

Warner Real Estate Advisors Inc.

Indian Trails Grove Housing Need Study – Unit Based Methodology

7/9/2015

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Transmittal Letter

July 9, 2015

Mr. Kevin Ratterree, Vice President
Palm Beach West Associates I LLLP
1600 Sawgrass Corporate Parkway STE 400
Sunrise, FL 33323 2890

Re: Housing Needs Study – Unit Approach, Palm Beach County, Florida

Dear Kevin,

Enclosed you will find a Housing Needs Study that analyzes and compares the supply of available residential land and dwelling units in Palm Beach to the projected population growth and housing demand over the next twenty years. This report is a supplemental study for the Indian Trails Grove Future Land Use Atlas Amendment Application.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rk D.W.' followed by a horizontal flourish.

Rick Warner,
Warner Real Estate Advisors, Inc.

Executive Summary

The purpose of this Housing Needs Study is to analyze if there are sufficient residential units, assuming maximum development potential of vacant land, to support the projected 2035 population in Palm Beach County. This analysis was performed comprehensively, on a county-wide basis, to determine if there are sufficient built and allowed potential dwelling units (“Residential Capacity”) in Palm Beach County to provide the housing needed for the 318,000¹ additional people which are projected to live in Palm Beach County by 2035. Below is a list of the major findings of this analysis:

1. The need for additional residential capacity is well demonstrated; there is more than enough housing need to support the comprehensive plan amendment request by Indian Trails Grove for a 3,943 unit development.
2. Following the significant crash of the real estate market in 2008, the housing need problem is once again becoming acute. Currently there is a significant housing need as reflected by housing prices with multiple offers. Prices are expected to continue to increase, in part, because this housing supply / demand equation continues to grow further out of balance.
3. By 2035, the county population is expected to increase by nearly 23%; given current BEBR population projections, 318,000 additional people will be living in PBCO.² This new population is equivalent to over three cities the present size of West Palm Beach, 104,000 by 2035. Please refer to Map 5 which displays three new cities (eastern area only of West Palm Beach)
4. Based on this analysis of available land in Eastern Palm Beach County³ for housing and applying the maximum allowable current densities, there are less than 77,000⁴ remaining available units to be constructed in eastern Palm Beach County. By comparing population growth for Eastern Palm Beach County and housing demand to the current supply of homes there are significant shortfalls.
 - a. By 2030 the shortfall will be nearly 64,000 units, assuming a 25% minimal market factor. A market factor is widely accepted by most planners as being a way to create sufficient supply of units so that there remains a balance between supply and demand. If supply dwindles, then prices of units rapidly escalate.

¹ Bureau of Economic and Business Research (BEBR) April 2015 Mid Range Estimates, Volume 48 Bulletin 171.

² BEBR April 2015 Mid-Range Estimates, based on estimated April 1, 2014 population. Note that the time periods in question are really 21 and 26 years, however for ease of read we will use 20 and 25 years.

³ Eastern Palm Beach County is defined as the area generally east of the 20 mile Bend.

⁴ Based on PBCO Planning Dept. Unit Assessment Study, February 2014 Table 6, excludes potential units through density bonus programs or redevelopment plans.

- b. By 2035 the shortfall will be nearly 100,000 units, assuming a minimal 25% market factor.
 - c. Finally, if you assume that not all the future unbuilt units will be constructed, which is likely, the shortfall with a 25% market factor increases to 116,000 units. It is likely that maximum density cannot be achieved on many parcels owing to their location, size, configuration, environmental factors, traffic concurrency, access limitations, drainage, and ownership desire to own large lots with homes, equestrian use, neighborhood objections and ultimately local government approvals.
5. Even with conservative assumptions, it is projected that by 2025 the eastern County will be built out of residential land.
6. The County is nearly “built out” in Eastern Palm Beach County. Approximately 94% of the potential total residential units are already built (645,784 units were built as of 2012, with an additional 77,000 remaining residential potential in eastern Palm Beach County). The 77,000 unbuilt units is probably an overestimate of units since the study assumed that each parcel/scrap of land is built on to its maximum allowable density.
7. WREA, Inc. asserts that some of the following assumptions in the Palm Beach County Planning Division’s 2013 Population Allocation Model are overly optimistic:
- a. The County’s first questionable assumption is that the PPH (Persons Per Household) will increase from its current county-wide 2.39 average to a 2.5 average by 2035. Note that PPH did increase between the 2000 and 2010 census – i.e. in 2000 the PPH was 2.34 and in 2010 it was 2.39 hence, a .05% increase. However, the last 2010 census was taken during the middle of an economic recession, where housing foreclosures and job losses were rampant. Many people continue to needed to share housing; therefore increasing the PPH, but only temporarily, until full economic recovery is achieved.
- This drastic increase of PPH in the allocation model is questionable for a number of additional reasons but particularly because it is likely that many future migrants to Palm Beach County will consist of pre-retiree baby-boomer households with their “smaller than average” household sizes.
- b. The second questionable assumption discussed is that all vacant properties will be built out to maximum density by 2035. In reality, there will always be some vacant land and not all property will be built out to maximum densities. Consequently, a more reasonable assumption would be to assume that 80% of the density will be utilized. However, for the purposes of this study, WREA, Inc. maintains the County complete build-out assumptions since (1) it

