

# Hillsborough County 2045 Population and Employment Projections

*Trends Analysis*

*prepared for*

**Hillsborough County MPO and Planning Commission**

*prepared by*

**Cambridge Systematics, Inc.**



*report*

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*date*

**January 26, 2018**

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## 1.0 Introduction

The Trend Analysis supports the development of 2045 Population and Employment Projections for Hillsborough County by examining residential, employment, land use, and demographic trends as they pertain to growth and development patterns. Identified trends will be used to support the development of an initial “Trend” growth scenario, alternative scenarios and ultimately a preferred hybrid scenario, which will be used as a foundation for the 2045 Long Range Transportation Plan (LRTP), comprehensive plan and other planning functions of the Hillsborough County Metropolitan Planning Organization (MPO), Planning Commission and other county-wide planning agencies.

This effort builds on previous efforts to estimate long term growth trends as part of the previous LRTP, Imagine 2040. Emphasis is placed on changes that have occurred since the previous effort (generally between the years 2010 to 2017) in addition to longer term trends.

Hillsborough County is the fourth largest metropolitan area in Florida, with nearly 1.3 million residents in 2015 and expected to grow to over 2 million by 2045. The county is comprised of three incorporated municipalities: Tampa, Temple Terrace, and Plant City, as well as an unincorporated area governed by Hillsborough County. Downtown Tampa is a major commercial hub, characterized by a mix of high intensity land uses such as office, government services, retail and entertainment districts, and dense multi-family residential. Outside of downtown, major points of interest include MacDill Airforce Base in South Tampa, the Port of Tampa, the University of South Florida and Westshore. Many parts of the county are comprised of single family homes, with commercial corridors and office land uses along main arterials, and agricultural, institutional, and preserved land around the county’s periphery.

The trends analysis draws from the following data sources:

- U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates
- Hillsborough County Planning Commission
- Hillsborough County Property Appraiser parcel database
- Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, Integrated Public Use Microdata Series: Version 5.0 (Machine-readable database), Minneapolis, Minnesota: Minnesota Population Center (producer and distributor), 2010.
- Bureau of Business and Economic Research
- Florida Department of Economic Opportunity, Bureau of Economic Analysis

The unit of analysis used to conduct the trend analysis varies based on the data available. Parcel level data is used whenever possible; however, much of the analysis is conducted at the traffic analysis zone (TAZ) level, the unit of analysis for the MPO’s travel demand model, or at the block group level based the U.S. Census Bureau’s American Community Survey (ACS). In addition, the county is stratified into ten submarket areas to enable a more specific analysis of the county’s unique geographic areas (Figure 1.1).

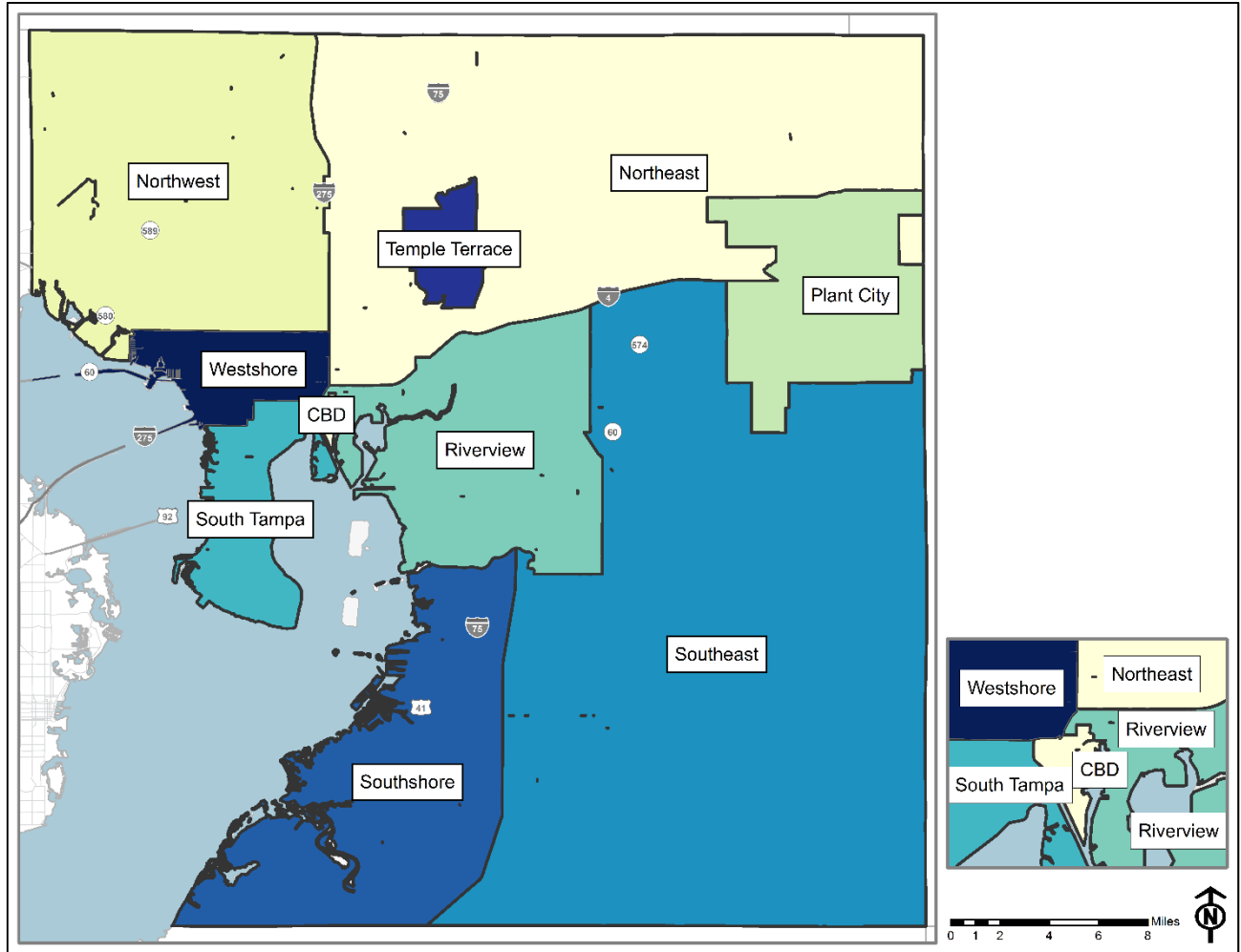
Key takeaways from the trends analysis include:

- Residential development in the CBD is growing at a faster rate than the rest of the county.
- Residential lot sizes are decreasing while home sizes are increasing.

- The population 18 to 34 is the largest age cohort in Hillsborough County, but is expected to decrease by 2045 while the population above 65 is expected to increase.
- The population 18 to 34 predominantly opts for multi-family housing, while the population above 50 opts for single family homes.
- Service sector industries such as office, professional, and retail make up the majority of employment in Hillsborough County.
- Employment grew rapidly between 2010 and 2015 and employee space utilization is becoming more efficient.
- Single family residential development is the predominant land use within the Urban Service Area, while agricultural, industrial, and institutional land uses make up most land outside the Urban Service Area.
- Most vacant and developable land is located outside the Urban Service Area, while most redevelopable land is located within the Urban Service Area.
- Hillsborough County's population share is remaining stable at about 50 percent of the tri-county area total, while Pinellas County is declining and Pasco County is absorbing growth.
- Zero-car households and non-single occupant-vehicle commuters are concentrated near downtown Tampa and USF, while student populations are larger in more outlying suburban areas.

The following sections describe residential, employment, land use, and demographics trends in greater detail, and provide a review of existing planning assumptions, major infrastructure projects, and external trends that have potential to impact future land use and transportation patterns.

Figure 1.1 Submarket Area Map



## 2.0 Residential Trends

The residential trend analysis explores key variables of housing types and density, home and lot sizes, occupancy rates, and vacant and seasonal households. Findings indicate that housing growth has been relatively strong over the last decade, growing at an annual average rate of about two percent. Housing density has increased in parallel, with significantly higher densities in the central business district (CBD) and Urban Service Area (USA) in general. The share of single and multi-family housing units has remained fairly constant since 2005, with multi-family units making up about 30 percent of the county’s housing stock.<sup>1</sup>

While home sizes in Hillsborough County have doubled since 1960, lot sizes appear to be in decline. This indicates a higher rate of residential intensity (or residential land utilization), as homes are taking up a larger portion of their lot. Aside from the CBD, both home sizes and lot sizes are significantly larger outside the Urban Service Area. Vacant and seasonal housing is most heavily concentrated along the Southshore, the northeast, and in certain areas surrounding the CBD.

**Table 2.1 Key Residential Measures**

Dwelling Units	561,584
Housing Density (Units per Net Acre)	3.7
Percent Multi-Family Housing	29%
Average Home Size (Square Footage)	1,909
Average Lot Size (Parcel Acreage)	0.41
Multi-Family Occupancy (Persons per Household)	2.5
Single Family Occupancy (Persons per Household)	2.0
Vacancy Rate	11%
Percent Seasonal Households	1.7%

The residential trends analysis identifies several key questions to be addressed by the scenario planning process:

- How will shrinking household sizes and available land influence housing choice?
- Will demand for multi-family housing increase?
- At what rate will lot size continue to shrink?
- Will home size shrink as well?

These trends and their implications are described in greater detail in the following sections.

### 2.1.1 Dwelling Units

According to the American Community Survey, there were 549,024 dwelling units in Hillsborough County in 2015, representing a 12 percent increase from the 490,172 dwelling units recorded in 2005 (Figure 2.1).<sup>2</sup> The annual average growth rate over the ten year period is approximately 2 percent.

<sup>1</sup> Multi-family housing includes apartments, condominiums, townhomes, and duplexes.

<sup>2</sup> 2015 dwelling units estimated by the American Community Survey are slightly lower than the Hillsborough County Planning Commission estimate. The Planning Commission estimated 2015 dwelling units at 561,584 – a discrepancy of about 12,500 units.

**Figure 2.1 Dwelling Unit Growth, 2005 - 2015**



Source: U.S. Census Bureau, 2005-2015 American Community Survey 5-Year Estimates

While the CBD contains only one percent of the county’s housing, the total number of dwelling units grew by 22 percent between 2010 and 2015, outpacing every other area in the county (Table 2.2 Dwelling Unit Growth by Sub Area). The Riverview, Southshore, and Southeast Hillsborough County submarkets also experienced more growth than the countywide average growth rate of five percent. Although these areas are growing, the Northeast and Northwest Hillsborough County submarkets still contain about 43 percent of the county’s housing combined.

**Table 2.2 Dwelling Unit Growth by Sub Area**

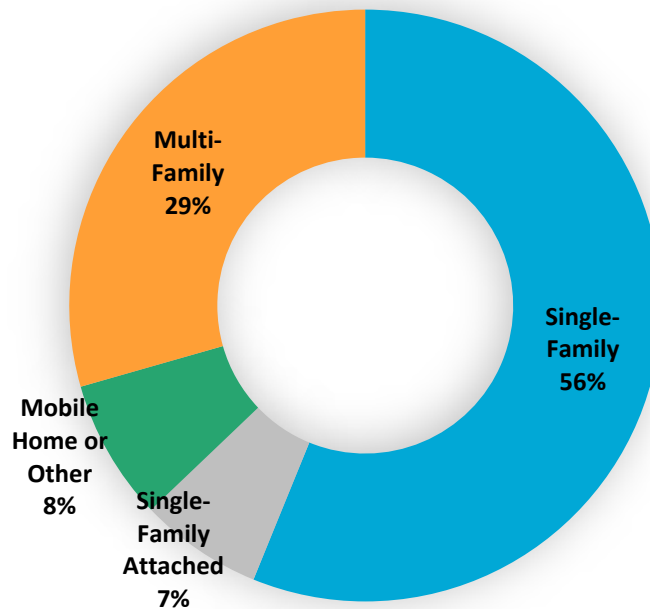
Sub Area	Dwelling Units (2010)	Dwelling Units (2015)	Percent of Total (2010)	Percent of Total (2015)	Percent Change (2010 – 2015)
CBD	6,095	7,459	1%	1%	22%
Northeast	104,715	107,637	20%	19%	3%
Northwest	132,662	136,198	25%	24%	3%
Plant City	21,560	21,855	4%	4%	1%
Riverview	70,100	74,071	13%	13%	6%
South Tampa	49,918	51,830	9%	9%	4%
Southeast	63,401	68,483	12%	12%	8%
Southshore	38,784	43,855	7%	8%	13%
Temple Terrace	16,313	16,857	3%	3%	3%
Westshore	32,544	33,344	6%	6%	2%
Total	536,092	561,584			5%

Source: Hillsborough County Planning Commission

### 2.1.2 Housing Type

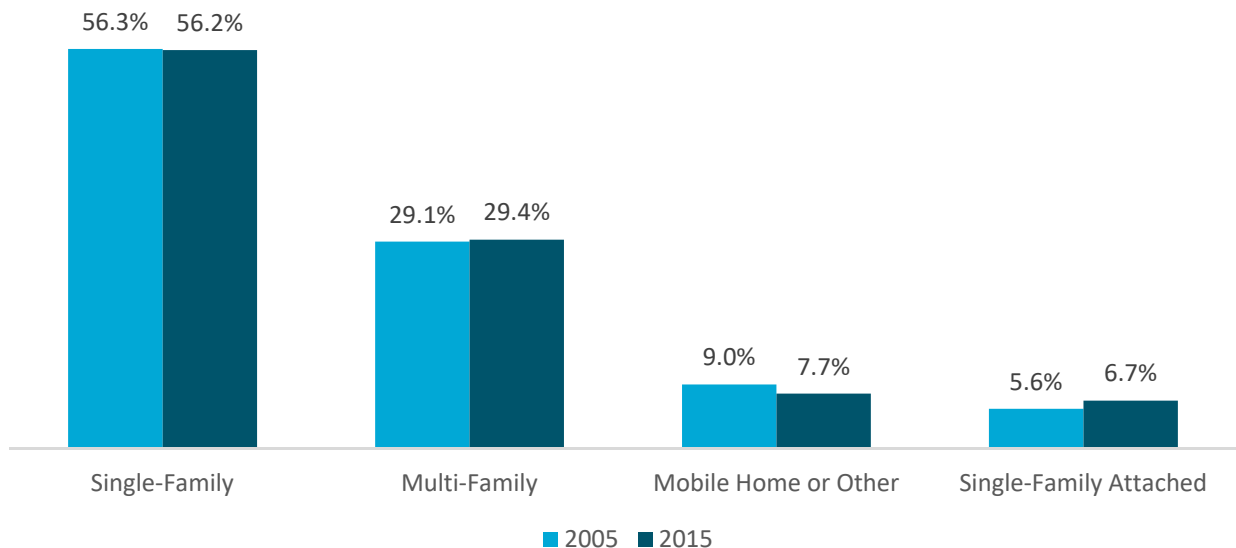
Single family detached housing makes up over 50 percent of Hillsborough County's housing stock. Mobile homes and single family attached make up about 15 percent of the housing stock combined, while multi-family makes up 30 percent (Figure 2.2). The share of single family detached and multi-family housing remained relatively constant between 2005 and 2015; however, there has been a slight decline in the share of mobile homes and a slight increase in the share of single family attached housing (Figure 2.3).

**Figure 2.2 Housing Type, 2015**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

**Figure 2.3 Change in Housing Type Distribution, 2005 - 2015**

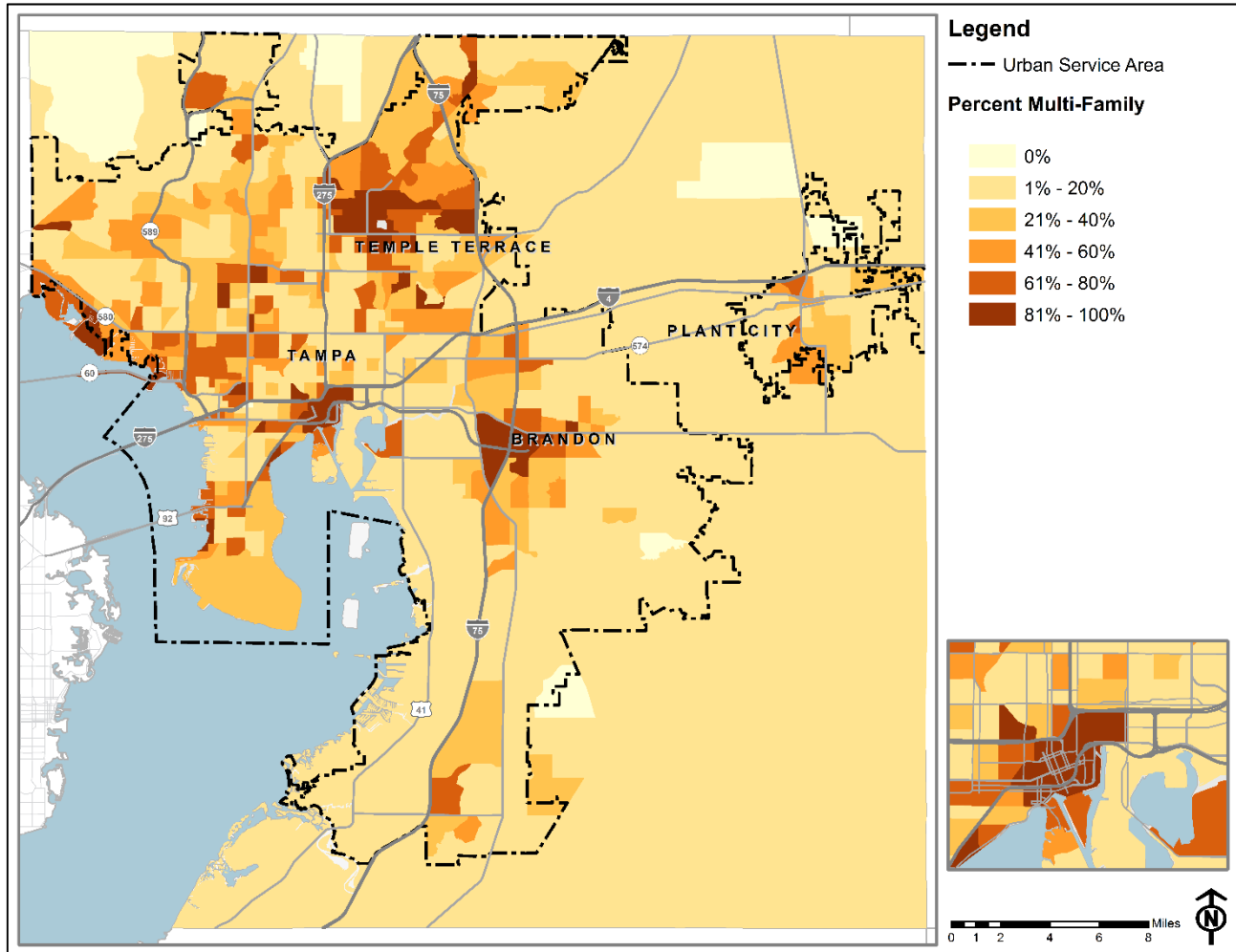




Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Areas with the largest concentration of multi-family dwelling units include the CBD, Westshore, University of South Florida (USF), and Brandon. In some of these areas, more than 80 percent of dwelling units are considered multi-family, which includes apartments, condominiums, townhomes, and duplexes (Figure 2.4). Areas with higher concentrations of multi-family housing are all located within the Urban Service Area.

**Figure 2.4 Multi-Family Housing Map, 2015**

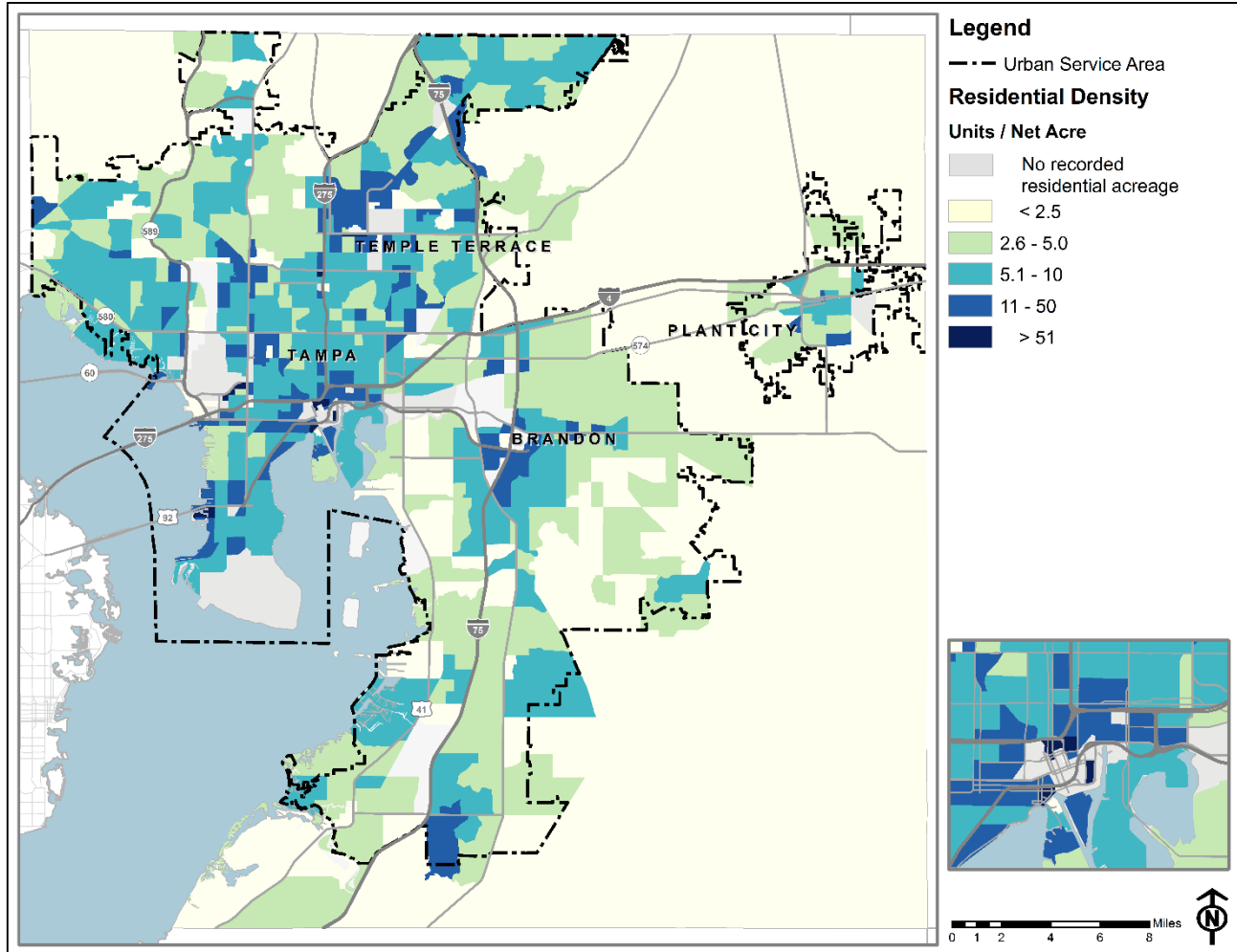


Source: U.S. Census Bureau, 2005-2015 American Community Survey 5-Year Estimates

### 2.1.3 Residential Density

Housing density in Hillsborough County ranges from one unit per ten net acres to more than 100 units per net acre. Figure 2.5 highlights the stark difference in housing densities within and outside the Urban Service Area. There are very few areas outside the Urban Service Area with more than 2.5 units per net acre, while nearly all residential land within the Urban Service Area has more than 2.5 units per net acre.

**Figure 2.5 Residential Density Map, 2015**



Source: Hillsborough County Planning Commission

The CBD is by far the densest submarket in Hillsborough County, with an average density of 85.5 units per net acre in 2015 (Table 2.3). This is consistent with Figure 2.4, which shows more than 80 percent of dwelling units in the CBD are multi-family residences. The South Tampa, Westshore and Temple Terrace (including USF) submarkets are also relatively dense, with average densities ranging between 6.4 and 9.0 units per net acre. Most of the remaining submarkets have net residential densities in the three to four units per acre range, while the Plant City and Southeast submarkets have the lowest density at 2.3 and 2.0 units per net acre, respectively. The county as a whole is trending toward higher density, led by CBD and Southshore submarkets, which saw the greatest increase.

