

# **Explanation of Seminole County Methodology for Projecting Future Population, Housing and Employment 2004-2025**

In preparation for the 2006 Comprehensive Plan Evaluation and Appraisal Report, the County performed basic research to create detailed estimates of the current population, housing and employment by Traffic Analysis Zones (TAZ) as well as projections of future population, housing and employment growth through 2025. Relevant information from each city was also collected and incorporated in creation of the new dataset. This revised and updated dataset serves as the basis for projecting capital facility needs to meet projected service demand in the areas of libraries, roads, mass transit, water, sewer, fire/safety, recreation and solid waste based on the adopted levels of service for each facility.

## **A Current Figures for October 2004**

- 1 Current county population was based on the 2000 Census and Florida Bureau of Economic and Business Research (BEBR) population estimates for 2001, 2002, 2003 and 2004. **NOTE:** The estimates were adjusted to October 1 of each year for planning purposes to match the start of the fiscal year.
- 2 Current county employment was derived from the Regional Economic Information System (REIS) dataset. This control total was then distributed to the TAZ level, using the most current InfoUSA employment dataset as a guide.

## **B Projected Figures to October 2025**

- 1 Projected county maximum population was based on the BEBR medium population projections for future years for Seminole County. This set an upper limit population control total for the entire county.
- 2 Projected county maximum employment was based on the Florida Long-term Economic Forecast 2002 prepared by BEBR with a trend line extension of the 2010-2015 growth used to create 2020-2025 projections. This set the future upper limits of employment control totals for the entire county.
- 3 An additional projection to the year 2030 was made in late 2006. Note that the total population is below the total population of 2025 as the projection is based on a slightly reduced average family size.

## **C Identifying the Potential for Development**

- 1 Using a variety of sources, all unbuildable parcels were identified and excluded from future development consideration. These properties primarily included wetlands, floodprone lands, public lands and dedicated open spaces not available for building.
- 2 All remaining parcels within the County were then identified as:
  - a Built - Current residential and non-residential built properties were determined using the Seminole County Property Appraiser's data. These properties were excluded from further development consideration.
  - b Approved for building – Properties with approved development plans were assigned the approved development, or if already under construction, the development yet to be completed. Each municipality was also queried for approved development information at the time of the dataset creation.

- c Vacant Buildable – All remaining properties were evaluated for their potential development capacity – residential and/or non-residential – based on the historic development pattern within the Future Land Use (FLU) category for each property. Vacant buildable land within cities was assigned a generalized FLU based on the city’s specific FLU. All buildable land, county-wide, was then analyzed based on the assigned FLU.
- 1) Historically, the average development of all properties with a particular FLU designation has generally been at a lower density or intensity than the maximum allowed by the FLU. Also, some parcels may include uses other than those allowed by the FLU designation that were built prior to the implementation of the FLU map categories. Property Appraiser records identifying individual properties developed during the 2000 to 2004 period were tabulated for each FLU category. The average development density/intensity per developable acre for each FLU category was then computed from these records. These recent development patterns and rates of growth were then used as the basis for projecting the future development of Vacant Developable lands.
  - 2) Seminole County bases current and projected development potential on net vacant developable acres. The net acres calculation begins with the removal of conservation (wetland and flood) acres from the gross acres leaving developable acres. Ten percent (10%) of the developable acres are then factored-out for anticipated power lines, ROW easements, public dedications. etc., with the remainder being considered the net buildable acres. The development density/intensity of buildable vacant lands in each FLU category is based on this calculated net buildable acres.
    - (a) Note: For rural FLU designations of R-3, R-5, R-10 and for HIPTR, no net developable factor is applied as public lands are generally not significant to the internal development of such property. This is also true of development in non-residential FLU categories.
    - (b) Note: The FLU designation of Conservation is based on a broad area assessment of such lands. The actual amount, if any, of conservation acres on a particular property is determined via field methods once a development interest is expressed.
  - 3) The two tables below, one for non-residential and one for residential development assumptions, detail both the maximum allowable densities/intensities of development by FLU category on the left and the growth projection assumptions on the right based on actual historic development in each classification

Non-Residential Land Use Development Assumptions				
Maximum Allowable Densities/Intensities		Assumptions for Potential Development of Vacant Land (1)		
Future Land Use Classification (FLU)	Max Building Area per Developable Acre	Building Sq Ft per Developable Acre	Employment per 1K sq ft Building Area	Employment per Developable Acre
Classifications	Sq Feet	Sq Feet	Employees	Employees
COMM	15,246	10,420	3.23	33.7
HIPTI (on 90% non-res)	15,246-43,560	12,610	2.77	34.9
HIPTR (on 10% non-res)	15,246	8,052	2.05	16.5
IND	28,314	9,167	2.30	21.1
OFF	15,246	10,144	3.85	39.0
PD	per approved DO	5,830	2.61	15.2
PUB	per approved DO	6,693	4.56	30.6

*1 Gross acres minus conservation acres equals developable dry acres. No public lands are removed for non-residential.*

