling of sites to create adequate conditions for development.

The Margate fine sand is a part of the Hallandale-Margate association which is typically found to the east of the Lauderhill-Dania association. The Hallandale-Margate association typically has vegetation which consists of native grasses, saw palmetto, wax myrtle, pine and cypress. However, many of these areas have been altered or invaded by brazilian pepper or melaleuca. These sandy soils are poorly drained and nearly level and the depth of the limestone is less than 60 inches. The soil wetness requires water control or drainage for most uses while the hard limestone provides a base for foundations. Fill is normally required to elevate building sites.

The primary restriction imposed upon these vacant areas as it regards the suitability for soils are interrelated with the drainage capabilities of the area and the ability to modify the soils to provide suitable building sites.

## 2) Topography

The City of Pembroke Pines is generally flat with minimal elevation fluctuations. The City of Pembroke Pines has land elevations varying from 5 ft. to 9 ft. Mean Sea Level (MSL).

Because Pembroke Pines surface elevations are generally level, topography has had and will continue to have a minimal impact on restricting urbanization within the City of Pembroke Pines. The primary effect of topography is the requirement that all building sites be of suitable height to meet all Federal Flood Insurance standards. The Floodplain/Flood Zone map will be updated on an as needed basis to identify the flood prone or non-flood prone areas within the City (See IE Policy 2.15). To accommodate these requirements, it typically requires the excavation of onsite lakes to provide the proper amount of fill to meet the floor elevation requirements and to retain/detain stormwater prior to discharge to the regional drainage system.

## 3) Wetlands

Within Pembroke Pines, the existing wetland communities occurring are non-forested fresh water wetlands. These wetlands consist of three subcategories: wet prairies, managed wetlands, and wetlands that have been impacted by invasive exotic species. The wet prairies have good representation of wetland plants. The soil is generally moist and in many instances has standing water. The managed wetlands have wetland flora intact, although the flora is pressed by management techniques such as mowing. Impacted wetlands have over 50% cover of invasive exotic species such as melaleuca and brazilian pepper.

Between U.S. 27 and the conservation area is an area known as the Everglades Buffer Zone, which is a designated Local Area of Particular Concern by Broward County. The only development within this area is the Holly Lakes Mobile Home Park at the northwest corner of U.S. 27 and Pines Boulevard, which was constructed over 20 years ago. There is also a small public park and some utility related facilities. However, the utility has been deactivated with improvement of water and sewer lines extending out to U.S. 27 serving this area. Because of the sensitivity of this area and South Florida Water Management District Buffer Cell 17, no further development should be permitted within the buffer zone (See FLU Policy 11.5 which was updated pursuant to the recommendations of the South Florida Regional Planning Council and South Florida Water Management District during the 1995 sufficiency review process of the EAR). This buffer zone should remain in its natural state and will provide a suitable and important transition between the pure wetlands of the conservation area and the more urbanized areas east of this vicinity.

In general, the amount of wetlands within the City has been significantly reduced because of the diking of the Everglades in the early 1900's. However, wetlands which are identified within the community (see Map No. CE-1, CE - Appendix - Maps -2) have significant controls in place by virtue of the permitting processes of the Broward County Department of Planning and Environmental Protection, the Florida Department of Environmental Protection and the United States Army Corps of Engineers. In addition, through the goals, objectives and policies of this Comprehensive Plan, the City will insure that no net reduction of wetlands will occur within the community.

When a wetland area is identified, the permitting process is initiated which would be required in advance of any development permits being issued for the subject parcel. The permitting process includes a three-agency review as follows:

1. The U.S. Army Corps of Engineers
2. The Florida Department of Environmental Protection
3. The Broward County Department of Planning and Environmental Protection

The U.S. Army Corps of Engineers and the Florida Department of Environmental Protection provide a joint application process for permit applications in a wetland area. However, based upon the jurisdictional requirements of the separate agencies, an individual permit is issued by each agency where applicable. In order to obtain a permit from these agencies, the subject parcel must meet all wetland permitting requirements. In the event wetlands are eliminated from the site, enhancement or creation of new wetland areas onsite must be incorporated into the design to mitigate the loss. Subsequent to the issuance of a permit by the Florida Department of Environmental Protection and the U.S. Army Corps of Engineers, the petitioner must also obtain a permit from the Broward County Department of Planning and Environmental Protection. The Broward County Department of Planning and Environmental Protection conducts a review similar to the Florida Department of Environmental Protection and the permitting process with the County agency can occur simultaneously with the Federal and State agencies.

4) Historic Resources

Due to the relatively recent history of the City of Pembroke Pines, there were no historic resources identified in the 1990 Comprehensive Plan or the 1996 EAR. However, there are some archeological sites which are listed on the Florida Master Site File Inventory. In accordance with CE Policy 4.17 the City updated its natural resources map series to include archeological sites listed on the Florida Master Site File Inventory (Map No. CE-2, CE – Appendix – Maps – Page 3).

5) Water Wellfields

On August 20, 1984, Broward County enacted Ordinance No. 84-60 which relates to the prohibition and regulation of hazardous and toxic substances within zones of influence of public utility water supply wellfields within the County. The study, which resulted in the adoption of the ordinance, was commissioned to insure an adequate and safe supply of drinking water for existing and future residents of Broward County. This ordinance is commonly known as the "Potable Water Supply Wellfield Protection Ordinance," and is effective countywide. The City of Pembroke Pines fully supports and adheres to the requirements of this ordinance.

