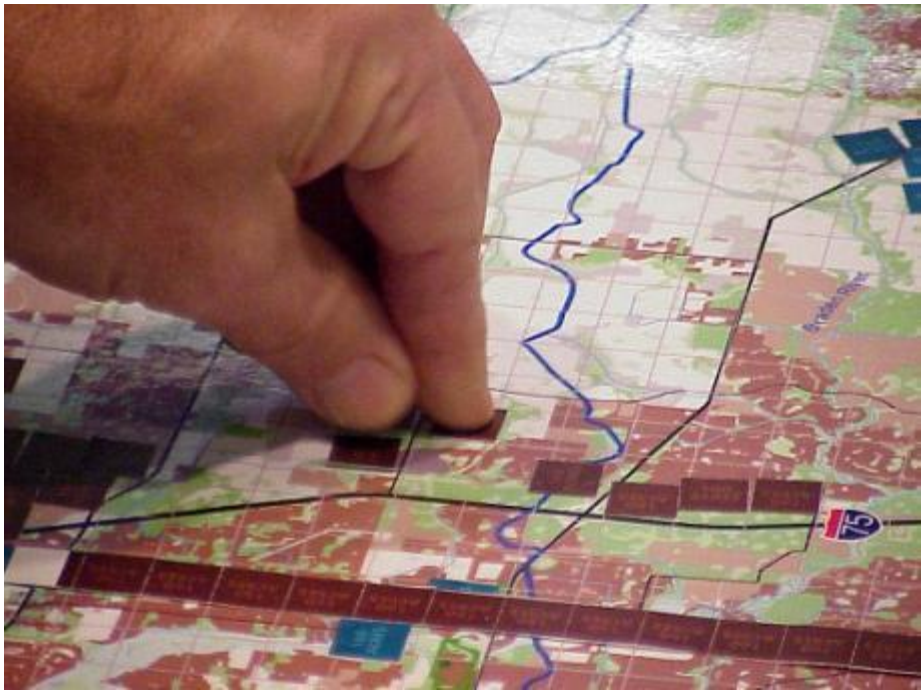
2012-2035

How Will We Grow?
A Conversation with the Community



A report analyzing alternative growth plans and their impact on infrastructure and service delivery.

Manatee County Government
February 11, 2013

BOARD OF COUNTY COMMISSIONERS
Larry Bustle, Chair
John R. Chappie
Robin DiSabatino
Michael Gallen
Carol Whitmore
Vanessa Baugh
Betsy Benac

PLANNING COMMISSION
Richard Bedford, Chair
David Wick
Timothy Rhoades
John Delesline
George Mendez
Bill Connerly, P.E.
Bob Sullivan

COUNTY ADMINISTRATION
Ed Hunzeker, County Administrator
Dan Schlandt, Deputy County Administrator
Karen Windon, Deputy County Administrator

COUNTY DEPARTMENTS
Building & Development Services
Community Services
Convention & Visitors Bureau
Financial Management
Information Technology
Natural Resources
Neighborhood Services
Parks & Recreation
Property Management
Public Safety
Public Works
Utilities

OTHER AGENCIES
Council of Governments
Fire Districts of Manatee County
Florida Department of Health
Manatee County Clerk of Circuit Court
Manatee County Property Appraiser's Office
Manatee County School Board
Manatee County Sheriff's Office
Manatee County Tax Collector
Manatee County Planning Task Force

Table of Contents

EXECUTIVE SUMMARY 1

OVERVIEW 5

Land Analysis 7

Population Growth in Manatee County 9

PLANNING CONCEPTS 17

Financial Impacts of Density and Non-Residential Development 22

PLANNING STUDIES 33

LAND DEVELOPMENT REGULATIONS 39

GROWTH ASSUMPTIONS & ALTERNATIVES 47

Growth Assumptions 49

Alternative 1 –Staying the Course 53

Alternative 2 - Southwest County Focus 58

Alternative 3 – Activity Centers 65

Alternatives Summary 82

GROWTH ALTERNATIVES & IMPACTS TO SERVICES 83

Economic Development 85

Environmental Protection 91

Libraries 96

Parks & Recreation 99

Public Safety & Emergency Services 106

Schools 113

Solid Waste 120

Transportation Planning 124

Utilities 142

CONCLUSION.....159
Alternative 1 – Stay the Course.....161
Alternative 2 – Southwest County.....164
Alternative 3 – Activity Centers.....166
Growth Alternatives and Impacts to Services Summary.....168
Good Ideas (No Matter What Alternative is Chosen).....170
What's Next?.....176
APPENDIX.....177

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The *How Will We Grow?* project came about from the challenges that arose from the boom and bust economy during the years 2000-2005. As new leaderships developed, they began questioning the reasoning behind many growth policies as some of the regulations seem to be having the opposite effect.

County administration has challenged staff to look at land use and infrastructure planning differently. Look at planning through the eyes of an accountant. Seeing infrastructure as assets, the following questions became apparent:

- Are we capitalizing on our current infrastructure and service assets?
- Is our existing infrastructure maximized in terms of the number of customers it's capable of serving?
- Does infrastructure support or hinder redevelopment efforts in established areas?
- Is new development maximized and balanced in terms of customers/fees/taxes versus cost of services?
- Is the county assisting with economic development in how it handles infrastructure delivery?
- How does all this relate to past public workshops and citizen input on growth?
- How does all this compare to future trends?

Like in years past, through the County's foresight with the construction of the Lake Manatee reservoir, Manatee County has a unique opportunity to make substantial improvements in land use and infrastructure planning to ensure higher rates of efficiency while making sure that opportunity is provided for economic opportunity and changes associated with new development trends. The *How Will We Grow?* project provides an introspective look, not only at our development review, land use and infrastructure planning, but also considers three alternatives to growth and weighs their impacts.

This report is the product of more than a year's worth of review of past planning studies, internal stakeholder discussion and data analysis that involved a thorough review of the County's existing infrastructure assets balanced with reasonable estimates of what is necessary for the future based upon population projections. Among the most important revelations made along the way was the need to look at infrastructure investment with a solid return that maximizes community needs. The challenge being to look at long range planning not through a

planner's eye fixed on technical needs and approximations, but through the eyes of an accountant set on maximizing a return on investment.

In shifting this mindset, consideration for the future community being planned and the residents being planned for was focused upon. The concept of a nuclear family living in a traditional single family home is fast becoming an idea of generations past. Many other communities around the country are realizing that future generations, the "Echo Boomers," don't necessarily desire sitting in traffic for their commute. People's expectations are changing. They want to live in greener, more walkable communities. There are desires for the availability of easy to access transportation alternatives to the automobile.

As these two ideas – wisely investing in infrastructure and the need to accommodate future living trends – emerged through the process, we learned that the two were not mutually exclusive, and in fact, had several commonalities.

The report focuses on the following sections and topics:

- Overview. Describes the land use makeup of unincorporated county and explains the projected population to 2035. It also discusses demographics and trends associated with up and coming generations. Highlights need to improve "Best Places" rankings in media.

- Planning Concepts. Discusses concepts of infrastructure development and costs associated for serving different types of densities and built environments (i.e., urban areas, suburbs, etc.). Recognizes financial issues with developing in a low density fashion and not allowing a greater variety of uses closer to residential areas.

- Planning Studies. Reviews past studies of growth and planning in Manatee County and what the consistent common recommendations are.

- Land Development Regulations. Reviews the existing land development regulations their shortcomings in terms of being flexible in ways that can be expensive to the County and inflexible in ways that may be contrary to market conditions.

- Growth Assumptions & Alternatives. Provides the background and the analysis of three different growth alternatives for unincorporated county and how they would affect future growth. Alternatives 1 and 3, likely being the most consistent with market trends.

    - Alternative 1, the "stay the course" option, focuses on development with the current plans (Comprehensive Plan Future Land Use Map and Land Development Code), with some minor tweaks. Alternative 1 continues growth trends towards low densities in high growth and other areas.

    - Alternative 2, the Southwest County focus, reflects existing entitlements throughout the county, but focuses additional population to the southwest area.

    - Alternative 3, is the “activity center” focus, considers more dense and concentrated growth within these designated areas (i.e., Port Manatee area, Parrish, Lakewood Ranch, and the Manatee Fruit/IMG area of Southwest County).

- Growth Alternatives & Impacts to Services. Analyzes how the three alternatives would impact various County services (i.e., libraries, parks, utilities, solid waste, transportation, etc.) and illustrates what alternative may provide advantages for different types of services.

Each alternative has its own advantages and disadvantages. The report provides detailed information about each alternative from a service provider standpoint and considers other important aspects such as changing population and market trends.

The results of *How Will We Grow?* generally recognize that past practices of restricting the county to low-rise and low-density development types is not a recipe for a community that wants to attract better employment opportunities, businesses, and a younger and more educated workforce. The report also identifies some actions that should be done, no matter what alternative is chosen. The county may address changes in its land development regulations to provide greater opportunities for growth, to include more locations for greater building heights and density, increasing the variety of land uses in developing areas and allowing the free market to work more in the community.

Infrastructure investments need to be made with a mindset of getting a return on the investment, which may include associated simultaneous land use changes to provide greater opportunities in those areas. This is especially true for reinvestment of older, existing neighborhoods. A similar mindset is also necessary with the construction of new development. Are there enough new and future customers along this new road/water/sewer infrastructure to pay the bills and provide savings to fund the reconstruction decades later? This needs to be taken into consideration with development proposals.

Manatee County has tremendous opportunities for new economic development beyond the service and home building industries. The alternatives and potential changes in land use regulations and greater awareness of future trends may enhance opportunities for economic development in existing and established areas of the county. The report provides a number of recommendations to improve the efficiency of the county, plan for the coming generations and improve the quality of life.

Staff will be presenting this information to the Planning Commission and Board of County Commissioners in January 2013 for an initial presentation and discussion. The next step is to start a conversation with the community on these issues. Staff will seek input from citizens and stakeholder groups and provide opportunities for citizen participation and comment. Later this year, the Board of County Commissioners will weigh the recommendations before them, hear

from the citizens, and provide direction on potentially a new direction for growth in unincorporated Manatee County.

OVERVIEW

OVERVIEW

Many studies related to the cost of growth ask "Is there a development pattern that would lead to incremental costs for public services less than those associated with conventional growth?" There are studies on "the cost of sprawl", which is but one aspect. However, the most important question to ask is," What type of community does Manatee County want to be?" The public has voiced their opinion on this subject through community meetings associated with past studies, this project and the recent 2011 Evaluation and Appraisal Report.

Several planning studies have provided vision and recommended actions in terms of how we will plan for future growth. In this report, "*How Will We Grow? A Conversation with the Community*", County staff has summarized the vision and actions into three distinct options for the Board of County Commissioners and community to consider. Some of these changes could potentially save the current and future taxpayers' money, lower infrastructure development and maintenance costs, provide more job opportunities and potentially improve the quality of life for Manatee County residents through better land use decision making.

Manatee County is a unique community in southwest Florida. Unlike other communities that went through the development boom of the last decade, Manatee County handled it successfully in part to good planning. The forefathers of Manatee County made sure that the community was setup to handle future development. As far back as the 1950's, the County made plans to address future utilities. It created a master utility plan, with three future sewer plants and constructed a potable water reservoir, Lake Manatee. It invested in mass transit and is nationally recognized for its handling of solid waste at the Lena Road Landfill.

Land Analysis

The county has remained predominately rural. with agricultural lands accounting for approximately 56 percent of the county's land area. Urban (developed) land exists primarily in the western portion of the county and includes commercial, government, industrial, institutional, recreation, and residential land uses. These uses have steadily increased and account for approximately 30 percent of the county. There are approximately 22,467 acres of vacant land with an *Agricultural/Rural* Future Land Use designation which is outside the utility service area for central potable water and wastewater.[1]

[1] *Manatee County Evaluation and Appraisal Report, 2011*.

Existing Land Uses (2010)		
Existing Land Use	**Acres**	**Percent of Total**
Non-Urban Uses		
Agriculture	258,715	56%
Rivers, Lakes, Submerged Lands[3]	396	<1%
Urban Uses		
Commercial	4,529	1%
Government	52,888	11%
Industrial	9,901	2%
Institutional	2,770	<1%
Recreation	14,464	3%
Residential	48,369	10%
Utility Transportation[2]	7,230	2%
Other Uses		
Vacant	54,085	12%
Incorporated (Municipalities)	12,753	3%
Total[1]	**466,100**	**100%**
Source: Manatee County Property Appraiser's Office 2010		

As illustrated in the following table, the second largest Future Land Use category of vacant, developable land is Urban Fringe (UF-3). Urban Fringe comprises approximately 7,628 acres or 15 percent. The UF-3 designation was originally designed to identify land beyond the long-term planning period within which future growth is projected to occur. This will be discussed further later in the report.

Finally, the county has a fairly significant amount of vacant, developable Mixed Use (MU) land. Generally speaking, land with a Mixed Use designation typically has some type of entitlement, usually associated with a large project or Development of Regional Impact (DRI) (see DRI Map in appendix). While the vacant MU land only accounts for approximately 1,273 acres or three percent, it is strategically located within the I-75 corridor, particularly at the I-75 and State Road 70 interchange (see Future Land Use Map in appendix).

The land associated with the Mixed Use - Community (MU-C) designation east of I-75 is owned by Schroder-Manatee Ranch (aka Lakewood Ranch developer). It is expected this land will develop consistent with other adjacent Ranch properties as DRIs. The remaining Future Land Use designations of the vacant, developable land (excluding Incorporated, Conservation or Major Recreation/Open Space designations) include Estate Rural, Industrial Heavy, Industrial

Light, Urban Industrial, Low intensity Office, Public/Semi-Public (1), and Retail/Office/Commercial. Combined, these lands equate to approximately 4,206 acres.

Future Land Use Designation of Vacant Land (2012)			
Future Land Use Category (Dwelling Units per Gross Acre)	**Acres**	**Potential Maximum Residential Density (dwelling units)**	**Percent of Total**
Agriculture/Rural (0.2 DU/GA)	22,467	4,493	44%
Estate Rural (0.2 DU/GA)	835	167	2%
Industrial - Heavy	464	0	1%
Industrial – Light (1 DU/GA)	1,003	1,003	2%
Urban Industrial	18	0	<1%
Mixed Use (9 DU/GA)	1,273	11,457	2%
Mixed Use – Community (9 DU/GA)	7,124	64,116	14%
Low Intensity Office (6 DU/GA)	11	66	0%
Public/Semi-Public - 1	1,206	0	2%
Residential - 1 DU/GA	3,549	3,549	7%
Residential - 3 DU/GA	1,013	3,039	2%
Residential - 6 DU/GA	2,822	16,932	6%
Residential - 9 DU/GA	1,006	9,054	2%
Residential - 16 DU/GA	203	3,284	<1%
Retail/Office/Commercial (9 DU/GA)	669	6,021	1%
Urban Fringe - 3 DU/GA	7,628	22,884	15%
Total	**51,293**	**146,065**	**100%**

Notes: Excludes incorporated cities.
Source: Manatee County Property Appraiser's Office and Manatee County Building & Development Services Department, 2012.

These properties are distributed throughout the County, but located primarily west of I-75 (see Future Land Use Map in appendix). The vacant lands will likely develop at some point. If they develop at their maximum density, there could be as many as 146,065 additional dwelling units (325,724 persons) in the county.

Population Growth in Manatee County

The rate of population growth in Manatee County has been relatively consistent with the statewide rate of growth. Between 2000 and 2005, the State of Florida grew by approximately 12 percent. During the same period, Manatee County grew at a rate of 15 percent. The

population estimate for Manatee County is 322,833 (2010).[2] Population growth has been approximately 1 to 2 percent per year since 2006 and the economic downturn. The County is predicting the annual growth rate to increase and average about 6% to 2035, with a population of 351,096 (unincorporated) and 448,135 (all county).[3]

The Metropolitan Planning Organization's 2035 Long Range Transportation Plan is recognized as providing the base projections for *How Will We Grow?* The projections estimate approximately 1,500 dwelling units per year from 2010 to 2035.

Population Projections from the 2035 Long Range Transportation Plan

	2015	2020	2025	2030	2035	Total
Projected Dwelling Units	6,681	7,000	7,954	8,272	8,272	38,180
Average Dwelling Units Per Year	1,336	1,400	1,591	1,654	1,654	

Demographics & Trends

Nationally, household demographics are changing. The number of households with children has been steadily decreasing with only 27% expected to have children by 2030 and singles will also have 34% of the households by that time. In this decade, we are already seeing household growth to be mostly adults without children (90%) and almost 40% of those adults are single. Households with children will only make up 10% of household growth this decade.[4]

The baby boomer generation will also cause a dramatic increase in the number of seniors nationally, increasing from 40 million in 2010 to over 70 million in 2030. Housing purchases are cyclical in life, with most people buying a home before they are 35 and selling their home after age 69. This is good news for Florida developers and homebuilders, as Florida is one of the top migration states for retirees, next to Arizona and Nevada. However, more seniors between 65

[2] US Census, 2010.

[3] *2035 Long Range Transportation Plan,* Sarasota-Manatee Metropolitan Planning Organization, 2012.

[4] *The Effect of the New Normal on Local Government Finance*, Burchell& Nelson, Growth & Infrastructure Consortium 2011.

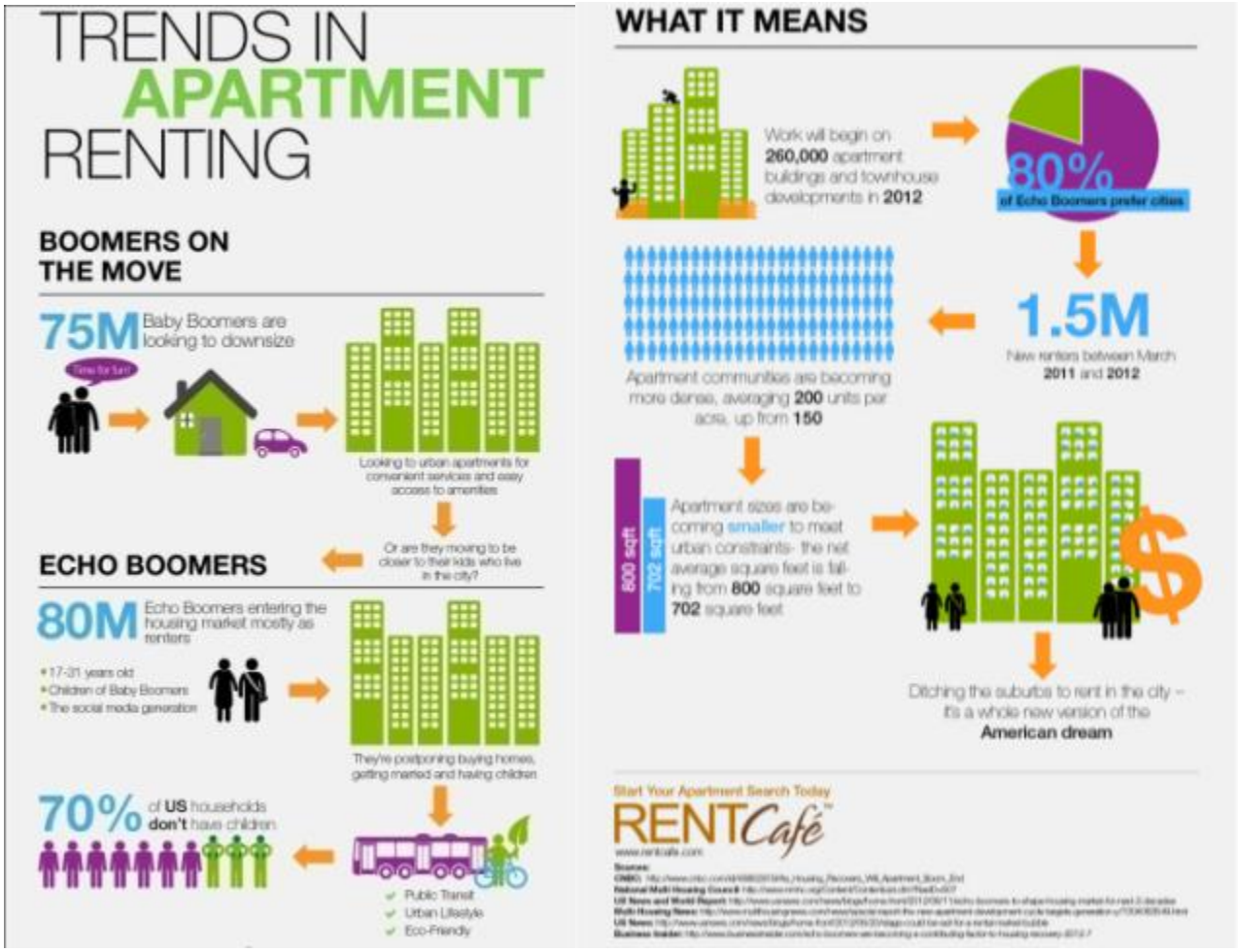
and 85 are more likely to seek an apartment for their housing choice instead of a single family home, which is a new trend.[5]

The following graphic, Trends in Apartment Renting, illustrates the effect Baby Boomers are and will be having on the future rental market. Research for the graphic was based upon data from the National Multi Housing Council and multiple news outlets to include CNBC, *US News and World Report*, *Multi-Housing News*, *US News and Business Insider*. It illustrates the potential for multi-family rental markets to increase dramatically in the coming years.

Manatee County has seen a renewed interest in multi-family rental products in recent years. Lost Creek Apartments in Lakewood Ranch and two different apartment complexes in Heritage Harbor have opened in the past several years. Other developers have or are in the process of adjusting their land development entitlements to include multi-family housing in response to these trends.

This future population will find new and existing homes to occupy. To serve this future population, the County has land development regulations and maintains a "concurrency" regulation system that requires new development to not degrade the infrastructure below adopted levels of service established by the County. This applies to water, wastewater, roads, parks, transit, etc.

[5] *The Effect of the New Normal on Local Government Finance*, Burchell& Nelson, Growth & Infrastructure Consortium 2011.



According to the Brookings Institution's *State of Metro America Report*, Southwest Florida is a "Mid-Sized Magnet". Meaning, there is high growth, but low diversity of persons and employment opportunities and low educational attainment. These areas lack some of the high-value industries that characterize other areas of the country. This is a reflection of the region's economy, being more construction centered and service oriented to the retirees and seasonal residents and tourists. The fast growth of the early century economic boom and crash has left these areas "among the most suburban oriented, spreading out farther from developed areas in lower densities. The report also identified other Florida metro areas that experienced a substantial growth slowdown between 2000–2006 and 2006–2009, including Bradenton (falling in growth rank from 19th to 59th).

Boomers and seniors are the majority of the population in Bradenton, and Florida remains the state with the highest share of senior population, but the cities of Provo, Raleigh, Austin, Atlanta, and Boise registered the highest senior growth rates from 2000 to 2008, exceeding 35 percent. Bradenton also has the:

- Lowest pre-senior (age 55-64) growth rates.

- Highest age (elderly) dependency rate in the nation.
- Share of married-with-children households at 13.5 percent (ranks lowest nationally).

The end result is that although retirees will continue to be a significant portion of the population in Manatee County, the growth of that sector will be lower than the 2000 -2006 levels in the foreseeable future.

Demographics and trends also paint a very different picture than what Florida has been accustomed to in terms of its residents and new arrivals. Multi-generational households with grandparents living with children and potentially grandchildren, existed in over 20% of households from 1900-WWII. The percentage declined steadily through 1980 but has now increased to over 15% of all households. New financial realities will also affect future housing preferences. The following are likely scenarios for the future:[6]

- Sub-prime mortgages will likely no longer be available.
- 20% down payments will be the norm for new mortgages.
- Fannie Mae and Freddie Mac will be out.
- Higher fuel costs.

This translates to smaller homes on smaller lots, more attached units and more rental properties. Projections also indicate declining home ownership rates. The National Association of Home Builders, Prudential Real Estate and the Urban Land Institute have similar findings reporting expected declines in home ownership from a high of 69% in 2005 to 62% nationally by 2020.[7] According to the National Association of Realtors, attached and small lot housing types are now preferred for home ownership.

Development Trends

Manatee County development approvals (entitlements only) have declined from a high of 5,000 dwelling units in 2005 to only 955 in 2009. Since 2009, dwelling units approved have increased their number to 1,397 in 2011 (see following table). The average over the 7-year period is approximately 1,900 dwelling units approved/entitled per year.

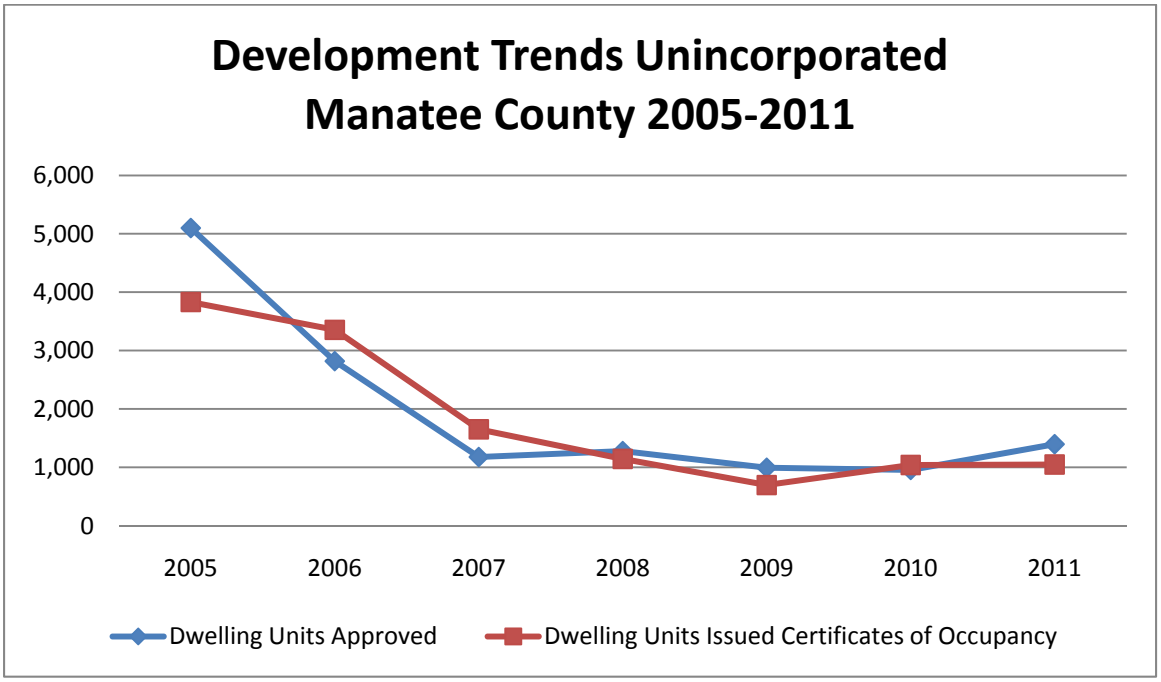
Correspondingly, actual dwelling units being constructed (Certificates of Occupancy issued) was also at a high in 2005 with 3,831 units. The low was in 2009 with only 697 units. That has

[6] *The Effect of the New Normal on Local Government Finance*, Burchell& Nelson, Growth & Infrastructure Consortium 2011.

[7] *Manatee County Evaluation and Appraisal Report, 2011*.

increased to 1,048 units in 2011. However, based on building permit activity this number is expected to be higher in 2012. The average over the 7-year period is approximately 1,800 dwelling units constructed per year.

The number of new dwelling units approved (new land development entitlements) is expected to be low for the next few years as there are still numerous entitled and unbuilt properties in the system that have not yet begun development.



"Best Community to_____."

Manatee County and Bradenton are being continuously marketed to people that may be considering moving, retiring to or moving their business to the community. The community is regularly ranked in a variety of periodical publications in terms of being a "Best Community to _____."*Money Magazine, Fortune Magazine* and others periodicals and media outlets publish annual "Best Places" lists that receive ample media attention. The community was rated:

- North Port-Bradenton-Sarasota #2 of the Top 20 Strongest US Metros (*Brookings Metro Monitor 2012)*
- North Port-Bradenton-Sarasota #2 of the Top 10 US Metros with Cleanest Air (*AirGenius 2012)*
- Bradenton #9 best places for teleworking (small metro) (*Sperling's 2012*)
- #1 for Florida retirement in 2011 (*Portfolio.com*)

- #10 Small City for art (*American Style Magazine*)
- Top Ten Places to Live and Boat (*Boatingmag.com*).

However, it was not ranked in the top fifty healthiest cities, best places for a raise, best places to launch a small business or in the top 100 places to live in recent years. Looking at the criteria for many of these "Best Places" can help leaders identify its shortcomings and align those with the community's vision and goals. This is crucial as the people and businesses potentially relocating to Manatee County review these popular periodical and web resources and find Manatee County/Bradenton missing from the top positions on these lists.

Given the current development trends and land use patterns, Manatee County is on its way to becoming like Central Florida. According to citizen outreach in the Orlando area (myregion.org), that region is overbuilt with suburban residential communities that require residents to drive everywhere to work, shop, study, and play. Citizens cited in the study say that the Central FL region is under-built with mixed-use, compact, walkable communities that can reduce traffic, limit the outward expansion of the metropolitan area, and improve public finances. Their region is working to identify and remove the regulatory barriers to this type of development. Regulatory barriers include low density Future Land Use categories (i.e., Urban Fringe – 3 dwelling units per acre maximum) in undeveloped areas and concurrency requirements that have the unintended consequences of reinforcing and extending sprawl. These need to be changed to facilitate the creation of the types of communities that will be most attractive to a new generation of homebuyers, reducing the amount of driving people have to do, and supporting sustainable growth.[8]

[8] *Strategies for Sustainable Growth: The Transportation/Land Use Intersection. Workshop Summary of Findings*. Urban Land Institute of Central Florida, June 18, 2009.

PLANNING CONCEPTS

Planning Concepts

This section discusses current planning and infrastructure issues, and some ways other communities are addressing these.

Manatee County generally uses a low density suburban based growth model. This means the land use types (e.g., residential, commercial, office, institutional, industrial, etc.) are separated by miles instead of by blocks, feet or within the same building, horizontally or vertically integrating the uses.

In unincorporated Manatee County, past Boards of County Commissioners have enacted a “low rise – low density” development philosophy. This means new development was typically approved at one (1) dwelling unit per acre or less. Projects were approved at 1/3 of their maximum potential dwelling units per acre in their respective areas. Even in areas of the county with higher maximum densities permitted, these areas of the county only have one (1) to three (3) dwelling units per acre, maximum built and platted.

This suburban type of planning separates uses by miles, increasing trip lengths and travel delays. Subdivision utilities have to be extended farther and serve fewer users or people per foot. The 2011 Community Planning Act in Florida Statues (FS 163.3164(51)) provided new definition for urban sprawl as follows:

> *"Urban sprawl" means a development pattern characterized by low density, automobile-dependent development with either a single use or multiple uses that are not functionally related, requiring the extension of public facilities and services in an inefficient manner, and failing to provide a clear separation between urban and rural uses.*

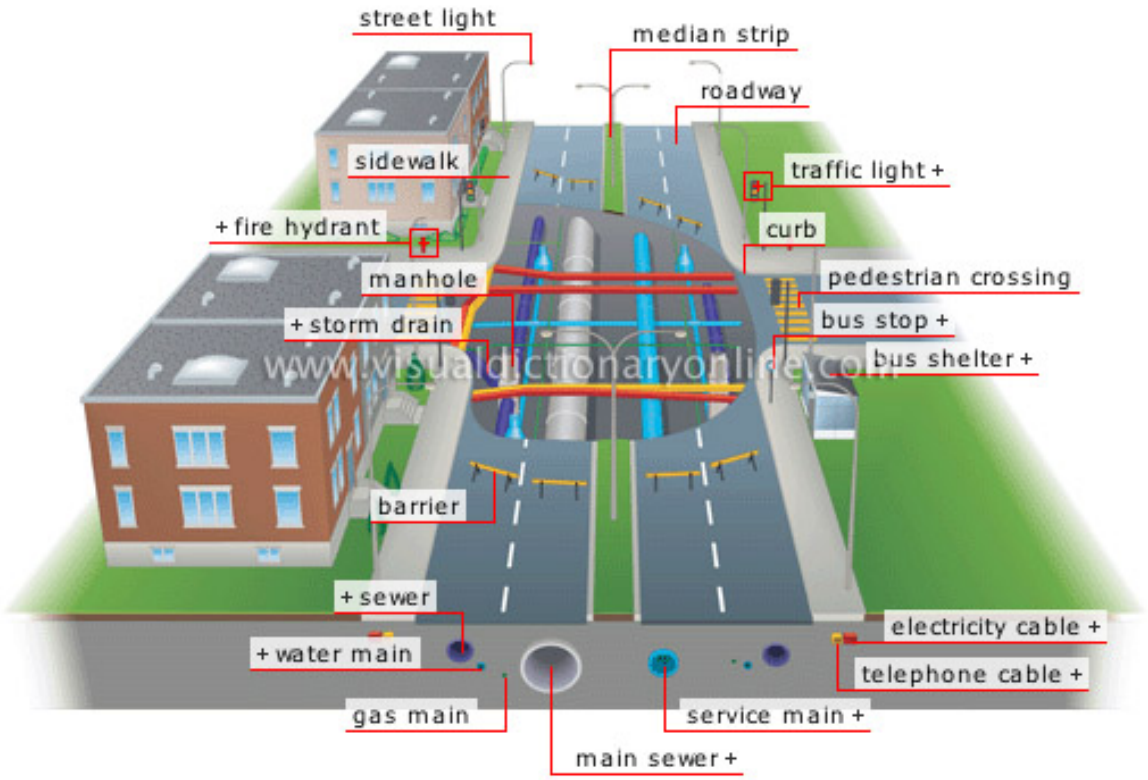
Other synergies of planning have been missing. Great efficiencies can be gained in infrastructure service delivery and costs to taxpayers if even some of the following were occurring:

- Density greater than 5 dwelling units per acre along transit routes.
- Greater residential densities around schools.
- Fire stations located in the heart of residential areas.
- Coordination among agencies in the location of new schools, services, etc.

This urban sprawl definition is a reality check for Manatee County. However, before proclaiming previously approved projects meet the definition of urban sprawl, we need to determine if indeed the extensions of public infrastructure have been extended in a fiscally responsible

manner. Have acceptable levels of service been maintained? Have traffic, water, wastewater, schools and their capacities been upgraded so growth has not been inconvenient or unbearable? Fiscally speaking, new infrastructure needs to be used to its maximum capacity to ensure the dollars were well spent. However, for roads, efficient infrastructure may also means delays in the afternoon peak travel period. To ensure those afternoon inconveniences do not occur, the cost for improvements increases dramatically.

Every development has hard impacts (e.g., wider roads, new utility lines, new fire stations, new schools, etc.) and soft impacts (e.g., more school buses, Sheriff's Deputies, fire stations, etc.) to the infrastructure of the community. These impacts are mitigated by the developer through the payment of impact fees, facility investment fees and physical improvements required by the County. Infrastructure improvements required by the development can be in the form of new or widened roads, utility lines and other improvements that are constructed and "dedicated", which means given to the County for perpetual ownership and maintenance. Upon completion, they essentially become "County" roads, water and wastewater lines, stormwater pipes, etc., the hard infrastructure of the community. In addition, soft infrastructure has to grow along with the hard infrastructure of the community. This could be best described as the incremental need for more law enforcement and Fire/EMS, parks, transit, libraries, social and veteran services, schools, school buses, beach parking, solid waste, etc.



For every road constructed in the county, there is infrastructure beneath the road, which can include water lines, wastewater lines, reclaimed water lines, stormwater pipes, etc. On the surface there are sidewalks, traffic signal systems, turn lanes, bus shelters, street lights, off-site stormwater ponds for the road drainage and a host of other infrastructure as may be necessary.

The economists may ask the county planners "What types of land uses do you have along this roadway to help pay for the maintenance of this infrastructure and its eventual replacement in the decades to come? How many customers are there per linear foot of roadway, water line and sewer line?" If the answer is generally consistent with low-rise and low-density residential development, then the community will maintain its bedroom community status, but with potentially higher property taxes, utility rates and increased travel times.

New development does not always occur in areas that are easy to serve. Manatee County directs development to areas inside its utility service area, which is quite expansive, west of the Future Development Area Boundary (i.e., Lake Manatee). In general, Developments of Regional Impact (DRIs) (see map in appendix) which are master planned, help mitigate the hard and soft impacts better. This is the case for Lakewood Ranch and other DRIs. With large projects and DRIs, it is easier for the County to ensure interconnected utility lines, lands for fire stations, schools, parks, provisions for adequate non-residential and employment type uses to serve new citizens, and payments to offset impacts of developments, etc. This is due to the economies of scale associated with larger projects. When projects come in sporadically, as smaller, stand alone developments similar to those generally occurring in North County near Parrish (e.g., 5-200 dwelling unit projects), it is more challenging to plan for services that more cost effectively serve the area.

The County's goal is to grow at a reasonable rate, so that it can provide the necessary services as required by the Comprehensive Plan. However, existing services may not be within a reasonable distance from new development, forcing the County to consider providing services to areas decades ahead of plans. Currently, the Future Land Use Map does not provide or allow for the variety of services that a growing community needs. In areas where most new communities and new infrastructure are being extended, the Future Land Use Map restricts the variety of land use types and limits it to primarily low density residential development with limited opportunities for non-residential development to include services and employment opportunities.

Unfortunately, the area where development is occurring is spread out and approximately the same size as the already developed area of the county. Lands arching east of Port Manatee to Parrish and South to Lakewood Ranch are primarily within the low density Urban Fringe – 3 dwelling units per acre (UF-3) Future Land Use designation. This designation limits land use density and types of development. Land uses with employment opportunities, services, medical offices, etc., are not permitted in this designation. Large commercial can be located at

intersection nodes, but do not provide the variety of uses unless the land use designation is changed.

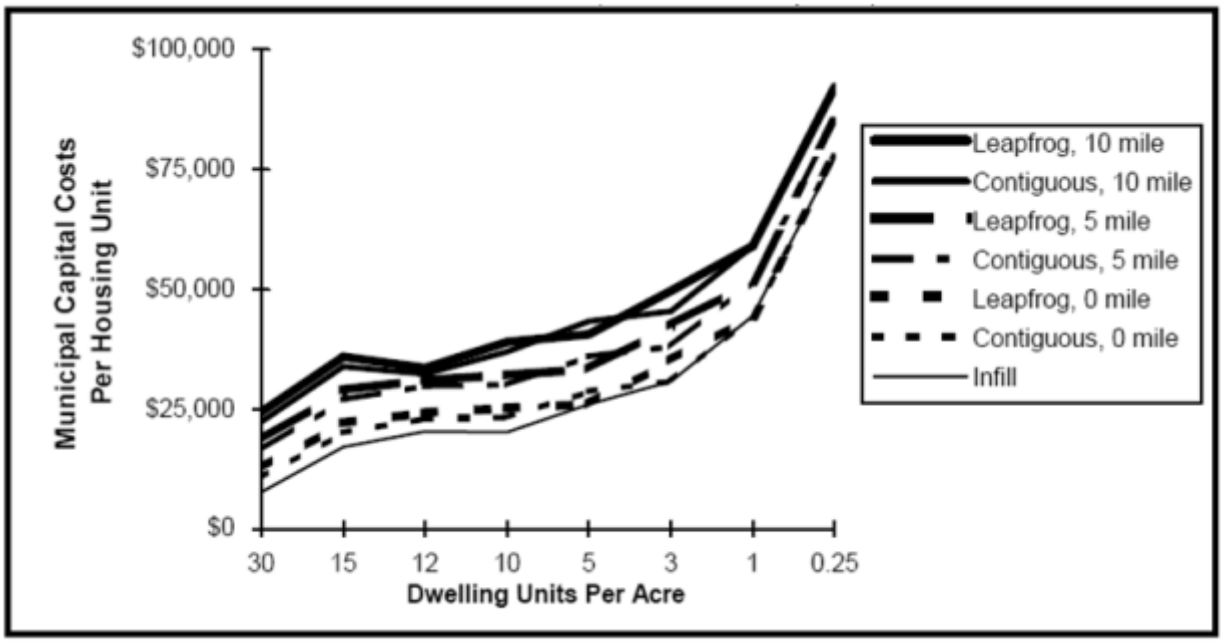
Due to the limitations of the UF-3 designated areas, they will essentially act as a traffic sending zone, as future residents must travel further in their daily routines seeking services and employment. Essentially, these new residents are increasing congestion on roadways in the already developed areas instead of having the opportunity to stay local for their daily trips.

Financial Impacts of Density and Non-Residential Development

Every land development application and development approved by the County has a future fiscal impact on Manatee County Government and its taxpayers. With the population increasing and projected to continue to increase every year, how do we maintain our adopted levels of service and keep future associated maintenance costs low? Are there better ways of land use planning that are more efficient for County infrastructure planning and service delivery that will also provide a higher quality of life for our citizens? The utility bill customers pay for services are not based upon density or not how many feet of public water or sewer lines it takes to serve a particular residence.

What Do the Studies Say?

Numerous studies from the past several decades address growth and the cost of service delivery. One such study, *The Costs of Alternative Development Patterns* , generally illustrates that capital costs for lower density, non-contiguous residential development per dwelling unit is much higher than higher densities, which are clustered (see charts). There is a doubling of costs from 30 dwelling units per acre to 2 units per acre. In Manatee County, most new development ranges from 0.5 to 2 dwelling units per acre, which is less efficient for the provision of services and the maintenance of infrastructure. That does not exclude low density areas. It shows they need to be balanced with higher density areas and nearby opportunities for employment and services.

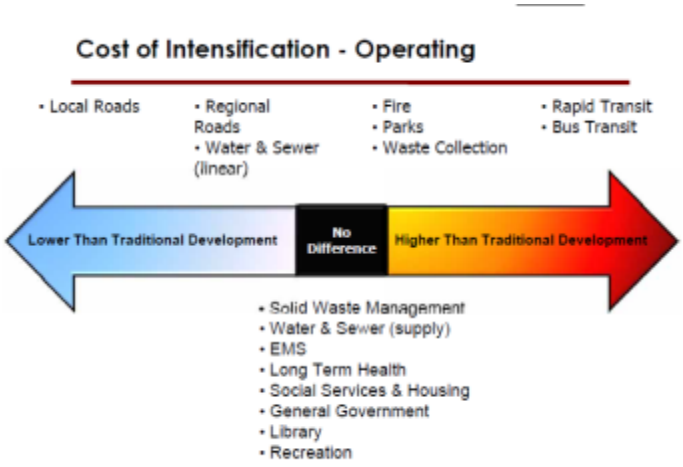


The *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, also provided some insight to low density single-family detached residential development, as 1-2 net dwelling units per acre is the most costly to serve on public infrastructure of all residential development types. Densities between 3-5 dwelling units per acre (net) are the lowest density that should be on public water and sewer. Densities also need to be higher to increase the efficiency and fare box revenues for public transit. [9]

The Victoria Transportation Policy Institute's report titled *Understanding Smart Growth Savings* (2004) illustrated the cost savings of compact growth on public infrastructure and services. Compact growth means higher densities, requiring less land area. Dispersed development exhibited a cost of almost 50% higher for public service costs than compact development.

Another study by HEMSON Consulting has taken a closer look at densities and services. They looked at a developing region of Toronto, Canada which has a very metropolitan, high density growth pattern. As they discovered, the cost of increasing the density would be higher for some services. However, they found that the capital costs of increasing density were lower for roads and water and wastewater lines, where you would have more customers per linear foot as illustrated in the figure, Cost of Intensification - Capital.

[9] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.



The cost of fire services, libraries, parks, and transit were higher. In the Toronto region, very high levels of transit service are provided to its residents. In terms of operating costs of infrastructure, the Toronto scenario illustrated the costs of increasing density were lower for roads and water and wastewater lines, with more customers per linear foot as illustrated in the figure, Cost of Intensification - Operating. The cost of fire services, parks, waste collection and transit were higher. In looking at capital and operating costs, there was no difference in managing solid waste, the actual water and wastewater plants, EMS, social services, housing, and general government.

Several communities in the United States and Canada performed an in-depth infrastructure analysis to better understand the cost of development on public services and if density and design choices played any financial role in not only the maximization of use of the infrastructure, but the construction, maintenance and eventual replacement of the infrastructure. The communities are as follows.

The Mid-America Regional Council in the Kansas City region, made up of government officials and homebuilders, studied six different developments in their region. They developed a cost analysis model to determine the financial impact of conventional and alternative development types. The design features of conventional development may include the use of curvilinear streets and cul-de-sacs in residential areas, shopping centers and strip malls with frontage on major streets with large parking lots, and single-use office parks. Most of the nonresidential land uses exhibit designs that enhance access via the automobile such as a location on major street, large parking lots, large setbacks and best exemplified by “big box” retail stores. Conventional is typical for development in Manatee County.

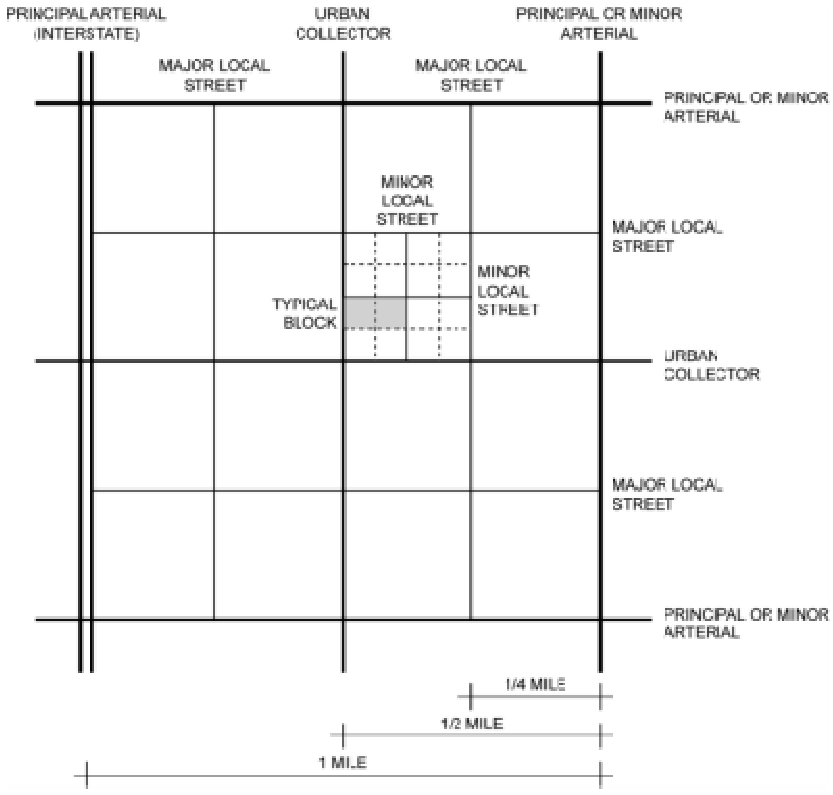
Design characteristics included: a prominent neighborhood center for commerce, culture or government; a compact design where daily needs such as school, work and shopping are within walking distance; a grid-like street network that provides traffic—pedestrian and vehicular—choices in route selection; and mixed land uses based on building size versus the use within the building.

