Envision Seminole
VISION REPORT

2045

APPENDIX

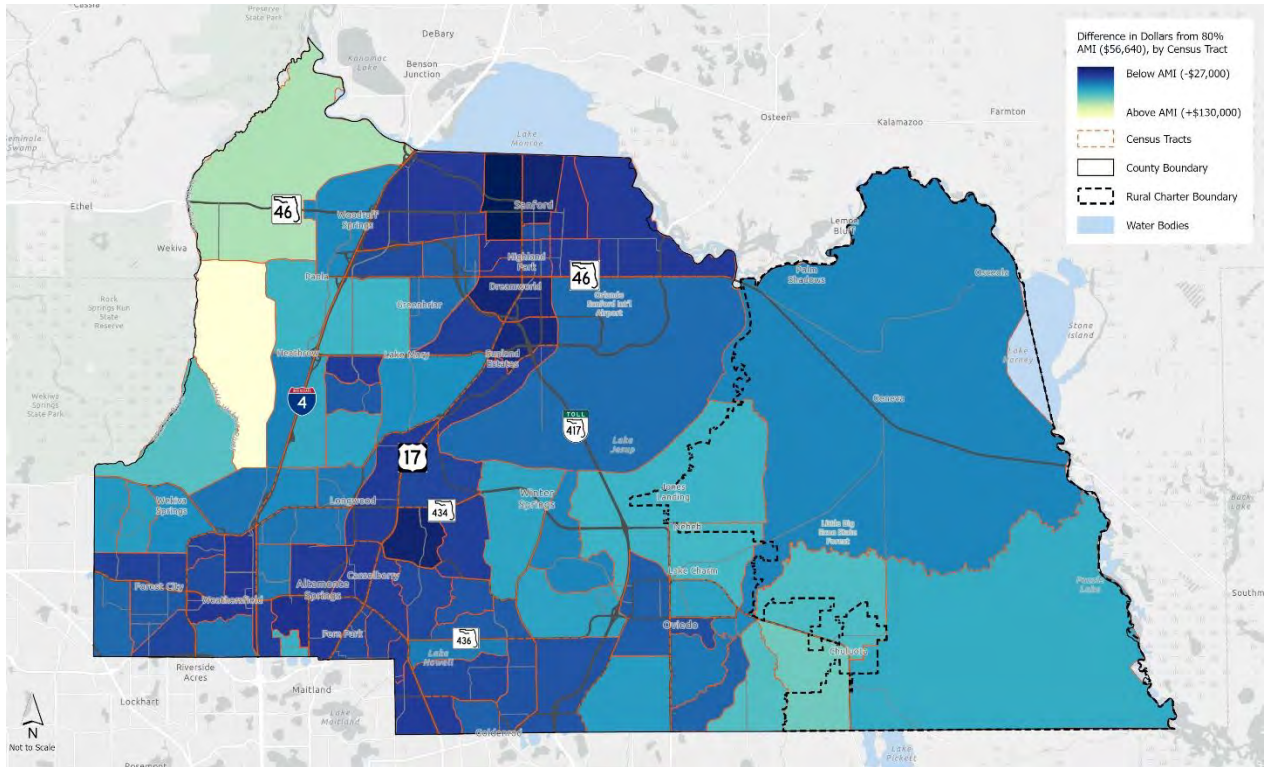**Land Use Analysis Memos**

Prepared for Seminole County Development Services

By GAI Consultants, Inc.

October 9, 2022

Analysis Memo 3.1: Demographics

Analysis Questions

What percentage of households within Seminole County have household incomes that fall below 80% of the area median income (AMI) of the metropolitan statistical area (MSA), and these households concentrated in specific areas?

According to HUD, the Orlando-Kissimmee-Sanford MSA that includes the entire Seminole County area has an AMI of $70,800. An individual would be at 80% of the AMI when earning $56,640. Based on 2021 data, 29.1% of households in Seminole County earn less than the 80% AMI.

To better understand where these households are located, Seminole County was divided by its 89 census tracts, ranging from 0.32 to 67.9 square miles in area and approximately 1,200 to 9,900 residents, to identify which tracts have a median household income below 80% of the AMI. Thirty-one census tracts' median household income showed below 80% of the AMI, located mostly in the northern center and southwest of the county and contains both incorporated and unincorporated areas (see Figure 1). Median household incomes that are the highest dollar amount above 80% AMI are concentrated in the northwest of the County (see Figure 2).

Figure 1: Median Household Income under 80% AMI, in Dollars

Figure 2: Median Household Income compared to 80% AMI, in Dollars

Are population-based level-of-service (LOS) standards currently being met? Will these LOS standards continue to be met across all intervals of the population projections?

The population-based LOS standards were evaluated against TAZ population data for 2022 and in 5-year intervals through 2045. TAZ data is suitable for population forecasts and can be used to decipher if the County is meeting the needs of its residents through its established population-based LOS standards.

Seminole County's adopted Level of Service Standards are as follows:

Parks LOS Standards

According to Comprehensive Plan Policy REC 4.1, Seminole County shall adopt and maintain the following levels of service through the implementation of the Capital Improvements Element, the development approval process, and ongoing operations of the Leisure Services Department.

- Standard A - Total Park Acreage: Seminole County shall ensure that sufficient park acres are available to meet future growth demands by maintaining the current level of service of 3.6 acres per 1,000 residents Countywide within urban community park sites.
- Standard B - Developed Acreage: To ensure that adequate park facilities are provided to accommodate growth demands, Seminole County shall continue to maintain the current level of service of 1.8 developed park acres per 1,000 residents for total park acreage needs. This standard includes both active and passive recreational facilities.

Table 1: Population-Based LOS Standards: Parks[1]

Year	2022	2023	2024	2025	2030	2035	2040	2045
TAZ Population	490,728	497,632	497,526	503,365	523,177	550,126	570,178	590,425
Standard A Urban Park Acres Required[2]	1,766.6	1,780.7	1,791.1	1,812.1	1,883.4	1,980.5	2,052.6	2,125.5
Standard B Developed Acres Required[3]	883.3	890.3	895.5	906.1	941.7	990.2	1,026.3	1,062.8

For Standard A, the park inventory was limited to County-owned parks that are located *outside* of the rural boundary to meet the "urban community park site" requirement. The urban community park list is as follows:

1. Big Tree Park
2. Bookertown Park
3. Boombah Sports Complex
4. Cameron Wight Park & Boat Ramp
5. Greenwood Lakes Park
6. Jamestown Park
7. Kewannee Park
8. Lake Dot Park
9. Lake Jesup Park
10. Lake Monroe Wayside Park & Boat Ramp
11. Midway Park
12. Overlook Park
13. Red Bug Lake Park
14. Roseland Park
15. Sanlando Park
16. Seminole County Softball Complex
17. Soldiers Creek Park
18. Sunland Park
19. Sylvan Lake Park
20. Wilsons Landing Park
21. Winwood Park

For Standard B, the park inventory was limited to all County-owned parks that are not considered a natural land to meet the "developed park" requirement. The natural land removed from the park inventory is as follows:

1. Black Bear Wilderness Area
2. Black Hammock Wilderness Area
3. Chuluota Wilderness Area
4. Econ River Wilderness Area

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[1] Park count, ownership, and acreage is derived from the Recreation.gdb GIS database provided by Seminole County. 21 "urban parks" (parks within Urban Area) totaling 873.1 acres; 22 "developed parks" totaling 976.9 acres
[2] Based on (Total Population ÷ 1,000) x 3.6 acres
[3] Based on (Total Population ÷ 1,000) x 1.8 acres

5. Geneva Wilderness Area
6. Lake Harney Wilderness Area
7. Lake Jesup Wilderness Area
8. Lake Proctor Wilderness Area
9. Little Big Econ Canoe Launch
10. Overlook Park
11. Sullivan Property (in preservation)
12. Spring Hammock Preserve
13. Wilson's Landing Park

As shown in Table 1, the current inventory of parks within Seminole County does not meet LOS for Standard A through 2045 based on the TAZ total population projections. However, the LOS for Standard B is met by the current park inventory through 2030.

Seminole County also implements Policy REC 1.1 to provide "a system of community parks that includes a community park within a 10–20-minute drive of every County resident, and provides that 30-40% of every community park should remain in open space for passive recreation, wildlife habitat, aesthetics, etc." Since this goal is not a population-based level of service standard, it is instead evaluated in Analysis Memo 3.5 – *Community Facilities*.

Are there adequate residential lands with supporting infrastructure to accommodate projected population growth?

To determine if adequate residential lands are present to support the current and projected Seminole County population, final tax roll data from the Florida Department of Revenue (FDOR, 2021) and Seminole County Transportation Analysis Zone (TAZ) Population Projections were utilized in conjunction with other analysis efforts of the FLU Study. In order to evaluate the adequacy of residential lands within the County, the residential needs were first estimated.

To estimate annual dwelling unit (DU) counts through the Transportation Analysis Zone (TAZ) data projection period, the FDOR tax roll construction date and DU count data were used to calculate the compound annual growth rate (CAGR) for the 30-year period between 1991 and 2020 – approximately 1.017%. Using the CAGR of dwelling units for this historical period allowed for estimation of total DU counts through the TAZ data projection period (see Figure 3, below).

Figure 3: Total Dwelling Unit Growth Analysis
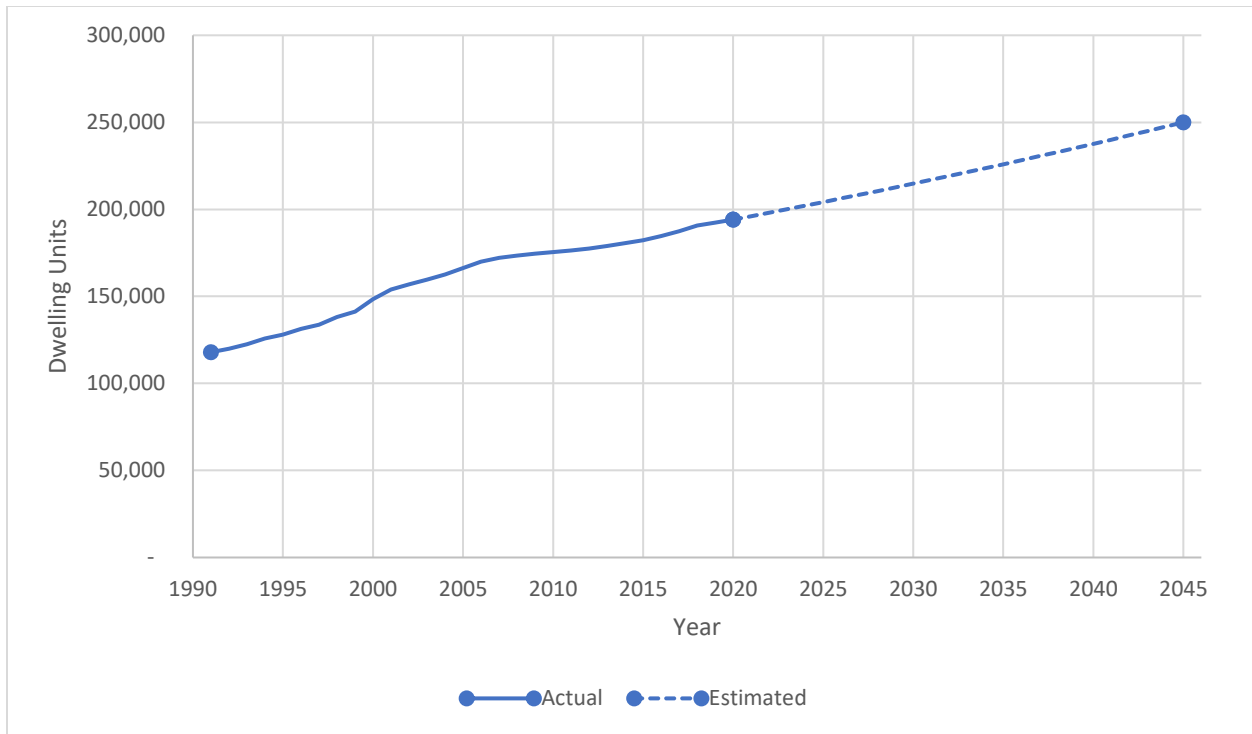
For the purposes of this analysis, a calculated 2.47 persons/DU is used to perform estimates of additional DU needs through the TAZ data projection period. According to the 2021 FDOR database, there were approximately 194,113 dwelling units in Seminole County in 2020; according to the Seminole County TAZ data, the 2020 total County population was approximately 479,048 people (479,048 persons ÷ 194,113 dwelling units ≈ 2.47 persons per dwelling unit).

Table 2, below, demonstrates the outlook for dwelling unit needs (or surplus) through the TAZ data projection period.

Table 2: Estimated Dwelling Unit Needs/Surplus - 2020 to 2045

Year	2020	2022	2023	2024	2025	2030	2035	2040	2045
TAZ Population Estimate	479,048	490,728	497,632	497,526	503,365	523,177	550,126	570,178	590,425
Dwelling Units Required[4]	193,947	198,675	201,470	201,428	203,791	211,813	222,723	230,841	239,038
Estimated Total Dwelling Units per 30-year CAGR	194,113[5]	198,080	200,094	202,129	204,184	214,777	225,921	237,642	249,971
Dwelling Units Over/Under	166	-595	-1,376	701	393	2,964	3,198	6,801	10,933

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[4] Based on 2.47 persons per dwelling unit
[5] Existing dwelling unit count per 2021 FDOR final tax roll database

According to this method of estimation, despite some periods of shortage (2022 to 2023) and narrow margins of surplus (2024 to 2025), if the annual rate of new dwelling unit construction continues along the 30-year trend (as estimated by the 30-year CAGR), the County's housing needs will – hypothetically – continue to be met through 2045. Further analysis, below, addresses the issues of land availability and suitability.

According to FDOR tax roll data, there are approximately 25,462 buildable acres of vacant and agricultural land area that hold a FLU designation permitting at least one dwelling unit. Buildable acres for the purpose of this analysis excludes acreage contained in the National Wetland Inventory and the County-provided "Preserved Lands" GIS dataset.

Figure 4: Vacant & Agricultural Parcels with FLU Designations Supporting Residential Development
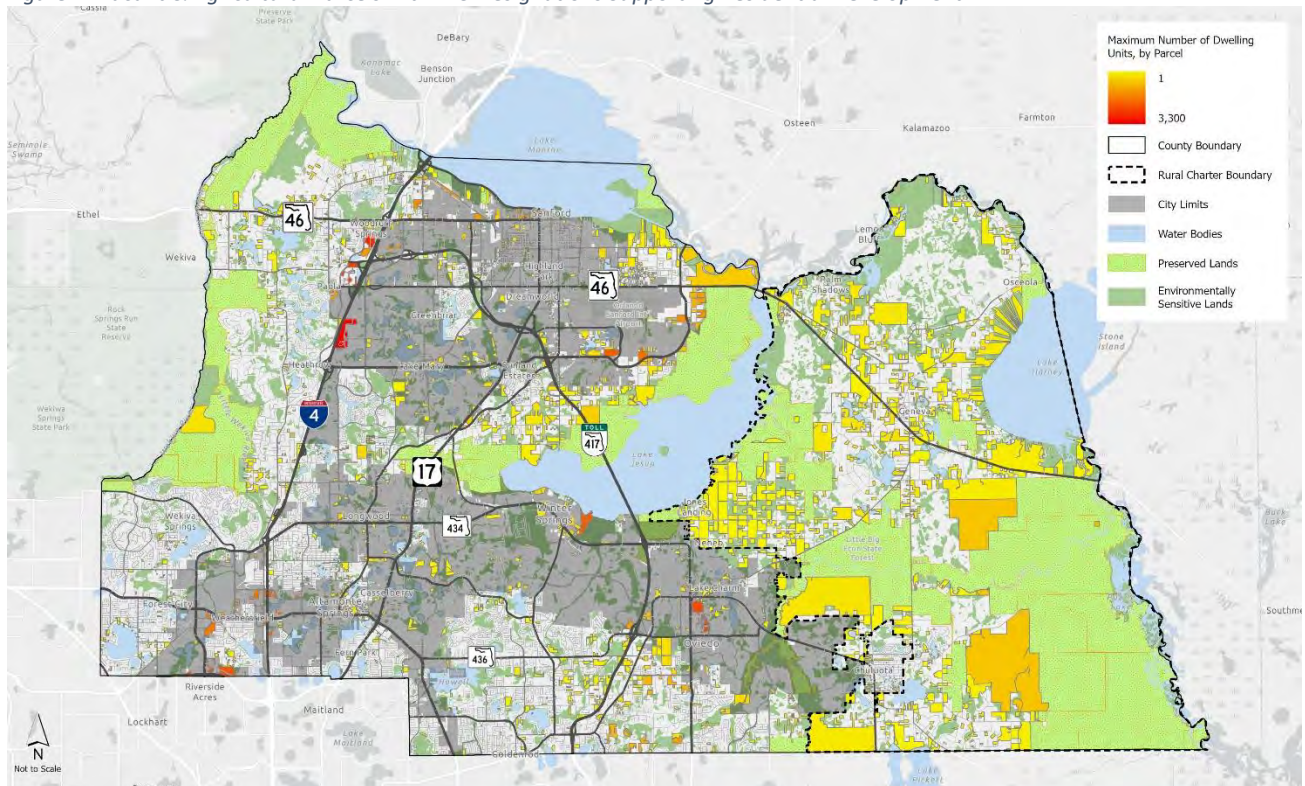
Table 3 details the number of additional dwelling units that could be developed on these lands as determined by the Comprehensive Plan's maximum residential development densities for each parcel's current FLU designation. Calculations have been provided for lands within the urban area of Seminole County and within the Rural Charter area.

Table 3: Maximum Additional Dwelling Units – Buildable Residential Lands

	Vacant		Agricultural		Total
Urban Area	5,739 Ac	79,347 DU	3,745 Ac	27,317 DU	106,664 DU
Rural Charter Area	983 Ac	750 DU	14,994 Ac	3,568 DU	4,318 DU
Total	6,723 Ac	80,097 DU	18,739 Ac	30,885 DU	110,982 DU

Containing future residential development to urban area lands can help ensure the availability of associated infrastructure needs. Residential developments within the Rural Charter area may suffer from inadequate supporting infrastructure. As illustrated in Analysis Memo 3.5 – *Community Facilities*, the Rural Charter area (when compared to the rest of the County) does not have equitable access to critical community facilities and infrastructure including County parks, educational facilities, public safety facilities (i.e. police and sheriff stations), hospitals, and fire stations. As previously demonstrated in Table 2: Estimated Dwelling Unit Needs/Surplus - 2020 to 2045, approximately 45,091 new dwelling units are needed by 2045 to support the TAZ population estimate. The evaluation above indicates that lands within the urban area of Seminole County can theoretically support the needed additional dwelling unit development through 2045.

Table 4 below demonstrates hypothetical land development scenarios that could accommodate the County's residential needs through 2045 using only land that meets the following criteria:

- Vacant parcel located within the urban area
- Acreage not within National Wetland Inventory or Seminole County Preserved Lands
- Current FLU designation that supports development of at least one residential unit

Table 4: Vacant Urban Area Lands - Residential Development Scenarios

Vacant Buildable Acres (Urban Area)	Acreage Utilization	Acres Developed	Estimated Dwelling Units Needed (2045)	Average Density of Residential Development
5,739	100%	5,739	45,091	7.9
5,739	80%	4,591	45,091	9.8
5,739	60%	3,443	45,091	13.1
5,739	57%	3,267	45,091	13.8[6]
5,739	40%	2,296	45,091	19.6
5,739	20%	1,148	45,091	39.3

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[6] The average density of maximum allowable residential development in vacant urban area lands is approximately 13.8 DU/ac (according to each parcel's respective current FLU designation).

Analysis Memo 3.2: Land Use

OVERVIEW

Urbanization Factors

Seminole County's population growth is slowing. US Census data indicates that Seminole County's population grew slower between 2000 and 2020 than any other 20-year period since 1920. Still outpacing the national growth rate, Seminole County's growth rate during this time was slower than the State's (see Table 1).

Table 1: Seminole County Population (U.S. Census Bureau)

Census Year	Population	Percent Change	Population Change
1920	10,986	—	—
1930	18,735	70.5%	7,749
1940	22,304	19.0%	3,569
1950	26,883	20.5%	4,579
1960	54,947	104.4%	28,064
1970	83,692	52.3%	28,745
1980	179,752	114.8%	96,060
1990	287,529	60.0%	107,777
2000	365,196	27.0%	77,667
2010	422,718	15.8%	57,522
2020[1]	470,856	11.4%	48,138

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[1] 2020 population data from the U.S. Census Bureau does not match Seminole County TAZ data for year 2020 population used elsewhere in the Seminole County FLU Study. Data from the U.S. Census Bureau was utilized herein for purposes of data continuity and consistency in historical analysis.

Seminole County's job growth outpaced Florida's. US Census data indicates that Seminole County employment grew by 36% compared to the State's growth of 26% between 2002 and 2019. Through that time, Retail Trade, Health Care and Social Assistance, Construction, Administration & Support, Waste Management and Remediation, and Accommodation and Food Services represent the largest share of employment (see Figure 1).

Figure 1: Seminole County Annual Job Growth Rate[2]
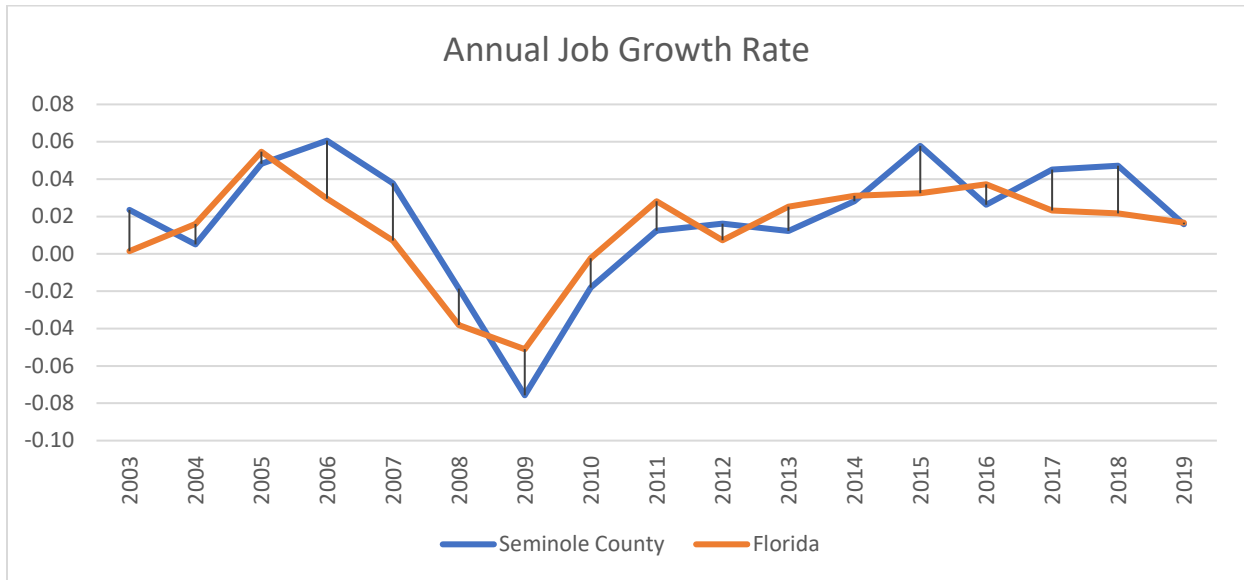
Most urbanization since 2000 occurred within the Urban Service Area. Urbanizing land cover was mostly limited to the urban service area (Sanford, Winter Springs, and Oviedo). Property appraiser data further indicates that 97.3% of floor area built since 2000 was inside the Urban Service Area. Moreover, development in unincorporated areas since 2000 is on average 2.5 times more intense (based on Floor Area Ratio) than development before 2000 (0.36 FAR and 0.14 FAR respectively) (see Table 2).

Table 2: Distribution of Floor Area Built in Unincorporated Seminole County[3]

Floor Area Type	Built before 2000	Built since 2000
Urban	95.1%	94.2%
Rural	4.9%	5.8%

Rate of development intensity peaked in 1985. Nearly 45% of the floor area in Seminole County was built between 1980 and 1999, peaking at over 15.2 million square feet built in 1985, according to Actual Year Built data from the Property Appraiser. Year 2000 saw the second highest peak in floor area built. Between 2006–2011, floor area development dipped to the lowest levels since 1967. Since recovery from the 2007-2009 Great Recession began, development levels are still only about half of 2000-2005 levels, peaking in 2018 at about 7.2 million square feet. Despite the Great Recession, over 30% of the existing floor area in Seminole County was built between 2000 and 2019 (see Figure 2).

Figure 2: Rate of Development in Seminole County[4]
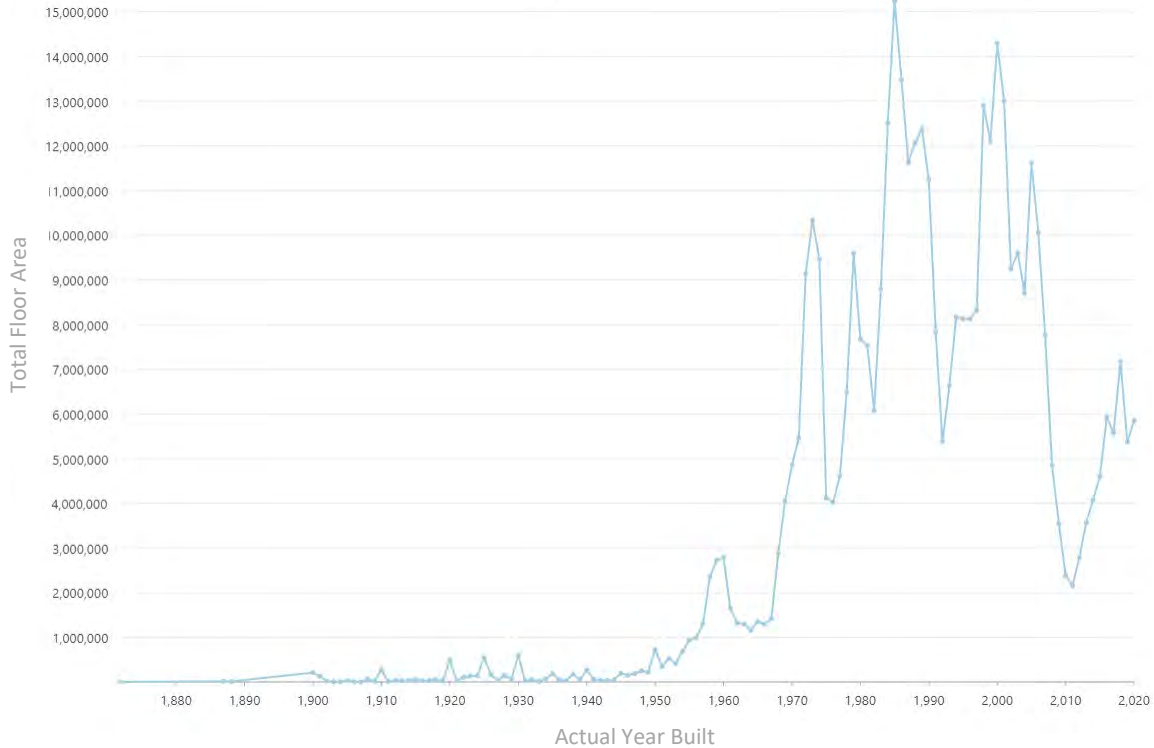
[4] 2021 FDOR final tax roll database

Rate of development between unincorporated Seminole County and incorporated Seminole County is virtually identical. About 1/3 of all floor area in unincorporated Seminole County was built after 2000 and 1/3 of all floor area in incorporated Seminole County was built after 2000 (see Figure 2).

Figure 3: Floor Area built since 2000 by Jurisdiction[5]
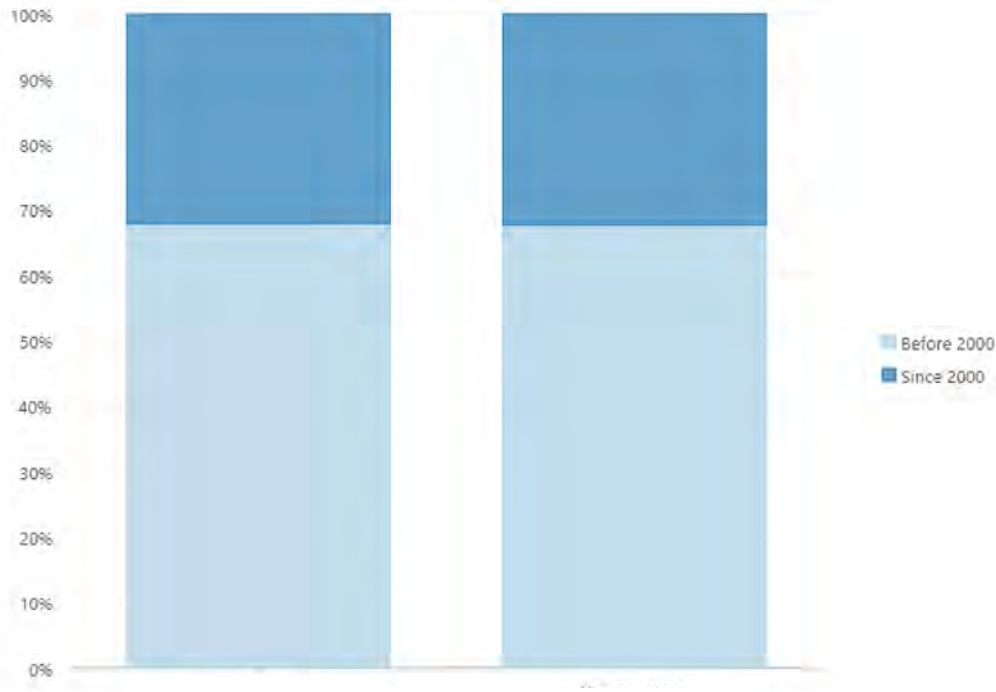
[5] 2021 FDOR final tax roll database

Land Cover[6]

Seminole County's *urban footprint* grew by ≈8% between 2001 and 2019. Nearly 18 square miles (or 5%) of total Seminole County land cover experienced development intensification or change to developed land cover (developed open space, low-, medium-, or high-intensity development). Of this cover, 57.5% was converted from natural or agricultural lands (including 22% from forests, 16% from pasture, and 14% from wetlands). Medium Intensity Development[7] represented 74% of the net increase in developed land cover (see Figure 4, Figure 5, and Figure 6).

Seminole County's *urban footprint* is becoming denser. Developed land cover per 1,000 people decreased from 0.37 to 0.31 (or by ±17%). Impervious land cover per 1,000 people decreased from 0.10 to 0.09 (or by ±7%) (see Figure 4, Figure 5, and Figure 6).

Figure 4: 2001 to 2019 Change in Land Cover Map ("change to…")

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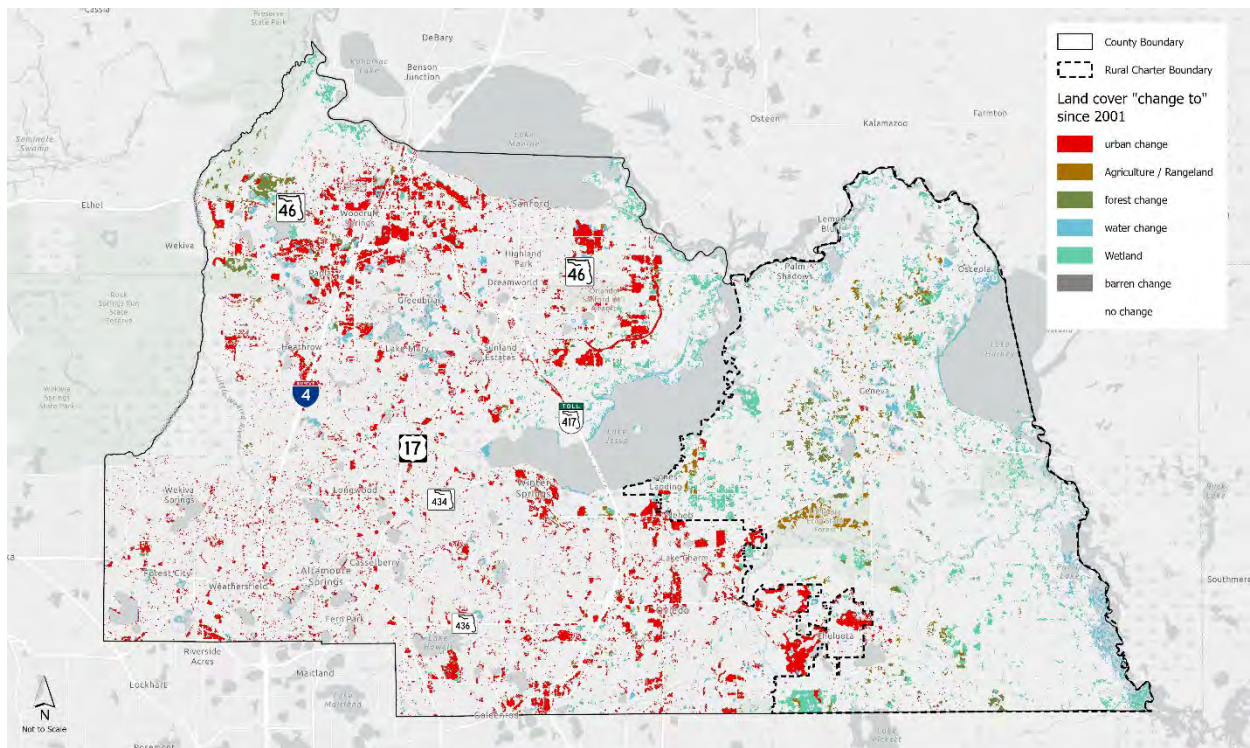
[6] National Land Cover Database (https://www.mrlc.gov/)

[7] Areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover. These areas most commonly include single-family housing units.

Figure 5: 2001 to 2019 Change in Land Cover

Change in Land Cover 2001-2019

(Chart showing change in square miles by land cover type)

High Intensity Development
Medium Intensity Development
Low Intensity Development
Scrub/Shrub
Grassland
Open Water
Wood Wetland
Emergent Wetland
Developed Open Space
Cultivated Crops
Pasutre/Hay
Evergreen Forest
Barren Land
Mixed Forest
Deciduous Forest
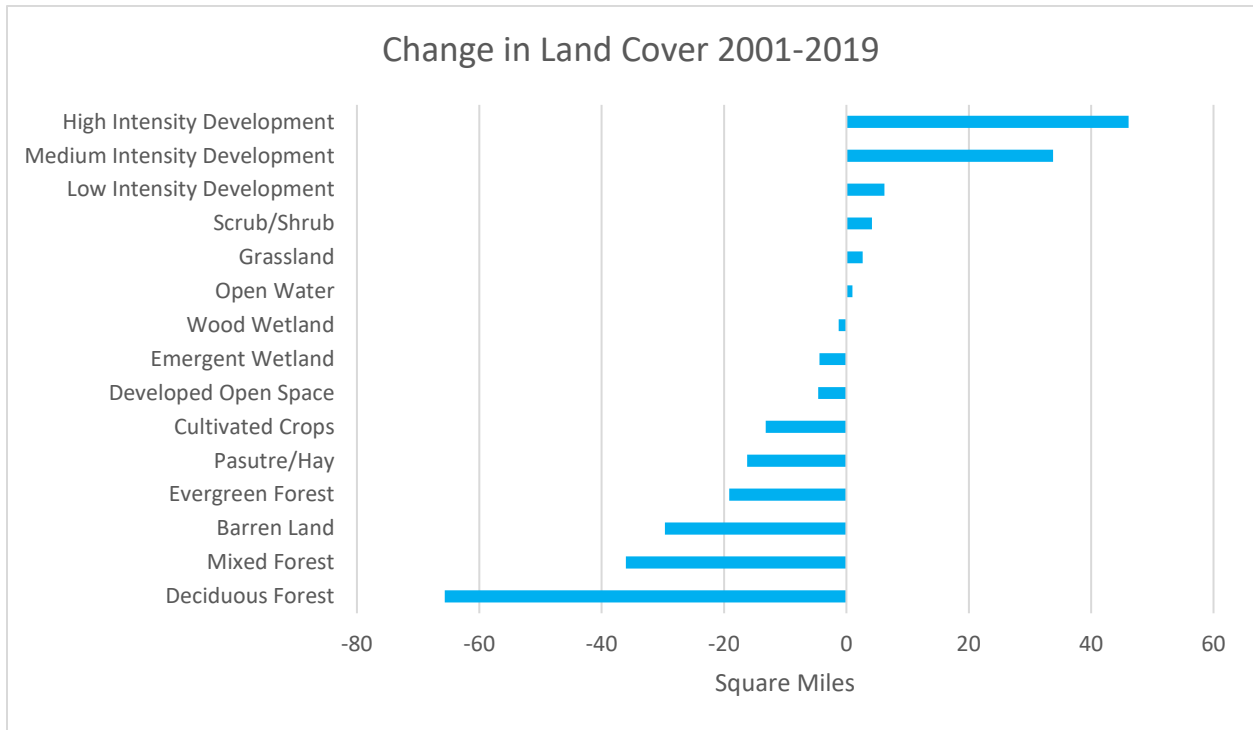
Square Miles

Figure 6: 2001 to 2019 Change in Land Cover ("change from…")
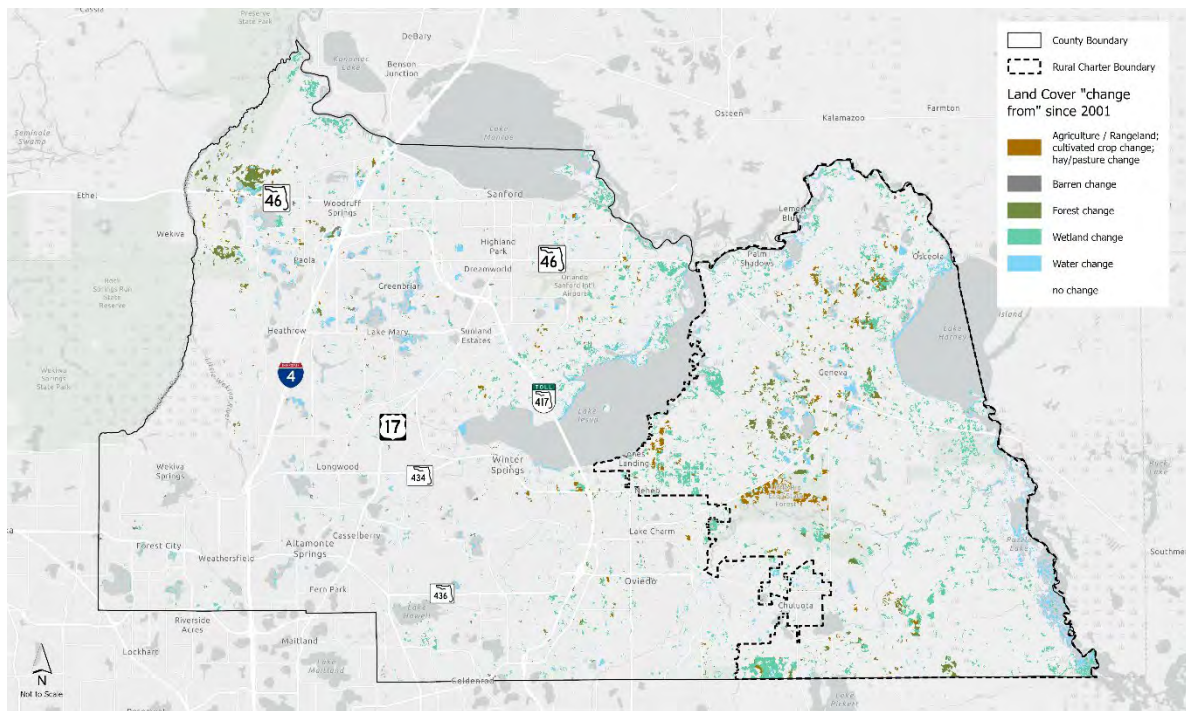
Seminole County lost 2% of remaining wetland land cover between 2001 and 2019. Wetland cover declined from 127 to 124.5 square miles. Developed cover accounts for 98% of wetland cover loss (see Figure 7).

