



imagine
2040



**Background Data
& Analysis** for the
**Comprehensive
plans**

for the

City of Tampa

City of Temple Terrace

City of Plant City

& Unincorporated Hillsborough County

Prepared by:



Hillsborough County
City-County
Planning Commission

planhillsborough.org



Contents

Part 12
Population/Employment/Housing/Schools.....2

Part 278
Mobility.....78

Part 3123
Unincorporated Hillsborough County - Background Data and Analysis123

Part 4186
Tampa – Background Data and Analysis.....186

Part 5191
Future Land Use Matrix.....191



Part 1

Population/Employment/Housing/Schools

This section presents data sets common to all four jurisdictions in Hillsborough County. The basis for all data herein is derived from the population and employment projections provided to the right and on the following page.

Hillsborough 2040 Socioeconomic Data Forecast: Summary by Location and Type (April 2015)

This table illustrates 2040 population, dwelling unit and employment in two ways: by location (inside the USA, in the potential expansion areas, outside the USA) and by type (station area development, redevelopment and greenfield development).

		Municipality (1)	2010 to 2040 Population Growth	2010 to 2040 Dwelling Unit Growth	2010 to 2040 Total Employment Growth
Tampa	Location	Inside USA	150,220	78,593	157,342
		Potential Expansion Area			
		Outside USA			
	TOTAL	150,220	78,593	157,342	
Type	Station Area Development	90,344	52,199	79,786	
	Redevelopment	15,124	7,960	30,721	
	Greenfield Development (2)	44,752	18,434	46,834	
	TOTAL	150,220	78,593	157,342	
Plant City	Location	Inside USA	15,807	6,554	15,433
		Potential Expansion Area	11,690	4,981	8,005
		TAZ 552	1,848	1,094	1,218
		TAZ 553	6,110	2,363	3,598
	TAZ 583	3,733	1,523	3,291	
	Outside USA	4,970	1,872	3,189	
	TOTAL	32,468	13,407	26,627	
	Type	Redevelopment	1,504	792	2,351
Greenfield Development (2)		30,964	12,616	24,276	
TOTAL		32,468	13,407	26,627	
Temple Terrace		Location	Inside USA	8,019	3,522
	Potential Expansion Area				
	Outside USA				
	TOTAL	8,019	3,522	5,316	
Type	Redevelopment	891	469	1,662	
	Greenfield Development	7,128	3,053	3,654	
	TOTAL	8,019	3,522	5,316	
Unincorporated County	Location	Inside USA	245,164	104,072	182,567
		Potential Expansion Area	45,633	22,748	11,629
		TAZ 552	1,848	1,094	1,218
		TAZ 553	2,618	1,013	1,503
		TAZ 583	2,489	1,016	2,187
		TAZ 741	28,042	16,098	4,200
		TAZ 746	4,540	1,636	1,177
		TAZ 747	6,096	1,892	1,295
	Outside USA	94,482	35,429	17,300	
	TOTAL	385,278	162,249	211,496	
	Type	Station Area Development	4,240	2,450	11,650
		Redevelopment	23,114	12,165	24,951
Greenfield Development (2)		357,924	147,634	174,895	
TOTAL		385,278	162,249	211,496	
Countywide Totals	Location	Inside USA	419,210	192,741	360,658
		Potential Expansion Area	57,323	27,729	19,634
		Outside USA	99,452	37,301	20,489
		TOTAL	575,985	257,771	400,781
	Type	Station Area Development	94,584	54,648	91,436
		Greenfield Development (2)	40,633	21,386	59,686
TOTAL	440,768	181,737	249,659		
TOTAL	575,985	257,771	400,781		

Note:

1) For deriving data by municipalities the same %s used by the MPO for population was used for dwelling units and employment at the TAZ level. Please note that the 2010 numbers may vary from the 2010 US Census for municipality totals

2) Other development indicates forecasted development not due to station area development or redevelopment (i.e. development on vacant developable lands)



DRAFT: Hillsborough 2040 Socioeconomic Data Forecast: Summary by Municipalities and Inside USA/City Limits

	Municipality (1)	2010 Population	2010 Units	2010 Total Employment	2040 Population	2040 Dwelling Units	2040 Total Employment	2010 to 2040 Population Growth	2010 to 2040 Dwelling Unit Growth	2010 to 2040 Total Employment Growth	Available Capacity to Allocate (Dwelling Units)	Surplus Capacity (Dwelling Units)
Tampa	Tampa Totals	330,500	160,100	328,900	481,100	238,700	486,200	150,600	78,600	157,300	78,600	-
	Inside USA/City Limits	330,500	160,100	328,900	481,100	238,700	486,200	150,600	78,600	157,300	78,600	-
	Station Areas	-	-	-	90,300	52,200	79,800	90,300	52,200	79,800	52,200	-
	Redevelopment	-	-	-	15,100	8,000	30,700	15,100	8,000	30,700	8,000	-
	Other/New Development (2)	330,500	160,100	328,900	375,700	178,500	375,700	45,200	18,400	46,800	18,400	-
Plant City	Plant City Totals	39,000	15,600	26,700	71,500	29,100	53,300	32,500	13,400	26,600	17,600	4,200
	Inside USA/City Limits	31,700	12,500	23,500	47,500	19,100	39,000	15,800	6,600	15,400	6,600	-
	Potential Expansion Area	2,600	1,300	1,300	14,300	6,300	9,300	11,700	5,000	8,000	5,000	-
	TAZ 552	1,500	900	200	3,300	2,000	1,400	1,800	1,100	1,200	1,100	-
	TAZ 553	900	300	400	7,000	2,700	3,900	6,100	2,400	3,500	2,400	-
	TAZ 583	200	100	700	3,900	1,600	4,000	3,700	1,500	3,300	1,500	-
	Outside USA (not including expansion areas)	4,700	1,800	1,900	9,700	3,700	5,100	5,000	1,900	3,200	6,100	4,200
	Redevelopment	-	-	-	1,500	800	2,400	1,500	800	2,400	800	-
	Other/New Development (2)	39,000	15,600	26,700	70,000	28,200	51,000	31,000	12,600	24,300	16,800	4,200
	Temple Terrace	Temple Terrace Total	35,000	16,500	14,000	43,100	20,000	19,300	8,200	3,500	5,300	3,500
Inside USA/City Limits		35,000	16,500	14,000	43,100	20,000	19,300	8,200	3,500	5,300	3,500	-
Redevelopment		-	-	-	900	500	1,700	900	500	1,700	500	-
Other Development/New (2)		35,000	16,500	14,000	42,300	19,600	17,700	7,300	3,100	3,700	3,100	-
Unincorporated	Unincorporated Total	802,700	343,900	341,800	1,194,600	506,100	553,300	391,900	162,200	211,500	261,800	99,600
	Inside USA/City Limits	665,300	288,500	306,200	915,500	392,600	488,800	250,200	104,100	182,600	104,100	-
	Station Areas	-	-	-	4,200	2,400	11,700	4,200	2,400	11,700	2,400	-
	Redevelopment	-	-	-	23,100	12,200	25,000	23,100	12,200	25,000	12,200	-
	Other/New Development (2)	888,200	378,000	452,100	1,167,300	378,000	452,100	222,900	89,500	145,900	89,500	-
	Potential Expansion Area	17,000	6,800	2,800	62,700	29,600	14,400	45,700	22,700	11,600	22,700	-
	TAZ 552	1,500	900	200	3,300	2,000	1,400	1,800	1,100	1,200	1,100	-
	TAZ 553	400	100	200	3,000	1,200	1,700	2,600	1,000	1,500	1,000	-
	TAZ 583	100	100	500	2,600	1,100	2,700	2,500	1,000	2,200	1,000	-
	TAZ 741	2,600	1,500	400	30,700	17,600	4,700	28,000	16,100	4,300	16,100	-
	TAZ 746	8,900	3,200	1,200	13,500	4,800	2,400	4,600	1,600	1,200	1,600	-
	TAZ 747	3,500	1,100	300	9,600	2,900	1,600	6,100	1,900	1,300	1,900	-
	Outside USA	120,400	48,600	32,800	216,400	84,000	50,100	96,000	35,400	17,300	135,000	99,600
Other/New Development (2)	802,700	343,900	341,800	216,300	83,900	50,200	364,500	147,600	174,900	135,000	99,600	
Totals	Inside USA/City Limits	1,062,500	477,600	672,600	1,487,300	670,400	1,033,300	424,800	192,700	360,700	192,700	-
	Potential Expansion Area	19,600	8,100	4,100	77,000	35,800	23,700	57,400	27,700	19,600	27,700	-
	Outside USA	125,100	50,400	34,700	226,100	87,700	55,200	101,000	37,300	20,500	141,100	103,800
	Station Areas	-	-	-	94,600	54,600	91,400	94,600	54,600	91,400	54,600	-
	Redevelopment	-	-	-	40,600	21,400	59,700	40,600	21,400	59,700	21,400	-
	Other/New Development (2)	1,207,200	536,100	711,400	1,655,200	717,800	961,100	448,000	181,700	249,700	285,500	103,800
	Countywide Total	1,207,200	536,100	711,400	1,790,400	793,900	1,112,200	583,200	257,800	400,800	361,600	103,800

Note:
 1) For deriving data by municipalities the same %s used by the MPO for population was used for dwelling units and employment at the TAZ level. Please note that the 2010 numbers may vary from the 2010 US Census for municipality totals
 2) Other development indicates forecasted development not due to station area development or redevelopment (i.e. development on vacant developable lands)

The methodology utilized to generate data for the housing element as required by F.S. § 163.3177(6)(f)2 is included below. The statute requires each local planning agency to supply:

...the number and distribution of dwelling units by type, tenure, age, rent, value, monthly cost of owner-occupied units, and rent or cost to income ratio, and shall show the number of dwelling units that are substandard. The data and analysis shall also include the methodology used to estimate the condition of housing, a projection of the anticipated number of households by size, income range, and age of residents derived from the population projections and the minimum housing need of the current and anticipated future residents of the jurisdiction.

PURPOSE

The housing element addresses the need for a variety of housing types. The statutory requirements address a number of needs such as: 1) adequate sites for future housing; 2) affordable workforce housing; 3) housing for a variety of income levels as well as supporting infrastructure. Socioeconomic data are a principal input for the development of goals, objectives and policies of this element.

Various data including population, housing inventories, housing tenure (to be understood as renter or owner), housing costs and values, as well as quality and crowding of dwelling units were all included in the analysis. The data were required for each of the four jurisdictions within Hillsborough County (the cities of Tampa,

Temple Terrace, and Plant City along with unincorporated portion of Hillsborough County).

METHODOLOGY

Inventory Data

There are two main data sets used in this element. The first set, constitutes data which provide an inventory or situational analysis of housing *contemporaneous with the writing of the element*. This set relies on U.S. Census Bureau data either provided through their most recent decennial census of population and housing, the 2010 Census, or one of their American Community Survey products. Beginning with the 2010 Census, the majority of data required for this element were no longer asked by respondents. Beyond basic demographic counts of sex, age, households and race/ethnicity, the more nuanced data was relegated to the American Community Survey.

The American Community Survey refers to three separate products. These products are derived from surveys and include margins of error (MOE). These products include a 1-year survey, a 3-year survey and a 5-year survey. Included below is Table 1, as found on the U.S. Census Bureau's American Community Survey website. This table outlines salient features of the three datasets, under what circumstances they should be used, and the population levels they address.



Table 1: Distinguishing features of ACS 1-year, 3-year, and 5-year estimates

1-year estimates	3-year estimates	5-year estimates
12 months of collected data	36 months of collected data	60 months of collected data
Data for areas with populations of 65,000+	Data for areas with populations of 20,000+	Data for all areas
Smallest sample size	Larger sample size than 1-year	Largest sample size
Less reliable than 3-year or 5-year	More reliable than 1-year; less reliable than 5-year	Most reliable
Most current data	Less current than 1-year estimates; more current than 5-year	Least current
Best used when	Best used when	Best used when
Currency is more important than precision Analyzing large populations	More precise than 1-year, more current than 5-year Analyzing smaller populations Examining smaller geographies because 1-year estimates are not available	Precision is more important than currency Analyzing very small populations Examining tracts and other smaller geographies because 1-year estimates are not available

In generating the inventory data, staff relied on the 2010 Census where applicable. If data was unavailable from the 2010 Census,

staff used either the 5-year and 3-year ACS datasets. The 3-year estimate was the preferred choice. Staff only used the 5-year estimate where the 3-year estimates were too small and no values were returned. For example, when identifying dwelling units which lacked heat, both Plant City and Temple Terrace had “null” values from the 3-year estimate due to such a small sample size. This required staff to utilize the 5-year estimate. **At no time did staff use the 1-year estimates used in the housing analysis.**

Forecast Data

The first step in generating the required forecasts was creating the countywide and jurisdiction-specific control totals. The control totals were derived from the annual projections prepared by the University of Florida. The University of Florida’s Bureau of Economic and Business Research (BEBR) prepared the population projections used to forecast population to 2040.¹ Using BEBR-Medium projections, a ratio of 1.8% was applied for each 5-year bracket to determine the Group Quarter Population. This number was subtracted and the remaining values were then adjusted by staff for each jurisdiction to determine the projected population for the four jurisdictions (Tables 2 and 3, respectively).

¹ Bureau of Economic and Business Research, University of Florida. *Projections of Florida Population by County, 2015-2040, with Estimates for 2012*. V. 46, Bulletin 165, March 2013.



Table 2: Control Totals (Baseline/BEBR Medium)

	2010	2015	2020	2025	2030	2035	2040
Household Population	1,207,161	1,290,348	1,406,715	1,515,324	1,613,917	1,704,948	1,790,382
Group Quarters Population	21,599	23,652	25,785	27,776	29,583	31,252	32,818
Total Permanent Population	1,229,226	1,314,000	1,432,500	1,543,100	1,643,500	1,736,200	1,823,200

Table 3: Control Totals (Baseline/BEBR Medium)

Jurisdiction	2010	2015	2020	2025	2030	2035	2040
Unincorporated Hillsborough County	834,255	857,723	940,112	1,014,852	1,075,680	1,136,625	1,194,597
City of Tampa	335,709	355,850	384,153	410,669	433,103	457,322	481,128
City of Temple Terrace	24,541	36,245	38,304	40,062	40,579	41,887	43,134
City of Plant City	34,721	40,530	44,146	49,740	64,555	69,113	71,523
Household Population	1,229,226	1,290,348	1,406,715	1,515,323	1,613,917	1,704,947	1,790,382

There were only four datasets required to be forecasted for the housing element. Based on staff's interpretation of the statutory requirements, these four datasets are:

1. A projection of the number of anticipated households by size;
2. A projection of the number of households by income range;
3. A projection of the age of residents derived from the population projections;
4. The minimum housing need for current and future residents of the jurisdiction.

Prior Studies

To begin the process, staff reviewed the methodology of prior housing elements. The most recently adopted Comprehensive Plans for all of Hillsborough County utilized a methodology prepared by the Shimberg Center for Affordable Housing.² At the time of the writing of the Housing Element, Shimberg's methodology was being rewritten and unavailable. They provided, and staff accepted, assistance in preparing additional household data. The documentation that follows is based on their earlier 2006 methodology.

Methodology

The Hamilton-Perry ratio is the sole, statistical tool used to generate the population by age for the years 2020, 2030, and

² Shimberg Center for Affordable Housing, Rinker School of Building Construction, College of Design, Construction and Planning, the University of Florida. *Affordable Housing Needs Assessment: Population and Household Projection Methodology*. September 2006.

2040. This ratio is a demographically accepted tool used since 1962 to calculate changes in population. Two points in time are needed to construct the survival/net migration ratio – the jurisdiction's population by age group for 2000 and 2010. The sources are the respective census counts. The tool is specifically suited to small population areas where more detailed demographic data such as in-migration, mortality and fertility rates are not known.

This ratio is designed to capture the size of an age cohort over a ten-year period. For example, the population aged 10-14 in 2010 is divided by the population ten years earlier, that is, the population aged 0-4 in 2000. This ratio is then applied to the population aged 0-4 in 2010 to project the population aged 10-14 in 2020 and to the population aged 0-4 in 2020 to project population aged 10-14 in 2030.

Finally, the projections are adjusted to account for growth at the extreme ends of the age spectrum. The population for ages 0-9 and 75+ are adjusted using specific ratios.

- a. To adjust for the population 75 year and over, the population in 2010 is divided by the sum of populations aged 65+ in 2000.
- b. To adjust the population for ages 0-9, a ratio is calculated by between children under 10 years of age and the population aged 15-44. That is, the population of children aged 0-9 in 2010 is divided by the population aged 15-44 in 2010 and that ratio is applied to the population aged 15-44 ten years later. Finally, the population has to be divided into two separate age brackets (0-4, 5-9). This is accomplished by



assuming the share of children aged 0-4 to those aged 5-9 in 2010 is the same going forward.

Finalizing the projections

After these calculations have been completed, the sum of the age brackets have to be reconciled against the control totals prepared at the outset by the planners. To accomplish this task, the population of each age group is adjusted in reference to the control total. The controlled age projection for 2020 is used to compute the ratio of the projected jurisdiction population (control total) to the sum of the age group populations (the jurisdiction’s total uncontrolled population). This ratio is applied to each age group population. This process is repeated for the 2030 and 2040 age brackets to adjust the uncontrolled age group brackets to the controlled population totals for these years.

If this process is not completed, the sum of age group brackets for each decade would not sum to the control total. Since the control total must be matched, deviations under or over the control total are adjusted by applying this ratio.

Mid-decade population projections are handled in a different manner. To construct population projections by age bracket, we use the compound growth rates between decades. The ANHA methodology has a simplified formula to construct these values. The function is:

$$\text{Pop of year } 2010+n = \text{pop2010} * e^{(5/10*\ln(\text{pop2010}/\text{pop2020}))}$$

$$\text{Population for the year 2015} = \text{pop2010} * e^{(5/10*\ln(\text{pop2010}/\text{pop2020}))}$$

In Excel, the formula is constructed as follows:

$$\text{Population for the year 2015} = \text{pop2010} * \text{EXP}((5/10*\ln(\text{pop2010}/\text{pop2020}))$$

The same finalizing process is used for calculating ratios between the uncontrolled sum by age brackets and the controlled sum total. This provides the same smoothing process to ensure data is consistent between decades.

Householder by Age and Tenure (Headship Rates)

The basic assumption underlying the housing element is that dwelling units are where people live. Barring the homeless and institutionalized populations, people occupy dwelling units. The propensity for people to form households by tenure varies among age brackets. For example, the percentage of persons aged 15-24 residing in owner occupied units is lower than people aged 55-64 whereas the converse is true for renter occupied units: rental units are primarily used by the younger age brackets.

Of course, not all age brackets form households. The minimum age for a householder is 15 with no cap on the oldest age. For the purpose of the analysis, age brackets are constructed around these three age brackets: 1) 15-34 years of age; 35-64 years of age; 65 years and over. **The percentage of the population in a given age group to form households is the headship rate.** Calculating the headship rate allows for the transformation of population numbers into dwelling units.

The previous steps generated population projections by age brackets and in five year increments from 2015-2040. This data is

one of the three required datasets to construct the headship data. In completing the headship analysis, staff will have solved 3 of the 4 statutorily required projected data:

1. A projection of the number of anticipated households by size;
2. A projection of the age of residents derived from the population projections;
3. The minimum housing need for current and future residents of the jurisdiction.

Headship formation rate is constructed from householder by tenure and age data (from the most recent Census), population by age (from the most recent Census) and the previously created age brackets. The headship rate is generated from the 2010 census data by dividing the number of householders in each tenure/age group by the total population of that age group. The projection of householder by age/tenure is then calculated by applying that ratio (headship rate) to the age group projections of population for each projection period. Household counts by age group are summed to the projected number of households. The following sections will explain in detail each of these three projections.

Projected Households by Size

Staff used two different methods to construct households by size. However, both methods focused on three age groups: households including 1-2 persons, households of 3-4 persons, and households over 5 persons. The first method incorporated historical census data from 1970 to 2010 (50 years), and constructed a likely upper limit for the year 2040 for each bracket. Staff constructed a set of averages for each age bracket based on all five Censuses. Staff

prepared a separate set of averages of three Censuses omitting the extremes. Finally the two Censuses, excluding the extreme, were averaged. These three sets of data were all averaged together in reference to the historical trend to construct a likely upper limit. A median was applied to the 2010 and 2040 numbers to generate the numbers for 2015-2035. This analysis was informed by staff's interpretation of historical trends and what was the most likely scenario for households to grow. The decades with extreme percentages of high or low were closely scrutinized as to whether they represented a trend or an anomaly in the data set. The scenarios were also scrutinized with reference to current residential construction data.

The second method relied on a linear regression analysis based on 2000 and 2010 Census data and Shimberg's 2009 estimates to construct a trend extending into 2040. The percentages were then applied to the control sums to determine the household brackets. This was a simple statistical exercise and the results were not adjusted by reference to any historical trends.

Projected Households by Age

The Projected Households by Age were derived directly from the headship rates by age and tenure summed by age to generate totals. This was a simple addition process.

Minimum Housing Needs

The minimum housing needs can be derived from any of the datasets. However, staff chose to construct a dataset, *Projected Households by Tenure*. The sum of households by tenure for each

5-year bracket provides the minimum housing needs. Furthermore, the household by tenure data indicates how many owner and renter units are needed for each five-year bracket.

Projected Households by Income Range

Projecting households by income proved to be the most difficult of the four required data-sets. This is due for two reasons. First, the U.S. Census no longer provides the type of cross-tabulated data necessary to generate this information. The analysis requires Household Count by Tenure by Age by Size by Income or some variation of this cross-tabulation. Neither the decennial Census nor any of the American Community Surveys provide this level of cross-tabulation. Shimberg methodology utilizes Public Use Microdata Sample (PUMS) to generate this information. However, PUMS data is most useful at the state and county level. Utilizing PUMS data below the county level requires extensive use of weighted data, raising the Margin of Error to a level where the data may be practically useless.

Second, any known datasets such as the American Community Survey, were impacted by the recession which ended in 2009. For example, staff analyzed the seasonally adjusted unemployment rate and the timeline of the national recession. While only statewide data was available going back to 1976, Hillsborough County closely tracked the statewide average, especially during the recession. Given the magnitude of economic impact on the residents of the time, it would prove difficult to include 2010 data into an economic analysis without some form of adjustment. Chart 1 illustrates the magnitude of the unemployment rate at this time

as well as the time of recession, both of which coincided closely with the April 1 date of the 2010 Census.

Chart 1: Unemployment Rates and National Recessions

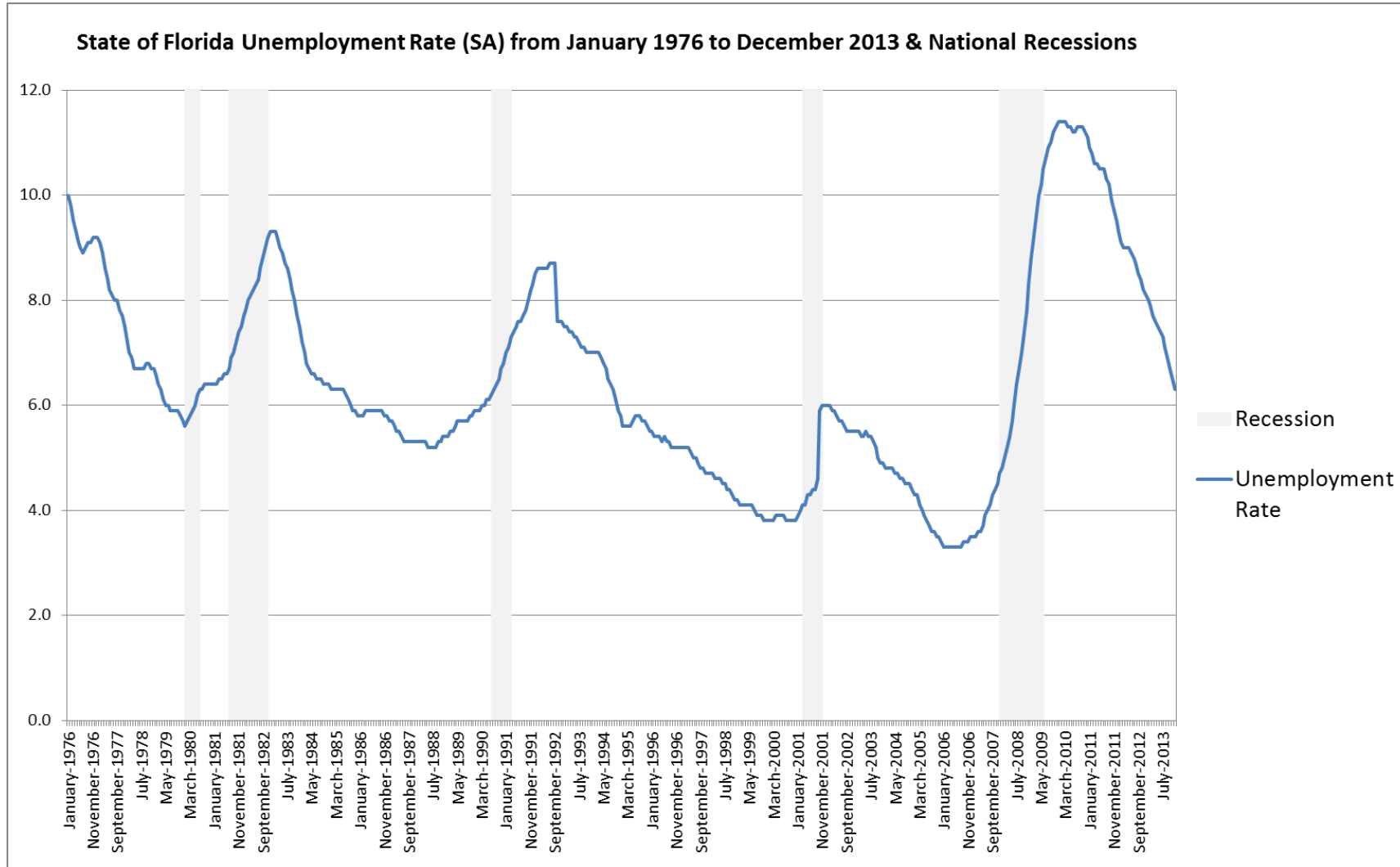
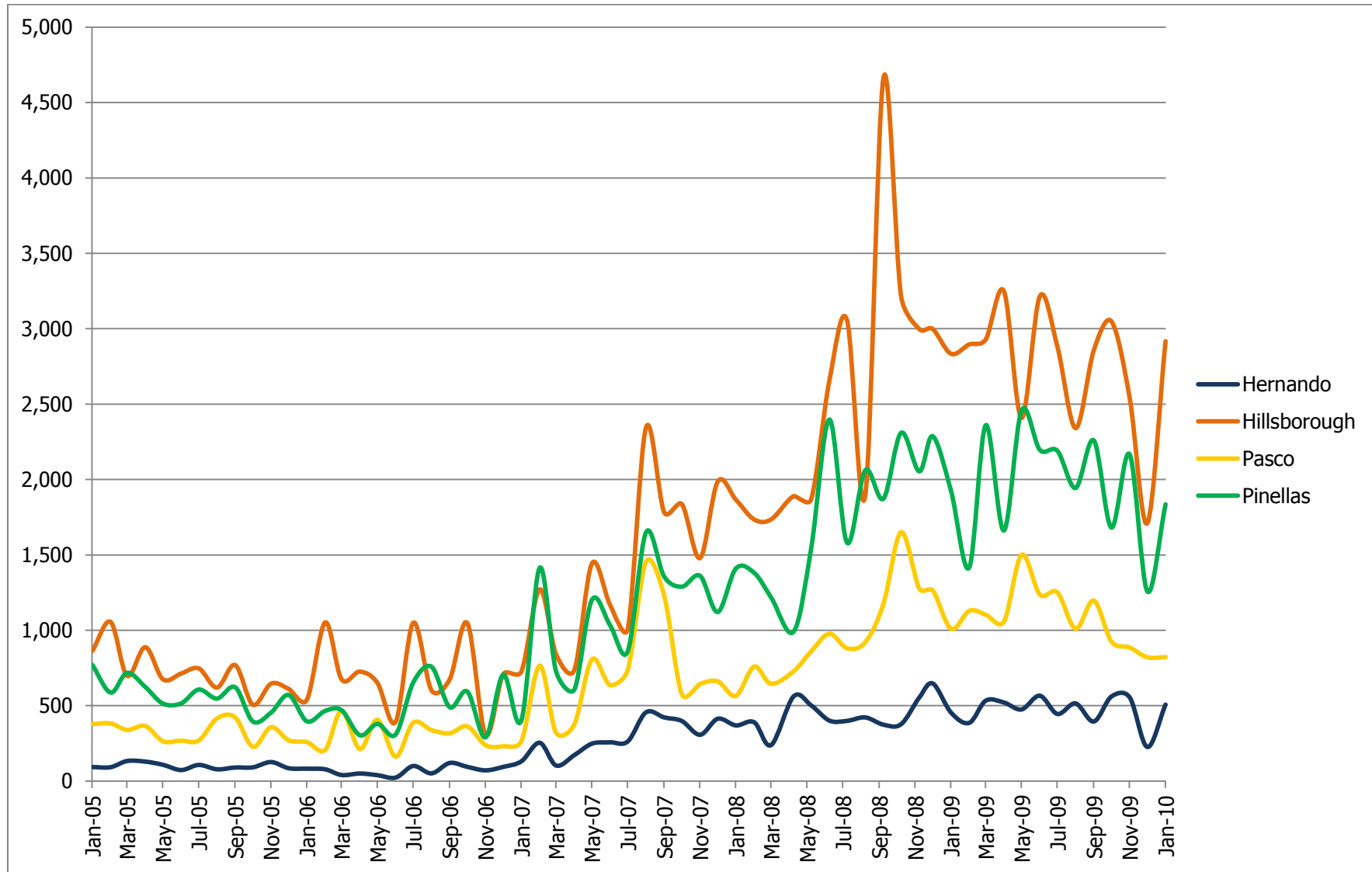




Chart 2: Foreclosures for Tampa Metropolitan Statistical Area by County



Finally, one last feature problematizing the construction of brackets by household by income range is the volatile nature of the housing market at the time of the 2010 Census. Using foreclosure data from January 2005-January 2010, Hillsborough County experienced a significant number of foreclosures.

In conclusion, using 2010 income data for forecasting purposes without attending to its very real shortcomings may lead to inaccurate, erroneous or skewed projections.

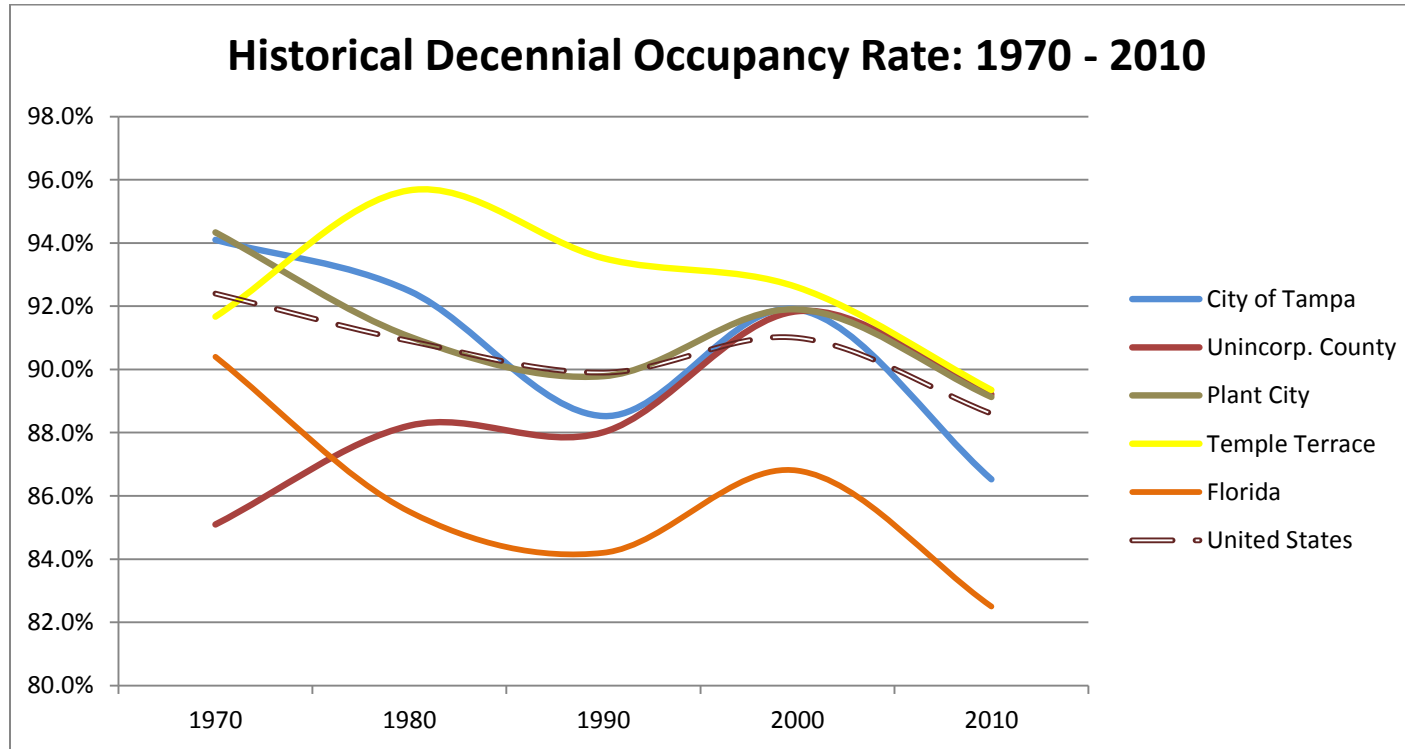
The Analysis

Staff relied on two techniques to generate the projected households by income range. First, staff used the tabulations prepared by Shimberg and simply applied their proportions to our control totals. Second, staff used a linear trend analysis based on Shimberg's values for 2000, 2009, and 2010 and extended the analysis to the horizon year. Both sets of data are very similar with the built in assumption that the low income would continue to grow and the high income would be reduced. However, the difference between the two sets of values is usually less than 1.0% for any calculation.

Quality Control

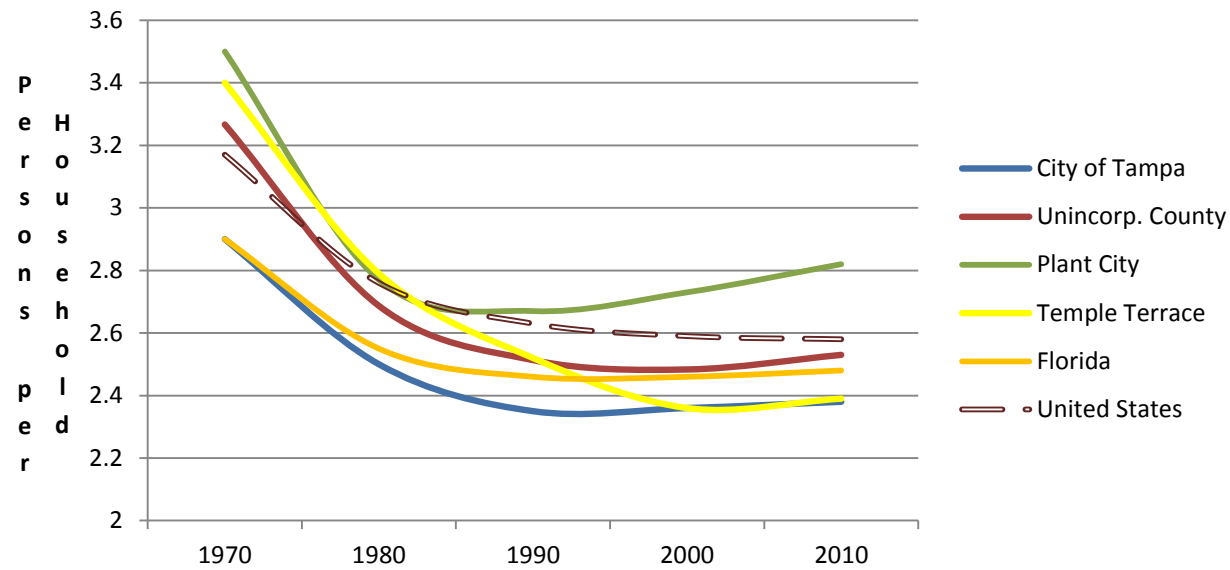
The final step in generating the required forecasts was reviewing the results for quality control and sensibility. Although the statistical tools generated age-bracket data based on the control totals, as with any mathematical model, the benefit of human common sense cannot be programmed. Therefore a final review was completed.

Appendix 1 - Historical Trends



	1970	1980	1990	2000	2010
City of Tampa	94.1%	92.5%	88.5%	91.9%	86.5%
Unincorporated Hillsborough County	85.1%	88.2%	88.0%	91.8%	89.2%
Plant City	94.3%	91.0%	89.8%	91.9%	89.1%
Temple Terrace	91.7%	95.7%	93.5%	92.6%	89.4%
Florida	90.4%	85.5%	84.2%	86.8%	82.5%
United States	92.4%	90.9%	89.9%	91.0%	88.6%

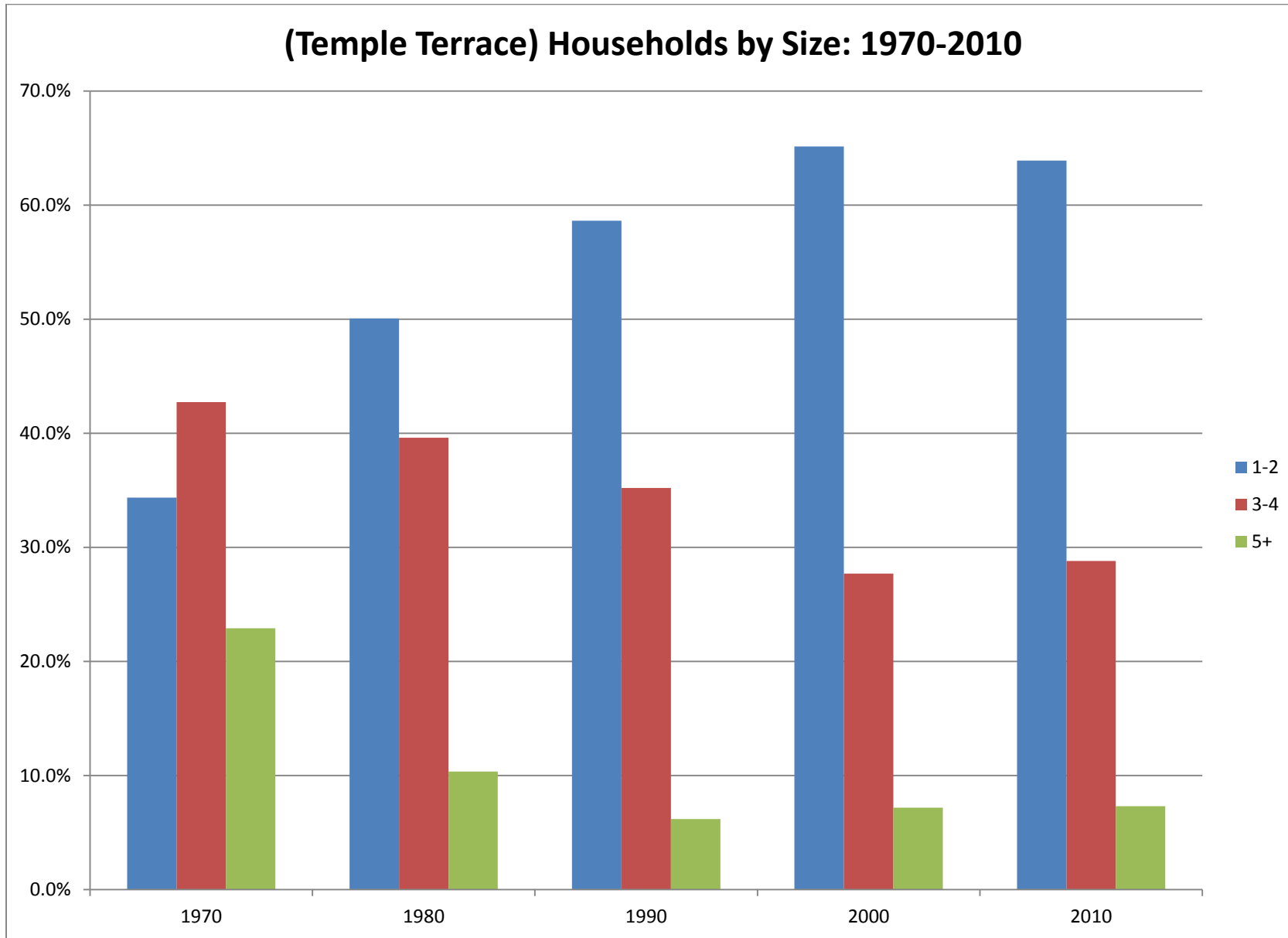
**Historical Decennial Average Household Sizes:
1970-2010**

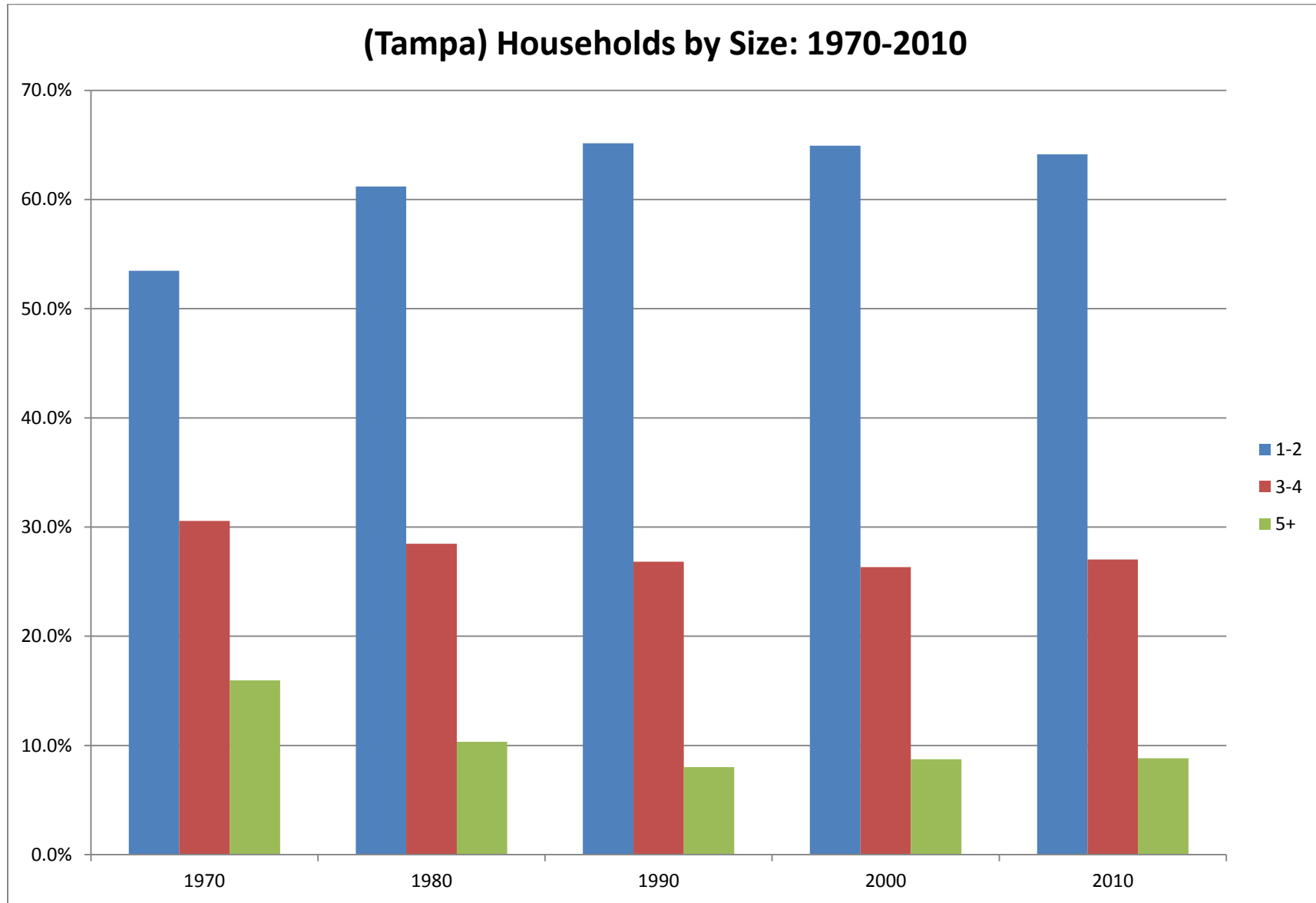


	1970	1980	1990	2000	2010
PLACE	PPH	PPH	PPH	PPH	PPH
City of Tampa	2.9	2.5	2.35	2.36	2.38
Unincorporated Hillsborough County	3.27	2.69	2.51	2.48	2.53
Plant City	3.5	2.77	2.67	2.73	2.82
Temple Terrace	3.4	2.79	2.52	2.36	2.39
Florida	2.9	2.55	2.46	2.46	2.48
United States	3.17	2.76	2.63	2.59	2.58



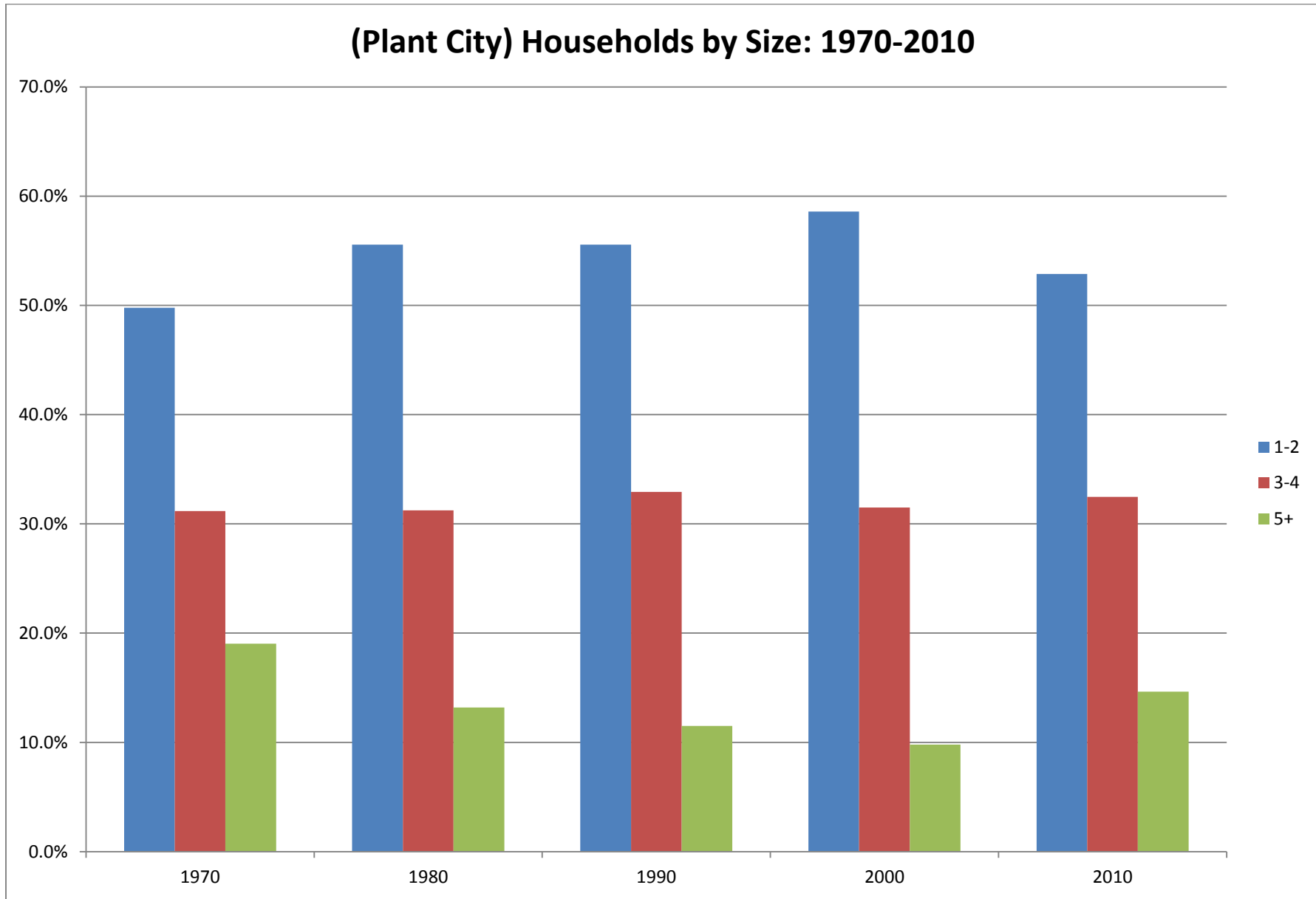
(Temple Terrace) Households by Size: 1970-2010

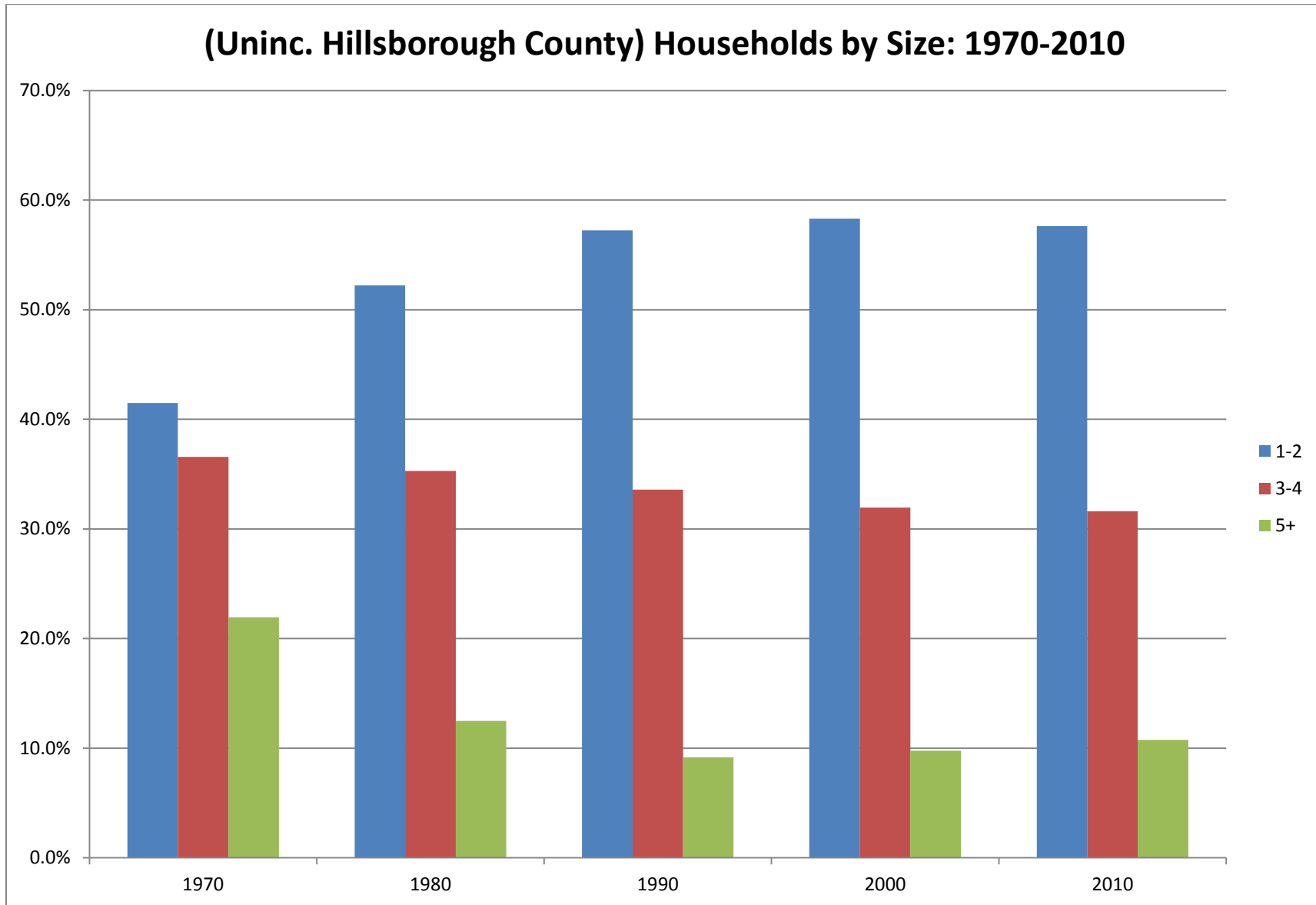






(Plant City) Households by Size: 1970-2010







Appendix 2 - Significant Group Quarter Populations

The control totals used in the analysis were derived from BEBR albeit with a reduction in population by 1.8% for each jurisdiction. Staff tracks the population of several known group quarters for our annual population projections. The significant group quarter populations, dormitories and inmate populations, are tracked. The dates reflect approximately April 1 of the year indicated.