presents a more conservative approach; and (2) it actually overestimates the supply while underestimating the shortfall; and (3) it partially off-sets density increases from land use and zoning changes that will occur over time. (Note and analysis is included which assumes a 20% reduction in the total future capacity.)

- c. The third questionable assumption is there is no “market factor” necessary to provide some depth to the market. It is far more likely that prices will continue to soar upwards as the finite amount of supply runs out. A minimal market factor of 25% is commonly accepted.
8. Finally, and underestimate of PPH provides flexibility for the future. If the higher PPH as estimated by the County is used, and actual PPH is much lower in 2035, the land which is vacant today will have already been built out at a lower underutilized density. Today we have the flexibility of potentially resolving this future problem, if the lower PPH is not achieved, the land will not be developed. By using a lower PPH in 2035 the county provides flexibility.

Implications of the Housing Needs Shortfall

1. There will be additional development pressure placed on the only remaining large vacant areas along with pressure to change policies and allow residential development within the EAA beyond 20-mile bend.
2. In the Eastern portion of the County, there will be limited agricultural land, including plant growing nurseries.
3. Commercial and industrial land will be converted into residential land uses, thereby reducing economic development opportunities for employment.
4. Palm Beach County will become a leisure market for the baby boomers
5. Housing prices will continue to rise, thus increasing the percentage of working families unable to afford housing.
6. Traffic density will worsen as workers continue to move out of the County to areas where they are required to commute longer distances to Palm Beach County market jobs.
7. Roadway costs will increase as new roads are needed to provide access to more remote counties where housing is affordable.
8. Single person households will be pressured to double or triple up; i.e., people will have to rent rooms.
9. There will be scattered concentrations of additional high rise developments. For example, in Miami Dade County and Broward County, infrastructure cannot adequately supply new higher densities. Secondly,

these higher densities are not wanted by the existing neighborhoods who vigorously oppose these developments at public zoning hearings resulting in the reduction of densities to obtain local government approvals, i.e. recent West Palm Beach over church amphitheater parcel.

Organization and Scope of This Report

The primary purpose of this study is to analyze housing need and to determine if there is a sufficient supply of residential capacity to develop the future residential units needed to meet the recent BEBR mid-range projections for Palm Beach County. Housing availability and pricing are viewed to operate on a county-wide basis.⁵

Demand Population and Housing

The first step in the study is to determine the demand for new housing by determining the number of additional people coming to the County over the next 25 years and then converting that figure into the number of homes needed to house this population. For this analysis the BEBR 2015 population estimates were used as a base and BEBR projections were used for 2020, 2025, 2030 and 2035.^{6 7} From these population projections, group quarters and residents living within the Glades communities were factored out. Then the number of new homes needed was calculated using assumptions for the number of occupied housing units⁸, seasonal units, vacancy rates and the number of people living in each home (PPH).

Supply / Adequacy of Land to Meet Needs

Housing supply was determined through the use of the PBCO Unit Assessment (adjusted to exclude Glades Units), February 2014⁹ and a review of the county's Exlu GIS database.

Demand/Supply Comparisons

Using the results from the Supply Analysis and the Demand Analysis comparisons, the following balance was determined.