Seminole County lost 20% of remaining forested cover between 2001 and 2019. Forested areas declined from 21.7 to 17.4 square miles. Developed cover accounts for 83% of forested cover loss (see Figure 7).

Figure 7: 2001 to 2019 Land Cover loss to Developed Cover
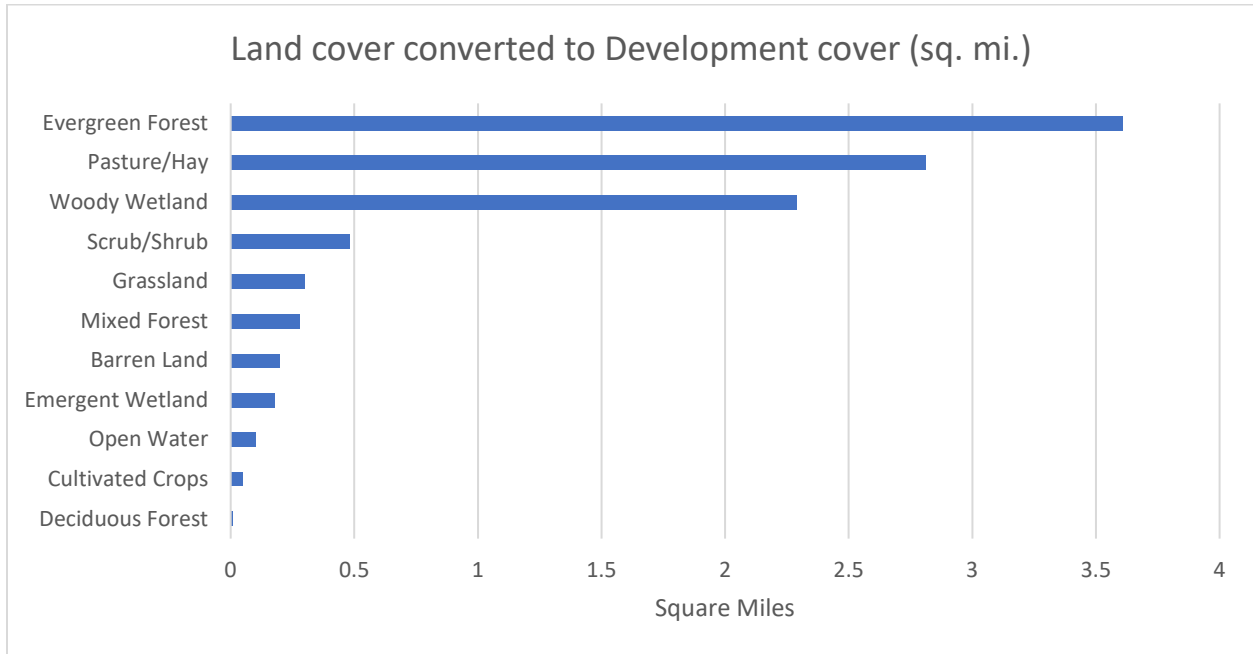
Seminole County lost 35% of remaining agricultural land cover between 2001 and 2019. Agricultural land cover decreased from 23.6 to 19.8 square miles. Developed cover accounts for 76% of agricultural cover loss (see Figure 8).

Figure 8: Existing Floor Area built since 2000 (Unincorporated Seminole County)
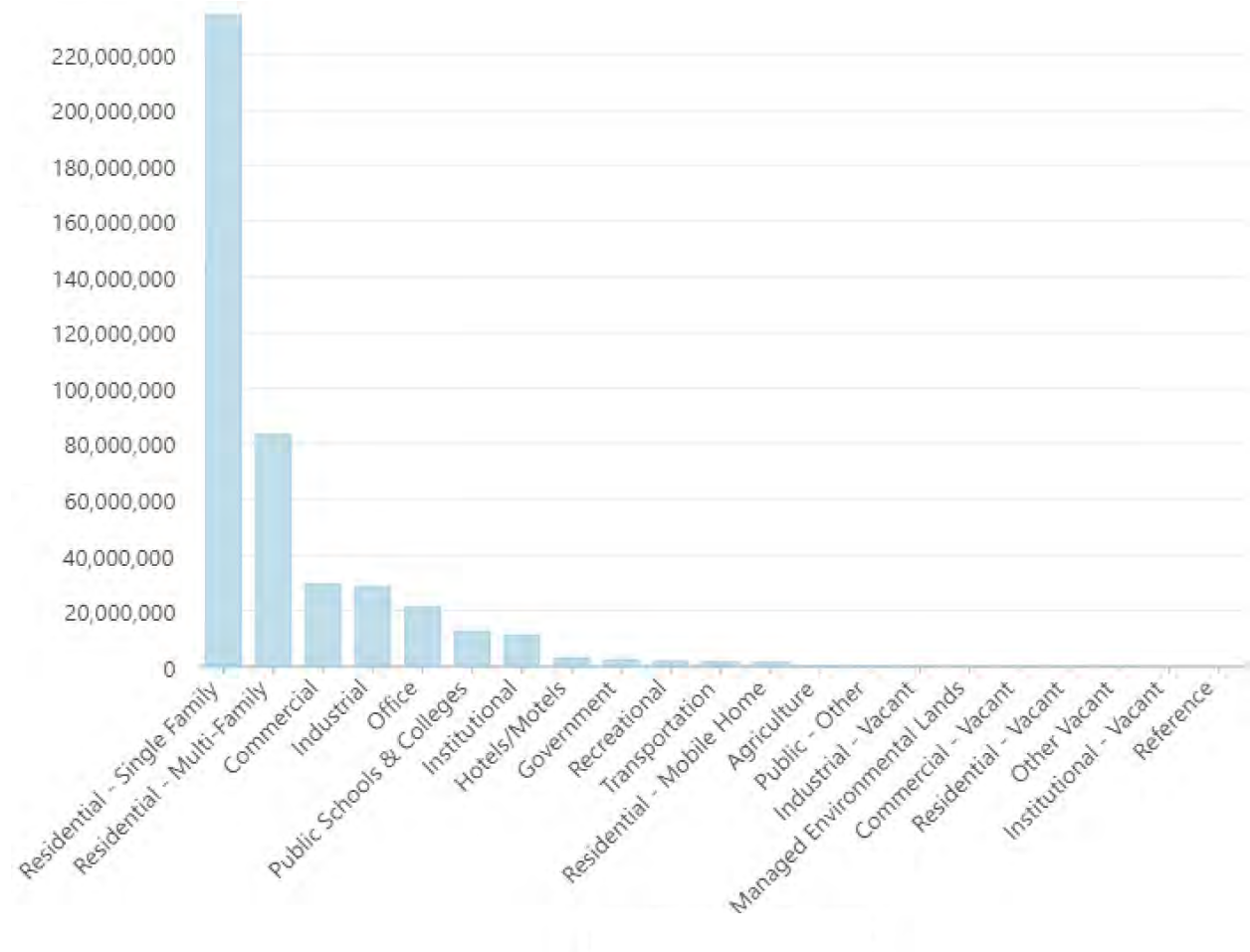
Land Use

Residential uses represent 80% of the floor area existing in unincorporated Seminole County today that was built since 2000. Property appraiser data indicates the presence of more than 66 million square feet of floor area built in unincorporated Seminole County after 2000. Of this, nearly 60% was single family residential floor area and 21% was multifamily floor area (see Figure 8, above).

Market value of agriculture production appears to be diminishing since at least 1997. USDA Census of Agriculture data indicates that market value of Seminole County's agricultural products sold decreased nearly 33% between 1997 and 2017 (adjusted for inflation). Total farm production expenses increased nearly 8% during that same period (adjusted for inflation). The "Farm Gate Value," or Market Value minus Production Costs, is down 95% since 1997 (adjusted for inflation). In 2017, FGV was a mere $18 per acre of land in farms (see Table 3).

Table 3: Farm Gate Value Analysis

	1997	2002	2007	2012	2017	
Market value of agricultural products sold (USD)	$ 20,784,000	$ 19,211,000	$ 20,828,000	$ 27,469,000	$ 21,345,000	
Total Cost of Production	$ 12,566,000	$ 14,357,000	$ 14,392,000	$ 24,823,000	$ 20,703,000	
2017 value (USD)						
Market value of agricultural products sold (USD)	$ 31,741,895	$ 26,175,655	$ 24,622,890	$ 29,326,556	$ 21,345,000	-32.8%
Total Cost of Production	$ 19,191,140	$ 14,357,000	$ 17,014,242	$ 26,501,624	$ 20,703,000	7.9%
	$ 12,550,755	$ 11,818,655	$ 7,608,648	$ 2,824,932	$ 642,000	-94.9%
Land in farms (acres)	41,299	27,987	35,542	21,697	34,926	
Market value per acre	$ 769	$ 935	$ 693	$ 1,352	$ 611	
Production expense per acre	$ 465	$ 513	$ 479	$ 1,221	$ 593	
Net per acre	$ 304	$ 422	$ 214	$ 130	$ 18	

Analysis Questions

What are the defining land use patterns and development trends within the following contexts?[8]

Figure 9: Centers, Corridors, Sunrail, and Rural Overlays
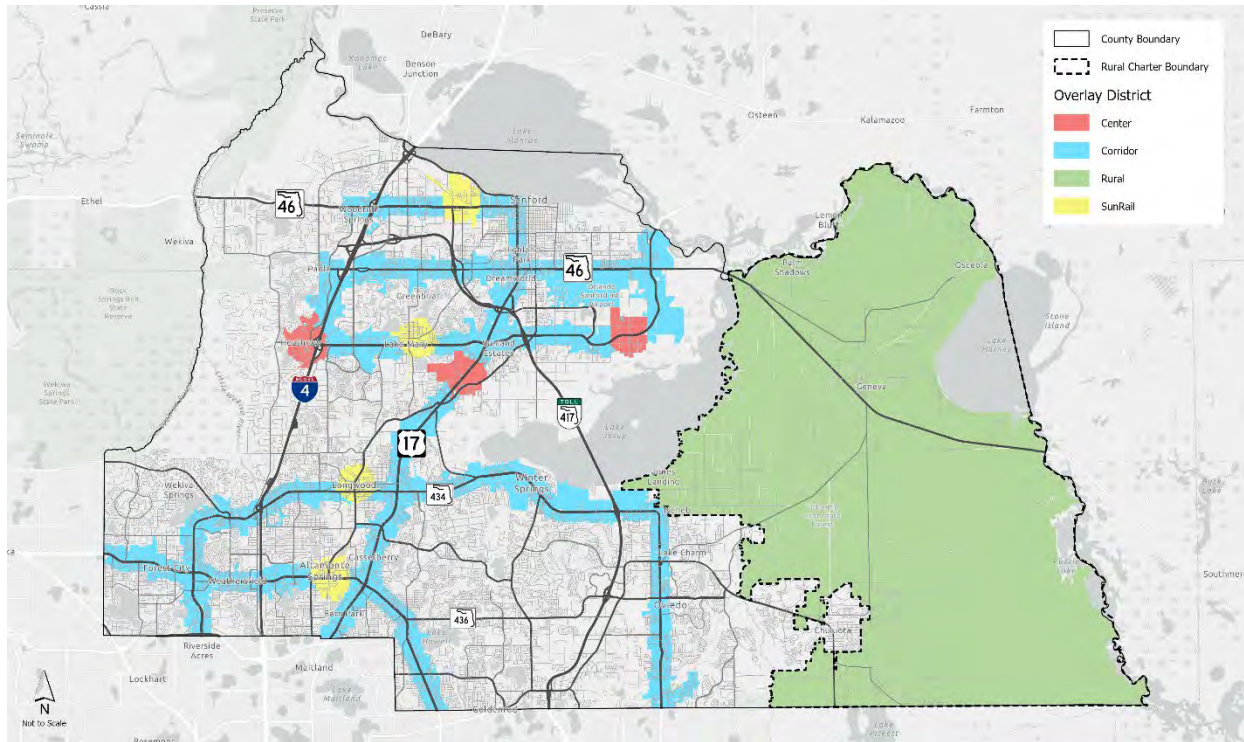
Centers

Centers are designated policy areas aimed at encouraging compact, mixed use redevelopment using land development incentives and investment in public transit improvements. The center overlay encompasses approximately 965 acres (1.1%) of unincorporated property.

The Comprehensive Plan specifies three Urban Centers. International Parkway – South (intersection at International Pkwy and H E Thomas Jr Pkwy), Reagan Center (intersection at N Ronald Reagan Blvd and US 17), and Seminole County Sports Complex (intersection at E Lake Mary Blvd and Skyway Dr) (see Figure 9, above).

Half of the land area associated with Urban Centers is Incorporated. The UCC overlay applies to properties within one-half mile of Urban Centers. Where an unincorporated parcel is located only partly within the Overlay, the entire property is eligible for the incentives available through Policy 5.17.

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[8] This section utilizes 'Actual Year Built' data (2021 FDOR Final Tax Roll database) to describe growth and capture rates.

Centers have the most evenly distributed mix of uses compared to other overlays (and Seminole County generally). Residential floor area represents the highest share of development in Centers (36.8%) with approximately equivalent levels of Governmental/Public and Commercial floor area (28.3% and 27.8% respectively – Sanford Airport accounts for most of the Governmental floor area). No industrial floor area is present in Centers. Floor area in unincorporated Centers skews more Residential and Commercial (57% and 29% respectively) with low levels of Governmental (see Table 4, Figure 10; Table 5, Figure 11)

Table 4: Total Living Area built before and since 2000 (by Land Use)

Land Use	Before 2000	Since 2000	Total Change	Percent Change
Residential	74.3%	74.6%	0.2%	0.01%
Commercial	12.1%	13.7%	1.6%	13%
Industrial	6.7%	6.0%	-0.7%	-10%
Governmental	4.3%	2.8%	-1.4%	-34%
Institutional	2.5%	2.7%	0.2%	7%
Agricultural	0.1%	0.2%	0.1%	100%

Figure 10: Total Living Area built before and since 2000 (by Land Use)
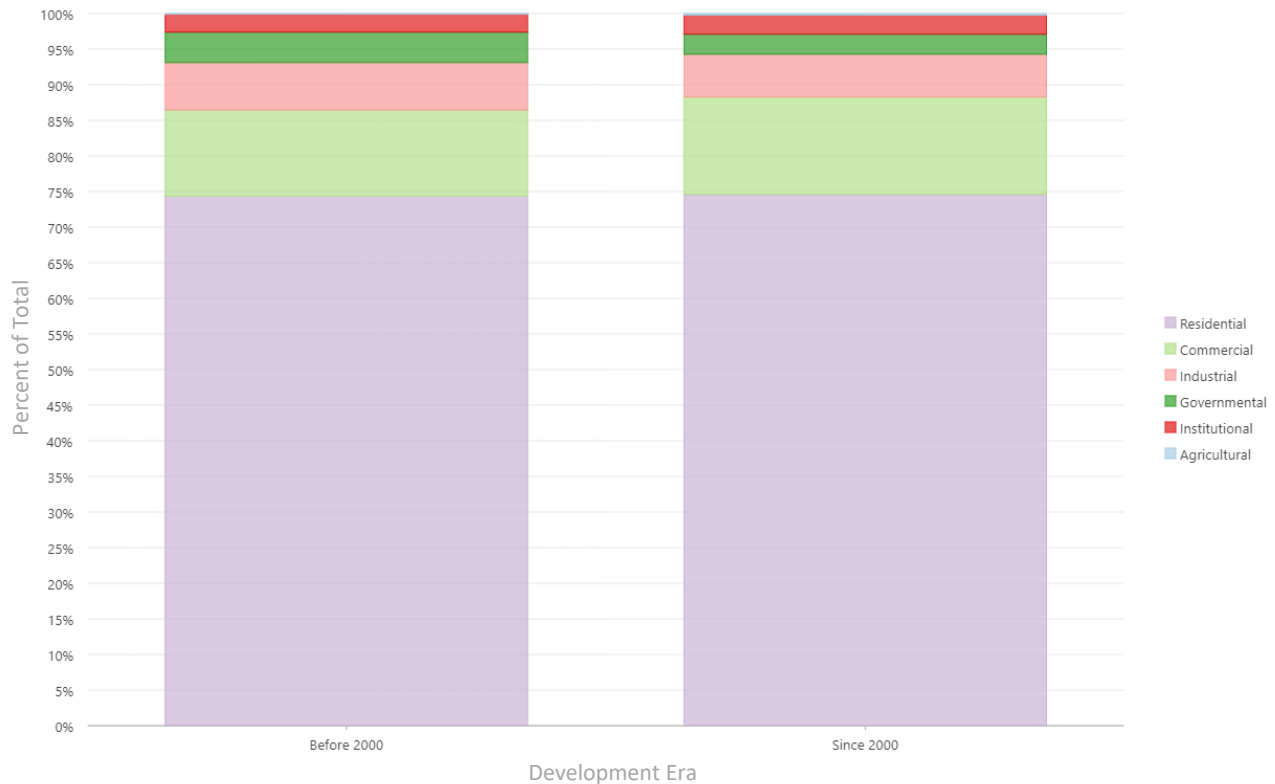
*Table 5: Floor Area built before and since 2000 (by Overlay District)*

District	Before 2000	Since 2000	Total Change	Percent Change
Centers	1.1%	1.9%	0.8%	71%
Corridors	24.9%	28.6%	3.7%	15%
Sunrail	2.3%	2.4%	0.4%	5%
Rural	2.3%	2.7%	0.4%	19%
Outside (Other)	69.4%	64.4%	-5.1%	-7%

*Figure 11: Floor Area built before and after 2000 (by Overlay District)*
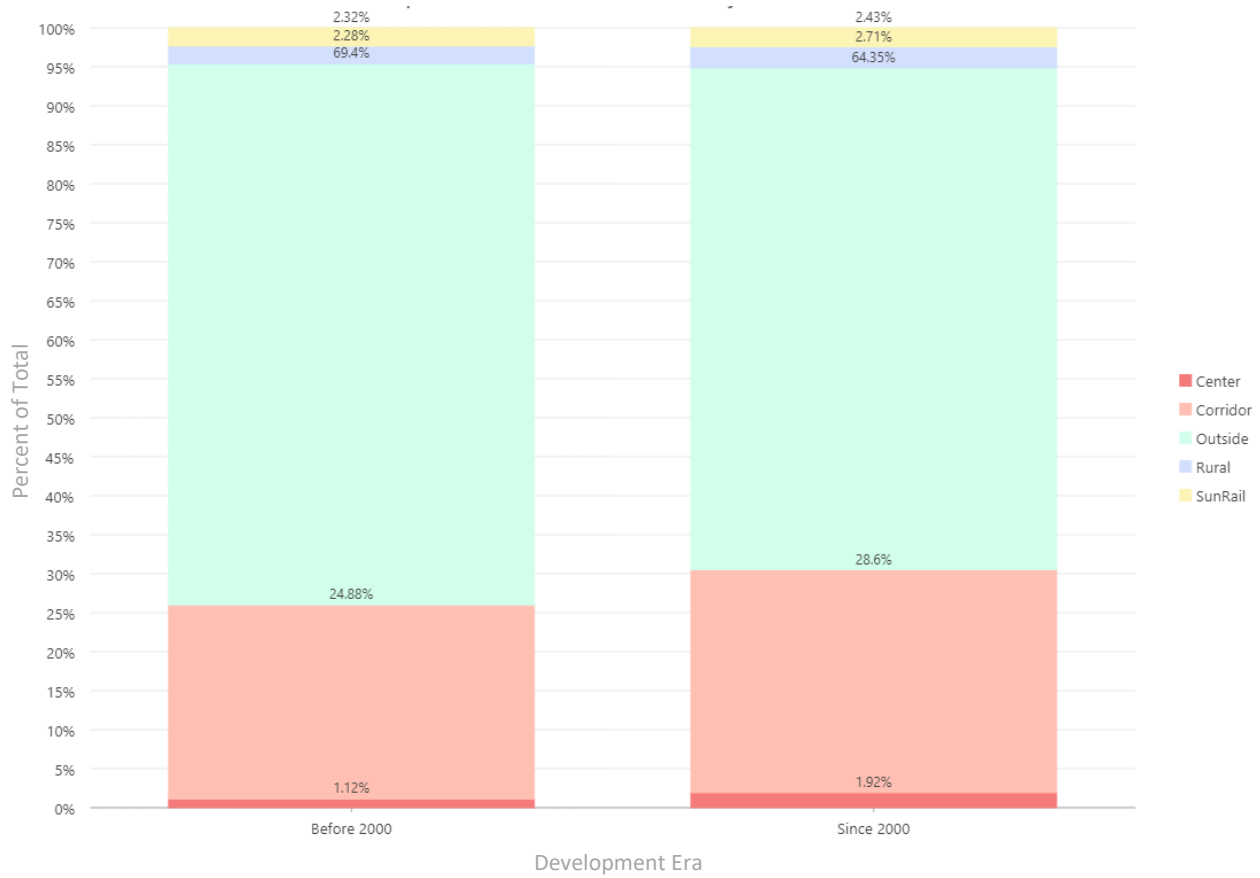
Centers captured 73% more built floor area since 2000 compared to before 2000. Approximately 1.9% of floor area built between 2000 and 2021 concentrated in Centers, compared to 1.1% built before 2000. Mix of new floor area since 2000 generally matches pre-2000 mix. 63% of floor area in unincorporated centers was built after 2000 (see Figure 11, above; Figure 12, below).

Figure 12: Land Use Mix in each Overlay District based on Existing Floor Area
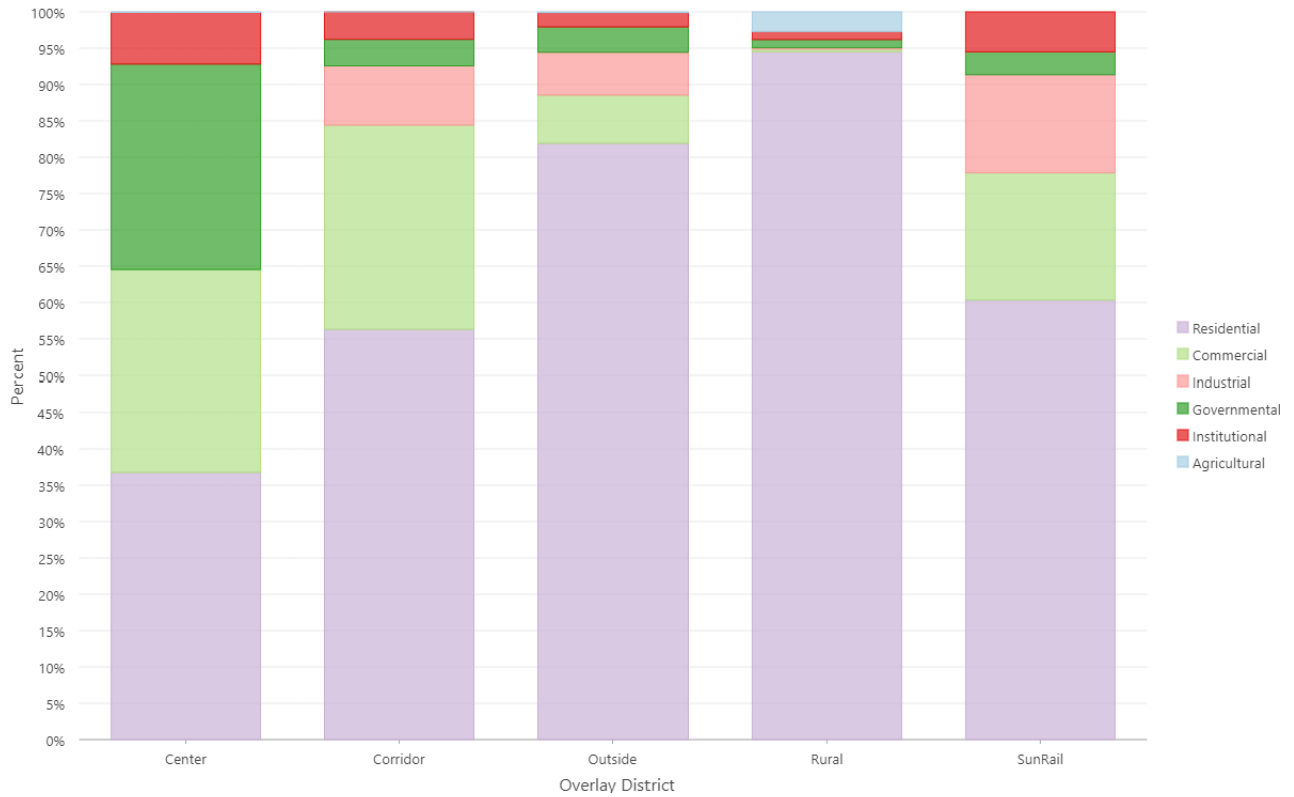
Higher Utilization Ratios may signal lower likelihood of major redevelopment in Centers. The average Utilization Ratio (improvement value as a share of total value) in Urban Centers is approximately 0.75; higher than corridors, rural areas, SunRail station areas, and all remaining areas. Utilization Ratios are even higher for Unincorporated parcels within Urban Centers. Rural and SunRail Station areas have the lowest utilization ratios, particularly unincorporated areas surrounding SunRail stations (see Figure 13).

Figure 13: Average Utilization Ratio (by Overlay District)
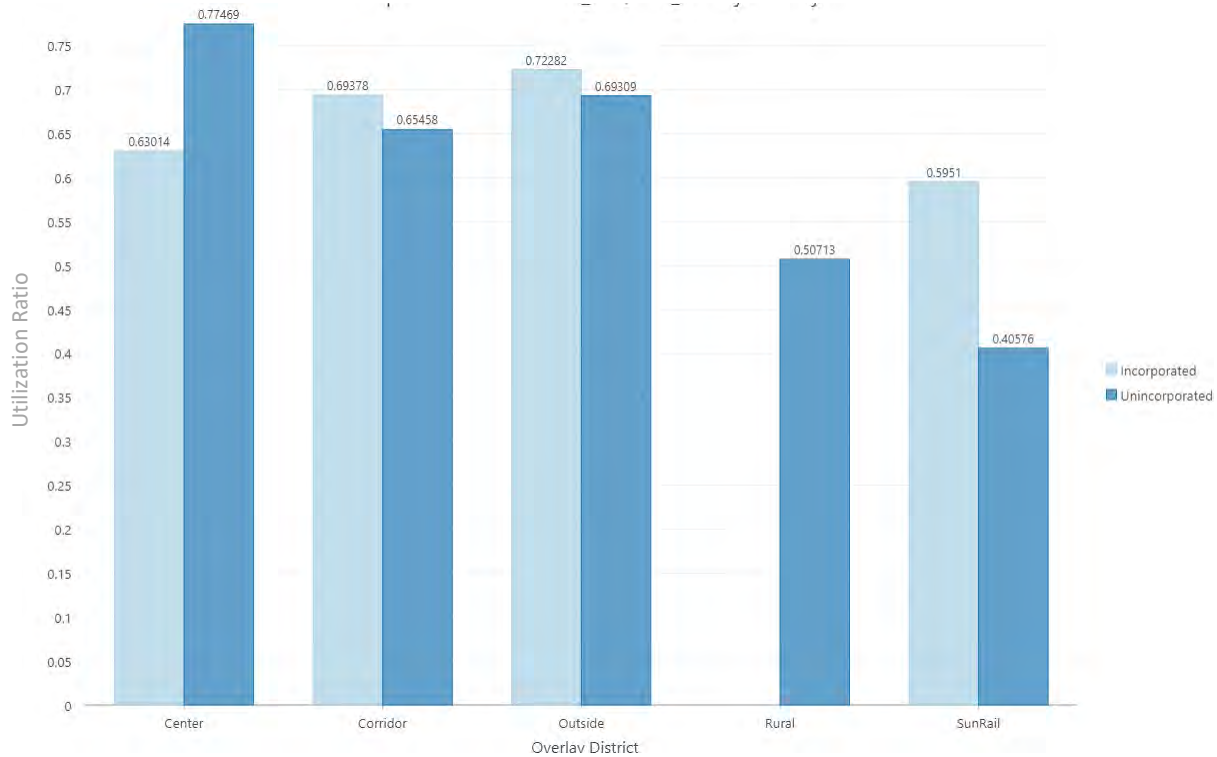
Centers are comparatively mixed-use areas that have shown signs of significant growth over the last 20 years. However, walkability data provided by the US EPA does not indicate that Centers are yet walkable and transit access is still low. Higher utilization ratios may be a sign that areas outside of centers are more likely to develop in the nearer term.

Corridors

Like centers, corridors are policy focus areas for encouraging mixed use, mobility-oriented land use patterns that are higher intensity than surrounding neighborhoods. The corridor overlay encompasses approximately 8,254 acres (9.2%) of unincorporated property.

The Comprehensive Plan specifies major roads as Urban Corridors. SR 436, SR 434, US-17/92, Lake Marky Blvd, SR 46, and International Pkwy (see Figure 9, above).

Two thirds of the land area associated with Urban Corridors is Incorporated. The UCC overlay applies to properties located within one-fourth mile of Urban Corridors. Where an unincorporated parcel is located only partly within the Overlay, the entire property is eligible for the incentives available through Policy 5.17.

Corridors have the greatest mix of uses compared to other overlays (and Seminole County generally). Corridors include the greatest count of use categories (followed closely by SunRail Station Areas and Centers). Residential floor area represents the highest share of development in Corridors (56.3%), followed by Commercial (28.1%), and Industrial (8.2%). Land uses in unincorporated corridors skew more Residential (63.4 %) (see Table 4, above; Figure 10, above; Table 5, above; Figure 11, above).

Corridors captured slightly more built floor area since 2000 compared to before 2000. Over 28% of floor area built between 2000 and 2021 concentrated in Corridors, compared to 25% built before 2000. Mix of new floor area since 2000 generally matches pre-2000 mix (see Figure 12, above).

Commercial use types in Corridors may be candidates for redevelopment. The average Utilization Ratio (improvement value as a share of total value) for Urban Corridors is approximately 0.75 in Incorporated areas and 0.72 in Unincorporated areas (lower than Centers, comparable to remaining County area, and higher than rural areas and SunRail station areas). However, average Utilization Ratio for Commercial use types in Corridors is less than 0.50 (0.47), indicating that land values are greater than the improvement values (see Figure 13, above).

Corridors are capturing a large and increasing share of the County's overall growth and relatively lower utilization rates in the unincorporated portions may signal continued redevelopment in those areas. Walkability data provided by the US EPA indicates that all the most walkable census tracts in Seminole County overlap with corridor overlay areas.

Countryside (Rural)

The 2004 Rural Character overlay a policy focus area for preserving the "positive qualities of the rural lifestyle presently enjoyed" in East Seminole County. The Rural Area encompasses approximately 61,100 acres (74.9%) of property in unincorporated Seminole County. Rural areas are maintaining their rural character; however, these areas are experiencing growth pressures proportional to the County as a whole, despite the rural overlay district.

- **The Comprehensive Plan specifies East Seminole County as the Rural Boundary Area**.
- **All land area associated with the Rural Boundary Area is Unincorporated**.
- **Nearly 95% of existing floor area in the Rural area is Residential.** Agricultural floor area accounts for an additional 2.7%.

- **The Rural area is growing at a similar pace as the rest of Seminole County, and maybe even a little faster.** Rural areas captured about 3% of total floor area built since 2000, which is about 1% more than what rural areas captured before 2000.

What is the existing community character and how is character changing over time?
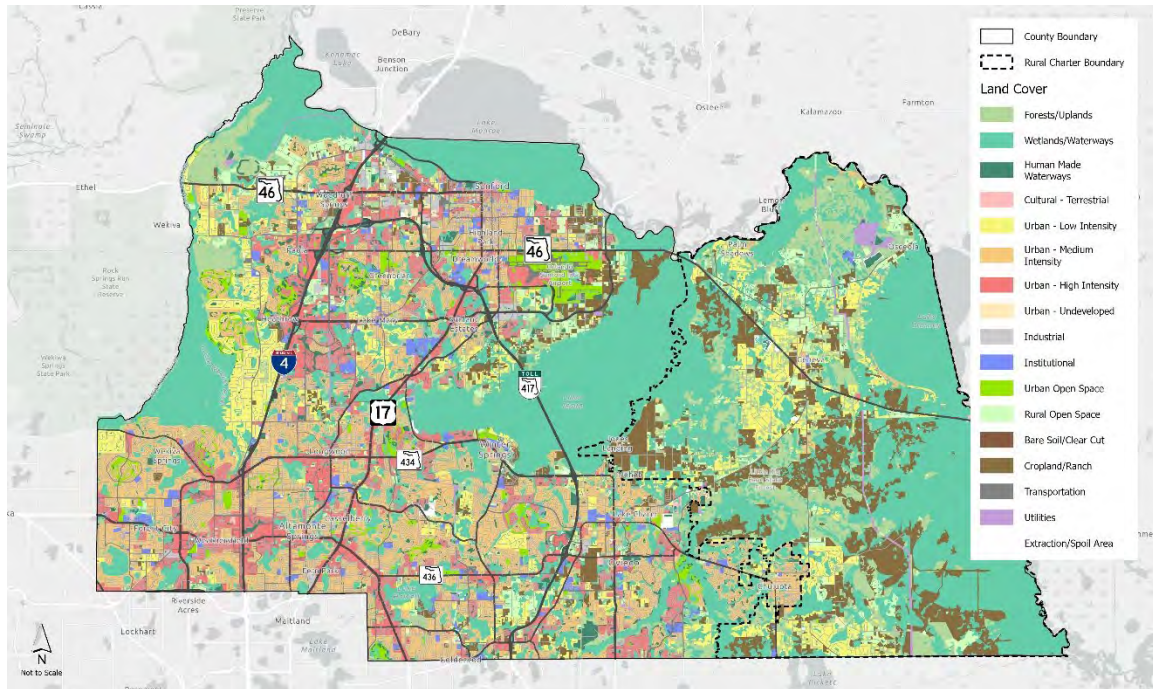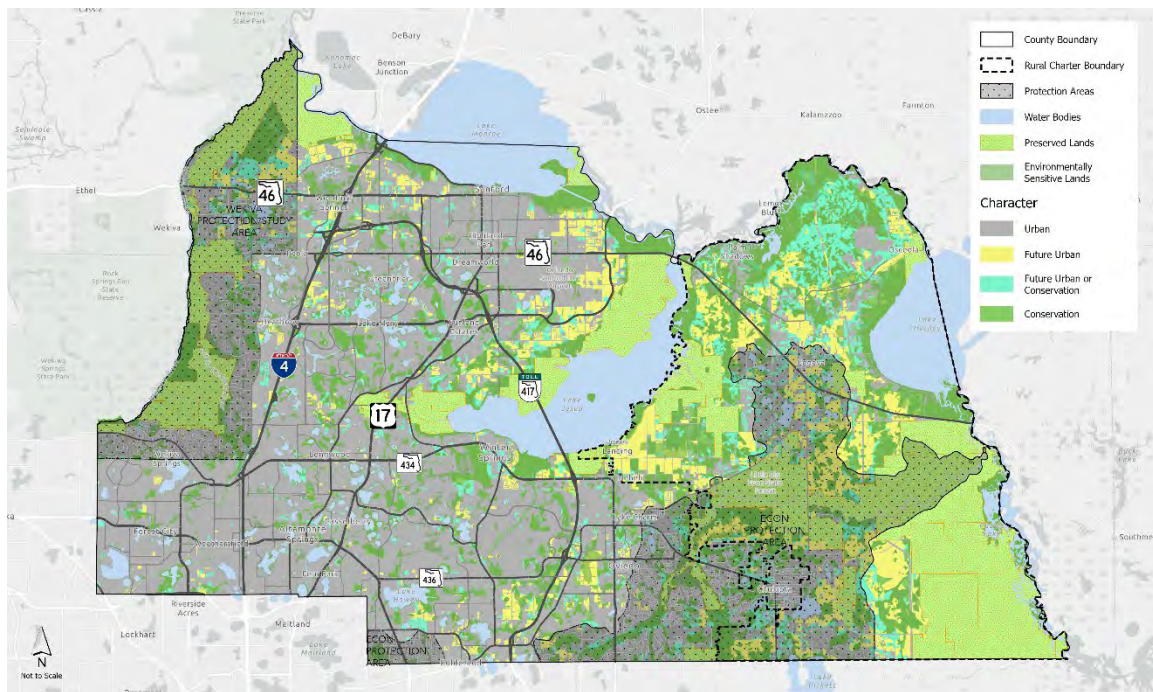
Figure 14: Existing Land Cover

Figure 15: Community Character

Outside of the Seminole County's 2004 Rural Character overlay, *suburban* (defined in this context as car-dependent urban areas) is the dominant character. Data provided by US EPA indicates a handful of census tracks with high walkability scores located around Sanford, Lake Mary, Longwood, and north Forest Hills. These areas have *walkable* urban character.