Jurisdiction	Census Tract	GQ	GQ11	GQ12	GQ13	GQ14	Location
Tampa	109.00	4716	5350	5202	5490	5281	University of South Florida
Tampa	050.00	3066	3315	3350	3500	3653	University of Tampa
Unincorporated Hillsborough County	122.11	2527	2841	2841	2593	2150	Falkenburg Jail
Tampa	037.00	900	181	181	251	605	Orient Road Jail
Unincorporated Hillsborough County	108.18	376	376	376	411	400	Florida Southern College
Tampa	073.00	246	321	321	341	341	MacDill AFB Dormitory



DWELLING UNITS BY TYPE				
	Estimate	Margin of Error	Percent	Percent Margin of Error
DWELLING UNITS BY TYPE – Hillsborough County				
Occupied housing units	309,289	1854	87.60%	0.3%
Vacant housing units	43,945	2130	12.40%	0.6%
Homeowner vacancy rate	N/A	(X)		
Rental vacancy rate	N/A	(X)		
UNITS IN STRUCTURE				
Total housing units	353234	1631		
1-unit, detached	200429	1650	56.7%	0.4%
1-unit, attached	24563	824	7.0%	0.2%
2 units	5746	520	1.6%	0.1%
3 or 4 units	13104	933	3.7%	0.3%
5 to 9 units	18919	1086	5.4%	0.3%
10 to 19 units	29637	1270	8.4%	0.4%
20 or more units	21785	1395	6.2%	0.4%
Mobile home	38532	1264	10.9%	0.4%
Boat, RV, van, etc.	519	135	0.1%	0.0%
DWELLING UNITS BY TYPE – Plant City				
HOUSING OCCUPANCY				
Total housing units	13,583	+/-409	13,583	(X)
Occupied housing units	12,226	+/-392	90.0%	+/-1.9
Vacant housing units	1,357	+/-272	10.0%	+/-1.9
Homeowner vacancy rate	3.2	+/-1.9	(X)	(X)
Rental vacancy rate	8.3	+/-3.0	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	13,583	+/-409	13,583	(X)

DWELLING UNITS BY TYPE				
	Estimate	Margin of Error	Percent	Percent Margin of Error
1-unit, detached	9,036	+/-399	66.5%	+/-2.5
1-unit, attached	342	+/-111	2.5%	+/-0.8
2 units	549	+/-187	4.0%	+/-1.4
3 or 4 units	558	+/-174	4.1%	+/-1.3
5 to 9 units	794	+/-206	5.8%	+/-1.5
10 to 19 units	915	+/-216	6.7%	+/-1.6
20 or more units	565	+/-163	4.2%	+/-1.2
Mobile home	809	+/-204	6.0%	+/-1.5
Boat, RV, van, etc.	15	+/-24	0.1%	+/-0.2
DWELLING UNITS BY TYPE – Tampa				
HOUSING OCCUPANCY				
Total housing units	158,239	+/-1,521	158,239	(X)
Occupied housing units	135,591	+/-1,551	85.7%	+/-0.7
Vacant housing units	22,648	+/-1,086	14.3%	+/-0.7
Homeowner vacancy rate	3.2	+/-0.5	(X)	(X)
Rental vacancy rate	9.6	+/-0.9	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	158,239	+/-1,521	158,239	(X)
1-unit, detached	86,748	+/-1,387	54.8%	+/-0.7
1-unit, attached	8,780	+/-613	5.5%	+/-0.4
2 units	5,058	+/-497	3.2%	+/-0.3
3 or 4 units	7,081	+/-610	4.5%	+/-0.4
5 to 9 units	8,651	+/-767	5.5%	+/-0.5
10 to 19 units	13,305	+/-934	8.4%	+/-0.6
20 or more units	25,874	+/-927	16.4%	+/-0.6
Mobile home	2,687	+/-345	1.7%	+/-0.2



DWELLING UNITS BY TYPE				
	Estimate	Margin of Error	Percent	Percent Margin of Error
Boat, RV, van, etc.	55	+/-50	0.0%	+/-0.1
DWELLING UNITS BY TYPE – Temple Terrace				
HOUSING OCCUPANCY				
Total housing units	10,946	+/-609	10,946	(X)
Occupied housing units	9,659	+/-538	88.20%	+/-2.5
Vacant housing units	1,287	+/-295	11.80%	+/-2.5
Homeowner vacancy rate	2.5	+/-1.8	(X)	(X)
Rental vacancy rate	9.3	+/-3.0	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	10,946	+/-609	10,946	(X)
1-unit, detached	5,096	+/-381	46.60%	+/-2.5
1-unit, attached	1,215	+/-214	11.10%	+/-1.9
2 units	138	+/-84	1.30%	+/-0.8
3 or 4 units	905	+/-260	8.30%	+/-2.2
5 to 9 units	853	+/-189	7.80%	+/-1.7
10 to 19 units	1,015	+/-270	9.30%	+/-2.4
20 or more units	1,724	+/-288	15.80%	+/-2.6
Mobile home	0	+/-25	0.00%	+/-0.4
Boat, RV, van, etc.	0	+/-25	0.00%	+/-0.4

Explanation of Symbols:

- An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.

- An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
- An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
- An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- An '**' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
- An '****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
- An '(X)' means that the estimate is not applicable or not available.

OCCUPIED HOUSING UNITS		
Hillsborough County		
HOUSEHOLD POPULATION	Number	Percent
Occupied housing units	315,743	100
Owner-occupied housing units	205,455	65.1%
Population in owner-occupied housing units	548,388	(X)
Average household size of owner-occupied units	(X)	(X)
Renter-occupied housing units	110,288	34.9%
Population in renter-occupied housing units	276,649	(X)



OCCUPIED HOUSING UNITS		
Average household size of renter-occupied units	(X)	(X)
Plant City		
HOUSEHOLD POPULATION	Number	Percent
Occupied housing units	12,239	100
Owner-occupied housing units	7,469	61
Population in owner-occupied housing units	20,850	(X)
Average household size of owner-occupied units	2.79	(X)
Renter-occupied housing units	4,770	39
Population in renter-occupied housing units	13,686	(X)
Average household size of renter-occupied units	2.87	(X)
Tampa		
HOUSEHOLD POPULATION	Number	Percent
Occupied housing units	135,955	100
Owner-occupied housing units	70,353	51.7
Population in owner-occupied housing units	174,618	(X)
Average household size of owner-occupied units	2.48	(X)
Renter-occupied housing units	65,602	48.3
Population in renter-occupied housing units	148,809	(X)
Average household size of renter-occupied units	2.27	(X)
Temple Terrace		
HOUSEHOLD POPULATION	Number	Percent
Occupied housing units	10,093	100
Owner-occupied housing unit	5,542	54.9
Population in owner-occupied housing unit	13,412	(X)
Average household size of owner-occupied units	2.42	(X)
Renter-occupied housing units	4,551	45.1

OCCUPIED HOUSING UNITS		
Population in renter-occupied housing units	10,749	(X)
Average household size of renter-occupied units	2.36	(X)

Household Population and Household Type by Tenure: 2010 Census Summary File

TENURE BY AGE OF HOUSEHOLDER	Number	Percent
Hillsborough County		
Owner-Occupied Housing Units	205,455	65.1%
15 to 24 years	2031	1.0%
25 to 34 years	20,354	9.9%
35 to 44 years	39,314	19.1%
45 to 54 years	49,878	24.3%
55 to 64 years	42,916	20.9%
65 years and over	50,962	24.8%
65 to 74 years	29,046	14.1%
75 to 84 years	17,157	8.4%
85 years and over	5,196	2.5%
Renter-Occupied Housing Units	110,288	34.9%
15 to 24 years	14,400	13.1%
25 to 34 years	30,704	27.8%
35 to 44 years	23,880	21.7%
45 to 54 years	18,898	17.1%
55 to 64 years	11,131	10.1%
65 years and over	11,275	10.2%
65 to 74 years	5,280	4.8%
75 to 84 years	3,488	3.2%
85 years and over	2,721	2.5%
Plant City		



TENURE BY AGE OF HOUSEHOLDER	Number	Percent
Owner-occupied housing units	7,469	100
15 to 24 years	90	1.2
25 to 34 years	810	10.8
35 to 44 years	1,342	18
45 to 54 years	1,680	22.5
55 to 64 years	1,541	20.6
65 years and over	2,006	26.9
65 to 74 years	1,084	14.5
75 to 84 years	696	9.3
85 years and over	226	3
Renter-occupied housing units	4,770	100
15 to 24 years	524	11
25 to 34 years	1,322	27.7
35 to 44 years	1,050	22
45 to 54 years	808	16.9
55 to 64 years	508	10.6
65 years and over	558	11.7
65 to 74 years	313	6.6
75 to 84 years	186	3.9
85 years and over	59	1.2
Tampa		
Owner-occupied housing units	70,353	100
15 to 24 years	757	1.1
25 to 34 years	7,452	10.6
35 to 44 years	13,461	19.1
45 to 54 years	17,147	24.4
55 to 64 years	14,322	20.4
65 years and over	17,214	24.5

TENURE BY AGE OF HOUSEHOLDER	Number	Percent
65 to 74 years	8,720	12.4
75 to 84 years	6,090	8.7
85 years and over	2,404	3.4
Renter-occupied housing units	65,602	100
15 to 24 years	8,741	13.3
25 to 34 years	18,756	28.6
35 to 44 years	12,777	19.5
45 to 54 years	10,614	16.2
55 to 64 years	6,979	10.6
65 years and over	7,735	11.8
65 to 74 years	4,121	6.3
75 to 84 years	2,539	3.9
85 years and over	1,075	1.6
Temple Terrace		
Owner-occupied housing units	5,542	100
15 to 24 years	117	2.1
25 to 34 years	452	8.2
35 to 44 years	835	15.1
45 to 54 years	1,227	22.1
55 to 64 years	1,342	24.2
65 years and over	1,569	28.3
65 to 74 years	861	15.5
75 to 84 years	533	9.6
85 years and over	175	3.2
Renter-occupied housing units	4,551	100
15 to 24 years	1,017	22.3
25 to 34 years	1,445	31.8
35 to 44 years	749	16.5



TENURE BY AGE OF HOUSEHOLDER	Number	Percent
45 to 54 years	602	13.2
55 to 64 years	394	8.7
65 years and over	344	7.6
65 to 74 years	176	3.9
75 to 84 years	118	2.6
85 years and over	50	1.1

Source: U.S. Census Bureau, 2010 Census. Summary File 1, Tables H4, H16, and H17.

RENT RATIO				
Subject	Unincorporated Hillsborough County			
	Estimate	Margin of Error	%	% Margin of Error
GROSS RENT				
Occupied units paying rent	105,893	2,696	105,893	(X)
Less than \$200	497	210	0.5%	0.2%
\$200 to \$299	809	180	0.8%	0.2%
\$300 to \$499	4,007	656	3.8%	0.6%
\$500 to \$749	21,486	1,344	20.3%	1.2%
\$750 to \$999	35,093	1,953	33.1%	1.6%
\$1,000 to \$1,499	32,116	1,830	30.3%	1.5%
\$1,500 or more	11,885	1,086	11.2%	1.0%
Median (dollars)	(X)	(X)	(X)	(X)
No rent paid	3,984	+/-664	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	103,291	2,600	103,291	(X)
Less than 15.0 percent	8,294	711	8.0%	0.7%
15.0 to 19.9 percent	10,821	1,218	10.5%	1.1%
20.0 to 24.9 percent	13,218	1,250	12.8%	1.2%
25.0 to 29.9 percent	11,278	1,124	10.9%	1.1%
30.0 to 34.9 percent	10,038	1,099	9.7%	1.0%
35.0 percent or more	49,642	2,133	48.1%	1.7%
Not computed	6,586	815	(X)	(X)



RENT RATIO				
Subject	Plant City			
	Estimate	Margin of Error	%	% Margin of Error
GROSS RENT				
Occupied units paying rent	4,957	+/-453	4,957	(X)
Less than \$200	0	+/-130	0.0%	+/-1.4
\$200 to \$299	86	+/-58	1.7%	+/-1.2
\$300 to \$499	410	+/-192	8.3%	+/-3.7
\$500 to \$749	1,385	+/-383	27.9%	+/-7.0
\$750 to \$999	1,515	+/-323	30.6%	+/-6.4
\$1,000 to \$1,499	1,398	+/-356	28.2%	+/-6.6
\$1,500 or more	163	+/-93	3.3%	+/-1.9
Median (dollars)	812	+/-61	(X)	(X)
No rent paid	197	+/-108	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	4,809	+/-439	4,809	(X)
Less than 15.0 percent	299	+/-157	6.2%	+/-3.2
15.0 to 19.9 percent	635	+/-199	13.2%	+/-4.0
20.0 to 24.9 percent	476	+/-175	9.9%	+/-3.5
25.0 to 29.9 percent	594	+/-221	12.4%	+/-4.3
30.0 to 34.9 percent	453	+/-190	9.4%	+/-3.7
35.0 percent or more	2,352	+/-323	48.9%	+/-5.8
Not computed	345	+/-183	(X)	(X)

RENT RATIO				
Subject	Tampa			
	Estimate	Margin of Error	%	% Margin of Error
GROSS RENT				
Occupied units paying rent	65,974	+/-1,875	65,974	(X)
Less than \$200	1,074	+/-363	1.6%	+/-0.5
\$200 to \$299	2,348	+/-411	3.6%	+/-0.6
\$300 to \$499	3,533	+/-472	5.4%	+/-0.7
\$500 to \$749	13,000	+/-1,045	19.7%	+/-1.5
\$750 to \$999	19,063	+/-1,220	28.9%	+/-1.7
\$1,000 to \$1,499	18,924	+/-1,032	28.7%	+/-1.4
\$1,500 or more	8,032	+/-760	12.2%	+/-1.1
Median (dollars)	922	+/-13	(X)	(X)
No rent paid	2,170	+/-396	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	63,897	+/-1,814	63,897	(X)
Less than 15.0 percent	5,863	+/-786	9.2%	+/-1.2
15.0 to 19.9 percent	6,423	+/-720	10.1%	+/-1.1
20.0 to 24.9 percent	6,807	+/-790	10.7%	+/-1.2
25.0 to 29.9 percent	7,924	+/-1,017	12.4%	+/-1.6
30.0 to 34.9 percent	6,128	+/-793	9.6%	+/-1.2
35.0 percent or more	30,752	+/-1,596	48.1%	+/-2.0
Not computed	4,247	+/-565	(X)	(X)



RENT RATIO				
Subject	Temple Terrace			
	Estimate	Margin of Error	Percent	Percent Margin of Error
GROSS RENT				
Occupied units paying rent	4,422	+/-546	4,422	(X)
Less than \$200	0	+/-130	0.00%	+/-1.6
\$200 to \$299	70	+/-108	1.60%	+/-2.4
\$300 to \$499	217	+/-193	4.90%	+/-4.3
\$500 to \$749	578	+/-208	13.10%	+/-4.5
\$750 to \$999	1,502	+/-353	34.00%	+/-7.9
\$1,000 to \$1,499	1,766	+/-454	39.90%	+/-8.5
\$1,500 or more	289	+/-165	6.50%	+/-3.6
Median (dollars)	967	+/-73	(X)	(X)
No rent paid	123	+/-95	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	4,422	+/-546	4,422	(X)
Less than 15.0 percent	302	+/-176	6.80%	+/-3.8
15.0 to 19.9 percent	252	+/-156	5.70%	+/-3.7
20.0 to 24.9 percent	190	+/-109	4.30%	+/-2.5
25.0 to 29.9 percent	431	+/-236	9.70%	+/-5.2
30.0 to 34.9 percent	589	+/-208	13.30%	+/-4.9
35.0 percent or more	2,658	+/-552	60.10%	+/-8.4
Not computed	123	+/-95	(X)	(X)

VALUE		
	Estimate	Margin of Error
Unincorporated Hillsborough County		
Total:	199,046	+/-2823
Less than \$10,000	3,283	+/-493
\$10,000 to \$14,999	2,499	+/-463
\$15,000 to \$19,999	2,358	+/-500
\$20,000 to \$24,999	1,466	+/-309
\$25,000 to \$29,999	1,573	+/-401
\$30,000 to \$34,999	1,631	+/-356
\$35,000 to \$39,999	1,390	+/-371
\$40,000 to \$49,999	3,527	+/-559
\$50,000 to \$59,999	4,724	+/-855
\$60,000 to \$69,999	5,617	+/-721
\$70,000 to \$79,999	7,642	+/-809
\$80,000 to \$89,999	8,933	+/-933
\$90,000 to \$99,999	7,642	+/-1007
\$100,000 to \$124,999	22,370	+/-1416
\$125,000 to \$149,999	19,755	+/-1559
\$150,000 to \$174,999	24,720	+/-1639
\$175,000 to \$199,999	14,219	+/-1117
\$200,000 to \$249,999	23,434	+/-1358
\$250,000 to \$299,999	14,879	+/-1189
\$300,000 to \$399,999	14,827	+/-1040
\$400,000 to \$499,999	5,994	+/-819
\$500,000 to \$749,999	3,625	+/-598
\$750,000 to \$999,999	1,450	+/-506
\$1,000,000 or more	1,488	+/-493
Plant City		
Total:	6,993	+/-451
Less than \$10,000	49	+/-56
\$10,000 to \$14,999	83	+/-58
\$15,000 to \$19,999	125	+/-119
\$20,000 to \$24,999	0	+/-130
\$25,000 to \$29,999	49	+/-37
\$30,000 to \$34,999	172	+/-105



VALUE		
	Estimate	Margin of Error
\$35,000 to \$39,999	34	+/-37
\$40,000 to \$49,999	131	+/-79
\$50,000 to \$59,999	217	+/-144
\$60,000 to \$69,999	132	+/-81
\$70,000 to \$79,999	365	+/-129
\$80,000 to \$89,999	478	+/-145
\$90,000 to \$99,999	334	+/-138
\$100,000 to \$124,999	1,024	+/-241
\$125,000 to \$149,999	1,088	+/-256
\$150,000 to \$174,999	745	+/-212
\$175,000 to \$199,999	512	+/-169
\$200,000 to \$249,999	593	+/-201
\$250,000 to \$299,999	429	+/-165
\$300,000 to \$399,999	336	+/-147
\$400,000 to \$499,999	37	+/-43
\$500,000 to \$749,999	23	+/-37
\$750,000 to \$999,999	0	+/-130
\$1,000,000 or more	37	+/-46
Tampa		
Total:	67,846	+/-1,686
Less than \$10,000	434	+/-168
\$10,000 to \$14,999	289	+/-128
\$15,000 to \$19,999	535	+/-214
\$20,000 to \$24,999	319	+/-140
\$25,000 to \$29,999	505	+/-230
\$30,000 to \$34,999	572	+/-188
\$35,000 to \$39,999	595	+/-206
\$40,000 to \$49,999	1,573	+/-326
\$50,000 to \$59,999	2,907	+/-486
\$60,000 to \$69,999	2,391	+/-403
\$70,000 to \$79,999	3,328	+/-439
\$80,000 to \$89,999	4,044	+/-516
\$90,000 to \$99,999	2,670	+/-404
\$100,000 to \$124,999	7,079	+/-638
\$125,000 to \$149,999	4,876	+/-599
\$150,000 to \$174,999	6,504	+/-693
\$175,000 to \$199,999	3,588	+/-519
\$200,000 to \$249,999	5,803	+/-619

VALUE		
	Estimate	Margin of Error
\$250,000 to \$299,999	4,146	+/-542
\$300,000 to \$399,999	5,342	+/-569
\$400,000 to \$499,999	3,445	+/-492
\$500,000 to \$749,999	3,858	+/-494
\$750,000 to \$999,999	1,511	+/-337
\$1,000,000 or more	1,532	+/-307
Temple Terrace		
Total:	5,792	+/-513
Less than \$10,000	25	+/-42
\$10,000 to \$14,999	36	+/-43
\$15,000 to \$19,999	0	+/-130
\$20,000 to \$24,999	0	+/-130
\$25,000 to \$29,999	0	+/-130
\$30,000 to \$34,999	54	+/-88
\$35,000 to \$39,999	23	+/-37
\$40,000 to \$49,999	143	+/-120
\$50,000 to \$59,999	114	+/-104
\$60,000 to \$69,999	285	+/-141
\$70,000 to \$79,999	224	+/-129
\$80,000 to \$89,999	342	+/-157
\$90,000 to \$99,999	328	+/-172
\$100,000 to \$124,999	619	+/-232
\$125,000 to \$149,999	457	+/-184
\$150,000 to \$174,999	644	+/-212
\$175,000 to \$199,999	524	+/-191
\$200,000 to \$249,999	864	+/-242
\$250,000 to \$299,999	647	+/-248
\$300,000 to \$399,999	274	+/-131
\$400,000 to \$499,999	31	+/-36
\$500,000 to \$749,999	107	+/-96
\$750,000 to \$999,999	39	+/-45
\$1,000,000 or more	12	+/-19

Source: U.S. Census Bureau, 2010-2012 American Community Survey



OCCUPIED/VACANT		
Subject	Number	Percent
Hillsborough County		
OCCUPANCY STATUS		
Total housing units	353,934	100.0
Occupied housing units	315,743	89.2%
Vacant housing units	38,191	10.8%
TENURE		
Occupied housing units	315,743	100.0
Owner occupied	205,455	65.1%
Owned with a mortgage or loan	152,508	48.3%
Owned free and clear	52,947	16.8%
Renter occupied	110,288	34.9%
VACANCY STATUS		
Vacant housing units	38,191	100.0
For rent	15,669	41.0%
Rented, not occupied	459	1.2%
For sale only	6,035	15.8%
Sold, not occupied	964	2.5%
For seasonal, recreational, or occasional use	5,544	14.5%
For migratory workers	187	0.5%
Other vacant	9,333	24.4%
Plant City		
OCCUPANCY STATUS		
Total housing units	13,732	100.0
Occupied housing units	12,239	89.1
Vacant housing units	1,493	10.9

OCCUPIED/VACANT		
Subject	Number	Percent
TENURE		
Occupied housing units	12,239	100.0
Owner occupied	7,469	61.0
Owned with a mortgage or loan	5,528	45.2
Owned free and clear	1,941	15.9
Renter occupied	4,770	39.0
VACANCY STATUS		
Vacant housing units	1,493	100.0
For rent	591	39.6
Rented, not occupied	20	1.3
For sale only	276	18.5
Sold, not occupied	37	2.5
For seasonal, recreational, or occasional use	100	6.7
For migratory workers	3	0.2
Other vacant	466	31.2
Tampa		
OCCUPANCY STATUS		
Total housing units	157,130	100.0
Occupied housing units	135,955	86.5
Vacant housing units	21,175	13.5
TENURE		
Occupied housing units	135,955	100.0
Owner occupied	70,353	51.7
Owned with a mortgage or loan	52,158	38.4
Owned free and clear	18,195	13.4



OCCUPIED/VACANT		
Subject	Number	Percent
Renter occupied	65,602	48.3
VACANCY STATUS		
Vacant housing units	21,175	100.0
For rent	9,774	46.2
Rented, not occupied	308	1.5
For sale only	3,049	14.4
Sold, not occupied	516	2.4
For seasonal, recreational, or occasional use	1,343	6.3
For migratory workers	4	0.0
Other vacant	6,181	29.2
Temple Terrace		
OCCUPANCY STATUS		
Total housing units	11,296	100
Occupied housing units	10,093	89.4
Vacant housing units	1,203	10.6
TENURE		
Occupied housing units	10,093	100
Owner occupied	5,542	54.9
Owned with a mortgage or loan	4,004	39.7
Owned free and clear	1,538	15.2
Renter occupied	4,551	45.1
VACANCY STATUS		
Vacant housing units	1,203	100
For rent	619	51.5
Rented, not occupied	29	2.4
For sale only	159	13.2

OCCUPIED/VACANT		
Subject	Number	Percent
Sold, not occupied	47	3.9
For seasonal, recreational, or occasional use	45	3.7
For migratory workers	0	0
Other vacant	304	25.3

General Housing Characteristics: 2010
2010 Census Summary File 1

YEAR STRUCTURE BUILT	Estimate	Margin of Error	%	%Margin of Error
Unincorporated Hillsborough County				
Total housing units	355,606	+/-2,201		(X)
Built 2010 or later	2,885	579	0.8%	0.2%
Built 2000 to 2009	86,389	2,748	24.3%	0.8%
Built 1990 to 1999	73,629	2,240	20.7%	0.6%
Built 1980 to 1989	85,689	2,619	24.1%	0.7%
Built 1970 to 1979	60,817	2,144	17.1%	0.6%
Built 1960 to 1969	27,419	1,715	7.7%	0.5%
Built 1950 to 1959	13,403	884	3.8%	0.2%
Built 1940 to 1949	3,055	490	0.9%	0.1%
Built 1939 or earlier	2,320	648	0.7%	0.2%
Plant City				
Total housing units	13,596	+/-638	13,596	(X)
Built 2010 or later	45	+/-41	0.3%	+/-0.3
Built 2000 to 2009	2,391	+/-385	17.6%	+/-2.6
Built 1990 to 1999	3,027	+/-412	22.3%	+/-3.2
Built 1980 to 1989	2,986	+/-472	22.0%	+/-3.2
Built 1970 to 1979	1,268	+/-255	9.3%	+/-1.8



YEAR STRUCTURE BUILT	Estimate	Margin of Error	%	%Margin of Error
Built 1960 to 1969	1,495	+/-377	11.0%	+/-2.7
Built 1950 to 1959	1,357	+/-303	10.0%	+/-2.2
Built 1940 to 1949	251	+/-153	1.8%	+/-1.1
Built 1939 or earlier	776	+/-219	5.7%	+/-1.6
Tampa				
Total housing units	158,719	+/-1,992	158,719	(X)
Built 2010 or later	1,022	+/-288	0.6%	+/-0.2
Built 2000 to 2009	29,166	+/-1,111	18.4%	+/-0.7
Built 1990 to 1999	16,864	+/-1,088	10.6%	+/-0.7
Built 1980 to 1989	20,932	+/-1,385	13.2%	+/-0.9
Built 1970 to 1979	21,697	+/-1,148	13.7%	+/-0.7
Built 1960 to 1969	20,483	+/-1,408	12.9%	+/-0.9
Built 1950 to 1959	25,631	+/-1,192	16.1%	+/-0.7
Built 1940 to 1949	9,736	+/-911	6.1%	+/-0.6
Built 1939 or earlier	13,188	+/-909	8.3%	+/-0.5
Temple Terrace				
	Estimate	Margin of Error		
Total:	11,587	+/-857		
Built 2010 or later	31	+/-51		
Built 2000 to 2009	2,006	+/-400		
Built 1990 to 1999	1,491	+/-404		
Built 1980 to 1989	3,766	+/-502		
Built 1970 to 1979	2,075	+/-431		
Built 1960 to 1969	951	+/-243		
Built 1950 to 1959	1,191	+/-284		
Built 1940 to 1949	45	+/-55		
Built 1939 or earlier	31	+/-26		

Source: U.S. Census Bureau, 2010-2012 American Community Survey
 Additional calculation prepared by the Hillsborough County City-County Planning Commission



QUALITY/CROWDING	Estimate	Margin of Error	%	% Margin of Error
Unincorporated Hillsborough County				
HOUSE HEATING FUEL				
Occupied housing units	309,289	1854		
Utility gas	14,541	780	4.7%	0.25%
Bottled, tank, or LP gas	2,997	255	1.0%	0.08%
Electricity	289,165	1664	93.5%	(N)
Fuel oil, kerosene, etc.	410	133	0.1%	0.04%
Coal or coke	7	(N)	0.0%	(N)
Wood	272	87	0.1%	0.03%
Solar energy	69	68	0.0%	0.02%
Other fuel	47	(N)	0.0%	(N)
No fuel used	1,781	248	0.6%	0.08%
SELECTED CHARACTERISTICS				
Occupied housing units	309,289	1854		
Lacking complete plumbing facilities	1,013	209	0.3%	0.07%
Lacking complete kitchen facilities	1,517	238	0.5%	0.08%
No telephone service available	7,814	694	2.5%	0.22%
OCCUPANTS PER ROOM				
Occupied housing units	309,289	1854		
1.00 or less	301,788	1721	97.6%	0.81%
1.01 to 1.50	5,205	607	1.7%	0.20%
1.51 or more	2,296	388	0.7%	0.13%
Plant City				
Occupied housing units	12,226	+/-392	12,226	(X)
Utility gas	168	+/-99	1.4%	+/-0.8
Bottled, tank, or LP gas	42	+/-34	0.3%	+/-0.3
Electricity	11,922	+/-385	97.5%	+/-0.9
Fuel oil, kerosene, etc.	6	+/-10	0.0%	+/-0.1
Coal or coke	0	+/-29	0.0%	+/-0.3
Wood	0	+/-29	0.0%	+/-0.3
Solar energy	0	+/-29	0.0%	+/-0.3

QUALITY/CROWDING	Estimate	Margin of Error	%	% Margin of Error
Other fuel	0	+/-29	0.0%	+/-0.3
No fuel used	88	+/-50	0.7%	+/-0.4
SELECTED CHARACTERISTICS				
Occupied housing units	12,226	+/-392	12,226	(X)
Lacking complete plumbing facilities	0	+/-29	0.0%	+/-0.3
Lacking complete kitchen facilities	32	+/-24	0.3%	+/-0.2
No telephone service available	408	+/-136	3.3%	+/-1.1
OCCUPANTS PER ROOM				
Occupied housing units	12,226	+/-392	12,226	(X)
1.00 or less	11,575	+/-444	94.7%	+/-1.6
1.01 to 1.50	352	+/-153	2.9%	+/-1.3
1.51 or more	299	+/-143	2.4%	+/-1.2
Tampa				
HOUSE HEATING FUEL				
Occupied housing units	135,591	+/-1,551	135,591	(X)
Utility gas	7,775	+/-542	5.7%	+/-0.4
Bottled, tank, or LP gas	566	+/-142	0.4%	+/-0.1
Electricity	125,622	+/-1,503	92.6%	+/-0.5
Fuel oil, kerosene, etc.	317	+/-120	0.2%	+/-0.1
Coal or coke	0	+/-32	0.0%	+/-0.1
Wood	26	+/-22	0.0%	+/-0.1
Solar energy	31	+/-38	0.0%	+/-0.1
Other fuel	45	+/-36	0.0%	+/-0.1
No fuel used	1,209	+/-279	0.9%	+/-0.2
SELECTED CHARACTERISTICS				
Occupied housing units	135,591	+/-1,551	135,591	(X)
Lacking complete plumbing facilities	576	+/-205	0.4%	+/-0.2
Lacking complete kitchen facilities	850	+/-229	0.6%	+/-0.2
No telephone service	6,645	+/-611	4.9%	+/-0.4



QUALITY/CROWDING	Estimate	Margin of Error	%	% Margin of Error
available				
OCCUPANTS PER ROOM				
Occupied housing units	135,591	+/-1,551	135,591	(X)
1.00 or less	131,772	+/-1,590	97.2%	+/-0.3
1.01 to 1.50	2,458	+/-338	1.8%	+/-0.2
1.51 or more	1,361	+/-251	1.0%	+/-0.2
Temple Terrace				
HOUSE HEATING FUEL				
Occupied housing units	9,659	+/-538	9,659	(X)
Utility gas	269	+/-91	2.8%	+/-0.9
Bottled, tank, or LP gas	31	+/-39	0.3%	+/-0.4
Electricity	9,292	+/-529	96.2%	+/-1.1
Fuel oil, kerosene, etc.	13	+/-14	0.1%	+/-0.1
Coal or coke	0	+/-25	0.0%	+/-0.4
Wood	0	+/-25	0.0%	+/-0.4
Solar energy	0	+/-25	0.0%	+/-0.4
Other fuel	0	+/-25	0.0%	+/-0.4
No fuel used	54	+/-51	0.6%	+/-0.5
SELECTED CHARACTERISTICS				
Occupied housing units	9,659	+/-538	9,659	(X)
Lacking complete plumbing facilities	59	+/-68	0.6%	+/-0.7
Lacking complete kitchen facilities	32	+/-51	0.3%	+/-0.5
No telephone service available	237	+/-110	2.5%	+/-1.1

QUALITY/CROWDING	Estimate	Margin of Error	%	% Margin of Error
OCCUPANTS PER ROOM				
Occupied housing units	9,659	+/-538	9,659	(X)
1.00 or less	9,399	+/-608	97.3%	+/-1.4
1.01 to 1.50	186	+/-121	1.9%	+/-1.3
1.51 or more	74	+/-64	0.8%	+/-0.7

Source: U.S. Census Bureau, 2008-2012 American Community Survey
 Additional calculation prepared by the Hillsborough County City-County Planning Commission



MONTHLY OWNER COST	Estimate	Margin of Error	Percent	% Margin of Error
Hillsborough County				
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	139,807	2810		
Less than \$300	482	251	0.3%	0.2%
\$300 to \$499	1,755	397	1.3%	0.3%
\$500 to \$699	4,899	643	3.5%	0.5%
\$700 to \$999	17,278	1099	12.4%	0.7%
\$1,000 to \$1,499	41,932	2169	30.0%	1.4%
\$1,500 to \$1,999	34,280	1838	24.5%	1.2%
\$2,000 or more	39,181	1822	28.0%	1.2%
Median (dollars)	(X)	(X)	(X)	(X)
Housing units without a mortgage	59,239	2173		
Less than \$100	1,063	330	1.8%	0.6%
\$100 to \$199	4,853	691	8.2%	1.1%
\$200 to \$299	7,902	737	13.3%	1.1%
\$300 to \$399	9,896	1068	16.7%	1.7%
\$400 or more	35,525	1630	60.0%	1.7%
Median (dollars)	(X)	(X)	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	138,801	2802		
Less than 20.0 percent	43,784	1966	31.5%	1.3%
20.0 to 24.9 percent	22,337	1692	16.1%	1.2%
25.0 to 29.9 percent	17,054	1306	12.3%	0.9%
30.0 to 34.9 percent	12,018	1277	8.7%	0.9%
35.0 percent or more	43,608	2367	31.4%	1.6%
Not computed	1,006	357		
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	58,103	2219		
Less than 10.0 percent	22,541	1546	38.8%	2.2%
10.0 to 14.9 percent	11,355	895	19.5%	1.3%
15.0 to 19.9 percent	8,197	894	14.1%	1.4%
20.0 to 24.9 percent	4,213	587	7.3%	1.0%
25.0 to 29.9 percent	2,555	540	4.4%	0.9%
30.0 to 34.9 percent	2,129	421	3.7%	0.7%
35.0 percent or more	7,113	1043	12.2%	1.7%



MONTHLY OWNER COST	Estimate	Margin of Error	Percent	% Margin of Error
Not computed	1,136	455		
Plant City				
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	4,699	+/-449	4,699	(X)
Less than \$300	15	+/-24	0.3%	+/-0.5
\$300 to \$499	44	+/-36	0.9%	+/-0.8
\$500 to \$699	321	+/-181	6.8%	+/-3.7
\$700 to \$999	636	+/-201	13.5%	+/-4.2
\$1,000 to \$1,499	1,770	+/-329	37.7%	+/-5.8
\$1,500 to \$1,999	953	+/-241	20.3%	+/-4.7
\$2,000 or more	960	+/-229	20.4%	+/-4.7
Median (dollars)	1,375	+/-74	(X)	(X)
Housing units without a mortgage	2,294	+/-414	2,294	(X)
Less than \$100	34	+/-39	1.5%	+/-1.8
\$100 to \$199	163	+/-80	7.1%	+/-3.7
\$200 to \$299	389	+/-186	17.0%	+/-6.9
\$300 to \$399	459	+/-178	20.0%	+/-7.1
\$400 or more	1,249	+/-301	54.4%	+/-8.0
Median (dollars)	428	+/-50	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	4,645	+/-454	4,645	(X)
Less than 20.0 percent	1,484	+/-273	31.9%	+/-5.2
20.0 to 24.9 percent	837	+/-226	18.0%	+/-4.7
25.0 to 29.9 percent	498	+/-172	10.7%	+/-3.4
30.0 to 34.9 percent	522	+/-198	11.2%	+/-4.1
35.0 percent or more	1,304	+/-288	28.1%	+/-5.7
Not computed	54	+/-65	(X)	(X)
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	2,261	+/-412	2,261	(X)
Less than 10.0 percent	981	+/-254	43.4%	+/-9.4
10.0 to 14.9 percent	320	+/-142	14.2%	+/-6.1
15.0 to 19.9 percent	266	+/-143	11.8%	+/-5.7
20.0 to 24.9 percent	91	+/-64	4.0%	+/-2.8
25.0 to 29.9 percent	226	+/-162	10.0%	+/-6.6
30.0 to 34.9 percent	81	+/-85	3.6%	+/-3.7



MONTHLY OWNER COST	Estimate	Margin of Error	Percent	% Margin of Error
35.0 percent or more	296	+/-143	13.1%	+/-5.6
Not computed	33	+/-36	(X)	(X)
Tampa				
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	47,214	+/-1,452	47,214	(X)
Less than \$300	62	+/-53	0.1%	+/-0.1
\$300 to \$499	488	+/-217	1.0%	+/-0.5
\$500 to \$699	2,271	+/-407	4.8%	+/-0.8
\$700 to \$999	6,977	+/-699	14.8%	+/-1.3
\$1,000 to \$1,499	13,659	+/-848	28.9%	+/-1.7
\$1,500 to \$1,999	8,126	+/-730	17.2%	+/-1.4
\$2,000 or more	15,631	+/-895	33.1%	+/-1.7
Median (dollars)	1,509	+/-44	(X)	(X)
Housing units without a mortgage	20,632	+/-1,131	20,632	(X)
Less than \$100	334	+/-169	1.6%	+/-0.8
\$100 to \$199	1,706	+/-327	8.3%	+/-1.4
\$200 to \$299	4,078	+/-565	19.8%	+/-2.4
\$300 to \$399	3,899	+/-404	18.9%	+/-1.9
\$400 or more	10,615	+/-808	51.4%	+/-2.7
Median (dollars)	411	+/-20	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	46,762	+/-1,442	46,762	(X)
Less than 20.0 percent	14,811	+/-1,158	31.7%	+/-2.2
20.0 to 24.9 percent	6,572	+/-651	14.1%	+/-1.4
25.0 to 29.9 percent	4,927	+/-537	10.5%	+/-1.1
30.0 to 34.9 percent	3,814	+/-550	8.2%	+/-1.1
35.0 percent or more	16,638	+/-1,087	35.6%	+/-2.0
Not computed	452	+/-187	(X)	(X)
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	20,194	+/-1,118	20,194	(X)
Less than 10.0 percent	7,635	+/-798	37.8%	+/-3.1
10.0 to 14.9 percent	3,646	+/-450	18.1%	+/-2.1
15.0 to 19.9 percent	2,714	+/-424	13.4%	+/-2.1
20.0 to 24.9 percent	1,350	+/-324	6.7%	+/-1.6
25.0 to 29.9 percent	1,054	+/-265	5.2%	+/-1.3



MONTHLY OWNER COST	Estimate	Margin of Error	Percent	% Margin of Error
30.0 to 34.9 percent	424	+/-148	2.1%	+/-0.7
35.0 percent or more	3,371	+/-461	16.7%	+/-2.0
Not computed	438	+/-179	(X)	(X)
Temple Terrace				
MORTGAGE STATUS				
Owner-occupied units	5,792	+/-513	5,792	(X)
Housing units with a mortgage	3,653	+/-349	63.1%	+/-4.6
Housing units without a mortgage	2,139	+/-372	36.9%	+/-4.6
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	3,653	+/-349	3,653	(X)
Less than \$300	0	+/-130	0.0%	+/-1.9
\$300 to \$499	52	+/-52	1.4%	+/-1.4
\$500 to \$699	26	+/-30	0.7%	+/-0.8
\$700 to \$999	575	+/-200	15.7%	+/-5.4
\$1,000 to \$1,499	1,312	+/-293	35.9%	+/-7.1
\$1,500 to \$1,999	904	+/-201	24.7%	+/-5.1
\$2,000 or more	784	+/-265	21.5%	+/-6.8
Median (dollars)	1,455	+/-81	(X)	(X)
Housing units without a mortgage	2,139	+/-372	2,139	(X)
Less than \$100	23	+/-38	1.1%	+/-1.8
\$100 to \$199	83	+/-67	3.9%	+/-3.1
\$200 to \$299	91	+/-66	4.3%	+/-3.2
\$300 to \$399	369	+/-177	17.3%	+/-7.1
\$400 or more	1,573	+/-308	73.5%	+/-8.1
Median (dollars)	508	+/-49	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	3,546	+/-350	3,546	(X)
Less than 20.0 percent	983	+/-286	27.7%	+/-7.6
20.0 to 24.9 percent	713	+/-273	20.1%	+/-7.2
25.0 to 29.9 percent	410	+/-180	11.6%	+/-4.9
30.0 to 34.9 percent	415	+/-217	11.7%	+/-6.1
35.0 percent or more	1,025	+/-255	28.9%	+/-6.6
Not computed	107	+/-77	(X)	(X)



MONTHLY OWNER COST	Estimate	Margin of Error	Percent	% Margin of Error
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	1,935	+/-339	1,935	(X)
Less than 10.0 percent	702	+/-211	36.3%	+/-8.6
10.0 to 14.9 percent	451	+/-195	23.3%	+/-9.2
15.0 to 19.9 percent	237	+/-118	12.2%	+/-5.5
20.0 to 24.9 percent	151	+/-91	7.8%	+/-4.7
25.0 to 29.9 percent	187	+/-95	9.7%	+/-5.1
30.0 to 34.9 percent	68	+/-89	3.5%	+/-4.4
35.0 percent or more	139	+/-101	7.2%	+/-5.1
Not computed	204	+/-182	(X)	(X)

Source: U.S. Census Bureau, 2010-2012 American Community Survey
 Additional calculation prepared by the Hillsborough County City-County Planning Commission



PROJECTED HOUSEHOLD BY SIZE				
Project Year	1-2 Persons	3-4 Persons	Over 5 Persons	TOTAL
Hillsborough County				
2010	181940	99833	33970	315743
% of Total	57.6%	31.6%	10.8%	100%
2015	196438	105889	32413	334740
% of Total	58.7%	31.6%	9.7%	100%
2020	225517	121170	36713	383400
% of Total	58.8%	31.6%	9.6%	100%
2025	246954	133059	39963	419976
% of Total	58.8%	31.7%	9.5%	100%
2030	269335	143611	42804	455750
% of Total	59.1%	31.5%	9.4%	100%
2035	288464	153161	45347	486972
% of Total	59.2%	31.5%	9.3%	100%
2040	305092	161856	47639	514587
% of Total	59.3%	31.5%	9.3%	100%

PROJECTED HOUSEHOLD BY SIZE				
Project Year	1-2 Persons	3-4 Persons	Over 5 Persons	TOTAL
Plant City				
2010	6472	3975	1792	12239
% of Total	52.9%	32.5%	14.6%	100%
2015	8043	4732	1850	14629
% of Total	55.0%	32.3%	12.6%	100%
2020	8700	5018	1818	15536
% of Total	56.0%	32.3%	11.7%	100%
2025	9932	5678	1969	17580
% of Total	56.5%	32.3%	11.2%	100%
2030	12993	7404	2519	22916
% of Total	56.7%	32.3%	11.0%	100%
2035	13914	7898	2641	24456
% of Total	56.9%	32.3%	10.8%	100%
2040	14594	8230	2735	25559
% of Total	57.1%	32.2%	10.7%	100%



PROJECTED HOUSEHOLD BY SIZE				
Project Year	1-2 Persons	3-4 Persons	Over 5 Persons	TOTAL
Tampa				
2010	87209	36755	11991	135955
% of Total	64.1%	27.0%	8.8%	100%
2015	95627	40303	13149	149079
% of Total	64.1%	27.0%	8.8%	100%
2020	104640	45058	15349	165048
% of Total	63.4%	27.3%	9.3%	100%
2025	111291	45850	16782	176653
% of Total	63.0%	26.0%	9.5%	100%
2030	117254	51439	17924	186710
% of Total	62.8%	27.6%	9.6%	100%
2035	123922	54364	18944	197328
% of Total	62.8%	27.6%	9.6%	100%
2040	129923	57282	20132	207545
% of Total	62.6%	27.6%	9.7%	100%

PROJECTED HOUSEHOLD BY SIZE				
Project Year	1-2 Persons	3-4 Persons	Over 5 Persons	TOTAL
Temple Terrace				
2010	6446	2907	740	10093
% of Total	63.9%	28.8%	7.3%	100%
2015	8957	4731	1219	14907
% of Total	60.1%	31.7%	8.2%	100%
2020	8750	4995	1296	15041
% of Total	58.2%	33.2%	8.6%	100%
2025	8919	5290	1377	15586
% of Total	57.2%	33.9%	8.8%	100%
2030	8909	5387	1405	15700
% of Total	56.7%	34.3%	8.9%	100%
2035	9689	5914	1543	17146
% of Total	56.5%	34.5%	9.0%	100%
2040	9221	5683	1484	16388
% of Total	56.3%	34.7%	9.1%	100%



PROJECTED AGE OF HOUSEHOLDS				
Project Year	15-34	35-64	65 and older	TOTAL
Hillsborough County				
2010	67489	186017	62237	315743
% of Total	21.4%	58.9%	19.7%	100%
2015	70582	202824	61334	334740
% of Total	21.1%	60.6%	18.3%	100%
2020	83106	210742	89552	383400
% of Total	21.7%	55.0%	23.4%	100%
2025	89113	225695	105167	419975
% of Total	21.2%	53.7%	25.0%	100%
2030	94393	239303	122054	455750
% of Total	20.7%	52.5%	26.8%	100%
2035	100528	255339	131105	486972
% of Total	20.6%	52.4%	26.9%	100%
2040	106640	270321	137626	514587
% of Total	20.7%	52.5%	26.7%	100%

PROJECTED AGE OF HOUSEHOLDS				
Project Year	15-34	35-64	65 and older	TOTAL
Plant City				
2010	2746	6929	2564	12239
% of Total	22.4%	56.6%	20.9%	100%
2015	3410	8323	2896	14629
% of Total	23.3%	56.9%	19.8%	100%
2020	3439	8384	3713	15536
% of Total	22.1%	54.0%	23.9%	100%
2025	3868	9417	4295	17580
% of Total	22.0%	53.6%	24.4%	100%
2030	5011	12180	5725	22916
% of Total	21.9%	53.2%	25.0%	100%
2035	5355	13058	6040	24456
% of Total	21.9%	53.4%	24.7%	100%
2040	5571	13455	6553	25559
% of Total	21.8%	52.6%	25.6%	100%



PROJECTED AGE OF HOUSEHOLDS				
Project Year	15-34	35-64	65 and older	TOTAL
Tampa				
2010	2746	6929	2564	12239
% of Total	26.3%	55.4%	18.4%	100%
2015	38432	84681	25965	149079
% of Total	25.8%	56.8%	17.4%	100%
2020	45041	86966	33041	165048
% of Total	27.3%	52.7%	20.0%	100%
2025	46016	93069	37569	176654
% of Total	26.0%	52.7%	21.3%	100%
2030	46289	98381	42040	186710
% of Total	24.8%	52.7%	22.5%	100%
2035	48717	103479	45132	197328
% of Total	24.7%	52.4%	22.9%	100%
2040	51462	110604	45478	207544
% of Total	24.8%	53.3%	21.9%	100%

PROJECTED AGE OF HOUSEHOLDS				
Project Year	15-34	35-64	65 and older	TOTAL
Temple Terrace				
2010	3031	5149	1913	10093
% of Total	30.0%	51.0%	19.0%	100%
2015	3837	8496	2575	14907
% of Total	25.7%	57.0%	17.3%	100%
2020	4607	7029	3405	15041
% of Total	30.6%	46.7%	22.6%	100%
2025	4595	7438	3553	15586
% of Total	29.5%	47.7%	22.8%	100%
2030	4428	7712	3560	15700
% of Total	28.2%	49.1%	22.7%	100%
2035	4093	8982	4071	17146
% of Total	23.9%	52.4%	23.7%	100%
2040	5042	8267	3079	16388
% of Total	30.8%	50.4%	18.8%	100%



PROJECTED HOUSEHOLD BY TENURE			
Project Year	Owner	Renter	TOTAL
Hillsborough County			
2010	205455	110288	315743
% of Total	65.1%	34.9%	100%
2015	217048	117691	334739
% of Total	64.8%	35.2%	100%
2020	251875	131525	383400
% of Total	65.7%	34.3%	100%
2025	276602	143374	419976
% of Total	65.9%	34.1%	100%
2030	301066	154684	455750
% of Total	66.1%	33.9%	100%
2035	321913	165049	486962
% of Total	66.1%	33.9%	100%
2040	339872	174715	514587
% of Total	66.0%	34.0%	100%

PROJECTED HOUSEHOLD BY TENURE			
Project Year	Owner	Renter	TOTAL
Plant City			
2010	7469	4770	12239
% of Total	61.0%	39.0%	100%
2015	8783	5846	14629
% of Total	60.0%	40.0%	100%
2020	9471	6064	15536
% of Total	61.0%	39.0%	100%
2025	10736	6843	17580
% of Total	61.1%	38.9%	100%
2030	14021	8895	22916
% of Total	61.2%	38.8%	100%
2035	14898	9505	24456
% of Total	60.9%	38.9%	100%
2040	15667	9892	25559
% of Total	61.3%	38.7%	100%



PROJECTED HOUSEHOLD BY TENURE			
Project Year	Owner	Renter	TOTAL
Tampa			
2010	70353	65602	135955
% of Total	51.7%	48.3%	100%
2015	77018	72061	149079
% of Total	51.7%	48.3%	100%
2020	85629	79418	165048
% of Total	51.9%	48.1%	100%
2025	92217	84436	176653
% of Total	52.2%	47.8%	100%
2030	98081	88628	186710
% of Total	52.5%	47.5%	100%
2035	103593	93735	197328
% of Total	52.5%	47.5%	100%
2040	109334	98211	207545
% of Total	52.7%	47.3%	100%

PROJECTED HOUSEHOLD BY TENURE			
Project Year	Owner	Renter	TOTAL
Temple Terrace			
2010	5542	4551	10093
% of Total	54.9%	45.1%	100%
2015	8552	6355	14907
% of Total	57.4%	42.6%	100%
2020	8486	6555	15041
% of Total	56.4%	43.6%	100%
2025	8737	6849	15586
% of Total	56.1%	43.9%	100%
2030	8745	6956	15700
% of Total	55.7%	44.3%	100%
2035	9912	7234	17146
% of Total	57.8%	42.2%	100%
2040	8966	7422	16388
% of Total	54.7%	45.3%	100%



PROJECTED HOUSEHOLD BY INCOME						
Project Year	Extremely Low (approximately ≤ 30% AMI)	Very Low (approximately 30.01-50% AMI)	Low (approximately 50.01-80% AMI)	Moderate (approximately 80.01-120% AMI)	Above Moderate (approximately 120+% AMI)	TOTAL
Hillsborough County						
2010	23681	29364	49256	67885	145558	315743
% of Total	7.5%	9.3%	15.6%	21.5%	46.1%	100%
2015	25440	32135	52889	71969	152306	334739
% of Total	7.6%	9.6%	15.8%	21.5%	45.5%	100%
2020	29905	37957	60961	82431	172147	383400
% of Total	7.8%	9.9%	15.9%	21.5%	44.9%	100%
2025	33178	42838	67616	90295	186469	419976
% of Total	7.9%	10.2%	16.1%	21.5%	44.4%	100%
2030	36460	47398	73832	97986	200074	455750
% of Total	8.0%	10.4%	16.2%	21.5%	43.9%	100%
2035	38958	50645	78889	104699	213781	486972
% of Total	8.0%	10.4%	16.2%	21.5%	43.9%	100%
2040	41682	54546	83878	110636	223845	514587
% of Total	8.1%	10.6%	16.3%	21.5%	43.5%	100%
Plant City						
2010	967	1175	1970	2631	5495	12239
% of Total	7.9%	9.6%	16.1%	21.5%	44.9%	100%
2015	1156	1404	2355	3145	6539	14629
% of Total	7.9%	9.6%	16.1%	21.5%	44.7%	100%
2020	1243	1538	2501	3340	6914	15536
% of Total	8.0%	9.9%	16.1%	21.5%	44.5%	100%
2025	1424	1776	2848	3780	7753	17580
% of Total	8.1%	10.1%	16.2%	21.5%	44.1%	100%
2030	1879	2360	3735	4904	10037	22916



PROJECTED HOUSEHOLD BY INCOME						
Project Year	Extremely Low (approximately ≤ 30% AMI)	Very Low (approximately 30.01-50% AMI)	Low (approximately 50.01-80% AMI)	Moderate (approximately 80.01-120% AMI)	Above Moderate (approximately 120+% AMI)	TOTAL
% of Total	8.2%	10.3%	16.3%	21.4%	43.8%	100%
2035	2030	2519	3986	5234	10638	24456
% of Total	8.3%	10.3%	16.3%	21.4%	43.5%	100%
2040	2147	2684	4217	5470	11041	25559
% of Total	8.4%	10.5%	16.5%	21.4%	43.2%	100%
Tampa						
2010	19578	15635	23384	25831	51391	135955
% of Total	14.4%	11.5%	17.2%	19.0%	37.8%	100%
2015	21766	17442	25791	28325	55905	149079
% of Total	14.6%	11.7%	17.3%	19.0%	37.5%	100%
2020	24262	19476	28553	31194	61563	165048
% of Total	14.7%	11.8%	17.3%	18.9%	37.3%	100%
2025	26145	21375	30738	33211	65008	176653
% of Total	14.8%	12.1%	17.4%	18.8%	36.8%	100%
2030	28007	22965	32674	34915	68149	186710
% of Total	15.0%	12.3%	17.5%	18.7%	36.5%	100%
2035	29599	24271	34532	36900	72025	197328
% of Total	15.0%	12.3%	17.5%	18.7%	36.5%	100%
2040	31132	25528	36320	38811	75754	207545
% of Total	15.0%	12.3%	17.5%	18.7%	36.5%	100%
Temple Terrace						
2010	868	1029	1675	2180	4350	10093
% of Total	8.6%	10.2%	16.6%	21.6%	43.1%	100%
2015	1297	1550	2489	3205	6350	14907



PROJECTED HOUSEHOLD BY INCOME						
Project Year	Extremely Low (approximately ≤ 30% AMI)	Very Low (approximately 30.01-50% AMI)	Low (approximately 50.01-80% AMI)	Moderate (approximately 80.01-120% AMI)	Above Moderate (approximately 120+% AMI)	TOTAL
% of Total	8.7%	10.4%	16.7%	21.5%	42.6%	100%
2020	1371	1663	2587	3311	6468	15401
% of Total	8.9%	10.8%	16.8%	21.5%	42.0%	100%
2025	1403	1714	2634	3335	6499	15586
% of Total	9.0%	11.0%	16.9%	21.4%	41.7%	100%
2030	1429	1758	2669	3360	6484	15700
% of Total	9.1%	11.2%	17.0%	21.4%	41.3%	100%
2035	1577	1920	2915	3652	7081	17146
% of Total	9.2%	11.2%	17.0%	21.3%	41.3%	100%
2040	1524	1835	2802	3474	6752	16388
% of Total	9.3%	11.2%	17.1%	21.2%	41.2%	100%



Public Schools Facilities Data Analysis Report

The following data was prepared by the School District of Hillsborough County to meet the requirements of the optional public school facilities element.

