BREVARD COUNTY, FLORIDA 2040 POPULATION PROJECTIONS

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I Introduction

Brevard County is undergoing significant development pressures and requires a proactive approach to planning for future infrastructure to support existing and projected development. This report synthesizes information from a wide variety of data types and sources, including Brevard County's Comprehensive Plan and Future Land Use Map, building permit trends, infrastructure plans, projected school enrollment, demographics, and population estimates and projections. Using this information, this report generates new population projections for the unincorporated areas of the county based on the geographic distribution of growth toward the year 2040.

Long-term population projections are best estimates using past and current development trend information. Long-term projections are not intended to be an exact accounting of future population but are to be used as a general guide to long term planning. Long-term population projections are subject to significant change based on unforeseen changes to the factors that drive development. Changes to the local, state, or national economy or changes to environmental conditions can have a significant impact on the projected rate of growth. Due to the uncertainty of long-term population projections, it is important to regularly review and update the projections to reflect changes in the shaping influences on future development.

This report provides an overview of the data analyzed to support the development of population projections toward the year 2040. In addition, this report provides a recommendation for population projections to be used by the County for future planning efforts. This report is organized to provide the supporting data first and followed by the recommended 2040 population projections.

II Brevard Comprehensive Plan and Future Land Use

The Brevard County Comprehensive Plan and the Future Land Use Map were reviewed to identify allowed residential density. Residential density is important to consider when looking at growth, because it allows for the identification of where growth can occur based on an area's land use designation. There are 13 land use designations that allow residential development. These are as follows:

Residential Densities[1]

Residential Land Use

Residential 30 Directive	–	Max of 30 dwelling units per acre
Residential 15	–	Max of 15 dwelling units per acre
Residential 10	–	Max of 10 dwelling units per acre
Residential 6	–	Max of 6 dwelling units per acre
Residential 4	–	Max of 4 dwelling units per acre
Residential 2	–	Max of 2 dwelling units per acre
Residential 1	–	Max of 1 dwelling unit per acre
Residential 1:2.5	–	Max of 1 dwelling unit per 2.5 acres

Agricultural Land Use

Residential densities shall not exceed 1 dwelling unit per 5 acres.

Conservation Land Use

Public Conservation

Max residential density is 1 dwelling unit per 50 acres.

Private Conservation

Max residential density is 1 dwelling unit per 10 acres.

[1] Brevard County Comprehensive Plan, Adopted December 2011, Chapter 11, Future Land Use Element, p. XI-2 - XI-8 & XI-28 – XI -28

Neighborhood Commercial

Residential development is permissible in the Neighborhood Commercial land use designation at a density of up to one category higher than the closest residentially designated area on the Future Land Use Map (FLUM) which is on the same side of the street.

Community Commercial

Residential development is permissible in the Community Commercial land use designation at a density of up to one category higher than the closest residentially designated area on the Future Land Use Map (FLUM) which is on the same side of the street.

Developments of Regional Impact (DRI)[2]

Brevard County has two (2) DRIs that allow residential development, Great Outdoors and Viera. **Map 2.1** shows the location of the DRIs approved for residential development within Brevard County. See **Table 2.1.**

Great Outdoors

The Great Outdoors DRI has 2,000 residential units approved (1,000 cabins and 1,000 RV units). The Great Outdoors DRI is in northeast Brevard County, southeast of Titusville. According to the Future Land Use Map, approximately 1,263 acres are designated DRI 1 Development Regional Impact (Great Outdoors).

Viera

The Viera DRI has 29,945 residential units approved. The Viera DRI is in the Central Brevard County, between Rockledge and Palm Shores. According to the Future Land Use Map, approximately 19,938 acres are designated DRI 3 Development Regional Impact (Viera).

[2] Brevard County Comprehensive Plan, Adopted December 2011, Chapter 11, Future Land Use Element, p. XI-32 – XI-38

Mixed Use

Farmton Tract

The Farmton Tract consists of approximately 11,500 acres located in northeast Brevard County. **Map 2.1** shows the location of the Farmton Tract. The Comprehensive Plan establishes a long-range, sustainable plan for the Farmton Tract in northern Brevard County. The Comprehensive Plan requires the planning horizon to be consistent with the County's Comprehensive Plan horizon. The Comprehensive Plan also states that no increase in the number of residential units beyond what is allowed by the future land use plan is allowed. At least 75% of the total Farmton Local Plan must be maintained as Agriculture. The total buildable acres, exclusive of stormwater management facilities, is limited to 1,500 upland acres. However, the total FMU area is to not exceed 2,800 acres. Farmton is identified on the Future Land Use Map as Agriculture and Farmton Mixed Use Areas (FMU). Policies for the FMU district is provided in the Comprehensive Plan. The policies include a transfer of development rights program to transfer development densities from the agricultural areas to the mixed use areas. Once transferred, the density of Agriculture should be zero and the Farmton Mixed Use Area should have a maximum of 2,306 dwelling units and a minimum of 2,000 dwelling units.

Table 2.1 DRI and Mixed Use Developments

Project Name	Formerly Known As	Approved Use	Approved Amount of Units/Square Footage
Great Outdoors	Great Outdoors Premier RV/Golf Resort	Residential	2,000 Units (1,000 Cabins and 1,000 RV units)
Viera	Capron Trace	Residential	29,945 Units
Farmton	Farmton	Residential & Agriculture	Min 2,000 Units; Max 2,306 Units

Source: Brevard County Comprehensive Plan, Adopted December 2011, Chapter 11, Future Land Use Element, p. XI-32 – XI-38 and XI-72 – XI-75 and "Central Florida Geographical Information Systems." CFGIS, Brevard County, September 10, 2019 cfgis.org/DRI/DRI-Information.aspx

Vacant Lands Analysis by Future Land Use

An analysis of unincorporated vacant lands by future land use designation was conducted using ArcGIS software, parcel data from the Brevard County Property Appraiser, and the adopted Brevard County Comprehensive Plan and Future Land Use Map. Vacant parcels were selected by Florida Department of Revenue (DOR) use code and confirmed by "vacant" description. Once selected, the corresponding Brevard County future land use designation was determined for each vacant parcel.

In terms of land area, most of the unincorporated vacant land in Brevard County is designated as "Public Conservation" or "Agricultural", each of which afford the least density (both less than one unit per acre). After Public Conservation and Agricultural, the Viera DRI, Farmton Mixed Use, and other low-density residential categories, cover significant vacant land area. See **Map 2.2**.

The gross acreage of each vacant parcel was also calculated. The gross acreage was then adjusted based on data provided by Brevard County Planning & Development that calculated the actual development yield of existing development projects. Based on the actual development yield analysis, it was determined that on average development projects in the county develop approximately 57.75% of the total gross development allowed by the adopted future land use classification. Based on this 57.75% development yield calculation, the gross allowed development yield from the adopted future land use classification was adjusted by 57.75%. This reduction accounts for environmental or other zoning constraints that may further limit developability. The maximum allowable density afforded by the Brevard County Comprehensive Plan and Future Land Use Map was then applied to the gross acreage (i.e., 100%) and reduced development lot yield (i.e., 57.75% of allowed gross development) of each vacant parcel to yield a maximum number of dwelling units. For the three (3) master planned developments (Viera, Great Outdoors, and the Farmton Mixed Use), the actual planned number of dwelling units was assigned to each development. This methodology resulted in an estimated potential 166,375 dwelling units based on the gross acreage of each vacant parcel and an estimated potential 110,553 dwelling units based on the reduced development yield.

According to the American Community Survey (ACS) 2013-2017 estimates, in Brevard County the average household size is estimated to be 2.47 persons. If this number is applied to the estimated potential number of dwelling units, the unincorporated vacant land toward buildout could accommodate 410,946 additional people based on gross

acreage or 273,065 additional people based on the reduced development yield . **Table 2.2** shows the land uses that allow for residential development and the potential number of dwelling units and resulting additional population.

Compared to future population projections for unincorporated Brevard County, the development potential of vacant lands far exceeds the projected population growth toward 2040. For example, the BEBR medium projection for unincorporated Brevard County is 260,757 and the TPO TAZ draft projection for unincorporated Brevard County is 303,487. While the unincorporated vacant lands are enough to accommodate projected growth, there is also a surplus of unincorporated vacant land beyond 2040.

The maximum potential population allowed under the current Comprehensive Plan densities provides a maximum limit that new 2040 population projections should not exceed. Given Comprehensive Plan densities typically provide for excessive development opportunities, the use of the potential maximum population from the densities allowed in the Comprehensive Plan as a maximum limit is reasonable.

Table 2.2: Vacant Lands Analysis by Future Land Use							
Future Land Use Description	**Density**		**100% Acres**	**% Total**	**DUs (Gross)**	**50% Acres**	**DUs (Reduced)**
AGRIC AGRICULTURAL	1 unit per 5 acres	0.2	79,415	28%	15,883	39,708	9,172
CC-COMMUNITY COMMERCIAL	Varies by Proximity to Residential		1,556	1%	10,400	778	6,006
DRI1 DEVELOPMENT REGIONAL IMPACT (Great Outdoors)	*2,000 Units Total*		796	0%	0%	398	2,000
DRI3 DEVELOPMENT REGIONAL IMPACT (Viera)	*29,945 Units Total*		15,802	6%	6%	7,901	29,945
FMU FARMTON MIXED USE	2,306 Units Total		7,508	3%	3%	3,754	2,306
NC-NEIGHBORHOOD COMMERCIAL	Varies by Proximity to Residential		953	0%	5,497	477	3,175
PRIV CONS PRIVATE CONSERVATION	1 unit per 10 acres	0.1	49	0%	5	25	3
PUB-CONS PUBLIC CONSERVATION	1 unit per 50 acres	0.02	144,367	50%	2,887	72,184	1,667
RES 10 RESIDENTIAL 10 UNITS PER ACRE	10 units per acre	10	7	0%	74	4	42
RES 12-DIR DIRECTIVE RESIDENTIAL 12 UNITS PER ACRE	12 units per acre	12	4	0%	53	2	31
RES 15 RESIDENTIAL 15 UNITS PER ACRE	15 units per acre	15	2,182	1%	32,733	1,091	18,903
RES 2-DIR DIRECTIVE RESIDENTIAL 2 UNITS PER ACRE	2 units per acre	2	7	0%	13	3	8
RES 2 RESIDENTIAL 2 UNITS PER ACRE	2 units per acre	2	7,328	3%	14,657	3,664	8,464
RES 3-DIR DIRECTIVE RESIDENTIAL 3 UNITS PER ACRE	3 units per acre	3	416	0%	1,249	208	722
RES 30-DIR DIRECTIVE RESIDENTIAL 30 UNITS PER ACRE	30 units per acre	30	2	0%	69	1	40
RES 4-DIR DIRECTIVE RESIDENTIAL 4 UNITS PER ACRE	4 units per acre	4	1	0%	6	1	3
RES 4 RESIDENTIAL 4 UNITS PER ACRE	4 units per acre	4	6,687	2%	26,749	3,344	15,448
RES 5-DIR DIRECTIVE RESIDENTIAL 5 UNITS PER ACRE	5 units per acre	5	0	0%	0	0	0
RES 6-DIR DIRECTIVE RESIDENTIAL 6 UNITS PER ACRE	6 units per acre	6	6	0%	36	3	21
RES 6 RESIDENTIAL 6 UNITS PER ACRE	6 units per acre	6	739	0%	4,432	369	2,559
RES 8-DIR DIRECTIVE RESIDENTIAL 8 UNITS PER ACRE	8 units per acre	8	124	0%	990	62	572
RES1 RESIDENTIAL 1 UNIT PER ACRE	1 unit per acre	1	13,092	5%	13,092	6,546	7,560
RES1:2.5 RESIDENTIAL 1 UNIT PER 2.5 ACRES	1 unit per 2.5 acres	0.4	8,248	3%	3,299	4,124	1,905
		TOTAL	289,291	100%	166,375	144,646	110,553
			ADDITIONAL POPULATION		**410,946**		**273,065**

Source: Brevard County Property Appraiser (Parcels); Brevard County Comprehensive Plan and Future Land Use Map (Land Use and Density); U.S. Census Bureau American Community Survey (ACS) 2013-2017 Estimates (2.47 persons per household); Brevard County Planning & Development Analysis pf Existing Development Yield, February 2020.

Comprehensive Plan Future Land Use (FLU) Amendments

From 2015 to June 2019, there have been 44 adopted amendments to Brevard County's Comprehensive Plan. Of the 44 amendments, there have been five (5) large-scale amendments. As of June 2019, there are six (6) pending amendments and one (1) denied amendment. **Map 2.3** shows the locations of all FLU Amendments from 2015 to June 2019. The majority of amendments occurred in central Brevard County on Merritt Island and on the mainland, south of Rockledge and north of Palm Shores and Melbourne. The location of these amendments provides some insight into the private sectors interest in opportunities for future development.

Of the 44 adopted FLU amendments, 22 have increased residential densities, six (6) have reduced residential densities, and 16 have had no change in residential densities. Of the six (6) pending FLU Amendments two (2) proposed an increase in residential densities, one (1) proposed a reduction, and two (2) propose no change to residential densities.

Amendment 16-04ESR 2.2 specifically addresses the reclassifications of some areas in the Indian River Lagoon and its tributaries from Class III waters to Class II waters. The amendment to the Comprehensive Plan addressed properties affected by the reclassification. Due to existing lot sizes, development on certain properties could be affected by the new buffer setback requirements. The proposed amendment to Policy 3.3.D was intended only for those lots legally established prior to the date of reclassification and located in reclassification areas. Avoidance and minimization of buffer impacts is required. The properties are subject to a maximum of 30% impervious area in the buffer, and stormwater management is required. The amendment also updated a map in the Conservation Element to reflect the new water classifications.

III Environmental and Land Use Constraints

Environmental and land use constraints are important considerations in the development of population projections and its allocation in the county. For this analysis, significant areas of environmental and land use constraints are related to the Save Our Indian River Lagoon Project Plan and the extensive lands owned by the Federal, State, County, and local agencies.

Save Our Indian River Lagoon Project Plan (SOIRLPP)

Brevard County's SOIRLPP initiative outlines local projects to improve water quality and the overall viability of the Indian River Lagoon. Funding for identified projects is supported through referendums to continue and implement the initiatives of the SOIRLPP. Annually, the SOIRLPP is updated to include new scientific information, technologies, and other data and analysis to help identify and administer projects under the plan.

In January 2019, a study was completed by Applied Ecology, Inc. for the Brevard County Natural Resources Management Department. That study updated the "Reduce Pollutants" section of the SOIRLPP and further narrowed down the priority areas to consider for retrofit from Onsite Sewage Treatment and Disposal System (OSTDS)/septic tanks to wastewater/sewer systems. The categories of potential retrofits were focus areas, communities (platted subdivisions), individual parcel quick connects, septic upgrades, and package plants.