1. In 2025 the County will have shortfall of approximately 24,000 units and in 2030 the shortfall will increase to approximately 64,000 units and in 2035 a shortfall increase again to approximately 100,000 units, assuming a 25% minimal market factor.

⁵ This study does divide the County into two markets, Glades Area and eastern County.

⁶ BEBR Volume 48, Bulletin 171, April 2015

⁷ Glades area population was based on review of worksheets from Palm Beach County Population Allocation Models.

⁸ Occupied Units are homes occupied on permanent basis by full time residents.

⁹ Memo to Honorable Jess R. Santamaria from Lorenzo Aghemo, Dated: February 10, 2014 RE: Palm Beach County Residential Permit & Dwelling Unit Data, page 11, Table 6, herein referred to as "PBCO Unit Assessment February 2014".

2. This shortfall can be expressed as a geographical comparison, i.e. a over three more cities with a population the current size of West Palm Beach, 104,000, must be located in the County within the next 20 years.

Demand Analysis

Demand - Estimated Population Growth - BEBR Forecast

Each year BEBR, the Bureau of Economic and Business Research at the University of Florida, prepares population projections on a county-wide basis.

The table below illustrates the following key points:

1. The total County population will increase by approximately 255,000 in the next 15 years.
2. The total County population will increase by approximately 318,000 in the next 20 years.

In comparison, the city of West Palm Beach currently has approximately 104,000 people. Therefore to accommodate 255,000 people by 2030 the equivalent of over two and one half new cities with a population the current size of West Palm Beach, 104,000, must be housed and provided with services. By 2035 the equivalent of nearly three cities with a population the current size of West Palm Beach must be located within the County. Please refer to Map 5 for visual graphic.

Table 1 - BEBR Projections Bulletin 171 released April, 2015

BEBR Population Estimates April 1, 2014 and Projections for 2015 - 2035							
	April 1, 2014	2015	2020	2025	2030	2035	Growth 2014 - 2035
PALM BEACH	1,360,238						
Low		1,335,100	1,371,000	1,397,800	1,415,700	1,423,300	63,062
Medium		1,377,300	1,463,900	1,543,200	1,615,100	1,678,700	318,462
High		1,431,500	1,560,600	1,689,600	1,817,900	1,942,400	582,162

Table 2 – Estimated Population and Housing Demand Scenario

This table converts BEBR mid-range population projections into total housing demand. Total housing demand is composed of occupied housing, seasonal housing and vacant housing.

"Best Guess" Population and Housing Demand Scenario without 25% Market Factor					
	2015	2020	2025	2030	2035
Total Population	1,377,300	1,463,900	1,543,200	1,615,100	1,678,700
Less Glades / Western Population	35,600	38,601	43,528	48,652	53,116
Eastern Population	1,341,700	1,425,299	1,499,672	1,566,448	1,625,584
Housed Eastern Population	1,317,667	1,395,013	1,461,871	1,519,610	1,574,693
GQ Population	24,033	30,286	37,801	46,838	50,891
Household Size	2.39	2.38	2.37	2.36	2.35
Total Housing Units Demand - Eastern	650,148	691,203	727,386	759,319	788,861
Occupied Housing Units	551,325	586,140	616,823	643,903	670,082
Vacant Housing Units	35,758	38,016	40,006	41,763	43,387
Seasonal Housing Units	63,064	67,047	70,556	73,654	75,391
Housed Population Percentage	98.21%	97.88%	97.48%	97.01%	96.87%
GQ Percentage	1.79%	2.12%	2.52%	2.99%	3.13%
Occupied Housing Unit Percentage	84.80%	84.80%	84.80%	84.80%	84.94%
Vacant Housing Unit Percentage	5.50%	5.50%	5.50%	5.50%	5.50%
Seasonal Housing Unit Percentage	9.70%	9.70%	9.70%	9.70%	9.56%
Total Supply of Units -- Less Glades Area Supply - Includes Minto West Units	722,659	722,659	722,659	722,659	722,659
Housing Surplus/Deficite Five Year Increments	72,511	31,456	(4,727)	(36,660)	(66,202)

GQ is Group Quarters

Table 3 – Estimated Population and Housing Demand Scenario with (minimal) 25% Market Factor