**Table 2.3 Residential Density by Submarket**

Sub Area	Density (2010)	Density (2015)	Total Increase	Percent Change (2010 – 2015)
CBD	69.9	85.5	15.6	22%
Northeast	3.8	3.9	0.1	3%
Northwest	3.9	4.0	0.1	3%
Plant City	2.2	2.3	0.0	1%

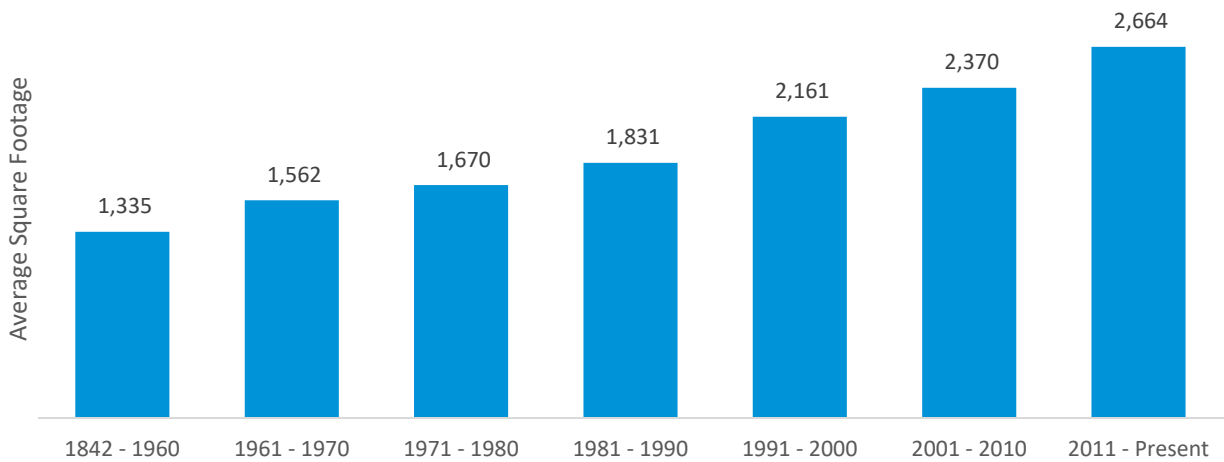
Riverview	4.3	4.6	0.2	6%
South Tampa	8.2	8.5	0.3	4%
Southeast	1.9	2.0	0.1	8%
Southshore	3.3	3.8	0.4	13%
Temple Terrace	6.2	6.4	0.2	3%
Westshore	8.7	9.0	0.2	2%
Total	3.7	3.7	0.2	5%

Source: Hillsborough County Planning Commission

### 2.1.4 Residential Home Size

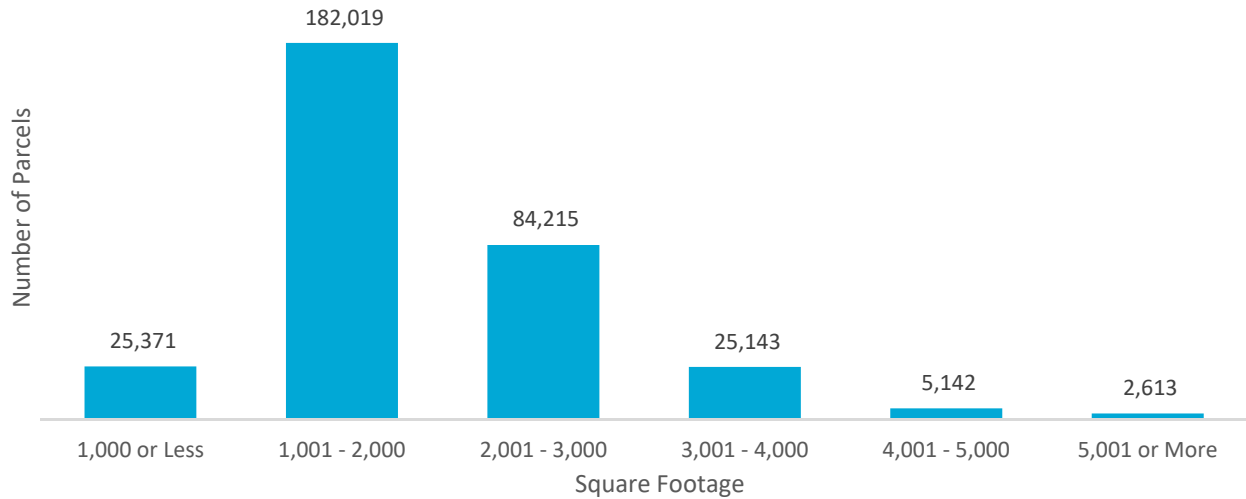
The average home size in Hillsborough County is about 2,600 square feet, which has doubled since 1960 (Figure 2.6). However, more than 60 percent of homes are less than 2,000 square feet (Figure 2.7).

**Figure 2.6 Average Home Size**



Source: Heated square footage reported in Hillsborough County Property Appraiser parcel database.

**Figure 2.7 Residential Home Size Distribution**



Source: Heated square footage reported in Hillsborough County Property Appraiser parcel database.

There are numerous large homes on Davis Island, which contributes to the high average home size observed in the CBD. Home sizes in other submarkets range from 1,500 to 2,100 square feet, with Plant City, Riverview, and Westshore having smaller home sizes than other submarkets (Table 2.4).

**Table 2.4 Average Single Family Residential Home Size by Sub Area**

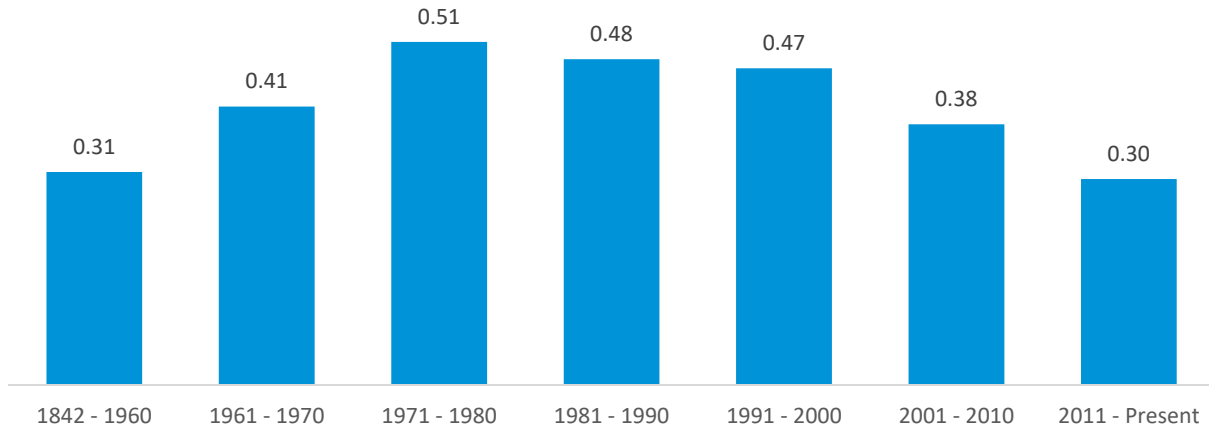
Sub Area	Average Home Size (Square Footage)
CBD	4,187
Northeast	1,860
Northwest	1,949
Plant City	1,690
Riverview	1,722
South Tampa	2,084
Southeast	2,102
Southshore	1,913
Temple Terrace	1,907
Westshore	1,521
Total	1,909

Source: Heated square footage reported in Hillsborough County Property Appraiser parcel database.

### 2.1.5 Residential Lot Size

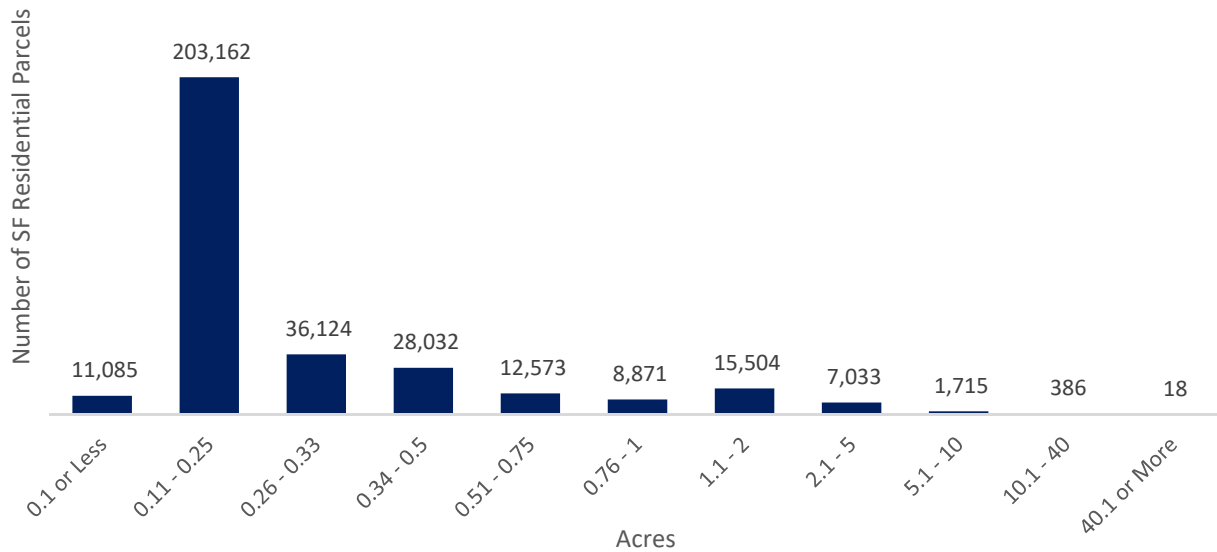
The average single family residential lot size increased by about one tenth of an acre per decade between 1960 and 1980, but has slowly declined since then (Figure 2.8). The average lot size of homes built between 1970 and 1980 was half an acre, whereas homes built between 2011 and 2017 were about one third of an acre. The majority of homes in Hillsborough County are built on lots that are one tenth to one quarter of an acre (Figure 2.9).

**Figure 2.8 Single Family Residential Lot Size Trend**



Source: Parcel Acreage reported in Hillsborough County Property Appraiser parcel database.

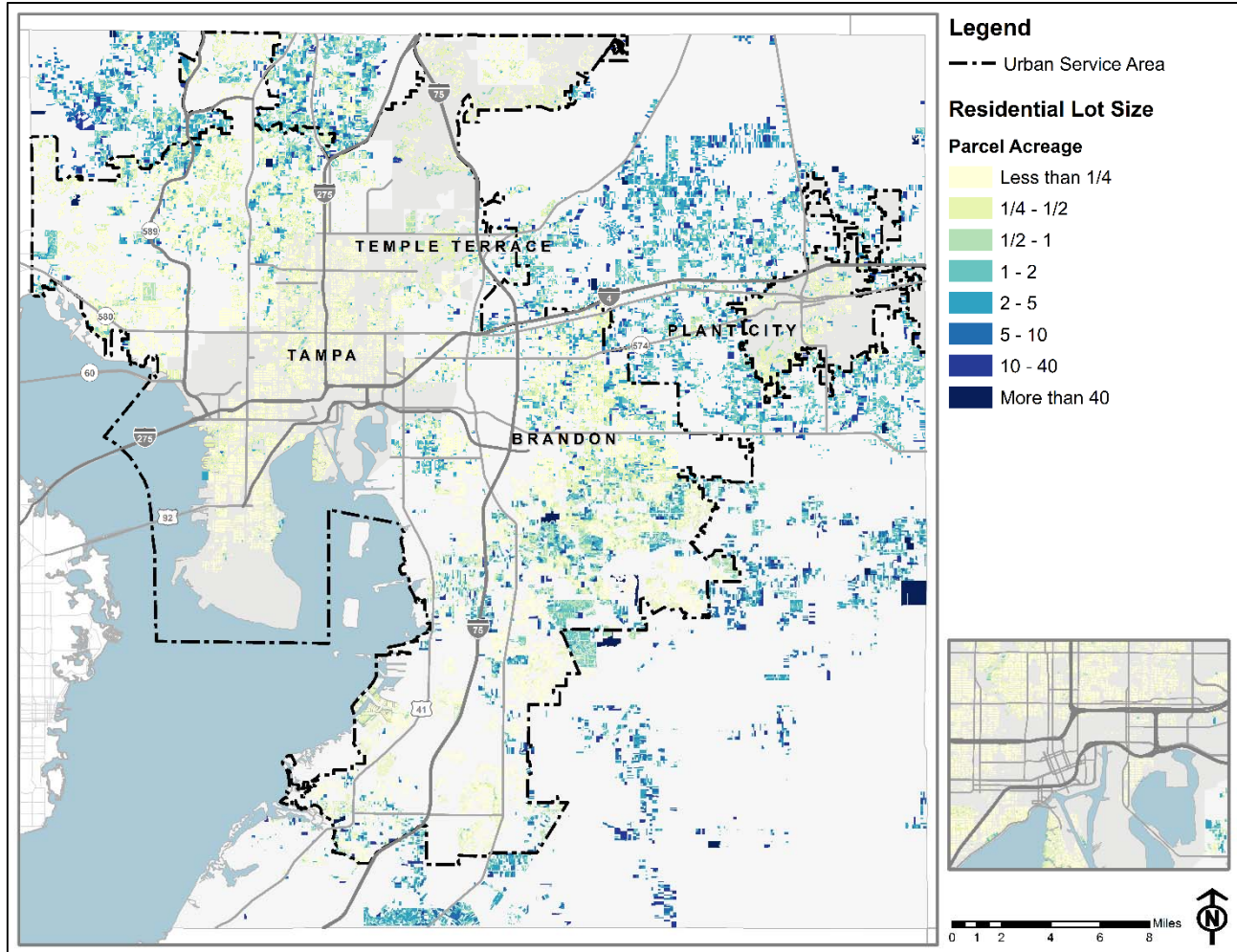
**Figure 2.9 Single Family Residential Lot Size Distribution**



Source: Parcel Acreage reported in Hillsborough County Property Appraiser parcel database.

Residential lot sizes in Hillsborough County range from less than a quarter acre to more than 40 acres, with smaller lot sizes predominantly located in the Urban Service Area (Figure 2.10). Although the average home size in the CBD is larger than other submarkets, the average lot size in the CBD is smaller, at about one fifth of an acre (Table 2.5). Lot sizes in South Tampa and Westshore are similar to the CBD. Plant City and Southeast Hillsborough County have the largest average lot size, at about two thirds of an acre.

**Figure 2.10 Single Family Residential Lot Size Map**



Source: Parcel acreage reported in Hillsborough County Property Appraiser parcel database.

**Table 2.5 Average Single Family Residential Lot Size by Sub Area**

Sub Area	Average Lot Size (Acres)
CBD	0.18
Northeast	0.48
Northwest	0.37
Plant City	0.66
Riverview	0.34
South Tampa	0.20
Southeast	0.60
Southshore	0.34
Temple Terrace	0.30
Westshore	0.18

Total 0.41

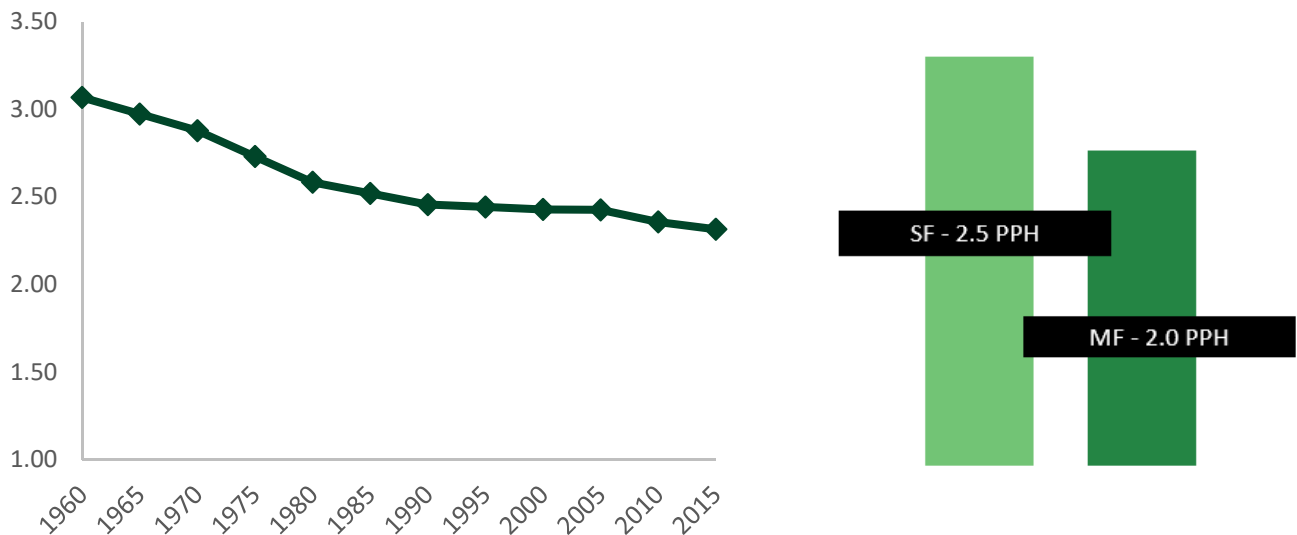
Source: Parcel Acreage reported in Hillsborough County Property Appraiser parcel database.

### 2.1.6 Residential Occupancy Rates

Residential occupancy rates are an important variable in growth forecasting, as they can be used to determine the number of housing units needed to accommodate population growth. In Hillsborough County, the average household size has been steadily declining since 1960 (Figure 2.11). In 1960, the average county-wide occupancy rate was 3.07 persons per household, whereas the occupancy rate observed in 2015 was 2.31 persons per household.

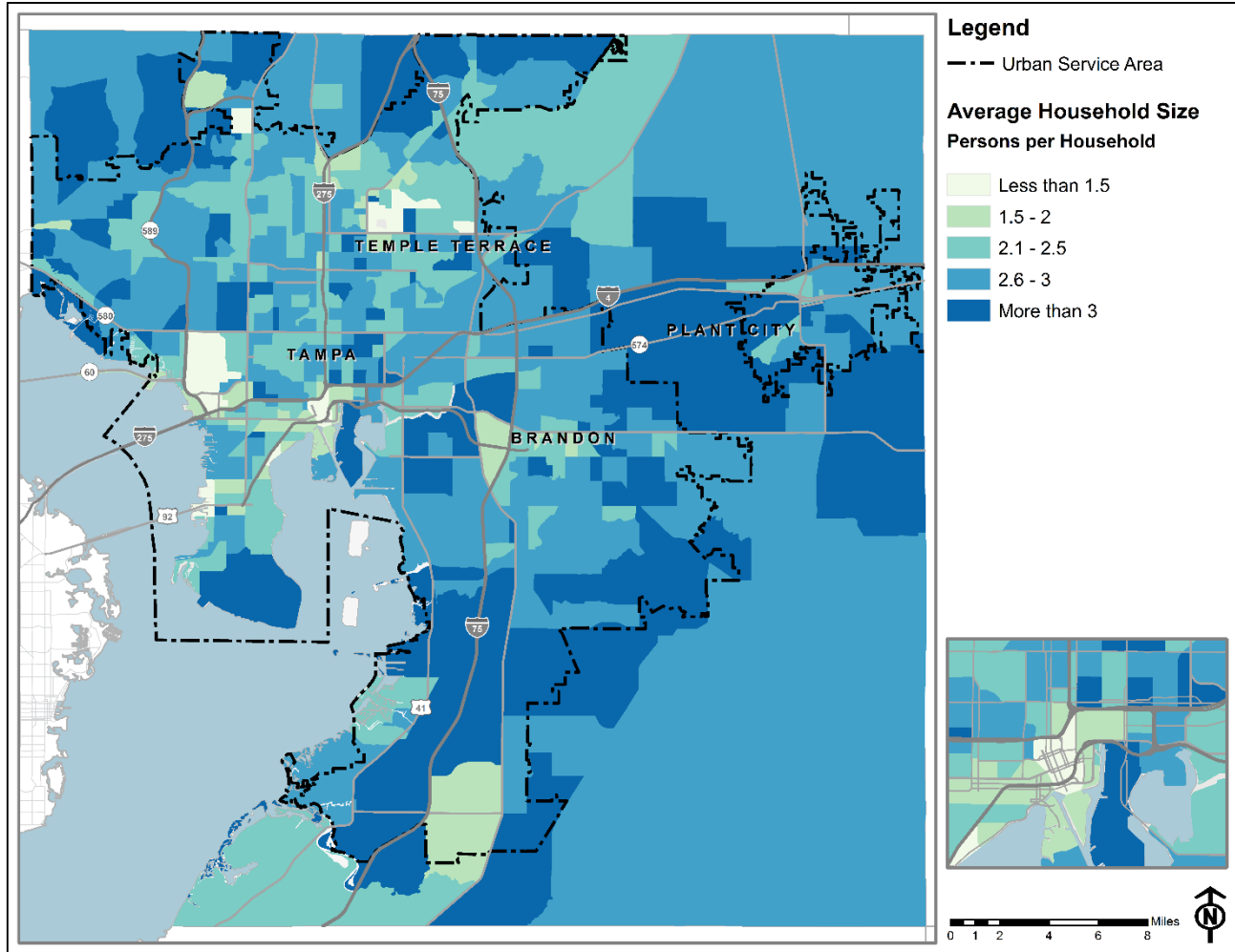
The Integrated Public Use Microdata Series (IPUMS) was used to cross-tabulate residential occupancy for single and multi-family dwelling units. The average occupancy for single family homes is 2.5 persons per household and 2.0 persons per household for multi-family units. This can be attributed to the fact that single family homes are typically much larger than multi-family homes, and thus can accommodate more people. Furthermore, average households sizes appear to be smaller within the Urban Service Area, which has a higher percentage of multi-family dwelling units (Figure 2.12).

**Figure 2.11 Average Household Size Trend**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates. Estimates for single family and multi-family residential occupancy rates were derived from the IPUMS data base: Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, Integrated Public Use Microdata Series: Version 5.0 (Machine-readable database), Minneapolis, Minnesota: Minnesota Population Center (producer and distributor), 2010.

**Figure 2.12 Average Household Size Map**



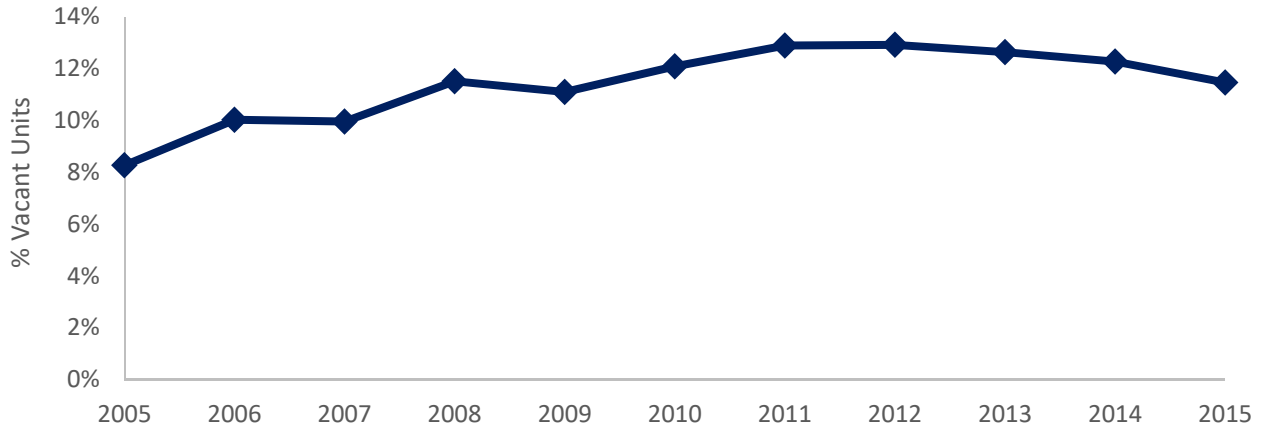
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

### 2.1.7 Residential Vacancy Rates

The residential vacancy rate is defined as the percentage of dwelling units that are unoccupied at a given time. In 2015, the vacancy rate in Hillsborough County was 11 percent, which increased by about three percentage points since 2005 (Figure 2.13). However, the vacancy rate declined slightly between 2010 and 2015.