Residential Land Use Development Assumptions							
Maximum Allowable Densities/Intensities		Assumptions for Potential Development of Vacant Land (3)					
Future Land Use Category (FLU)	Maximum Residential Density per Net Acre (1)	Net Developable Factor (2)	Single Family (SF) Development		Multi-family (MF) Development		Non-Residential Development
Categories	Units	Percent	Average Units per Net Acre	Net Acre % Developed as SF	Average Units per Net Acre	Net Acre % Developed as MF	Net Acre % Developed as Non-Res
R10	0.1	100%		100%			
R5	0.2	100%		100%			
R3	0.33	100%		100%			
SE	1	90%		100%			
LDR	4	90%	3.2	100%			
MDR	10	90%	5.8	96%	6.7	4%	
HDR	20	90%	8.4	22%	12.7	78%	
HIPTR	20	100%			12	90%	10%
HIPTI	50	90%			20	10%	90%

*1 Gross acres minus conservation acres (wetlands + flood) equals developable dry acres.*

*2 Net developable factor removes public road and associated stormwater land area from the net calculation.*

*3 Based on actual development history within the FLU category during the period 2000-2004.*

## D Assignment of Projected Development Figures to TAZs thru 2025

### 1 In general:

- a Development in and around current high growth TAZ's was given priority as determined by past building history and planner assessment of the location and timing of growth areas.
- b Approved development outside of current high growth TAZ's was given next priority – generally absorbed within the first five years.
- c Outlying and historically slow growth areas received any remaining growth up to their absorption potential.
- d The assignment of development to TAZs is constrained by two factors: 1) the upper limit control totals computed for both population and employment and the capacity of the vacant buildable lands to absorb the development based on the locally adopted future land use category.

2 In particular:

- a Population growth was based on projected housing growth, persons-per-household and available vacant buildable property by adopted future land use category. Population per household projections were based on BEBR's Florida Long-term Economic Forecast, using a linear extension of the available 2005-2010 trend. Average household size was assumed to slowly decline from 2.563 in 2005 to 2.532 in 2010, 2.507 in 2015, 2.482 in 2020 and 2.457 in 2025. While the BEBR medium population growth rate was used through 2009 to calculate the housing demand, this rate was deliberately slowed starting in 2010 based on two limiting assumptions:
  - 1) That only 15% of the remaining residential capacity would be built in any one year and that the residential vacancy rate would decline slightly over time. The 15% rate of absorption is actually slightly higher than the absorption rate now occurring, but does reflect the declining supply of remaining buildable residential land.
  - 2) This approach was felt to best model the rate of residential growth as available parcels became smaller, more scattered and potential compatibility issues increase development difficulty next to existing neighborhoods. A small residual of housing potential still remained at the 2025 mark.
- b Employment was not slowed as buildable, non-residential lands are sufficient to support projected growth through the planning period.

## **E The Projection Results**

- 1 Based on the methodology described above, the resulting TAZ figures reflect projected future growth by time and by location within both the unincorporated and incorporated areas.
- 2 The TAZ figures are inclusive of existing land use, approved development and the potential of vacant buildable lands based on their current future land uses as adopted in local comprehensive plans as of 2004.
- 3 Seminole's projection of a residential population of 500,582 by 2025 is 15% below the BEBR projected medium figure of 574,000 for the same year. The difference can be attributed to the variation in calculation methodology. The County's methodology is primarily based on the currently adopted development potential of vacant buildable land, whereas the BEBR methodology is based primarily on past population trends.
- 4 Potential future growth not incorporated in the current projections are the following:
  - a Significant amendments to the current future land use maps of either the County or the cities;
  - b Redevelopment of the US 17-92 corridor;
  - c City annexations;
  - d A shift to mixed development projects; and
  - e Construction of commuter rail stops leading to changes in land use adjacent to the sites.
- 5 As these potential growth scenarios develop, Seminole County will continue to evaluate service demand figures and capital facility needs in those areas where the intensity or density of the redevelopment exceeds that planned for under the current Future Land Use pattern.

## Associated Materials

In addition to this methodology, the following associated materials can be found online:

- A Traffic Analysis Zone Map: *tax.pdf*
- B ArcGIS mapping files for the traffic analysis zones and city boundaries can be found at: <http://www.seminolecountyfl.gov/pd/commres/gis/layerbib2.asp>
- C Projection figures for each TAZ for select years between 2004 and 2030. Below are the variable definitions. The file is titled: *ZDATA1\_04D4veach.html*

**Socio-Economic Data by Traffic Analysis Zone Table  
Column Heading Definitions**

Variable	Definition
Single Family Housing Units	Single family detached, occupied and unoccupied
Multi Family Housing Units	Apartment , Condo, Townhome, Mobile Home, occup/unoccup
Persons/ Occupied SF Unit	Persons per housing unit. Varies by year.
Persons/ Occupied MF Unit	Persons per housing unit. Varies by year.
Single Family Population	Persons living in single family housing
Multi Family Population	Persons living in multi family housing
Hotel/Motel Units	Total units
Hotel/Motel Population	Population in occupied units
Nonhousehold Resident Pop.	Group quarters
Seasonal Population	Non-residents
Total Functional Population	Sum of Single, Multi, H/M, Nonhousehold, Seasonal Pop
Total Employment	Total jobs in the TAZ