

SECTION 2.1: DEMOGRAPHIC DATA, TRENDS, AND FORECASTS

As discussed in Section 1, upon completion, the MMP will conceptualize a future vision for Collier County. Ultimately, Phase Three of the MMP will carry forward policy recommendations that move towards implementing this vision. The first step in developing the MMP is to understand where the county has been, where it is now, and where it is going in the future. By analyzing past trends, current conditions, and future forecasts, a picture can be formed: How has the county grown and developed in the past? How many people live here now, and how many new residents can we expect in the future? Where are they living and where do we expect new residents to move to? What will new and redeveloped communities look like in the future? How many jobs are there in the county, and where are those jobs located? How do people and goods currently move about the county, and how will this change in the future? Analysis of these and many other indicators highlight Collier County's relative strengths and weaknesses, which can then be perpetuated or countered through policy recommendations resulting from development of the MMP.

Existing and Projected Build-Out Population

One of the most important components in the planning process is an analysis of both the existing and projected demographics of a community. As such, population and employment forecasts are critical components of long-range planning and touch almost every element of the planning process. First, forecasts help articulate expectations about the future: *Is the community expected to grow?* Second, forecasts can help a community better understand some of the forces affecting community growth and change: *What is the spatial distribution of the population? What are the employment trends?* The growth or decline of employment in a community is a major determinant of housing needs.

Historically, Collier County has consistently outpaced Florida in terms of population growth. This trend is projected to continue through 2035,

although the projections indicate that the differential annual growth between Collier County and Florida is decreasing. According to the 2010 U.S. Census, Collier County increased its permanent population more than seven-fold between 1970 and 2010. Table 2-1 presents the historical, current, and projected population figures for both Collier County and Florida. Build-out year population estimates are available for Collier County but not for Florida. For purposes of this project, build-out is estimated to be 2080, though it is recognized that this is approximate. The use of 2080 as the estimated build-out year is strictly a planning tool to provide a temporal perspective.

Table 2-1
Historical and Projected Population, Collier County and Florida

Year	Collier County	Annual % Change	Florida	Annual % Change
1970	39,000	n/a	6,845,000	n/a
1980	86,000	8.2%	9,747,000	3.6%
1990	152,000	5.9%	12,938,000	2.9%
2000	251,000	5.1%	16,049,000	2.2%
2010	322,000	2.5%	18,801,000	1.6%
2035	518,000	1.9%	24,971,000	1.1%
2080	936,000	1.3%	n/a	n/a

Sources: U.S. Census (1970, 1980, 1990, 2000 and 2010); University of Florida, Bureau of Economic and Business Research (BEBR), Medium 2035 Projections for Collier County and Florida; Collier County 2080 (build-out) population figure based on previous planning efforts and refined as part of the MMP; build-out margin of error is $\pm 10\%$. Figures in this table have been rounded to the nearest thousandth.

The build-out data set is based largely upon the work previously done by Tampa Bay Engineering (TBE) Inc., as part of the Collier County Horizon Study Phase II (February 9, 2006), which was based on the County Growth Management Department's Urban Build-Out Analysis (circa 2005) and the later work by Van Buskirk, Ryffel & Associates, Inc., in the CIGM and the East of 951 Horizon Study (2008). In 2009, the data set was also reviewed for consistency with the recent RLSA Review

Committee's Five-Year Review of the Rural Lands Stewardship Program. As part of the MMP, the 2080 build-out dwelling unit and population estimates were allocated spatially (geographically) in the RLSA using the RLSA Five-Year Review Committee Report's potential locations for future towns and villages. The dwelling unit and population estimates for this area used in this report came from the CIGM, not from the RLSA Five-Year Review Committee report.

All of the work to date has been based upon the County's adopted Growth Management Plan's Future Land Use Map (FLUM). The build-out socioeconomic data set includes residential data (single- and multifamily dwelling units) as well as non-residential information (e.g., employment by type: commercial, service, and industrial; hotel/motel units; student population, etc.). The data are quantified for each individual traffic analysis zone (TAZ) in the travel model. As part of the MMP, the Project Team evaluated the completed data set for reasonableness as a baseline condition representing a "business as usual" scenario based upon adopted policies.

Table 2-2 presents the historical and projected employment figures for both Collier County and Florida. Employment figures reflect the total number of employees within Collier County (employer-based data) and not just employed residents of Collier County (resident-based data). The employment growth trend in both Collier County and Florida is comparable to the population trend.

As part of the MMP, build-out population and employment projections are available by TAZ and have been aggregated to develop population and employment sub-totals for each MMP planning sub-area. These population and employment data are illustrated in the maps and table on the following pages:

- Map 2-1 is a conceptual map illustrating the 2007 population and employment figures by MMP planning sub-area.
- Map 2-2 is a conceptual map illustrating the 2080 population and employment projections by MMP planning sub-area.
- Map 2-3 illustrates the 2007 population densities (persons per acre of available land).
- Map 2-4 illustrates the projected 2080 population densities (persons per acre of available land).
- Map 2-5 illustrates the 2007 employment densities (employees per acre of available land).
- Map 2-6 illustrates the projected 2080 employment densities (employees per acre of available land).
- Table 2-3 provides a comparison of the 2007 and build-out population and employment figures by MMP planning sub-area.

Table 2-2
Historical and Projected Employment, Collier County and Florida

Year	Collier County	Annual % Change	Florida	Annual % Change
1970	19,800	n/a	2,966,100	n/a
1980	46,900	9.0%	4,687,500	4.7%
1990	92,100	7.0%	6,740,300	3.7%
2000	142,500	4.5%	8,841,600	2.8%
2010	166,300	1.6%	9,856,800	1.1%
2035	274,600	2.0%	14,356,300	1.5%
2080	536,000	1.5%	n/a	n/a

Sources: 2011 Woods and Poole Economics State Profile for Collier County and Florida for figures from 1970 through 2035; Collier County 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

Map 2-1
2007 Population and Employment by MMP Planning Sub-Area

Collier County Master Mobility Plan RF Receiving Area A - Population - 100 Immokalee Urban Area - Population - 19,000 - Employment - 0 - Employment to Population Ratio - 0.00 - Employment - 9,000 - Employment to Population Ratio - 0.47 **Orange Tree** - Population - 3,000 - Employment - 1,000 - Employment to Population Ratio - 0.33 Rural Lands Stewardship Area (RLSA) RF Receiving Area B - Population - 500 - Population - 1,500 - Employment - 2,000 - Employment - 500 - Employment to Population Ratio - 3.80 - Employment to Population Ratio - 0.33 **Golden Gate Estates** - Population - 35,500 Employment - 4,000 - Employment to Population Ratio - 0.11 Coastal Urban Area - Population - 269,000 - Employment - 148,000 - Employment to Population Ratio - 0.55 RF Receiving Area C - Population - 100 - Employment - 150 Employment to Population Ratio - 1.50 RF Receiving Area D - Population - 2,000 - Employment - 1,000 Countywide - Employment to Population Ratio - 0.50 - Population - 334,000 - Employment - 167,000 - Employment to Population Ratio - 0.50 Population and employment outside of the areas identified on the map are included in the countywide totals. 2007 figures are from the 2035 LRTP model. The 2010 countywide population according to the 2010 U.S. Census is 321,520. ■ Coastal Urban Boundary RF-Receiving Areas Natural Resource Protection Areas 2007 Rural Land Stewardship Area Immokalee Area Big Cypres Area of Critical State Concern Boundary Population and Collier County Golden Gate Estates Municipal Limits XXX RLSA "Open" Lands in the Big Cypress Area of Critical State Concern Protected & Environmentally Sensitive Lands Orange Tree **Employment**

Source: 2007 figures from the 2007 (base year) socioeconomic data developed for the Collier County 2035 LRTP.