The previous iteration of the SOIRLPP identified priority focus areas based on septic loading hotspots. The January 2019 study further limited the priority focus areas to areas having a nutrient loading of more 25 lbs./year per parcel, although some parcels having more than 22 lbs./year per parcel were kept because they were already in the process of compliance with the SOIRLLPP. In total, the focus-area based prioritization from the January 2019 study identified 23 priority focus areas in Brevard County for retrofit. See **Map 3.1**.

Outside of the City of Palm Bay, approximately 3,588 parcels were identified as “quick connects” located within 10-meters of a sewer gravity main line, with the North Indian River Lagoon watershed having the highest number of quick connect parcels. Nearly 50,000 parcels were identified as potential septic system upgrades (not near a sewer gravity main line), with the majority in the Central Indian River Lagoon watershed. Although several package plants were modeled as part of the January 2019 study and data presented, no specific recommendations for package plants are identified.

The January 2019 study also identified seven (7) stand-alone communities outside of the priority focus areas that are included under quick connects or septic upgrades but could be retrofit as a whole. These communities include:

- South Banyan Isles (septic upgrades)
- James M. Hearndon (septic upgrades)
- Leewood Forest Estates (quick connects)
- Oak Hammock Estates (septic upgrades)
- Sanderling Run (septic upgrades)
- Pine Island Lakes, Unit 1 (septic upgrades)
- Pineridge Heights (septic upgrades)

Within unincorporated Brevard County, priority focus areas are concentrated at the Indian River, near US-1. For example, the “Sharpes A”, “SoCen A”, “SoCen C”, and “Micco” priority focus areas are either mostly or completely within mainland unincorporated Brevard County; however, each of these areas abuts US-1. Similarly, “Sykes M”, “Sykes N”, “Sykes T”, and “Merritt Island C” are on unincorporated Merritt Island. Of the stand-alone communities, only Pineridge Heights (near Micco on the mainland), Pine Island Lakes, Sanderling Run, and South Banyan Isles are within unincorporated Brevard County.

Land Use Constraints

To determine areas within Brevard County that restrict or prohibit opportunities for future growth, three (3) types of areas were reviewed. First, all conservation lands within Brevard County were identified. Conservation land is considered a land use constraint because development is to be minimized within conservation lands. In addition, large areas within the county are owned by either Brevard County, the Federal government (military and NASA), or State agencies (St. Johns River Water Management District conservation lands – St. Johns River). These Brevard County, Federal, and State owned lands are not available for future residential development and are excluded from future residential growth. Finally, wetlands within Brevard County were identified. Wetlands are considered a land use constraint because development cannot occur within wetlands unless properly mitigated and conservation of wetlands is highly prioritized. **Map 3.2**. shows all areas within Brevard County that are identified as Restrictive Development Areas.

IV Existing Infrastructure

The identification of the location of existing infrastructure such as County utilities and the major road network is an important part of determining the distribution of future population. In addition, the identification of existing infrastructure provides a context for the future planning of new infrastructure to meet the demand of the projected population growth.

County Utilities

Most of the existing County owned utilities are concentrated within five (5) areas of Unincorporated Brevard County. See **Map 4.1.** The unincorporated areas with County owned utilities are as follows:

1. Just north of Titusville.
2. The majority of Merritt Island. From State Road 528 south to just south of State Road 520.
3. On the mainland, south of Rockledge and north of Palm Shores and Melbourne.
4. On the barrier islands, from Pineda Causeway, just north of Satellite Beach, south to Glengarry Avenue, just south of Melbourne Beach.
5. South Brevard County, just south of Grant-Valkaria, east of Palm Bay.

Table 4.1 provides a breakdown of the types of County owned utilities available in each concentrated unincorporated area listed above.

Table 4.1 County Owned Utilities by Areas

Areas Listed	Hydrants	Water Lines	Reclaimed Water Lines	Force Main	Gravity Main
1	X	X	X	X	X
2			X	X	X
3			X	X	X
4			X	X	X
5	X	X	X	X	X

Source: Brevard County Utility Services Department, 2019.

Though some of these unincorporated areas do not have County owned utilities servicing them, utilities may still be available, but are provided by city owned utilities.

Transportation

Brevard County has approximately 18 major roadways that run North to South and approximately 14 major roadways that run East to West. **Map 4.2** shows all major roadways in Brevard County. See **Table 4.2** for a list of the major roadways in Brevard County.

Table 4.2 Major Roadways in Brevard County

North to South Roads	East to West Roads
State Road-5/US Highway-1/Dixie Highway	State Road-46
Interstate-95	Garden Street/Amax Brewer Memorial Parkway
Hopkins Avenue	Cheney Highway/Columbia Boulevard
Washington Avenue	North Courtenay Parkway
State Road-407	State Road-528/Beachline Expressway
North Courtenay Parkway	State Road-520/King Street/Willard Street
North/South Cocoa Boulevard	Barnes Boulevard
Astronaut Boulevard	Wickham Road
Atlantic Avenue/State Road-A1	Pineda Causeway
Orlando Avenue	Eau Gallie Boulevard
Fiske Boulevard	NASA Boulevard
Rockledge Boulevard	US Highway-192/Strawbridge Avenue/Melbourne Causeway/ 5th Avenue
Wickham Road	Palm Bay Road
Harbor City Boulevard	County Road-514/Malabar Road
Minton Road	
Babcock Street	
RJ Conlon Boulevard	
Miramar Avenue	

Source: Florida Department of Transportation (FDOT), Major Roads.

V Residential Building Permits and Certificates of Occupancy

Evaluation of existing building permitting trends provides an insight into growth pressures in the county. Building permit information for new residential units and certificate of occupancy information for unincorporated areas of the county from 2015 to 2018 were evaluated to identify trends in building permitting.

Residential Building Permits by Zip Codes from 2015 to 2018

From 2015 to 2018, there were 3,148 Single-Family and Multi-Family units permitted by Brevard County. In those four years, Zip Code 32940 had the most Single-Family and Multi-Family units permitted by Brevard County (1,845). Approximately 58.63% of all Single-Family and Multi-Family units permitted in Brevard County, from 2015 to 2018, were permitted in Zip Code 32940. The Brevard County jurisdiction accounts for approximately 88,945 acres in this Zip Code, which equates to approximately 1 permit per 48 acres.

Zip Code 32953 has the second most permitted Single-Family and Multi-Family units from 2015 to 2018 (196). The Brevard County jurisdiction accounts for approximately 21,245 acres in this Zip Code, which equates to approximately 1 permit per 108 acres.

There are 12 Zip Codes in Brevard County that had no Single-Family or Multi-Family units permitted through Brevard County. Four of the Zip Codes with no Single-Family or Multi-Family unit permits are mostly or entirely within a city's jurisdiction (32907, 32905, 32901, and 32920). Two of the Zip Codes with no Single-Family and Multi-Family unit permits are mostly or entirely within the Brevard County jurisdiction (32948 and 32925). **Table 5.1** provides a breakdown of Single-Family and Multi-Family unit permits in Brevard County from 2015 to 2018. **Map 5.1** shows the number of permits in each zip code.

Table 5.1 Single-Family and Multi-Family Unit Permits in Unincorporated Brevard County, 2015 to 2018			
2015	**2016**	**2017**	**2018**
629	802	751	966

Source: Brevard County, Planning Department, New Residential Building Permit Data, 2015-2018

Certificates of Occupancy

From 2014 to 2018, 4,825 residential units where issued a Certificate of Occupancy (CO) in Unincorporated Brevard County. There was a noticeable increase in COs of residential units from 2014 to 2018. From 2014 to 2018 there was a 59% increase in COs in Unincorporated Brevard County. **Table 5.2** provides a breakdown of residential units that were issued a COs from 2014 to 2018.

Table 5.2 Single-Family and Multi-Family Certificate of Occupancy in Unincorporated Brevard County, 2014 to 2018				
2014	**2015**	**2016**	**2017**	**2018**
528	704	1,025	1,275	1,293

Source: Brevard County School Board, 2019

VI Brevard County Historic Population and Socio-Economic Characteristics

Evaluating the historic population growth and socio-economic characteristics provides a strong basis for future population projections. The following analysis looks at population growth and socio-economic changes from 2000 to 2018. This time period is important as it encompasses the Florida housing boom of the early 2000s, the real estate crisis in 2007-2008, and the economic recovery.

Historic Population from 2000 to 2018

When looking at the change in population in Brevard County and unincorporated Brevard County, from 2000 to 2018, it is clear that population continued to increase. However, the rate of population growth slowed down. From 2000 to 2010, the population in Brevard County increased an average of 6,714 persons per year, and in unincorporated Brevard County the population increased an average of 1,741 persons per year. However, from 2010 to 2018, the population in Brevard County increased an average of 5,023 persons per year, and in unincorporated Brevard County the population increased an average of 1,446 persons per year. From 2000 to 2018, the average increase in population in Brevard County is 5,963 persons per year, and in unincorporated Brevard County the average increase in population is 1,610 persons per year. This shows that the growth that occurred between 2010 and 2018 was below the average of growth that occurred from 2000 to 2018. See **Table 6.1.**

Table 6.1 Historic Population from 2000 to 2018

	2000	Change	Average Annual Growth Rate	2010	Change	Average Annual Growth Rate	2018
Brevard County	476,230	67,146	1.33%	543,376	40,187	0.90%	583,563
Unincorporated Brevard County	188,918	17,414	0.89%	206,332	11,570	0.68%	217,902
Cities	287,312	49,732	1.61%	337,044	28,617	1.02%	365,661

Source: Bureau of Economic and Business Research (BEBR), University of Florida (2018) Florida Estimates of Population 2018.

Table 6.2 compares the historic average annual growth rate of the counties surrounding Brevard County. When comparing surrounding counties to Brevard County (1.33%), Seminole County (1.47%) and Volusia County (1.10%) had the most similar average annual growth rate from 2000 to 2010. When comparing surrounding counties to Brevard County (0.90%), St. Lucie County (1.07%), Seminole County (1.16%), Indian River County (1.20%), and Volusia County (0.89%) had the most similar average annual growth rate from 2010 to 2018.

Table 6.2 Historic Population of Surrounding Counties from 2000 to 2018

	2000	Average Annual Growth Rate	2010	Average Annual Growth Rate	2018
Indian River County	112,947	2.02%	138,028	1.20%	151,825
Orange County	896,344	2.49%	1,145,956	2.07%	1,349,597
Osceola County	172,493	4.53%	268,685	3.45%	352,496
St. Lucie County	192,695	3.73%	277,789	1.07%	302,432
Seminole County	365,199	1.47%	422,718	1.16%	463,560
Volusia County	443,343	1.10%	494,593	0.89%	531,062

Source: Bureau of Economic and Business Research (BEBR), University of Florida (2018) Florida Estimates of Population 2018

Income/Earnings (Individuals)

The 2005-2009 American Community Survey 5-Year Estimates estimated there was approximately 218,885 households in Brevard County. The mean annual income of these households, during this time, was $64,454. The largest percentage (19.70%) of households had an annual income of $50,000 to $74,999. The smallest percentage (2.80%) of households had an annual income of $200,000 or more. In Brevard County, households with an annual income of less than $10,000 represent 6.20% of all households. Households with an annual income of $100,000 or more represents 17% of all households.

By the 2009-2013 American Community Survey 5-Year Estimates the number of households increased by 1,392 to 220,227 households. The mean annual household income decreased by $339 to $64,115. Households with an annual income of $100,000 to $149,99 had the largest percent increase (0.90%). Households with an annual income of $75,000 to $99,999 had the largest percent decrease (1.30%). Households with an annual income of $50,000 to $74,999 represented the largest percentage (18.70%) of households. The smallest percentage (2.90%) of households had an annual income of $200,000 or more. By the 2009-2013 American Community Survey 5-Year Estimates, households with an annual income of less than $10,000 increased by 0.50% to 6.70%. Households with an annual income of $100,000 or more represents 18.4% of all households.

From the 2009-2013 American Community Survey 5-Year Estimates to the 2013-2017 American Community Survey 5-Year Estimates the number of households increased by 6,946 to 227,223 households. The mean annual household income increased by $5,597 to $69,712. Households with an annual income of $200,000 or more had the largest percent increase (1.00%). Households with an annual income of $25,000 to $34,999 had the largest percent decrease (1.40%). Households with an annual income of $50,000 to $74,999 represented the largest percentage (19.60%) The smallest percentage (3.90%) of households had an annual income of $200,000 or more. By the 2013-2017 American Community Survey 5-Year Estimates, households with an annual income of less than $10,000 decreased by 0.70% to 6.00%. Households with an annual income of $100,000 or more represents 20.2% of all households.

In 2017, the percent of households that have an annual income of less than $10,000 is lower than any of the previously reviewed years. Annual household income ranges of $10,000 to $14,999, $100,000 to $149,999, $150,000 to $199,999, and $200,00 or more are the only income ranges in which the percent of households increased each year. See **Table 6.3**.

Table 6.3 Income/Earnings (Individuals)								
	2005-2009 American Community Survey		Change	2009-2013 American Community Survey		Change	2013-2017 American Community Survey	
Subject	Brevard County, Florida			Brevard County, Florida			Brevard County, Florida	
	Households			Households			Households	
	Estimate	Margin of Error	Estimate	Estimate	Margin of Error	Estimate	Estimate	Margin of Error
Total	218,885	+/-1,621	1,392	220,277	+/-1,593	6,946	227,223	+/-1,810
Less than $10,000	6.20%	+/-0.4	0.50%	6.70%	+/-0.4	-0.70%	6.00%	+/-0.4
$10,000 to $14,999	5.20%	+/-0.3	0.20%	5.40%	+/-0.4	0.10%	5.50%	+/-0.3
$15,000 to $24,999	11.70%	+/-0.6	0.00%	11.70%	+/-0.4	-0.70%	11.00%	+/-0.4
$25,000 to $34,999	11.90%	+/-0.4	0.20%	12.10%	+/-0.5	-1.40%	10.70%	+/-0.4
$35,000 to $49,999	16.00%	+/-0.5	0.00%	16.00%	+/-0.5	-0.80%	15.20%	+/-0.6
$50,000 to $74,999	19.70%	+/-0.6	-1.00%	18.70%	+/-0.5	0.90%	19.60%	+/-0.5
$75,000 to $99,999	12.40%	+/-0.4	-1.30%	11.10%	+/-0.5	0.70%	11.80%	+/-0.5
$100,000 to $149,999	10.90%	+/-0.5	0.90%	11.80%	+/-0.5	0.10%	11.90%	+/-0.4
$150,000 to $199,999	3.30%	+/-0.2	0.40%	3.70%	+/-0.3	0.70%	4.40%	+/-0.3
$200,000 or more	2.80%	+/-0.2	0.10%	2.90%	+/-0.2	1.00%	3.90%	+/-0.3
Median income (dollars)	$49,114	+/-658	-$1,075	$48,039	+/-671	$3,497	$51,536	+/-616
Mean income (dollars)	$64,454	+/-848	-$339	$64,115	+/-840	$5,597	$69,712	+/-1,005

Source: U.S. Census Bureau; American Community Survey, 2013-2017 American Community Survey 5-Year Estimates, Table S1901

Historic and Projected Populations Comparison by Age from 2010 to 2040

Chart 6.1 is a population pyramid representing historic (2010) and projected population, through 2040, by age and sex in Brevard County. This graph shows that as the years progress, population in the 0-4-year age group seem to stay fairly consistent while slightly dropping each year. Overall, the 0-4-year age group represents the smallest percentage of the population, through 2040. The average percent of the population for the 0-4-year age group, from 2020 to 2040, is projected to be 4.80%. This is below the historic average from both 2010 (4.93%) and 2017 (4.90%).