Table 1: Population Projections							
	2010	2015	2020	2025	2030	2035	2040
HC	834,255	857,723	940,112	1,014,852	1,075,680	1,136,625	1,194,597
Tampa	335,709	355,850	384,153	410,669	433,103	457,322	481,128
Plant City	34,721	40,530	44,146	49,740	64,555	69,113	71,523
Temple Terrace	24,541	36,245	38,304	40,062	40,579	41,887	43,134

Source: Hillsborough County Planning Commission

Table 2: School Capacity Summary Profile	
Facility	Amount
Permanent Buildings	2,415
Relocatable Units	68
Permanent Stations	237,964
Relocatable Stations	4,642
Total Stations	242,606
Capacity	234,551
Permanent Classrooms	11,352
Relocatable Classrooms	233
Total Classrooms	11,585
TOTAL NET SQ FT	26,586,828
Permanent Net Sq Ft (All)	26,181,580
Relocatable Net Sq Ft (All)	405,248
Instructional Net Sq Ft	11,133,060

Source: FDOE Total Space June 2014 and FISH School Land Inventory

Table 3: Age of Facilities		
Age of Facilities in Years	Sq Ft	% of Sq Ft
1-10	4,005,782	15.3%
11-20	7,802,111	29.8%
21-30	4,110,508	15.7%
31-40	1,937,437	7.4%
41-50	3,115,608	11.9%
51 and Over	5,210,134	19.9%
Avg. 31		
Total	26,181,580	100

Source: FDOE Age of Facilities June 2014



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
ALAFIA ELEMENTARY	40	845	845	574	68%	845	574	68%
ALEXANDER ELEMENTARY	28	726	726	619	85%	726	619	85%
ANDERSON ELEMENTARY	14	468	468	354	76%	468	354	76%
APOLLO BEACH ELEMENTARY	15	721	721	643	89%	721	643	89%
BAILEY ELEMENTARY SCHOOL	20	920	920	752	82%	920	752	82%
BALLAST POINT ELEMENTARY	10	485	485	401	83%	485	401	83%
BAY CREST ELEMENTARY	15	954	954	765	80%	954	765	80%
BELLAMY ELEMENTARY	15	914	914	680	74%	914	680	74%
BEVIS ELEMENTARY	14	945	945	803	85%	945	803	85%
BING ELEMENTARY	19	738	738	590	80%	738	590	80%
BOYETTE SPRINGS ELEMENTARY	20	1,019	1,019	552	54%	1,019	632	62%
BROOKER ELEMENTARY	18	1,053	1,053	884	84%	1,053	884	84%
BROWARD ELEMENTARY	10	548	548	389	71%	548	389	71%
BRYAN ELEMENTARY	13	771	771	743	96%	771	743	96%
BRYANT ELEMENTARY	10	1,066	1,066	965	91%	1,066	965	91%
BUCKHORN ELEMENTARY	15	843	843	665	79%	843	665	79%
BURNEY ELEMENTARY	11	456	456	337	74%	456	337	74%
CAHOON ELEMENTARY	16	663	663	413	62%	663	413	62%
CANNELLA ELEMENTARY	13	979	979	711	73%	979	711	73%
CARROLLWOOD ELEMENTARY	10	886	886	755	85%	886	755	85%
CHIARAMONTE ELEMENTARY	9	511	511	392	77%	511	392	77%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
CHILES ELEMENTARY	15	963	963	788	82%	963	788	82%
CIMINO ELEMENTARY	10	1,045	1,045	800	77%	1,045	800	77%
CITRUS PARK ELEMENTARY	9	876	876	589	67%	876	589	67%
CLAIR-MEL ELEMENTARY	16	883	883	537	61%	883	537	61%
CLARK ELEMENTARY	18	975	975	808	83%	975	808	83%
CLAYWELL ELEMENTARY	17	898	898	748	83%	898	748	83%
CLEVELAND ELEMENTARY	5	416	416	371	89%	416	371	89%
COLLINS ELEMENTARY	16	1,146	1,146	1,021	89%	1,146	1,021	89%
COLSON ELEMENTARY	20	888	888	700	79%	888	700	79%
CORK ELEMENTARY	12	949	949	695	73%	949	695	73%
CORR ELEMENTARY	14	929	929	708	76%	929	708	76%
CRESTWOOD ELEMENTARY	15	1,089	1,089	890	82%	1,089	890	82%
CYPRESS CREEK ELEMENTARY	16	1,021	1,021	1,133	111%	1,021	733	72%
DAVIS ELEMENTARY	26	1,038	1,038	795	77%	1,038	795	77%
DEER PARK ELEMENTARY	23	1,054	1,054	954	90%	1,054	954	91%
DESOTO ELEMENTARY	4	322	322	214	66%	322	214	66%
DICKENSON ELEMENTARY	11	703	703	556	79%	703	556	79%
DOBY ELEMENTARY	15	958	958	798	83%	958	591	62%
DOVER ELEMENTARY	20	949	949	790	83%	949	790	83%
DUNBAR ELEMENTARY	3	355	355	229	65%	355	229	65%
EDISON ELEMENTARY	9	618	618	456	74%	618	456	74%
EGYPT LAKE ELEMENTARY	14	680	680	493	72%	680	493	73%
ESSRIG ELEMENTARY	13	825	825	688	83%	825	688	83%
FISHHAWK CREEK ELEMENTARY	15	1,056	1,056	998	94%	1,056	998	95%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
FOLSOM ELEMENTARY	20	698	698	541	78%	698	541	78%
FOREST HILLS ELEMENTARY	8	1,069	1,069	960	90%	1,069	960	90%
FOSTER ELEMENTARY	14	659	659	474	72%	659	474	72%
FROST ELEMENTARY	18	1,002	1,002	768	77%	1,002	708	71%
GIBSONTON ELEMENTARY	11	822	822	565	69%	822	565	69%
GORRIE ELEMENTARY	3	529	529	564	107%	529	519	98%
GRADY ELEMENTARY	15	522	522	455	87%	522	455	87%
GRAHAM ELEMENTARY	4	444	444	305	69%	444	305	69%
HAMMOND ELEMENTARY	21	938	938	725	77%	938	725	77%
HERITAGE ELEMENTARY	15	747	747	637	85%	747	637	85%
HUNTERS GREEN ELEMENTARY	15	1,034	1,034	840	81%	1,034	840	81%
IPPOLITO ELEMENTARY	13	850	850	854	100%	850	514	60%
JACKSON ELEMENTARY	5	594	594	503	85%	594	503	85%
JAMES ELEMENTARY SCHOOL	10	876	876	621	71%	876	621	71%
JUST ELEMENTARY	9	598	598	592	99%	598	487	81%
KENLY ELEMENTARY	12	731	731	488	67%	731	488	67%
KIMBELL ELEMENTARY	9	652	652	551	84%	652	551	85%
KINGSWOOD ELEMENTARY	15	781	781	613	79%	781	613	78%
KNIGHTS ELEMENTARY	20	926	926	670	72%	926	670	72%
LAKE MAGDALENE ELEMENTARY	15	1,110	1,110	853	77%	1,110	853	77%
LAMB ELEMENTARY (open 2015)	20	0	0	0	0%	950	662	70%
LANIER ELEMENTARY	16	456	456	346	76%	456	346	76%
LEE ELEMENTARY SCHOOL OF TECHNOLOGY	4	399	399	258	65%	399	258	65%
LEWIS ELEMENTARY	24	945	945	801	85%	945	801	85%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
LIMONA ELEMENTARY	18	710	710	487	69%	710	487	69%
LINCOLN ELEMENTARY	5	450	450	379	84%	450	379	84%
LITHIA SPRINGS ELEMENTARY	31	731	731	616	84%	731	616	84%
LOCKHART ELEMENTARY	11	659	659	360	55%	659	440	67%
LOMAX ELEMENTARY	4	509	509	354	69%	509	354	70%
LOPEZ ELEMENTARY	13	889	889	534	60%	889	476	54%
LOWRY ELEMENTARY	15	1,063	1,063	768	72%	1,063	768	72%
LUTZ ELEMENTARY	14	893	893	590	66%	893	590	66%
MABRY ELEMENTARY	18	853	853	786	92%	853	786	92%
MACFARLANE ELEMENTARY	3	406	406	362	89%	406	362	89%
MANGO ELEMENTARY	14	811	811	703	87%	811	703	87%
MANISCALCO ELEMENTARY	15	857	857	537	63%	857	537	63%
MCDONALD ELEMENTARY	15	675	675	591	88%	675	591	88%
MCKITRICK ELEMENTARY	27	1,045	1,045	995	95%	1,045	995	95%
MENDENHALL ELEMENTARY	9	835	835	676	81%	835	676	81%
MILES ELEMENTARY	10	835	835	795	95%	835	795	95%
MINTZ ELEMENTARY	14	1,009	1,009	826	82%	1,009	826	82%
MITCHELL ELEMENTARY	3	728	728	615	85%	728	660	91%
MORGAN WOODS ELEMENTARY	16	769	769	551	72%	769	551	72%
MORT ELEMENTARY	20	1,026	1,026	817	80%	1,026	817	80%
MULLER ELEMENTARY	8	484	484	332	69%	484	332	69%
NELSON ELEMENTARY	21	963	963	770	80%	963	770	80%
NORTHWEST ELEMENTARY	17	865	865	655	76%	865	655	76%
OAK GROVE ELEMENTARY	20	1,000	1,000	868	87%	1,000	868	87%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
OAK PARK ELEMENTARY	9	757	757	589	78%	757	589	78%
PALM RIVER ELEMENTARY	20	707	707	514	73%	707	514	73%
PINECREST ELEMENTARY	37	820	820	542	66%	820	542	66%
PIZZO ELEMENTARY	10	810	810	697	86%	810	697	86%
POTTER ELEMENTARY	10	744	744	580	78%	744	580	78%
PRIDE ELEMENTARY	22	1,018	1,018	896	88%	1,018	896	88%
REDDICK ELEMENTARY SCHOOL	15	948	948	798	84%	948	798	84%
RIVERHILLS ELEMENTARY	7	590	590	284	48%	590	404	68%
RIVERVIEW ELEMENTARY	18	972	972	601	62%	972	631	65%
ROBINSON ELEMENTARY	17	656	656	559	85%	656	559	85%
ROBLES ELEMENTARY	9	832	832	638	77%	832	638	77%
ROOSEVELT ELEMENTARY	5	745	745	708	95%	745	708	95%
RUSKIN ELEMENTARY	12	1,016	1,016	1,071	105%	1,016	971	96%
SCHMIDT ELEMENTARY	18	717	717	609	85%	717	609	85%
SCHWARZKOPF ELEMENTARY	15	677	677	640	95%	677	640	95%
SEFFNER ELEMENTARY	16	898	898	732	81%	898	732	82%
SEMINOLE ELEMENTARY	7	560	560	455	81%	560	455	81%
SESSUMS ELEMENTARY	15	1,020	1,020	814	80%	1,020	814	80%
SHAW ELEMENTARY	10	846	846	600	71%	846	600	71%
SHEEHY ELEMENTARY	8	562	562	406	72%	562	406	72%
SHORE ELEMENTARY	4	445	445	382	86%	445	382	86%
SPRINGHEAD ELEMENTARY	18	874	874	808	92%	874	808	92%
STOWERS ELEMENTARY SCHOOL	8	972	972	876	90%	972	876	90%
SULPHUR SPRINGS ELEMENTARY	9	824	824	561	68%	824	561	68%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
SUMMERFIELD CROSSINGS	15	1,030	1,030	878	85%	1,030	674	65%
SUMMERFIELD ELEMENTARY	15	1,012	1,012	832	82%	1,012	832	82%
SYMMES ELEMENTARY	18	747	747		87%	747		78%
TAMPA BAY BOULEVARD ELEMENTARY	10	885	885	719	81%	885	719	81%
TAMPA PALMS ELEMENTARY	15	965	965	825	85%	965	825	85%
TEMPLE TERRACE ELEMENTARY	21	853	853	620	73%	853	620	73%
THOMPSON ELEMENTARY	15	948	948		0%	948	700	74%
THONOTOSASSA ELEMENTARY	22	551	551	374	68%	551	374	68%
TINKER ELEMENTARY	23	688	688	557	81%	688	557	81%
TOWN & COUNTRY ELEMENTARY	10	732	732	440	60%	732	440	60%
TRAPNELL ELEMENTARY	10	524	524	545	104%	524	485	93%
TURNER ELEMENTARY (K-8)	10	1,200	1,200	1,121	0%	0	0	0%
TWIN LAKES ELEMENTARY	11	752	752	689	92%	752	689	92%
VALRICO ELEMENTARY	20	979	979	788	80%	979	788	80%
WALDEN LAKE ELEMENTARY	10	983	983	850	86%	983	850	86%
WASHINGTON ELEMENTARY	6	638	638	459	72%	638	459	72%
WEST SHORE ELEMENTARY	5	395	395	285	72%	395	285	72%
WEST TAMPA ELEMENTARY	7	593	593	466	79%	593	466	79%
WESTCHASE ELEMENTARY	14	1,040	1,040	932	90%	1,040	932	90%
WILSON ELEMENTARY	4	405	405	337	83%	405	337	83%
WIMAUMA ELEMENTARY	9	59	659	507	77%	659	507	77%
WITTER ELEMENTARY	10	737	737	501	68%	737	501	68%
WOODBIDGE ELEMENTARY	15	883	883	586	66%	883	586	66%
YATES ELEMENTARY	15	860	860	672	78%	860	672	78%



Table 4: Elementary School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
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Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan modified per future FISH updates

Table 5: Middle School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
ADAMS MIDDLE	16	1,667	1,500	1107	74%	1,500	1,107	74%
BARRINGTON MIDDLE SCHOOL	19	1,635	1,471	1,214	82%	1,471	1,014	69%
BARTELS MIDDLE SCHOOL (K-8)	16	1,323	1,190	845	71%	0	0	0%
BENITO MIDDLE	32	1,473	1,325	1,038	78%	1,325	1,038	78%
BUCHANAN MIDDLE	20	1,137	1,023	739	72%	1,023	739	72%
BURNETT MIDDLE	27	1,332	1,198	909	76%	1,198	909	76%
BURNS MIDDLE	39	1,650	1,485	1,271	86%	1,485	1,271	86%
COLEMAN MIDDLE	14	1,055	949	864	91%	949	864	91%
DAVIDSEN MIDDLE	24	1,598	1,438	970	67%	1,438	970	67%
DOWDELL MIDDLE	9	1,178	1,060	603	57%	1,060	703	66%
EISENHOWER MIDDLE	50	1,742	1,567	1,265	81%	1,567	1,065	68%
FARNELL MIDDLE	28	1,434	1,290	1,391	108%	1,290	1,241	96%



Table 5: Middle School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
FERRELL MIDDLE MAGNET	17	977	879	401	46%	879	551	63%
FRANKLIN MIDDLE	12	1,012	910	409	45%	910	559	61%
GIUNTA MIDDLE SCHOOL	34	1,726	1,553	986	64%	1,553	986	63%
GRECO MIDDLE SCHOOL	27	1,437	1,293	888	69%	1,293	888	69%
HILL MIDDLE	33	1,285	1,156	932	81%	1,156	832	72%
JENNINGS MIDDLE	39	1,337	1,203	838	70%	1,203	838	70%
LIBERTY MIDDLE	28	1,645	1,480	1,078	73%	1,480	1,078	73%
MADISON MIDDLE	19	1,058	952	802	84%	952	702	74%
MANN MIDDLE	19	1,484	1,335	1,133	85%	1,335	1,033	77%
MARSHALL MIDDLE	30	1,374	1,236	818	66%	1,236	818	66%
MARTINEZ MIDDLE	57	1,344	1,209	1,060	88%	1,209	1,010	84%
MCLANE MIDDLE	23	1,648	1,483	898	61%	1,483	898	61%
MEMORIAL MIDDLE	24	1,161	1,044	697	67%	1,044	697	67%
MONROE MIDDLE	34	982	883	527	60%	883	552	63%
MULRENNAN MIDDLE	29	1,606	1,445	1,132	78%	1,445	1,082	75%
ORANGE GROVE MIDDLE	6	652	586	553	94%	586	538	92%
PIERCE MIDDLE	23	1,357	1,221	1,048	86%	1,221	898	74%
PROGRESS VILLAGE MIDDLE	14	1,111	999	855	86%	999	780	78%
RANDALL MIDDLE	22	1,600	1,440	1,334	93%	1,440	1,259	87%
RODGERS MIDDLE	88	1,346	1,211	731	60%	1,211	731	60%
SHIELDS MIDDLE	42	1,729	1,556	1,483	95%	1,556	1,204	77%
SLIGH MIDDLE	26	1,256	1,130	640	57%	1,130	690	61%



Table 5: Middle School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
SMITH MIDDLE SCHOOL	11	1,578	1,420	949	67%	1,420	949	67%
STEWART MIDDLE	18	1,349	1,214	843	69%	1,214	843	69%
TOMLIN MIDDLE	21	1,904	1,713	1,610	94%	1,713	1,475	86%
TT MIDDLE (open 2016)	0	0	0	0	0%	1,350	850	63%
TURKEY CREEK MIDDLE	29	1,363	1,226	1,039	85%	1,226	1,039	85%
VAN BUREN MIDDLE	7	1,091	981	582	59%	981	592	60%
WALKER MIDDLE	42	1,091	981	888	90%	981	857	87%
WEBB MIDDLE	18	1,157	1,041	850	82%	1,041	775	74%
WILLIAMS MIDDLE	18	948	853	789	92%	853	714	84%
WILSON MIDDLE	4	653	587	562	96%	587	487	83%
YOUNG MIDDLE	12	1,095	985	555	56%	985	595	60%

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan modified per future FISH updates

Table 6: High School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
ALONSO HIGH	60	2,731	2,594	2,461	95%	2594	2,332	90%
ARMWOOD SENIOR HIGH	53	2,518	2,392	1,720	72%	2392	1,630	68%



Table 6: High School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
BLAKE SENIOR HIGH	16	1,795	1,705	1,639	96%	1705	1,553	91%
BLOOMINGDALE SENIOR HIGH	80	2,351	2,233	2,147	96%	2233	2,034	91%
BRANDON SENIOR HIGH	69	2,622	2,490	1,895	76%	2490	1,922	77%
CHAMBERLAIN SENIOR HIGH	36	2,496	2,371	1,765	74%	2371	1,672	71%
DURANT SENIOR HIGH	82	2,883	2,738	2,177	80%	2738	2,063	75%
EAST BAY SENIOR HIGH	58	2,124	2,017	2,229	111%	2017	1,550	77%
FREEDOM SENIOR HIGH	56	2,694	2,559	2,024	79%	2559	1,919	75%
GAITHER SENIOR HIGH	52	2,275	2,161	2,046	95%	2161	1,891	88%
HILLSBOROUGH SENIOR HIGH	23	2,210	2,099	1,845	88%	2099	1,749	83%
JEFFERSON SENIOR HIGH	51	2,184	2,074	1,491	72%	2074	1,413	68%
KING SENIOR HIGH	47	2,533	2,406	1,833	76%	2406	1,737	72%
LENNARD HIGH	47	2,132	2,025	1,857	92%	2500	2,052	82%
LETO SENIOR HIGH	46	2,384	2,264	1,801	80%	2264	1,707	75%
MIDDLETON SENIOR HIGH	50	2,102	1,996	1,238	62%	1996	1,220	61%
NEWSOME SENIOR HIGH	71	2,670	2,536	2,331	92%	2536	2,209	87%
PLANT CITY SENIOR HIGH	72	2,614	2,483	2,112	85%	2483	2,001	81%
PLANT SENIOR HIGH	27	2,621	2,489	2,307	93%	2489	2,186	88%
RIVERVIEW SENIOR HIGH	79	2,702	2,566	2,296	89%	2566	2,081	81%
ROBINSON SENIOR HIGH	37	1,684	1,599	1,530	96%	1599	1,450	91%
SICKLES SENIOR HIGH	86	2,231	2,119	2,045	96%	2119	1,938	91%
SPOTO HIGH SCHOOL	53	2,115	2,009	1,336	66%	2009	1,522	76%
STEINBRENNER HIGH SCHOOL	53	2,544	2,416	2,219	92%	2416	2,103	87%
STRAWBERRY CREST HIGH SCHOOL	58	2,446	2,323	2,132	92%	2323	2,020	87%
TAMPA BAY TECHNICAL HIGH	48	2,551	3,061	1,961	64%	3061	1,858	61%



Table 6: High School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
SCHOOL								
WHARTON SENIOR HIGH	76	2,617	2,486	2,282	92%	2486	2,162	87%

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan



Table 7: Combination School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
RAMPELLO DOWNTOWN PARTNERSHIP	2	937	843	763	91%	843	763	91%
ROLAND PARK K-8	1	1,035	931	753	81%	931	753	81%
TURNER/BARTELS K-8*	0	0	0	0	0%	2311	1966	85%
WATERSET K-8 (open 2018)	0	0	0	0	0%	1215	960	79%

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan

* Turner/Bartels was combined in 2014-15 school year, however data is displayed in individual schools

Table 8: ESE School Profile

School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
BOWERS WHITLEY CAREER CENTER	7	627	627	234	37%	627	234	37%
BRANDON ALTERNATIVE	5	457	457	87	19%	457	87	19%
CAMINITI EXCEPTIONAL STUDENT EDUCATION CENTER	11	252	252	127	50%	252	127	50%
CARVER EXCEPTIONAL CENTER	4	210	210	78	37%	210	78	37%
D. W. WATERS CENTER	1	491	491	262	53%	491	262	53%
DOROTHY THOMAS EXCEPTIONAL STUDENT EDUCATION CENTER*	4	0	0	0	0%	262	45	17%
LAVOY EXCEPTIONAL STUDENT EDUCATION CENTER	3	270	270	86	32%	270	86	32%
LOPEZ EXCEPTIONAL STUDENT EDUCATION CENTER*	7	0	0	0	0	122	58	0%
NORTH TAMPA ALTERNATIVE CENTER	4	450	450	109	24%	450	109	24%
SIMMONS CAREER CENTER	9	344	344	235	68%	344	235	68%



Table 8: ESE School Profile								
School	Site Size	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment	Current Level of Service (%)	2018-19 FISH Capacity	Projected 2018-19 COFTE	Projected Level of Service (%)
SOUTH COUNTY CAREER CENTER	220	718	718	284	40%	718	284	40%

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan

*Future FISH modifications will separate Lopez ESE from Lopez Elementary and add Dorothy Thomas ESE per Educational Plant Survey Recommendations

Table 9: Leased School Profile				
Elementary School	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 40 Day Enrollment	Current Level of Service (%)
Metropolitan Ministries	100	100	67	67%
Museum of Science and Industry (MOSI)	300	300	241	80%
USF/Patel	232	232	205	88%

Source: Hillsborough Schools 40th Day Count Report 10.15.2013



Table 10: Charter Schools

Name	Student Stations	Students Enrolled	Total Charter Students projected for 2018 - 2019
Kid's Community College	348	348	348
Learning Gate	800	795	800
Literacy/Leadership/Tech Middle School	584	531	637
Mount Pleasant	240	92	175
Pepin Academies	570	570	580
RCMA Wimauma	240	211	232
Bell Creek Academy High	500	115	500
Channelside Academy Middle School	230	88	198
Focus Academy	180	32	175
Hillsborough Academy of Math	950	609	950
Village of Excellence Middle School	180	132	330
Henderson Hammock	951	874	1,172
Kid's Community College SE	348	180	348
King's Kids Academy of Health Sciences	83	83	248
RCMA Leadership Academy	100	59	132
West University Charter High School	175	370	500
Bell Creek Academy	650	452	650
Lutz Preparatory School	566	557	464
New Springs Elementary School	214	198	260
Pepin Transitional School	68	63	68
Pivot Charter School	448	321	475
Winthrop Charter School	1,280	1,260	1,280
Woodmont Charter School	1,100	620	1,100
Valrico Lake Advantage Academy	900	645	900

Table 10: Charter Schools

Name	Student Stations	Students Enrolled	Total Charter Students projected for 2018 - 2019
Kids Community College Middle Charter School	242	198	198
New Springs School	176	149	242
Seminole Heights Charter High School	185	430	525
Channelside Academy, Math & Science	400	351	400
Community Charter Middle School of Excellence	116	106	200
Florida Autism Charter School of Excellence	128	98	127
Shiloh Elementary Charter School	480	423	480
Advantage Academy of Hillsborough	375	323	375
Advantage Academy Middle School	220	145	220
Community Charter School of Excellence	116	106	200
Shiloh Middle Charter School	440	187	440
Tampa Charter	212	200	300
Terrace Community	660	657	660
Trinity School for Children	752	739	869
Village of Excellence	240	219	500
Walton Academy of the Performing Arts	242	172	348
Brooks DeBartolo High School	600	425	600

Source: Hillsborough County School Five Year Facilities Plan



Table 11: Capacity and Enrollment by Type

Type	FISH Satisfactory Student Stations	Permanent FISH Capacity	2013-14 COFTE Enrollment
High Schools	63,060	59,894	50,355
Middle School	62,25	56,007	42,562
Elementary Schools	63,060	116,208	87,508
Other Schools	9,303	9,363	3,763
SDHC Schools	197,677	241,472	184,188
Charter	N/A		
Total	N/A	241,472	184,188

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan

Table 12: District Owned Ancillary Facilities Inventory

Site Name	Address	City
Furniture Refinishing	3702 East 10th Avenue	Tampa
Green Street Warehouse	1731 Green Street	Tampa
Head Start Administration	4350 E Ellicott	Tampa
Horatio Office Building	908 West Horatio Street	Tampa
Instructional Services Center	2920 n. 40th Street	Tampa
Maintenance Central	4905 32nd Avenue	Tampa
Maintenance East	3102 Airport Road	Plant city
Maintenance Operations Center	4805 M L King Boulevard E	Tampa
Maintenance West	5002 N Lois Avenue	Tampa
Manhattan Center	4210 Bay Villa Avenue	Tampa
Raymond O Shelton Administrative Center	901 E Kennedy Boulevard	Tampa
Sanchez Service Center	2100 E 26th Avenue	Tampa
Velasco Student Service Center	1202 Palm Avenue	Tampa
Warehouse	5715 E Hanna Avenue	Tampa

Source: Hillsborough County Florida Inventory of School Houses 9.2014

Table 12: District Owned Ancillary Facilities Inventory

Site Name	Address	City
40th STREET VEHICLE MAINTENANCE BUILDING	2909 N. 40th Street	Tampa
Area I Office	2718 Paxton Avenue	Tampa
Area II Office	7958 Gunn Highway	Tampa
Area iii Office	317 East 124th Avenue	Tampa
Area iv Office	9415 N. Boulevard	Tampa
Area v Office	825 Brooker Road	Brandon
Area vi Office (Nifong Building)	703 N. Thomas Street	Plant city
Area vii Office	1009 N Parsons Avenue	Seffner
Area viii Office	4646 South Highway 41	Ruskin
Bus Garage	9455 Harney Road	Thonotosassa



Table 13: Historic and Projected COFTE by Grade Level

	School Year	K-12 Enrollment	Students Added	Percent Increase	Grades PK-5	Grades 6-8	Grades 9-12	Total COFTE
Actual	2008-09	182,994	1,128	-0.61%	88,403	42,606	51,985	182,994
Actual	2009-10	183,463	468	0.26%	88,581	42,420	52,462	183,463
Actual	2010-11	183,904	442	0.24%	88,718	42,398	52,788	183,904
Actual	2011-12	183,356	(548)	-0.30%	87,904	42,484	52,968	183,356
Actual	2012-13	184,188	832	0.45%	88,352	42,128	53,708	184,188
Actual	2013-14	184,512	324	0.18%	89,584	41,066	53,861	184,512
Projected	2014-15	184,681	169	0.09%	90,390	39,946	54,344	184,681
Projected	2015-16	184,133	(548)	-0.30%	90,489	39,386	54,258	184,133
Projected	2016-17	184,023	(110)	-0.06%	91,092	39,502	53,430	184,023
Projected	2017-18	183,473	(550)	-0.30%	91,286	39,936	52,251	183,473
Projected	2018-19	182,322	(1,152)	-0.63%	90,398	40,758	51,166	182,322
Projected	2019-20	181,700	(622)	-0.34%	89,635	41,812	50,253	181,700
Projected	2020-21	181,836	136	0.08%	89,562	42,222	50,053	181,836
Projected	2021-22	182,625	788	0.43%	90,530	41,554	50,540	182,625
Projected	2022-23	183,766	1,141	0.62%	91,816	40,754	51,196	183,766
Projected	2023-24	185,365	1,599	0.87%	93,731	40,137	51,497	185,365
Projected	2024-25	187,377	2,011	1.09%	96,199	40,003	51,175	187,377

Source: FDOE



Table 14: Cost per Student Station Projections

Year	Elementary	Middle	High
Jan-14	\$21,194	\$22,886	\$29,728
Jan-15	\$21,642	\$23,370	\$30,356
Jan-16	\$21,912	\$23,663	\$30,736
Jan-17	\$22,273	\$24,052	\$31,242
Jan-18	\$22,715	\$24,530	\$31,862
Jan-19	\$23,157	\$25,007	\$32,482
Jan-20	\$23,599	\$25,484	\$33,102
Jan-21	\$24,086	\$26,010	\$33,786
Jan-22	\$24,601	\$26,566	\$34,507
Jan-23	\$25,124	\$27,131	\$35,241

Source: FDOE Student Station Cost Factors, 7.13.2014

Table 15: Projected Costs - Five Year Facilities Plan

School	School Type	Project	Student Stations	Cost	Capacity Available
Lennard High School	High School	Addition	500	\$5,065,790	2015-16
Middle School "TT"	Middle School	New School	1,500	\$15,914,857	2016-17
K-8 School South County	K-8 Combination	New School	1,350	\$36,515,514	2018-19
Meacham Middle (Partially Funded)	Middle School	New School	1,000	\$15,317,441	N/A
Total Capacity			4,350	\$72,813,602	
Total Renovations *					

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan

* No renovations are funded

Table 16: Capital Outlay Revenue - Five Year District Facilities Plan

Revenue Sources	2014 - 2015	2015 -2016	2016 -2017	2017 - 2018	2018 - 2019	Total
Interest, Including Profit On Investment	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Local 1.5 Mill discretionary Capital Outlay	\$107,492,720	\$109,642,575	\$111,835,426	\$114,072,135	\$116,353,577	\$559,396,433
Millage Carry forward	\$10,000,000					\$10,000,000
PECO Maintenance Revenue	\$3,831,847	\$7,916,139	\$7,798,945	\$8,756,823	\$9,061,807	\$37,365,561
CO & DS Revenue	\$731,777	\$731,777	\$731,777	\$731,777	\$731,777	\$3,658,885
Impact fees received	\$13,882,147	\$14,158,979	\$14,582,110	\$14,872,925	\$15,317,441	\$72,813,602
TOTAL	\$135,988,491	\$132,499,470	\$134,998,258	\$138,483,660	\$141,514,602	\$683,484,481

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan



Table 17: Long Range Facilities Plan

Facility	10 Year Program		20 Yr Program	
	Capacity	Cost	Capacity	Cost
New Middle School (Central Tampa)	900	\$35,000,000		
New Elementary School (South County)	950	\$20,000,000		
High School Remodel (South County)	475	\$6,500,000		
New Elementary School			950	\$25,000,224
New Elementary School			950	\$25,000,224

Source: Hillsborough County Schools, 2014-2015 Five Year Facilities Plan

Table 18: Level of Service by School Type

Type of School	Level of Service
Elementary	100% of permanent FISH capacity
Middle	100% of permanent FISH capacity
High	100% of permanent FISH capacity
K-8	100% of permanent FISH capacity
Special Purpose	100% of permanent FISH capacity

Source: 2008 Interlocal Agreement for School Facilities Planning, Siting and Concurrency



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
ALAFIA ELEMENTARY	845	0	580	0	265	69%
ALEXANDER ELEMENTARY	726	0	614	0	112	85%
ANDERSON ELEMENTARY	468	0	351	163	-46	110%
APOLLO BEACH ELEMENTARY	721	0	643	16	62	91%
BAILEY ELEMENTARY SCHOOL	920	0	713	19	188	80%
BALLAST POINT ELEMENTARY	485	0	407	8	70	86%
BAY CREST ELEMENTARY	954	0	757	0	197	79%
BELLAMY ELEMENTARY	914	0	679	6	229	75%
BEVIS ELEMENTARY	945	0	803	0	142	85%
BING ELEMENTARY	738	0	630	0	108	85%
BOYETTE SPRINGS ELEMENTARY	1,019	0	550	17	452	56%
BROOKER ELEMENTARY	1,053	0	883	72	98	91%
BROWARD ELEMENTARY	548	0	388	0	160	71%
BRYAN ELEMENTARY	771	0	752	2	17	98%
BRYANT ELEMENTARY	1,066	0	962	5	99	91%
BUCKHORN ELEMENTARY	843	0	659	0	184	78%
BURNEY ELEMENTARY	456	0	344	0	112	75%
CAHOON ELEMENTARY	663	0	438	0	225	66%
CANNELLA ELEMENTARY	979	0	722	0	257	74%
CARROLLWOOD ELEMENTARY	886	0	770	0	116	87%
CHIARAMONTE ELEMENTARY	511	0	393	0	118	77%
CHILES ELEMENTARY	963	0	785	2	176	82%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
CIMINO ELEMENTARY	1,045	0	804	0	241	77%
CITRUS PARK ELEMENTARY	876	0	619	18	239	73%
CLAIR-MEL ELEMENTARY	883	0	586	0	297	66%
CLARK ELEMENTARY	975	0	830	0	145	85%
CLAYWELL ELEMENTARY	898	0	754	0	144	84%
CLEVELAND ELEMENTARY	416	0	415	0	1	100%
COLLINS ELEMENTARY	1,146	0	1,003	189	-46	104%
COLSON ELEMENTARY	888	0	699	7	182	80%
CORK ELEMENTARY	949	0	676	0	273	71%
CORR ELEMENTARY	929	0	701	103	125	87%
CRESTWOOD ELEMENTARY	1,089	0	903	0	186	83%
CYPRESS CREEK ELEMENTARY	1,021	0	1,129	169	-277	127%
DAVIS ELEMENTARY	1,038	0	786	0	252	76%
DEER PARK ELEMENTARY	1,054	0	948	14	92	91%
DESOTO ELEMENTARY	322	0	236	2	84	74%
DICKENSON ELEMENTARY	703	0	601	95	7	99%
DOBY ELEMENTARY	958	0	826	221	-89	109%
DOVER ELEMENTARY	949	0	687	0	262	72%
DUNBAR ELEMENTARY	355	0	230	0	125	65%
EDISON ELEMENTARY	618	0	495	0	123	80%
EGYPT LAKE ELEMENTARY	680	0	532	0	148	78%
ESSRIG ELEMENTARY	825	0	695	13	117	86%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
FISHHAWK CREEK ELEMENTARY	1,056	0	997	0	59	94%
FOLSOM ELEMENTARY	698	0	533	34	131	81%
FOREST HILLS ELEMENTARY	1,069	0	964	0	105	90%
FOSTER ELEMENTARY	659	0	469	1	189	71%
FROST ELEMENTARY	1,002	0	779	76	147	85%
GIBSONTON ELEMENTARY	822	0	591	33	198	76%
GORRIE ELEMENTARY	529	0	569	91	-131	125%
GRADY ELEMENTARY	522	0	458	6	58	89%
GRAHAM ELEMENTARY	444	0	351	0	93	79%
HAMMOND ELEMENTARY	938	0	722	21	195	79%
HERITAGE ELEMENTARY	747	0	644	90	13	98%
HUNTERS GREEN ELEMENTARY	1,034	0	842	0	192	81%
IPPOLITO ELEMENTARY	850	0	874	133	-157	118%
JACKSON ELEMENTARY	594	0	499	5	90	85%
JAMES ELEMENTARY SCHOOL	876	0	616	0	260	70%
JUST ELEMENTARY	598	0	669	101	-172	129%
KENLY ELEMENTARY	731	0	508	3	220	70%
KIMBELL ELEMENTARY	652	0	549	9	94	86%
KINGSWOOD ELEMENTARY	781	0	614	10	157	80%
KNIGHTS ELEMENTARY	926	0	692	0	234	75%
LAKE MAGDALENE ELEMENTARY	1,110	0	868	35	207	81%
LAMB ELEMENTARY	0	950	0	0	950	0%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
LANIER ELEMENTARY	456	0	387	7	62	86%
LEE ELEMENTARY SCHOOL OF TECHNOLOGY	399	0	264	0	135	66%
LEWIS ELEMENTARY	945	0	793	3	149	84%
LIMONA ELEMENTARY	710	0	487	3	220	69%
LINCOLN ELEMENTARY	450	0	418	0	32	93%
LITHIA SPRINGS ELEMENTARY	731	0	610	10	111	85%
LOCKHART ELEMENTARY	659	0	406	0	253	62%
LOMAX ELEMENTARY	509	0	361	0	148	71%
LOPEZ ELEMENTARY	889	0	490	9	390	56%
LOWRY ELEMENTARY	1,063	0	768	56	239	78%
LUTZ ELEMENTARY	893	0	586	151	156	83%
MABRY ELEMENTARY	853	0	790	0	63	96%
MACFARLANE ELEMENTARY	406	0	362	0	44	89%
MANGO ELEMENTARY	811	0	776	0	35	96%
MANISCALCO ELEMENTARY	857	0	557	3	297	65%
MCDONALD ELEMENTARY	675	0	597	44	34	95%
MCKITRICK ELEMENTARY	1,045	0	995	0	50	95%
MENDENHALL ELEMENTARY	835	0	665	0	170	80%
MILES ELEMENTARY	835	0	823	0	12	99%
MINTZ ELEMENTARY	1,009	0	840	0	169	83%
MITCHELL ELEMENTARY	728	0	610	8	110	85%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
MORGAN WOODS ELEMENTARY	769	0	566	0	203	74%
MORT ELEMENTARY	1,026	0	848	0	178	83%
MULLER ELEMENTARY	484	0	335	0	149	69%
NELSON ELEMENTARY	963	0	776	58	129	87%
NORTHWEST ELEMENTARY	865	0	657	16	192	78%
OAK GROVE ELEMENTARY	1,000	0	911	0	89	91%
OAK PARK ELEMENTARY	757	0	601	0	156	79%
PALM RIVER ELEMENTARY	707	0	535	4	168	76%
PINECREST ELEMENTARY	820	0	555	3	262	68%
PIZZO ELEMENTARY	810	0	694	0	116	86%
POTTER ELEMENTARY	744	0	646	3	95	87%
PRIDE ELEMENTARY	1,018	0	904	22	92	91%
REDDICK ELEMENTARY SCHOOL	948	0	830	221	-103	111%
RIVERHILLS ELEMENTARY	590	0	292	0	298	49%
RIVERVIEW ELEMENTARY	972	0	655	24	293	70%
ROBINSON ELEMENTARY	656	0	544	0	112	83%
ROBLES ELEMENTARY	832	0	697	0	135	84%
ROOSEVELT ELEMENTARY	745	0	720	0	25	97%
RUSKIN ELEMENTARY	1,016	0	1,090	118	-192	119%
SCHMIDT ELEMENTARY	717	0	624	10	83	88%
SCHWARZKOPF ELEMENTARY	677	0	652	20	5	99%
SEFFNER ELEMENTARY	898	0	725	15	158	82%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
SEMINOLE ELEMENTARY	560	0	474	0	86	85%
SESSUMS ELEMENTARY	1,020	0	807	395	-182	118%
SHAW ELEMENTARY	846	0	589	0	257	70%
SHEEHY ELEMENTARY	562	0	447	0	115	80%
SHORE ELEMENTARY	445	0	490	0	-45	110%
SPRINGHEAD ELEMENTARY	874	0	838	0	36	96%
STOWERS ELEMENTARY SCHOOL	972	0	869	288	-185	119%
SULPHUR SPRINGS ELEMENTARY	824	0	624	0	200	76%
SUMMERFIELD CROSSINGS	1,030	0	872	237	-79	108%
SUMMERFIELD ELEMENTARY	1,012	0	811	209	-8	101%
SYMMES ELEMENTARY	747	0	646	65	36	95%
TAMPA BAY BOULEVARD ELEMENTARY	885	0	734	0	151	83%
TAMPA PALMS ELEMENTARY	965	0	808	0	157	84%
TEMPLE TERRACE ELEMENTARY	853	0	622	30	201	76%
THOMPSON ELEMENTARY	948	0	858	32	58	94%
THONOTOSASSA ELEMENTARY	551	0	409	30	112	80%
TINKER ELEMENTARY	688	0	553	0	135	80%
TOWN & COUNTRY ELEMENTARY	732	0	472	0	260	64%
TRAPNELL ELEMENTARY	524	0	555	23	-54	110%
TURNER ELEMENTARY (NOW K-8)	1,200	0	1,124	0	76	0%
TWIN LAKES ELEMENTARY	752	0	692	0	60	92%



Table 19: Elementary School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
VALRICO ELEMENTARY	979	0	771	13	195	80%
WALDEN LAKE ELEMENTARY	983	0	851	0	132	87%
WASHINGTON ELEMENTARY	638	0	494	0	144	77%
WEST SHORE ELEMENTARY	395	0	305	33	57	86%
WEST TAMPA ELEMENTARY	593	0	507	0	86	85%
WESTCHASE ELEMENTARY	1,040	0	925	40	75	93%
WILSON ELEMENTARY	405	0	355	0	50	88%
WIMAUMA ELEMENTARY	659	0	517	5	137	79%
WITTER ELEMENTARY	737	0	546	0	191	74%
WOODBIDGE ELEMENTARY	883	0	579	0	304	66%
YATES ELEMENTARY	860	0	673	0	187	78%

Source: Hillsborough County Schools Florida Inventory of School Houses and Development Tracking, September 2014



Table 20: Middle School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016 - 2017	Projected LOS 2017 - 2018 (%)
ADAMS MIDDLE	1,500	0	1,110	14	376	75%
BARRINGTON MIDDLE	1,471	0	1,205	54	212	86%
BARTELS MIDDLE (NOW K-8)	1,190	0	845	0	345	0%
BENITO MIDDLE	1,325	0	1,054	70	201	85%
BUCHANAN MIDDLE	1,023	0	737	90	196	81%
BURNETT MIDDLE	1,198	0	913	26	259	78%
BURNS MIDDLE	1,485	0	1,261	46	178	88%
COLEMAN MIDDLE	949	0	866	3	80	92%
DAVIDSEN MIDDLE	1,438	0	978	13	447	69%
DOWDELL MIDDLE	1,060	0	610	21	429	60%
EISENHOWER MIDDLE	1,567	0	1,260	481	-174	111%
FARNELL MIDDLE	1,290	0	1,375	45	-130	110%
FERRELL MIDDLE MAGNET	879	0	406	0	473	46%
FRANKLIN MIDDLE	910	0	419	0	491	46%
GIUNTA MIDDLE SCHOOL	1,553	0	984	106	463	70%
GRECO MIDDLE SCHOOL	1,293	0	882	21	390	70%
HILL MIDDLE	1,156	0	937	17	202	83%
JENNINGS MIDDLE	1,203	0	827	63	313	74%
LIBERTY MIDDLE	1,480	0	1,057	2	421	72%
MADISON MIDDLE	952	0	809	134	9	99%
MANN MIDDLE	1,335	0	1,120	18	197	85%
MARSHALL MIDDLE	1,236	0	798	3	435	65%



Table 20: Middle School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016 - 2017	Projected LOS 2017 - 2018 (%)
MARTINEZ MIDDLE	1,209	0	1,059	11	139	89%
MCLANE MIDDLE	1,483	0	915	80	488	67%
MEMORIAL MIDDLE	1,044	0	689	1	354	66%
MONROE MIDDLE	883	0	529	21	333	62%
MULRENNAN MIDDLE	1,445	0	1,131	37	277	81%
ORANGE GROVE MIDDLE	586	0	562	0	24	96%
PIERCE MIDDLE	1,221	0	1,057	42	122	90%
PROGRESS VILLAGE MIDDLE	999	0	864	0	135	86%
RANDALL MIDDLE	1,440	0	1,339	7	94	93%
RODGERS MIDDLE	1,211	0	730	395	86	93%
SHIELDS MIDDLE	1,556	0	1,462	322	-228	115%
SLIGH MIDDLE	1,130	0	649	1	480	58%
SMITH MIDDLE SCHOOL	1,420	0	950	27	443	69%
STEWART MIDDLE	1,214	0	858	0	356	71%
TOMLIN MIDDLE	1,713	0	1,596	1	116	93%
TT MIDDLE	0	1350	0	0	1,350	0%
TURKEY CREEK MIDDLE	1,226	0	1,006	15	205	83%
VAN BUREN MIDDLE	981	0	593	0	388	60%
WALKER MIDDLE	981	0	900	0	81	92%
WEBB MIDDLE	1,041	0	835	6	200	81%
WILLIAMS MIDDLE	853	0	798	0	55	94%
WILSON MIDDLE	587	0	562	51	-26	104%



Table 20: Middle School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016 - 2017	Projected LOS 2017 - 2018 (%)
YOUNG MIDDLE	985	0	561	0	424	57%

Source: Hillsborough County Schools Florida Inventory of School Houses and Development Tracking, September 2014

Table 21: High School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2014-2017	Projected LOS (%)
ALONSO HIGH	2594	0	2502	48	44	98%
ARMWOOD SENIOR HIGH	2392	0	1741	64	587	75%
BLAKE SENIOR HIGH	1705	0	1663	57	-15	101%
BLOOMINGDALE SENIOR HIGH	2233	0	2212	51	-30	101%
BRANDON SENIOR HIGH	2490	0	1926	29	535	79%
CHAMBERLAIN SENIOR HIGH	2371	0	1809	17	545	77%
DURANT SENIOR HIGH	2738	0	2205	59	474	83%
EAST BAY SENIOR HIGH	2017	0	2264	575	-822	141%
FREEDOM SENIOR HIGH	2559	0	2082	2	475	81%
GAITHER SENIOR HIGH	2161	0	2096	18	47	98%
HILLSBOROUGH SENIOR HIGH	2099	0	1872	1	226	89%
JEFFERSON SENIOR HIGH	2074	0	1547	49	478	77%
KING SENIOR HIGH	2406	0	1833	46	527	78%
LENNARD HIGH	2025	475	1915	363	222	91%
LETO SENIOR HIGH	2264	0	1816	0	448	80%



Table 21: High School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2014-2017	Projected LOS (%)
MIDDLETON SENIOR HIGH	1996	0	1271	2	723	64%
NEWSOME SENIOR HIGH	2536	0	2373	203	-40	102%
PLANT CITY SENIOR HIGH	2483	0	2178	3	302	88%
PLANT SENIOR HIGH	2489	0	2333	56	100	96%
RIVERVIEW SENIOR HIGH	2566	0	2318	452	-204	108%
ROBINSON SENIOR HIGH	1599	0	1556	93	-50	103%
SICKLES SENIOR HIGH	2119	0	2074	44	1	100%
SPOTO HIGH SCHOOL	2009	0	1354	173	482	76%
STEINBRENNER HIGH SCHOOL	2416	0	2252	110	54	98%
STRAWBERRY CREST HIGH SCHOOL	2323	0	2152	14	157	93%
TAMPA BAY TECHNICAL HIGH SCHOOL	3061	0	2000	0	1061	65%
WHARTON SENIOR HIGH	2486	0	2334	100	52	98%

Source: Hillsborough County Schools Florida Inventory of School Houses and Development Tracking, September 2014

Table 22: Combination School Concurrency Analysis

Location	Actual 2014-15 FISH Capacity	Capacity to be Added 2014-17	2013-2014 40 Day Count	Students Generated by Development	Available Capacity 2016-17	Projected LOS 2017-18 (%)
RAMPELLO DOWNTOWN PARTNERSHIP	843	0	766	0	77	91%
ROLAND PARK K-8	931	0	763	0	168	82%
TURNER/BARTELS K-8*	2311	0	1969	46	296	87%

Source: Hillsborough County Schools Florida Inventory of School Houses and Development Tracking, September 2014

* Turner/Bartels was combined in 2014-15 school year 40 day count used from individual school

Part 2

This data and analysis section is comprised of chapter three of the *Imagine 2040: Hillsborough Long Range Transportation Plan* and meets those requirements of the transportation element.

Mobility

Building something always starts from the ground up. In the case of building a long range transportation plan like Imagine 2040, the ground is made up of previous plans and existing conditions data.

In addition, the plan must take into consideration new federal regulations which require the use of performance measures. The performance measures will be used to evaluate transportation networks and systems in Hillsborough County to determine what improvements are needed and which can be achieved in the Imagine 2040 Plan.

Performance Measures

Performance Measures are a key component of the Moving Ahead for Progress in the 21st Century Act (MAP-21). Congress established seven national goal areas in MAP-21:

- **Safety** – to achieve a reduction in traffic fatalities and injuries on all public roads.
- **Infrastructure Condition** – to maintain the public highway infrastructure in a state of good repair.
- **Congestion Reduction** – to reduce congestion on the National Highway System.
- **System Reliability** – reduce travel time unpredictability on the public highway system.
- **Freight Movement and Economic Vitality** – to improve the national freight network, provide rural communities better access to national and international trade markets, and to encourage regional economic development.
- **Environmental Sustainability** –to enhance the transportation system while at the same time protecting the natural environment.
- **Reduced Project Delivery Delays** –to reduce project costs and accelerate the completion of projects by eliminating delays in the project development and delivery process.

Performance measures to achieve these goals are being established by US DOT, and each state will set its own targets against these measures. MPOs in Florida may adopt the statewide targets, and may create supplemental measures and targets appropriate for the metropolitan area.

For *Imagine 2040*, the Hillsborough MPO expanded on the MAP-21 performance measures and applied them to some of the thorniest challenges facing the community.

Successive years of recessionary budget cutbacks have affected this community's ability to achieve targets in the following performance areas:

- Preserve the System
 - Road resurfacing schedule
 - Bridge repair schedule
 - Transit vehicle replacement schedule
- Reduce Crashes & Vulnerability
 - Total crashes, fatal crashes, and pedestrian/bike crashes
 - Recovery time and economic impact of a major storm
- Minimize Traffic for Drivers & Shippers
 - Peak-hour travel time reliability
 - Affected truck trips
- Real Choices When Not Driving
 - People & jobs served by the bus system
 - People & jobs served by the trail/sidepath network
- Major Investments for Economic Growth
 - Key Economic Spaces
 - Jobs served
 - Delay reduced
 - Strategic Intermodal System
 - Development Based Needs
 - Longer Range Vision

Each of these needs categories will be discussed in detail in this chapter.

Preserve the System

System preservation is a vital component to a long range transportation plan because investment for pavement

preservation and new structural standards will be critical to ensuring the viability of roads and bridges. Additionally, transit system performance will not be jeopardized by fleet age and will be able to sustain for longer periods of time with enhanced maintenance measures. Deferring preventative maintenance to fleet vehicles can lead to failure of the road base and lead to more costly roadway rehabilitation efforts. Measuring system preservation can be accomplished by the maintenance schedule of roads and bridges, and transit fleet replacement schedule. Detailed information about system preservation can be found in the *System Preservation – Pavement, Bridges, and Transit Costs and Benefits* technical memorandum.

Pavement and Bridges

Well maintained roadways and bridges are not only critical to Hillsborough County, but to the entire nation since economic growth, national defense, and the movement of goods and people rely upon a well-maintained infrastructure system.

From the 1960s through the 1980s, most Federal and State funding went to building new highways and bridges. Now, roadways and bridges constructed during this time period are in jeopardy due to age, increased traffic volumes, and smaller budgets to maintain them. Pavement preservation extends the pavement's serviceable condition over a period of time, improves safety, and meets motorists driving expectations. Preventive maintenance, minor rehabilitation,



and routine maintenance are examples of common pavement preservation methods.

Hillsborough County has 12,025 lane miles and they are maintained by the following agencies or jurisdictions:

- FDOT – 1,896 miles
- Hillsborough County – 6,920 miles
- City of Tampa – 2,800 miles
- Temple Terrace – 165 miles
- Plant City – 150 miles
- Tampa-Hillsborough Expressway Authority – 94 miles

Bridges are essential to the transportation network and have an average life expectancy of 50 years. Current spending on bridge maintenance in the county, as shown in the five-year work programs and capital improvement programs of Hillsborough County, the three cities, and FDOT District 7, comes to an average of \$31 million annually, or \$620 million over 20 years. However, current funding does not adequately address all of the needs for major bridge repairs and/or replacements on some bridges for which Tampa and Hillsborough County are responsible.

Figure 3-1 is a list of bridges in Hillsborough County and Tampa that need to be replaced within the next 15 years, with cost estimates. The total cost to replace all thirty bridges on the list is just under \$100 million in 2014 dollars.

Pavement begins aging and deteriorating the day it is applied. Most asphalt pavements have an optimal lifespan

of 15 years, some less and some more depending on design structure, traffic volumes, traffic weights, and climate. For its high volume, high truck usage arterials, FDOT’s standard are to resurface at least every 17 years. On lower volume collector and local streets, the pavement may last longer.

Pavement conditions are measured by three performance measures:

- **Safety** – wheelpath rutting, friction
- **Preservation** – cracking, potholes, raveling, patching, depressions
- **Ride** – rippling, faulting, public complaints

Figure 3-2 shows the estimated annual cost to achieve FDOT’s maintenance standard on all roads countywide, which requires that six percent of roads are resurfaced annually. Under the low investment level, which matches current spending, only two percent of roads are resurfaced every year, while in the medium investment scenario four percent of roads are resurfaced annually.






Figure 3-1 Bridges in Hillsborough County and City of Tampa Identified for Replacement

Bridge Name	Total
Caruthers Road over Turkey Creek	\$976,000
E. Keyville Road over Alafia River West Branch	\$1,450,313
CR 672 over Hurrah Creek	\$2,910,325
Grange Hall Loop over Little Manatee River	\$5,231,250
CR 579 over Little Manatee River	\$3,275,938
CR 579 over Little Manatee River South Fork	\$3,339,036
CR 587 (West Shore Boulevard)	\$1,386,189
Old Mulberry Road	\$2,955,423
70 th Street S	\$1,709,736
Balm Riverview Road	\$1,832,685
Old Big Bend Road	\$5,066,102
CR 39 (230' North of CR 672)	\$4,616,090
W. Waters Avenue	\$2,077,620
Sligh Avenue	\$8,581,706
CR 582 (Tarpon Springs Road)	\$1,633,830
N. Pebble Beach Boulevard	\$1,661,270
Fletcher Avenue	\$14,406,596
Morris Bridge Road	\$1,528,145
Morris Bridge Road	\$2,440,457
Columbus Drive	\$3,344,625
CR 39 (1.4 mi S of CR 640)	\$2,357,228
CR 39 (2.2 mi S of CR 640)	\$2,485,479
78 th Street	\$2,380,325
Morris Bridge Road	\$6,615,000
4 th Street SW	\$5,433,026
Brorein Street Bridge	\$2,000,000
Columbus Drive over Hillsborough River	\$2,000,000
Cass Street Bridge	\$2,000,000
Laurel Street	\$2,000,000
Platt Street	\$2,000,000
Total \$99,694,389	



Figure 3-2: Summary of Pavement Preservation Investment Levels

Investment Level	Annual Cost for Resurfacing (\$2014)	Total Cost for Resurfacing (20 years)	Lane Miles Resurfaced	Percentage of Roads Resurfaced Annually	Resurfacing cycle
Low 	\$25,600,000 Based on current annual funding; currently there is a funding shortfall to maintain roads.	\$512,000,000	146 - 197	2%	Every 50 years
Medium 	\$53,700,000 Annual funding required to improve the pavement condition.	\$1,074,000,000	350 - 458	4%	Every 25 years
High 	\$83,833,035 Annual funding required to meet FDOT standard of resurfacing all roads every 17 years.	\$1,676,660,700	715	6%	Every 17 years

Transit Fleet

The latest data about transit fleet replacement was found in HART’s fleet plan. The Federal Transit Agency’s (FTA’s) minimum vehicle life requirement is 12 years. Currently, HART’s fleet replacement plan indicates a funding shortfall to achieve the prescribed 12 year replacement schedule. The current funding level is illustrated in Investment Level 1, with an average vehicle fleet age of 13 years in 2040, and an average of eight road-calls (vehicle breakdowns) each weekday. The high investment level describes an optimum fleet maintenance scenario with an average of five road-calls per weekday. The medium investment level, between these two, was based on having an average fleet age of eight years in 2040 with an average of six road-calls per weekday.

Figure 3-3 describes the high, medium, and low investment levels respectively for each transit vehicle fleet replacement.

With the High Investment Scenario, the average vehicle age in HART’s fleet will be 5 years in 2040.