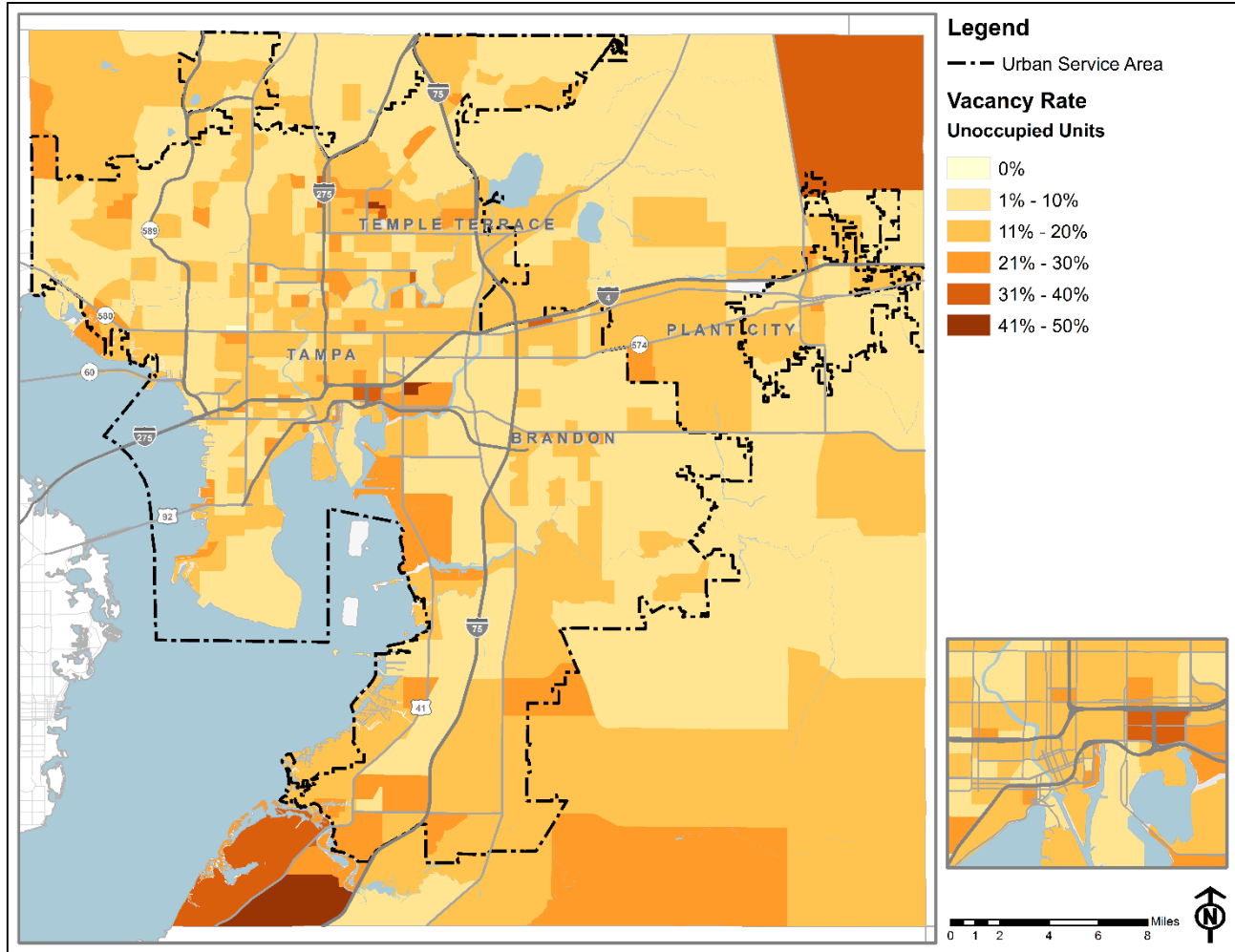
**Figure 2.13 Vacancy Rate Trend**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

At the TAZ level, vacancy rates range from zero to 50 percent, with higher vacancy rates observed along the southern border of Hillsborough County. Higher vacancy rates are also observed in the northeast part of the county and in the port-industrial area east of the CBD (Figure 2.14). The submarket level analysis supports this finding, showing that Southshore and Northeast Tampa have slightly higher vacancy rates (16 and 14 percent respectively) than other submarkets (Table 2.6).

**Figure 2.14 Vacancy Rate Map**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

**Table 2.6 Vacancy Rates by Submarket**

Sub Area	Vacancy Rate
CBD	12%
Northeast	14%
Northwest	10%
Plant City	10%
Riverview	9%
South Tampa	10%
Southeast	10%
Southshore	16%
Temple Terrace	12%

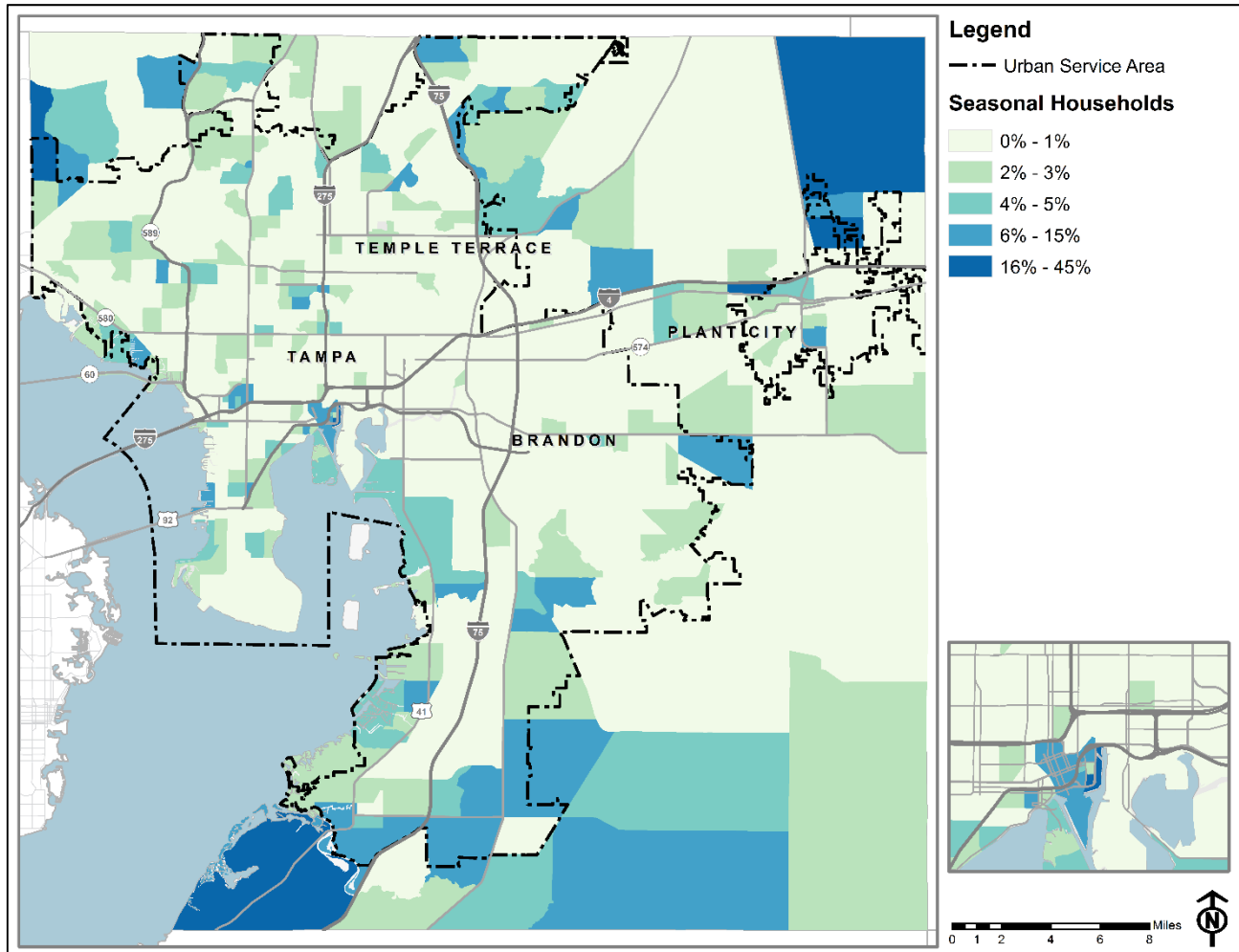
Westshore	12%
Total	11%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

### 2.1.8 Seasonal Households

Seasonal housing is a key land use consideration in Hillsborough County due to the large seasonally migrant population along Florida’s coast. At the TAZ level, the percentage of seasonal household ranges from zero percent to 45 percent, with a greater share of seasonal households in the county’s southeast and northwest quadrants and along the coastline (Figure 2.15). The submarket level analysis reveals that the CBD also has a relatively large share of seasonal households (five percent). Aside from Southshore, which has the highest share of seasonal households, the percentage ranges from zero to three percent (Table 2.7).

**Figure 2.15 Seasonal Households Map**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

**Table 2.7 Seasonal Households by Submarket**

<b>Sub Area</b>	<b>Vacancy Rate</b>
CBD	5%
Northeast	1%
Northwest	1%
Plant City	3%
Riverview	0%
South Tampa	2%
Southeast	2%
Southshore	6%
Temple Terrace	0%
Westshore	1%
Total	2%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

## 3.0 Employment Trends

The employment trend analysis examines employment growth across Hillsborough County both spatially and by sector, commercial land use, floor area, and occupancy rates, and non-residential development intensity. These measures are central to land use planning efforts, as they help inform the type, location, density, and intensity of commercial development needed to support future employment growth.

In Hillsborough County, the bulk of employment is in service sectors such as finance, professional services and office as well as retail. Since 2010, total employment in Hillsborough County grew by about 16 percent, to a total of 827,700 jobs. Although the CBD has the highest employment density (and grew at the faster rate between 2010 and 2015), the northern areas of the county, as well as the Riverview, Westshore, and South Tampa submarkets have more total jobs.

Office and commercial land uses, which employ the largest numbers of people, are predominantly located within the Urban Service Area along main arterials. Industrial land uses are located along the waterfront near the Port of Tampa and adjacent to the airport and CSX intermodal terminal. Mining uses are located outside of the USA at the county's periphery. Industrial land has the largest total floor area but has been growing at a slower rate than office, commercial, or industrial sectors. Overall, floor area grew at a very fast pace between 2000 and 2010, but has level off since 2010.

**Table 3.1 Key Employment Measures**

Employment (2015)	827,700
Employment Density (Jobs per Gross Acre)	1.3
Occupancy Rate (Employees / 1,000 Ft <sup>2</sup> ) – County	1.5
Occupancy Rate (Employees / 1,000 Ft <sup>2</sup> ) – Office	6.1
Occupancy Rate (Employees / 1,000 Ft <sup>2</sup> ) – Commercial	2.6
Occupancy Rate (Employees / 1,000 Ft <sup>2</sup> ) – Industrial	1.4
Floor Area Ratio – County	0.2
Floor Area Ratio - Office	0.6
Floor Area Ratio - Commercial	0.3
Floor Area Ratio - Industrial	0.2

Employee occupancy rates, in terms of employees per thousand square feet, are increasing in all sectors, particularly in the office and commercial sectors, which collectively increased from 3.4 to 4.1 employees per thousand square feet between 2010 and 2015. Although space is being used more efficiently, commercial intensity (floor area ratio) has been declining, especially in the office sector.

While these data-driven trends provide an important foundation for scenario planning, there are numerous external considerations that could have major implications for future non-residential land use patterns. Automation of routine labor in both goods-producing and service sectors may curb or shift job growth, while e-commerce and automation of warehousing and delivery services could lead to more decentralized manufacturing and distribution facilities. In the short-term, it appears that employment will likely continue to grow in service sectors.

The analysis of employment data reveals a handful of questions for the scenario planning process, including:

- Will commercial buildings become more dense or intense?
- Will there be more efficient utilization of existing floor space?

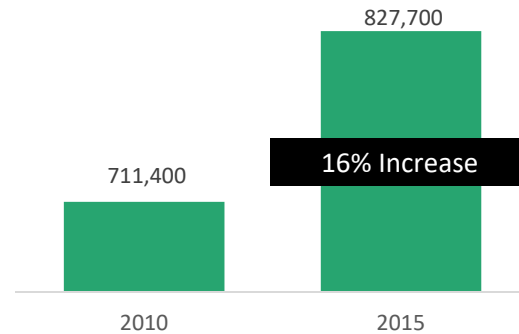
- Will there be a greater trend towards shared work space?
- How will emerging technology, such distance working, medicine and learning or increased e-commerce, influence patterns of commuting and commerce?

The following sectors explore employment growth trends in greater detail.

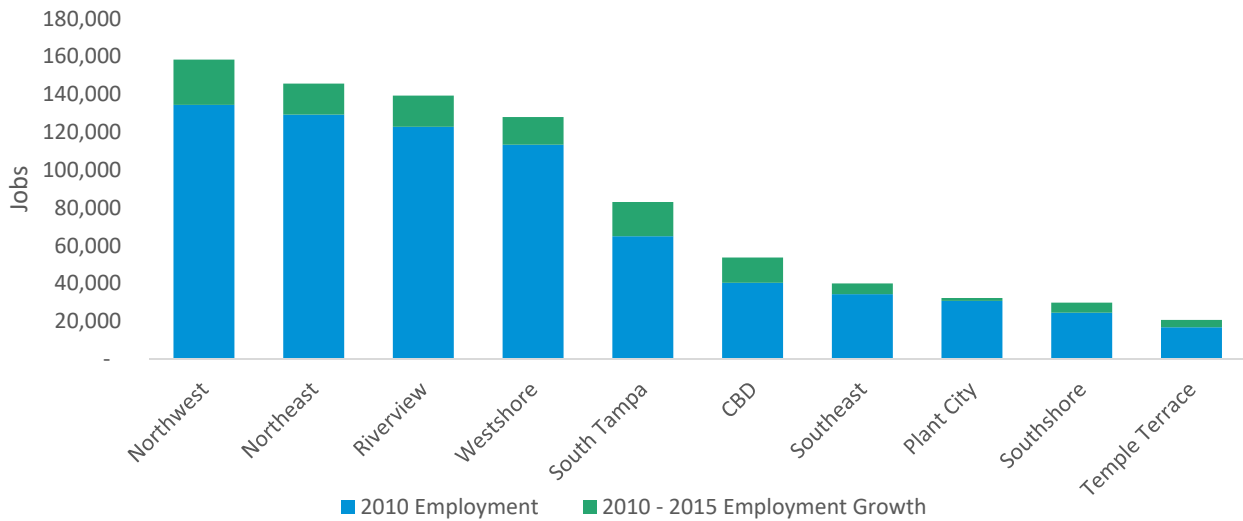
### 3.1.1 Employment Sectors

In 2015 there were 827,700 jobs in Hillsborough County, which is a 16 percent increase from 2010 (Figure 3.1 Employment Growth). Most of the county's jobs are located in the Northwest and Northeast submarkets; however, the CBD and South Tampa submarkets are the fastest growing between 2010 and 2015, at 33 and 28 percent, respectively. The Northwest and Northeast submarkets grew by about 18 and 13 percent, respectively, between the same time period. The Riverview and Westshore submarkets also hold a significant portion of the county's jobs (Figure 3.2 Employment Growth by Submarket).

**Figure 3.1 Employment Growth**



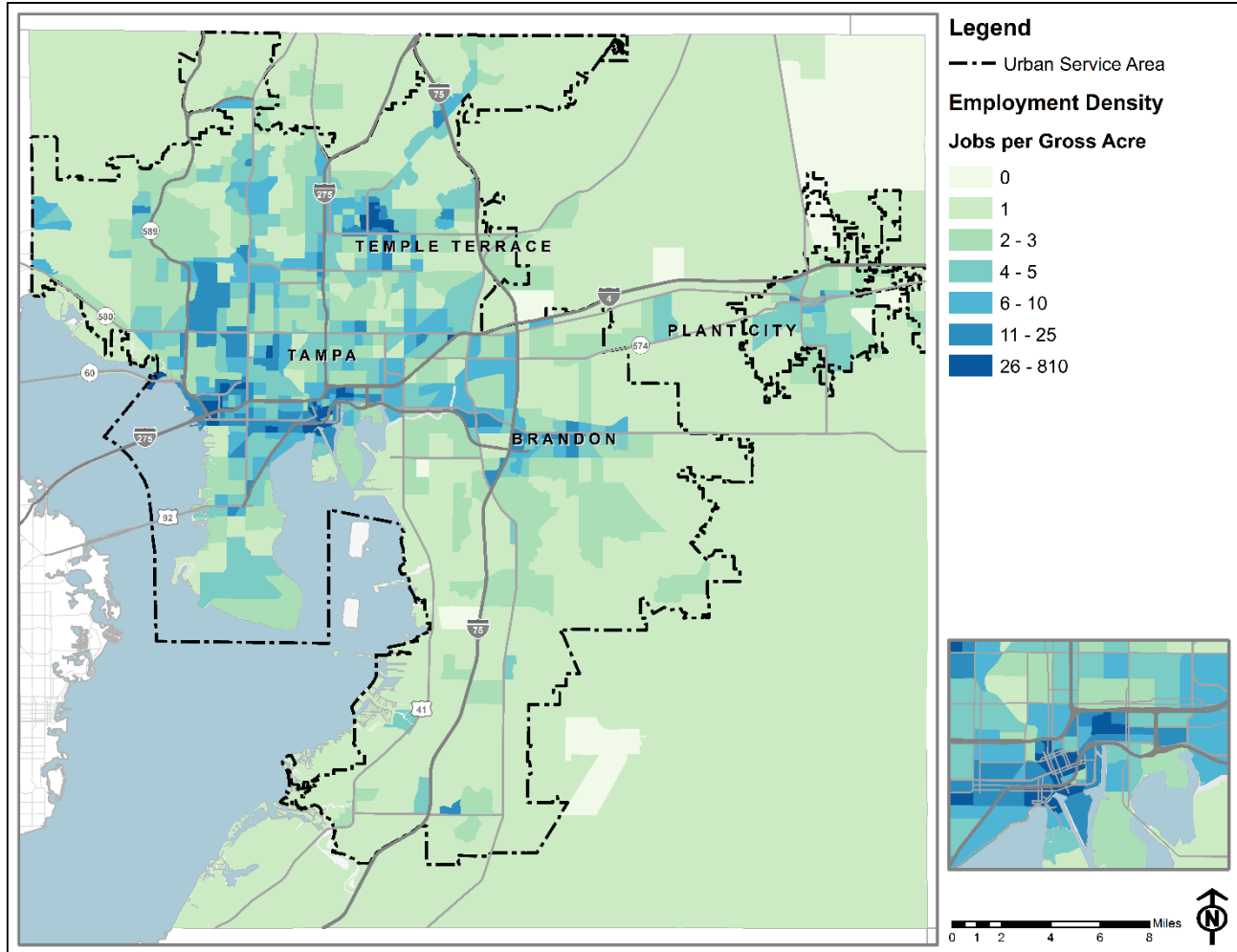
**Figure 3.2 Employment Growth by Submarket**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis.

Employment is most heavily concentrated in the CBD, with other employment centers at USF, the airport and Westshore, and in Brandon, with some parts of the CBD and USF area having up to 810 jobs per acre. Areas with high employment density are concentrated within the Urban Service Area, with TAZs outside the Urban Service Area having no more than two to three jobs per acre.

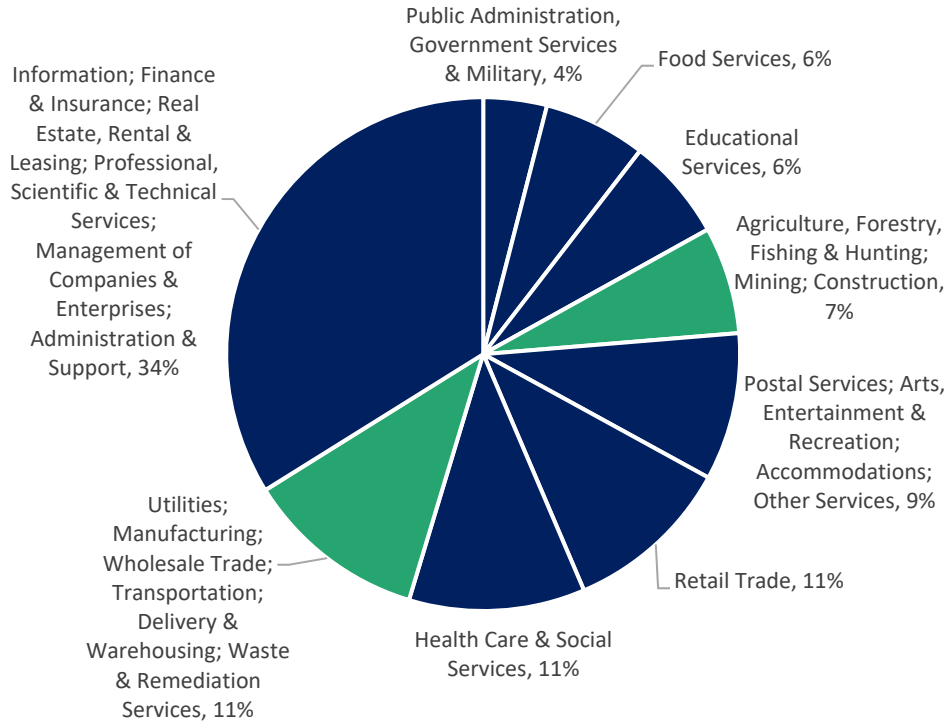
**Figure 3.3 Employment Density Map**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis.

Employment in Hillsborough County is predominantly in service sector industries including information, finance, public administration and health care, food services, education, social services, retail, the arts and accommodation. Goods-producing sectors such as utilities, manufacturing, wholesale trade, agriculture, and construction make up only 18 percent of jobs county-wide. Figure 3.4 Employment by Sub Sector shows service sector employment categories in blue and goods-producing sectors in green. Employment sector trends are critical to land use planning efforts, as employment determines the type of land (commercial, office, industrial) needed to support job growth. Additionally, service sector jobs tend to be located in more dense urban areas whereas goods-producing jobs tend to be located in rural areas, which has implications for transportation patterns. Over one third of jobs in Hillsborough County are in information, finance, insurance, real estate, rental and leasing, professional, scientific and technical service, management of companies and enterprises, and administration and support – all of which require office space. Growth in service sector industries could imply increases in commercial density and/or intensity, higher utilization rates, or both.

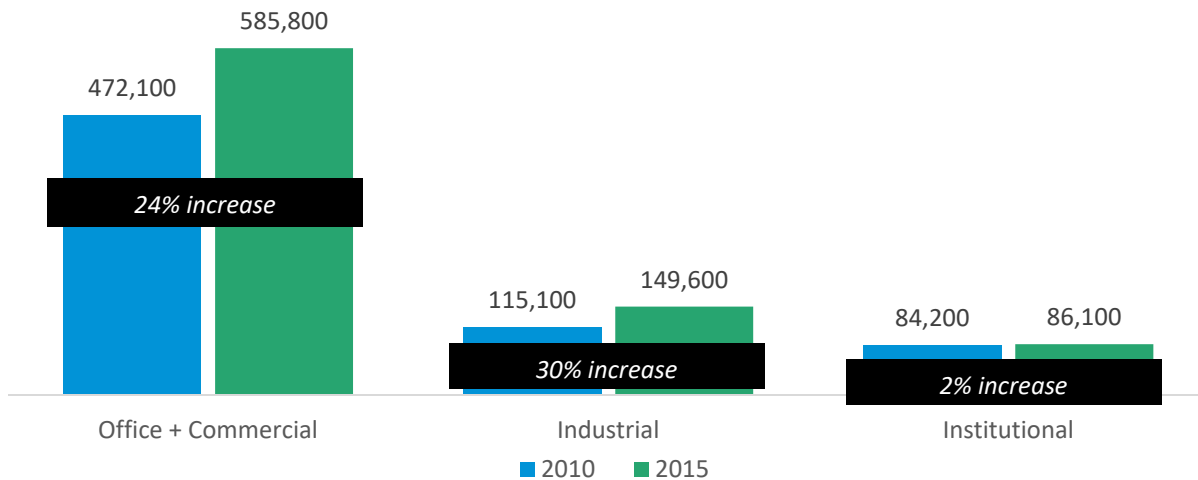
**Figure 3.4 Employment by Sub Sector**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis

Although the majority of jobs in Hillsborough County are in office and commercial sectors (service sectors), industrial employment grew at a slightly faster rate between 2010 and 2015. Office and commercial jobs grew by 24 percent, compared to a 30 percent increase in industrial jobs. Institutional jobs make up a small portion of employment in Hillsborough County, and grew by only two percent between 2010 and 2015 (Figure 3.5 Employment Growth by Sector).