Important design features include narrower streets laid out in a grid-like pattern, buildings of many sizes that are built to a human scale with little or no building set back from the street, the use of large windows for merchandising, and rear parking lots. Commercial areas may feature live-work units with residences on the second floor and office or retail uses on the first floor.

Design characteristics in residential areas may include the use of alleys, rear garages, ancillary uses such as garage apartments, and on-street parking. The case study of the six developments demonstrated that there is a savings in the per unit development cost and in some cases the total development costs when a project used alternative designs.[10]

The Mid-America study also summarized other research by stating "…higher overall density led to more compact regions and thereby reduced the need for roads, utilities and other infrastructure. Several studies summarized the results of several previous analyses and concluded the average savings for compact versus conventional development was 25% for roads, 5% for schools, and 15% for utilities." Some case studies demonstrated that there is a savings in the per unit development cost, and in some cases, a savings in the total development cost as well. Projects designed under alternative design principles that focus on mixed uses, clustering and open space preservation instead of conventional development and subdivision layouts reduces the cost of infrastructure.[11]

In 2005, the University of Pennsylvania completed a planning study of central Florida titled *Alternative Futures for the Seven County Orlando Region, 2005-2050*. They took the current Comprehensive Plans and Codes of multiple Central Florida communities and modified them to facilitate areas of focused growth, public investments, economic development centers, mix of uses, etc. The study looked at a more cost effective infrastructure planning approach. The study illustrated potential cost savings to the communities if



[10] *SMART CHOICES: Understanding the Cost of Development: An Element of Creating Quality Places,* prepared for Mid-America Regional Council, December 2001 by Hammer, Siler, George Associates and Gould, Evans, Goodman Associates.

[11] Ibid.

they made some changes such as adding more collector roadways, more mixed uses, concentrated density at nodes, smaller schools, etc.

From this study, changes are underway at various local governments to better align with the plan. The Central Florida Congress of Regional Leaders was created to address growth issues and the Regional Growth Compact was formed to focus on a variety of regional planning issues.[12]

Medium Density?

The studies generally do not point to higher densities as the solution to cost effective infrastructure. They all generally state that having too high a density (e.g., New York, Toronto, etc.) can have the opposite effect (more expensive to serve), but well planned medium density (on average) with good transportation connectivity, more localized schools, balance of open spaces, a mix of uses closer or within residential developments can have positive impacts on infrastructure costs and improve the overall quality of life. Coincidentally, many of these attributes are indicators of "Best Places".

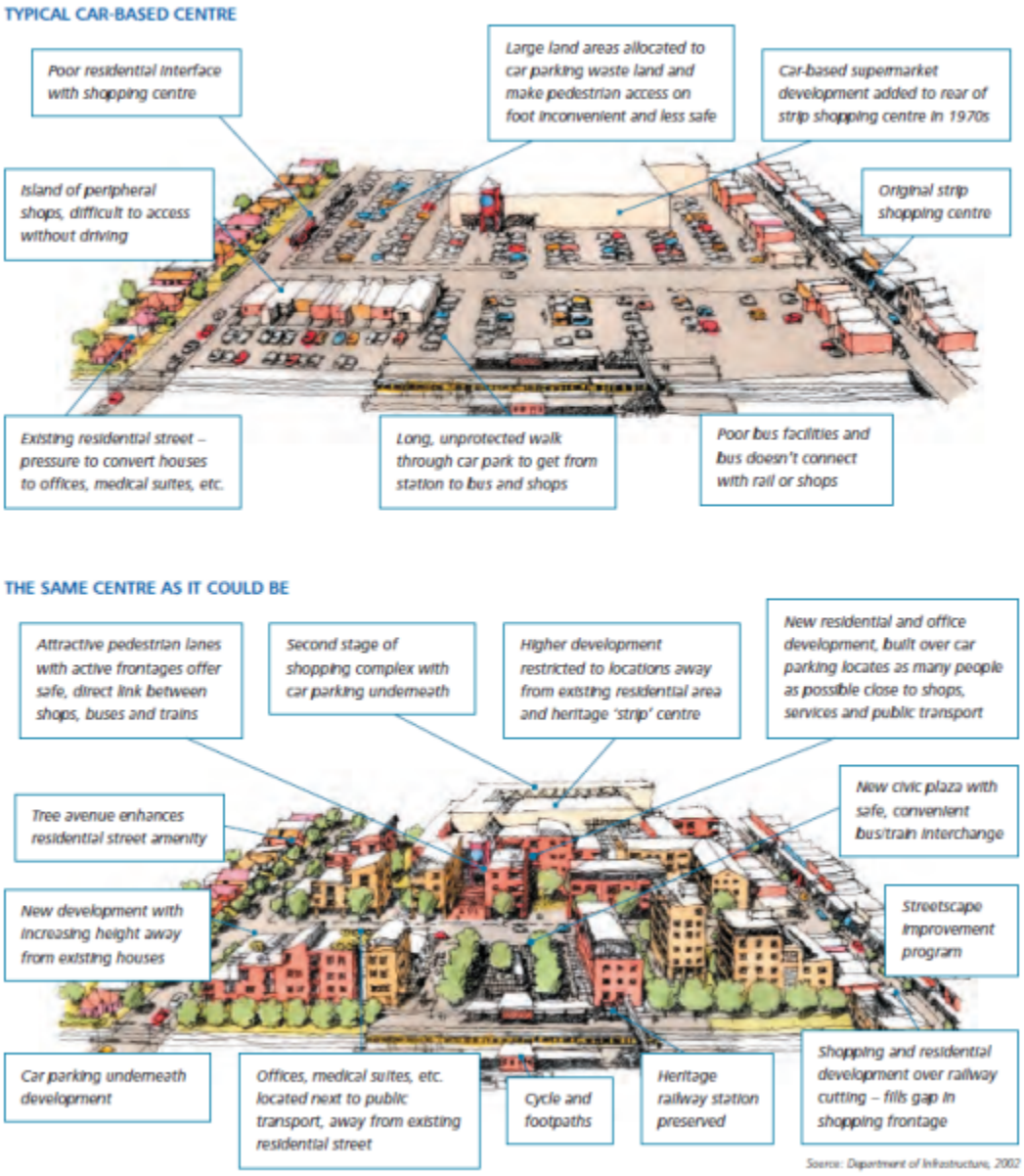
This is what many community input exercises have said over the years. *Imagine Manatee, One-Bay, Growing Green, Council of Government's Community Character and Compatibility Study* and the *Build-out Study* (studies available at www.mymanatee.org/manateeplan), all essentially recommend more mixed uses, better focus on other transportation modes, expand non-residential development opportunities at nodes, plan for more open space, value the environment, and respect the existing suburban neighborhoods.

Other communities around the world have struggled with these issues of density and infrastructure efficiency. In 2003, Melbourne, Australia began working on a new development plan called Melbourne 2030. Even with the growth slowdown this decade, projections still warrant planning for 620,000 new households by 2030 in that area. The following are elements of the plan (summarized):

- More compact city – more housing in activity centers.
- Better management of growth – so services available early in new communities.
- Average housing density higher than 4 dwelling units per acre.

The following graphic is an example from the Melbourne 2030 Plan. It illustrates a more medium density development pattern and redevelopment opportunities of existing suburban based environments.

[12] http:/www.centralfloridapartnership.org/key-initiatives/congress-of-regional-leaders/ accessed December 27, 2012.



The Melbourne 2030 plan recognizes that low density is costly to serve and that fragmented growth could lead to significant extra financial costs, if infrastructure agencies dealing with multiple development fronts are forced to invest in new capacity before the existing capacity is efficiently utilized.[13]

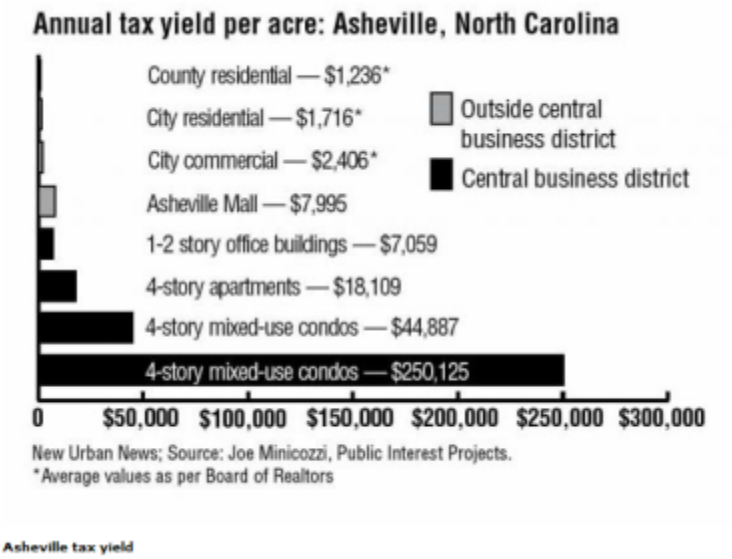
It is important to note that allowing vertically integrated mixed uses may also have a financial benefit to the County in addition to more efficient infrastructure planning. When looking at tax

[13] *Melbourne 2030: Planning for Sustainable Growth*, Melbourne Department of Infrastructure, 2002.

dollars received per acre, mixed use structures can be advantageous for local government in terms of taxes and infrastructure efficiencies.[14] For example, a "big box" (Wal-Mart) in the county, nets approximately $7,335 per acre (values are approx. and in 2011 dollars). A typical suburban two story apartment building nets $15,766 per acre. A four story mixed use building nets $39,032 per acre (not in Manatee County, but locale with similar tax structure/rates). The mixed use building not only provides a higher rate of return than typical suburban uses, but also provides a variety of land uses at one location. This land use type also requires fewer automobile trips in comparison to suburban uses that are separated by blocks or miles. It requires fewer feet of roadway, water, sewer and other infrastructure to serve the variety of uses. The taxation advantages in addition to the infrastructure and efficiency of mixed uses creates clear advantages for the community to incentivize mixed uses.

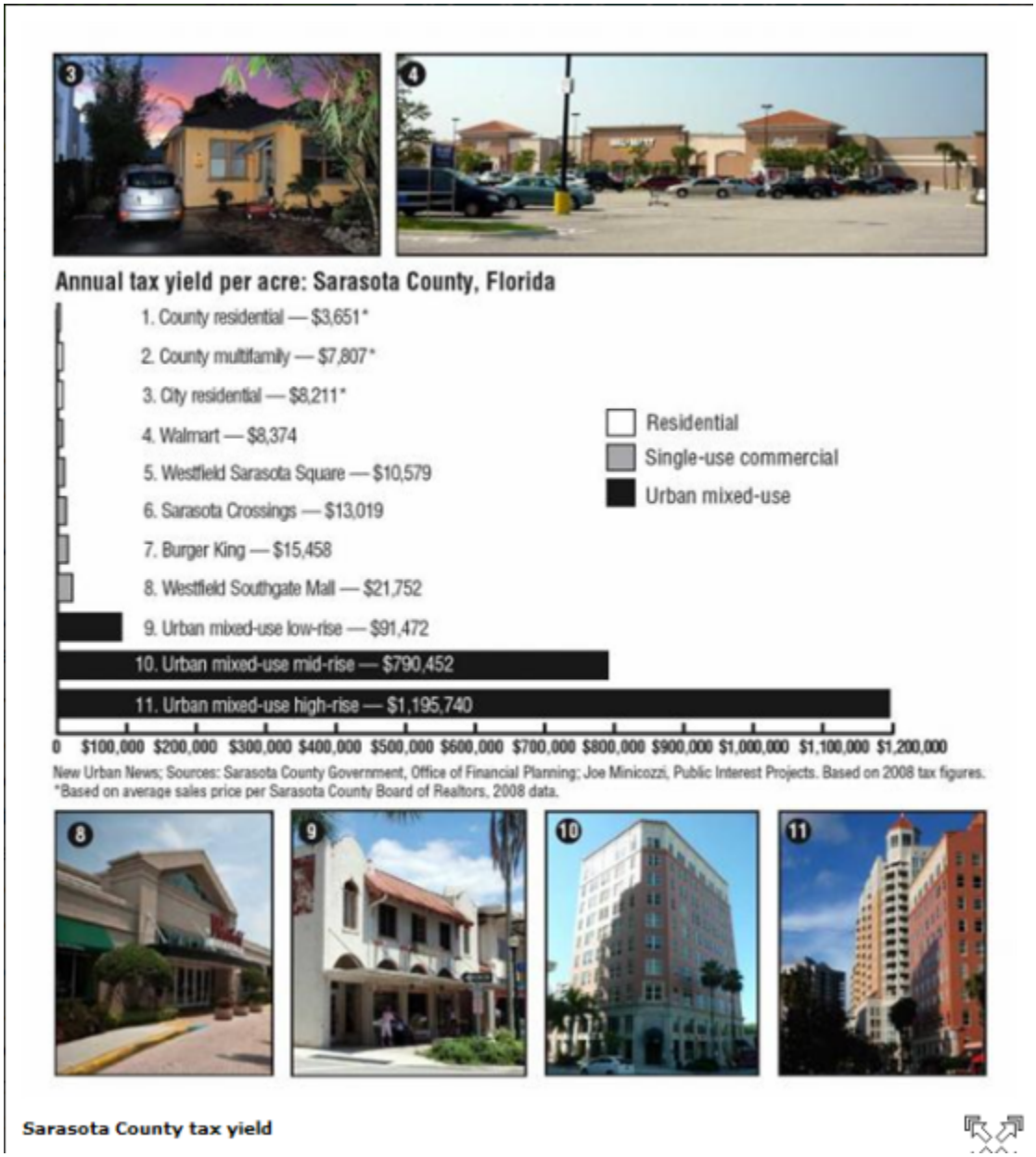
While examples of mixed use development exist on Main Street in Lakewood Ranch, this type of mixed use building has not occurred on any scale yet in Manatee County. This is attributable to the existing land development regulations, which do not make it clear this type of development is even allowed. Until late in 2012,

Sarasota County did a similar study. It compares area development in Sarasota County and Ashville, North Carolina. The following graphics illustrate their results:



Asheville tax yield

[14] Best Bet for Tax Revenue: Mixed-Use Downtown Development, Philip Langdon, *New Urban News*, via http://bettercities.net/article/best-bet-tax-revenue-mixed-use-downtown-development-13144, accessed December 27, 2012.



Integration of Transportation and Land Use

There are greater efficiencies that can be realized when land use and transportation planning efforts are combined. Land uses and densities are directly related to the amount of traffic on the transportation network. Land uses like employment and commercial centers, serve as destinations for travel, while other land uses, such as residential uses, serve as generators of trips. The perception of increased densities and increased traffic congestion are not always true. Mixed-use developments help reduce traffic volumes by providing internal destinations for the

residents of those developments. Even if single-use development (e.g., stand alone restaurants, drug stores, etc.) are used, as long as the separation of uses is measurable by blocks or feet instead of miles, the effect can be the same. Like roadways, all transportation systems are subsidized in some way. In order to help existing transit get more ridership per bus trip (greater return on investment), development at densities greater than seven units per acre makes transit systems much more viable.[15]

Medium densities and mixed use projects located in the suburbs or exurbs farther out from the "employment center" of a community may not see great reductions in daily vehicle trips more so than if the development was built in a suburban fashion. However, the annual vehicle miles traveled would be decreased. There are lots of variables though associated with development design, location, type of uses, size of project, etc. Areas that typically see the greatest reduction of vehicle miles traveled and trips had the most destinations within walking distance (1/4 mile) and where the design of the street facilitated walkability, like downtown areas. Density of population and employment are only weakly associated with travel behavior (fewer trips and vehicle miles traveled) unless the other factors (high number of walkable destinations and walkability of street) are present.[16]

Development Cost Study -1983

The Development Cost Study provided some insight into the growth concerns faced in the 1980's that still ring true in 2012. The key findings from the study are as follows:

- Impacts of new residential development are significant on schools.
- Impact of new residential development to the County varies depending upon location of new development.
- Each new development produces a net loss to the County utilities system (excluding utilities costs and revenues).
- Non-residential development is generally recognized as having positive fiscal impact.
- Single-family residential development imposes slightly smaller fiscal cost than multi-family developments due to higher taxable values offset higher costs generated by single-family development (bear in mind that densities of single-family were much

[15] *Alternative Futures for the Seven County Orlando Region, 2005-2050*, prepared for The Metropolitan Center for Regional Studies, The University of Central Florida, City Planning 702 Urban Design Studio, University of Pennsylvania School of Design, Department of City & Regional Planning, 2005.

[16] Travel and the Built Environment: A Meta-Analysis, Ewing, Reid and Cervero, Robert, *Journal of the American Planning Association*, Summer 2010, Vol. 76, No. 3.

higher in the late 70's and early 80's than in 2000's, streets connected more, wetland impacts not regulated, etc.).

Manatee County citizens and officials have embraced the philosophy that new development should "pay its own way," i.e., new growth should bear a fair share of the costs imposed on the County.[17]

Conclusion

Generalizing the studies examined, most illustrate that lower densities (0-3 dwelling units per acre) and higher densities (greater than 24 dwelling units per acre) are more expensive to serve with infrastructure than medium (6-9 dwelling units per acre) densities. Lower densities have higher costs given the nature of the infrastructure required with too few customers to help pay for the services. The cost of serving higher densities increases given the fact that infrastructure starts to take on a new level, in terms of transportation planning and infrastructure where urban densities start necessitating larger and costlier mass transit systems to move people. The goal of allowing more medium densities, 6 to 9 dwelling units per acre in specific areas, may provide a better balance. It still provides the options of lower densities, but allows the regulatory handcuffs to be removed and a wider variety of development opportunities as the market necessitates.

While efficiencies can be gained easily with density in terms of utility infrastructure, there are other factors to be considered to gain transportation efficiencies. Greater numbers of destination land uses within walking distance and design of the street better facilitating walkability, like downtown areas, are key components to reduce trips and vehicle miles traveled.[18]

[17] *Development Cost Study*, Manatee County Planning and Development, May 1983.

[18] *Travel and the Built Environment: A Meta-Analysis*, Ewing, Reid and Cervero, Robert, *Journal of the American Planning Association*, Summer 2010, Vol. 76, No. 3.

PLANNING STUDIES

PLANNING STUDIES

The County has initiated several outreach projects and reports over the years which have provided substantial citizen input. They include:

- *Imagine Manatee*
- *One-Bay*
- *2012 Evaluation & Appraisal Report*
- *Council of Government's Community Character and Compatibility Study*
- *Build-out Study*

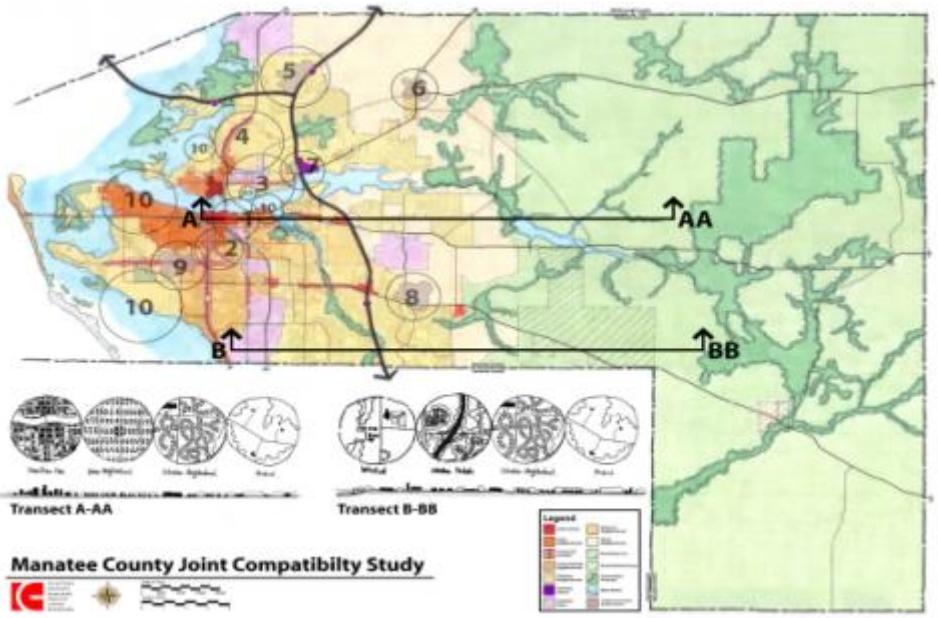
Manatee County and Bradenton have been ranked in a variety of periodical publications in terms of being a "Best Community to (fill in blank)." These studies share many common concerns and thoughts for future direction for the community.

Imagine Manatee (2002-2004; updated 2006)

This community visioning process was a strong endorsement of compact mixed-use and infill/redevelopment land uses. It called for traditional neighborhoods, multi-modal transportation, shared school/park facilities, conservation of land and water resources, a master plan for parks and trails, and more open space. Imagine Manatee reached consensus on the need to amend the County's land-use regulations to concentrate new development closer to already developed areas, to make development higher-density, utilize clustering and mixed-use forms, and to promote redevelopment of already developed areas – all to preserve open space and protect agriculture and preserve uses. It also called for the County to acquire and preserve as much as an additional 10 percent of the County's total land, which would double the amount currently in County preserves.

Character Compatibility Study (2005)

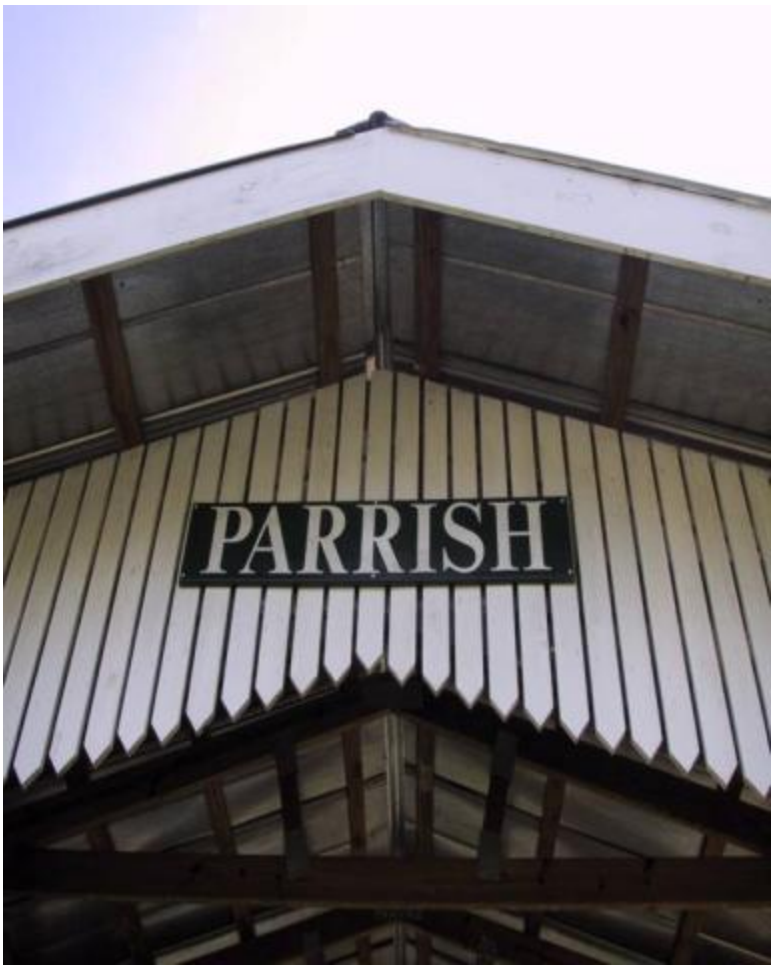
The Manatee Council of Governments sponsored this study to ensure that the community develops in a compatible manner across governmental jurisdictions. Essentially, the goal of the study was to create a framework to ensure that new development was more compatible with existing development or land-use codes between adjacent jurisdictions. Its chief areas of focus were building heights, waterfronts, activity centers, long-range transportation, and overall community character. The study was derived from the stakeholders, staff, and the Council of Governments, along with the MPOs 2035 Long Range Transportation Plan. The study was adopted by the Council of Governments and provided key insight as to what the community's desires were with regard to having activity centers in developing areas of the community.



Carrying Capacity Study (May 2006)

Manatee County funded a "Transportation Carrying Capacity Study" to examine anticipated build-out conditions, population and employment according to the County's growth management policies. An objective from the study was to create and expand regional employment centers closer to areas facing demand for residential development. Shifting employment opportunities to regional employment and commercial centers reduce the vehicle miles traveled affecting the capacity of the Thoroughfare Plan network. One of the conclusions to this study was to provide a significant change in the land use pattern, such as a regional employment center, to shift the transportation dynamic and reduce the number of vehicle miles traveled. This study also helped illustrate issues between the existing Future Land Use Map and the Future Thoroughfare Maps in the Comprehensive Plan.

Parrish Area Planning 2005-2007



During the early 2000's, the developers in the Parrish area had issues getting developments and projects entitled. This is due to development getting father ahead of existing available services and infrastructure in that area. Manatee County, the School Board and the development community partnered and created a plan to address infrastructure issues.

In 2006, growth projections were developed for the area by Metrostudy. This study predicted steady growth in North County thru 2035, averaging 4,000 dwelling units constructed annually by 2035 and maintaining about 40% of the market share of new residences in the county to 2019.

The North Parrish Development Group presented a plan to the Board of County Commissioners in 2007. They studied a 30.3 square mile (approx. 19,392 acres) area in the vicinity of Moccasin Wallow Road and US 301 in Parrish. Over 5,700 acres were included as proposed projects. The plan proposed the 750 acre Parrish Centre as the development of a future mixed use commercial development and 1,500 dwelling unit Town Center. The plan analyzed and recommended the following additional infrastructure be ultimately provided with build-out of this area:

- Schools - 6.8 elementary, 2.8 middle and 1.7 high schools.
- Libraries - 41,700 s.f.
- Fire Stations – 3.
- Parks – 64 acres.
- Commercial needs – 3 million s.f.

The plan was successful in getting staff and the Board up to speed on growth and infrastructure planning issues. It was also successful in getting the development community partnered on right-of-way dedication that was used successfully with the widening of US 301. After 2008, at the height of the recession, little else was heard from the group. Other development in Parrish continued at Harrison Ranch and Copperstone, but fewer other communities in the plan area.

OneBay (2007; 2009-2010)

A consortium of Tampa Bay regional organizations initiated this study to promote a regional approach to growth management as an antidote to suburban sprawl, to preserve scarce resources, and to promote economic development. The study's recommendations largely echo those of previous studies: Recommendations for new development patterns that seamlessly integrate with transportation systems, including rapid transit, bike lanes, sidewalks and shuttles; higher-density, mixed-use projects clustered around employment centers and/or transit stations; development that enhances open space and promotes green objectives.

It recommended mixed uses, focus on multi-modal transportation, expanded non-residential development opportunities at nodes, and planning for open space, being green, and respecting the existing strong neighborhoods. OneBay had numerous large scale citizen input workshops and an online comment system. After this report was finalized, the Board of County Commissioners selected "Scenario C", but no amendments to the Comprehensive Plan or Land Development Code were made.

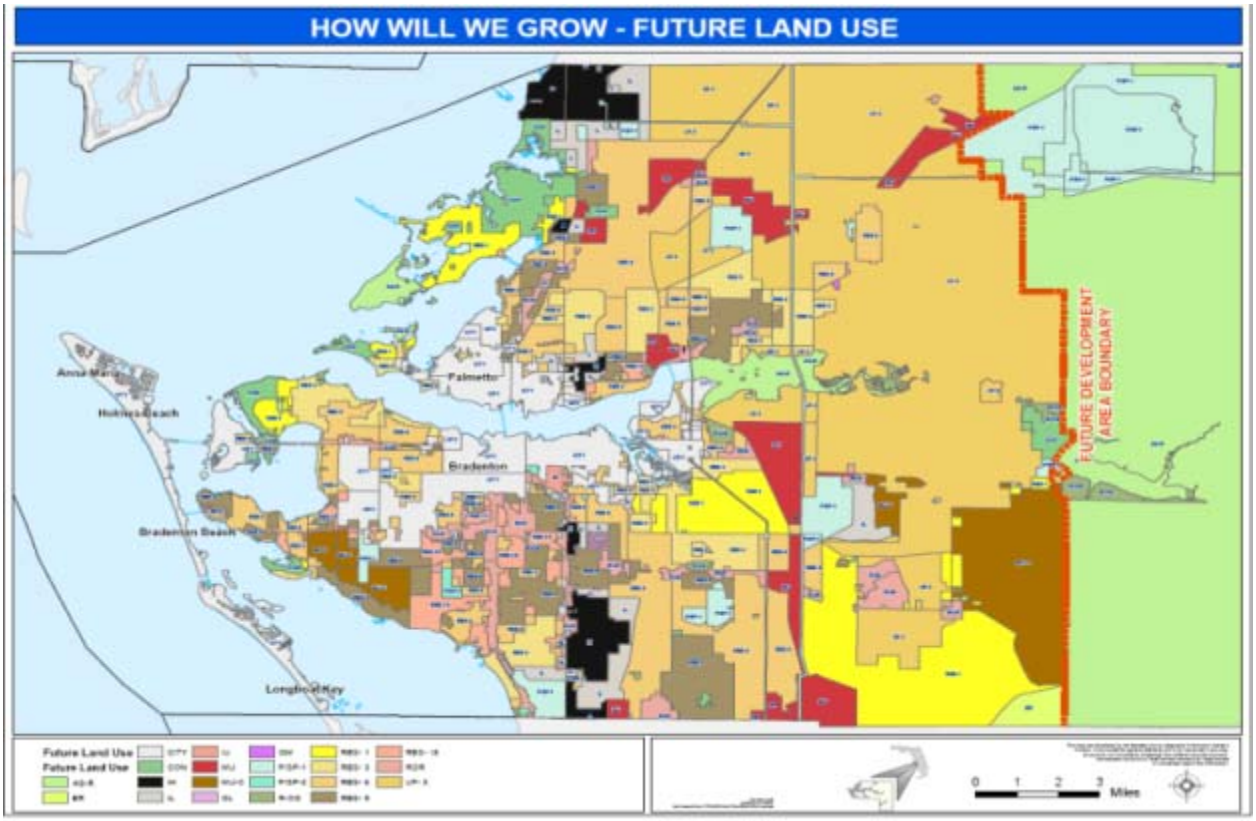
LAND DEVELOPMENT REGULATIONS

LAND DEVELOPMENT REGULATIONS

Unincorporated Manatee County's Comprehensive Plan was originally adopted in 1989. As part of the Comprehensive Plan, a Future Land Use Map was also adopted. Less detailed than zoning, the Future Land Use Map provides a more conceptual development plan for how and where the county should grow. The Comprehensive Plan is the County's growth management manual and establishes policies for how it handles infrastructure, services and growth. The Land Development Code is the implementation tool. It is more detailed with specific rules about what can be developed and where in terms of zoning, building setbacks, criteria for land uses, etc.

The Future Land Use Map establishes land uses with prescribed maximum densities and sets the tone for the type of development, and where it should occur in Unincorporated Manatee County. The Future Thoroughfare Map, also in the Plan, illustrates the plan for improving existing roads and building future roads.

The current Comprehensive Plan, Land Development Code and Official Zoning Map generally provide a suburban based growth plan for Unincorporated Manatee County with the provisions for primarily single-use, low density and low intensity of uses in high growth areas. The County has a utility service area established (aka Future Development Area Boundary) that limits future development east that would require County utilities infrastructure. The primary land use in the



developing areas is low density suburban development (1 – 3 dwelling units per acre). Pictured to the right is approximately 1 dwelling unit per acre. This development pattern has occurred for a variety of reasons:

- Market conditions warrant.
- Combination of an expansive existing and planned road network.
- Large County utility service area.
- Lower maximum densities in developing areas of the service areas with few support uses.
- Traffic concurrency rules that push development further away from existing utility infrastructure.

The current Future Land Use Map is out of balance with existing development and the Future Thoroughfare Map. The existing Future Land Use Map establishes future densities in the established western areas that are much higher than existing development. For example, many areas in the southwestern portion of the county/urban core, have RES-6, 9 or 16 land use designations but are built anywhere from 1 to 3 dwelling units per acre. The Future Land Use Map provides the necessary variety overall, but allows for significant growth over a broad area that would necessitate costly improvements to the utility system and transportation network to support build out.

The current Plan and Code need to be changed to address compatibility issues with new growth expanding against and into established neighborhoods and communities (e.g., Old Ellenton, Terra Ceia, Parrish, etc.). The current rules have limited provisions for newer mixed use development types. There are also issues associated with residential development as it grows closer to planned industrial areas. Proposed industrial developments in areas with existing industrial land use designations saw opposition from nearby residents, but also those farther than 500 feet away (min. public notification requirement).

The current Plan and Code do little to discourage sprawl, decrease commute times, or encourage redevelopment or a mix of uses. These developing areas (see Development Projects/Concurrency Map) will have future impacts to infrastructure costs. These impacts include: cost of transportation, parks, utilities, schools, etc., as low density development can be more expensive to serve, increase vehicle miles traveled, and is an overall less efficient use of

land. Suburban sprawl is not unique to Manatee County. This growth pattern was observed in most of the United States during the boom years. Other "edge counties" adjacent to metropolitan areas grew at twice the national average, and approached 75% home ownership with 2/3 of the housing being single-family detached.[19]

While originally the Future Land Use Map and associated use categories provided a reasonable growth plan, other factors (such as concurrency requirements, the growing cost of transportation improvements, limited utility capacity in established areas and a large utility service area that reaches far into agricultural areas) of the Plan led to low density development growing away from established areas and the extension of utility lines to serve those areas. Sound engineering provided "solutions" for extending water and wastewater lines and consuming all available roadway capacity.

In the mid- to late-90's it became obvious that this new growth was going to forever change the landscape. A series of roadway projects including the widening of SR 64, SR 70, and US 301 began to create more capacity that fueled suburban growth away from employment centers and services to fringe areas. Unfortunately, the Future Land Use Map and Comp Plan policy structure were not easily amended to encourage better planning of activity centers, mixed uses, etc. This perpetuated more low density development extending farther north and east. The Future Land Use Map also provides many areas in the western portion of the county with excess density above and beyond what is already developed. Unfortunately, the same concurrency rules apply to most of these urban infill and redevelopment areas within the county. This makes the additional density potentially unusable when the adopted levels of service are the same for the developing rural areas of the county as they are in the urban areas of the county. The Future Land Use Map also places much of this additional density in areas that are more vulnerable to hurricanes.

The Comprehensive Plan establishes a nodal based plan for new commercial and non-residential development which places new non-residential development at the intersections of higher functionally classified roadways (nodes). This is done to preserve the capacity of the roadways by concentrating most of the traffic and turn movements to one general area. It is usually necessary to amend the Future Land Use Map categories at the intersections when commercial or non-residential development is proposed, adding to the complexity and expense associated with the development review and land entitlement process. Unfortunately the process of implementing the nodes on the Future Land Use Map was unpopular with previous Boards.

This is a bigger issue in developing areas of the county where there are great expanses of the Urban Fringe – 3 (UF-3) Future Land Use Category (see Future Land Use Map). This category provides limited opportunity for any other type of development other than low density single

[19] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.

family residential development. Where non-residential is permitted, it is typically too small a scale to meet the needs of the area.

This encourages a bedroom community, with limited road capacity for residents traveling to commercial development, employment or day to day services in the area. It also creates a large transportation "sending zone", where future road improvements may not be enough to maintain acceptable levels of service when the majority of auto trips are out of this area. Most new communities in these areas do not provide additional functionally classified or collector roadways in a grid roadway network. They funnel all their traffic onto wide, high speed and volume major roadways, limiting the amount of travel options for commuters.

It is recognized that non-residential development (i.e., services, employment, etc.) needs a certain number of rooftops in the area before non-residential development occurs. It is important to ensure that this non-residential development is growing consistent with new residential projects. This helps to ensure that new residents are in close proximity to employment and essential services in the area where the houses are being constructed. This is also important from a tax base perspective to help support the government services new residents require. It also helps to reduce the vehicle miles traveled, improve air quality, and according to the Washington Research Council, contributes to slower increases in housing costs. Manatee County is not proposing to regulate a jobs-housing balance, but is proposing land use changes that permit the opportunity for more non-residential and mixed-use development in areas of the county where our current rules limit it.

In October 2012, the Federal Housing Administration (FHA) loosened restrictions on the residential portion of mixed-use development. Previously, the FHA restricted the percentage of residential mixed-use in order to qualify for FHA-insured loans, which had an impact on the sale of mortgages on secondary markets.[20]

Concurrency

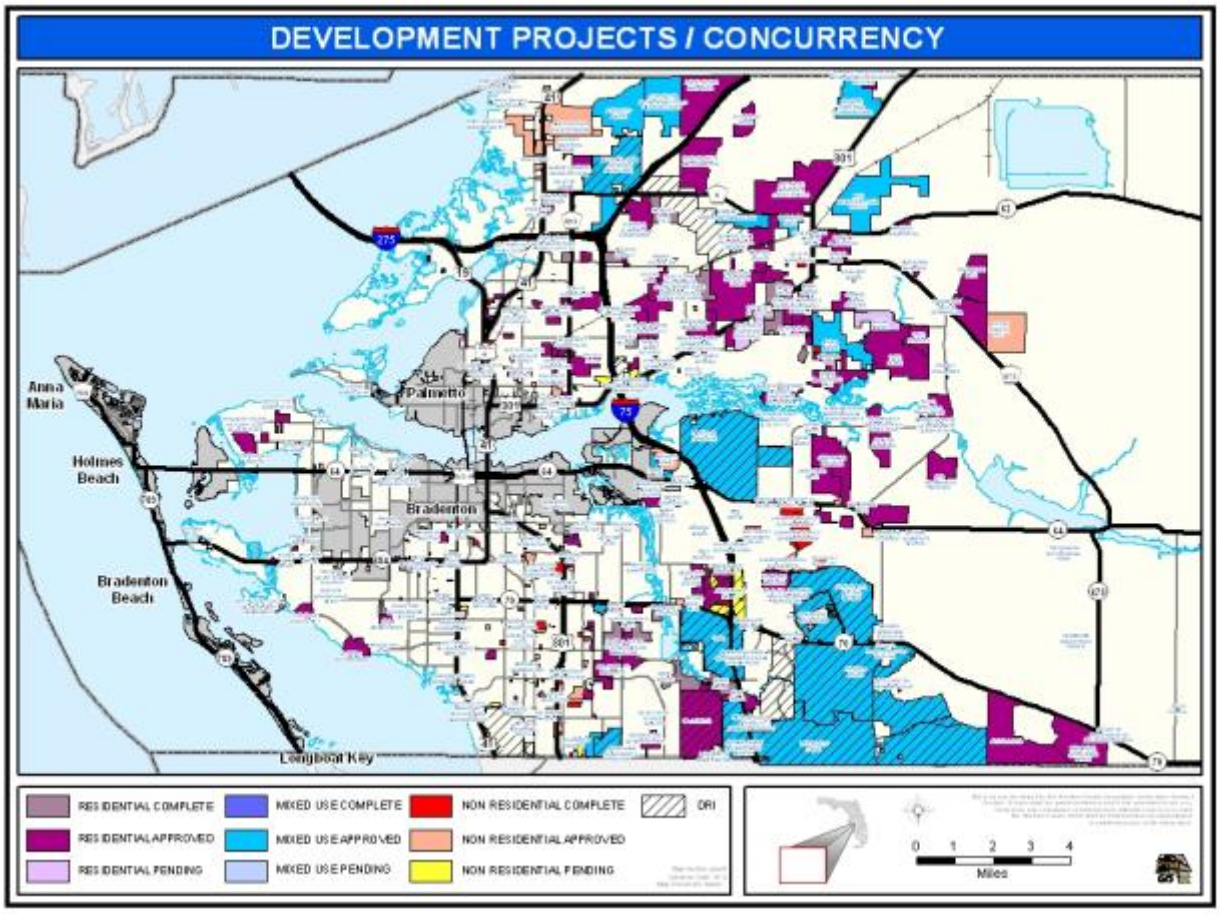
In 1985, the State of Florida approved the Growth Management Act which put into place requirements for a Comprehensive Plan and mandated "Concurrency Management". In theory, concurrency was created to help reduce urban sprawl by only allowing growth when it would not degrade the infrastructure below adopted levels of service standards established by the County. This applies to water, wastewater, roads, parks, transit, etc. However, the effect was the opposite. Concurrency forced developers to continually build in the undeveloped parts of the utility service areas to minimize off-site improvements that concurrency would have required "in-town." Regulatory barriers, like concurrency requirements that have the unintended consequences of reinforcing and extending sprawl, are being changed to facilitate the creation

[20] Regulatory Break for Mixed-Use Projects, *The New York Times*, published November 27, 2012. Accessed online on January 2, 2013.

of the types of communities that will be most attractive to a new generation of homebuyers, thus reducing the amount of driving people have to do, and support sustainable growth.[21]

Concurrency systems are databases that keep track of the established levels of service standards for County infrastructure and the impacts of development on that infrastructure. It helps staff determine the status of infrastructure in terms of meeting the County's level of service standards. Level of service is an indicator of extent or degree of service which is, or will be, provided by a facility. The Community Planning Act established in 2011 no longer requires local governments to have a concurrency system. This report provides some recommendations on changes to concurrency.

The previous map illustrates projects in the Concurrency Reservation System. These projections have received approval and have encumbered County reservations for water, sewer, parks and traffic capacity. The projects may have required improvements to infrastructure both on- and off-site to mitigate their impacts. These projects also have a limited amount of time to develop, or these entitlements and reservations of infrastructure expire.



GROWTH ASSUMPTIONS & ALTERNATIVES

GROWTH ASSUMPTIONS & ALTERNATIVES

The goal of *How Will We Grow?* is to propose options to the Planning Commission and Board of County Commissioners that may create more efficiency in the community in terms of infrastructure and improve the community's quality of life. There are three alternatives for growth that have been focused on in public workshops and County land use meetings.

The three alternatives were developed by taking the entitled projects in the concurrency system and existing vacant properties already served by utilities and along existing roadways and projecting out their development timeframe. Their development timeframes were estimated by their size, proximity to services, and availability of suitable infrastructure.

- Alternative 1 focuses on development with the current plans (Comprehensive Plan and Land Development Code), with some minor tweaks.
- Alternative 2 focuses more growth into the southwest portion of the county.
- Alternative 3 focuses more dense and concentrated growth within the "activity centers" (i.e., Port Manatee area, Parrish, Lakewood Ranch, and Manatee Fruit/IMG area) that have developed in recent years but at higher densities in these areas.

As previously mentioned, the Metropolitan Planning Organization's 2035 Long Range Transportation Plan provided the base population projections. Historically, population projects change from year to year. For example, the population projections for the year 2035 have varied tremendously over the past decade. For the purposes of this study, staff utilized higher population projects than what is currently projected. This is due to the high degree of variability associated with projections, but also to identify future infrastructure issues earlier and plan for a worst case scenario or best case scenario, depending upon the perspective taken.

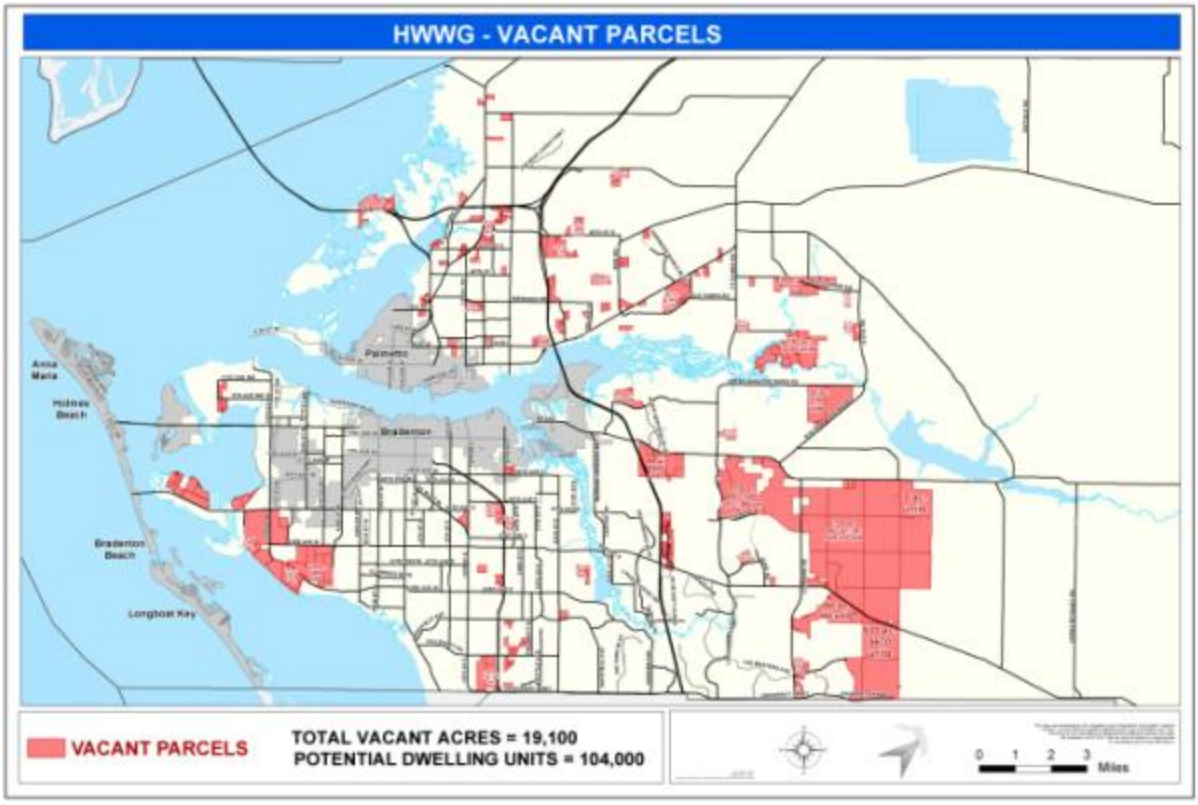
Growth Assumptions

The following is a discussion of the three alternatives and what impacts they may have to specific infrastructure types. The following are common overall assumptions made with the projections, such as:

- Utilized development projects currently approved, entitled or in the Concurrency Reservation System.
- Utilized ending development (currently under review), and assumes future development of pending projects but with longer buildout timeframes.