In 2010, the census shows the 5-17-year age group at its highest percent of population in Brevard County (14.88%) out of all the reviewed years. The average percent of the population for the 5-17-year age group, from 2020 to 2040, is projected to be 13.46%. This age group population is projected to decline in the year 2020 and fluctuate within 0.08 of a percentage through 2040.

In Brevard County, the 18-24-year age group is the second smallest, on average, age group in the County. The average percent of the population for the 18-24-year age group, from 2020 to 2040, is projected to be 6.89%. The percentage of this age group population it projected to continue to slightly decline from 2017 to 2030 (6.78%), as it did from 2010 (7.87%) to 2017 (7.65%) but begin to increase from 2035 (6.79%) to 2040 (6.89%).

The 25-54-year age group is the largest age group in Brevard County. In 2010, this age group represented 38.2% of Brevard County. The average percent of the population for the 25-54-year age group, from 2020 to 2040, is projected to be 32.51%. This age group is projected to progressively decline, and by 2040 it will represent 32.26% of the population in Brevard County.

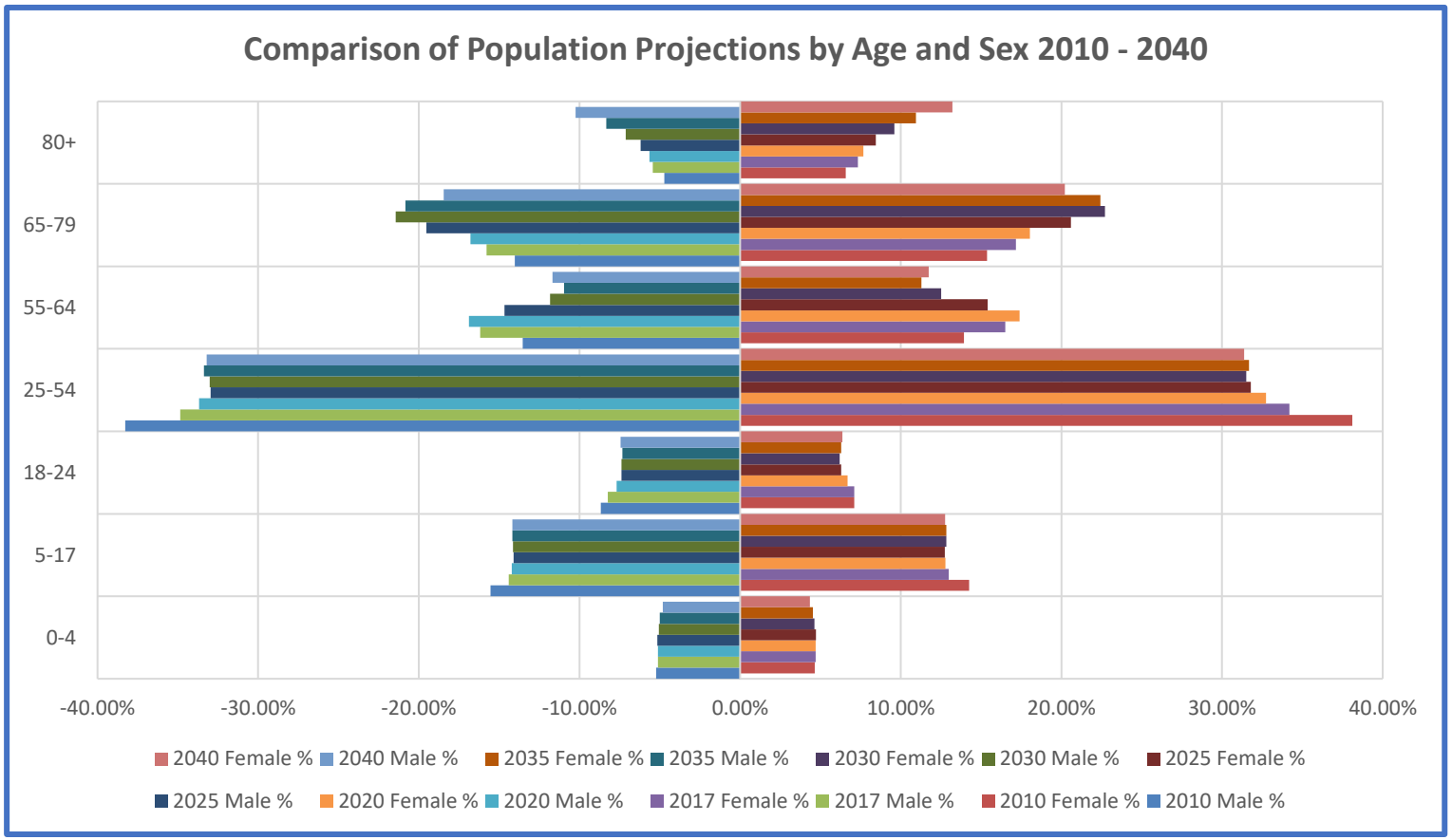
By 2020, the 55-64-year age group is projected to represent a higher percent (17.14%) of the population in Brevard County than it had in 2010 (13.74%) and 2017 (16.35%). The average percent of the population for the 55-64-year age group from 2020 to 2040, is projected to be 13.44%. By 2040, this age group is projected to steadily decline to 11.70% of the population. This age group is projected to decline in population by 5.44% from 2020 to 2040.

In Brevard County, the 65-79-year age group represents the second largest percent of the population. The average percent of the population for the 65-79-year age group, from 2020 to 2040, is projected to be 20.12%. Projections shows this age group growing to its highest percentage by 2030 (22.09%), then declining 2.73% by 2040.

The 80 years and up age group is the only age group projected to have a steady increase in population percentage in Brevard County. The average percent of the population for this age group from 2020 to 2040, is projected to be 8.77%. In 2010, this age group represented 5.67% of Brevard County's population. By 2040, this age group is projected to represent 11.77% of the population.

Generally, the County's population is getting older through 2040. This trend is consistent with the statewide trend of an ageing population. However, the largest proportionate age range remains 25-54 between 2010 and 2040, although it is less than what it was in 2010.

Chart 6.1 Comparison of Population Projections by Age and Sex 2010-2040



Source: Bureau of Economic and Business Research (BEBR), University of Florida (2018). Bulletin 181, June 2018. Florida Population Projections By Age, Sex, Race, and Hispanic Origin For Florida and Its Counties, 2020-2045, With Estimates for 2017, p. 10

VII Other Brevard County Population Projections for Comparison

In addition to evaluating past population growth trends, other population projections were reviewed and analyzed. The other population projections analyzed include projections from the University of Florida Bureau of Economic and Business Research (BEBR), the University of Florida Shimberg Center for Housing Studies, the Space Coast Transportation Planning Organization, and the Brevard County School District.

These other population projections provide a guide for the development of the long-term population projections in this report. It is important that the long-term population projections within this report have a reasonable relationship to other population projection activities. As stated in the introduction to this report, long-term population projections are not absolute and can vary widely based on unanticipated changes in factors shaping population growth. However, if other long-term projections are relatively consistent, then there is a level of confidence that the long-term projections are reasonable. In addition, these other population projections also provide insight into potential allocation of future populations not only between the unincorporated county and the cities, but also population allocation throughout the county.

BEBR Population Projections for Brevard County Through 2040

BEBR is recognized by the State of Florida as the official long-term population projections for the state and for all 67 counties. Each year BEBR prepares long-term population projections that provide for low, medium, and high growth scenarios for all 67 counties. Because BEBR provides a diverse range of projections, BEBR projections are a good resource to compare other projections and their relationship to the official BEBR projections. For example, if a calculated population projection is lower than the BEBR low or higher than the BEBR high, then there could be a significant local influence on population growth that is not accounted for by BEBR. It is important to recognize that the BEBR long-term projections are only at the total county level and do not allocate between the unincorporated and incorporated areas of the county.

Based on the BEBR low growth scenario for Brevard County, the 2018 estimated population in Brevard County is projected to increase by 16,837 persons by the year 2040. This increase in population during that 22-year period projects that the population will increase, on average, 765 persons per year. For Low growth projections, the projected average annual growth rate from 2020 to 2030 is 0.35% and from 2030 to 2040 is 0.10%. Given the building permitting data and other data analyzed in this report, the BEBR low projection is not reasonable.

Based on the BEBR medium growth scenario, the 2018 estimated population in Brevard County is projected to increase by 115,137 persons by the year 2040. This increase in population over the next 22 years projects that the population will increase, on average, 5,234 persons per year. For medium growth projections, the projected average annual growth rate from 2020 to 2030 is 0.93% and from 2030 to 2040 is 0.63%.

Based on the BEBR high growth scenario, the 2018 estimated population in Brevard County is projected to increase by 215,537 persons by the year 2040. This increase in population over the next 22 years projects that the population will increase, on average, 9,797 persons per year. For high growth projections, the projected average annual growth rate from 2020 to 2030 is 1.41% and from 2030 to 2040 is 1.11%.

Based on the historical population growth for Brevard County, the BEBR medium growth population projection seems to be the closest aligned to historic growth. See **Table 7.1.**

Table 7.1 BEBR Population Projections for Brevard County Through 2040

	Estimates April 1, 2018	2020	Average Annual Growth Rate	2030	Average Annual Growth Rate	2040
BREVARD	583,563					
Low		573,800	0.35%	594,300	0.10%	600,400
Medium		598,500	0.93%	656,300	0.63%	698,700
High		621,600	1.41%	715,300	1.11%	799,100

Source: Bureau of Economic and Business Research (BEBR), University of Florida (2019). Volume 52, Bulletin 183, January 2019. Projections of Florida Population by County 2020-2045, with Estimates from 2018, p.5.

Table 7.2 compares the projected average annual growth rate of the counties surrounding Brevard County. When comparing surrounding counties to Brevard County, Indian River County, Seminole County and Volusia County have the most similar projected average annual growth rate from 2020 to 2030. When comparing surrounding counties to Brevard County, Indian River County, Seminole County and Volusia County have the most similar projected average annual growth rate from 2030 to 2040.

Table 7.2 BEBR Population Projections for Surrounding Counties Through 2040						
		2020	Average Annual Growth Rate	2030	Average Annual Growth Rate	2040
Indian River County	Low	149,600	0.67%	160,000	0.19%	163,000
	Medium	157,600	1.35%	180,200	0.80%	195,000
	High	165,400	1.96%	200,900	1.41%	231,100
Orange County	Low	1,341,400	1.12%	1,498,900	0.50%	1,575,400
	Medium	1,415,500	1.81%	1,694,000	1.11%	1,891,800
	High	1,482,700	2.31%	1,862,600	1.66%	2,195,700
Osceola County	Low	356,500	1.94%	432,200	0.98%	476,700
	Medium	380,700	2.77%	500,200	1.68%	591,000
	High	402,000	3.28%	554,900	2.31%	697,100
St. Lucie County	Low	300,000	0.83%	325,800	0.47%	341,600
	Medium	313,100	1.39%	359,500	0.95%	395,100
	High	325,000	1.89%	392,100	1.49%	454,600
Seminole County	Low	458,000	0.54%	483,200	0.22%	493,700
	Medium	477,800	1.11%	533,500	0.73%	573,700
	High	496,100	1.60%	581,600	1.23%	657,000
Volusia County	Low	527,100	0.47%	552,400	0.23%	565,000
	Medium	544,100	0.89%	594,300	0.58%	629,900
	High	559,700	1.40%	642,900	1.08%	715,800

Source: Bureau of Economic and Business Research (BEBR), University of Florida (2019). Volume 52, Bulletin 183, January 2019. Projections of Florida Population by County 2020-2045, with Estimates from 2018

Population Projections for Cities in Brevard County

Although this report develops long-term population projections for unincorporated areas of the county, it is still important to consider the growth of the cities within the county. City population growth has an impact on growth potential within unincorporated areas. It is common to see unincorporated areas that are in close proximity to growth areas of a city to have strong growth pressures for new development. In addition, as cities grow and the adjacent unincorporated areas grow, it is not unusual for a city to pursue annexation of the growing unincorporated areas. If these unincorporated areas are annexed into the city, then often the core public services such as utilities, fire, police, parks, etc. are no longer the responsibility of the county but become the responsibility of the annexing city.

The data for projected city growth in Brevard County was obtained from the University of Florida Shimberg Center for Housing Studies (Shimberg). Shimberg provides long-term population projections at the city level for use in comprehensive planning other planning purposes. See **Table 7.3.**

From 2020 to 2040, Palm Bay is projected to have the highest absolute increase in population of any city in Brevard County, with an increase of 26,142 people. West Melbourne is projected to have the second highest absolute increase in population of any city in Brevard County, with an increase of 10,825 people. Melbourne is projected to have the third highest absolute increase in population of any city in Brevard County, with an increase of 10,200 people.

West Melbourne is projected to have the highest percent increase in population of any city in Brevard County, with a 31% increase from 2020 to 2040. Palm Bay is projected to have the second highest percent increase in population of any city in Brevard County, with an 18% increase. Palm Shores is projected to have the third highest percent increase in population of any city in Brevard County, with a 17% increase.

By 2040, Cocoa Beach is projected to have the largest absolute decrease and percent decrease of any city in Brevard County, with a decrease of 1,120 people or -11%. Melbourne Beach is projected to have the second largest absolute decrease and percent decrease of any city in Brevard County, with a decrease of 282 people or -10%. Melbourne Village is projected to have the third largest absolute decrease and percent decrease of any city in Brevard County, with a decrease of 40 people or -6%.

When utilizing **Table 7.1** and **Table 7.3**, the Low, Medium, and High projected growth scenarios for the total cities population within Brevard County can be determined. Based on the low growth scenario for Brevard County, on average, cities are projected to account for 69% of the total County population from 2020 to 2040.

Based on the medium growth scenario for Brevard County, on average, cities are projected to account for 63% of the total County population from 2020 to 2040.

Based on the high growth scenario for Brevard County, on average, cities are projected to account for 58% of the total County population from 2020 to 2040.