Map 2-2
2080 Population and Employment by MMP Planning Sub-Area

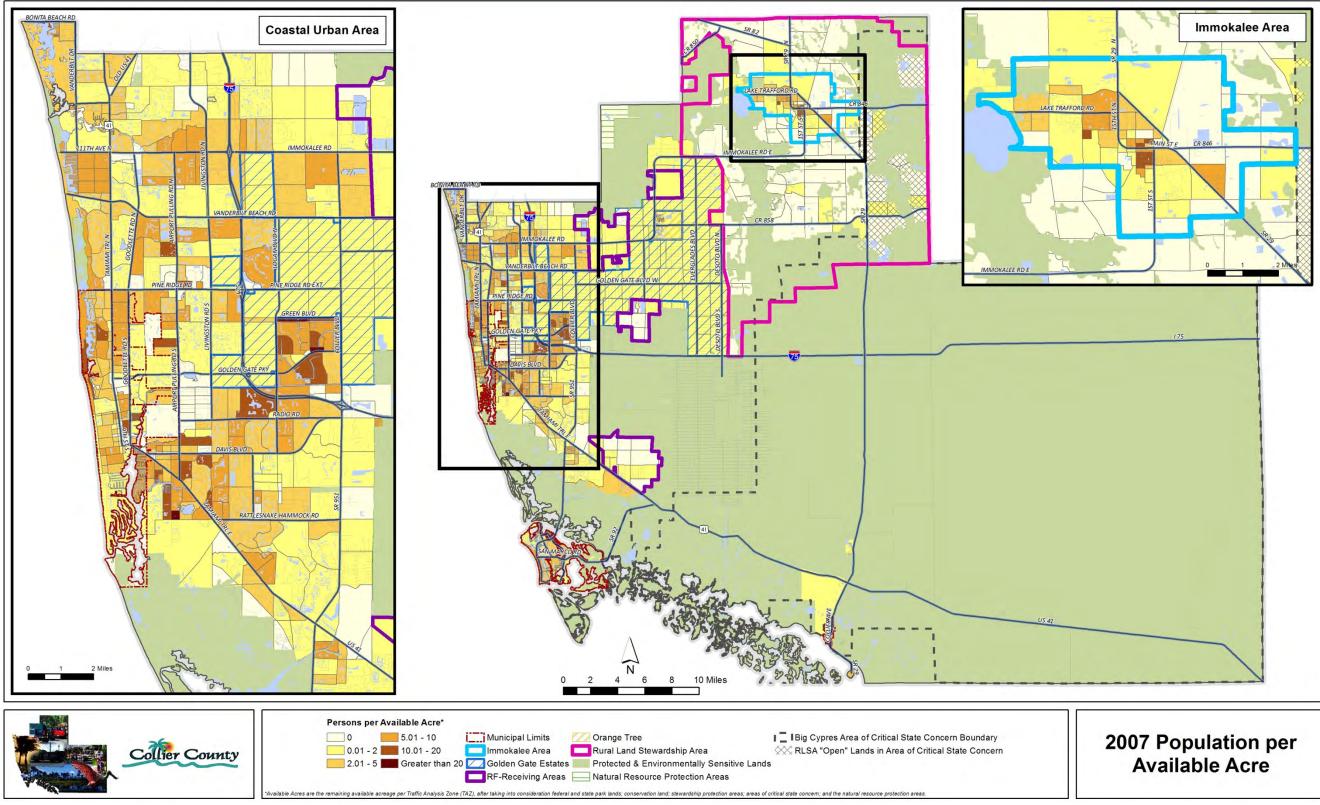
Collier County Master Mobility Plan RF Receiving Area A Immokalee Urban Area - Population - 5,500 - Population - 68,000 - Employment - 3,500 - Employment - 59,500 - Employment to Population Ratio - 0.64 - Employment to Population Ratio - 0.88 **Orange Tree** - Population - 9,000 - Employment - 4,500 - Employment to Population Ratio - 0.50 Rural Lands Stewardship Area (RLSA) RF Receiving Area B - Population - 221,000 - Population - 16,500 - Employment - 128,500 - Employment - 7,500 - Employment to Population Ratio - 0.58 - Employment to Population Ratio - 0.45 **Golden Gate Estates** - Population - 88,000 Employment - 7,500 Employment to Population Ratio - 0.09 Coastal Urban Area - Population - 485,000 - Employment - 286,000 - Employment to Population Ratio - 0.59 RF Receiving Area C - Population - 5,500 - Employment - 4,000 - Employment to Population Ratio - 0.73 RF Receiving Area D - Population - 21,500 Countywide - Employment - 10,500 - Population - 935,500 - Employment to Population Ratio - 0.49 - Employment - 536,000 - Employment to Population Ratio - 0.57 Collier County 2080 (build-out) projections are based on previous planning efforts and were refined as part of the Master Mobility Plan. Population and employment outside of the areas identified on the map are included in the countywide 10 Miles totals. 2080 Projected ■ Coastal Urban Boundary RF-Receiving Areas Natural Resource Protection Areas Immokalee Area Rural Land Stewardship Area Big Cypres Area of Critical State Concern Boundary Population and Collier County XXX RLSA "Open" Lands in the Big Cypress Area of Critical State Concern Golden Gate Estates Municipal Limits **Employment** Orange Tree Protected & Environmentally Sensitive Lands

Source: 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

Collier County - Master Mobility Plan

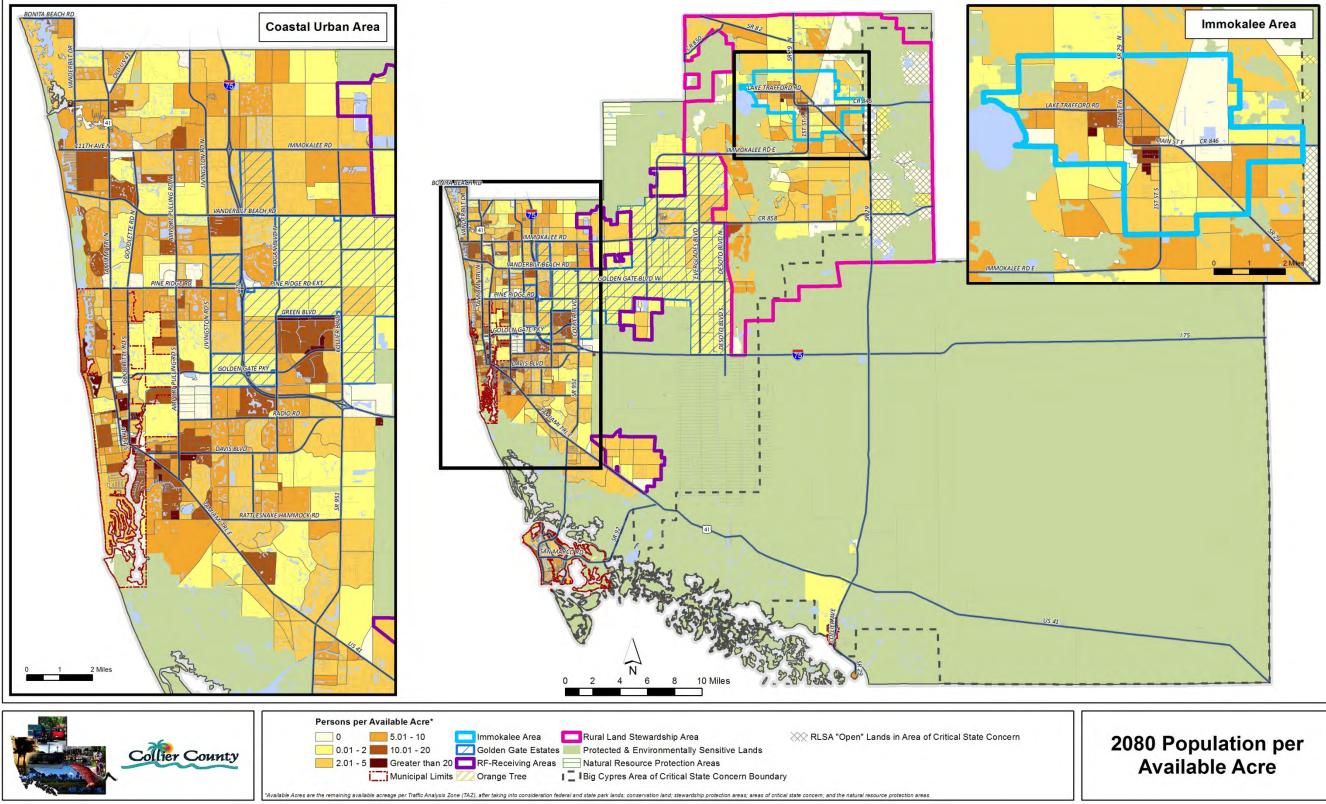
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Map 2-3 2007 Population per Available Acre



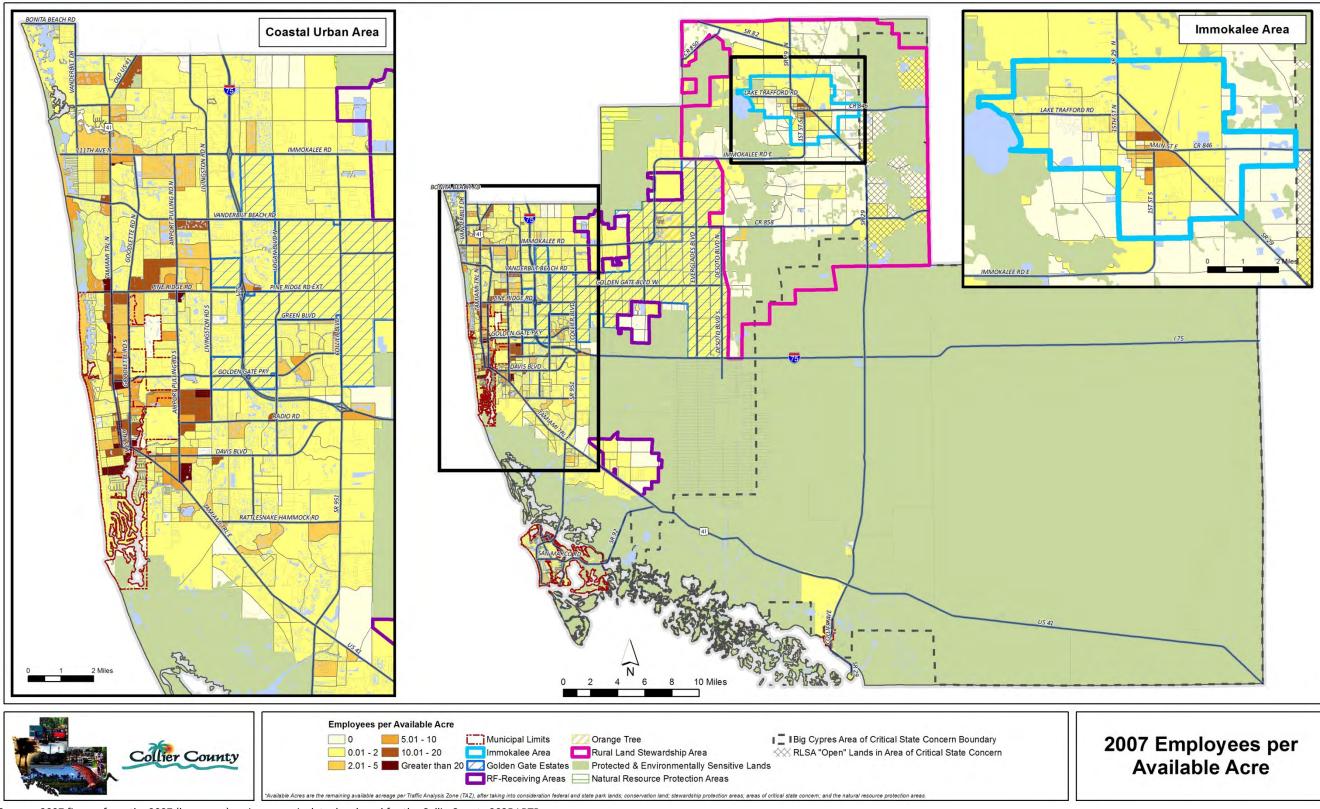
Source: 2007 figures from the 2007 (base year) socioeconomic data developed for the 2035 LRTP; 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