Centers are comparatively mixed-use areas that have shown signs of significant growth over the last 20 years. However, walkability data provided by the US EPA does not indicate that Centers are yet walkable and transit access is still low. Higher utilization ratios may be a sign that areas outside of centers are more likely to develop in the nearer term.

Corridors are capturing a large and increasing share of the County's overall growth and relatively lower utilization rates in the unincorporated portions may signal continued redevelopment in those areas. Walkability data provided by the US EPA indicates that all the most walkable census tracts in Seminole County overlap with corridor overlay areas.

Rural (defined as areas with natural and agricultural lands) is the dominant character within the 2004 Rural Character overlay. The rural character area is entirely car-dependent, including Geneva which has the highest Walkscore in the east area (see Figure 14, above; Figure 15, above).

Which areas are most suitable as Rural Enclaves?

As previously mentioned, east Seminole County portrays a car-centric, rural character that has potential to transition into suburban character despite the character overlay. Rural areas are maintaining their rural character; however, these areas are experiencing growth pressures proportional to the County as a whole, despite the rural overlay district. As a result, the County's rural areas are in jeopardy of experiencing growth over time resembling rural sprawl that would potentially occur in conflict with the County's overall conservation and preservation goals.

Establishment of rural enclaves within the County's existing suburban regions can relieve development pressure which would otherwise result in continued development outside of the Rural boundary.

What are the land use characteristics and activities related to agriculture in Seminole County?

Between 2008 and 2020, agricultural land cover accounts for approximately 5.9% of county land area. Of this, 83.3% is grassland/pasture, 15.2% is orange/citrus, and the remaining 1.5% are other crops.

USDA Census of Agriculture data indicates that market value of Seminole County's agricultural products sold decreased nearly 33% between 1997 and 2017 (adjusted for inflation). Total farm production expenses increased nearly 8% during that same period (adjusted for inflation). The "Farm Gate Value," or Market Value minus Production Costs, is down 95% since 1997 (adjusted for inflation). In 2017, FGV was a mere $18 per acre of land in farms. The 2017 Ag Census shows that Seminole County is ranked 46 out of 67 Florida counties for *Market Value of Agricultural Products Sold* (See Table 3, above).

Which parcels are underutilized?

Figure 13: *Average Utilization Ratio (by Overlay District)*, (above) shows that East Rural and SunRail station parcels are least utilized compared to the average parcel. Commercial parcels along Corridors are also lower than the County average.

How much job growth is occurring in HIP-TI areas relative to the County as a whole?

Between 2011 and 2019, HIP-TI areas saw 75% job growth (2,589 to 4,537 total jobs) relative to the County's 27% growth (165,110 to 209,551 jobs, excluding HI growth). Management of Companies and Enterprises, Construction, and Mining, Quarrying, and Oil and Gas Extraction account for the fastest growing industry sectors countywide while Arts, Entertainment, and Recreation, Construction, and Retail Trade represent that fastest growing sectors within HI-TIP areas. A fifth of total HIP-TI jobs are Finance and Insurance.

What share of development in countryside context occurs as cluster development and how much open space is preserved as a result?

NONE DISCOVERED, FURTHER ANALYSIS MAY BE REQUIRED

Technical Memo 3.3: Transportation

Analysis Questions

What are the defining characteristics of the mobility network and its capacity?

The Seminole County mobility network (see Figure 5) is characteristically in-line with its suburban context. Primary mobility is vehicular and provided to motorists via the street network; public transit service is provided by the SunRail commuter rail line and various LYNX bus services; a network of paved multi-use trails adds additional mobility options for pedestrians and cyclists.

Street Network

The street network (see Figure 1) consists of principal arterials and high-speed corridors (e.g. limited-access highways, large state highways) providing mostly north-south routes, with a fairly robust network of minor arterials (e.g. state and county roads) providing connections throughout the County. In-line with predominantly suburban development patterns, the minor collectors and local roads largely lack a traditional grid structure and, in many cases, fail to provide full connectivity between edges of the arterial networks, which decreases mobility across all travel modes. As illustrated in Figure 2, areas with local streets providing fuller connectivity to edge networks (e.g. downtown Sanford; Altamonte Springs in the vicinity of Eastmonte Park) are characterized by high intersection density and thus greater mobility.

Figure 1: Seminole County Street Network

Figure 2: Street Intersection Density by Census Block Group (EPA Smart Location Database v3.0)
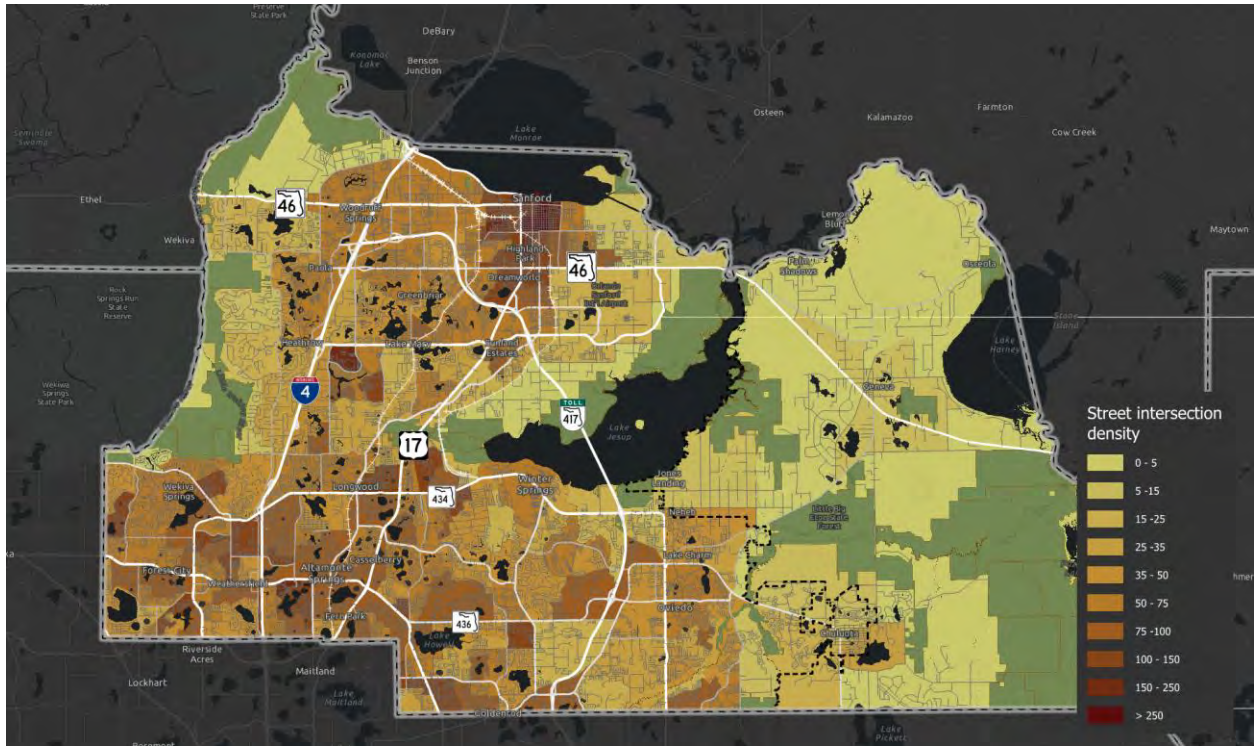
The public transit network (see Figure 3) consists of the SunRail commuter rail line and services provided by LYNX. There are four SunRail stops in Seminole County: Sanford, Lake Mary, Longwood, and Altamonte (from north to south). The Maitland SunRail stop is less than a ½-mile south of the County boundary. LYNX bus routes primarily utilize the principal arterial network with branch routes and "NeighborLink" call-ahead service in areas such as Oviedo and downtown Sanford.

Figure 3: Seminole County Public Transit Network
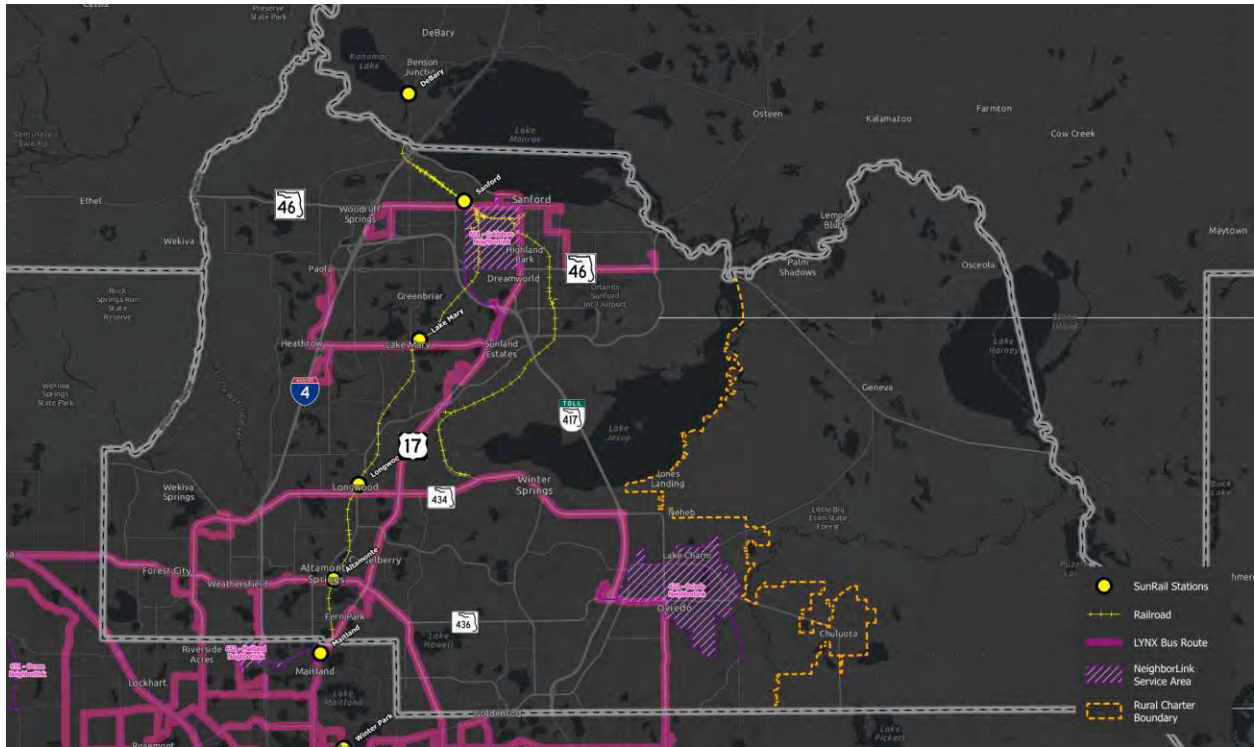
Trails Network

A number of paved multi-use trails (see Figure 4) exist within the County, consisting of the Seminole-Wekiva and Cross-Seminole Trails and multiple connector trails (e.g. Kewannee Trail). These trails, totaling over 50 miles, do allow for continuous travel through very long corridors. Connectivity within the County is strong, providing ample opportunity for recreation; the trails also provide connections to neighboring counties' trails networks. However direct connections to any of the SunRail stops is notably missing, which may limit the utility of multi-use trails for regional commutes.

Figure 4: Seminole County Paved Multi-Use Trails Network
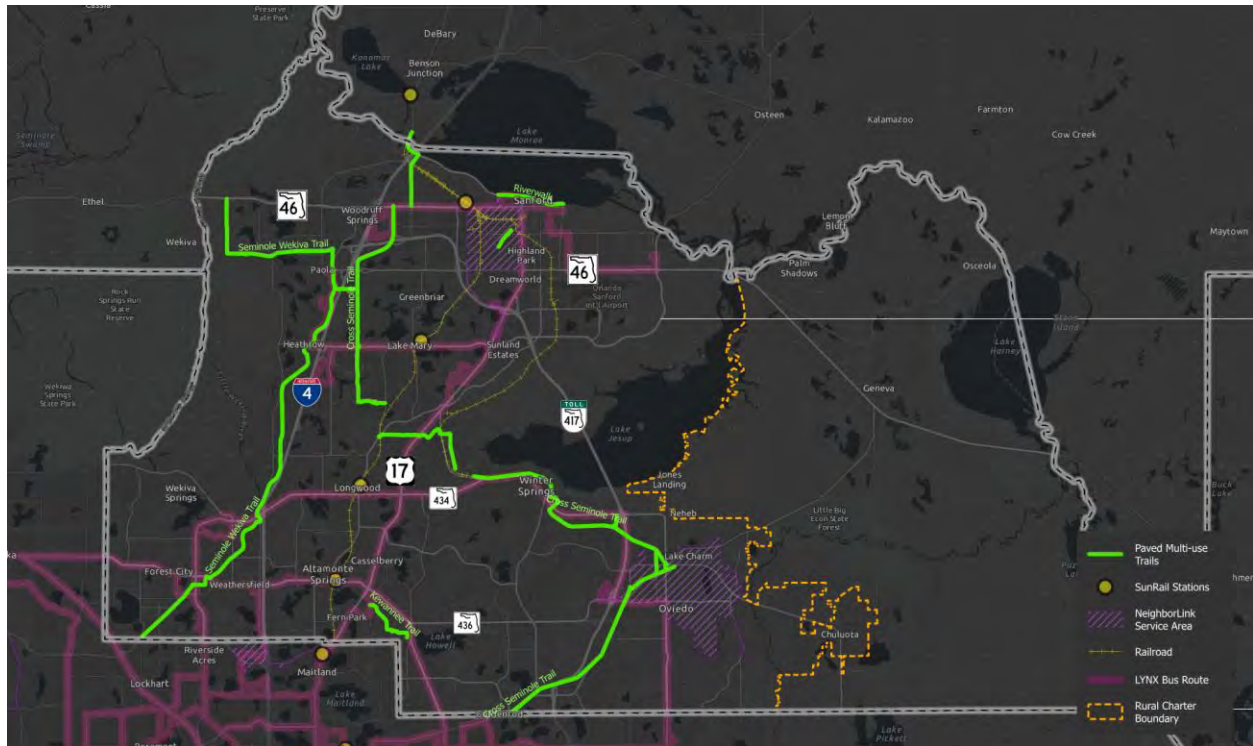
Figure 5, below, shows the streets, public transit, and trails networks together forming the Seminole County mobility network.

Figure 5: Seminole County Mobility Network
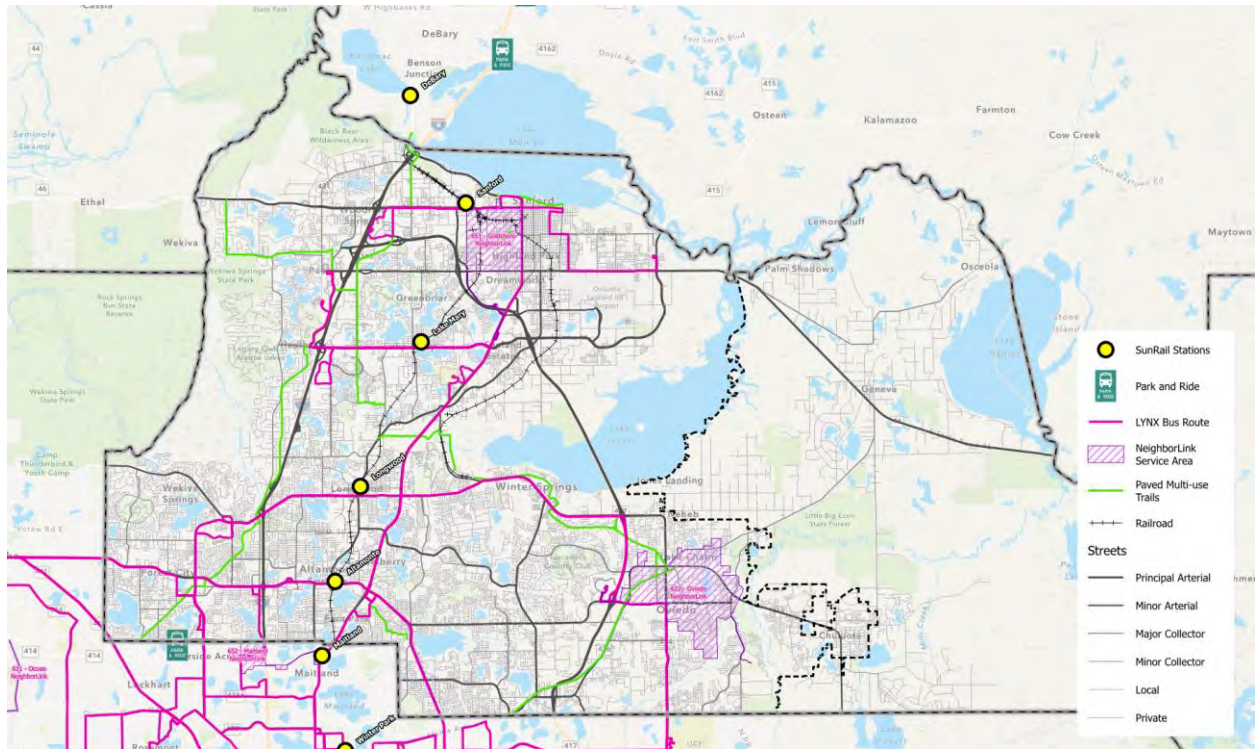
To what extent does Seminole County's mobility network enable people access to jobs and amenities?

The following datasets were utilized to perform analysis and evaluation of Seminole County residents' access to jobs:

- Longitudinal Employer-Household Dynamics (LEHD) counts of 2019 jobs by census block (U.S. Census Bureau, retrieved from https://onthemap.ces.census.gov LODES v7.5)
- U.S. Environmental Protection Agency (EPA) Smart Location Database

Data products from the U.S. EPA Smart Location Database were used to evaluate access to jobs by auto and transit. These data products "measure accessibility relative to other [Census Block Groups] within the same metropolitan region ([Core-Based Statistical Area])" (Chapman et al, 2021, Smart Location Database Technical Documentation and User Guide v3.0). The Core-Based Statistical Area (CBSA) for Seminole County is the Orlando-Kissimmee-Sanford statistical area, including Lake, Seminole, Orange, and Osceola Counties.

Figure 6 illustrates relative accessibility to jobs by auto for each census block group (CBG) in the County. Areas with the highest relative accessibility are found along the I-4 corridor between Lake Mary and Altamonte Springs with accessibility progressively increasing toward the Altamonte Springs area.

Figure 6: EPA Accessibility Index - Auto to Jobs
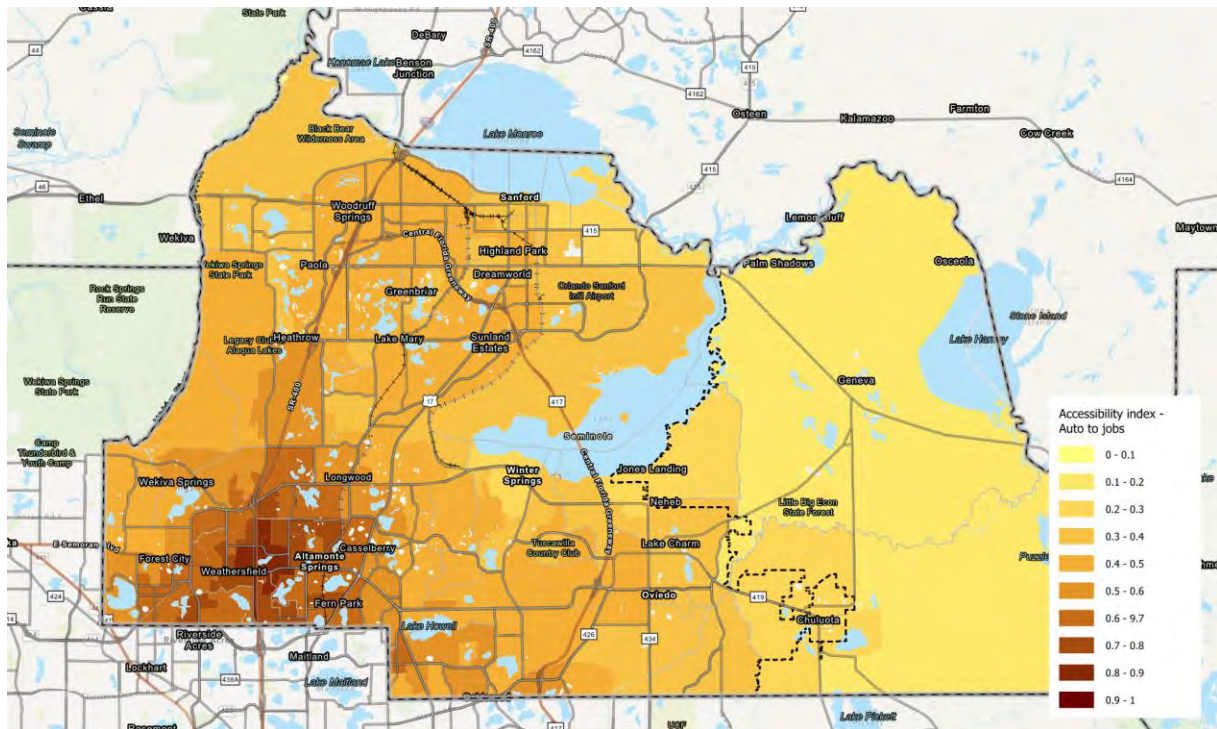
Figure 7 illustrates relative access between CBGs to jobs by way of transit. The highest relative accessibility is found in the Casselberry area, with additional highlights of accessibility near each of the SunRail stops. Pockets of low accessibility are found near most municipalities within the County.

Figure 7: EPA Accessibility Index - Transit to Jobs
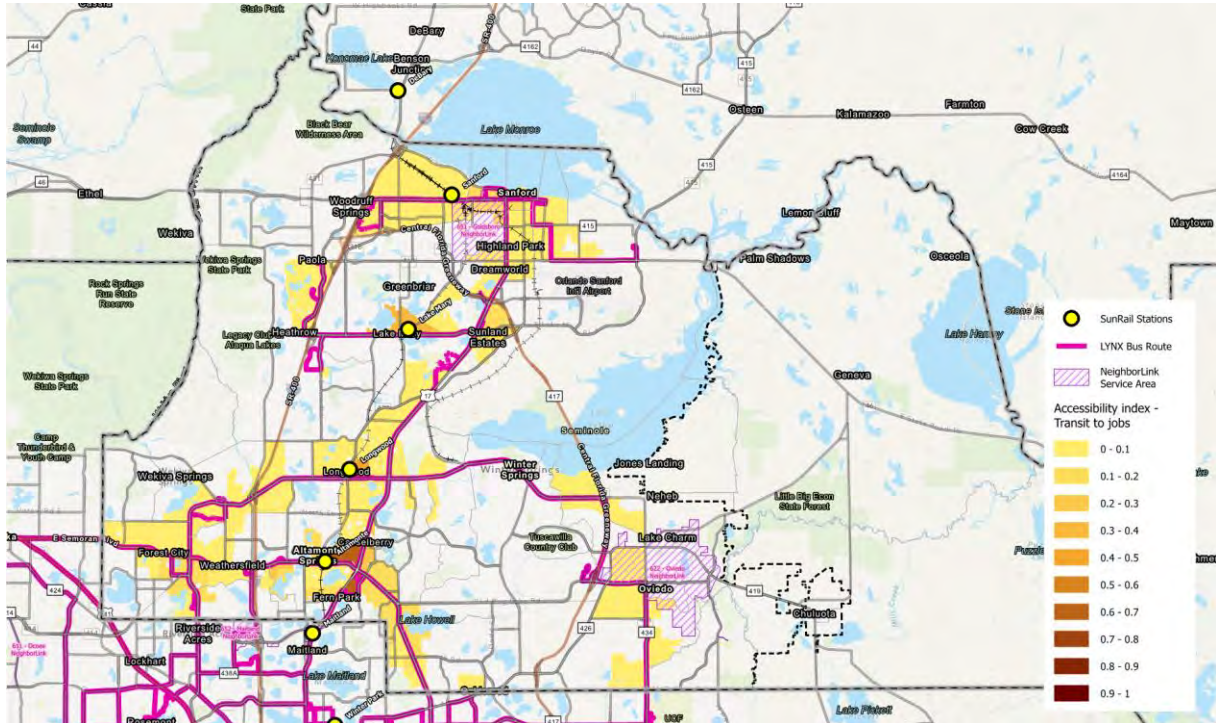
How does the existing transportation infrastructure influence existing land use/land cover throughout Seminole County?

In a given geography, evaluation of the relationship between transportation infrastructure and surrounding land use can provide insight pertaining to the overall mobility experienced within the area. To explore these relationships across Seminole County, existing intersection density (EPA Smart Location Database) was utilized to characterize connectivity along with residential and job density data useful in characterizing land use in general terms. All three metrics were analyzed at the census block group (CBG) level.

Generally, areas of the County with higher connectivity have similarly higher density of jobs and housing. In such urbanized areas, greater mobility is experienced and homogenous land use gives way to greater variety. As expected, many of the County's areas with very low connectivity (characteristically rural areas) also have correspondingly low residential and job densities. In both scenarios, the existing transportation infrastructure is more-or-less appropriate for the surrounding land use. Identifying areas where mismatches exist – areas with lots of jobs and/or housing but low connectivity or, conversely, areas with less jobs and/or housing and high connectivity – can provide valuable insight into the outcomes of past land use and transportation planning efforts and can inform current and future efforts. Once identified, these areas will be evaluated in greater detail in the 3.9 Future Land Use Map analysis memo.

Figure 8, below shows the number of jobs as proportional symbols over the CBGs symbolized by street intersection density. Clusters of jobs are visible in CBGs with both mid-range and high levels of connectivity.

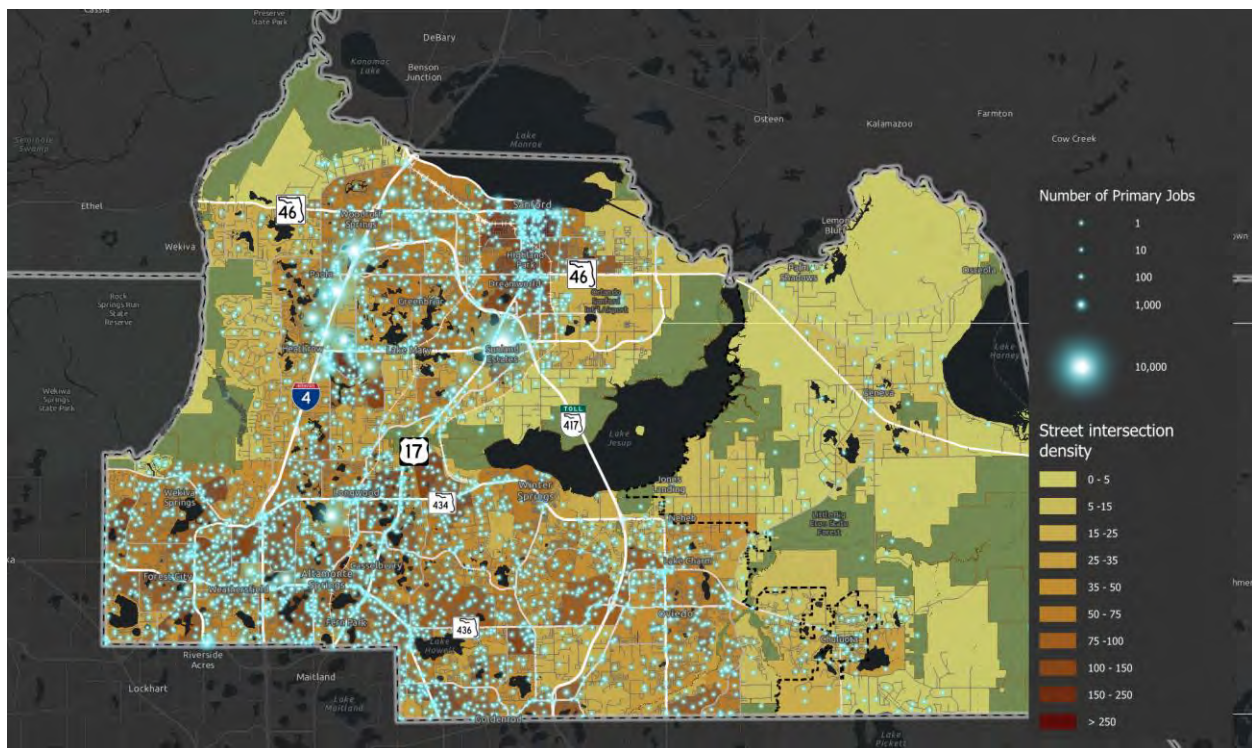*Figure 8: Primary Jobs and Street Intersection Density*

Figure 9 presents a bivariate analysis of job and street intersection densities to identify different typologies found within the County.

Pink areas denote high job density in areas that have low intersection density which is indicative of overall low mobility (e.g. employment centers); mobility could potentially be increased through either transportation improvements (i.e. increasing mobility to other land uses), or land use strategies (i.e. bringing other land uses into closer proximity to the area).

Bright blue areas denote low job density and high intersection density (typically homogenous residential land use); while these areas already experience a relatively elevated measure of mobility due to the nature of the existing transportation network, evaluation of land use strategies could potentially further increase mobility by decreasing distance traveled to other land uses.

Figure 9: Bivariate Analysis - Job and Street Intersection Densities
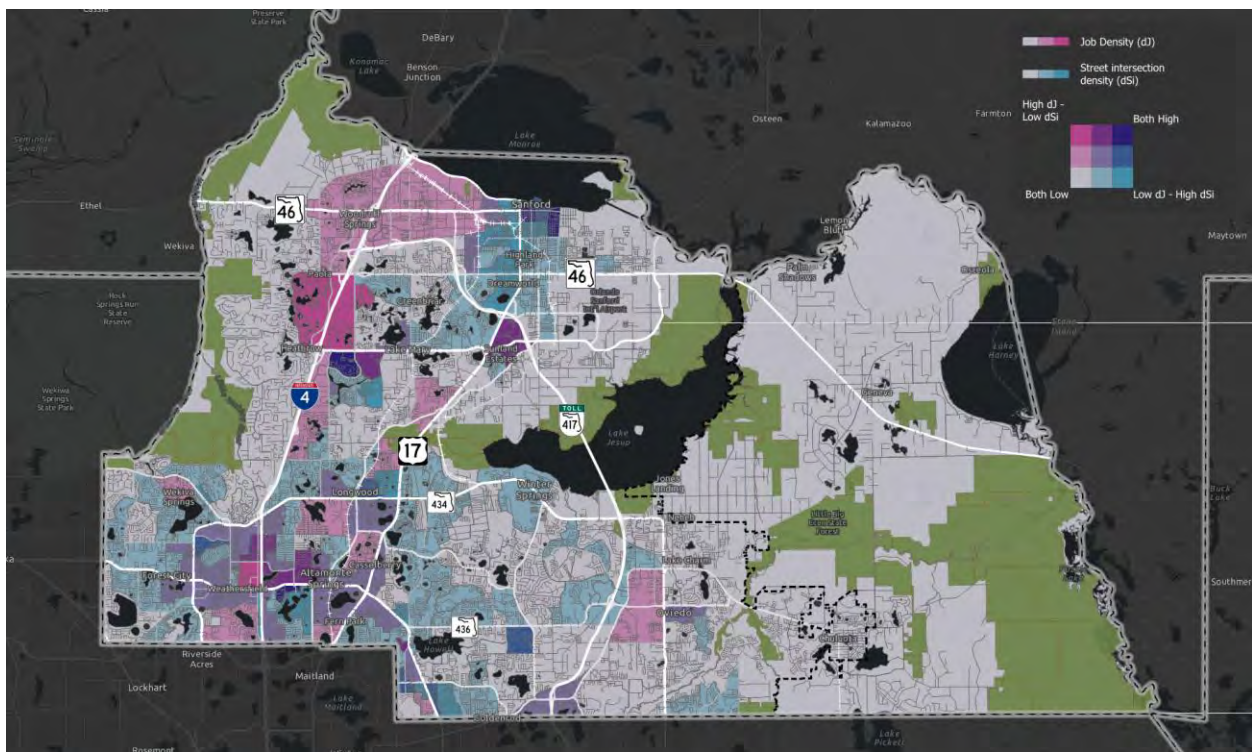
Figure 10, below, shows residential density (dwelling units per square mile) as proportional symbols over the CBGs symbolized by street intersection density. Most clusters of high residential density are found within CBGs with mid-to-high street intersection density.

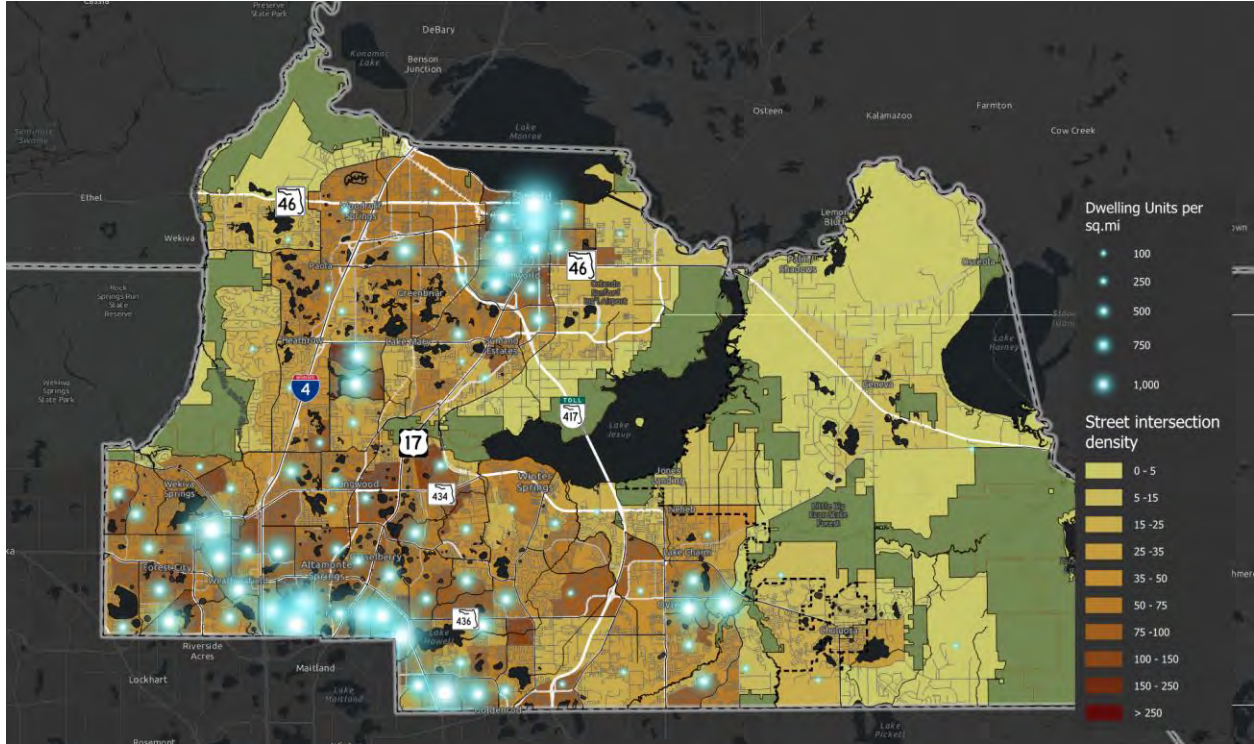*Figure 10: Residential Density and Street Intersection Density*

Figure 11Figure 9 presents a bivariate analysis of residential and street intersection densities to identify different typologies found within the County.

Pink areas denote high residential density in areas that have low intersection density which is indicative of overall low mobility (e.g. residential cul-de-sacs; disconnected neighborhoods); mobility in these areas could potentially be increased through either transportation improvements (i.e. increasing mobility to other land uses), or land use strategies (i.e. bringing other land uses into closer proximity to the area).

Bright blue areas denote low residential density and high intersection density (typically homogenous residential land use); while these areas already experience a relatively elevated measure of mobility due to the nature of the existing transportation network, evaluation of land use strategies could potentially further increase mobility by decreasing distance traveled to other land uses. In addition, these areas could potentially be target sites for increased residential density taking advantage of a high mobility areas.