Figure 3-3 Investment Levels and Statistics for Transit Vehicle Fleet Replacement

Investment Level	Statistics	Total
High LEVEL 3	Total capital required for fleet plan	\$168,086,862
	Average fleet age (2040)	5 years
	Number of new vehicles	272
	Road calls per year	1,316
	Road calls each weekday	5
Medium LEVEL 2	Total capital required for fleet plan	\$128,628,520
	Average fleet age (2040)	8 years
	Number of new vehicles	246
	Road calls per year	1,579
Low LEVEL 1	Total capital required for fleet plan	\$100,843,178
	Average fleet age (2040)	13 years
	Number of new vehicles	187
	Road calls per year	2,193
	Road calls each weekday	8

Minimize Traffic for Drivers & Shippers

As discussed in Chapter 2, the *Regional Congestion Management – State of the System 2012* report notes that the Tampa Bay Region is the 12th most congested metropolitan area in the nation and second most in Florida after Miami. The region ranked 28th in the nation with \$670 million wasted each year as a result of congestion and had the 19th longest delay in the nation with over 53,000 hours spent each year stuck in traffic.

The congestion statistics for freight traffic are not much better. The Tampa Bay region ranks 21st in the nation in freight congestion with \$210 million wasted each year due to congestions while the national average is \$53 million per year³.

Figure 3-4 depicts the most congested corridors in the Tampa Bay Area and **Figure 3-5** identifies the most congested intersections in unincorporated Hillsborough County.

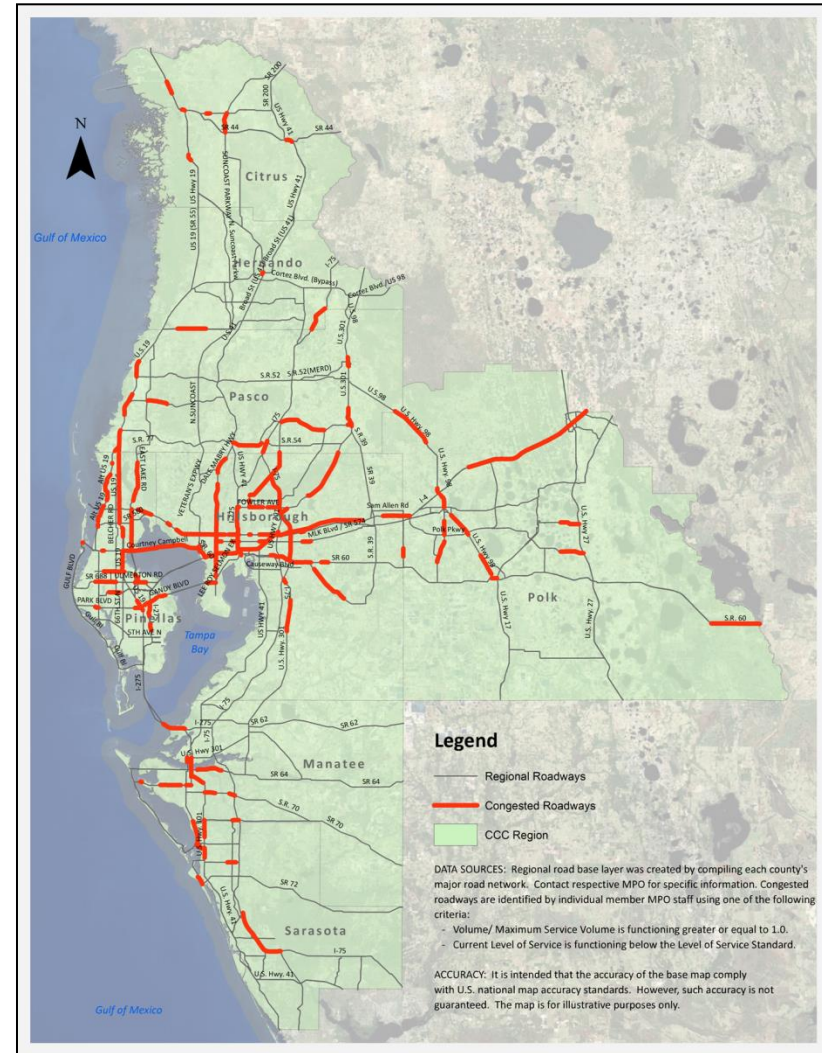
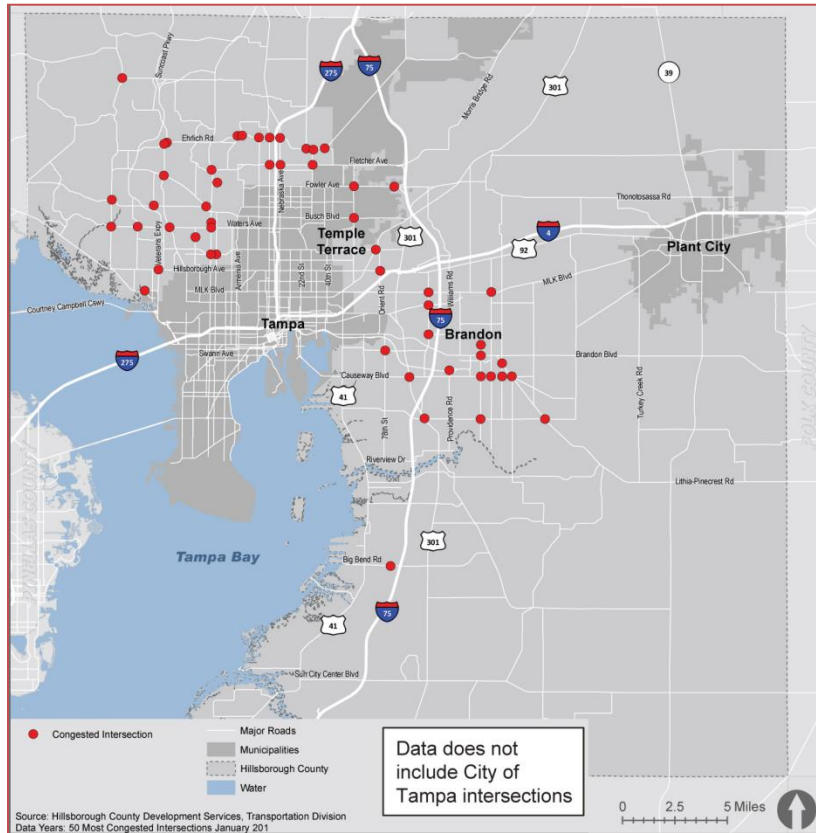


Figure 3-4 Existing Tampa Bay Congested Corridors Map

³ Source: West Florida Metropolitan Planning Organizations Chairs Coordinating Committee *Regional Congestion Management Process: State of the System 2012, 2012*



Congestion Management for Drivers

The *Congestion Management Costs and Benefits* technical memorandum goes into detail about performance measures used to evaluate congested roadway segments and the methodology behind the evaluation. The performance measures used were:

- Reliability –the consistency or dependency in commute times measured through a Travel Time Index
- Travel Time Index (mean travel time/free flow travel time)

All major roadway segments that were 80% congested (a volume to capacity ratio of greater than 0.8), based on existing traffic, where identified as needing improvement. The types of improvements that were considered in the analysis were:

- Geometric improvements at intersections, such as adding or extending turn lanes
- Advanced coordinated signal control, management at Traffic Management Centers (TMCs).
- Advanced Traffic Management Systems (ATMS)
- Expanding Road Ranger patrols/improving incident management.
- Freeway operational movements, such as variable speed limits, lane control, and ramp metering.

The lowest funding level, Level 1, extends today’s congestion management funding into the future, spending \$310 million by 2040, and results in arterial capacity increasing by 7%. The Level 2 investment level spends over \$871 million on improvements by 2040 and increases arterial capacity by 17%, reduces incident frequency by 5% and incident duration is reduced by 25%. The final investment level, Level 3, allocates over \$1 billion to congestion improvements by 2040 and yields a 17% increase in arterial capacity by 17%, a 10% increase in freeway capacity, and incident frequency and duration are reduced by 7% and 25% respectively.

Figure 3-6 describes the type of projects, costs, and benefits under each investment scenario. For a list of specific congested roadways please see the *Congestion Management Costs and Benefits* technical memorandum



Figure 3-6: Congestion Management Costs and Benefits

	Responsible Agency	Description	FY13-17 CIP	FY14-18 CIP	
LEVEL 1 Investment Level 1 CURRENT SPENDING TREND	FDOT	Road Ranger Patrol: I-275, 1-4/Selmon	\$9,125,004	\$9,125,004	
	Hillsborough	Intersection Program, ATMS, TMC	\$50,792,000	\$67,900,000	
	City of Tampa	Intersection Program, ATMS, signals	\$10,440,000		
	City of Temple Terrace	ATMS	\$270,000		
	Total 5-year spending			\$70,627,004	\$77,025,004
	Average of 5-year spending			\$73,826,004	
	Current Spending Trend – Extended over 20 years			Level 1 Total \$295,304,016	
Benefits	- Arterial capacity is increased by 7%.				
LEVEL 2 Investment Level 2	Description	Number	Unit Cost	Additional Cost	Total Cost
	Level 1 Congestion Projects				\$295,304,016
	Intersections: geometric improvements, ATMS, TMC	640 intersections	\$770,000		\$492,800,000
	TMC and ATMS Infrastructure and labor	One time cost		\$9,400,000	\$9,400,000
	Freeway operations: Incident Management	120 miles	\$260,000		\$31,200,000
	Freeway operations: Incident Management Infrastructure	One time cost		\$3,000,000	\$3,000,000
					Level 2 Total \$831,704,016
Benefits	Arterial capacity is increased by 17%	Incident frequency is reduced by 5%	Incident duration is reduced by 25%		
LEVEL 3 Investment Level 3	Description	Number	Unit Cost	Additional Cost	20-Year Cost
	Level 1 Congestion Projects				\$295,304,016
	Intersections: geometric improvements, ATMS	640 intersections	\$770,000		\$492,800,000
	TMC and ATMS Infrastructure and labor	one time cost		\$9,400,000	\$9,400,000
	Freeway operations: Incident Management, ramp metering, variable speed limits, lane control	120 miles	\$1,500,000		\$4,600,000
	Freeway operations: Infrastructure & Labor	one time cost		\$4,600,000	\$180,000,000
				Level 3 Total \$982,374,016	
Benefits	- Arterial capacity is increased by 17% Incident frequency is reduced by 7% Incident duration is reduced by 25% - Freeway capacity is increased by 10%				

Freight Congestion

Freight and goods movement in Tampa Bay is already congested, and by 2040 the Federal Highway Administration (FHWA) forecasts that 496 million tons of freight will move through Tampa Bay in 2040 compared to 295 million tons in 2011⁴. Most of that freight will be moved by truck on the region's roadways.

To determine the 2040 needs to move freight efficiently through the region, various plans were reviewed, including the Port Tampa Bay Strategic Plan, the Tampa Bay Regional Goods Movement Study (TBRGMS), the Strategic Regional Freight Plan (SFRP), the Florida Statewide SIS Needs Plan, and the Statewide Ports Plan. Recommended projects from these studies were evaluated using performance measures designated to specifically address freight congestion. The performance measures used were:

- Percent miles of congested freight routes – this is used to track reductions in congestion on the regional freight system
- Percent of freight hotspots (high density areas where freight and goods movement take place) mitigated – based on the list of identified freight hot spots, this performance measure can track the number of hot spots eliminated or mitigated over time
- Planning Time Index – measures travel time reliability
- Buffer Index – measures how much time must be added for freight traffic to travel through a corridor

⁴ Source: Hillsborough MPO *Freight Investment Program for the 2040 Long Range Transportation Plan Technical Memorandum*, 2014.

- Cost of Freight Delay – Calculating the cost of truck delay provides a monetized value of delay that can be used system-wide, or corridor-wide, to determine the benefit of a completed project

The *2040 Freight Needs Assessment Technical Memorandum* documents three levels for freight investment. The baseline comprises the FDOT District 7 Freight Quick Fix projects for Hillsborough County, as funded in the 5-year FDOT Work Program. This level of funding was extrapolated over 20 years, resulting in an investment of \$18,632,000 for Level 1. This investment level provides funding for all 73 low-cost freight projects identified in the FDOT District 7 consolidated freight improvement database and FDOT Regional Strategic Freight Plan (excluding capacity projects and major maintenance/resurfacing projects, which are accounted for in other spending programs). The total investment for these projects is \$17,020,523.

- Low-cost, Level 1 projects include: Any project identified on the FDOT Freight Quick Fix list regardless of cost;
- Restriping to reconfigure an intersection or make lane width adjustments on existing surfaces to 12 feet, where possible, on heavily used truck corridors;
- Pulling back concrete median noses and replacing with pavement markings to enhance truck turning and reduce infrastructure damage;
- Adjusting the location of stop bars to allow for unimpeded wide truck turns, where generally only a single receiving lane exists;
- Adding truck-related signage;

- Minor corner radius changes/shoulder repair within the existing right-of-way (ROW);
- Corner radius modifications on rural facilities;
- Adding or modifying raised concrete channelization islands; and
- Adjusting signal timing.

Level 1 also includes moderate cost investments that range between \$100,000 and \$1 million although some projects and combinations of projects to improve a corridor or a corridor segment that may cost more. These projects include:

- Minor reconstruction within the existing ROW;
- Corner radius modifications on urban facilities;
- Milling and resurfacing intersections and approaches;
- Adding left-/right-turn lanes within the existing ROW;
- Adjusting turn lane lengths to accommodate more vehicles at intersections with a large amount of truck turning movements;
- Converting median openings to directional median openings throughout a corridor segment; and
- Railroad crossing upgrades/repairs/resurfacing, and
- Adding new traffic signals.

The next level of investment adds one major capacity improvement, a more costly project than many Level 1 investments combined. The recommended capacity project is a railroad grade separation on US 41 at Rockport. This high priority grade separation is identified in the Regional Strategic Freight Plan and has also been identified by the SIS Systems Needs Plan, the Regional Rail Plan, and the Port Tampa Bay Strategic Plan. It

will relieve congestion resulting from 28⁵ or more train crossings per day entering and exiting the CSX Rockport Phosphate Terminal, especially during peak commuting hours when traffic queues often reach over a mile length.

Level 3 investments recommend a second railroad grade separation (Causeway Boulevard, east of US 41), in addition to the grade separation listed under Level 2 or, as an alternative, construction of the SR 60 to I-4 Connector east of Brandon that is recommended in the Regional Strategic Freight Plan. Similar to the US 41 grade separation, the Causeway Boulevard grade separation will relieve congestion caused by trains entering the Rockport Terminal, as well as trains heading south to the Eastport Terminal, Port Manatee, and Bradenton. Causeway Boulevard is a key connector route between the US 301/I-75 corridor and Port Tampa Bay. The SR 60 to I-4 Connector is proposed to relieve a portion of the heavy through traffic on SR 60/Brandon Boulevard by providing an alternate route around Brandon via I-4. It is also expected to relieve additional traffic between I-75 to the north of I-4 and SR 60 east of Brandon. Other high cost projects that would further facilitate freight movement remain as unfunded needs.

Figure 3-7 below shows the baseline plus the additional recommended spending at each tier, as well as the total combined spending if the additional Level 2 or 3 funding is available. For specific projects and freight hot spots please see the *Freight*

⁵ Source: Hillsborough MPO *Freight Investment Program for the 2040 Long Range Transportation Plan Technical Memorandum*, 2014



Investment Program for the 2040 Long Range Transportation Plan technical memorandum.

The typical costs presented in the tables include a percentage of the construction costs to cover engineering design, mobilization/CEI, ROW, and contingencies.

Figure 3-7: Freight Program Funding Tier Spending

	Project Costs	Investment Level Costs	Investment Level Benefits
Baseline (Total value of FDOT Freight Quick Fix projects in Hillsborough County funded in the current adopted five-year FDOT Work Program)	\$3,105,333		
LEVEL 1 72 operational and minor infrastructure projects (continuation of FDOT Freight Quick Fix program)	\$17,020,523	\$17,020,523	117 thousand daily truck trips flow better through intersections
LEVEL 2 Add one railroad grade separation	\$50,652,000	\$67,672,523	Above, plus: removes traffic stoppage of about 5 hours per day
LEVEL 3 Add second railroad grade separation	\$37,520,000	\$105,192,523	Above, plus: removes another traffic stoppage of about 5 hours/ day
Total Freight Needs (Includes additional grade separations)			\$956,773,568
Unfunded Freight Needs (Beyond Level 3 Investment)			\$851,601,045

Reduce Crashes & Vulnerability

Another key component of the *Imagine 2040 Plan* is safety and security. The safety segment of the plan focuses on crash reduction while the security segment deals with transportation infrastructure vulnerability to flooding.

Safety: Crash Reduction

Hillsborough County has some of the most dangerous roadways in the nation. With the highest traffic fatality rate per capita of all large U.S. counties, Hillsborough has a traffic fatality rate of 12.4 fatalities per 100,000 residents based on 2010 data. Further, Hillsborough ranks 12th in the nation (based on counties with populations exceeding 1 million) for having the most traffic

fatalities.⁶ Safety Emphases Area crashes are those that are caused by aggressive driving, at-intersection, or lane departures, all of which Hillsborough County ranks in the top five Florida counties for these type of crashes. **Figure 3-8** identifies high crash areas in Hillsborough County. Very busy roadways such as Dale Mabry Highway, Hillsborough Avenue, Fletcher Avenue, and SR 60 in Brandon are identified on the map as high crash roadways with high crash intersections.

In addition, the Tampa Bay region has the highest pedestrian fatality rate in the nation with 3.5 pedestrian fatalities per 100,000 residents. In May 2014, Smart Growth America, a national organization that is dedicated to the research of and advocating for better community development and safer streets released a report, *Dangerous by Design 2014*, that chronicles the most dangerous roadways and the most threatened populations in the United States. Utilizing a methodology of determining the rate of pedestrian deaths relative to the number of people who drive to work in a given region, a Pedestrian Death Index (PDI) was calculated for all metropolitan areas in the country. According to the report, Tampa-St. Petersburg-Clearwater, FL was identified as the second most dangerous metropolitan area for pedestrians with a pedestrian danger index of 190.13, coming in behind the Orlando - Kissimmee, Florida metropolitan area. **Figure 3-9** is a map showing the most dangerous locations for pedestrians. Areas along Florida Avenue, Nebraska Avenue, SR 60 in Brandon, and downtown Tampa have high pedestrian crashes.

⁶ Source: Hillsborough MPO, *Congestion Management/Crash Mitigation Process: Crash Severity Reduction Report*, 2012

The Hillsborough MPO produced the *Congestion Management/Crash Mitigation Process: Crash Severity Reduction Report* in 2012 that included the most common type of severe and fatal crashes. **Figure 3-10** is a pie chart that describes the type of severe crashes with angle/left turn accidents being the most common severe crashes. **Figure 3-11** shows the most common type of fatal crashes which bicycle and pedestrian crashes.

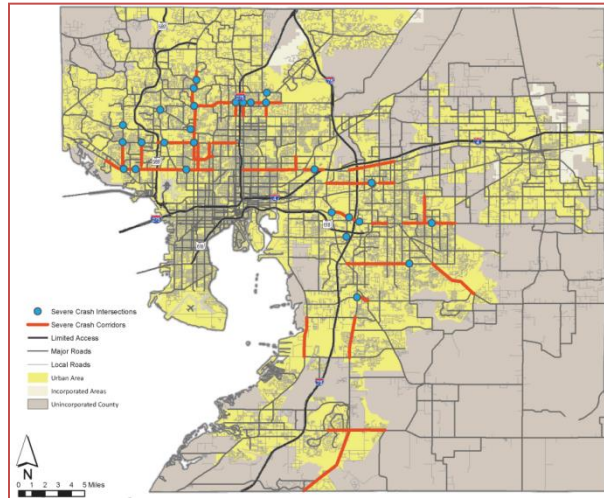


Figure 3-8 Severe Crash Hot Spots in Hillsborough County

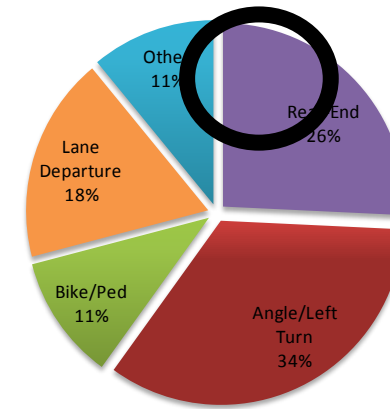


Figure 3-10 Severe Crashes by Category

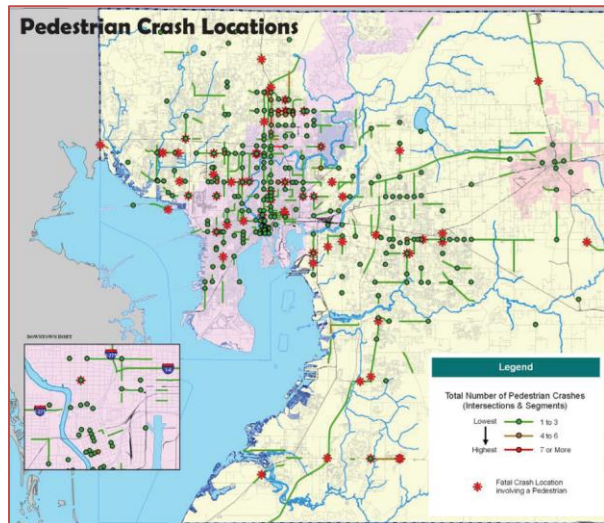


Figure 3-9 Pedestrian Crash Areas

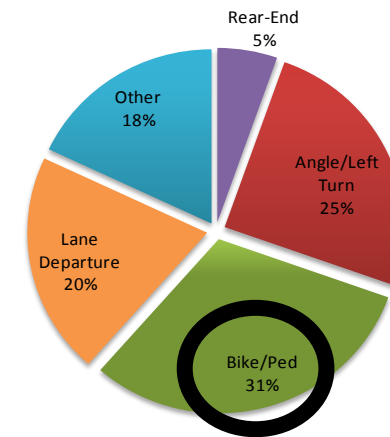
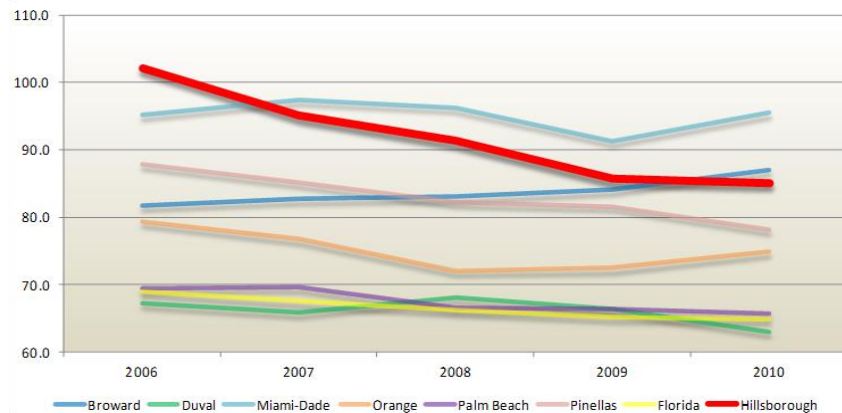


Figure 3-11 Fatal Crashes by Category



From 2006 to 2010 Hillsborough County experienced a reduction in injury and fatality crashes per 100 million vehicle miles travelled (VMT). In 2006 Hillsborough County had the highest injury and fatality crashes among other peer counties (Broward, Duval, Miami-Dade, Orange, Palm Beach, and Pinellas) in Florida and higher than the statewide average. By 2010 Hillsborough had the 3rd highest in the state, with a 17% decrease in injury and fatality crashes since 2006. Figure 3-12 is a line graph comparing injury and fatality crashes per 100 million VMT for the most populous counties in Florida.

Figure 3-12 Injury and Fatality Crashes per 100 Million VMT



The *Imagine 2040 Plan* intends to continue this trend for Hillsborough County. The *Congestion Management/Crash Mitigation Process: Crash Severity Reduction Report* identifies roadway infrastructure strategies that have the potential to address those crash issues which are not easily mitigated through current safety retrofit programs and typical design approaches. Safety enhancement projects include:

- Roundabouts instead of traditional signalized intersections;
- Continuous flow intersections;
- Construct medians;
- Construct Diverging Diamond Interchanges;
- Construct turn lanes/bays;
- Complete streets design that includes the addition of bicycle lanes, and sidewalks;
- Construct pedestrian islands/refuges;
- Increase better signage;
- Road diets; and
- Street lights

For more details and examples of the safety enhancement treatments listed above and specific safety improvement projects please see the *Congestion Management and Crash Mitigation Technical Memorandum* and the *Congestion Management/Crash Mitigation Process: Crash Severity Reduction Report*.

As with the previous programs discussed, there are three funding levels to improve safety in the *Imagine 2040 Plan*. The Level 1 investment level represents the current trend and proposes to spend over \$498 million by 2040 and anticipates reducing crashes by 9%, fatal crashes by 9.7%, and bicycle/pedestrian crashes by 136 crashes per year.

⁷ Source: Hillsborough MPO, *Congestion Management/Crash Mitigation Process: Crash Severity Reduction Report*, 2012

The Level 2 investment level intends to spend over \$919 million by 2040 and reduce total crashes by 20%, fatal crashes by 20%, and reduces bicycle and pedestrian crashes by 294 crashes per year.

The Level 3 investment level proposes to spend over \$2.2 billion by 2040 and is anticipated to reduce total crashes by 50.8%, fatal crashes by 50.7%, and reduce bicycle and pedestrian crashes by 704 crashes per year.

Another investment level, Level 2 ½, is projected to lower the total number of crashes and fatal crashes by over 20% by investing approximately \$1.3 billion by 2040. Projects in Level 2 ½ include over 450 miles of “complete streets” treatment that will cover all priority corridors and 300 miles of new sidewalks.

Figure 3-13 details the benefits and costs of each investment level. **Figure 3-14** is a list of complete streets projects (complete streets are those that have pedestrian and bicycle facilities, along with other features for the safety and comfort of all users) to be implemented in Level 2 ½ or Level 3 that would improve safety along Hillsborough County roadways.



Figure 3-13: Crash Reduction Costs and Benefits

Investment Level	Benefits	Responsible Agency	Description	Annual Cost (in thousands)	20 Year Cost (in thousands)
Level 1 Current Spending Trend LEVEL 1	<ul style="list-style-type: none"> Total crashes are reduced by 4,390 (9%) Total fatal crashes reduced by 13 (10%) Bike/pedestrian crashes reduced by 136 	Hillsborough County	Intersections, medians, sidewalks, school safety	\$11,315	\$226,300
		City of Tampa	Sidewalks, bikeways, crosswalks	\$5,769	\$115,373
		Temple Terrace	Sidewalks, bike lanes, ADA curbs	\$133	\$2,655
		Plant City	Intersections, sidewalks	\$112	\$2,240
		FDOT	Education, enforcement, grants to local agencies	\$7,587	\$151,732
				Total	\$24,915
Level 2 LEVEL 2	<ul style="list-style-type: none"> Total crashes are reduced by 9,017 (20%) Total fatal crashes reduced by 28 (20%) Bike/pedestrian crashes reduced by 294 	All	900 intersection treatments: signal adjustments, pedestrian signals & refuge areas, turn lanes/bays, crosswalks	\$22,575	\$451,500
		Hillsborough County	600 miles of new standard street lights, including operational cost for 20 years	\$21,000	\$420,000
		All	300 miles of new sidewalks for continuous sidewalk on at least one side of all major roads	\$2,400	\$48,000
Level 2 1/2 LEVEL 2	<ul style="list-style-type: none"> Total crashes are reduced between 20%-51% Total fatal crashes reduced between 20%-51% 	All	450 miles of "Complete Streets" treatments, covering all Priority Corridors plus some other major roads with above-average crashes	\$44,787	\$895,735
		Hillsborough County	600 miles of new standard street lights, including operational cost for 20 years	\$21,000	\$420,000
		All	300 sidewalk miles, for continuous sidewalk on at least one side of all major roads	\$2,400	\$48,000
				Total	\$68,188
Level 3 LEVEL 3	<ul style="list-style-type: none"> Total crashes are reduced by 22,722 (51%) Total fatal crashes reduced by 68 (51%) Bike/pedestrian crashes reduced by 704 	All	900 miles of "Complete Streets" treatments, covering all major roads with above-average crash rate	\$87,918	\$1,758,367
		Hillsborough County	600 miles of new standard street lights, including operational cost for 20 years	\$21,000	\$420,000
		All	300 sidewalk miles, for continuous sidewalk on at least one side of all major roads	\$2,400	\$48,000
				Total	\$111,318
				Total	\$2,226,367



*Figure 3-14: Complete Streets Potential Projects
Illustrative Projects for Consideration in Crash Mitigation Program*

Source or Responsible Party	Project Location	Further Description	Transportation for Economic Development Project?
City of Tampa	22nd St (21st Ave to 23rd Ave) Phase 3	Roundabout at 21st/22nd, on-street bike lanes, bus shelters, sidewalks	
City of Tampa	22nd St (Hillsborough Ave to MLK Blvd)	Complete Street	
City of Tampa	40th St (SR 60 to Hillsborough Ave)	Road diet	YES
City of Tampa	7th Ave (22 St to 50 St)	Road diet	YES
City of Tampa	Cass/Tyler/Nuccio "The Green Spine"	2-way, roundabout, protected bikeway	YES
City of Tampa	Columbus Dr./17th, 18th, and 19th (from 14th Street to 43rd Street)	2-way conversion, on-street parking, protected bikeway	YES
City of Tampa	County Line Rd (I-75 overpass to Bruce B. Downs)	Complete Street	
City of Tampa	Floribaska Ave (Nebraska to Florida)	road diet, bicycle and pedestrian enhancements	YES
City of Tampa	Tampa/Florida (I-275 to Violet St.)	one-way conversion to two-way	YES
City of Tampa	Westshore Blvd (Kennedy Blvd to Spruce St)	Bicycle and pedestrian enhancements	YES
City of Tampa	Whiting St (Ashley Dr. to Brush St)	Complete Street	
City of Tampa	Zack St. Promenade of the Arts	ped friendly, public art, gateway to Curtis Hixon, shade, crosswalks, medians, on-street parking	
Hillsborough County	131st Ave (Nebraska Ave to 30th St)	bicycle and pedestrian enhancements	YES
Hillsborough County	Ambassador Rd. (Powhattan Ave. to Hillsborough Ave.) T & C Community Plan	Add curb, sidewalks, bike lanes, landscaping, streetscaping	YES
Hillsborough County	Paula Dr. (Town N Country Blvd to Hanley Rd) T & C Community Plan	Add curb, sidewalks, bike lanes, landscaping, streetscaping	YES
Hillsborough County	Pauls Dr. - Brandon Main Street (SR 60 to Feeder Rd.)	Sidewalks, on-street parking, streetscaping, landscaping, gateways	
Plant City	SR39/Collins from Park Rd. to Alabama St.	Complete Street	
Temple Terrace	Fowler Ave. (Riverhills Blvd to I75)	bicycle and pedestrian enhancements	YES
MPO Crash Severity Reduction Study	Fowler Ave. (Nebraska to 30th St)	bicycle boulevard on frontage roads, widen medians, landscaping	
MPO SR60 Compatibility Study	Brandon Blvd.	Consistent with SR60 Overlay District	
MPO SR60 Compatibility Study	Lithia Pinecrest and Bryan Road reconfigure	Roundabout, one-way pairs for circulation	

Security: Vulnerability Reduction

Due to Hillsborough County’s location along the coast of the Gulf of Mexico and Tampa Bay reaching into the heart of the county, the area is vulnerable to storm surges and flooding from hurricanes as well as sea-level rise. Much of the transportation infrastructure in Hillsborough County is located within zones that are susceptible to storm surges and sea level rise. Vital connections between Hillsborough and Pinellas Counties such as the Gandy Bridge (US 92), Howard Frankland Bridge (I-275), and Courtney Campbell Causeway (SR 60) must cross over Tampa Bay thus almost cutting Pinellas County off from Hillsborough County in the event of a hurricane. The bay bridges, coastal roadways within storm surge areas, and even roads subject to inland flooding may suffer from structural failure, washouts, and debris on the roadway. **Figure 3-15** is map identifying the anticipated storm surge and disrupted links in Hillsborough and Pinellas Counties after a Category 3 hurricane.

In the event of a major hurricane, the three bay crossings connecting Hillsborough with Pinellas may be unusable.

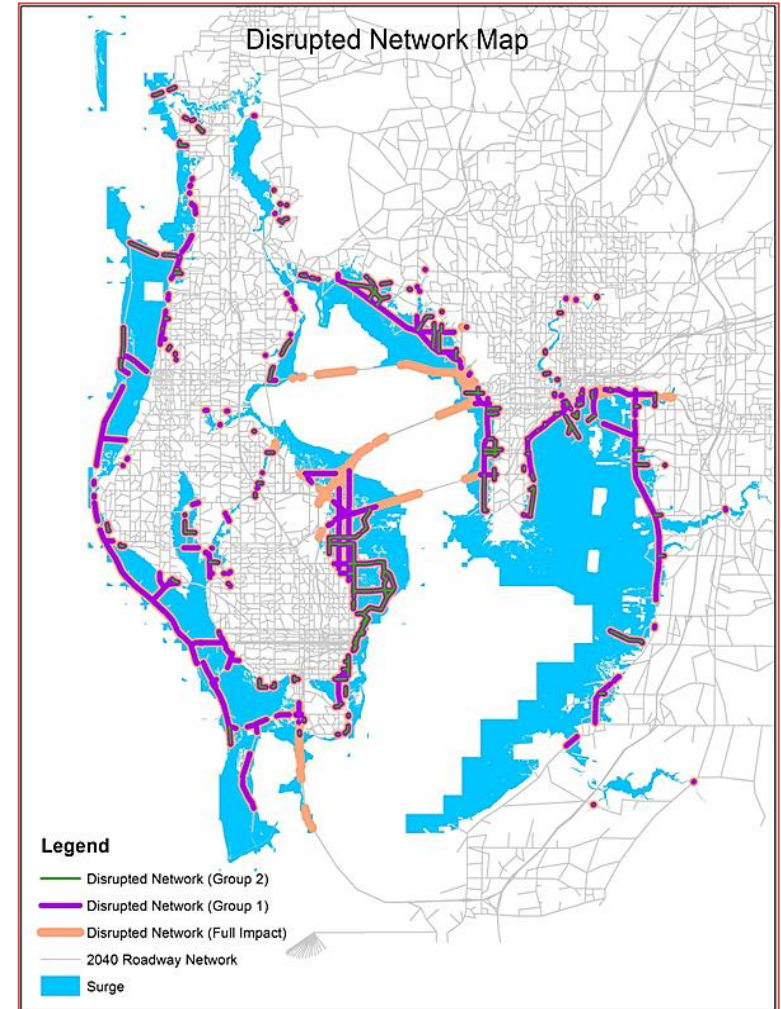


Figure 3-15 Potentially Disrupted Links in Pinellas and Hillsborough Counties During and After a Category 3 Hurricane

To measure the impacts to transportation infrastructure, from a representative Category 3 hurricane, three different investment levels were evaluated. The performance measures used to analyze the three investment scenarios are:

- Travel Time Delay due to transportation network disruption;
- Lost Trips due to transportation network disruption; and
- Economic Losses due to storm in 2014 dollars.

Below are the comparisons between the three investment scenarios:

Investment Level 1:

- Cost over 20 years: Approximately \$629 million;
- Funds only routine stormwater drainage improvements, and is based on current spending trend;
- 8 weeks of road network disruption due to representative Category 3 storm; and
- Economic loss to Hillsborough County: \$266 million.

Investment Level 2:

- Cost over 20 years: Approximately \$660 million;
- Funds Interstates only with drainage improvements, shoreline armoring and wave attenuation;
- 6 weeks of road network disruption due to representative Category 3 storm;
- Economic loss to Hillsborough County: \$153 million or 42% less than Investment level 1; and
- \$31 million additional investment compared with Level 1 results in \$113 million benefit in avoided losses.

Investment Level 3:

- Cost over 20 years: \$772 million;
- Funds Interstates and arterials with drainage improvements, shoreline armoring and wave attenuation;
- 3 weeks of road network disruption due to representative Category 3 storm;
- Economic loss to Hillsborough County: \$119 million or 55% less than level 1; and
- \$112 million additional investment compared with Level 1 results in \$147 million benefit in avoided losses.

Flooding vulnerability is a very real threat that the transportation network and infrastructure face in Hillsborough County. The amount that is invested in adaptation and mitigation measures to shore up the vulnerable infrastructure in the *Imagine 2040 Plan* determines how much disruption and economic loss the residents and businesses of Hillsborough County will endure when a storms and flooding impact the region.

For more detailed information about vulnerability please see the Needs Assessment: Vulnerability Reduction Costs and Benefits Technical Memo.

Real Choices When Not Driving

The Preferred Growth Scenario described in Chapter 2 requires that investments in transportation alternatives to driving alone be made. In order to achieve this goal, investment in transit, multi-use trails, and services for the transportation



disadvantaged (TD) and the growing senior citizen population must be planned for.

Transit/Bus Service

Hillsborough Area Regional Transit (HART) is the transit provider for Hillsborough County. As of 2014, HART operates local, express, and flex bus service. Three potential levels of investment in HART bus services were developed for the Imagine 2040 Plan. A detailed list of the service improvements in each investment level, including capital and operating costs, is provided in the *Needs Assessment: Real Choices When Not Driving Technical Memo*. The three potential levels of investment were evaluated using Transit Level of Service (TLOS), a measure of the quality of service from the passenger’s perspective, based on the frequency with which buses travel each road. The thresholds for the A (best) through F (worst) letter grade are consistent with FDOT’s ARTPLAN methodology. For this analysis, the TLOS score for each road segment is based on the total number of buses of any route which travel that road each hour. Since HART typically is able to provide only a few trips per day on its express bus routes, the express routes were not included in the analysis. The TLOS score is as follows:

<u>Level of Service</u>	<u>Wait Time</u>
LOS A: >6 buses/hour	< 10 min. – Passengers don’t need schedules
LOS B: 4.01-6 buses/hour	10-14 min. – Frequent service
LOS C: 3-4 buses/ hour	15-20 min. – Max desirable time to wait if missed bus
LOS D: <3 buses/hour	21-30 min. – Service unattractive to choice
LOS E: <2 buses/hour	31-60 min. – Service available during hour
LOS F: <1 bus/hour	>60 min. – Service unattractive to all rider

Each of the three investment levels will serve the population at different levels of service. **Figure 3-16** summarizes how much of the population and jobs of Hillsborough County in 2040 will be served by transit with each investment level. **Figure 3-17** is a bar graph describing the number of people and jobs that will be served in 2040 with each investment level.

- **Low Investment Level (Level 1):** The low investment level is based on HART’s “Status Quo” Plan as described in the *Transit Development Plan (TDP) for FY 2014 - FY 2023*. The “Status Quo” is a financially constrained plan extrapolating today’s funding levels into the future. Service improvements are limited to those which can be implemented without increasing the number of buses needed at peak hour, since HART’s existing vehicle maintenance facility is very close to capacity. Therefore, the proposed improvements primarily include adding evening or weekend hours to existing routes and some higher frequencies. A map of the TLOS that would be provided under the low investment level is shown in **Figure 3-18**. The bus service areas shown in the map are a ¼-mile radius (about a 10-minute walk) around each route.
- **Medium Investment Level (Level 2):** The medium investment level is a subset of HART’s Vision Plan as described in the TDP. HART’s Vision Plan identifies unfunded transit needs for Hillsborough County. For the LRTP, the medium investment level includes Vision Plan improvements that focus on the core urban area, where ridership potential is greatest. Specifically, the medium investment level consists of six new MetroRapid routes, plus 30 local routes that are new or improved in frequency

and/or hours. A map of the TLOS that would be provided under the medium investment level is shown in **Figure 3-19**.

High Investment Level (Level 3): Similar to the medium investment level, the high investment level is also based on HART's Vision Plan. It adds the remaining service improvements identified as needed by HART, including 20 new or improved express bus routes, and at least 18 flex and circulator route improvements. These express and flex/circulator routes expand the bus service area and provide cost-effective service to lower density communities. A map of the TLOS that would be provided under the high investment level is shown in **Figure 3-20**



Figure 3-16: Transit Performance Measures for Each Investment Level

Investment Level ¹	Statistics				
Low LEVEL 1	Costs¹				
	Total Cost (Capital and O&M over 20 years)				\$1,730,760,275
	Performance Measures				
		Frequent	Somewhat Frequent	Basic	Minimal/None
		(LOS A-B)	(LOS C-D)	(LOS E)	(LOS F)
	Countywide population & jobs within 1/4-mile of transit	16%	29%	4%	51%
	Roadway Centerline Miles	84	305	70	-
Medium LEVEL 2	Costs¹				
	Total Cost (Capital and O&M over 20 years)				\$2,638,324,568
	Performance Measures				
		Frequent	Somewhat Frequent	Basic	Minimal/None
		LOS A-B	LOS C-D	LOS E	LOS F
	Countywide population & jobs within 1/4-mile of transit	44%	8%	0.5%	48%
	Roadway Centerline Miles	400	120	15	-
High LEVEL 3	Costs¹				
	Total Cost (Capital and O&M over 20 years)				\$3,010,135,325
	Performance Measures				
		Frequent	Somewhat Frequent	Basic	Minimal/None
		(LOS A-B)	(LOS C-D)	(LOS E)	(LOS F)
	Countywide population & jobs within 1/4-mile of transit	48%	16%	0.2%	36%
	Roadway Centerline Miles	503	140	7	-

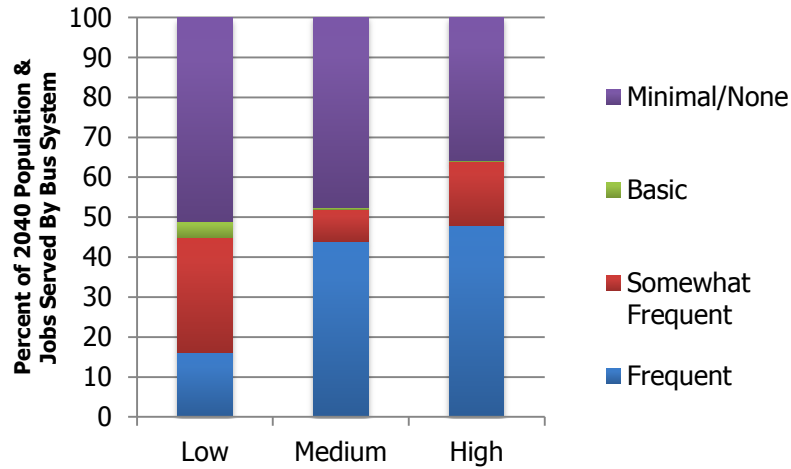


Figure 3-17 Quality of Service with Each Level of Investment

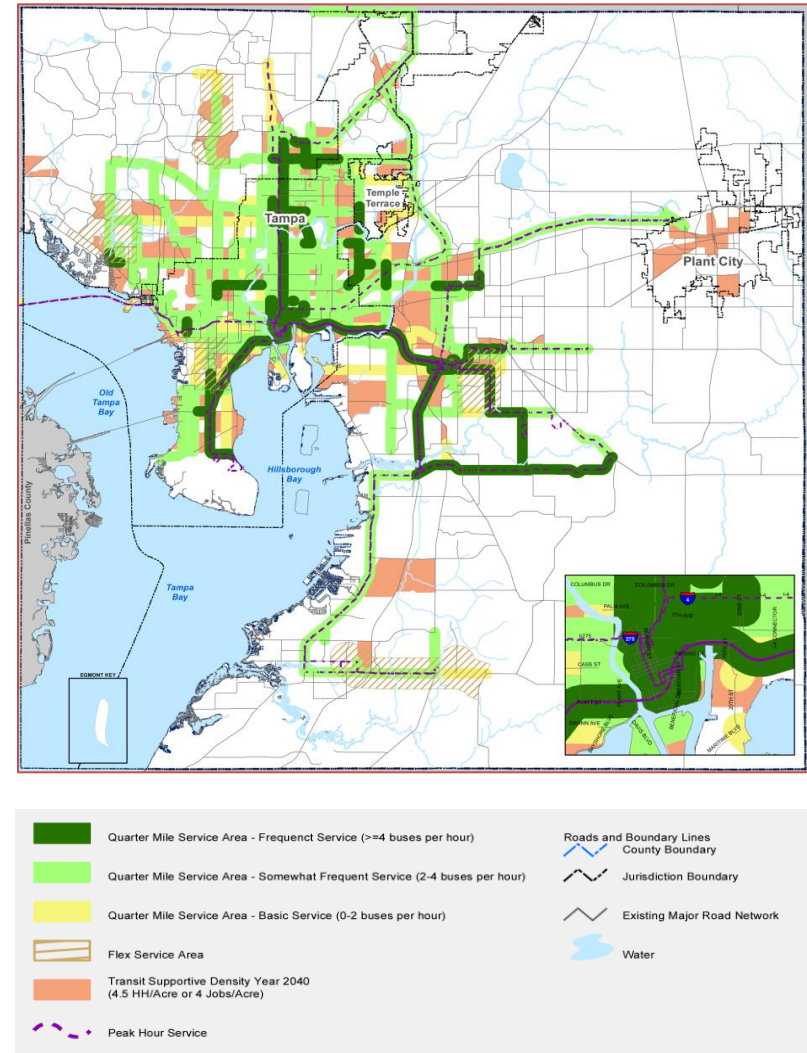


Figure 3-18 Map of Transit Service in Hillsborough County with Low Investment Level

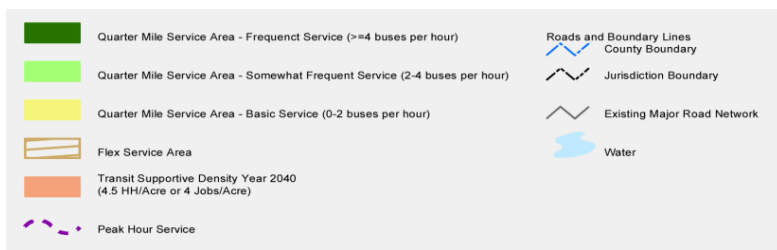
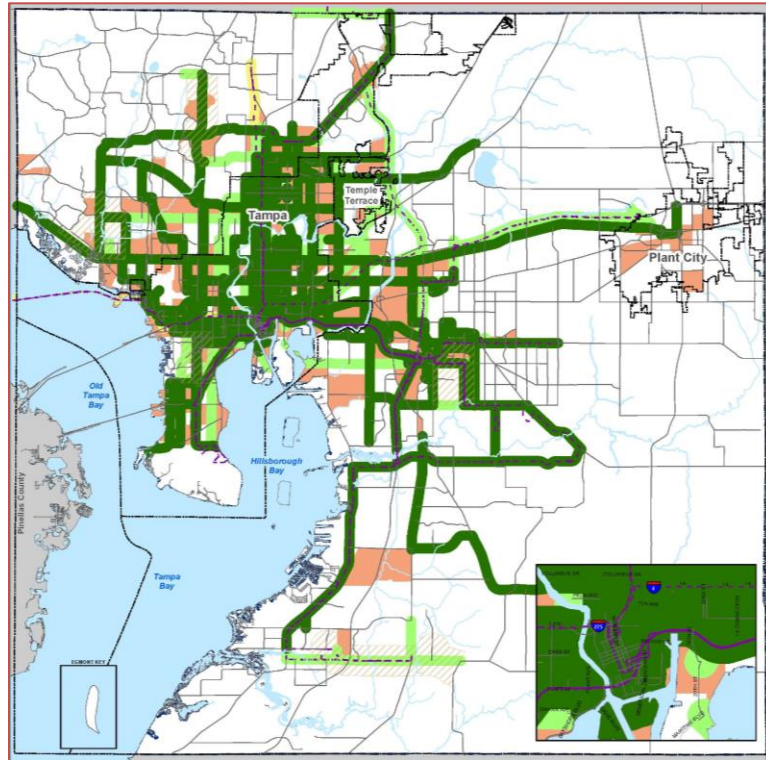


Figure 3-19 Map of Transit Service in Hillsborough County with Medium Investment Level

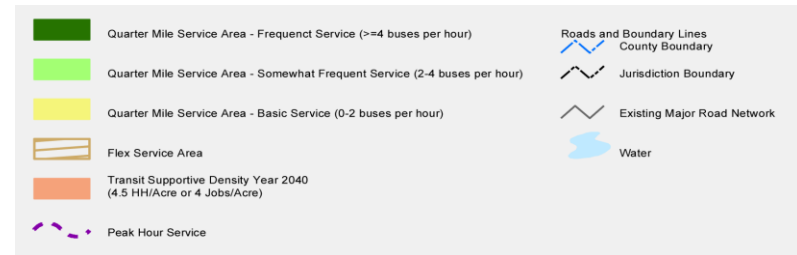
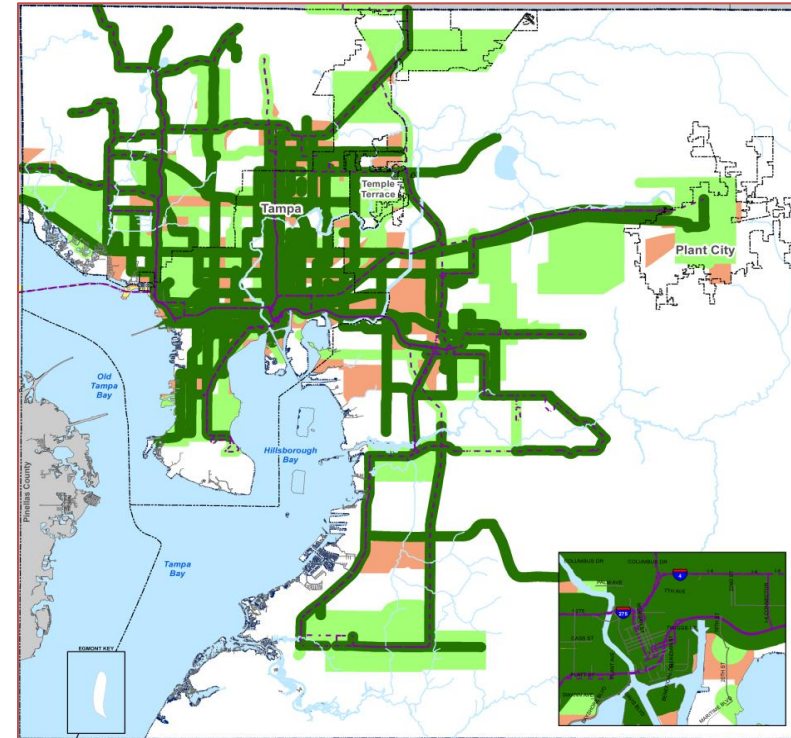


Figure 3-20 Map of Transit Service in Hillsborough County with High Investment Level



Transportation Disadvantaged Services

One important aspect of this Plan is the allocation of funds for accommodating the increasing population of the transportation disadvantaged (TD). These services provide equal access for those who are unable to transport themselves or to purchase transportation, and are therefore dependent upon others to obtain access to health care, employment, education, shopping, social activities, and/or other life-sustaining activities (per Florida Statutes, Chapter 427).

Fixed route transit serves 52% of the population within the County, leaving 48% of the County without access to the fixed route bus system. Paratransit services in the County, such as the Hillsborough County Sunshine Line and HARTplus, provide TD residents in Hillsborough County with needs-based transit for eligible persons who have physical, cognitive, emotional, visual, or other disabilities which prevent them from using the HART fixed route system. Depending on the needs of the passenger, the service either picks them up and drops them at their destination, or takes them to an accessible fixed route bus stop.

According to the 2010 Census, 12% of the population is age 65 and older. Including seniors, persons with disabilities and/or low income, the potential TD population in 2013 (407,727) is an estimated 34% of the total population of Hillsborough County. **Figure 3-21** estimates the forecasted TD population living outside of the bus service area in 2040 respective to the three levels of bus service investment described previously. A cost estimate for providing Sunshine

Line services to this population, at similar levels of service as today, is also summarized here. Detailed cost estimates are available in the *2040 Needs Assessment: Real Choices When Not Driving Technical Memorandum*. It is important to note that more investment in fixed route transit service decreases the need for TD services because more people that qualify as TD will have access to fixed route transit service.

Investment Level	TD Population Unserved By Transit in 2040	Annual ParaTransit Trips Needed in 2040	Annual Operating Cost in 2040 (2014\$)	Fleet Needed in 2040	Total Capital + Operating Cost, 2019-2040
Low Bus Investment	282,000	2.26 M	\$31.8 M	547	\$579.43 M
Medium Bus Investment	187,000	1.5 M	\$21.1 M	363	\$436.60 M
High Bus Investment	182,000	1.4 M	\$20.0 M	352	\$428.52 M

Figure 3-21 Transportation Disadvantaged Living Outside of Bus Service Area

34% of the population of Hillsborough County has the potential to be Transportation Disadvantaged.

Trails and Sidepaths

Considerable progress has been made in expanding the availability of sidewalks and on-road bicycling facilities, such as striped lanes and shared-lane arrows, in Hillsborough County. In the last few years, demand has grown for “protected” bike lanes, which are physically separated from traffic. The separation could be a curb, flexible posts, planters, green boulevard area or some other means. National surveys point to 10% or less of the population feeling safe and comfortable bicycling on the paved shoulders of roads. Expanding the availability of “protected” walk/bike facilities could attract a much wider audience.

Hillsborough County at present has approximately 80 miles of paved trails and sidepaths, which are mostly in parks. The potential new trails and sidepaths considered in this analysis come from multiple sources, including the Hillsborough County and Tampa Greenways Plans, Tampa Walk-Bike Plans, Temple Terrace multi-modal plans, and community plans prepared by the Planning Commission.

The performance measures used in this analysis were the number of residents and workers with access to excellent or good Pedestrian Level of Service (PLOS) and Bicycle Level of Service (BLOS) facilities (i.e., living or working within ¼ mile). PLOS and BLOS are defined as “A” (best) through “F” (worst) based on quantitative measures that represent the pedestrian’s or bicyclist’s point of view. Trails and sidepaths are both typically considered high PLOS/BLOS facilities.

The investment levels are as follows:

- **The “Status Quo,” low investment level** maintains the current level of spending, which when extrapolated into the future provides approximately \$40 million over the next 20 years. Under this level of investment, 40 miles of paved trails and sidepaths will be added. Even if high-density areas are prioritized, only 16-17% percent of the population (about 1/6) will live near a good or excellent walk/bike facility (PLOS/BLOS “A” or “B”) in 2040. Because jobs tend to be more centrally located, 28-29% of future employees will be near a good or excellent walk/bike facility.
- **The medium investment level** invests \$140 million over the next 20 years and results in the construction of 140 miles of paved trails and sidepaths. Based on this level of investment, 22-23% percent of the population (at least 1/5) will live near a good or excellent walk/bike facility and 34-35% percent of jobs will be located near a good or excellent walk/bike facility.
- **The high investment level** invests \$240 million over the next 20 years and results in the construction of 240 miles of paved trails and sidepaths. This level of investment expands the trail/sidepath network out into the rural and lower-density suburban areas. Based on this level of investment, 24-25% percent of the population (about ¼) will live near a good or excellent walk/bike facility. In addition, 36-37% percent of jobs will be located near a good or excellent walk/bike facility.