**Figure 3.5 Employment Growth by Sector**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis.



Table 3.2 shows the distribution of employment across submarkets. While information, finance, and professional services account for the largest percentage of jobs in nearly every sub sector, the distribution varies significantly. Information, finance, and professional services make up 63 percent of jobs in the CBD, but only 19 percent in Plant City. At the same time, utilities, manufacturing, and wholesale trade make up only four percent in the CBD and 23 percent in Plant City. Riverview, Southshore, and Temple Terrace also have a relatively higher percentage of jobs in utilities, manufacturing, and wholesale trade. The Northeast and South Tampa submarkets have a relatively larger concentration of health care and social work jobs.

**Table 3.2 Employment Sub Sectors by Submarket**

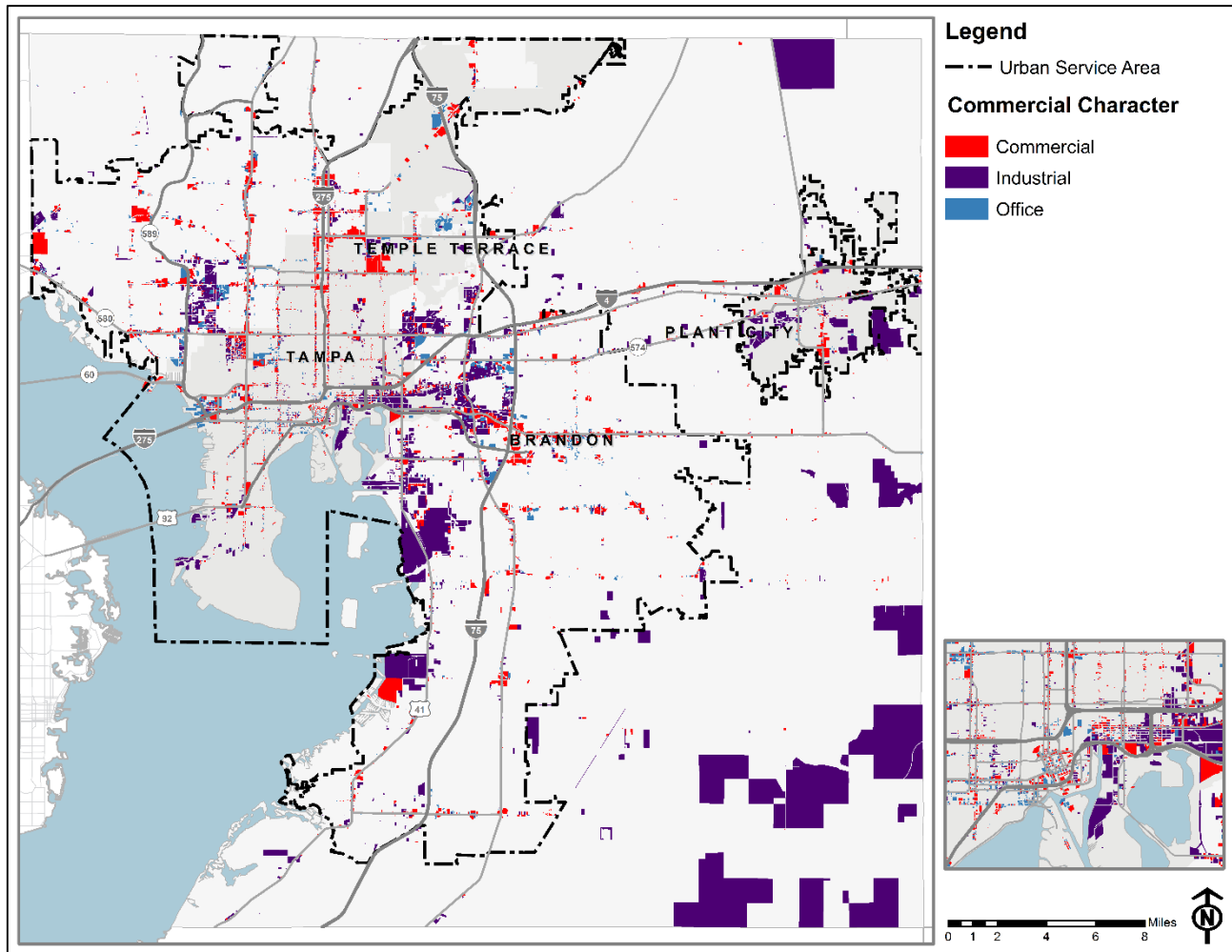
Sub Area	Agriculture/Mini ng/Construction	Utilities/Manuf acturing/Whol esale Trade	Retail	Postal/Arts and Accommoda tion	Information/ Finance/Prof essional Services	Education	Health Care/Social Work	Food Services	Government
CBD	2%	4%	1%	10%	63%	1%	1%	3%	13%
Northeast	7%	10%	8%	12%	22%	15%	17%	6%	3%
Northwest	6%	10%	15%	8%	37%	5%	10%	7%	2%
Plant City	14%	23%	12%	6%	19%	6%	10%	7%	3%
Riverview	8%	19%	13%	9%	29%	4%	7%	7%	3%
South Tampa	3%	4%	8%	7%	33%	4%	17%	6%	17%
Southeast	15%	8%	14%	9%	24%	13%	7%	9%	1%
Southshore	12%	16%	12%	7%	24%	5%	14%	6%	3%
Temple Terrace	8%	14%	9%	9%	35%	5%	9%	8%	3%
Westshore	5%	9%	9%	10%	44%	4%	11%	6%	2%

Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis.

### 3.1.2 Commercial Character

Commercial land use in Hillsborough County is consistent with the type and distribution of jobs. Office and commercial land uses are located in more urbanized areas, along arterials, and in the CBD, while industrial land use is concentrated in Riverview, Plant City, and Southeast Hillsborough County. The large industrial parcels in Southeast Hillsborough County are used for mining, petroleum, and gas extraction purposes, while much of the industrial land in Riverview supports port industrial activity.

**Figure 3.6 Commercial Land Use Types Map**



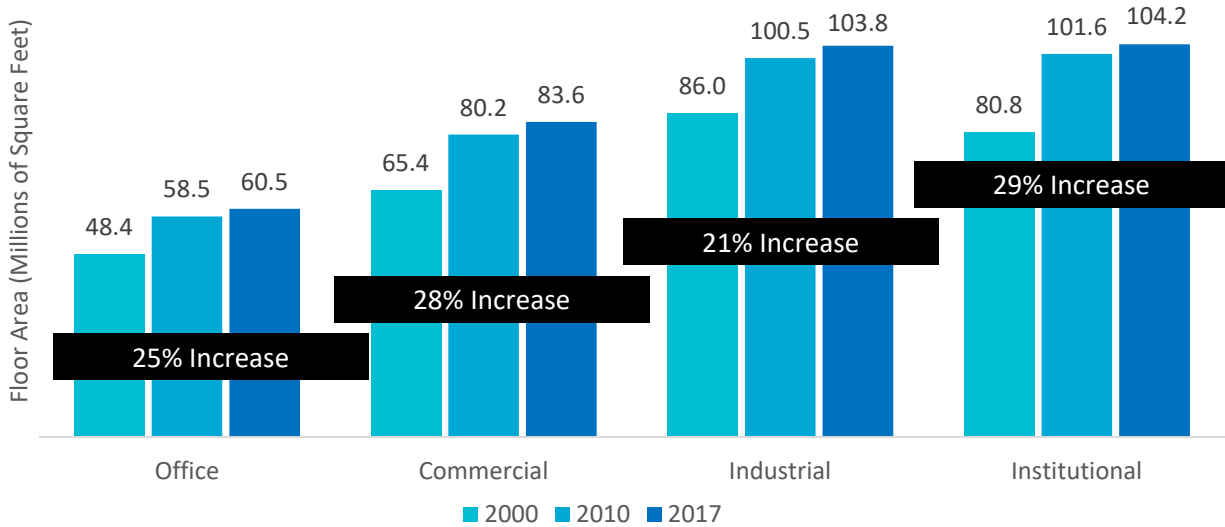
Source: Land use reported in Hillsborough County Property Appraiser parcel database.

### 3.1.3 Commercial Floor Area and Occupancy Rates

Commercial floor area is not only an indicator of building size and intensity, but can inform the efficiency of commercial space utilization when compared to employment growth. Figure 3.7 shows the increase in total floor area of each commercial land use type between 2000 and 2017. While the industrial sector has the largest total floor area, commercial and institutional sectors grew at a faster rate between 2000 and 2017. During the five year period from 2010 to 2015, employment in office and commercial sectors grew by 24 percent. Comparatively, total floor area in office and commercial sectors grew by only four percent between

2010 and 2017, indicating that employment growth is absorbing excess commercial space and that occupancy rates are increasing.<sup>3</sup> Similarly, industrial employment increased by 30 percent while industrial floor area increased by only 3.2 percent. Since institutional land encompasses a broad range of land uses that are not all linked to employment, a comparison cannot be drawn between employment growth and floor area growth.

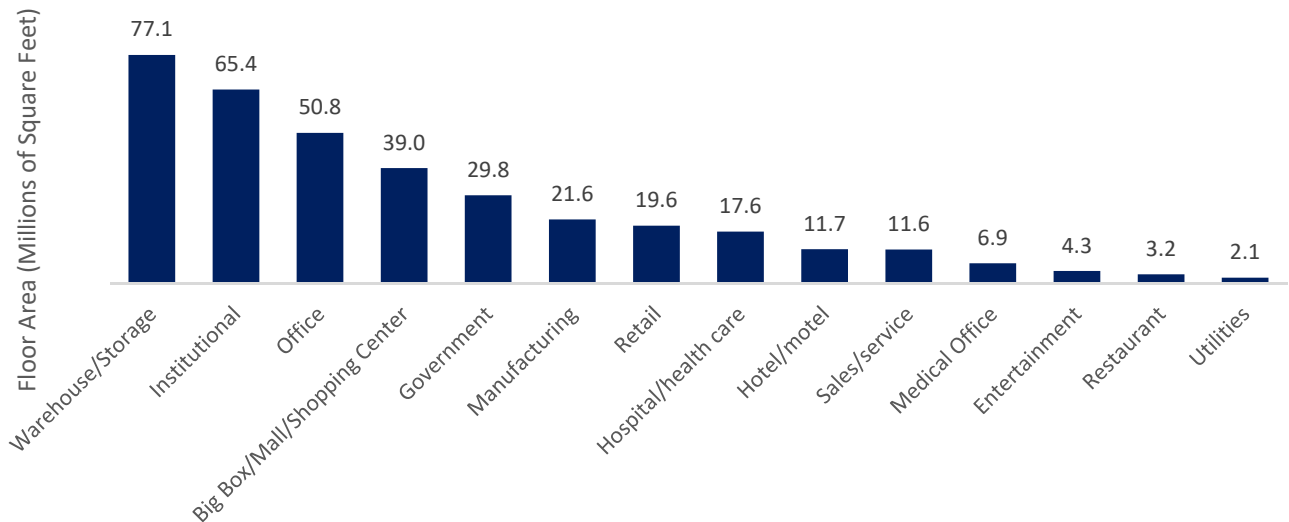
**Figure 3.7 Floor Area Growth by Sector**



Source: Heated square footage reported in Hillsborough County Property Appraiser parcel database.

At the sub sector level, warehousing and storage, institutional, and office buildings have the largest total floor area, while entertainment, restaurants, and utilities have the smallest total floor area (Figure 3.8).

**Figure 3.8 Floor Area by Commercial Sub Sectors**

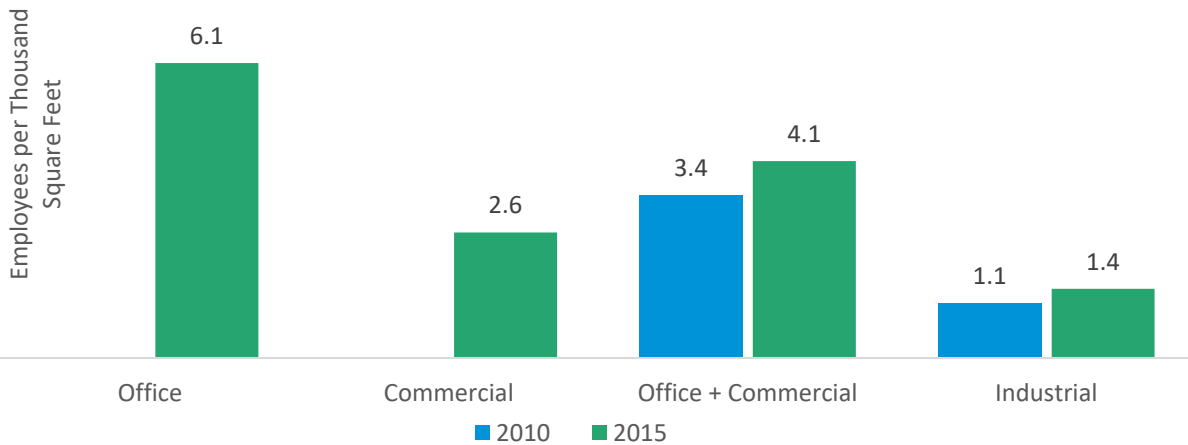


Source: Heated square footage reported in Hillsborough County Property Appraiser parcel database.

<sup>3</sup> Office and commercial employment are combined since 2010 data is not available for each category.

Figure 3.9 supports the conclusions drawn about commercial occupancy rates in the beginning of this section. Between 2010 and 2015, combined office and commercial employment occupancy increased by about 0.7 employees per thousand square feet, indicating a more efficient use of space. Industrial employment occupancy increased by about 0.3 employees per thousand square feet. Although trend data is not available for office and commercial sectors in 2010, it should be noted that the office sector has a much higher rate of utilization than commercial (or other) sectors.

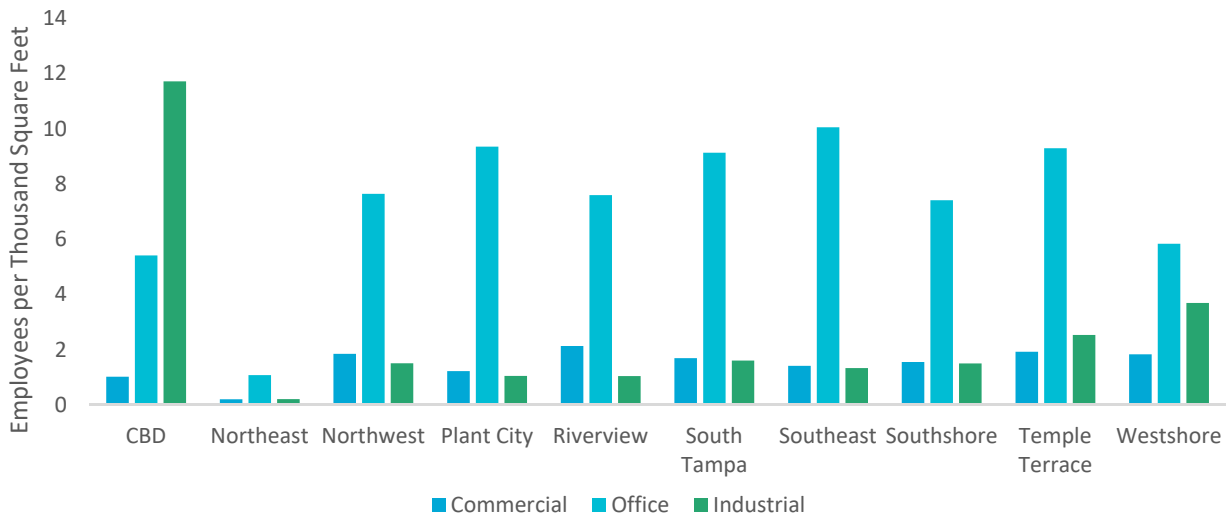
**Figure 3.9 Commercial Occupancy Rate Trend by Sector**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis. Heated square footage reported in Hillsborough County Property Appraiser parcel database.

Examining occupancy rates at the submarket level shows that office sector continues to have the most efficient utilization of space, with the exception of the CBD, which has a very high industrial occupancy rate (Figure 3.10). This is likely due to the numerous port industrial activities along the waterfront that have a large number of employees. While occupancy rates are relatively constant across the other submarkets, Northeast Hillsborough County has much lower occupancy rates in all three sectors, none of which exceed two employees per thousand square feet.

**Figure 3.10 Commercial Occupancy Rates by Submarket**

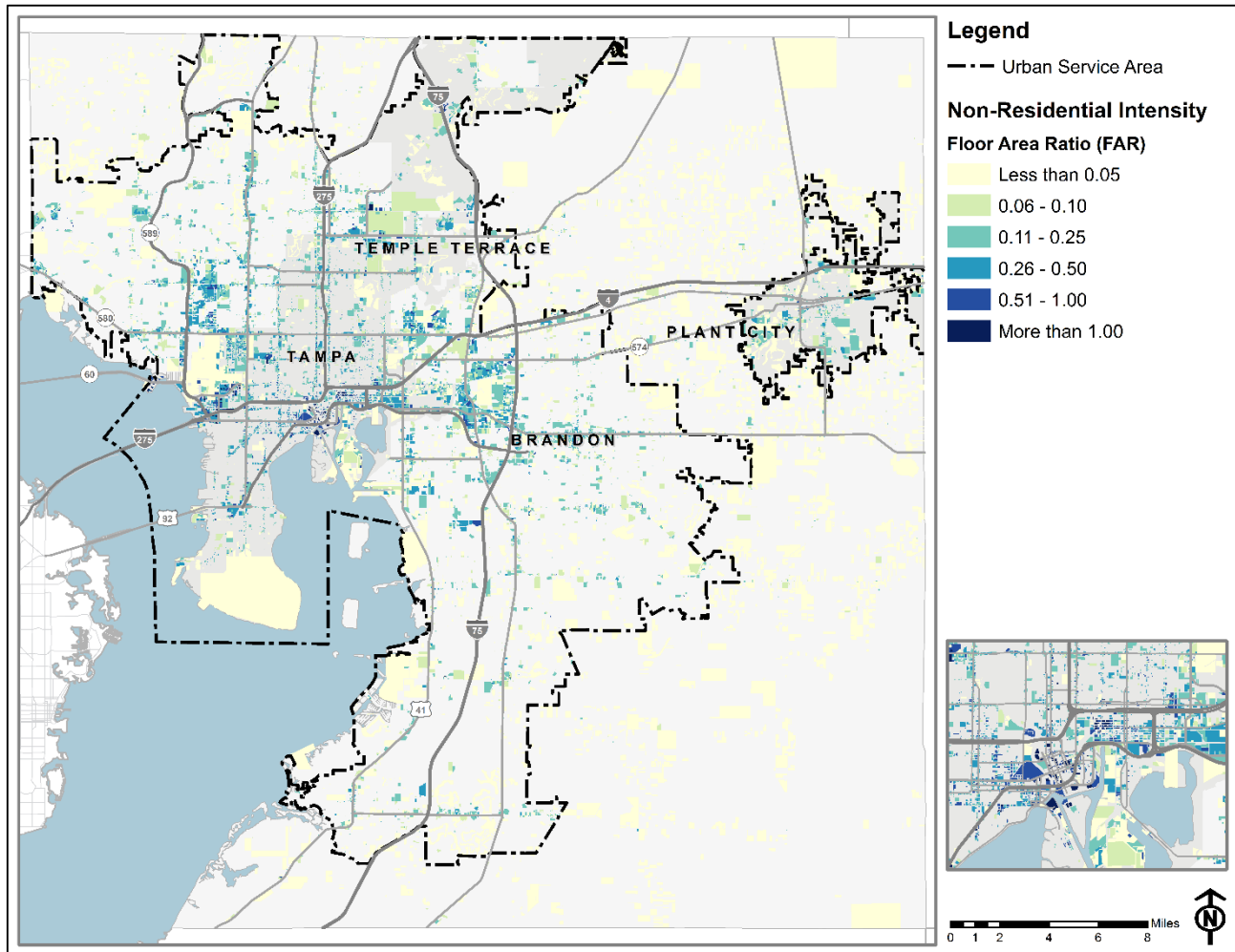


Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis. Heated square footage reported in Hillsborough County Property Appraiser parcel database.

### 3.1.4 Commercial Intensity (Floor Area Ratio)

Floor Area Ratio (FAR) is defined as the ratio of building size to parcel size, typically measured by square footage. FAR is common measure in land use planning used to evaluate development intensity and urban form. In Hillsborough County, FARs range from less than 0.05 to more than 10.0, with higher intensity land uses concentrated within the Urban Service Area (Figure 3.11). There are pockets of high intensity development in the CBD, Westshore, Brandon Town Center, and USF, as well as areas with higher levels of warehousing and manufacturing activities such as north of the airport, around the CSX intermodal facility, and north of the fairgrounds.

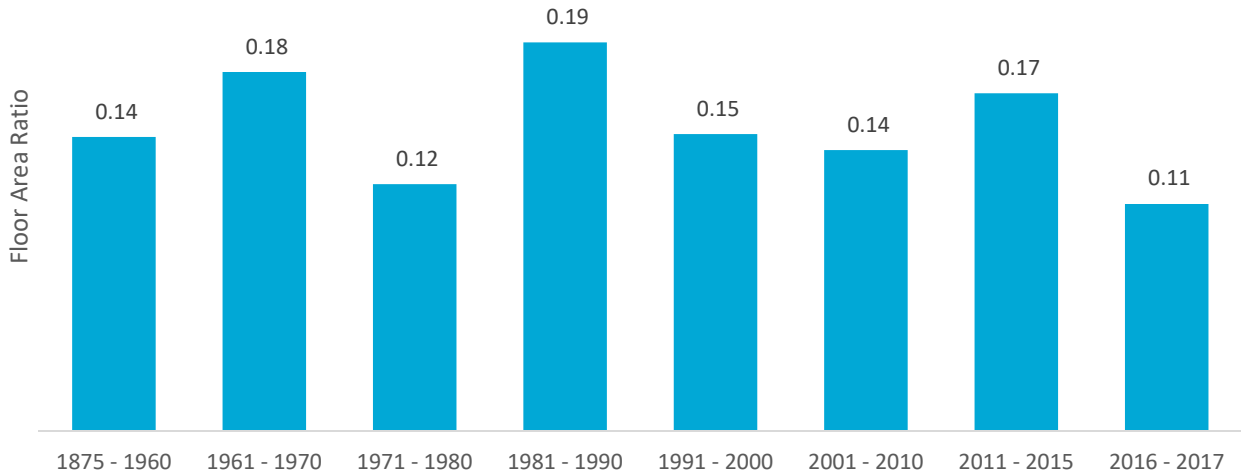
**Figure 3.11 Commercial Intensity Map**



Source: Census Bureau, Florida Department of Economic Opportunity, Bureau of Economic Analysis. Heated square footage reported in Hillsborough County Property Appraiser parcel database.

Although cumulatively the county-wide FAR has been increasing since the 1960's due to expansion into rural and suburban areas (which can accommodate larger buildings), the FAR of buildings erected during each decade does not follow a clear trend (Figure 3.12). Buildings erected during the 1980s had an FAR of nearly 0.2, while buildings erected in 2016 and 2017 had an FAR of 0.11. However, development in the previous 5-year period from 2011 to 2015 exhibited FARs more similar to the 1980s. FARs between 1960 and 2017 fluctuate from about 0.1 to 0.2.