Figure 11: Bivariate Analysis - Residential and Street Intersection Densities
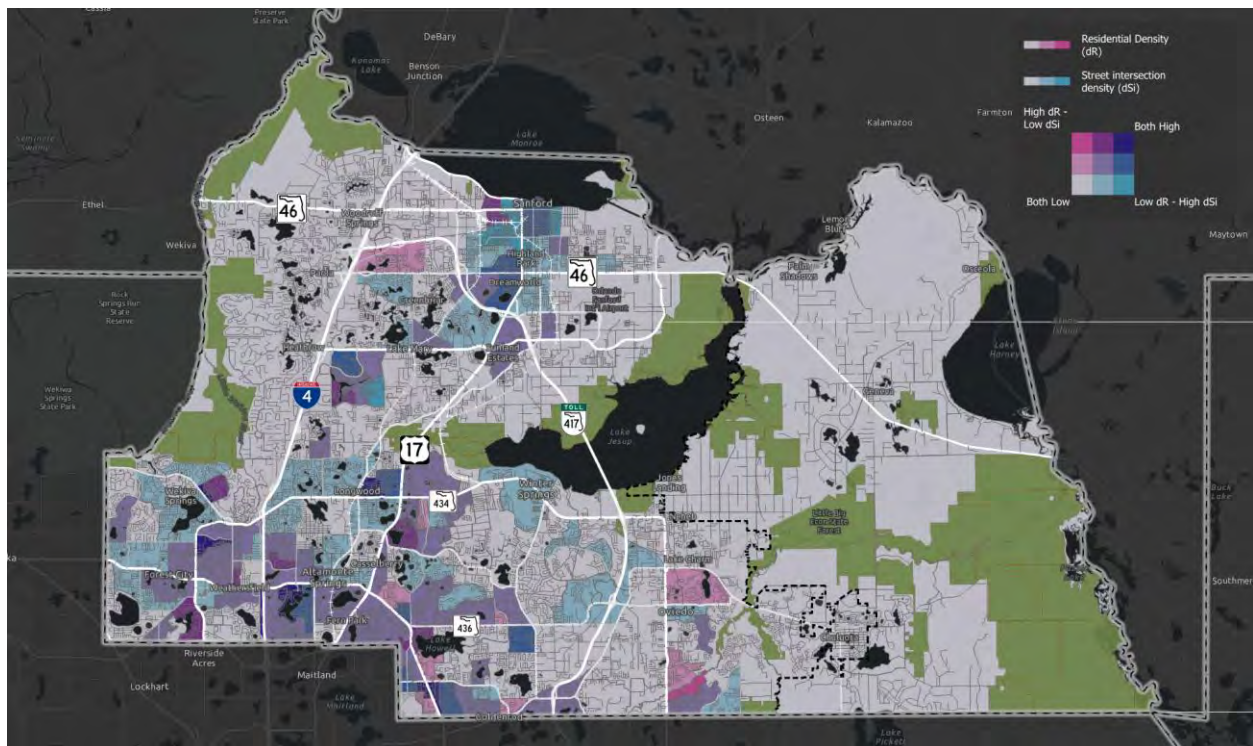
Analysis Memo 3.4: Utilities

The septic system basin management action plans for Lake Jesup / Middle St. Johns Rover (document titled, *Wastewater System Inventory and Alternatives Evaluation REI Job# 12103 (2021)*) and Wekiva (document titled, *Wekiva Priority Focus Area Septic Tank Remediation Plan And Wastewater Treatment Feasibility Analysis (2020)*) were utilized as guiding documents to answer the preliminary questions for the utilities task. The findings and improvement plans will be integrated into the overall future land use study.

Under the Florida Springs and Aquifer Protection Act, the Florida Department of Environmental Protection (FDEP) must adopt septic system remediation plans for Outstanding Florida Springs (OFS) where FDEP has determined that the upgrade or elimination of septic systems is necessary to achieve water quality objectives with respect to nutrients. FDEP has identified Seminole County (one of nine counties identified) as an area where wastewater treatment feasibility analyses will have the most impact due to the location, number, and density of existing septic systems, formally known as onsite sewage treatment and disposal systems (OSTDS), within impaired basin areas. FDEP has also identified Priority Focus Areas (PFAs) within these counties, where the nutrient impact of OSTDSs is most intense.

Seminole County is divided into three focus areas for septic system basin management action plans (BMAP): Lake Jesup, Middle St. Johns River (SJR), and Wekiva. Lake Jesup and Seminole County overlap throughout the central region of the County spanning a total of approximately 125 square miles. Middle SJR BMAP and Seminole County overlap in portions of the northern and northeastern County spanning a total of approximately 89 square miles. Wekiva and Seminole County overlap in the southwest corner of the County spanning a total of approximately 23 square miles.

Analysis Questions

How many individual septic systems are located within the existing sewer service area?

Focus Areas	Known OSTDS Parcels	Likely OSTDS Parcels	Somewhat Likely OSTDS Parcels	Total OSTDS Parcels
Lake Jesup	-	11,705	1,618	18,127
Middle St. Johns River	-	4,804		
Wekiva	1,365	2,494	52	3,911

In the Lake Jesup and Middle SJR focus areas, a total of 18,127 parcels were identified through the OSTDS inventory review process including 16,509 likely OSTDS parcels and 1,618 somewhat likely sewer parcels. The likely sewer parcels require ongoing review and confirmation from existing utility providers servicing the areas where the parcels are located. These parcels are located within a proximal distance to existing sewer, and if not already connected, may be easily converted to sewer. There are 11,705 parcels which are likely serviced by OSTDS within the Lake Jesup BMAP, and 4,804 parcels likely serviced by OSTDS within the Middle SJR BMAP.

In the Wekiva focus area, a total of 3,911 OSTDSs were identified after data was provided from utility providers, including 1,365 known OSTDS, 2,494 likely OSTDS and 52 somewhat likely OSTDS. The known OSTDSs are formally confirmed parcels with existing OSTDSs. The likely OSTDSs are parcels which are within areas without known central systems but are not formally confirmed as existing. The somewhat likely OSTDSs are parcels which are within an area without known central systems but minimal records to confirm the presence of an OSTDSs.

What existing private septic systems are not being provided an adequate level of service?

The adequate level of service is determined by the amount of nitrogen released and drives the prioritization of septic system replacement, paired with the parcel size. Traditional, or conventional septic systems, contribute 29% of the total nitrogen loading to the groundwater per year. It is expected that for conversion of OSTDS to enhanced treatment or connection to central sewer, the effective reduction in nitrogen load would be approximately 65% or 95%, respectively.

In the Lake Jesup and Middle SJR focus areas, a total of 15,205 of 16,509 OSTDSs were determined feasible for conversion to central sewer within the Seminole County PFA over a 15-year period. A total of 711 OSTDSs are not feasible or impractical for conversion to central sewer and are recommended for conversion to enhanced on-site treatment. The OSTDSs were grouped into 199 projects to meet the minimum phosphorus load reduction of 3,307 lbs-P/yr, equal to 6% of the OSTDSs.

Figure 1: Lake Jesup and Middle SJR Focus Area Projects[1]

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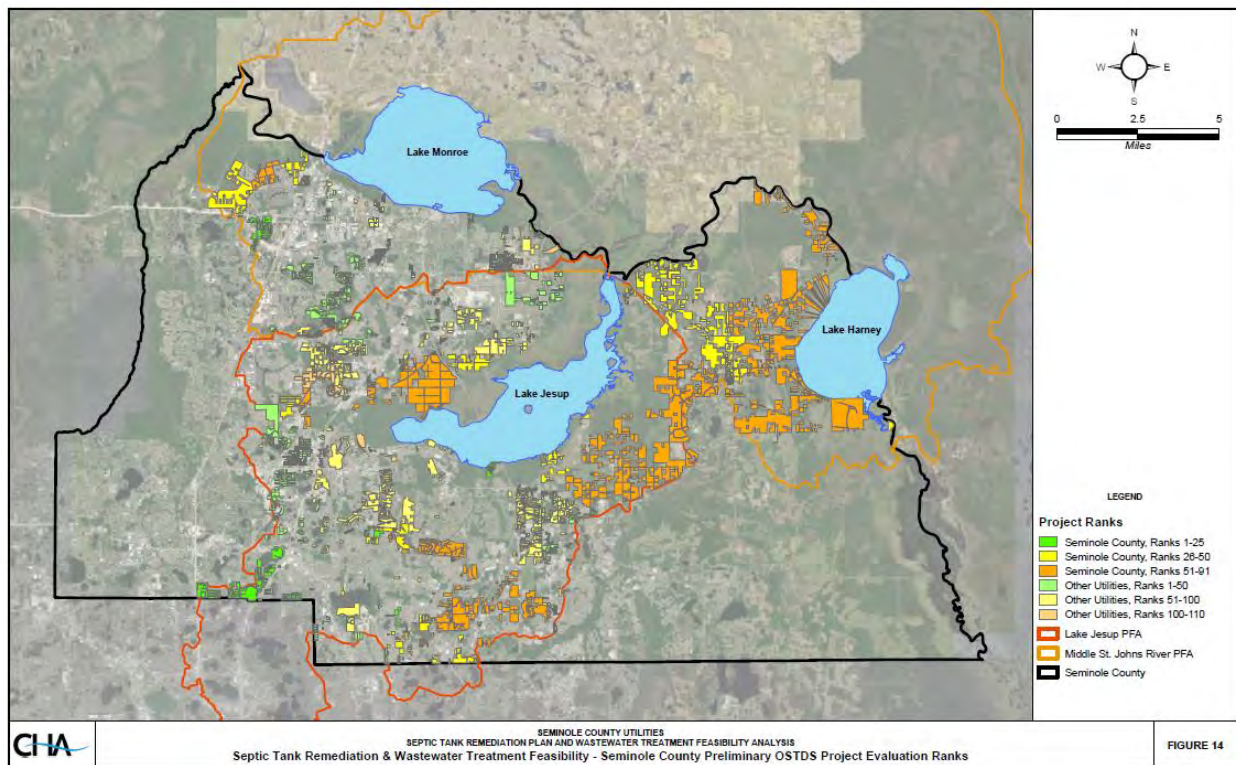
[1] Wastewater System Inventory and Alternatives Evaluation REI Job# 12103 (2021)

In the Wekiva focus area, 53 projects were determined suitable for conversion to central sewer or enhanced on-site treatment within the Seminole County PFA over a 20-year period. These projects have been separated into two categories, major projects (31 projects) which will convert single or multiple neighborhoods central sewer and minor projects (22 projects) which include less than five (5) OSTDS and will require individual connections to existing or gravity sewer infrastructure. It is expected that conversion from conventional OSTDS to central sewer will provide an annual nitrogen reduction rate of approximately 19,659 lb-N/year, accounting for approximately seven percent (7%) of the ES-4 total nitrogen loading to groundwater from all OSTDS within the Wekiwa Springs and Rock Springs basins.

Figure 2: Wekiva Focus Area Projects[2]
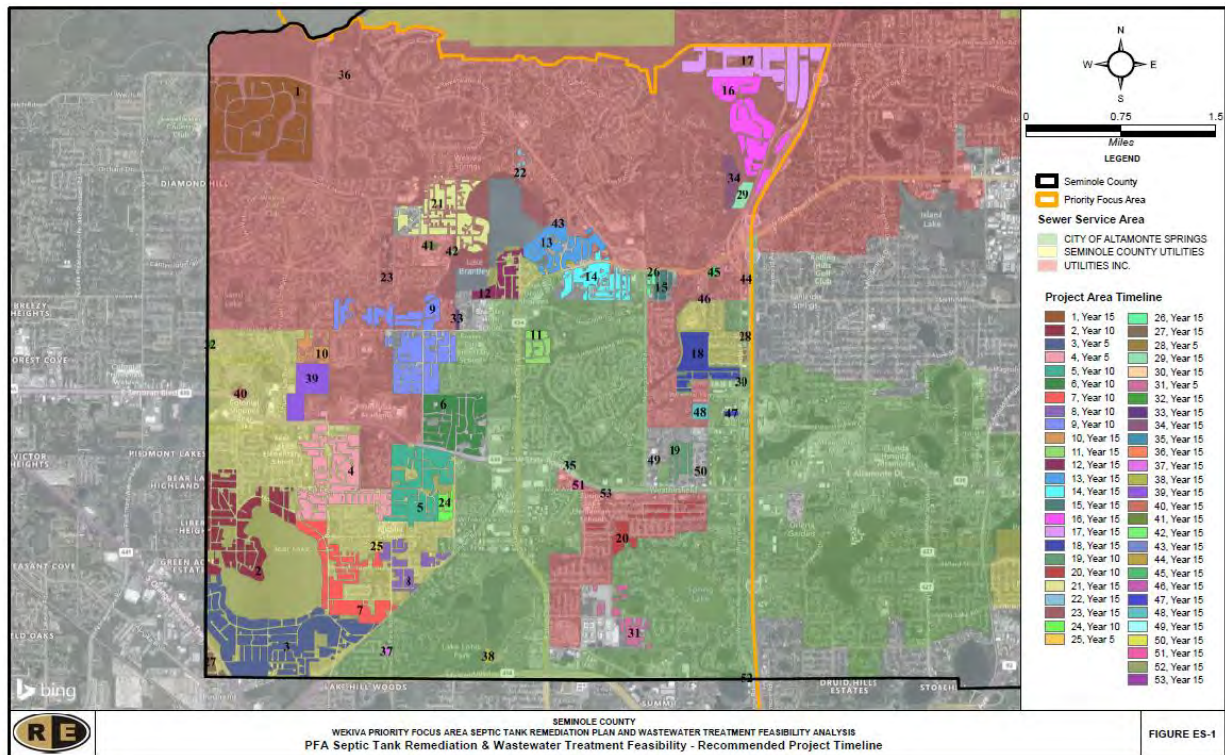
[2] Wekiva Priority Focus Area Septic Tank Remediation Plan And Wastewater Treatment Feasibility Analysis (2020)

Analysis Memo 3.5: Community Facilities

The network dataset provided by Seminole County GIS was used to identify the locations of underserved areas regarding driving access to community facilities. The county-wide street junctions (intersections and nodes) analyzed the distribution of facilities using one of two different analysis methods depending on the nature of the community facility.

For community facilities evaluated based on travel *distance*, the street junctions were used as origins and the community facilities were used as destinations in creating a series of Origin-Destination Matrices. This analysis determined the closet community facility to each street junction based on driving distance in miles. With some more visually evident than others, the outliers of the results were identified using the interquartile range of the minimum miles traveled. These outliers identified the underserved areas.

For community facilities evaluated based on travel *time*, the community facilities were used as origins in creating a Drive-Time Analysis to proximate street junctions within a specified drive-time. Drive-time cutoffs were determined using Level of Service standards outlined in the Seminole County Comprehensive Plan. The area outside of the drive-time service area was identified as underserved.

Analysis Questions

How are Community Facilities currently distributed within Seminole County?

Parks and Recreational Facilities

Parks: The street network junctions range from zero (directly adjacent) to 12.5 miles in distance to the next closest park. 99 of the 124 parks are within incorporated areas.

The highest number of street network junctions are within 0.8 to 1.3 miles from the closest park.
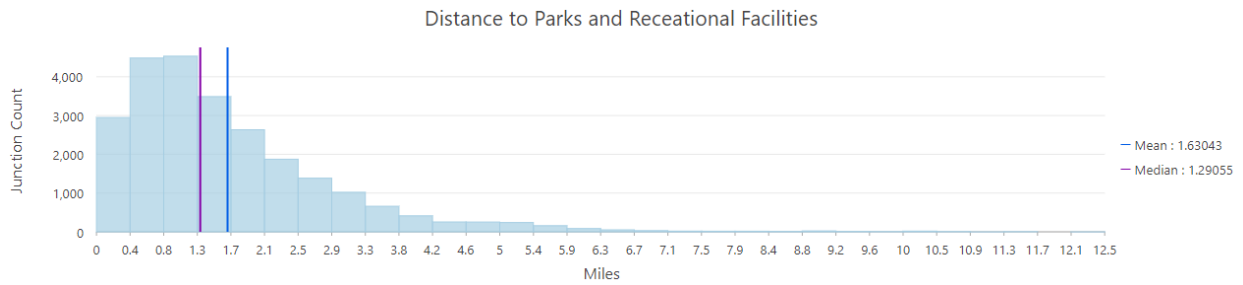
Figure 1: Distance to Parks and Recreational Facilities

Figure 2: Distance to nearest Park from street network junctions
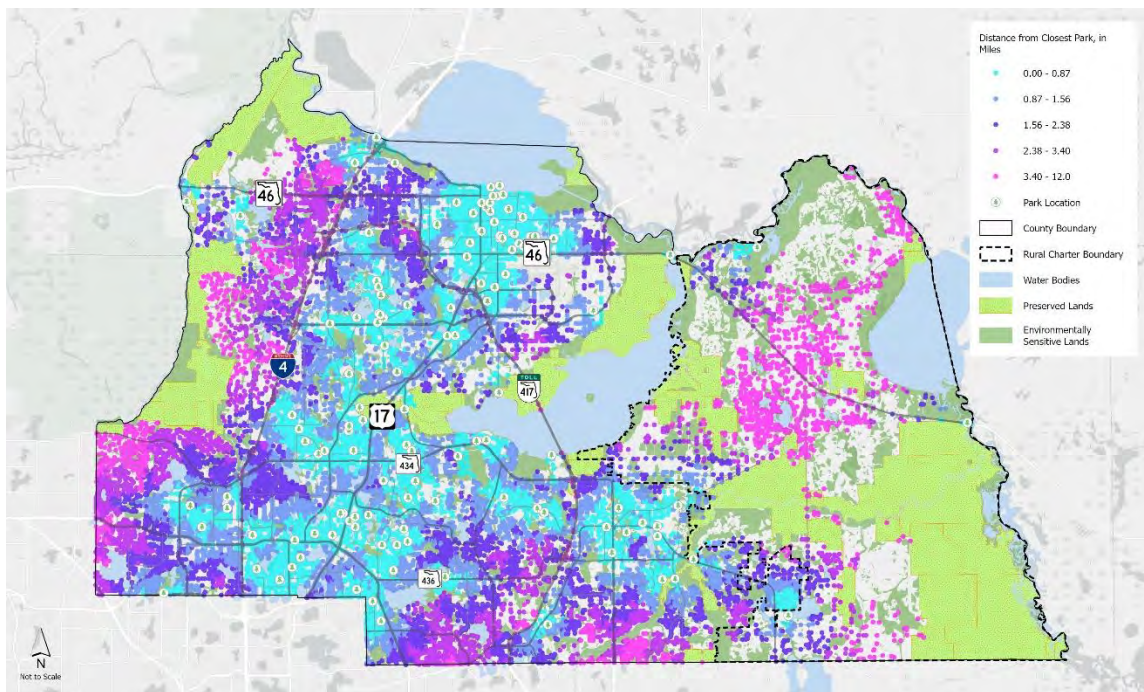
Figure 3: Areas within 20-min drive from Parks
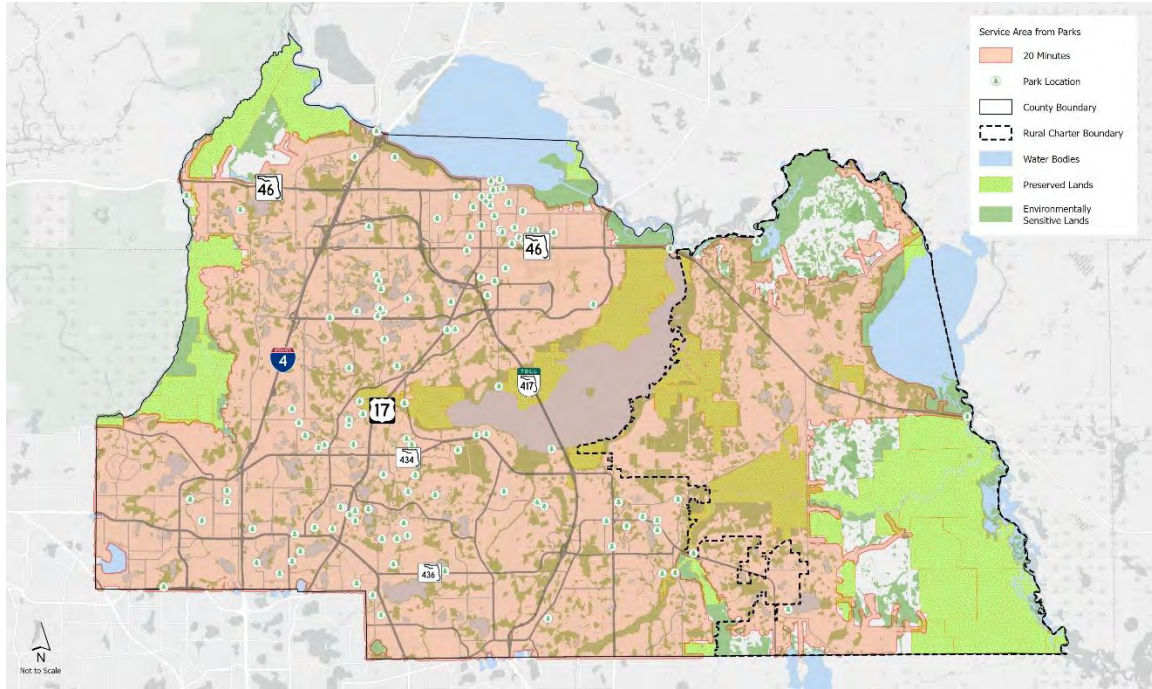
Educational Facilities

Schools: The street network junctions range from zero (directly adjacent) to 10.2 miles in distance to the next closest school. 115 of the 192 schools are within incorporated areas.

The highest number of street network junctions are within 0.3 to 0.6 miles from the closest school.
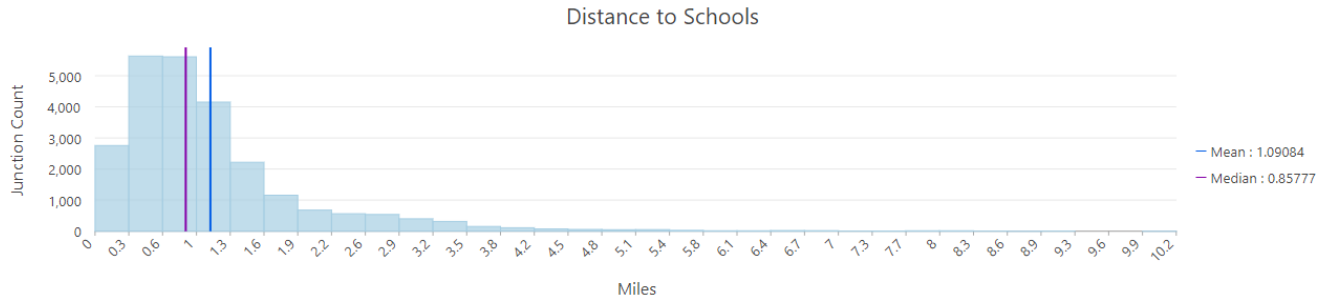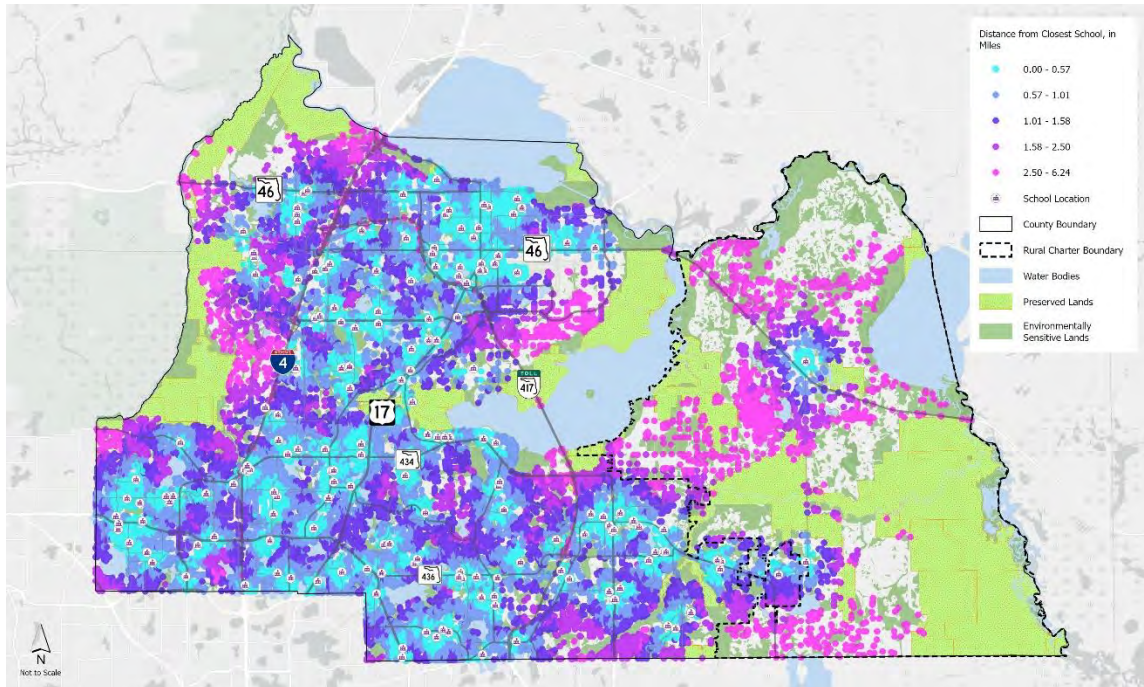
Figure 4: Distance to Schools

Figure 5: Distance to nearest School from street network junctions

City police: The street network junctions range from zero (directly adjacent) to 19.5 miles in distance to the next closest city police station. As expected, all nine of the city police stations are within incorporated areas.

The highest number of street network junctions are within 1.8 to 2.4 miles from the closest station.
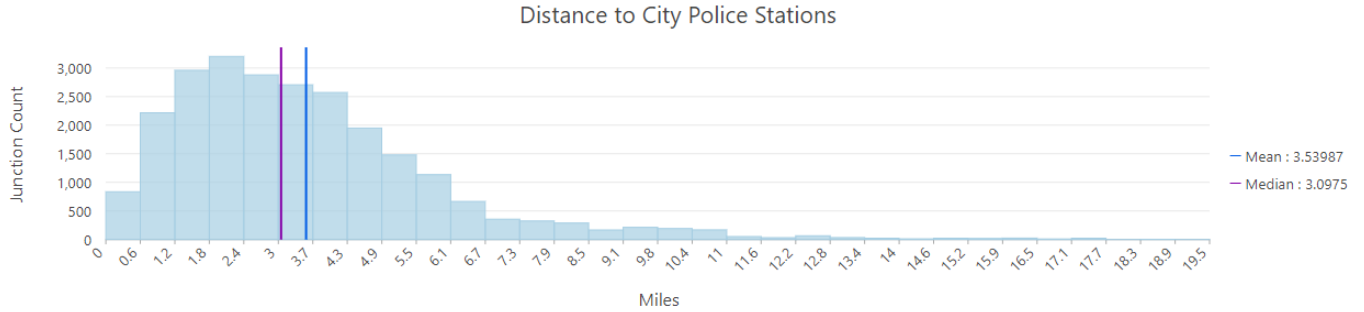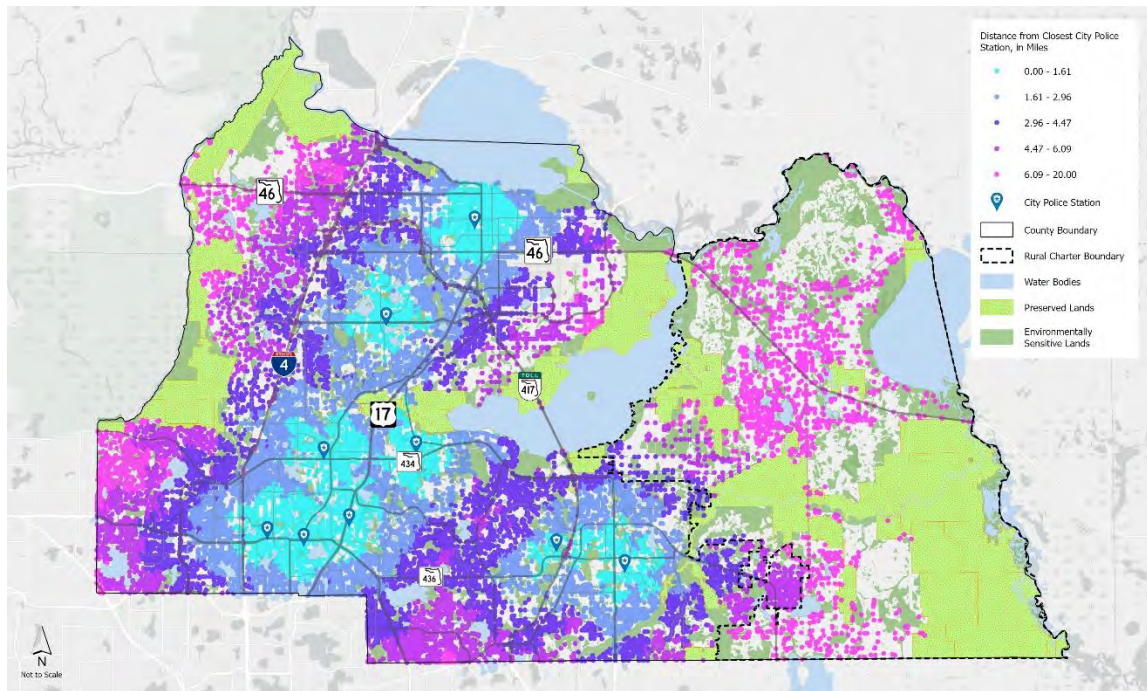
Figure 6: Distance to City Police Stations

Figure 7: Distance to nearest City Police Station from street network junctions

County police: The street network junctions range from zero (directly adjacent) to 17.7 miles in distance to the next closest county police station. Five of the six the county police stations are within incorporated areas.

The highest number of street network junctions are within 3.3 to 3.9 miles from the closest station.

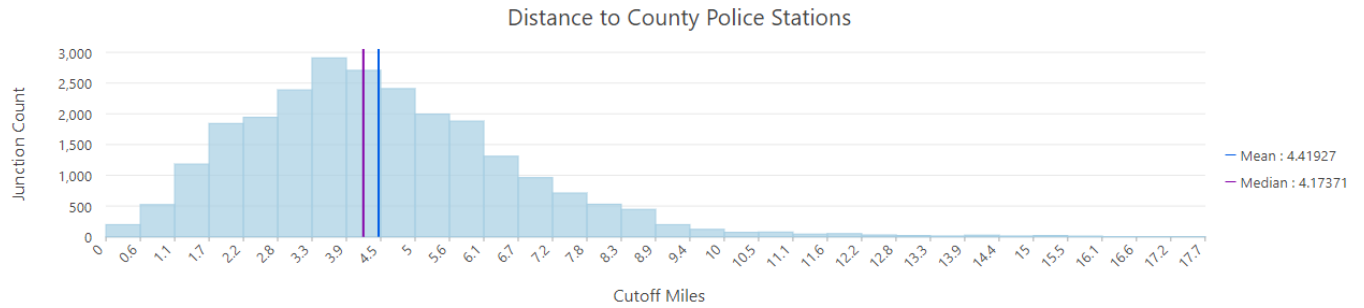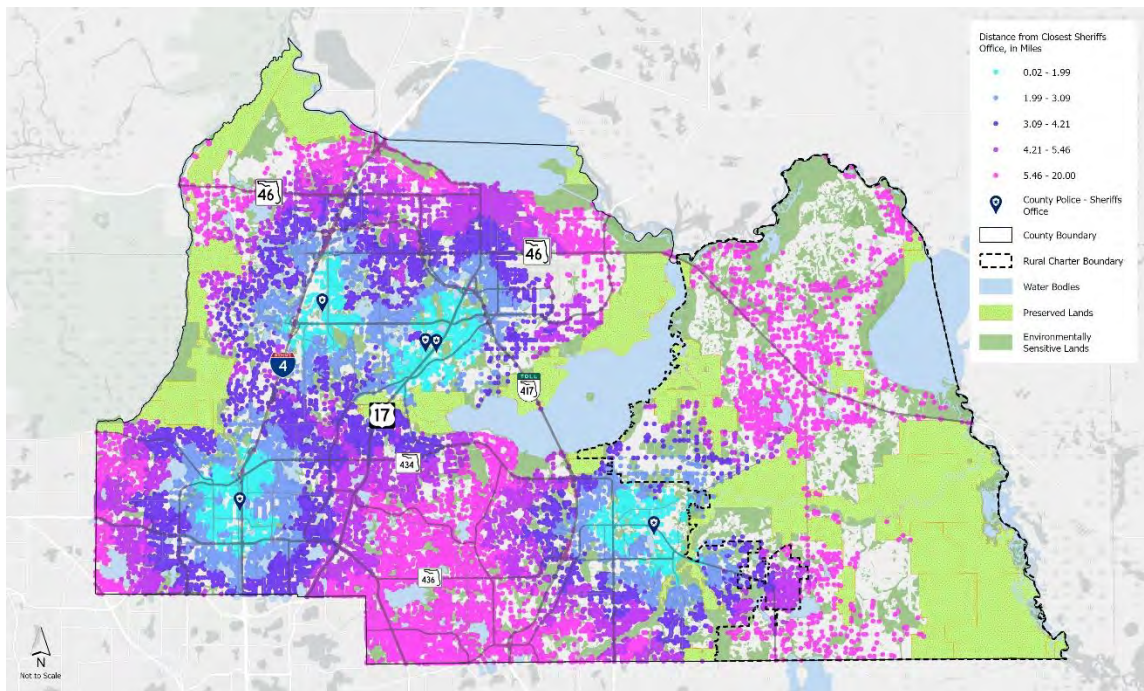*Figure 8: Distance to County Police Stations*

Figure 9: Distance to nearest County Sheriff Station from street network junctions

Hospitals: The street network junctions range from zero (directly adjacent) to 20.4 miles in distance to the next closest hospital. Eight of the nine total hospitals are within incorporated areas.

The highest number of street network junctions are within 1.9 to 2.6 miles from the closest hospital.
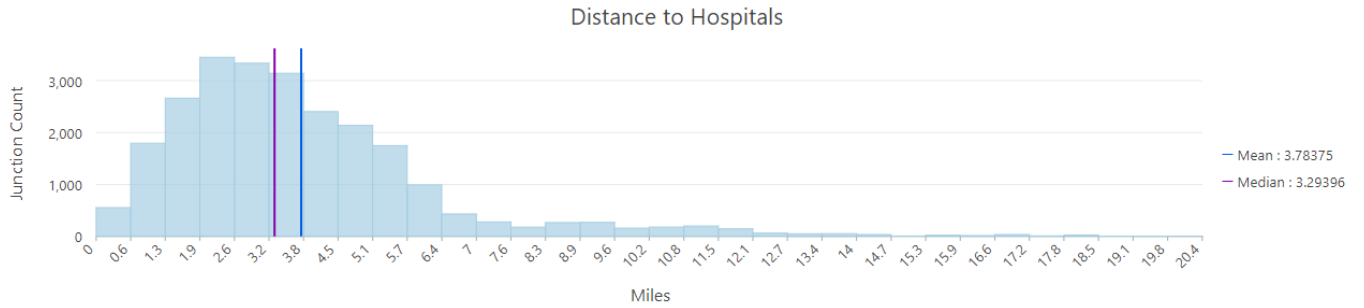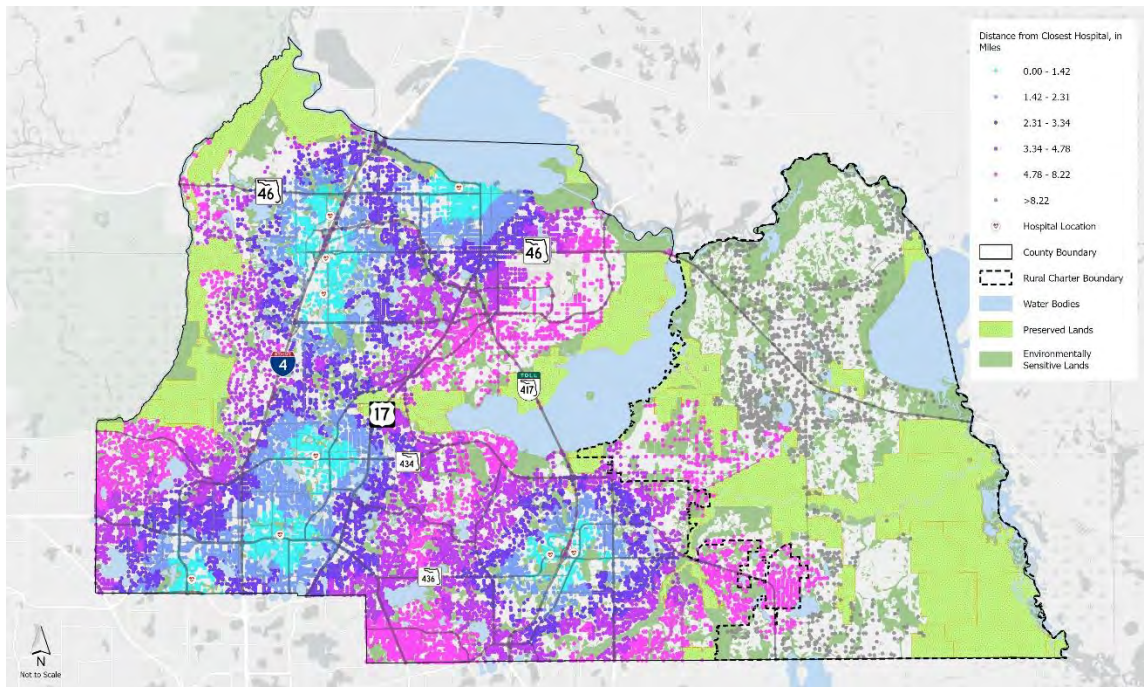
Figure 10: Distance to Hospitals

Figure 11: Distance to nearest Hospital from street network junctions

Fire stations: The street network junctions range from zero (directly adjacent) to 10.3 miles in distance to the next closest fire station. Twenty-one of the thirty-five total fire facilities (thirty-one existing stations, three proposed new stations, and the fire training facility) are within incorporated areas. Station 65 was included in the distribution analysis despite being just outside of the Seminole County boundary.

The highest number of street network junctions are within 1.3 to 1.6 miles from the closest fire facility.

Figure 12: Distance to Fire Stations

Figure 13: Distance to nearest Fire Station from street network junctions

Historical and Cultural Facilities

Churches: The street network junctions range from zero (directly adjacent) to 9.8 miles in distance to the next closest church. 154 of the 312 churches are within incorporated areas.

The highest number of street network junctions are within 0.3 to 0.6 miles from the closest station.