Table 7.3 Population Projections for Cities in Brevard County

City	2020	2025	2030	2035	2040
Cape Canaveral	10,534	10,922	11,190	11,302	11,441
Cocoa	19,671	20,613	21,446	22,213	22,900
Cocoa Beach	11,079	10,815	10,528	10,253	9,959
Grant-Valkaria	4,290	4,541	4,727	4,839	4,966
Indialantic	2,809	2,798	2,773	2,755	2,726
Indian Harbour Beach	8,562	8,681	8,758	8,819	8,849
Malabar	2,877	2,932	2,978	3,008	3,028
Melbourne	83,225	86,319	88,973	91,358	93,425
Melbourne Beach	3,028	2,959	2,888	2,820	2,746
Melbourne Village	661	653	644	631	621
Palm Bay	117,146	126,226	133,714	138,859	143,288
Palm Shores	1,036	1,099	1,154	1,208	1,249
Rockledge	27,962	29,860	31,387	32,382	33,219
Satellite Beach	10,760	11,059	11,300	11,510	11,684
Titusville	47,614	49,389	50,913	52,285	53,473
West Melbourne	23,544	26,959	29,943	32,262	34,369
Total	374,798	395,825	413,316	426,504	437,943

Source: Shimberg Center for Housing Studies' Florida Housing Data Clearinghouse, Population Projections, Permanent Residents, 2010-2040

Population Projections for Unincorporated Brevard County – BEBR and Shimberg

As previously stated, the BEBR long-term population projections only provide total county projections. To determine the low, medium, high projected population for unincorporated Brevard County to use for comparison, the total projected city population from Shimberg was subtracted from the projected total county population from BEBR. **Table 7.4** shows the low, medium, and high projected growth to occur within unincorporated Brevard County from 2020 to 2040.

Table 7.4 Population Projections for Unincorporated Brevard County

Unincorporated Brevard County	2020	2025	2030	2035	2040
Low	199,002	190,975	180,984	171,896	162,457
Medium	223,702	234,475	242,984	252,196	260,757
High	246,802	274,075	301,984	331,396	361,157

Source: Source: Bureau of Economic and Business Research (BEBR), University of Florida (2019). Volume 52, Bulletin 183, January 2019. Projections of Florida Population by County 2020-2045, with Estimates from 2018, p.5 and Shimberg Center for Housing Studies' Florida Housing Data Clearinghouse, Population Projections, Permanent Residents, 2010-2040

Based on the BEBR low growth scenario for unincorporated Brevard County, by 2040, the population is projected to decrease by 36,545 persons. Based on the BEBR low growth population projections for Unincorporated Brevard County, the population, on average, accounts for 31% of the total county population from 2020 to 2040. From 2020 to 2040, the BEBR low rate of growth for unincorporated Brevard County, on average, is projected to be -5%.

Based on the medium growth scenario for unincorporated Brevard County, by 2040, the population is projected to increase by 37,055 persons. Based on the BEBR medium growth population projections for Unincorporated Brevard County, the population, on average, accounts for 37% of the total county population from 2020 to 2040. From 2020 to 2040, the BEBR medium rate of growth for unincorporated Brevard County, on average, is projected to be 4%.

Based on the high growth scenario for unincorporated Brevard County, by 2040, the population is projected to increase by 114,355 persons. Based on the BEBR high growth population projections for Unincorporated Brevard County, the population, on average, accounts for 42% of the total county population from 2020 to 2040. From 2020 to 2040, the BEBR high rate of growth for unincorporated Brevard County, on average, is projected to be 9%.

"How Shall We Grow" – East Central Florida Regional Planning Council

In 2011, the East Central Florida Planning Council adopted "How Shall We Grow" (HSWG) a region-wide planning analysis that established concepts for a new planning paradigm within the region. The analysis included population projections for the counties in the region based on the alternative planning paradigms.

The data in "How Shall We Grow" is relatively old. It was adopted in 2011. In review of the population within HSWG, it is apparent that the projections developed then are higher than what is anticipated today. This is evidenced by the fact that the projected populations for 2010 and 2015 in HSWG where significantly higher than the actual population in those years.

However, future potential implementation of the concepts within HSWG could have significant impact on population distribution throughout Central Florida. It is important to maintain regular updates to population projections to reflect the impact of any future planning paradigm shifts.

Brevard County Traffic Analysis Zones

Preliminary Traffic Analysis Zone (TAZ) data was obtained from the Space Coast Transportation Planning Organization (TPO). The data obtained from the TPO is in draft format and is currently being analyzed by the TPO for use in the TPO's next Long-Range Transportation Plan (LRTP). The TPO TAZ data was utilized as a benchmark for generating new population projections for unincorporated Brevard County.

For initial analysis, the "ZData1" database files containing production variables (i.e., population data, including projected population in single-family and multi-family housing units) were utilized in five-year increments between 2015 and 2040 (i.e., 2015, 2020, 2025, 2030, 2035, and 2040). The "ZData1" database files were then joined to the shapefile of Brevard County's TAZ geographic boundaries for analysis using ArcGIS software and subsequently mapped. Because the TAZ data obtained from the TPO does not distinguish between unincorporated Brevard County and its incorporated cities, a density analysis was conducted to further allocate population based on the population density of each TAZ. For example, the population of each TAZ was first calculated in persons by area, then the TAZ data was clipped to the jurisdictional boundaries within Brevard County. Using the population density of each TAZ, the projected population within the county overall (i.e., countywide), unincorporated county, and incorporated cities was estimated.

Based on the TPO TAZ data, the overall countywide population (i.e., including incorporated and unincorporated jurisdictions) is expected to initially change by 15% between the years 2015 and 2020, increasing by 80,486 people during the first five (5) years. After the year 2020, the rate of change is anticipated to slow from 7% to 5% over the subsequent years toward the year 2040. The overall rate of population change anticipated between year 2015 and year 2040 is 45%, from a starting population of 535,578 in 2015 to an ending population of 777,027 in 2040. Countywide, the additional population projected between the years 2015 and 2040 is 241,449 people. See **Table 7.5**.

Table 7.5: Space Coast TPO Traffic Analysis Zones, Population Projections by Jurisdiction

	Based	Future Projections					
	2015	2020	2025	2030	2035	2040	Change 2015-2040
Unincorporated	214,120	243,899	258,890	273,707	288,624	303,487	89,367
Incorporated	321,458	372,165	397,637	422,834	448,245	473,540	152,082
Total	535,578	616,064	656,527	696,541	736,869	777,027	241,449

Source: Space Coast Transportation Planning Organization (TPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data. Note: ZData1 files were joined to TAZ geography shapefiles and density analysis was conducted to estimate the share of population within unincorporated Brevard County versus the incorporated cities.

Based on the TPO TAZ data, the unincorporated population of Brevard County is expected to initially change by 14% between the years 2015 and 2020, increasing by 29,779 people during the first five (5) years. After the year 2020, the rate of change is anticipated to slow from 6% to 5% over the subsequent years toward the year 2040. The overall rate of population change anticipated between year 2015 and year 2040 is 42%, from a starting population of 214,120 in 2015 to an ending population of 303,487 in 2040. Within unincorporated Brevard County, the additional population projected between the years 2015 and 2040 is 89,367 people. See **Table 7.5**.

Based on the TPO TAZ data, the incorporated population of the cities is expected to initially change by 16% between the years 2015 and 2020, increasing by 50,707 people during the first five (5) years. After the year 2020, the rate of change is anticipated to slow from 7% to 6% over the subsequent years toward the year 2040. The overall rate of population change anticipated between year 2015 and year 2040 is 47%, from a starting population of 321,458 in 2015 to an ending population of 473,540 in 2040. Within the incorporated cities, the additional population projected between the years 2015 and 2040 is 152,082 people. See **Table 7.5**.

In general, the rates of countywide, unincorporated, incorporated population change shown by the TPO TAZ data are similar (i.e., between 45% and 47% from 2015 to 2040); however, projected growth within the incorporated cities is slightly higher than that of unincorporated Brevard County both in the short-term (five year) and long-term (25 years) periods. While the TPO TAZ-based projected long-term growth of unincorporated Brevard County is projected to be less than 90,000 people, long-term growth within the cities is expected to exceed 150,000 people between 2015 and 2040.

In terms of geographic distribution of growth, the mainland TAZs are anticipated to experience higher percentages of growth than the barrier islands. Of the mainland areas, the area south of Wickham Road is anticipated to experience the highest percentage of growth, particularly during the first five (5) years of the planning period. By planning area, growth rates are highest in unincorporated Brevard County, where the population of the area south of Wickham Road is anticipated to more than double by the year 2040. See **Map 7.1**.

School Growth Projection

School growth projection provides an insight into short-term population growth anticipated by the Brevard County School District. The school growth projections provide some guidance to the allocation of future population and support previous analysis related to current residential permitting activities.

Out of the 83 existing schools in Brevard County, 45 schools are projected to have student membership growth by 2024. See **Map 7.2**. There is one new elementary school planned to open in 2020 (Viera). The projected membership at the new elementary school in Viera, by 2024, is 788 students. **Table 7.6** shows the projected percent change of growth of student membership from school year 2018-19 to 2023-24, in ranges, for the number of schools and type of schools that have projected membership growth.

Table 7.6 Number of Schools with Projected Student Enrollment Growth through 2024 by Percent Change

Percent Change Range	Total Schools	Elementary School	Middle School	Jr/Sr High School
0-0.99%	4	2	0	2
1-9.99%	16	9	3	4
10-19.99%	16	9	3	4
20-29.99%	7	2	2	3
30-48%	2	1	0	1

Brevard County School Board; Student Enrollment Projections and School Capacity Analysis (Total Factored Capacity); School Years 2018-19 to 2023-24

University Park Elementary School is projected to have the highest growth in student membership with a projected percent change of 47.03% from school year 2018-19 to 2023-24. Palm Bay High School is projected to have the second the highest growth in student membership with a projected percent change of 37.33% from school year 2018-19 to 2023-24. Edgewood Jr/Sr High School is projected to have the lowest growth in student membership with a projected percent change of 0.21% from school year 2018-19 to 2023-24.

Out of the 83 existing schools in Brevard County, 38 schools are projected to have a decline in student membership. Coquina Elementary school is projected to have the highest decline in student membership with a projected percent change of -34.2% from school year 2018-19 to 2023-24. West Melbourne Elementary is projected to have the lowest decline in student membership with a projected percent change of -0.18% from school year 2018-19 to 2023-24.

VIII Findings

Brevard County Population Projections Through 2040

In review of the population data collected from multiple data sources alongside future land use, environmental and land use constraints, and other geographic factors, population projections were developed for Brevard County. Actual population estimates for unincorporated Brevard County and the incorporated cities were sourced from the University of Florida's Bureau of Economic and Business Research (BEBR) for the years 2000 through 2018. See **Table 8.1**. Using a linear regression of these historic growth rates, unincorporated population projections were generated for unincorporated Brevard County through the year 2040. Incorporated population projections were sourced directly from the Shimberg Center for Housing Studies' Florida Housing Data Clearinghouse (Shimberg). The resulting unincorporated and incorporated population projections were then added together to generate a countywide total population.

The linear regression of historic population growth was based on population data from 2000 to 2015. The interim years of 2016 to 2018 were used to verify the appropriateness of the results of the analysis. The first year of the projected data was 2020. The 2015 actual estimated population is 561,714, and the projected 2020 population is 595,350. The actual estimated population of the interim years 2016 to 2018 align well with the projection between 2015 and 2020.

Table 8.2 shows the Brevard County population projections toward the year 2040. As shown in **Table 8.2,** the resulting projections show a countywide population of 683,808 people by the year 2040, which represents a 17% increase from the year 2018.

Table 8.1: Brevard County Population, Estimates and Interim Projections, 2000 to 2018							
	Population Estimates				Interim Projections		
	2000	2005	2010	2015	2016	2017	2018
Unincorporated	188,918	210,260	209,469	210,276	212,740	215,142	217,902
Incorporated	287,312	321,710	333,907	351,438	356,179	360,069	365,661
Total	476,230	531,970	543,376	561,714	568,919	575,211	583,563

Source: Population estimates, 2000 to 2015 and 2018, from University of Florida Bureau of Economic and Business Research (BEBR); unincorporated Brevard County and incorporated cities interim projections, 2016 to 2018, generated using linear regression of historic and current BEBR estimates.

Table 8.2: Brevard County Population, Future Projections, 2020 to 2040						
	Future Projections					
	2020	2025	2030	2035	2040	Change 2018-2040
Unincorporated	220,552	226,880	233,208	239,536	245,865	*27,963*
Incorporated	374,798	395,825	413,316	426,504	437,943	*72,282*
Total	595,350	622,705	646,524	666,040	683,808	*100,245*

Source: Unincorporated Brevard County projections, 2020 to 2040, generated using linear regression of historic BEBR estimates shown in Table 8.2; incorporated projections, 2020 to 2040, sourced from Shimberg Center for Housing Studies' Florida Housing Data Clearinghouse.

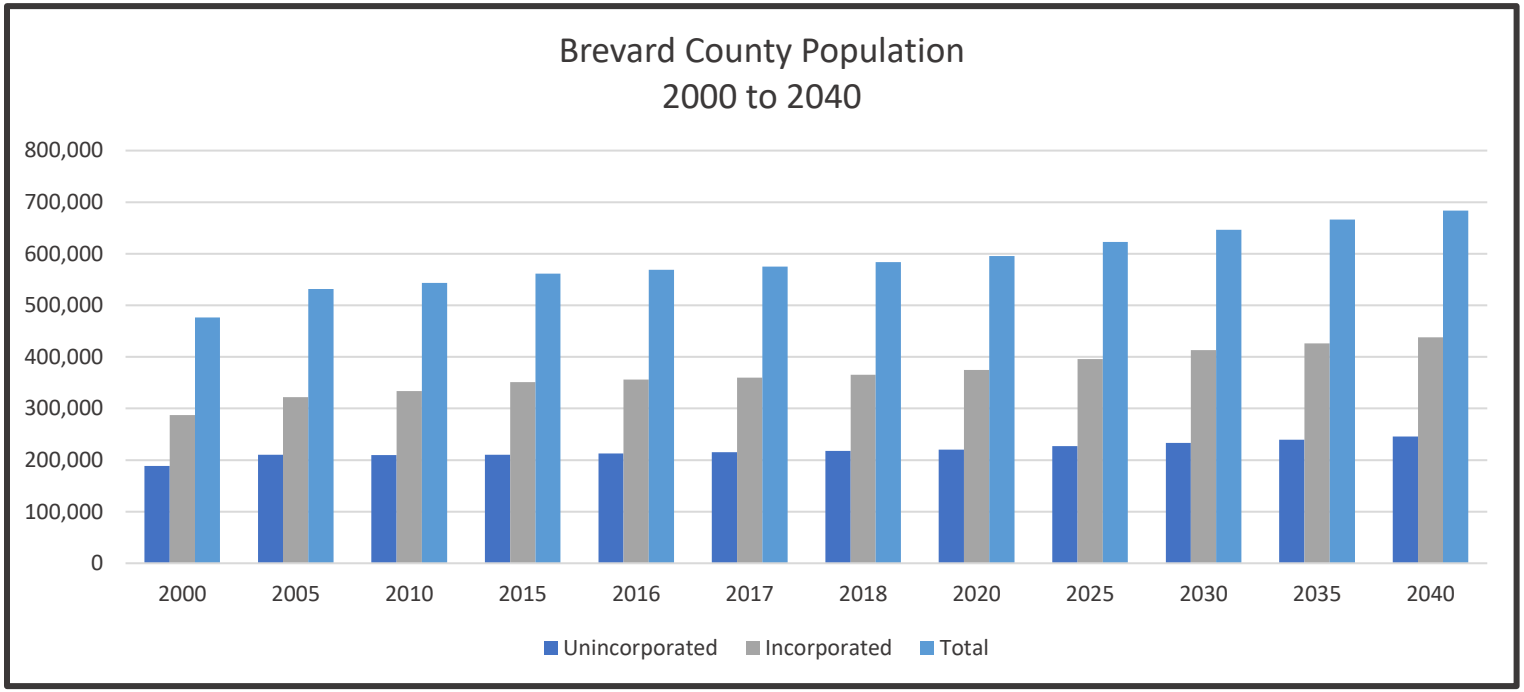
When compared to the BEBR 2040 projections, the countywide figure (683,808) generally aligns with the BEBR medium projection, which is just under 700,000 by the year 2040. See **Table 8.3**. In addition, the projected unincorporated county population of 245,865 generally aligns with the calculated medium projection for unincorporated county population from BEBR and Shimberg data.

