Appendix B

LUCIS and Transit Corridor Density

A. LUCIS Model Assumptions (Figures 3-10)

The calculation for 'Gross Urban Density' is simple and relatively easy to determine if the analyst has two factors:

1. The county population at a given time (example 2005).
2. The existing urban acreage for the same time period.

Figure 3. 2005 Gross Urban Density
Number of Persons Per Acre Based on 2005 TAZ Data

County	Population 2005	*Roads and Urban Acres 2005	Gross Urban Density 2005 (Persons/Acre)
Brevard	531,970	207,059	2.57
Lake	263,017	228,570	1.15
Orange	1,043,437	287,951	3.62
Osceola	235,156	121,908	1.93
Polk	541,840	258,310	2.10
Seminole	411,744	102,260	4.03
Volusia	494,649	262,426	1.88
Total	**3,521,813**	**1,468,484**	**2.47 Avg.**

2005 Population/Roads and Urban Acres=Gross Urban Density
*Additional 20% added to acreage for roads
**Traffic Analysis Zone (TAZ)

Figure 4. LUCIS Population Projection 2060

County	2005	2010	2020	2030	2040	2050	2060	Increase	Mean Annual Increase
Brevard	533,646	587,900	625,200	694,100	766,723	839,347	911,970	378,324	7,262
Lake	263,642	293,500	368,500	444,000	521,824	599,649	677,473	413,831	7,782
Orange	1,052,479	1,119,200	1,324,500	1,535,000	1,747,885	1,960,771	2,173,656	1,121,177	21,289
Osceola	243,501	280,300	380,100	480,400	583,036	685,671	788,307	544,806	10,264
Polk	537,931	586,200	679,600	774,300	871,092	967,884	1,064,676	526,745	9,679
Seminole	422,630	424,600	474,200	523,900	576,800	629,701	682,601	259,971	5,290
Volusia	494,631	510,300	565,600	620,900	680,086	739,271	798,457	303,826	5,919
Totals	**3,548,460**	**3,802,000**	**4,417,700**	**5,072,600**	**5,747,446**	**6,422,294**	**7,097,140**	**3,548,680**	

Source: *University of Florida Bureau of Economic and Business Research (BEBR). Dr. Paul Zwick, University of Florida, 2030-2060.*

Figure 5. New Population by County

Population Change from 2005-2060 (10-Year Increments)							
Period	**2005-2010**	**2010-2020**	**2020-2030**	**2030-2040**	**2040-2050**	**2050-2060**	**Totals**
Brevard	54,254	37,300	68,900	72,623	72,623	72,623	378,324
Lake	29,858	75,000	75,500	77,824	77,824	77,824	413,831
Orange	66,721	205,300	210,500	212,885	212,885	212,885	1,121,177
Osceola	36,799	99,800	100,300	102,636	102,636	102,636	544,806
Polk	48,269	93,400	94,700	9,6792	96,792	96,792	526,745
Seminole	1,970	49,600	49,700	52,900	52,900	52,900	259,971
Volusia	15,669	55,300	55,300	59,186	59,186	59,186	303,826
Total	**253,540**	**615,700**	**654,900**	**674,846**	**674,846**	**674,846**	**3,548,680**

Figure 6. Total New 2005-2060 Population Allocated by County (Trend vs. ECFRPC 2060 Plan)

	TREND		ECFRPC 2060 Plan	
	Greenfield	Redevelopment	Greenfield	Redevelopment
Brevard	332,925	45,399	283,743	94,581
Lake	364,171	49,660	331,065	82,766
Orange	986,636	134,541	728,765	392,412
Osceola	517,566	27,240	408,605	136,202
Polk	500,408	26,337	421,396	105,349
Seminole	228,774	31,197	116,987	142,984
Volusia	288,635	15,191	243,061	60,765
Total	**3,219,115**	**329,565**	**2,533,622**	**1,015,059**