- Some approved and pending projects were purged due to the unlikelihood of development.
- Projects weighted by size of property, density, proximity to existing services and off-site mitigation requirements (reflects per unit cost of infrastructure).
- Developable but unentitled vacant properties were included in each alternative that meet the following criteria (see map):
    - Minimum 5 acres – 10 acres in size (depending upon Alternative).
    - Fronts functionally classified roadway.
    - Fronts existing water and sewer infrastructure.

The three alternatives also have their own unique set of assumptions which are discussed by each alternative type.



Land development projects typically have an expiration date. If they do not build before their expiration date, their entitlements expire and they would have to start the development review and entitlement application process over again to develop. When the County approves a project, it typically reserves capacity in the infrastructure it provides. The County places a time

limit on the approval of the development of that project so the County isn't reserving capacity for that project for water, sewer, roadway, and parks infrastructure indefinitely.

For the purposes of this exercise, projects with land development entitlements are being extended through the years. This is a reasonable assumption based upon the time length larger projects take to completely build-out. In addition, in past years the legislature has extended entitlements.

As mentioned, the growth projections for this exercise are higher than currently estimated. This is to test the infrastructure and identify weaknesses and future areas of concern. This allows the County to identify infrastructure issues in areas where development applications may have been infrequent. It also brings development consideration to properties that may be more likely to develop if other changes to utility extension policy, land use regulations and other incentives are introduced.

Demographic Trend Assumptions

The future population of Manatee County will be different than it is today in terms of demographics. Demographic trends have indicated substantial differences in wants, needs and desires that related to where the Baby Boomers, Generation Xers and Millennials will want to live and how. It also includes information on assumptions made with the projections that are consistent with published and generally accepted trends being seen now:

- Decrease in households with children/families.
- Greater interest in smaller residences.
- Increase in demand for rental properties.
- More interest in walkable communities.

Entitlement Assumptions

This study makes assumptions for growth under the three alternatives. Many of the assumptions change the rate of growth of current projects and may even assume some projects cease to exist. These assumptions are based upon existing and projected future business and market conditions. These projections are referenced throughout this report. These assumptions are for the purposes of this study only. Future entitlements may be affected by this study via future changes to the County's land development regulations.

Housing Assumptions

On a larger scale, the type of housing product can have a dramatic effect on the use of County infrastructure. Typical types of housing products include single-family and multi-family products.

Both single-family and multi-family come in a variety of specific types. For example, for single-family there is an attached product, a semi-attached product and a detached product. There are major differences (nationally recognized) associated with the different housing products in terms of how they impact infrastructure and services, such as:

- Vehicle trip generation.
- Solid waste generation.
- Water and sewer usage.

In order to provide a higher degree of accuracy with the analysis, the following assumptions have been made as to percentages of single-family versus multi-family housing development for the future population projections to 2035:

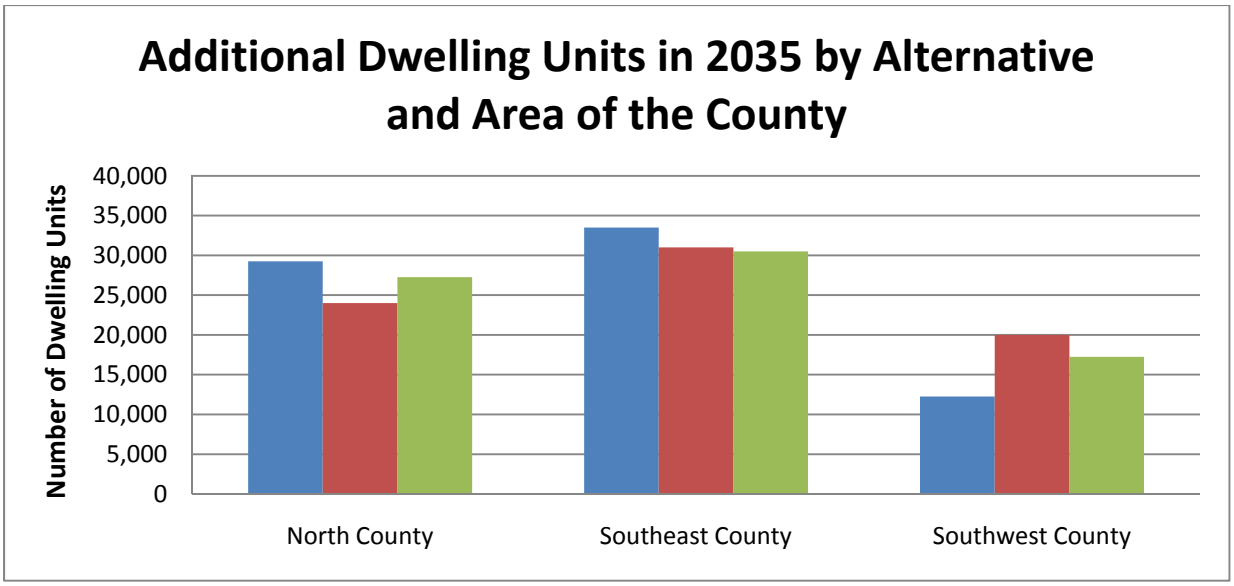
- Alternative 1 - 5% of new dwelling units were estimated as multi-family.
- Alternative 2 - 33% of new dwelling units were estimated as multi-family.
- Alternative 3 - 10% of new dwelling units were estimated as multi-family.

For school facilities, student generation rates also vary by type of single-family unit (i.e., single-family attached, single-family detached, etc.).

Population Projections for Alternatives 1-3

The population projections are detailed and vary by county population subarea, and even by alternative. Some of the services analyzed, such as utilities, schools, and solid waste, utilized a more detailed analysis as key data was already in existence.

Some services did not have as much detailed data available. In order to simplify the data collection and analysis, the population projections were smoothed. The distribution of the population still varies by sewer district, but keeps the total future population the same among the three different alternatives. Varying the population by sewer district illustrates the difference between the various alternative as the following chart illustrates.



The future population projection (75,000 dwelling units/165,000 persons by 2035) is almost twice the current projections from the Long Range Transportation Plan (LRTP) of 38,000 dwelling units/83,600 persons.

Alternative 1 –Staying the Course

This alternative maintains the core philosophies of the current Comprehensive Plan and Land Development Code. There are some proposed changes, but they are mostly incremental in nature.

- Recognizing mixed use development.
- Transit oriented development.
- Greater building heights are acceptable in certain areas.

These areas are already generally encouraged in the current Comprehensive Plan, but not reflected in the Land Development Code. These areas of density include those areas with existing higher maximum densities per the Future Land Use Map, such as those locations in Southwest County, and those locations at the intersection of major roads and around the interstate interchanges where higher residential densities, mixed uses and non-residential uses are encouraged.

It would also consider increasing the variety of uses in the developing areas to decrease travel times. Generally, this would continue low density single land use projects primarily in residential in nature.

Land Use Planning

The County has made substantial investments into redevelopment efforts (e.g., 14th Street Community Redevelopment Area, South County Community Redevelopment Area, etc), which should continue. However, adoption of an encouragement zone philosophy similar to the Port Encouragement Zone is suggested to provide more certainty in redevelopment without the expense of developers doing full-scale engineering prior to public hearings.

It is not clear in the current land development regulations that mixed use development is an allowable or encouraged use. This needs more clarification and how compatibility issues and transitions to traditional residential will be handled. Allowing more height in areas of the county along the interstates and other areas consistent with the Council of Government's *Community Character and Compatibility Study* should be accomplished to ensure the community has plenty of opportunity for hotel and other types of economic development.

The land development regulations currently provide the opportunity for non-residential development to occur generally within 1,500 feet of an existing intersection of major roads, known as a "commercial node". There is a perception, from previous Boards, that these nodes limited opportunities in the developing areas of the county. They need to be utilized to a greater extent and intensity to allow more opportunities for goods, services, employment and also for concentrated higher density residential development.

In addition, there are in some locations of the county many miles between nodes, putting new residential subdivisions adjacent to arterial roadways. In these locations, mid-block non-residential development should be encouraged to provide a better transition of uses from the roadways and buffer residents from high traffic areas.

Development Expectations

Under this scenario, the assumption is that growth will continue as planned by the current entitlements granted (see previous Development Projects/Concurrency Map). They might not occur during their entitlement period, but are likely to be developed at some point in future. Based upon past trends, development has occurred in areas regardless of availability or proximity of utilities and services. This alternative makes some new recommendations in the summary to address that issue.

The population projection for Alternative 1 brings approximately 75,000 more dwelling units by 2035 and incorporates approved yet un-built projects and makes assumptions on what currently vacant properties with existing water, sewer and roadway access may be more likely to develop if utility extension policy/criteria are implemented. It also focuses most of the future growth to Southeast County, the area east of I-75 and south of the Manatee River.

The projections also take into account large vacant properties that are owned by developers with the resources and momentum to develop, such as Schroder-Manatee Ranch (Lakewood Ranch) and Manatee Fruit Company in Southwest County. For the purposes of this study, some approved projects were purged due to the likelihood of development being very low due to their size, proximity to existing services and mitigation requirements versus size and scale of project.

The projections increase the rate of growth now until 2035, to approximately 3,000 dwelling units per year over a 25 year period. The projections reflect a peaking development trend in 2025, are generally consistent with baby boomer retirement trends. Between 2005 and 2011, there are approximately 1,900 dwelling units approved/entitled per year and 1,800 dwelling units constructed per year. So the 2,900 units constructed is a higher average, but not unheard of in comparison to past boom years. The purpose of using higher projections is also to test the infrastructure, identify weaknesses and areas of concern.

ALT 1 2035 Growth Projections

	SW County Sewer District (dwelling units)	N County Sewer District (dwelling units)	SE County Sewer District (dwelling units)	Unincorporated Sewer Service Area Total (dwelling units)
ALT 1 Growth Projection	12,250	29,250	33,500	**75,000**

Notes: ALT 1 projection has assumptions as to what developments may change, go away or get built sooner. Numbers vary slightly from projections when broken out by development sites, years and by sewer districts. Above does not reflect areas outside of sewer services (e.g., Myakka, Duette, etc.).

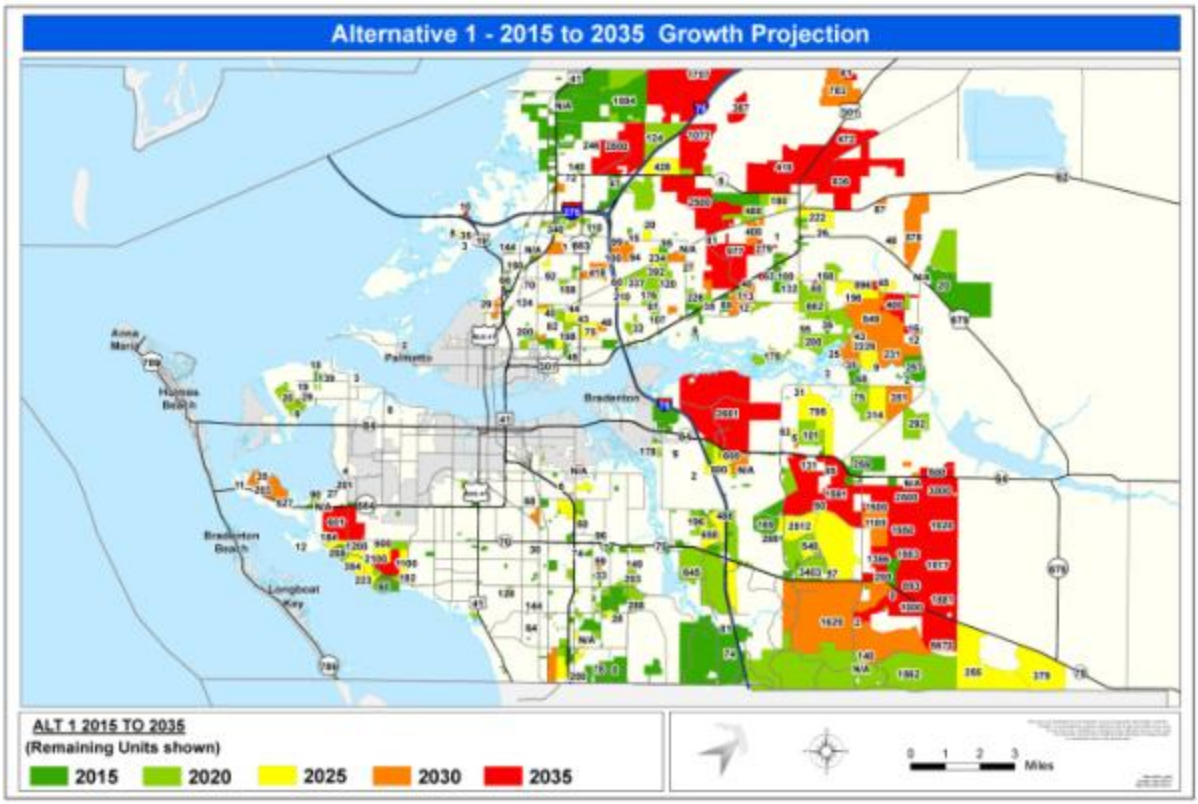
Using the previous table, it illustrates that this would likely entail all the approved and pending projects in the Concurrency Reservations System coming to fruition, in addition to a number of "developable" parcels being developed at 33-50% their maximum density, which is higher than would typically be developed. The "developable" parcels are those identified as vacant parcels, greater than 10 acres in size and located along a functionally classified roadway as illustrated in the previous Vacant Properties Map.

The following map, Alternative 1 – 2015 to 2035 North County illustrates the estimated buildout timeframe for various projects in the Concurrency Reservation System and some currently vacant properties that lend themselves to development. Again, these vacant properties were chosen due to their proximity to existing water and sewer infrastructure, being next to a functionally classified roadway and size of the parcel.

Assumptions affecting timeframe of development include proximity of utilities and momentum of developers with large entitlements and properties (i.e., Schroder-Manatee Ranch, etc)

weighted versus smaller developers/builders with projects farther away from infrastructure. Some projects have entitlements for housing products that are not currently marketable or located far enough away from infrastructure with a limited number of entitled units making the financial viability of the project unrealistic. Many of these projects that are approved and within the Concurrency Reservation System have entitlements that can expire. However, State legislation in past years during the recession has extended these timeframes. It is also assumed that the property owners will continue their development interests in the subject property to future years, even if the market does not warrant it today.

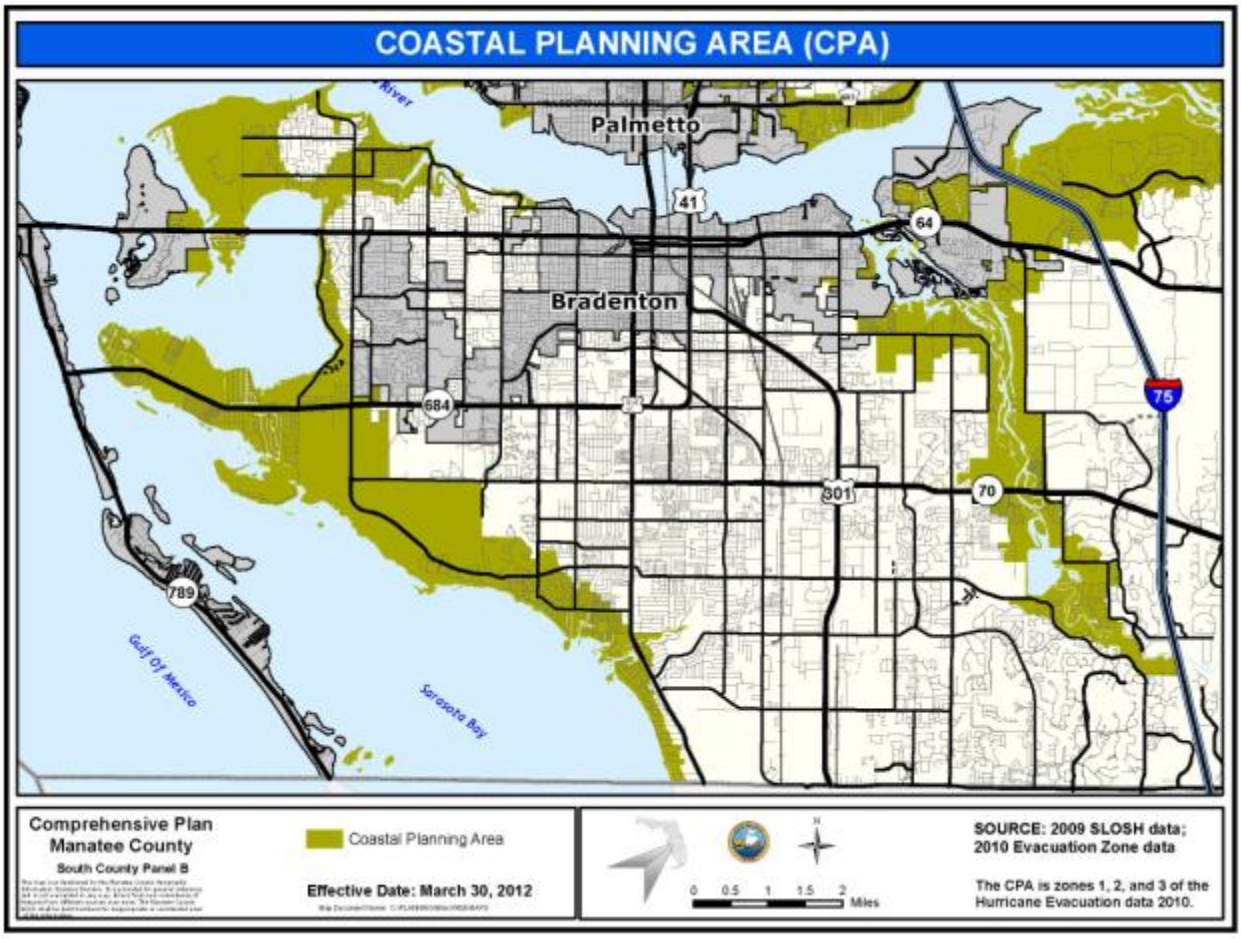
The dates on the map reflect expected build-out timeframes, but development could begin at any time for many of these projects. Portions of larger parcels may develop sooner, leaving other portions to develop in later years. For example, many larger parcels develop with residential first, and then commercial/retail/services come in later years once enough residences are present to support the non-residential uses. Tara (SW corner of I-75 and SR 70) is a good example of a project starting in the 1980's yet is still under development.



Coastal Planning Area

The Coastal Planning Area is a special concern to the County. This area is below the elevation of the Category C storm surge as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model prepared by the State of Florida. These

areas are subject to higher degrees of damage from wind and water during a tropical storm or hurricane. The area limits specific land uses inside it and the Coastal Evacuation Area (Category A and below) limits increases in density beyond the current Comprehensive Plan's Future Land Use Map.



The Future Land Use Map, when it was adopted in 1989, established some higher densities that are now located in the Coastal Planning Area. Existing and established development in some of these areas are much less than the allowable maximum densities established by the Comprehensive Plan's Future Land Use Map. For example, the Bayshore Gardens area of Southwest County has a Future Land Use Map designation of RES-6 and RES-16 in parts. What is actually built is about 3 dwelling units per acre and is not likely to be redeveloped, as it is an established neighborhood. Manatee County currently has adequate shelter capacity and meets evacuation time goals in the event of any hurricane event.[22]

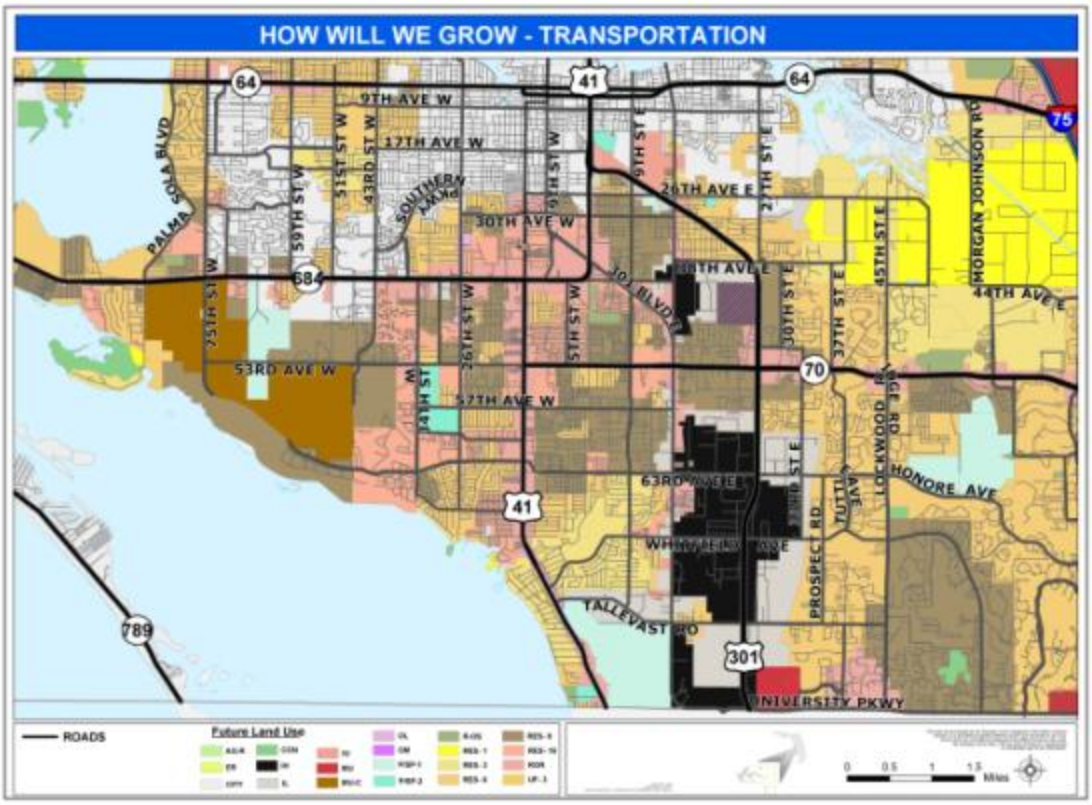
[22] *2010 Statewide Regional Evacuation Study for the Tampa Bay Region*, Florida Department of Emergency Management and Tampa Bay Regional Planning Council, accessed via http://www.tbrpc.org/tampabaydisaster/, accessed December 28, 2012.

Future redevelopment of these areas with higher densities may create hurricane evacuation issues. Manatee County may consider amendments to the Future Land Use Map to bring the designation of existing development more consistent with what is constructed and platted. However, there are many areas that lend themselves to redevelopment consistent with the higher densities on the Future Land Use Map. These areas will likely remain with their existing designations. Sea level rise modeling is being performed by NOAA. Mote Marine noted impacts to storm surge and hurricane evacuation planning. Monitoring will continue by staff on research of this issue by NOAA and other agencies.

Alternative 2 - Southwest County Focus

Southwest County is part of the "Urban Core" as defined by the Comprehensive Plan. It includes most of the unincorporated area south of the Manatee River but only extends east to the CSX rail line. Alternative 2 focuses on all unincorporated lands south of the Manatee River and west of Interstate 75. The goal of this alternative is to place 60% of the 2035 future population growth into the Southwest County. This includes areas 10 and 11 on the Population Sub-Area map (see appendix). This area has the following attributes:

- Broad range of housing types and values
- Bulk of population
- Commercial strip development
- Employment base
- Existing developed areas
- Existing schools
- Existing services
- Grid roadway system
- Shopping and entertainment
- Some neighborhoods at end of lifecycle
- Transit service
- Waterfront



For this Alternative, the future population focus area falls mostly within Manatee Fruit Company property. Alternatively, the US 41 corridor has been the focus of the County for development and redevelopment opportunities for many years. There are hundreds of acres of property within ¼ mile of US 41 that are underdeveloped both residentially and non-residentially. Meaning, current development densities are less than the Future Land Use Map allows, creating an entitlement for more intense uses over a very large area of Southwest County (e.g., Plan allows 9 dwelling units per acre, but developed and platted at only 2-3 dwelling units per acre). Crime and the perception of crime also affect property values and the viability of many commercial businesses in the area.

New development gravitates towards larger undeveloped properties known as “greenfields”. These properties typically at the edge of developed areas because of less expensive land costs; ownership and development patterns are conducive to large-scale master planned developments; local regulations are favorable; and the public is willing to accept it, at least to some extent. Still others argue for a balance that directs much of the new demand to urban areas and the rest into greenfields in a more urban-like configuration.[23]

Little development has occurred in the area in comparison to growth areas in North and Southeast County. Areas of Southwest County also lend themselves to redevelopment with greater densities. This is due to the existing grid system of roadways, existing water and sewer systems, and school capacities in the area and other existing services in the area. Other studies have pointed out that walkable mixed use developments with increased density along with enhanced transit and a multi-modal transportation infrastructure would help incentivize redevelopment. This may be especially true if transportation impacts associated with this type of development could be addressed with transit, walkability and an urban-oriented level of service standard.

Land Use Planning

Originally, this alternative was envisioned to focus future population growth but more focused to the US 41 and US 301 area of Southwest County specifically. While this would be ideal for redevelopment, this is a difficult option for many reasons:

- Southwest area of county not completely built out.
- Low market activity – not many developers investing in the area.
- Lands of a sizeable acreage in US 41 vicinity would require redevelopment of existing properties or property assembly.
- Lands in US 301 corridor intermixed with industrial properties making residential development undesirable.

[23] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.

- Focusing 60% of future development could limit development and future entitlements in other growing parts of the county.
- Requires accelerated infrastructure investment and upsizing from County due to aging infrastructure in Southwest County.
- Other larger and undeveloped lands in Southwest County (i.e., Manatee Fruit Company) that market will likely dictate developing next.

Ironically, the expected 2035 population for this area can be reached with the existing projects in the Concurrency Reservation System. This is due to low population growth in the area in recent years.

In other communities, redevelopment did not occur at a large scale until the communities were largely built-out. Pinellas County, FL is a good example of this as redevelopment is underway in communities where there is little vacant land left to develop.

The Manatee Fruit Company amended its Future Land Use Map designations in 2010 and added some mixed use areas and concentrated the densities at major roadway intersections. In 2012, Manatee Fruit Company sold land to IMG Academies for the expansion of the athletic training facilities and dormitories. A more realistic scenario is to trend existing concurrency projects and developable vacant parcels in the developed areas (i.e., Manatee Fruit Company, etc.) instead of focusing on massive redevelopment of Southwest County, which is less realistic.

Redevelopment and greenfield development have different cost considerations. Redevelopment may have remediation, assembly of a viable site (purchasing numerous small properties instead of one large property), and lengthy permitting processes, demolition of obsolete structures and infrastructure, and site retrofitting for new infrastructure. Redevelopment may also have neighborhood opposition, requiring time and money investment to overcome opposition or modify the site design to achieve a compromise. Redevelopment costs can be two and a half times that of an equivalent greenfield project. Therefore, it must generate a resale or rental value that is two and a half times greater, usually making redevelopment unfeasible unless high profit land uses such as retail or high-end residential are involved.[24]

High-end coastal residential properties can have some of the highest returns on investment. There are many properties in this area of the county that may be able to see Sarasota Bay or the Gulf of Mexico, if greater variability was allowed with building heights. The ability to see major water bodies can be a real estate game changer for some properties.

[24] *Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community*, November 2005.

To facilitate Alternative 2, the following would have to be addressed:

- Eliminate Comprehensive Plan barriers to achieving greater densities to increase infrastructure efficiencies.[25]
    - Amend Special Approval requirements in Comprehensive Plan.
    - Amend level of service standards to support more urban-like infrastructure.
- Consider amendments to Future Land Use Categories at nodes to allow Retail Office Residential Future Land Use or Mixed Use Community categories to permit more intense development to better serve surrounding area with services with greater densities and variety of uses.
- Remove barriers to mixed uses, along with a mixture of building types, supported by pedestrian-friendly, walkable communities along transit routes.
- Consider greater building heights not only in areas consistent with the Council of Government's *Community Character and Compatibility Study*, but other areas along US 41, commercial corridors, intersections, Interstate interchanges, etc.
    - Better clarify mixed uses and allow them consistent with above.
- Consider resort hotel development to expand economic development opportunities.
- Consider adoption of "Port Encouragement Zone" philosophy to commercial corridors, major intersections and interstate interchanges.

Coastal Planning Area

As stated in Alternative 1, the Coastal Planning Area is a special concern to the County. These areas are subject to higher degrees of damage from wind and water during a tropical storm or hurricane.

Manatee County currently has adequate shelters and meets evacuation time goals in the event of any hurricane, but locating more residential uses in vulnerable areas is of concern. Future redevelopment of these areas with higher densities may create hurricane evacuation issues. Manatee County may consider in the future bringing forward amendments to the Future Land Use Map to re-designate established residential areas more consistent with what is constructed and platted. However, there are also many areas that lend themselves to redevelopment at greater densities than exist today but within the established designation.

[25] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.

Manatee County may also consider bringing forward amendments to the Comprehensive Plan that would allow the transfer of excess density out of the established areas in the Coastal High Hazard Area to other areas of the county that are outside of these coastal areas.

Development Expectations

For Alternative 2, growth projections bring approximately 75,000 more dwelling units county-wide by 2035. For Southwest County; this means approximately 20,000 dwelling units over the 25 year period. Between 2005 and 2011, there are approximately 1,900 dwelling units approved/entitled per year and 1,800 dwelling units constructed per year county-wide. This would bring approximately 800 units constructed per year to Southwest County. Many of these dwelling units are from Manatee Fruit Company properties developing consistent with their recent Future Land Use Map amendments.

Alternative 2 2035 Growth Projections

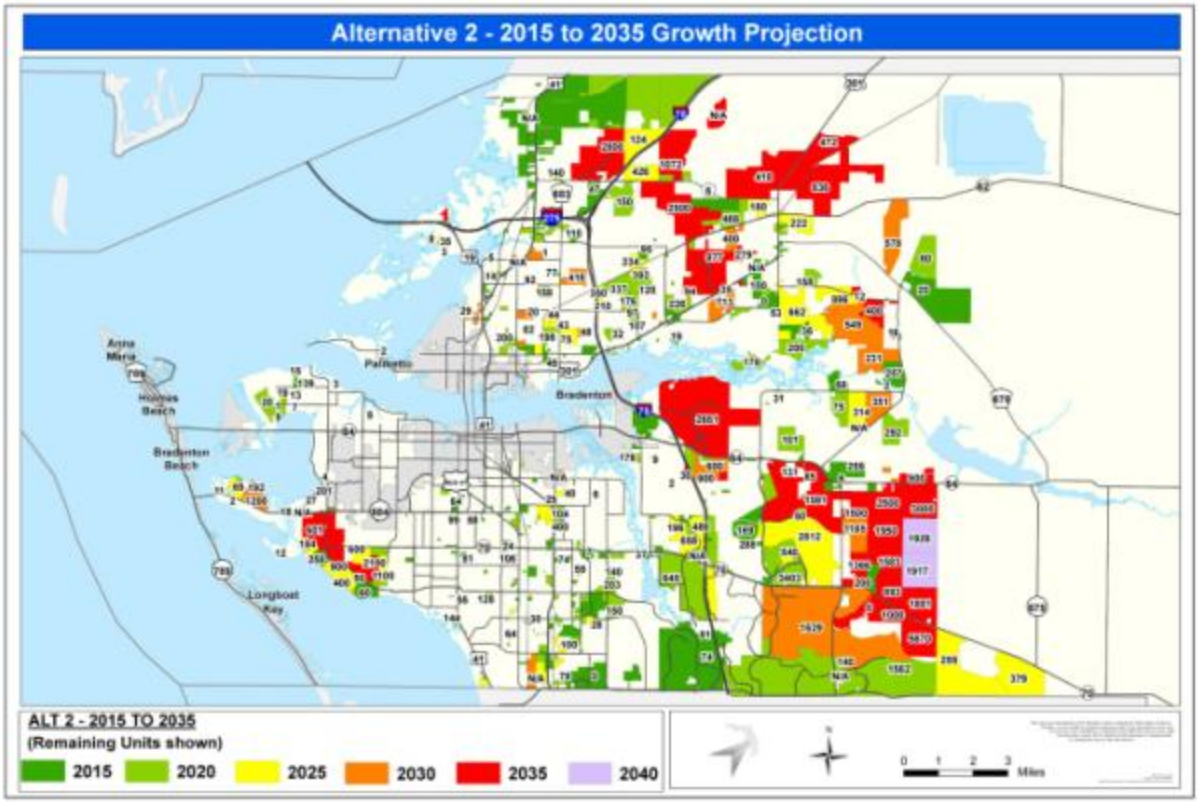
	SW County Sewer District (dwelling units)	N County Sewer District (dwelling units)	SE County Sewer District (dwelling units)	Unincorporated Sewer Service Area Total (dwelling units)
ALT 2 Growth Projection	20,000	24,000	31,000	75,000

Notes: ALT 2 projections have assumptions as to what developments may change, go away or get built sooner. Numbers vary slightly from projections when broken out by development sites, years and by sewer districts. Above does not reflect areas outside of sewer services (e.g., Myakka, Duette, etc.).

Many of the mobile home parks have become problematic in this area of the county in the past decade. Age of infrastructure, housing and increases in the number of residents beyond what was originally intended are contributing factors to these blighted communities. Redevelopment of mobile home parks was analyzed, but due to existing high numbers of residents in the parks, no net gain in population occurred. Recognizing the issues associated with higher numbers of persons living in these dwelling units than most other types of dwelling units, Manatee County should consider other incentives for development of these properties. However, the County must be sensitive to Ch. 723.083 *Florida Statutes*, which requires local government to determine if adequate mobile home parks or other suitable facilities exist for the relocation of the mobile home owners prior to any redevelopment approval of a mobile home park. No

official action of Manatee County is being proposed with this report which would result in the removal or relocation of mobile home park owners.

The development of Manatee Fruit Company and area properties may have a “trickle-down effect” economically to the county and will bring more investment to the US 301 and US 41 corridors. The University of South Florida has a new campus master plan, which will bring more housing to the campus which was included in the analysis. Only one active existing large scale project, the Sarasota-Bradenton International Airport Development of Regional Impact, is located in Southwest County but is primarily non-residential in nature.



Based on the assumptions, the following, illustrates the estimated build-out timeframe for various projects in the Concurrency Reservation System and some currently vacant properties that lend themselves to development. These vacant properties were chosen due to their proximity to existing water and sewer infrastructure, being next to a functionally classified roadway and size of the parcel. Assumptions effecting timeframe of development include:

- Approximately 60% of future population directed to Southwest County and impact to development of projects county-wide with existing entitlements.
- Proximity of utilities and momentum of developers with large entitlements and properties (i.e., Schroder-Manatee Ranch, etc) weighted versus smaller developers/builders with projects farther away from infrastructure.

- Some projects have entitlements for housing products that are not currently marketable or located far enough away from infrastructure with a limited number of entitled units making the financial viability of the project unrealistic.

Alternative 3 – Activity Centers

The current Comprehensive Plan and Land Development Code are setup to provide County services to a large geographic area, inside the Future Development Area Boundary (all lands west of Lake Manatee). This requires significant investment in terms of infrastructure. If growth were more focused, County services could be applied in a more efficient manner. This can be achieved through the adoption/implementation of activity centers.

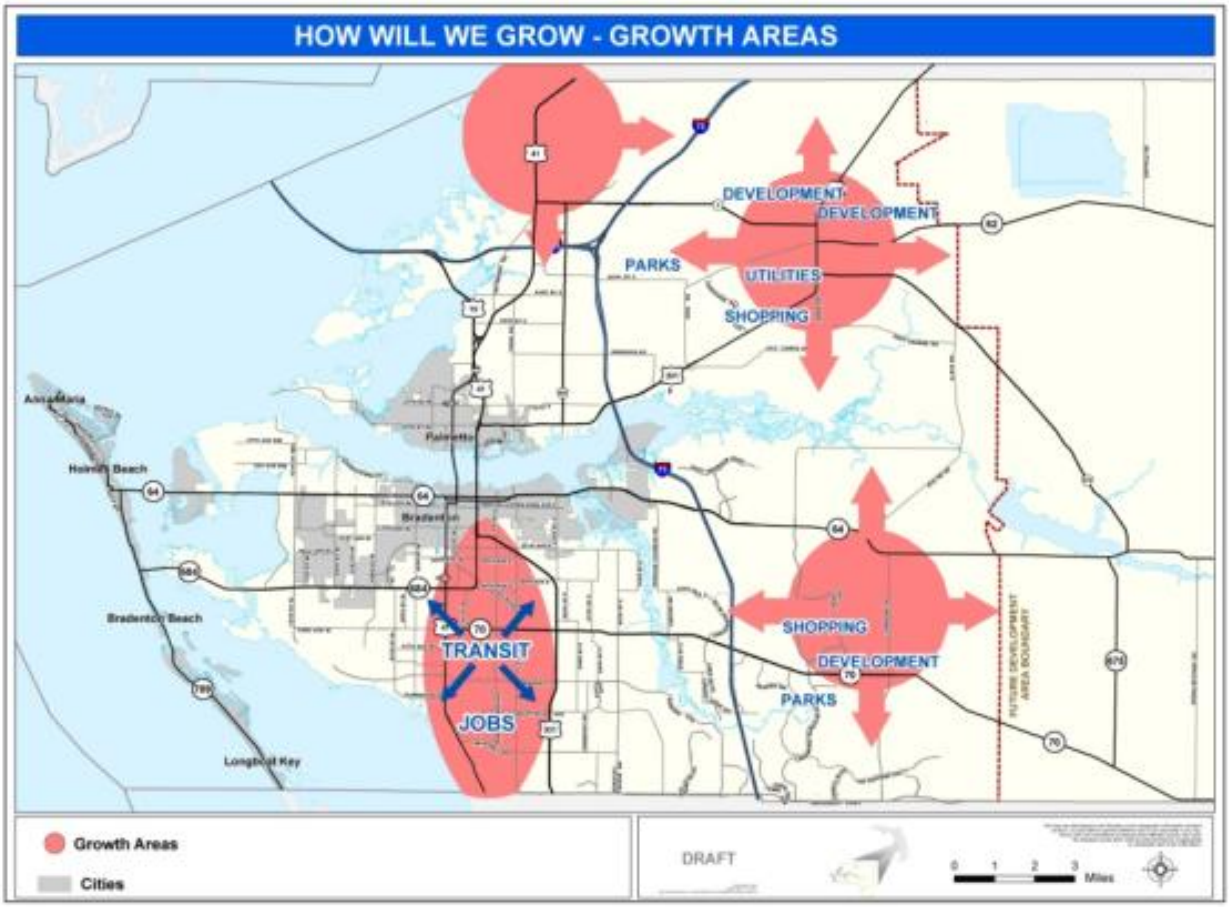
The goal of activity centers would be to share the benefits of more efficient service delivery to the developers and future businesses and residents of those areas. These areas would promote a mix of uses, employment opportunities, focus County resources and Capital Improvement Projects and allow necessary services to create a more livable community.

Activity centers are nodes of exchange located near large residential areas. Exchanges may include residential, commercial and retail, and employment, depending on the location. Activity centers are places that attract people from a wide area for specific purposes such as education, shopping, government, public gatherings, entertainment, employment and health care. They typically have more mixed uses, both horizontally and vertically integrated, density and taller building heights. The intent is to be able to have greater variety of uses within a short walk, bike, auto trip or transit ride. Therefore, the land use patterns are typically more urban than suburban design in nature. “Mixed-use center” is a term often used interchangeably with activity center, but mixed-use centers usually mean more types of residential units and uses.

Where & What Are the Activity Centers?

Based upon previous studies, citizen comments and Board interest, the following areas have been discussed as the four major growth and focus areas (as illustrated in the following early map of activity centers):

- Parrish
- Port area
- US 41 corridor
- Lakewood Ranch



Land Use Planning

Activity centers may be any of the following (based upon size, scale, density, etc.):

- Intense Activity Centers where residential, commercial, industrial, research/development, hotel, civic/public uses, trails, and supporting infrastructure will occur.
- Moderately intense Activity Centers where residential, commercial, hotel, civic/public uses, trails, and supporting infrastructure will occur.
- Neighborhood serving Activity Centers where commercial and professional services and supporting infrastructure will occur.
- Residential areas that will include a variety of residential products and intensities and residential support uses such as churches and active and passive recreational open space areas.

Activity centers would create new employment opportunities to serve the nearby residential neighborhoods. Providing employment opportunities and commercial services proximate to the residential communities not only adds convenience and desirability, but more importantly reduces the frequency and length of vehicle trips which helps extend the capacity of road infrastructure saving taxpayers from more immediate capital improvements. A good example of larger scale activity centers would be the downtowns for the Cities of Bradenton and Palmetto.

The approach would be similar to other communities utilizing an urban service area strategy. This would provide fees or incentives pro-rated based upon the location. If a proposed development is inside a designated activity centers it would receive the most incentives. Projects may still be approved if they are outside incentive areas, but may be more expensive to develop in those locations. Manatee County would have to develop a detailed plan for each of these areas to ensure adequate capacities are available at the time and consistent with development time frames.

To facilitate Alternative 3, the following would have to be addressed:

- Eliminate Comprehensive Plan barriers to achieving greater densities to increase infrastructure efficiencies.[26]
- Consider amendments to Future Land Use Categories at nodes to allow Retail Office Residential or Mixed Use Community categories to permit more intense development to better serve surrounding area with services.

[26] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.

- Remove barriers to mixed use, along with a mixture of building types, supported by pedestrian-friendly, walkable communities along transit routes.
- Consider greater building heights consistent with the activity centers map.
- Better clarify mixed uses and allow them consistent with above.
- Consider resort hotel development to expand economic development opportunities.
- Consider incentives for redevelopment of mobile home parks due to issues associated with crime, living conditions and storm resiliency.
- Take into consideration Coastal High Hazard Area, Coastal Evacuation Area and Sea-Level Rise planning with decision making.
- Consider adoption of "Port Encouragement Zone" philosophy to commercial corridors, major intersections and interstate interchanges.

Coastal Planning Area

As stated in the previous alternatives, the Coastal Planning Area is a special concern to the County. These areas are subject to higher degrees of damage from wind and water during a tropical storm or hurricane.

Manatee County may also consider bringing forward amendments to the Comprehensive Plan that would allow the transfer of excess density out of the established areas in the Coastal High Hazard Area to other areas of the county that are outside of these coastal areas, such as the activity centers.

Development Expectations

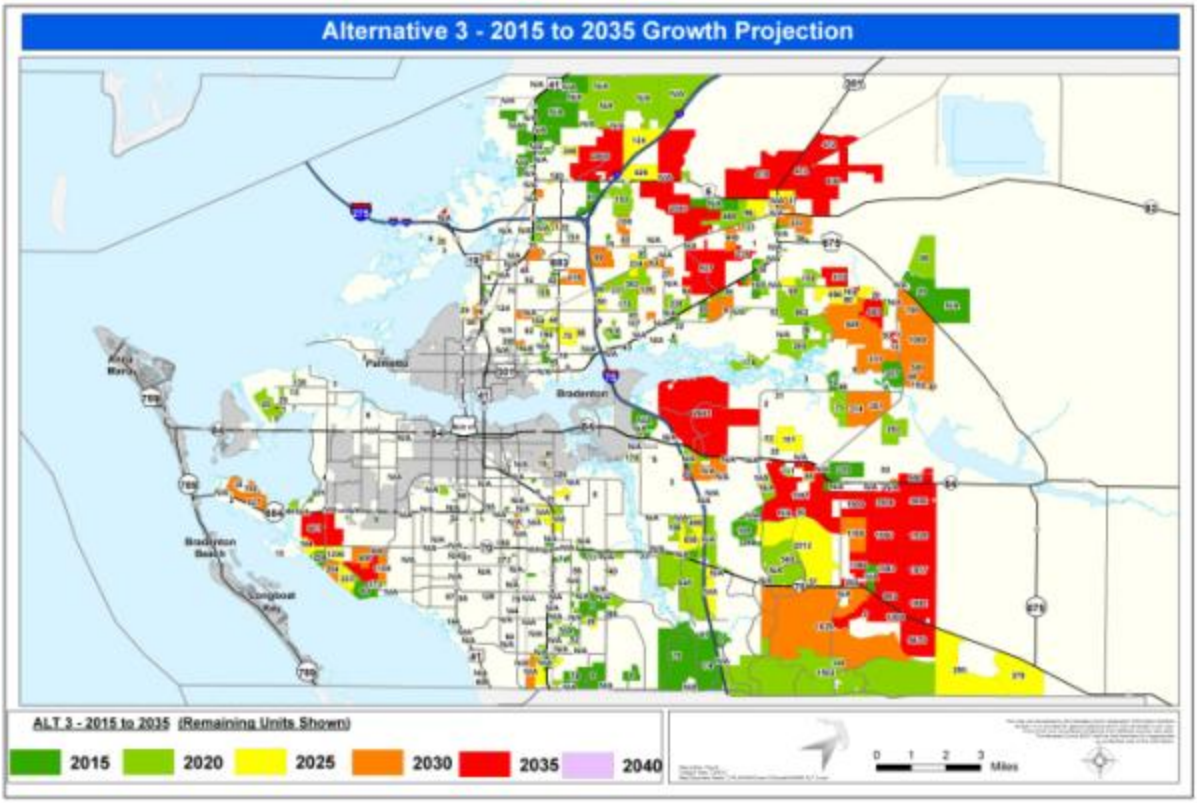
The following map, Alternative 3 – 2015 to 2035 illustrates the estimated buildout timeframe for various projects in the Concurrency Reservation System and some currently vacant properties that lend themselves to development. These vacant properties were chosen due to their proximity to existing water and sewer infrastructure, being next to a functionally classified roadway and size of the parcel. Assumptions effecting timeframe of development include:

- 60% of future population directed to Activity Centers and impact to development of projects county-wide with existing entitlements. This would add more predictability for the extension and provision of County services and for the development community.
- Proximity of utilities and momentum of developers with large entitlements and properties (i.e., Schroder-Manatee Ranch, etc) weighted versus smaller developers/builders with projects farther away from infrastructure/activity centers.