Estimated Population and Housing Demand Scenario with 25% Market					
		2015 to 2020	2015 to 2025	2015 to 2030	2015 to 2035
Change in Housing Demand		41,055	77,238	109,172	138,714
Add 25% Market Factor		51,319	96,548	136,464	173,392
Total Housing Unit Demand with 25% Market Factor		701,467	746,696	786,612	823,539
Total Supply		722,659	722,659	722,659	722,659
Surplus/Deficit		21,192	(24,037)	(63,953)	(100,880)

Table 4 – Estimated Population and Housing Demand Scenario with (minimal) 25% Market Factor and Reduced Unbuilt Units

Estimated Population and Housing Demand Scenario with 25% Market and 80% of Available Units					
		2015 to 2020	2015 to 2025	2015 to 2030	2015 to 2035
Change in Housing Demand		41,055	77,238	109,172	138,714
Add 25% Market Factor		51,319	96,548	136,464	173,392
Total Housing Unit Demand with 25% Market Factor		701,467	746,696	786,612	823,539
Supply Less 20% of Unbuilt Units (76,875)		707,284	707,284	707,284	707,284
Surplus/Deficit		5,817	(39,412)	(79,328)	(116,255)

The table above computes the shortfall if you assume that not all units will be constructed as assumed by Palm Beach County. In this example, we assume that 20% of the 76,875 unbuilt will not be constructed, because of ownership issues, environmental issues, drainage, access, neighborhood objections, and ultimately local government restrictions.

Supply - Available Land and Capacity to Build Homes to Meet BEBR Mid-Range Projections - Eastern Palm Beach County

Using the total Palm Beach County Planning Departments Unit Assessment report, the number of total residential units in the Eastern portion of the county was analyzed. The table below has built units and potential units that remain unbuilt.

Table 4 – Built – Unbuilt Units – Maximum Potential County Wide

Tier	Built Units (2012)	Maximum Potential	Total Unbuilt	Vacant Unbuilt	Approved Unbuilt
Ag Reserve	4,819	12,483	7,664	3,560	4,104
Exurban	14,778	17,826	3,048	3,048	-
Rural	6,925	13,477	6,552	6,552	-
Urban/Suburban (Includes Minto West)	619,262	678,873	59,611	34,771	24,840
Total Countywide	645,784	722,659	76,875	47,931	28,944

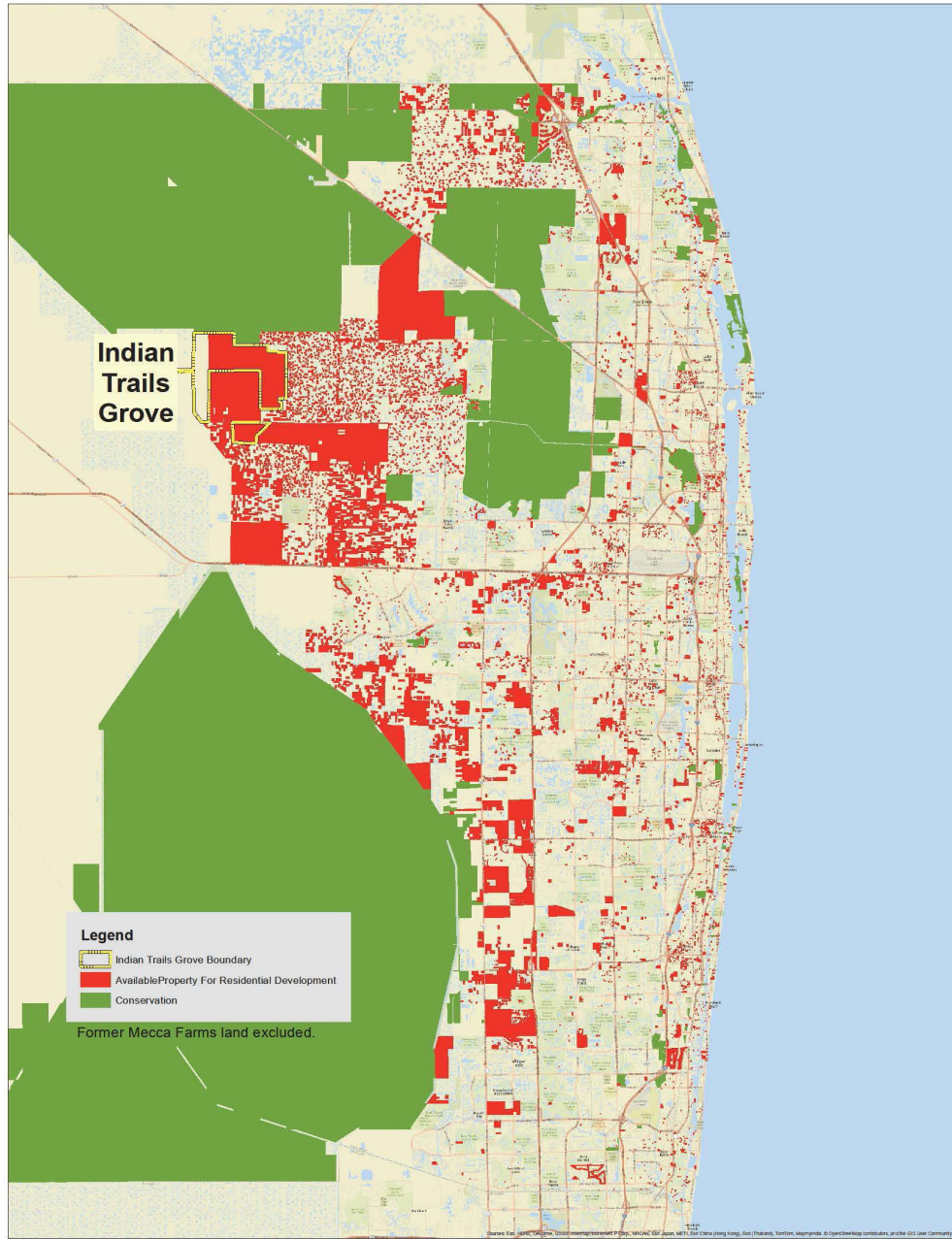
Source: PBCO Unit Assessment Report February 10, 2014 Table 6, excludes potential units through density bonus programs or redevelopment plans .