Figure 3-22 details the benefits and costs of trails and sidepaths in each investment level scenario. **Figure 3-23**

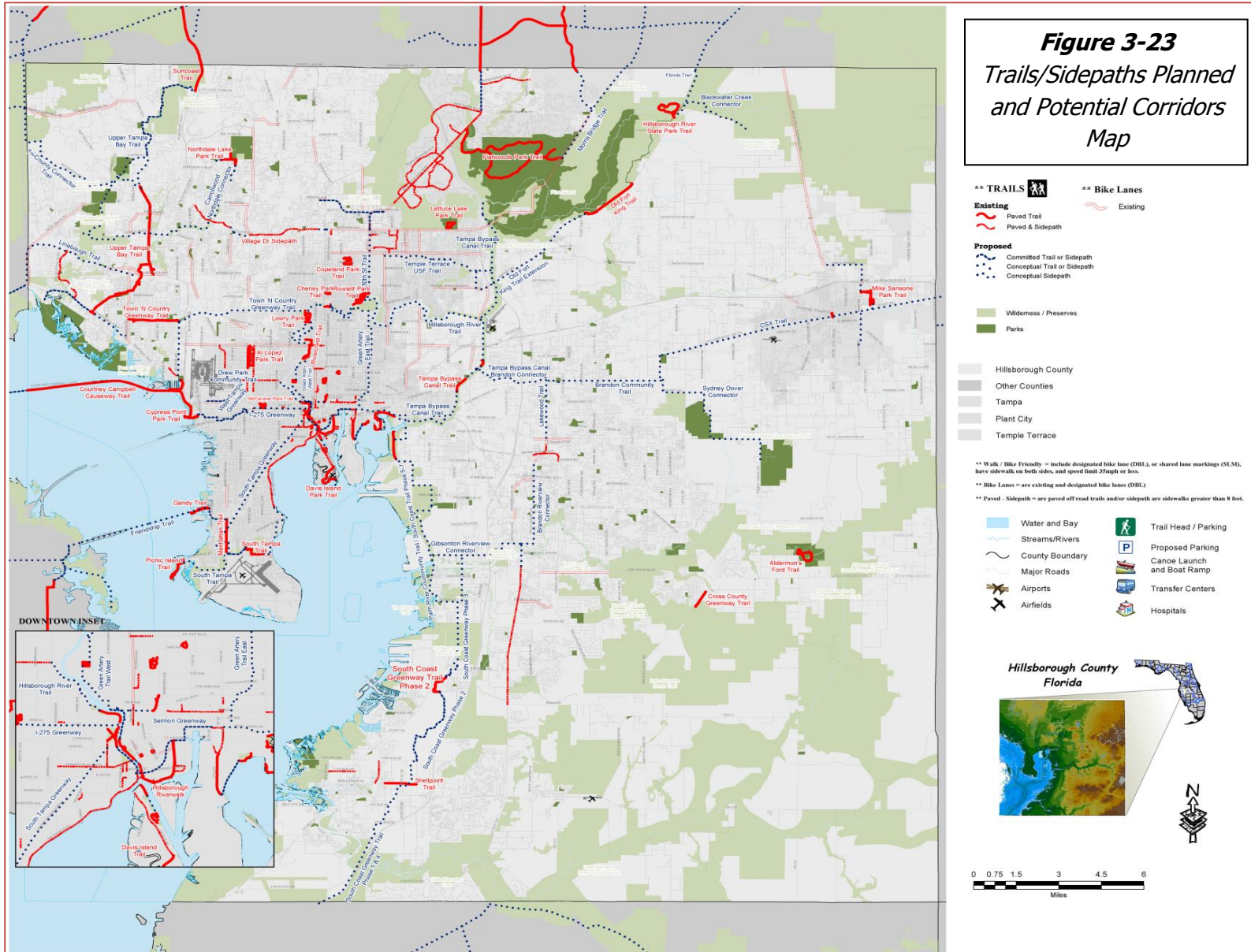


is a map showing the trails that could be built with each funding investment level. The trails in yellow are those that would be funded in low investment scenario. Those trails in green plus the yellow trails from the low

investment scenario would be funded in the medium investment level scenario. The high investment level scenario will fund all trails in the low and medium investment scenarios plus the trails in red.

Figure 3-22: Benefits and Costs of Trail/Sidepath Investment Levels

Trail/Sidepath Investment Level Statistics					
Low LEVEL 1	Capital Cost	\$39,902,854			
	Performance Measures				
	Level of Service	A-B	A-B	C-D	E-F
	Facility	Ped LOS	Bike LOS	Both	Both
	Countywide population near trails*	17%	16%	3%	81%
	Countywide jobs near trails	29%	27%	5%	69%
Medium LEVEL 2	Capital Cost	\$140,406,778			
	Performance Measures				
	Level of Service	A-B	A-B	C-D	E-F
	Facility	Ped LOS	Bike LOS	Both	Both
	Countywide population near trails	23%	22%	3%	75%
	Countywide jobs near trails	35%	34%	2%	62%
High LEVEL 3	Capital Cost	\$241,737,567			
	Performance Measures				
	Level of Service	A-B	A-B	C-D	E-F
	Facility	Ped LOS	Bike LOS	Both	Both
	Countywide population near trails	25%	24%	2%	73%
	Countywide jobs near trails	37%	37%	2%	61%





Major Investments for Economic Growth

Investing in transportation infrastructure is a key component of growing an area’s economy. A safe, reliable, and efficient transportation infrastructure must be in place in order for people and goods to move from one place to another. Good transportation infrastructure can promote economic growth.

Key Economic Spaces (KES)

In collaboration with other agencies participating in Hillsborough County’s Transportation for Economic Development (TED) effort, the Hillsborough MPO analyzed existing employment patterns and future growth potential, identifying a number of clusters of “key economic spaces” comprising at least five thousand jobs today. As shown in **Figure 3-24**, many of these have great potential. **Figure 3-25** is a clustered dot density map that displays jobs in Hillsborough County.

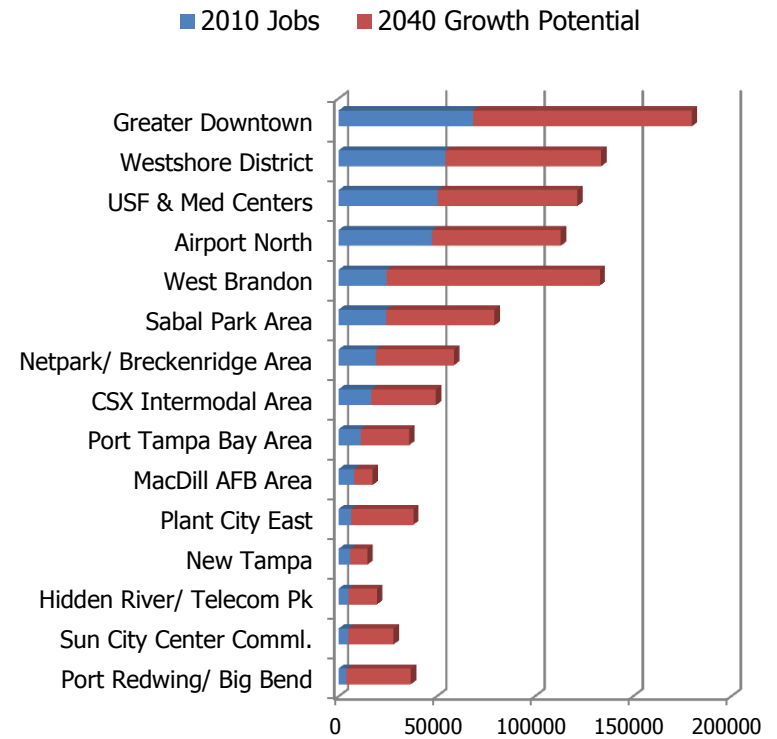


Figure 3-24 Key Economic Spaces & Potential Growth 2010 and 2040 Job Estimates

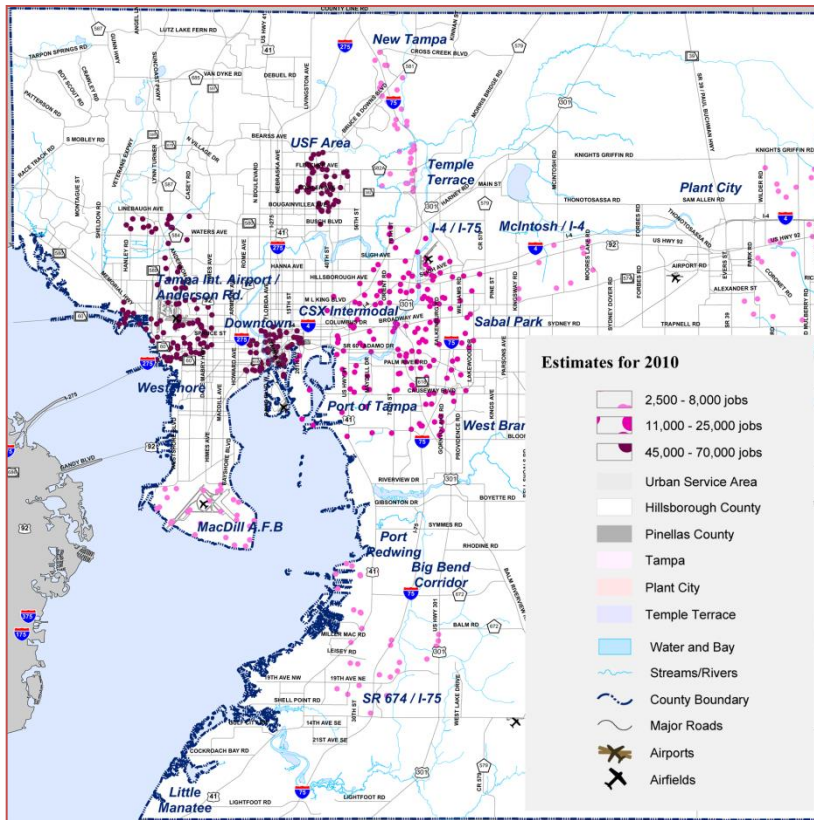
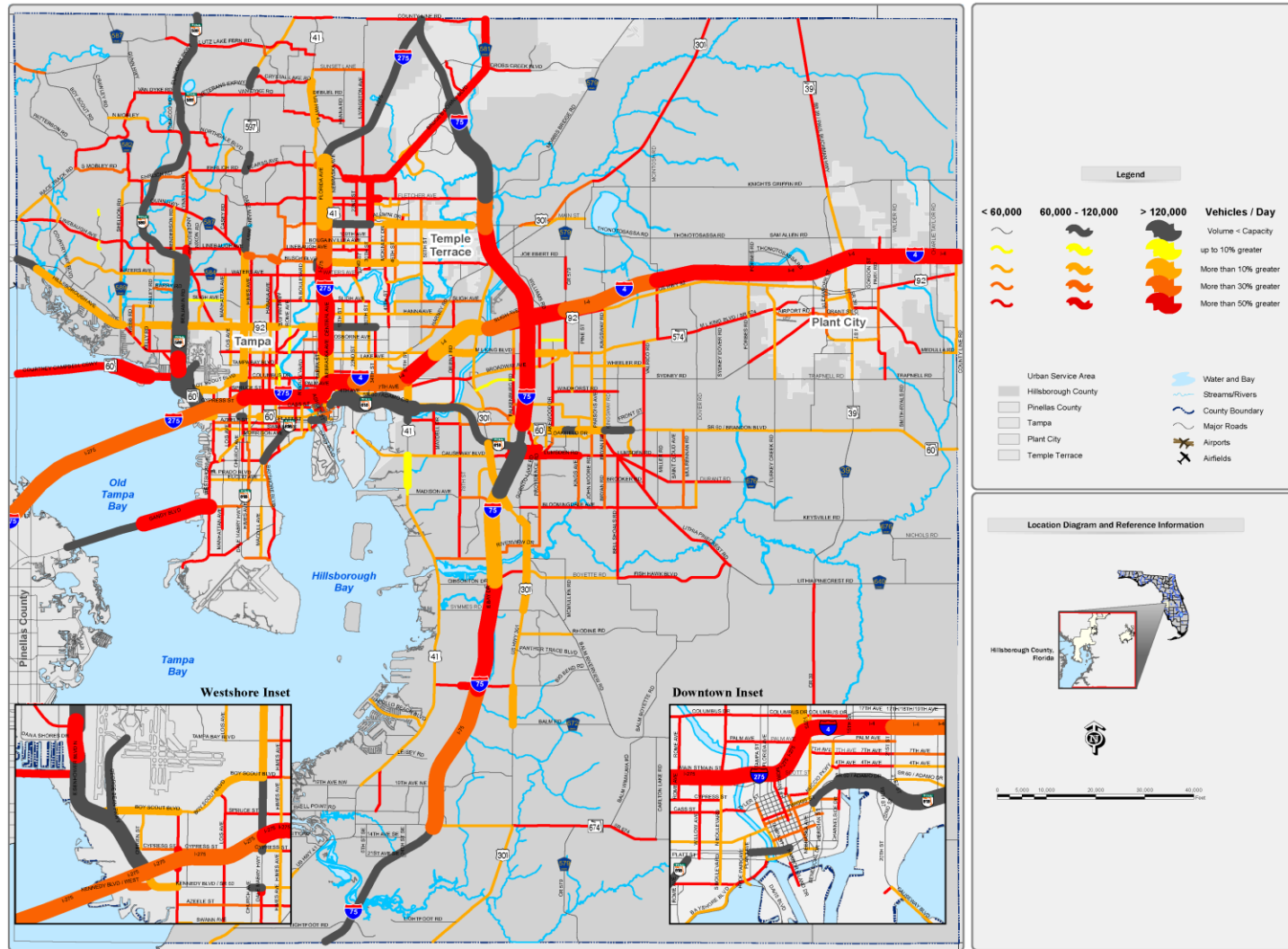


Figure 3-25 Job Clusters in Hillsborough County

While growth is desirable, it also presents challenges, as shown in **Figure 3-26**. The most heavily congested corridors in 2040 are forecast to be greater than 50% over their capacity.

To maintain good connectivity within and between Hillsborough’s key economic spaces, and to other major activity centers in the region and state, strategic capacity improvements have been identified. Roadway widening and extension projects that serve key economic spaces *and* are forecast to be at least 30% over capacity in 2040 have been identified as 2040 Needs.

This evaluation was used to focus limited resources on projects that provide the greatest benefit. Other road capacity projects remain in the Longer Range Vision. Such congested corridors which are less than 30% over capacity by 2040 can potentially be addressed with a combination of less costly strategies such as advanced traffic management systems, intersection geometry, travel demand management, mixed-use development, and cultivating walk, bike and transit usage.



Traffic Volumes Higher Than Roadway Capacity in 2040 If No Improvements Are Made Beyond Those In The Currently Funded Five-Year Improvement Programs

By taking this two-tiered approach, 41 distinct projects were identified that met the Key Economic Space and 30% Over Capacity criteria.

An upgraded transit system can also facilitate connections between economic centers. **Figure 3-27** is a map displaying the potential transit connections between major KES areas such as downtown Tampa, Westshore, and USF. In addition possible regional connections to Pinellas County, Pasco County, and Orlando are shown.

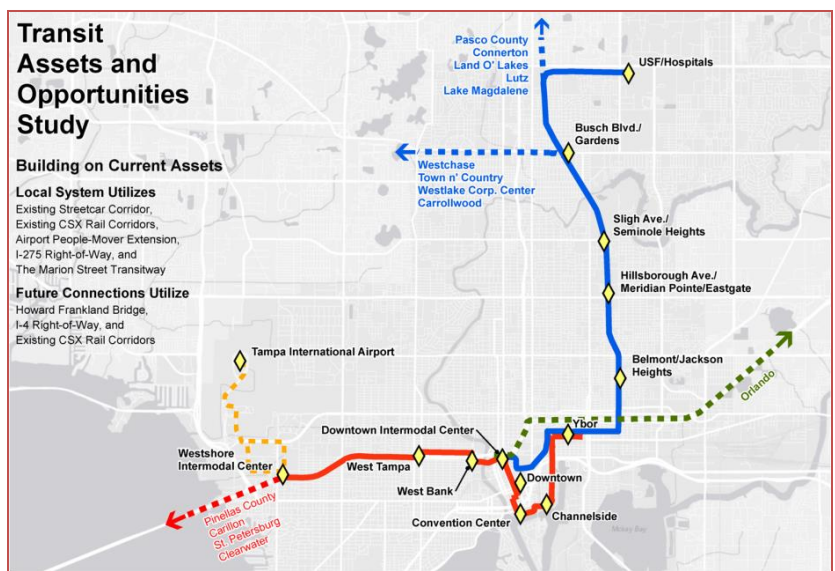


Figure 3-27 Map of Potential Transit KES and Regional Connections

Another proposed project to connect KES areas, the Westshore Multimodal Center, is a FDOT project coordinated with the Hillsborough MPO and HART, to construct a multimodal center on the north side of I-275 between Trask Street and Manhattan Avenue. The multimodal center will serve multiple modes of transit and provided a location to connect from one mode of transit to another. The Westshore Multimodal Center also has the potential to connect to the proposed people mover at Tampa International Airport. **Figure 3-28** is a rendering of the proposed Westshore Multimodal Center.

Figure 3-29 is the *Imagine 2040 Plan* 2040 needs project list. The project list includes a mixture of roadway widening and extensions, interchange modifications, and fixed-guideway transit projects. The list gives an estimate of the total project cost in 2014 dollars; the two main performance measures, delay reduction and the number of jobs in the vicinity of the project; and the key economic space that the project serves.

This project list is financially unconstrained, meaning if money were not an issue, these are the projects that should be built by 2040 to accommodate the projected growth that Hillsborough County is anticipating. The list *is* constrained by the comprehensive plans of the local governments, which identify some roadways which will not be widened regardless of congestion due to severe impacts on neighborhoods, environmental or cultural resources.

Some projects in the list have been studied before, while others are new concepts which require further evaluation. The fixed guideway transit projects listed arise from the recent MPO's *Transit Assets & Opportunities Study*, which builds on several previous studies of rail and bus rapid transit, including the HART Alternatives Analysis of 2010 and the MPO's Post-Referendum Analysis of 2011-2012. The *Transit Assets & Opportunities Study* focused on key central corridors where there is high congestion, high demand, and little available right-of-way, as the right place to start investing in transit. It pointed towards least-cost technologies, such as adding passenger vehicles on existing underutilized freight rail track, and modernizing and extending TECO Streetcar to serve major destinations such as the downtown office core and Westshore business district. Both of these potential investments provide an opportunity for future extensions to serve other major regional destinations.

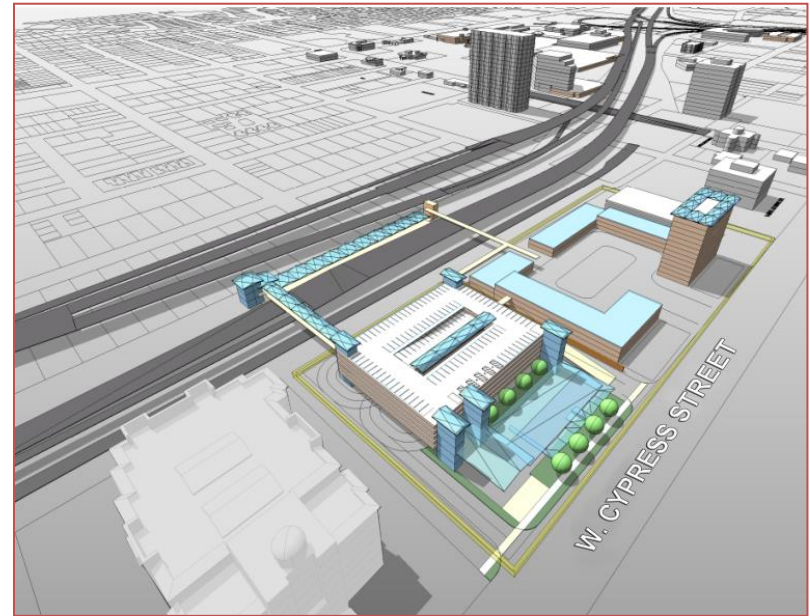


Figure 3-28 *Rendering of Proposed Westshore Multimodal Center*

Figure 3-29: 2040 Needs Assessment for Capacity Projects

Project No.	Facility	From	To	Existing or Committed Lanes	MPO 2040 Needed Lanes	TOTAL PROJECT	Local Govt. Cost Share	Delay Reduction / Centerline Mile	2040 Jobs / Centerline Mile	Imagine 2040 Business District
1023	131ST AVE	NEBRASKA AVE	30TH ST	2U	4D	\$31,940,903		22	3779	USF Area
1024	46TH ST	FLETCHER AVE	SKIPPER RD	2U	4D	\$21,249,674		17	1017	USF Area
1025	78TH ST	MADISON AVE	CAUSEWAY BLVD	2U	4D	\$33,402,905		-14	620	Pt Tampa Bay
1026	ANDERSON RD	HILLSBOROUGH AVE	HOOVER	2U	4D	\$20,493,667		290	2573	Airport North
1051	ANDERSON RD	SLIGH AVE	LINEBAUGH AVE	4D	6D	\$61,306,780		374	1879	Airport North
1027	ARMENIA AVE	SLIGH AVE	BUSCH BLVD	2U	3D	\$13,744,404		120	910	
1052	BEARSS AVE	I-275	BRUCE B DOWNS BLVD	4D	6D	\$60,007,232		380	942	USF Area
1079	BIG BEND RD	US HWY 41	COVINGTON GARDEN DRIVE	4D	6D	\$55,968,000		235	713	Pt Redwing/ Big Bend
1049	BLOOMINGDALE AVE	US 301	BELL SHOALS RD	4D	4D + 1 SUL	\$3,401,694		382	283	Brandon West
1029	BROADWAY AVE (CR 574)	62ND ST	US 301	2U	3D	\$21,059,794		116	938	CSX Area
1055	CR 579	US 92	I-4	4D	6D	\$17,469,138		124	799	Sabal Park Area
1056	CR 579	I-4	SLIGH AVE	2U	6D	\$5,322,851		26	623	Sabal Park Area
9996	DAVIS RD	HARNEY RD	MAISLIN DR	0	2U	\$3,000,000				NetPark Area
Rail1	FIXED GUIDEWAY TRANSIT	USF-DTN TRANSIT CORR.	PINELLAS COUNTY LINE	0	DMU on existing track	\$341,492,500	>25%			Airport North
Rail1.1	FIXED GUIDEWAY TRANSIT - OPERATIONS FOR 10 YEARS	USF-DTN TRANSIT CORR.	PINELLAS COUNTY LINE	0	DMU on existing track	\$68,925,650	>75%			Airport North
Rail2	FIXED GUIDEWAY TRANSIT	USF-DTN TRANSIT CORR.	PASCO COUNTY	0	DMU on existing track	\$175,087,500	>25%			USF Area
Rail2.1	FIXED GUIDEWAY TRANSIT - OPERATIONS FOR 10 YEARS	USF-DTN TRANSIT CORR.	PASCO COUNTY	0	DMU on existing track	\$31,288,620	>75%			USF Area
95	FIXED GUIDEWAY TRANSIT	YBOR CITY	DOWNTOWN	Streetcar	Capital Maint. / Modernization	\$39,013,278				Greater Downtown
1030	FALKENBURG RD	BRYAN RD	HILLSBOROUGH AVE	2U	4D	\$19,362,598		-4	2394	Sabal Park Area
1057	FLETCHER AVE	30TH ST	MORRIS BRIDGE RD	4D	6D	\$133,177,618		1169	2131	New Tampa & Hidden River
1058	HILLSBOROUGH AVE	50TH ST	ORIENT RD	4D	6D	\$57,179,338		736	1802	NetPark Area

Figure 3-29: 2040 Needs Assessment for Capacity Projects

Project No.	Facility	From	To	Existing or Committed Lanes	MPO 2040 Needed Lanes	TOTAL PROJECT	Local Govt. Cost Share	Delay Reduction / Centerline Mile	2040 Jobs / Centerline Mile	Imagine 2040 Business District
INT4	I-75	at BIG BEND ROAD		0	Interchange	\$41,500,000				Interstate Improvements
1019	INTERBAY	DALE MABRY HWY	MANHATTAN	2U	3D	\$8,546,945		39	586	MacDill AFB Area
1013	LAKEWOOD	SR 60	SR 574	2U	3D	\$23,793,607		58	289	Sabal Park Area
1059	LINEBAUGH AVE	SHELDON RD	VETERANS EXWY	4D	6D	\$49,841,161		222	377	Airport North
1031	LIVINGSTON AVE	BEARSS RD	VANDERVORT RD	2U	4D	\$41,089,091		243	303	New Tampa & Hidden River
1034	NEW E/W ROAD (NEW TAMPA)	I-275	COMMERCE PARK BLVD	0	4D	\$103,138,992		569	55	New Tampa & Hidden River
1035	NEW TAMP BLVD	COMMERCE PARK BLVD	BRUCE B DOWNS BLVD	2U	4D	\$ 23,915,301		12	166	New Tampa & Hidden River
1014	OCCIDENT ST EXTENSION	CYPRESS ST.	WESTSHORE PLAZA	0	2U	\$4,846,783		261	18647	Westshore
1036	PARSONS AVE/ JOHN MOORE RD	BLOOMINGDALE AVE	SR60/BRANDON BLVD	2U	4D	\$63,250,919		16	723	Brandon West
1037	PROGRESS BLVD	FALKENBURG RD	US HWY 301	2U	4D	\$24,259,271		-51	169	Brandon West
Rail3	FIXED GUIDEWAY TRANSIT	DOWNTOWN	USF	0	DMU on existing track	\$296,700,000	>25%			Greater Downtown
Rail3.1	FIXED GUIDEWAY TRANSIT OPERATIONS FOR 10 YEARS	DOWNTOWN	USF	0	DMU on existing track	\$54,000,000	>75%			Greater Downtown
Rail4	FIXED GUIDEWAY TRANSIT	DOWNTOWN	WESTSHORE	0	Modern Tram	\$455,975,000	>25%			Greater Downtown
Rail4.1	FIXED GUIDEWAY TRANSIT - OPERATIONS FOR 10 YEARS	DOWNTOWN	WESTSHORE	0	Modern Tram	\$57,000,000	>75%			Greater Downtown
Rail5	FIXED GUIDEWAY TRANSIT	WESTSHORE	TAMPA INTERNATIONAL AIRPORT	0	Automated People Mover	\$206,508,862	>25%			Greater Downtown
Rail5.1	FIXED GUIDEWAY TRANSIT OPERATIONS FOR 10 YEARS	WESTSHORE	TAMPA INTERNATIONAL AIRPORT	0	Automated People Mover	\$38,000,000	>75%			Greater Downtown
1038	SAM ALLEN RD	PARK RD	WILDER RD	2U	4D	\$9,239,668		189	240	Plant City East
1040	SAM ALLEN RD EXTENSION	WILDER RD	COUNTY LINE RD	0	4D	\$55,543,005		20	101	Plant City East
1041	SKIPPER RD	BRUCE B DOWNS BLVD	46TH ST	2U	4D	\$11,384,888		47	1476	New Tampa & Hidden River

Figure 3-29: 2040 Needs Assessment for Capacity Projects

Project No.	Facility	From	To	Existing or Committed Lanes	MPO 2040 Needed Lanes	TOTAL PROJECT	Local Govt. Cost Share	Delay Reduction / Centerline Mile	2040 Jobs / Centerline Mile	Imagine 2040 Business District
1042	SR 674	US 301	CR 579/SAFFOLD RD	2U	4D	\$49,192,157		115	57	Sun City Center
1015	TRAPNELL RD EXTENSION	NESMITH RD	COUNTY LINE RD	0	2U	\$4,741,351		94	101	Plant City East
1022	TRASK ST	CYPRESS ST.	BOY SCOUT BLVD	2U	3D	\$4,774,371		341	14059	Westshore
1016	TRASK ST EXTENSION	CYPRESS ST.	GRAY ST	0	2U	\$2,723,967		192	16368	Westshore
1043	US HWY 92	US HWY 301	CR 579	2U	4D	\$51,213,498		57	1760	Sabal Park Area
1044	US HWY 92	CR 579	THONOTOSASSA RD	2U	4D	\$203,419,551		150	290	Sabal Park Area
1045	US HWY 92	REYNOLDS ST	COUNTY LINE RD	2U	4D	\$61,918,234		119	568	Plant City East
MMC1	FIXED GUIDEWAY CENTER WESTSHORE	CYPRESS ST.	TRASK ST	0	Transit Center	\$35,040,500				Westshore
1046	WILLIAMS RD	BROADWAY AVE	SLIGH AVE	2U	4D	\$48,673,711		28	1322	Sabal Park Area
1047	WOODBERRY RD	FALKENBURG RD	GRAND REGENCY BLVD	2U	4D	\$12,339,404		156	1751	Brandon West
1048	WOODBERRY RD	GRAND REGENCY BLVD	LAKEWOOD DR	2D	4D	\$24,851,874		58	511	Brandon West
1091	EVERHART RD EXTENSION	FALKENBURG RD	US301	0	3D	\$3,436,524		10	396	Brandon West
1100	US HWY 41	CAUSEWAY BLVD	CSX INTL YARD		New Interchange	\$96,750,000		3336	Interchange N/A	Brandon West
1099	MEMORIAL HWY	INDEPENDENCE PKWY	HILLSBOROUGH AVE		6D	\$65,241,955		1470	60	Airport North
Water	WATER TRANSIT	PORT REDWING	MACDILL AFB		Commuter Ferry	\$16,934,000				MacDill AFB Area
9999	62ND STREET	COLUMBUS DR	CSX INTL YARD	2U	3D	\$4,889,776				CSX Area

Strategic Intermodal System

FDOT District 7 has a long range planning list of projects that have a horizon year for the Strategic Intermodal System (SIS). FDOT classifies SIS facilities as those that have statewide and interregional significance. SIS facilities contain all modes of transportation for moving people and goods including linking transfers between modes and facilities. **Figure 3-30** shows the future express lanes and intermodal system planned for Hillsborough and Pinellas counties. SIS projects include replacement of the northbound span of the Howard Frankland Bridge, modification of the I-275 & SR 60 interchange near Tampa International Airport, and express lanes on Tampa Bay area interstates. **Figure 3-31** is a table detailing all SIS projects projected to be needed through 2040.

FDOT conducted an express lanes study on interstates in the three core Tampa Bay counties (Hillsborough, Pasco, and Pinellas). Express lanes are proposed to be constructed along I-275 from the Gateway Area in Pinellas County across the Howard Frankland Bridge and onto Wesley Chapel in Pasco County. In the long term, express lanes are proposed to be constructed along I-4 from I-275 to the Polk County line and along I-75 from Wesley Chapel in Pasco County to SR 674 in southern Hillsborough County.

The express lanes are anticipated to be constructed separate from the general purpose lanes and accommodate longer distance trips and express bus service. Express bus routes are proposed to connect Pinellas County, Westshore/Tampa

International Airport, Downtown Tampa, and the USF Area. These express lanes will be tolled with variable pricing dependent on how congested the corridor’s general purpose lanes are.



Figure 3-30 Tampa Bay Express Lanes and Intermodal System



Figure 3-31: Financially Unconstrained SIS 2040 Needs Project List

Project No.	Facility	From	To	Existing or Committed Lanes	TOTAL PROJECT* (\$ millions)	MPO 2040 Needed Lanes
1002	I-275	N OF HOWARD FRANKLAND	S OF LOIS AVE	6F	\$261.47	SR 60 INTERCHANGE
1003	I-275	S OF LOIS AVE	HILLSBOROUGH RIVER BRIDGE	6F	\$140.90	2 Express Toll Lanes
1005	I-275 @ I-4	ROME AVE / I-275	MLK / SELMON CONNECTOR	8F	\$2,182.12	DOWNTONW INTERCHANGE
1008	I-4	E OF 50TH STREET	POLK PARKWAY	6F	\$2,709.87	4 Express Toll Lanes
1008	I-4	I-4 / SELMON CONNECTOR	E OF MANGO RD	6F	\$111.31	2 Express Toll Lanes
	I-4	W OF ORIENT RD	WEST OF I-75	6F	\$95.49	Operational Improvements
1009	I-75	SR 674	S OF US 301	6F	\$438.94	4 Express Toll Lanes
1010	I-75	S OF US 301	N OF FLECTHER AVE	6F/8F	\$1,934.16	4 Express Toll Lanes
1011	I-75	N OF FLETCHER AVE	N OF I-75/I-275 APEX	6F	\$309.39	4 Express Toll Lanes
1093	I-275	SR 60 INTERCHANGE			\$35.67	SR 60 INTERCHANGE
1093	I-275 NB EXPRESS	N OF HOWARD FRANKALND	S OF TRASK ST		\$113.88	SR 60 INTERCHANGE
1093	I-275 NB FLYOVER	SR 60 EB	I-275 NB		\$53.25	SR 60 INTERCHANGE
1093	I-275 SB	N OF REO ST	S OF LOIS AVE		\$140.75	SR 60 INTERCHANGE
1093	SR 60	N OF INDEPENDENCE	I-275 AT WESTSHORE		\$193.29	SR 60 INTERCHANGE
1006	I-275	JEFFERSON / ORANGE ST	N OF BEARSS AVE	4F/6F	\$263.28	2 Express Toll Lanes
Interchange	I-75	S OF CSX/BROADWAY	EB/WB I-4		\$61.05	INTERCHANGE
Interchange	I-75	US 301	I-4		\$93.46	INTERCHANGE
Interchange	I-75 & SR 60	SR60 @ SLIP RAMP	TO N OF SR 60 AT CSX		\$21.47	INTERCHANGE
Interchange	I-75 SB OFF RAMP	S OF BYPASS CANAL	EB/WB I-4	6F	\$16.33	INTERCHANGE
Interchange	I-4	TAMPA BYPASS CANAL	EAST OF I-75		\$16.66	INTERCHANGE
	I-75	SR 60	BRUCE B DOWNS BLVD	6F	\$179.27	2 Express Toll Lanes
	I-75	S OF SELMON EXPRESSWAY	N OF SR 60	6F	\$12.78	Operational Improvements
Interchange	I-75	WB SR 60 ENTRANCE RAMP	S OFCSX RR		\$23.51	INTERCHANGE
Interchange	I-75	I-75	EAST OF WILLIAMS RD		\$3.21	INTERCHANGE
1089	SUNCOAST PARKWAY	VETERANS EXPWY	PASCO COUNTY	4F	\$36.,73	6F
	SR 60	VALRICO RD	SR 39	4D	\$219.05	6D
1001	US 92	GANDY BRIDGE	DALE MABRY HWY	4D	\$125.30	4D + 2F

*Costs for SIS projects are provided by FDOT in future year of expenditure dollars

Development Based Needs

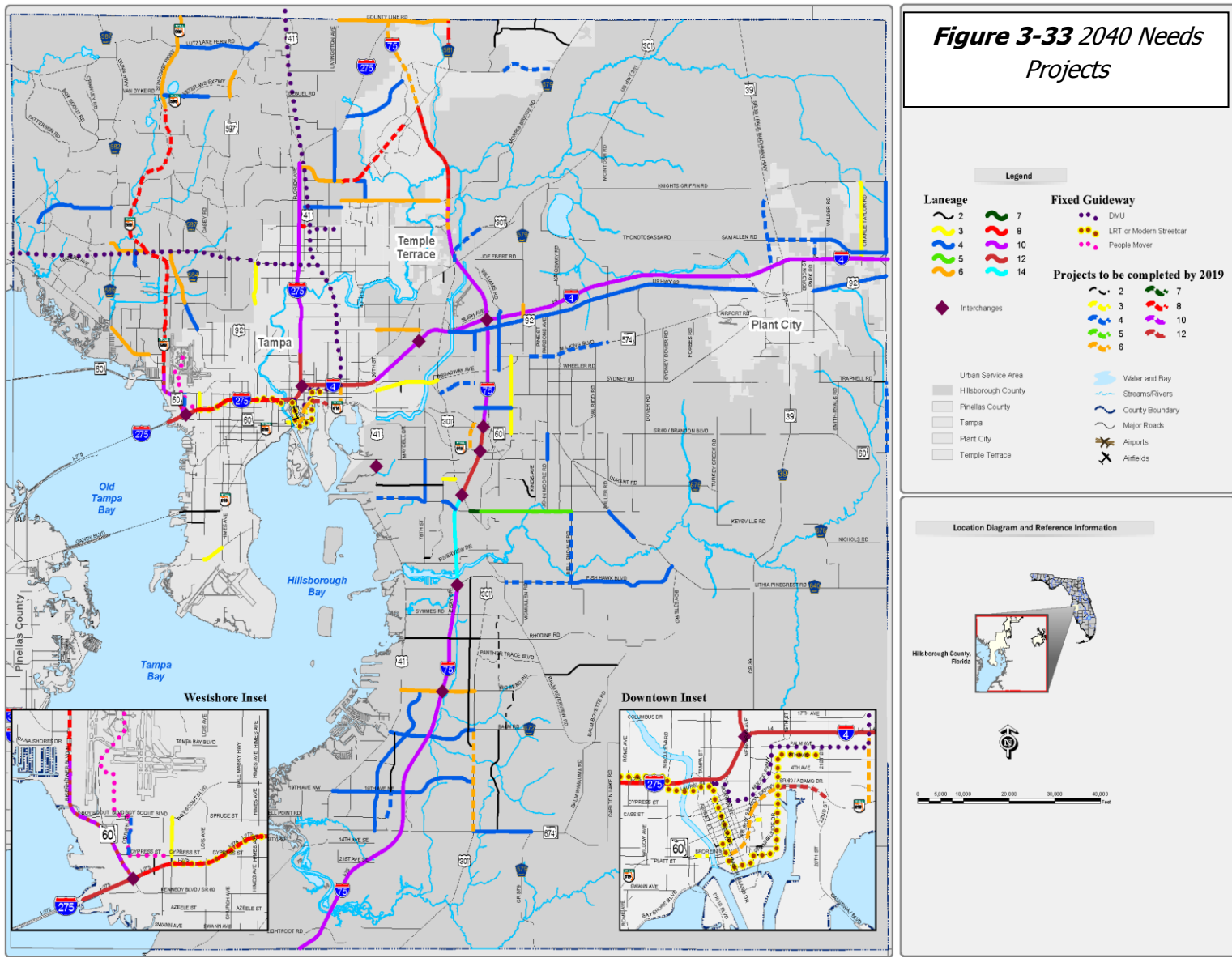
Traffic congestion is not limited to Hillsborough County's key economic spaces. Recent and upcoming suburban expansion places new burdens on roadways. Development-based needs are road capacity projects that will be constructed to mitigate the traffic impacts of those new and/or expanded developments.

Some projects on the list could be funded as part of development agreements, proportionate share mitigation, or using impact or mobility fees. Changes in Florida's growth management law have led to renegotiations of development agreements, making the long-term funding outlook less clear. There are 28 development based projects identified in the *Imagine 2040 Plan* as shown in **Figure 3-32**.



Figure 3-32: Development Based Needs Projects

Project No.	Facility	From	To	Project Description
9995	19 th Avenue NE	US 41	US 301	Widen to 4 Lanes Divided
1095	24 th Street	SR 674	19 th Avenue NE	Widen to 4 Lanes Divided
1096	24 th Street	19 th Avenue NE	Big Bend Road	Widen to 4 Lanes Divided
1097	30 th Street	19 th Avenue	Apollo Beach Boulevard	New 2 Lane Divided
1094	Apollo Beach Boulevard	US 41	US 301	New 4 Lane Divided
1097	Big Bend Road	US Hwy 41	US Hwy 301	Widen to 6 Lanes Divided
1077	Big Bend Road Ext.	Balm Riverview Road	Boyette Road	New 2 Lane
1090	Camden Field Parkway	US Hwy 41	Falkenburg Road	New 2 Lane
9997	Charlie Taylor Road	I-4	Knights Griffin Road	Add center turn lane
1068	Citrus Park Drive	Linebaugh Ave	Sheldon Rd	New 4 Lane Divided
1088	County Line Road	Swindell Road	Knights Griffin Road	Widen to 4 Lanes Divided
3010	County Line Road	Livingston Avenue	Bruce B. Downs Blvd	Widen to 4 lanes Divided (Pasco County)
1081	Cumberland Street	Ceaser Street	Meridian Street	New 2 Lane Divided
1101	Dale Mabry Hwy	Van Dyke Road	Cheval Boulevard	Widen to 6 Lanes Divided
1074	Falkenburg Road Ext.	78 th Street	Dead End	New 2 Lane
1076	Fish Hawk Boulevard	Bell Shoals Road	Lithia Pinecrest Road	Widen to 4 Lanes Divided
1085	K-Bar Parkway	Kinnan Road	Morris Bridge Road	New 2 Lane
1086	Kinnan Street	Dead End	Pasco County*	New 2 Lane Divided
1075	Lithia Pinecrest Road	Bloomington Avenue	Adelaide Drive	Widen to 4 Lanes Divided
1066	Lutz Lake Fern Road	Suncoast Parkway	Dale Mabry Hwy	Widen to 4 Lanes Divided
1073	Madison Avenue	US 41	78 th Street	Widen to 4 Lanes Divided
1087	Meadow Point Extension	K-Bar Parkway	Beardsley Drive	New 2 Lane
9998	Providence Lake Boulevard	English Bluff Court	S. of Summer Breeze Drive	New 2 Lane
1103	Rhodine Road	US 41	US 401	New 2 Lane
1078	Simmons Loop Road	US 301	Gibson Road	New 2 Lane
1080	Summerfield Boulevard/West Lake Drive	SR 674	Balm Road	New 2 Lane
9993	Tyson Street	Westshore Boulevard	Manhattan Boulevard	New 2 Lane
1067	Van Dyke Road	Suncoast N. Ramp	Dale Mabry Hwy	Widen to 4 Lanes Divided
8000	Wilsky Boulevard	Hanley Road	Linebaugh Avenue	Widen to 4 Lanes Divided



Longer Range Vision/Illustrative Projects

Highway Projects in Longer Range Vision

Longer range highway and roadway needs that are beyond 2040 have been identified in Figure 3-34. These improvement concepts have been identified in previous plans and studies, but did not meet the threshold for severe congestion by 2040. Examples include the widening of US 301 north of Fowler Avenue from two to four lanes, widening of SR 60 east of Valrico Road from four lanes to six lanes, and the widening of US 41 from Madison Avenue to Ruskin from four lanes to six lanes.

Transit Projects in Longer Range Vision

Longer range transit needs that are in addition to the 2040 transit needs have also been identified in Figure 3-35. These improvement concepts have been identified in previous plans and studies, such as the 2035 Long Range Transportation Plan and the TBARTA Master Plan. They include a range of transit modes such as bus rapid transit, express bus routes, regional bus routes, rail, water transit, high speed rail, and streetcar system.

Conclusion

Chapter 2 has shown that Hillsborough County is projected to grow by nearly 600,000 people by 2040. In order to accommodate this anticipated population growth, the Hillsborough MPO must identify the transportation needs for the horizon year of 2040. Chapter 3 of *Imagine 2040*

identifies these transportation needs and what kind of projects can be funded depending on the investment level that the residents of Hillsborough County are willing to fund. The next step is to identify funding sources and estimate the revenues from these funding sources in order to pay for the projects and at which investment level.

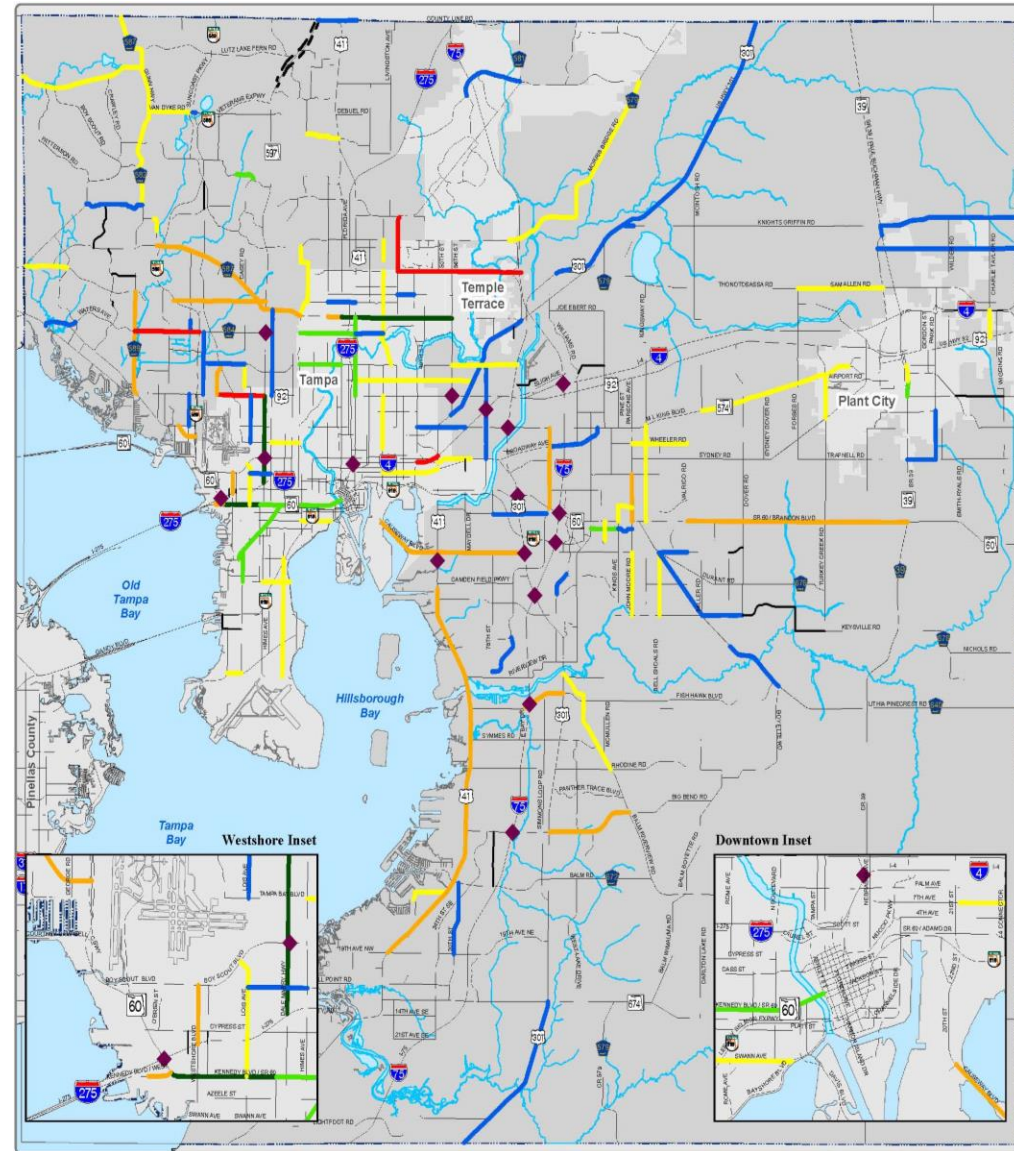
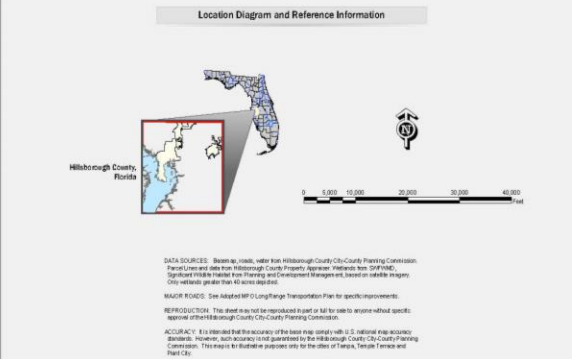
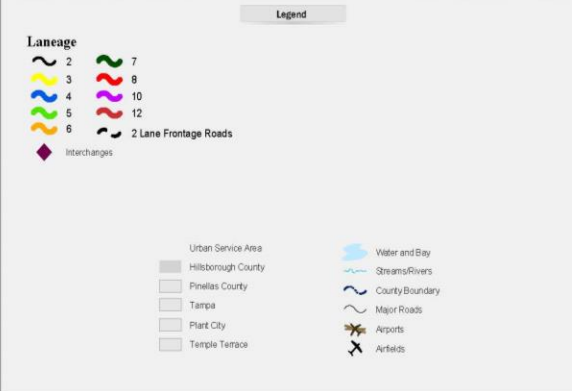


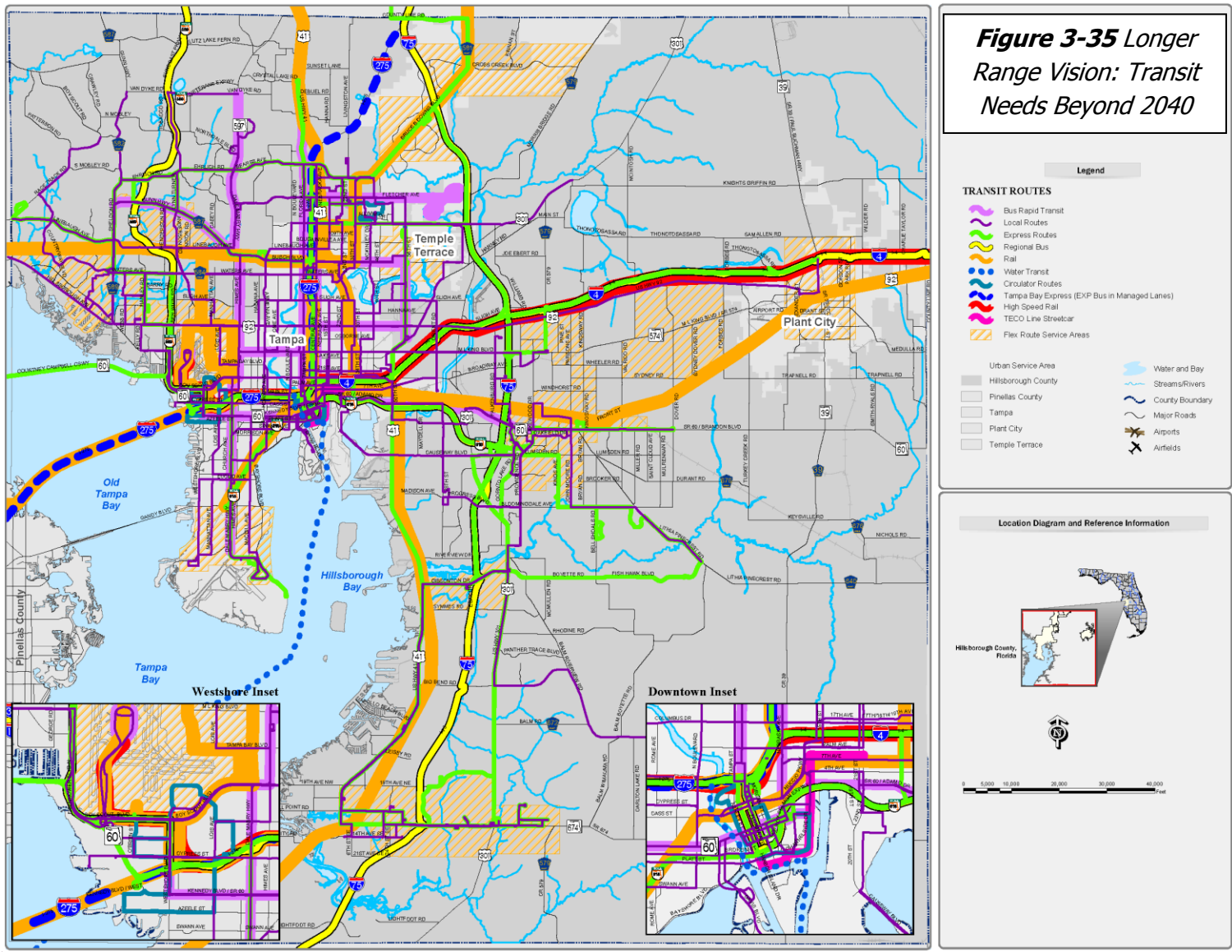
Figure 3-34 Longer Range Vision:
Highway Needs Beyond 2040



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Date: 4/1/2015
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For more information about our organization visit our website: www.thepanningcommission.org



Part 3

Unincorporated Hillsborough County - Background Data and Analysis

Public Facilities

Potable Water

The 22 mgd potable water savings since 1989 is estimated to be the combined effect of outdoor water restrictions, reclaimed water reuse, and other conservation measures. Other conservation measures include low-volume toilet rebate program, rain sensor installation, low flow fixture retrofitting, etc.

The LOS for potable water in the Hillsborough County Comprehensive Plan is based on an adjusted gross residential usage expressed as gallons per capita per day (GPCD) on an annual average. The method of calculating per capita demand is the Southwest Florida Water Management District (SWFWMD) "adjusted gross" gallons per capita per day formulated in permit rulemaking in the Water Use Caution Areas.

The adopted LOS is 124 GPCD. This LOS is based on historical usage and the County's commitment to manage the water resource. A Plan goal was to reduce the actual demand to 110 GPCD through an aggressive water conservation program to more efficiently use the limited resource. The total countywide capacity of 62 MGD translates into an adjusted

gross per capita LOS measure of 128 GPCD. By service area, the existing capacity LOS is 128 GPCD in the Northwest and 121 GPCD in the South-Central. Thus, the available capacity exceeds the adopted LOS of 124 GPCD.

Hillsborough County projects its potable water demands based on projected served population and demand per capita within the USA. The total population in each County service area is estimated by aggregating Traffic Analysis Zone population projections provided by the Planning Commission. The initial served population is estimated from Water Department billing system residential unit count data and persons per household factors from The Planning Commission. Future served population is calculated by added future population growth within the USA to the initial served population estimate for each planning year. Gross demand per capita is then calculated based on the billed consumption, treatment plant water production and estimated served population. Future gross per capita is estimated based on anticipated potable water conservation savings, including the effect of reclaimed water system expansion.

Tampa Bay Water has developed a demand forecasting system to estimate the water demands for the Tampa Bay region. Member Governments demands are further disaggregated into water demand planning areas that correspond with water service areas within each Member Government including the South-Central and Northwest Hillsborough Service Areas. This demand forecasting system



will be used as the basis for implementing future water supplies to best meet the needs of the region

Hillsborough County Potable Water Supply Demand 2015-2025

Average Day Demand Forecasting (mgd)		
Year	Northwest Service Area	South Central Service Area
2015	22.9	41.6
2020	24.7	46.4
2025	26.4	51.1

Source: Tampa Bay Water Long-Term Water Supply Plan 2008, Hillsborough County Water Resource Service, 2015.

The County Capital Improvement Projects identified in the Water Facilities Work Plan are those required to maintain the adopted County Level of Service (LOS) for delivery of water supply within the County distribution system. This LOS includes meeting annual average daily demand of 300 gallons per day (gpd) per single-family residential unit and 150 gpd per multi-family unit while maintaining distribution system pressures at or above 20 pounds per square inch (psi) for all demand conditions, including fire flow demands (750 gallons per minute (gpm) for residential and 1000 gpm for commercial) at peak hour on a maximum day. The water transmission mains and treatment, storage and pumping improvements insure that this LOS is maintained for existing and future water demands through the 10-year planning horizon and beyond based on hydraulic performance computer modeling. Included in the projects is a new water treatment facility to deliver water supply from a new Point of Connection with the TBW regional water supply system in the South-Central Water Service Area. The reclaimed water projects are those required to deliver the alternative supply to offset potable water use.