Some projects have entitlements for housing products that are not currently marketable or located far enough away from infrastructure with a limited number of entitled units making the financial viability of the project unrealistic.

For Alternative 3, growth projections bring approximately 75,000 more dwelling units county-wide by 2035. For the activity centers; this means approximately 34,800 dwelling units over the 25 year period.

Alternative 3 - 2035 Growth Projections				
	SW County Sewer District (dwelling units)	**N County Sewer District (dwelling units)**	**SE County Sewer District (dwelling units)**	**Unincorporated Sewer Service Area Total (dwelling units)**
ALT 3 Growth Projection	17,250	27,250	30,500	75,000
Concentrations Estimated for Activity Centers	3,853	6,604 Port 10,941 Parrish	13,402 LW Ranch	34,800
Notes: ALT 3 projections have assumptions as to what developments may change, go away or get built sooner. Numbers vary slightly from projections when broken out by development sites, years and by sewer districts. Above does not reflect areas outside of sewer services (e.g., Myakka, Duette, etc.).				



Land Use Planning – Activity Centers

The primary existing activity centers include the downtowns of Bradenton, Palmetto and beach communities, such as Bridge Street and Pine Avenue. The Village of Parrish area, Port Encouragement Zone, Manatee Fruit/IMG/US 41 area and Lakewood Ranch area are generally designated to be major activity centers. As indicated in the previous maps, activity center development will likely have various levels. As indicated in *Imagine Manatee*, stakeholders are generally supportive of activity center development along collector and arterial roads, at intersections, etc., which are generally proposed at the periphery or outside edges of existing residential communities. Future activity centers (i.e., Manatee Fruit Company, etc) are proposed to have more of a mix of uses within the entire property.

Parrish – Major Activity Center

The Parrish area naturally lends itself to being a future activity center. This is due to multiple arterial and collector roadways going through or ending near the Village of Parrish. Multiple studies (i.e., *Carrying Capacity Study, Community Character and Compatibility Study, Imagine Manatee, OneBay*, etc.) have cited Parrish as a future growth and activity center.

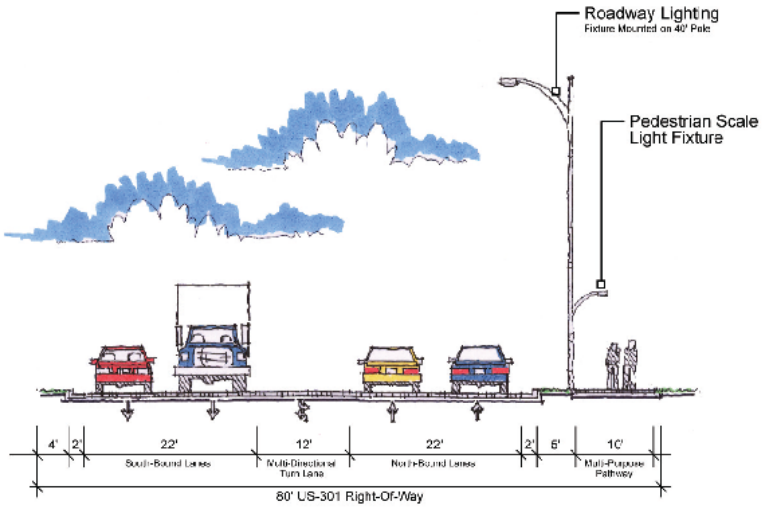
Alternative 3 projections forecast the Parrish area to develop from where existing water and sewer infrastructure is currently in place and to extend more towards the Village of Parrish. The properties northwest of the village that have land development entitlements will develop east towards the village and US 301. New projects are expected to develop from south of the village where water and sewer lines currently terminate and move north along US 301 through the village. Southeast of Parrish area along Golf Course Road, north to the village area, utilities will extend north and northwest with development projects to the village. This is a sound infrastructure extension plan, as long as adequate utility flows for public health, safety and welfare can be maintained and without exorbitant maintenance requirements by the County on new lines where adequate consumption of capacity is unavailable to maintain flows.

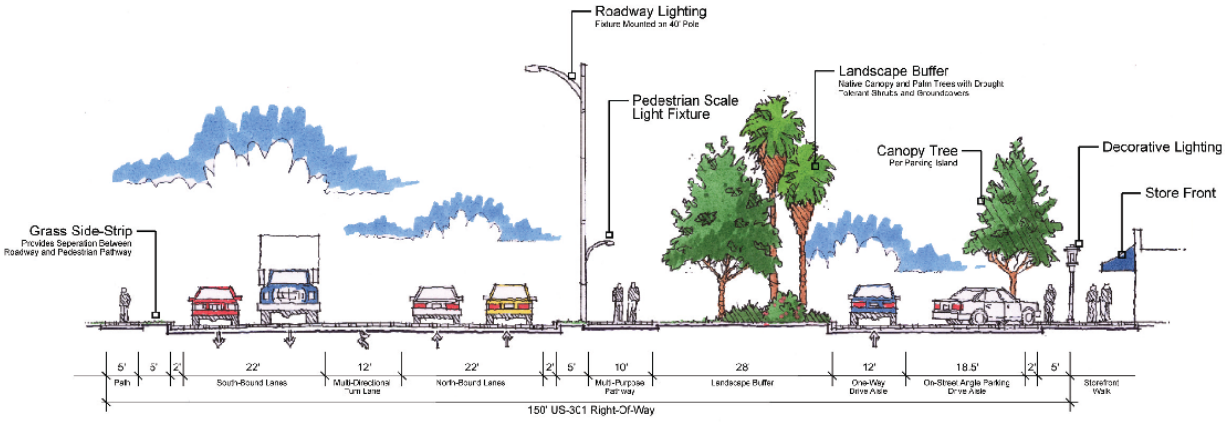
New development will also occur along the US 301 corridor in the village and on the east side of the corridor. The housing to the west of US 301 in the village will likely increase in value as the village develops consistent with its design criteria.

The County has provided an overlay district (North Central Overlay) to help mitigate the impact of suburban development on this area. The Parrish Civic Association and other residents are more receptive to growth in recent years to bring village-scale development to “Downtown Parrish.” Planning is necessary to ensure the activity center would be cost effective to serve with infrastructure. Outside of the village zoning district, these areas are inside the North Central Overlay District which may have policies opposing activity center designs as they are more low density suburban in nature.

This activity center will occur with the development of Parrish Center, Parrish Plantation, Morgan’s Glen and other associated properties at the intersection of Moccasin Wallow Road and US 301. Other properties along US 301 in the village and future neighborhood activity centers will provide the capability for development in a village and mixed use fashion. Key components of the activity center development will be maintaining connectivity of parking areas, streets and the prioritization of infrastructure facilitating pedestrian movements in this area.

Improvements to US 301 are scheduled by FDOT (2015), which will extend current developed cross section in Village (4 lane with center turn lane) south to CR 675. The Board of County Commissioners and the Parrish community were generally in favor of a frontage road concept, as illustrated below, that provides off-street parking and a more pedestrian oriented design for the village area.





Improvements may be required to SR 62, Moccasin Wallow Road, Erie Road and Ft Hamer road to facilitate trips in the activity center. To achieve true activity center status, amendments to existing land development entitlements may be required.

Port Encouragement Zone – Major Activity Center

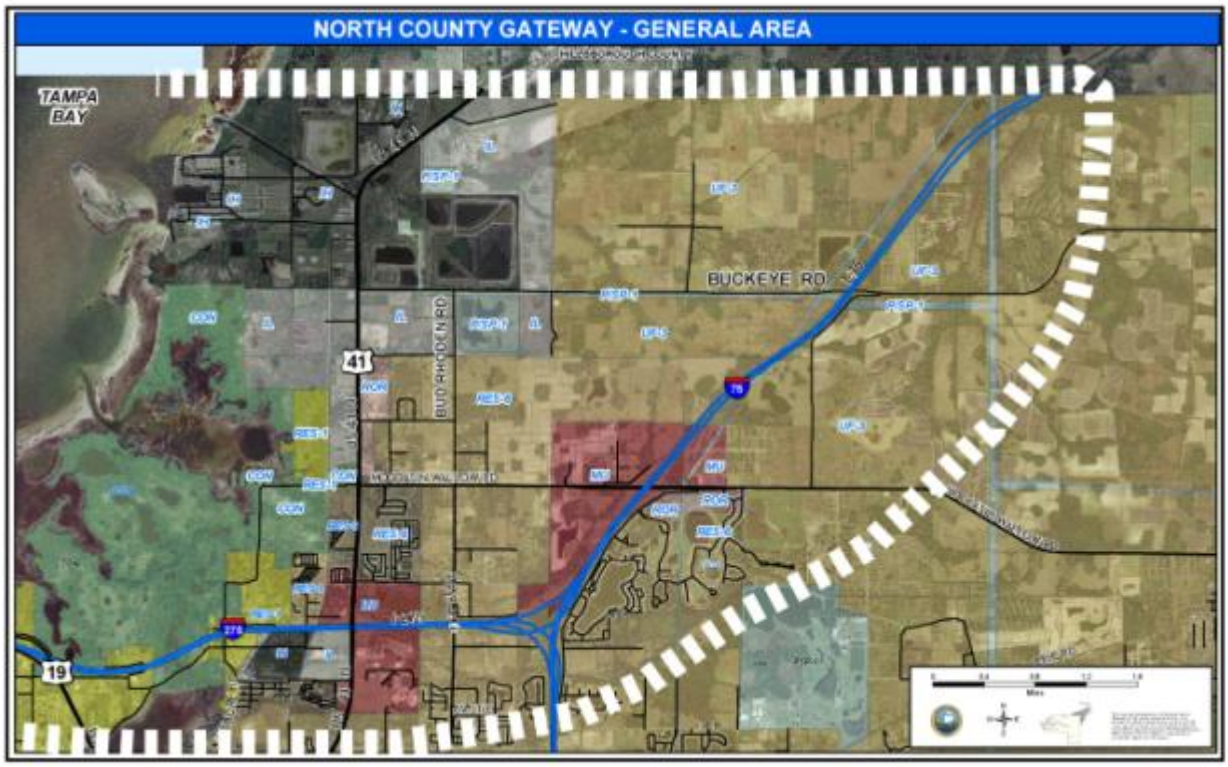
The Port area naturally lends itself to being an activity center. This is due to port related freight movements and area industries along an arterial roadway (US 41) that is in close proximity to I-75 and I-275.

The properties to the west of I-75 along the north side of Moccasin Wallow Road all have development entitlements that include typical low-density master planned residential communities. However, in 2009, Manatee County provided a dual entitlement for those properties to develop in a non-residential and Port-supporting fashion at the option of the

developer. Obviously, it is in the county's best economic interest for those properties to develop in a land use that is more Port-oriented than residential.

Projections for growth in this area were targeted mostly for non-residential development. However, entitlements were considered for the Gateway North (Artisan Lakes) Development and other properties to develop with a more residential/retail/office focus as previously approved.

Alternative 3 projections forecast the Port area to develop from where existing water and sewer infrastructure is currently in place along US 41. However, in recent years, capacities of the infrastructure (water and sewer) have come into question in the encouragement zone area. In 2012, Manatee County began studying the lines in the area that serve the Port to identify any immediate issues and make recommendations to correct deficiencies and increase capacity.



US 41 currently has available transportation capacity. FDOT is considering improvements to the intersection of US 41 and Moccasin Wallow Road. Improvements are also being considered for Moccasin Wallow Road, potentially widening the facility from US 41 to I-75. Buckeye Road is limited in its ability to handle improvements as it is encumbered by a major gas line, power transmission lines and the HRK gypsum stack on the western portion of the road. It also has no immediate ability for an interchange at I-75. Pursuing an interchange at that location would take many years of permitting with the US DOT/Federal Highway. Area developments (i.e., Sweetwater Preserve, Newport Isles, Curiosity Creek, Artisan Lakes, etc) have various levels of infrastructure and transportation improvement requirements that also need to be considered when planning future infrastructure improvements.

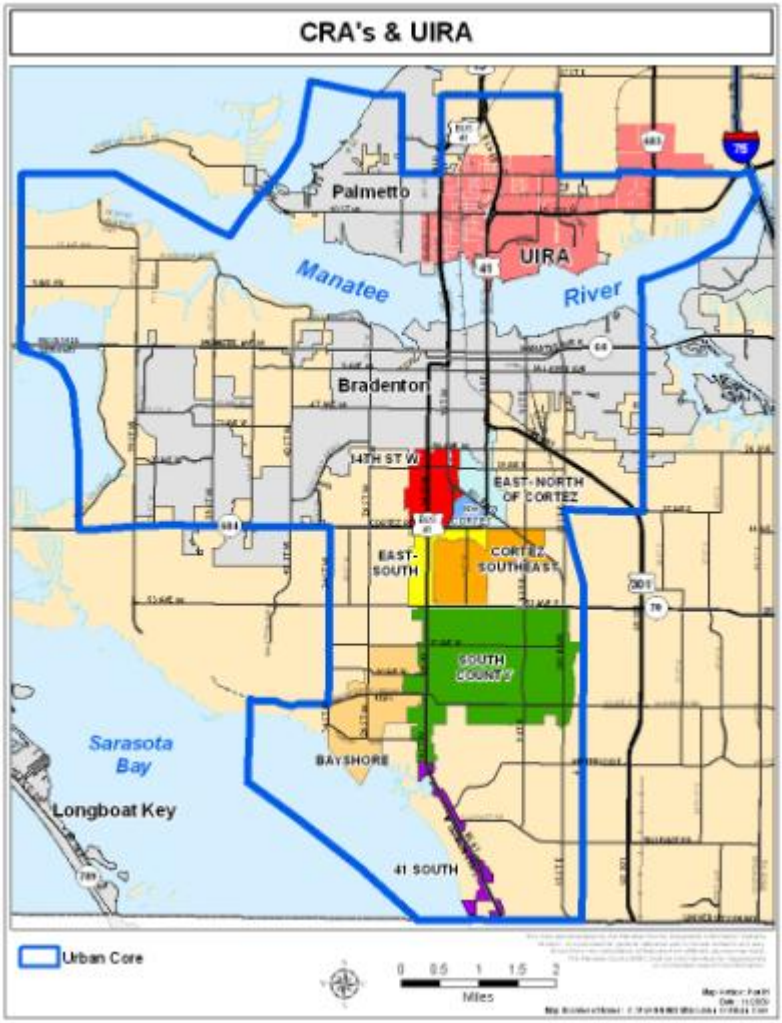
A “heavy haul route” to facilitate movement of bulk freight from the Port to sites east of US 41 will be a key component to the success of the Port. This route will facilitate the movement of bulkier and heavier freight than can normally be moved on public roads, across US 41 for distribution to DOT-spec loads and trucks.

Other Port-related development is projected to continue to occur in the Encouragement Zone and along the US 41 corridor. This includes US 41 south to the I-275 interchange and Gulfcoast Corporate Park and area non-residential lands.

Southwest County – Major Activity Center

There are many facets to activity center development in Southwest County. There are existing commercial corridors of Cortez Road, US 41 and SR 70. Infrastructure is existing in the majority of the area and is typically sized in the Utility Masterplan for much of the vacant properties to develop consistent with its neighboring development. It is more difficult to define one area as the primary activity center. However, this alternative will reflect the greenfield development of Manatee Fruit and IMG Academies expansion and the positive impacts to US 41 and other southwest areas.

"Target Areas" are established Community Redevelopment Areas (CRAs) and the designated Urban Infill and Redevelopment Area (UIRA), which have had County focus for redevelopment. These areas have great flexibility in terms of development opportunities. Mixed use, residential, office and employment centers are possible in these areas. While the DeSoto Square Mall is technically an existing activity center, it would also carry the same weight for redevelopment or expansion as a "Target Area". The County is dedicated to the success of that property. The site has ample parking and land areas to facilitate expansion of outparcel development or other additional development that would contribute economically to the area.



While the State College of Florida and IMG Academies area is technically an existing activity center, it would also carry the same weight for additional development and expansion as a "Target Area". The County is dedicated to the success of those organizations. The IMG site has been entitled and expansion is underway. The State College of Florida continues to grow and there is ample opportunities surrounding the college for the expansion of student housing and related uses. A key component in the college area will be infrastructure for

walking and cycling.

Like the State College of Florida area, the USF Sarasota Campus has a masterplan it will continue development of. There are opportunities surrounding the colleges for the expansion of student housing and related uses. A key component will be infrastructure supporting the connectivity of those uses by walking and cycling, and for USF, connectivity to the other schools such as Ringling College to the south.

Opportunities also exist with the continued development of the airport properties and area related industrial development. Recent developments in area hotel and related uses demonstrate the economic impact the airport has on the area.

A future activity center is proposed associated with the Manatee Fruit Company property, which will have its own requirements for area infrastructure improvements. Another future activity center is associated with the future 44th Avenue Corridor and the area west of US 301. This future activity center is envisioned to continue development as a major employment center.

Infrastructure improvements will likely focus on increasing opportunities for walking, cycling and transit. No major road improvements may be necessary in the immediate future, however additional traffic may warrant focus on the US 301 corridor through the downtowns. Infrastructure improvements will be focused to intersections. Build-out plans should be considered for intersections and pedestrian improvements along major corridors.

Lakewood Ranch – Major Activity Center

The Lakewood Ranch activity center focuses on the continued development of the Lakewood Centre development and future activity center properties. Other properties not owned by Schroder-Manatee Ranch are also included as a future activity centers (i.e., southeast corner of I-75 and SR 64). Heritage Harbour is also in the process of developing its commercial components at the I-75 interchange. Phase II of Heritage Harbor will include a marina and more residential development of its eastern property, which abuts the Waterlefe community and Upper Manatee River Road.

Schroder-Manatee Ranch also amended the County's Future Land Use Map in 2010 to create future activity centers. These activity centers are at the southeast corner of Lakewood Ranch Blvd. and SR 64 (known as NW Quadrant) and the property located south of SR 64 and east of Lorraine Road (known as NE Quadrant). These properties have a new Future Land Use Map

designation called Mixed Use Community (MU-C), which helps focus densities and provide opportunities for more density, building height and a better mix of uses.

State Road 64 was widened to 6 lanes in 2011. Planned improvements include extension of Port Harbor Parkway to Upper Manatee River Road, the Ft Hamer Bridge and associated improvements to Ft Hamer Road and Upper Manatee River Road, and interchange improvements to University Parkway and I-75. Other future projects include 44th Avenue Extension over I-75, improvements to Lorraine Road, Rye Road and other internal planned roads within the Future activity centers as they develop. Many of the area roadway improvements costs are borne by the developments.

Many of these properties will be developed under the State-regulated Development of Regional Impact process. Manatee County is generally comfortable with the processes as it helps to ensure that the County gets the necessary infrastructure provided in a master planned fashion in exchange for longer term entitlements over larger areas of land.

Activity Center Facilitation

In order to facilitate activity centers in Manatee County, potential changes could include the following:

- Amending commercial locational criteria to allow more non-residential uses in activity centers.
- Refining of mixed use to include horizontal and vertical use integration.
- Re-focus Land Development Code and Comprehensive Plan to urban instead of suburban development in activity centers.
    - Remove barriers for more urban-like characteristics (i.e., greater building heights, setbacks/build-to lines, mix of uses horizontally & vertically, allow transit oriented designs, reduce parking requirements, etc.).
    - Density bonuses in targeted areas
    - Urban level of service standards
        - Concurrency exception areas or other incentives for activity centers?
    - Consider low impact development standards
    - Provide opportunities for the transfer of development rights
    - Capital Improvements Plan focuses more on providing pedestrian oriented infrastructure.

In an effort to better define the activity centers, other areas need to be discussed. Manatee County has several areas that are generally considered existing activity centers, but some are also growing. These include the parts of the beach communities and the downtowns of Bradenton and Palmetto, but also include the following in unincorporated county:

- Prime Outlets area
- State College of Florida & IMG Academies area
- Commercial corridor of Cortez Road
- I-75 Interchanges of US 301, SR 64, SR 70 and University Parkway
- Lakewood Ranch Downtown & Hospital Area
- Port Manatee
- University of South Florida & the Manatee County Crosley Estate
- Sarasota-Bradenton International Airport (SRQ) and industrial area

There are vacant properties that may/may not have zoning or other entitlements but have had some efforts of beginning the land development process and lend themselves to becoming future activity centers (see following activity center working map):

- N Parrish Area Development of Parrish Commons, Cone Ranch, Hecht Ranch (entitled)
- NE and NW portions of Lakewood Ranch (areas of 2010 Future Land Use Map amendments)
- Manatee Fruit Company properties (areas of 2010 Future Land Use Map amendments)
- Port area development of Sweetwater, Newport and Curiosity Creek (residential and non-residential entitlements)
- US 301/Future 44th Ave area
- South County industrial in vicinity of US 301

There are also targeted activity centers for development and redevelopment through various programs, studies or master plans to include:

- 14th Street Community Redevelopment Area
- South County Community Redevelopment Area
- North Palmetto Enterprise Zone and Urban Infill & Redevelopment Area
- Port Encouragement Zone (Tax Increment Finance District)
- DeSoto Square Mall

The smallest scale, Future Neighborhood Activity Centers are located at the intersections (nodes) of functionally classified roadways (i.e., collector roads and above). At these nodes, opportunities currently exist by the Comprehensive Plan for a greater variety of uses and densities within 1,500 feet of the intersection. Applying this same “node” philosophy to areas around schools, one-quarter mile around schools should also be considered minor activity centers as the 1,500’ radius around schools provides an acceptable walking distance for students. Therefore, increasing opportunity for residential development and densities in these “school nodes” or minor activity centers could provide school operational efficiencies related to transportation and busing.

The following activity center map incorporates the above concept. It illustrates the existing, future and minor activity centers. It also identifies schools and those schools that are operating at below their approved capacities (data at time of publishing), which have existing room for more students.

Obviously, implementation of the activity center concept would have to be done consistent with the availability of infrastructure. Timing and partnerships with the development community are also key components for this potential alternative. In addition, the above map may also show future activity centers (1,500 foot radius circles) where existing and established residential development has occurred. The map is conceptual only. A more detailed analysis and coordination with the community and property owners would have to occur to determine exact locations of the future activity center areas.

Activity Center Design Concepts

The County will encourage development in new mixed-use centers based on the following principles:[27]

- Mixed-use centers should be designed with universal blocks or connected local streets as much as possible, i.e., blocks with standard dimensions that accommodate several different types of uses, to enable re-use over time through infill, redevelopment and intensification.
- Mixed-use developments shall have integrated infrastructure, vertical and/or horizontal integration of different land uses and coordinated access.
- Mixed-use centers should promote development planning that encourage site plans to anticipate infill development with future building sites, structured parking where applicable and the flexibility to intensify the site later when the market grows.

Key concepts also include utilizing the following:[28]

- "Urban dimensions" such as setbacks, parking rates, floor-area-ratios, etc, that reflect more urban and dense environments.
- Higher densities and uses horizontally and vertically integrated.
- Urban street standards and allowance of on-street parking where applicable on County public roadways.
- Support activity centers with appropriate levels of Capital Improvements and services focus.
- Activity centers adjacent to cities, consider reflecting their design standards especially if in annexation plans.

Future amendments to land development regulations will provide more detail regarding "opening up" these activity center areas for potentially more growth and development consistent with the activity center concept.

[27] *Manatee Council of Governments: Character Compatibility Study*, 2005.

[28] *Essential Smart Growth Fixes for Urban and Suburban Zoning Codes*, US EPA, November 2009.

Alternatives Summary

All three alternatives continue to allow lower (up to three dwelling units per acre) density development. Where the alternatives vary is how they allow more concentrated development and where. Alternative 1 still has the higher densities in the form of Future Land Use categories with higher (greater than 3 dwelling units per acre) maximum dwelling units in areas Southwest County, Lakewood Ranch and limited areas of North County near Palmetto. All three alternatives also promote the concept of using the Retail-Office-Residential (ROR) future land use or similar category at the intersection nodes to allow more density and better variety of uses closer to the lower density residential developments.

Alternative 2 may not be the most realistic not only for the County, but for the commercial and residential real estate markets. While the larger metropolitan markets are developing at greater densities with more vertically integrated mixed uses, it has yet to trickle down to the Bradenton area substantially. Developers have been busy adjusting their entitlements to include the option to build multi-family dwelling units to be ready for the market to return. The County is planning on investing tens of millions into utility reinvestment and rehabilitation into the older areas of the county regardless of the plans of the development community in the coming years, by necessity.

Alternative 3 provides more consistency with market realities and some of the momentum observed during the boom years and what construction continues in some areas of the county. It better recognizes market trends, while still considers investment into rehabilitation of portions of Southwest County important. Alternative 3 also provides the opportunity for development that was permitted in the boom to continue with entitlements or consider re-entitlement with a different land use product and density. Some additional work in infrastructure planning similar to what was done in North County/Parrish will need to be looked at again. Focus will need to be permitting more employment uses in these key areas.

GROWTH ALTERNATIVES & IMPACTS TO SERVICES

GROWTH ALTERNATIVES AND IMPACT TO SERVICES

The three growth alternatives have different impacts to the various services and infrastructure the County provides, such as environmental resource protection, libraries, parks, public safety, solid waste, transportation and utilities.

Economic Development

The county's economy is fueled by a diverse base including manufacturing, agriculture, tourism, service industries, high-technology companies, sports performance, business services and many other prominent sectors. Large and small, internationally known and locally owned, companies of all kinds are successfully blended together within Manatee County.

The proximity of Manatee County to the Tampa Metropolitan Statistical Area, Port Manatee, Sarasota-Bradenton International Airport and thousands of acres of developable land (including heavy and light manufacturing entitlements) with infrastructure capacity, gives the county significant advantages over many of the other counties in the region and state. Industry provides significant non-service oriented jobs and expanded tax base.

Top Non-Governmental Employers in Manatee County:

Beall's Inc.
Manatee Memorial Hospital
Tropicana
Blake Medical Center
Publix
Pierce Manufacturing
IMG Academies
SYSCO West Coast FL, Inc.
Eaton Corporation

Source: Manatee County Chamber

Business and industry opportunities for Manatee County include a range of retail, manufacturing and service activities that relate well to existing resources in the county. Manatee County took a hit during the recession, and it is projected that it may take past 2017 to recover jobs lost.[29] That is why it's important for the county to be at the forefront of encouraging new businesses and business diversification away from construction and service industries.

Opportunities exist to support new and emerging services and technologies that have been targeted by the County. The formation of high wage primary jobs is paramount to the success

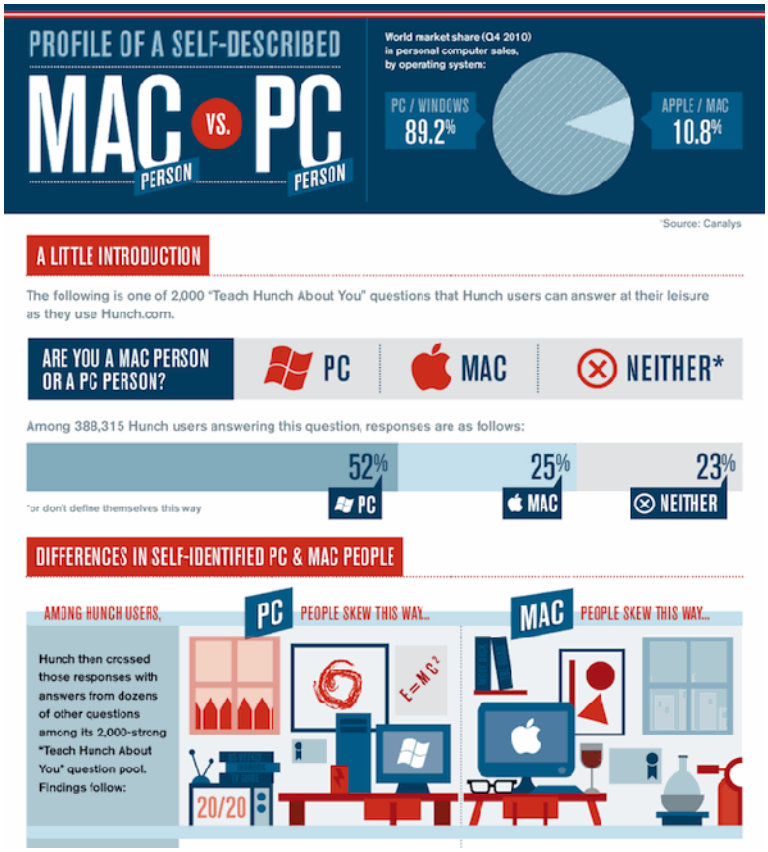
[29] Metro Job Recovery Remains a Long Way Off, Richard Florida, *The Atlantic Cities: Place Matters*. http://theatlanticcities.com/jobs-and-economy/2012/01/which-cities-are-winning-economic-recovery-race, accessed September 25, 2012.

of the community such as new manufacturing, high tech research and development. Example target industries (including NAICS Code) include the following:

- Medicinal and Botanical Manufacturing (325411)
- Electro-medical and Electrotherapeutic Apparatus Manufacturing (334510)
- Surgical Appliance and Supplies Manufacturing (339113)
- Software Publishers (511210)
- Miscellaneous Financial Investment Activities (523999)
- Direct Health and Medical Insurance Carriers (524114)
- Computer Systems Design Services (541512)
- Research and Development in the Physical, Engineering, and Life Sciences (541710)
- Medical Laboratories (621511)

These businesses and employees bring significant wealth into the larger community. They also create demand for secondary businesses and high-quality public services and amenities.[30] The county's population has historically contained a large percentage of seniors. Manatee County's median age is 44 years. Target industries (i.e., new manufacturing, high tech research and development) require an educated, younger workforce. The percent of population with age over 65 years is as follows (2000):

- Pinellas 22.5%
- Manatee County 15%



[30] *Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community*, November 2005.

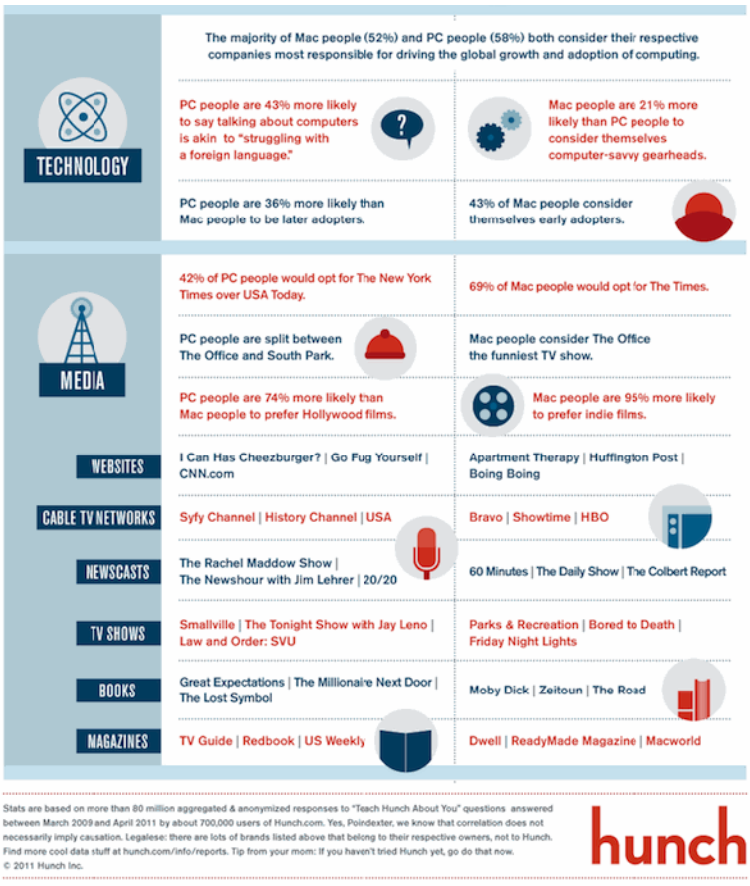
- Hillsborough 12%
- Orange County 10%

A young, educated population is key to being competitive in the employment markets for high-wage jobs. Most recruitment and retention policies targeted to specific industries are for younger employees. Many larger metropolitan areas have invested great sums into targeting these types of employees to their areas.

There is likely more known and to be known about this group known as “millennials”. Millennials were born between 1981 and 2000. According to Pew Research Group, this group: has the following attributes:

- Most ethnically and racially diverse cohort of youth in the nation's history (among ages 13 to 29: 18.5% are Hispanic; 14.2% are black; 4.3% are Asian; 3.2% are mixed race or other; and 59.8%, a record low, are white).
- Starting out as the most politically progressive age group in modern history.
- Millennials voted for Barack Obama over John McCain (2008) by 66%-32% , while adults ages 30 and over split their votes 50%-49% for the largest gap in a presidential election between the votes of those under and over age 30.
- First generation in human history who regard behaviors like tweeting and texting, along with websites like Facebook, YouTube, Google and Wikipedia, as everyday parts of their social lives and their search for understanding.
- Least religiously observant youths since survey research began charting religious behavior.
- More inclined toward trust in institutions than were either of their two predecessor generations -- Gen Xers (who are now ages 30 to 45) and Baby Boomers (now ages 46 to 64) when they were coming of age.

The target subgroup of millennials for high wage employers has a lot in common with users of Apple computer products (see Mac vs. PC graphics). It is important to note their traits if you are targeting them for employment within the community you are building.



It is important to create and commit to existing and new economic centers that are attractive to younger people. Economic centers need to exhibit the following factors to be successful:

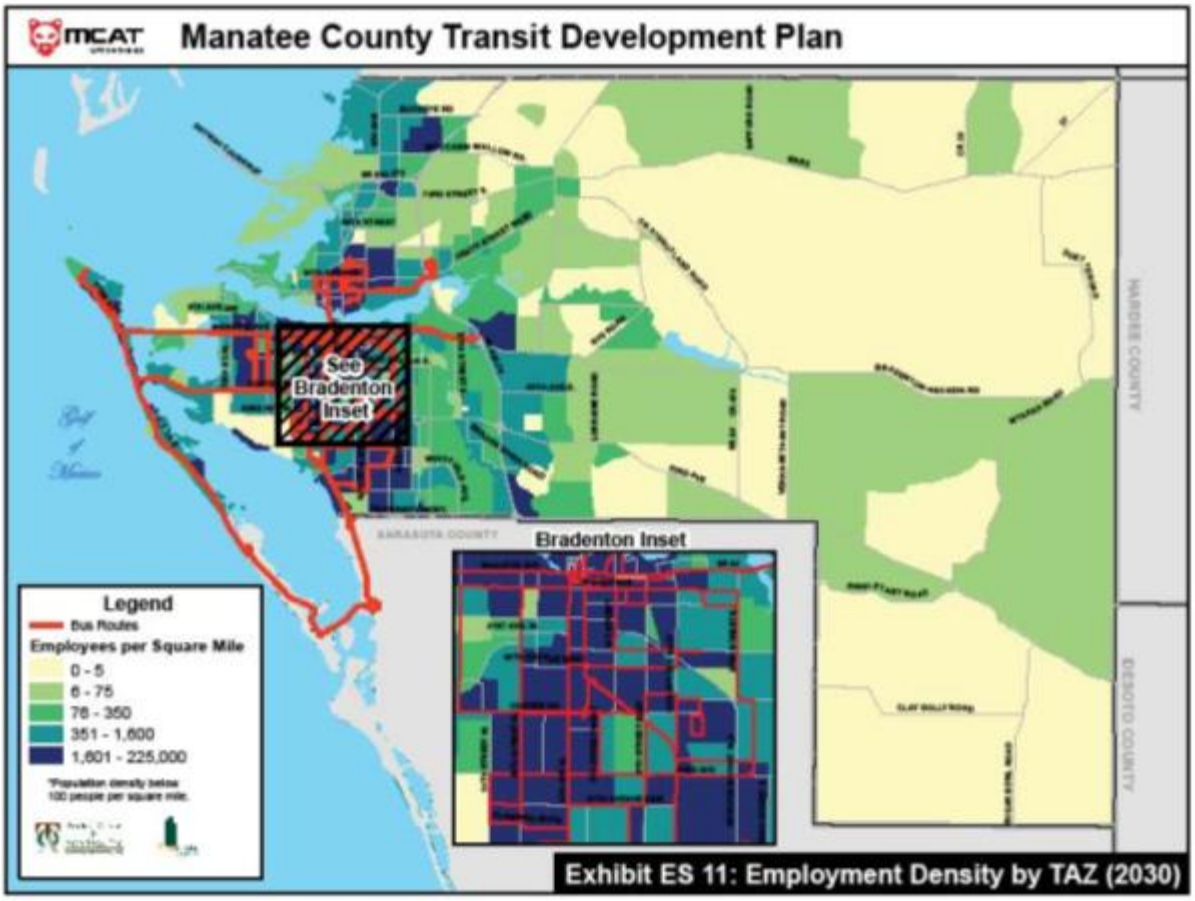
- Economic centers need room for development of amenities and services.
- Commitment by local governments to focus development and capital projects to these areas.
- Served by street network that also facilitates pedestrian and bicyclists – multi-modal.
- Served by transit/public transportation.
- Ability to construct efficient, low infrastructure costs per dwelling unit.
- Certainty in development review process.

When businesses relocate, they look for quality of education systems, recreation and cultural amenities and an aesthetically pleasing place to live. Preserving environmentally sensitive land, improving public education and creating appealing places to live, work, shop and play will enable the county to maintain and improve its quality of life.[31] Creating and recruiting the right type of high-wage employment opportunities requires creating the type of place these businesses, employees and their families will want to live, a "Best Place".

[31] *Alternative Futures for the Seven County Orlando Region, 2005-2050*, prepared for The Metropolitan Center for Regional Studies, The University of Central Florida, by City Planning 702 Urban Design Studio, University of Pennsylvania School of Design, Department of City & Regional Planning, 2005.

Economic Development with Alternative 1

Alternative 1 continues focus on the established Community Redevelopment Areas (CRAs), the North Palmetto Enterprise Zone, Port Manatee Encouragement Zone, sports performance industry, bio-tech industry and tourism. The following Employment Density Map illustrates where the jobs will be in the county by 2030. The greatest concentrations of employment continue to be in Southwest County. Manatee County will continue to develop incentives for recruitment of new high-wage employers and businesses. It will continue to assist in the data collection of entitled properties for use with Economic Development Council's recruitment efforts.



Economic Development with Alternative 2

The focus of new population in Southwest County will have a tremendous trickle-down effect economically. Increased construction, new service industries, other businesses and more customers in the area will help invigorate the area economically.

It is envisioned, that within the established Community Redevelopment Areas in Southwest County, there is continued focus on redevelopment of vacant and underutilized parcels both with residential but most likely non-residential units. It is envisioned that the majority of the residential development activity will be located in the Manatee Fruit Company / western portions of Southwest County.

It is also important to note that the focus of new population (labor) will bring more residents closer to industrial and the main employment center of the county. Manatee County has over 1,000 acres of vacant greenfield lands with a Future Land Use Classification of industrial in Southwest County. Many of the existing industrial parks have vacant sites with existing infrastructure and many are along existing transit routes.

Economic Development with Alternative 3

As indicated on the Activity Center Map, various areas are identified as industrial activity centers. Mixed use activity centers also have the potential for economic development activities to support office, medical and other businesses in addition to retail. Key economic drivers are located in activity centers to include:

- Port Manatee
- N Palmetto Enterprise Zone
- Parrish Center
- Downtowns of Palmetto & Bradenton
- State College of Florida & IMG Academies
- University of South Florida
- Sarasota – Bradenton International Airport
- Lakewood Ranch Hospital and Downtown

Activity Centers are being promoted by larger developments in Manatee County, to include Schroder-Manatee Ranch and Manatee Fruit Company properties. The intent of the Activity Center is to encourage economic development in strategic areas that are served by appropriate infrastructure. What does this do to our economic engines?

A valuable approach to encouraging positive economic development is to build off of the urban core as well as Lakewood Ranch, Parrish, and Port Manatee to encourage strong mixed use environments in these areas. Integrating retail into the mixed use environments particularly near job centers will spur economic development in the County's desired growth areas. Eliminating barriers to mixed use developments through allowing a diverse mix of land uses in

the future land use categories, and modifying setback, buffering and parking requirements to promote urban development patterns will encourage professional and retail activities in the growth centers targeted for development and redevelopment.

Economic Development Summary

Manatee County has provided ample opportunities and incentives for the development and business community. However, the best way to facilitate redevelopment is the private sector creation of good paying jobs. The expansion of existing industries and those in the professional, health, and manufacturing industries is vital to the future of the community. The availability of more jobs in those sectors will allow those making below median income to potentially improve their economic status, thereby spending more money locally in the community on better housing, and more goods and services. The key to the success of our community is the continuing partnership of the business community and educators to provide a workforce the business community desires.

Tourism and Lodging

Waterfront property is limited in supply. Many of the older beach hotels in the county have been torn down or converted into other uses, such as condominiums. This is due to the short-term economic return associated with high-end residential properties being greater than hospitality. This has discouraged hospitality investment in the county. However, Manatee County is in a unique position for more hotel development. This is due to the increase in economic activities associated with the sports performance industry. Other improvements to enhance the tourism experience and increase attractiveness in areas of the county frequented by tourists, to include:[32]

- Investments in roadway corridor improvements, landscaping
- Better way-finding signage
- Enhanced public open spaces and parks

Environmental Protection

Imagine Manatee prioritized Preservation of Natural Areas and Environmental Quality as the #1 and #2 goals, above transportation, parks, public safety and cultural resources. Manatee County's Comprehensive Plan and other public visioning documents including *Imagine Manatee*, views sensitive lands and their ecological functions as integral components of the community's

[32] *Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community*, November 2005.

infrastructure and cultural resources. Manatee County will continue its own land acquisition efforts as feasible and coordinate with the state on its land acquisition efforts. However, Manatee County has no specific program or funding for the acquisition of environmentally sensitive lands.

In unincorporated Manatee County, the amount of land in the Conservation Future Land Use Category has increased by 55% since 1997 as follows. This is not all from purchasing of sensitive lands in these years. Some of the increases were due to amending the Future Land Use Category of lands to Conservation from their previous designation.

- 21,390 acres in 1997
- 28,056 acres in 2003
- 33,187 acres in 2010

Community Efficiency & Quality of Life

It is important to ensure that the community will continue to have the water, infrastructure and natural resources which are crucial to the protection of our quality of life and industries such as tourism and sports performance.

Typical performance measures and trend monitoring for community efficiencies and quality of life issues include the following and many are indicators of “Best Places” as previously discussed:

- Vehicle Miles Traveled (VMT)
- Rates of use of transit, walking and biking
- Percentage of land preserved as open space (e.g., recreation, common areas, etc)
- Recreation assets
- Solid waste generated per capita and recycling
- Air quality trends
- Surface water quality trends

Efficiencies can be realized with good planning and coordination among various agencies. For example, locating schools at points central to neighborhoods can have dramatic effects on future roadway needs in comparison to schools located along major roads near commercial areas or away from residential areas. Schools that are at the hub or centrally located within neighborhoods can reduce the need for additional roadway lane miles, busing and other

expensive infrastructure. It will also reduce the community's overall vehicle miles traveled, air emissions, etc.[33]

Industrial Development

The Tampa Bay area is monitored by multiple agencies to ensure the air and water quality is maintained. Manatee County is working hard to ensure its economic development goals associated with Port Manatee and industrial lands do not conflict with its environmental protection goals.

As part of the economic development efforts, the County provides environmental staff as liaisons to Fast Track Development Review Teams. This is to advise economic development teams in its business recruitment efforts to help recruit cleaner industries. Manatee County has to be sensitive to industry recruitment efforts to ensure other important industries, such as tourism and sports performance, are not negatively affected. Most importantly, the environment and public health standards must be maintained.

Over accommodating the wrong industry to locate in the community can have unintended side effects that not only effect public health and the environment, but it can also be costly to taxpayers in mitigating these negative water and air quality impacts to the Tampa Bay area.

Land Development Regulations

Manatee County's Comprehensive Plan provides a policy framework for environmental protection. It is one of the strongest plans for preservation of sensitive lands in the state, well above and beyond state requirements.

The Comprehensive Plan has various goals, objectives and policies that provide performance measurements. While not exactly like the level of service standards of other infrastructure types, the performance measures in the Comprehensive Plan's Monitoring Element are for wetland protection, listed species protection, surface water quality, ground water quality, and air quality. They provide measurable targets to determine if the environmental quality is improving or declining.

Environmental Protection with Alternative 1

With this alternative, no changes are assumed to occur with Manatee County's Comprehensive Plan. This will continue the preservation of sensitive lands and buffers through the land development process. However, this land development pattern brings much more land into development per new dwelling unit. This in turn increases the impacts to roads and other

[33] *Local Governments and Schools: A Community-Oriented Approach*, ICMA Press IQ Report, Volume 40/Special Edition 2008.

county services. Infrastructure and services is stretched farther to reach fewer people. It extends the impacts of development farther to the north and east, impacting more land. However, modern development practices (i.e., preservation, stormwater retention, buffers, sensitivity to listed species, etc.) help to mitigate the impacts of development.

Environmental Protection with Alternative 2

With the majority of the development focused to the Southwest portion of the county, there are likely fewer new environmental impacts with this alternative. While there are some undeveloped areas, most of the Southwest area of the county has already been developed. The focus would then shift to improving the environment with new development and redevelopment.

Alternative 1 does continue existing policies that work to improve the ranking of the following indicators. However, due to the heavier focus of new population to already developed areas, Alternative 2 is generally the most effective in the following:

- Less Vehicle Miles Traveled
- Least impact to air quality
- Most opportunity of use of transit, walking and biking
- Highest percentage of land preserved as open space
- Lowest increase in impervious surface area
- Least impact to agricultural acreage
- Least amount of water used
- Least solid waste generated per capita
- Least impact to surface water quality
- Least impact to listed species

Environmental Protection with Alternative 3

Alternative 3 does continue existing policies that work to improve the ranking of the following indicators. However, the rate of improvement is the least of the three alternatives. This is due to the increased developed in areas that are currently undeveloped but proposed for developed at a more intense level. However, the same modern development practices mentioned in Alternative 1 still apply.