Figure 14: Distance to Churches

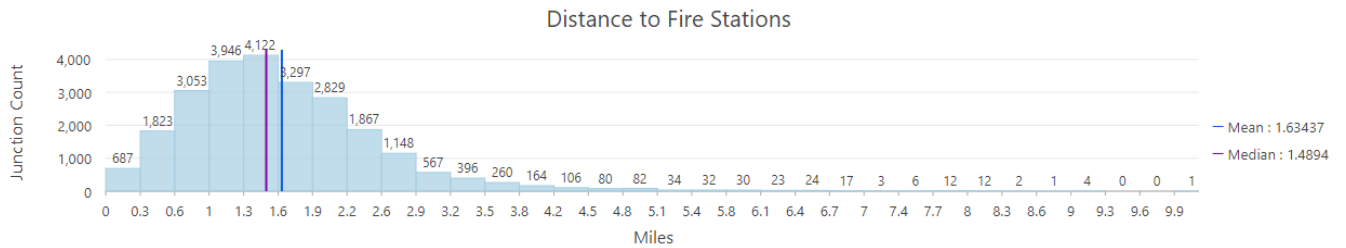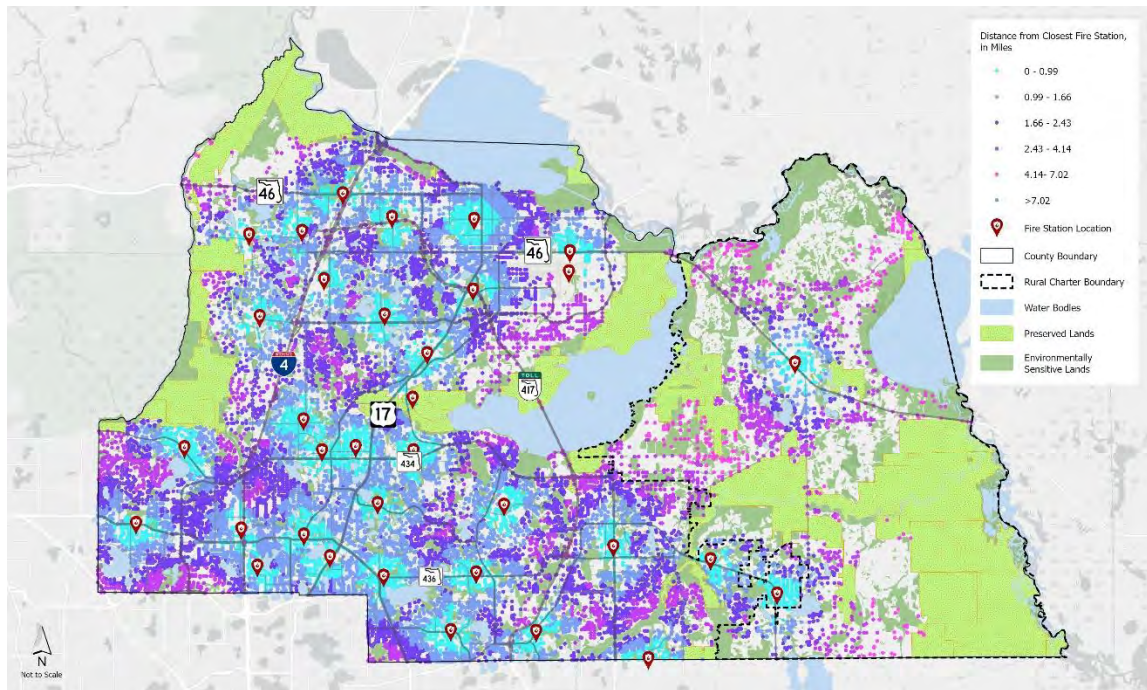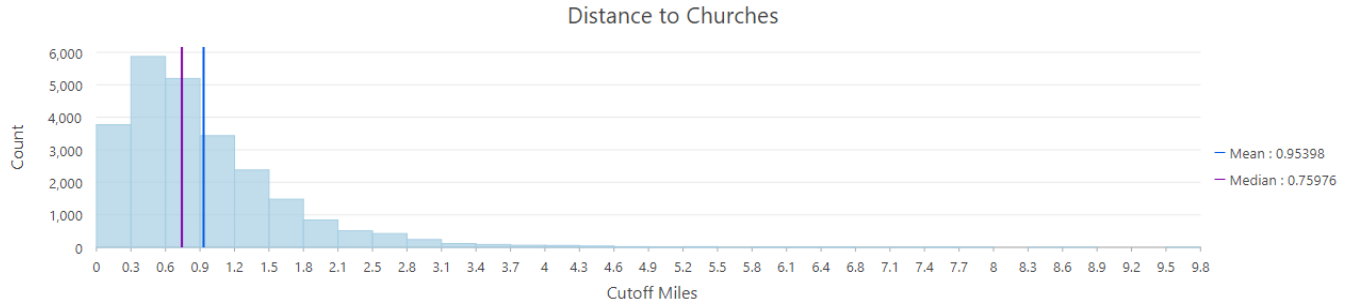*Figure 15: Distance to nearest Church from street network junctions*
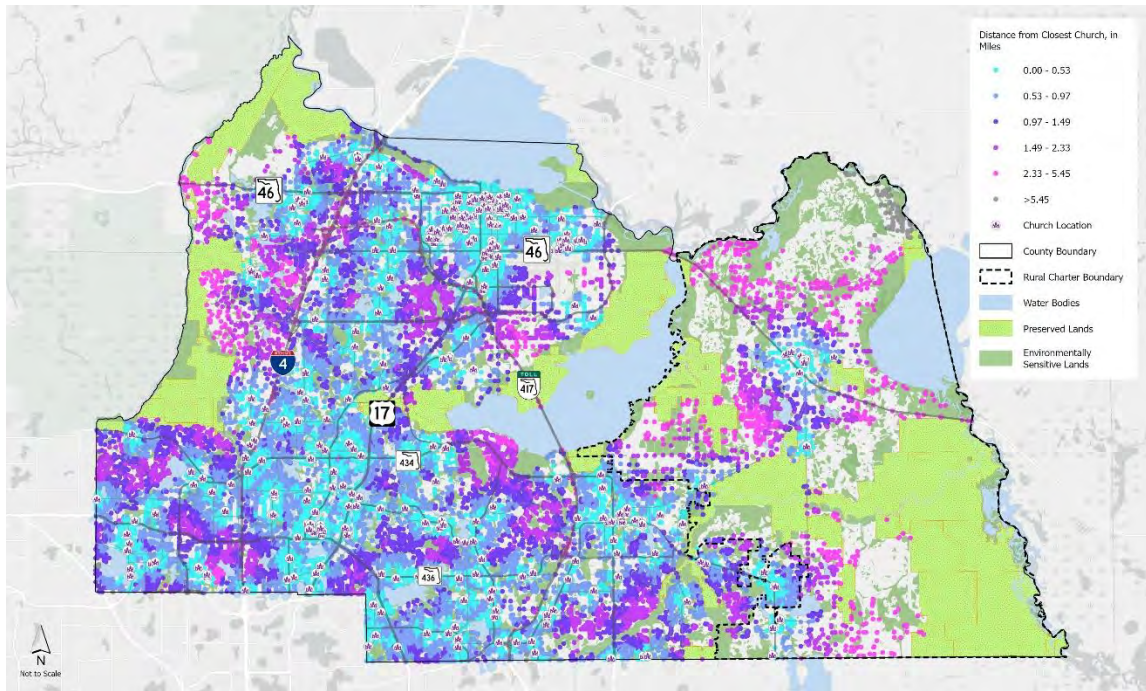
Where are potentially underserved areas of each type based on spatial distribution?

Parks and Recreational Facilities

Parks: The analysis identified that locations further than 4.3 miles are outliers compared to those currently served.

Figure 16: Outliers of distance to nearest Park from street network junctions
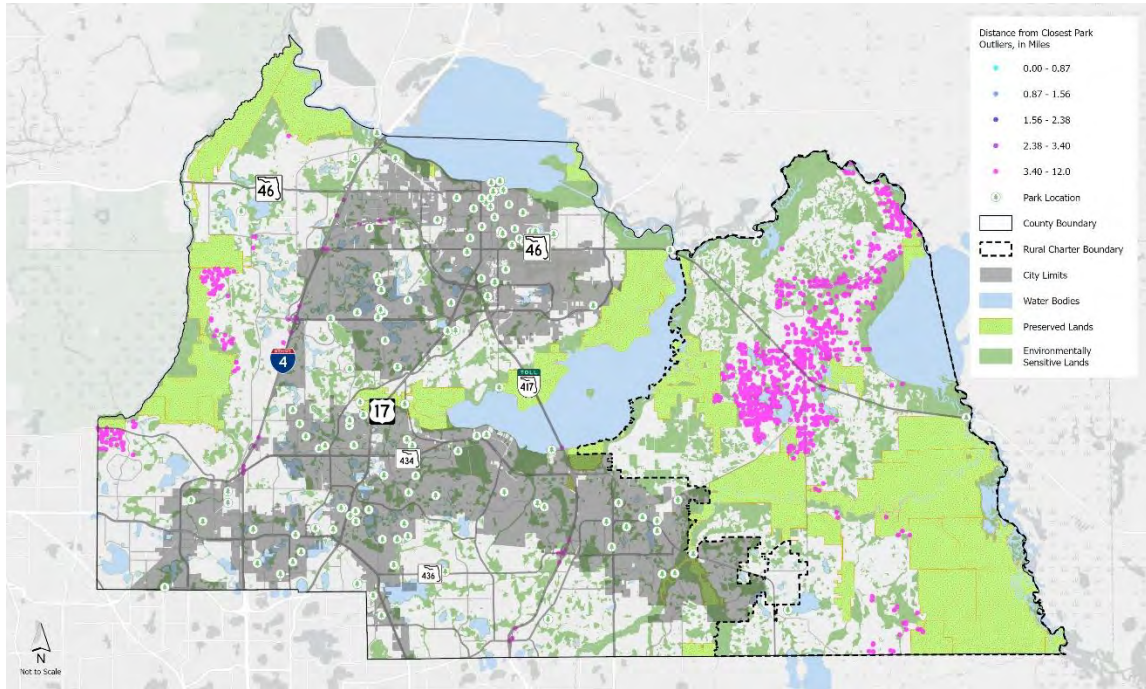
According to the Comprehensive Plan Policy REC 1.1, the County aims to provide a community park within a 10–20-minute drive of every County resident. The analysis also identified residential areas that are outside of a 20-minute drive cutoff time.

Figure 17: Residential Areas not within a 20-min drive of a Park

Educational Facilities

Schools: The analysis identified that locations further than 2.4 miles are outliers compared to those currently served.

Figure 18: Outliers of distance to nearest School from street network junctions
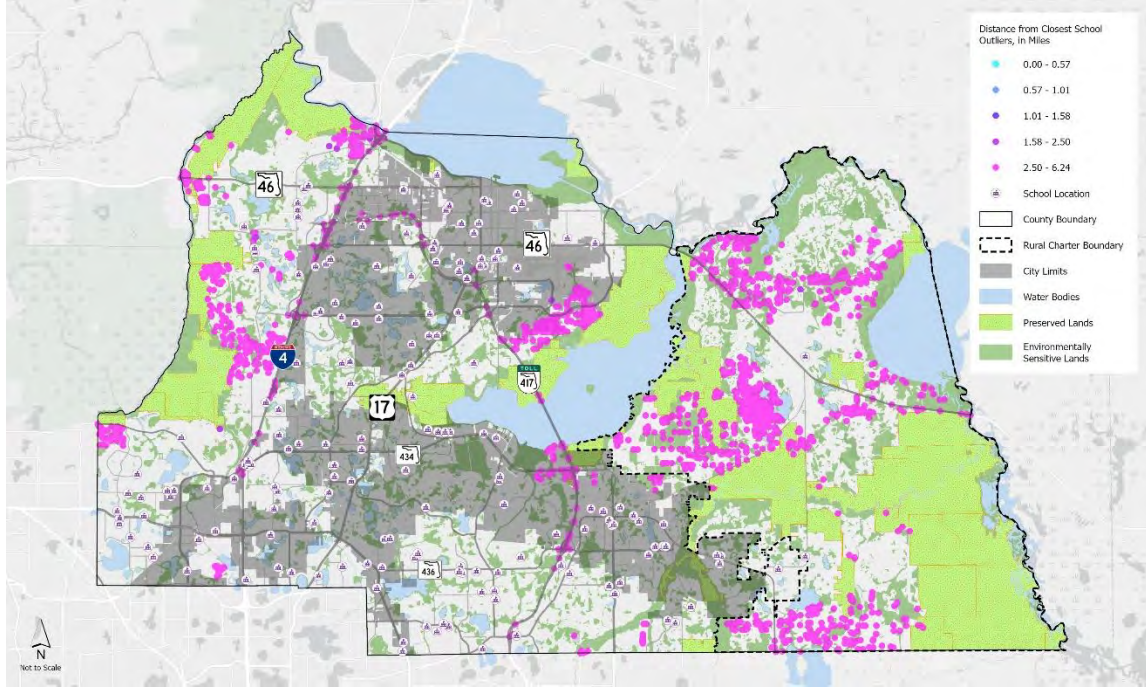
Public Safety Facilities

City police: The analysis identified that locations further than 8.6 miles are outliers compared to those currently served.

Figure 19: Outliers of distance to nearest City Police Station from network street junctions
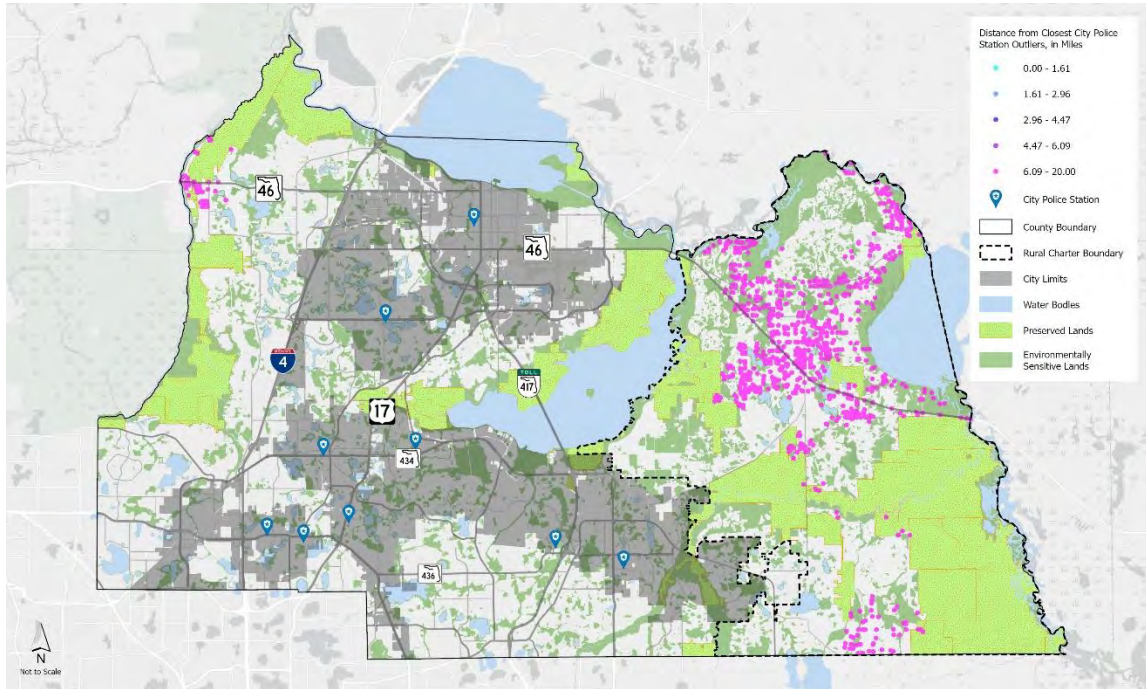
County police: The analysis identified that locations further than 9.8 miles are outliers compared to those currently served.

Figure 20: Outliers of distance to nearest County Sheriff Station from street network junctions
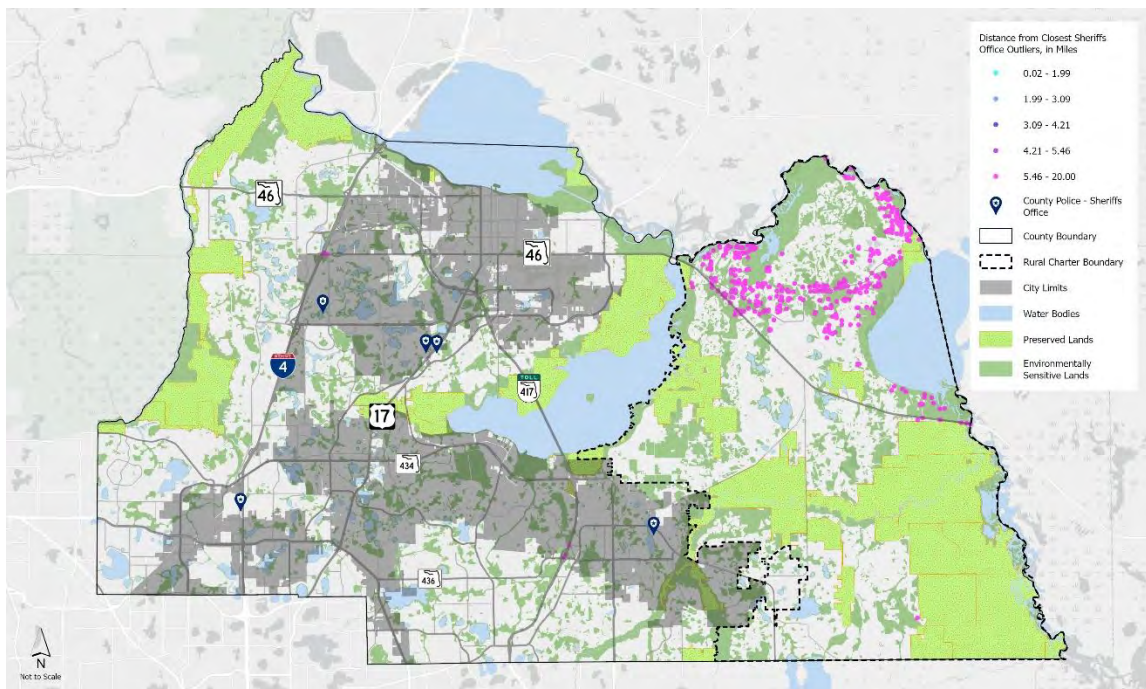
Hospitals: The analysis identified that locations further than 8.7 miles are outliers compared to those currently served.

Figure 21: Outliers of distance to nearest Hospital from street network junctions
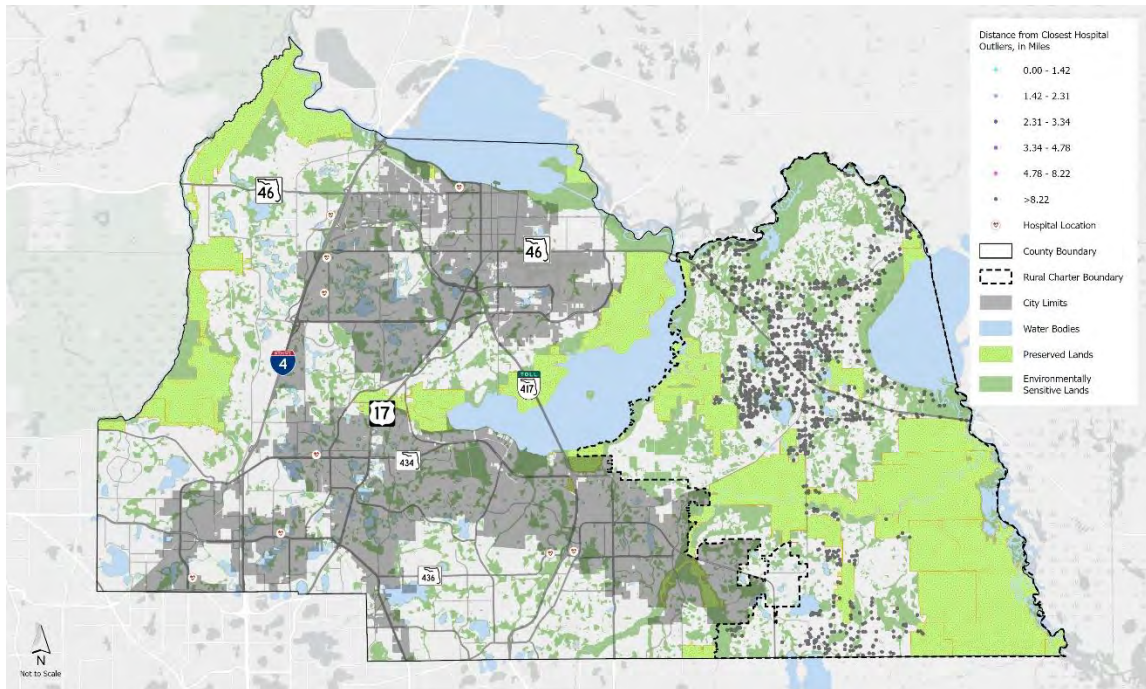
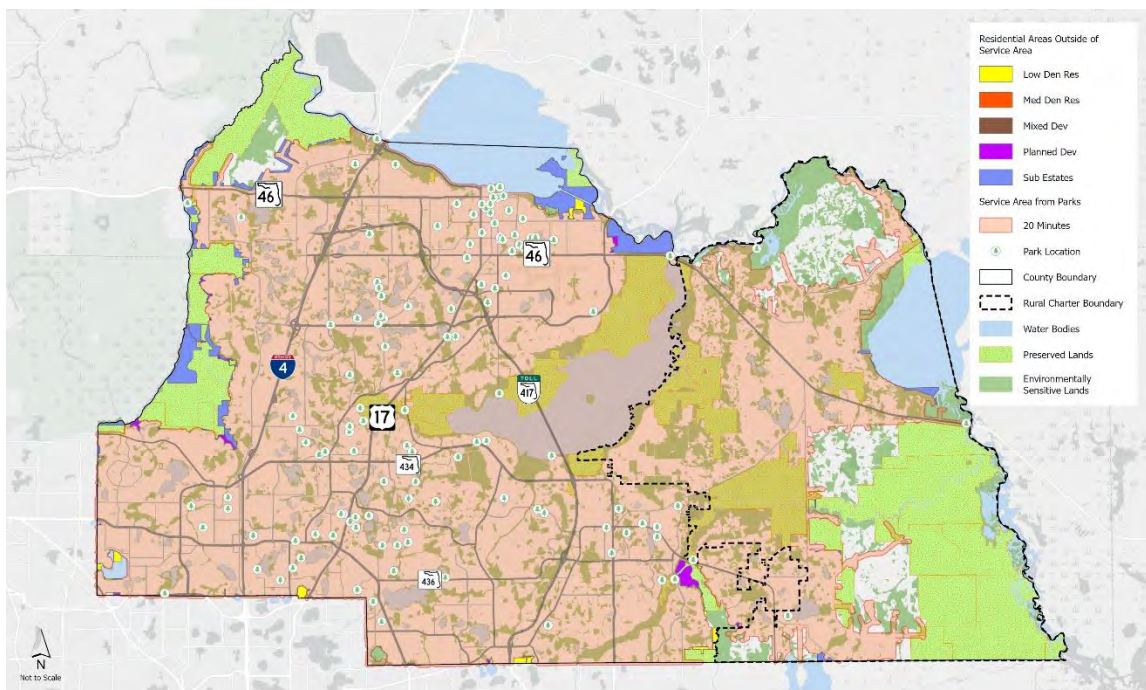**Fire stations**: The analysis identified that locations further than 3.7 miles are outliers compared to those currently served.

Figure 22: Outliers of distance to Fire Station from street network junctions
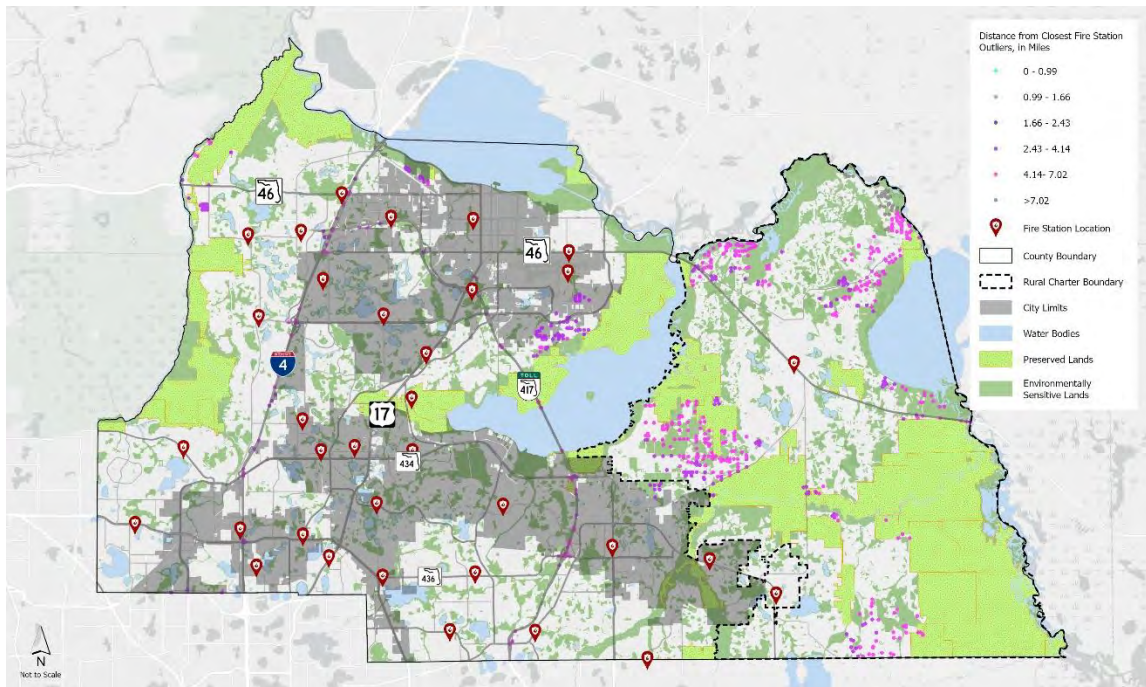
Historical and Cultural Facilities

Churches: The analysis identified that locations further than 2.4 miles are outliers compared to those currently served.

Figure 23: Outliers of distance to nearest Church from street network junctions
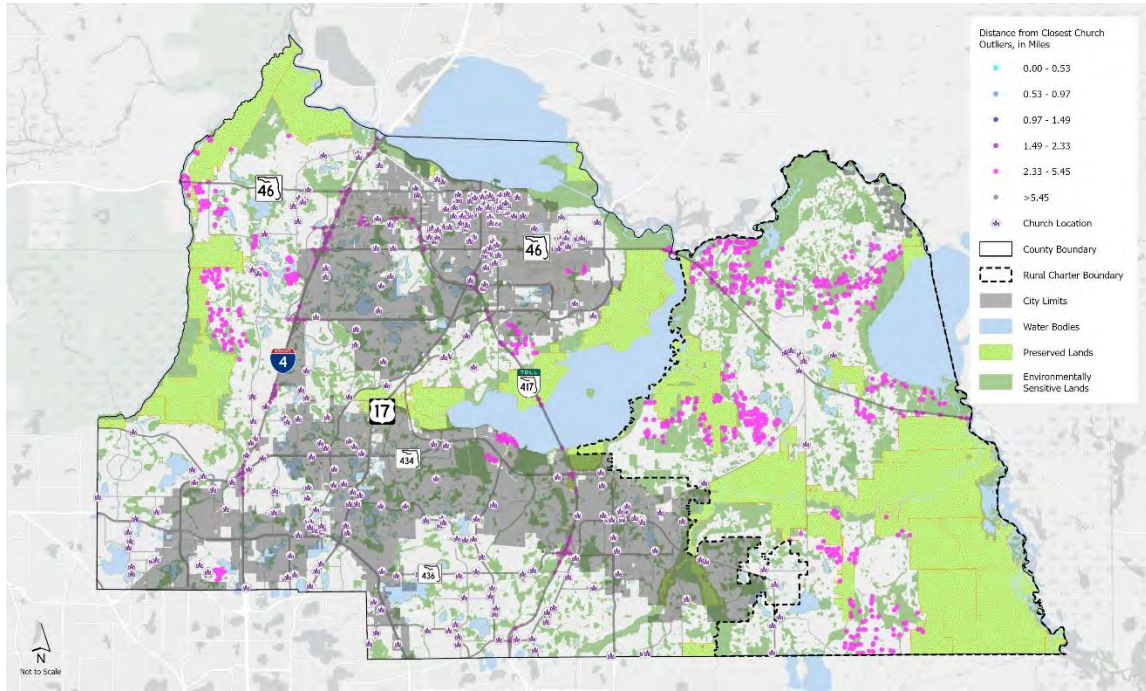
Analysis Memo 3.6: Housing

Analysis Questions

What is the current inventory of available housing? What are the housing production trends?

Seminole County Housing Trends

Home Values are Rising

Seminole County's home values have been rising since bottoming out in 2011, echoing a nationwide housing trend (see Figure 1). Between 2012 and 2021, the median home sale price in Seminole County increased 153% from $130.2K to $329.8K. During this same time, over 81,000 home sales occurred in Seminole County, with average monthly sales increasing 35.5% from 566 homes in 2012 to 767 homes in 2021 (see Figure 2). Of total homes sold, 74% were single detached units, 13.2% townhome units, 12.4% condominiums, and 0.4% multiplex (2-4 units), according to Redfin.com.

Figure 1: Zillow Home Value Index for Seminole County (2000-2021) - Zillow.com
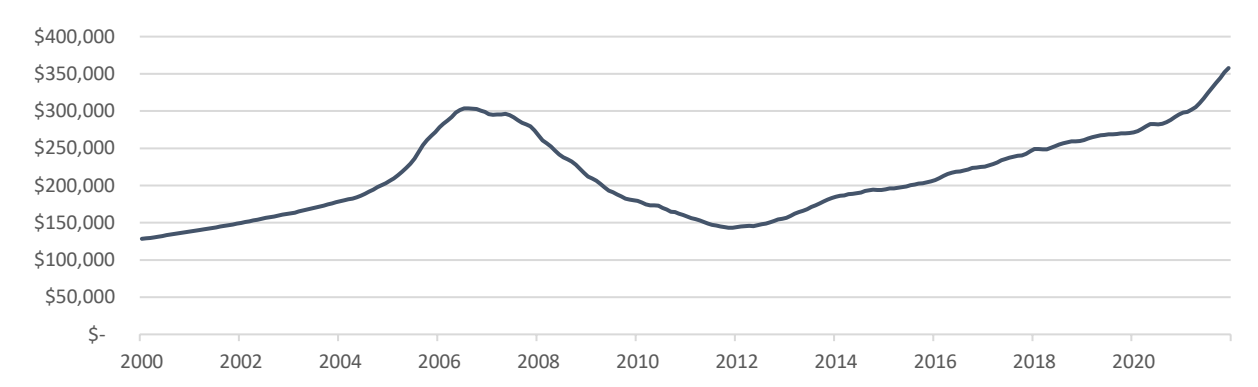
Figure 2: Home Sales and Inventory for Seminole County (2012-2021) - Redfin.com
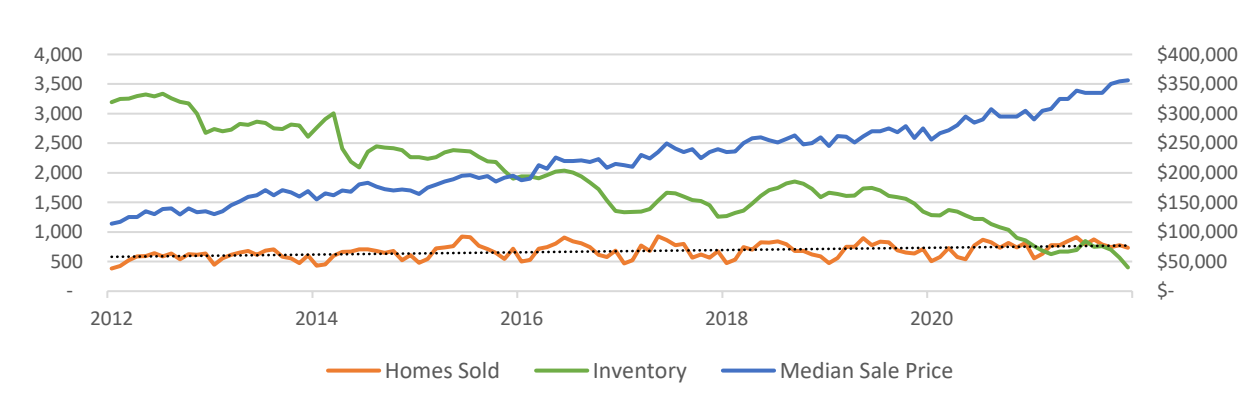
Millennials are a Major Source of Demand

According to the 2021 National Association of Realtors Profile of Home Buyers and Sellers Report, first-time home buyers made up 34% of all home buyers in 2021 nationwide, an increase from 31% in 2020. Millennials represented a sizable portion of first-time buyers as the typical buyer age was 33 years old. U.S. Census data indicates that both Seminole County and the broader Orlando-Kissimmee-Sanford MSA (Metropolitan Statistical Area) saw a significant increase in Millennial age population between 2010 and 2021. Nearly 40% of Seminole County's growth in population during that time were from people ages 25 to 40, prime first-time home buying age range (See Figure 3).

Figure 3: Seminole County Population by Age (2010 - 2021) - U.S. Census

Age	YR 2010	YR 2021
Age 85+	1.6	1.9
Age 75 - 84	3.8	4.7
Age 65 - 74	6.5	10.1
Age 55 - 64	12.1	13.7
Age 45 - 54	15.9	12.9
Age 35 - 44	13.9	13.0
Age 25 - 34	13.0	15.4
Age 20 - 24	7.3	6.3
Age 15 - 19	7.3	5.8
Age 10 - 14	6.9	5.8
Age 5 - 9	6.1	5.4
Age 0 - 4	5.5	5.0

■ YR 2010   ■ YR 2021
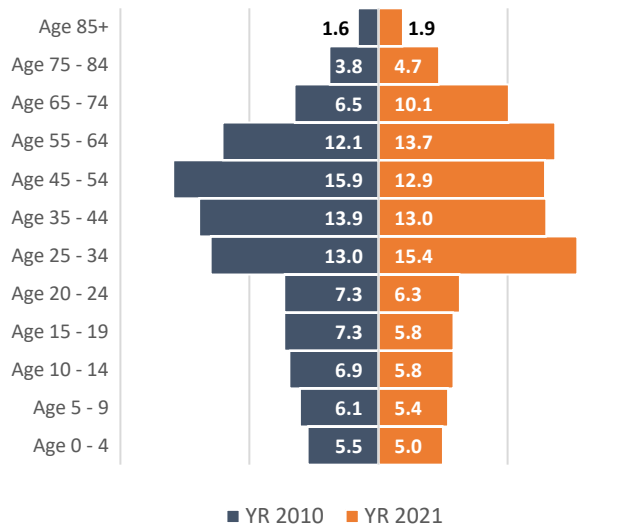
However, Demand is Cooling

This demographic transition is a major factor behind Seminole County's rise in home sale prices. The Realtor.com Market Hotness Index, a composite metric of regional housing supply and demand, reports Seminole County as the most competitive housing market in the Central Florida region. However, Realtor.com's *demand score*, a measure based on the number of listing views, shows that demand in Seminole County has been decreasing since before the Global Pandemic (see Figure 4). Despite a potential cooling in demand, home sale prices have continued to rise, signaling that demand may not be the primary determinant of price increase.

Figure 4: Demand Score for Central Florida Counties (Aug 2017 to Dec 2021) - Realtor.com

Seminole — Orange — Lake — Osceola — Polk
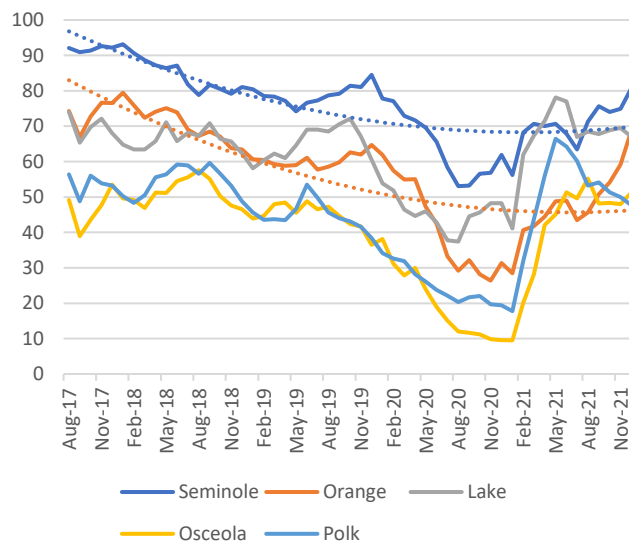
Housing Inventory is Constrained

Housing inventory in Seminole County is at an all-time low, shrinking nearly 79% between 2012 and 2021 (see Figure 2 and Figure 6). Data from U.S. Census Bureau and U.S. Department of Housing and Urban Development indicates that the number of housing units completed nationwide in 2021 was more than twice the number of completed units in 2011, but only two-thirds the number of completed units in 2005 (see Figure 5). New construction represented nearly 8% of all Seminole County home sales in 2020, up from 4.3% in 2012, despite COVID related disruptions in labor and materials (see Figure 7).

Figure 6: Median Sale Price and Inventory appear highly correlated

Figure 5: Housing Units Completed in the U.S. (thousands of units)
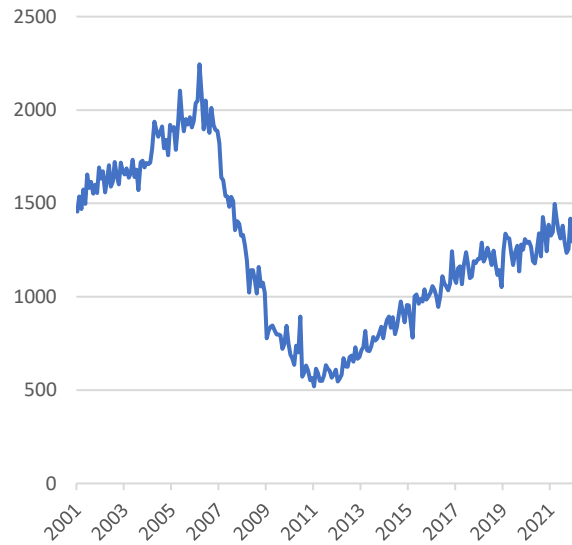
Figure 7: Percentage of Total Homes Sold that were New Construction
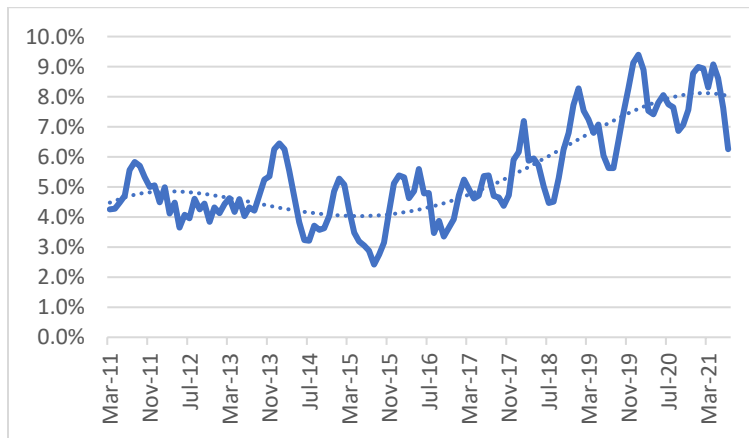
Rents are Rising

Average monthly rent is also rising throughout the Orlando MSA – up 49% between 2014 and 2021 (see **Error! Reference source not found.**) and outpacing the 27% increase in average wages, according to the St. Louis Fed. Redfin.com estimates the average monthly rent in the Orlando MSA for December 2021 at $2,050. Data provided by ESRI indicates average gross rents in Seminole County are $1,315 as of 2021. Despite the rise in rent, U.S. Census data indicates that more people are renting as the homeownership rate in Seminole County decreased 6.5% from 72.8% in 2009 to 66.3% in 2019. Monthly mortgage costs are generally lower than average rents in the Orlando MSA, however down payment and non-mortgage costs such as home insurance, maintenance/repairs, and HOA fees still make home ownership more costly on average per month than renting in the Orlando MSA.