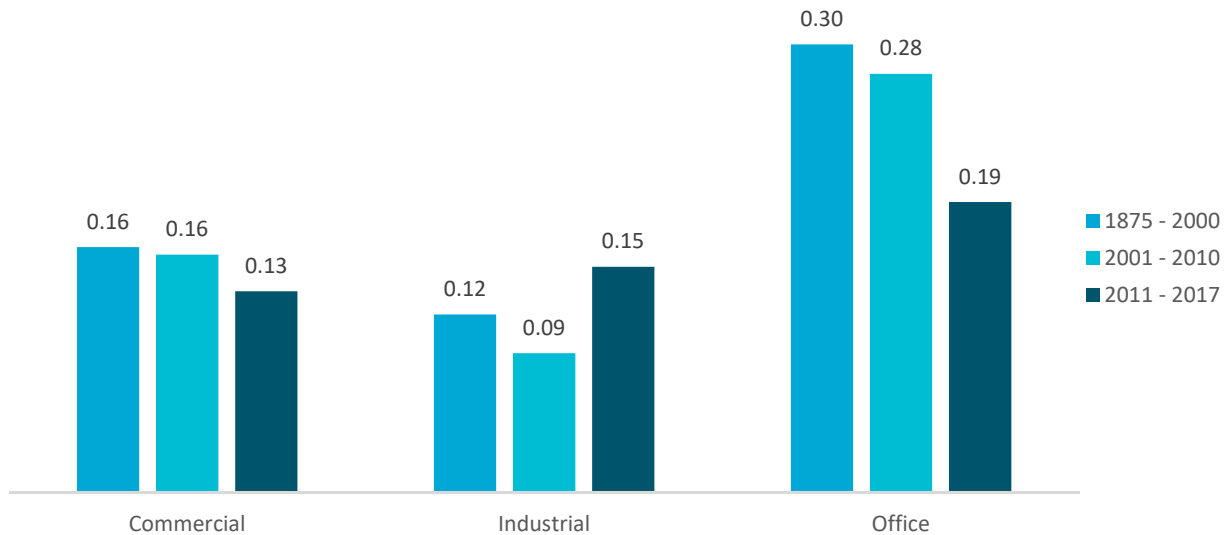
**Figure 3.12 Commercial Intensity Trend**



Source: Heated square footage and parcel acreage reported in Hillsborough County Property Appraiser parcel database.

While development intensity is highest in the office sector, the FAR has declined dramatically for buildings erected between 2011 and 2017 (Figure 3.13). Commercial FAR also decreased during the same period, while industrial FAR increased. The decrease in office and commercial FAR could be a reflection of employment suburbanization, where service sector employers choose to locate in the suburbs due to lower building values, development standards, and to be closer to employees commuting from the suburbs and/or neighboring counties.

**Figure 3.13 Commercial Intensity by Sector**



Source: Heated square footage and parcel acreage reported in Hillsborough County Property Appraiser parcel database.

The CBD submarket experiences the highest intensity development, while the Northeast, Westshore and South Tampa submarkets also have relatively high intensities (Table 3.3). The Southshore and Southeast submarkets have the lowest intensity development. The county-wide FAR is 0.18.

**Table 3.3 Floor Area Ratio by Submarket**

<b>Sub Market Area</b>	<b>Floor Area Ratio</b>
CBD	1.33
Northeast	0.18
Northwest	0.19
Plant City	0.12
Riverview	0.12
South Tampa	0.28
Southeast	0.01
Southshore	0.08
Temple Terrace	0.12
Westshore	0.32
Total	0.18

Source: Heated square footage and parcel acreage reported in Hillsborough County Property Appraiser parcel database.



## 4.0 Land Use

The land use trend analysis explores land development patterns in Hillsborough County, including the spatial distribution of land uses, land consumption, development and redevelopment potential, and key growth areas based on Planning Commission staff input and building permit data. In 1993, Hillsborough County adopted an Urban Service Area boundary to focus growth and development in areas with existing services and infrastructure, and to develop urban activity centers while maintaining suburban, rural, and agricultural assets in more peripheral parts of the county. The land use analysis shows that the Urban Service Area has been effective at achieving these objectives.

While the rate of land consumption in Hillsborough County has remained relatively constant since 1960, land development since the 1990s has been more heavily concentrated within the Urban Service Area. Within the Urban Service Area, single family residential is the predominant land use, with agriculture, institutional, and industrial land uses making up most land outside the Urban Service Area. Most developable land (vacant, agricultural, and single family residential parcels greater than ten acres) is located outside the Urban Service Area, while most redevelopable land is located within the Urban Service Area. Developable and redevelopable land within the Urban Service Area are key measures because they define the amount and type of growth that can be accommodated by 2045. Within the Urban Service Area, about 20 percent of developable and redevelopable land (respectively) is constrained by wetlands, which are typically removed from development consideration.

Based on 2045 population and employment projections, it is likely that all developable land in Hillsborough County will be consumed before 2045. With this constraint on development, there are numerous ways that the market could respond. Many urban areas across the country are directing efforts at increasing density and intensity in urbanized areas through infill and redevelopment, while other are experiencing pressure to grow outwards into rural and suburban areas. While housing and job markets are significant drivers of new development, policies developed throughout strategic planning efforts can be highly effective at guiding growth in a manner consistent with the county's priorities and vision for the future.

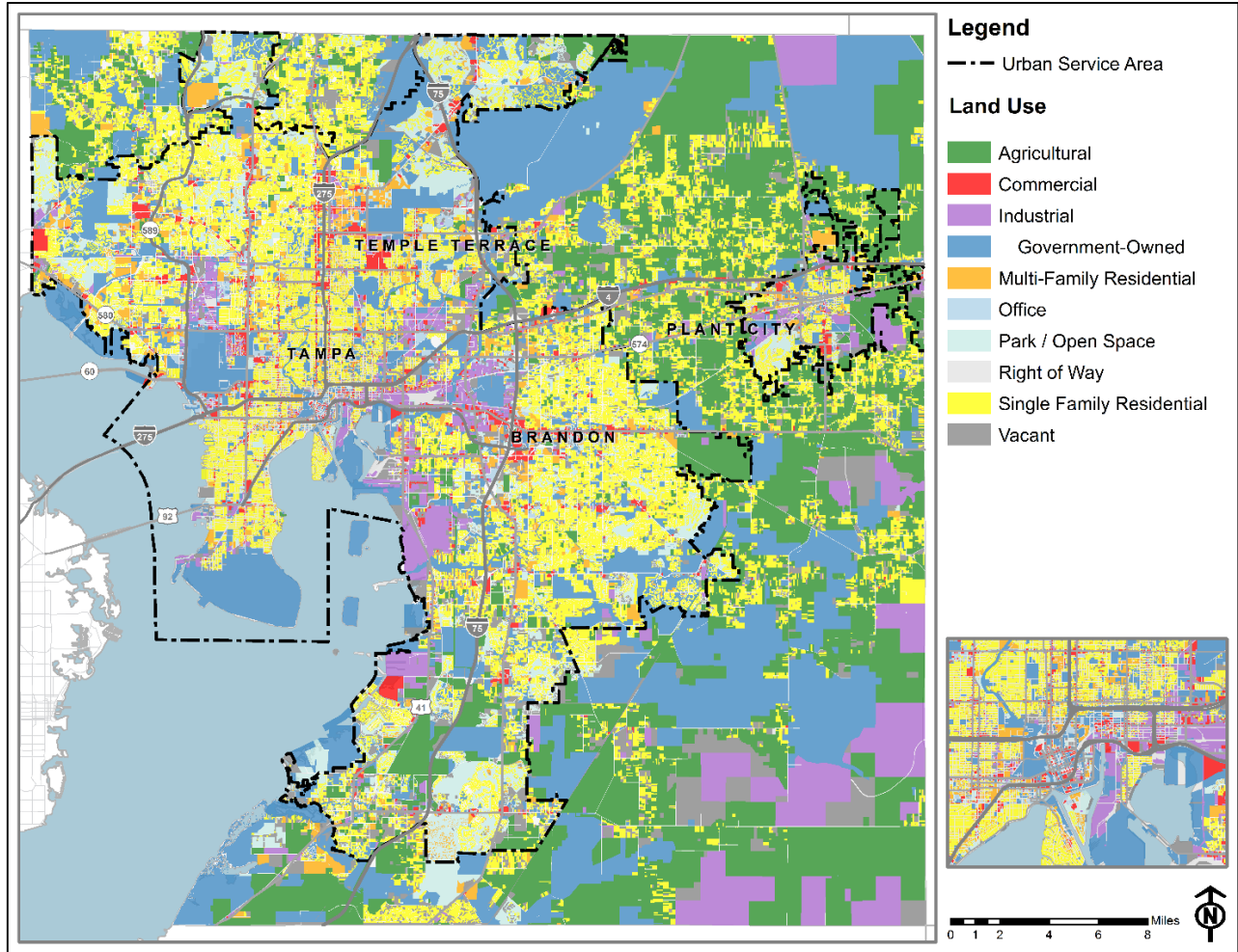
**Table 4.1 Key Land Use Measures**

Total Acreage	641,534
Vacant Acreage	54,753
Developable Land in USA (Unconstrained)	34,700
Developable Land in USA (Constrained)	9,800
Redevelopable Land in USA (Unconstrained)	14,865
Redevelopable Land in USA (Constrained)	1,687

### 4.1.1 Existing Land Use

Land use within Hillsborough County's Urban Service Area is predominantly single family residential, with pockets of industrial land along port areas and the CSX intermodal facility and commercial corridors along arterials (Figure 4.1). Outside of the Urban Service Area, there are large plots of agricultural, institutional, and industrial land, with some single family land uses clustered around Plant City.

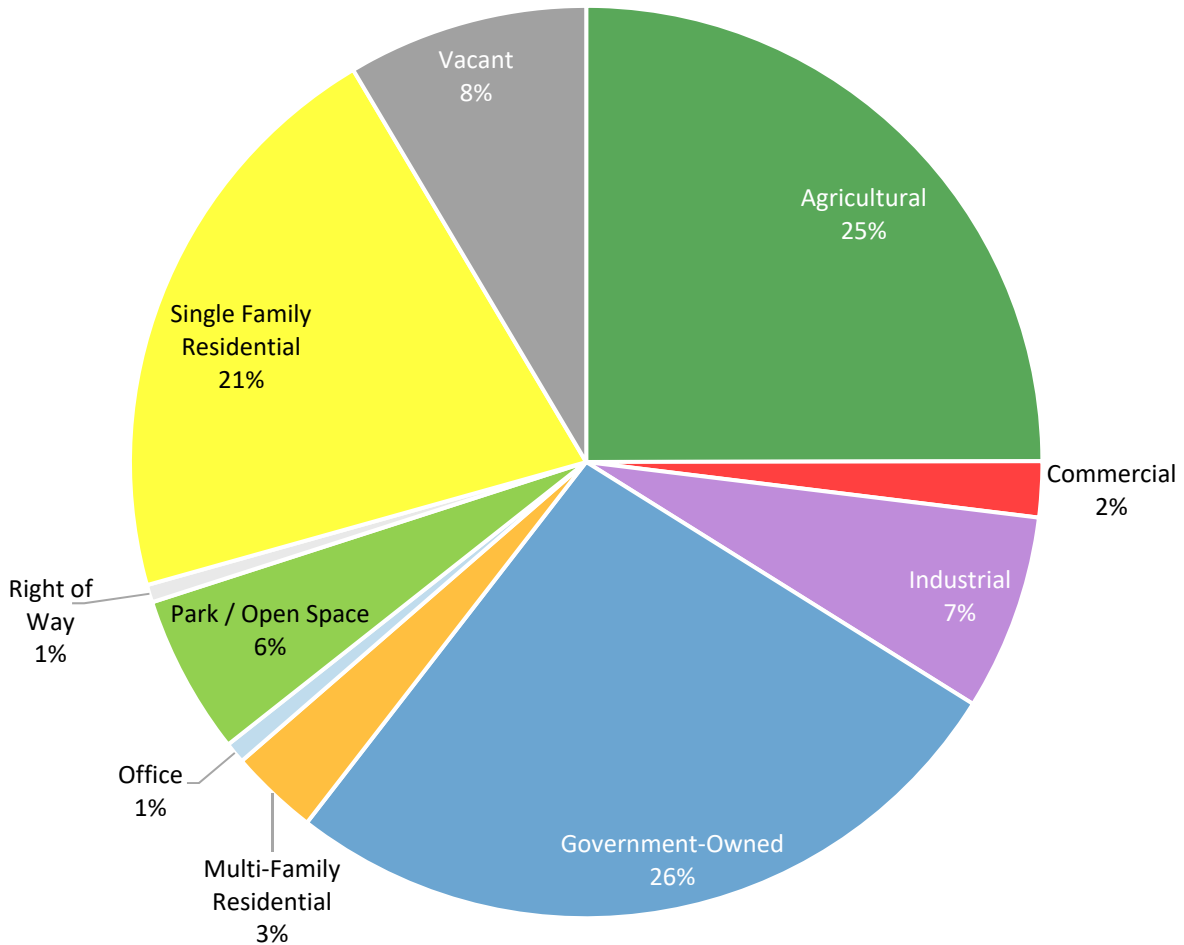
Figure 4.1 Existing Land Use Map



Source: Land use reported in Hillsborough County Property Appraiser parcel database.

Due to the large amount of agricultural and industrial land outside the Urban Service Area, those land uses make up the majority of land within Hillsborough County, with single family residential making up 21% of total land use (Figure 4.2). Comparatively, multi-family residential makes up on three percent. Eight percent of the County's land is vacant.

**Figure 4.2 Existing Land Use Distribution**



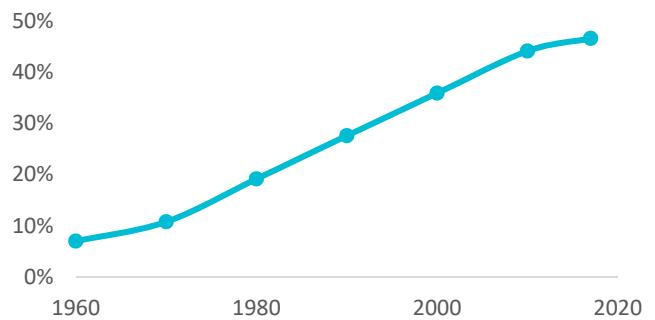
Source: Land use and parcel acreage reported in Hillsborough County Property Appraiser parcel database.

**4.1.2 Land Consumption**

The gross acreage of Hillsborough County is about 640,000 acres. As of 2017, about 47 percent of the county’s land contains some type of development, not including land for parks and recreation or agriculture (Figure 4.3). In 1960, only seven percent of the county’s land was developed. Figure 4.3 represents the total acreage of parcels that have been developed, but does not account for increases in density or intensity.

Figure 4.4 shows the chronology of land consumption by decade. Land consumption has predominantly occurred within the Urban Service

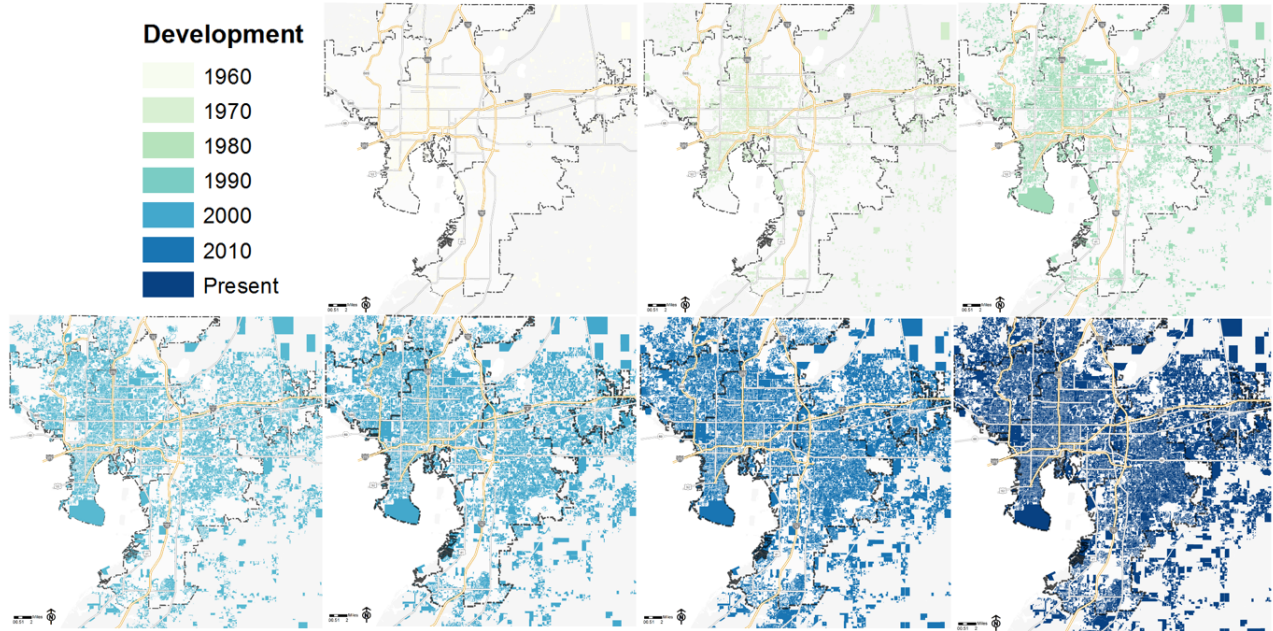
**Figure 4.3 Percentage of Land Developed**



Source: Land use and parcel acreage reported in

Area since the 1980s, indicating that the boundary has been effective at concentrating development in more urbanized areas. As of 2017, there is very little land area within the Urban Service Area that is not developed. Forecasted population and employment growth suggests that all developable land within the Urban Service Area will likely be consumed before 2045. A key consideration throughout the scenario development process is whether this growth will be accommodated through increased density and intensity within the Urban Service Area, or if the boundary will be extended.

**Figure 4.4 Land Consumption Timeline**



Source: Land use reported in Hillsborough County Property Appraiser parcel database.

### 4.1.3 *Developable and Redevelopable Land*

#### Developable Land

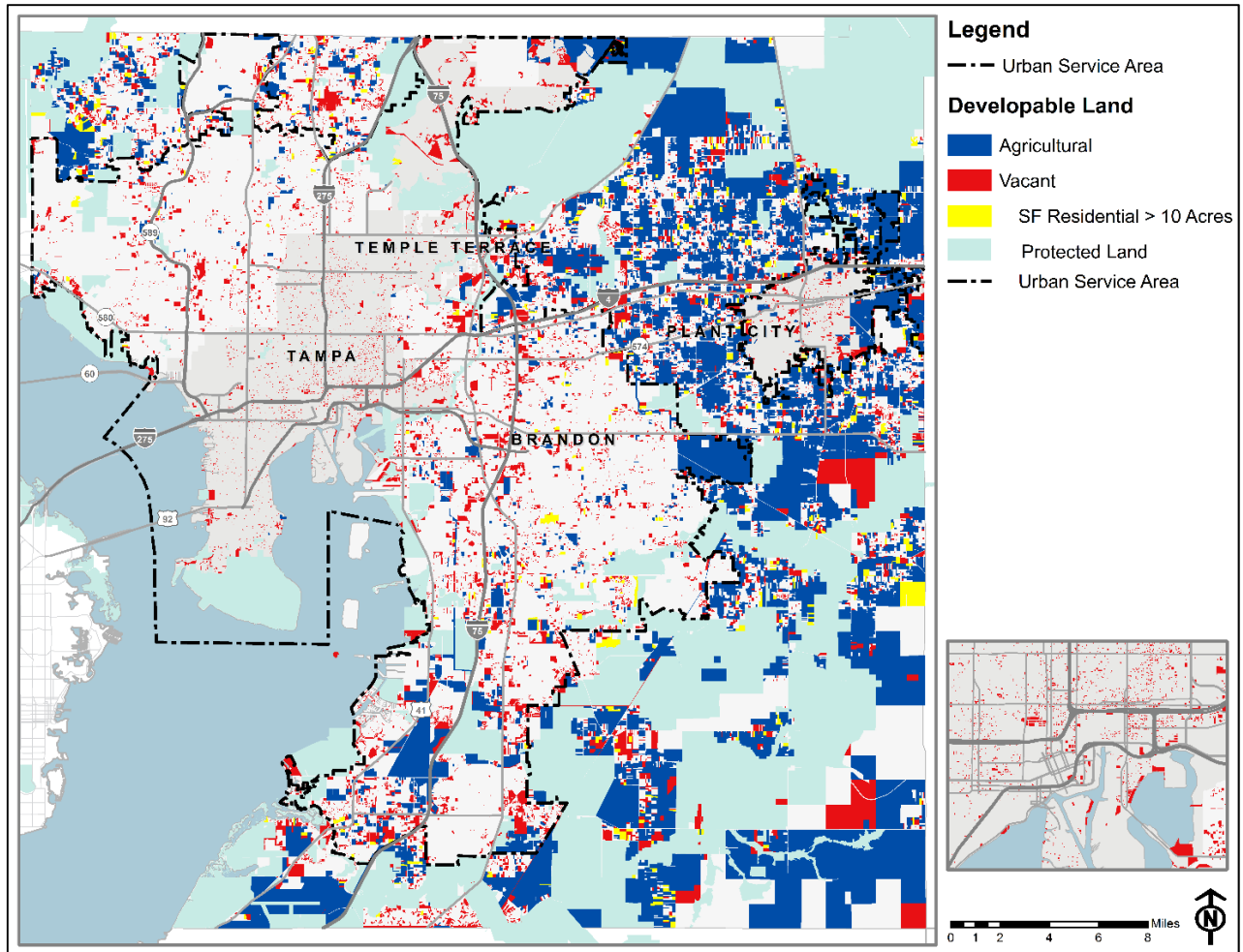
The term “developable land” refers to land that has very minimal or no current structures, and is therefore able to accommodate new development. The following land use categories were used to identify developable land in Hillsborough County:

- Vacant Parcels
- Agricultural Parcels
- Single Family Residential Parcels > 10 Acres

While agricultural parcels and single family residential parcels greater than 10 acres likely have structures on a small portion of the land, these parcels are likely to subdivide or add additional structures, especially as demand for available land continues to grow.

To determine the total acreage of developable land in Hillsborough County, preserves and restoration areas and Florida Managed Lands were removed from the analysis. Figure 4.5 shows where each type of developable land exists within the County, and Figure 4.6 shows the total acreage of developable land both within and outside of the Urban Service Area.

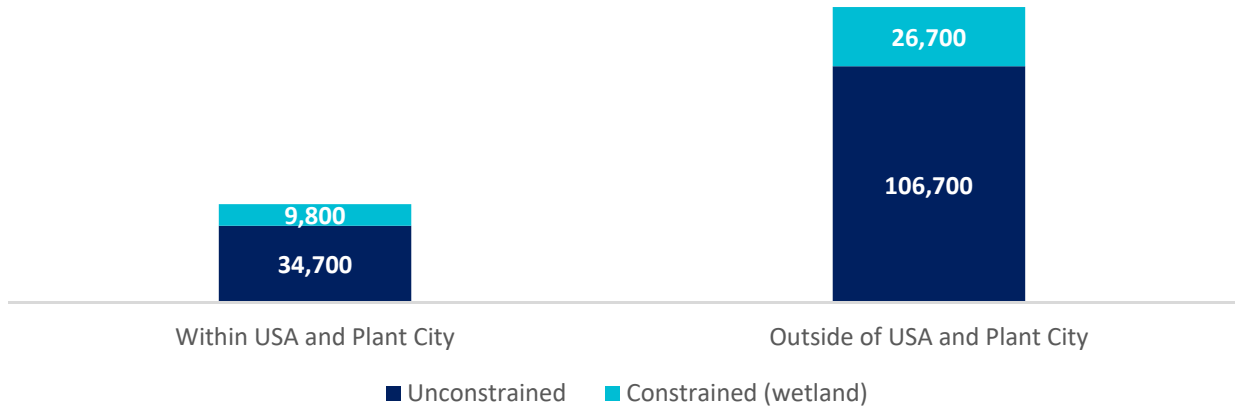
**Figure 4.5 Developable Land Map**



Source: Land use reported in Hillsborough County Property Appraiser parcel database. Constrained land (wetlands) is reported by the National Wetlands Inventory.



**Figure 4.6 Developable Land Acreage**



Source: Parcel acreage reported in Hillsborough County Property Appraiser parcel database. Constrained land (wetlands) is reported by the National Wetlands Inventory.

### Redevelopable Land

Redevelopable land refers to land that has existing underutilized structures that are likely to be redeveloped at a higher density or intensity. Determining the amount and location of potentially redevelopable land is important to land use modeling efforts, especially when vacant land is limited, because it can be assumed that these areas can accommodate future housing and employment growth. For this analysis redevelopment potential is determined by the ratio of the assessed building value to land value using data from the Hillsborough County Property Appraiser.

The methodology is based on the assumption that parcels with land values that increasingly exceed corresponding building values are more likely to redevelop. This analysis uses a threshold ratio of 0.5 to identify potentially redevelopable land. Commercial parcels greater than five acres with an FAR between 0.01 and 0.2 were also considered to have redevelopment potential. Based on stakeholder input, parcels in the Channel District and along Water Street were all considered to have redevelopment potential.