Alternative 3 would likely encourage the re-entitlement of existing projects. Meaning, most of the entitled projects in North County and Parrish which are approved with low density

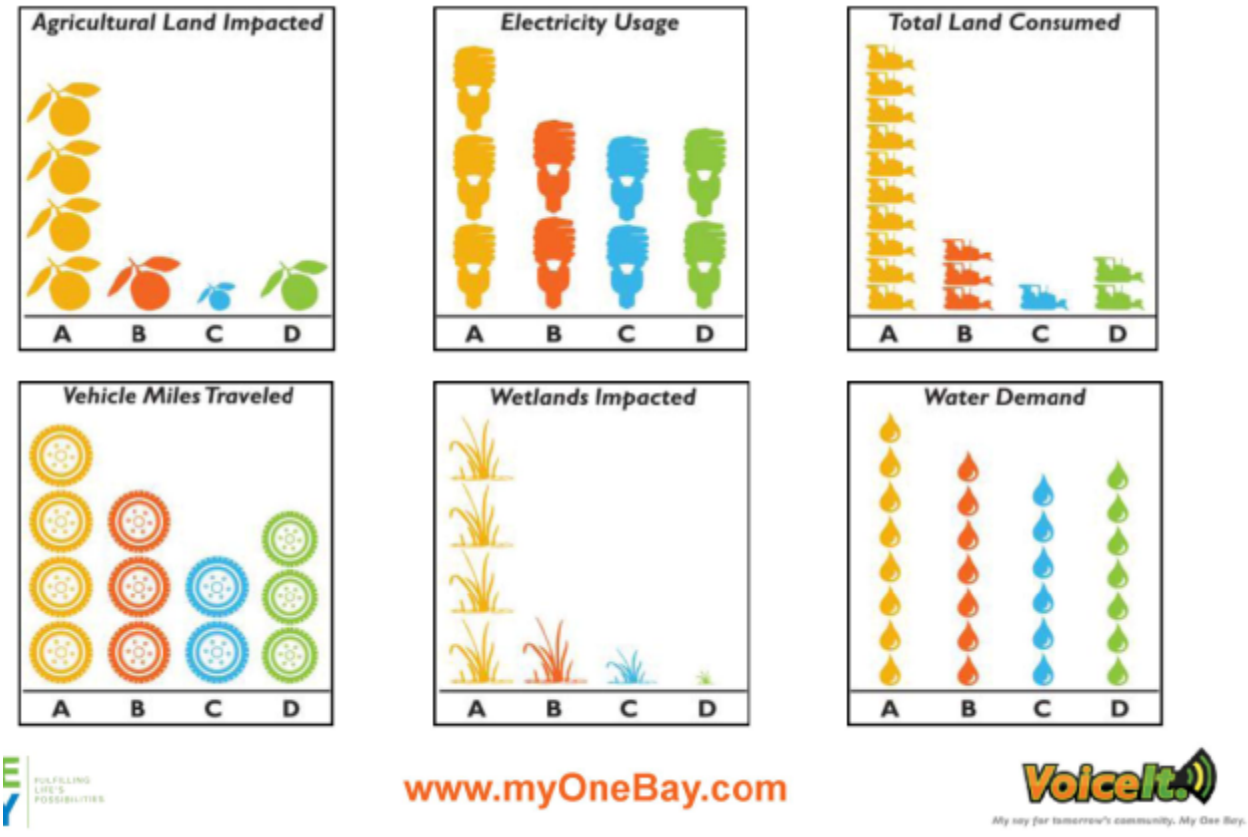
residential and provide limited opportunities for non-residential development may be incentivized to consider mixed uses and more dense residential development. These projects have concurrency entitlements with low densities, meaning fewer customers per linear foot of infrastructure. They also are typically residential, meaning longer driving distances for employment and services. This is also an area of the county, where there are limited infrastructure and service investments by the County, requiring massive infrastructure upgrades at no matter what alternative is chosen.

By providing greater opportunities in specific areas (not all areas) for greater densities and a wider variety of uses - essentially taking the regulatory handcuffs off - the market may dictate a different development scenario that is more efficient for the County to serve. In many cases, more efficient infrastructure provision may have positive environmental benefits.

Environmental Protection Summary

Alternative 2 provides the least impacts to the environmental by 2035. This is due to concentrating the population in an area where many of these impacts have already occurred. However, if the study was to extend to 2050 or beyond, Alternative 3 may have some longer term environmental benefits. It would consolidate a greater percentage of the future development better than Alternative 1, but in a way that the market is more likely to react and follow through with.

Alternative 3 may encourage development of some entitled land in a more dense fashion. It is expected Alternative 3 would provide greater opportunity to absorb future populations within the existing infrastructure service areas. This was illustrated in the OneBay exercises (Scenario C preferred by County Commission) as shown in the following illustration which is similar to Alternative 3.



www.myOneBay.com

Libraries

Manatee County has six libraries throughout the community with over 440,000 items available. Libraries and their levels of service are key indicators for many "Best Places". They even contribute to the financial value of communities. The State of Florida regularly performs a return on investment study for libraries. For every tax dollar received, Florida public libraries provided $8.32 in value to the community (2008 dollars). The return on investment for Manatee County is slightly higher, at $8.64 for every tax dollar spent.[34] The libraries are located on the beaches, downtowns and located west of I-75 with the exception of the Rocky Bluff Library in Parrish. The Library Facilities Long Range Development Plan includes the following priorities:[35]

[34] *Return on Investment in Florida Public Libraries*, Florida Department of State, Division of Library & Information Services, http://dlis.dos.state.fl.us/bld/roi/index.cfm accessed January 8,2013.

[35] *Manatee County Public Library Long Range Plan: 2012-2017*, Manatee County Neighborhood Services Department, April 2011.

- Determine appropriate location for possible library and or joint use library located at least 10 miles east of the existing Braden River Library.
- Explore possibility of a relationship between the South County Library and State College of Florida to form a joint use library.
- Review recommendations for renovations to the Central Library in Downtown Bradenton.

In the Comprehensive Plan, level of service standards are provided for public libraries. The standards are 2 volumes per capita and 0.6 s.f. library space per capita. Libraries do not have a concurrency requirement for new development. The libraries also serve the entire county population, not just the incorporated area. The following table illustrates how the libraries currently compare to the standards.

Manatee County Public Libraries (2010)

Library	Pop. Served	Patrons	Patron - Pop Ratio	Sq. Feet	Items	Sq. Feet Per Capita	Items Per Capita	Circulation	Circ - Patron Ratio
Anna Maria	8,915	110,000	**12.34**	8,460	45,000	**0.95**	**5.05**	225,000	2.05
Bayshore / South County	**103,620**	**180,000**	1.74	**13,044**	**68,000**	0.13	0.66	**530,000**	**2.94**
Braden River	**102,441**	**170,000**	1.66	**21,161**	**80,000**	0.21	0.78	**590,000**	**3.47**
Central	**48,498**	**320,000**	**6.60**	**57,732**	**175,000**	**1.19**	**3.61**	**830,000**	**2.59**
Palmetto	35,577	110,000	3.09	6,776	50,000	0.19	**1.41**	265,000	2.41
Rocky Bluff	35,406	120,000	**3.39**	10,393	30,000	**0.29**	0.85	272,000	2.27
Totals	334,457	1,010,000		117,566	448,000			2,712,000	

Notes: Assumes "Items" from Long Range Library Plan and "Volumes" from level of service standard are same.

Anna Maria and the Central Library exceed the level of service standards for their specific service areas. Overall, Manatee County currently does not meet its adopted level of service standards for libraries. However, the standards themselves do not reflect the business efficiencies or the ability to serve the library customers.

The adopted standards do not reflect at what point the existing libraries reach their maximum service area/patron population. The different libraries have varying levels of utilization rates, which vary by their area demographics.

According to library staff, Braden River is the library that is struggling to meet demands. Looking at the patron counts for Braden River and comparing it to the population served and circulation, a population to patron ratio and population to circulation ratio can be developed that provides some insight as to when another library may be necessary. The following analysis considers the impact of the three development alternatives on future library needs.

The assumptions utilized in the analysis include the following. The Central Library was not weighted for its use as the hub or main library for the library system. A patron to population ratio was utilized to illustrate what areas of the county, the respective service areas of each library, utilize their library more heavily. Anna Maria, the Central Library and Rocky Bluff had the highest ratios. A circulation to patron ratio was developed to illustrate which libraries had the more intense library users. These are the patrons that are checking out the most books, having assisted research, and other functions requiring more librarian activity, etc. Braden River, Bayshore and Central had the most intense patrons with the highest circulation to patron ratios.

These ratios for each library and service area were projected forward to 2035. While the areas may change demographically in the next 22 years, these assumptions are the best available data at this time. Other important factors for future research may include:

- Proximity of libraries to users (i.e., proximity to schools, school-age children, senior living areas, etc)
- Amount of reserved materials
- Customer waiting time
- Impact of digital media

The impacts of electronic reading devices, aka eBooks, are yet to be fully realized on library operations. The population of e-book readers is growing. In the past year, the number of those who read e-books increased from 16% of all Americans ages 16 and older to 23%. At the same time, the number of those who read printed books in the previous 12 months fell from 72% of the population ages 16 and older to 67%.[36] From November 2011 through October 2012 the monthly "eBook" circulation count system-wide rose from 660 items to 2,729 items, a 412% increase. The annual total was 27,418 circulations.[37] It could be assumed with that type of growth in circulation of electronic books will continue to increase in the future. Libraries host access to many periodicals and databases that are not available to the general public or online without subscription. They also serve as community centers, social service resource centers and

[36] *E-book Reading Jumps; Print Book Reading Declines*, Lee Raine and Maeve Duggan, Pew Internet website http://libraries.pewinternet.org/2012/12/27/e-book-reading-jumps-print-book-reading-declines/ accessed January 8, 2013.

[37] Manatee County Neighborhood Services Department, Library Division, November 2012.

internet portals for the public, a role that was unforeseen twenty years ago. The role of libraries will likely remain for decades to come as places to get away, do research and seek personal assistance on a variety of government services.

Libraries – Alternatives Analysis

The three alternatives did not illustrate substantial differences in library service needs. This is due to the number of dwelling units still approved/pending but undeveloped. All the libraries showed substantial increases in patrons and items in circulation. Central Library, Braden River and Rocky Bluff are the three libraries that have substantially increased patron numbers in all three alternatives. Residents of urban, suburban, and rural areas vary in their purposes for reading, their use of digital content, their engagement with public libraries, and where they turn for book recommendations, which could also affect library usage.

Libraries Summary

Alternative 1 will require library services expand. The current Library Masterplan addresses the need for a future library in southeastern Manatee County. This has been discussed as a limited service type library. While Alternative 2 increases populations in Southwest County, library needs are still growing throughout the county. However, additional library services, which could include another library, would likely be necessary in the southwest area. Alternative 3 continues growth throughout the county, but puts focus on the activity centers. Ideally, future libraries would be located in the heart of these major activity centers of Lakewood Ranch and Parrish. This may likely be initially more expensive, but may provide the most fiscal sense for growth and planning beyond 2035.

Parks & Recreation

Countywide there are fifty-one County-maintained and developed parks. Nine of these parks are owned by other jurisdictions, but maintained by the County. Manatee County has an agreement with the School Board for the public to utilize school recreation facilities as local parks.

In Manatee County there are thirty-one local parks and forty-two school parks. There are seven district parks, and nine regional parks and preserves (see following Parks Map). The Comprehensive Plan establishes a level of service requirement of one local park per 10,000 residents, one district park per 100,000 residents, and one regional park per 500,000 residents. For this exercise, the focus on future park needs will be for the unincorporated portion of the county. Based upon the current (2010) population, the County is required to have 24 local parks, 3 district parks, and 1 regional park. Manatee County exceeds the adopted LOS standard for parks. The county has approximately 31 properties managed by the State of Florida for recreational purposes. The federal government also manages two properties, Passage Key and

the DeSoto National Memorial. The county also has miles of world-class beaches, providing residents and guests with plenty of water related recreation opportunities.

The Comprehensive Plan also has specific level of service performance measurements as illustrated in the following table. Utilizing only the recently created Park's Atlas database and comparing the Manatee County Comprehensive Plan Recreation Facilities Performance Measures table, we have completed a first pass analysis of the recreation resources available in units per population.

Limitations should be recognized in the availability of certain data not included or defined as part of the Parks Atlas database. These excluded items include trails that are managed under the Natural Resources Department; school athletic fields and other Manatee County School Board managed recreation facilities; and private facilities, both profit and not-for profit . In the future, it would also be useful to look at how the Park's Atlas database was setup and use the Comprehensive Plan measures as part of the input and query. Some of the database inputs were structured differently, such as the database included the number of basketball courts, not the number of basketball goals.

In order to meet or exceed adopted recreation measures as listed in the Manatee County Comprehensive Plan, we calculated the number of units needed based on an estimated population of 322,000 from the U.S. Census Bureau 2010 statistics. This column can then be compared to existing recreation elements as tabulated from the Park's Atlas.

In comparing the number of various recreation elements against the adopted measures, the data shows that Manatee County meets or exceeds the goals set forth in the Comprehensive Plan by providing baseball/softball fields, football/soccer fields, and handball/ racquetball courts. Other measures that are close to the minimum threshold include swimming pools (-1), and basketball goals (-9).

Some recreation facilities that appear grossly deficient are tennis courts (33 vs. 105), boat ramps (17 vs. 42), holes at golf courses (36 vs. 113), and shuffleboard courts (0 vs. 31). Further analysis is needed to determine if there is an actual need in the community for these additional facilities, or is the community at large adequately served by private commercial facilities for these areas. Not included in the Park's Atlas as a tracked amenity are fishing piers. The Comprehensive Plan recommends that there be 800-feet of fishing pier for every 10,000 persons. That would equate to 25,200-feet of pier, or roughly 5 miles.

Other large deficiencies noted are in the area of trails, including bicycle, accessible hiking, and fitness trails. With the exception of fitness trails with exercise stations, the trails, using miles as the base unit, don't include the trails available in Manatee County from the preserves managed by the Natural Resources Department. Future coordination is recommended with that department to either include preserve information as part of the Atlas, or for that department to have available a similar, but separate database so a more complete analysis can be conducted in the future.

In an older report titled, "Parks Needs Assessment Study – Support Material August 1999" the assessment was completed with information from the preserves, schools (including Manatee Community College), and an inventory of private golf courses and commercial recreation facilities. Counting public school recreation facilities in Level of Service sufficiency calculations are particularly problematic, since many of these school facilities are not available to the public after school hours nor are they open during school winter, spring, or summer break periods.

RESOURCE / FACILITY	UNITS	ADOPTED MEASURE (1) (UNITS/ RESIDENT POPULATION)	Amounts Needed Based on Adopted Measure*	Elements Available As of March 20, 2009
Bicycle Trail	**Miles**	1/10,000	31.5	4.69
Accessible Hiking Trail	**Miles**	1/10,000	31.5	5.26
Fitness Trail with Parcourse Stations	**Miles**	1/50,000	6.3	0.57
Fishing Piers	**Feet**	800'/10,000	25,200	unknown
Boat Ramps	**Lanes**	1/7,500	42	17
Swimming Pools	**Pools**	1/50,000	6.3	5
Basketball Goals	**Goals**	1/5,000	63	54
Handball / Racquetball Courts	**Courts**	1/20,000	15.75	18
Shuffleboard Courts	**Courts**	1/10,000	31.5	0
Tennis Courts	**Courts**	1/3,000	105	33
Baseball / Softball Field	**Fields**	1/6,000	53	54
Football / Soccer Fields	**Fields**	1/15,000	21	30
Gun / Archery Range	**Stations**	1/6,000	53	unknown(NR)
Golf Course	**Holes**	9/25,000	113	36
Beaches		Subjects to Natural Constraints	Not applicable	3

The Comprehensive Plan level of service requirements are for public parks. The performance measurements may need to consider the availability of private parks to provide a more accurate reflection of recreation assets in the community. Most residential development, both single-family subdivisions and multi-family products, typically have private recreation amenities. Some are as simple as a swing set, to fitness facilities, soccer fields, swimming pools and other recreation amenities.

Private Parks

Developments have been building and maintaining private parks for many years in Manatee County. Homeowner associations typically manage and maintain these parks for their residents. There are over 53 private parks run by homeowner associations. There are approximately 7 private parks that are for specific private groups or purposes, which include Boy and Girl Scouts, Audubon land and property owned by the Florida Institute of Saltwater Heritage.

Future Public Parks

The County has identified three potential future local parks towards meeting projected needs. These include parks at potential school sites at Copperstone Elementary, the "FLM" property, and the "Riggs" property (see Parks Map). Public school recreation areas also count for local parks, therefore any future school sites upon completion will be counted towards the level of service requirement. Local parks cost approximately $1 million dollars (2012 dollars) each, not including annual maintenance costs.[38]

Parks with Alternative 1

Based on population estimates, deficiencies will occur in local parks occurring District E (2030) by 2 parks and District D (2035) by one park, for a total of 3 additional local parks needed by 2035. Based on population estimates, deficiencies in district parks will occur in District E (2030) by 1 park. Alternative 1 continues the same level of service requirements in the current Comprehensive Plan for local, district and regional parks.

Parks with Alternative 2

Based on population estimates, deficiencies in local parks will occur in District E (2030) by 2 parks and deficiencies in district parks will occur in District E (2030) by 1 park. The urban core area includes park districts A and C. Even with 60% of the future population going to these park districts, the need for parks existed in other areas of the county, due to existing land development entitlements and limited park facilities.

[38] Manatee County Parks Department, January 2012.

Development in Southwest County will likely lead to parks needs not accounted for in the standard level of service requirements. This is consistent in other growth areas of the county where parks meet level of service standards, but these growth areas of the county lack specific parks and recreation amenities requiring the County to continue park development even when the level of service standards are met.

Part of the emphasis will be for enhanced alternative transportation infrastructure in Southwest County. Providing better infrastructure that encourages walkability and bicycling also provides enhanced recreation opportunities, as it is likely safer to walk and bicycle for recreation when the infrastructure is in place. Also considering the target market for economic development in terms of industries and employees, recreation components that are more specific to high-wage earning millennials is an important consideration. This may mean more bicycle trails, skateboard parks, public urban spaces such as urban outside music venues, etc., similar to what is going on at the Riverwalk in Downtown Bradenton.

Parks with Alternative 3

Based on population estimates, deficiencies in local parks will occur in District E (2030) by 2 parks. Based on population estimates, deficiencies in district parks will occur in District E (2030) by 1 park.

Like the urban core areas, focusing 60% of the future population into activity centers will change the needs for parks. Development in the activity centers will likely lead to parks needs not accounted for in the standard level of service requirements.

This is consistent with growth areas in the county that have a master plan approach, such as Developments of Regional Impact, which are large single developer projects. In these projects they maximize parks to ensure the population of these developments needs is met and the parks are a walkable distance from the majority of the residents and may also serve as alternative transportation (i.e., sidewalks, greenways, trails, etc) to access shopping, employment, etc.

One important aspect in areas of higher densities is open space. Parks that provide green, usable open space will be crucial to the success of the communities in the activity centers of the county.

Parks Summary and Recommendations

Using the County's level of service requirements for parks, the analysis provided insight into what alternative would serve the future population more efficiently for park needs. Alternative 3- Activity Centers was the most efficient, but not by much. The other alternatives were very close, but Alternative 2 was a close second in requiring an additional District Park by 2035 (see following table).

The County's level of service requirements are based just on having one of the three park types for so many persons in each parks district. It does not take into account parks needs in terms of where the park is located (i.e., urban/suburban/rural), range of recreation activities necessary in the district, compare to available private recreation amenities, and the demand for future parks in terms of park functions. A parks master plan for the County is necessary to gain further insight and refine community desires with parks planning and the level of service requirements for the county.

Manatee County's population based level of service standards ensures there is an excess of parks based upon the population, but there is no specific criteria (i.e., National Recreation Standards type criteria) for the different park types or locational criteria for parks. Manatee County is still subject to building and acquiring parks due to high demand for specific park types, including higher intensity recreation facilities associated with team sports (e.g., lighted baseball, soccer, etc) even though we far exceed our current adopted standards.

Not only do parks needs not align with the level of service standards, the county needs to plan for changing demographics. Park needs will be changing in terms of the population aging. As the baby boomers begin to retire, parks oriented to the bulk of the population being an older demographic have different recreational needs. A master plan could address these trends as well so the County can better plan for the future to stay consistent with community expectations.

Impact of Alternatives on Parks by 2035

	Local Parks	District with Future Need	Year Local Park Needed	District Park Needs	Ranking / Efficiency of Service
Alternative 1	3	D (1 park) E (2 parks)	2030 2035	1.2	**2nd**
Alternative 2	2	E	2030	1.3	**1st (tie)**
Alternative 3	2	E	2030	1.3	**1st (tie)**

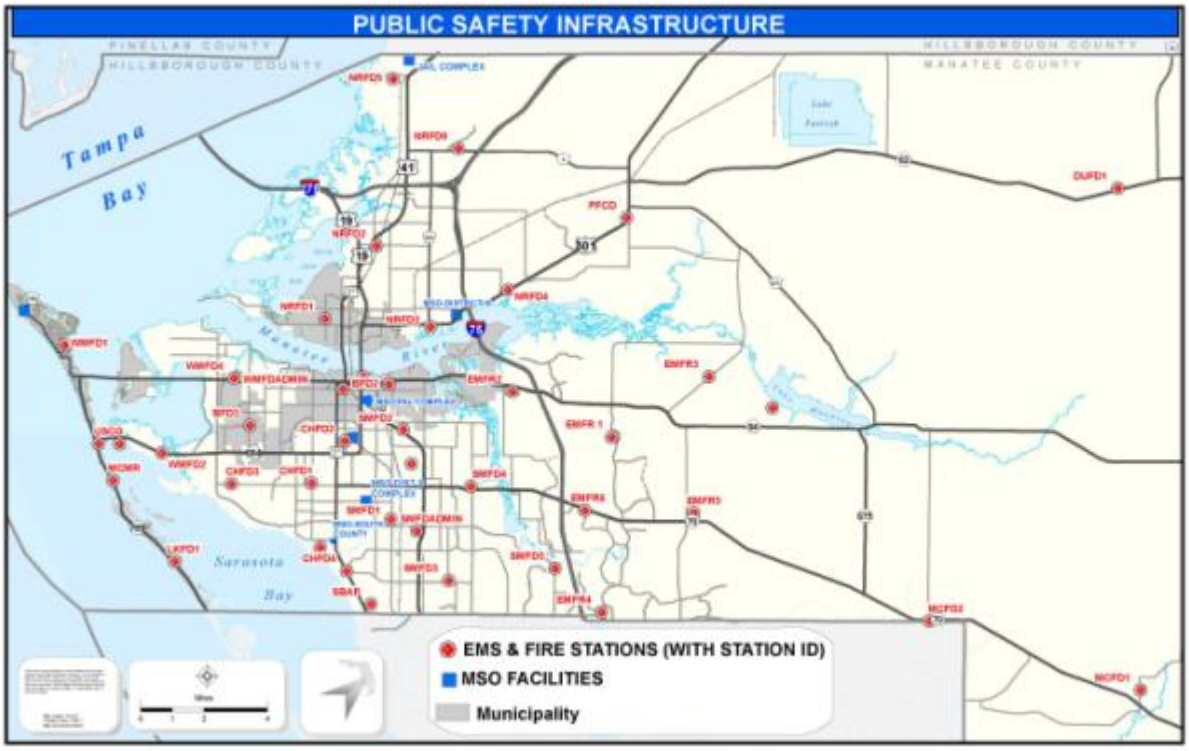
The County continues to require recreation areas with private land development and improvements. However, private facilities are not counted towards meeting the County's level of service requirements nor do they receive impact fee credit. Some larger developments do get impact fee credit when they dedicate land for a planned public park. For example, Lakewood

Ranch was awarded impact fee credit for land dedication associated with Lakewood Ranch Park (2009). Since the Community Planning Act was passed, the County has the ability to address concurrency as necessary. This could include a master plan approach that inventories all the public and private recreational assets and counts them towards concurrency. Other recommendations are as follows:

- Begin work on a Manatee County parks and recreation master plan to address following:
    - Align parks planning with community goals, trends.
    - Parks needs based upon built environment (i.e., urban/activity center, suburban and rural areas).
    - Recognition of parks and recreation amenities as crucial to economic development (i.e., Best Places criteria).
- Amend concurrency requirements to focus more on measuring implementing performance measures of master plan versus existing parks and recreation needs.
- Look at alternative level of service standards as current measures do not reward efficiencies for density in relation to parks.
- Co-location and improved partnership with School Board to provide enhanced recreation needs at schools.
- Recreational infrastructure investment reflecting tourism, the health of the community and the fast growing sports performance industry.

Public Safety & Emergency Services

Public safety facilities include 911, fire, emergency medical services, law enforcement and the county jail. Although there are virtually no planning standards recommended by national organizations, the following summarizes results of a variety of studies based on national surveys. Nationally, there is a range of service levels based on actual experience among communities in terms of uniformed, sworn personnel per 1,000 residents.



911 Dispatch

The Manatee County 911 system processed 219,869 calls in 2010 and over 228,907 in 2011. The State of Florida requires all Public Safety Answering Points to answer 911 calls within 10 seconds 95% of the time. Manatee County answered 18,297 calls within10 seconds in August of 2012. 911 will likely not be affected by the development alternatives, but the development alternatives could affect call type.

Law Enforcement

Unincorporated Manatee County and the City of Anna Maria are served by the Manatee County Sherriff's Office for law enforcement. According to the FBI, the following are national averages for law enforcement officers per thousand population by jurisdiction type:[39]

- 2.4 = Total Law Enforcement Officers/1,000 Population All Agencies (County and City)
- 2.3 = Total Law Enforcement Officers/1,000 Population Cities

[39] US Dept. of Justice – Federal Bureau of Investigation, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/police-employee-data/tables/10tbl71.xls/view, accessed September 27, 2012.

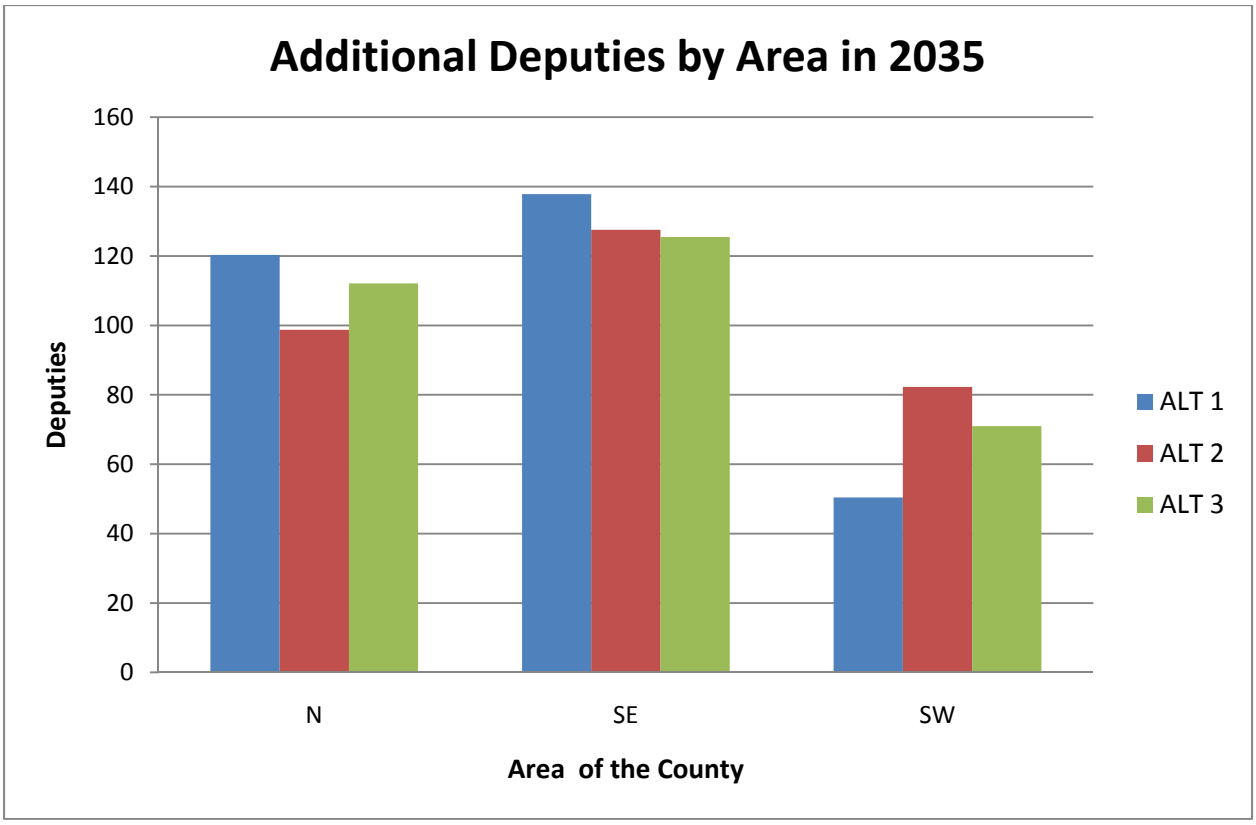
- 2.7 = Total Law Enforcement Officers/1,000 Population Counties

Manatee County Sheriff's Office is currently authorized by the FL Dept. of Law Enforcement for its 479 sworn deputies. The Sheriff's Office rate of full-time law enforcement officers per 1,000 citizens is 1.87, which is below the national average for counties. According to the Sherriff's Office, they are 315 deputies short of their goal of a 3.1 officers per 1,000 population average, which is for jurisdictional populations similar to Manatee County within our South Atlantic region (please note: each 0.1 deputy/population ratio increase = 25.6 deputies).

The population served by the Sheriff's Office has increased by approximately 17,000 people from 2009 to 2012. In 2009 there were 477 deputies for 240,000 persons. In 2012 there were 479 deputies for 256,000 persons, placing Manatee County into a different population group/category as defined by the FBI. This population increase decreases the law enforcement officer per 1,000 population ratio from 2009.

Impact of Alternatives

These projections do not account for any additional officers for the rural areas of the county, which would be very limited due to low growth projections in those areas. Based upon population projections, the growth would require 309 additional law enforcement officers by 2035 (using the current ratio of 1.87 officers per 1,000 persons). This would equate to a hiring rate of 14 per year. Since the alternatives distribute the population in the county differently, the number of officers needed for a particular area of the county is affected. These numbers would be utilized differently by the Sheriff and distributed into patrol districts.



Law Enforcement - Summary

Unlike EMS and Fire, Deputies respond while on patrol in a given patrol district. They are not fixed to a specific station. However, greater efficiencies can be realized with call handling and service delivery if new populations are closer to other patrol districts that frequently require additional requests for service (i.e., West 30 patrol district, etc). In addition, the spillover effects for additional residential, commercial/retail, and general economic development efforts could reduce the unemployment rate and aid in reducing calls for service. More population density also increases the viability of community policing, which has many positive social benefits. As far as a specific alternative having clear advantages, generally Alternatives 2 and 3 would likely provide more efficiency in response time as population would be more concentrated in areas.

Fire Services

In Manatee County, eight independent districts handle fire services as following:

- Cedar Hammock Fire Department
- East Manatee Fire District
- Myakka City Fire District

- North River Fire Department
- Parrish Fire Department (includes Duette)
- Southern Manatee Fire & Rescue
- Trailer Estates Fire Department (Volunteer Department)
- West Manatee Fire District

The City of Bradenton has its own fire department. In addition, the Sarasota-Bradenton Airport Authority has a fire department for its facilities and the State of Florida Division of Forestry handles wild land fires.

Across the United States, communities average 1.53 to 1.77 career firefighters per 1,000 people. Average apparatus for communities with populations ranging from 250,000 to 499,999 is 0.059 pumpers per 1,000 people, 0.014 aerial apparatus per 1,000 people and 0.058 stations per 1,000 people.[40] Much of this depends upon local preferences in regards to desire to achieve certain fire insurance ratings made by Insurance Services Offices.[41] Many local fire districts prefer to maintain stations within 5 miles of the majority of their citizens.

However, despite over 300 years of organized fire protection in the United States, there is no national standard for the number of firefighters or equipment for a specific population size. Fire staffing is best determined by community desires and to a certain degree, probability. Community desires include per capita fire cost, response times and effect of number of fire stations has on home owner insurance costs. The Insurance Services Office (ISO) and Commission on Fire Accreditation International (CFAI) determine numbers and probability based on several assumptions that are known to be true. The first is how long it takes for a person to cease being a viable, survivable patient after losing airway breathing and circulation. The second is the standard time-temperature curve to indicate what happens at a fire once it has gone to open flame. If we consider all of these magic numbers together — firefighters per 1,000, per capita fire cost, 1 hour travel distance and four-minute travel time, the potential outcome of a fire in a community helps determine the level of investment in fire services.[42]

---

[40] *US Fire Department Profile Through 2010*, Michael J. Karter, Jr. and Gary P. Stein, NFPA Fire Analysis and Research Division, October 2011.

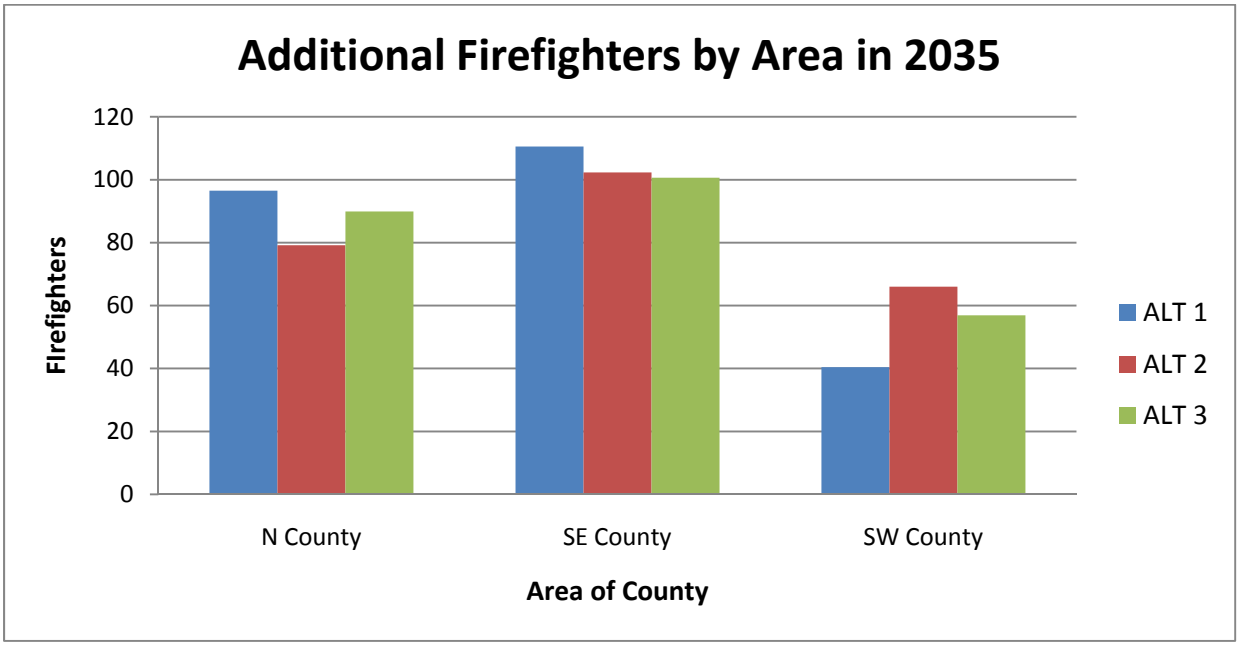
[41] *Planner's Estimating Guide: Projecting Land-Use and Facility Needs*, Arthur C. Nelson, FAICP, American Planning Association, 2004.

[42] *Magic Numbers Do Departments No Favors, Fire Chief Magazine*, July 2005, accessed via website http://firechief.com/suppression/ar/firefighting_magic_numbers_departments, on September 15, 2012.

It is up to each individual fire district in Manatee County to work with their elected fire commissioners and public to determine the level of service they are going to provide for their community, balanced with the level of taxation they will charge their citizens.

Impacts of Alternatives

These projections do not account for any additional firefighters for the rural areas of the county, which would be very limited due to low growth projections in those areas. Based upon population projections, the growth would require 248 additional firefighters by 2035 (using the current ratio of 1.5 firefighters per 1,000 persons). This would equate to a hiring rate of 11 per year. Since the alternatives distribute the population in the county differently, the number of firefighters needed for a particular area of the county is affected. These numbers would be utilized differently as the County is distributed into fire districts.



Based upon population projections, these fire districts may require additional stations and pumper/aerial equipment. However, given the additional population is located in an area already served, greater efficiencies can be realized with call handling and service delivery as the new population is close to existing fire stations. Instead of many new stations, additional fire engines could be located at the existing stations. Stations could also be relocated to better serve existing and new residents.

Fire Services - Summary

Greater efficiencies can be realized with call handling and service delivery if new populations are closer to existing fire stations. In addition, the spillover effects from new residential, commercial/retail, and other redevelopment related construction efforts, helps in fire prevention as new construction and redevelopment is done to more modern fire safety standards and

building codes. As far as a specific alternative having clear advantages, generally Alternatives 1 and 2 would likely provide more efficiency in response time as population would be more concentrated in areas with existing fire services and stations. Alternative 3, while provides concentrated future development, still requires initial investment and infrastructure to adequately serve the potential population.

Emergency Medical Services

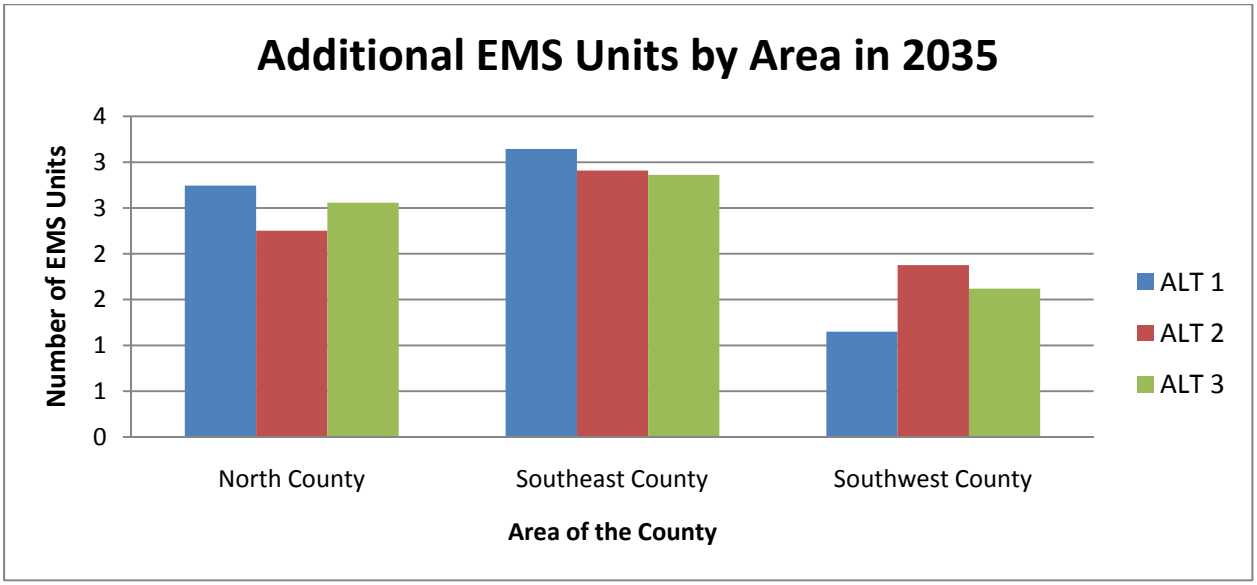
Manatee County Government handles Emergency Medical Services which operates 17 advanced life support transport units and one advanced life support engine in Myakka City. EMS handles approximately 36,000 calls for service each year. These EMS units are housed in various fire district fire stations.

They are located with similar consideration that the fire districts apply to level of service, countywide. The goal of EMS is to maintain current operational standard of one EMS unit for approximately 23,445 persons. However, they consider unit hour utilization, response times and demographics when determining if an EMS unit will be housed in a particular area or station.

Impact of Alternatives

Based upon population projections County EMS will require approximately 7 additional units by 2035. The subareas that are projecting the highest population growth include Lakewood Ranch (Subareas 8 & 9) and Southwest County associated with Manatee Fruit Company development (Subarea 11). Development in specific areas would require the additional EMS units:

Some of the future population is in an area already served, adding greater efficiencies for call handling and service delivery. A more detailed analysis will be provided when determining exact EMS needs that include response time modeling, etc.



EMS Summary

Greater efficiencies can be realized with call handling and service delivery if new populations are closer to existing EMS units. EMS units can expect higher call volumes per capita as the population continues to grow in age. As far as a specific alternative having clear advantages, generally Alternatives 1 and 2 would likely provide more efficiency in response time as population would be more concentrated in areas that are in the vicinity of existing EMS units. Alternative 3, while provides concentrated future development, still requires initial investment and infrastructure to adequately serve the potential population.

Public Safety Summary

The various growth alternatives affect public safety differently than many other services. However, it became apparent in the analysis that just using population projections would not suffice in providing true clarity of differences for these services and the effect the alternatives would have on them. Additional analysis is required to consider response time, call frequency, density of development, existing districts, demographics, area of the county or other factors that could help provide a more detailed analysis.

Response times and cost of service delivery are key EMS and fire station considerations. In areas of lower rates of street connectivity (i.e., fewer thru streets), more fire stations may be required to serve residents to provide acceptable response times, making conventional suburban communities more expensive to serve than the older communities where the local streets mostly connected to other local or collector streets. The City of Charlotte, NC, recently studied the effects of suburban development patterns with streets similar to what has been constructed in Manatee County in recent years and found higher service costs for fire (for EMS as well in Manatee County).[43]

As far as a specific alternative having clear advantages, generally Alternatives 1 and 2 would likely provide more efficiency in response time as population would be more concentrated in areas that are in the vicinity of existing public safety units. Alternative 3, while provides concentrated future development, still requires initial investment and infrastructure to adequately serve the potential population.

Schools

Manatee County public schools serve 21,694 elementary, 9,492 middle and 11,934 high school students (2011). This is accomplished with 35 elementary schools, 11 middle schools, 7 high schools, 8 charter schools, 2 tech centers and 2 special schools. Charter schools serve 2,675 of

[43] *Effect of Connectivity on Fire Station Service Area & Capital Facilities Planning*, City of Charlotte Mecklenburg County Government Services, 2012.

these students. Transportation of students costs $6.73 million dollars per year, with over 15,000 students transported daily in the school year. Combined, buses travel over 3,250,000 miles per year and use over 2,300 gallons of fuel per day.

Manatee County public schools are typically multi-use facilities. They have before school, school and after school activities. Some schools are even utilized by church groups and sports teams on weekends. For concurrency purposes, their play fields count towards the County's level of service requirements for parks.

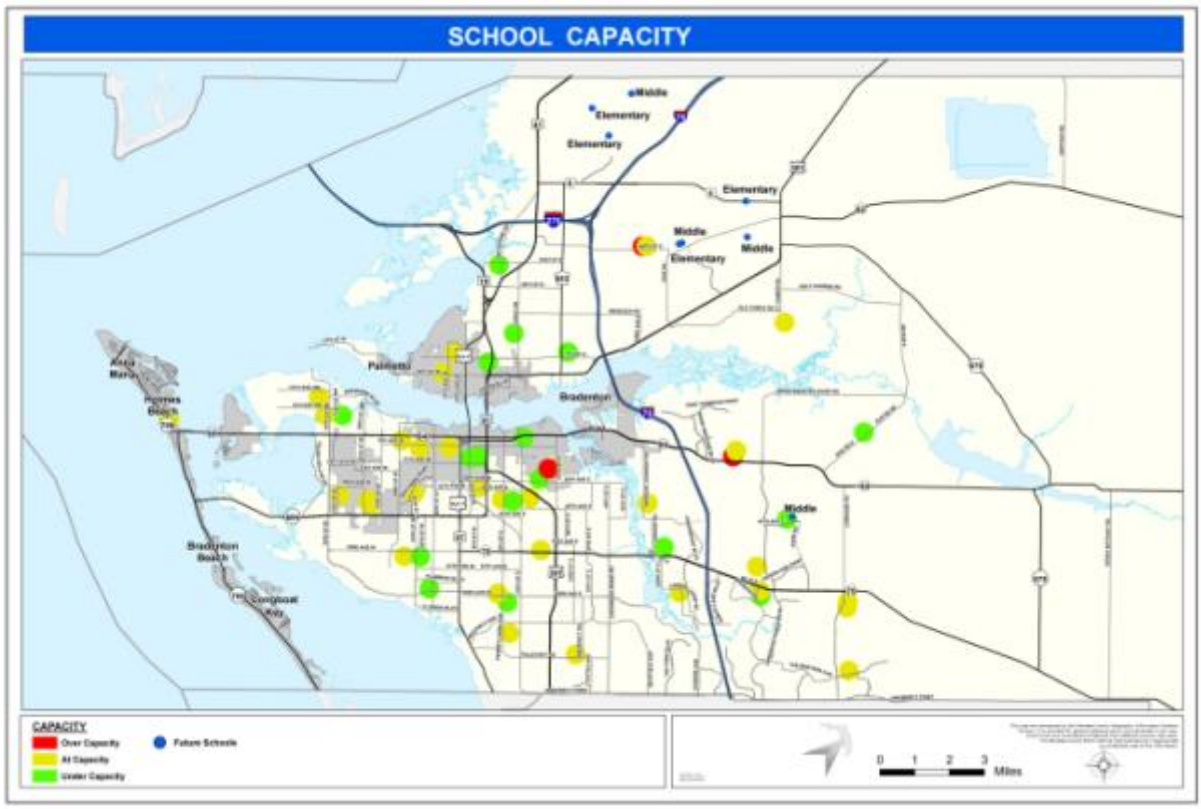
School Growth

Schools are significant financial investments for communities. Like other fast growing regions in Florida during the boom years in the last decade, Manatee County had challenges providing for future student needs based upon growth trends. Portable classrooms, large class sizes and overcrowded facilities played on the fears of officials and parents. The Manatee County School Board invested millions in new schools and properties for new schools during 2000-2007 to account for growth and the Class Size Amendment, which set maximum numbers of students in class rooms also requiring new school construction. Unfortunately, much of those investments in developing areas went unneeded as the economy faltered and hundreds of homes remain vacant and many subdivisions remain unconstructed. The School Board was successful in purchasing and leveraging properties for future school sites from developers as follows (see following map):

- Future Elementary & Middle School Sites (developer commitment): Curiosity Creek & Newport Isles (50 $\pm$ acres)
- Future Elementary Site (developer commitment): Curiosity Creek & Artesian Lakes (20 $\pm$ acres)
- Future Elementary Site (developer commitment): Copperstone (20 $\pm$ acres)
- Future Elementary & Middle School Sites (developer commitment): "FLM Property" near Erie Road & 69th Ave, (60 $\pm$ acres)
- Future Middle School Site & County Park : Riggs Property near Parrish (47 $\pm$ acres)
- Future Middle School Site: Lakewood Ranch near 44th Ave (27 $\pm$ acres)

School Capacities and Concurrency

Like the County's Concurrency Reservation System, the School Board has a Concurrency Reservation System that handles reservations and encumbrances associated with new development and its impact on schools. The School Board plans by School Service Areas. The county, incorporated and unincorporated, is divided into 4 School Service Areas.