Map 2-4 2080 Population per Available Acre



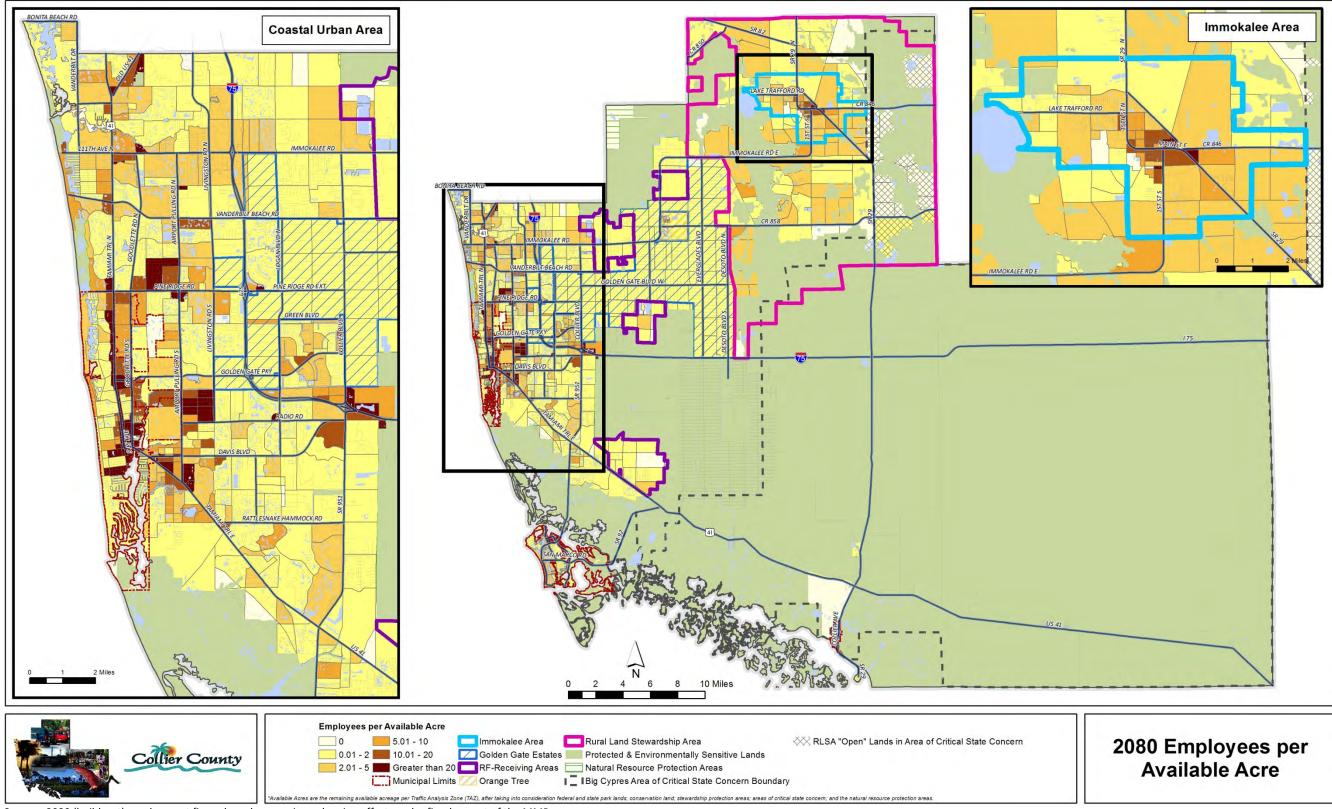
Source: 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

Map 2-5 2007 Employees by Available Acre



Source: 2007 figures from the 2007 (base year) socioeconomic data developed for the Collie County 2035 LRTP.

Map 2-6 2080 Employees by Available Acre



Source: 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

Table 2-3
Comparison of Base Year and Build-Out Population and Employment by MMP Planning Sub-Area

Area	Total Population 2007	Total Dwelling Units 2007	Persons Per Dwelling Unit 2007	Total Employment 2007	Employment to Population 2007	Total Population 2080	Percent of Total Population Growth	Total Dwelling Units 2080	Persons Per Dwelling Unit 2080	Total Employment 2080	Percent of Total Employment Growth	Employment to Population 2080
Urban Coastal Area	269,000	172,000	1.56	148,000	0.55	485,000	36%	304,500	1.59	286,000	37%	0.59
Immokalee	19,000	6,000	3.17	9,000	0.47	68,000	8%	26,000	2.62	59,500	14%	0.88
Golden Gate Estates	35,500	11,000	3.23	4,000	0.11	88,000	9%	27,000	3.26	7,500	1%	0.09
Orange Tree	3,000	1,000	3.00	1,000	0.33	9,000	1%	3,500	2.57	4,500	1%	0.50
RF Receiving A	100	50	2.00	0	0.00	5,500	1%	3,000	1.83	3,500	1%	0.64
RF Receiving B	1,500	650	2.31	500	0.33	16,500	2%	9,000	1.83	7,500	2%	0.45
RF Receiving C	100	50	2.00	150	1.50	5,500	1%	3,000	1.83	4,000	1%	0.73
RF Receiving D	2,000	1,000	2.00	1,000	0.50	21,500	3%	11,000	1.95	10,500	3%	0.49
RLSA	500	250	2.00	2,000	4.00	221,000	37%	107,500	2.06	128,500	34%	0.58
Other	3,300	3,500	0.94	1,350	0.41	15,500	2%	9,000	1.72	24,500	6%	1.58
Total	334,000	195,500	1.71	167,000	0.50	935,500	100%	503,500	1.86	536,000	100%	0.57

Source: 2007 figures from the 2007 (base year) socioeconomic data developed for the Collier County 2035 LRTP; 2080 (build-out) employment figure based on previous planning efforts and refined as part of the MMP.

To quantify the magnitude of growth, the build-out demographic data are compared to the base-year data. The base-year data is the 2007 socioeconomic data prepared for the Collier County 2035 Long Range Transportation Plan. While 2010 Census data are now becoming available, Census data are not available by TAZ. Therefore, to provide a meaningful comparison, 2007 base-year and 2080 build-out model data by TAZ are used.

Age

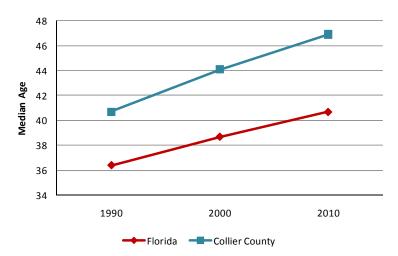
Understanding how the community is expected to grow may be one of the most important parts of the planning process, but understanding the make-up of that population growth is equally if not more important, especially as it relates to mobility. The age profile of a community's residents can have a direct impact on its mobility needs, as younger and older populations typically are more dependent upon alternative modes of transportation for their daily needs. To understand how the county is "aging," a review of both historical age data and existing age composition was undertaken.

As presented in Table 2-4 and Figure 2-1, the median age in both Collier County and Florida has been trending upward since 1990, with Collier County's median age growing at a slightly faster rate than Florida's.

Table 2-4 Median Age (1990, 2000, 2010)

Year	Florida	Collier County
1990	36.4	40.7
2000	38.7	44.1
2010	40.7	46.9

Source: U.S. Census Bureau 1990, 2000, and 2010 Census



Source: U.S. Census Bureau 1990, 2000, and 2010 Census

Figure 2-1 Median Age (1990, 2000, 2010)

As presented in Table 2-5, currently the highest percentage of Collier County's residents are age 65 years of age and older, just slightly higher than the group of residents 45 to 64 years old. In Collier County, the most significant shift in age distribution since 1990 reflects the aging of the "baby boomer" generation, as seen in the increases in the 45 to 64 and 65+ age demographic.