Map 1 - Study Area Eastern PBCO



Map 2 - All Vacant Residential Parcels With Current Residential Unit Potential

Vacant Land Analysis Eastern Palm Beach County



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All Vacant Residential Land Parcels

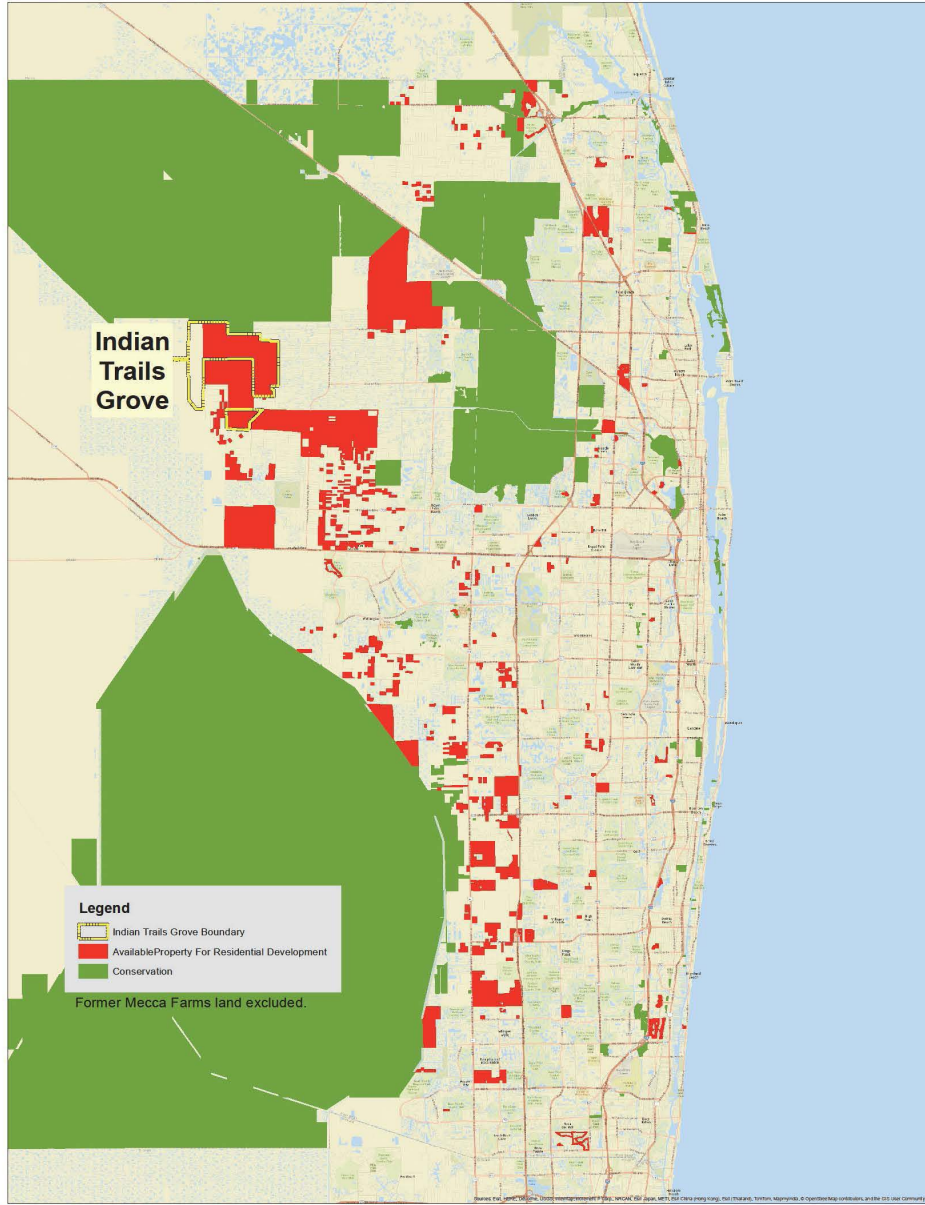
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Prepared: May 30, 2015
Data Sources:
PBCO Exlu - Oct. 2014