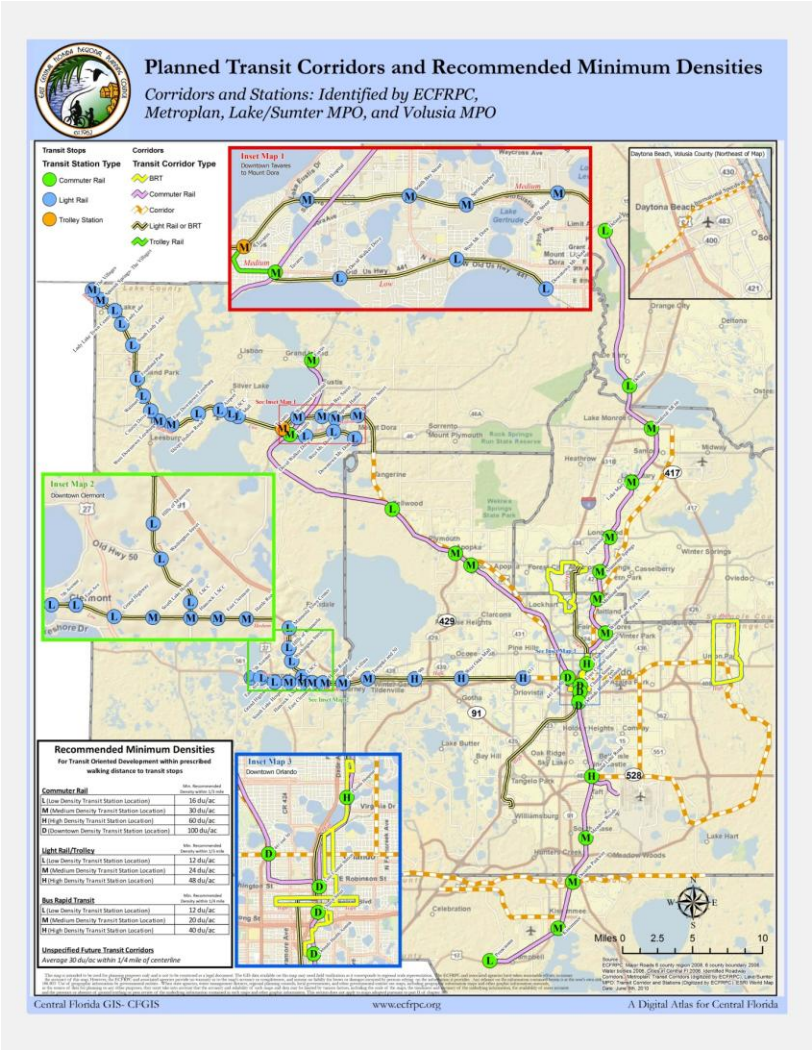
Figure 7. Trend 2060 Redevelopment Assumptions

County	Redevelopment Percent	Redevelopment Population 2005-2060	Greenfields Population 2005-2060	Total Population 2060
Brevard	12	45,399	332,925	911,970
Lake	12	49,660	364,171	677,473
Orange	12	134,541	986,636	2,173,656
Osceola	5	27,240	517,566	788,307
Polk	5	26,337	500,408	1,064,676
Seminole	12	31,197	228,774	682,601
Volusia	5	15,191	288,635	798,457
Total		**329,565**	**3,219,115**	**7,097,140**

Figure 8. ECFRPC 2060 Plan Redevelopment Assumptions

County	Redevelopment Percent	Redevelopment Population 2005-2060	Greenfields Population 2005-2060	Total Population 2060
Brevard	25	94,581	283,743	911,970
Lake	20	82,766	331,065	677,473
Orange	40	448,471	672,706	2,173,656
Osceola	25	136,202	408,605	788,307
Polk	20	105,349	421,396	1,064,676
Seminole	55	142,984	116,987	682,601
Volusia	20	60,765	243,061	798,457
Total		**1,071,118**	**2,477,563**	**7,097,140**

B. LUCIS 2060 Model Population Allocations (Using TAZ Variable Density)

See Executive Summary, Page 3, Paragraph B. and Figure 2, Page 5 for additional detail

- ✓ For Residential-No new development at less than the mean County TAZ Density
- ✓ For Infill Residential-Same
- ✓ For Employment–Same only for employment by sector
- ✓ For Planned Transit Corridors–Used the density recommended by the ECFRPC (see also large Figure 24, Chapter 5 of this Plan)