Table 8.3: Countywide Projections, BEBR					
	2020	2025	2030	2035	2040
Low	573,800	586,800	594,300	598,400	600,400
Medium	598,500	630,300	656,300	678,700	698,700
High	621,600	669,900	715,300	757,900	799,100

Source: University of Florida Bureau of Economic and Business Research (BEBR), Projections of Florida Population by County, 2020-2045, with Estimates for 2018.

Of the countywide population by 2040, 245,865 people are allocated to unincorporated Brevard County and 437,943 people are allocated to the incorporated cities. This equates to 36% and 64% of the countywide population, respectively, with much of the population concentrated in cities. From the year 2018 to the year 2040, the County is expected to grow by 13%; whereas the cities are expected to grow by 20%. Similar to the draft TAZ data sourced from the Space Coast TPO, the incorporated cities are expected to experience a higher rate of growth than the unincorporated county toward the year 2040. See **Chart 8.1**.

Chart 8.1 Brevard County Population, 2000 to 2040



Source: Population estimates, 2000 to 2015 and 2018, from University of Florida Bureau of Economic and Business Research (BEBR); unincorporated Brevard County and incorporated cities interim projections, 2016 to 2018, generated using linear regression of historic and current BEBR estimates. Unincorporated Brevard County projections, 2020 to 2040, generated using linear regression of historic BEBR estimates shown in Table 8.1; incorporated projections, 2020 to 2040, sourced from Shimberg Center for Housing Studies' Florida Housing Data Clearinghouse.

In order to map the results of the 2040 population analysis, a population share was assigned to each TAZ geography based on the total countywide population expected by the year 2040. For example, each TAZ population count was divided by the countywide TAZ population (e.g. 777,027) to produce a share of the total. The share was then multiplied by the new countywide population (e.g. 683,808) resulting from the linear regression applied to BEBR estimates for the unincorporated county and the Shimberg projections for the incorporated cities.

As shown in **Map 8.1**, the majority of percentage population growth increase in unincorporated areas is anticipated to occur between the cities of Melbourne and Rockledge; unincorporated areas west of Titusville; and unincorporated areas to the west and south of the City of Palm Bay. Two of these areas correspond to existing Developments of Regional Impact (DRI); however, population growth outside of the DRIs is also anticipated as these areas become developed. Very little growth is expected on the barrier islands except for an area on Merritt Island.

When total absolute population is considered, the highest numbers of people will be located south and southwest of the City of Titusville, between the cities of Melbourne and Rockledge, and west and south of the City of Palm Bay. See **Map 8.5.** Moreover, if population density is considered, the greatest concentration of population by 2040 will be in the unincorporated areas between the cities of Melbourne and Rockledge, areas just south of Titusville, and on Merritt Island. See **Map 8.9.**

While the SOIRLPP prioritizes several focus areas, very few are within unincorporated Brevard County. Of those within unincorporated Brevard County, the majority are near US-1 on the mainland side of the Indian River. Priority focus areas are found between the cities of Melbourne and Rockledge, where population growth is projected, or south of the City of Palm Bay near Micco. Several of the priority focus areas are also located on Merritt Island where little growth is projected.

In conclusion, the recommended 2040 population projections for Brevard County of 683,808 for total county population and 245,865 for unincorporated population are relatively consistent with other population projections for Brevard County by BEBR and the Space Coast TPO. In addition, the recommended 2040 population projections do not exceed the development potential as provided in the current adopted Brevard County Comprehensive Plan. The proposed geographic allocation of the projected 2040 population is consistent with the development indicators and constraints analyzed in this report.

As previously discussed, long-term population projections are not an exact science but provide a guide for future planning efforts. Long-term population projections can be significantly impacted by unforeseen changes in economic

conditions and other regulatory or natural constraints. It is important that the County continue to monitor actual development activity and periodically update these long-term projections.

Appendix

Maps:

2.1 Developments of Regional Impact (DRI)

2.2 Vacant Lands by Future Land Use

2.3 Future Land Use Amendments

3.1 SOIRL Priority Focus Areas by Nutrient Load

3.2 Land Use Constraints Areas

4.1 County Utilities

4.2 Transportation

5.1 Residential Building Permits

7.1 2015-2040 TAZ Population Change

7.2 Projected School Growth from 2018-2024

8.1 Year 2040 Population Change

8.2 Year 2040 Population Change – Northern County

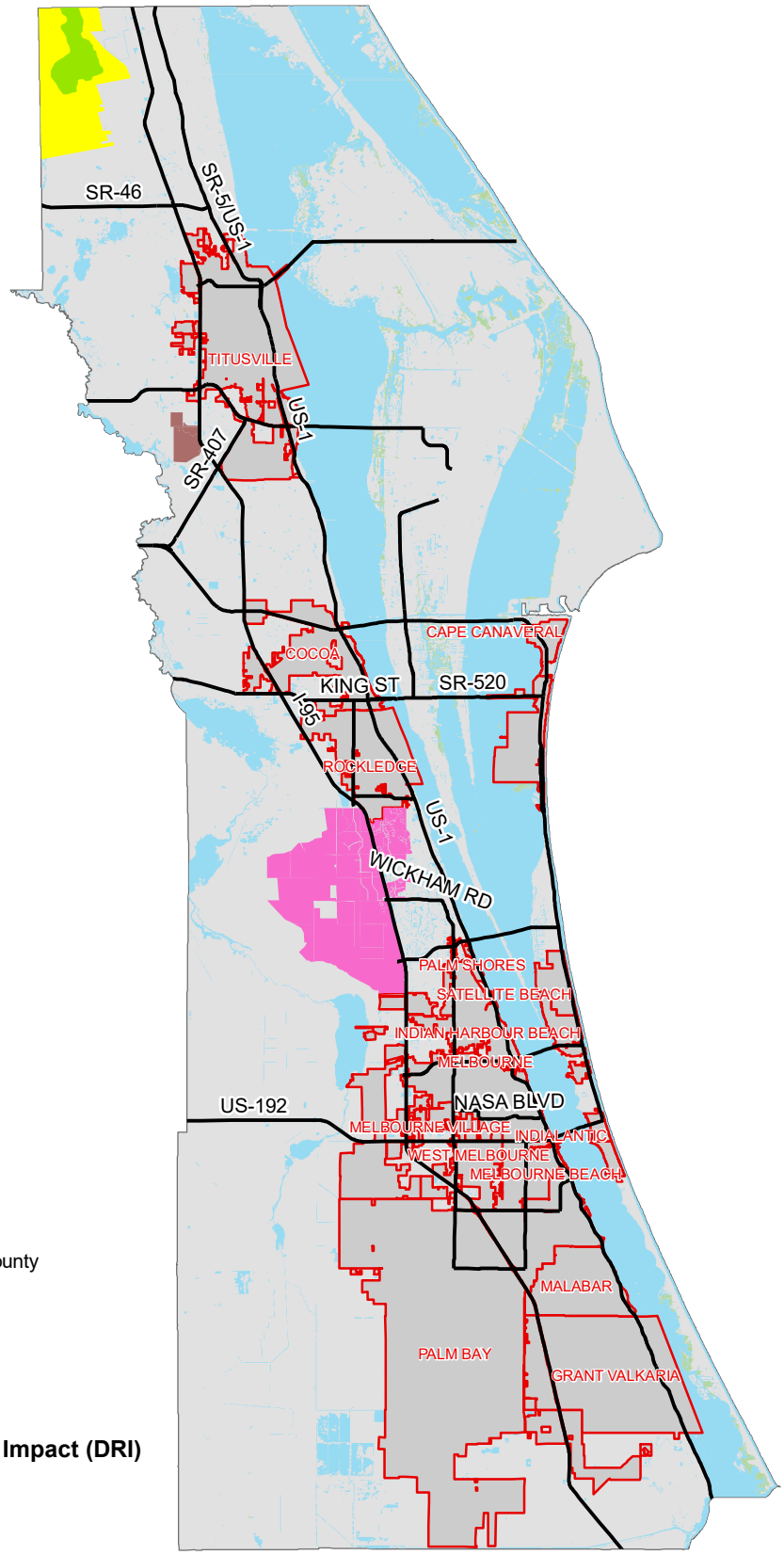
8.3 Year 2040 Population Change – Central County

8.4 Year 2040 Population Change – Southern County

8.5 Year 2040 Total Population

8.6 Year 2040 Total Population – Northern County

8.7 Year 2040 Total Population – Central County



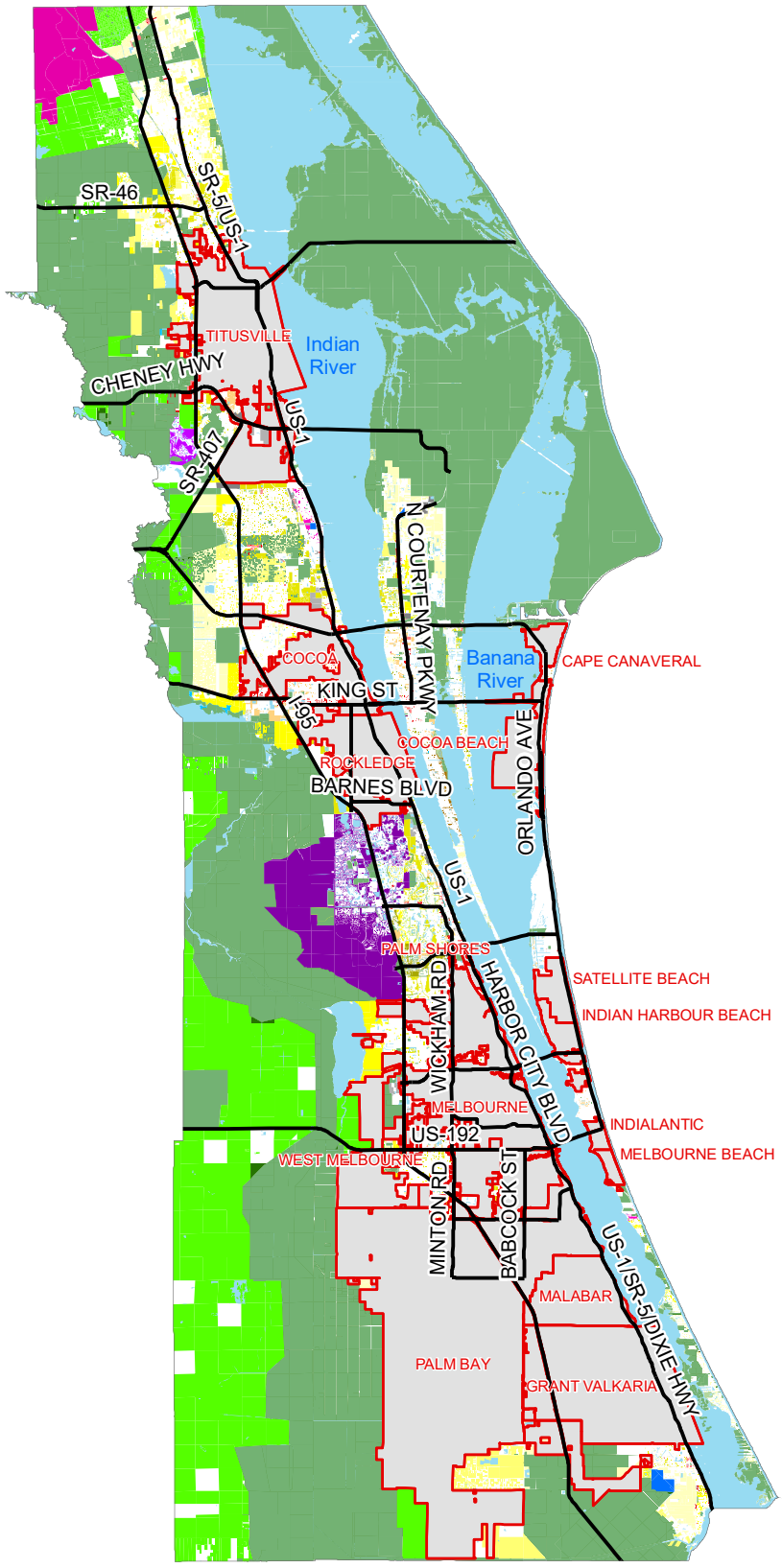
Brevard County, Florida
2040 Population Analysis

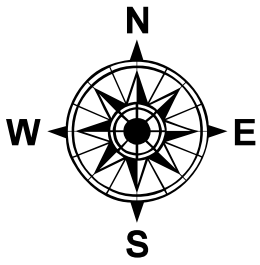
WADE TRIM

Data Source: Brevard County Comprehensive Plan, 2009; Brevard County Future Land Use Map

Brevard COUNTY

MAP 2.1
Developments of Regional Impact (DRIs)





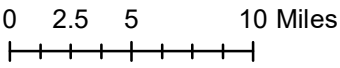
Legend

- Cities
- Major Roads
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh

Vacant Lands (Unincorporated Brevard County)