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Map 3 - Vacant Residential Parcels 10 Acres or Greater with Current Residential Unit Potential

Vacant Land Analysis Greater than 10 Acres Eastern Palm Beach County



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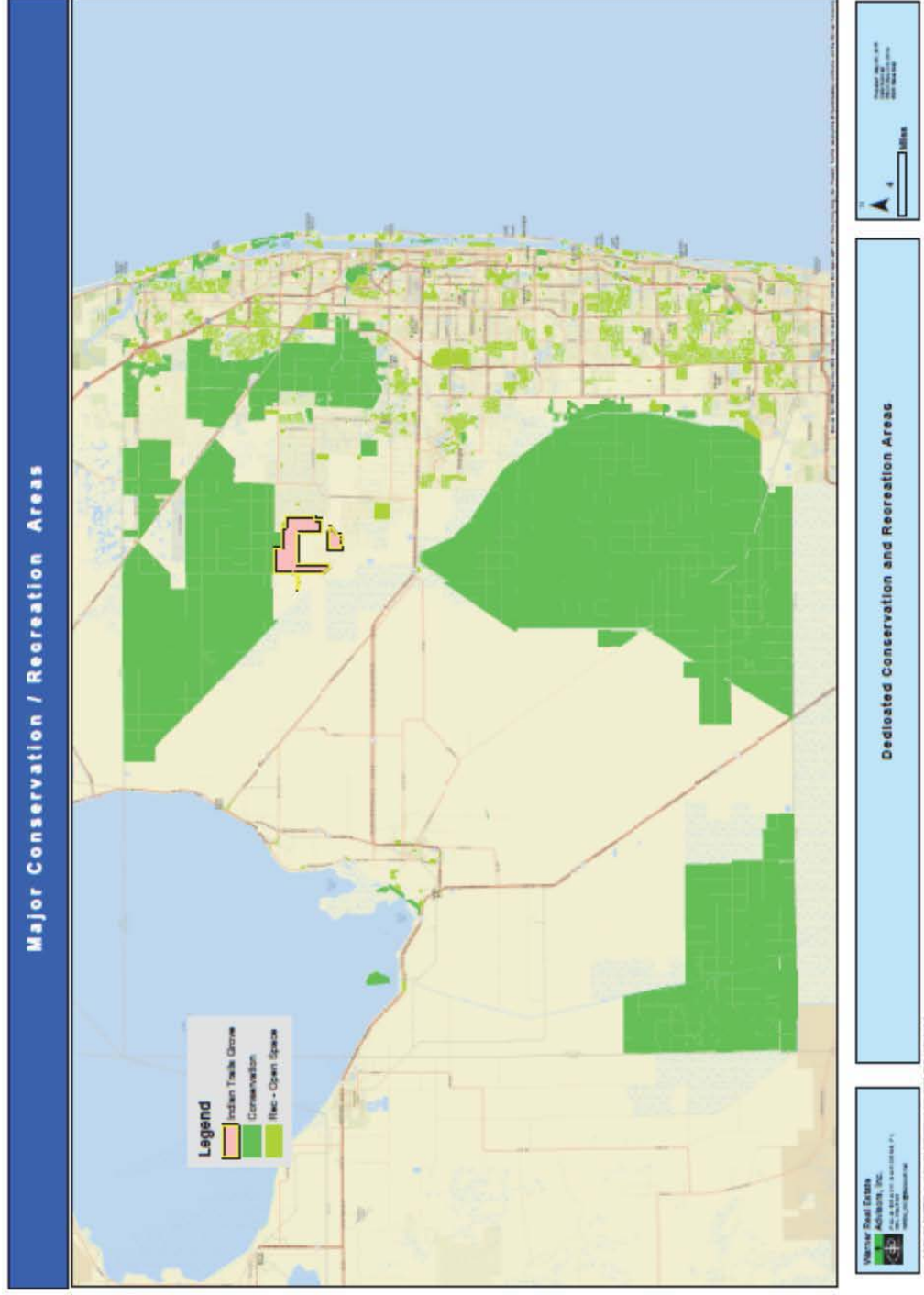
**All Vacant Residential
Land Parcels**