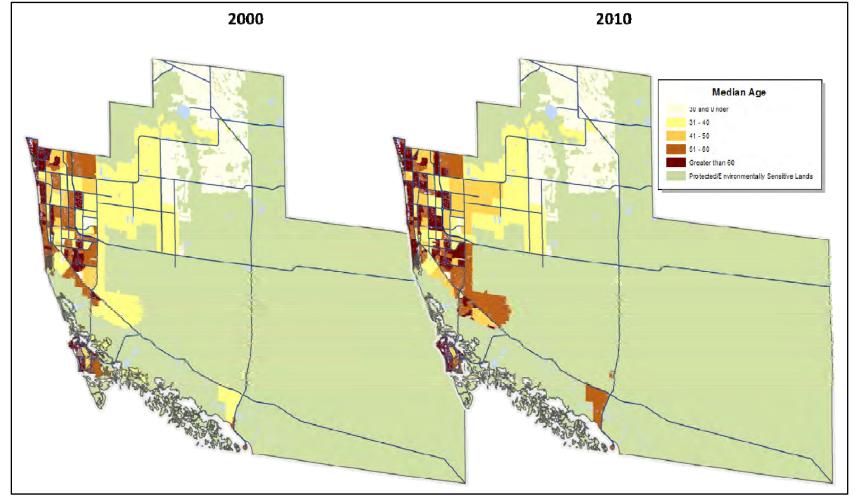
Both statewide and in Collier County, the percent of total population less than 15 years old has been declining slightly while the percent of total population 15 to 24 years old has remained relatively steady.

Interestingly, the percent of population 25 to 44 years old has been declining both statewide and in Collier County. Being that these are the typical child-bearing years, the decline in this age bracket could provide some explanation to the decline in the less than 15 age bracket. In both Collier County and statewide, the population between 45 and 64 has been increasing. Statewide, the percent of population 65+ has been declining since 1990, while in Collier County this age bracket has been increasing steadily. However, it is important to note that approximately 73 percent of Collier County's population is younger than 65 years old. In addition, approximately 42 percent of the county's population is either 14 years or younger or 65+, representing the two age groups more likely to be dependent on alternative modes of transportation.

The decennial U.S. Census provides data in many geographic categories. Block groups is one of those categories and is generally regarded as a good geographic unit to display demographic data, as it clearly illustrate the spatial variation in data. Figure 2-2 presents a comparison of the median age by block group using 2000 and 2010 U.S. Census data.

Table 2-5
Distribution of Age by Category (1990, 2000, 2010)

Ago Cotogowy		Florida		Collier County			
Age Category	1990	2000	2010	1990	2000	2010	
0 to 14 years	18.6%	19.0%	17.5%	17.0%	16.5%	16.0%	
15 to 24 years	12.7%	12.2%	13.1%	10.5%	10.0%	10.3%	
25 to 44 years	30.5%	28.6%	25.1%	27.8%	24.6%	21.1%	
45 to 64 years	19.9%	22.7%	27.0%	22.0%	24.5%	26.1%	
65 years and older	18.3%	17.6%	17.3%	22.7%	24.5%	26.4%	



Source: U.S. Census Bureau 1990 Census, 2000 Census, 2010 Census

Source: U.S. Census Bureau 2000 and 2010 Census Data

Figure 2-2
Median Age by Census Block Group, 2000 and 2010

Student Generation Rates

To help understand the nature of the build-out parameters in Collier County, the need for capital investment in schools can be measured by the student generation rate, or number of students per dwelling unit. As presented in Table 2-6, the 2010 student generation rate is, on average, 0.23 public school students per dwelling unit. Table 2-7 also presents data that indicate a stable student generation rate over time. Given this trend, future stability in student generation rate can be assumed.

Table 2-6
Student Generation Rate (2010)

School Type	Student Generation Rate (2010)
Elementary	0.11
Middle	0.05
High	0.07
Total	0.23

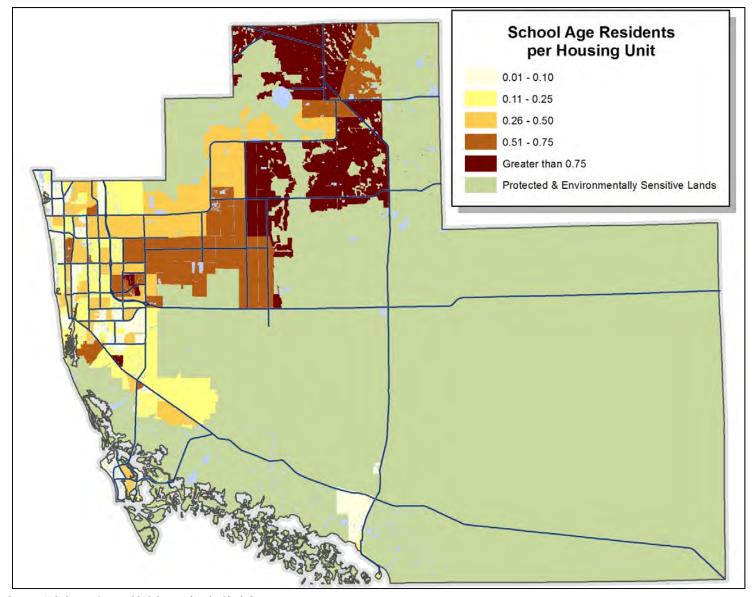
Source: Student Generation Rate Analysis conducted for the Collier County School Impact Fee Update (June 2011). Figures include charter school students.

Table 2-7
Student Generation Rate Trend

Year	Student Generation Rate
1990 (Census)	0.23
2000 (Census)	0.24
2006	0.22
2010	0.23

Source: 1990 data are based on the number of school age children and housing unit data per the 1990 Census. 2000 data are based on the number of public school students and housing unit data from the US Census. 2006 data are based on the 2000 student generation rate, brought current to 2006 using building permit and 2006 student enrollment data developed for the 2006 Collier County School Impact Fee Update Study. 2010 data are based on the student generation rate analysis conducted for the Collier County School Impact Fee Update (June 2011).

As expected, the trend in student generation rates closely aligns with the age trends observed in Collier County. Areas with lower median ages also experience higher student generation rates, as these are areas with a greater proportion of school age children and families. As shown in Figure 2-3, the Coastal Urban Area (CUA) averages fewer school age (5 to 19 years) persons per housing unit than areas east of CR 951, including GGE and Immokalee. The ratio of school age residents per housing unit in Figure 2-3 is a reflection of the number of students generated per dwelling unit, on average by Census Block Group. It does not reflect the overall student population within a particular area, but rather the ratio of students to total housing units.



Source: U.S. Census Bureau 2010 Census data by Block Group

Figure 2-3
School Age Residents (5-19 years) per Housing Unit, 2010

Income

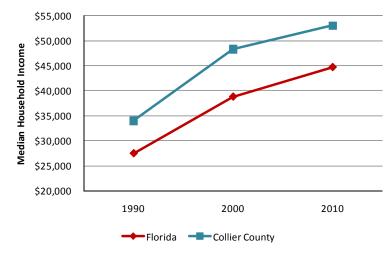
Similar to age, the income levels within a community also influence the community's mobility needs, especially in regards to alternative modes. To understand the county's economic make up, a review of both the historical household income trends and the current distribution of income of the county's residents was undertaken.

As presented in Table 2-8 and Figure 2-4, the median household income in both Collier County and Florida have been trending upward since 1990. Although Collier County's median income is significantly higher than Florida's, the state's median household income has been growing at a slightly higher rate than Collier County.

Table 2-8 Median Household Income (1990, 2000, 2010)

Florida	Collier County
\$27,480	\$34,000
\$38,820	\$48,290
\$44,740	\$53,000
	\$27,480 \$38,820

Source: U.S. Census Bureau 1990, 2000, and 2010 Census



Source: U.S. Census Bureau 1990, 2000, and 2010 Census

Figure 2-4
Median Household Income (1990, 2000, 2010)

As presented in Table 2-9, the percentage of households with median incomes lower than \$50,000 has been decreasing steadily in Collier County and Florida since 1990, while the percentage of households with median incomes higher the \$50,000 has been increasing.

Households with annual income that does not exceed 80 percent of the Area Median Income (AMI) are defined as being "low income" by the U.S. Department of Housing and Urban Development under the Uniform Act, while households with annual incomes that do not exceed 50 percent of the AMI are defined as being "very low income." The 2010 AMI figure for the Naples-Marco Island area is \$72,300; a total of 80 percent of the 2010 AMI for a four-person household equates to an annual household income of about \$58,000.

Table 2-9
Distribution of Household Income (1990, 2000, 2010)

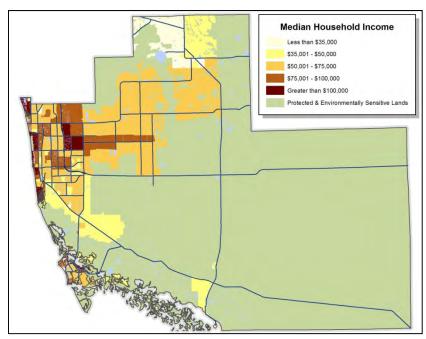
la como Distribution		Florida		Collier County			
Income Distribution	1990	2000	2010	1990	2000	2010	
Less than \$10,000	15.1%	9.6%	8.0%	8.6%	6.0%	5.4%	
\$10,000 to \$24,999	30.0%	21.2%	18.7%	25.0%	15.6%	13.6%	
\$25,000 to \$49,999	34.1%	31.7%	28.6%	36.8%	29.9%	27.2%	
\$50,000 to \$74,999	12.9%	18.5%	18.4%	15.0%	19.4%	20.2%	
\$75,000 to \$99,999	4.1%	8.7%	10.7%	5.4%	10.9%	11.4%	
\$100,000 to \$149,999	2.3%	6.3%	9.5%	4.5%	9.1%	10.5%	
\$150,000 and greater	1.5%	4.1%	6.2%	4.6%	9.0%	11.6%	

Source: U.S. Census Bureau 1990, 2000, and 2010 Census

At the time of this plan, the 2010 Census income data for Collier County at the block group level was unavailable. Therefore, 2009 data developed by Environmental Systems Research Institute (ESRI) was used to analyze the existing geographic variations in median household income throughout Collier County. Figure 2-5 presents the distribution of household income by Census Block Group. In general, the highest median household incomes are in the more urbanized western areas of the county, with the median household incomes decreasing as you move east towards the more rural areas of the county.