Future Land Use Description

- AGRIC AGRICULTURAL
- DRI1 DEVELOPMENT REGIONAL IMPACT (Great Outdoors)
- DRI3 DEVELOPMENT REGIONAL IMPACT (Viera)
- FMU FARMTON MIXED USE
- CC COMMUNITY COMMERCIAL
- NC NEIGHBORHOOD COMMERCIAL
- IND INDUSTRIAL
- PI PLANNED INDUSTRIAL
- PUB PUBLIC
- PRIV CONS PRIVATE CONSERVATION
- PUB-CONS PUBLIC CONSERVATION
- REC RECREATION
- RES1 RESIDENTIAL 1 UNIT PER ACRE
- RES1:2.5 RESIDENTIAL 1 UNIT PER 2.5 ACRES
- RES 2 RESIDENTIAL 2 UNITS PER ACRE
- RES 4 RESIDENTIAL 4 UNITS PER ACRE
- RES 6 RESIDENTIAL 6 UNITS PER ACRE
- RES 10 RESIDENTIAL10 UNITS PER ACRE
- RES 15 RESIDENTIAL15 UNITS PER ACRE
- RES 2-DIR DIRECTIVE RESIDENTIAL 2 UNITS PER ACRE
- RES 3-DIR DIRECTIVE RESIDENTIAL 3 UNITS PER ACRE
- RES 4-DIR DIRECTIVE RESIDENTIAL 4 UNITS PER ACRE
- RES 5-DIR DIRECTIVE RESIDENTIAL 5 UNITS PER ACRE
- RES 6-DIR DIRECTIVE RESIDENTIAL 6 UNITS PER ACRE
- RES 8-DIR DIRECTIVE RESIDENTIAL 8 UNITS PER ACRE
- RES 12-DIR DIRECTIVE RESIDENTIAL 12 UNITS PER ACRE
- RES 30-DIR DIRECTIVE RESIDENTIAL 30 UNITS PER ACRE



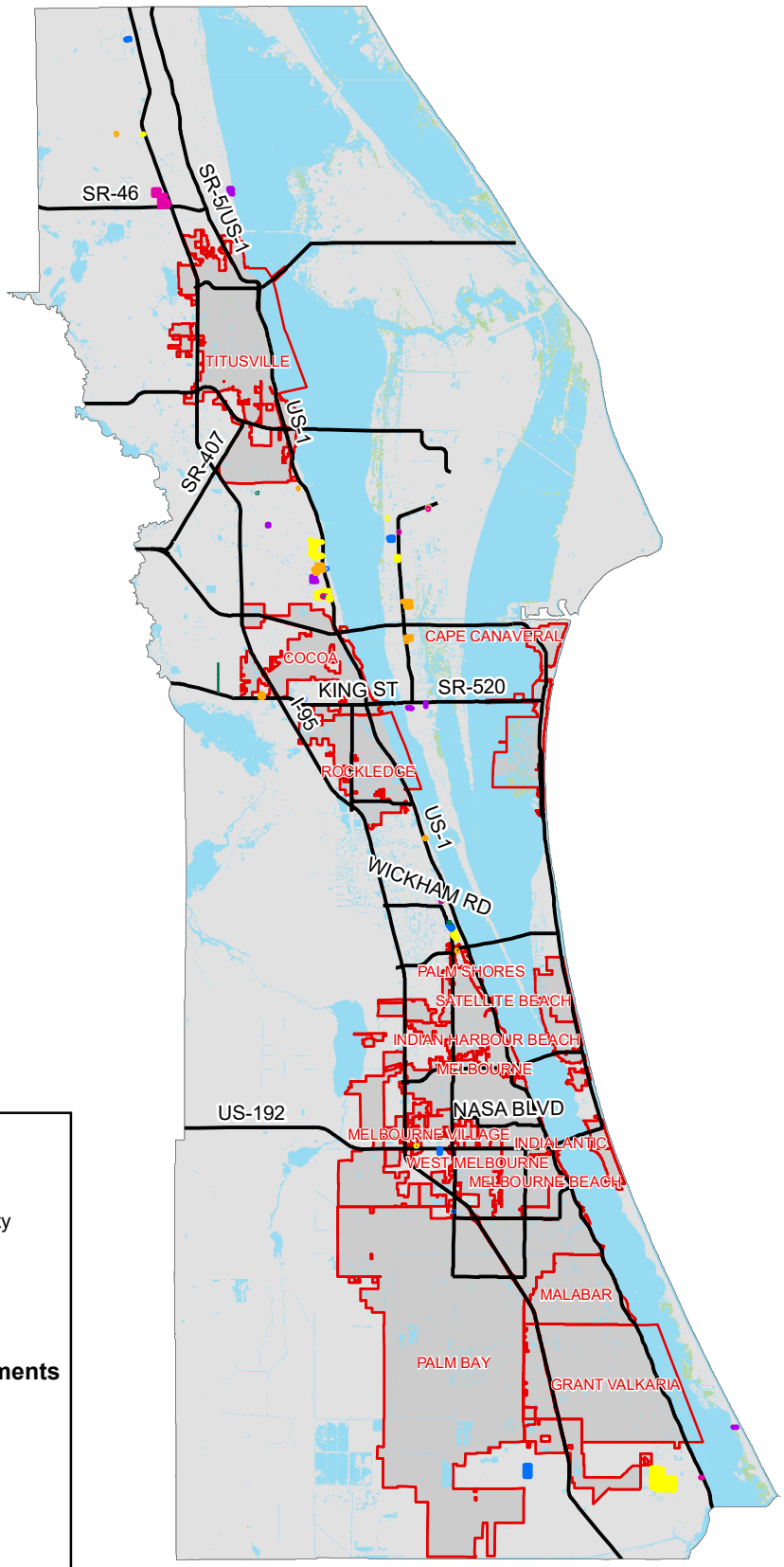
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Brevard County Comprehensive Plan, 2009.

Brevard COUNTY

MAP 2.2
Vacant Lands by Future Land Use



Legend

- Cities
- Unincorporated Brevard County
- Major Roads
- Water
- Swamp/Marsh

Comprehensive Plan Amendments

- 2015
- 2016
- 2017
- 2018
- 2019
- PendingAmendments

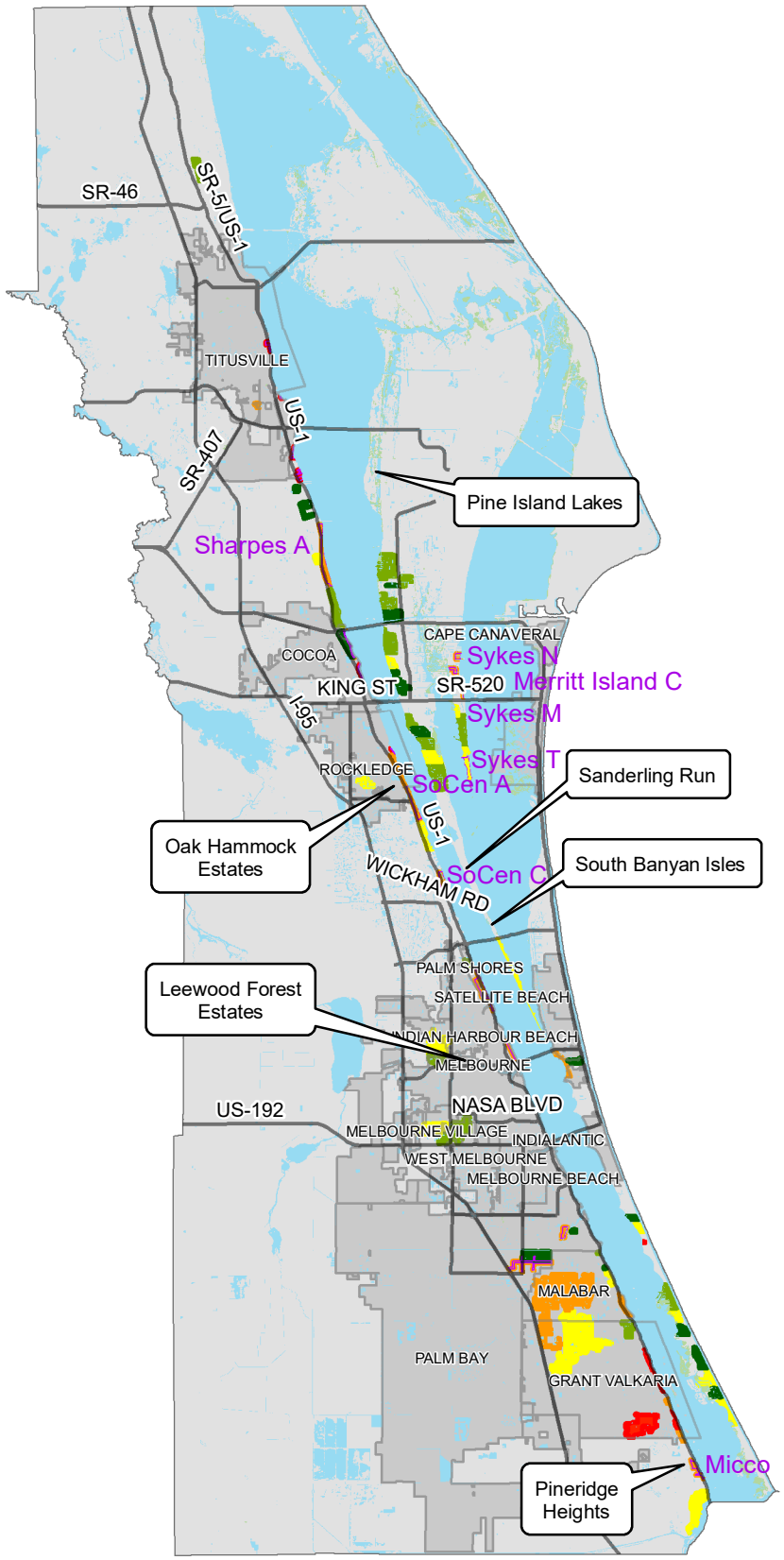
Brevard County, Florida 2040 Population Analysis

Data Source: Brevard County Planning and Development Department; Florida Department of Economimc Opportunity (DEO), Florida Papers, Brevard County Comprehensive Plan Amendments, Years 2015 to 2019 (to June).

WADE TRIM

Brevard COUNTY

MAP 2.3 Future Land Use Amendments



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Legend

- Major Roads
- Unincorporated Brevard County
- Cities
- Water
- Swamp/Marsh
- Priority Focus Areas (January 2019)

Nitrogen (lbs/year per Septic Parcel)

- 0.004 - 6.930
- 6.931 - 12.853
- 12.854 - 22.876
- 22.877 - 36.422
- 36.423 - 57.511

Priority Communities (Platted Subdivisions)

0 2.5 5 10 Miles

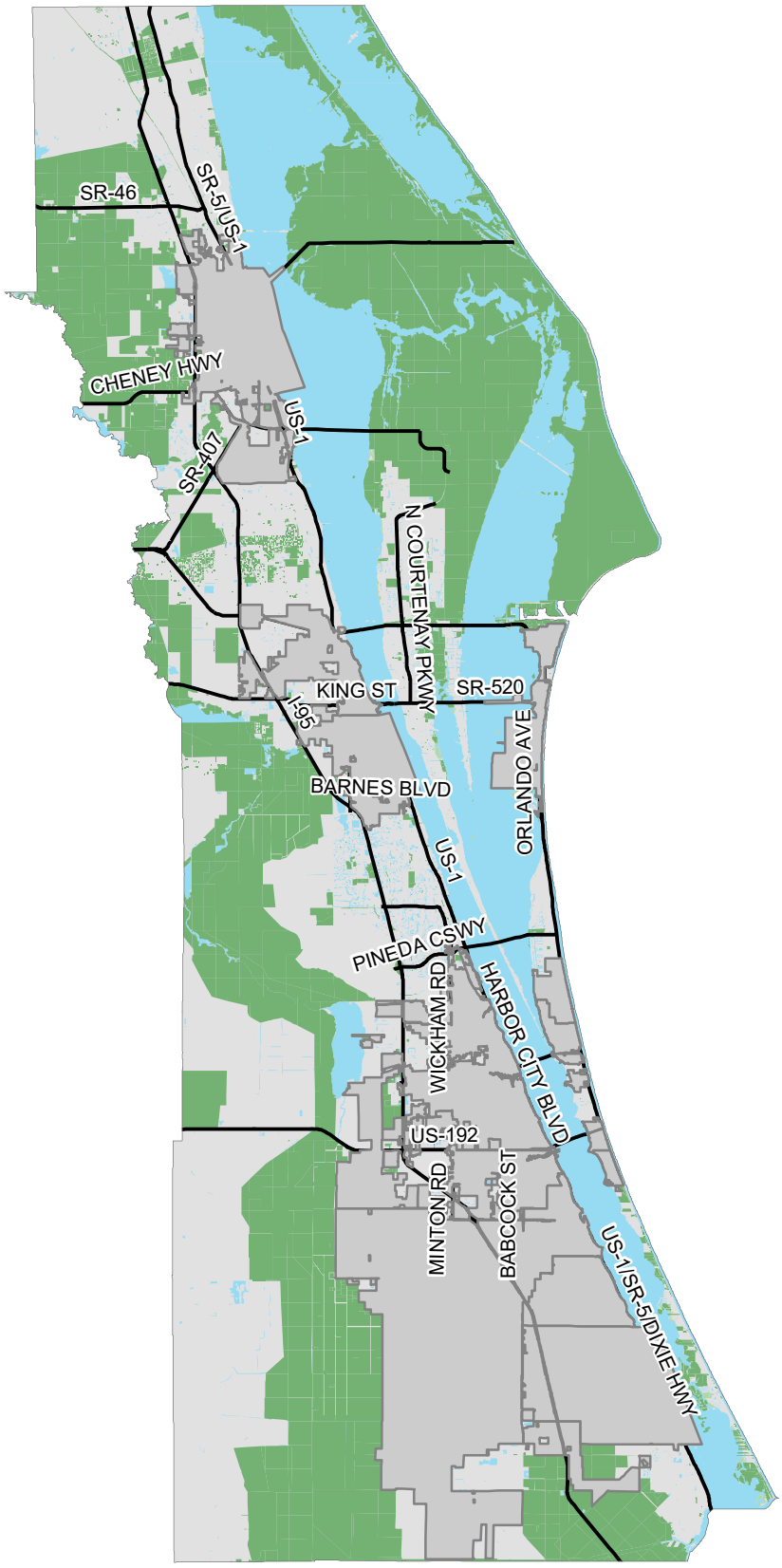
Brevard County, Florida 2040 Population Analysis

Data Source: Brevard County Natural Resources Management Department, "Parcel-, Modified Focus Area-, and Community-Based OSTDS Prioritization Analysis in Support of Updated SOIRL Septic System Conversion and/or Replacement Projects" (Applied Ecology, Inc., January 17, 2019). Report developed in support of the Save Our Indian River Lagoon Project Plan (SOIRLPP). "Focus Areas" represent septic to sewer prioritization areas based on multiple inputs. "Priority Focus Areas" (January 2019) identified for retrofit based on >25 lbs/year per septic parcel or already in process of compliance with SOIRLPP.