Figure 8: Zillow Observed Rent Index
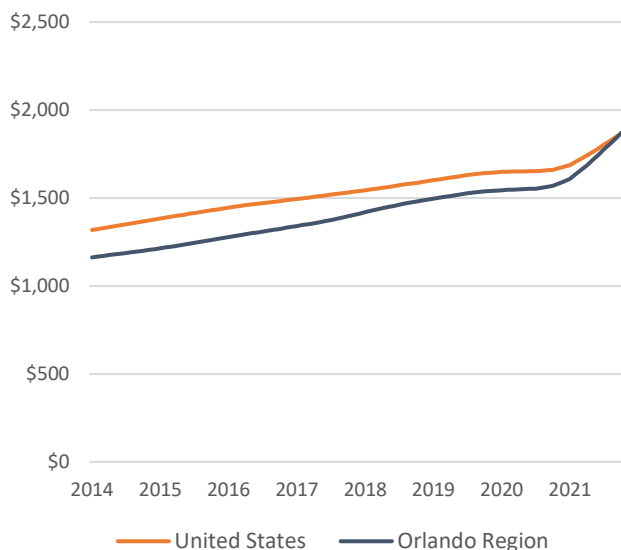
Other Factors: Investors are Buying More

Redfin.com data indicates that investors account for an increasing share of home buyers in the Orlando-Kissimmee-Sanford MSA, competing for the same dwindling stock of housing inventory. Investors purchased nearly 1 in 4 homes sold in the Orlando MSA between July and September 2021. Many of these homes are rented rather than renovated and resold. Investor purchasing is more prevalent in the Orlando MSA compared to the national housing market and has been a rising trend since the 2008 Global Financial Crisis (see Figure 9).

Figure 9: Investor Market Share for home sales in Orlando MSA (2000-2021) - Redfin.com
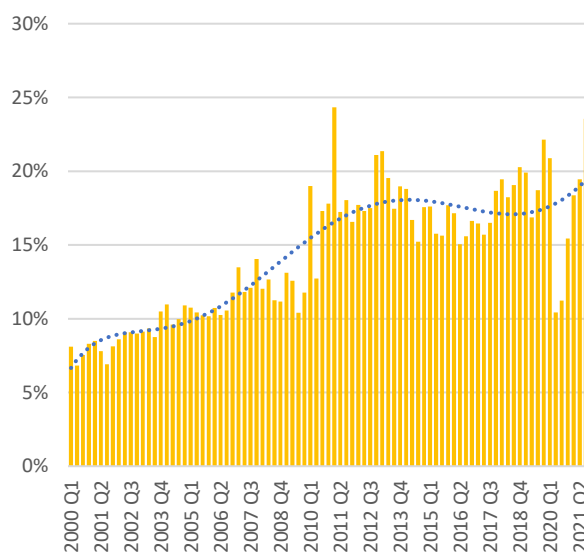
Other Factors: Short-Term Rentals

Some people are concerned that Short-Term rentals play a significant role in constraining housing supply. At least from a countywide perspective, this does not appear to be the case. According to AirDNA, a data resource for tracking short-term rental listings on AirBNB and VRBO, less than 1,000 housing units in Seminole County had active listings at the peak in 2021. This accounts for less than 0.5% of all housing units. Nearly 3 in 4 listings are for the entire unit, rather than a private or shared room. Most listings occurred in incorporated areas with Sanford and Altamonte Springs hosting the highest number of rentals. Oviedo and Winter Springs appear to capture the highest monthly median revenues – between $2,220 and $2,320 – while Altamonte Springs brings in the lowest – $1,300.

Continued Rise in Housing Costs

As Millenial home buyers continue to search for their first home and supply remains constrained, home sale prices in Seminole County will continue to rise. Financial markets are anticipating a rise in interest rates which will increase mortgage costs, however this will not necessarily dampen housing prices since supply is so extrordinarily low. Rather, the rate hike could likely place more competitive pressure on the sale and/or production of smaller units, which are already particularly scarce.

Seminole County Housing Stock

Housing Types

According to data from Seminole County Property Appraiser, there are an estimated 90,000 residential units in Unincorporated Seminole County. Of these, 69.9% are single unit detached, 21% apartment, 2.9% are single unit attached (townhomes), 2.2% mobile/manufactured units, and 0.6% are multiplex units. Half of all residential units existing in unincorporated Seminole today were built before 1986 (see Figure 10). The share of units that are single detached is decreasing over time. Three out of four units built before 2000 are single detached units compared to one out of two units built after 2011. Apartment units are twice as prevalent among units built after 2011 compared to before 2000.

Figure 10: Sum of Residential Units by Actual Year Built
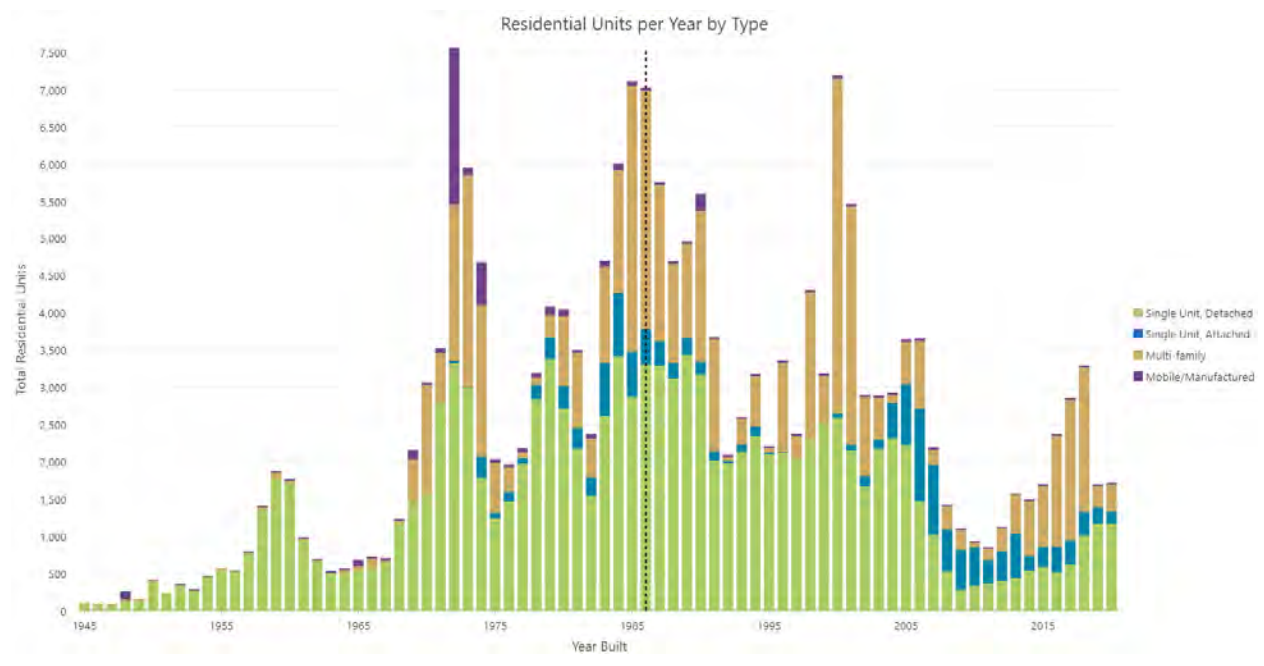
Properties with single detached units account for over 38,300 acres of unincorporated Seminole County and 90% of all residential acreage, not including all the shared space associated with HOAs. Approximately 3,000 acres are devoted to mobile units, primarily located north of Geneva in east Seminole County, and 1,000 acres to apartments, primarily located at the edges of incorporated areas (see Figure 11).

Figure 11: Existing Land Use Map showing Housing Types (FDOR)
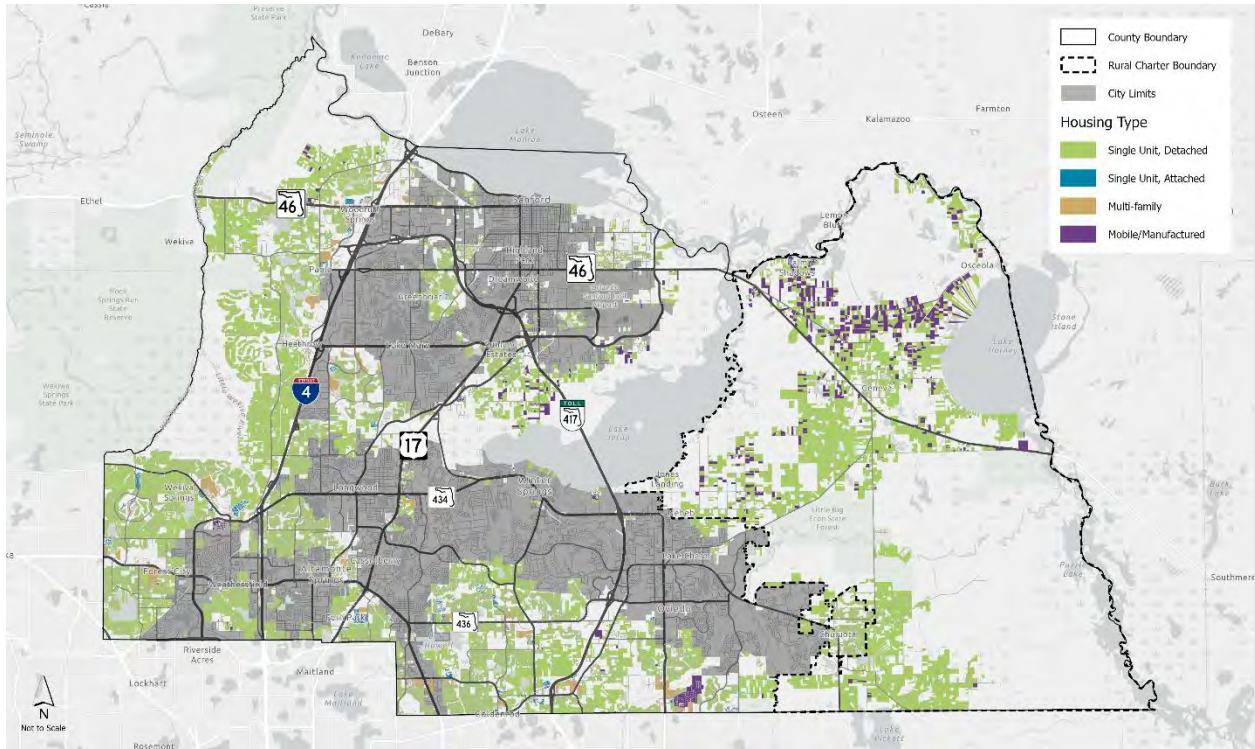
Figure 12: Aerial Image of "Typical Housing Unit in Unincorporated Seminole County" (Bing Maps)
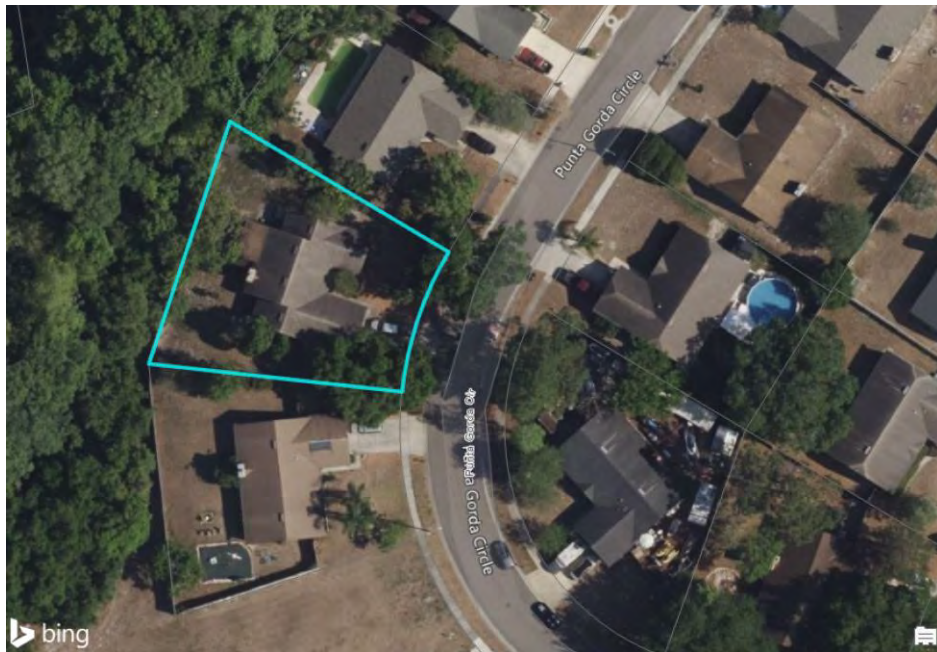
The typical residential unit is a one-story single detached unit built in 1986 with approximately 1,870 square feet of living area, on a 0.26-acre lot.

To what extent does Seminole County housing stock meeting the needs of existing and future residents?

Housing Accessibility & Affordability

Housing Cost Burden

As previously mentioned, the cost of home ownership and rental is increasing in Seminole County. Estimates by Shimberg Center for Housing Studies show that more than 30% of owner-occupied Households in unincorporated Seminole County pay more than 30% of household income on housing costs (also referred to as "cost burdened"). The incidence of cost burdens among renters is higher with over 46% of renter households in unincorporated Seminole County paying more than 30% of household income on housing costs.

Table 1: Cost Burden by Income, 2020 Estimate (Summary by Shimberg Center for Housing Studies)

	Cost Burden by Income, 2020 Estimate						
	30% or less		30.1-50%		More than 50%		
Household Income	**Owner**	**Renter**	**Owner**	**Renter**	**Owner**	**Renter**	**Total**
30% AMI or less	231	219	221	16	2,165	1,845	2,621
30.01-50% AMI	844	184	624	565	1,661	2,312	3,034
50.01-80% AMI	2,468	755	1,870	2,457	1,289	1,100	6,371
80.01-100% AMI	2,665	1,172	1,081	1,205	663	180	4,121
Greater than 100% AMI	38,536	10,267	3,641	1,088	421	119	15,417
Total	44,744	12,597	7,437	5,331	6,199	5,556	**81,864**

Structural Mismatch

A critical dimension of housing access is how well the existing stock matches the needs of existing households. One way to measure this is by investigating household size vs housing unit size. A quarter of Seminole County households have 1 person but only 10% units have 1 or fewer bedrooms. This means that many single-person households compete with larger households for larger, often more expensive, housing units.

Residential Redevelopment

Land value is a proxy for the desirability and demand for land. Areas where land value is high signals high demand in response to some benefit of location such as proximity to infrastructure, schools, parks, goods and services, etc. Figure 13 illustrates land value per acre in throughout Seminole County. Areas shown as yellow/orange have high land values and correspond with areas with relatively higher access to transportation networks and community facilities (see memos 3.8 and 3.10). During periods of population growth, high-desirable lands will experience pressures to intensify from lower density to higher density. Capital, in the form of floor area, will target these areas as the potential for economic land rent increases. However, barriers to redevelopment, including land use policy that places limits on intensity, tend to displace potential growth toward less desirable land or competing regions with more favorable development/redevelopment conditions.

Figure 13: Land Value per GIS acre (FDOR)
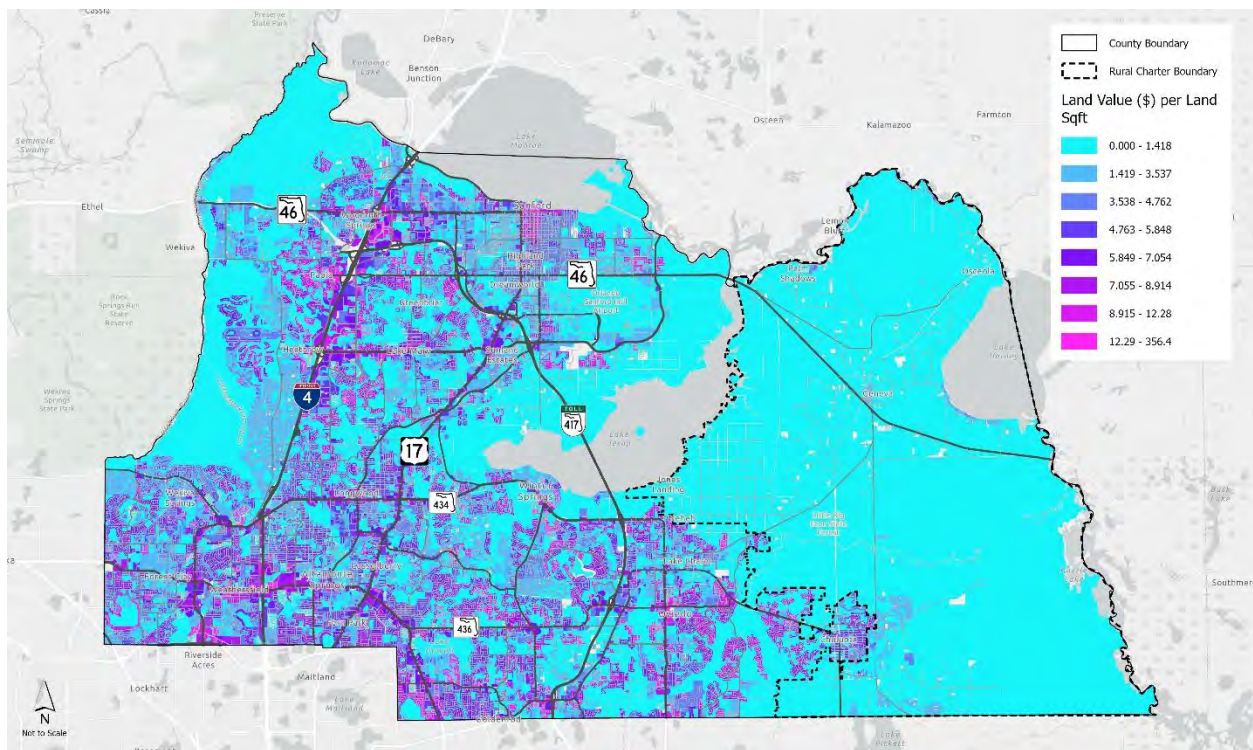
Seminole County's continued population growth will sustain pressure to build housing in high desirable areas. Figure 14 illustrates the areas (shown in pink) where land values are relatively high, but improvement values are relatively low. These are areas where we might expect to see future reinvestment/improvement in the form of new floor area. Land use policy will play a significant role in dictating whether this new floor area materializes as more, smaller housing units or fewer, larger housing units.

Figure 14: Bivariate Map - Land Value per acre and Improvement Value (FDOR)
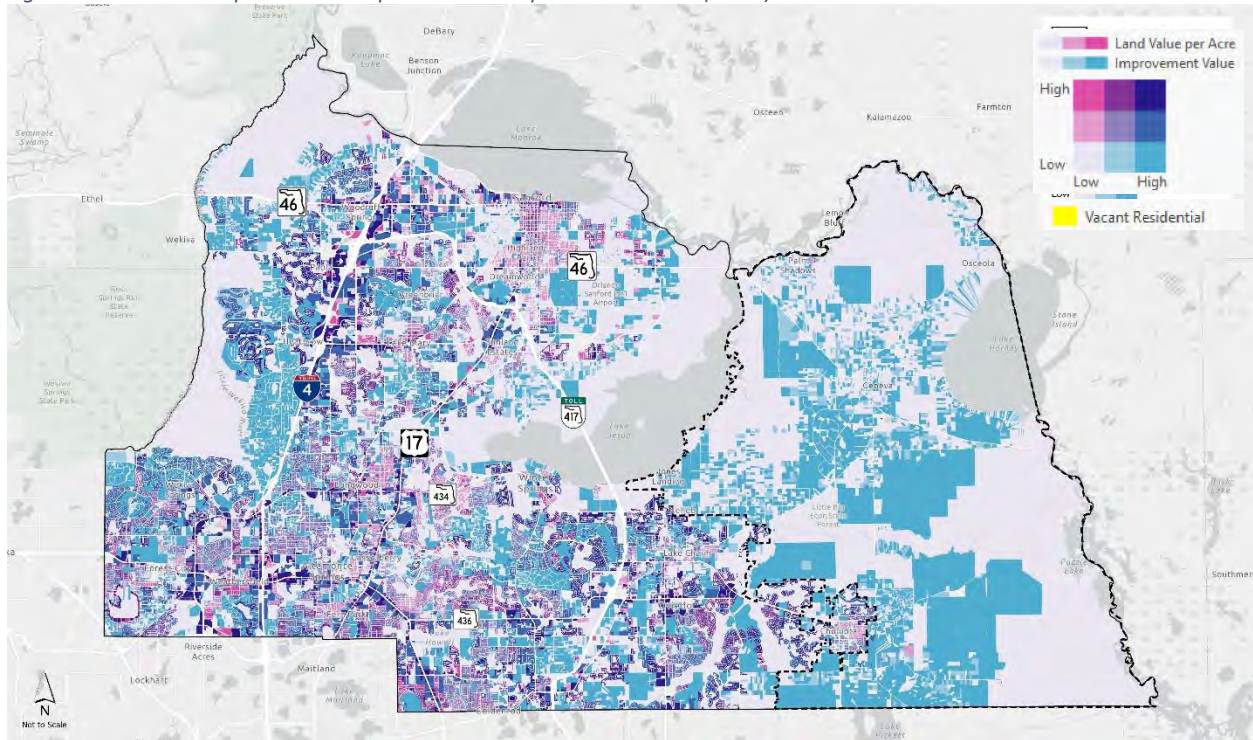
Analysis Memo 3.7: Environmental Stewardship
Analysis Questions

The Conservation element of the County's Comprehensive Plan contains several strategies intended to aid in preservation of the County's natural resources. Can the current FLU plan accommodate projected population growth while allowing for long-range success of these conservation strategies?

As illustrated in Analysis Memo 3.1 – *Demographics*, the current FLU plan permits future residential development within the urban area and rural boundary. The residential development scenarios contained therein estimated minimum development densities along a selection of acreage utilization scenarios. These minimum development densities describe hypothetical averages that would need to be achieved in vacant urban land to accommodate future population growth while avoiding new residential development within the rural boundary and any agricultural lands. The development scenarios are as follows:

Table 1: Vacant Urban Area Lands - Residential Development Scenarios

Vacant Buildable Acres[1] (Urban Area)	Acreage Utilization	Acres Developed	Estimated Dwelling Units Needed (2045)	Average Density of Residential Development (DU/ACRE)
5,739	100%	5,739	45,091	7.9
5,739	80%	4,591	45,091	9.8
5,739	60%	3,443	45,091	13.1
5,739	57%	3,267	45,091	13.8[2]
5,739	40%	2,296	45,091	19.6
5,739	20%	1,148	45,091	39.3

To provide additional context for these scenarios, historical residential development density averages were calculated to estimate the feasibility of meeting future population housing needs within vacant urban areas and thus avoid conflict with preservation and environmentally sensitive areas. Historical average densities, as displayed in Table 2, are much lower than the density needed to accommodate new development within vacant urban areas and suggest that the current FLU plan will present conflict with environmentally sensitive areas to meet population/housing demands.

Table 2: Historical Average Residential Density, per area since 1991

Area	Average Residential Development Density
County-wide	3.5 DU/ACRE
Urban Area	5.1 DU/ACRE
Rural Area	0.2 DU/ACRE

According to Policy FLU 11.20, protecting the rural character of the East Rural Area Neighborhoods by maintaining limited densities is a priority. Therefore, in order to meet future dwelling unit needs without increasing residential density in the rural areas, the residential development scenarios were extended to include urban agricultural lands (approximately 3,745 acres). Further evaluation was performed to determine if this additional acreage would bring the future density requirements nearer to the typical residential development density that Seminole County has experienced historically. As seen in Table 3, the development density required to maintain "business as usual"

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[1] Acreage not within National Wetland Inventory or Seminole County Preserved Lands

[2] The average density of maximum allowable residential development in vacant urban area lands is approximately 13.8 DU/ac (according to each parcel's respective current FLU designation).

development would require development of all vacant and agricultural land within the urban area at an average acreage utilization of over 80%. However, the current FLU plan would allow for a maximum average density of approximately 11.2 DU/ac, which equates to approximately 42% acreage utilization.

Table 3: Vacant and Agricultural Urban Area Lands - Residential Development Scenarios

Vacant AND Agricultural Buildable Acres (Urban Area)	Acreage Utilization	Acres Developed	Estimated Dwelling Units Needed (2045)	Average Density of Residential Development (DU/ACRE)
9,484	100%	9,484	45,091	4.7
9,484	80%	7,587	45,091	5.9
9,484	60%	5,690	45,091	7.9
9,484	42%	4,026	45,091	11.2[3]
9,484	40%	3,794	45,091	11.9
9,484	20%	1,896	45,091	23.8

This evaluation illustrates that to effectively accommodate projected population growth either additional acreage must be designated for residential use or a significant increase in average residential density must be achieved within lands currently designated for residential use.

To serve conservation strategies in the County's Comprehensive Plan, designation of additional acreage for residential use should be avoided in favor of achieving significantly higher average residential density within the Urban Area.

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[3] The average density of maximum allowable residential development in combined vacant and agricultural urban area lands is approximately 11.2 DU/ac (according to each parcel's respective current FLU designation).

Does the current FLU plan present imminent conflict to preservation and/or proper management of important and unique natural resources, wetlands, flood plains, agricultural land, or natural areas within the County? If so, what are the various natures and geographies of these conflicts?

Previous analysis has concluded that according to historical average residential development density and current regulations, the current FLU plan is unlikely to support future population growth without the conversion of additional lands to residential use.

As described in Analysis Memo 3.2 – *Land Use*, the growth of the County's urban footprint has resulted in losses of wetland, forested, and agricultural land cover (see Figure 9, Memo 3.2). Vacant and agricultural lands within the Rural Charter area, depicted in Figure 1, below, are areas of concern as population growth may create pressure for these lands to be developed for residential and supporting land uses at densities and intensities that would conflict with the proper management of adjacent important and unique natural resources, wetlands, flood plains, and natural areas.

Figure 1: Vacant and Agricultural Lands
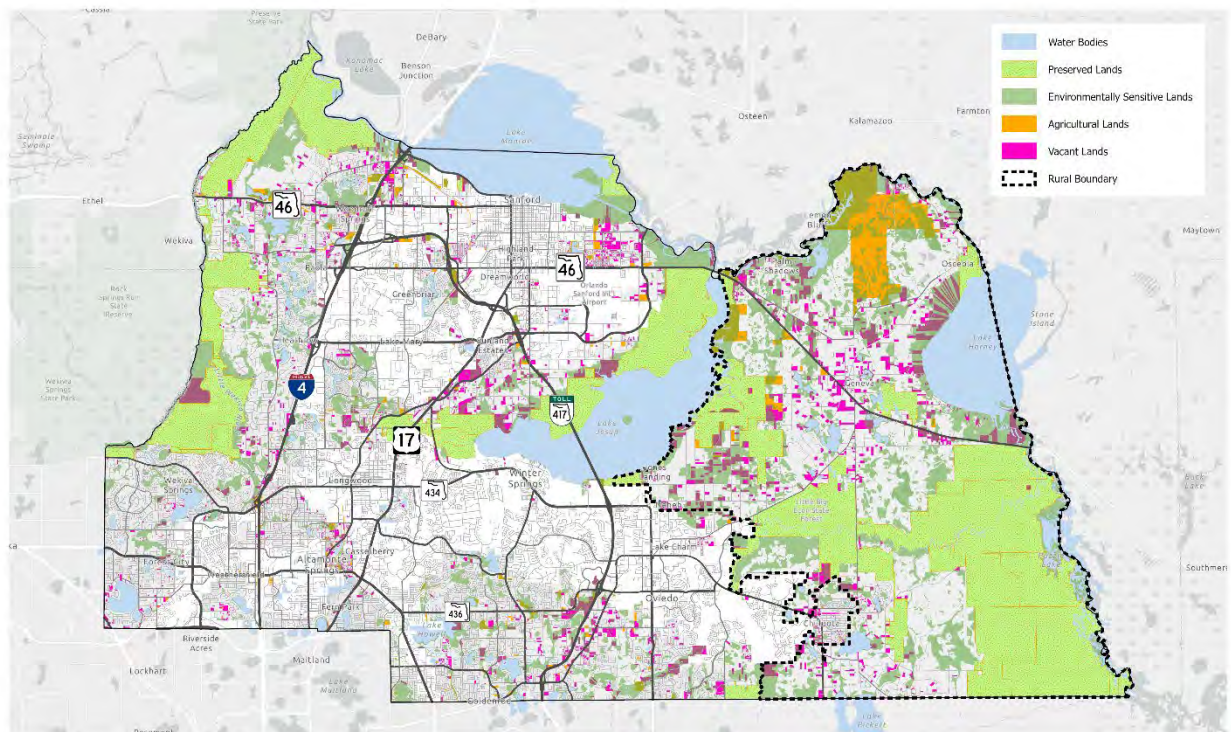
Are there geographic areas where Low Impact Development practices have the potential for greater benefit toward overall environmental stewardship goals? If so, are the FLU designations in identified geographic areas properly aligned to maximize the use of LID practices in development and redevelopment activities?

According to Policy CON 2.6 and 2.11, alternative development standards that improve water quality are desirable, specifically Low Impact Development (LID). LID practices have the greatest capacity to provide benefit to County environmental stewardship goals in areas that suffer from high levels of stormwater runoff and risks to water quality. High stormwater runoff typically coincides with high intensity development and high levels of imperviousness, which are typically seen in urban centers and corridors. As shown in the Comprehensive Plan FLU Exhibit 6, Seminole County has an Urban Centers and Corridors Overlay which points toward geographic areas where LID practices could have a great benefit.

A method to easily identify these areas is through the existing land use FAR, estimated in this analysis using building floor area and land area data in the Property Appraiser database. As seen in Figure 2, the Urban Centers and Corridors Overlay correlates with the higher density development patterns shown through the FAR values throughout the unincorporated area. In addition to the centers and corridors, areas like Red Bug Road in Winter Springs see high levels of imperviousness where LID interventions – such as trees, bioswales, and infiltration trenches – that leverage natural hydrological function to attenuate stormwater runoff from imperviousness.

Figure 2: Current FAR with Urban Centers & Corridors Overlay
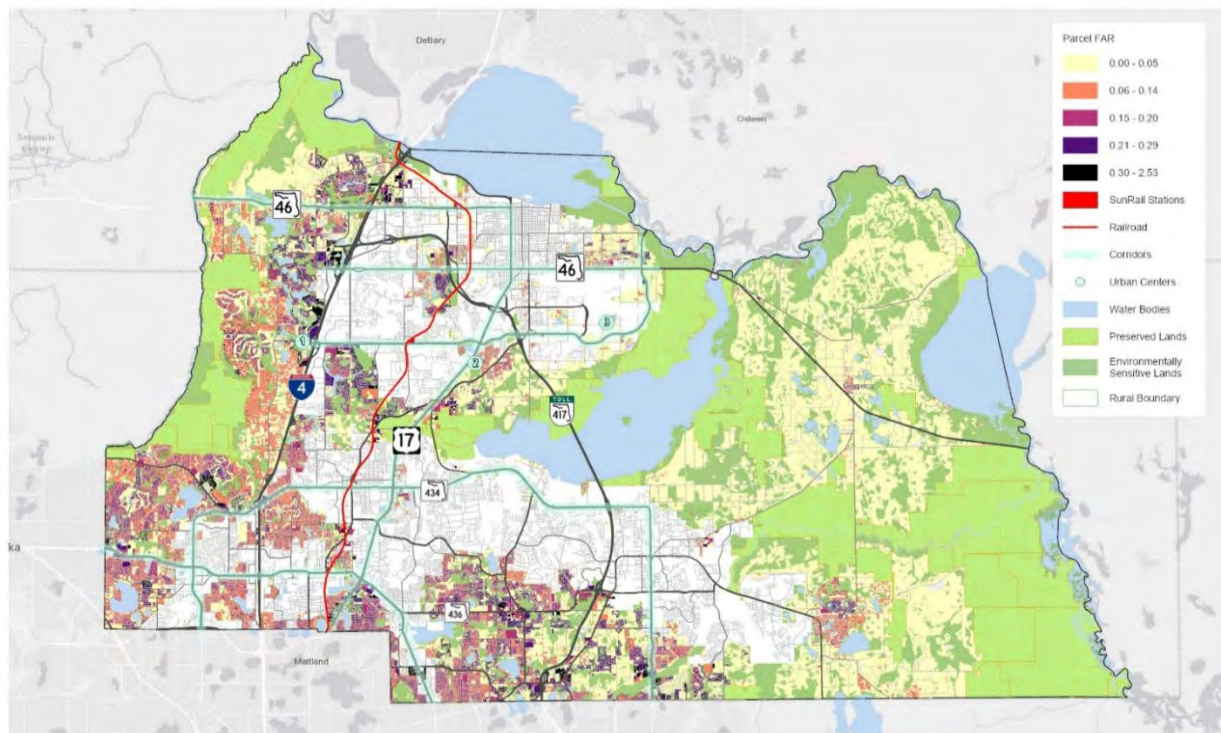
The high-density areas (an FAR greater than 0.3) are comprised primarily of the following FLU designations:

- 34% MDR
- 26% LDR
- 14% MXD
- 12% COM

Upon review of the FLU Element of the Comprehensive Plan, it has been determined that the goals, objectives, and policies are not sufficiently developed to achieve promotion of LID practices within the FLU designations primarily found in areas where LID could potentially have the greatest impact. The Comprehensive Plan's language emphasizes accessibility to transit corridors and services for higher intensity uses, but does not provide specific measures with LID intent, with exception for Policy FLU 5.15(c)2 *Mixed-Use Developments*, *Densities and Intensities in General*, summarized below:

Mixed Use (MXD)

MXD offers an FAR bonus of 0.20 for non-residential uses that meet the requirements for certification outlined in LEED-NC v2.2 or Core & Shell v2.0 or Commercial Interiors v2.0, or FGBC Green Standard v5.0, Green Commercial Building Standard v1.0, or Green Hi-Rise Residential building v1.0. These certifications include credits for various LID implementations, however version requirements should be reviewed and updated.

Where within the County do septic and private discharge systems have the potential to impact natural resources?

The *Lake Jesup and Middle St. Johns River Septic Tank Remediation Plan And Wastewater Treatment Feasibility Analysis* (2021) / *Wekiva Priority Focus Area Septic Tank Remediation Plan And Wastewater Treatment Feasibility Analysis* (2020) identified a number of properties containing Onsite Sewage Treatment and Disposal Systems (OSTDS) with considerable potential to negatively impact natural resources within Seminole County. These properties have been identified and ranked according to their potential environmental impact within impaired basins. Factors included in priority scoring and, ultimately, ranking include:

Table 4: Multipliers for OSTDS Grouping Priority Scoring

Criteria	Multiplier
Nitrogen and Phosphorus Load from OSTDS	2.00
Age of OSTDS	1.75
Proximity to Potable Water Wells	1.75
Proximity to Surface Water Bodies	1.75
Depth of Groundwater Level	1.50
Soil Conditions	1.50
Population Density of OSTDS Properties	1.00

Source: Table 2-4: Multipliers for OSTDS Grouping Priority Scoring, Lake Jesup and Middle St. Johns River Septic Tank Remediation Plan And Wastewater Treatment Feasibility Analysis, December 2021

These PFAs are shown in Figure 3, below.