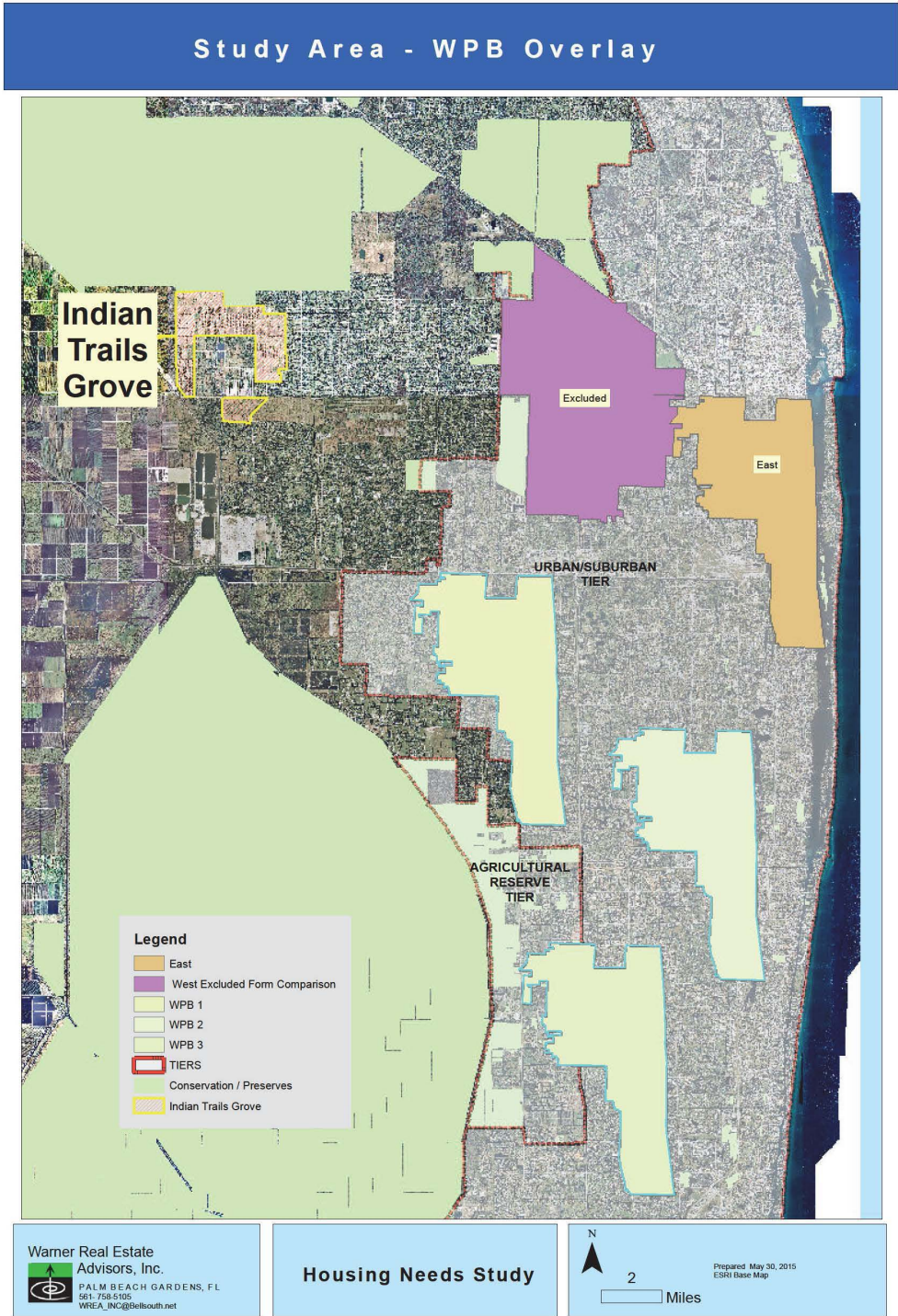
Prepared: May 30, 2015
Data Sources:
PBCO Exits - Oct. 2014