WADE TRIM

Brevard COUNTY

MAP 3.1 SOIRL Priorty Focus Areas by Nutrient Load



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Legend

- Unincorporated Brevard County
- Cities
- Major Roads
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh

0 2.25 4.5 9 Miles

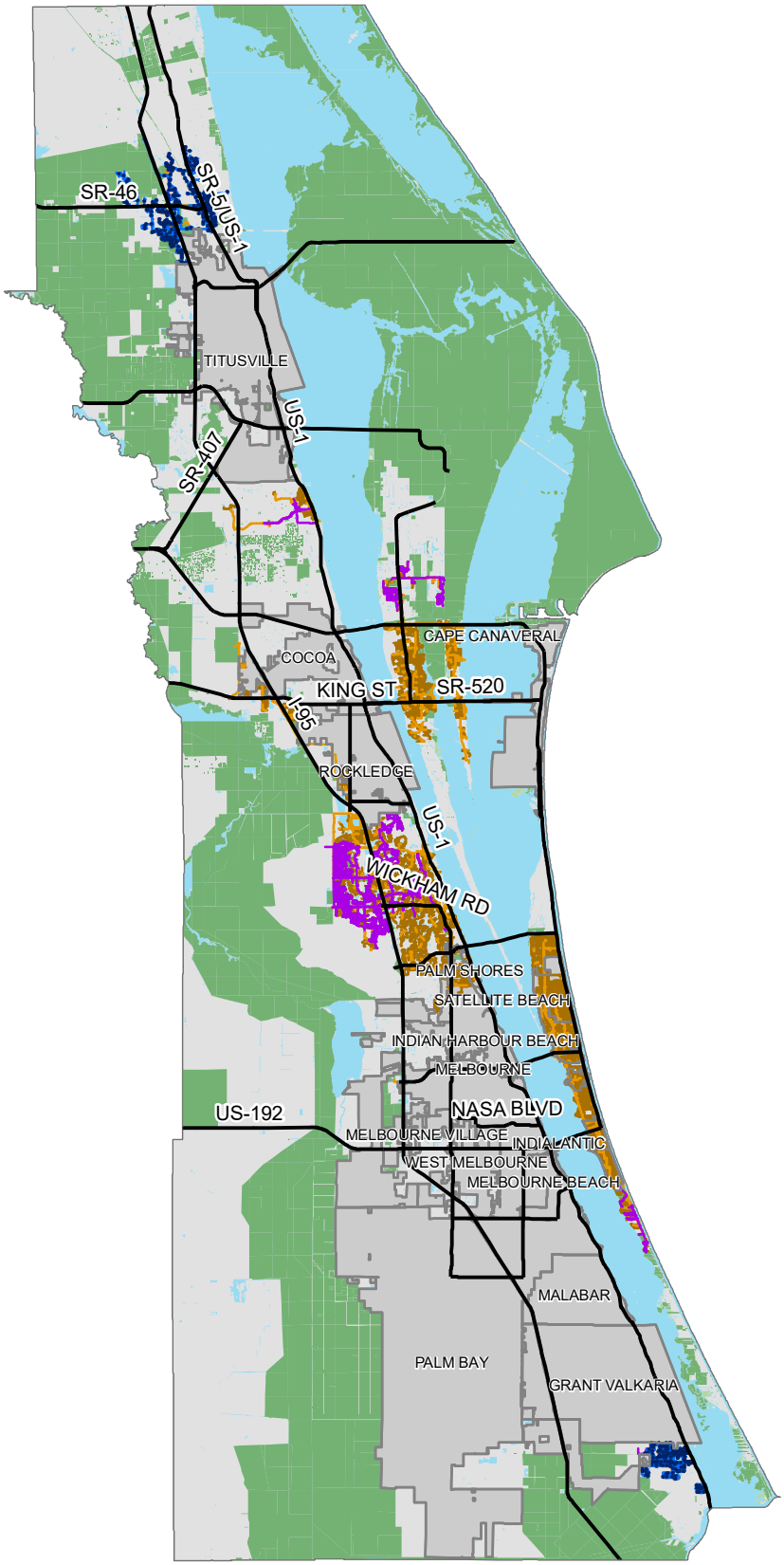
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Environmental data obtained from Save Our Indian River Lagoon (SOIRL), U.S. Geological Survey (USGS) National Hydrography Dataset, and Brevard County Property Appraiser.

Brevard COUNTY

MAP 3.2
Land Use Constraints Areas



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Legend

- Unincorporated Brevard County
- Cities
- Major Roads
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh
- Hydrants
- Water Lines
- Reclaimed Water Lines
- Force Main
- Gravity Main

0 2.5 5 10 Miles

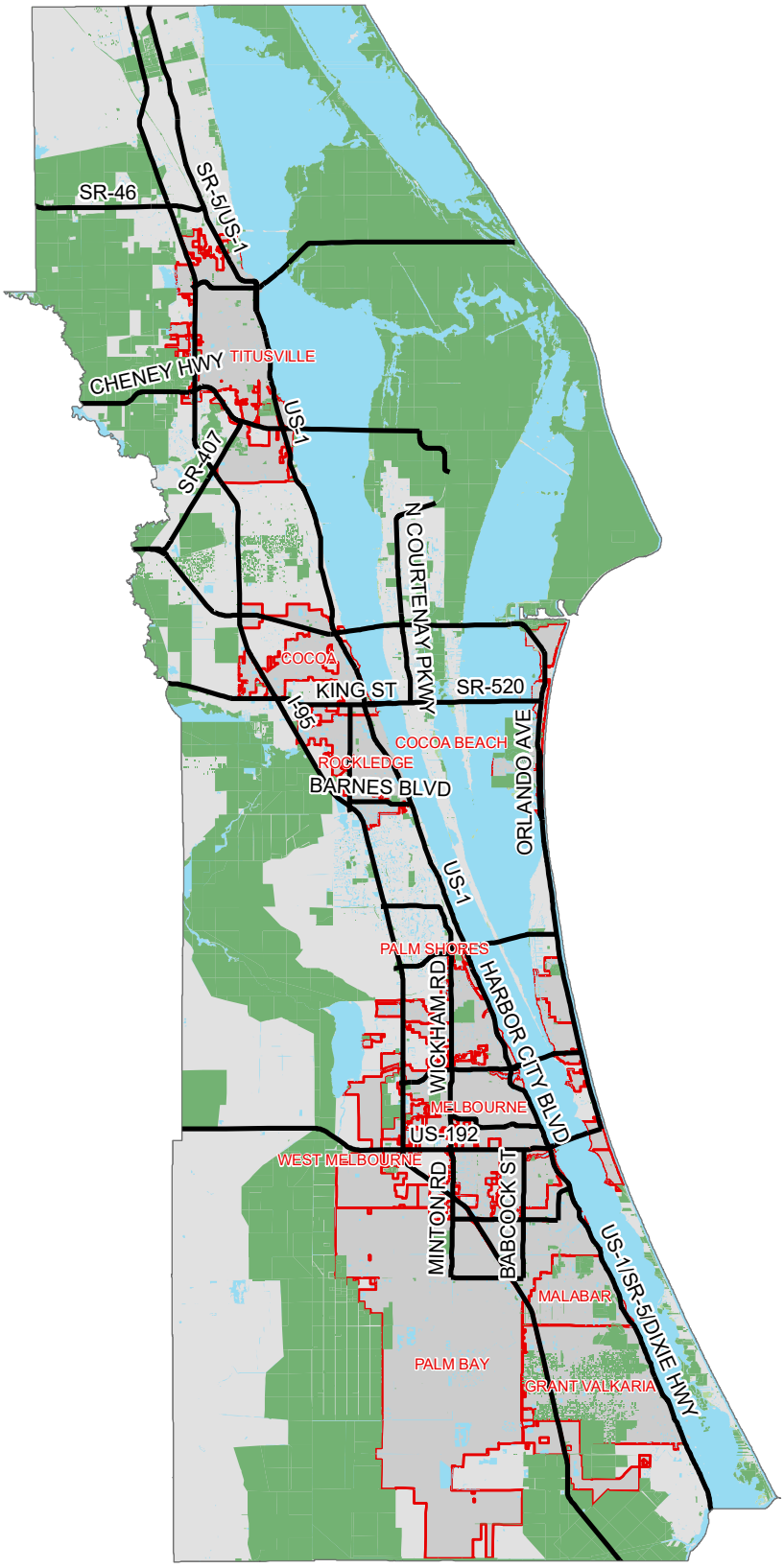
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Brevard County Utility Services Department, 2019.

Brevard COUNTY

MAP 4.1
County Utilities



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Legend

- Unincorporated Brevard County
- Cities
- Major Roads
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh

0 2.5 5 10 Miles

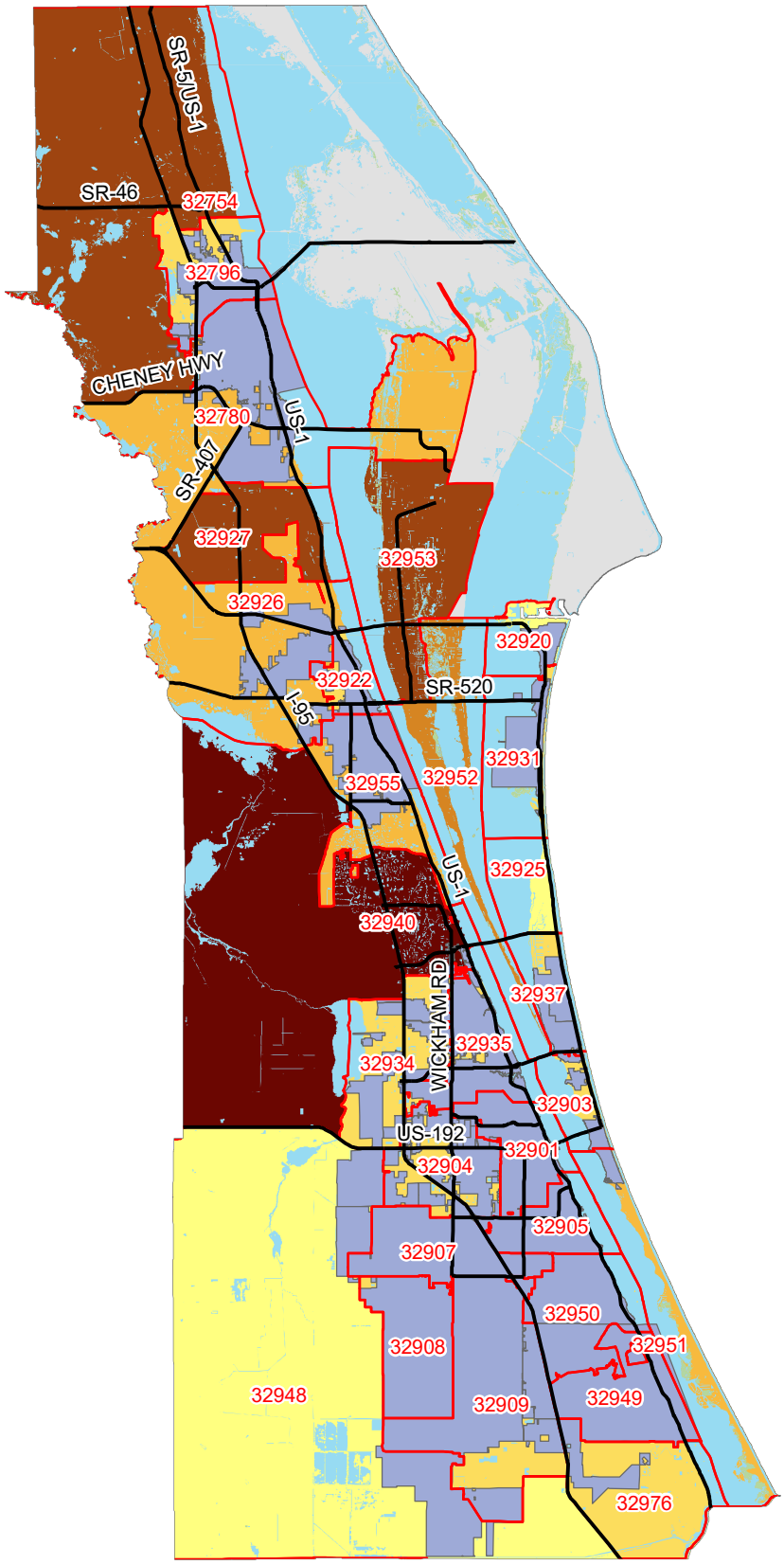
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Florida Department of Transportation (FDOT), Major Roads.

Brevard COUNTY

MAP 4.2
Transportation



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Legend

- Brevard County Zip Codes
- Cities
- Unincorporated Brevard County
- Major Roads
- Water
- Swamp/Marsh

PERMITS BY ZIP CODE

- 0
- 1 - 50
- 51 - 100
- 101 - 150
- 151 - 200
- 201 - 1,845

0 2.5 5 10 Miles

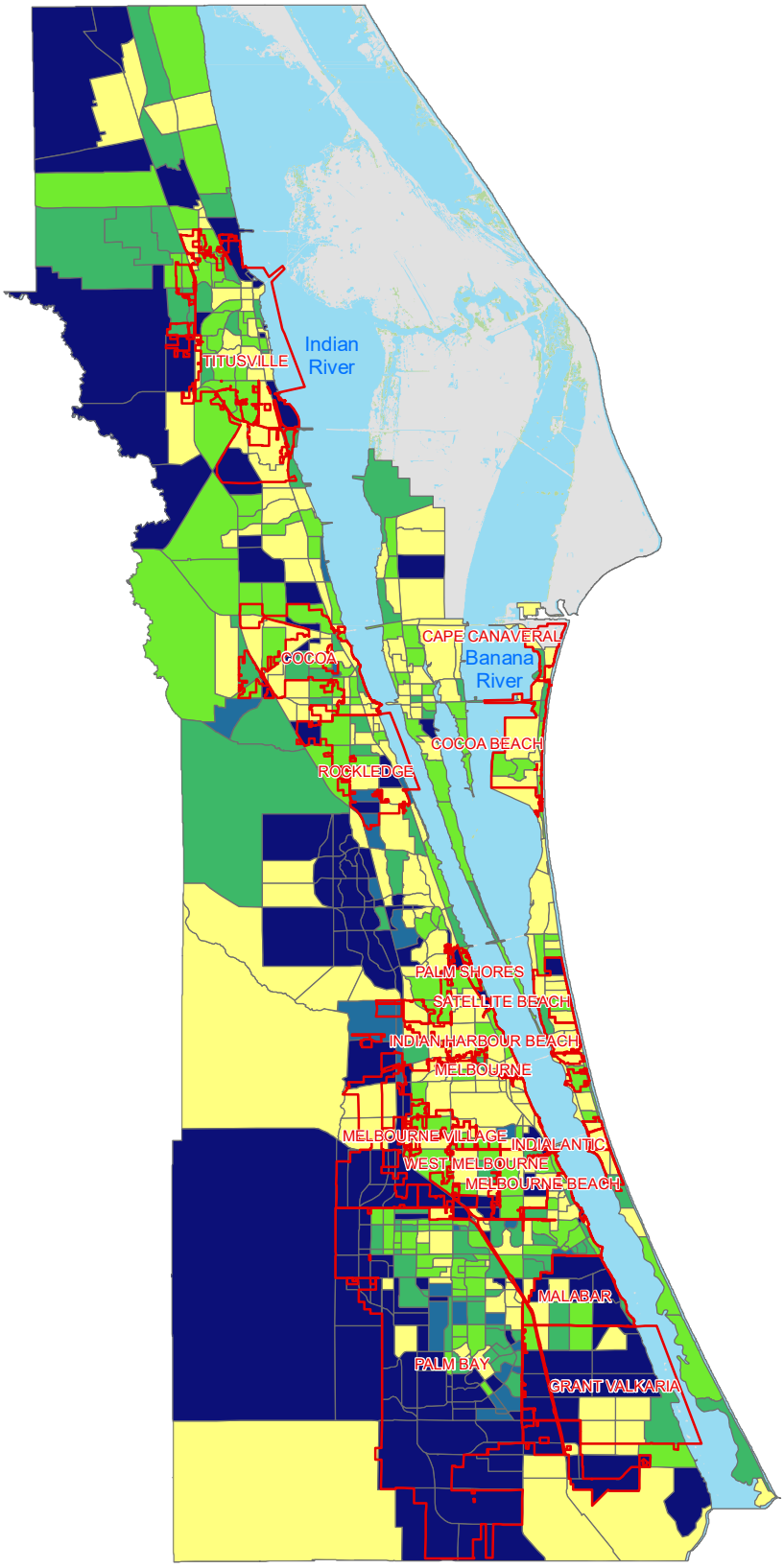
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Brevard County Planning and Development Department, New Residential Building Permit Data, 2015-2018.