WasteWater

The purpose of the Wastewater Section is to provide reliable, efficient, and environmentally safe collection, transmission, treatment, and disposal of all wastewater generated throughout the unincorporated Hillsborough County wastewater service area.

The Wastewater Section focuses on the facilities needed by existing residents and the anticipated needs of a growing population in unincorporated Hillsborough County. This background section contains an inventory of the unincorporated County’s wastewater facilities and an analysis of current and future demands from 2015 through 2025.

Hillsborough County Wastewater 2015 Treatment Plant And Conveyance System Capacities

Service Areas	Treatment Plant:			Conveyance System		
	Permitted Capacity (MGD)	Existing Flow (MGD)	Additional Capacity (MGD)	Maximum Capacity (MGD)	Existing Flow (MGD)	Additional Capacity (MGD)
NORTHWEST						
Dale Mabry	6.00	4.10	1.90	27.90	4.10	23.80
NWRWRF	5.00	4.33	0.67	29.26	4.33	24.93
River Oaks	10.00	7.81	2.19	35.19	7.81	27.38
Van Dyke	1.70	0.97	0.73	9.00	0.97	8.03
Subtotal	22.70	17.21	5.49	101.35	17.21	84.14
CENTRAL						
Falkenburg	9.00	8.25	0.75	13.05	8.25	4.80
Valrico	6.00	4.63	1.37	20.28	4.63	15.65
Subtotal	15.00	12.88	2.12	33.33	12.88	20.45
SOUTH						
South County	4.50	3.48	1.02	20.28	3.48	16.80
Subtotal	4.50	3.48	1.02	20.28	3.48	16.80
UNINCORPORATED HILLSBOROUGH COUNTY						



Total	42.20	33.57	8.63	154.96	33.57	121.39
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Source: Hillsborough County Public Works Department, 2015

Hillsborough County 2015 – 2025 Northwest Service Area Projected Wastewater Capacities And Demand (Mgd)

NORTHWEST			
	2015	2020	2025
DALE MABRY			
Capacity:	6.00	6.00	6.00
Demand:	4.10	6.00	6.00
Difference:	1.90	0.00	0.00
NWR WRF			
Capacity:	5.0	10.00	10.00
Demand:	8.31	7.40	9.10
Difference:	1.69	2.60	0.90
RIVER OAKS			
Capacity:	10.00	10.00	10.00
Demand:	8.31	8.60	9.30
Difference:	1.69	1.40	0.60
VAN DYKE			
Capacity:	1.70	Off-line	Off-line
Demand:	0.97		
Difference:	0.73		
TOTAL CAPACITY:	2.700	30.00	30.00
TOTAL DEMAND:	17.21	22.00	24.40
TOTAL DIFFERENCE:	5.49	8.00	5.60

Source: Hillsborough County Public Works Department, 2015

Hillsborough County: 2015 – 2025 Central Service Area Projected Wastewater Capacities And Demand(Mgd)

CENTRAL			
	2015	2020	2025

FALKENBURG			
Capacity:	9.00	12.00	15.00
Demand:	8.25	10.90	13.80
Difference:	0.75	1.10	1.20
VALRICO			
Capacity:	6.00	12.00	12.00
Demand:	4.63	9.60	11.80
Difference:	1.37	2.40	0.20
TOTAL CAPACITY: ¹	17.48	26.48	29.48
TOTAL DEMAND:	12.88	20.50	25.60
TOTAL DIFFERENCE:	4.60	5.98	3.88

Source: Hillsborough County Public Works Department, 2015

Hillsborough County: 2015 – 2025 South Service Area Projected Wastewater Capacities And Demand(Mgd)

SOUTH			
	2015	2020	2025
SOUTH COUNTY			
Capacity:	4.50	4.50	4.50
Demand:	3.48	4.23	4.50
Difference:	1.02	0.27	0.00
TOTAL CAPACITY:	4.50	4.50	4.50
TOTAL DEMAND:	3.48	4.23	4.50
TOTAL DIFFERENCE:	1.02	0.27	0.00

Source: Hillsborough County Public Works Department, 2015

Solid Waste

SOLID WASTE MANAGEMENT SYSTEM OVERVIEW



The Solid Waste Division focuses on the facilities and services needed by existing residents and businesses and the anticipated needs of a growing population in unincorporated Hillsborough County (County). The Solid Waste Division maintains a fully integrated solid waste system and actively monitors current and projected future demands for solid waste services in the County.

The County owns and/or operates several major solid waste facilities for the collection, transfer, processing, and disposal of solid waste. The cornerstone of the County’s Solid Waste System is the 1,800 ton per day Hillsborough County Resource Recovery Facility, operated under a 20 year operations and management contract with Covanta Hillsborough, Inc.

The County is currently meeting and is projected to meet its Level of Service Requirements through the required time horizon with its current Class I Landfill facilities. The County’s new Class I landfill facility will further expand its ability to maintain its Level of Service beyond the time frame of 2025.

COLLECTION SERVICES

The County maintains franchise agreements with private haulers for residential and commercial solid waste collection within its service areas. Approximately 260,000 single family homes and condominium units in the County are currently served through the collection franchise agreements. Collection services are mandatory for residential properties. Property owners in the County’s service areas are required by ordinance to pay annual disposal and collection service charges as part

of their property tax statement. These charges entitle them to receive curbside collection services consisting of two garbage, one recyclable, and one yard waste collection per week and dispose of limited household waste and bulk items without an additional charge at County solid waste facilities if proper photo ID and a copy of their annual tax assessment are presented.

SOLID WASTE FACILITIES

There are several major solid waste facilities within Hillsborough County for the collection, transfer, processing, and disposal of solid waste. Table 1 below is a list of capital facilities owned by the County for the collection and disposal of solid waste.



SITES	LOCATION
Hillsborough County/Resource Recovery Facility	350 Falkenburg Road
South County Transfer Station	13000 US Hwy 41 South
Northwest County Transfer Station	8001 W. Linebaugh Ave.
Southeast County Landfill	15960 C.R. 672 in Picnic
Falkenburg Yard Waste Facility	350 Falkenburg Road
South County Yard Waste Facility	13000 US Hwy 41 South
Northwest Yard Waste Facility	8001 W. Linebaugh Ave.
Alderman Ford Community Collection Center	9402 SR 39 Lithia
Hillsborough Heights Community Collection Center	6209 CR579 Seffner, 33584
Northwest Community Collection Center	8001 W. Linebaugh Ave.
South County Community Collection Center	13000 U.S Hwy 41 South
Wimauma Community Collection Center	West Lake Drive
Sheldon Road Household Chemical Collection Center	9805 Sheldon Road
East County Household Chemical Collection Center	6209 CR 579 Seffner, 33584
South County Household Chemical Collection Center	13000 US Hwy 41 South

Source Hillsborough County Solid Waste Management Department, 2015

CURRENT AND PROJECTED SOLID WASTE GENERATION

The most widely accepted method of estimating current and projected solid waste quantities is to establish per capita waste generation factors. Projection of future solid waste quantities are then based on these per capita waste generation factors in conjunction with population, and other significant growth indicators.

The amount of solid waste generated within unincorporated Hillsborough County saw an overall decline beginning in 2008 due to a variety of macro-economic factors. The amount of waste generated began to increase again in 2011 and has continued to increase steadily over last four years. Based on current population, the average unincorporated County resident currently generates about 4.87 pounds of solid waste per day and is projected to generate 5.26 pounds of solid waste per day by 2025.

YEAR	TONS PER YEAR	POUNDS PER CAPITA
2015	850,500	4.87
2020	987,788	5.26
2025	1,064,581	5.26

Source: Hillsborough County Solid Waste Management Department, 2015



HAZARDOUS WASTE MANAGEMENT SYSTEMS

Hazardous waste is generated within Hillsborough County through many different sources. Some manufacturers create large quantities of hazardous waste; these businesses are very carefully monitored by the U.S. Environmental Protection Agency (EPA) and the Hillsborough County Florida Department of Environmental Protection (FDEP) to ensure their waste is properly handled and disposed. Many other businesses that are vital to our everyday lives also create small amounts of hazardous waste.

These businesses include dry cleaners, photo labs, automobile service stations and body shops, hospitals, clinics, funeral homes, dental offices and many other businesses. Their compliance with hazardous waste regulations is monitored by the FDEP and the Environmental Protection Commission (EPC), and all matters relating to biomedical waste are monitored by Health and Rehabilitative Services (HRS) and FDEP.

Residents also generate household hazardous waste in the form of waste paints, pesticides and herbicides, cleaning solvents, and other household chemicals. These wastes are exempt from the Resource Conservation and Recovery Act (RCRA) requirements and may be disposed of in a Class I landfill.

Coastal Management

The Coastal Management Element was prepared pursuant to the mandate of Chapter 163, Florida Statutes, as amended by

the Local Government Comprehensive Planning and Land Development Regulation Act of 1985. This Act requires the development of a comprehensive plan by each local government in the State of Florida.

The purpose of this Coastal Management Element is to provide a plan and policy direction for development activities in the coastal planning area. This plan and policy direction includes restrictions on development activities where such activities would damage or destroy coastal resources, protection of human life, and limitations on public expenditures in areas subject to destruction by natural disaster. The objectives of this element are to ensure that development in the coastal area does not prohibit public accessibility to the coast, that human life is not endangered, that adequate public hurricane shelter space is available to coastal inhabitants, that levels of service on coastal evacuation routes do not deteriorate, such that safe and timely evacuation is adversely impacted, that water-dependent and water-related land uses are given priority, that public expenditures do not encourage growth in coastal high hazard areas, and that public decisions will include consideration of coastal hazards in each land use and public infrastructure decision-making process.

EXISTING LAND USE IN THE COASTAL PLANNING AREA

The primary land use issue within Hillsborough County's coastal planning area is balancing public access demand with the demands of water dependent and water related uses. Historically, the coastal area included a mixture of residential, commercial and industrial land uses. This mixture of land uses has developed over time into a definable-pattern in which development land uses must fit. Also, the remaining natural shoreline system must be preserved or renourished so that future generations can study and understand this system and benefit from the recreational and aesthetic enjoyment this complex system provides.

Existing Land Use

Existing land uses within the coastal planning area include: residential, commercial, industrial, public facilities, natural, agricultural, vacant and mining.

Residential: Primary concentrations of residential uses occurs in the Town and County, generally described as the land mass south of Gunn Highway, south to Tampa Bay, Palm River/Clair Mel located south of the Palm River and west of I-275, Riverview/Gibsonton located along the Alafia River, and the Ruskin/Wimauma area in the very southern portion of the county.

Many of the areas are often either on low, floodprone uplands, or on land made as the result of dredge and fill operations. Concentrations of this type of development are especially

prevalent in the areas of Town and County, Clair Mel City, Apollo Beach, and Bahia Beach. Problems that are common to these areas are periodic flooding, cumulative adverse impacts to wetlands, soil erosion, non-functioning septic systems, and reduced public access to the shoreline.

Although additional development is anticipated, areawide planning process requirements will mitigate the impacts to public facilities and concentrate growth in defined limits.

Commercial: Commercial development in the unincorporated County's coastal planning area is not extensive. Most commercial uses are neighborhood in scale, and do not serve as an attraction for future development in the coastal zone. The Hillsborough Avenue/Memorial Highway area is experiencing extensive commercial development activity, primarily because of the continued residential development in Town n' Country and the area's proximity to Pinellas County. Commerce has not served as an attraction to development; rather, it has followed the demand created in that area by residential development.

Community Facilities: General uses include facilities such as electrical power generating and transmission facilities, wastewater treatment and disposal facilities, governmental complexes, schools, churches, recreation and open space lands, streets and rights-of-way. In terms of acreage, the largest single land user within this category are electrical generating and transmission facilities followed by recreation and open space lands both of which are primarily water dependent land uses. Recreational and open space uses

include both passive pursuit of nature and active forms of recreation, such as fishing and boating.

Agricultural: Agricultural and vacant lands occupy a significant portion of the County's coastal planning area, but urban growth is steadily displacing these land uses forcing agricultural activities to move to more inland parts of the County.

Industrial: Much of the County's heavy industrial development is located in the coastal planning area, primarily due to the maritime history of the Hillsborough County, and its subsequent development in port-related activities. The balance of the industrial uses take the form of light industrial and warehouse and distribution uses and are generally located inland from the waters of Tampa Bay. Port Tampa Bay's historic evolution is detailed within the City of Tampa's Coastal Management Element; however, the Port's activities have spread from the inaugural Port Tampa area, on the southwest shore of the Interbay peninsula in Tampa, along the east shore of Hillsborough Bay. Heavy industrial land use designations on the land use map trace the Port's development.

Natural Areas: Natural areas are more particularly defined as water, woodlands and wetlands which possess significant environmentally sensitive habitat. These natural areas provide vital shoreline habitat and protect already developed areas from storm surge. It is anticipated that future development in natural areas will generally occur on the vacant parcels in urban areas as opposed to the displacement of woodlands and

wetlands which is consistent with the County's continuing policy to achieve infilling of development. The development of the existing shoreline, where most of the recreational lands occur within the coastal zone, must be of sensitive design. The impacts of recreation use must be controlled to preserve the integrity and future viability of the natural systems.

Mining: Of all the primary land uses within the coastal planning area, mining represents the least in real coverage. However, mining becomes a significant competing land use issue due to the short and long term impacts upon both the physical and visual environment. Both active and mined out areas of shell and dolomite pits exist within the coastal zone in South County. Most recent mining has occurred at the Leisey Shell pit. The mined out pits have been used by amateur archaeologists as dig sites and have yielded several archaeological discoveries.

WATER-DEPENDENT AND WATER-RELATED USES

Shoreline Access: As previously mentioned, shoreline access problems result from demand by incompatible or competing land uses for coastal locations. The coastal planning area is limited and has historically been the first area to be developed. As demand for land grows, shoreline property is the first to appreciate in value due both to its unique characteristics and to its relative scarcity. For this reason, and to minimize conflicts, coastal planning area land uses must be prioritized with regard to the necessity of shore access. Those activities that require deepwater access, such as port facilities, or large amounts of salt water (electrical generating facilities

or aquaculture projects) should be assured that the coastal land they need will not be usurped by a land use that could be accommodated at an inland location.

Economic Base of Coastal Area

In the coastal planning area of Hillsborough County, the major sectors of the economic base include services, retail trade and wholesale trade. Within the service sector, the most significant components or subsectors are business services and medical and health services. The retail trade sector is dominated by automotive dealers, service stations and furniture and home furnishings, while the wholesale trade is dominated by durable goods, such as material equipment and supplies, and lumber and construction material. The second tier of economic sectors, in terms of contribution to the economic base of the coastal planning area, includes finance/insurance/real estate, manufacturing and construction. The balance of the economic base of the coastal zone is comprised of smaller, less significant sectors including transportation/ communication/utilities, agriculture and fishing, mining and government services.

Electric and Wastewater Services: Electric and wastewater services represent adjunct components of the economic base of the coastal zone area.

The Big Bend Station electric power plant is located roughly ten miles south of the City of Tampa in unincorporated Hillsborough County. The plant is situated along the eastern shore of Tampa Bay in the coastal area of the County. The

siting of the power station along the Tampa Bay shoreline is advantageous from a cost perspective. The Bay serves as a source of cooling water needed to operate the plant. In theory, the reduced cost alternative afforded by the Tampa Bay siting of the Big Bend Station translates into reduced costs of electric power services supplied to local residents and businesses in Hillsborough County.

Tampa Bay is currently used as a receiving body for treated wastewater and effluent discharge. This method of wastewater and effluent disposal is cost effective from an economic perspective. More recently, this effluent discharge has been greatly reduced by the expansion of the County's Reclaimed Water Program.

Impacts of the Future Land Use Plan on the Economic Base: The impact of implementation of the future land use plan for Hillsborough County should affect most, if not all, components of the coastal planning area's economic base.

Most of the growth of the economic base should occur in the southern and eastern sub-areas of Hillsborough County's coastal zone, including the area between I-75 on the east and Tampa Bay on the west. The area within the northwest section of the County, generally described as the lands south of the proposed Linebaugh Extension and Old Tampa Bay to the County line, is showing a trend from agricultural lands to low to medium density residential and support commercial development.

The growing desire for people to live and recreate along the coast will increase the demand for coastal access. Sensitive design and engineering of restricted recreational development along the abundant natural shoreline and tidally-influenced tributaries of Hillsborough County will enable the growing population to access these areas. Through understanding of and education about the value of these systems, the general population's environmental awareness may lead to a higher quality of life for existing and future residents of Hillsborough County.

Wetland Habitat: Three major types of vegetative wetland communities occur within the Tampa Bay estuarine system, including seagrass beds, salt marshes, and mangrove forests. The critical roles that estuarine wetlands play with regard to shoreline stabilization, pollutant assimilation and fisheries production has been discussed above and cannot be underestimated.

Seagrasses: The catastrophic loss of seagrasses in Tampa Bay has been attributed to numerous causes, including propeller damage from boats, dredging, and water quality degradation. While the first two causes have undoubtedly resulted in significant direct destruction, the third is probably the most important factor affecting the health of seagrasses in Tampa Bay. Recent studies indicate that increasing nutrient enrichment, or eutrophication, of estuarine waters from sewage treatment plant effluent and stormwater runoff is responsible for the production of phytoplankton blooms in the water column and excessive epiphytic growth of macroalgae

on the leaves of seagrasses. These nuisance species decrease the amount of light available to seagrasses for growth and reproduction. In addition to eutrophication, widespread temporary increases in water column turbidity due to large scale harbor and channel deepening projects have also reduced the light available to seagrasses, thus resulting in significant seagrass destruction.

Emergent Wetlands: Small fish, shrimp, and crab feed on the nutrient rich detritus formed from decaying mangrove leaves. The sturdy roots of the mangrove tree anchor the shoreline, while the mangrove canopies serve as roosts and nests for a variety of wintering and native birds.

Unlike seagrasses, anthropogenic impacts on salt marshes and mangrove forests are almost exclusively attributable to the direct effects of dredging and filling, where suitable intertidal substrate has simply been eliminated. With the exception of the effects of oil spills, the survival and proliferation of emergent tidal wetlands are not particularly dependent upon water quality. Thousands of acres of this habitat may be damaged from invasion by exotic plants, such as the Australian Pine and Brazillian Pepper, that choke out native habitat.

Riverine Forests and Adjacent Wetlands: The acreage of freshwater wetlands of Hillsborough County has declined significantly since historical times. Losses would be expected to reduce the ability of these systems to filter upland runoff, allowing more turbid water to reach the Bay. Particulate organic matter inputs to the Bay from litter fall in adjacent

wetland and terrestrial habitats would also be expected to decline, and nutrient inputs would probably increase as filtration capacity declined. In addition, many of these streams have been channelized, and even if the wetlands are structurally intact, hydraulic exchange with the adjacent water body, and thus wetland functions, may be impaired.

Living Marine Resources: Tampa Bay was once the State's most productive and diverse estuarine system. Inventories performed in the late 1960's have shown that the recorded diversity and abundance of marine life in Tampa Bay is not exceeded by any other estuary between the Chesapeake Bay and the Laguna Madre of Texas.

The productivity of Tampa Bay in terms of commercially valuable fisheries has, however, declined dramatically in recent decades due to man's influence on the Bay. The harvest of these species is a particularly visible and important part of the value of the Bay as perceived by most citizens.

Shellfish: Five economically important shellfish species occur in Tampa Bay including, in order of commercial value, the following: bait shrimp, stone crab, blue crab oysters and quahog clams. The bay scallop once flourished in Tampa Bay but since the early 1950's it has been virtually eliminated from the estuary due to degraded water quality conditions.

Currently, only four areas are approved or conditionally approved for shellfishing in Tampa Bay. Due to poor water quality conditions (e.g. high bacterial counts), these areas are now virtually all restricted to Lower Tampa Bay, where better

flushing conditions prevail. The Cockroach Bay Aquatic Preserve area, although conditionally approved, has been closed periodically due to coliform contamination from nearby septic systems and has been recommended for permanent closure.

The oyster industry in Tampa Bay, especially Hillsborough Bay, once thrived, with annual oyster meat yields exceeding 500,000 pounds in 1900. Harvests of oysters from the Bay were second only to those of the still productive Apalachicola Bay for most of the 19th Century. However, between the turn of the century and 1970, the oyster industry in Tampa Bay was essentially eliminated due to water quality problems. Other shellfish species have been similarly affected by development around the Bay, and only bait shrimp and stone crabs remain as economically viable fisheries in Tampa Bay.

Fishes: The Tampa Bay estuary and contiguous coastal waters serve as home, feeding ground, and/or nursery for more than 270 species of resident and migrant fish. Approximately 80 fish species are found in at least one life stage within the Tampa Bay estuary, with about 25 of these species considered to be economically important. Of special concern are spotted seatrout, red drum and snook which constitute the bulk of the recreational finfish landings in Tampa Bay. Available statistics indicate that these species, all of which spend most of their lives in estuaries, are declining in numbers both locally and statewide. Accordingly, the Florida Department of Environmental Protection has recently placed greater restrictions on the commercial and recreational harvest

of these species. As stated above, vegetated tidal wetlands, especially seagrass beds, play a critical role as nursery habitat for larval and juvenile fishes. It is felt that the significant decline in both seagrasses and emergent wetlands has had a corresponding adverse impact on fishery stocks; however, long term quantitative studies on fishery stocks in Tampa Bay are not available to confirm this. Data on commercial finfish landings in Tampa Bay indicate a general downward trend occurring after 1965.

Reptiles: Only two species of marine reptiles are common in Tampa Bay, the diamondback terrapin) and the mangrove water snake). Both are common in localized areas but have not been well studied. However, because of the reduction of intertidal habitat and adjacent upland areas due to coastal development, these species may be threatened. Loggerhead turtle) are occasionally observed in the Bay on the gulf side of Egmont Key.

Birds: Seabirds and wading birds are a very visible and important component of the animal life of Tampa Bay. 83 species of birds are associated with marine habitats in the Bay. Many of these not only use certain Bay habitats for nesting and raising young, but also wade in the shallows or dive in deeper waters to feed on fish and invertebrates.

McKay Bay, located in northeast Tampa Bay, is a particularly important feeding area and typically supports a winter population of almost 25,000 marine birds of at least 75 species. Almost 80% of these birds are of five species: lesser

scaup, ruddy duck, dunlin, short-billed dowitcher, and western sandpiper.

Marine Mammals: Only two species of marine mammals are normally found within Tampa Bay, the bottlenose dolphin and the West Indian manatee. The bottlenose dolphin is a year-round resident, with a local population estimated at 100-200 individuals, generally found in small herds of 3-6 animals.

Manatees seek refuge in the winter at the warm water discharges surrounding the bay's power plants. The mouth of the Alafia River has been designated a State Manatee Sanctuary by the Florida Department of Environmental Protection, and is the only such area in Tampa Bay.

HISTORIC AND ARCHAEOLOGICAL RESOURCES

The protection, preservation, and restoration of historic resources is an integral part of the federal Coastal Zone Management Act. The best available information is that provided by the Florida Master Site Files.

Historically Significant Structures in the Coastal Planning Area:

- George H. Elsberry Farm House, 4 Mi. E. on S. R. 674, Wimauma
- Giants Motel, south US 41, Gibsonton
- Kep-Rite Tourist Court Office, 9839 US 41 Gibsonton
- L.L.Dickman House, 401 Tamiami Trail, Ruskin
- Lewis Good Gulf Service, Swilley Rd., and SR 39, Alafia
- Ruskin Vegetable Corporation Bldg., US 41 at Millermack, Ruskin

- Ruskin Women’s Club, 508 Tamiami Trail, Ruskin
- Sun City Show House, 2824 Studio Blvd., Ruskin
- Symmes House, Millpoint Rd., Riverview
- U.S. Phosphoric Products Bldg., south US 41, Riverview
- W.B. Moody House, W. Hackney Dr., west of US 301 Riverview
- W.I. Bradley Place, Riverview
- William House, 10605 Hackney Dr, Riverview
- Wimauma Church of the Nazarene, SR 674, Wimauma
- Providence Baptist Church, 5416 Providence Church Rd., Riverview
- James L. Hackney House, Section 17, Township 30S, Range 20 E.
- Riverview Cemetery, Providence Rd. and Hackney Dr., Riverview
- Joe Ebert House , Section 20, Township 28S, Range 20 E.

Sites of Local Significance for Unincorporated Hillsborough County

- 102 College Avenue East, Ruskin; 402 College Ave. East, Ruskin; 601 4th Ave. SW, Ruskin; Dr. Beaudette House, Ruskin;
- Grubbs House, Gibsonton.

Hillsborough County does not contain a large number of built historic resources; rather, the predominant historic resources are archaeological sites. Because a significant portion of the unincorporated County's archaeological sites are located in the coastal zone, special consideration should be given to those resources. Hillsborough County adopted a landmark ordinance as part of its Land Development Regulations in March, 1992.

The future requires continuing efforts to achieve the long-term goal of historic preservation.

Impacts of Future Land Use on Historic Preservation

The County’s historic resources are located within suburban and rural development areas which will accommodate their continued use. Future land Use designations have not created non conformity of structures.

Hillsborough County, in an attempt to manage its diverse growth has adopted an Urban Service Area. The Urban Service Area emphasizes three principles: the type of development; the location of development; and the services required for development. These three principles should be properly coordinated to promote a rational transition from urban to rural land uses within the County.

The Urban Service Area provides some order and reliability to the land development process, its implementation can have a positive impact on historic resources. The historic resources that are located in the designated Urban Service Area should make these structures attractive for continued use. Conversely, for those structures that are located outside the USA may not experience development pressures to be converted to subdivisions.

The Future Land Use Element also contains policy provisions which set up the framework for the preservation and reuse of historic structures within Hillsborough County, including those that lie within the coastal planning area.

Estuarine Management

The entire shoreline of Hillsborough County borders on the Tampa Bay estuary. Closely associated with the Tampa Bay estuary are the tidal freshwater habitats that occur immediately above the upper limits of salt water. These ecosystems are vitally important as nursery and spawning areas for many anadromous fisheries. Seaward from the estuary, measurable dilution of sea water by land drainage can be traced for considerable distances offshore. Moreover, considerable acreages of vegetated wetlands, including seagrass meadows, salt marshes and mangrove forests, occur along the shallower bottoms and peripheral fringes of the estuary. Together with the open water estuary, these important transition zones comprise the entire Tampa Bay estuarine system.

Existing Conditions and Past Impacts

Water Quality: In practical terms, water quality refers to the fitness of water for both human and natural uses and can be described by concentrations of specific parameters (such as bacteria) or by the relation of observed concentrations to state standards (e.g. allowable levels of bacteria). Several parameters are important from the standpoint of human uses of the Bay. The Environmental Protection Commission of Hillsborough County (EPC) has monitored numerous parameters throughout Tampa Bay every month since 1972.

Sediment Pollution: The sediments of the Tampa Bay estuary are generally uniform in character. They are mostly

composed of reworked terrace quartz and near shore sand and biogenic carbonate detritus. The mean size of the sediments increases from the upper to the lower reaches of the estuarine system. Organic sediments and clays are prominent, primarily in the upper portions of Hillsborough Bay and in other isolated portions of the Bay complex. Because of their greater binding capabilities, pollutants such as heavy metals are generally more concentrated in the fine-grained sediments of Hillsborough and Old Tampa Bays.

The Florida Department of Environmental Protection (FDEP) analyzed sediment quality in Hillsborough Bay during its comparative study of estuarine sediments in deepwater ports. In general, sediments in and around the port and urban areas of Hillsborough Bay contain elevated levels of metals, including cadmium, lead, zinc and mercury. Natural levels for chromium and copper are only slightly exceeded. The combined metals data indicate anthropogenic (man-induced) impacts most likely caused by urban stormwater runoff.

Point Source Pollution: Stormwater, industrial operations and domestic wastewater treatment plants are major sources of pollutants discharged to the waters of Hillsborough County. The EPC, in cooperation with the Florida Department of Environmental Protection uses a permit process as the primary tool for controlling water pollution from the industrial and domestic sources. Stormwater management is also addressed through a permitting process, this is administered by the Southwest Florida Water Management District.

While advances in wastewater treatment and increased regulation have helped reduce pollution, sewage treatment plants and industries discharging into the bay still contribute substantial pollutants to Tampa Bay.

Non-Point Source Pollution: Non-point source pollution encompasses those sources of water pollution which are diffuse in nature, and generally refers to urban stormwater runoff. Sources of urban stormwater pollution have been identified as trash and litter deposited on streets and parking lots; erosion of exposed ground due to construction, lawn and landscape maintenance; domestic pet litter; automobile emissions; and atmospheric pollution. Following a storm event, these non-point sources of pollution are concentrated by stormwater collection systems and transported to a point of discharge.

Stormwater runoff from the Tampa Bay watershed contributes significantly to the bay's total annual nitrogen load. More than half of the nitrogen in urban runoff comes from residential areas, the region's largest land use. By comparison, commercial/industrial sites account for about 7 percent of total nitrogen in urban runoff, although their per acre contribution is higher than that of residential uses. (Zarbock et.al. 1994). Runoff from intensive agricultural land uses contribute about 12 percent of total bay loadings along with pesticides. Agricultural runoff from pastures and range lands account for 17 percent of total bay nitrogen loadings, with forests and wetlands contributing 6 percent, and mining the remaining 6 percent.

Tributaries: Freshwater discharges to an estuary are critical to the maintenance of good circulation and flushing, as well as the salinity gradient required by numerous estuarine-dependent fisheries. Four major rivers, the Hillsborough, Alafia, Little Manatee and Manatee, flow into Tampa Bay. Another, the Palm River, once drained lands between the Hillsborough and Alafia Rivers, but has been completely channelized and controlled since 1970 and is now called the Tampa Bypass Canal. All but the Manatee River occur in Hillsborough County. The Hillsborough and Manatee Rivers are impounded as municipal reservoirs. Some of the flow of the Little Manatee is withdrawn for power plant cooling water, but it is otherwise regarded to be the least disturbed river flowing to Tampa Bay. The Alafia has been affected by phosphate mining and processing and is impounded at places. Numerous lesser tributaries and three major flood control channels also drain into Tampa Bay.

Circulation and Flushing: Circulation refers to the paths taken by water currents and their constituents due to tidal forces, runoff, wind, and other effects. Flushing is the net retention or export of water or waterborne material after circulation has occurred over a given period of time. Both circulation and flushing in estuaries are largely determined by the relationship of freshwater inflow to tidal volume. In Tampa Bay, freshwater inflow from rivers, sewage plant effluent and rainwater runoff contribute some localized flushing. This however, is exceeded by the tidal volume by a factor of 500 or more, making it a comparatively sluggish estuary with regard to both circulation and flushing.

The EPC reports that a complete tidal cycle for Tampa Bay requires 14 and one half days in which a cycle of two high and two low tides predominates.

Eutrophication: Eutrophication is defined as the process of increasing dissolved nutrient concentrations (nitrogen and phosphorous) to a point where nutrient enrichment produces certain characteristic responses in a water body. These responses include algal blooms, noxious odors, decreases in water clarity, declines in dissolved oxygen, and periodic fish kills.

Studies performed by the Department of Environmental Protection, the U. S. Geological Survey, and the City of Tampa concluded that urban runoff from streets, parking lots and lawns could contribute up to 25% of the biochemical oxygen demand, 35% of the suspended solids, and 15% of the nitrogen loading to Hillsborough Bay. These studies further suggested that stormwater runoff is a major source of nutrient enrichment to the entire Tampa Bay estuarine system.

Dredge and Fill: It has been estimated that the original surface area of the Tampa Bay estuarine system has been reduced by 3.6%, or 13.15 square miles, due primarily to the filling of shallow tidal wetlands for development. Of this acreage, about 11% was for the construction of causeways, 15% each for residential and commercial (power plants) development, and 60% for port development including channels, filled sites, and dredged material disposal sites. This development resulted in the filling or excavation of 44% of the Bay's marsh and mangrove habitat, and contributed, through

direct destination or increased water turbidity, to the loss of 81% of the Bay's seagrasses.

Because of scientific documentation of the value of tidal wetlands as wildlife and fisheries habitat in the early 1970's, the type of large-scale dredge and fill projects which were routinely permitted by regulatory agencies in the 1950's and 1960's are no longer permitted, and any proposed project undergoes close scrutiny.

Freshwater Flows to the Bay: More than 60 years of marine research has shown conclusively that low-salinity estuarine water, combined with the physical protection and energy sources supplied by marine plants, constitutes the primary nursery habitat for most of the commercially and recreationally important fish and shellfish species in the Gulf of Mexico. In addition, freshwater flows into estuaries are critical to maintaining normal circulation and flushing patterns.

With the population of the Tampa Bay area growing rapidly, public demand for increased diversion of freshwater is expected to grow. It is critical that future plans to divert additional flows of freshwater away from the Bay receive careful biological study.

Fisheries: The health of Tampa Bay's fisheries is important to the economic and recreational value of the Bay. Thus, it is important that the enhancement and restoration of fishery stocks be identified as a key measurable objective for all future estuarine management efforts.

Available commercial landings data and anecdotal evidence strongly indicate that both finfish and shellfish stocks have declined significantly in Tampa Bay since the early 1950's. The loss of wetland habitat (especially seagrasses) and degraded water quality are cited most often as the cause for these declines, although excessive commercial fishing pressure has also been identified as a contributing factor. More recently, the diversion of freshwater and the resulting alteration of critical low-salinity nursery areas has been cited as a potential problem for many estuarine-dependent fisheries.

The future of Tampa Bay's fisheries under the projected growth scenario will be primarily dependent upon the success of measures taken to control nutrient enrichment of the Bay, restore habitat and provide adequate freshwater flows

Coastal Redevelopment Needs and Potential

Because Hillsborough County's coastal shoreline is a limited natural and economic resource, it is in the public interest to ensure the maximum beneficial and efficient use of coastal lands.

Because of the relative youth and viability of the existing development within Hillsborough County's coastal shoreline, there is not a major need for extensive areawide redevelopment efforts. In localized areas, however, there is a need for redevelopment of individual properties or small land areas, thus lessening the need for new water-dependent and water-related facilities in pristine, undeveloped areas, where the adverse fiscal and environmental impacts will be most

greatly felt. The need for maximum efficiency of coastal land use is obviously crucial to effective long range coastal planning and natural resource/amenity conservation.

Intergovernmental Coordination

Existing Regulatory Programs: Currently, management of the Tampa Bay estuarine system and adjacent coastal waters is shared amongst federal, State and regional regulatory agencies, as well as seventeen local governments bordering the Bay. Management is accomplished through the implementation of various monitoring, permitting and regulatory programs.

The major agencies currently involved in the management of estuarine wetland habitat in the Tampa Bay region include the following:

Federal

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Environmental Protection Agency (EPA)
- U.S. Department of Commerce (NOAA)
- National Marine Fisheries Service (NMFS)

State

- Florida Department of Environmental Protection (FDEP)
- Florida Fish and Wildlife Conservation Commission (FWC)
- Florida Department of Economic Opportunity (FDEO)



Regional and Local

- Southwest Florida Water Management District (SWFWMD)
- Tampa Bay Regional Planning Council (TBRPC)
- Tampa Port Authority (TPA) a/d/b/a Port Tampa Bay
- Environmental Protection Commission of Hillsborough County (EPC)
- Counties and Municipalities

The Surface Water Improvement and Management (SWIM) Program

With the passage of the Surface Water Improvement and Management (SWIM) Act of 1987, the Southwest Florida Water Management District was mandated the responsibility for improving, maintaining, restoring and protecting Tampa Bay and its tributaries. As required under the Act, SWFWMD must identify surface water bodies in the Tampa Bay drainage basin for conservation and restoration and develop work programs to manage those activities. The programs are to be funded by the Legislature and staffed by SWFWMD.

On August 1, 1988, the SWFWMD published the Surface Water Improvement and Management Program for Tampa Bay. In this plan, five priority issues have been identified as critical to the management, restoration and preservation of the Bay, including:

- • Water quality improvement;
- • Habitat protection and restoration;
- • Fisheries and shellfish management;

- • Development and use of the Bay; and
- • Legal framework for comprehensive management.

Coordination Potential- The Future:

The Tampa Bay Estuary Program was established in 1991 to assist the community in developing a comprehensive plan to restore and protect Tampa Bay. The Program receives local administrative support from the Tampa Bay Regional Planning Council.

The landmark agreement establishing the Tampa Bay Program brought together Hillsborough, Pinellas and Manatee counties; the cities of Tampa, St. Petersburg and Clearwater; the Southwest Florida Water Management District; the EPC; Florida Department of Environmental Protection; and the U.S. Environmental Protection Agency in a partnership committed to action.

The missions of the Estuary Program are: to set reasonable, achievable goals for the estuary’s recovery; to coordinate the many new and ongoing bay management initiatives, from small-scale efforts that focus on individual segments of the bay to broad-based programs that address the estuary as a whole; and to determine how best to implement these programs in the future to avoid costly and ineffective duplication of efforts.

The Tampa Bay National Estuary Program has also published “Charting the Course for Tampa Bay” which is the basis for the “Comprehensive Conservation and Management Plan for Tampa Bay”.

The Comprehensive Conservation and Management Plan for Tampa Bay contains action plans that address the following areas:

- Water and Sediment Quality
- Bay Habitat
- Fish and Wildlife
- Dredging and Dredged Material Management
- Spill Prevention and Response

Natural Disaster Planning

Hillsborough County has prepared a Comprehensive Emergency Management Plan (CEMP), in cooperation with the incorporated cities, the Tampa Bay Regional Planning Council and the State of Florida Division of Emergency Management. The CEMP establishes: the procedures for disseminating warnings and reporting the severity and magnitude of any disaster; operational procedures for governments' and disaster organizations' response to disasters; a framework for expeditious, effective and coordinated employment of resources; procedures for requesting State and federal assistance; and a description of recovery and mitigation operations.

The Tampa Bay region, including Hillsborough County, has been identified by the National Weather Service as one of the most hurricane-vulnerable areas of the United States, with the potential for large scale loss of life. For purposes of this document, natural disaster planning will focus on a hurricane event.

Hazard Vulnerability Analysis

Hazard vulnerability is the likelihood of a particular area to experience a natural disaster. For purposes of this discussion, a natural disaster is limited to a hurricane. The hazard vulnerability analysis includes information and data to identify the geographical area, the population, and the public facilities susceptible to the impacts of a 100-year or Category 3 hurricane event.

The hurricane vulnerability zone is defined as the area requiring evacuation in a Category 3 storm event. A Category 3 hurricane has winds of 111 to 130 miles per hour and storm surge 13 to 18 feet above normal. The hurricane vulnerability zone is shown graphically, on the TBRPC Storm Tide Analysis and the designated evacuation areas are shown on the Hillsborough County Hurricane Guide. The Hurricane Guide also shows evacuation routes and designated shelters.

In addition to identifying the vulnerability zone, the Coastal High Hazard Area (CHHA) must be defined. The CHHA is defined as the area defined in the most current regional hurricane evacuation study as requiring evacuation during a category one hurricane.

Evacuation

Evacuation is required in the event of a hurricane. Consequently, an analysis of the number of persons requiring evacuation, the number of public shelter spaces available, the number of public shelter spaces required, and evacuation

route transportation constraints is required. These statistics are included in TBRPC's Regional Hurricane Evacuation Study, and updated periodically.

Transportation Constraints

The Tampa Bay Regional Planning Council (TBRPC) has prepared transportation models to determine the best available evacuation routes for Tampa/Hillsborough County residents and visitors. These models identify several factors that contribute to determining the optimum evacuation route. These factors include areas-at-risk, public shelter location, inter-jurisdictional traffic impacts, and expected behavioral responses of the population at risk.

Special Needs Population

A hurricane evacuation requires not only the evacuation of able-bodied, vehicle-owning residents but also a population consisting of elderly, handicapped, disabled, or individuals lacking personal transportation. Recognizing this special need, the Hillsborough County Office of Emergency Management has provided such residents the opportunity to register with the County regarding their special needs. Residents are encouraged to register with the County so that during an evacuation they can be safely evacuated.

Hazard Mitigation

Recognizing that Hillsborough County is vulnerable to a hurricane storm event, government is responsible for ensuring that human life is protected and property damage is minimized

in flood-prone and coastal high hazard areas; that land use and development patterns are consistent with the vulnerable nature of the coastal high hazard and inland flood-prone areas; and that natural systems and vegetation that serve to reduce the impacts of severe weather are protected and preserved. In order to accomplish these ends, Hillsborough County must consider available options to reduce or limit exposure in the coastal high hazard area; develop guidelines/procedures for development in the coastal high hazard area; propose alternatives to reduce clearance times or reduce deficit public shelter space; and develop methods to redirect population concentrations away from the coastal high hazard area.

Post-Disaster Redevelopment

Hillsborough County has a significant population vulnerable to the effects of a worst case hurricane scenario. Therefore, a plan for how to deal with not only the mechanics of redevelopment (how much it costs to repair or replace damage or destroyed structures; what development standards should the redevelopment be required to meet; the post-disaster timetable; etc.) but also the more esoteric issue of whether redevelopment should occur at all, must be prepared.

Once a decision that redevelopment will occur has been made, the standard at which redevelopment will occur must be determined. New construction in the coastal high hazard area must meet more stringent construction standards than did older development. Hillsborough County participates in the National Flood Insurance Program (NFIP), which requires that

communities adopt minimum ordinances and regulations which address hazard mitigation and elevation requirements designed to minimize flood damage associated with hurricanes or other natural disasters.

In 1991, the County initiated a Post Disaster Redevelopment Task Force, which produced a Post Disaster Redevelopment Ordinance, adopted by the Board of County Commissioners in 1993. In 1995 the County, through a grant from the Florida Department of Community Affairs and in conjunction with the Tampa Bay Regional Planning Council, developed the "Model Local government Disaster Mitigation and Redevelopment Regulations" study.

Public Acquisition: Federal acquisition falls under Section 1362 of the National Flood Insurance Act of 1968, which states that property damaged by a storm or flood event can be purchased with federal money and donated to the local government. However, the local governments in Florida have not utilized Section 1362 acquisition funds, primarily because of an inability to meet the strict eligibility requirements. Hillsborough County does accept the dedication of land in lieu of impact fees; however, the dedication is not restricted to coastal areas.

BEACH AND DUNE SYSTEMS

Existing Conditions

Beaches and dunes are built through the constant resuspension and deposition of weathered beach material (sand) along the turbulent land-sea interface known as the

littoral zone. Beach and dune systems generally constitute the land masses associated with coastal barrier islands, and are thus a product of a high-energy wave environment.

Hillsborough County's one natural coastal barrier island on the Gulf of Mexico is Egmont Key, located at the mouth of Tampa Bay. This 300-acre island is the only coastal dune/strand vegetation in the County, and is an ecological showcase for the barrier island type environment. Egmont Key has been designated as a wildlife refuge by act of Congress (PL 93-341). As part of the National Wildlife Refuge System, Egmont Key is under federal jurisdiction (U. S. Coast Guard and U. S. Fish and Wildlife Service) which discourages any intensive recreational use.

The remainder of the Hillsborough County shoreline occurs along the low-energy waters of the Tampa Bay estuary. Although sandy beach formations can naturally develop along the more windward shorelines of bays and estuaries, their formation in Tampa Bay is relatively minor and limited due to the Bay's shallow depth. Consequently, no natural estuarine beaches of significance occur in Hillsborough County. There are, however, five major man-made and maintained sandy beaches in Hillsborough County and the City of Tampa, including three public and two private beaches.

Areas Subject to Erosion/Accretion

As stated above, most of the sandy beach areas in Hillsborough County face low-energy wave regimes typical of

estuaries. Therefore, rapid erosion of beach and dune systems is not a significant problem in the County.

Some of the man-made beach areas in the County are, however, subject to localized erosion problems. E. G. Simmons Park beach is subject to significant wave action, especially during winter months, when passing storm fronts approach from the northwest. In addition, the two prominent dredge spoil disposal islands, 2-D and 3-D, located in lower Hillsborough Bay have experienced considerable erosion along their western shorelines, due primarily to wave energy generated from passing ship traffic. There are no areas of significant sand accretion in Hillsborough County tidal waters.

Beach and Dune Protective Measures

Beach and dune systems are naturally in a state of dynamic equilibrium. The stability of these systems is often critically dependent upon the associated vegetative communities, which trap and bind sand particles with their root network.

Establishing new vegetative communities or supplementing existing growth may be feasible for several Hillsborough County beaches. Dune plantings would most likely benefit Apollo Beach, E. G. Simmons Park and possibly Bahia Beach.

The erosion problems occurring on dredge spoil islands, especially 2-D and 3-D, have been analyzed and are being addressed by the Tampa Port Authority.

Public Access

Public access includes boat ramps, fishing piers, beaches, and regional, district, neighborhood, and special parks.

Public access to the coastal area, either through publicly-owned property or dedicated private easements, is an issue that is becoming increasingly sensitive as the pressure to develop coastal areas intensifies. Because 94 percent of the County's coastal area is in private ownership, those areas in public holdings should not be lost through sale, vacation or transfer. Moreover, existing public access locations should be enhanced to more completely take advantage of the limited resource.

Unincorporated Hillsborough County has only one public beach area, E. G. Simmons Park; the remainder of the coastal shoreline areas contain mangroves, making those areas inaccessible to the public. Any development, whether public or private, shall be done in accordance with applicable environmental regulations.

Coastal Public Infrastructure

Public infrastructure located in the coastal planning area is subject to hazards and damage that inland facilities do not experience. The following inventory and analysis summarizes the existing and projected infrastructure located within the coastal planning area and includes: roadways, bridges and causeways; sanitary sewer facilities; potable water facilities; and shoreline protection structures. In addition, although it is

a for-profit utility, electric generating facilities and substations are inventoried and the potential loss of service analyzed.

Roadways, Bridges, and Causeways: Generally, level of service (LOS) "D" is used by Hillsborough County as the acceptable traffic operation standard. LOS D represents high-density, but stable flow with speed selection and maneuverability severely restricted; substantial delays and significant decreases in operating speed resulting from small increases in flow.

All evacuation routes located in the CHHA are currently operating at an acceptable LOS. However, based on the MPO 2025 Cost Affordable Long Range Transportation Plan (LRTP), parts of US Hwy 41 (Cockroach Bay Rd to 19th Ave NE and Apollo Beach Blvd to Riverview Drive) and Hillsborough Avenue / SR 580 (Double Branch Road to Memorial Hwy) will fall to an unacceptable LOS.

Further, planned improvements on parts of US Hwy 41 (Riverview Drive to Madison Ave) and Causeway Blvd (Maritime Blvd to 50th Street) identified in the LRTP presumably prevent these roadways from falling to unacceptable levels of service by the year 2025.

In addition, the bridge approaches at U. S. 41/Alafia River and U. S. 41/Little Manatee River have been identified as critical evacuation route points that are susceptible to flooding.

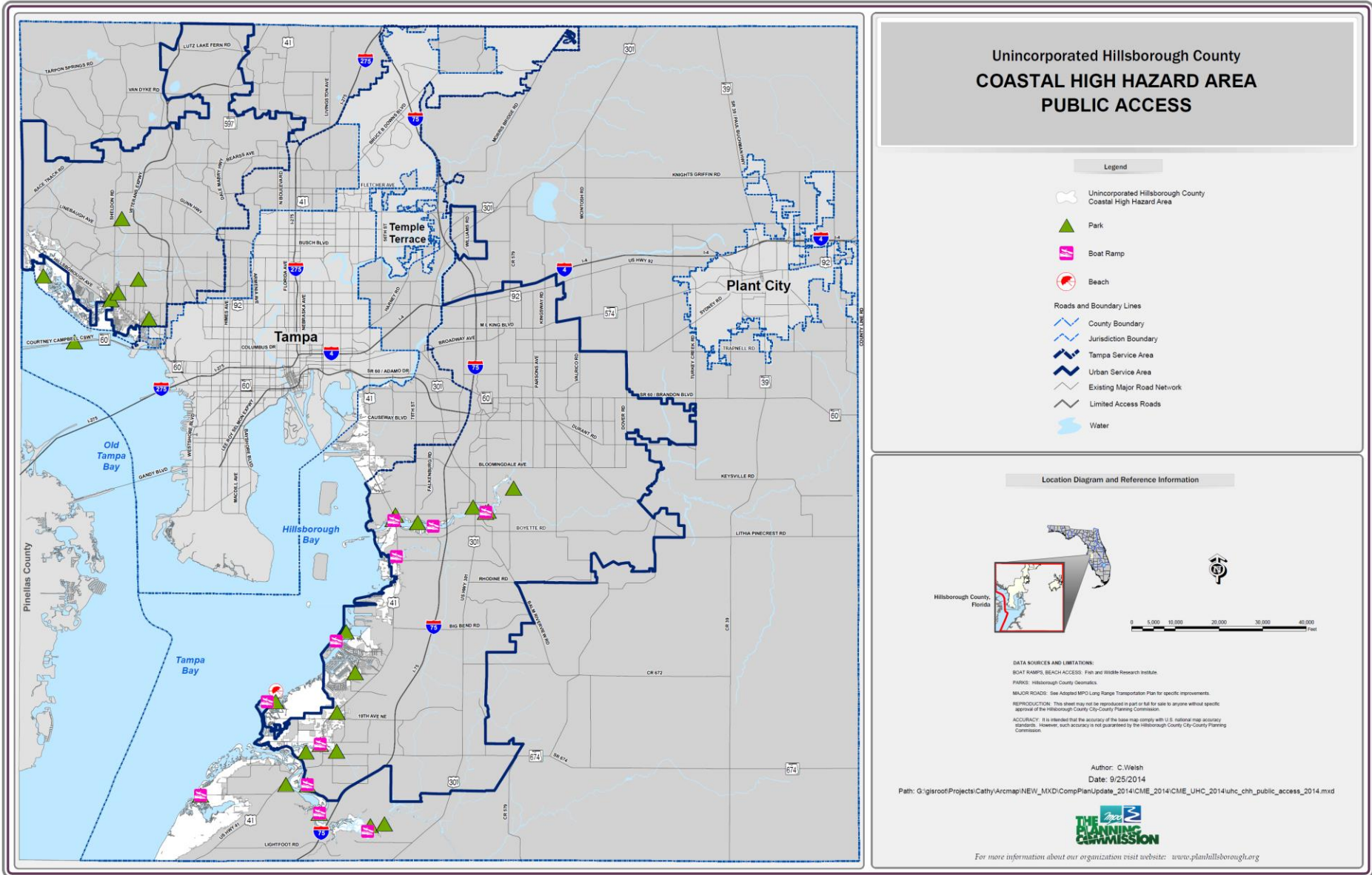
Wastewater Treatment Facilities: Unincorporated Hillsborough County does not have any wastewater treatment

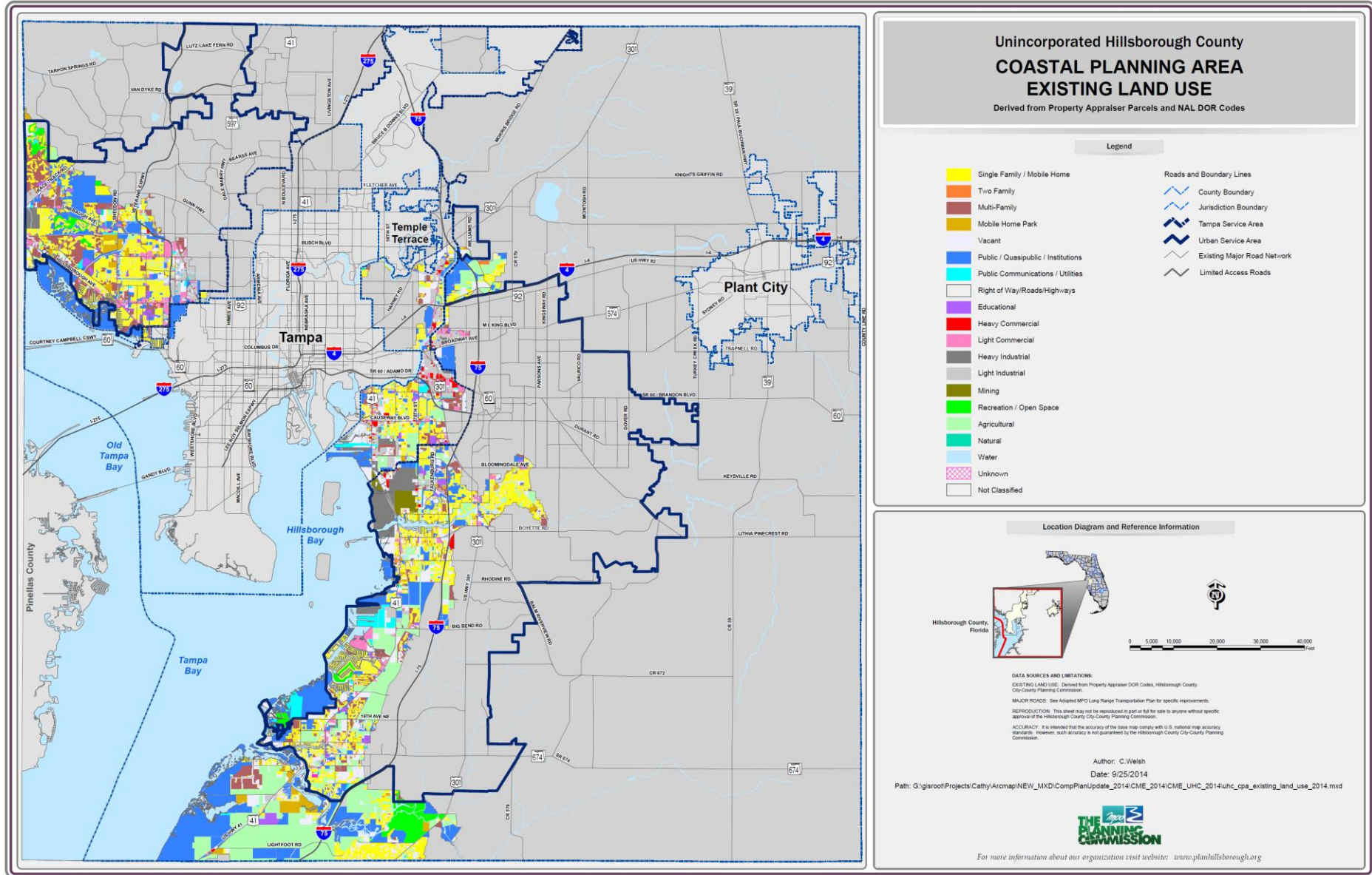
facilities located in the coastal planning area. However, the City of Tampa's Hookers Point Advanced Wastewater Treatment Plant, serving both County (approximately 12 percent of capacity is to unincorporated County) and City residents, is located in the CHHA. Hookers Point is projected for potential service disruption of two (2) days for a minimal hurricane scenario (Category 1) to fifteen (15) days for a medium scenario (Category 3).