In general, single family parcels maintain their use and do not redevelop. However, single family parcels located within Hillsborough County Comprehensive Plan Future Land Use (FLU) categories R-10, R-20, and R-35 are assumed to have redevelopment potential based on recent observed trends. Busch Gardens and Tampa Bay Downs were not considered to have redevelopment potential even though they meet the criteria of having an FAR between 0.01 and 0.2. These criteria are summarized as follows:

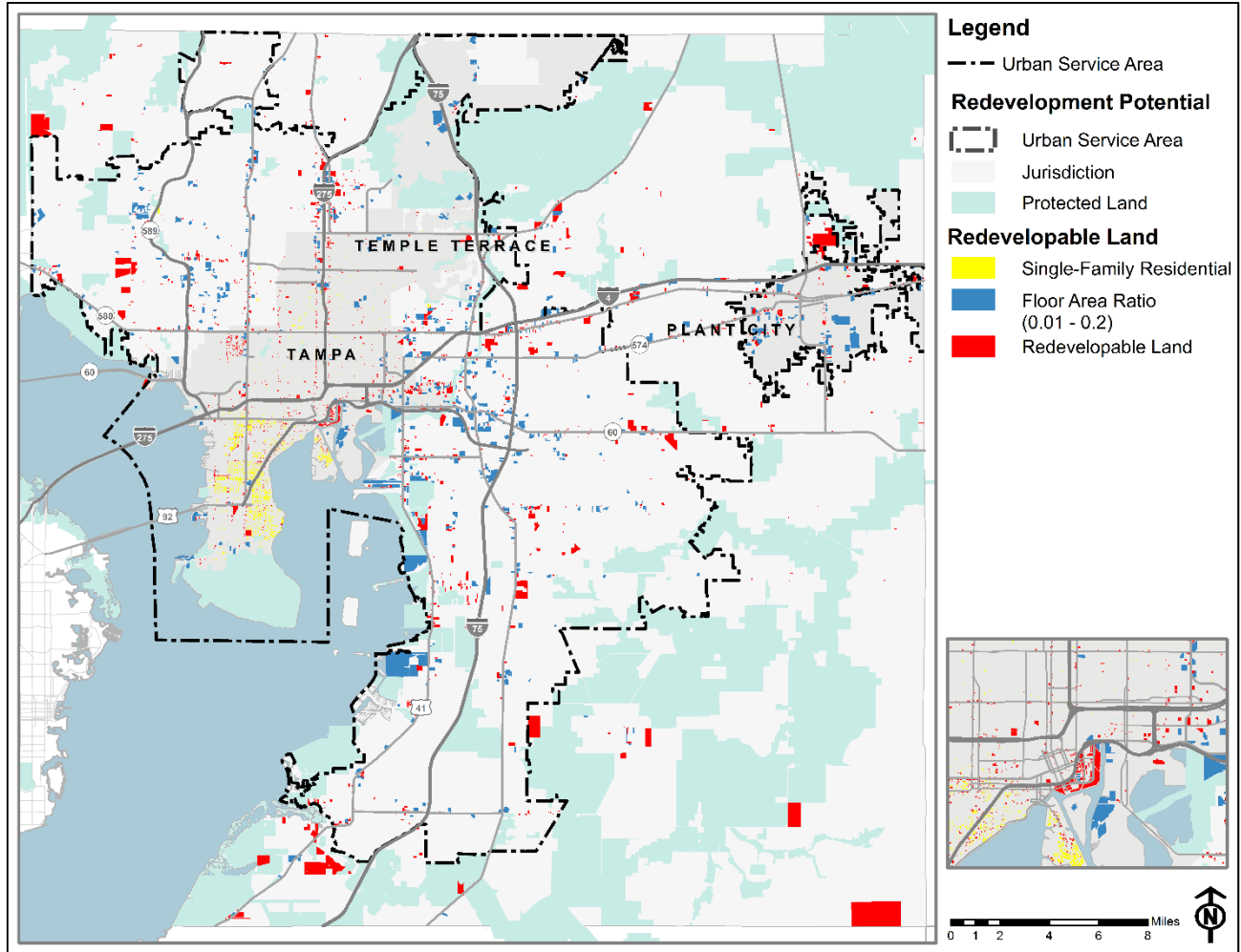
- Criteria 1: Ratio of building value land value
  - ≤ 0.5 = Likely to redevelop
  - > 0.5 = Unlikely to redevelop
- Criteria 2: FAR > 5 acres
  - 0.01 to 0.2. = Likely to redevelop

- Criteria 3: Water Street/Channel District
- Criteria 4: University of South Florida

Certain land uses which are unable or highly unlikely to redevelop are excluded from the analysis. These include:

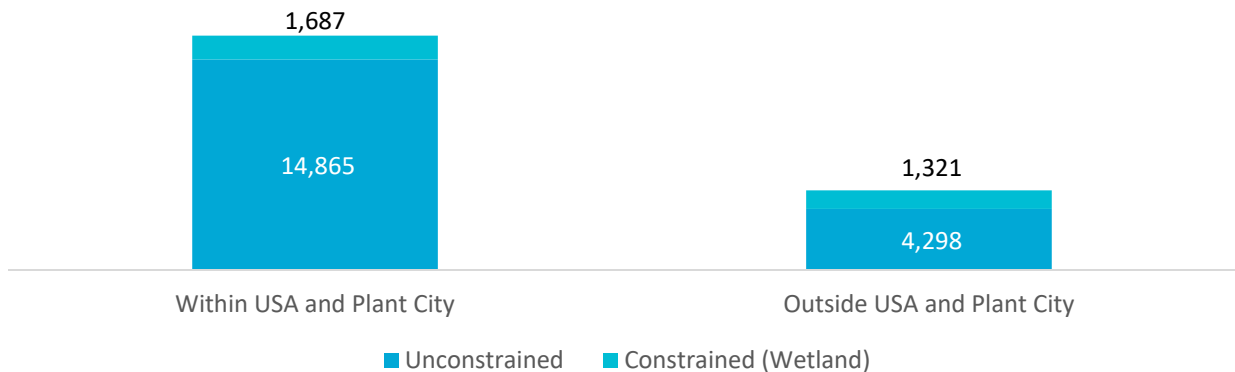
- Agricultural Land
- Single Family Residential (except in future R-10, R-20, or R-35 categories)
- Institutional
- Right of Way
- Parks / Open Space
- Gas & Oil Storage and Distribution
- Utilities
- Subsurface Rights
- Busch Gardens
- Tampa Bay Downs

**Figure 4.7 Redevelopable Land Map**



Source: Land use reported in Hillsborough County Property Appraiser parcel database. Building value and land value reported in Hillsborough County Property Appraiser parcel database. Constrained land (wetlands) is reported by the National Wetlands Inventory.

**Figure 4.8 Redevelopable Land Acreage**



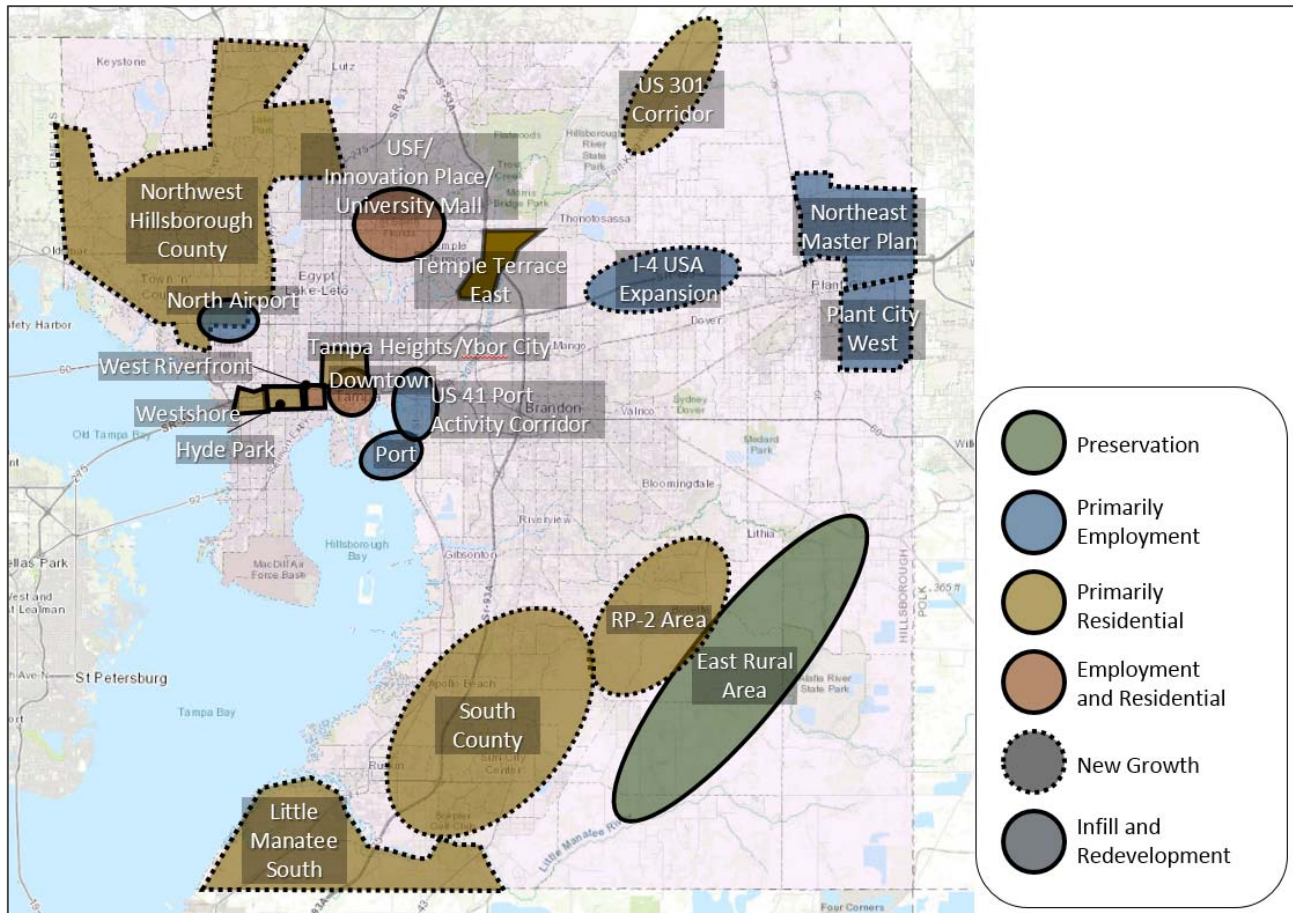
Source: Parcel acreage reported in Hillsborough County Property Appraiser parcel database. Constrained land (wetlands) is reported by the National Wetlands Inventory.



### 4.1.4 Trend Focus Areas

There are numerous areas throughout Hillsborough County that are expected to undergo significant change or, alternatively, will be targeted for preservation. These areas were identified through conversations with Hillsborough County Planning Commission staff, and are displayed in Figure 4.9 by the type of expected future development.

**Figure 4.9 Trend Development Focus Area Map**



Source: Map was developed based on feedback from Hillsborough County Planning Commission staff.

### Residential

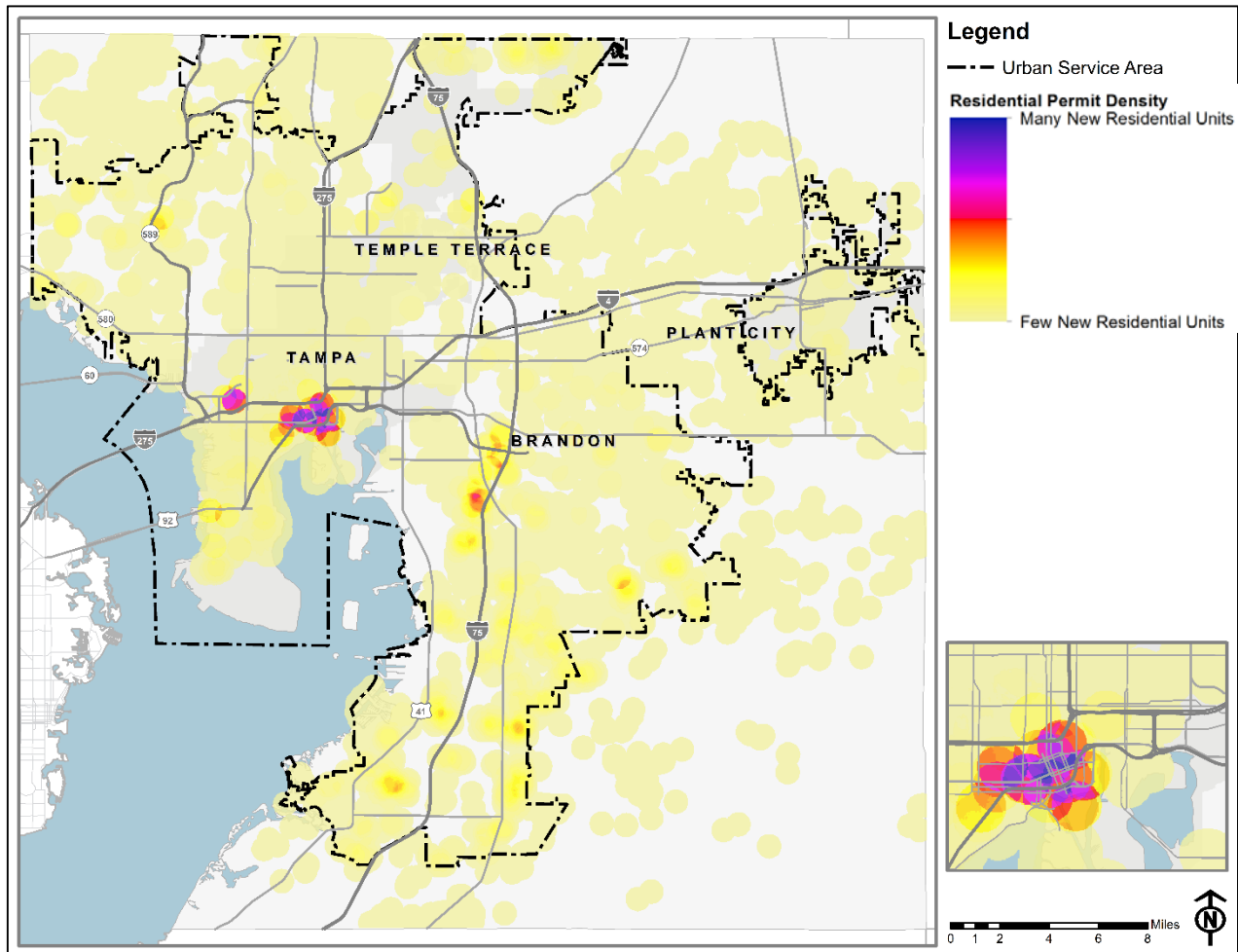
Future areas of growth and development were also identified by examining building permit density. There were about 50,000 building permits issued between 2011 and 2017 (Table 4.2). While the Southeast, Southshore, South Tampa, and Riverview submarkets experienced the largest number of issued building permits, the CBD and Westshore submarkets experienced the most intense areas of activity (Figure 4.10). Since 2011, the number of building permits issued annually increased from the previous year; however, there was a sharp decline between 2016 and 2017 from about 10,000 to 5,000 permits. It is unclear if this is an outlier or represents a broader trend (Figure 4.11).

**Table 4.2 Residential Building Permits by Sub Area (2011 – 2017)**

Sub Area	2011 – 2017 Residential Building Permits
CBD	3,750
Northeast	4,064
Northwest	5,142
Plant City	954
Riverview	7,073
South Tampa	7,710
Southeast	9,982
Southshore	8,233
Temple Terrace	698
Westshore	2,731
<b>Total</b>	<b>50,337</b>

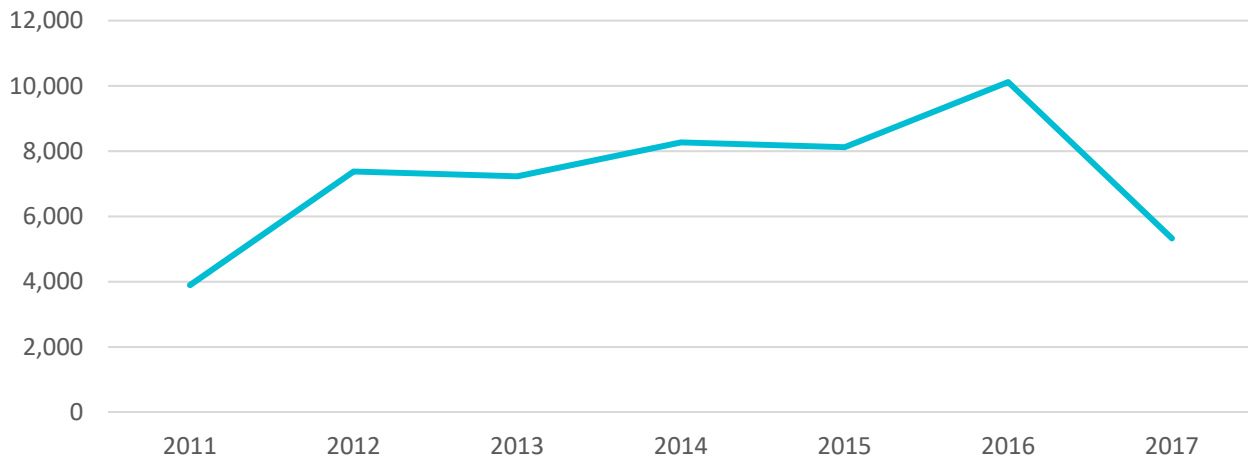
Source: Hillsborough County Planning Commission

**Figure 4.10 Residential Building Permits by Unit Map**



Source: Hillsborough County Planning Commission.

**Figure 4.11 Residential Building Permit Trend**



Source: Hillsborough County Planning Commission (note: 2017 reflects partial year data)

**Non-Residential**

The Riverview, Northeast and Northwest submarkets experienced the largest share of non-residential building permits issued between 2011 and 2017, although the CBD, Westshore submarkets experienced the most intense pockets of activity (Table 4.3 and Figure 4.12). Brandon and the USF area also have a relatively higher concentration of non-residential building permits than other areas. It should be noted that data on total floor area, which can vary widely by permit, is not available and this information should be used with caution.

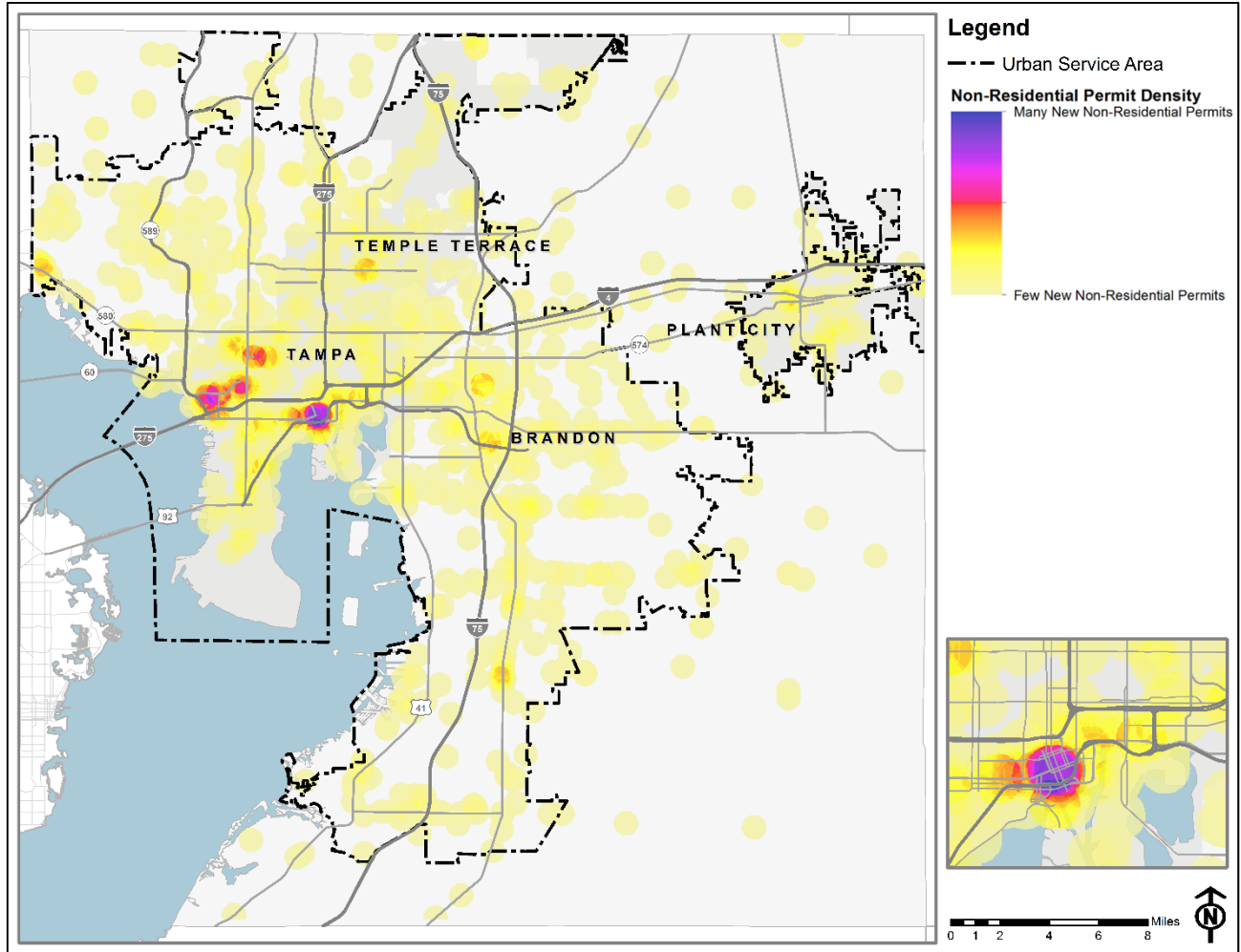
**Table 4.3 Non-Residential Building Permits by Sub Area (2011 – 2017)**

Sub Market Area	2011 – 2017 Non-Residential Building Permits
CBD	58
Northeast	231
Northwest	243
Plant City	77
Riverview	317
South Tampa	149
Southeast	177
Southshore	134
Temple Terrace	33
Westshore	197
Total	1,616

Source: Hillsborough County Planning Commission

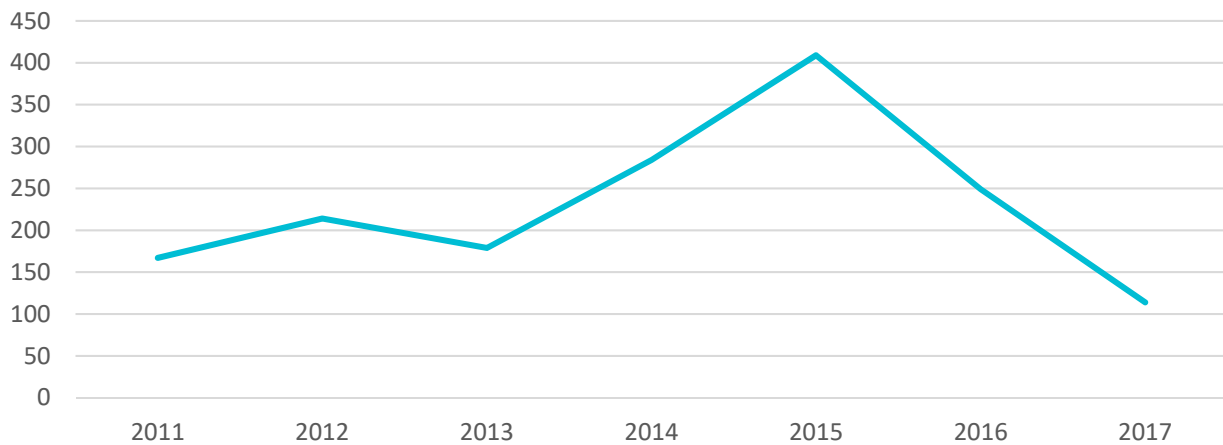
The number of non-residential building permits issued annually declined between 2015 and 2017 (Figure 4.13). However, the trend generally increased between 2011 and 2015.