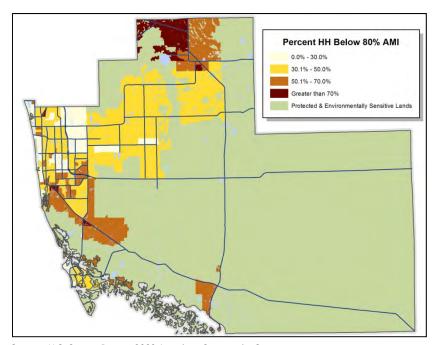
Figure 2-6 presents the distribution of households that meet the criteria for "low income" with annual household incomes of 80 percent or below the 2010 AMI for the Naples-Marco Island area using 2009 ESRI data. As expected, the block groups with the lowest median household income also have the highest percentage of households below the 80 percent AMI threshold.

Alternative modes of travel offer benefits to the entire community, whether they exist in a high income area or a low income area. However, when targeting the potential demand for alternative modes of travel, especially transit, distinguishing between "choice" users (those who choose to use alternative modes) and "dependent" users (those who depend on alternative modes) is a key component to future planning. Assuming that lower income areas have a higher demand for alternative modes, the income analysis suggests that the demand for alternative modes of travel—bicycle and pedestrian for local travel and transit for more long distance travel— is the greatest in the northeastern portions of the county, in the Immokalee urban area, and portions of the county south east of the City of Naples.



Source: U.S. Census Bureau 2009 American Community Survey

Figure 2-5
Median Household Income by Census Block Group, 2009

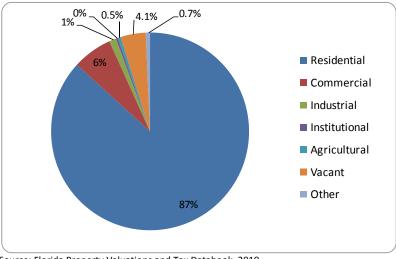


Source: U.S. Census Bureau 2009 American Community Survey

Figure 2-6
Low Income Distribution (Households Below 80% of AMI), 2009

Ad Valorem Tax Base

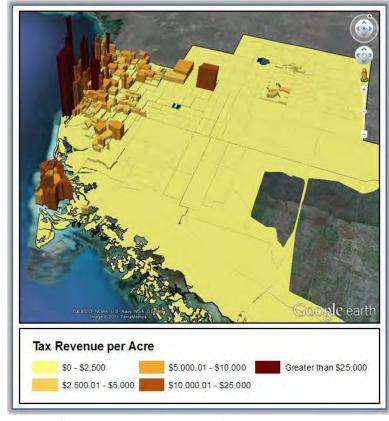
The primary source of ad valorem tax revenue for Collier County is from the residential land uses. Figure 2-7 illustrates the 2010 tax base distribution by land use category. As shown, approximately 87 percent of the county's total taxable value is generated by residential property, while the remaining 13 percent is generated by all other non-residential properties. This indicates that Collier County does not have a heavily diversified tax base from which to draw its ad valorem revenue.



Source: Florida Property Valuations and Tax Databook, 2010

Figure 2-7
Tax Base Distribution (2010)

To determine spatially how the county's tax base is distributed, an analysis of the tax revenue per acre was completed. Figure 2-8 illustrates the results of this analysis. As presented, higher valued development is located within the CUA, primarily within higher density areas along the coastline, with property values gradually decreasing eastward.



Source: Collier County Property Appraiser Parcel Data, June 2011

Figure 2-8
Tax Revenue per Acre (2011)

Journey-to-Work

The future of Collier County includes not only permanent population living with Collier County, but also the population of people living outside Collier County and traveling in to the county to work. As a result, all people within the community, whether residents, workers, or visitors, create a greater peak population that public services and infrastructure must accommodate. To capture the total worker population, U.S. Census Journey-to-Work data are reviewed, resulting in a more accurate population figure representing all that need to be served.

Table 2-10 presents an analysis of 2000 Census Journey-to-Work data for Collier County. Journey-to-Work data are based on a sample of people 16 years or older from the 2000 Census. As such, the 2000 Census employment figure understates the total employment within the County. However, this survey does provide an indication as to whether an area is an attractor for employment or not by showing if more people travel into an area to work, or if more people leave an area for work elsewhere. As presented, an analysis of the 2000 Census Journey-to-Work data for Collier County reflects an increase of nine percent of employees, indicating more people travel into Collier County to work than leave. It should be noted that 2010 U.S. Census Journey-to-Work data are not yet available for analysis, so the results of the 2000 Census analysis are used as a proxy.

¹ Summary File 3, 2000 Census of Population and Housing Technical Documentation, Appendix B, p. B-27 (Limitation of the Data), July 2007.

Table 2-10
Journey-to-Work (Census 2000)

Item/Calculation Step	Figure
Workers who live and work in Collier County ⁽¹⁾	95,000
Workers who live outside of Collier and work in Collier (2)	18,000
Workers who live in Collier County but work elsewhere (3)	8,000
Net increase in workers (4)	10,000
Total workers in Collier County ⁽⁵⁾	113,000
Percent increase in daily workers in Collier County ⁽⁴⁾	9%

- (1), (2), (3), (5) Source: Bureau of Transportation Statistics, Census Transportation Planning Package (CTPP) 2000 Part 3 (figures for Year 2000)
- (4) Workers who live outside of Collier County and work in Collier County (Item 2) less the workers who live in Collier County but work elsewhere (Item 3)
- (6) Net increase in workers (Item 4) divided by the total workers in Collier County (Item 5)

Transit Ridership

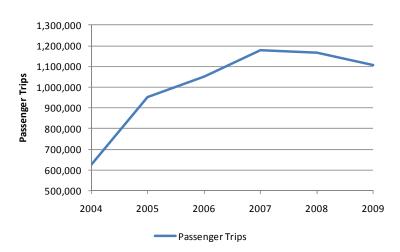
Since the inception of the Collier Area Transit (CAT) system in 2001, actual annual ridership numbers have continued to exceed original projections. From 2004 to 2009, there was a 77 percent increase in total annual passenger trips. Table 2-11 and Figure 2-9 present the annual ridership figures from 2004 through 2009. As illustrated in Figure 2-9 ridership peaked in 2007 at nearly 1.2 million passenger trips and decreased by 6 percent to around 1.1 million passenger trips in 2009.

Passenger trips per capita is one of the indicators used to measure the effectiveness of a system in meeting the transportation needs of the community. Since 2004, passenger trips per capita have decreased by over 14 percent, from 3.90 trips per capita in 2004 to 3.33 trips per capita in 2009. Figure 2-10 illustrates the change in trips per capita between 2004 and 2009.

Table 2-11 CAT Total Annual Passenger Trips

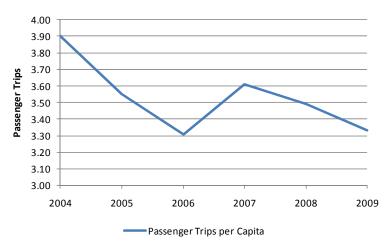
Year	Passenger Trips
2004	627,800
2005	951,600
2006	1,052,500
2007	1,180,100
2008	1,166,400
2009	1,107,800

Source: CAT Transit Development Plan, FY 2011-2020



Source: CAT Transit Development Plan, FY 2011-2020

Figure 2-9
CAT Total Annual Passenger Trips



Source: CAT Transit Development Plan, FY 2011-2020

Figure 2-10
CAT Passenger Trips per Capita

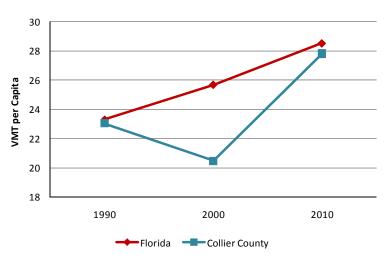
Daily Vehicle Miles Traveled (VMT)

As discussed in Section 1, the MMP is funded with a grant provided by the U.S. DOE, with the primary purpose of reducing greenhouse gas emissions within Collier County, specifically by reducing VMT. VMT is defined as the number of miles driven by all vehicles within a certain time period and geography. For comparison purposes, VMT often is expressed in terms of daily VMT per capita, which represents the number of miles driven per person per day. Table 2-12 and Figure 2-11 present the daily VMT per capita for Collier County and Florida.