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Map 4 - Conservation Lands



Map 5 – West Palm Beach Overlay – Eastern Area Only



Is there Sufficient Land and Housing in Eastern Palm Beach County to House Projected Population?

To determine if the current supply of land and housing is adequate to accommodate the projected population, the BEBR population projections were compared to the number of existing and potential homes that could be constructed on the vacant land and underutilized parcels. A key point of this segment of the analysis is the number of people who will occupy each home. Currently the County has an overall 2.39 PPH.

Palm Beach County Planning Staff assumptions indicate this figure may increase to 2.50 by 2035 for all housing in the County. This is an important assumption because it requires every one of the anticipated housing units in the County (722,659) to achieve 2.50 PPH on average, even those which today are populated by smaller households of retirees.

For the purposes of this study, a more conservative approach was taken and used the PPH trends displayed on Table 2. The major reasons for these PPH's are as follows:

1. Nationwide the PPH has been dropping for decades.
2. Although the overall PPH may rise modestly over the next five years as working and Hispanic families continue to move into Palm Beach, the relative importance of these two groups will soon diminish due to an influx of baby boomer migrants. Thus, it is highly unlikely the PPH of 2.50, postulated by the County, will be reached.
3. Palm Beach County has embraced community values that are different from those of Broward County which are cited by the County as being part of its justification for the 2.48 figure (2.52 is the Census 2010 PPH for Broward County).
4. According to the most recent BEBR projections, the percentage of age 65+ population in Palm Beach County is expected to increase from 21.6% to 26.9.6% by 2035.¹⁰ Simultaneously, the median price of housing is escalating sharply, impairing the County's overall affordability, causing people to move to St. Lucie County and creating more roadway impacts. Clearly, in PBCO, attainable housing will not be available for working class families.
5. Finally, and underestimate of PPH identifies a problem now, which can partially be fixed by better residential utilization of the remaining vacant land. If the higher PPH as estimated by the County is used, and actual PPH is much lower in 2035, it is likely that a better utilization of the remaining residential cannot be achieved because it will already be built. Today we have the flexibility of potentially resolving this future problem.

¹⁰ BEBR Population Projections by Age, Sex, Race, and Hispanic Origin, Bulletin 169, June 2014.

Disclaimer

This report, analysis, and its conclusions represent the opinion of Warner Real Estate Advisors, Inc., based on data provided by published sources including the U.S. Census Bureau, the University of Florida's Bureau of Economic and Business Research, the Palm Beach County Property Appraiser, and Palm Beach County Planning Division in combination with our own in-house expertise. An effort has been made to obtain the latest applicable data from reliable sources. Any changes within the study area, such as unforeseen changes and developments in economic conditions that could influence projections and conclusions. For these reasons, no representation or warranty, expressed or implied, is herewith being made as to the accuracy or completeness of this report.