As of October 2011, according to the School Board (see following School Capacity Map), the majority, 64% of public schools (34 schools) are operating “at capacity’, meaning they are operating between 70 and 100 percent of their capacity. Twenty-six percent (26%), or 14 schools, are operating “under capacity”, meaning they are operating below 70 percent of their capacity. Eight percent (8%), 4 schools, are operating “overcapacity”, greater than 100% of their capacity. The schools that are operating “under capacity” are primarily concentrated west of I-75; many are located in the county’s more densely populated areas. Some of the variation in school is likely due to the School Board’s “school choice” program. Recent legislative changes by the Community Planning Act in 2011, no longer require local governments to maintain school concurrency.

The analysis for schools by alternative is more detailed than the other service analyses. The School Board actively maintains significant data and trends on school needs, district populations, etc.

Schools with Alternative 1

There are several school service areas in the county that have capacity issues with specific school types. School Service Area-1 (North County) has capacity issues with elementary schools

and high schools. School Service Area-2 (East County) has capacity issues with high schools. School Service Area-3 (South Central County) has capacity issues with middle schools and high schools. The majority of School Service Area-4 (Southwest County) schools are at capacity, with Horizons Academy High School over capacity and 10 schools under capacity. The number of charter schools has grown substantially in the past decade.

Many new developments farther from services (School Service Areas 1 and 2) also hold cheaper land values, keeping the cost of housing lower than those closer to services. These "drive to qualify" developments make commuters out of those who cannot afford higher priced housing closer to services. Many of these residents have school-aged children.

Alternative 1 assumes 73,962 future additional dwelling units by 2035. It also assumes that 70% of the future dwelling units will be single-family detached, 25% will be single-family attached and 5% multi-family. Projections for Alternative 1, the following table provides an estimate of school needs based upon future student populations generated by the amendment area by school type. For comparison purposes in 2011, the *Development Growth by School Service Area Report* by the Manatee County School Board projected 29,402 additional students by 2030. There are several developer commitments to provide school sites in the growing areas of the county, including the Port area of NW County, Parrish and Lakewood Ranch. If these facilities are constructed by 2035, the following table illustrates reduced future school needs.

Schools with Alternative2

School Service Area-1 (North County) has capacity issues with elementary schools and high schools. School Service Area-2 (East County) has capacity issues with high schools. School Service Area -3 (Southwest County) has capacity issues with middle schools and high schools. The majority of School Service Area-4 (Southwest County) schools are at capacity, with Horizons Academy High School over capacity and 10 schools under capacity. The number of charter schools has grown substantially in the past decade.

Alternative 2 assumes of 81,234 future additional dwelling units by 2035. It also assumes that 34% of the future dwelling units will be single-family detached, 33% will be single-family attached and 33% multi-family. Using the maximum development potential of Alternative 2, the following table provides an estimate of school needs based upon students generated by the amendment area by elementary, middle, and high school students using the January 2008 generation rates.

There are several developer commitments to provide school sites in the growing areas of the county, including the Port area of NW County, Parrish and Lakewood Ranch. If these facilities are constructed by 2035, the following table illustrates reduced future school needs. However, none of these sites directly address additional school needs in Southwest County.

Since Alternative 2 focuses new population growth for the Southwest County, for comparison purposes, the following illustrates specific impacts to Southwest County (School Service Areas 3 and 4):

- 4 Elementary Schools
- 2 Middle Schools
- 2 High Schools

Schools with Alternative 3

School Service Area-1 (North County) has capacity issues with elementary schools and high schools. School Service Area-2 (East County) has capacity issues with high schools. School Service Area -3 (Southwest County) has capacity issues with middle schools and high schools. The majority of School Service Area-4 (Southwest County) schools are at capacity, with Horizons Academy High School over capacity and 10 schools under capacity.

Alternative 3 assumes of 78,919 future additional dwelling units by 2035. It also assumes that 34% of the future dwelling units will be single-family detached, 33% will be single-family attached and 33% multi-family. Using the maximum development potential of Alternative 3, the following table provides an estimate of students generated by the amendment area by elementary, middle, and high school students using the January 2008 generation rates.

There are several developer commitments to provide school sites in the Port, Parrish and Lakewood Ranch area activity centers. If these facilities are constructed by 2035, the following table illustrates reduced future school needs.

Existing Schools Serve the Activity Centers?

While existing schools are generally not located consistent with the larger Future activity centers (see previous Activity Center Map), schools should be considered minor activity centers. As a minor activity centers, these areas around the schools should facilitate higher residential densities and other support uses to save as many out-of-area vehicle trips as possible, saving future infrastructure costs.

Another opportunity to service the activity centers is to potentially relocate older schools to new school sites within the activity centers.

School Summary

There are several schools in the county that are underutilized or not at maximum capacity. There may be an opportunity at these or other schools to provide additional public uses. Student safety and security, public access points and other issues would have to be addressed.

However, there is an opportunity to maximize the space available to allow other government service uses to utilize space and provide their services to other parts of the county where they may not be a presence. This could include social services, veteran services, use of library facilities outside of school hours, and a variety of other uses should be explored as County and services by other agencies have not always extended services in the growing areas of the county.

Impact of Alternatives on Schools by 2035

	Elementary	Middle	High	Total	Total w/ Developer Commitment
ALT 1	31	7	8	**46**	**40**
ALT 2	34	14	9	**58**	**52**
ALT 3	33	14	9	**56**	**50**

Schools as Community Focal Points

Public schools are major destinations for thousands of vehicles and buses every day. Site location of the schools needs to be carefully located within communities to balance community and transportation needs. Zoning and land use planning in the area around schools should maximize the potential number of students within a walkable distance. Residential densities in the area of schools ideally would be higher than what is approved with most new developments (1 dwelling unit per acre) to achieve higher levels of efficiency for the schools in terms of transportation.

The private sector performs a site selection analysis for new business sites to locate sites that best meet their marketing and pro-forma requirements in an attempt to minimize off-site infrastructure impacts in terms of concurrency. Site selection analysis performed for schools while may locate school sites that are initially more expensive, but may save in other ways for other local government agencies. A cost-benefit analysis of the potential partnership to address the following would be beneficial:

- Consider upfront development costs associated with smaller schools.
- Ongoing maintenance costs associated with smaller schools.
- Potential savings in terms of physical infrastructure (e.g., impact to future street lane miles, busing, etc).
- Other funding and financing issues.

This may lead to locating smaller schools within neighborhoods instead of along arterial roadways outside of the neighborhoods where commercial and office uses typically occur. The key to ensure the traffic viability of the schools is a grid network of local streets and pedestrian systems in the neighborhood to ensure adequate distribution of school traffic without less reliance upon functionally classified roads.

School Size & Location

In 2005, the University of Pennsylvania completed a planning study of central Florida titled *Alternative Futures for the Seven County Orlando Region, 2005-2050*. With the help of the area regional planning councils and several local governments, they analyzed an alternative growth model. They used the same estimated future populations, but approached school planning slightly different that those schools in the area did. They proposed to reduce the school sizes by a third and also allowed them to be located internal to neighborhoods. This one change dramatically reduced the number vehicle trips for the entire region, which was estimated to save millions in future roadway improvements and provide air quality benefits. Not to mention, quality of life improvements for its residents.[44]

The Manatee County School Board determines the size of schools for maximum efficiency of operations for the facility. It may be more expensive to operate smaller schools, but savings may occur in the area of annual busing and transportation expenses to offset higher operational costs. Numerous studies, such as the Gates Foundation Study - Making *the Case for Small Schools*[45], point to smaller schools as having other benefits, such as academic achievement, student attitudes, social behavior, attendance, drop-out rate, etc. The School Board should study this option to determine with new schools, if this is a viable option.

---

[44] *Alternative Futures for the Seven County Orlando Region, 2005-2050*, prepared for The Metropolitan Center for Regional Studies, The University of Central Florida, by City Planning 702 Urban Design Studio, University of Pennsylvania School of Design, Department of City & Regional Planning, 2005.

[45] *Making the Case for Small Schools,* Bill & Melinda Gates Foundation (http://www.gatesfoundation.org/NR/Downloads/ed/evaluation/BMG911SmallSchoolsBrochure.pdf), 2003.

Another option agencies should consider to increase the efficiency of the investment of tax dollars is to further expand upon the mixing of uses at school sites. Not only should schools be used as public recreation centers, but also community centers, libraries or other social service activities as much as reasonably possible to not conflict with the primary role of the school and protection of children.

- Enhance focus of schools as centers of the community. Enhance opportunities to utilize facilities for recreation and the collocation of other community services and non-profits.
- Locate schools within neighborhoods. School Board may have to consider smaller, more community-sized schools.
    - School Board partnership with Manatee County to share costs and benefits associated with smaller schools.
- Partner with Manatee County to perform a site selection analysis for new school sites to locate potential sites that best meet marketing and pro-forma requirements but also minimize off-site infrastructure impacts in terms of concurrency.
- Analysis of current undeveloped sites.
- Study potential usage of available space in existing public schools for expansion of other government services.
- Amend land use regulations around schools.
- Focus on activity centers
- Consider use of public school libraries after hours for use by the public.
- School Board partner with Manatee County to study the potential of expanding and improving existing recreational opportunities on public school sites to facilitate County parks needs in areas where there are limited resources (e.g., ball fields, etc).

Solid Waste

Manatee County disposed of approximately 275,235 tons of solid waste in FY 09-10. This is approximately 4.7 pounds per capita per day, including waste diversion, based upon the 2010 population estimate of 321,097. This is only slightly higher than the solid waste level of service standard of 4.5 pounds per capita per day. The national average is 4.43 pounds per capita per day (2010).[46] However, County rates continue to decrease as levels of recycling increase. Nationally, Municipal Solid Waste (MSW) rates peaked in 2005, and have been in decline

[46] US EPA, http://www.epa.gov/epawaste/nonhaz/municipal/index.htm, accessed May 2012.

since.[47] At the state level, MSW rates peaked in 1995 and have been in decline since. Staff predicts the average per capita per day to remain at 4.5 lbs. through 2035. While nationally the average has been on the decline, it fluctuates with the economy.

Solid Waste Concurrency

There are 680 approved projects/land development applications with concurrency reservations in unincorporated Manatee County with 5,359 cubic yards per day capacity reserved in the County's landfill (as of January 2012). Most of these "reservations" are only good for a limited time, usually 3 years. If the development does not occur, this reservation comes off the concurrency reservation system. As of January 2012, the County has 15.8 million cubic yards per day available capacity in the landfill.

Like schools, the analysis for solid waste by alternative is more detailed than the other service analyses. Significant differences in solid waste volumes can be seen when data is more specific in terms of dwelling unit type, etc.

Solid Waste with Alternative 1

Alternative 1 provides for opportunity for multi-family housing development. Multi-family housing typically has lower solid waste generation rates, typically one-third of single-family detached units. Solid waste pickup with multi-family units is more cost-effective and due to lower generation rates, extends the life of the landfill longer versus more numbers of future populations moving into single-family detached housing.

Forecasting solid waste with ALT 1, the following assumptions have been made. To take into account the MSW generation decline over a 20 year period, an average of 4.5 lbs/capita/day was used. To reflect potential reductions in MSW associated with multi-family development, ALT 1 had the lightest emphasis on higher densities. Five percent (5%) of new dwelling units were designated as multi-family. This population had 1/3 the MSW generation rate.

Based on population estimates, new development would generate an average of 129,224 tons/year for a total unincorporated county generation rate by 2035 of 356,185 Tons/year for the landfill. In 2010, there was 275,421 Tons/year generated.

Solid Waste with Alternative 2

Alternative 2 provides more opportunity for increased development density and multi-family housing development. Multi-family housing typically has lower solid waste generation rates, typically one-third of single-family detached units. Solid waste pickup with multi-family units is

[47] US EPA, http://www.epa.gov/osw/nonhaz/municipal/index.htm, accessed May 2012.

more cost-effective and due to lower generation rates, extends the life of the landfill longer versus more numbers of future populations moving into single-family detached housing.

Forecasting solid waste with ALT 2, the following assumptions have been made. To take into account the MSW generation decline over a 20 year period, an average of 4.5 lbs/capita/day was used. To reflect potential reductions in MSW associated with multi-family development, ALT 2 has the strongest emphasis on higher densities in the urban core, which translates to higher numbers of dwelling units that are multi-family. Thirty-three percent (33%) of new dwelling units were designated as multi-family. This population had 1/3 the MSW generation rate.

Based on population estimates associated with Alternative 2, new development will generate an average of 332,449 Tons/year. For a total unincorporated county generation rate by 2035 of 356,185 Tons/year for the landfill. In 2010, there was 275,421 Tons/year generated.

Solid Waste with Alternative 3

Alternative 3 provides more opportunity for increased development density and multi-family housing development within the activity centers. Multi-family housing typically has lower solid waste generation rates, typically one-third of single-family detached units. Solid waste pickup with multi-family units is more cost-effective and due to lower generation rates, extends the life of the landfill longer versus more numbers of future populations moving into single-family detached housing.

Forecasting solid waste with ALT 3, the following assumptions have been made. To take into account the MSW generation decline over a 20 year period, an average of 4.5 lbs/capita/day was used. Ten percent (10%) of new dwelling units were designated as multi-family. This population had 1/3 the MSW generation rate.

Based on population estimates, new development will generate an average of 133,086 Tons/year. For a total unincorporated county generation rate by 2035 of 360,047 Tons/year for the landfill. In 2010, there was 275,421 Tons/year generated.

Solid Waste Summary

Forecasting solid waste with the three alternatives, the following assumptions have been made. To take into account the municipal solid waste generation decline but also times of economic booms and busts over a 20 year period, an average of 4.5 lbs/capita/day, consistent with the adopted level of service standard was used. To reflect potential reductions in municipal solid waste associated with multi-family development, different percentages of housing was estimated to be constructed as multi-family as follows:

- Alternative 1 - 5% of new dwelling units were estimated as multi-family.
- Alternative 2 - 33% of new dwelling units were estimated as multi-family.

- Alternative 3 - 10% of new dwelling units were estimated as multi-family.

Increases in multi-family development may relate to reduced costs in terms of solid waste pickup contracting due to the nature of the service provided. However, there is no guarantee of cost reductions here as it is a competitive bid process for solid waste pickup.

The Lena Road Landfill has a remaining capacity of 16,476,180 cubic yards and an estimated life of 30 remaining years. The current 2008 average annual daily use is 1040.3 tons. Given both scenarios population projections, it is expected that the landfill's estimated life will actually increase in future years. This is due to higher rates of recycling and as the County allows denser development in areas, those developments typically have lower solid waste generation rates. However, with lower generation rates, comes a reduced fee which impacts future capital improvements for solid waste facilities.

Impact of Alternatives on Solid Waste by 2035

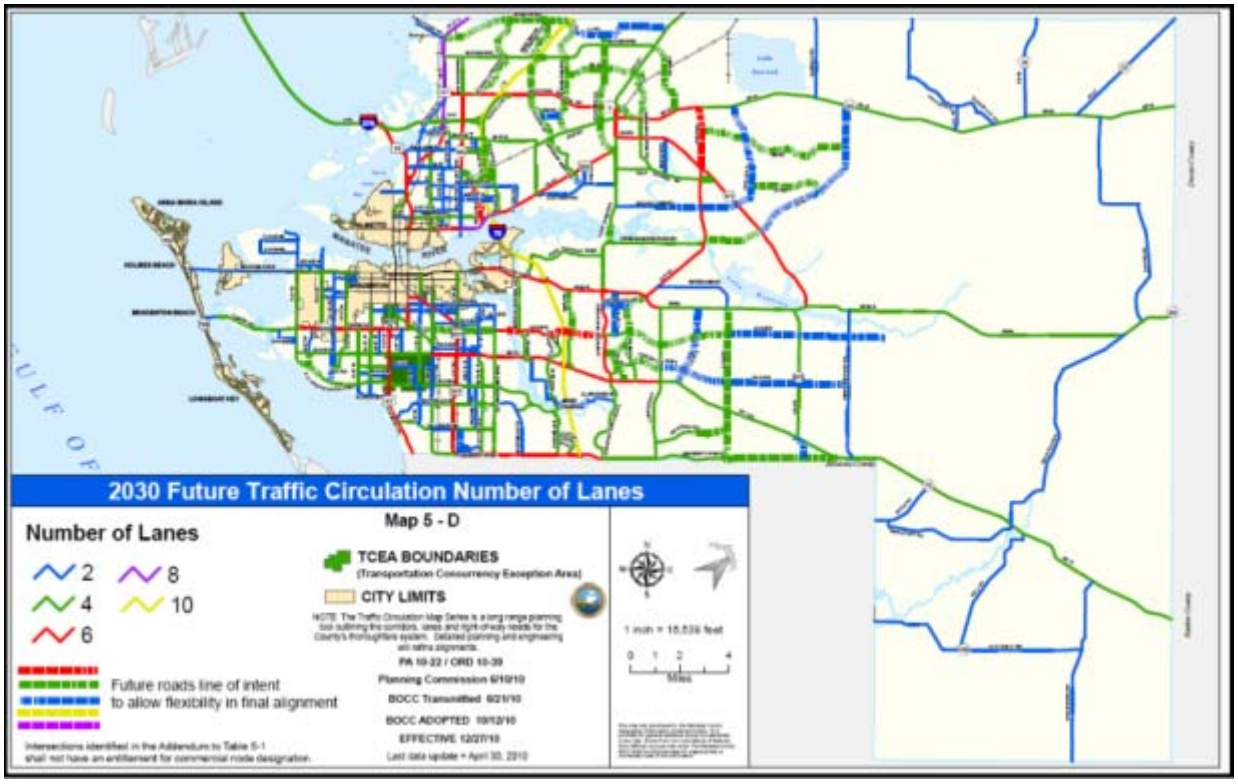
	Generated 2015-2035 Tons/Yr	2035 Total Tons/Yr	Rank
Alternative 1	**129,224**	**356,185**	**2**
Alternative 2	**105,488**	**332,449**	**1**
Alternative 3	**133,086**	**360,047**	**3**

Transportation Planning

Transportation planning for Manatee County occurs at both the local and state level. For State Roadways (e.g., SR 64, SR 70, US 301, etc.), the Sarasota-Manatee Metropolitan Planning Organization (MPO) is the regional transportation planning agency, which focuses on the funding of improvements for State roadways. Part of their planning responsibility is a Long Range Transportation Plan (LRTP) for the two member counties. This plan has the proposed improvements for the State roadway system and is updated every 5 years.

Current Transportation Plans

Transportation planning in Manatee County is done via the Comprehensive Plan's Future Thoroughfare Map Series, the Manatee County Transit Development Plan (TDP), and coordinated with the MPO's Long Range Transportation Plan (LRTP). The current Comprehensive Plan has a 2030 Future Thoroughfare Transportation Network map for the expansion of existing roadways and the construction of new roadways in the county.



Nationally, the costs of transportation have been increasing over the decades. In many metropolitan areas, the cost of transportation exceeds the annual expenditures for the home itself. In the Tampa Bay region, these costs are about $6,000 for each home. However, if fuel prices continue to rise, transportation costs will exceed annual housing costs. Poverty is

typically believed to be in the urban core areas or in the extreme rural sections, but has now made a dramatic appearance in the suburbs. This is in part due to rising costs of transportation and home ownership. National trends indicate that poverty has increased in the suburbs by 25% since 2000.[48]

The Future Thoroughfare Map Series has an expansive roadway plan that includes the potential widening of many existing roads throughout the county. The future lane miles are excessive in terms of the future cost and extent of improvements that will be necessary to maintain levels of service as the community grows. This is mostly due to the approval of low density residential development in areas with limited employment services or other land use types available so future residents drive longer distances. The Future Land Use Map of the Comprehensive Plan offers little opportunity in the growth areas for employment, office, commercial and other types of non-residential employment and essential services.

Subdivisions constructed since 1970 have been very inefficient from a transportation perspective. They have been designed to remove any thru-traffic from the residential streets entirely. This has been done by the use of winding streets, disconnected roadways, cul-de-sacs and entry gates. Most traffic has been routed onto arterial roadways, where walking, bicycling and transit uses are difficult.[49]

These developing areas are served by rural roads that serve the primarily agriculture uses. Bringing thousands of new residents to these areas requires improving mostly rural 2-lane cross section roadways with narrow pavement widths and open (swale) drainage to an urban standard consisting of either 4 or 6 lane divided roadways that have street lighting, curb and gutter, sidewalks, bike lanes, etc. This is an expensive upgrade ($2 to $4 million per mile) to make. In the older urban areas, the impacts of new development in other areas of the county will eventually call for the widening of many roadways “in-town” as the suburban development pattern in north and east county with its limited services and employment opportunities, distribute a disproportionate amount of traffic back to areas with existing services.

The Thoroughfare Plan calls for the widening of many streets “in town” (e.g., 26thSt. W, 59thSt. W, etc.). This would potentially degrade the quality of life for residents along these corridors. These corridors in older, developed areas typically have higher costs to improve due to property necessary being acquired or taken by Imminent Domain, instead of the additional right-of-way for future expansion of the road being dedicated with the development of the land which typically occurs in developing areas.

---

[48] *The Effect of the New Normal on Local Government Finance*, Burchell& Nelson, Growth & Infrastructure Consortium 2011.

[49] *Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community*, November 2005.

Transportation Concurrency Status

Transportation concurrency is a complicated issue to address. The County has adopted levels of service for the roadway system that dictate the maximum amount of congestion for each roadway. This correlates into how long the public is willing to accept congested conditions in the afternoon rush hour (4pm-6pm). The existing level of service requirements do not allow any transportation infrastructure to have a failed level of service longer than 15 minutes. This means that during rush hour, any section of road or intersection cannot "fail".

For example, it can take longer than one signal light cycle to get through an intersection for a 15-minute period, but no longer. If it takes longer than one light cycle to get through an intersection for over 15 minutes during rush hour, an improvement to the capacity of the intersection must be done. This could be as simple as an adjustment to the signal timing (i.e., longer green time for failing turn or through lane movement) or require expansion of the intersection to add a second left turn lane, additional thru-lane, etc., in order to get the failure rate down to 15 minutes or less during rush hour.

One concept to be explored is whether the public would be willing to accept congested conditions for longer periods during rush hour. For example, if the length of time an intersection could fail was increased to 20 or even 25 minutes during rush hour, theoretically millions of dollars could be saved and the existing infrastructure's lifespan could be extended for years longer, depending upon the specific area of the county and the willingness of the public to accept slightly longer periods of traffic congestion.

There are approximately 680 approved development projects/land development applications with concurrency reservations in unincorporated Manatee County (January 2012). These projects have 47,353 vehicle trips reserved on county roads (as of January 2012). These "reservations" are only good for a limited time, typically 3 years. If the development does not occur, those reserved trips come off the reservation system. If the development moves forward and is constructed, the trips then become part of the everyday traffic, known as "existing traffic". Some developments may have been required to construct improvements to the roadway system to facilitate their development, which is also tracked in the concurrency reservation system. There are some developments with longer term "reservations" that came in the form of Local Development Agreements, which is essentially a contract agreement with a developer where they get longer reservations in exchange for something that the County needs.

Transportation Planning Impacts of Alternatives

The three development alternatives affect transportation differently. Levels of congested lane miles and average trip length are key measurements in determining which alternative may provide a more efficient growth option.

Transportation Planning with Alternative 1

The County plans for new future roads and the widening of roads via the Comprehensive Plan's Future Thoroughfare Map Series. The Future Thoroughfare Maps allow the County to secure future right-of-way from property owners along various roadways in the county. The map identifies the necessary future improvements to the roads in terms of number of lanes, based upon the future population of the county. It does not identify specific intersection improvements, as those occur with the Capital Improvements Plan which is updated annually or by the development community as required improvements to facilitate the additional traffic they are creating.

As previously mentioned, the County over-allocated future growth to the urban core and western portions of the county when the Comprehensive Plan and Future Land Use Map were adopted in 1989. Transportation plans in terms of future road widening projects in the developed areas are proposed to be scaled back. Many roadways in these developed areas have residences along them and would be too expensive and politically unpopular to widen. These factors will also necessitate the need to move future potential population associated with the Future Land Use Map's unrealized densities out of these areas. Given these changes, amendments may be proposed to reduce the future road thoroughfare network. These changes would include reducing future roads by 500 lane miles, by amending the Future Thoroughfare Map Series. These changes and amendments could occur by 2013 and are consistent with the Sarasota-Manatee Metropolitan Planning Organization's 2035 Long Range Transportation Plan.

Growth with Alternative 1 Future Thoroughfare Network and Current Comprehensive Plan	
Total Lane Miles	2,217
Congested Lane Miles	444
% Congested	20%
Average Delay per Trip	16.8 Minutes

Staff is proposing to maintain most of the roads in the developed portion of the county as they currently are, with more improvements focused on safety and improving capacity at intersections. This strategy, also known as "wide nodes – narrow roads" is a cost saving measure that helps maintain level of service of the roadways, without the additional expense of widening the roads midblock between the intersections. This approach is common in more

metropolitan areas. By reducing the future lane miles, estimated roadway build-out cost ($2 Million per lane mile new road costs) would be reduced to $884.4 Million (FY10 Dollars).

There would then be 2,217 total lane miles of roads in Manatee County. Out of that, 444 lane miles (20% of the total lane miles) would be considered congested in the PM Peak Hour (4-6pm "rush hour"). The average delay per trip would be over 16 minutes, meaning during rush hour, your trip would take, on average, 16 minutes longer as illustrated the previous table. This reduction in future lane miles would not facilitate or assist transportation needs along the major thoroughfares to the employment core of the county, as they would remain congested during the PM Peak Hour.

Inter-neighborhood ties are still politically unpopular when existing subdivisions are required to connect to a new subdivision's streets via an existing dead-end street. A more reasonable way to resolve this issue is to require more through local streets at appropriate locations that do not have residential driveways on them, so these roads function more as a collector roadway. Obviously this would not help existing subdivisions, but new subdivisions need access to more through streets especially in developing areas of the county where the majority of traffic is focused on arterial roadways, creating an area with limited transportation redundancy and wide, high speed and high volume roads. The County needs to consider other alternative incentives for the development community to provide the additional lane miles necessary for a grid system.

Transportation Planning with Alternative 2

This alternative shifted 60% of the 2035 population growth (44,486 persons) to Southwest County. While this may not be a reasonable assumption for some, for comparison purposes, it helps to illustrate the impact of more dense development that utilizes other transportation options. This alternative has the following outcomes when modeled:

- Reduction of Thoroughfare Network by 600 lane miles.
- Reduced vehicle miles traveled from Alternative 1 – Trend.
- Congestion increases by 4% vs. Current Adopted Network.
- Estimated cost at $2 Million per lane mile is $779 Million (FY10 Dollars).

There would then be 2,164 total lane miles of roads in Manatee County. Out of that, 456 lane miles (21% of the total lane miles) would be considered congested in the PM Peak Hour (4-6pm "rush hour"). The average delay per trip would be over 16 minutes, meaning during rush hour, your trip would take, on average, 16 minutes longer. Major thoroughfares would remain congested and more congestion on constrained facilities would occur.

Addressing transportation concurrency is more complicated in developed areas. Level of service standards need greater flexibility in terms of allowing other forms of transportation to address

trips (i.e., walking, bicycling, transit, etc.) and extending the amount of time in allowing typical "failed" conditions. This is a multi-modal level of service approach to addressing congestion.

The existing level of service requirements do not allow any transportation infrastructure, anywhere in unincorporated county, to have a failed level of service longer than 15 minutes. In urban areas, it would be beneficial if the public was willing, to accept congested conditions for longer than 15 minutes, perhaps 20-30 minutes per day. This could save the County millions of dollars and extend the existing infrastructure's lifespan many years or even decades, depending upon the specific area of the county.

Transportation Planning with Alternative 3

This alternative shifts 60% of the future population growth to activity centers. It also reduces the Future Thoroughfare Network by 600 lane miles. It reflects One-Bay Option "C" as preferred by the Board of County Commissioners and the Tampa Bay Regional Planning Council.

- Reduced vehicle miles traveled and vehicle hours traveled from Alternative 1 – Trend
- Significant reduction in delay and congestion
- Estimated cost at $2 Million per lane mile is $822.7 Million (FY10 Dollars)

In most of the developing areas, there are limited services and employment opportunities for residents. This change would allow reductions in the future roadway network by 600 lane miles. However, infrastructure improvements would still be required. The estimated cost for these roadway infrastructure improvements would be estimated at $822.7 million (FY10 Dollars) reflecting $2 million per lane mile.

This alternative generally provides for less congestion along roadways to the employment core in comparison to the other alternatives with the same proposed future population in 2035. It also creates shorter trips and more internal capture within the activity centers. This alternative, like Alternative 2, increases multi-modal and pedestrian opportunities.

Growth with Alternative 3 Future Thoroughfare Network and Activity Center Focused Comprehensive Plan	
Total Lane Miles	2,186
Congested Lane Miles	380
% Congested	17%
Average Delay per Trip	12.6 Minutes

Activity centers will need a balanced multi-modal transportation system that emphasizes pedestrian and bicycle connectivity while creating neighborhoods which will offer a variety of housing, amenities, and lifestyles with conveniently located commercial uses. Activity centers have the potential to create "internal capture" by allowing residents to "live, work, and play" within one location.

Activity centers may include clustering of uses, dense development, and a mix of uses to reduce the number of vehicle miles traveled. The proximity of non-residential services can reduce vehicle miles traveled and reduce delays and congestion in other areas of the county by keeping trips more localized.

Alternative 3 provides less congestion, in comparison to other alternatives, along roadways to the employment core of the county. The Activity Center focus would also create shorter trips and more internal capture within the development centers.

Transit Planning

The Mass Transit Sub-Element of the Manatee County Comprehensive Plan establishes mass transit generation rate of 9.81 passenger miles per capita per year. The County's Transit Development Plan projects ridership (entire county) from 8,566 riders in 2007 to over 10,000 riders in 2017.[50] Transit is also required for concurrency. Manatee County Area Transit (MCAT) serves a limited portion of the developed area of the county. MCAT has the following performance measures identified in the Comprehensive Plan:

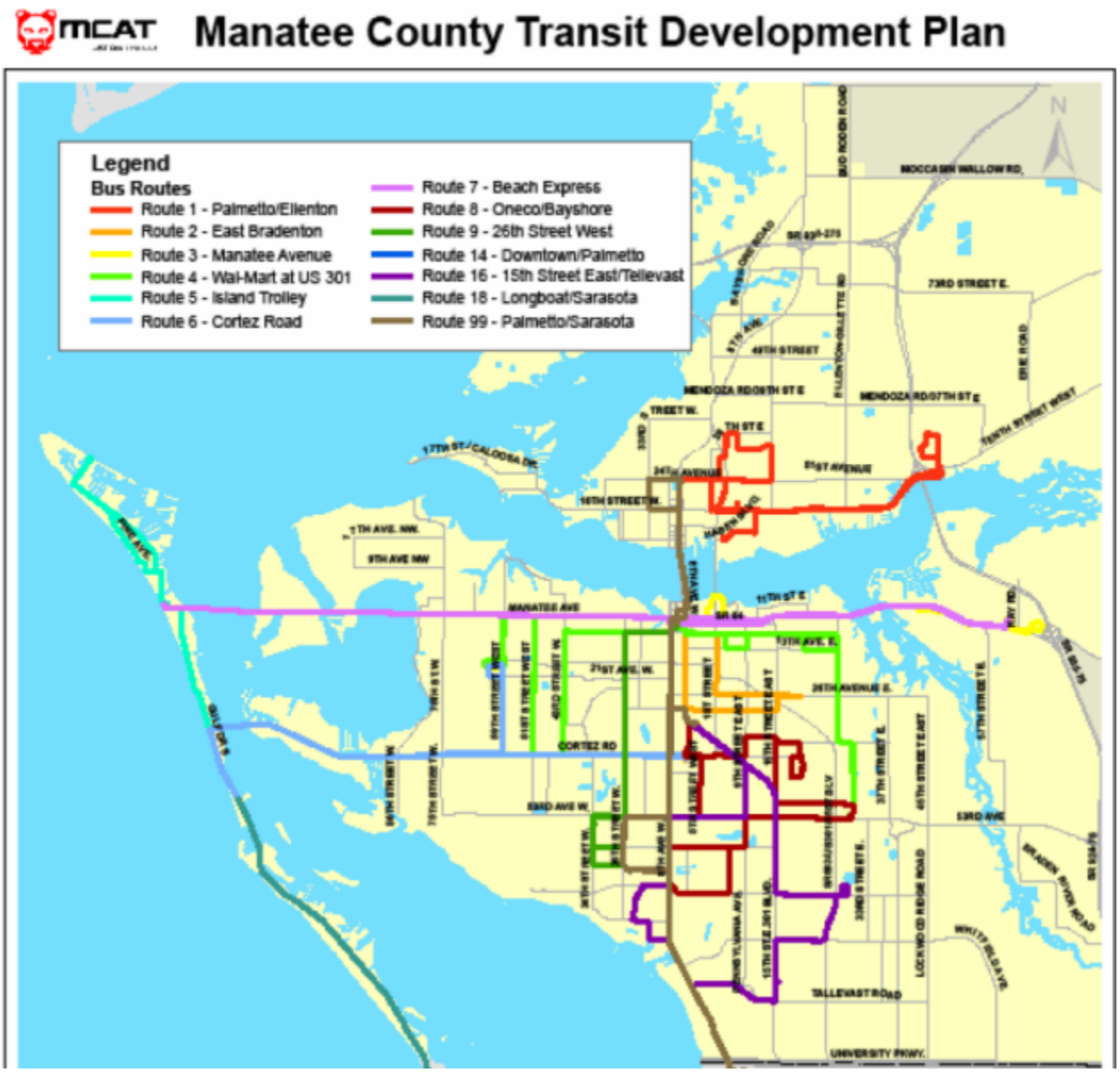
- Provide and fund a transit system providing a level of service at a level of 9.81 annual passenger miles per capita based on resident population of the county.
- Address increased demand for line haul transit service concurrent with the increase in resident population by budgeting and expending funds to address projected annual operating and capital costs.
- Meet the following performance standards (line haul routes), where financially feasible, for design and operation of the fixed route transit system.
    - An average of one bus stop every one-quarter route mile.
    - An average of one bus shelter every 1.5 route mile.
- Develop strategies to reduce transit vehicle headways during peak hour periods.[51]

[50] *Manatee County Transit Development Plan FY2008-FY2017 Major Update*, Center for Urban Transportation Research at the University of South Florida and Tindale-Oliver & Associates, Inc., August 2008.

[51] *Manatee County Comprehensive Plan,* Monitoring Element.

Service is concentrated west of I-75. *Imagine Manatee, One-Bay, Growing Green, Council of Government's Community Character and Compatibility Study* and the *Build-out Study* all called for improvements and expansion of the County's transit system. However, to ensure expanded transit service is used efficiently, additional density is necessary in terms of increased dwelling units per acre and businesses developed in a denser fashion. While Manatee County has some areas of density, it is not dense enough to make transit available to more people. The Florida Department of Transportation has studied "Transit-Oriented Developments (TODs)". These TODS analyzed development types and densities and illustrated what types contribute more to transit ridership. According to the study, densities in a community that ranged from 5 to 30 dwelling units per acre were a minimum for a line haul local bus transit system.[52] Manatee County's average density in developing areas since 2000 has been slightly less than 2 dwelling units per acre.

[52] *Transit-Oriented Development Design Guidelines*, FDOT 2009.



The *Manatee* County *Transit Development Plan* identifies a plan for improvements to the transit system. Transit has not expanded with past development activity. Service has focused on older areas of the community and the beaches. Transit is not treated from a concurrency perspective like roadways, or other infrastructure, as it is not required infrastructure. The transit system is not designed to serve all tax payers equally. Federal grant based funding for the bus fleet mandates service is focused on areas that have fewer autos per household, lower incomes, etc., thus creating more of a social service system instead of a county-wide transportation system.

For the purposes of this analysis, transit planning is expanded to address additional travel demands in the county. Adding routes or expanding existing transit service is expensive. The

routes must be carefully planned and analyzed to determine the highest return on the investment in terms of fare box revenues and maximization of grant funds.

Transit Planning - Alternative 1. Transit is a key component to maintaining the level of service of roadways and providing a cost feasible transportation alternative for the community. Enhancements for Alternative 1 are recommended as follows by 2035:

- Expansion of existing routes to include:
    - Increased service frequency (less time between buses) on existing routes
    - Expansion of service to Saturdays and Sunday (select routes)
    - New routes for Port Manatee, Parrish and Lakewood Ranch
- Commuter Express Services
    - Additional 99X (Sarasota - Palmetto)
    - South via US 301 to Sarasota
    - North via I-75 to Brandon
    - North via I-275 to Pinellas / St. Petersburg
- Additional buses required total - 69

The existing transit services include 12 routes with 26 vehicles (not including para-transit). Adding the above services would necessitate increasing the fleet size from 26 to 95 vehicles. Typically the buses are funded from federal grants. Existing services (FY 2012) costs (net for Manatee County includes fuel, vehicle maintenance, administrative costs, etc.) $4 million to run the transit system. Expanding the transit system to this level would increase costs to Manatee County to $17.5 million (2012 dollars).

Transit Planning (Alternative 2). For Alternative 2, growth projections bring 74,601 more dwelling units county-wide by 2035. For Southwest County; this means approximately 20,221 dwelling units over the 25 year period. This is twice the number of dwelling units estimated with Alternative 1 (11,574) for Southwest County. This would bring approximately 808 dwelling units constructed per year to Southwest County. Many of these dwelling units are from Manatee Fruit Company and SBC Development (located along El Conquistador Parkway) developing consistent with the allowable densities allowed by the Future Land Use Map. Transit will play a greater role in this growth alternative. Future densities along transit routes should be at a minimum of 6-8 dwelling units per acre, which is the lowest density that justifies bus service with 15-30 minute headways.

Transit is a key component to maintaining the level of service of roadways, especially for Southwest County, and providing a cost feasible transportation alternative for the community. Enhancements for Alternative 2 are recommended as follows by 2035:

- Expansion of existing routes to include:
    - Increased service frequency (time between buses) on existing routes to 30 minutes and 15 minute headways on Routes 3, 6, 9 and Anna Maria Island
    - Expansion of service to Saturdays and Sunday (select routes)
- New routes as follows:
    - El Conquistador – IMG Academies - Bayshore Gardens – State College of Florida
    - New routes for Port Manatee, Parrish and Lakewood Ranch
- Commuter Express Services
    - Additional 99X (Sarasota - Palmetto)
    - South via US 301 to Sarasota
    - North via I-75 to Brandon
    - North via I-275 to Pinellas / St. Petersburg
- Additional buses required total - 70

An additional route along El Conquistador Parkway serving Manatee Fruit Company, Bayshore Gardens and the State College of Florida is an important addition to this area of the county. This route will likely have over 183 potential users per day by 2035 from the development of Manatee Fruit Company alone.

The existing transit services include 12 routes with 26 vehicles (not including paratransit). Adding the above services would necessitate increasing the fleet size from 26 to 96 vehicles. Typically the buses are funded from federal grants. Existing services (FY 2012) costs (net for Manatee County includes fuel, vehicle maintenance, administrative costs, etc.) $4 million to run the transit system. Expanding the transit system to this level would increase costs to Manatee County to $17.0 million (2012 dollars).

Transit Planning (Alternative 3). For Alternative 3, transit circulators connecting residential to employment within centers would provide transportation options for inter-activity center commuting. However, ridership estimates are still low throughout build-out scenario. This is due

to typical human behavior as programmed into the transportation model. This could change with increases in fuel prices.

To make the mixed use concept work effectively with limited opportunity for future capacity building roadway improvements, transit will be key to efficiently move travelers in this part of the county. The 2035 population growth projections provide an opportunity for transit to grow with the population. For Alternative 3, growth projections bring 78,870 more dwelling units county-wide by 2035.The population distribution is as follows:

- North County 28,655 dwelling units
- Southeast County 31,577 dwelling units
- Southwest County 16,638 dwelling units

Transit is a key component to maintaining the level of service of roadways, especially the extension of service to Parrish and Lakewood Ranch. Enhancements for Alternative 3 are recommended as follows by 2035:

- Expansion of existing routes to include:
    - Increased service frequency (time between buses) on existing routes to 30 minutes and 20 minutes for select routes
    - Expansion of service to Saturdays and Sundays (select routes)
- New routes as follows (30 minute headways):
    - El Conquistador – IMG Academies - Bayshore Gardens – State College of Florida
    - Benderson Rowing – Sarasota-Bradenton International Airport – Hotels – University Parkway Corridor
    - New routes for Port Manatee, Parrish and Lakewood Ranch
- Commuter Express Services
    - Additional 99X (Sarasota - Palmetto)
    - South via US 301 to Sarasota
    - North via I-75 to Brandon
    - North via I-275 to Pinellas / St. Petersburg
- Additional buses required total - 31

Like Alternative 2, an additional route along El Conquistador Parkway serving Manatee Fruit Company, Bayshore Gardens and the State College of Florida is an important addition to this area of the county. This route will likely have over 183 potential users per day by 2035 from the development of Manatee Fruit Company alone. The addition of the Benderson World Rowing facility and Sarasota-Bradenton International Airport (SRQ) route will reach shopping and hotels in the southern area of the county, which is important for tourism and economic development.

Adding the above services would necessitate increasing the fleet size from 26 to 80 vehicles. Typically the buses are funded from federal grants. Existing services (FY 2012) costs (net for Manatee County includes fuel, vehicle maintenance, administrative costs, etc.) $4 million to run the transit system. Expanding the transit system to this level would increase costs to Manatee County to $14.8 million (2012 dollars).

Alternative Transportation Planning

Imagine Manatee, One-Bay, Growing Green, Council of Government's Community Character and Compatibility Study and the *Build-out Study* all called for improvements and expansion of the County's alternative transportation system. This was based upon a variety of factors, but specifically relates to improving the quality of life.

Annually, Manatee County and the School Board staff meet to determine where pedestrian improvements around public schools are needed. The consideration of schools and the matching of appropriate bicycling and walking infrastructure consistent with the age and skill level of the users is very important. Providing usable, walking and cycling infrastructure can save school districts millions in transportation costs and save the County millions in reduced roadway infrastructure needs. Future roadway improvements should not only address motor vehicles, but primarily focus on associated safety improvements and improvements that better

facilitate pedestrians, bicyclists and transit users as well as motor vehicles. This planning is known as Complete Streets. In 2013, the County will consider new policies and engineering standards that better facilitate this concept.

Communities with heavy investment in alternative transportation infrastructure also typically rank higher in "Best Places" inventories. Implementation of the Manatee County Greenways and Trails Masterplan (see map in appendix) has the potential of bringing these activities, recreation and travel choices to the community. Where off-street bicycling and walking have been constructed within the community (i.e., Emerson Point, Robinson Preserve, Riverwalk, etc), they have been tremendously popular. Overall, greenways are important attributes for communities. They are key indicators for livability ratings and most of the "Best Places" in terms of living have invested heavily in greenways and parks. While the sports performance industry may not use greenways directly, they are important to improve the livability and quality of life in the community.

Other specific studies and actions have followed similar to previously mentioned, and include:

- Innovation41 Plan (US 41 south corridor by colleges)
- Manatee Bicycle Pedestrian Safety Action Plan
- US 41 Safety Study

Alternative Transportation Planning (Alternative 1). Alternative 1 continues lower development densities. New roads do have bicycle and pedestrian infrastructure, but development is more suburban focused and less walkable with longer distances between uses. Infrastructure is there to walk or bike, but takes greater physical commitment from commuter. Instead of the ¼ mile walking distance, it may be 1-3 miles or longer to reach employment, retail or services. Development that is less dense and suburban oriented does not support transit or alternative transportation successfully.

Alternative Transportation Planning (Alternative 2). As previously mentioned, urban areas need to approach transportation from a multi-modal angle, recognizing physical and fiscal limitations to widening infrastructure in comparison to more suburban and rural areas. Vehicle trips can also be reduced through the use of urban development design practices. This includes providing pedestrian/walking trails, parks, open spaces, neighborhoods closer to employment, retail, services and the use of greenways. While this type of infrastructure can be difficult to build in established areas, focus can be connectivity of sidewalks, widening of sidewalks, creation of bike lanes and the provision of alternative bike routes off busy roads that lack the appropriate sidewalks and bike lane infrastructure. The Greenways and Trails Masterplan also includes some facilities identified in Southwest County to include the Baywalk Greenway and the Bayshore Greenway. These greenways have the potential of bringing new activities, recreation and travel choices to existing areas of the community.

Alternative Transportation Planning (Alternative 3). As previously mentioned, urban areas (activity centers) need to approach transportation from a multi-modal angle, recognizing physical and fiscal limitations to widening infrastructure in comparison to more suburban and rural areas. The activity centers will need to utilize urban development design practices to include providing pedestrian/walking trails, parks, open spaces, neighborhoods closer to employment, retail, services and the use of greenways. The Greenways and Trails Masterplan may need to be amended to provide some focus on intra-activity center bicycle and walking trips.