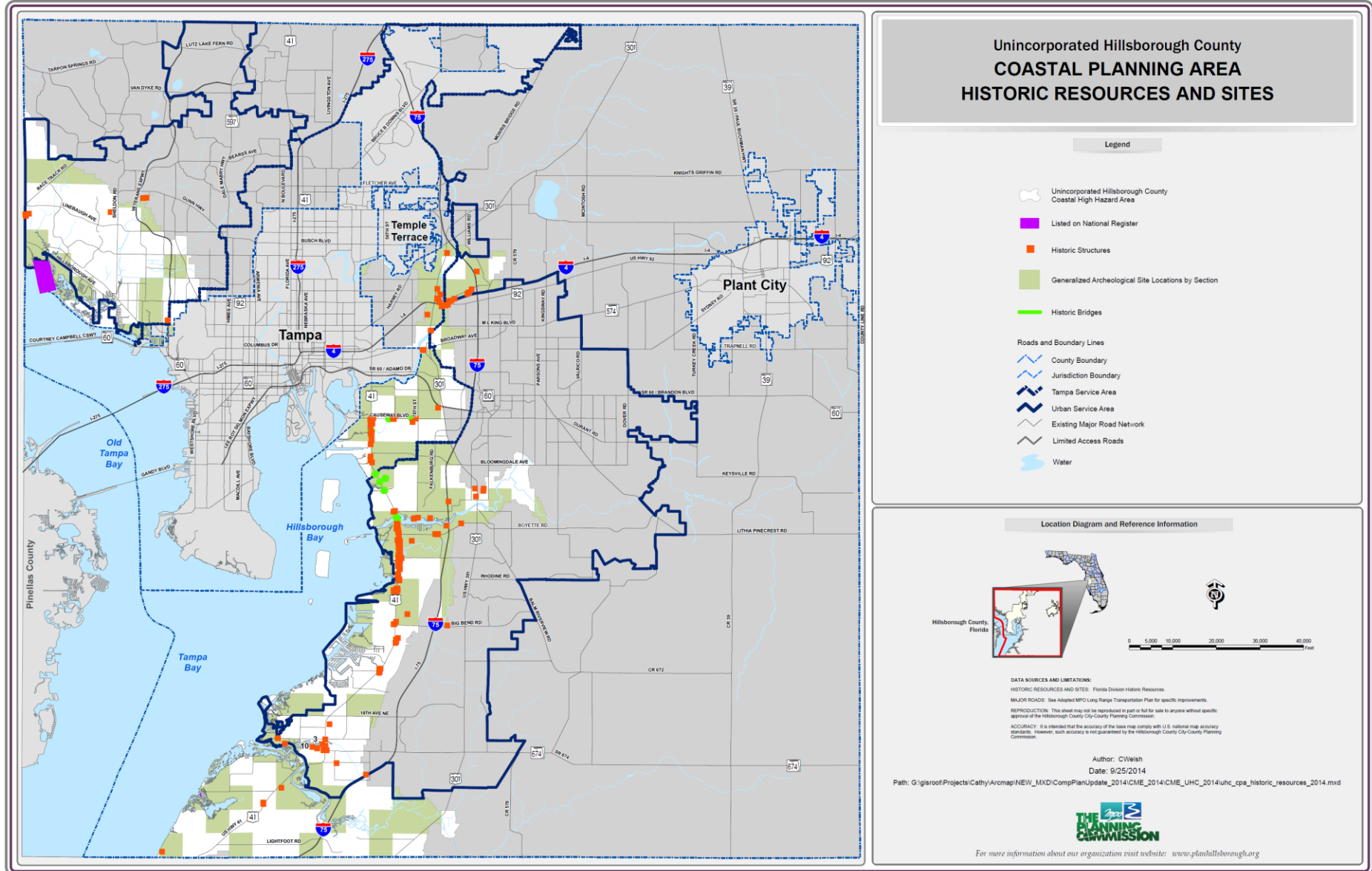
Potable Water Facilities: Unincorporated Hillsborough County has three (3) potable water facilities located in the coastal high hazard area. All three facilities are located in the Apollo Beach area: a pump station and two (2) elevated storage tanks. None of these potable water facilities are projected to experience service disruption from structural damage under a Category 1 storm; however, under a Category 2 storm, the pump station and the Gibsonton elevated storage tank are projected for a five (5) and twelve (12) day service disruption, respectively.

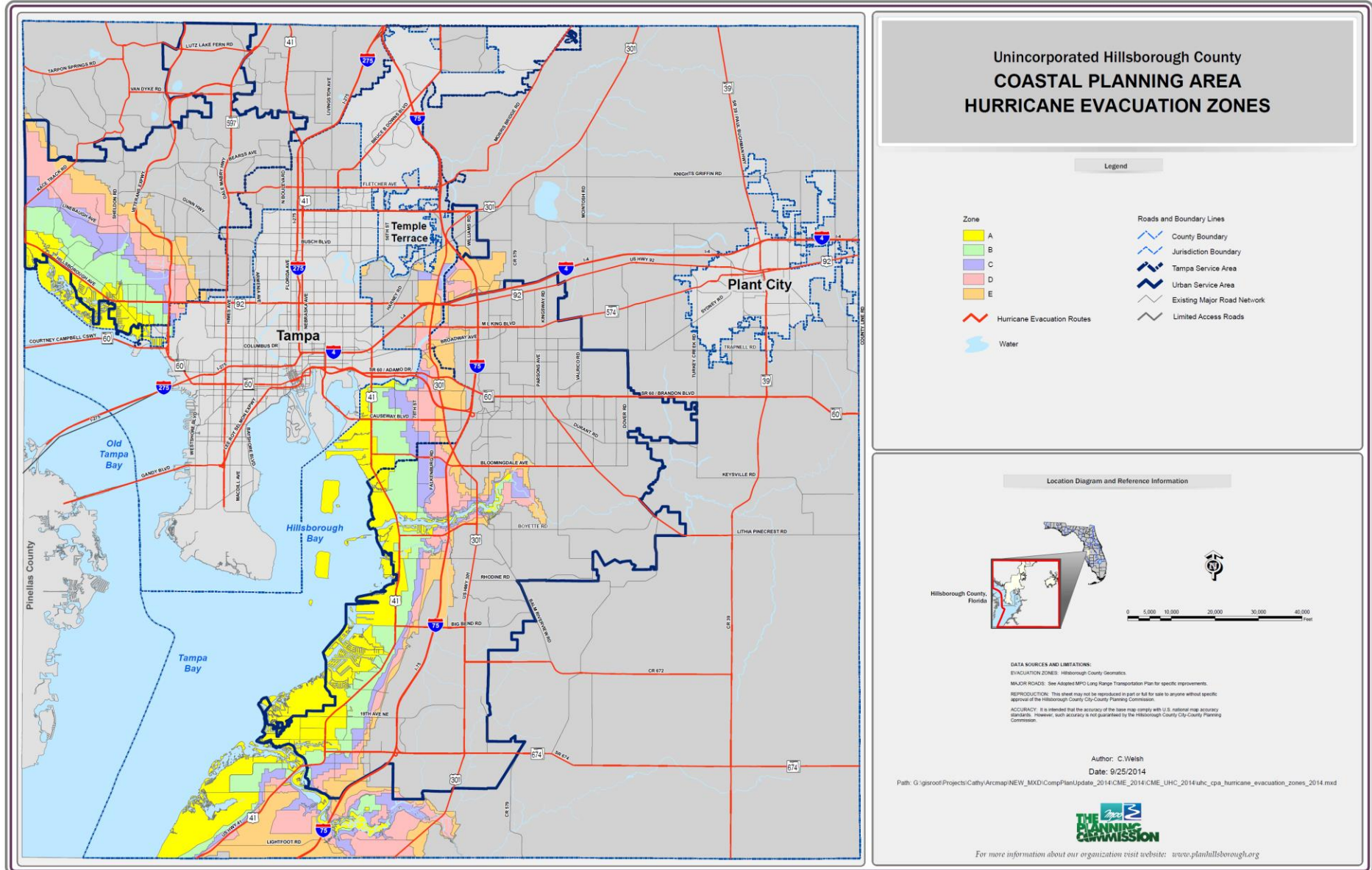
Electrical Utility Facilities: Unincorporated Hillsborough County has two (2) electrical plants (Bayside and Big Bend) and several substations located within the coastal planning area. All of these facilities are owned and operated by Tampa Electric Company (TECO). In a Category 2 storm the Big Bend Plant and 15 of the County's total 114 substations are projected to experience disruption of up to 5 days. Moreover, in a Category 3 storm all three electrical plants (Hookers Point, Bayside and Big Bend) and 18 substations would experience service disruption, most for up to fifteen (15) days.

Shoreline Protection Structures: Seawalls are the primary man-made coastal protection structures in the County. The remainder of the shoreline in the coastal planning area is comprised of beaches and naturally-vegetated areas. To date, a comprehensive inventory of seawalls has not been completed for the County. Routine maintenance and redevelopment are accorded to both private interests and the County. It is recommended that repairs and reconstruction of any seawalls should be consistent with the standards required under Chapter 61B-33, Rules and Procedures for Coastal Construction and Excavation (FDEP, Division of Beaches and Shores).









Unincorporated Hillsborough County COASTAL PLANNING AREA HURRICANE EVACUATION ZONES

Legend

<p>Zone</p> <ul style="list-style-type: none"> A B C D E <p>— Hurricane Evacuation Routes</p> <p> Water</p>	<p>Roads and Boundary Lines</p> <ul style="list-style-type: none"> — County Boundary - - - Jurisdiction Boundary - - - Tampa Service Area - - - Urban Service Area - - - Existing Major Road Network - - - Limited Access Roads
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Location Diagram and Reference Information

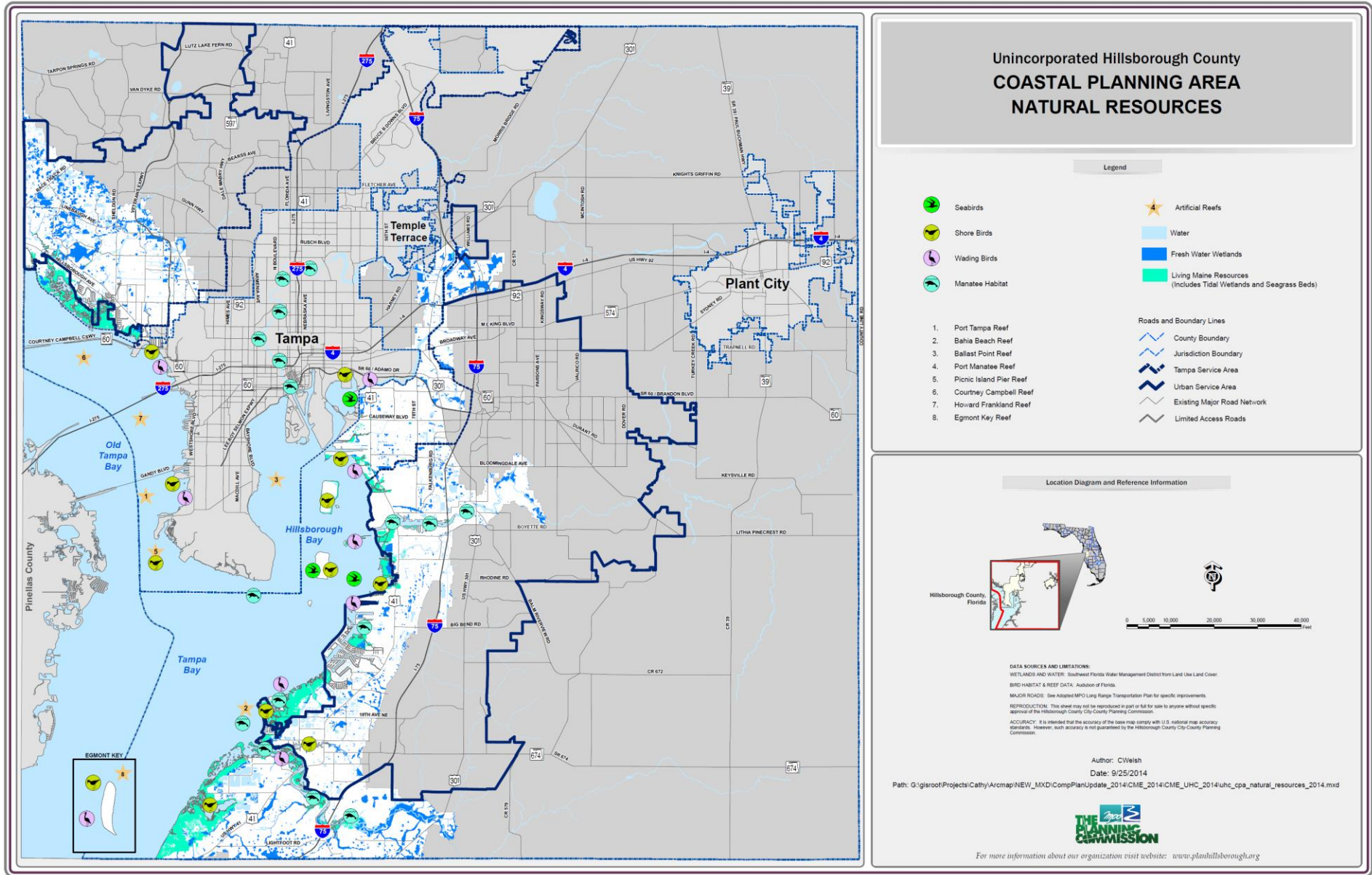
0 5,000 10,000 20,000 30,000 40,000 Feet

DATA SOURCES AND LIMITATIONS:
 EVACUATION ZONES: Hillsborough County Geomatics.
 MAJOR ROADS: See Adopted MPO Long Range Transportation Plan for specific improvements.
 REPRODUCTION: This plan may not be reproduced in part or full for sale to anyone without specific approval of the Hillsborough County City-County Planning Commission.
 ACCURACY: It is intended that the accuracy of the base map comply with U.S. national map accuracy standards; however, such accuracy is not guaranteed by the Hillsborough County City-County Planning Commission.

Author: C. Welsh
 Date: 9/25/2014

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For more information about our organization visit website: www.planhillsborough.org





Environmental

The purpose of the Conservation and Aquifer Recharge Element is to provide a plan and policy direction for the preservation, conservation, and management of the natural resources of Hillsborough County. This element is intended to provide guidelines for future governmental programs and decisions related to the protection and enhancement of the County's natural environment, as well as the public health, safety and welfare.

NEED FOR CONSERVATION AND AQUIFER RECHARGE ELEMENT

Hillsborough County, by virtue of its subtropical climate and variable hydrology and geology, supports a rich and diverse complement of natural resources. The County borders the largest estuary in the State, Tampa Bay, and three major rivers (the Hillsborough, Alafia and Little Manatee) flow through the County's borders. The County is underlain by the Floridan Aquifer, the largest and highest quality potable water aquifer in the State, as well as by some of the richest phosphate deposits in the world.

Over the past century, however, development has slowly degraded the rich natural resources of the County. The unregulated filling of wetlands, discharge of pollutants, mining of phosphate deposits, clearing of forests, dredging of bay bottoms, channeling of streams and rivers, and over pumping of groundwater supplies has irretrievably destroyed or altered much of the original natural resource base. Environmental

legislation passed at the federal, state, regional and local levels over the past three decades has done much to stem the tide of this destruction.

INVENTORY AND ANALYSIS

Geographic Setting

Hillsborough County is located on the coast of west-central Florida, bounded on the west by Tampa Bay and Pinellas County, on the east by Polk County, on the north by Pasco County, and on the south by Manatee County. Hillsborough County has a surface area of approximately 1,072 square miles. Land-surface altitudes range from sea level along the coast to approximately 160 feet above sea level at the Hillsborough-Polk County line southeast of Keyville.

Major surface drainage features in Hillsborough County are the Hillsborough, Alafia, and Little Manatee Rivers. The Hillsborough River begins in the Green Swamp and flows southwestward, draining 690 square miles before emptying into Hillsborough Bay. The Alafia begins in Polk County and flows westward, draining a 420 square mile basin, and also enters Hillsborough Bay. The Little Manatee River begins in southeast Hillsborough County and northeast Manatee County and flows west to Tampa Bay, draining 225 square miles.

Geology

Economically mineable quantities of pebble and sand phosphate are found in the shallow Bone Valley and Hawthorn Formations in southeast Hillsborough County. This rock

resource is processed into agricultural fertilizer. This area is the northwest section of the Central Florida Phosphate district located in Hillsborough, Manatee, Polk, and Hardee Counties. The limestone in the northeast part of the County is also at or near the surface, consequently making the area subject to possible future limestone mining activities. This economical resource is used as road base, fill, concrete, and asphalt production. Other economically mined products include sand, peat, and clay.

SINKHOLES

Sinkhole formation is most prevalent throughout much of northern and eastern Hillsborough County. Data suggests where sinkholes are more common in regions of Florida, but it's much more difficult to accurately predict specifically where sinkholes will occur. Special ground penetrating radar equipment can be used to create a map of the underground area, but this information provides only a clue where the cavities are in the subsurface. There has also been research to indicate that many sinkholes are hydraulically connected to the Surficial, Intermediate and Floridan Aquifers. Some sinkholes act as both sinks and springs, depending upon seasonal water level variations in the aquifer. The permitted utilization of sinkholes should entail the provision of adequate site-specific information, to ensure that the proposed use will not lead to degradation of ground or surface water quality, or cause water level impacts to nearby wells.

Soils

There are four broad divisions of soil types in Hillsborough County as follows:

- Poorly drained to very poorly drained;
- Moderately well drained to poorly drained;
- Well drained; and
- Mine pits and dumps.

Refer to the USDA Soil Conservation Service publication "Soil Survey of Hillsborough County, Florida" for a detailed description of soil types in the County.

Soil Limitations

Due to the flat topography and relative uniformity of soil distribution in Hillsborough County, soil limitations generally do not preclude structural development, except in extreme cases (e.g., wetland soils). Instead, these limitations require that engineering modifications be made to the site prior to construction. Severe limitations may require the removal of the natural material and replacement with a more suitable soil type.

The use of septic systems for the treatment and disposal of sewage effluent may, however, be significantly limited by site specific soil conditions. The location of septic systems in improper soils may result in several undesirable effects. If the soils have high wetness and poor permeability then the discharged effluent will not percolate properly and may runoff into, and contaminate, adjacent surface waters. In



excessively well-drained deep sand, septic effluent can migrate too rapidly for purification processes to occur, and carry contaminants into the groundwater supply. Extreme prudence should be used when permitting septic tanks in very well-drained soils. If a large number of tanks sited on highly permeable soil generate effluent that reaches the potable water supply without sufficient filtering, severe water quality problems can arise. The Surficial aquifer, the Intermediate aquifer, and even the primary artesian aquifer (Floridan) are all subject to contamination from septic wastes.

Soil Erosion

According to the Hillsborough County Soil and Water Conservation District (USDA), there are no chronic soil erosion problems in the County. Temporary soil erosion problems often occur during land clearing for agriculture and development; however, these perturbations can be controlled through the implementation of Best Management Practices (BMPs). The County and the Environmental Protection Commission of Hillsborough County (EPC) each review development applications for development approval in conjunction with soils survey information, exercising jurisdiction over wetlands soils.

COMMERCIALLY VALUABLE MINERALS

The most significant mineral resource in Hillsborough County is phosphate, which has been mined in the area since the late 19th century. Prior to 1989, there were several mining companies operating within Hillsborough County. Mosaic

Phosphate is currently the only remaining company. Economically, the phosphate industry continues to provide hundreds of jobs in the Tampa Bay region in the fields of processing, marketing, and shipping, as well as the mining of the resource. This results in a net capital inflow to Hillsborough County. Port facilities are also necessary for export of the phosphate rock.

From a land use perspective, phosphate mining has by far the greatest impact of any mineral resource in the County. Phosphate mining complicates land use considerations in southeast and central Hillsborough County because large tracts of known deposits are reserved for future mining thereby precluding other land uses in these areas. Additionally, land allocations are necessary for beneficiation plant's tailings and clay settling ponds. Clay settling, or slime ponds, are particularly space intensive and create large areas of unstable land surface unsuitable for development. A single mining plant may require a square mile or more of settling ponds.

SURFACE WATER RESOURCES

Freshwater Resources

Hillsborough County's surface water features include rivers, lakes, bays, creeks, sloughs, ponds, springs and wetlands.

Saltwater Resources

An in-depth discussion of Tampa Bay, the County's most significant surface water resource, can be found in the Coastal

Management Element. The protection and conservation of the resources of Tampa Bay is one of the County's most critical conservation issues, and is dealt with both in this element and the Coastal Management Element.

Water Quantity

Surface water flows are not only a product of runoff, but also include a groundwater baseflow component. In fact, many surface water systems in west-central Florida are closely interconnected with the underlying groundwater system through springs and sinkholes. In accordance with hydrologic conditions, these natural interconnections may augment flow, reduce flow, or perform both functions intermittently. Because the Tampa Bay region manifests annual wet and dry seasons with significant variations in precipitation frequency and intensity, the contribution of surface runoff and groundwater baseflow to streams varies. This cyclic pattern of changing baseflow conditions results in variable surface water quantity and quality.

Water Quality

Surface waters in the region may intermittently contain large quantities of sulfates, chlorides, fluorides, total dissolved solids (TDS), total hardness and color. The development of potable surface water supplies requires treatment facilities designed to reduce these constituents to acceptable levels, and also to remove trace contaminants and biological pollutants which may exist in the stream. Expensive treatment techniques,

such as demineralization and defluoridation, may be required to reduce high concentrations of fluorides and TDS.

Hillsborough River

The Hillsborough River originates in the Green Swamp and flows southwesterly into Hillsborough Bay. The river's drainage basin encompasses approximately 690 square miles of which approximately 120 square miles are located in Hillsborough County.

The Hillsborough has five main tributaries which flow into it at various points. Together, these tributaries account for approximately 65% of the total drainage basin area.

The water quality of the Hillsborough River at the reservoir varies seasonally, but is normally in compliance with State water quality standards. Flow in the Hillsborough River varies significantly during the year, from approximately 9,500 million gallons per day (MGD) during the wet season to less than 30 MGD at the end of the spring dry season. The average flow entering the Tampa reservoir is approximately 368 MGD. During periods of low flow, the river is primarily maintained by base flow from Crystal Springs, in southeastern Pasco County. Its discharge is about 40 MGD. In addition, Sulphur Springs can be used by the City to add up to 20 MGD into the reservoir, if necessary.

Presently, there are two flow controlling structures on the Hillsborough River. The first is the City of Tampa Water Works Dam, which is located on the river at 30th Street. The

water below the dam is brackish and tidally influenced by Hillsborough Bay. The water above the dam forms a reservoir which contributes to the City's overall potable water supply. The second structure is located just north and east of Interstate 75 in the vicinity of Fletcher Avenue. This structure (S-155) is operated by the Southwest Florida Water Management District to control flooding. When the river level reaches 28 feet above mean sea level at Fowler Avenue, the flood gates are closed and the excess flow is diverted into the Lower Hillsborough Flood Detention Area where the water is temporarily stored and systematically discharged through the Tampa Bypass Canal system.

The upper Hillsborough River is classified as a Class I-A (potable) water, while the remainder of the river is classified as Class III waters (suitable for propagation of fish and wildlife). The portion of the river passing through Hillsborough River State Park is further designated as Outstanding Florida Waters (OFW). The upper Hillsborough is largely publicly owned and as such is not presently available for major land development.

Alafia River

The Alafia River flows westward from Polk County and eastern Hillsborough County into the Hillsborough Bay near Gibsonton; the drainage basin consists of approximately 420 square miles. The Alafia River is comprised of the North and South prongs, which join nearly 20 miles from the mouth at Hillsborough Bay. The Alafia River has numerous tributaries throughout its course, the most notable being Turkey Creek, Fishhawk Creek,

Bell Creek and Rice Creek. Also found along the Alafia are natural springs, the most well-known being Lithia Springs and Buckhorn Springs.

Historical average flow readings range from 200 MGD to 235 MGD. Average flow at the mouth of the Alafia is approximately 300 MGD. Two reservoirs have been constructed in the Alafia River basin, including the Edward Medard Reservoir and Lake Grady. Lake Grady was built in 1960 by damming Pelleham and Bell creeks for recreation and flood retention, and it remains private. Medard Reservoir was created in 1970 for water management and recreation by damming the Little Alafia River and flooding a phosphate pit. Medard Reservoir has become the most popular Hillsborough County park and has had no significant water quality problems for public recreation. During high-flow periods, Tampa Bay Water pumps water from the Alafia River to help meet water demands at their regional Water Treatment Plant or is pumped to their reservoir in Southeast County for storage and later use.

Little Manatee River

The Little Manatee River discharges to Tampa Bay at Ruskin after descending from some of the County's highest ground. This tri-county (Polk, Hillsborough, Manatee) river basin contains 225 square miles, and the river has a mean flow of more than 150 MGD. This system, with its relatively unimpacted floodplains, swamps and tributaries, is more pristine than the other rivers of Hillsborough County. The Little Manatee is, however, threatened by phosphate mining in

its upper reaches. Rich deposits of phosphate matrix lie near the surface along the river's bed, and the easy extraction makes these areas extremely attractive for future mining.

The river is classified as a Class III water body and is an Outstanding Florida Water (OFW) from S. R. 674 west to the mouth. West of U. S. 301, the river is designated as an Aquatic Preserve.

The Little Manatee River is also used to supply a reservoir. Florida Power and Light (FP&L) pumps water from the Little Manatee River into its offstream reservoir, Lake Parrish, in Manatee County for cooling its thermoelectric power plant.

Tampa Bypass Canal

The original Palm River was dredged and channelized to form the Tampa Bypass Canal. The Tampa Bypass Canal System was designed by the U. S. Army Corps of Engineers to provide flood protection for the Tampa metropolitan area. The system has three canal segments with a total length of approximately 37 miles. The canal segments are the Tampa Bypass Canal, the Harney Canal and the Thonotosassa Canal. Since this central pool extends partially into the Floridan Aquifer, it acts as a sink for groundwater flow and, therefore, draws down the surrounding water table and potentiometric surface somewhat (SWFWMD, 1988). Currently, the Tampa Bypass Canal is used by the City of Tampa to augment their Hillsborough River Reservoir, and also used by Tampa Bay Water during high-flow periods to meet regional demands or is pumped to their reservoir in Southeast County for storage and later use.

Lakes

Many small lakes occur in Hillsborough County. Some lakes appear to be surface expressions of water tables perched on impermeable materials; others are interconnected to the Floridan Aquifer system through sinkholes and reflect the potentiometric surface of the aquifer. In an area north of Tampa, surface water is mainly internally drained through sinkholes and percolation through lake bottoms into the upper Floridan Aquifer.

Wetlands

The County is achieving its objective of a no net loss of wetlands functions. Wetlands and other surface waters(OSW) continue to be protected in accordance with the Rules of the EPC, which are consistent with and generally more stringent than the rules of the Southwest Florida Water Management District, the Florida Department of Environmental Protection (FDEP), and the U. S. Army Corps of Engineers, all of which exercise wetlands protection jurisdiction throughout Hillsborough County.

Wetlands/OSW are protected at the time of platting as Conservation or Preservation Areas. The County applies, through its Land Development Code, building setback requirements. Many wetlands are also protected in parks and preserves, and through processes such as the ELAP and Save-our Rivers Programs.

Floodplains

Hillsborough County has developed historically along the Hillsborough, Alafia and Little Manatee Rivers, numerous streams and creeks, and Tampa Bay. As such, over one third of the County's land area is physically located in the historical 100-year floodplain. Because of this, significant steps have been taken throughout the County's history to protect the residents and structures from flood damage. Most notable is the construction of the Tampa Bypass Canal and Lower Hillsborough Flood Detention Area system, built by the U. S. Army Corps of Engineers and managed by the Southwest Florida Water Management District in accordance with Corps guidelines.

The County, often in conjunction with the District, also built canals and other flood management structures to address both coastal and inland flooding. The Bypass Canal System is the most notable of a number of flood control projects built pursuant to the U.S. Army Corps of Engineers' Four River Basins study, undertaken in the late 1960's to address regional flood problems that became most apparent after significant tropical storms caused serious flood damage in the summers of 1960-61.

Groundwater Resources

The groundwater system is the principal source of water for domestic, agricultural, and industrial use in Hillsborough County. The groundwater system in Hillsborough County is divided into three distinct aquifer systems: the Surficial, Intermediate, and Floridan. The Floridan Aquifer system is the principal source of groundwater production and is capable of

yielding greater than 5,000 gallons per minute (GPM) from fully penetrating wells.

Groundwater Levels

The potentiometric surface of a confined aquifer is the elevation that water would rise under greater than atmospheric pressure and is generally an expression of the "hydraulic head" or recharge pressure within the confined aquifer. The potentiometric surface of the Floridan Aquifer varies seasonally, with highest and lowest levels occurring in September and May, respectively. September is normally the end of the wet season; May, the end of the dry season. Generally, more stress is placed on the aquifer in May because seasonal rains have not yet begun and crop irrigation is heaviest. Also, tourism is at its peak in late winter and early spring and places additional demands on the freshwater supply at a time when rainfall is least. However, the amount of rainfall is the most important factor affecting the elevation of the potentiometric surface of the Floridan Aquifer.

Aquifer Recharge

Aquifer recharge can generally be defined as the replenishment of water in an aquifer system. There are two basic dimensions to the issue of recharge area protection: water quantity and water quality. From the quantity perspective, it is desirable to ensure enough recharge to sustain projected ground-water requirements for natural systems and the future population of the region. But in terms of water quality, recharge areas are sensitive zones, because

water moving downward from the surface can transport contaminants to the aquifer.

Areas of high recharge represent only about 15 percent of the entire State of Florida, and in these areas recharge rates are estimated to range from 10 to 20 inches per year. In comparison to the State as a whole, there are no known areas of high recharge in Hillsborough County, although there are areas of relatively high aquifer contamination potential. However, it should be noted that natural recharge rates can be greatly influenced by groundwater withdrawals, which have the effect of lowering the potentiometric surface and thus potentially increasing recharge rates, within the cones of influence of wellheads. Consequently, maps indicating areas of 'natural' recharge may be very misleading in situations where significant groundwater withdrawals are taking place.

Aquifer Contamination

Florida Aquifer Vulnerability Assessment (FAVA) data shows potential for groundwater contamination.

Hillsborough County has been identified as an area experiencing some aquifer contamination. Recent studies conducted by SWFWMD have detected pollutants seeping into the Floridan aquifer and returning through springs. Rising levels of nitrogen and phosphate-based nutrients have been detected in regional surface waters.

The findings of a study entitled Origin of Nutrients in Groundwater Discharging from Lithia and Buckhorn Springs

point to inorganic fertilizers and dairy wastes as causes for increased nitrogen loadings in Lithia and Buckhorn Springs located in northeast Hillsborough County and in the groundwater of the Brandon karst terrain (SWFWMD, September 1993).

Pollution Sources

The major pollution sources to the waters of Hillsborough County include stormwater, industrial operations and domestic wastewater treatment plants. The EPC, in cooperation with the FDEP, uses a "Permit Process" as the primary tool for controlling water pollution from industrial and domestic sources. The stormwater management permitting process has been delegated to the Southwest Florida Water Management District (SWFWMD).

Industrial Sources. There are approximately 20 different types of major industries requiring regulatory permits from DEP for wastewater management, treatment or discharge.

Stormwater Sources. Stormwater is a major source of pollutants to lakes, streams and bays. Unlike domestic or industrial sources, stormwater is a non-point pollution. Undeveloped uplands and wetland systems help maintain good water quality by filtering, settling and/or assimilating these pollutants as stormwater flows through and across them. Land development with its accompanying increased impervious surfaces (roads and roof tops) fundamentally disrupts the natural treatment of rainfall and runoff. The quantity of runoff and rate of runoff is increased because



roads and storm sewers provide a direct, unimpeded conduit to the receiving water. The problem is further compounded because there is less vegetation which results in lower nutrient uptake/assimilation. Thus, stormwater is laden with nutrients which are readily available to aquatic vegetation and algae, exacerbating the eutrophication problems evident in our lakes and bays.

In 1991, the Board of County Commissioners (BOCC) approved the Stormwater Fee Program which made stormwater management a utility. The fee is \$12 per year for single family parcels and variable rates for other land uses which is utilized for Stormwater Capital Improvement Projects, Stormwater culvert replacements, National Pollutant Discharge Elimination System Permit requirements and Watershed Management Master Plan updates.

Individual Watershed Management Master Plans, which collectively comprise the comprehensive Countywide Watershed Management Master Plan, were completed for all of unincorporated Hillsborough County from 1998 through 2002. The plans are used to establish existing levels of service within the unincorporated area of the County, and to provide project recommendations for alleviating stormwater LOS deficiencies where they occur, as well as general recommendations for improving the overall Stormwater Management Program.

Specific policies are included in Chapter IV of the Stormwater Management Element of the Comprehensive Plan (Goals, Objectives, and Policies) which outline the commitment of the

County to the development, maintenance, and updating of the comprehensive Countywide Watershed Management Master Plan.

Total Maximum Daily Loads (TMDL)

Section 303(d) of the Clean Water Act (CWA) requires states to submit lists of surface waters that do not meet applicable water quality standards (impaired waters) after implementation of technology-based effluent limitations, and establish Total Maximum Daily Loads (TMDLs) for these waters on a prioritized schedule. TMDLs establish the maximum amount of a pollutant that a water body can assimilate without causing exceedances of water quality standards. As such, development of TMDLs is an important step toward restoring our waters to their designated uses. In order to achieve the water quality benefits intended by the CWA, it is critical that TMDLs, once developed, be implemented as soon as possible.

Basin Management Action Plans

Basin Management Action Plans (BMAPs) are an important step in the TMDL process. These documents are developed in cooperation with local stakeholders and attempt to reach consensus on detailed allocations and on how load reductions will be accomplished.

WATER SUPPLY SOURCES AND ALTERNATIVES

Water Supply and Current and Projected Water Use

Potable water is currently supplied to residents of Hillsborough County from a combination of sources, including the City of Tampa's Hillsborough River Reservoir, the Tampa Bypass Canal (TBC), Sulphur Springs, the Alafia River, a new 15-billion gallon regional reservoir and a network of public supply wellfields and private wells, located within and outside the County. A desalination plant provides 25 million gallons per day (mgd), as needed.

Water Use Caution Areas (WUCAs), created by SWFWMD, utilize workgroups comprised of representatives from agriculture, industry, public supply, and environmental interests to develop short-term water management tools. In 1992, our Governing Board designated a 5,100-square-mile area in the southern region of the District as the Southern Water Use Caution Area (SWUCA). This area includes all of DeSoto, Hardee, Manatee, Sarasota, and portions of Charlotte, Highlands, Hillsborough and Polk counties. SWUCA water resource concerns include depressed aquifer levels which cause saltwater intrusion and contribute to reduced flows in the upper Peace River, and lowered lake levels in upland Polk and Highlands counties.

Wellfields

Tampa Bay Water (TBW), a regional water supply authority, is responsible for the development of water supply for Hillsborough County's potable water supply needs. TBW was established in 1998 by a Five Party Interlocal Agreement among Hillsborough, Pinellas and Pasco counties and the cities of St. Petersburg and Tampa that reorganized the existing

West Coast Regional Water Supply Authority. TBW provides potable water to six member governments at a unitary rate. These governments in turn distribute the water to their residents.

Under TBW's Master Water Plan the regional system was expanded to include a new set of sources including the Brandon Dispersed Wells, Alafia River Pump Station, Tampa Bypass Canal Pump Station, Regional Reservoir, Desalination Plant and an expanded network of transmission mains between facilities to create a "Loop System," which allow for increased movement of water within the system, redundant interconnects for emergencies, and greater options for wellfield rotation to better manage the resource and protect the environment. (Additional information on potable water supply can be found in the Potable Water Element.)

Water Conservation

Water conservation is expected to play an important role in the County's efforts to plan for future water supplies, wastewater disposal, and environmental protection.

The County has responded to the need for water demand management by strengthening its Water Conservation Program. Building codes were modified to require low-flow fixtures and low-volume toilets (1.6 gallons per flush) in new construction. A program to retrofit existing residences with low-flow/volume fixtures was initiated with joint funding from the SWFWMD. Maintenance of that program continues independent of funding from the District.



The County utilizes an inverted block rate structure that encourages water conservation by charging higher user fees on usages above reasonable beneficial use while lowering user fees for essential uses. The County's water conservation rate is the most progressive in the tri-county area, having the highest rates for the high-usage categories.

Reclaimed Water Reuse

The County has developed an aggressive Reclaimed Water Reuse Program. The use of reclaimed water reduces groundwater withdrawals and the demand on potable water supplies by substituting reclaimed water for certain industrial processes and turf irrigation.

The County is expanding the reclaimed water distribution system through the CIP to make the resource available to more users. In addition, the County has initiated a Reclaimed Water Improvement Unit (RWIU) program that enables existing residential development to finance the installation of reclaimed water distribution facilities within their subdivisions over a 20-year period through special taxing districts. The RWIU program results in the direct replacement of potable water use for irrigation with reclaimed water.

Flora and Fauna

The State's variable climate and geography, combined with soil composition, rainfall patterns and coastal influences, provide a mosaic of habitats, each with a unique association of flora and fauna.

Hillsborough County, due to its size, extensive estuarine shoreline, and location in a transitional climate zone (temperate to sub-tropical), contains representative examples of over half of the major plant communities in the State. Fourteen plant communities occur in Hillsborough County.

Regulation, specifically through the upland habitat protection program and EPC's Wetlands Rule, is designed to protect the most sensitive portions of private parcels that have been identified as a Significant or Essential Wildlife Habitat. Wetlands/OSW and other environmentally-sensitive areas are also protected in accordance with plan provisions through Code requirements. Wetlands/OSW county-wide are protected in accordance with the Rules of the EPC, which was created through a special state act (Chapter 84-446, Laws of Florida, the Environmental Protection Act of Hillsborough County). EPC has received partial delegation of the State Environmental Resource Permit program for wetlands/OSW protection from the FDEP; all wetlands disturbances must be first approved by the EPC.

Commercially and Recreationally Important Fish and Shellfish

Once a highly productive ecosystem, Tampa Bay has sustained considerable damage due to urban development. There are only two shellfish harvesting areas in Tampa Bay. They are both classified by the state as "conditionally approved," meaning that they are subject to ongoing water quality analysis due to conditions which frequently alter the water quality including flooding and urban runoff. One area is in Boca Ciega Bay and the other is in Lower Tampa Bay. Oysters

and clams are no longer commercially harvested due to the inability of the few approved shellfish harvesting areas to produce harvests large enough to support a commercial industry. In addition, recreational harvesting of clams and oysters is extremely limited due to these conditions. Scallop harvesting is strictly prohibited as efforts are underway to reestablish the species.

NATURAL PRESERVES

Natural preserve lands are those lands which are maintained and managed in essentially their natural state with the primary objective of conserving and protecting their environmentally unique, irreplaceable and valued ecological resources. Natural preserve lands also provide recreation and aesthetic benefits and are open to public use and enjoyment to the extent that such uses are compatible with the conservation and protection of these lands.

In 1987, Hillsborough County voters passed a referendum to create the Environmental Lands Acquisition and Protection program (ELAPP) with the purpose of acquiring, preserving and protecting endangered and environmentally sensitive lands, beaches, parks and recreational lands in Hillsborough County. In 1990, the voters approved another ELAPP referendum authorizing the County to issue bonds up to \$100 million that would be retired by the levy of ad valorem taxes not to exceed 0.25 mil in any one year, to designate a portion of such funding for site restoration and management, and to permit the conveyance of such lands to other public agencies for the purpose of preservation, provided the proceeds be

used to acquire additional land or retire bonds. In November of 2008 voters approved a referendum for the issuance of up to \$200 million in bonds.

AIR QUALITY

Clean air is a vital natural resource that is necessary for life and should be safeguarded for public safety and wellbeing. The components of air directly affect the health and welfare of the County's residents.

Air quality in Hillsborough County is regulated at the federal level by the U. S. Environmental Protection Agency (EPA), at the state level by FDEP, and at the local level by the EPC. In February 1993, the EPC became the first local program in Florida to receive full air permitting delegation from the State. FDEP retained primary permitting jurisdiction for some major facilities; however, EPC maintains significant involvement in the permitting of these facilities through field inspections and drafting permit conditions. The EPC also maintains several air monitoring stations throughout Hillsborough County to provide the public with daily air quality information and to determine compliance with national and state air quality standards.

Pollution Sources

Title V of the Clean Air Act Amendments of 1990 (CAAA) became effective in 1997 and requires major sources of air pollution to obtain a State or an EPC permit. Compared to requirements prior to its implementation, Title V requires distinct emission controls for certain industries and a more complete accounting and reporting of their emissions, along

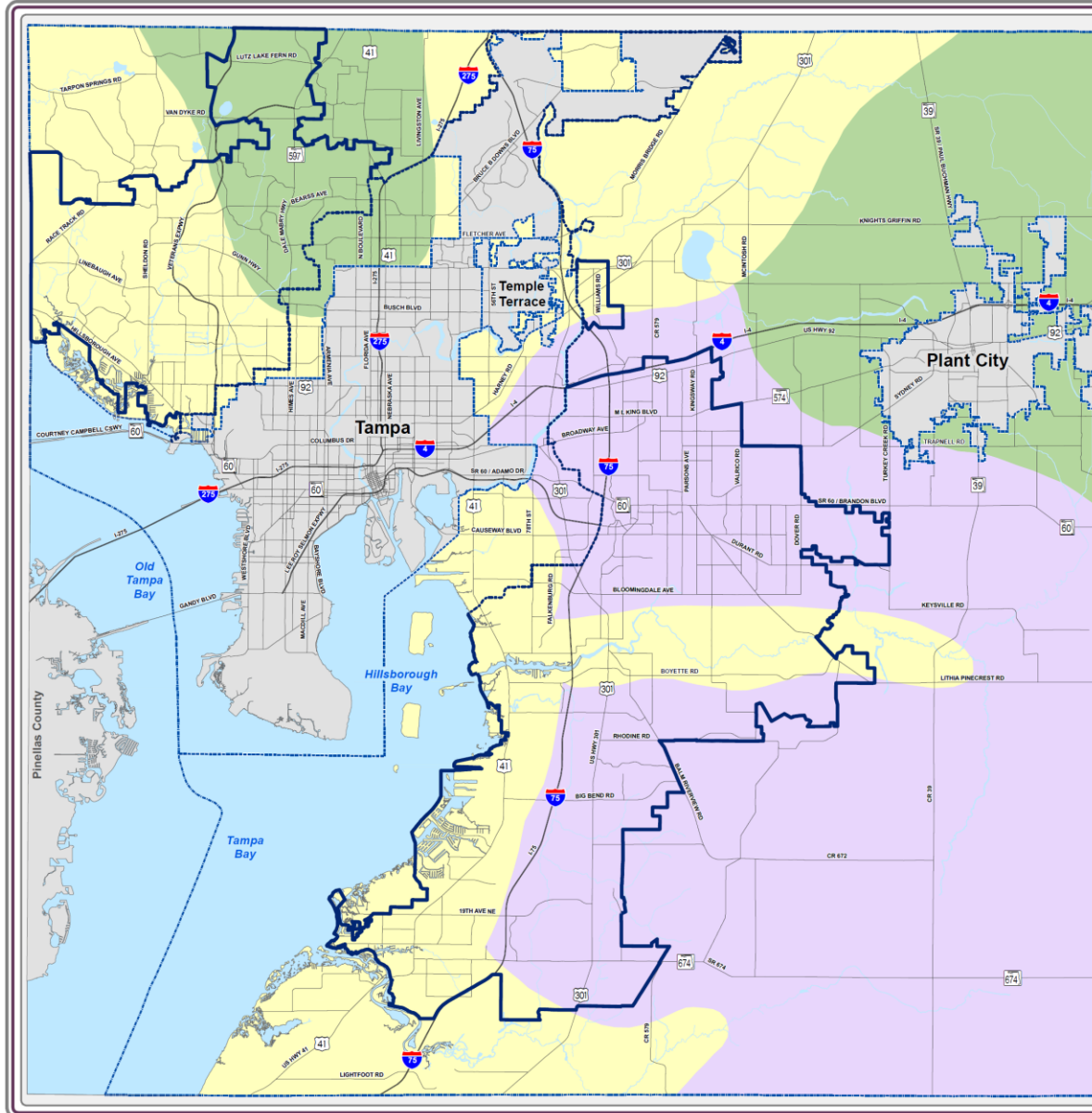


with improved compliance monitoring of activities. There are approximately 30 Title V facilities in Hillsborough County including power plants, fertilizer manufacturers, gasoline terminals, etc.

Another major source of area pollution are non-point sources, which include highways, construction sites, and forest fires. Non-permitted facilities or individual citizen's activities which emit excessive dust, odor, noise or smoke are also regulated by the Rules of the EPC. Asbestos regulation of demolition and renovation projects is an additional program administered by EPC. The EPC Air Division Citizen's Response section responds to hundreds of complaints each year.

HAZARDOUS WASTE AND HAZARDOUS MATERIALS

Please refer to Solid Waste Element Technical Report for information regarding hazardous waste.



Unincorporated Hillsborough County AREAS OF NATURAL RECHARGE TO THE FLORIDAN AQUIFER

Legend

- Discharge Area
- Less Than 1" Per Year to the Floridan Aquifer
- 1' to 10' Per Year to the Floridan Aquifer

Roads and Boundary Lines

- County Boundary
- Jurisdiction Boundary
- Tampa Service Area
- Urban Service Area
- Existing Major Road Network
- Limited Access Roads

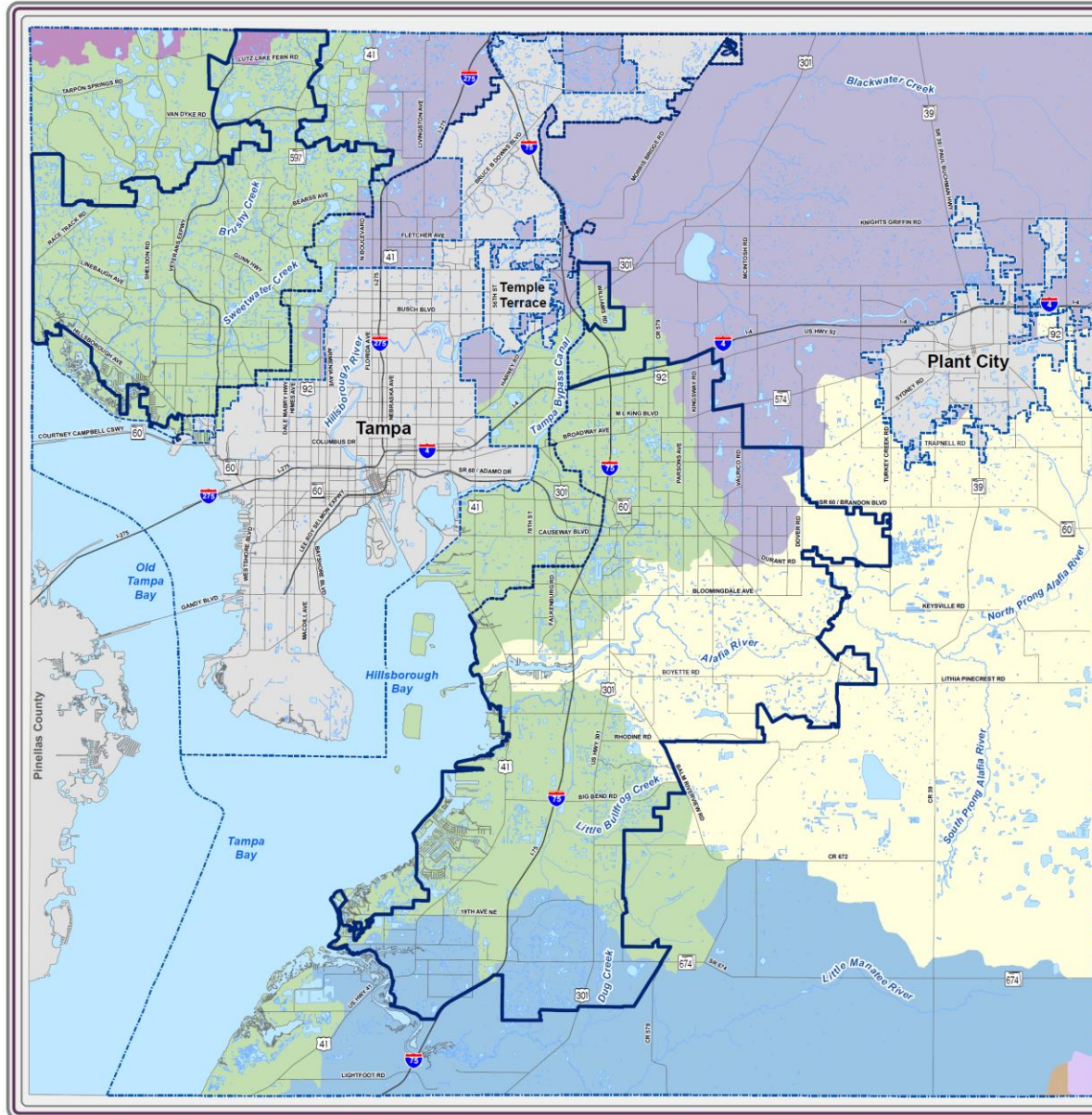
Location Diagram and Reference Information

Hillsborough County, Florida

DATA SOURCES AND LIMITATIONS:
 RECHARGE AREAS TO THE FLORIDAN AQUIFER: SRAFWMD.
 MAJOR ROADS: See Adopted MPO Long Range Transportation Plan for specific improvements.
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Author: CWelsh
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For more information about our organization visit website: www.planhillsborough.org



Unincorporated Hillsborough County MAJOR DRAINAGE BASINS

Legend

Drainage Basins	Roads and Boundary Lines
Peace	County Boundary
Manatee	Jurisdiction Boundary
Little Manatee	Tampa Service Area
Alafia	Urban Service Area
Hillsborough	Existing Major Road Network
Tampa Bay	Limited Access Roads
Crystal-Pithlachascote	Bays, Lakes & Harbors
	Rivers

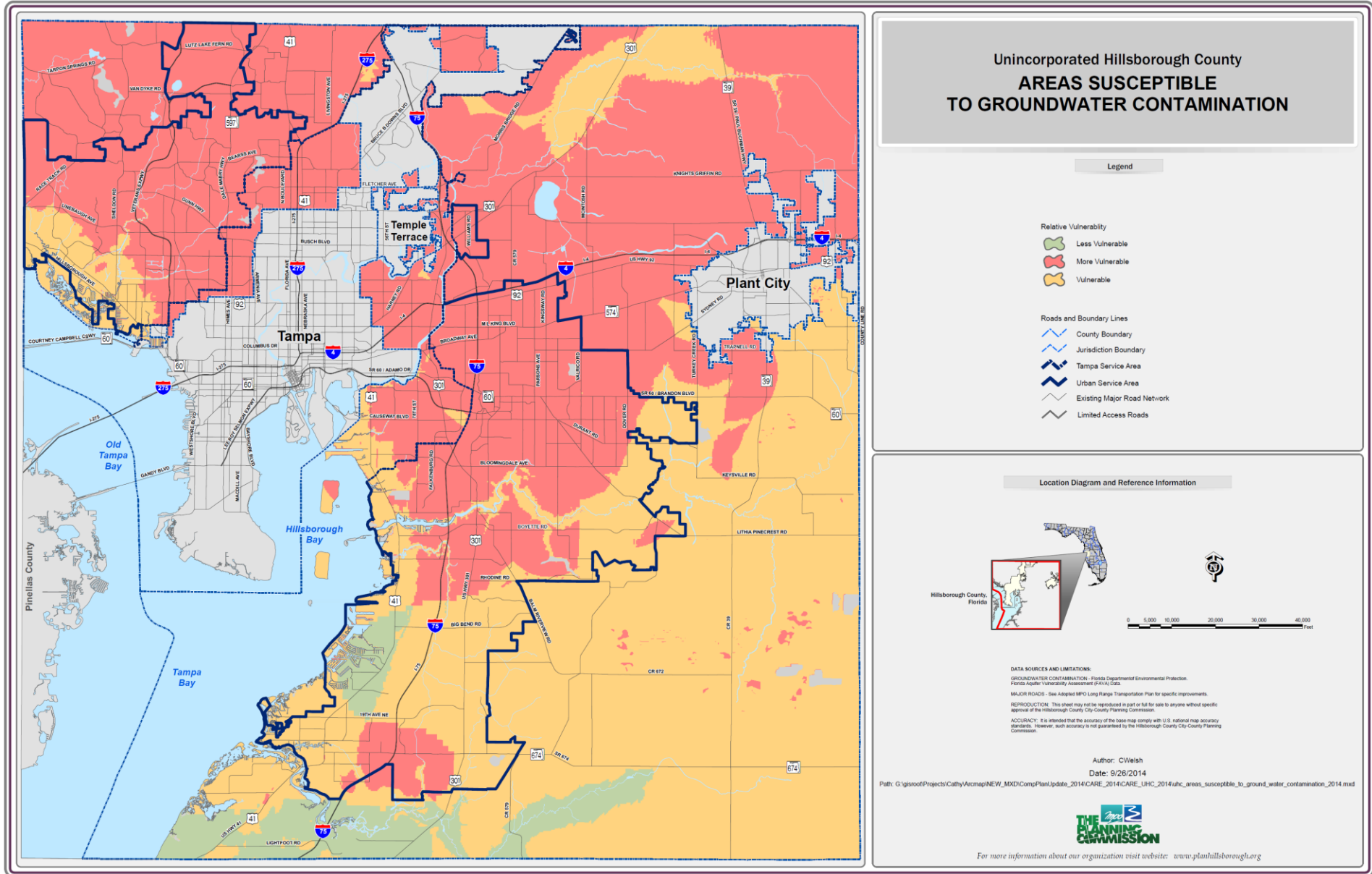
Location Diagram and Reference Information

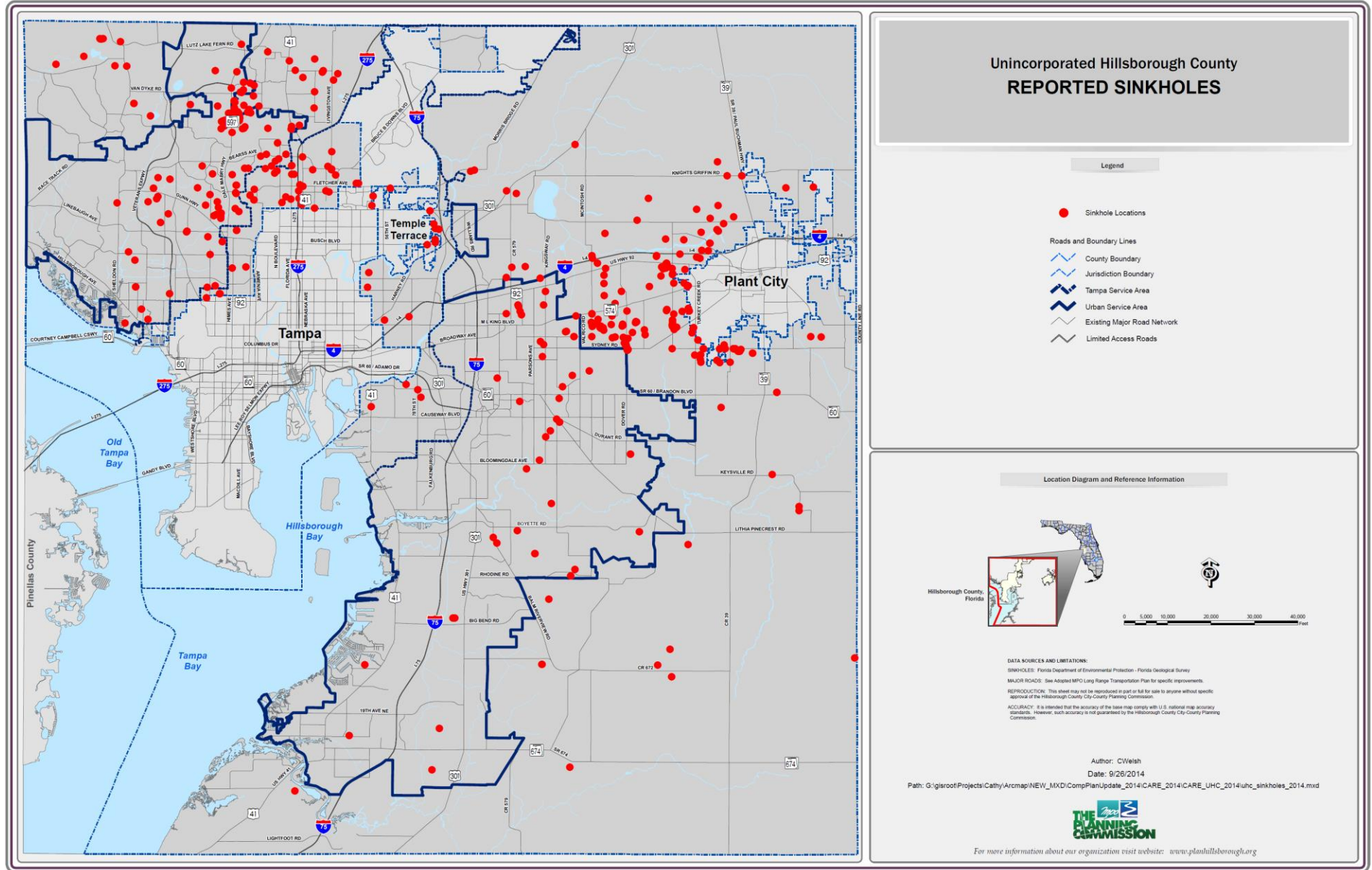
Hillsborough County, Florida

DATA SOURCES AND LIMITATIONS:
 DRAINAGE BASINS: U.S. Geological Survey/U.S. Department of Agriculture.
 WETLANDS AND WATER: Southeast Florida Water Management District from Land Use Land Cover.
 MAJOR ROADS: See Adopted MPO Long Range Transportation Plan for specific improvements.
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Recreation and Open Space Section

EXECUTIVE SUMMARY

The purpose of the Recreation and Open Space Section is to provide guidance to unincorporated Hillsborough County to enhance recreation and open space areas, while designating adequate and appropriately located land for recreational facilities to meet the needs of the anticipated population. Through its goals, objectives and policies, this Section establishes criteria for recreation and open spaces, provided by both the public and private sector, to meet the needs of the growing community. The Section addresses the needs to plan for the development of additional leisure time recreation facilities to provide the necessary recreational opportunities to keep pace with the demands generated by growth.