The ordinance delineates cones of influences for all existing and planned wellfields within the community and adjacent communities. Water Wellfields and Wellfield Protection Areas have been identified on Map No. FLU-2, Water Wellfields and Wellfield Protection Areas (FLU Appendix-Maps) in accordance with the Broward County Map series. The ordinance speaks to three (3) zones which are further identified below and defined as follows:

A. Zone 1

The land area situated between the well(s) and the ten (10) day travel time and contour.

B. Zone 2

The land area situated between the ten (10) day and the thirty (30) day travel time contours.

C. Zone 3

The land area situated between the thirty (30) day and the two hundred and ten (210) day travel time contours, or the thirty (30) day and the one (1) ft. draw down contours, whichever is greater.

The techniques that were utilized to develop these different zones were sensitive to the effects and the hydraulic nature of our groundwater and canal system within Broward County, and also to the build-out of the County and the City and the pumping rates that would be applicable at that time.

There are some existing wellfields within the community on Johnson Street east of University Drive. Water Wellfields and Wellfield Protection Areas have been identified on Map No. FLU-2, Water Wellfields and Wellfield Protection Areas (FLU Appendix-Maps) in accordance with the Broward County Map series. FLU Policy 10.2 was adopted to provide for the protection of potable water wellfields by designating appropriate activities and land uses within wellhead protection areas. New development or renovations which may occur in these areas must fully comply with the Wellfield Protection Ordinance which the City fully supports and administers in concert with the Broward County Department of Planning and Environmental Protection. The following describes the prohibitions, common restrictions and permitting within the zones of influence:

### **Zone 1**

Within zone 1, no non-residential activity which includes the storage, handling, age or production of any of the regulated substances, outlined in Resolution 84-20255, shall be permitted without an exemption permitted within the Ordinance.

Anyone currently engaged in the storage, handling, use or production of regulated substances shall cease to continue that operation within two years of the effective date of the ordinance (August 28, 1984).

### **Zone 2**

Any new non-residential activity which includes the handling, storage, use or production of regulated substances will only be permitted provided the following:

A monitoring program is implemented; and

The County will make a study of the accumulation or regulated substances that may be occurring in any potable waterfield.

In the event that accumulation has occurred in excess of 10% over the amount of the substance present one year earlier, then one of the following actions will become mandatory;

Cease to continue the operation within three years of written notification with the County; and

The effective well will be reconfigured within three years by change of pumping grade or relocation which remove the effected activity from within Zone 2.

### **Zone 3**

Activities involving the storage, handling or use of regulatory substances within Zone 3 must obtain a wellfield protection operation permit unless exempted by the Potable Supply Wellfield Protection Ordinance.

In summary, the protection of wellfields for the expanding potable water needs of the City is inherent to proper land use planning. No land uses should be permitted which would have a deleterious effect on the Wellfield Protection Ordinance and the wellfields which are presently planned or implemented.

### **G. Land Needs**

In accordance with FLU Policy 7.7, the previously submitted vacant land analysis has been updated, conducted in coordination with the Transportation Element, and added to the Housing Element Analysis section in order to determine if there are adequate sites at sufficient densities to accommodate identified affordable housing needs, and provide direction for amendments to the future land use map and future land use categories to ensure that a sufficient supply of potential affordable housing sites are designated.

The various future land use categories with their densities or intensities of use have been outlined under item F. - Permitted Uses for the City of Pembroke Pines Future Land Use Plan. These categories are consistent with the Broward County Land Use Plan which was created as part of the mandate of the Broward County Charter. These permitted uses and densities outline a variety of residential categories plus nonresidential categories including variations of commercial, office and employment center uses. The City is proposing the addition of three new mixed use categories pursuant to the County's Future Land Use Plan to supplement the city's affordable housing efforts (TOD, TOC, and Mixed Use Residential).

The updated intensities of nonresidential land use categories within the City of Pembroke Pines are provided in Table FLU-3, of the adoption document, and are to be utilized in determining the maximum carrying capacity of non-residential properties. The intensities will be implemented through the Zoning Code of the City of Pembroke Pines (see FLU Policy 1.15). Maximum height restrictions are also implemented through Chapter 155, Zoning Code, City of Pembroke Pines.

**Note: The above is being deleted from the support document and added into the adoption document.**

## H. Redevelopment

As indicated throughout the Housing Element and previously in the Land Use Element, the City of Pembroke Pines housing stock is relatively new in comparison to Broward County; and it is also in good structural condition. Accordingly, there are presently no blighted areas within the community nor are there areas which are beginning to deteriorate. However, through its Code Enforcement Division, the City will continue to closely monitor the condition of neighborhoods and address any deficiencies that may occur in the future.

## I. Flood Prone Areas

Development and redevelopment in areas that are flood prone require special development considerations. First, the raising of building pad elevations must meet the FEMA requirements. Secondly, the development of onsite drainage systems that provide sufficient site drainage and retain/detain stormwater runoff quantity and quality must meet the requirements of the South Florida Water Management District (SFWMD), Broward County Department of Planning and Environmental Protection, the South Broward Drainage District, the Central Broward Drainage District, and the City of Pembroke Pines Environmental Services Division.

The City of Pembroke Pines has limited areas which are flood prone and any development within those areas must conform with the Flood Insurance Rate Maps. The City fully subscribes with the FEMA Maps and all development must conform with those standards.