Using the alternative transportation approach would have the greatest benefit to trips, quality of life and public health to Alternative 3. This would be due to the fact that the new development would create it upfront in a master planned fashion instead of retrofitting it into the major growth area of the community like Alternative 2 requires. It is likely that more alternative transportation infrastructure would be created and utilized due to greater densities and closer proximity of uses associated with Alternative 3 than the other alternatives.

Financial Impacts of Current Transportation Plan

The Future Thoroughfare Maps (see previous 2030 Future Traffic Circulation Map) call for the current roadway network to increase by 1,150 lane miles (71% increase). These improvements and associated additional lane miles would reduce overall roadway network congestion by only 6% (23% today) over the current road network. However, the current estimated cost of construction is $2 million per lane mile (one lane of roadway for one mile in length), so projected future costs are approximately $1.97 billion (FY10 Dollars). Some of this cost would be borne by the development community. However, not all projects and improvements can be attributed to specific developments so many of the larger scale improvements will be borne by the County and State.

Unless there is a Capital Improvements Project (CIP) for a specific roadway improvement, most road projects in the county are constructed by the development community as required off-site mitigation for their traffic impacts to the roadway network. The state roads are the exception, as they carry most of the traffic in the county and are generally funded by the FDOT. In Manatee County, the developer builds roads or pays their proportionate fair share of future improvements due to the philosophy adopted by the Board of County Commissioners that the development community pays for the improvements associated with new development.

Legislative changes in 2011 prohibit local governments from requiring infrastructure improvements that address existing deficiencies, which creates new challenges in addressing infrastructure improvements. During the boom years of the last decade, the growth was concentrated into previously rural areas that had roadway capacity but had limited services and planned infrastructure. This development fueled large scale FDOT projects that widened the major thoroughfares of the community, to include SR 64, SR 70 and US 301, partially due to the limited number of planned collector roads in growth areas.

While the development community pays for project specific impacts to roadway infrastructure in their area of development, over time and with numerous other developments impacting the roadway system, other improvements are required due to increases in what is known as "background traffic." Background traffic is known as the traffic that exists throughout the county, but is not directly attributable to any specific project. For the County, financial constraints impact the completion of the Future Thoroughfare Network.

Growth with Current Adopted Future Thoroughfare Network and Current Comprehensive Plan	
Total Lane Miles	2,760
Congested Lane Miles	476
% Congested	17%
Average Delay per Trip	22.2 Minutes

Transportation Summary and Recommendations

As illustrated by the following table, Alternative 1 did not provide any clear advantages to any of the measurements. It was close to other alternatives in terms of total lane miles proposed. Alternative 2 had the lowest overall vehicle miles traveled, fewest line mile additions, lowest estimated costs and highest levels of transit ridership. This also has the most density within ¼ mile of transit. However, it had the worst congestion and tied for delay per person with Alternative 1. Alternative 3 did provide the fewest hours traveled and fewest hours of delay. This is because of increasing the variety of land uses in developing areas, reducing trips to other areas of the county and reducing time spent in vehicles. Congestion will continue to occur along the US 41 / US 301 corridors through year 2035 for any of the scenarios being studied.

Impact of Alternatives on Transportation by 2035			
Measurement	**Alt 1** **Stay the Course**	**Alt 2** **SW County Focus**	**Alt 3** **Activity Center Focus**
Vehicle Miles of Travel (VMT)	**12,005,595**	**11,219,495**	**11,402,072**
Vehicle Hours of Travel (VHT)	**441,931**	**405,715**	**391,638**
Vehicle Hours of Delay (VHD)	**123,853**	**123,853**	**94,994**
Total Lane Miles Proposed	**2,217**	**2,164**	**2,186**
Estimate Total Cost	**$884 M**	**$779 M**	**$822 M**
% Congested Lane Miles	**20%**	**21%**	**17%**
Average Delay per person	**16.8 Min**	**16.8 Min**	**12.6 Min**
Transit Ridership (person trips)	**6,295**	**15,294**	**7,988**

Notes: Cost estimates based on FY 2010 dollars. Estimates include the cost associated with stormwater impacts. **Green** = Best, **Red** = Worst, **Orange** = Between Best and Worst

The analysis makes no additional assumptions based upon change in travel patterns associated with any of the developments. As observed by other studies via FDOT, developments over the years achieve higher rates of internal capture as people adjust their living and working situations over time, likely driving shorter distances over the years for work, services, etc.

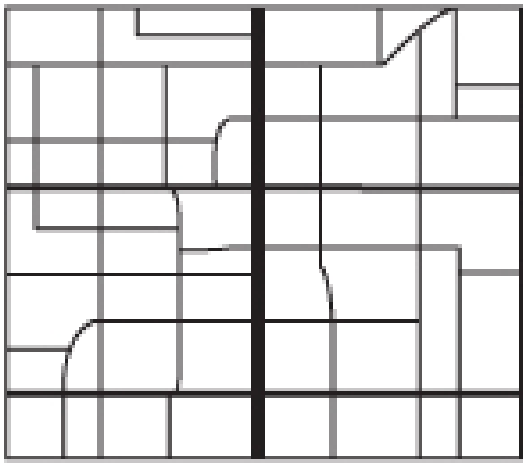
The analysis illustrates what it takes from an infrastructure perspective to increase transit operations in the county. Any increase in bus headways and additional routes has impacts to personnel, fleet size and maintenance facilities. Improvements to the transit are costly and would likely require an additional or expanded funding source.

Recommendations

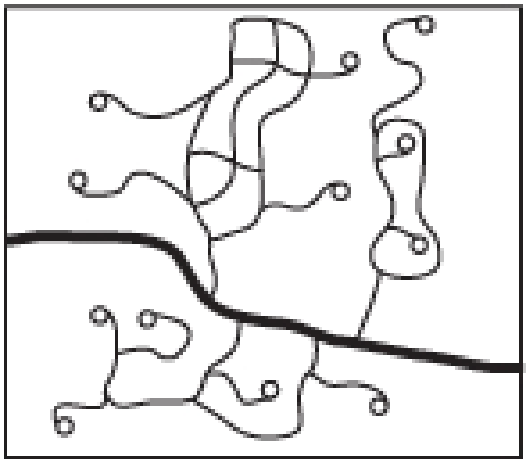
Common recommendations for all the alternatives include the following:

- Amending the Future Thoroughfare Map Series to reduce the future road thoroughfare network consistent with MPO's Adopted Long Range Transportation Plan.

- Move forward with key infrastructure - Ft. Hamer Bridge, 44th Avenue Extension.
- Implement “wide nodes – narrow roads” concurrency philosophy to maintain level of service of the roadways, without the additional expense of widening the roads.
- County coordination with the development community to provide the additional 2 lane collectors and interneighborhood ties necessary for a grid system.



High Connectivity Network



Low Connectivity Network

- Consider longer term (5+ years) capital improvements planning for infrastructure to better ensure appropriate project timing, funding and feasibility.
- Improvements in core developed areas to focus more on Complete Streets.
- Amend level of service standards to accept longer congested conditions.
- Remove barriers for greater densities and intensities at the major nodes as illustrated in the OneBay development scenario to maximize existing public transit and multi-modal activities.
- Creation of an Infrastructure Capacity Map for quicker decision making and economic development.
- Expand the transit system as funding allows for increasing the service interval and providing new routes.
- Expand the greenways system as funding allows for new trail development focusing on the Baywalk Greenway and other prioritized trails.

Utilities

Utilities include the County's central potable water, wastewater, reclaimed water and solid waste programs. There are two parts to the utility discussion, the actual treatment facilities (i.e., physical plants and equipment) and the delivery facilities (i.e., actual lines, pump stations and associated infrastructure) that extends the service to the customers.

Manatee County has three (3) wastewater treatment plants and one (1) water treatment plant. The City of Bradenton, City of Palmetto and the Town of Longboat Key maintain their own infrastructure. However, Manatee County provides wholesale water and wastewater service to Longboat Key, and wholesale water service to Palmetto. Manatee County also provides retail water and wastewater service to the beach communities on Anna Maria Island. Manatee County has over 4,000 miles of water and sewer lines. Manatee County has been a leader in Florida in terms of central potable water and wastewater infrastructure planning. This started with the construction of the 1,800 acre Lake Manatee in the 1960's, which is the unincorporated county's main potable water source.

Current Utilities Planning

The County has been maintaining its adopted level of service standards set by the Board of County Commissioners for the wastewater and potable water plants. These level of service standards are in the *Manatee County Comprehensive Plan's Monitoring Element*.

Manatee County utility master planning is done annually and based upon annual population projections for the county. Depending upon the population projections and corresponding wastewater service area, upgrades and improvements are then programmed into the County's Five-Year Capital Improvements Program. However, these improvements are not based upon the Comprehensive Plan's Future Land Use Map and the potential densities and intensities therein (build-out), but instead reflect current growth trends in the area. Essentially, utilities are sized based upon development trends in the area, and not the maximum potential allowed by the Future Land Use Map. The difference in what typically gets built, low density single-family detached and greater, but more density as high as 16 dwelling units per acre which is allowed, could occur in many locations in the county.

Individual utility studies and modeling are done for the respective wastewater plant service areas, to include the North Service Area, Southeast Service Area and the Southwest Service Area. The potable water service area also has a water supply master plan associated with the Lake Manatee water plant. Reclaimed water (MARS) also has a master plan.

Potable Water Concurrency

The following are monitoring measures for potable water utilities from the Comprehensive Plan:

- Maintenance of an infrastructure standard providing for an average daily flow of 110 gallons per capita per day.
- Maintenance of treatment capacity at the Lake Manatee treatment plant of 52.8 million gallons per day (permitted capacity).

There are 680 approved projects/land development applications with concurrency reservations in unincorporated Manatee County with 5.3 million gallons per day (MGD) capacity reserved in the County's water plant (as of January 2012). Most of these "reservations" are only good for a limited time, usually 3 years. If the development does not occur, these gallons come off the reservation system. If the development moves forward and is constructed, the 5.3 MGD then becomes part of the water consumed daily. Projects may have been required to construct improvements to the water system to facilitate their development, which is also tracked in the concurrency reservation system.

As of January 2012, the County had 9.7 MGD of "available" potable water at the plant. However, this water is not completely available. This number does not take into account the County's contractual requirements; in FY11, contracts reserved 13 MGD, but only 7.83 MGD was used. The unused 5.17 MGD while "available" in FY 11 is not "available" as long as a long term source for new demand. However, there is a step down feature in the contract to Sarasota County which will make up to 8 MGD of the currently contracted reserve available in the future.

Wastewater Concurrency

The following are monitoring measures for wastewater utilities:[53]

- Maintain an infrastructure standard providing not less than 115 gallons of wastewater treatment and disposal per day (average daily flow) per capita.
- Provide advanced secondary treatment of wastewater, or a higher treatment level where required, at all regional wastewater treatment plants.

Based upon the available remaining capacity of the County's north and southwest reclamation facilities there is sufficient capacity through 2030 and 2025, respectively. Planned capital improvements will provide needed capacity beyond 2035 at the north plant. The southeast plant will likely require capacity increase beyond 2035.

Those approved projects/land development applications with concurrency reservations in unincorporated Manatee County have 5.4 MGD capacity reserved in the County's three sewer

[53] *Manatee County Comprehensive Plan,* Monitoring Element.

treatment plants (as of January 2012). As of January 2012, the County has available 7.4 MGD in sewer plant capacity.

Utilities & Land Development

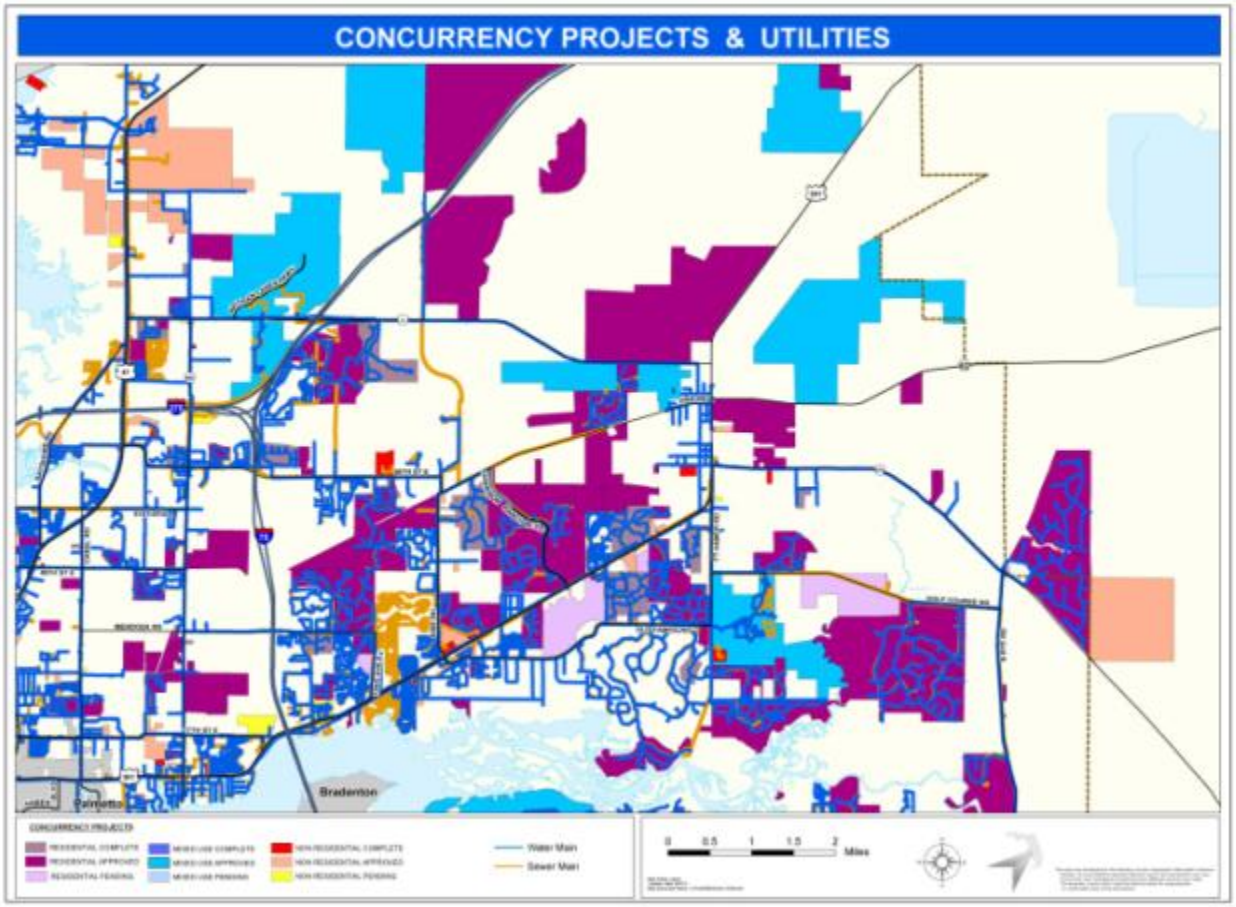
The County has a utility service area established that goes east to Lake Manatee (aka the Future Development Area Boundary). Between concurrency rules, plant capacities and the service area, it has been difficult for the County to affect the timing of developments inside its utility service area as extensive areas of the service area are undeveloped and without infrastructure.

A disconnect between the County's Future Land Use Map and Utility Plan can lead to inefficient provision of service, reactionary approach to service provision, either over/under capacity system and increased maintenance costs. The utility lines have not grown outward from the sewer plants in a steady and predictable manner. The Parrish area of the N County Sewer District provides the most insight.

In some instances, a developer may be required to construct a utility line to serve a new residential subdivision. Between the new development and the original end of the utility lines, there may be opportunities to serve additional properties along the proposed line extension as they develop. In order to avoid the County or another new developer tearing up what a developer recently installed or installing parallel lines, Manatee County has historically paid developers to upsize lines to serve future customers. These new upsized lines with greater capacity, with the difference in line size paid for by the County, create capacity for future development of those "in-between" properties and other lines that can be extended to this new line. However, there is no mechanism to recover the original expense to the County of upsizing the lines by any new development of those "in-between" properties. As a matter of fact, the next person to develop and connect to the upsized lines has lower infrastructure costs compared to the original developer that was forced to extend the line in the first place.

Extending lines without enough customers contributing to the flows of the water and sewer lines also can create maintenance issues for the County. In some instances, the County has to constantly flush water and sewer lines with potable water (thousands of gallons per day) to maintain public health in potable water lines and ensure sewer lines flow and lift stations operate effectively, minimizing odors, etc. In some instances line extensions have occurred to new development without the potential for future customers along the line from the original end of the line to the new subdivision, as the property along the extension is already developed with rural lot splits where the frontage lots are greater than 5 acres each and have already invested in their own well and septic systems.

The following map illustrates development in the Parrish area of Manatee County. Long distances sometimes exist in areas between approved projects and existing water and sewer infrastructure.



Utility Planning with Alternative 1

Even though the County over-allocated future growth to the urban core and western portions of the county when the Comprehensive Plan and Future Land Use Map were adopted in 1989, the utility system was not designed specifically to be consistent with the Future Land Use Map and its ultimate potential development; it was designed to serve existing and planned development. In addition, traffic concurrency requirements made new projects not feasible many developed areas as off-site traffic mitigation costs made projects financially unfeasible.

Potential changes to the utility planning for developing areas in the northern and eastern portions of the county would be to add specific criteria to utility line extensions. These criteria would be in addition to the current trends/timing policies related to new development identified by the Comprehensive Plan. It would also allow the County to limit extension of current lines if the new infrastructure is inconsistent with the utility system's business model or may pose maintenance issues.

These issues may be limited in time, as more hookups/customers along the lines may resolve flow issues. However, extension criteria and a maintenance agreement with the developer puts

the County in a better position to fund the maintenance of lines if development does not occur at an acceptable rate to maintain appropriate flows or allow for redundancy of looped/interconnected utility systems.

This does not imply that development could not extend lines farther away from the plants inside the existing service area; it simply means the County needs to be more careful with extensions and protect its current utility customers.

Water Supply (Alternative 1)

Within the urban service area boundary of Manatee County, the residents of unincorporated Manatee County, the City of Palmetto, the island communities of Anna Maria Island and Longboat Key, and Sarasota County are served with potable water from the Lake Manatee Water Treatment Plant. Located on Waterline Road approximately one mile north of S.R. 64 on the west side of Lake Manatee, the Lake Manatee Water Treatment Plant has a total water treatment capacity of 84.0 MGD with a current combined water use permit capacity of 56.796MGD.

Utilities – Cost of Service (Alternative 1)

The additional infrastructure associated with growing the county consistent with the Comprehensive Plan is a conceptual exercise. There are two parts to the utility discussion, the actual treatment facilities (i.e., physical plants and equipment) and the delivery facilities (i.e., actual lines, pump stations and associated infrastructure) that extends the service to the customers.

Potable Water Infrastructure (Alternative 1)

In September 2012, Manatee County approved amendments to its 10 Year Water Supply Plan. For potable water treatment facilities, the following table illustrates planned improvements to facilitate population growth for the next 10 years (2022) associated with Alternative 1.

Potable Water System 10-Year (2022) Improvements for Treatment Facilities

Planned Growth Related Major Investments	Projected Cost
Buffalo Creek Water Facility and Water Treatment Plan	$36M

For potable water delivery facilities, the following table illustrates planned improvements to facilitate population growth for the next 10 years (2022) associated with Alternative 1.

Potable Water System 10-Year (2022) Improvements for Delivery Facilities	
Planned Growth Related Major Investments	**Projected Cost**
Ft Hamer 24" sub-aqueous crossing	$2.14M
Erie Road 24" transmission main	$2.74M
Growth driven improvements potable and reclaimed (developer sponsored)	$40.50M
TOTAL ($ M = million)	**$45.34M**

Growth and development will require almost $ 82M in improvements to potable water infrastructure to the County through 2022. Water supply demands for the calculated projected population increases associated with the assumptions of Alternative 1 from 2022-2035 will require an additional $54.8M. Funding for these improvements will come from utility reserves and revenue from rates and from bonds. Financing decisions will be as is deemed appropriate based on financial markets and in consultation with the County Financial Management Department.

The reclaimed water system also requires $112M for improvements. Seventy two percent ($81M) of those improvements is for storage lakes at the Water Reclamation Facilities. Many of these requirements are also related to FDEP requirements for the Water Reclamation Facilities. The County is also planning on reinvestment and rehabilitation ($32.8M over next 10 years) in older portions of the county system, but this is not growth related.

Planning for improvements to the system from 2022 to 2035, Public Works and Utility Operations staff have estimated that an additional $ 11.9M in potable water infrastructure improvements will be required to facilitate this growth consistent with the growth plan of Alternative 1, which does not include minor potable water service lines. Most of this $11.9M cost will likely be borne by the development community.

Total expected growth related costs are approximately $148M for future improvements to the potable water treatment and delivery system. These do not include reinvestment and rehabilitation, reclaimed water, additional storage lakes, or other non-growth related improvements.

Sanitary Sewer Infrastructure (Alternative 1)

Unlike the State requirements for jurisdictions to provide a 10-Year potable water supply plan, there is no like requirement for sanitary sewer infrastructure. Obviously, the sewer system

would generally reflect any system improvements to the potable water infrastructure as it has to deliver a portion of that same water back to one of the three plants for treatment. For sanitary sewer treatment facilities, the following table illustrates planned improvements to facilitate population growth associated with Alternative 1 however this is limited to the next 5 years.

Sanitary Sewer System 5-Year Growth Related Improvements for Treatment Facilities	
Planned Major Investments	**Projected Cost**
North Water Reclamation Facility Deep Well Injection System	$ 20.0M
North Water Reclamation Facility Plant Expansion	$ 15.0M
Southeast Water Reclamation Facility Plant Expansion	$ 15.0M
TOTAL ($ M = million)	**$ 50.0M**

For waste water delivery facilities, the following table illustrates planned improvements to facilitate population growth associated with Alternative 1.

Sanitary Sewer System 5-Year Growth Related Improvements for Delivery Facilities	
Planned Major Investments	**Projected Cost**
Growth Related Booster Stations	$7.06M
Transportation Related	$4.25M
TOTAL ($ M = million)	$ 11.31M

Growth and development will require almost $61.31M in improvements to sanitary sewer infrastructure to the County through 2017. Additional wastewater treatment capacity to meet demands for the projected population increases associated with the assumptions of Alternative 1 from 2017-2035 will require an additional $44.9M. Funding for these improvements will come from utility reserves, and revenue from rates and from bonds. Financing decisions will be as is

deemed appropriate based on financial markets and in consultation with the County Financial Management Department.

The collection systems also requires $15.86M in non-growth related improvements in the form of force main replacements. The County is also planning on reinvestment and rehabilitation ($78.66M over the next 5 years) in older portions of the county system, but this is not growth related.

Planning for improvements to the system from 2017 to 2035, Public Works and Utility Operations staff have estimated that an additional $52.2M in sanitary sewer infrastructure improvements will be required. Most of this $52.2M cost will likely be borne by the development community.

Total expected growth related costs are over $158.4M for future improvements to the sanitary sewer treatment and delivery system. These do not include reinvestment and rehabilitation or other non-growth related improvements.

Water and Sewer Summary (Alternative 1)

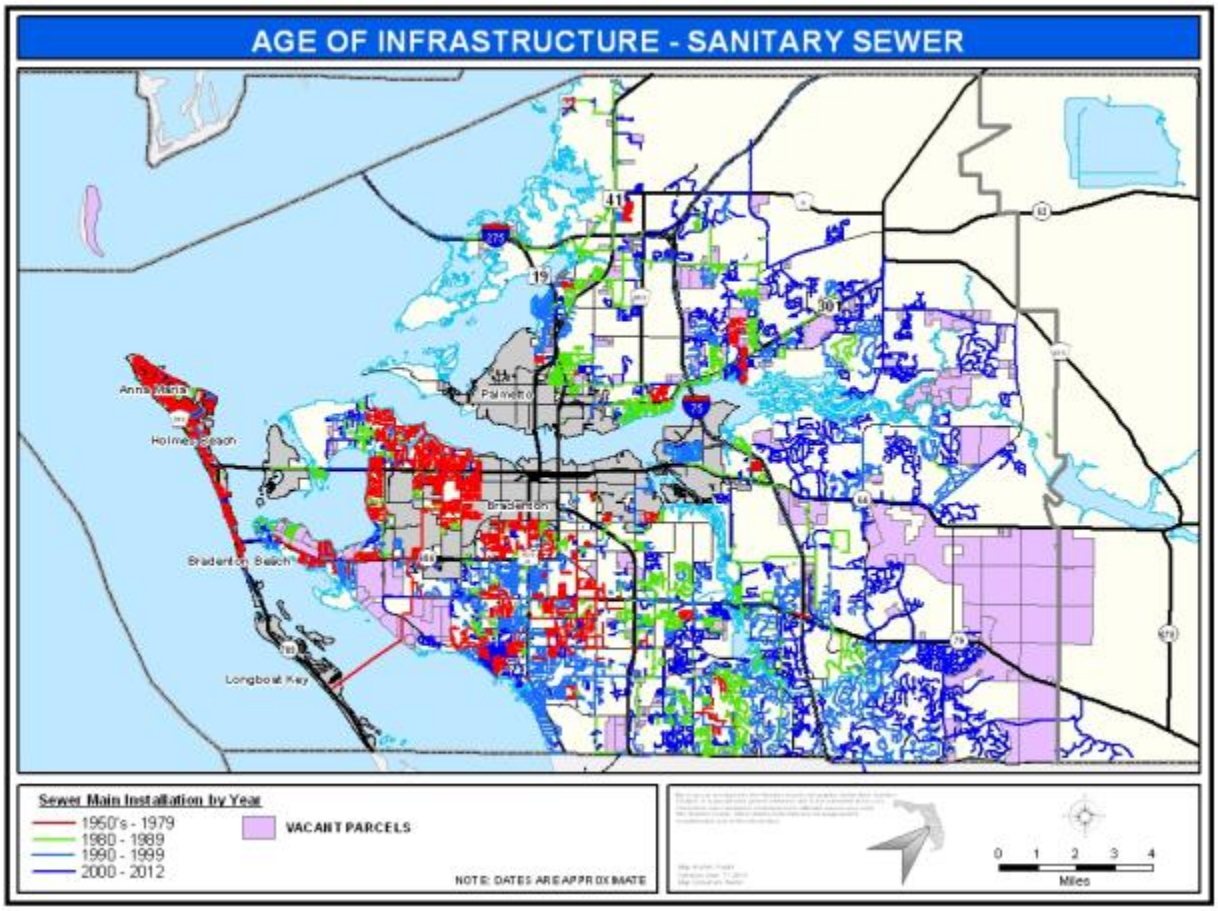
Total costs estimates are over $148M for future improvements to the potable water treatment and delivery system. Similar improvements are required to the sanitary sewer treatment and delivery systems with cost estimates over $158M by 2035. The impact of building out the County's water and sewer infrastructure to meet population growth estimated by Alternative 1 is over $307M.

Utility Planning with Alternative 2

Private development will be responsible for the extension of improvements to the system if required. Utilities could still be extended if the urban sprawl test and specific engineering criteria in the Land Development Code/Utility Standards were addressed to make sure extensions made fiscal sense from an operational perspective (providing looped systems and other obvious advantages). If extending lines farther from utility plants creates potential maintenance issues that may be one of the reasons a project is denied.

Age of Infrastructure (Alternative 2)

There are hundreds of miles of underground utilities in the urban core area of the county. Most of which was installed from a period of 1960-1980's. The County continues to spend money on the reconstruction of aging infrastructure in this area. However, as property values in the area have dropped in recent years, it may be proactive to consider increasing the development and redevelopment potential of these properties in areas of utility reconstruction to increase the opportunity to get a greater return on the re-investments made to these areas.



It makes economic sense to reconstruct existing lines to serve redevelopment when other services are already in existence in these areas and likely paid for. The alternative would be to keep replacing/upsizing lines vs. allowing new lines continuously to be built in developing areas and building the other services in those areas to serve those new communities.

Utilities – Cost of Service (Alternative 2)

The additional infrastructure associated with growing the county consistent with the Alternative 2 is a conceptual exercise. Assumptions were made as to what infrastructure will be replaced and upsized at the County's expense, versus new utility lines that are typically constructed privately and dedicated to the County with new development. New lines were taken from the existing sewer master plan. Estimates do not include feeder lines, just transmission system improvements.

Potable Water Infrastructure (Alternative 2)

Like Alternative 1, growth and development will require almost $ 143M in improvements to potable water infrastructure to the County. Funding for these improvements will come from utility reserves, and revenue from rates and from bonds. Financing decisions will be as is deemed appropriate based on financial markets and in consultation with the County Financial Management Department. While some of the existing infrastructure technically has the capacity to serve some future growth, tapping into 50 year old lines is problematic and replacement and capacity increases would be required throughout the delivery system to ensure reliable service. Total costs are almost $153M for future improvements to the potable water treatment and delivery system. These do not include reinvestment and rehabilitation, additional storage lakes, or other non-growth related improvements.

Sanitary Sewer Infrastructure (Alternative 2)

Like Alternative 1, growth and development will require approximately $ 61.31M in improvements to sanitary sewer infrastructure to the County. Funding for these improvements will come from utility reserves, and revenue from rates and from bonds. Financing decisions will be as is deemed appropriate based on financial markets and in consultation with the County Financial Management Department. While some of the existing infrastructure technically has the capacity to serve some future growth, tapping into 50 year old lines is problematic and replacement and capacity increases would be required throughout the delivery system to ensure reliable service.

Planning for improvements to the system from 2017 to 2035, Public Works and Utility Operations staff have estimated that an additional $ 52.2M in sanitary sewer infrastructure improvements will be required, which does not include minor gravity sewer feeder lines.

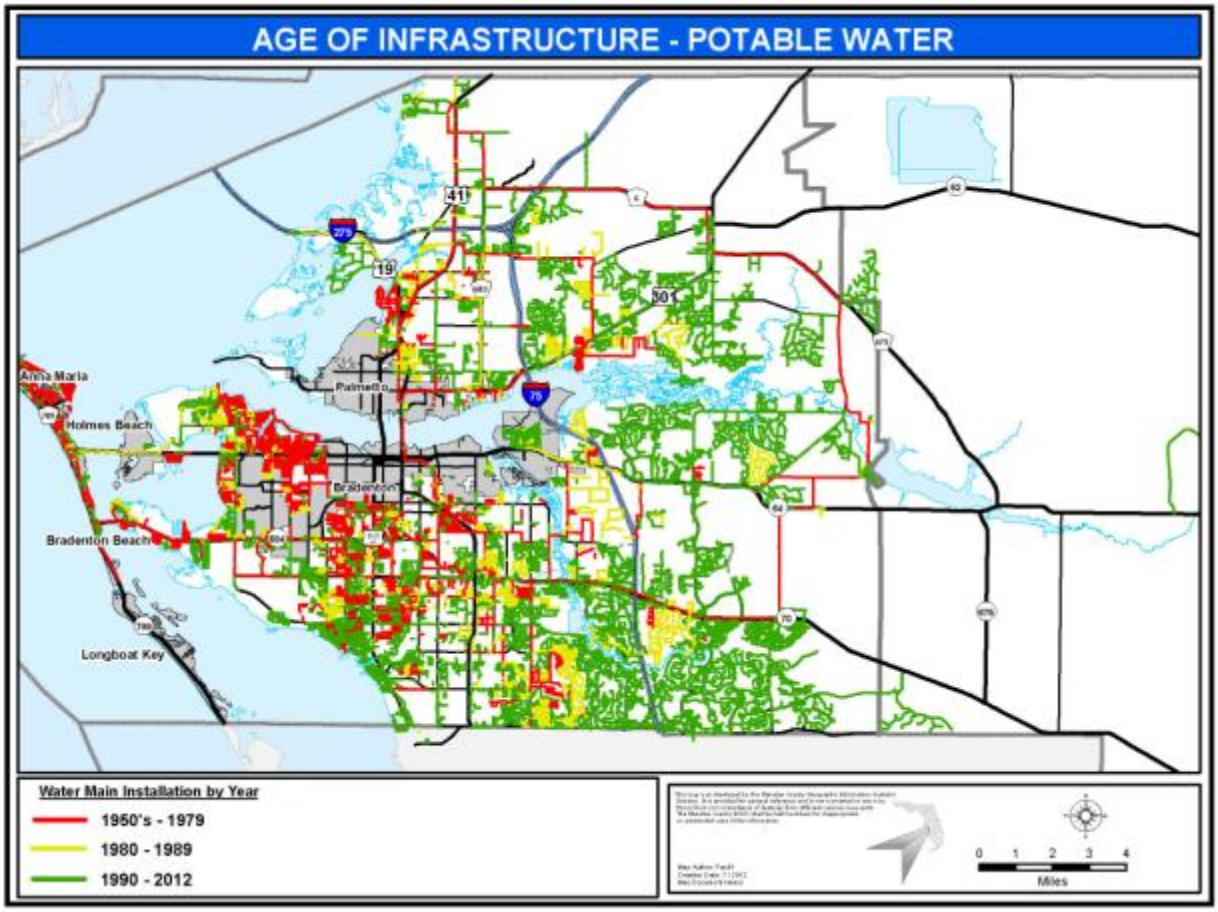
Total costs are over $77M for future improvements to the sanitary sewer treatment and delivery system. These do not include reinvestment and rehabilitation or other non-growth related improvements which could add significant costs in the short term to facilitate major growth and redevelopment in the area.

Additional cost benefit analysis and looking at improving specific areas at a time would be the best approach to address these issues in Southwest County. Upsizing infrastructure in these areas is key to facilitate redevelopment and “up-zoning” of properties to provide an opportunity for a better return on the investment and more developer participation with the ability to get impact fees, facility investment fees and higher rates of taxation to help offset some of these costs associated with redeveloping blighted areas.

Water and Sewer Summary (Alternative 2)

Total costs estimates are over $152M for future improvements to the potable water treatment and delivery system. Similar improvements are required to the sanitary sewer treatment and

delivery systems with cost estimates over $191M by 2035. However, costs for reinvestment and rehabilitation could add significantly to these costs. The impact of building out the County's water and sewer infrastructure to meet population growth estimated by Alternative 2 is over $344M.



Utility Planning with Alternative 3

Manatee County has masterplans for the development of the service areas of the three wastewater plants and the water treatment plant and service area. Continued growth of Lakewood Ranch and development in the Parrish and Port Manatee areas have been accounted for with planned expansions of the Southeast and the North County Wastewater facilities. However, changes may be required in the utility masterplan to address more focused development in the activity centers.

Potential changes to the utility planning for developing areas in the northern and eastern portions of the county would be to add specific criteria to utility line extensions. These criteria would be in addition to the current trends/timing policies related to new development identified

by the Comprehensive Plan. It would also allow the County to limit extension of current lines if the new infrastructure is inconsistent with the utility system's business model or may pose maintenance issues.

These issues may be limited in time, as more hookups/customers along the lines may resolve flow issues. However, extension criteria and a maintenance agreement with the developer puts the County in a better position to fund the maintenance of lines if development does not occur at an acceptable rate to maintain appropriate flows or allow for redundancy of looped/interconnected utility systems.

This does not imply that development could not extend lines farther away from the plants inside the existing service area; it simply means the County needs to be more careful with extensions and protect its current utility customers.

Utilities – Cost of Service (Alternative 3)

The additional infrastructure associated with growing the county consistent with the Alternative 3 is a conceptual exercise. There are two parts to the utility discussion, the actual treatment facilities (i.e., physical plants and equipment) and the delivery facilities (i.e., actual lines, pump stations and associated infrastructure) that extends the service to the customers.

Potable Water Infrastructure (Alternative 3)

Because the development scenario for Alternative 3 results in a greater total population than for Alternative 1, growth and development will require almost $ 16M more (total of $153M) in improvements to potable water infrastructure to the County for additional supply development. Funding for these improvements will come from utility reserves, and revenue from rates and from bonds. Financing decisions will be as is deemed appropriate based on financial markets and in consultation with the County Financial Management Department. Alternative 3 also planned on reinvestment and rehabilitation in older portions of the county. This number will likely be increased by 25% ($41M) for reinvestment and rehabilitation to facilitate additional growth and development in Southwest County. While some of the existing infrastructure technically has the capacity to serve some future growth, tapping into 50 year old lines is problematic and replacement and capacity increases would be required throughout the delivery system to ensure reliable service.

Planning for improvements to the system from 2022 to 2035, Public Works and Utility Operations staff have estimated that an additional $ 11.9M in potable water infrastructure improvements will be required, which does not include minor feeder lines.

Total costs are over $164M for future improvements to the potable water treatment and delivery system. These do not include reinvestment and rehabilitation, additional storage lakes, or other non-growth related improvements.

Sanitary Sewer Infrastructure (Alternative 3)

Like Alternative 1, growth and development will require approximately $ 61.31M in improvements to sanitary sewer infrastructure to the County. Funding for these improvements will come from utility reserves and revenue from rates and from bonds. Financing decisions will be as is deemed appropriate based on financial markets and in consultation with the County Financial Management Department. Alternative 1 also planned on reinvestment and rehabilitation ($78.66 over the next 5 years) in older portions of the county, but is not growth related. While some of the existing infrastructure technically has the capacity to serve some future growth, tapping into 50 year old lines is problematic and replacement and capacity increases would be required throughout the delivery system to ensure reliable service.

The activity centers and developments therein, will be required to make improvements as necessary to facilitate their large scale development. The challenge is with the activity centers that are made up of multiple projects and property owners. Either the County or development groups will need to come together to address these shortcomings of infrastructure and partner to fund the necessary improvements. This will be a similar endeavor to what occurred in Parrish in 2005.

Planning for improvements to the system from 2017 to 2035, Public Works and Utility Operations staff have estimated that an additional $ 52.2M in sanitary sewer infrastructure improvements will be required, which does not include minor gravity sewer feeder lines.

Total costs are over $185M for future improvements to the sanitary sewer treatment and delivery system. These do not include reinvestment and rehabilitation or other non-growth related improvements.

As mentioned in Alternative 2 for Southwest County, there are areas in the activity centers, minor commercial nodes and around the vicinity of schools that are operating at under capacity, that could benefit from “upzoning” of the properties to provide an opportunity for a better return on the investment and more developer participation with the ability to get impact fees, facility investment fees and higher rates of taxation to help offset some of these costs development and providing more concentrated and efficient delivery of services to the community.

Water and Sewer Summary (Alternative 3)

Total costs estimates are over $164M for future improvements to the potable water treatment and delivery system. Similar improvements are required to the sanitary sewer treatment and delivery systems with cost estimates over $185M by 2035. The impact of building out the County’s water and sewer infrastructure to meet population growth estimated by Alternative 3 is approximately $350M.

Utility Planning Summary and Recommendations

The following table addresses the impacts of the three alternatives on utility infrastructure. Unlike the State requirements for jurisdictions to provide a 10-Year potable water supply plan, there is no like requirement for sanitary sewer infrastructure. Obviously, the sewer system would generally reflect any system improvements to the potable water infrastructure as it has to deliver that same water back for treatment. For sanitary sewer treatment facilities, the following table illustrates planned improvements to facilitate population growth associated with Alternative 1 however this is limited to the next 5 years. The following table does not completely distinguish costs borne by the development community or the County.

Impact of Alternatives on Utilities by 2035

	Water	Sewer	Total
Alternative 1	$ 149M	$ 158M	$ 307M
Alternative 2	$ 153M	$ 191M	$ 344M
Alternative 3	$ 165M	$ 185M	$ 350M

Notes: Cost estimates based on FY 2012 dollars.

By these projections, Alternative 1 is estimated as the most cost feasible alternative. This is due to the population projections being slightly higher with the other two alternatives. It also does not take into account efficiencies associated with density. However, further analysis may identify some differences. This could include applying some weight in the analysis for the number of customers per linear foot, the number of customers and customer type based upon the build-out scenarios of each. In addition, applying some weight to operational expenses may illustrate a different result.

A more in-depth study may illustrate that Alternatives 2 or 3 would provide greater long-term benefits. The second most feasible is Alternative 3, the activity center plan which concentrates infrastructure and development into smaller areas. Alternative 2 the most expensive and continues the expansion of the sewer and water system to throughout the existing urban service area, serving mostly lower densities. However, it was saddled with the additional costs associated with a higher rate of reinvestment and rehabilitation to meet the needs of the development.

Achieving increased densities in locations that the same infrastructure serves more customers is necessary to maintaining the economic viability of this infrastructure. Utility rate structures and fees are based on gallons used, not density of property or property values. So it is vital for the feasibility of the system to have infrastructure that is more efficient in its service to customers.

How Do Other Jurisdictions Handle Utility Extensions?

The policies local governments utilize to address utility extensions vary tremendously. In general, smaller communities may extend lines at their expense for “economic development”; the type of development can vary and be up to the agency. This approach is common in the southeastern United States. Other jurisdictions have a variety of growth tools to include urban service areas, minimum density requirements and payback mechanisms to local governments to ensure the other utility fee payers are protected from inefficient infrastructure investments. This is more common in metropolitan and higher growth areas.

The New Jersey Board of Public Utilities utilizes guidelines where the developer makes an initial deposit in the amount of the estimated cost of the extension to cover the risk that the development will fail. Then, as homes are constructed and connected to the system generating revenues for the utility, portions of the deposit are refunded to the developer in accordance with the formulae. Should there be a shortfall in anticipated customer yield; the developer must financially contribute to the costs of the extension. Their new "smart growth" policy requires payment for main extensions outside of designated growth areas without regard to anticipated customer revenues or the utility's financial condition. Instead, the regulatory agency's determination of "who pays" is based on land use policy goals in the State Plan.[54]

In Texas, the City of Boerne the developer is required to extend and install water and sewer mains from their present locations. These costs and fees may be waived by their City Council for proposed industrial parks and commercial developments. Such waiver shall be at the discretion of the Council after taking into consideration all the circumstances including, but not limited to, the following:[55]

- The ratio of the potential tax revenues and utility system revenues from property within the industrial park or commercial development to the costs to the City of Boerne extending water, gas and sewer mains and electric primary distribution lines to the proposed industrial park or commercial development.
- The availability of funds for the extension of such mains and distribution lines.

---

[54] *Who Pays For Future Utility Extensions? The BPU Enters the Growth Control Business*, Lewis, Nielsen V., Hill Wallack LLP website http://www.hillwallack.com/web-content/news/article_abc05_06.html, accessed September 28, 2012.

[55] *Subdivision Ordinance of the City of Boerne, Texas*, accessed via web http://www.ci.boerne.tx.us/DocumentCenter/Home/View/1494, September 28, 2012.

- The contribution, if any, by the subdivider for the extension of the mains and distribution lines.

Jefferson County in the state of Washington has an established urban growth area. Inside this area water and sewer are available by extension. The State of Washington Growth Management Act does not provide the option to zone suburban – there are only urban or rural designations. Without a sewer, building is limited because of the limitations of septic systems and the reserve land area required for replacement leach fields should the primary leach field fail. The minimum density for residential on sewer is 4 units per acre and the maximum density 18 units per acre.

Manatee County needs to provide more information to the development community on the locations of existing capacity in terms of water, sewer, and roadways in order to encourage development along its existing infrastructure.

CONCLUSION

CONCLUSION

The goal of How Will We Grow? is to propose options to the Planning Commission and Board of County Commissioners that may create more efficiency in the community in terms of infrastructure and improve the community's quality of life. The three alternatives provide many advantages and disadvantages as follows.

Alternative 1 – Stay the Course

The Comprehensive Plan provides a reasonable suburban based growth plan established for the county. However, in the long run, it may provide a built environment that is inconsistent with development trends and market desires. The following are advantages and disadvantages of this alternative:

Advantages of Alternative 1

- Widely known and understood land development market and regulations by agencies, land development professionals, real estate industry, and banking industry.
- Lower short-term costs associated with implementation.
- Predictability for community and County.

Disadvantages of Alternative 1

- Development occurs in areas regardless of availability or proximity of utilities and services.
- Continuing low density suburban development into non-contiguous areas puts pre-mature strains on existing infrastructure.
- Utility extensions may have issues meeting minimum flow levels without additional and expansive maintenance work and there is little redundancy provided without looped utility systems.
- Lack of additional collectors or connecting local roads creates issues meeting with traffic flow, concurrency, public safety and ease of travel. Little redundancy provided without a better roadway grid.
- Suburban focus, which limits options for alternative transportation modes and decreases supportability for transit in the developing areas.

- Creates bedroom community in Northeast County with limited uses in close proximity creating longer distance vehicular trips for accessing employment and services.
- Highest infrastructure costs per dwelling unit.
- Low density development has fewer taxpayers per linear foot of infrastructure = higher costs to maintain.
- Lack of diversity in land uses increases number of trips and trip lengths.

"Staying the course" does not mean living with the issues presented in Alternative 1, it means making continuous incremental changes over the years to address these issues. It does not mean making sweeping land use rule changes in future years. If this alternative is chosen, the following actions are recommended (in addition to existing Goals, Objectives and Policies of the Comprehensive Plan) to include:

Land Use Recommendations - Alternative 1

- Consider greater building heights in areas consistent with the Council of Government's Community Character and Compatibility Study along US 41 and at Interstate interchanges.
- Better clarify mixed uses as a land use type.
- Allow Retail Office Residential or Mixed Use Community Future Land Use categories to permit more intense development to better serve surrounding area with services at nodes.

- Consider amending the Future Land Use Map to allow/incentivize transfer excess density out of CHHA, evacuation areas, in the established residential areas to other areas or potentially new activity centers identified in Alternative 3.
- Consider adoption of "Port Encouragement Zone" philosophy to redevelopment areas along US 41, etc.
- Remove "Special Approval" requirements from Comprehensive Plan for benign projects.