Figure 3: Septic Tank Remediation Priority Focus Areas (PFA)
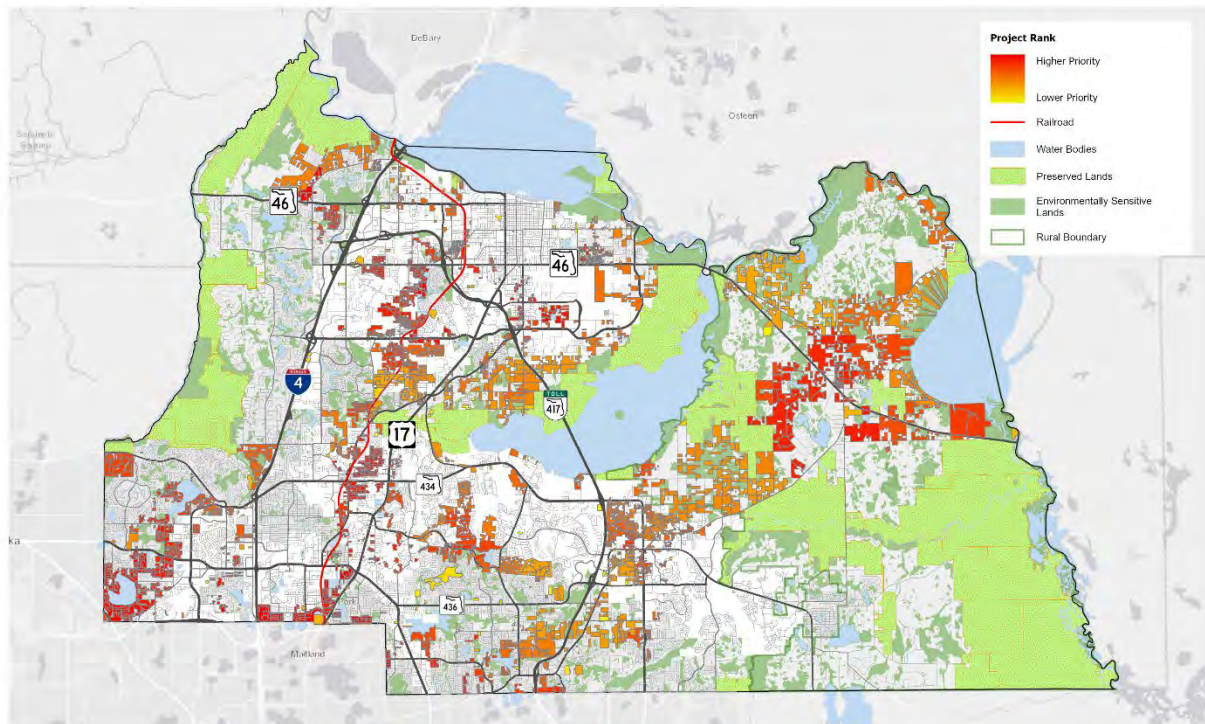
As shown in the map, a great number of higher priority OSTDS are located within close proximity of identified environmentally sensitive lands and preserved lands across the County. Areas of particular concern include the Black Bear Wilderness/Seminole State Forest/Wekiva River area in the northwest, the Lake Jesup Conservation Area, south and west of the Black Hammock Wilderness Area, and surrounding the Lake Proctor Wilderness Area and Lake Harney/St. Johns River (northeast portion of Seminole County).

Analysis Memo 3.8: Economic Development

Analysis Scope

Review existing available analyses, as identified by the County, concerning the economic base of the County and surrounding region. Evaluate the findings of these existing analyses and confirm and/or identify current business and economic conditions and future trends that could impact the plan.

Identify, summarize, and comment on key local and external factors driving County economic changes. This may include, but not be limited to, the restructuring of the area's major established industries, new global business realities impacting the County's industry competitiveness, broader regional competition for economic development opportunities, the role of tourism, entrepreneurship, innovation, and technology in stimulating local economic growth, and other key factors and trends.

Related Comprehensive Plan Issues and Concerns

- **Issue FLU 3:** Protection of HIP and HIP-TI Areas
- **Issue FLU 6:** Infill development, redevelopment, neighborhood protection/reversal of decline and blight
- **Issue FLU 10:** Trends in Comprehensive Planning

Analysis Approach

Growth Analysis

Utilizing historical data sets provided by the county in addition to new data collected from industry standard sources (CoStar, ESRI, BEA, Census), identify and analyze growth trends by major business and industry sector, employment, and labor market dynamics.

Seminole County experienced job growth of 17.3% between 2008 and 2019, which amounts to the addition of roughly 31,500 jobs over the 11-year period. The largest job gains during this period were in the Professional, Scientific, and Technical Services Sector and the Health Care and Social Assistance Sector, which added 6,875 jobs and 5,076 jobs, respectively. The HIP-TR and HIP-TI areas combined experienced an 84.1% increase in jobs, which accounts for approximately 7% of total job growth within Seminole County during the same 11-year period. While the HIP-TR area added 721 jobs which is an increase of 423.9%, the HIP-TI area added 1,351 jobs which is an increase of 58.9% from 2008-2019. The largest job gains in the HIP-TR area during this period were in the Accommodation and Food Services Sector and Retail Trade Sector, which added 259 jobs and 205 jobs, respectively. The largest job gains within the HIP-TI area during this period were in the Finance and Insurance Sector and Accommodation and Food Services Sector, which added 763 jobs and 347 jobs, respectively.
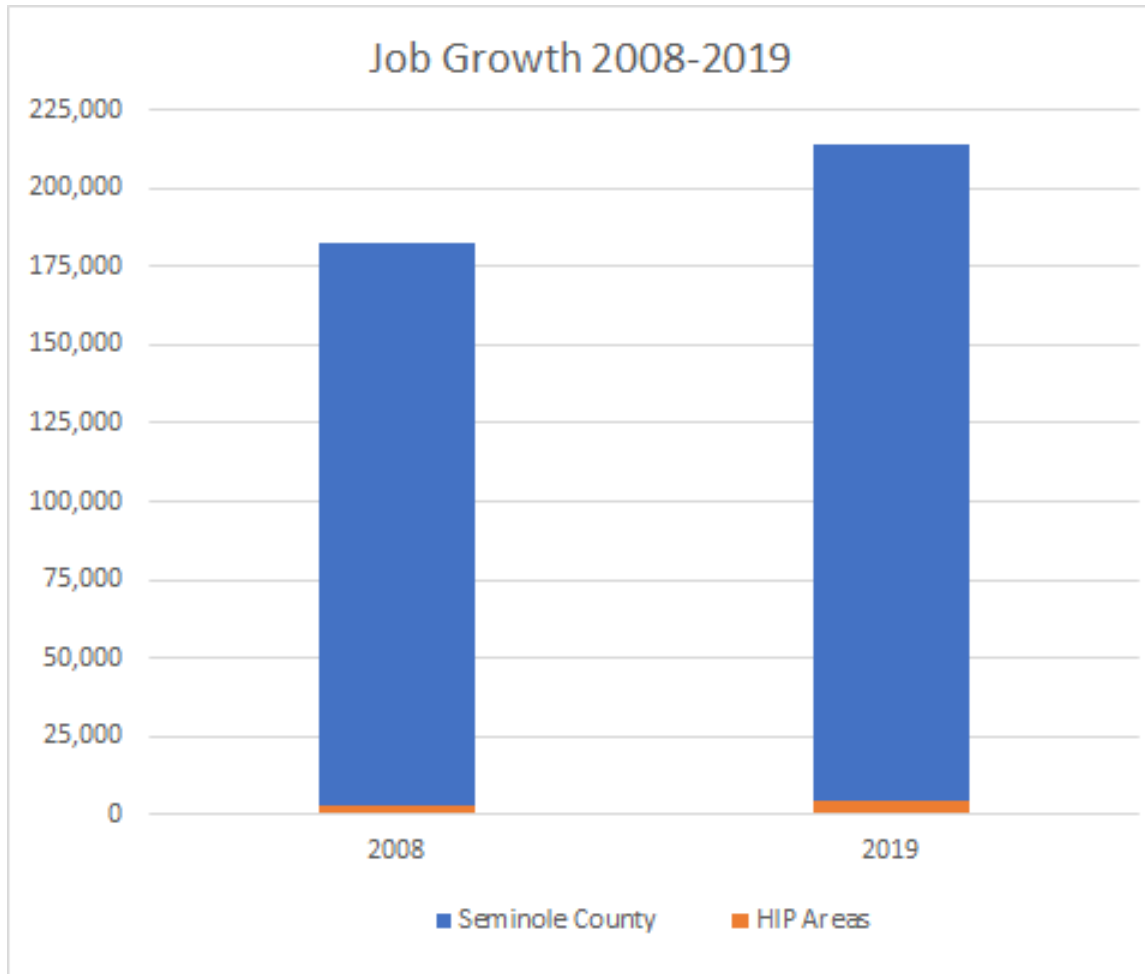
Seminole County has identified eight industries to target for economic growth within the county, these include Manufacturing, Advanced Technologies, Technical and Research Services, Life Sciences, Distribution, Digital Media, and Financial and Information Services. Each targeted industry encompasses a broad range of business types which evolve and change over time due to economic and market influences as well as technological advancements.

Job growth within the target industries as identified is measured by job growth within their respective North American Industry Classification System (NAICS) Code. The eight target industries largely fall within one or more of the following eight NAICS Industry Sectors:

- Manufacturing,
- Wholesale Trade,
- Transportation and Warehousing,
- Information,
- Finance and Insurance,
- Professional, Scientific, and Technical Services,
- Management of Companies and Enterprises,
- Health Care and Social Assistance.

Jobs in Seminole County within the respective NAICS Industry Sectors increased by 25.8% between 2008 and 2019 which amounts to 17,737 jobs in the County's target industries. Job growth within the County's target industries represented 56.2% of all job growth within the County during the 11-year period. While job gains were observed across the majority of the respective NAICS Industry Sectors, the Manufacturing, Wholesale Trade, and Information NAICS Industry Sectors experienced a decline of 14.6%, 19.0%, and 14.4%, respectively. Overall, from 2008 to 2019, Seminole County lost roughly 4,300 jobs but gained over 22,000 new jobs within target industries.

Figure 2: 2008 to 2019 Seminole County Target Industry Job Growth
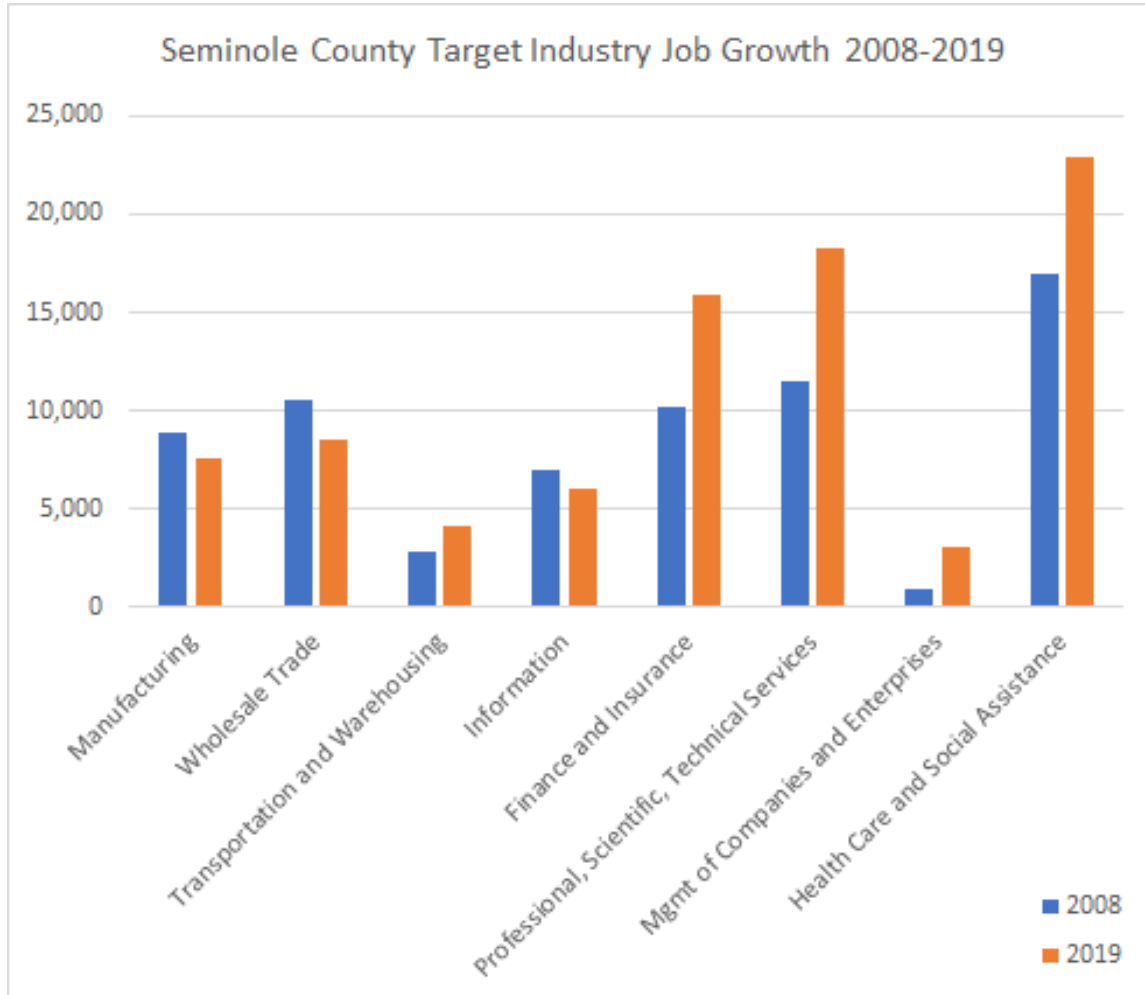
Target industry jobs within the HIP Areas (HIP-TR and HIP-TI combined) grew by 85.9% from 2008 to 2019, this amounts to the addition of 760 target industry jobs and represents 36.7% of all job growth within the HIP Areas. While job gains were observed across the majority of the respective NAICS Industry Sectors, the Manufacturing, Information, and Health Care and Social Assistance NAICS Industry Sectors experienced a decline of 37.6%, 95.2%, and 25.5%, respectively. Overall, from 2008 to 2019, the HIP Areas lost roughly 320 jobs but gained nearly 1,100 new jobs within target industries.

Figure 3: 2008 to 2019 HIP Areas Target Industry Job Growth

HIP Areas Target Industry Job Growth 2008-2019
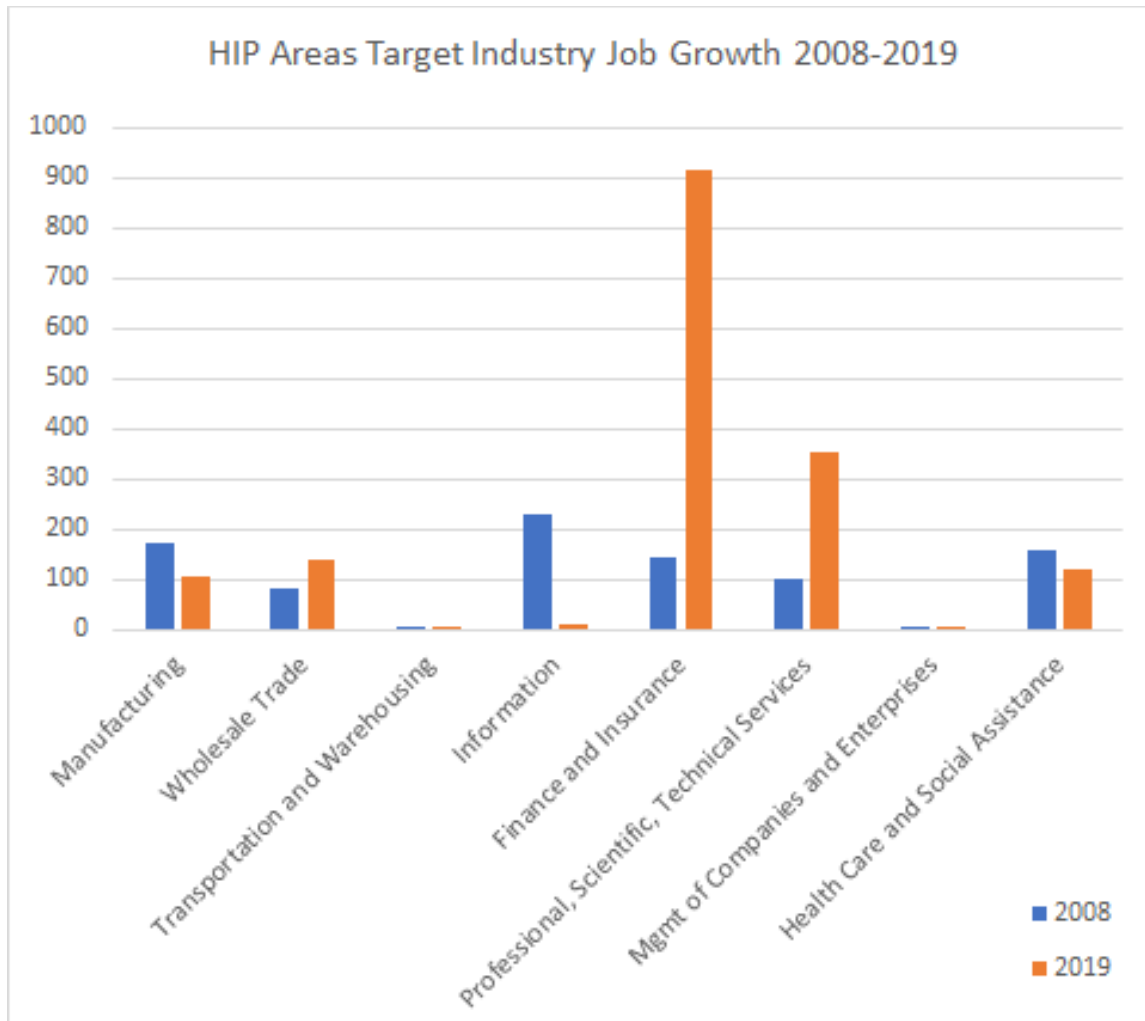
Market Assessment

Evaluate commercial and industrial market trends to identify any local, regional, or external conditions which may be impacting the County's industry competitiveness for economic development opportunities.

US Economic Outlook

The COVID-19 pandemic made 2020 a historic year for the U.S. economy, marking the worst economic downturn in employment and production since the Great Depression. In February 2020, the U.S. economy ended its longest period of expansion since 1945, a consequence of the global response to the COVID-19 pandemic. March 2020 marked the beginning of nationwide stay-at-home orders, following the declaration of a National Emergency, with many states shutting down nonessential businesses to thwart the spread of COVID-19. This resulted in a violent economic downturn, ending 128 months of economic expansion—the longest in U.S. history.

The broadest measure of the U.S. economy, gross domestic product (GDP), expanded 5.7% in 2021. It was the strongest calendar-year growth since a 7.2% surge in 1984 after a previous recession. Growth in 2021 was driven up by a 7.9% surge in consumer spending and a 9.5% increase in private investment. A few factors representing a drag on US economic growth include impacts of major disruption in global trade – which are expected to continue; slow productivity growth; constraints on fiscal spending and stimulus; and rising income inequity – which continues to pose a significant challenge on consumers' perceptions of economic security. Continued growth in technology is expected to provide a boost in productivity and allow the short-term accumulation of national debt burden to be addressed with sound financial and economic policies. The economic response to this recession has aided in the acceleration of several market trends that existed pre-pandemic, many of which are expected to contribute to stronger productivity gains (e.g., logistics and transportation, online retail, remote workforce). Despite the pandemic's impact on US economic growth thus far, the US economy is fundamentally sound and is expected to continue to grow and build on the most recent, longest economic expansion.

Focusing on Florida

Consistent with the balance of the US, the Florida economy lost significant momentum in economic growth beginning in February 2020, falling into recession in March 2020. However, the Florida economy gained momentum at the end of 2020 with the addition of 16,800 jobs in December 2020, countering the downward trend for the US as a whole, which saw a net loss of 227,000 jobs for the same month. Florida's unemployment rate for December 2021 fell to 4.4 percent, slightly higher than the national average of 3.9 percent for the same period. Florida lost 1,269,200 jobs from February to April 2020, and has since regained 85% of jobs lost (+1,077,000 jobs). The December 2021 labor force statistics and the total nonagricultural employment are rapidly approaching pre-pandemic levels of February 2020.

The housing market in Florida has continued to experience growth, with Single Family sales up 12.9% from December 2020 to December 2021, and median sale prices up 20% for the same time period. Similarly, condominium market sales are up 34.2%, and median sale prices are up 17.2% year-over-year from December 2020. These are all indicators of robust demand and tight market conditions.

Of all states in the US, Florida is expected to fare better in the recovery over the long-term as a result of strong population and employment growth that is expected to continue beyond 2021. Florida's natural resources, strong employment opportunities, and low tax structure will continue to draw a larger

portion of domestic households looking to relocate for a variety of reasons. All of which are expected to benefit economic growth prospects for the future.

Industry Trend Impacts

In 2020, the US Retail Industry had approximately $5.6 trillion in total retail sales, an increase of 2.8% from 2019. While some retail sectors experienced operating declines, home improvement, discount retailers, and supermarkets performed reasonably well with most declines happening in discretionary sectors such as specialty retail, department stores and apparel and footwear. The volume of internet-based retail sales has grown significantly over the past two decades and surged in 2020 as consumers shifted towards online purchases in the wake of the COVID-19 pandemic. Total e-commerce retail sales have increased from approximately $27 billion, accounting for less than 1% of total US retail sales in 2000, to nearly $760 billion in 2020, representing roughly 13.6% of total US retail sales. The trend towards growing on-line sales pushed e-commerce to over $870 billion in 2021, a nearly 15% increase over 2020. In 2021 e-commerce retail sales represented roughly 13.2% of total retail sales, which is an increase over 2019, but is the first occurrence of an annualized year-over-year decline in e-commerce sales as a percentage of total retail sales. The shift from traditional retailing to the acceptance and demand for on-line options has significantly changed how retailers interact with customers as well as changing the retail landscape by creating companies solely focused on delivering e-commerce retail sales. This market shift and the possibility that e-commerce could eclipse more than 50% of total retail sales volumes over the next 20 years given current growth trends, makes this topic important in the context of future retail growth, as well as distribution logistics.

The tumultuous COVID-19-related events of the past two years have led to supply chain disruptions across nearly every industry. One notable consequence of these disruptions is the semiconductor shortage. This shortage has led to bottlenecks for many sectors, including automobiles, tech products, and home appliances. In recent months, bottlenecks have made it difficult for input suppliers to keep up with strong demand, contributing to a sharp rise in intermediate goods prices, including lumber and some metals. Indeed, the producer price index of intermediate goods started rising immediately after the 2020 recessionary period and increased over 21% year-over-year in September 2021. On the other hand, prices of semiconductors and other electronic components have remained relatively stable. This contrasting price response is intriguing. It is possible that long-term contractual relationships between producers of some final goods and their suppliers of chips may have helped mitigate fluctuations in the overall semiconductor price index. It seems that the recent scarcity of semiconductors has not been reflected in prices. There is evident excess demand and, thus, rationing.

Another notable occurrence with far reaching effects on various industries throughout the country is that some commodities have seen significant price fluctuations during the COVID-19 pandemic. One that has had reverberating effects is softwood lumber. Data on its retail price is not the primary concern, that is the price that the producer gets: the Producer Price Index. While prices stayed within a narrow band for years, it has suddenly spiked and plummeted in unprecedented ways since the middle of 2020. These price fluctuations have been unusual because even when the price was high, the fluctuations were proportionally very large.

Analysis Questions

Are existing HIP and HIP-TI Areas appropriately located to attract target industries generating higher paying jobs?

Emerging from Comprehensive Plan amendments in the late 1980s and 90s, the High Intensity Planned Development (HIP) land uses intend to attract employment and housing to designated areas of the County. Outside the HIP-TI area, a significant portion of HIP lands are unchanged since its inception. This section considers the features that support or undermine the potential for attracting housing and employment to HIP designated areas.

Location strengths and weaknesses of Higher Intensity Planned Development Target Industry (HIP-TI)

The HIP-TI area (Figure 4, below) is distributed across three clusters: 1) west of Interstate 4 at the junction of SR-417, 2) along Monroe Road between US 17 and the railway and 3) loosely scattered around south of the Sanford Sunrail station.

Figure 4: HIP-TI FLU Areas
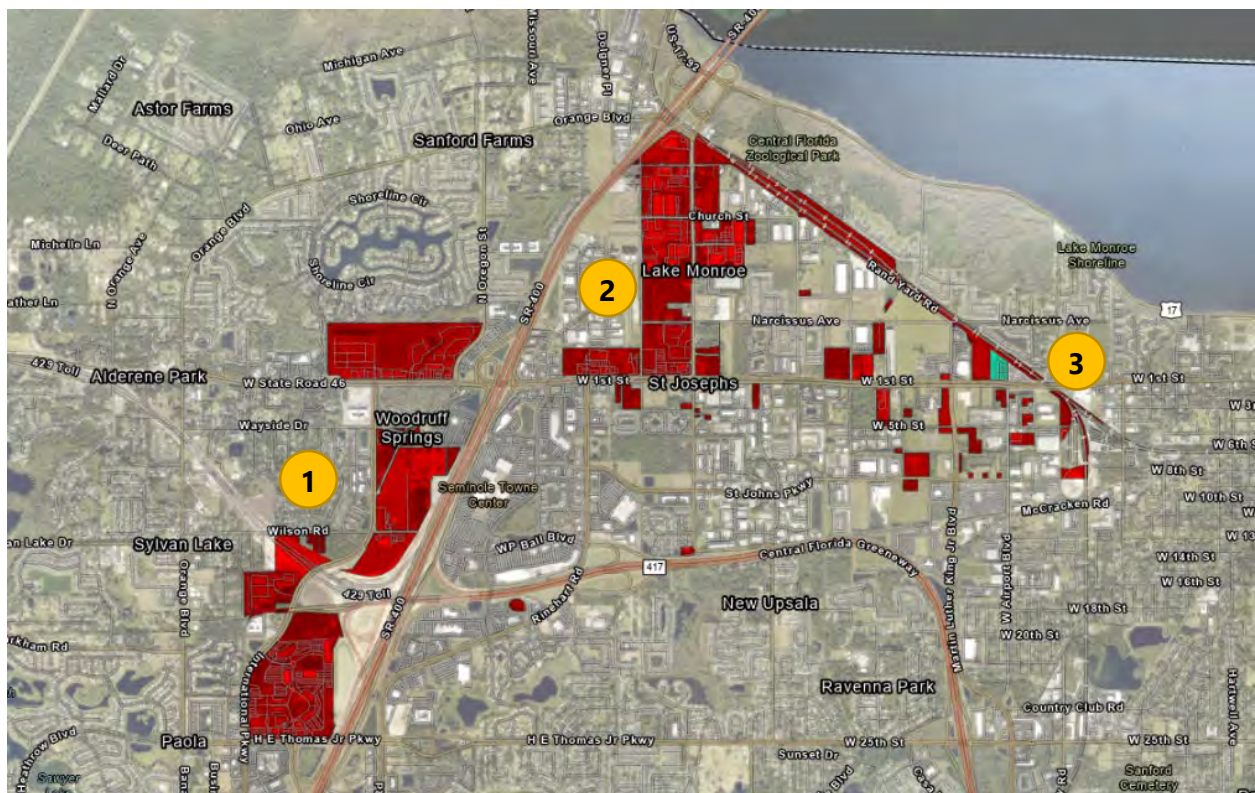
Of the HIP areas, the HIP-TI area is the only that exhibits significant development. What was predominantly agricultural use is now a combination of multifamily residential, warehousing, office, and retail use.

Clusters 1 and 2 are not located near an anchor institution, such as a major medical facility or university, which likely precludes any life science or advanced technology employers from locating within these

areas. Easy access to I-4 make clusters 1 and 2 candidates for large-footprint manufacturing, distribution, and various office uses, as outlined in FLU Exhibit-40, *Target Industry Uses*.

Cluster 3 is generally located within a 5-minute drive of a major medical institution, HCA Lake Monroe Hospital, as well as connected by transit bus route. However, this distance and lack of multimodal connectivity, significantly diminishes the potential for "spillover" effects from the hospital, limiting the likelihood of high-value, research-oriented industries, such as applied sciences, to locate in this cluster. Cluster 3 does include a Sanford Sunrail station which could expand the potential market area for workers however walkability data indicates that this cluster is not walkable or bikeable, dampening the potential for transit commuters.

Location strengths and weaknesses of Higher Intensity Planned Development Airport (HIP-AP)

The HIP-AP area (Figure 2, below) is distributed across two clusters along Lake Mary Boulevard, 1) east and 2) south of the Orlando Sanford International Airport. Both Clusters are approximately a 10-minute drive to SR-417, 15-minute drive to I-4, and 30-minute drive to I-95, each are links within Florida's Strategic Intermodal System. East Lake Mary Blvd is designated as a Florida Strategic Intermodal System (SIS) connector.

Figure 5: HIP-AP FLU Areas
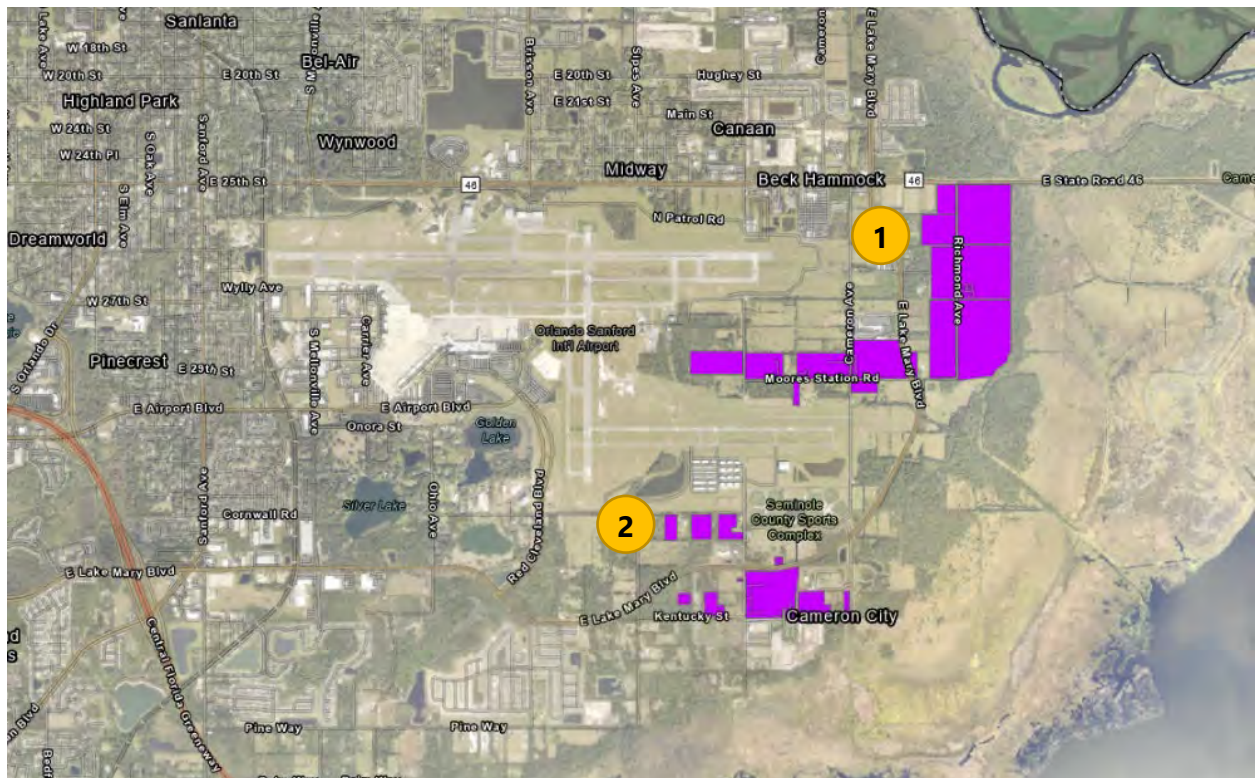
Both clusters benefit from proximity to the airport, potentially attracting large footprint manufacturing and distribution uses. Airport access can support industries that demand travel, such as Hotels and Lodging as well as Sports Associated Industries. The Seminole County Sports Complex may serve as an anchor for such industries as regional, state, or even national sports events will demand air travel.

Without a major university, hospital, or employer in this area, advanced technology and life science industries are not likely to locate in HIP-AP areas.

Location strengths and weaknesses of Higher Intensity Planned Development Transitional (HIP-TR)

The HIP-TI area (Figure 6, below) is distributed across three clusters: 1) west of SR-417 at Red Bug Lake Road, 2) proximate to SR-417 and SR-426, and 3) along the south county line proximate to Alafaya Trail.

Figure 6: HIP-TR FLU Areas
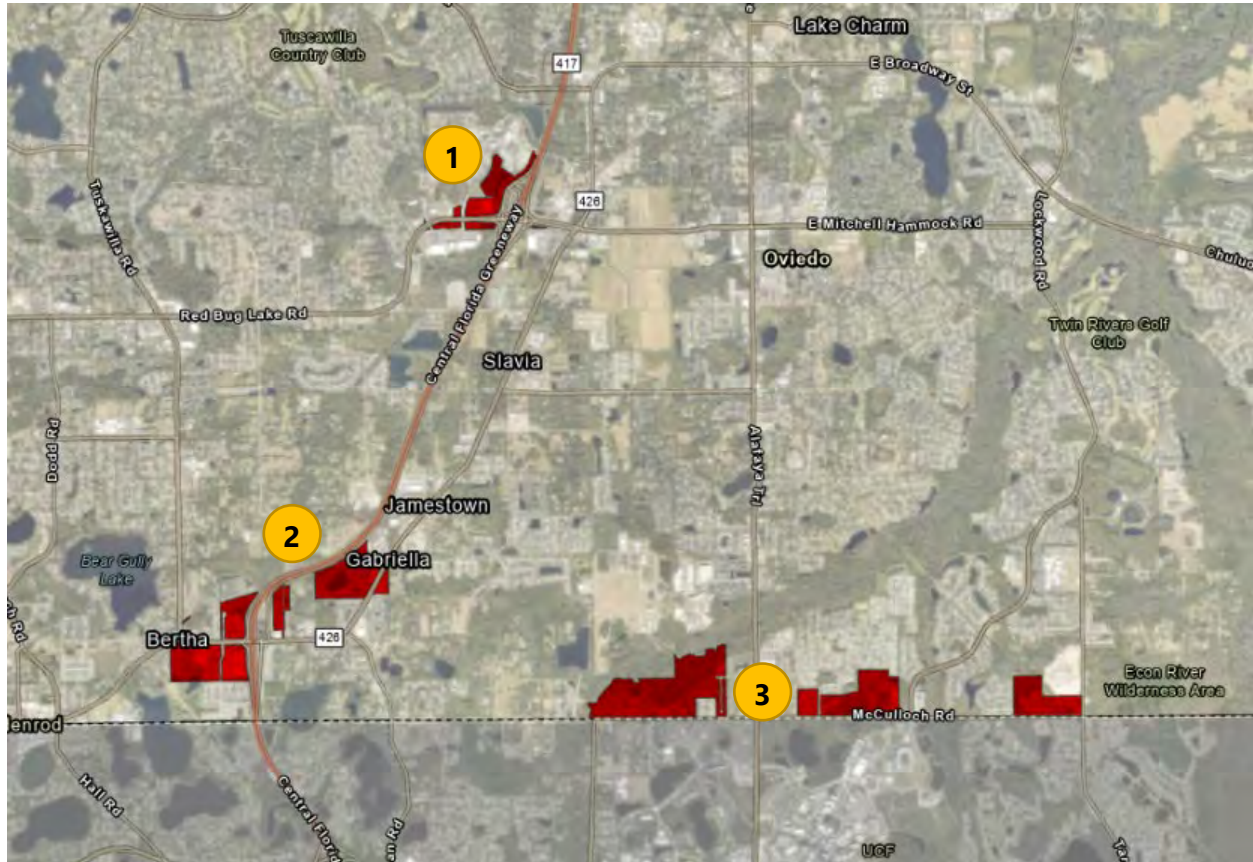
Clusters 1 and 2 benefit from proximity to a major highway, SR-417, offering potential to target various office uses. The relatively small size of these clusters likely precludes large footprint manufacturing and distribution from location here.

Cluster 3 is within a 5 to 10-minute drive of an anchor institution, University of Central Florida, increasing the potential for applied research and advanced technology firms to locate within this area. However, limited transit accessibility, walkability, and bikeability dampens the potential for an emergent "innovation district."

Are there any existing neighborhoods that would benefit from revitalization?

Numerous neighborhoods throughout Seminole County have evolved without adequate access to neighborhood amenities including parks, grocery stores, and transit stations. Neighborhoods that lack such amenities are generally less desirable despite their demand for housing.

Figure 7: Land Values & Areas of Reinvestment Need
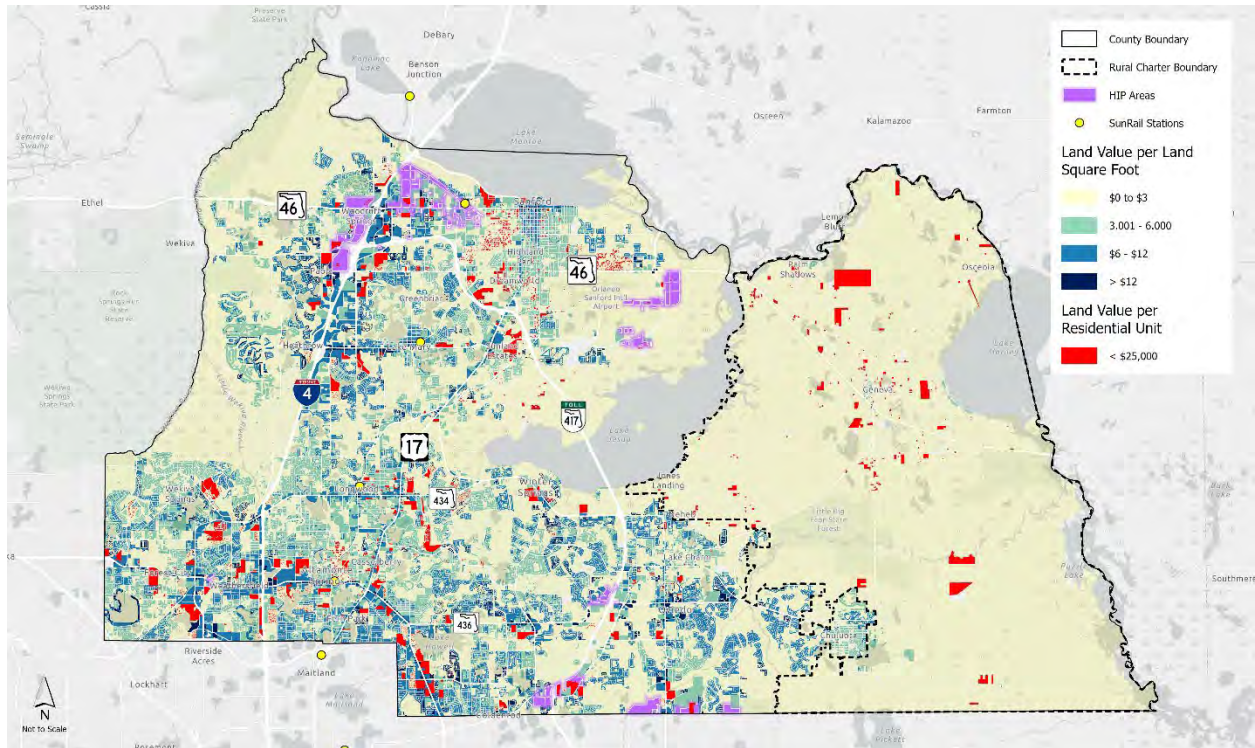
Areas that are shown in blue are lands in high demand, typically in proximity to population and transportation centers. However, to investigate desirability, parcels highlighted as red represent low *land values per residential unit*. These parcels *may* indicate lower neighborhood desirability relative to the number of units they support. These neighborhoods would benefit from private/public investment in neighborhood amenities mentioned above. Additional benefits to broader economic development goals of the County could be realized through revitalization of neighborhoods specifically located near HIP districts. These areas include west Downtown Sanford, north Altamonte Springs, west Forest City, and parts of Geneva. For firms looking to locate in Seminole County, proximity to mixed-use neighborhoods with multimodal connectivity and access to quality-of-life amenities, such as parks, is a priority.