This Section has been prepared to meet the requirements of the Chapter 163, Florida Statutes (FS). The Hillsborough County Board of County Commissioners adopted the Park Site Improvement Program Ordinance in 1985. The Board determined that the provision of adequate park facilities is an essential public service by recognizing that increasing the number of parks in order to serve the needs of the growing population is a responsibility of government, and it is in the best interest of the public health, safety and welfare. The Ordinance states that "in order to ensure that existing and future residents of Hillsborough County have adequate park facilities to serve the needs of the growing community, the Board of County Commissioners of Hillsborough County must create a program that deals with existing park deficiencies as

well as providing for the location and construction of park improvements to meet future needs."

The Park Site Improvement Program is the product of this Ordinance. The Ordinance describes the types of parks for which the Parks and Recreation Department is responsible – local, regional, and special parks. It includes standard levels of service and analyzes the extent of future needs.

Based on County Parks and Recreation Department standards, the Recreation and Open Space Section reassesses the current deficiencies and future needs based upon updated parks facilities and acreage data. The size of the park has a great bearing on a park's development potential. Furthermore, acreage is correlated to population and used as a means of evaluating recreational levels of services.

The analysis of current and future needs by park planning areas was performed. These are defined in the Ordinance as generalized budgeting zones created for the purpose of implementing the provisions of the Ordinance relating to expenditure of park impact fees. The impact fee is a mechanism whereby residential development may be assessed a pro rata share of its economic impact on the local park system.

Alternatives to correct existing deficiencies and address future needs are proposed through the Goals, Objectives and Policies of this Section. Furthermore, the Objectives and Policies prescribe eventual implementation activities by providing ways in which the programs and activities shall be conducted to



achieve the identified goal. The Goals, Objectives and Policies chapter of the Recreation and Open Space Section is divided under 4 Objectives:

- ROS Objective 1.1 – Develop Parks, Recreation, and Conservation Space Master Plan
- ROS Objective 1.2 – Preserve and Manage Open Space and Natural Assets
- ROS Objective 1.3 – Provide and Maintain Parks and Recreational Facilities
- ROS Objective 1.4 – Develop and Maintain Greenways System
- ROS Objective 1.5 – Maintain and Expand Public Access to Public Lands, Facilities and Assets

The Section proposes the creation of a countywide open space network which would utilize existing natural resources and combine them to create a county-wide system. This network would enhance County land use plans and management, and it would more efficiently utilize lands that are currently underutilized. The open space network concept promotes the efficient utilization of public lands by combining public service activities, such as recreation, stormwater management, aquifer recharge and protection of wildlife habitat corridors into an open space network.

The interconnections of these public lands can be accomplished primarily through existing rights-of-way, existing and extended bike paths, nature trails, rivers, and scenic corridors in order to minimize public acquisition of private land. The implementation of this concept would increase the

availability of open spaces and recreational areas and improve their access throughout the County.

In addition to being consistent with the Tampa Bay Regional Policy Plan and the State Comprehensive Plan, this Section is internally consistent with other Sections of the plan, such as Future Land Use, Conservation, Coastal Management, and Capital Improvements Sections. In general, the Recreation and Open Space Section provides guidance in supplying recreational opportunities while protecting natural resources for the residents of unincorporated Hillsborough County.

Introduction

Parks are an essential component of every community. There are proven correlations between the presence of parks and enhanced environmental, economic, and social conditions. The Hillsborough County Parks, Recreation and Conservation Department (PRC) is responsible for the provision and maintenance of recreational opportunities to over one million residents. To date, the PRC is guided by the Department’s Annual Business Plan. The most recent Plan is as follows and provides the background data and information for the Parks, Recreation, and Open Space Section:

HILLSBOROUGH COUNTY PARKS, RECREATION AND CONSERVATION BUSINESS PLAN FISCAL YEAR 2014-2015

MISSION OF THE PRC

Hillsborough County Parks, Recreation and Conservation Department (PRC) seeks to enrich our community by: providing superior recreational opportunities through places,



programs and preservation of resources; increasing cultural awareness; promoting economic development; and offering active lifetime learning experiences.

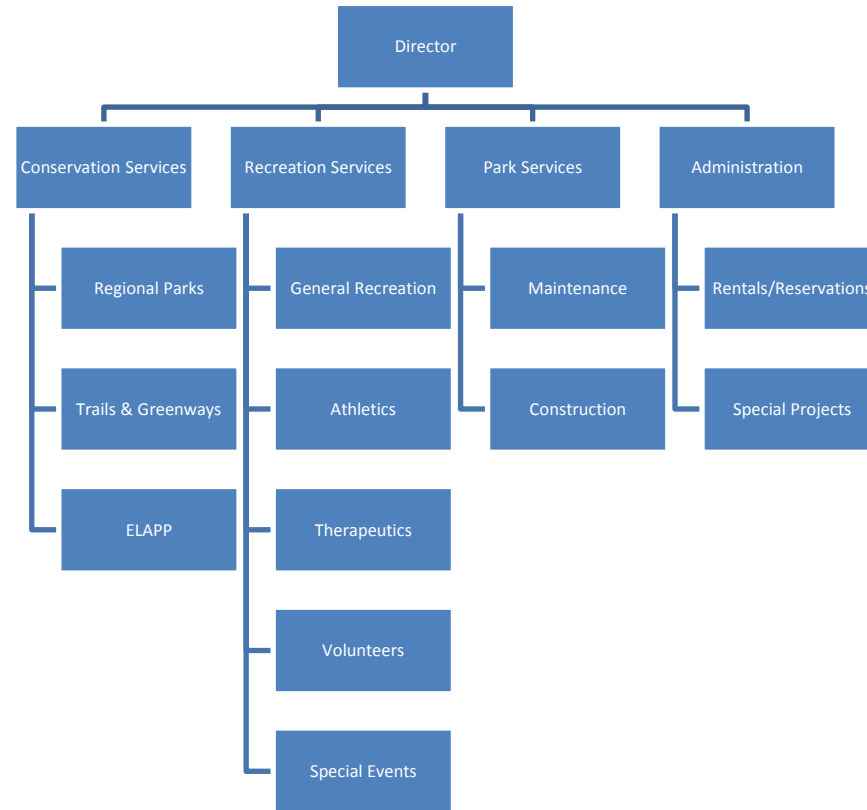
DEPARTMENTAL OVERVIEW

PRC provides recreational opportunities to over one million residents. Throughout Hillsborough County, PRC is comprised of more than 80,000 acres of park land that includes:

- 61 preservation sites through the Jan K. Platt Environmental Lands Acquisition and Protection Program (ELAPP) and other large managed tracts. These parks and nature preserves include 652 miles of paved, unpaved and waterways trails along with public educational features and land- and water-based activities and programs.
- A large-scale regional parks system providing safe, well-maintained park facilities at 10 Regional Parks and the Upper Tampa Bay Trail totaling 16,463 acres with an annual FY13 attendance of 2,215,302 patrons. These parks offer access to a variety of outdoor activities including picnicking, swimming, camping, hiking, biking, fishing and nature study. Facilities located on Regional Parks include 169 improved family campsites, 10 group campsites, a horse arena, botanical gardens, greenhouse exhibit, BMX track, archery range, 3 nature centers, boardwalks, boat ramps, and off-road bicycles trails. The Upper Tampa Bay Trail serves nearly 300,000 visitors a year and provides urban and rural trail experiences for bicyclists and hikers.
- 182 parks programmed year-round including:
- 10 regional recreation center clusters offering a wide breadth of activities and classes for all ages.
- 40 satellite centers within the clusters offering a wide variety of activities through contracted partnerships.

- Therapeutic programs.
- Youth and adult athletics
- Sites for specialized interests such as skate parks and dog parks.
- Facilities for cultural and arts programming.
- Special events almost every weekend with community and civic organization partners throughout the county.
- Supporting these activities and facilities is a dedicated maintenance and construction division.

Staffed with a combination of full- and part-time employees (344 FTEs) along with several thousand volunteers, PRC is organized as follows:





CORE SERVICES AND CUSTOMERS

Though primarily located in unincorporated areas of Hillsborough County, PRC parks and programs are open to everyone. Services provided can be generally characterized as follows:

- Public Open Space
- Services provided primarily to:
- Hillsborough County residents
- Visitors

Principal service delivery area(s): Local and regional parks, ELAPP sites

- Common customer expectations:
- Facilities for congregating inside and outside like picnic pavilions and meeting halls
- Access to natural areas with little to no development
- Beaches, boat ramps, water trails
- Nature conservation areas, habitat for wildlife, and ecological restoration programs
- Camping sites
- Trails for walking, running, and bicycling
- Canoe/kayak rentals

GENERAL RECREATION

Services provided primarily to:

- Hillsborough County residents
- Principal service delivery area(s): Local and regional parks, trails, skate parks

Common customer expectations:

- Playgrounds in close proximity to neighborhoods
- Athletic fields and courts available to the general public
- Wide variety of classes for different ages and skill levels
- After-school programs and summer camps for kids

THERAPEUTICS

Services provided primarily to:

- Disabled athletes
- Physically and intellectually challenged youth and young adults
- Principal service delivery area(s): Recreation centers, particularly Bakas Equestrian Center and All People’s Life Center

Common customer expectations:

- Athletic competitions for disabled athletes
- Therapeutic horseback riding
- ADA accessible athletic fields and facilities
- Afterschool and summer programs for physically and intellectually challenged youth

SPECIAL EVENTS

Services provided primarily to:

- Hillsborough County residents
- Internal and external partner event support



Principal service delivery area(s): Local and regional parks; cultural centers

- Common customer expectations:
- Provide Signature events
- Oversee compliance of outside entities utilizing county facilities for events
- Provide set up and event support for internal and external partners

ATHLETICS

Services provided primarily to:

- Hillsborough County residents
- Local, state, and national traveling athletic teams

Principal service delivery area(s): Local and regional parks; sports complexes

Common customer expectations:

- County-run adult leagues
- Facilities for youth and adult sports (e.g., football, basketball, soccer, baseball, softball and specialty sports)
- Large facility rentals for tournaments with associated infrastructure (e.g., offices, meeting rooms, concessions, parking)
- Partnerships with youth league associations
- Training and screening of volunteers working with youth

CULTURAL AND COMMUNITY PROGRAMS

Services provided primarily to:

- Hillsborough County residents

Principal service delivery area(s): Designated community centers through partner providers, particularly University Area Community Development Center, Carrollwood Cultural Center, Lutz School House, Ruskin Fire House, Hillsborough County Sheriff/Boys and Girls Club, Hillsborough County Aging Services, Mann Wagon non-profits, Veteran’s Park and Museum and other emerging partnerships.

Common customer expectations:

- Maintained facilities
- Financial assistance
- Managed contract relationship

MAINTENANCE/CONSTRUCTION

Services provided primarily to:

- PRC operations

Principal service delivery area(s): Local and regional parks, sports complexes, cultural centers, skate parks

Common customer expectations:

- Regular trash removal
- Mowing of facilities and athletic fields
- Repairs of buildings and infrastructure
- Minor construction projects (e.g., small buildings, foundations, boardwalks)



OPERATING ENVIRONMENT

The 2013 Hillsborough County Board of County Commissioners (BOCC) Strategic Plan contains two strategies relevant to PRC:

Distinctive Experiences – This strategy seeks to expand the number of people visiting or retiring in the County. PRC focuses on providing memorable experiences for each park’s visitor and participant through its programs and activities.

Great Places – This strategy seeks to provide the safety, arts, culture, recreation and other community features that make it a desirable place to live, work and do business. PRC designs its offerings with the interests, needs and desires of the customer as its focus.

At the core of PRC’s mission is leaving each park’s visitor with a distinctively positive memory from their experience. To that end, PRC devotes significant resources to surveying a wide berth of customer experiences. Examples include bikers and hikers along a trail, young and older athletes engaged in a league, moms supervising children at the local playground, attendees at a community center program or activity, canoers or hikers exploring a water or wilderness trail, and many more. Customers are surveyed throughout the parks system to serve as the basis for improving PRC’s offerings and providing distinctive experiences at great places at Hillsborough County parks.

PRC anticipates re-engaging in certain deferred maintenance, refreshing selected facilities and adding some minor amenities

during the next budget cycle as modest budget increases become available after several years of budget constrictions.

To help us address our customers’ expectations, PRC has begun the process of hiring a consulting firm to offer recommendations on how to increase and diversify parks revenue and participation. Areas to be explored include memberships, better tournament facilities, and more fee-based amenities. The goal of this effort will be to strengthen the “distinctive experiences” and “great places” strategies.

OUTCOMES AND STRATEGIC ALIGNMENT

The County Administrator has also identified four vision statements to guide how the department achieves positive outcomes in support of the BOCC’s strategic goals. They are:

Community Building: residents and stakeholders fully invested in creating a physically, culturally, spiritually and economically diverse, balanced and sustainable community.

Defining Essential (Core) Services: perceived by those whom we serve as capable of and willing to provide the essential elements of community building for which local government bears a responsibility.

Customer Service: customers who enjoy reliable, respectful and fully-facilitated access to service at all times



Organizational Culture: employees who feel empowered to deliver service to the community with accountability to their customers and to each other.

PRC’s principal objectives and associated actions are shown in the table below as well as their alignment with County Administrator’s vision, the outcomes to be measured, and their current status:



MAINTAIN HIGH LEVELS OF CUSTOMER SATISFACTION	
Actions	Vision Statement
Provide safe, well-maintained and accessible parks, facilities and open space for all.	Core Services
Customer satisfaction is tracked and measured through online surveys for a variety of parks, recreation centers, and associated programming.	Organizational Culture
Convert the current mowing contract from twice-weekly mowing to a schedule that reflects current weather and ground conditions as well as add chemical treatment especially for athletic fields	Core Services
Increase the number of completed surveys	Customer Service
Use PRC staff to complete construction projects whenever possible to supplement Facilities and Real Estate Department activities	Core Services
Outcomes: satisfaction rating goal for Regional Parks; satisfaction rating goal from athletic associations regarding field maintenance; percentage of construction projects completed on time	
Current Status: Achieved 95% customer satisfaction rating for regional parks during FY13, surpassing 85% goal outlined in FY13 business plan. FY14 customer satisfaction goal for regional parks is 90%.	

INCREASE ACCESS TO NATURE-BASED PROGRAMMING	
Actions	Vision Statement
Implement nature camps in Regional Parks for area youth during the summer and other selected times during the year.	Community Building
Implement nature based programming in year round after school programs.	Community Building



INCREASE ACCESS TO NATURE-BASED PROGRAMMING	
Actions	Vision Statement
Develop signature events promoting family oriented nature programming.	Community Building
Outcomes: number of participants enrolled in nature based programming	
<p>Current Status: Currently, "Project Learning Tree" nature programming is incorporated into both the afterschool and summer camp curriculum, reaching almost 2,000 children between the ages of 5-12. Additionally, three resource-based summer camps provide a more in-depth nature experience to an additional 450 children. These camps are also offered during Spring Break and Thanksgiving Break.</p> <p>The "Great American Campout", a facilitated family camping experience is offered two weekends each year with over 100 families being introduced in 2013 to spending the night in the wilderness in a controlled and safe environment.</p>	

FURTHER DEVELOP SPECIAL EVENTS	
Actions	Vision Statement
Create an enhanced, recreation-based special events team to ensure continued support of County special events.	Community Building
Develop Signature Events	Community Building
Streamline process for events team	Organizational Culture
Outcomes: number of County-sponsored events supported, diversity of events	
<p>Current Status: the County provided set up and oversight of over 200 County and non-County special events during FY13. A permitting process has been developed for special events, both internal and external, to capture all events utilizing County resources and assist in determining need for insurance, fees and staffing.</p> <p>"Eat at Joe's", a downtown picnic in the park and concert series developed in FY 13 has set the bar for Signature Events. With agencies such as the Downtown Partnership, City of Tampa, the Arts Council, and the Sports Commission; Parks Recreation and Conservation has turned the</p>	



FURTHER DEVELOP SPECIAL EVENTS	
Actions	Vision Statement
second Friday of every month into a festival of food trucks and music at Joe Chillura Courthouse Square. With continued sponsorships and partnerships, PRC will expand "Park After Dark", a movie in the park series, and the "Great American Campout" as well as expand the already established Senior Games, Battle of the Bands, and Tiny Tot Olympics.	

MANAGE EXISTING AND NEWLY ACQUIRED CONSERVATION LAND	
Actions	Vision Statement
Implement individual preserve management plan goals, objectives and strategies over 61,000 acres of land acquired through ELAPP.	Core Services
Reduce wildfire threats on preserved lands through the use of prescribed burning and mechanical treatments.	Core Services
Enhance site security and reduce poaching on select ELAPP sites through the construction or acquisition of permanent site security residences.	Core Services
Implement existing ELAPP restoration, enhancement and access projects through the CIP. Outline scope and budget for similar needs on newly-acquired ELAPP sites.	Core Services
Outcomes: number of acres burned using prescribed fire	
Current Status: During FY13, achieved an 11.6% reduction in wildfire threats on preserved lands utilizing prescribed fire and mechanical treatments over 4,335 acres. During FY14, opened 1,000 acres of the Lower Green Swamp Preserve to the general public with over six miles of new hiking/equestrian trails, large parking area, and newly constructed bridges traversing Blackwater and Itchepakesassa Creeks.	



PROVIDE A DIVERSE SOURCE OF REVENUE FOR THE DEPARTMENT	
Actions	Vision Statement
Implement the current PRC fee schedule to provide continued revenue and support for PRC operations.	Core Services
As appropriate, add new services and/or facilities that promote a wide range of uses and revenue streams within parks and recreation sites.	Customer Service
Hire a marketing consultant to provide direction on increasing revenue	Organizational Culture
Outcomes: total revenue received by PRC in Countywide and Unincorporated Funds	
Current Status: Collected \$3,836,987 in revenue during FY13. Projected FY14 revenue is \$3,615,383.	

OFFER ATHLETIC AND THERAPEUTIC ACTIVITIES TO SERVE ALL PARK CUSTOMERS	
Actions	Vision Statement
Attract large conferences and tournaments to sports complexes and recreation centers	Community Building
Support therapeutic sports programs	Core Services
Support Youth Athletic Programs	Core Services
Adult Athletic programs	Core Services
Outcomes: Numbers of participants participating in youth and adult leagues, revenue generated by tournament partnerships with Tampa Bay Sports Commission and others	
Current Status: Currently over 60,000 youth participate in sports leagues facilitated by Parks, Recreation and Conservation. Leagues are monitored for coach training, concussion prevention, and background checks for coaches and volunteers, providing a safe environment for the community's children. Over 700 children and adults participate in therapeutic sports programs, from local Special Olympic tournaments to National Wheelchair Basketball tournaments, to international Quad Rugby tournaments. In FY 2013, the Sports Commission estimated over \$6.5 million in revenue to the Tampa Bay area was generated by tournaments held on PRC facilities.	

KEY INITIATIVES

While PRC will pursue many actions each year to meet their objectives, there are some major initiatives underway to fully realize them. They are:

Hire a marketing consultant and implement recommendations

In order for PRC to remain competitive with other counties in Florida and help fulfill the BOCC's strategic mission to attract economic development, the Department needs to increase amenities and activities offered at its facilities while increasing revenue. The consultant will likely review current sources of revenue with associated trends, survey current park users to ascertain their desires for the park, examine current fee schedules, and look for public/private partnerships or public/non-profit partnerships. This initiative will be completed in FY15 and result in revisions and recommendations for the FY16 budget requests and business plan. PRC, Communications, and Fiscal and Support Services staff are currently in the process of writing a scope of work in order to solicit interested consultants.

Pursue partnerships with other organizations to provide more programming

Recreation services currently partners with a number of community non-profits, volunteer groups, contract instructors and athletic associations to provide programming and activities at staffed and unstaffed parks and facilities. The optimal goal is to provide 75% of all programming through partnerships

and special interest contractors. This is determined by realizing full partnerships in 40 satellite centers and expanding special interest programming in regional centers. Currently, partners and contractors provide 50% of all recreational programming hours.

Begin Phase IV construction of the Upper Tampa Bay Trail

This 4-mile expansion of the Upper Tampa Bay Trail will run from Van Dyke Road north to the Suncoast Expressway. A majority of the trail route will run through the Brooker Creek Headwaters Preserve, providing the trail user a nature experience unlike any other along the existing trail. A trailhead with parking and restrooms will be provided along the northern preserve boundary adjacent to Lutz-Lake Fern Road. From there, the trail will extend eastward along Lutz-Lake Fern Road until it intersects with the Suncoast Trail, providing access to a 65-mile regional trail network that stretches across three counties.

Continue habitat restoration activities and access improvements Within the Lower Green Swamp Preserve

From a land management perspective, the restoration of the 12,800-acre Lower Green Swamp Preserve will be a priority over the next 10-plus years. This includes the development and implementation of upland/wetland habitat restoration projects, timber management, resource-based (passive) access improvements, exotic plant/animal control, and

prescribed burning. During FY 15, it is expected that the County will: 1) begin construction on the third (and final) access bridge across Blackwater Creek, connecting the central and northern portions of the preserve; 2) begin planning efforts with the Florida Forest Service to harvest timber (slash pine) from several hundred acres of pine plantation units, allowing native understory grasses and shrubs to regenerate and flourish within these areas; and 3) acquire new field equipment to provide needed in-house restoration and management services utilizing PRC staff.

Develop a habitat mitigation pilot program for ELAPP sites

There are currently extensive habitat mitigation opportunities within disturbed areas of various ELAPP sites. Two of these sites include the Lower Green Swamp Preserve (Hillsborough River Basin) and Balm Scrub Addition (Tampa Bay Basin). These sites are candidates for future FDOT and County mitigation projects. Internal policies and procedures will need to be developed in order to implement these mitigation projects on ELAPP sites.

THE FUTURE

If the economy and the number of residents in Hillsborough County continue to grow, PRC will have to expand programming, facilities, and amenities. This will create demands for more facilities. Capital funding and operational funding will need to be added to keep up with demand, however, both should be adequately planned and developed. PRC will have to critically analyze where facilities are planned,

funded and constructed. PRC must be efficient in both the development of new facilities as well as maintenance. The department must focus on its core services to keep parks, facilities and open space safe and accessible for all. Resources from other departments will be needed to maintain and improve existing facilities. The department must keep a watchful eye on facility conditions to keep them from falling into disrepair.

However, the addition of new facilities, particularly the indoor gymnasiums, will create an opportunity to expand programming for all ages and maintain our desired levels for customer satisfaction. With larger facilities, higher quantity and quality programming will be available. The indoor facilities will be managed by existing staff thus limiting our need for additional human resources. Many programs will be planned by staff, but managed through contracted services thus following the department's strategic plan of limiting staff while expanding programming through other providers. The department will continue to focus on being a facilitator rather than a direct provider. This will allow for redeployment of current staff to expand and add cultural activities and events as well as expand inclusion programs without adding additional cost.

The table on the following page identifies other future demands without designated resources that will be important to address:



PROJECTS IN NEED OF ADDITIONAL RESOURCES	RETURN ON INVESTMENT (ROI)
Feral swine control on ELAPP lands	Contracts with trappers have failed to adequately control destruction caused by feral hogs. In-house control measures by PRC staff would cost \$10-20k each year and save as much as \$6 million per year in potential restoration costs related to habitat destruction, road damage, and introduction of native species by feral hogs. Staff has developed an outline for a new, aggressive feral swine control program complete with draft policies and procedures to ensure proper internal controls are in place while ensuring maximum success.
Continued acquisition of ELAPP lands	By the end of 2014, it is expected that all of the initial \$59 million in ELAPP bond funds (series 2009) for acquisition by the Real Estate Department will be exhausted. If the County is to continue acquiring lands through ELAPP, it is recommended that another bond issue be brought before the BOCC for approval during the next 12-18 months. Acquisition and protection of lands through ELAPP provide a multitude of economic benefits to the County including the protection of surface and groundwater resources, reduced flood insurance rates, enhancement of ecotourism opportunities, carbon sequestration, and general ecosystem services.
Additional Staffing and Operational Costs for Conservation Services Division	During Countywide budget reductions between FY09 and FY12, Conservation Services Division staff was reduced by approximately 27%. In FY13, two additional positions were lost to the Animal Services Department. In order to provide adequate service and operation levels within the Division, 8.5 FTEs are being requested in FY15 for referenced regional parks and conservation lands. The projected cost of additional staff is \$302,571. In order to cover all major holidays within the regional park system, overtime in the amount of \$41,154 is also being requested. During FY13, the Conservation Services Division collected \$2,051,962 in general revenue through park-related user fees and various reimbursements.
Conservation Services Division Reorganization	In order to better align classifications of senior-level management positions in the Conservation Services Division with those of the Recreation Division, a reorganization plan was submitted to County administration for review during FY14. If implemented as submitted, the management-level reorganization plan will require an additional \$109,346 during FY15. As part of the overall plan, it is envisioned that all Park Ranger II pay grades be changed from their current AG classification to AH, which is consistent with the "Recreation Leader II" title and maintains integrity of salary throughout the department. The projected cost of this action is \$123,907. This reorganization will allow the Department to retain (and attract) highly-skilled employees in a variety of positions throughout the Conservation Services Division.



PROJECTS IN NEED OF ADDITIONAL RESOURCES	RETURN ON INVESTMENT (ROI)
Establishment of Special Events Team Under Recreation Division	<p>PRC provides oversight, set up, and management of over 200 County and non-County special events every year. Administrative oversight of special events is provided through a special event coordinator position under the Recreation Division. However, the set up for special events is provided by park rangers within the Conservation Services Division. In order to align the management and set up of special events under one team, it is recommended that all staffing be placed under the Recreation Division given that most special events fall under the recreation umbrella. The current team of "roving rangers" dedicated to event set up is needed in the Conservation Services Division, and will not move to Recreation Services as this team is consolidated. Instead, it is estimated that two full time Rec Leader II positions and two Permanent Part Time (PPT) Rec Leader I positions will be needed to accomplish this transition.</p>
Create and Maintain Infrastructure Needed to Meet PRC Objectives	<p>The economic recession had a negative impact on the County's ability to fund maintenance of PRC infrastructure. Maintenance projects in need of funding include re-paving park roads and trails, reconstruction of sea walls and boat ramps, and athletic field renovations. At the same time, the rapidly growing population of Hillsborough County has increased the need for new infrastructure particularly upgrades to athletic complexes for tournaments, ADA and other upgrades to playground equipment, and new regional recreation centers. Other needed additions to PRC infrastructure include the completion of several bikeways. These capital projects will provide tourism dollars as well as attract the type of workforce and companies needed to spur economic development. This infrastructure contributes to the County's efforts to create a "Great Place" with "Distinctive Experiences".</p>
Additional Recreational Staff	<p>Addressed above in Events Team Additional staff is needed at a Recreation Coordinator Level for full time monitoring and maintenance of the RecTrac system as future modules are implemented and passed on to PRC for maintenance. Although RecTrac will affect the entire Department, this position will be housed within Recreation Services.</p>



Part 4

Tampa – Background Data and Analysis

Public Facilities

TAMPA POTABLE WATER BACKGROUND INFORMATION

The raw water supply capacity analysis is found in the Potable Water background section of the Tampa Comprehensive Plan. The table below shows the capacity analysis based on the population projections provided by the Southwest Florida Water Management District.

The capacity analysis shown in the below table, using SWFWMD population estimates, indicates that the City’s demand for raw water is projected to be at 78.8 mgd in 2020 and 81.5 mgd in 2025.

The City is permitted to withdraw an average of 82.0 mgd of raw water from the Hillsborough River. Water demand above this amount is purchased from Tampa Bay Water in the form of treated water. The capacity analysis includes water that is available from Tampa Bay Water via agreements between the City and the Authority

City of Tampa 2015 2025 Potable Water Demand and Capacity

Raw Water Capacity	2015	2020	2025
Projected Average Daily Demand	75.1	78.8	81.5
Projected Supply	122.0	122.0	122.0
Estimated Surplus / Deficit (mgd)	46.9	43.2	40.5
% Capacity	61.6%	64.6%	66.8%

Treatment Capacity	2015	2020	2025
Projected Average Daily Demand	75.1	78.8	81.5
Maximum Treatment Capacity (mgd)	160.0	160.0	160.0
Estimated Surplus / Deficit (mgd)	84.9	81.2	78.5
% Capacity	47.0%	49.3%	50.9%

Pumping Capacity	2015	2020	2025
Projected Average Daily Demand	99.78	104.67	108.22
Fire Reserve Pumping (mgd)	26.00	26.00	26.00
Total Projected Average Daily	125.78	130.67	134.22
Average Pumping Capacity (mgd)	273.00	273.00	273.00
Estimated Surplus / Deficit (mgd)	147.22	142.33	138.78
% Capacity	46.1%	47.9%	49.2%

Demand Method: Population

Service Area Population (SWFWMD)	631,788	662,512	686,862
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Level of Service Standards

Raw Water Supply: 125 gallons/day/capita

Treatment Capacity: 160 mgd (includes 40 mgd from Tampa Bay Water if needed)

Pumping Capacity: 166 gallons per person per day (includes fire reserve)

Source: City of Tampa, Public Works Department, 2015

TAMPA SOLID WASTE BACKGROUND INFORMATION

The City of Tampa Department of Solid Waste and Environmental Program Management is responsible for the collection, processing or disposal of solid wastes, including hazardous wastes, and transfer stations, processing plants, recycling plants, and disposal systems.

Expanding current recycling programs

The City has done an excellent job on promoting curbside recycling; however the program needs to be expanded to apartment and condominium complexes, as well as businesses and to all City municipal buildings. Recycling has become mandatory in some Florida cities. The City of Tampa may conduct a study to evaluate the potential impacts of this alternative.

Evaluating the financial feasibility of collecting waste for the New Tampa Area

The current solid waste service area does not include the New Tampa area. The Department of Solid Waste and Environmental Program Management is looking to evaluate the impact of providing residential and commercial collection within this area and letting the County keep the responsibility for the final disposal of waste. The impacts of this action need to be evaluated, but certainly will make the solid waste service area more cohesive. This action assumes the incorporation of approximately 42,481 residents with an

additional waste generation of 138 tons per day or 50,393 tons a year.

Addressing long term disposal capacity to accommodate growth

According to the solid waste capacity analysis, the City of Tampa will accommodate expected growth until 2025. However, it is necessary to start developing a strategy to increase disposal capacity within the next ten years. Growth within the City will be accommodated through redevelopment and infill which will impact current disposal capacity. By 2025, the City will have 15.91 percent of capacity left considering the current population projections and generation of 6.5 pounds per person per day.

Table 1 and Table 2 summarize the current and projected future demands placed on the City of Tampa solid waste collection system.



TABLE 1: SOLID WASTE SYSTEM DISPOSAL CAPACITY (TONS) CURRENT & FUTURE PROJECTIONS 2015-2025

Year	Population (1)	(A) Residential Tonnage Demand	(B) Com./Ind. Tonnage Demand	(C) Private Tonnage Demand	LOS Standard (A)+(B)+(C) (2)	Disposal Capacity (3)	LOS Surplus or Deficiency (4)
2015	352,957	117,891	147,296	123,484	382,671	550,000	167,329
2020	370,958	135,568	169,382	141,999	440,049	550,000	109,951
2025	389,877	142,482	178,020	149,241	462,491	550,000	87,509

1. Assuming 5.1% increase.
2. Solid Waste System Tonnage Total (McKay Bay WTE, Transfer Station, & Landfill); (6.5 lbs x Population)/2000
3. Solid Waste System Annual Capacity [WTE (365K) + TS (185K)]
4. Capacity – LOS Standard

Source: Tampa Department of Solid Waste, 2015; Bond Rating Analysis, Nov 2014; Census Report 2013

TABLE 2: SOLID WASTE SYSTEM SERVICE DEMANDS (COLLECTION POINTS) CURRENT & FUTURE PROJECTIONS 2015-2025

Year	City of Tampa Solid Waste Utility Account (1)	(A) Residential Minimum Collection Points (Weekly)	(B) Com./Ind. Minimum Collection Points (Weekly)	LOS Standard (A) + (B) (2)	Collection Point Capacity (3)	LOS Surplus or Deficiency (4)
2015	83,705	291,408	21,706	313,114	320,000	6,886
2020	87,974	306,270	22,813	329,083	320,000	(9,083)
2025	92,461	321,888	23,976	345,864	320,000	(25,864)

1. Assuming 5.1% increase.
2. Collection Service Standard Required: Residential 4/wk + Commercial 2/wk avg
3. Capacity determined by personnel and equipment
4. Capacity – LOS Standard

Source: Tampa Department of Solid Waste, 2015

TAMPA STORMWATER BACKGROUND INFORMATION

One of the main issues identified within the City's stormwater management system is the aging stormwater infrastructure facilities in Downtown and South Tampa. Over the years, these areas have become subject to new developments with minimal replacement of the original infrastructure system (pipes, boxes and inlets/manholes).

South Tampa main lines were built in the 1920s, along with substantial portions of Downtown. Areas such as Ybor City and Hyde Park (Spanish Town Creek), present age related problems. In addition, flooding issues occur due to undersized drainage systems that need improvement. The areas below have been identified as the most severe:

- Dale Mabry Highway near Neptune Street;
- Cleveland Street near Clark Street;
- Westshore Boulevard near Cypress Street;
- North of Gandy Boulevard near Alline/Asbury Street;
- Western portion of the Interbay Peninsula;
- Eastern Ybor City;
- Grant Park; and
- East Tampa South of I-4

Another issue is monitoring redevelopment activities at the sub-basin level affecting stormwater loads. The current permit structure requires mitigation measures for impervious areas over 3,000 square feet per site. Those developments greater than 10,000 square feet must have full pre-post treatment and attenuation. These requirements still allow a slow increase in unmitigated impervious area over time. However, consideration must be given to create a mechanism to monitor

all redevelopment activities by stormwater planning areas (sub-basins) to evaluate cumulative impacts and ensure the maintenance of appropriate level of services.

Lastly, meeting the proposed Total Maximum Daily Loads (TMDLs) requirements for water quality will have unknown financial impacts. Under Section 303(d) of the federal Clean Water Act and the Florida Watershed Restoration Act, Total Maximum Daily Loads must be developed for all water bodies that are defined as "impaired" or unable to meet their designated use (i.e., drinking, swimming, habitat, etc.).

The Tampa Bay Estuary has established, federally recognized TMDL. The City of Tampa continues to contribute to the reasonable assurance efforts in the Tampa Bay nutrient management compliance regulations. Waterbodies within the City Limits, including a segment of the Hillsborough River have been identified on the *Verified List of Impaired Water for the Tampa Bay Tributaries Basin*. A TMDL has been established for fecal coliform at Water Body Identification (WBID) number 1443E of the Hillsborough River and we expect other segments to have TMDLs established over the next few years.

As part of the FDEP's watershed-based management approach, the next phase in the TMDL program requires the development of a Basin Management Action Plan (BMAP) for the waterbody and its basin. These action plans will be developed in coordination with the Hillsborough County Environmental Protection Commission (EPC), Southwest Florida Water Management District (SWFWMD), City of Tampa, and other stakeholders. These plans will identify



steps needed to reduce loadings, including appropriate allocations among affected parties, load reduction activities, timetables, funding sources, local ordinances, water quality standards, permits, and monitoring activities.

Practices affecting the City of Tampa Stormwater and Wastewater Departments may include reducing and treating urban stormwater runoff through stormwater retrofit, septic tank replacement, or reducing pollutant loadings from permitted discharges.

TAMPA WASTEWATER BACKGROUND INFORMATION

Many of the City of Tampa’s wastewater collection facilities are aging. The majority (59%) of the existing collection mains were constructed prior to 1970 and a quarter (23%) of them were constructed prior to 1950. The majority of the aging infrastructure is located in South Tampa, West Tampa, and Ybor City. Aging infrastructure requires frequent maintenance to repair leaks and breaks which create the potential for risks to the environment and public health.

The concern of aging infrastructure is also faced by other utility departments, such as Potable Water and Stormwater, due to the age of the City and historic development patterns. In order to address this problem, the City will need to plan to replace and rehabilitate aging infrastructure in order to reduce maintenance costs and ensure the efficiency of the system.

TABLE 1: Tampa WASTEWATER current and future FLOW PROJECTIONS 2015-2025

Year	Service Area Population	Annual Average Daily Flow (MGD)	System Capacity (MGD)
2015	561,000	58.8	96.0
2020	599,000	62.8	96.0
2025	636,000	66.7	96.0

Source: Tampa Public Works Department, 2015



Part 5

Future Land Use Matrix

The following tables provide statistical information related to land use distribution by jurisdiction. Please refer to the individual land use element from each jurisdiction for more information related to the FLUE category. Existing land use acronyms are explained in the last table. This information is provided to further strengthen how the jurisdiction can accommodate projected population and employment.

Land Use Acreage Matrix

Based on August 2015 Existing and Future Land Use Data

[Jurisdiction and FLUE](#) [Existing Land](#)

	AG	HC	HI	LC	LI	MF	MHP	MIN	NAT	NC	PI	PU	R/W	ROS	SCH	SF	TF	UNK	VAC	Total	
HILLSBOROUGH COUNTY																					
A	9,919.25		185.33	8.75	29.85	75.02		11.97	1,709.35	145.50	1,001.09	0.01	8.74			738.74		0.98	323.01	14,157.58	
A/M	37,943.79		717.06	0.96		8.06		21,240.80	1,544.38	473.71	2,208.57	22.16	0.02			784.18			6,648.51	71,592.20	
A/R	34,378.66	0.97	244.31	310.28	194.48	310.49	198.55	943.83	553.74	1,939.49	11,035.47	79.53	52.80	0.16	2.90	7,512.06	27.73	4.37	4,388.60	62,178.42	
AE	7,374.91		70.02	5.01		30.95	11.61		103.99	329.76	324.29	58.58	2.92			2,908.90	19.23		951.51	12,191.68	
CMU-12	937.07	239.77	109.46	741.30	1,082.49	514.25	296.42			1,673.54	1,116.63	82.26	12.01	34.91	60.54	2,023.70	21.68	4.12	1,668.13	10,618.29	
CPV	5.50	0.06		55.20	14.07	54.18			0.83	131.38	62.97	0.52	0.15		21.84	276.67	4.98	0.04	180.57	808.96	
EIP-USA	2,922.05						2.33	56.38		18.06	0.00		14.16			0.14			0.31	3,013.44	
HI	23.13	64.60	2,564.95	17.65	197.79		0.05	141.55		226.19	617.06	632.48	173.28			16.12	1.73		346.90	5,023.48	
LI	1,081.86	245.26	1,144.24	640.11	1,972.45	11.61	7.73	489.28		1,021.21	584.60	513.81	116.25		7.92	135.50	2.42		1,563.62	9,537.86	
LI-P	33.17	102.39	531.61	69.47	492.48	1.01				252.06	74.52	77.07	9.59			1.04			242.16	1,886.57	
N	269.31	0.02	1,225.73	0.08	1.12	8.40	2.33	253.12	0.39	1,011.29	81,797.84	432.54	1.13	1,798.76	33.16	175.82	0.00	0.03	419.18	87,430.27	
NMU-4	203.83	6.01	0.39	84.90	49.26	203.75	2.39		0.53	197.48	849.29	10.38	12.26	0.55	12.22	911.59	2.24		187.22	2,734.30	
OC	65.07	276.68	75.65	2,068.96	304.53	312.94	83.84			992.88	412.32	53.17	7.81	0.00	17.10	214.13	22.16	0.00	541.11	5,448.37	
P/QP	65.47		238.86	132.92	0.23	22.73	4.73		0.07	1,687.16	9,396.51	0.61	21.94		3,511.78	20.38		0.24	133.68	15,237.31	
PEC	1,726.91								223.70	5.62	0.17									1,956.40	
R-1	34,756.33	70.15	225.88	420.63	43.30	139.56	797.76	9.20	985.30	6,695.62	4,327.80	410.94	125.73	442.51	93.29	35,424.63	400.60	4.58	10,017.15	95,390.96	
R-12	173.46	54.46	5.58	273.00	46.88	1,072.55	127.89			732.95	384.28	19.27	3.28	16.65	12.03	1,238.88	92.30	0.64	414.70	4,668.79	
R-2	1,017.87	27.93	0.02	106.99	28.23	321.52	769.86	4.03	131.62	1,478.61	1,710.33	251.15	23.00	885.08	12.19	8,037.74	45.69	10.85	1,259.18	16,121.91	
R-20	300.63	4.54		283.25	36.54	2,096.61	93.93		4.48	462.92	417.22	30.32	0.42		47.38	395.86	89.97	12.29	244.19	4,520.53	
R-4	4,974.95	72.04	62.38	802.31	96.75	2,323.83	684.42	5.77	71.17	8,512.50	4,834.40	415.84	116.09	1,987.36	295.81	36,042.84	255.12	41.49	5,488.40	67,083.47	
R-6	1,343.31	29.85	58.44	834.14	94.01	1,152.91	1,630.59	0.00	15.94	5,349.13	2,757.59	216.88	70.30	1,322.28	154.30	16,096.86	125.89	19.02	2,672.27	33,943.71	
R-9	312.92	24.37	26.15	250.38	64.40	1,461.18	238.15	0.00		1,316.92	628.95	53.68	13.53	288.03	43.65	3,323.13	76.64	5.11	685.82	8,813.00	
RCP	65.27	10.65	97.89	92.67	88.54	48.52				68.54	124.34	0.83	3.12		0.01	44.25			118.21	762.85	
RMU-35	5.05	8.80		295.16	75.83	119.26				301.98	43.79	31.34	4.73	13.74	1.28	10.09			308.63	1,219.68	
RP-2	5,902.08	0.98	344.68	83.30	3.67	45.05	6.17	0.00	19.66	820.42	2,947.86	301.96	48.68	15.64	7.78	3,563.12	6.70	1.41	983.53	15,102.69	
SMU-6	5,903.07	201.13	68.94	339.26	429.63	300.42	185.51		22.97	1,909.38	1,454.07	40.38	28.86	151.19	13.89	3,888.01	41.50	2.79	2,521.04	17,502.03	
UMU-20	658.90	191.54	12.03	1,453.72	451.86	768.03	11.74	0.00	23.18	1,145.54	903.75	66.74	19.59		32.00	434.29	17.49		1,005.40	7,195.81	
WVR-2	5,168.27			220.57		27.97	24.24			191.50	1,476.43	43.98	1.26	1.07		718.96	10.30		379.57	8,264.12	
Total	157,532.09	1,632.22	8,009.60	9,590.97	5,798.38	11,430.81	5,180.24	23,155.94	5,411.28	39,091.32	131,492.13	3,846.43	891.65	6,957.95	4,381.07	124,937.67	1,264.38	107.95	43,692.60	584,404.68	



Land Use Acreage Matrix

Based on August 2015 Existing and Future Land Use Data

[Jurisdiction and FLUE](#) [Existing Land](#)

PLANT CITY	AG	HC	HI	LC	LI	MF	MHP	MIN	NAT	NC	PI	PU	R/W	ROS	SCH	SF	TF	UNK	VAC	Total
C	189.93	99.13	12.06	443.25	41.38	127.44	14.20		17.09	334.83	68.81	17.15	1.89		6.37	65.10	3.77		169.73	1,612.13
DC		0.90	0.25	17.21	0.38	1.52				31.56	25.59	0.76	1.74			0.40			4.28	84.59
I	1,358.60	3.89	199.45	48.29	841.37	2.65	4.70	0.00		315.56	367.89	9.43	13.34		17.90	58.48	5.94		572.14	3,819.62
LCO		2.41		14.34		0.54				16.08	10.58	0.41	0.78		0.30	5.33	0.69		7.74	59.19
MU/GW	95.37		0.94	8.25	4.58				43.11	25.52	36.61	2.37				20.43			53.49	290.68
MU/RC	301.02									7.74										308.77
MU-R/C/I	1,242.59	16.26	6.05		54.76					23.51	3.94	0.18	0.80			0.02			18.46	1,366.55
NP	238.04			3.06	0.95	0.00			10.56	0.55	48.35					52.24	0.06		52.50	406.32
P				0.00		89.41				61.42	236.90				154.28	2.69			1.66	546.37
R-12	223.26	15.35	0.72	28.80	4.90	124.24	63.87			225.13	77.21	7.57	1.38		16.53	370.44	27.52	0.03	147.98	1,334.94
R-20	39.29			2.85	0.02	49.19				41.22	24.81				3.15	76.89	5.37		35.87	278.66
R-4	1,441.47	0.21		0.15	0.50	23.09	19.84		0.19	365.93	313.25	15.46	0.01		15.99	832.68	4.05		499.13	3,531.96
R-6	400.03	0.22		61.36	0.32	144.72	5.03			464.84	83.56	5.16	2.49	321.92	30.33	1,749.86	2.56		299.75	3,572.15
RO	46.50			0.01		1.37				26.28	535.31	0.19				0.40			0.00	610.06
TA	84.56				5.51				19.08	3.69						11.55			0.93	125.33
Total	5,660.67	138.38	219.48	627.58	954.67	564.16	107.64	0.00	90.04	1,943.86	1,832.79	58.67	22.43	321.92	244.86	3,246.51	49.96	0.03	1,863.65	17,947.32



Land Use Acreage Matrix

Based on August 2015 Existing and Future Land Use Data
 Jurisdiction and FLUE Existing Land

	AG	HC	HI	LC	LI	MF	MHP	MIN	NAT	NC	PI	PU	R/W	ROS	SCH	SF	TF	UNK	VAC	Total
TAMPA																				
CBD		1.20		112.89	8.30	8.16				18.91	111.93	1.01	0.18		6.24	0.21			11.28	280.30
CC-35	15.95	357.07	9.18	1,041.80	227.88	150.54	26.15			39.22	191.50	36.16	5.56		59.36	124.83	17.18		155.76	2,458.15
CMU-35	1.14	39.37	74.74	938.73	46.43	373.22	5.86			68.70	256.35	9.34	11.31		45.26	215.49	37.85		226.32	2,350.13
ESA	493.44	0.29	13.26	99.26	0.42	284.49				139.32	3,118.65	1,199.82	1.03	234.72	5.66	1,420.38			725.99	7,736.73
GMU-24		2.21	1.35	21.07	33.17	4.24				0.20	4.70	0.48			0.77	6.08	0.93		9.78	84.99
HI	21.81	59.57	506.20	211.01	734.40	0.23	0.00			109.87	1,214.80	39.78	384.47	20.29		0.38		2.13	189.10	3,494.03
LI	9.22	215.87	90.53	200.22	396.83	51.40	5.95			181.64	389.57	45.12	28.51		18.19	28.67	9.60		170.51	1,841.84
MACDILL AFB										35.34	5,479.53					0.06			0.01	5,514.94
M-AP		10.77		207.11	30.80	5.69				9.17	32.68	0.65				1.24			40.71	338.83
P/QP				29.29	4.90	16.56				68.26	4,382.89				851.76	3.70		0.00	1.53	5,358.89
R/OS		0.01	0.01		0.01	7.33				191.64	1,822.42	0.00	0.01	92.12	7.86	1.83			0.19	2,123.44
R/W	0.82	3.46	4.89	41.83	14.05	26.53	1.12			10,736.16	434.37	6.52	157.99	0.93	14.27	290.41	7.56	0.10	84.28	11,825.28
R-10	4.85	7.36	0.81	102.70	7.38	125.94	3.03		0.01	431.78	607.40	26.29	7.12	8.85	109.96	10,660.07	166.49	0.82	516.91	12,787.78
R-20		3.95	0.04	126.84	6.50	167.96	53.14			45.37	431.75	5.82	0.38		38.63	1,208.53	213.86	3.70	192.85	2,499.32
R-3	0.06					28.51				9.99	398.01	0.04		38.63	45.51	942.31		0.13	87.91	1,551.10
R-35		1.54	0.45	65.30	4.70	959.41	8.09		0.83	87.12	164.80	12.36	1.92		52.95	295.08	60.06	0.27	206.27	1,921.15
R-50		0.54		16.60	0.60	50.97				2.09	34.69				4.32	4.52	1.20		3.37	118.90
R-6		0.11		9.35	0.07	0.70				29.16	78.31	1.01	0.08		0.00	1,693.69	2.94	0.10	48.93	1,864.45
R-83		0.34		7.94		43.07				1.19	16.71				0.04	8.22	1.04	0.54	7.80	86.90
RE-10	240.48									1.04						18.45			28.60	288.58
RMU-100	0.93	17.73	8.39	491.83	14.94	126.09				61.83	272.65	5.37	4.67	1.72	24.56	72.72	0.52		118.15	1,222.12
SMU-3	932.17	0.57		51.18	2.61	239.41				335.35	344.91	11.17	11.43		17.76	1,199.28			359.62	3,505.47
SMU-6		1.05		307.75	34.24	480.83				260.97	616.07	123.75	1.76	145.64	190.11	2,076.60		0.00	581.22	4,819.99
TU-24	5.86	29.08	33.19	39.17	94.81	33.43	14.12			59.19	63.88	3.30			10.93	65.65	6.68		47.23	506.50
UMU-60		10.65	28.05	707.90	61.18	45.45				9.38	71.92	10.50	0.00	0.15	8.06	3.18	1.27		54.87	1,012.57
Total	1,726.73	762.73	771.10	4,829.80	1,724.22	3,230.19	117.45		0.84	12,932.91	20,540.49	1,538.47	616.42	543.06	1,512.22	20,341.58	527.18	7.80	3,869.19	75,592.37



Land Use Acreage Matrix

Based on August 2015 Existing and Future Land Use Data
[Jurisdiction and FLUE](#) [Existing Land](#)

	AG	HC	HI	LC	LI	MF	MHP	MIN	NAT	NC	PI	PU	R/W	ROS	SCH	SF	TF	UNK	VAC	Total
TEMPLE TERRACE																				
C		1.20	0.34	100.95		0.88				53.35	2.40	1.84	0.40	7.45	0.87	0.55	1.17		4.94	176.35
CMU-12	134.55			10.71		2.08				5.87	0.00					1.00	0.00		12.63	166.84
DMU-25		1.53		72.92		30.24				36.20	29.64	1.24			21.61	18.46	2.24		9.13	223.21
OI				11.65		0.99				5.20	3.21				9.53	0.00			1.89	32.47
P				0.00		5.28				18.34	78.59				115.75	1.33			0.39	219.67
R						0.00				55.09	238.93			132.75	0.52	7.88			1.31	436.47
R-18	0.00			10.73		245.36				37.52	22.09	67.17			0.00	30.40			22.07	435.34
R-4	17.08			1.17		0.25	0.00			343.67	42.40			32.99	1.80	973.94	0.36		71.48	1,485.14
R-9	0.00	0.13		5.16		73.22				134.11	55.89	5.29	0.09		1.30	542.02	4.57		41.09	862.88
RCP	0.00			157.80	9.02	0.43				37.87	0.14				4.09	1.90			121.87	333.12
ROW				0.00		0.02				0.08										0.10
TA				0.85	37.53					8.69	0.00								3.52	50.59
UMU-20				30.41		118.40	0.00			25.28	0.57	1.21			1.33	75.75	0.01		56.32	309.29
Total	151.63	2.87	0.34	402.34	46.55	477.17	0.00			761.27	473.86	76.75	0.49	173.19	156.81	1,653.22	8.35		346.63	4,731.48
TOTAL	165,071.12	2,536.20	9,000.52	15,450.70	8,523.83	15,702.33	5,405.33	23,155.94	5,502.17	54,729.36	154,339.26	5,520.32	1,530.99	7,996.12	6,294.95	150,178.98	1,849.88	115.78	49,772.08	682,675.84



Code	Description
ELU	Existing Land Use
AG	Agricultural
HC	Heavy Commercial
HI	Heavy Industrial
LC	Light Commercial
LI	Light Industrial
MF	Multi-Family
MHP	Mobile Home Park
MIN	Mining
NAT	Natural
NC	Not Classified
PI	Public / Quasi-Public / Institutions
PU	Public Communications / Utilities
R/W	Right of Way / Roads / Highways
ROS	Recreational / Open Space
SCH	Educational
SF	Single Family / Mobile Home
TF	Two Family
UNK	Unknown
VAC	Vacant
WAT	Water