Table 2-12
Summary of VMT and Population by Decade

	January or thir and reputation by Desdac							
		Florida		Collier County				
Year	Total Daily VMT	Total Population	VMT per Capita	Total Daily VMT	Total Population	VMT per Capita		
1990	301,362,600	12,937,900	23.3	3,506,000	152,100	23.1		
2000	410,568,000	15,982,800	25.7	5,145,600	251,400	20.5		
2010	536,315,500	18,801,300	28.5	8,943,100	321,500	27.8		

Source: FDOT Public Road Mileage and Miles Traveled Report (1990, 2000, and 2010)

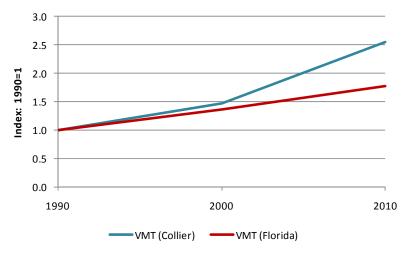


Source: U.S. Census Bureau 1990, 2000, and 2010 Population Totals

Figure 2-11
Daily Vehicle Miles Traveled per Capita

As illustrated in Figure 2-11, from 1990 to 2000, Collier County's population growth outpaced that of daily VMT, lowering the daily VMT per capita. However, from 2000 to 2010, daily VMT growth outpaced that of population growth, increasing the daily VMT per capita. One explanation for this is that over the last 10 to 15 years, residential development has consistently progressed further east, resulting in longer trip lengths and greater VMT for those traveling back to the urbanized coastal area for work or recreation. In addition, Figure 2-11 also illustrates that the daily VMT per capita for Collier County has remained less than the state's daily VMT per capita. However, as Figure 2-12 illustrates, when comparing the growth in total VMT, Collier County's total VMT is growing nearly twice as fast as the state's.

Data obtained from these eight sites provided average distance traveled (trip length), as well as average VMT. As illustrated in Figure 2-13, VMT at each site produced from these studies ranged from 21.41 to 145.92. As evidenced by the data, the study sites located west of CR 951, in general, produce a shorter trip length, along with correspondingly less VMT. In general, the study sites east of CR 951 in areas served by less of employment and commercial development, have longer trip lengths and higher VMT.



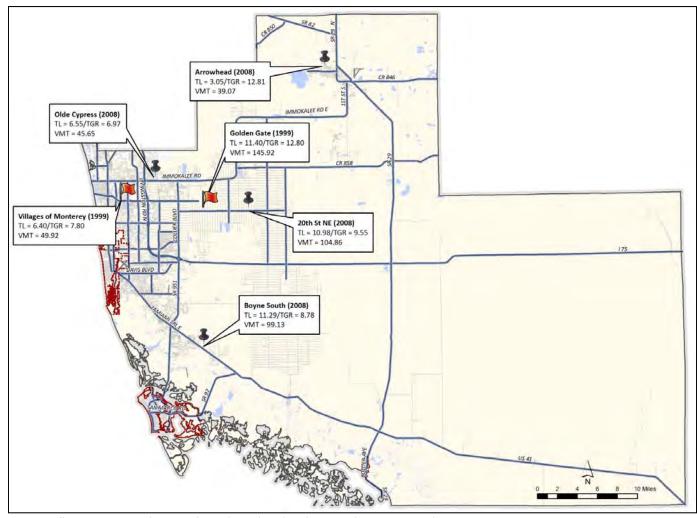
Source: FDOT Public Road Mileage and Miles Traveled Report (1990, 2000, and 2010)

Figure 2-12
Daily Vehicle Miles Traveled Growth

Single Family Residential Land Use Trip Characteristics Studies

Collier County periodically commissions trip characteristics studies to measure travel characteristics of various land uses throughout the county. In 1999, two single-family residential developments were studied in an effort to quantify typical vehicle trip characteristics. Similarly, in 2008, Collier County commissioned the study of four additional single-family residential developments located throughout the county for purposes of collecting trip characteristics data.

Data obtained from these eight sites provided average distance traveled (trip length), as well as average VMT. As illustrated in Figure 2-13, VMT at each site produced from these studies ranged from 21.41 to 145.92. As evidenced by the data, the study sites located west of CR 951, in general, produce a shorter trip length, along with correspondingly less VMT. In general, the study sites east of CR 951 in areas served by less of employment and commercial development, have longer trip lengths and higher VMT.



Source: Collier County 1999 and 2008 Single Family Residential Land Use Trip Characteristics Studies TL = Trip Length; TGR = Trip Generation Rate; VMT = Vehicle Miles of Travel

Figure 2-13
1999 and 2008 Single Family Residential Land Use Trip Characteristics Study Sites

SECTION 2.2: LAND USE AND DEVELOPMENT PATTERNS

Policy recommendations documented in Section 5 of this Report (ultimately to be carried forward as part of Phase Three) were influenced largely by land use and development patterns, both existing and planned. The goal of the MMP is not to radically alter land use planning tools developed by the county to date but rather to enhance existing policy by creating tools to reduce VMT and GHGs, provide economic savings, and protect sensitive environments and habitats.

Current Land Use

Map 2-7 presents the existing generalized land uses in Collier County. The generalized land uses in Map 2-7 are based on the Florida Department of Revenue (DOR) codes found within the county's parcel data. The generalized land use was compiled by the University of Florida's Geoplan Center and was made available through the Florida Geographic Data Library (FGDL).

The existing and approved land use map shows that majority of existing development is located within the CUA, GGE, Immokalee, and Ave Maria. The majority (67%) of existing commercial development is especially concentrated within the CUA.

Future Land Use

The Future Land Use Element (FLUE) of the Collier County GMP provides the framework for growth in the county. The FLUE guides the decision making process on matters that pertain specifically to land use. The FLUE identifies the desired type, density, and use of land by geographic area and aids in the development of infrastructure planning. Map 2-8 illustrates the county's future land use. Phase Three of the MMP may result in recommended changes to portions of the FLUE, based on concepts developed during Phase Two.

Environmentally-Sensitive Areas

Collier County is home to many unique and sensitive natural environments. These natural environments provide habitat to a unique and diverse mix of plant and animal life and perform vital functions that attribute to the health and vitality of not only Collier County, but the entire state of Florida. A major objective of the MMP is to consider environmentally-sensitive areas and minimize the effects of future development on those areas. Map 2-9 identifies environmentally sensitive areas along with areas of significant environmental importance, including Natural Resource Protection Area (NRPA) and Big Cypress Area of Critical State Concern (ACSC). Of the nearly 1.3 million acres in Collier County, more than 1 million have been identified as environmentally sensitive.

The environmentally-sensitive areas identified in Map 2-9 are classified into three categories: Protected Lands, Big Cypress Area of Critical State Concern, and Natural Resource Protection Area.

- Protected and Environmentally-Sensitive Lands include the nearly 825,000 acres of Federal and State Parks, Preserves, and Refuges along with non-NRPA sending land in the Rural Fringe Mixed-Use District (RMFUD), and the Rural Lands Stewardship Area (RLSA), which include the 500 Foot Restoration Area, Flowway Stewardship Area (FSA), Habitat Stewardship Area (HSA), and Water Retention Area (WRA).
- Big Cypress ACSC is designed to protect resources and public facilities of major statewide significance. The Big Cypress ACSC was established in 1974 by the Florida Legislature.
- NRPA includes major wetland systems and regional flow-ways.

The ACSC, FSA, HSA, and WRA have stringent site clearing and alteration limitations, non-permeable surface limitations, and requirements addressing surface water flows which protect wetland functions within the wetlands in those areas.

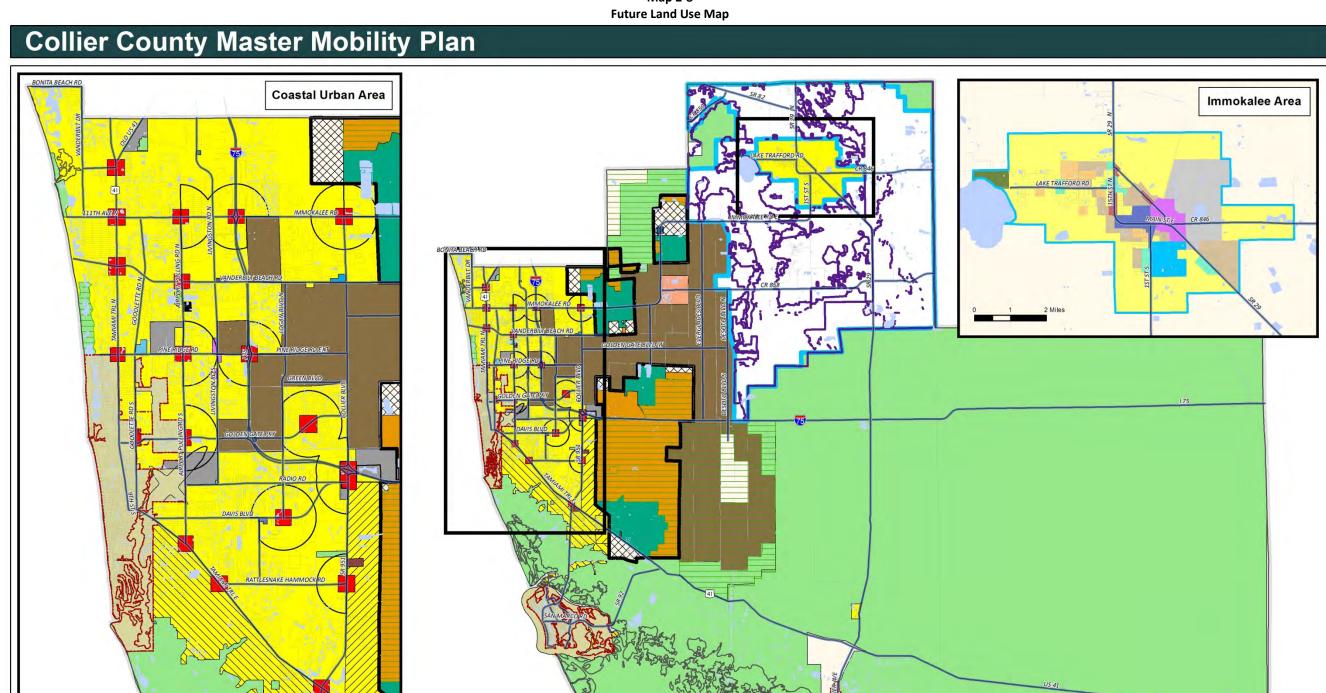
Map 2-7
Existing Land Use Map

Collier County Master Mobility Plan Coastal Urban Area **Existing Land Use** Residential Agricultural Recreation/Open Space Water Collier County **Existing Land Use**

Source: Collier County Parcel Database (provided by the Collier County Property Appraiser) grouped by DOR Code

Data Source: Existing land use derived from 2009 Florida DOT available parcels and was compiled by the University of Florida GeoPlan Center.