**Figure 4.12 Non-Residential Building Permit Map**



Source: Hillsborough County Planning Commission.

**Figure 4.13 Non-Residential Building Permit Trend**



Source: Hillsborough County Planning Commission (note: 2017 reflects partial year data)

## 5.0 Population and Demographic Changes

Population and demographic changes have a strong influence on land use and transportation patterns. This section examines trends in population growth, age cohort distributions, school enrollment, poverty status, auto ownership, and commute characteristics. Hillsborough County's population has gradually increased since 1960, and has retained a stable share of the tri-county area population (about 50 percent). Pinellas County, which had the largest share of population in 1980, has declined in share while Pasco County has a growing share.

The 18 – 34 age cohort has been predominant in Hillsborough County since 1980; however, projections from the Bureau of Economic and Business Research suggest that the share of population below age 34 will continue to decline through 2045, while the population age 65 and above will increase. The 18 – 34 age cohort is disproportionately represented in multi-family housing, while the 50 and above age cohorts are disproportionately represented in single family homes.

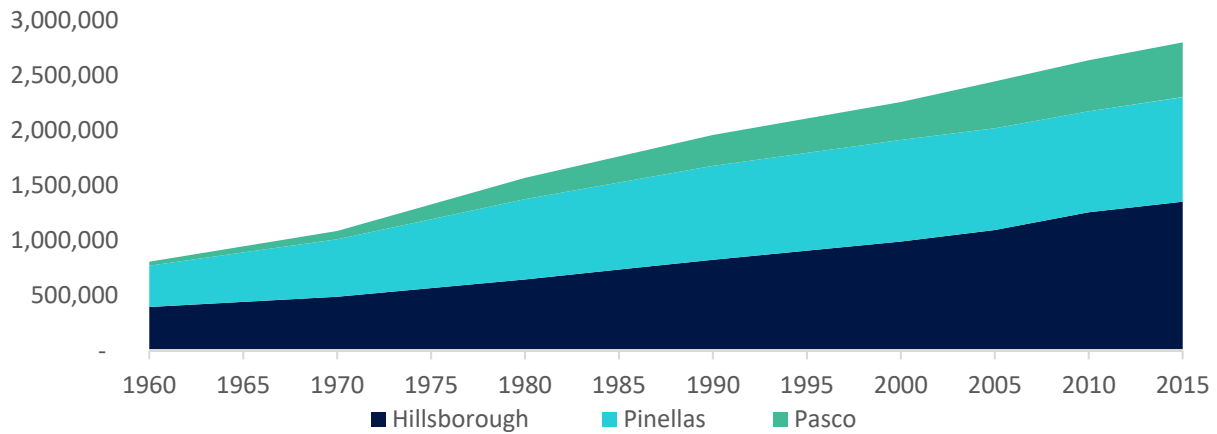
Other significant patterns are that there are higher levels of student enrollment in more suburban parts of the county, and that there are more zero-car households and non-single occupant-vehicle commuters in urban areas. While auto-ownership has remained stable, there are numerous trends in automation and shared-mobility that may impact auto ownership rates and travel patterns in the future. Changes to land use mix and intensity also have potential to alter these factors. These trends are explored in greater detail in the following sections.

### 5.1 Population Growth

**Hillsborough County's population has grown steadily since 1960, to approximately 1.3 million residents in 2015 (Figure 5.1). Since 2000, the county's population has increased at an annual average growth rate of about 1.3 percent. Across the tri-county area of Pasco, Pinellas, and Hillsborough County, Hillsborough County has the highest share of population, at nearly 50 percent (**

Figure 5.2). Since the 1960s, Pinellas County's share of population has declined, while Pasco County has a growing share.

**Figure 5.1 Historic Tri-County Population Growth**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

**Figure 5.2 Tri-County Population Distribution**

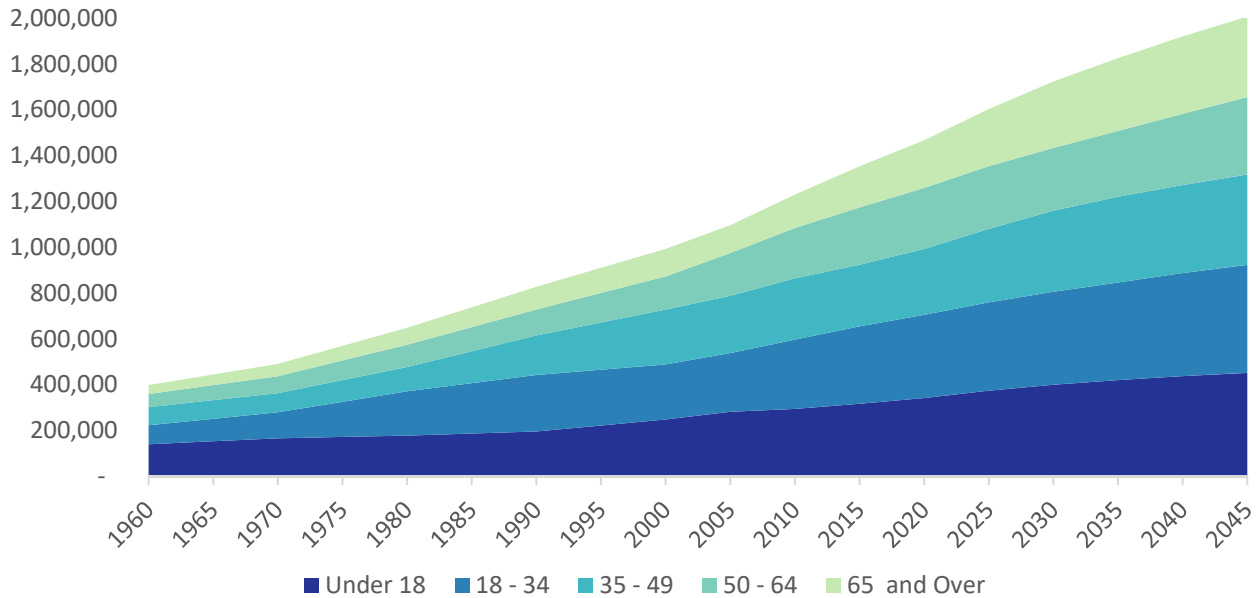


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

## 5.2 Age Cohort Trends

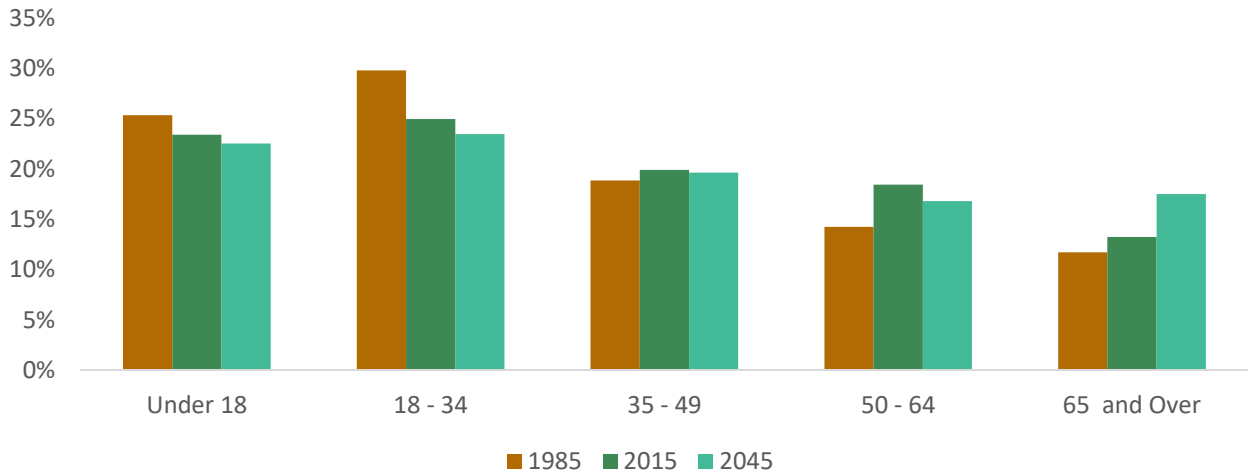
Hillsborough County’s population is expected to grow by about 640,000 to more than two million people by 2045 (Figure 5.3). Between 1985 and 2015, the percentage of population in 34 and younger age cohorts declined, while the percentage in 65 and older age cohorts saw an increase (Figure 5.4). This trend is expected to continue through 2045. However, the 18-34 age cohort is still expected to have a larger share of population than other age cohorts.

**Figure 5.3** Historic and Projected Population Growth by Age Cohort



Source: Historic data from Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, Integrated Public Use Microdata Series: Version 5.0 (Machine-readable database), Minneapolis, Minnesota: Minnesota Population Center (producer and distributor), 2010; age cohort projections from the Bureau of Economic and Business Research

**Figure 5.4** Age Cohort Distribution Trend



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

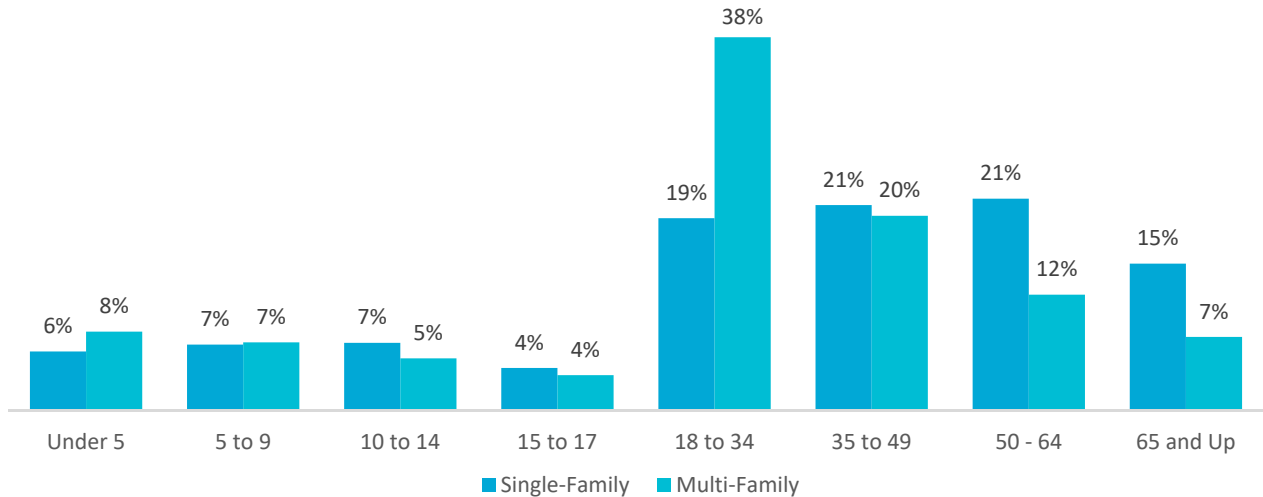
Source: Historic data from Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, Integrated Public Use Microdata Series: Version 5.0 (Machine-readable database), Minneapolis, Minnesota: Minnesota Population Center (producer and distributor), 2010; age cohort projections from the Bureau of Economic and Business Research

Age cohort trends are important to land use planning because housing type, location, and transportation choices vary across age groups. Figure 5.5 shows the distribution of age cohorts by housing type,



demonstrating that there is a strong preference for multi-family housing among people between 18 and 34. Similarly, people age 50 and up have a preference for single family housing.

**Figure 5.5 Age Cohort by Housing Type, 2015**



Source: Historic data from Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, Integrated Public Use Microdata Series: Version 5.0 (Machine-readable database), Minneapolis, Minnesota: Minnesota Population Center (producer and distributor), 2010

### 5.3 School Enrollment

In 2015, there were nearly 160,000 students enrolled in Hillsborough County, including pre-kindergarten and higher education and public and private schools (Table 5.1). Between 2010 and 2016, pre-kindergarten through high school enrollment increased by about six percent, while higher education enrollment increased by about one percent. Nearly 90 percent of students in Hillsborough County are enrolled in public school.

**Table 5.1 Public and Private School Enrollment**

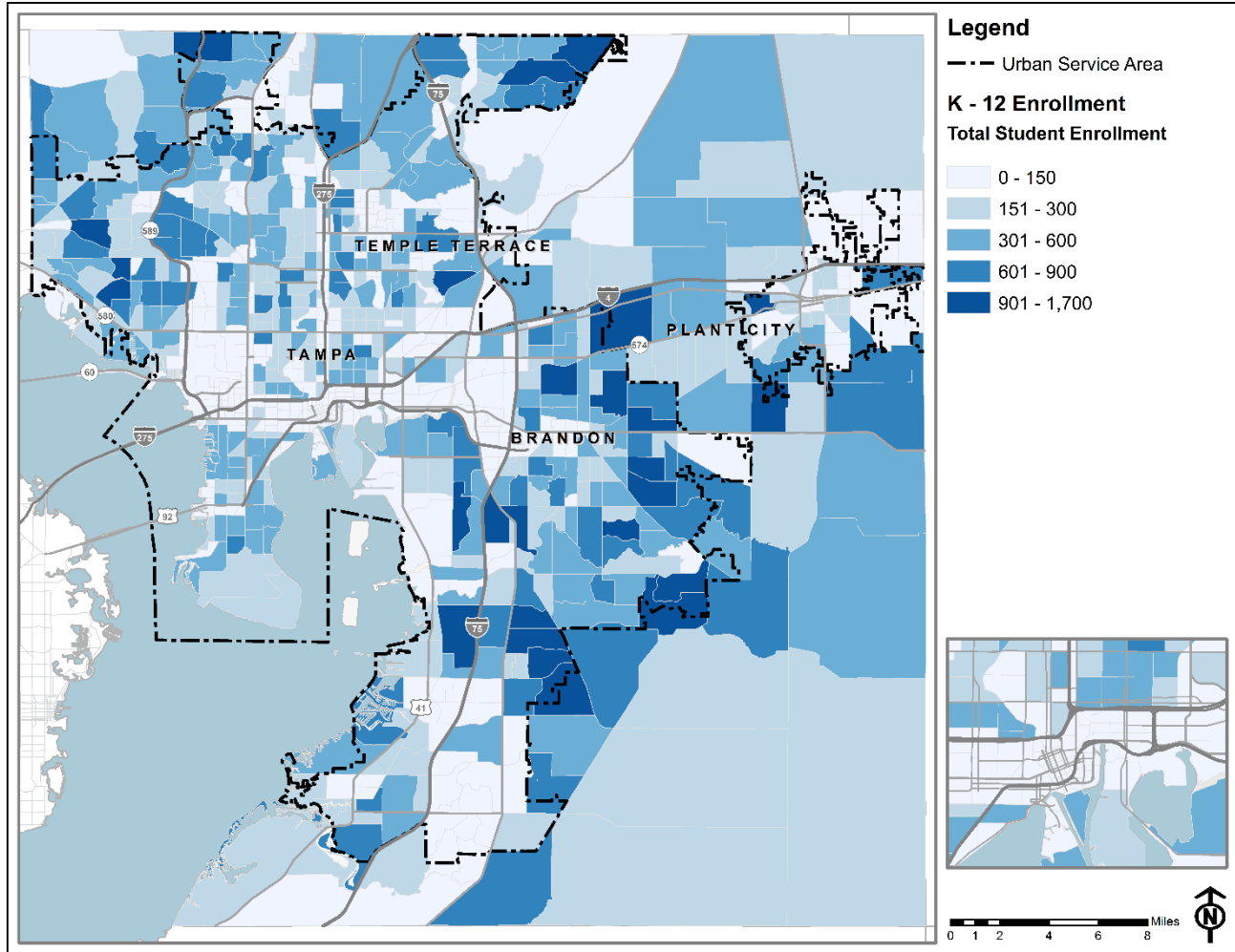
School Type	PK - 12	Higher Education	PK – 12 (% of Total)	Higher Education (% of Total)
Public	103,544	35,101	87%	90%
Private	16,045	3,732	13%	10%
All Schools	119,589	38,833		

Source: Hillsborough County Planning Commission

There are more kindergarten through high school students in the suburban and rural areas of Hillsborough County (Figure 5.6). Northeast Hillsborough County and the areas surrounding Brandon in particular have a larger student population.



**Figure 5.6 School Enrollment Map**



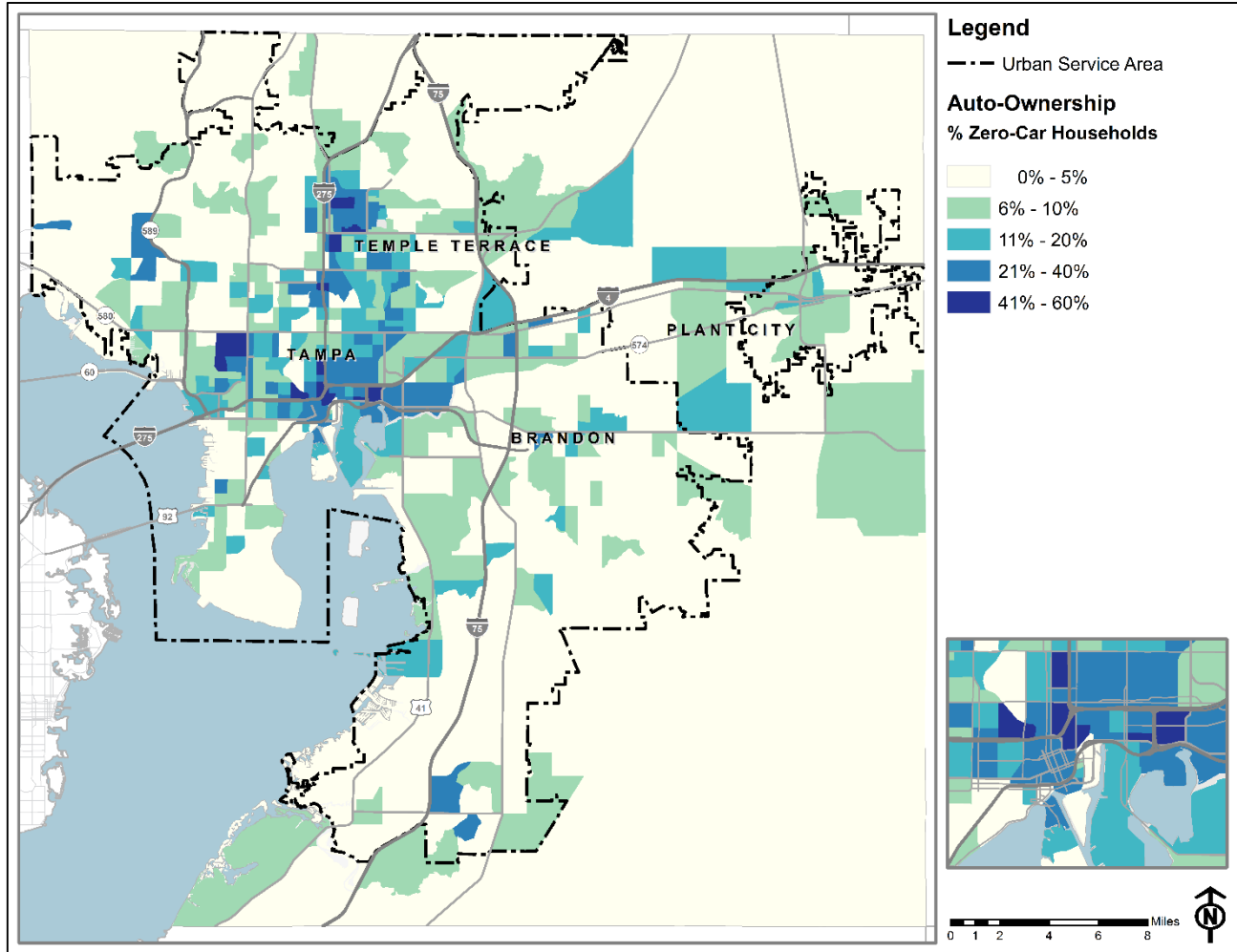
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

## 5.4 Poverty Status

North Tampa, Temple Terrace, and Plant City have higher numbers of people living below 125 percent of the poverty line (Figure 5.7). Some areas inland of the Southshore also have more people living in poverty.

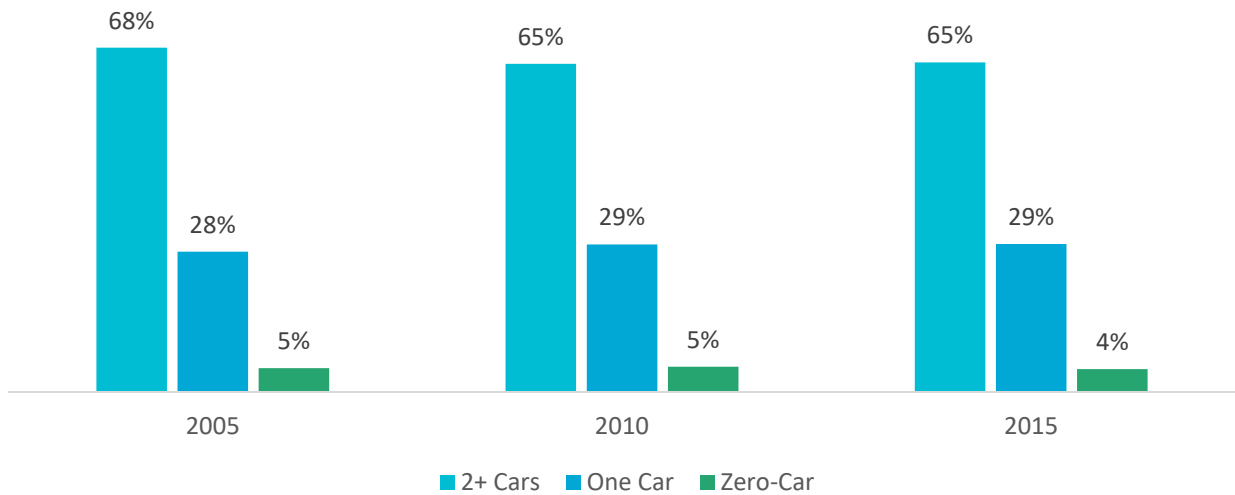


**Figure 5.8 Zero-Car Households**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

**Figure 5.9 Auto Ownership Trend**

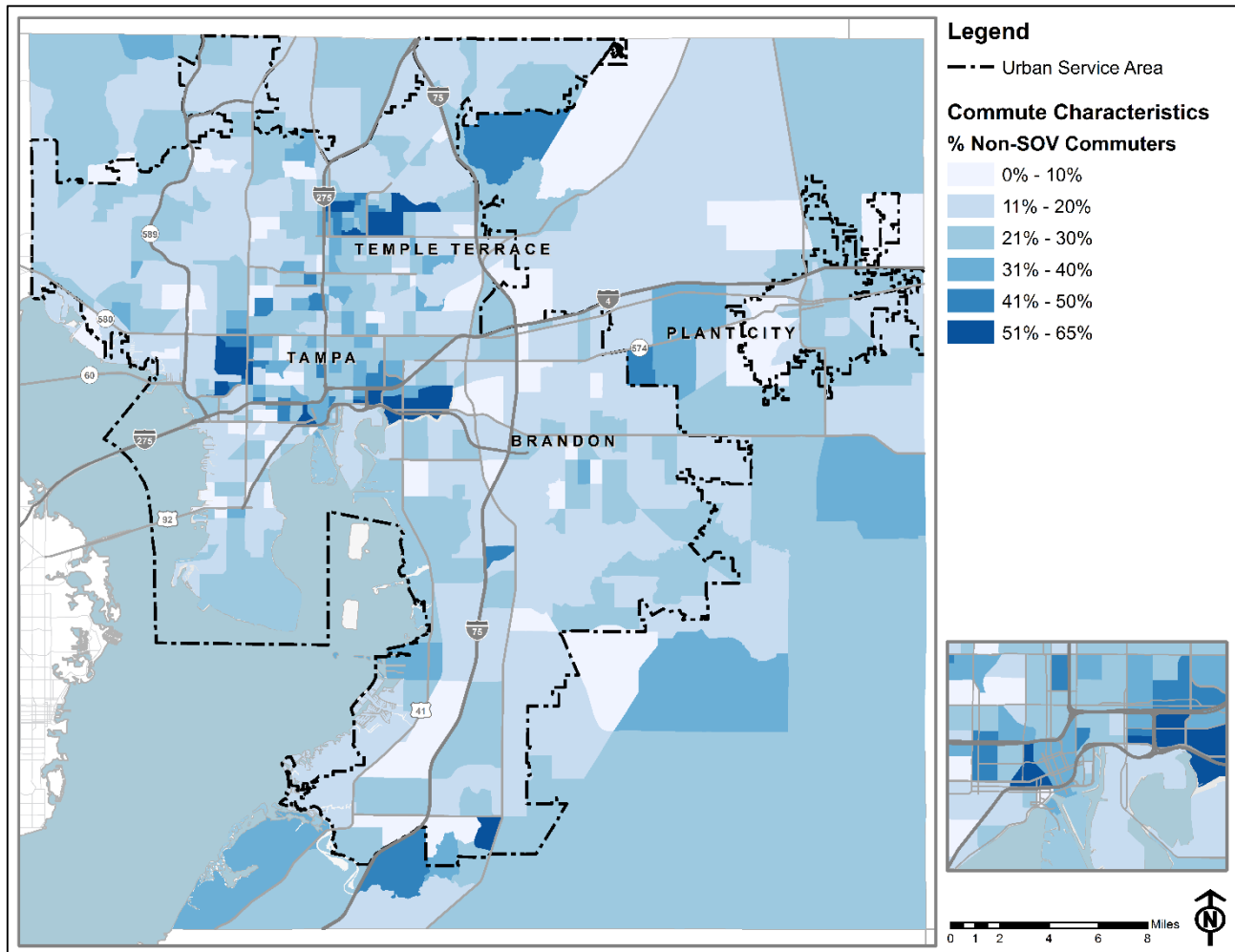


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

## 5.6 Commute Characteristics

Commute characteristics are closely linked to auto-ownership, as people without access to a vehicle tend to rely on transit, walking, biking, or carpooling to get to work. In Hillsborough County, areas with the largest percentage of residents that do not drive alone to work are around downtown Tampa and USF. These areas are more densely populated, have better access to transit and bicycle and pedestrian infrastructure and correlate to areas with lower automobile ownership.