What type of economic development initiatives are needed to create and foster targeted industry areas?

After review and analysis of the targeted industry areas in Seminole County, including review of the 2017 Evaluation of the HIP-TI FLU by Renaissance Planning, certain economic development initiatives stand out as having the potential to bolster the success of the HIP areas:

Link anchor institutions. Anchor institutions, such a research universities, research-oriented medical hospitals, and businesses with extensive R&D, are vital assets for growing target industry areas. Large and consistent streams of funding/revenue help sustain anchor institutions and their research orientation have "spillover" effects to surrounding areas. However, the propensity of this effect is determined by physical and social factors that enable people to connect with each other. Seminole

County can help expand the influence of these anchor institutions by investing "connecting" elements such as bike paths, sidewalks, pedestrian-oriented streets, and activated public space that help expand an anchor institutions' area of influence to surrounding neighborhoods. Premium transit investments, such as Bus Rapid Transit, can go a long way to connect anchor institutions from a regional perspective.

Expand HIP designations to more lands and close gaps to create contiguous HIP Districts. Today, the HIP areas are fragmented and scattered, limiting their viability to support a diverse mix of employment and housing development, and limited the potential impact of public investment and economic development initiatives. Designating broader swaths of land as HIP and closing gaps to create contiguous districts, will enable greater flexibility for land development to accommodate a range of uses that support target industry uses. This Moreover, this effort can help each HIP district, and their subdistricts establish a coherent "brand" that communicates more clearly to perspective firms looking to locate in these areas.

Neighborhood revitalization. Strong neighborhoods support strong HIP areas. Neighborhoods not only offer workforce, but also the amenities that support target industry attraction such as cafes and restaurants, grocery stores, parks, and other placemaking elements.

Invest in multi-modal mobility. Address first- and last-mile connection needs to link HIP areas to transit nodes and alternative transportation corridors (e.g. multi-use trail network, sidewalk connections, safe intersections etc.)

Density/Intensity Bonuses. Explore the creation of various incentive strategies to increase density and/or intensity within HIP areas. Incentive strategies should be substantial enough to create distinct advantages to development within HIP areas when compared to nearby incorporated and County lands.

Analysis Memo 3.9: Future Land Use Map

Analysis Scope

Based on previous analyses, GAI will provide an analysis and recommendation for the appropriate mix of future land use designations to support the economic needs of the County. This analysis will include a recommendation for the appropriate amount and location of future land use designations to provide the needed tax base to support population growth and create jobs. Special emphasis will be placed on key focus areas including, but not limited to, the Orange Boulevard Corridor, US 17/92 Corridor, SR 417 Corridor, Old Lockwood Road Corridor, and Rural Enclaves.

Analysis Questions

What is the current spatial distribution of the Seminole County and municipal FLU designations?

To evaluate FLU on a County-wide scale, the varying FLU designations from each municipality and Seminole County unincorporated lands were combined using a crosswalk approach to create a single list of FLU designations. Seminole County's existing FLU designations acted as the framework to categorize each municipality's FLU designations. First, the Seminole County FLU designations were slightly simplified to minimize convoluted conversions of municipal designations. Then, the FLU codes from each city were assigned the County FLU code deemed most appropriate based on the respective municipality's Comprehensive Plan Future Land Use Element descriptions. The resulting categorization is detailed in *Table 1*, below.

Table 1: FLU Crosswalk Matrix

COM – Commercial	
Seminole County	COM
Altamonte Springs	—
Casselberry	COMM LINR HINR
Lake Mary	COM RCOM
Longwood	—
Oviedo	CM
Sanford	GC NC
Winter Springs	Commercial
HDR – High Density Residential	
Seminole County	HDR
Altamonte Springs	—
Casselberry	HDR
Lake Mary	—
Longwood	—
Oviedo	HDR
Sanford	HDR
Winter Springs	High Density Residential
HIP – Higher Intensity Planned Development	
Seminole County	HIPAP HIPTI HIPTR
Altamonte Springs	RBC RBC - Core West RBC - Core East
Casselberry	—
Lake Mary	HIPTI
Longwood	—
Oviedo	HICM
Sanford	HI

Winter Springs	Greenway Interchange District
IND – Industrial	
Seminole County	IND
Altamonte Springs	IND
Casselberry	IND
Lake Mary	IND
Longwood	IND
Oviedo	IN
Sanford	I WIC
Winter Springs	Industrial
LDR – Low Density Residential	
Seminole County	LDR
Altamonte Springs	LDR
Casselberry	LDR
Lake Mary	LDR LMDR
Longwood	LDR
Oviedo	LDR LDR* LDR-T
Sanford	LDRMH LDRSF
Winter Springs	Low Density Residential
MDR – Medium Density Residential	
Seminole County	MDR
Altamonte Springs	MDR
Casselberry	MDR
Lake Mary	MDR
Longwood	MDR
Oviedo	MDR
Sanford	MDR10 MDR15
Winter Springs	Medium Density Residential

MXD – Mixed Development

Seminole County	MXD
Altamonte Springs	COM OFF/RES West Town Center East Town Center Gateway Center
Casselberry	MTMU
Lake Mary	DDD HTM MUMT MXD
Longwood	DTN HD IMU NCMU
Oviedo	DMU MU
Sanford	ROI WDBD
Winter Springs	Mixed Use Town Center District

OFF – Office

Seminole County	OFF
Altamonte Springs	—
Casselberry	—
Lake Mary	—
Longwood	—
Oviedo	OFF
Sanford	—
Winter Springs	—

PD – Planned Development

Seminole County	PD
Altamonte Springs	—
Casselberry	—
Lake Mary	—
Longwood	—
Oviedo	PUD
Sanford	—
Winter Springs	—

PML – Preserved/Managed Lands

Seminole County	PML
Altamonte Springs	CON
Casselberry	—
Lake Mary	—
Longwood	CON
Oviedo	C/CONS
Sanford	RP
Winter Springs	Conservation

PUB – Public/Quasi-public

Seminole County	PUBC PUBG PUBO PUBR PUBS PUBU
Altamonte Springs	IN
Casselberry	PUB
Lake Mary	PUB
Longwood	P/I
Oviedo	P
Sanford	PSP
Winter Springs	Public/Semi-Public

R – Rural

Seminole County	R3 R5 R10
Altamonte Springs	—
Casselberry	—
Lake Mary	—
Longwood	—
Oviedo	RL
Sanford	—
Winter Springs	—

REC – Recreation

Seminole County	REC
Altamonte Springs	—
Casselberry	REC
Lake Mary	REC
Longwood	—
Oviedo	—
Sanford	—
Winter Springs	Recreation

ROW – Right-of-Way

Seminole County	ROW
Altamonte Springs	—
Casselberry	—
Lake Mary	—
Longwood	—
Oviedo	—
Sanford	—
Winter Springs	ROW

SE – Suburban Estates

Seminole County	SE
Altamonte Springs	—
Casselberry	—
Lake Mary	RR
Longwood	—
Oviedo	—
Sanford	SE
Winter Springs	Rural Residential Split

The spatial distribution can be seen in *Figure 1*, below. Mapping the crosswalk of municipal and County FLU categories allows for identification of general County spatial FLU characteristics. Generally, the predominance of low-density residential FLU is immediately apparent. Additionally, the organization of non-residential designations (e.g. commercial, HIP, mixed-use, and planned development) along corridors is also evident.

Elsewhere, the progressively lower intensity FLU designations SE (Suburban Estates) and R (Rural 3/5/10) are found lining natural environmental assets which are largely identifiable as lands carrying FLU designations of PML (Preserved/Managed Lands), PUB (Public/Quasi-public), or REC (Recreation).

Figure 1: FLU Crosswalk Map
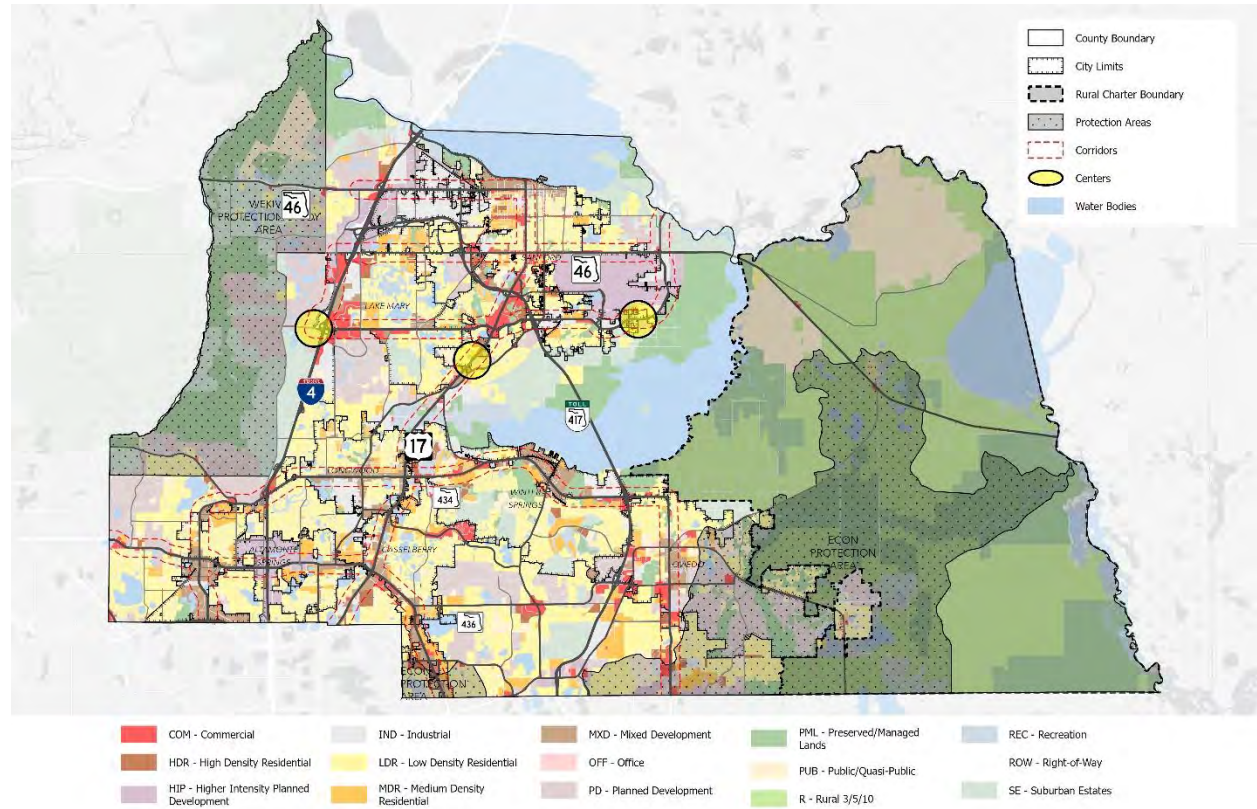
Figure 2 and *Table 2* below, detail the distribution of improved and vacant FLU acreage across the entire County; vacant and improved status is per FDOR land use codes (2021 Seminole County final tax roll).

Figure 2: FLU Acreage Distribution - County-wide
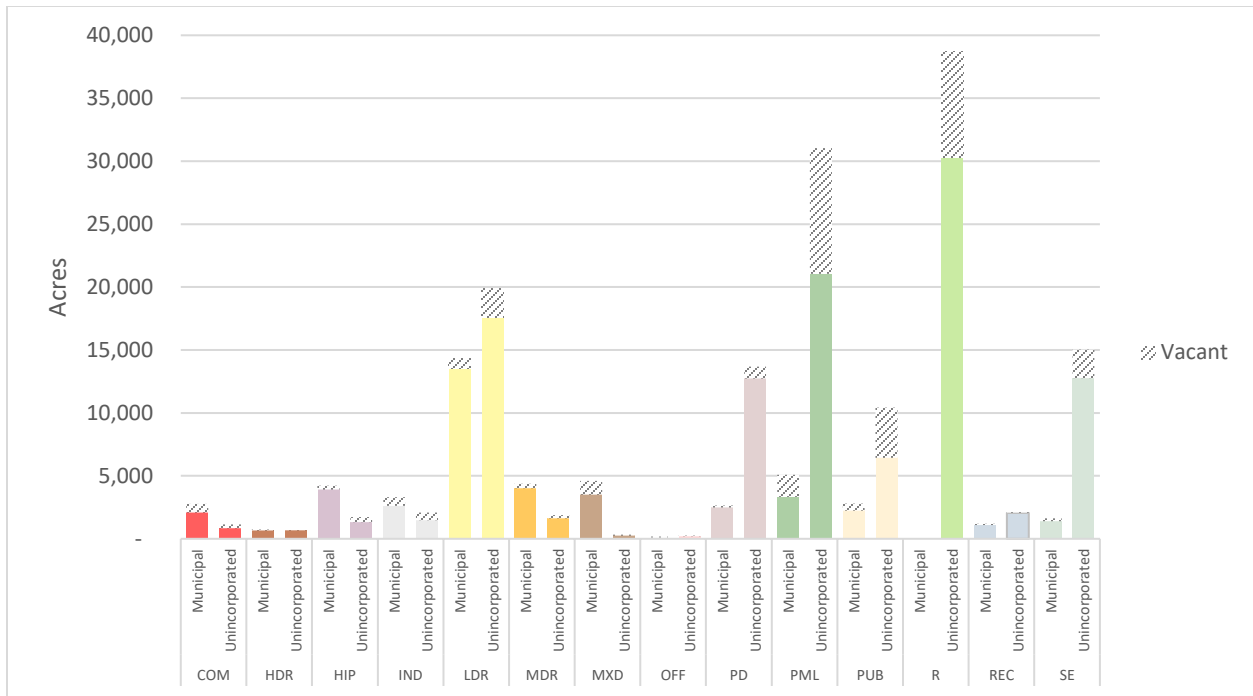
Table 2: FLU Acreage Distribution - County-wide

	Improved		Improved Total	Vacant		Vacant Total	Grand Total
Row Labels	Municipal	Unincorporated		Municipal	Unincorporated		
COM	2,079	843	2,922	705	308	1,013	3,935
HDR	660	664	1,325	88	35	123	1,448
HIP	3,924	1,311	5,235	291	417	708	5,943
IND	2,621	1,482	4,103	676	613	1,289	5,392
LDR	13,502	17,596	31,098	817	2,267	3,084	34,182
MDR	4,007	1,620	5,627	368	260	628	6,255
MXD	3,517	251	3,768	1,075	70	1,145	4,913
OFF	97	196	293	75	66	140	433
PD	2,502	12,728	15,230	137	945	1,082	16,313
PML	3,324	21,043	24,367	1,768	10,008	11,776	36,143
PUB	2,241	6,445	8,685	558	3,973	4,531	13,216
R	0	30,258	30,258	0	8,484	8,484	38,742
REC	1,084	2,050	3,134	110	60	169	3,303
SE	1,390	12,771	14,162	243	2,261	2,504	16,665
Grand Total	40,948	109,259	150,206	6,910	29,766	36,676	186,882

How does this distribution support (or otherwise influence) key Objectives of the Comprehensive Plan Future Land Use Element?

The County's Comprehensive Plan *Future Land Use Element* contains a number of Objectives across multiple disciplines, the overarching goals of which are sufficiently characterized by the Future Land Use Element text stating that the Objectives are directed towards achieving:

A. Protection and preservation of the environment, including water resources, air quality, regionally significant natural areas, open space and recreational areas;
B. Creation and support of diverse, globally competitive economic conditions favorable to higher wage jobs;
C. Provision of a range of obtainable housing opportunities and choices;
D. Provision of adequate services and facilities, including a variety of transportation choices;
E. Maintenance of established residential neighborhoods, revitalization of declining neighborhoods and creation of new energy-efficient communities with educational, health care and cultural amenities;
F. Protection of rural and agricultural areas; and
G. Protection of private property rights.

The current FLU map and its distribution of land use designations continues to evolve in pursuit of these overarching goals. As previously stated, while the predominance of homogenous low-density residential areas is quite evident within the County, gradual changes based on County and regional-level growth visioning efforts have resulted in clear emerging patterns of residential, industrial, and mixed-use designations of higher densities/intensities along and around primary roadway corridors, the SunRail stops, and strategic centers. In addition, however to varying degrees, the Rural Charter Area, and Wekiva and Econ Protection Areas continue to frame a central corridor of land that represents a primary – or preferred – development area within the County, illustrated below in *Figure 3*.

Figure 3: Seminole County Preferred Development Area
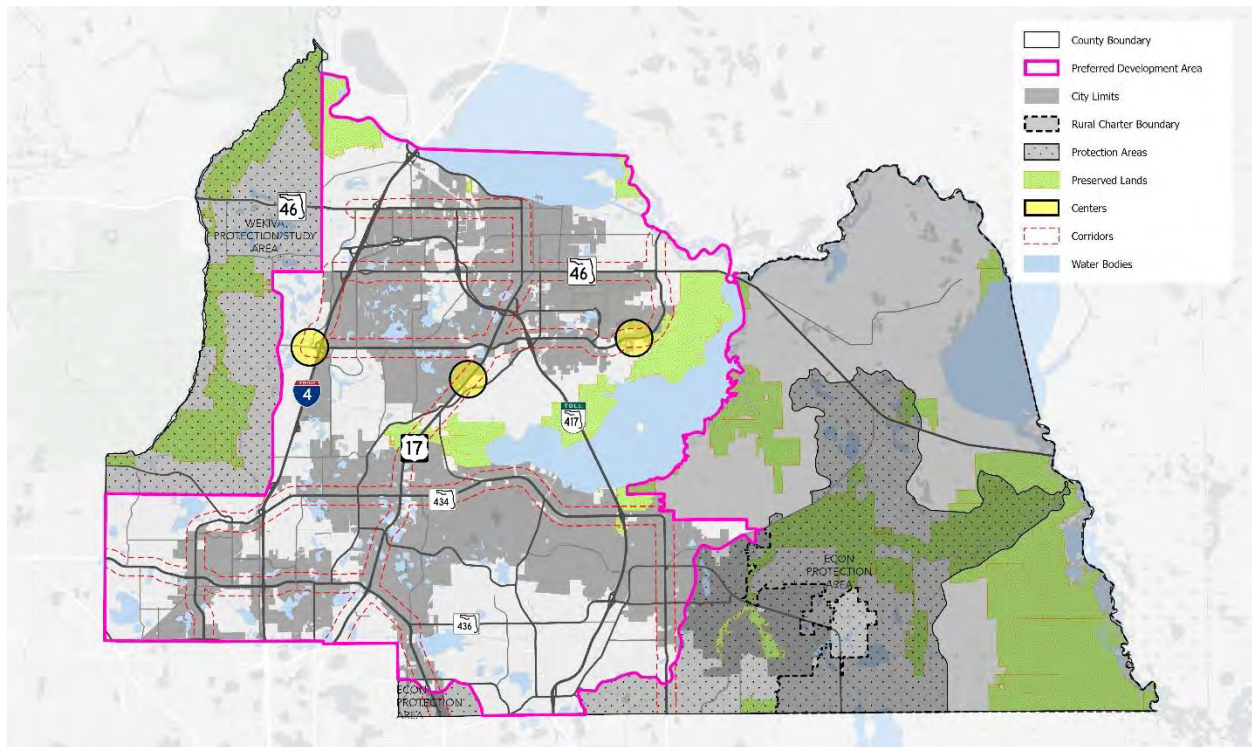
As the Rural Charter Area, and Wekiva and Econ Protection Areas exist in service to achieving primary environmental, conservation, and preservation goals of the County, the "Preferred" development area will be utilized to further evaluate the influence of the FLU map on its Objectives. *Figure 4*, below illustrates the spatial distribution of FLU designations within the Preferred Development Area; *Figure 5* and *Table 3*, following, detail the distribution of improved and vacant FLU acreage within the Preferred Development Area; vacant and improved status is per FDOR land use codes (2021 Seminole County final tax roll).
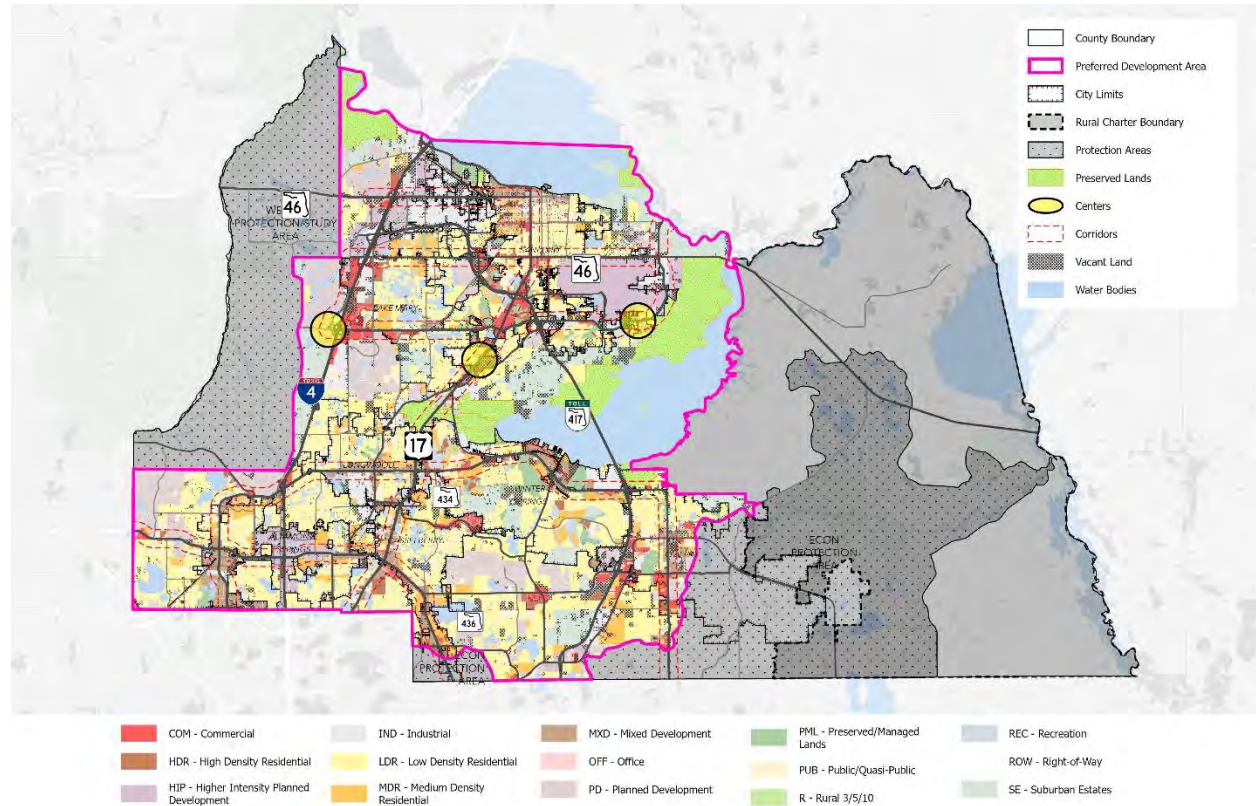
Figure 4: FLU Map: Preferred Development Area

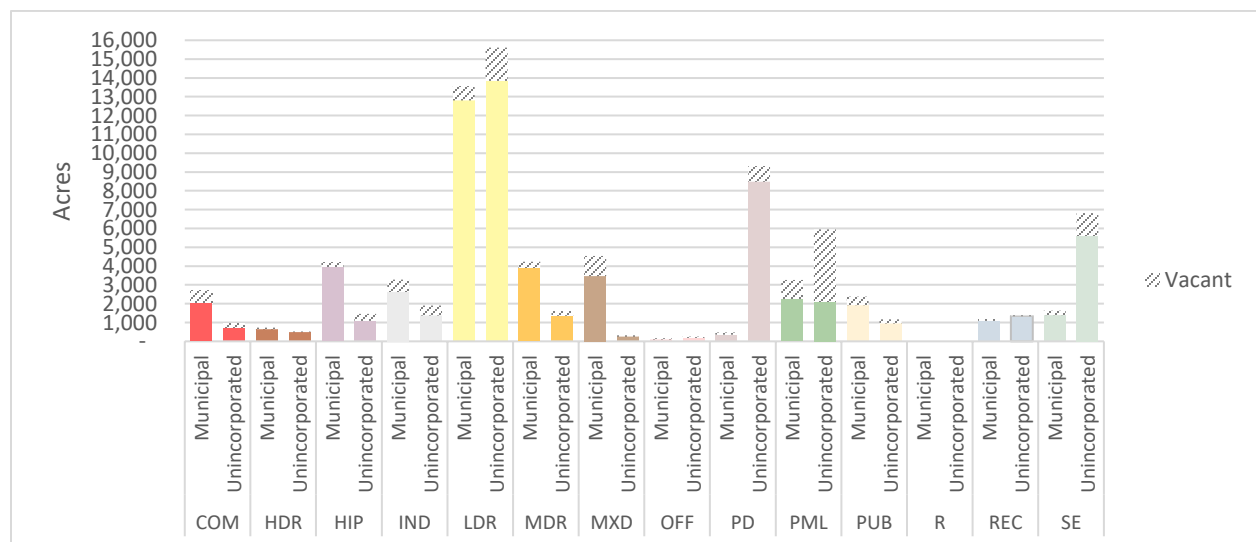*Figure 5: FLU Acreage Distribution - Preferred Development Area*

Table 3: FLU Acreage Distribution - Preferred Development Area

Row Labels	Improved Municipal	Improved Unincorporated	Improved Total	Vacant Municipal	Vacant Unincorporated	Vacant Total	Grand Total
COM	2,019	725	2,744	703	239	942	3,686
HDR	648	493	1,141	87	23	110	1,251
HIP	3,922	1,079	5,001	291	386	677	5,678
IND	2,611	1,372	3,983	675	531	1,205	5,188
LDR	12,805	13,842	26,647	771	1,774	2,545	29,192
MDR	3,872	1,364	5,236	363	250	613	5,849
MXD	3,470	251	3,721	1,074	70	1,144	4,865
OFF	95	180	275	72	65	138	413
PD	348	8,489	8,837	119	822	942	9,779
PML	2,232	2,083	4,315	1,022	3,863	4,885	9,200
PUB	1,919	955	2,874	466	215	682	3,556
R	0	14	14		2	2	16
REC	1,084	1,347	2,431	110	24	134	2,565
SE	1,390	5,583	6,972	243	1,229	1,472	8,444
Grand Total	**36,416**	**37,775**	**74,191**	**5,995**	**9,495**	**15,490**	**89,681**

Within this context, the predominance of low-density residential acreage persists in both improved and vacant lands. FLU designations such as MXD (Mixed Development), MDR (Medium Density Residential), and HDR (High Density Residential) which can absorb needed housing development at greater densities are not present in significant quantities of vacant unincorporated land.

Approximately 822 acres of vacant unincorporated land carries the PD (Planned Development) FLU designation, which has the potential to result in both residential and non-residential development at higher densities. Additionally, approximately 386 acres of vacant unincorporated land is designated with a HIP FLU, which has the potential to result in residential development of significantly higher densities, however utilization of HIP lands primarily for absorption of residential development would substantially reduce the availability of lands preferred for target industry development and higher wage job creation.

Table 4 and *Table 5*, below, detail gross and net building acreage within the Preferred Development Area within unincorporated and municipal lands (net acreage = total acreage less environmentally sensitive lands, "ESL").

Table 4: FLU Distribution – Net Buildable Unincorporated Acreage in Preferred Development Area

Row Labels	Improved Acreage Gross	ESL	Net Buildable	Vacant Acreage Gross	ESL	Net Buildable
COM	725	114	611	239	65	174
HDR	493	85	408	23	10	12
HIP	1,079	185	894	386	96	290
IND	1,372	216	1,156	531	159	372

	Gross	ESL	Net Buildable	Gross	ESL	Net Buildable
LDR	13,842	3,353	10,489	1,774	744	1,031
MDR	1,364	220	1,144	250	58	192
MXD	251	37	214	70	21	49
OFF	180	21	158	65	20	45
PD	8,489	2,346	6,143	822	305	517
PML	2,083	1,978	105	3,863	3,817	46
PUB	955	151	804	215	142	73
R	14	13	1	2	2	0
REC	1,347	958	390	24	19	6
SE	5,583	2,391	3,192	1,229	733	495
Grand Total	**37,775**	**12,068**	**25,707**	**9,495**	**6,193**	**3,302**

Table 5: Net Buildable Municipal Acreage in Preferred Development Area

	Improved Acreage			Vacant Acreage		
Row Labels	**Gross**	**ESL**	**Net Buildable**	**Gross**	**ESL**	**Net Buildable**
COM	2,019	216	1,803	703	180	523
HDR	648	115	534	87	6	81
HIP	3,922	231	3,691	291	42	249
IND	2,611	245	2,366	675	77	598
LDR	12,805	2,504	10,301	771	336	435
MDR	3,872	657	3,215	363	87	275
MXD	3,470	473	2,997	1,074	276	798
OFF	95	13	83	72	13	59
PD	348	47	301	119	50	69
PML	2,232	1,896	335	1,022	981	41
PUB	1,919	195	1,724	466	116	351
R	0	0	0	0	0	0
REC	1,084	467	617	110	76	34
SE	1,390	261	1,129	243	102	141
Grand Total	**36,416**	**7,320**	**29,096**	**5,995**	**2,342**	**3,654**

The net buildable vacant lands represent the subset of land most readily available for absorption of development intended to support the future housing and economic development needs of the County. As stated previously in Analysis Memos *3.1: Demographics* and *3.7: Environmental Stewardship*, approximately 45,000 additional dwelling units are needed to accommodate population growth projected through the year 2045 (TAZ-based population estimates, Seminole County).

Table 6, below, demonstrates theoretical residential development based on a range of estimated development densities within the maximum limits set by the Comprehensive Plan. The estimated densities are intended to provide more conservative estimates of resulting dwelling unit counts per FLU designation than assuming the maximum allowable density.

Table 6: Preferred Development Area - Theoretical Residential Capacity

	Description	Max Density (DU/AC)	Estimated Density (DU/AC)	Unincorporated			Municipal			Estimated Dwelling Units (County-wide)
				Net Vacant Acreage	Acreage Utilization for RES	Estimated Dwelling Units (Unincorporated)	Net Vacant Acreage	Acreage Utilization for RES	Estimated Dwelling Units (Municipal)	
PML	Preserved/ Managed Lands	0	-	46	-	0	41	-	0	0
PUB	Public/Quasi-Public	0	-	73	-	0	351	-	0	0
REC	Recreation	0	-	6	-	0	34	-	0	0
R	Rural 3/5/10	0.2	-	-	-	0	-	-	0	0
SE	Suburban Estates	1	1 to 1	495	100%	495 to 495	141	100%	141 to 141	636 to 636
LDR	Low Density Residential	4	3 to 4	1,031	100%	3093 to 4124	435	100%	1305 to 1740	4398 to 5864
MDR	Medium Density Residential	10	8 to 10	192	100%	1536 to 1920	275	100%	2200 to 2750	3736 to 4670
HDR	High Density Residential	20	16 to 20	12	100%	192 to 240	81	100%	1296 to 1620	1488 to 1860
PD	Planned Development	30	6 to 8	517	100%	3012 to 4136	69	100%	414 to 552	3516 to 4688
MXD	Mixed Development	30	24 to 30	49	50%	588 to 735	798	50%	9576 to 11970	10164 to 12705
COM	Commercial	0	-	174	-	0	523	-	0	0
OFF	Office	0	-	45	-	0	59	-	0	0
HIP	Higher Intensity Planned Development	50	40 to 50	290	49%	5684 to 7105	249	49%	4880 to 6101	10564 to 13206
IND	Industrial	0	-	372	-	0	598	-	0	0
	Grand Total			**3,302**		**14690 to 18755**	**3,654**		**19812 to 24874**	**34502 to 43629**

The scenario above reflects key objectives of the FLU Map goals by adhering to the following strategies:

- Preserving environmentally sensitive lands and natural resources by limiting residential development to available vacant net acreage within the Preferred Development Area;
- protecting rural character and suburban enclaves by maintaining densities in existing Suburban Estates lands and surrounding transitional FLU;
- and reserving well-positioned lands in support of economic development and higher wage job creation by allocating 49% of remaining vacant HIP lands (max allowable per Comprehensive Plan) and 50% of remaining vacant mixed-development lands to residential development.

This approach estimates a range of approximately 34-43,600 dwelling units at build-out of specified net vacant acres within the Preferred Development Area – at least approximately 60% of which will be multi-family (assuming roughly 50% of MDR and all of PD builds out with single-family units). Based on the urban service area average rate of development of 5.1 DU/AC (1991-2021), this reflects 10-13 of years of residential development.

Realization of the estimated additional 26-33,000 dwelling units over the 10-13 year period would narrowly support the projected TAZ data population estimates for the year 2035; the total unit count falls short of supporting the projected population estimates from 2035 to 2045, which would require a estimated 45,000 dwelling units, total. However, the estimates provided for development in cities could be considered conservative, especially in mixed-use lands, and the analysis does not factor in additional residential units within the Preferred Development Area that could be realized through redevelopment activities, specifically:

- Conversion of existing underutilized non-residential lands (COM and OFF) to residential use;
  - underutilized non-residential lands defined as COM and OFF lands where FAR utilization ratio is less than the median FAR utilization ratio of all improved unincorporated COM and OFF lands (0.50 and 0.72, respectively)
- Intensification of existing underutilized residential lands (MDR, HDR, and MXD), where underutilized residential lands are defined as MDR, HDR, or MXD lands where the improvement value is less than the land value (per FDOR 2021 Final Tax Roll database).

Table 7, below, provides estimates of the potential additional dwelling units that could result from these types of redevelopment activities within unincorporated lands in the Preferred Development Area. This analysis is a hypothetical scenario using available *land* to describe potential development activities. Factors such as land-assemblage, suitable parcel size, land-owner intent, etc. are not considered in this analysis.

Table 7: Potential Redevelopment Activities - Preferred Development Area

| Row Labels | Description | Max Density (DU/AC) | Estimated Density (DU/AC) | Unincorporated | | | | |
				Net Redevelopment Acreage	Acreage Utilization for RES	Estimated Dwelling Units	Existing Dwelling Units	Net Additional Dwelling Units
MDR	Medium Density Residential	10	8 to 10	137	100%	1096 to 1370	253	**843 to 1117**
HDR	High Density Residential	20	16 to 20	3	100%	48 to 60	1	**47 to 59**
MXD	Mixed Development	30	24 to 30	119	50%	1428 to 1785	11	**1417 to 1774**
COM to MXD	Commercial redeveloped as MXD	30	24 to 30	268	50%	3216 to 4020	189	**3027 to 3831**
OFF to MXD	Office redeveloped as MXD	30	24 to 30	119	50%	1428 to 1785	64	**1364 to 1721**
Grand Total				**646**		7216 to 9020	518	**6698 to 8502**

The hypothetical redevelopment activities detailed above are intended to lend a loose tangible figure for potential additional residential units that could be realized within unincorporate lands in the Preferred Development Area and, in turn, a conceptualization of activities that could be promoted through various amendments to the FLU Map in order to close the gap between the estimated number of dwelling units needed to support the full 2045 population estimate, and the dwelling unit capacity of the Preferred Development Area, as estimated in this analysis.

Table 8, below, details the remaining lands available for non-residential development. Utilizing Seminole County maximum floor area ratios (FAR) without bonuses, total maximum non-residential floor area capacity of vacant mixed development, commercial, office, HIP, and industrial lands after residential development is estimated at approximately 28.7 million SF (unincorporated) and 48.4 million SF (municipal) of development floor area.

Table 8: Preferred Development Area - Remaining Non-residential Capacity

Row Labels	Max Intensity (FAR)	Unincorporated			Municipal		
		Remaining Net Vacant Land (AC)	Remaining Net Vacant Land (SF)	Max Non-residential floor area (SF)	Remaining Net Vacant Land (AC)	Remaining Net Vacant Land (SF)	Max Non-residential floor area (SF)
PML	-	-	-	-	-	-	-
PUB	-	-	-	-	-	-	-
REC	-	-	-	-	-	-	-
R	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-
LDR	-	-	-	-	-	-	-
MDR	-	-	-	-	-	-	-
HDR	-	-	-	-	-	-	-
PD	-	-	-	-	-	-	-
MXD	0.60	24.50	1,067,220	640,332	399	17,380,440	10,428,264
COM	0.35	174.00	7,579,440	2,652,804	523	22,781,880	7,973,658
OFF	0.35	45.00	1,960,200	686,070	59	2,570,040	899,514
HIP	1.25	261.00	11,369,160	14,211,450	224	9,761,796	12,202,245
IND	0.65	372.00	16,204,320	10,532,808	598	26,048,880	16,931,772
Grand Total				28,723,464			48,435,453

Area-Specific Strategies to Increase Residential Development

The strategies presented herein are respectively associated with generalized geographies shown in *Figure 6*, below. These strategies are intended to provide conceptual guidance in the contemplation of amendments to the FLU map for the purpose of accommodating projected future population growth.

Targeted Density

Maximize density of residential development to preserve as much land as possible for supporting economic development and higher wage job creation.

Infill Intensification

Opportunity to intensify between Casselberry and Altamonte Springs while capitalizing on mobility provided by proximity to Altamonte Springs SunRail stop.

Gentle Infill Density

Opportunity for gentle increase in residential density; preserve neighborhood character while providing small increases in density. Examples include infill MDR (e.g. townhomes, etc.), ADUs, etc.

Figure 6: Targeted Strategy Areas