Map 2-8

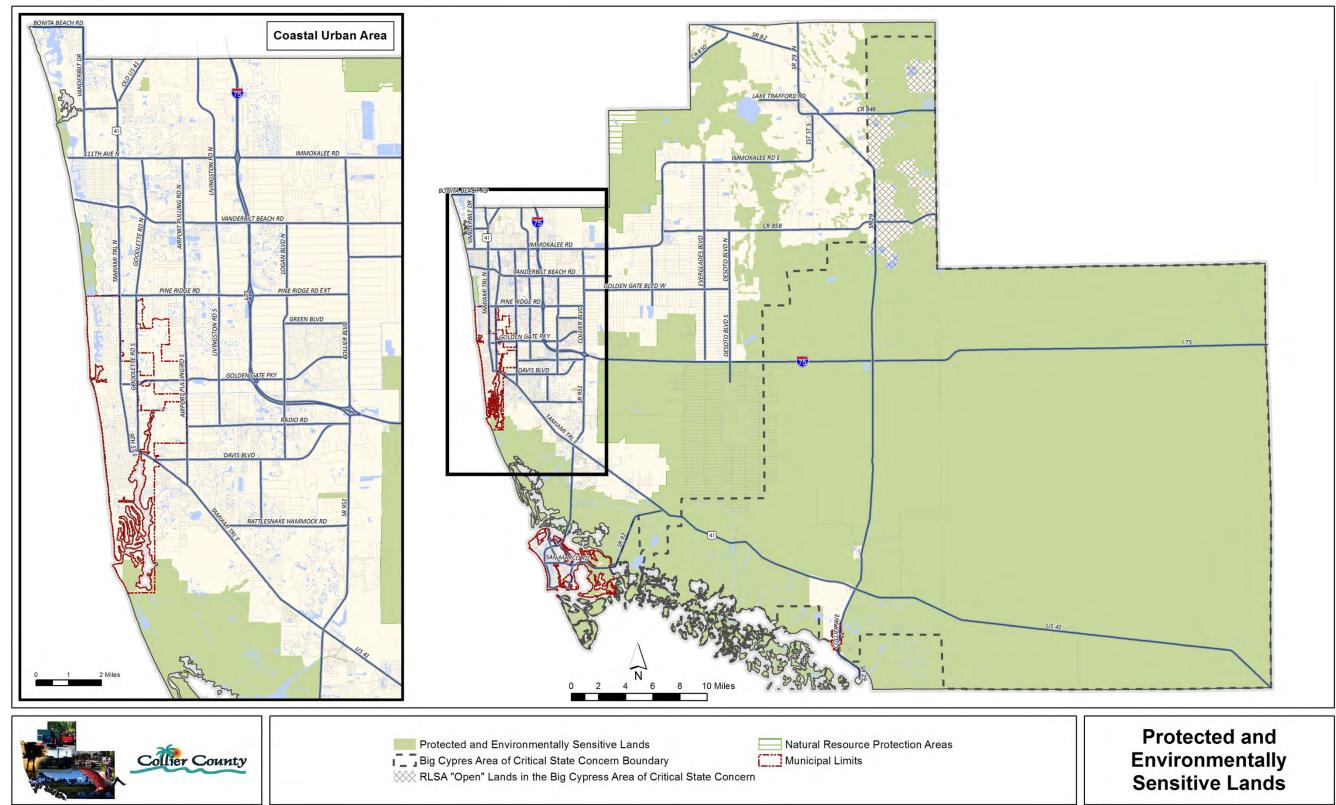




Future Land Use

Source: Collier County Growth Management Plan, adopted Future Land Use Map

Map 2-9 Environmentally Sensitive Areas



Source: Collier County GIS Services

Under the adopted GMP, there are about 300,000 acres of available/developable land in Collier County. About 60 percent of this land currently is developed to some degree, resulting in approximately 120,000 acres available for development in the future. It is recognized that new growth and development will continue to occur in Collier County until build-out. As part of the MMP, the challenge lies in developing strategies that minimize the environmental impact from existing and new development without inhibiting growth.

MMP Planning Sub-Areas

Early in the MMP process, consistent project themes began to emerge, largely through input received from stakeholders and the public. One of the emerging project themes included the need to identify and consider sub-areas for purposes of developing VMT-reducing recommendations. As part of the MMP process, planning sub-areas have been identified based on unique characteristics or opportunities that will effectively reduce VMT and achieve the overall recommendations of the MMP. Figure 2-14 illustrates a countywide illustration of the six planning sub-areas.

Some sub-areas, such as the CUA, will lend themselves to application of all or nearly all recommendations, while in other sub-areas, recommendations may have limited application while others may be critically important. As such, it is important to understand the unique characteristics or opportunities of each sub-area that will effectively reduce VMTs.

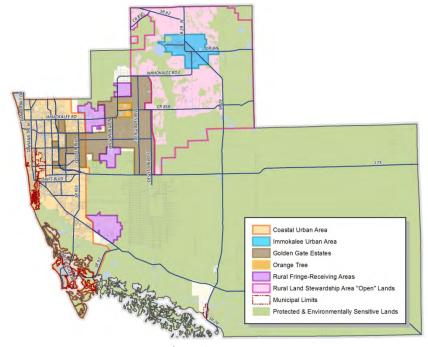


Figure 2-14
MMP Planning Sub-Areas

Coastal Urban Area (CUA)

This area is, for the most part, developed with a wide variety of uses including residential, tourism related uses, personal services, retail, and other commercial uses. Larger employers within the CUA include Collier County Government, Naples Community Hospital, several larger hotels, and various private companies. On average, the current density in the CUA is relatively low, averaging less than 3.0 units per gross acre. The CUA includes several older platted neighborhoods as well many gated master-planned communities. Presently, the CUA houses the majority of population in Collier County and includes two Community Redevelopment Areas (CRAs) and several other areas that likely will be a future target for redevelopment in the future.

The existing and projected demographic data for the CUA sub-area are summarized below:

<u>Year</u>	<u>Population</u>	Dwelling Units	<u>Employment</u>
2007	269,000	172,000	148,000
2080	485,000	304,500	286,000

Figure 2-15 illustrates the CUA sub-area.

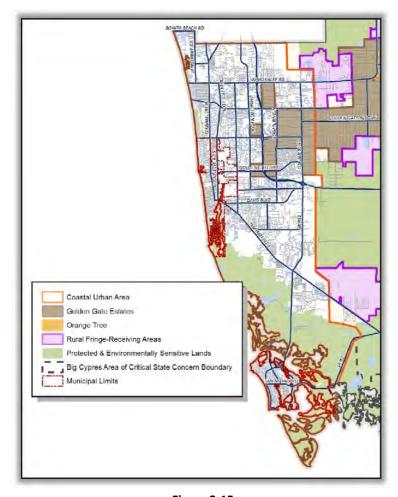


Figure 2-15 Coastal Urban Area Sub-Area

Golden Gate Estates (GGE)

GGE was originally platted in the early 1960s by Gulf American Corporation. This was a vast area of Collier County originally containing approximately 175 square miles. The South Blocks of GGE have been acquired by the State of Florida, and plans have been implemented to restore this area to its historic hydrologic and habitat condition. North Golden Gate Estates, due to a combination of affordability and lifestyle choice (semi-rural), developed rapidly during the 1990s and through 2006. This is a vast area of semi-rural larger lots (generally either 1.25-acre legal non-conforming lots or 2.25-acre or larger conforming lots). While thousands of lots in GGE have been developed to date, there is still a considerable number of undeveloped lots and, therefore, considerable opportunity for additional growth and development exists in this area.

GGE consists primarily of residential uses, although recent efforts to develop additional commercial areas, both within and along the periphery of GGE have increased. Recently, a commercial development allowing initially for up to 150,000 square feet of commercial retail and office use was approved for the intersection of Golden Gate and Wilson boulevards. Additionally several Neighborhood Centers are authorized within the Golden Gate Area Master Plan, and several opportunities for mixed-use higher density development exists along the periphery of North GGE in the Orange Tree Settlement Area and in several of the Receiving Areas in the RFMUD.

The existing and projected demographic data for the GGE sub-area are summarized below:

<u>Year</u>	<u>Population</u>	Dwelling Units	Employment
2007	35,500	11,000	4,000
2080	88,000	27,000	7,500

Figure 2-16 illustrates the GGE sub-area.