**Figure 5.10 Commute Characteristics Map**



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

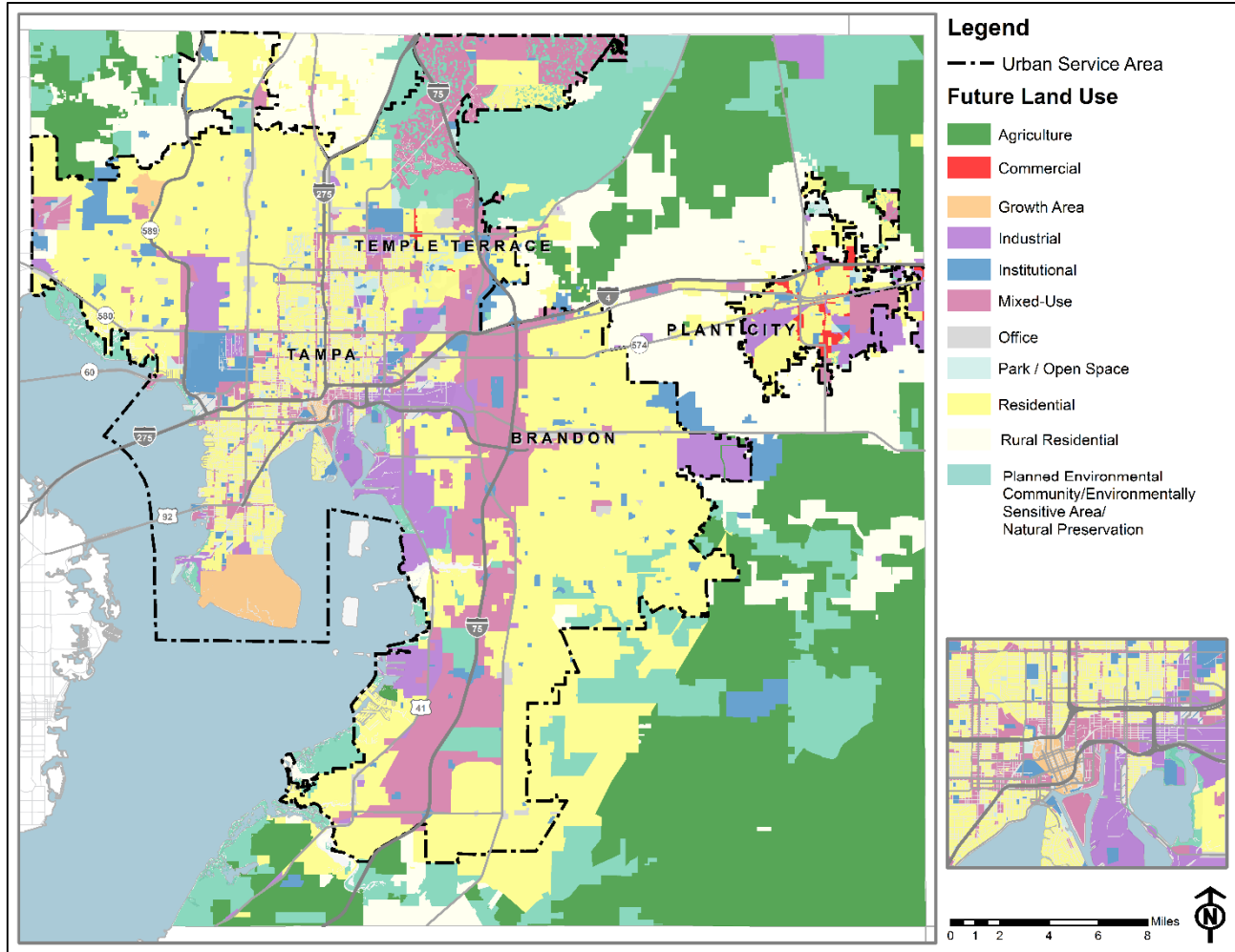
## 6.0 Plans and Policies

Hillsborough County and its jurisdictions are guided by many individual plans and policies. A handful of the more significant plans were reviewed for this analysis, including Imagine 2040, the Comprehensive Plan, the Regional Transit Feasibility Study and FDOT District Seven's Tampa Bay Next initiative.

### 6.1 Imagine 2040

Imagine 2040, Hillsborough County's Comprehensive Plan, integrates four separate plans for each of the jurisdictions within Hillsborough County. The plan's future land use (FLU) map identifies over 40 land use categories, each with an assigned density and/or intensity. Land use categories were generalized to get a broader sense of how the county will develop in the future (Figure 6.1). The County is expected to remain predominantly residential, with higher density residential development within the Urban Service Area. Mixed-use development is planned along the I-75 corridor, with industrial land uses around the existing port activity area and in Plant City. Rural, peripheral parts of the county are designated as agricultural land or as preservation areas.

**Figure 6.1 Future Land Use Map**



Source: Imagine 2040

Future land use density ranges from 0.1 dwelling units per acre to 100 dwelling units per acre, with higher densities designated in downtown Tampa, new Tampa, USF, along the I-75 corridor, West Brandon, and in Plant City (Figure 6.2). Averaged at the submarket level, the CBD has the highest prescribed future densities, at 33.7 dwelling units per acre. Westshore, Riverview, and South Tampa also have relatively higher prescribed future densities (

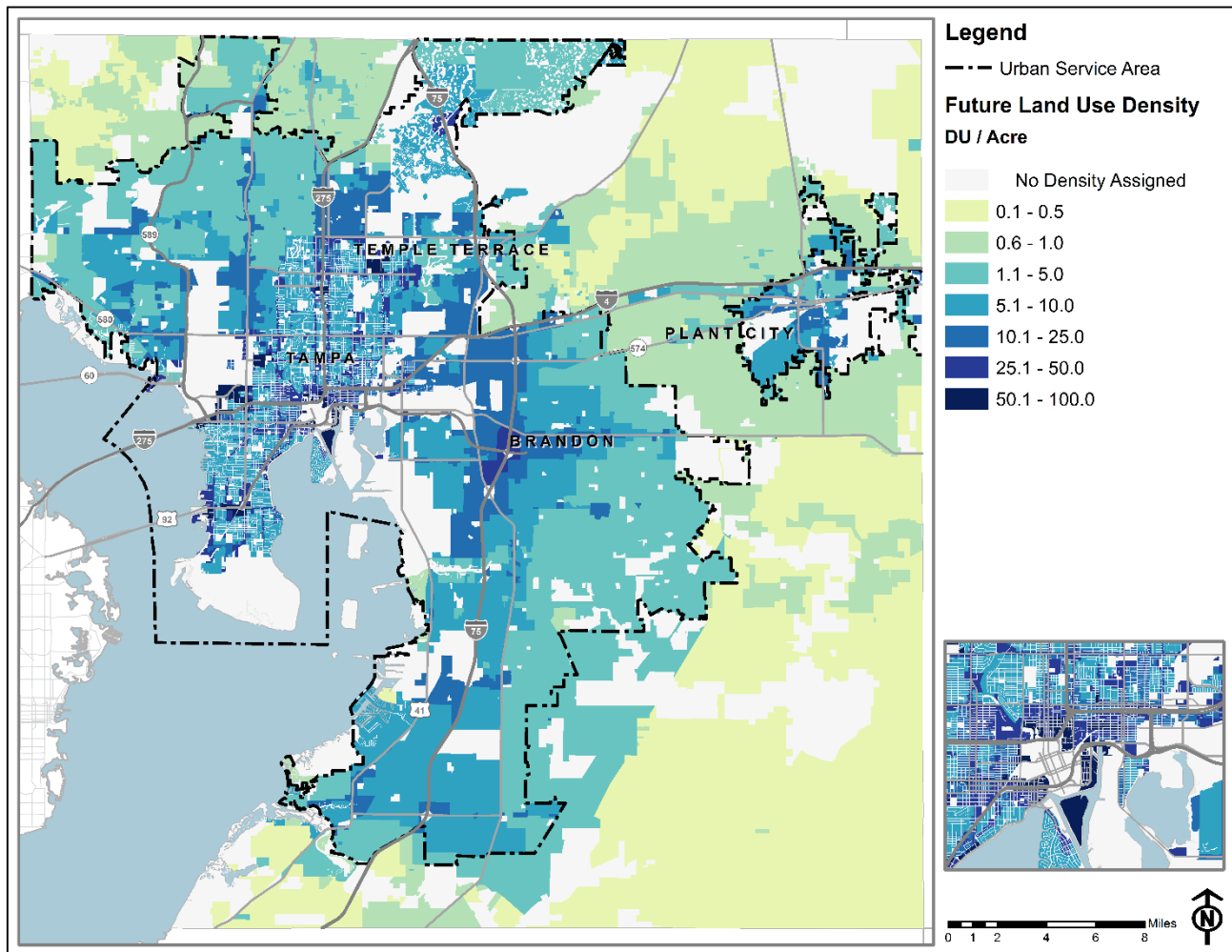
Table 6.1).

**Table 6.1 Future Land Use Density by Submarket**

Submarket	Net Units/Acre
CBD	33.7
Northeast	2.6
Northwest	4.0
Plant City	2.9
Riverview	8.0
South Tampa	8.4
Southeast	1.1
Southshore	3.6
Temple Terrace	7.6
Westshore	13.3

Source: Imagine 2040

**Figure 6.2 Future Land Use Density**



Source: Imagine 2040



### Future land use intensities in Hillsborough County range from 0.01 to 4.5 net FAR

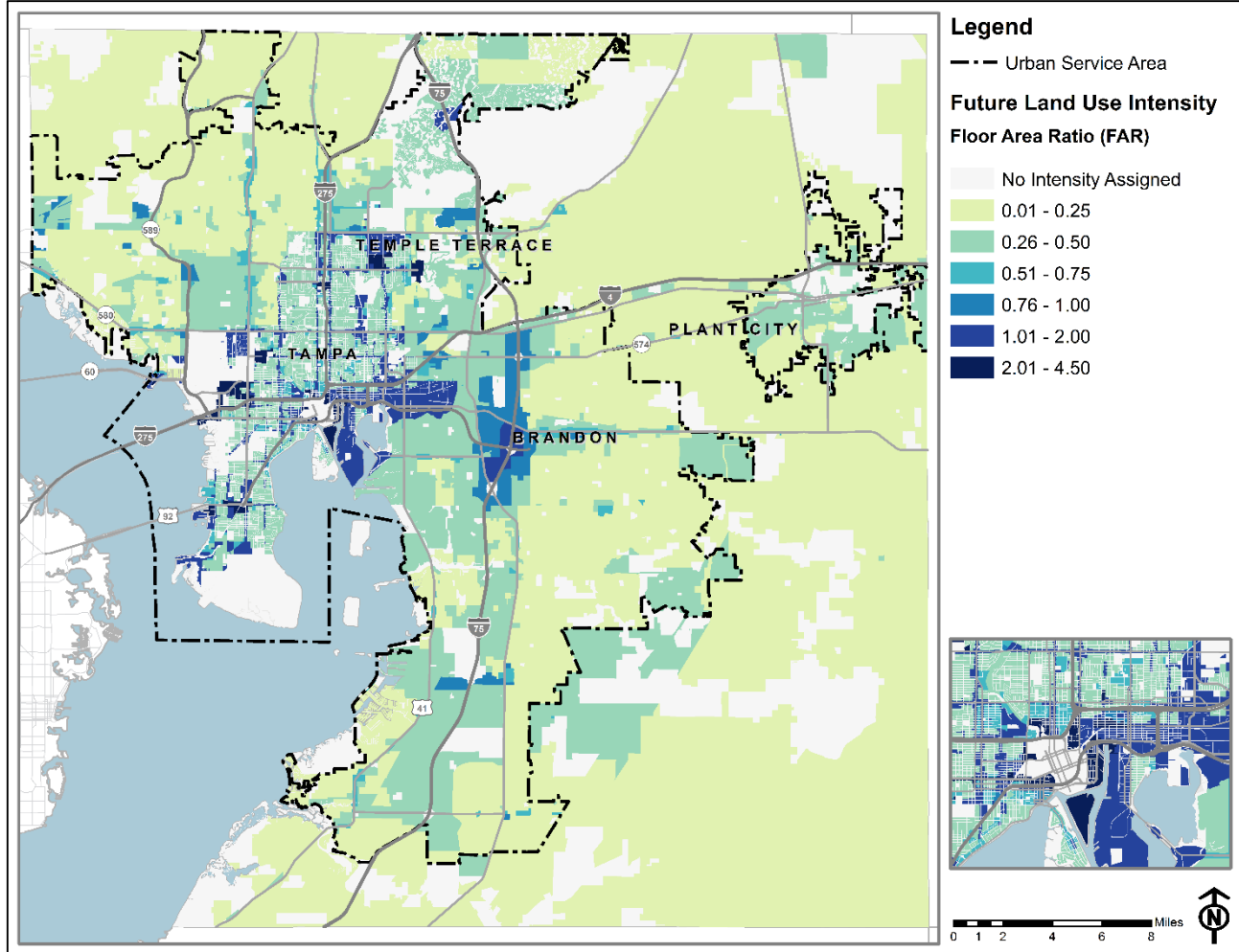
Figure 6.3). Areas with high planned future intensities include New Tampa, USF, the airport area, Ybor City, Harbor Island/Palmetto Beach, and Brandon. At the submarket level, planned intensity ranges from 0.22 to 1.24, with higher FARs planned in the CBD and lower FARs planned in Northeast and Northwest Hillsborough County, Southeast Hillsborough County, and Southshore (Table 6.2).

**Table 6.2 Future Land Use Intensity**

Submarket	Net Floor Area Ratio
CBD	1.24
Northeast	0.23
Northwest	0.27
Plant City	0.25
Riverview	0.53
South Tampa	0.35
Southeast	0.22
Southshore	0.24
Temple Terrace	0.44
Westshore	0.53

Source: Imagine 2040

**Figure 6.3 Future Land Use Intensity**



Source: Imagine 2040

## 6.2 Regional Transit Feasibility Plan

The Regional Transit Feasibility Plan establishes a vision for transit throughout the tri-county area and identifies cost-effective, innovative projects that will best support future growth. Although the plan has not yet been adopted or funded, the plan serves as a blueprint for transit, using public engagement and clearly defined evaluation criteria to identify priority corridors for a future regional transit system. The top performing corridors include:

- Westshore to Brandon
- Downtown Tampa to USF
- Wesley Chapel, USF, Tampa, St. Petersburg

- Clearwater, Gateway, St. Petersburg
- South Tampa to Downtown Tampa

The plan will ultimately recommend specific modes and alignments for implementation, including more detailed planning, engineering and design and funding at the local, state and federal levels.

## 6.3 Tampa Bay Next

Tampa Bay Next is a transportation action plan coordinated by the Florida Department of Transportation (FDOT) District Seven that aims to move people and goods more safely and efficiently, build a comprehensive regional transit system, create opportunities for public input, balance regional needs with community concerns, and commit to sustainable infrastructure decisions.<sup>4</sup> Tampa Bay Next is an ongoing process, aiming to develop a regional multimodal transportation system that includes interstate modernization projects, bicycle and pedestrian facilities, intelligent transportation systems (ITS) and transportation systems management and operations (TSMO) projects, transit improvements, complete streets, and freight mobility projects. Key initiatives within Tampa Bay Next include:

- Howard Franklin Bridge
- Gateway Expressway
- Westshore Area Interchange
- Westshore to Downtown
- Downtown Interchange
- I-275 Innovation Corridor
- I-4 and Connector

## 6.4 State Legislation

Two key pieces of state legislation that impact land use planning in Hillsborough County are described below.

### 6.4.1 Growth Management Act and Community Planning Act

In 1985, the State of Florida established the Local Government Comprehensive Planning and Land Development Regulation Act, which requires local governments to develop and implement land use plans to regulate future growth and development. The 1985 Act updated the previous Growth Management Act of 1975 by requiring that plans and amendments be adopted by ordinance and be approved by the state. Furthermore, the Act enabled citizens and local governments to legally challenge plans and amendments, and required that each plan include a Future Land Use Map, such as the one shown in Figure 6.1. Since

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<sup>4</sup> <http://www.tampabaynext.com/>

1985, the Act has been amended numerous times, most notably to require joint planning efforts between local governments and school districts and to require that local governments identify adequate water supply sources to meet future demand. In 2011, the Growth Management Act was renamed the Community Planning Act, and was revised to eliminate much of the state oversight.

#### *6.4.2 Statewide Complete Streets Policy*

In 2014, FDOT adopted a Complete Streets Policy, which laid the groundwork for the Complete Streets Implementation Plan (2015) and the Complete Streets Handbook (2017). The Complete Streets Policy represents a commitment from FDOT to ensure that complete streets elements and concepts are integrated into transportation projects on the State Highway System. The Handbook contains numerous “Context Classifications” that are transect-based design typologies that vary by land use and street network character and are organized on a spectrum from preservation areas to the urban core, and contain classifications such as rural, suburban residential, and urban center.

## 7.0 Major Infrastructure Changes

Transportation and land use are inextricably linked, and must be examined in parallel when determining future trends. The following major infrastructure projects are planned to occur in Hillsborough County in both the short- and long-term:

- **Highway Projects**

- Widening of 301 north of Fowler from two to four lanes
- Widening of State Route 60 east of Valrico Road from four to six lanes
- Widening of US 41 from Madison Avenue from Ruskin from four to six lanes
- Tampa Bayshore Boulevard Enhancements and other improvements along Manhattan Avenue and Willow Avenue at Kennedy Boulevard
- Armenia Avenue at Busch Boulevard intersection improvements, also North O'Brien Street, Spruce Street, and Westshore Area roadway extension
- \$11.2 million for citywide Intelligent Transportation Systems infrastructure, intersection improvements, and sidewalk construction
- Capacity improvement projects on SR 589, I-75, and Selmon Expressway in downtown Tampa

- **Transit Projects**

- Central Ave BRT Corridor
- Regional Transit Feasibility Plan Corridors

- **Active Transportation Projects**

- \$1 Million for Paved Shoulders and Bike Lanes between 2018 and 2021
- \$2.2 Million for Sidewalk ADA Retrofit Program between 2018 and 2021
- \$2.2 Million for Complete Streets Safety Improvement Program between 2018 and 2021

## 8.0 External Trends

Hillsborough County, like other places across the United States, is subject to a number of external trends, including emerging technologies, shifting political and economic conditions, climate change, and alternative energy that have the potential to influence development patterns and how people move between the various parts of their day. Although it is difficult to quantify the impacts of these trends, acknowledging their potential to change land use and travel patterns is critical to planning efforts. Scenario planning in particular has become an increasingly prevalent tool to account for variability of potential futures and help local governments develop programs and policies that are adaptable under conditions of uncertainty.

### 8.1 Technology and Automation

Several emerging technologies are expected to have short- and long-term impacts on Hillsborough County's transportation system, including connected and autonomous vehicles, shared-use mobility, intelligent transportation systems, and data sharing and information. One of the most transformative technologies is connected and autonomous vehicles (CAV), which have the potential to increase safety and mobility, reduce vehicle ownership, and utilize existing roadway capacity more efficiently. A major land use implication of declining vehicle ownership and driverless cars is reduced demand for (and space allocated to) parking, which could increase housing density by eliminating minimum parking requirements and create more on-street space for alternative transportation options like walking, biking, and transit. However, CAVs could also increase urban congestion by introducing zero-occupancy vehicles to already congested roadways and creating more demand for vehicular travel.

Automation has also proven to have far-reaching impacts on the economy. Employment has declined significantly in manufacturing sectors while output and productivity have increased, which has implications for industrial land use, freight transportation, and commute patterns as jobs shift to service sector industries. Automated warehousing and storage solutions, autonomous freight vehicles, and 3D printing technologies are also expected to lead to more dispersed manufacturing and distribution operations. Technologies enabling distance learning, telecommuting, and same-day deliveries could also change demand on the transportation system by reducing commute and shopping trips. Delivery services have already proven to impact commercial land use as retailers struggle to compete with Amazon and other online delivery services.

### 8.2 Climate Change and Resiliency

Rising temperatures, sea level rise, and increased likelihood of storms and drought are a growing risk to coastal development and populations in Hillsborough County. A recent Sea Level Rise Vulnerability Assessment for the City of Tampa predicts that the Tampa Bay Region could experience a sea level rise increase of 0.5 to 2.5 feet by 2050.<sup>5</sup> The three most vulnerable areas identified include development along Tampa Bay, McKay Bay and the Tampa Bypass Canal, and the Hillsborough River. At the lowest sea level rise estimate of 4 to 5 inches by 2050, 1,250 parcels (predominantly residential) would be impacted at a total value of nearly \$1.5 billion. In the worst case scenario, sea levels would rise 19 inches by 2050, impacting 1,486 parcels and causing about \$1.8 billion in damages. Although numerous schools, parks, facilities, infrastructure assets, and public utilities are in the basin that would be impacted by sea level rise, the

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<sup>5</sup> <http://www.planhillsborough.org/wp-content/uploads/2017/01/Sea-Level-Rise-Vulnerability-Assessment-for-the-City-of-Tampa-rev5.pdf>

Vulnerability Assessment does not expect that critical damage would occur to these assets. However, the growing risk of disruption to development, infrastructure, public utilities, and associated maintenance costs could prove to be a significant economic burden that can be mitigated by incorporating principles of risk, resiliency, and sustainability into the planning process.

### 8.3 Energy

Energy sector trends can have a profound impact on land use and transportation patterns. Energy extraction, whether renewable or non-renewable, requires different types and amounts of land as well as systems to transport energy. Shifts toward renewable energy indicate that there may be greater demand for land that is compatible with wind and solar energy generation, whereas oil, natural gas, and coal have historically been predominant energy sources that require pipeline and rail transportation. The cost of energy is also a major determinant for businesses choosing to locate in a given area, and can therefore impact commercial, office, and industrial land use patterns.

State and federal policies geared towards reducing reliance on fossil fuels have also led many auto manufacturers to explore alternative energy technologies that increase fuel efficiency. As such, electric vehicles have become a growing segment of the transportation landscape. One of the key land use impacts of electric vehicles is the need for charging stations, which have started to show up along many curbs and parking lots in urban areas. Integrated land use planning at the local and regional level will be critical to the sustainable development, transport, and placement of renewable energy sources.

## 9.0 Summary

Hillsborough County will see approximately 700,000 new residents and 450,000 new jobs by the year 2045. An examination of both recent and long term population, employment, land use and demographic trends and current plans and policies will provide insight into how the county might absorb this growth on its current trajectory. The analysis presented in this document lays the groundwork for a projected year 2045 trend growth scenario.