Transportation Recommendations - Alternative 1

- Amending the Future Thoroughfare Map Series to reduce the future road thoroughfare network by 500 lane miles consistent with MPO's Adopted Long Range Transportation Plan.
    - Move forward with key infrastructure - Ft. Hamer Bridge, 44th Avenue Extension.
- Implement "wide nodes – narrow roads" concurrency philosophy to maintain level of service of the roadways, without the additional expense of widening the roads.
- County coordination with the development community to provide the additional 2 lane collectors and interneighborhood ties necessary for a grid system.
    - Implement Policy 5.2.1.2 of the Traffic Sub-Element of the Comprehensive Plan that states: *Develop a framework of collector roadways that are located approximately one-half mile apart from other collector roadways or arterial roadways to facilitate inter-neighborhood movement and reduce circuitous travel and congestion*.
- Consider longer term Capital Improvements Planning for growth areas to better ensure project timing, funding and feasibility.
- Improvements in core developed areas to focus more on Complete Streets, operational and safety improvements (e.g., intersection improvements, bike lanes, pedestrian improvements, stormwater and lighting improvements, etc).

Utilities Recommendations - Alternative 1

- Consider limits or specific criteria for the extension of existing utility lines within its service areas to ensure consistency with the County Utility system's business plan and growth of infrastructure away from the plants is planned, consistent and more incremental in nature.
- Consider a strategy to better encourage development along its existing utility lines.
- Implement wastewater masterplan and use as growth management tool.
    - Develop and implement extension criteria for utility line extensions away from current lines.
    - Do not fund upsizing or allow extension of utilities if cost/benefit analysis does not show fees covering expense or way to recover any County capital costs.

Alternative 2 – Southwest County

Not all areas identified in Alternative 2 are the best location for denser, urban type development (i.e., the coastal areas, adjacent to industrial properties, etc.). A more realistic scenario may be identifying areas that are appropriate for increased density and height.

These areas have been identified over the years via several studies, including *Imagine Manatee, One-Bay, Growing Green, Council of Government's Community Character and Compatibility Study* and the *Build-out Study*. Not only do they point out where, but they all essentially say to mix uses, focus on multi-modal transportation, expand non-residential development opportunities at nodes, plan for open space, "be green", but to also respect existing strong neighborhoods (i.e., Whitfield, Cortez, Northwest Bradenton, etc.).

Alternative 2 provides an interesting alternative to growth and development. While the concept is not necessarily immediately feasible, areas of Southwest County will continue to grow and develop, but may not reach the 60% of future growth as this alternative assumed. The following are advantages and disadvantages of this alternative:

Advantages of Alternative 2

- Puts focus on development in areas that are closer to existing communities, retail and services and along transit lines.
- Puts more residents closer to employment core of county.
- Provides increased opportunity for old and underdeveloped properties in the county to be redeveloped.
- Allows for higher rate of replacement of utility lines in existing areas (i.e., instead of putting new lines to serve future populations in North and East County) with potentially increased capacity to better serve existing and provide capacity for new development in areas of other existing services.

Disadvantages of Alternative 2

- Issues associated with development and redevelopment in urban core areas, such as dealing with aging infrastructure, stormwater, concurrency issues, etc.
- Historic investments patterns from development community that may not align with this concept.
- Likely development scenario will be limited to Manatee Fruit Company; redevelopment may be limited until area approaches build-out.

- Unless traffic concurrency and level of service approach is addressed, not feasible option for development in Southwest County.
- Citizens may have issues with redevelopment or changes - even when blight is being removed.
- Areas of Southwest County have coastal hazard concerns.

A focus on Southwest County does not mean there will be no other growth anywhere else in the county. However, it would require some land development regulation changes.

Regulatory Process

The key to the revival of the urban areas of the county will be the County's ability to adapt to changing social and economic needs and preferences. Land use policy, and development regulation in particular, are an important component of the policy environment that can either encourage or interfere with this process of adaptation. In fact, urban redevelopment and infill is more complex than conventional suburban development because the infrastructure and land-use patterns support more complex development patterns. Neighborhood services and retail are often within walking distance, and commercial uses mix with residential uses along busy thoroughfares. Development regulation, then, must be nimble, flexible and adaptable, responding to changing tastes rather than attempting to shape or determine them.[56]

Unfortunately, the County's current land development regulations are not nimble, flexible or responsive enough to changing market needs. The Retail-Office-Residential Future Land Use Category provides flexibility with Planned Development zoning to address the urban design issues, but not easily or clearly enough without potential policy conflicts. The Planned Development Encouragement Zone (PDEZ) zoning district philosophy should be used in the targeted redevelopment areas of the county. Changes that encourage growth and development with potential incentives (i.e., density bonuses, reduced fees, streamlined permitting, etc.) would be required. The incentives need to include reducing regulations in these areas to expand opportunities at appropriate locations so development and redevelopment can occur in terms of greater height, density and intensity.

[56] *Rejuvenating Urban America through Land Use and Housing Policy Reform: The Case of Cleveland*, Samuel R. Staley, Reason Foundation Policy Brief 91, March 2010.

Alternative 3 – Activity Centers

The activity centers illustrated on the activity center map all lend themselves for development with additional density, intensity and increase in the variety of land uses to support their respective areas of residential. All activity centers respect the ability to build lower density, single-family residential dwelling units outside of the activity centers and nodes.

These activity center areas have generally been identified over the years via several studies, including *Imagine Manatee, One-Bay, Growing Green, Council of Government's Community Character and Compatibility Study* and the *Build-out Study*. Not only do they point out where, but they all essentially say to mix uses, focus on multi-modal transportation, expand non-residential development opportunities at nodes, plan for open space, "be green", but to also respect existing strong neighborhoods (i.e., Whitfield, Cortez, Northwest Bradenton, etc.).

The following are advantages and disadvantages of this alternative:

Advantages of Alternative 3

- Puts focus on providing development in a more efficient land use pattern that also provides closer support services for existing and lower density single-use residential communities.
- Continues focus of new residents closer to employment core of county and extension of new services and employment opportunities to other areas of the county.
- Provides increased opportunity for old and underdeveloped properties in the county to be redeveloped.
- Concentrates growth and decreases amount of sprawl.
- Identifies town centers/neighborhood centers within activity centers/transit oriented areas.

- Make available Transfer of Development Rights to provide the ability to transfer densities into activity centers or other locations.

Disadvantages of Alternative 3

- Investments patterns from area development community may not align with this concept.
- Unless traffic concurrency is addressed differently in activity centers, may not be feasible option.
- Citizens sometimes have issues with development at even low densities.

A new focus on activity centers does not mean there will be no other growth anywhere else in the county. However, it does likely require some land use rule changes in the future. Not to increase regulations necessarily, but to expand opportunities at appropriate locations so development and redevelopment can occur in terms of greater height, density and intensity.

Growth Alternatives and Impacts to Services Summary

The following table illustrates what alternative is the most efficient by service provided. However, these do not carry any weights by cost of infrastructure, portion of County budget, etc. Alternatives 2 and 3 may be more efficient for service provision. Many of the services studied do not provide glaring winners. This is in part due to the amount of existing properties and development with existing approvals and entitlements to develop, versus the population projections. A large portion of the population projection is already tied up with existing and approved projects.

Summary of Rankings			
	ALT 1 **Stay the Course**	**ALT 2** **Southwest County**	**ALT 3** **Activity Centers**
Emergency Medical Services	1	2	3
Environmental Protection	3	1	2
Fire	1	2	3
Law Enforcement	3	1	2
Libraries	1	2	3
Parks	2	1	1
Schools	1	3	2
Solid Waste	2	1	3
Traffic	3	2	1
Transit	3	2	1
Utilities – Water & Sewer	1	3	2

Alternative 1 may not provide enough flexibility to address market changes. Since the development boom in the early 2000's, most of the projects have had to utilize the flexible "Planned Development" zoning category as the typical zoning categories have not been updated since the 1980's. In addition, the current regulations do not provide clear opportunities to many newer development types or distinguish enough between urban and suburban development types.

Alternative 2 provides many clear fiscal advantages. However, the market must be considered. The development community has not been historically interested in infill and redevelopment projects. This is partially due to concurrency requirements being an impediment in existing and established areas. In order to have some success with increasing the population of Southwest County significantly, limitations on development would have to occur in other parts of the county. However, given the amount of existing and approved entitlements throughout the county, there would be little affect on development in other parts of the county. Alternative 2 could have the opposite effect and limit projects in developing areas that are considered "infill" projects in areas with existing infrastructure capacity and along newer roads and utility lines, where other projects have previously leapfrogged farther out and away from the plants. Other issues include aging infrastructure in the established areas, along with other challenges such as developer accumulation of a critical mass of properties, etc. Like the example in Pinellas County, when the developable land in areas is gone, redevelopment becomes more feasible financially. The market has to dictate when all these factors make redevelopment possible, not government programs.

Alternative 3 provides many advantages. It recognizes not only the entitlements provided in developing areas, but encourages infill development in Southwest County and along existing infrastructure. Alternative 3 also provides greater flexibility in areas of the county for development. It provides opportunities for a greater variety of land uses, densities and heights in areas that make sense. There are clear advantages for transportation and other services.

Alternative 3 is generally consistent with past plans (i.e., Imagine Manatee, OneBay, etc). Alternative 3 probably does the best job at capturing the momentum of the development community and market trends, while encouraging other aspects of development that provides a higher level of efficiency for government service delivery.

Good Ideas (No Matter What Alternative is Chosen)

A number of realizations, thoughts and potential policy and procedural changes came out of this endeavor. Many of these potential tasks or policy changes make sense, no matter which alternative is chosen by the Board.

Capital Improvements Programming

- Develop master list of current and future capital improvements projects through 2035, updated annually.
- Develop criteria for the development and prioritization of capital projects.
- Capital Improvements Plan should reflect the community's priorities.
- Capital Improvements Plan and other infrastructure investments should consider/analyze land use changes that may provide greater return on investment.

Economic Development

- "Best Places" rankings are too important to ignore. Drill down and determine data sources. Communicate with publishers of data. Provide updated/correct data in format they require. Indicators of Best Places and other best communities generally is associated with the following:[57]
    - Intellectual capital and innovation
    - City gateway/global connection of place
    - Technology readiness
    - Health, safety and security
    - Transportation and infrastructure
    - Sustainability and the natural environment
    - Demographics and livability

[57] PricewaterhouseCoopers (PwC) Cities of Opportunities, 2012. http://www.pwc.com/us/en/cities-of-opportunity/2012/rankings-and-analysis.jhtml. Website accessed October 30, 2012.

- Economic clout
- Ease of doing business
- Cost of business and living

- Infrastructure mapping. Identify where excess capacity in wastewater, potable water, traffic and transportation infrastructure. Areas overlapping capacities are "sweet spots" that would be easier for development and redevelopment to occur.
- Concurrency – revise level of service standards for urban areas – this is an economic development issue.
- PDEZ expansion to existing industrial and urban redevelopment areas
- Greenways and trails, urban parks, etc – this is an economic development issue / "Best Place" item as well as a parks and recreation issue. This recreation infrastructure is important and highly sought after with those next generations and employees of high-tech industries.
- Explore a Brownfield designation for a large area(s) of Southwest County area – 15th St Corridor, US 41, etc. to capitalize on incentives.
- Mapping of properties with opportunity for taller buildings and ability to see water (i.e., Sarasota Bay, Gulf of Mexico) and at what height.

Education

- Coordinate with the School Board and private school providers on future school locations.
- Explore advantages for the County in term of reduced infrastructure needs associated with smaller community / local schools. Explore financial partnership opportunities with School Board where the County shares any cost savings with the School Board.
- Look at existing lands owned by the School Board. Surrounding areas should be considered for higher residential densities to maximize cost of service provision, transportation costs of busing and impact on roadway infrastructure.[58]

Financing

- Consider dedicated source of funding for transit

[58] *Local Governments and Schools: A Community-Oriented Approach*, ICMA Press IQ Report, Volume 40/Special Edition 2008.

- Consider dedicated source of funding for stormwater utility
- Explore district based impact fees
- Explore mobility fees

Government Services

- Explore consolidation opportunities for specific services with other agencies:
    - Human resources
    - Information technology and contracts (i.e., completion of fiber optic infrastructure, etc.)
    - Purchasing
- Before any lands are purchased by a local agency, a GIS based site suitability analysis should be done to identify the best sites. This should be based upon a variety of criteria, including the Comprehensive Plan, to provide recommendations for the best site.
- Communicate with other agencies (i.e., School Board, fire districts, and private school providers) on future land purchases. Analyze existing inventories first. Government service delivery efficiencies may be realized if purchases are coordinated with residential development, densities and future locations of other service providers.
- Consider opportunities to collaborate with other agencies on a County Annex in East County. Board of County Commissioners may be interested in extending building permit review and other services in that area of the community.
- Explore the possibility with the State College of Florida and Manatee County to consider a joint-use library to serve the college and the community. [59]
- Explore the possibility with the School Board and Manatee County to consider other joint-use libraries to serve the schools and the community.[60]

[59] *Manatee County Public Library Long Range Plan 2012-2017*, Manatee County Government, April 2011.

[60] *Local Governments and Schools: A Community-Oriented Approach*, ICMA Press IQ Report, Volume 40/Special Edition 2008.

Land Development & Redevelopment

Previous studies and community input given during these studies and monthly land use hearings indicate that the community is generally against sprawl. But the following may be acceptable:

- Allow a greater variety of development types nearer to growing residential areas.
- Pedestrian oriented designs.
- Mix land uses at activity centers.
- Decrease size of blocks and add to inventory of future collector streets in developing areas.
- Allow wider variety of housing options in closer proximity to services – do not limit housing types in developing areas.
- Identify areas of increased densities – activity centers and recognize existing activity centers.
- Conversion of “Grayfields” which are typically underutilized or vacant older strip commercial shopping centers to mixed uses. Could include uses such as professional office, medical office, restaurants, retail or multi-family.

- Greater alignment with the cities to ensure the edges and those areas that may be annexed in the future, better reflect the urban development trends of the cities.

Typical redevelopment projects must generate a resale or rent value that is two and a half times that of a comparable Greenfield development to earn an equivalent profit, making local

government involvement to offer financial or regulatory incentives very important to accomplish any redevelopment activities.[61]

Parks & Recreation

- A parks master plan is key for appropriate parks development. This should take into consideration facilities as the demographics of the community are changing.
- Parks development should take into consideration community goals.
- Parks development should be consistent with target economic development activities (i.e., sports performance industry, etc) and cultural and demographic trends.
- Parks development should be consistent with improving community ratings in "Best Places"

Public Safety

- Analyze moving of fire and EMS services first, before building an additional station. May be more efficient to move station instead of building new one.

Transportation

- Amend Comprehensive Plan Future Thoroughfare Maps to be generally consistent with Metropolitan Planning Organization's Long Range Transportation Plan.
- Recognize relationship between moderate levels of traffic congestion and economic vitality.[62]
- Allow reduced levels of service on certain facilities or under certain circumstances.[63]
- Introduce other performance standards, such as minimizing vehicle miles traveled, maximizing person mobility, providing non-auto connections between key activity centers.[64]

---

[61] *Pinellas by Design: An Economic Development and Redevelopment Plan for the Pinellas Community*, November 2005.

[62] *The Shifting Transportation Planning Paradigm,* presented by Don Samdahl, PE and Julie Morgan, AICP with Fehr & Peers, Growth and Infrastructure Consortium, October 2011.

[63] Ibid.

[64] Ibid.

- Focus density bonuses and incentives for transit oriented design within 1/3 mile from transit stops as ridership is cut in half from that distance.
- Explore competitive contracting to operate a portion or all of the transit and paratransit services. Long Island, NY, New Orleans, Denver and the City of San Diego all have contracted services out to reduce costs.

Utilities

- Take stronger stance with utility system as catalyst for growth planning and as growth management tool.
- Consider use of Urban Service Area strategy to better control extensions of utilities.
- Utilize criteria and cost-benefit analysis for utility line extensions.
- Incentivize development to use existing infrastructure.
- Consider allowing interim wastewater treatment plants (package plants) in select areas on a case-by-case basis.

What's Next?

How Will We Grow? is not the end-all-be-all report. It has pointed out that things are changing. A new journey and challenges are beginning for our community. Manatee County needs to continue to move forward and make an informed decision on the issues identified in this report. The expertise from other regions and our own community needs to be tapped to continue the conversation.

Conversation with the Community

Staff will continue the conversation with the community, the real experts. Input from citizens and stakeholder groups will have an opportunity to participate and comment throughout the process. It will be important to note where the expert advice and community desires align? Where do they disagree? The citizens and stakeholders need to be an integral part of this process.

How Do We Pay? Infrastructure Financing

Choosing none or one of the alternatives does not address the current problem of infrastructure financing. Manatee County has limited options on how to address growth related improvements to the infrastructure. Citizens and officials have embraced the philosophy that new development should "pay its own way," i.e., new growth should bear a fair share of the costs imposed on the County.[65] That was true in 1983 and that policy is reflected in the FY 2013 Capital Improvements Plan. The status quo and all three alternatives provide a need for the County to fund specific growth related improvements above and beyond what developers contribute.

Infrastructure/Capital Improvement Project funding sources include gas taxes, impact fees, utility revenues, user fees, general revenues, and State & Federal funding options including those provided through the Metropolitan Planning Organization for roadway improvements. Gas taxes are redistributed by the State after collection. Gas taxes fund roadway maintenance as well.

Impact fees are one–time fees assessed on new development. When a home or business is built or expanded, it increases the load on County services like public safety, law enforcement, and roads. Impact fees therefore help the County to increase infrastructure capacity and maintain the same levels of service as those provided before new development occurred. Manatee County is divided into four geographic regions for the collection and expenditure of road impact fees. This division helps to ensure that impact fees are used to fund capacity improvements in the regions in which they were actually collected.

[65] *Development Cost Study*, Manatee County Planning and Development, May 1983.

During the boom years earlier this century, there was an imbalance of infrastructure funding needs versus what the minimum improvements, requirements and fees the development community provided. The developers did provide additional improvements, but the deficit of infrastructure in some areas of the county, such as Parrish, was insurmountable by the means available.

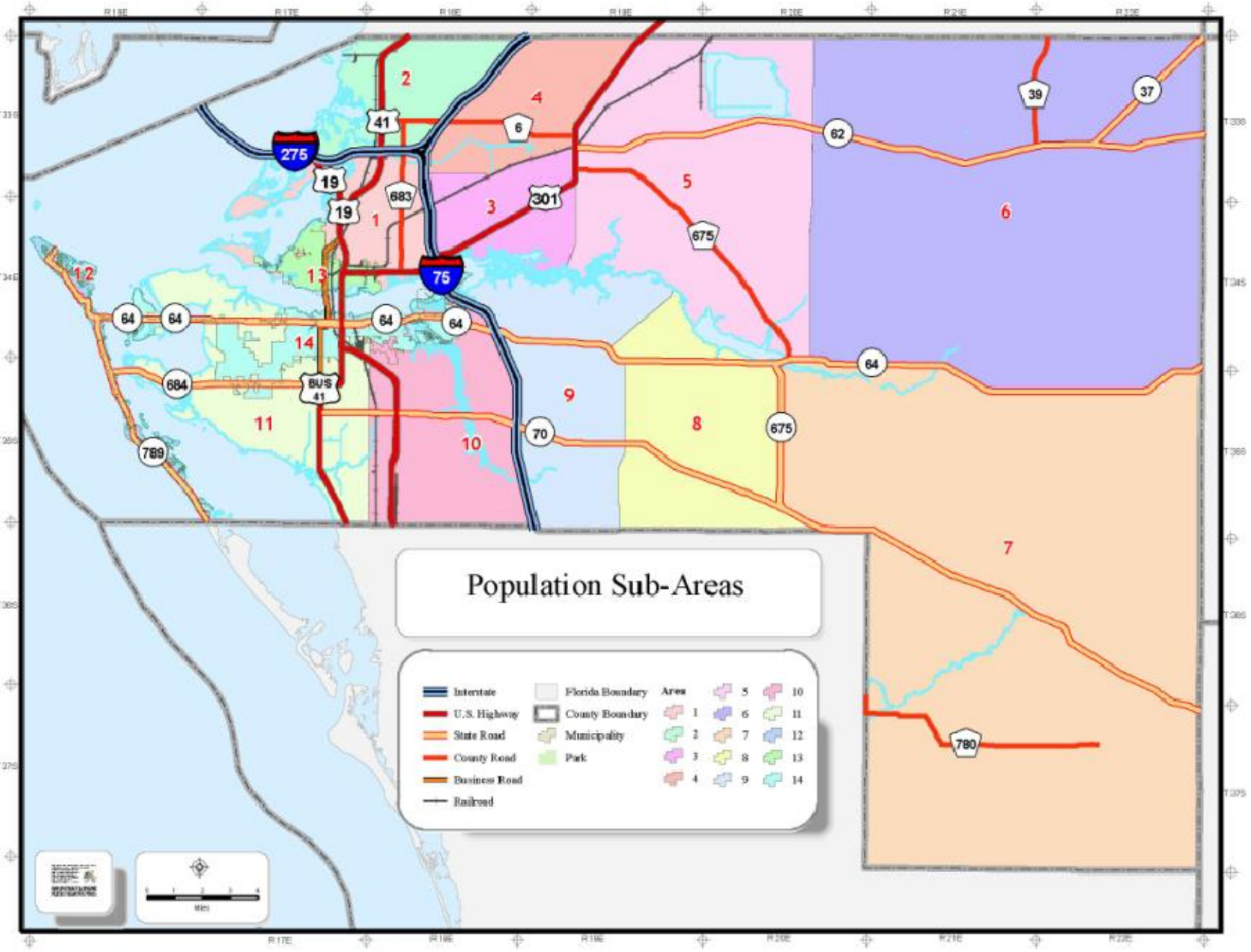
There are a variety of factors that contribute to this issue. This is partially due to the inability of the County to raise funds for development, which seems to diminish further with every legislative session by the state government. It is also due to the fact that the County has been heavy handed with transportation concurrency. This has forced development to build farther away from services. Another contributing factor is that the infrastructure in these more rural areas is at a "rural standard", requiring massive upgrades and improvements to bring higher numbers of suburban dwellers to these areas. Another contributing factor is the lack of utility extension criteria, allowing development to decide where to extend major infrastructure.

There are a variety of options available to local governments to get a better handle on infrastructure financing: [66]

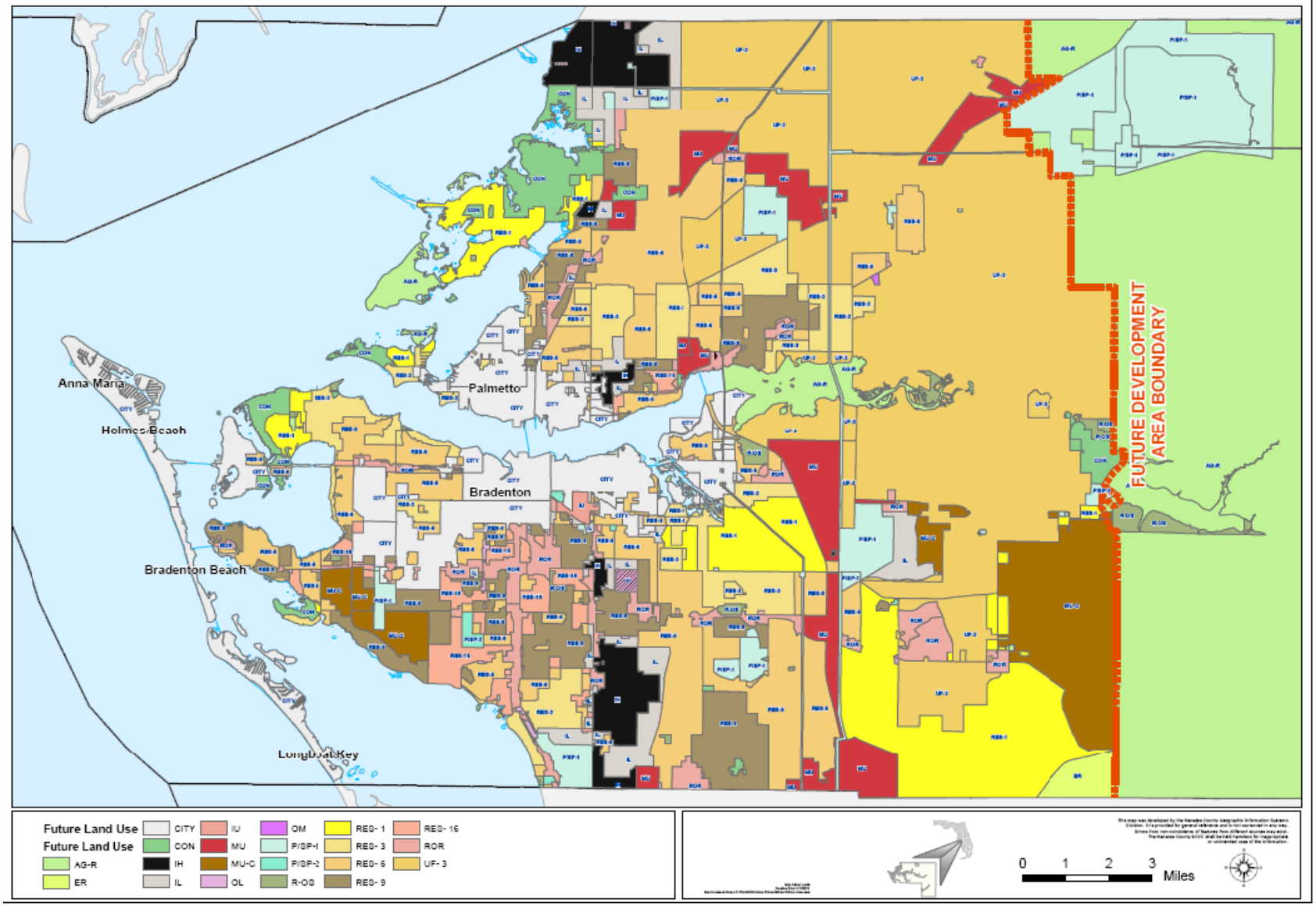
- Create a Municipal Services Taxing Unit (MSTU). The County can designate specific services to fund with this tax, limited to a specific area. Not included in State millage cap. Can fund transit, transportation, libraries, law enforcement, stormwater and drainage.
- Create a Stormwater Utility. Address stormwater maintenance program with dedicated funding source. According to 2009 Stormwater Utilities Survey by the Florida Stormwater Association, the average monthly rate for a stormwater utility fee is $4.88.
- Increase Local Government Infrastructure Surtax (1%). Can be used to finance, plan and construct infrastructure. May also be used to acquire environmental lands and court house construction, etc.
- Consider State Sales Tax Rebate related to the sports performance facilities (Bradenton gets rebate for Pittsburgh Pirates Spring Training Facility).
- Infrastructure fees reflect the costs of providing infrastructure based upon the area being developed and level of current availability (i.e., impact fees vary by zone, etc).

[66] *Revenue Analysis*, Lee County Government, Nabors, Giblin & Nickerson, January 2012.

APPENDIX


Population Sub-Areas
Interstate
U.S. Highway
State Road
County Road
Business Road
Railroad
Florida Boundary
County Boundary
Municipality
Park
Area
1
2
3
4
5
6
7
8
9
10
11
12
13
14
275
75
41
19
683
301
6
62
39
37
675
64
684
BUS 41
70
789
780

HOW WILL WE GROW - FUTURE LAND USE



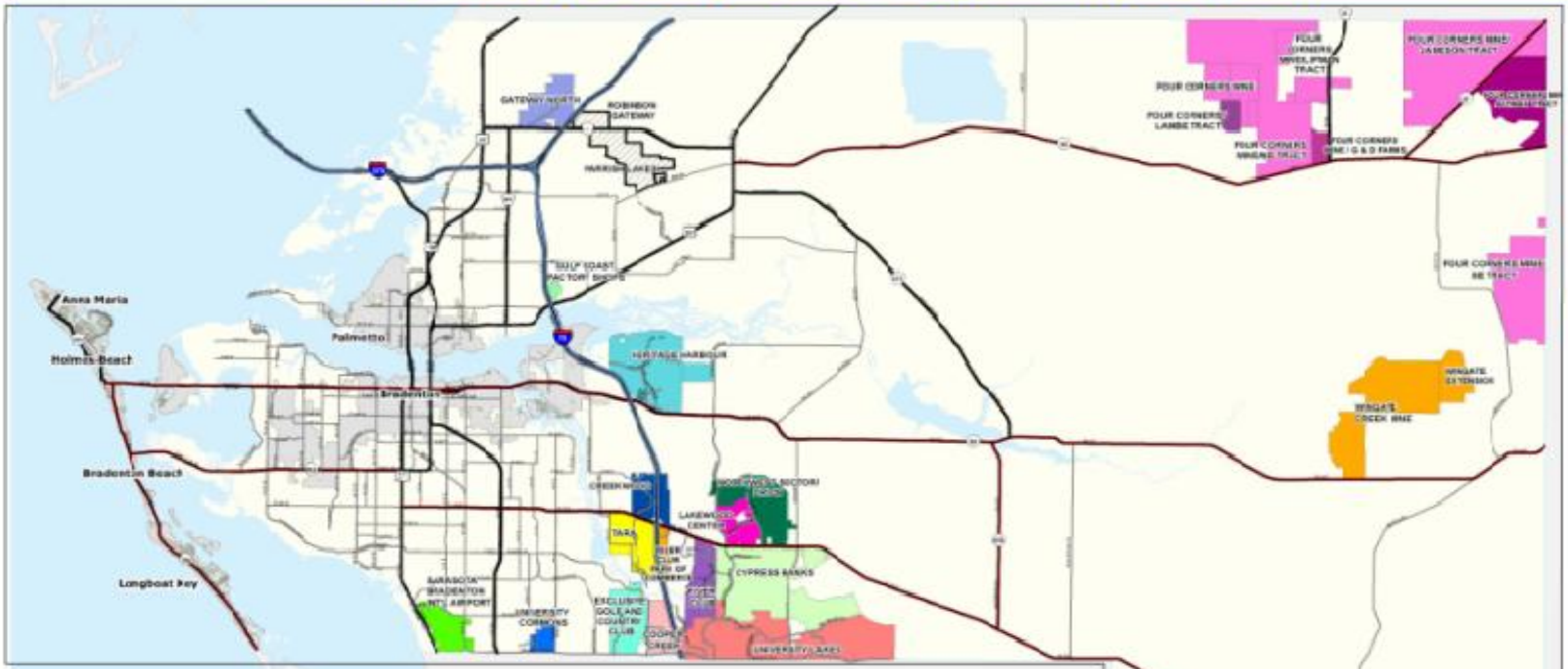
CONCURRENCY RESERVATION SYSTEM SUMMARY - JANUARY 2012

	Southwest County	North County	Southeast County	Unincorporated County Total Inside Urban Service Area	
General Concurrency Numbers (January 2012 Concurrency GIS Database)					
Total Active Projects (includes pending)	294	489	345	1,128	Projects
Total Projects (Approved w/CLOS)	84	142	139	365	Projects
Total Dwelling Units (Pending & Reserved Projects)	1,998	20,214	10,384	32,596	units
Total Approved Future Population (DUs x 2.2)	4,396	44,471	22,845	71,711	persons
Total Pending Commerical (non-res) (square feet)	31,975	589,134	487,147	1,108,256	square fee
Total Approved Commerical (non-res) (square feet)	1,024,585	2,352,627	2,288,545	5,665,757	square fee
Developable Vacant Property (acres) (property along classified roadway adjacent to utilites and greater than 10 acres)				Approx. 19,000	acres
Potential Maximum Dwelling Units	18,828	7,158	19,788	45,774	units
Potential Maximum Future Population (DUs x 2.2)	41,422	15,748	43,534	100,703	persons
Developable Vacant Property (acres) Inside FDAB				52,099	acres
Developable Vacant Property (dwelling units) Inside FDAB				193,940	units
Developable Vacant Property (potential population - DUs x 2.2) Inside FDAB				426,668	persons
Potable Water Concurrency Reservations (from Concurrency Database)					
Total Preliminary Units (GPD)	1,005,539	2,332,868	9,027,923	12,366,330	GPD
Total Gallons Per Day (GPD)	442,934	3,429,027	6,892,999	10,764,960	GPD
Total Reserved Units (GPD)	1,005,261	2,206,365	4,419,506	7,631,132	GPD
Total Gallons Per Day (GPD)	395,744	2,427,925	2,551,730	5,375,399	GPD
Year End Available Capacity (GPD)*	15,150,000	15,150,000	15,150,000	15,150,000	GPD
Total Reserved (GPD)*	5,375,399	5,375,399	5,375,399	5,375,399	GPD
Current Available Capacity (GPD)*	9,774,600	9,774,600	9,774,600	9,774,600	GPD
** Same facility - Lake Manatee WTP*					
Wastewater Concurrency Reservations (from Concurrency Database)					
Total Preliminary Units (GPD)	1,005,544	2,436,958	9,005,830	12,448,332	GPD
Total Gallons Per Day (GPD)	407,300	3,423,292	7,029,448	10,860,040	GPD
Total Reserved Units (GPD)	1,005,266	2,310,456	4,412,839	7,728,561	GPD
Total Gallons Per Day (GPD)	360,110	2,434,651	2,622,321	5,417,082	GPD
Year End Available Capacity (GPD)	3,200,000	3,600,000	6,100,000	12,900,000	GPD
Total Reserved (GPD)	360,110	2,434,651	2,622,321	5,417,082	GPD
Current Available Capacity (GPD)	2,839,889	1,165,348	3,477,678	7,482,915	GPD
Solid Waste Concurrency Reservations					
(from Concurrency Database)					
Total Preliminary Units (CY)	1,155,644	8,843,075	13,536,266	23,534,985	CYI
Total Cubic Yards Per Day (CYD)	104	4,413	1,344	5,861	CYD
Total Reserved Units (CY)	1,154,866	8,716,184	10,683,143	20,554,193	CYI
Total Cubic Yards Per Day (CYD)	100	4,218	1,040	5,358	CYD
Year End Available Capacity (CYD)*	15,880,780	15,880,780	15,880,780	15,880,780	CYD
Total Reserved (CYD)*	5,359	5,359	5,359	5,359	CYD
Current Available Capacity (CYD)*	15,875,420	15,875,420	15,875,420	15,875,420	CYD
`					
Transportation Concurrency Reservations					
Total Projects w/Concurrency Reservations	212	257	211	680	projects
Total Initial Trips	1,845	30,985	34,775	67,605	trips
Total Reserved Trips	1,567	26,785	19,001	47,353	trips
NOTES:					
Report generated January 24, 2012.					
Data refined further as project proceeded.					

Unincorporated Manatee County Active Development of Regional Impact (DRI) Summary (residential only)								
DRI No.	**DRI Name**	**Subarea**	**DU Type**	**DU's Approved**	**DU's Developed**	**DU's Remaining**	**Buildout/Expiration**	**Year Expected Closeout**
66	Tara	10	Not Spec	2,719	2,074	645	1/28/2013	2020
102	Creekwood	10	Not Spec	1,250	592	658	12/31/2014	2020
103	Cooper Creek	10	Not Spec	767	693	74	12/30/2019	2025
190	U Commons	10	SF	400	530	-130	9/14/2015	2020
190	U Commons	10	MF	383	240	143	9/14/2015	2020
202	Exclusive Golf	10	Not Spec	1,238	1,160	78	12/31/2019	2015
Total Dwelling Units Subarea 10				**6,757**	**5,289**	**1,468**		
102	Creekwood E	9	n/a	0	0	0	12/31/2014	2015
130	Cypress banks	9	SF	4,912	4,001	911	8/7/2021	2030
130	Cypress banks	9	MF	1,070	352	718	8/7/2021	2030
216	U Lakes	9	SFD	2,215	1,381	834	9/13/2026	2035
216	U Lakes	9	SFA	88	88	0	9/13/2026	2035
216	U Lakes	9	MF	1,740	992	748	9/13/2026	2035
239	River Club Park of Cc	9	SF	2	2	0	10/22/2018	2025
239	River Club Park of Cc	9	MF	500	0	500	10/22/2018	2025
240	Heritage Harbour	9	SFD	2,270	1,189	1,081	12/30/2017	2035
240	Heritage Harbour	9	SFA	1,140	181	959	12/30/2017	2035
240	Heritage Harbour	9	MF	1,590	969	621	12/30/2017	2035
256	NW Sector	9	SF	4,072	0	4,072	12/31/2019	2035
256	NW Sector	9	MF	350	0	350	12/31/2019	2035
265	Lakewood Ctr	9	SF	3,239	0	3,239	12/31/2019	2035
265	Lakewood Ctr	9	MF	436	0	436	12/31/2019	2035
Total Dwelling Units Subarea 9				**23,624**	**9,155**	**14,469**		
271	*Robinson Farms*	*5*	*??*	*426*	*0*	*426*	*n/a*	*2035*
Total Dwelling Units Subarea 5				**426**	**0**	**426**		
269	*Parrish Lakes*	*3*	*SF*	*2,150*	*0*	*2,150*	*n/a*	*2035*
269	*Parrish Lakes*	*3*	*MF*	*350*	*0*	*350*	*n/a*	*2035*
Total Dwelling Units Subarea 3				**2,500**	**0**	**2,500**		
218	Gateway N	2	SF	1,685	0	1,685	2/20/2022	2035
218	Gateway N	2	MF	722	0	722	2/20/2022	*2035*
218	Gateway N	2	TH	393	0	393	2/20/2022	*2035*
Total Dwelling Units Subarea 2				**2,800**	**0**	**2,800**		
Total Dwelling Units				**35,681**	**14,444**	**21,237**		

Notes:	Dwelling Unit Types:
Italics means not yet approved	DU = Dwelling Unit
Used TBRPC Report from Jan 2012	SF= Single Family
U Commons negative as they changed DU types	MF = Multi-family
Creekwood is in both subarea 9 and 10	SFD = Single family detached
Exp. dates may be extended	TH = Townhome
Data valid as of January 2012	SFA = Single family attached

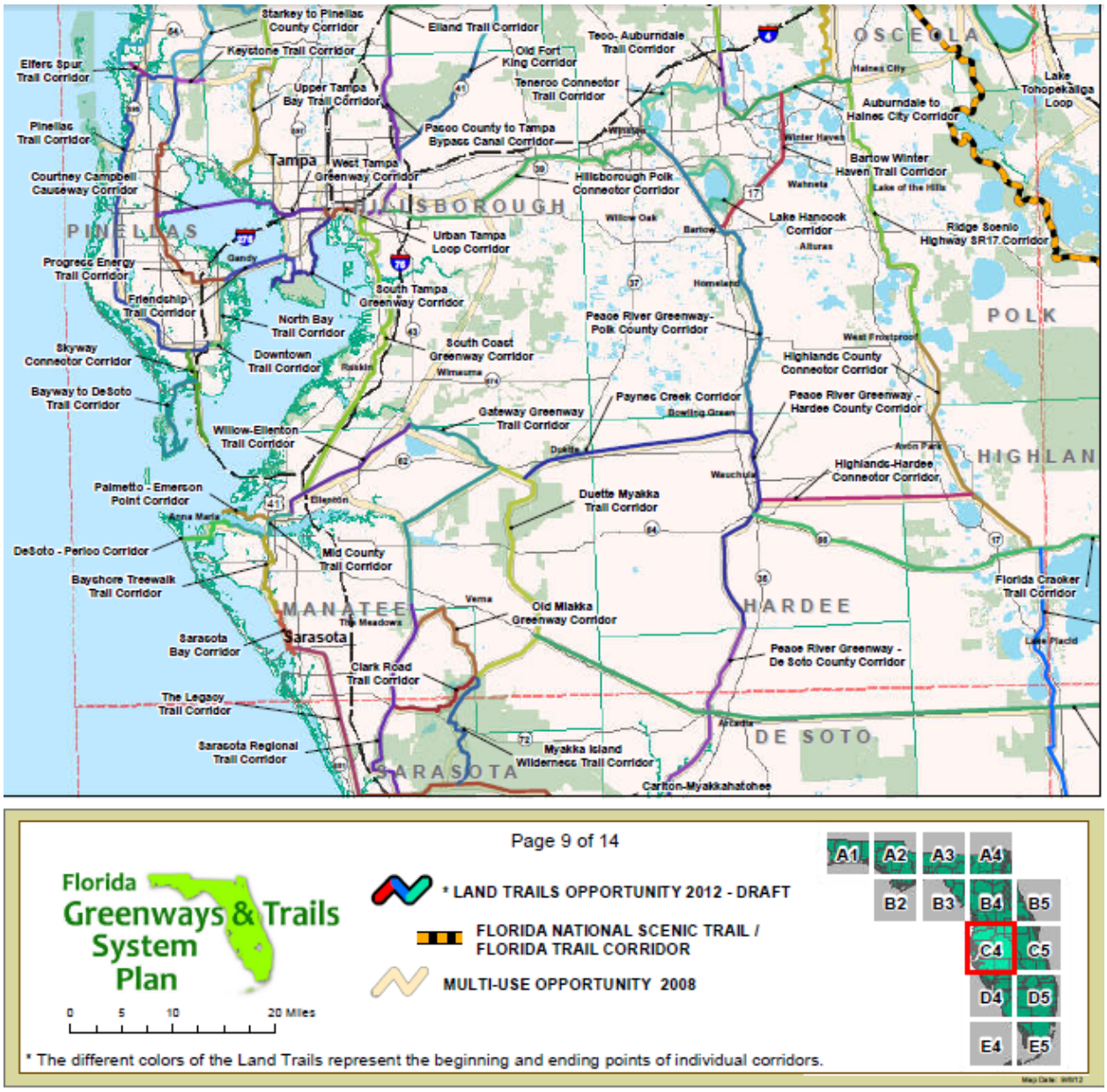
Manatee County Development of Regional Impact (DRI)



Development of Regional Impact

- COOPER CREEK
- CREEKWOOD
- CYPRESS BANKS
- EXCLUSIVE GOLF AND COUNTRY CLUB
- FOUR CORNERS MINE/LITMAN TRACT
- FOUR CORNERS MINE
- GATEWAY NORTH
- GULF COAST FACTORY SHOPS
- HERITAGE HARBOUR
- LAKEWOOD CENTER
- NORTHWEST SECTOR / DRI 26
- PARRISH LAKES
- RIVER CLUB
- RIVER CLUB PARK OF COMMERCE
- SARASOTA BRADENTON INT'L AIRPORT
- TARA
- UNIVERSITY COMMONS
- UNIVERSITY LAKES
- WINGATE
- PROPOSED OR ADDITIONS

0 2 4 8
Miles


Starkey to Pinellas County Corridor
Eiland Trail Corridor
Teco- Auburndale Trail Corridor
Keystone Trail Corridor
Old Fort King Corridor
Elfers Spur Trail Corridor
Upper Tampa Bay Trail Corridor
Teneroo Connector Trail Corridor
Auburndale to Haines City Corridor
Lake Tohopekaliga Loop
Pinellas Trail Corridor
Pasco County to Tampa Bypass Canal Corridor
Tampa
West Tampa Greenway Corridor
Bartow Winter Haven Trail Corridor
Courtney Campbell Causeway Corridor
Hillsborough Polk Connector Corridor
HILLSBOROUGH
PINELLAS
Lake Hancock Corridor
Ridge Scenic Highway SR17 Corridor
Urban Tampa Loop Corridor
Progress Energy Trail Corridor
South Tampa Greenway Corridor
Friendship Trail Corridor
North Bay Trail Corridor
Peace River Greenway - Polk County Corridor
POLK
Skyway Connector Corridor
Downtown Trail Corridor
South Coast Greenway Corridor
Highlands County Connector Corridor
Bayway to DeSoto Trail Corridor
Paynes Creek Corridor
Peace River Greenway - Hardee County Corridor
Gateway Greenway Trail Corridor
Willow-Ellenton Trail Corridor
HIGHLAN
Highlands-Hardee Connector Corridor
Palmetto - Emerson Point Corridor
Duette Myakka Trail Corridor
DeSoto - Perico Corridor
Mid County Trail Corridor
Bayshore Treewalk Trail Corridor
Florida Cracker Trail Corridor
MANATEE
HARDEE
Old Miakka Greenway Corridor
Sarasota
Sarasota Bay Corridor
Peace River Greenway - De Soto County Corridor
Clark Road Trail Corridor
The Legacy Trail Corridor
DE SOTO
Sarasota Regional Trail Corridor
Myakka Island Wilderness Trail Corridor
SARASOTA
Carlton-Myakkahatchee
Page 9 of 14
Florida Greenways & Trails System Plan
0 5 10 20 Miles
* LAND TRAILS OPPORTUNITY 2012 - DRAFT
FLORIDA NATIONAL SCENIC TRAIL / FLORIDA TRAIL CORRIDOR
MULTI-USE OPPORTUNITY 2008
A1 A2 A3 A4
B2 B3 B4 B5
C4 C5
D4 D5
E4 E5
* The different colors of the Land Trails represent the beginning and ending points of individual corridors.

Public Outreach Efforts to Date (presentation made):

- County Agencies & Constitutional Officers
    - Area Planning Directors – October 2012
    - Clerk's Office– September 2012
    - County Attorney's Office – November 2012
    - Development Review Committee – November 2012
    - Fire Districts – fire marshal's and fire chief's meetings August and September 2012
    - Sheriff's Office – September 2012
    - Neighborhood Services Dept – Bi-monthly through 2012
    - Parks Dept – Bi-monthly through 2012
    - Property Appraiser's Office– September 2012
    - Public Safety Dept – Bi-monthly through 2012
    - Public Works Engineering – Bi-monthly through 2012
    - Public Works Transportation – Bi-monthly through 2012
    - School Board staff leadership – March 2012
    - Tax Collector's Office– September 2012
    - Transit– Bi-monthly through 2012
    - Utilities (solid waste, ops) – monthly through 2012
- Public Outreach Efforts (presentation made)
    - Community Redevelopment Area – South County – summer 2012
    - Federation of Communities – May 2012
    - Growth & Infrastructure Consortium, Atlanta, GA - Oct. 2012
    - Gulfcoast Builders Exchange, Home Builders Association – TBD
    - League of Women Voters – March 2011

- Manatee Chamber of Commerce Retreat – Summer 2011
- Manatee Realtors Association - TBD
- Neighborhood Registry - TBD
- Parrish Civic – conceptual presentations 2011 and early 2012
- Planning Commission – monthly worksession updates
- Planning Task Force – updates every monthly meeting
- Sierra Club - TBD
- South County Community Redevelopment Agency Advisory Board - April 2012
- South County Community Outreach – March 2011
- Tampa Bay Regional Planning Council – Winter 2011
- Urban Land Institute Tampa Bay Conference – February 2012