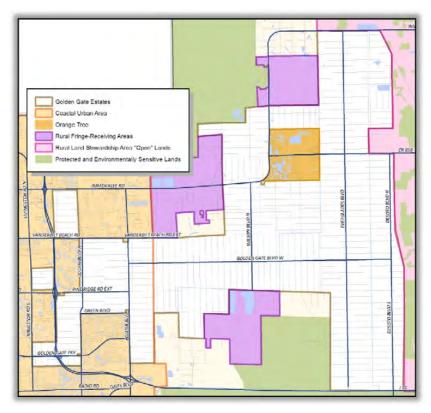


Figure 2-16
Golden Gate Estates Sub-Area

Rural Fringe Mixed Use District (RFMUD) Receiving Areas

The RFMUD is located between the CUA and the GGE sub-areas. It contains three types of land use areas: Sending Lands, Neutral Lands, and Receiving Lands. Sending Lands are those of high environmental value targeted for protection and acquisition. Sending Lands have a low density allowance of one dwelling units per 40 acres. Development rights (along with various bonus units) can be transferred from the Sending Lands to Receiving Lands. Receiving Lands are those lands that are deemed appropriate for development based upon their location and the fact that they contain lands of lesser environmental value than the Sending Lands. Receiving Lands allow for increased density through the Transfer of Development Rights (TDR) and bonus units from Sending Lands. One development option in the Receiving Lands is a compact mixed-use rural village (presently limited to a maximum of three within each of the four Receiving Areas). Neutral Lands cannot receive or send development rights and retain the historically-permitted density of one dwelling unit per five acres.

The existing and projected demographic data for the RFMUD Receiving Areas sub-area are summarized below:

<u>Year</u>	<u>Population</u>	Dwelling Units	Employment
2007	3,700	1,750	1,650
2080	49,000	26,000	25,500

Figure 2-17 illustrates the sub-area containing the RFMUD Receiving Areas.

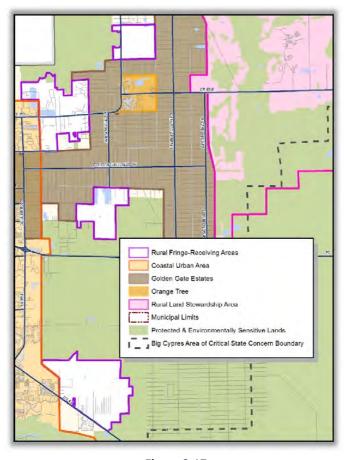


Figure 2-17
Rural Fringe Mixed Use District Receiving Areas Sub-Area

Orange Tree

Orange Tree, formerly referred to as the Rural Settlement Area District, consists of more than four full sections of land that were zoned and platted between 1967 and 1970. In settlement of a lawsuit pertaining to the permitted uses of this property, this area was "vested" for the types of land uses specified in the 1986 Settlement and Zoning Agreement. This area now comprises the Orange Tree PUD and Orange Blossom Ranch PUD, and the types of uses permitted in this sub-area include residential, earth mining, commercial, agricultural, community facility, community uses, education facilities, religious facilities, golf course, open space and recreational uses, and essential service uses. This area is located within GGE about mid-way between Immokalee and downtown Naples (as the crow flies) and can be accessed by several arterial roadways including Immokalee Road, Oil Well Road and, Randall Boulevard. Orange Tree presently contains elementary, middle, and high schools, the County Fairgrounds, and land for several community parks or one large County park. The two PUDs provide significant opportunity for retail commercial and office use and the potential for additional government offices.

The existing and projected demographic data for the Orange Tree subarea are summarized below:

<u>Year</u>	<u>Population</u>	Dwelling Units	<u>Employment</u>
2007	3,000	1,000	1,000
2080	9,000	3,500	4,500

Figure 2-18 illustrates the Orange Tree sub-area.



Figure 2-18
Orange Tree Sub-Area

Immokalee Urban Area (IUA)

The Immokalee Urban Area is located in northeastern Collier County, relatively close to rural southeastern Lee County and rural southwestern Hendry County. Immokalee is surrounded by hundreds of thousands of acres of rural agricultural lands and a vast amount of significant habitat for listed species, including the Florida Panther. Immokalee has long been recognized as a distinct community within Collier County, as its economy, geography, and demographic make-up are very different than that of the CUA. Approximately 50 percent of the land within the IUA is presently zoned and actively used for agriculture. Many residents of Immokalee work in the agricultural industry.

A detailed Master Plan for the IUA has been developed and was incorporated into the County's GMP in 1991. Major revisions to the Immokalee Area Master Plan were adopted in 1997 following the 1996 Evaluation and Appraisal Report. The Immokalee Area Master Plan addresses conservation, future land use, population, recreation, transportation, housing, and the local economy. Major purposes of the Master Plan are coordination of land uses and transportation planning, redevelopment or renewal of blighted areas, and the promotion of economic development.

Over the last several years, a new Master Plan was developed for Immokalee. While the Plan has not yet been approved by Collier County, it does contain policies that support many of the concepts outlined in the MMP, including a focus on a high density, mixed-use urban core, a focus on industrial development and related employment, and a focus on a multi-modal transportation system, including transit and enhanced bicycle and pedestrian facilities.

The existing and projected demographic data for the IUA sub-area are summarized below:

<u>Year</u>	<u>Population</u>	Dwelling Units	<u>Employment</u>
2007	19,000	6,000	9,000
2080	68,000	26,000	59,500

Figure 2-19 illustrates the IUA sub-area.

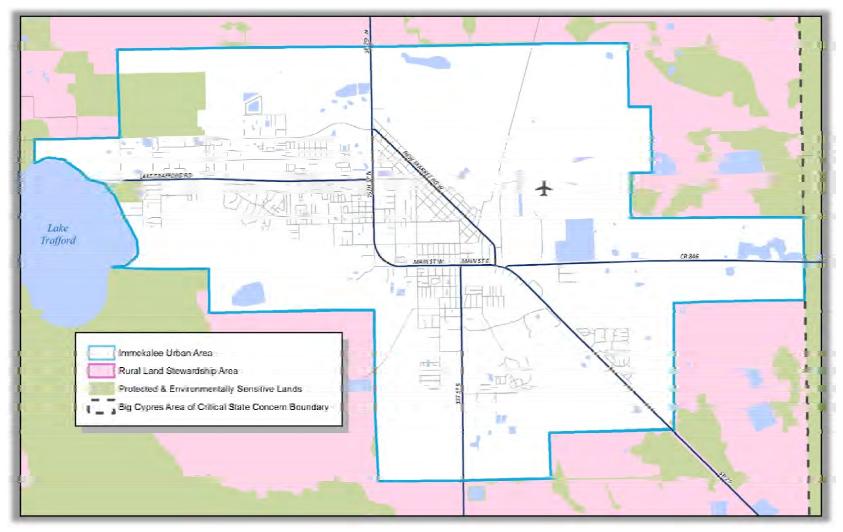


Figure 2-19 Immokalee Urban Area Sub-Area

Rural Land Stewardship Area (RLSA)

The RLSA is located in eastern Collier County and generally surrounds the IUA. The RLSA includes hundreds of thousands of acres of rural agricultural lands, as well as critical habitat for listed species including the Florida Panther, and several critical flow-ways. In 2002, the County adopted the RLSA program.

The RLSA program is a purely voluntary and incentive-based program where privately owned lands within the RLSA have generally been designated as having high ecological value or as "open" lands. Those lands having higher ecological value fall under one of three categories, Flow-way Stewardship Areas, Habitat Stewardship Areas, and Water Retention Areas. A land owner can voluntarily request designation by the BCC for certain lands to be identified as Stewardship Sending Areas (SSA). For this designation, the landowner receives Stewardship Credits that can be used to entitle mixed-use compact development on Open Lands with an approved Stewardship Receiving Area (SRA) designation. To date, one SRA has been approved and partially developed-the Town of Ave Maria. If all opportunities to create SRAs are exercised, it is estimate that approximately 45.000 acres will be developed in various locations within the RLSA. Under this same scenario, well over 100,000 acres of land would then be protected, either in conservation or in continued agricultural use. Section 4.08 of the County's LDC documents the standards and procedures of the RLSA program. The RLSA is recognized as an award-winning program. In 2005, the RLSA Plan received the 2005 Better Community Award from 1000 Friends of Florida.

Figure 2-20 illustrates the RLSA sub-area.

The existing and projected demographic data for the RLSA sub-area are summarized as follows:

<u>Year</u>	<u>Population</u>	Dwelling Units	<u>Employment</u>
2007	500	250	2,000
2080	221,000	107,500	128,500

Note: RSLA Build-out population estimate from Collier County Interactive Growth Model

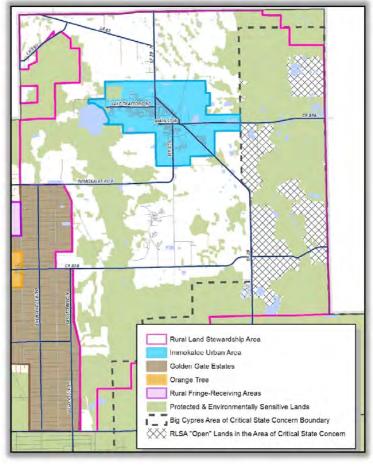


Figure 2-20
Rural Lands Stewardship Area Sub-Area