Brevard COUNTY

MAP 5.1
Residential Building Permits



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Legend

- Cities
- Unincorporated Brevard County
- Water
- Swamp/Marsh

Traffic Analysis Zones (TAZ)

Population Change, Years 2015 to 2040

- <= 10%
- 10% - 25%
- 25% - 50%
- 50% - 75%
- > 75%

0 2.5 5 10 Miles

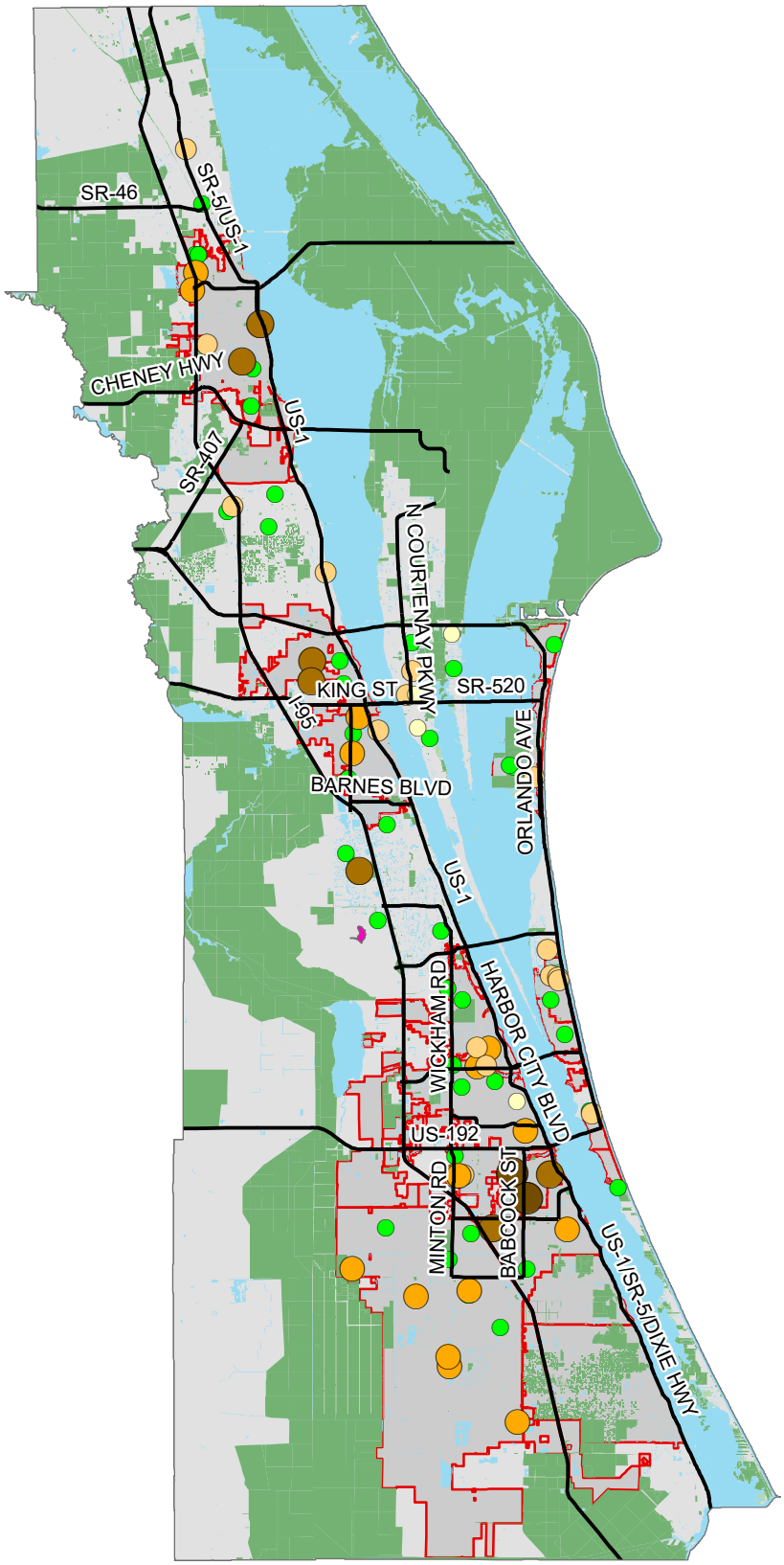
Brevard County, Florida
2040 Population Analysis

WADE TRIM

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files).

Brevard COUNTY

MAP 7.1
2015-2040 TAZ Population Change



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Legend

- Cities
- Unincorporated Brevard County
- Major Roads
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh

Projected Percent Growth fron 2018-2024

- < 1%
- 1% - 10%
- 10% - 20%
- 20% - 30%
- > 30%
- Schools with Decline
- New Viera Elementary 2020

0 2.5 5 10 Miles

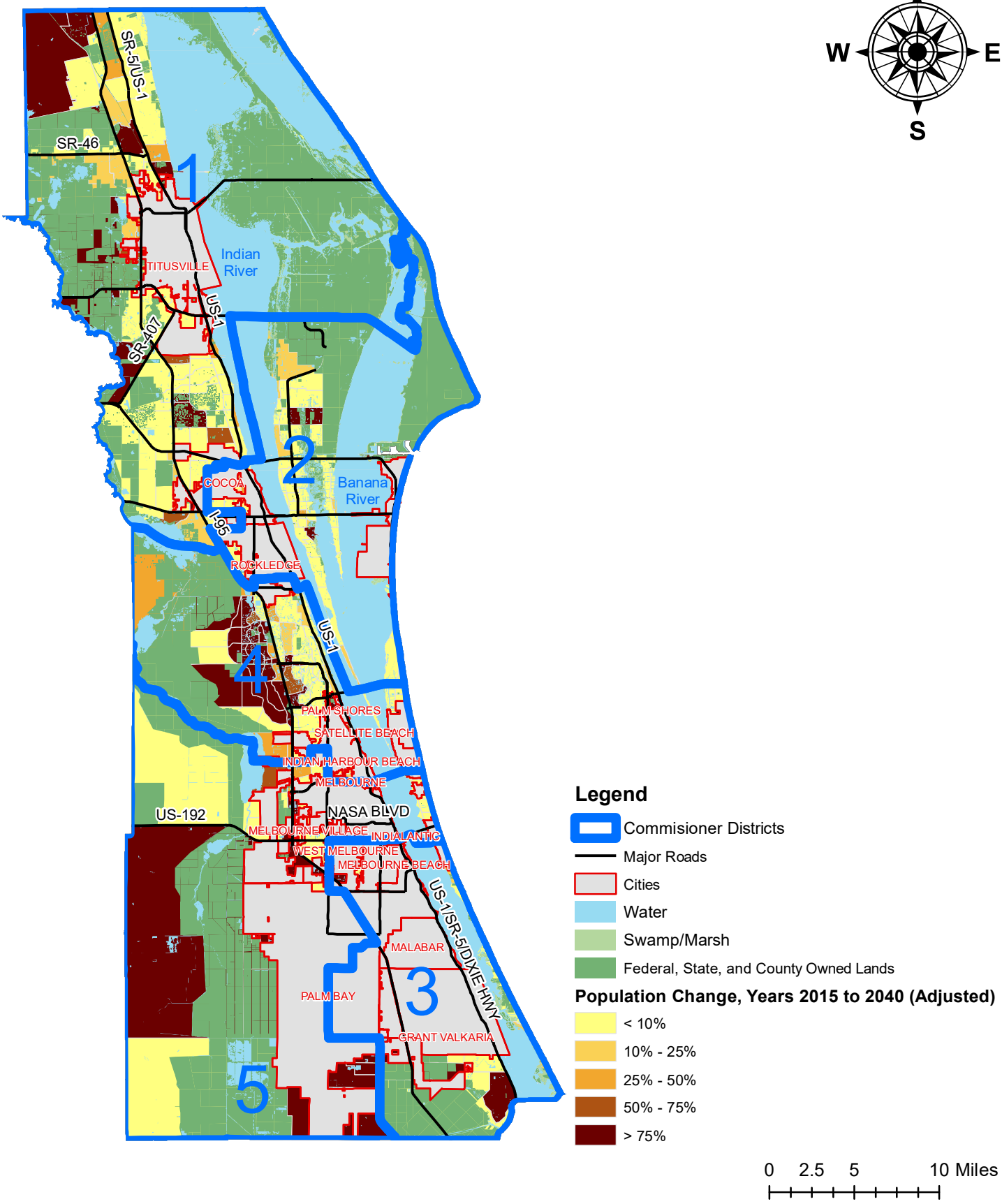
Brevard County, Florida 2040 Population Analysis

Data Source: School data obtained from Brevard Public Schools District; municipal and county boundary data obtained from Brevard County; environmental data obtained from Save Our Indian River Lagoon (SOIRL), U.S. Geological Survey (USGS) National Hydrography Dataset, and Brevard County Property Appraiser.

WADE TRIM

Brevard COUNTY

MAP 7.2 Projected School Growth from 2018-2024



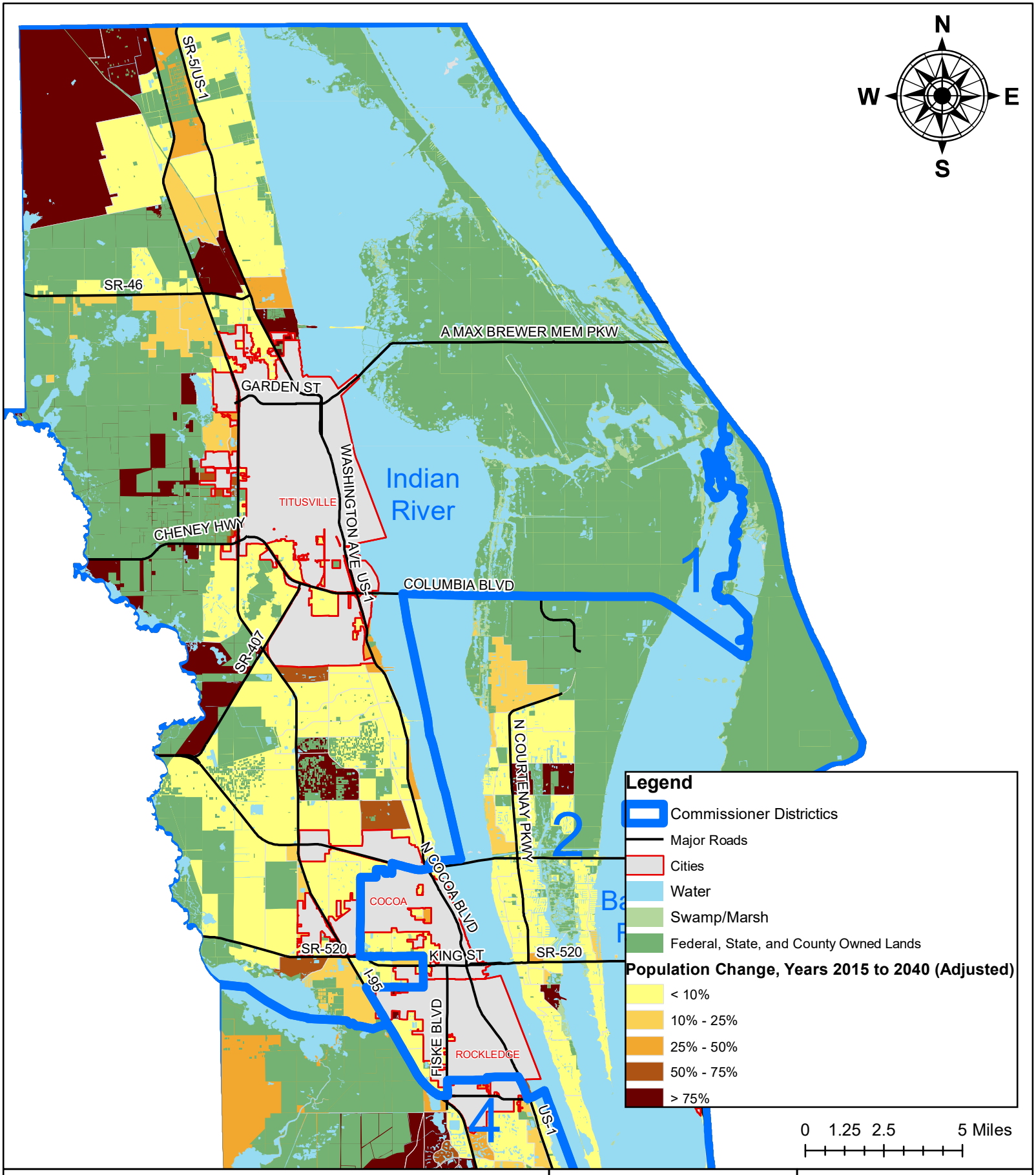
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & Business Research (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.1
Year 2040
Population Change



Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & Business Research (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

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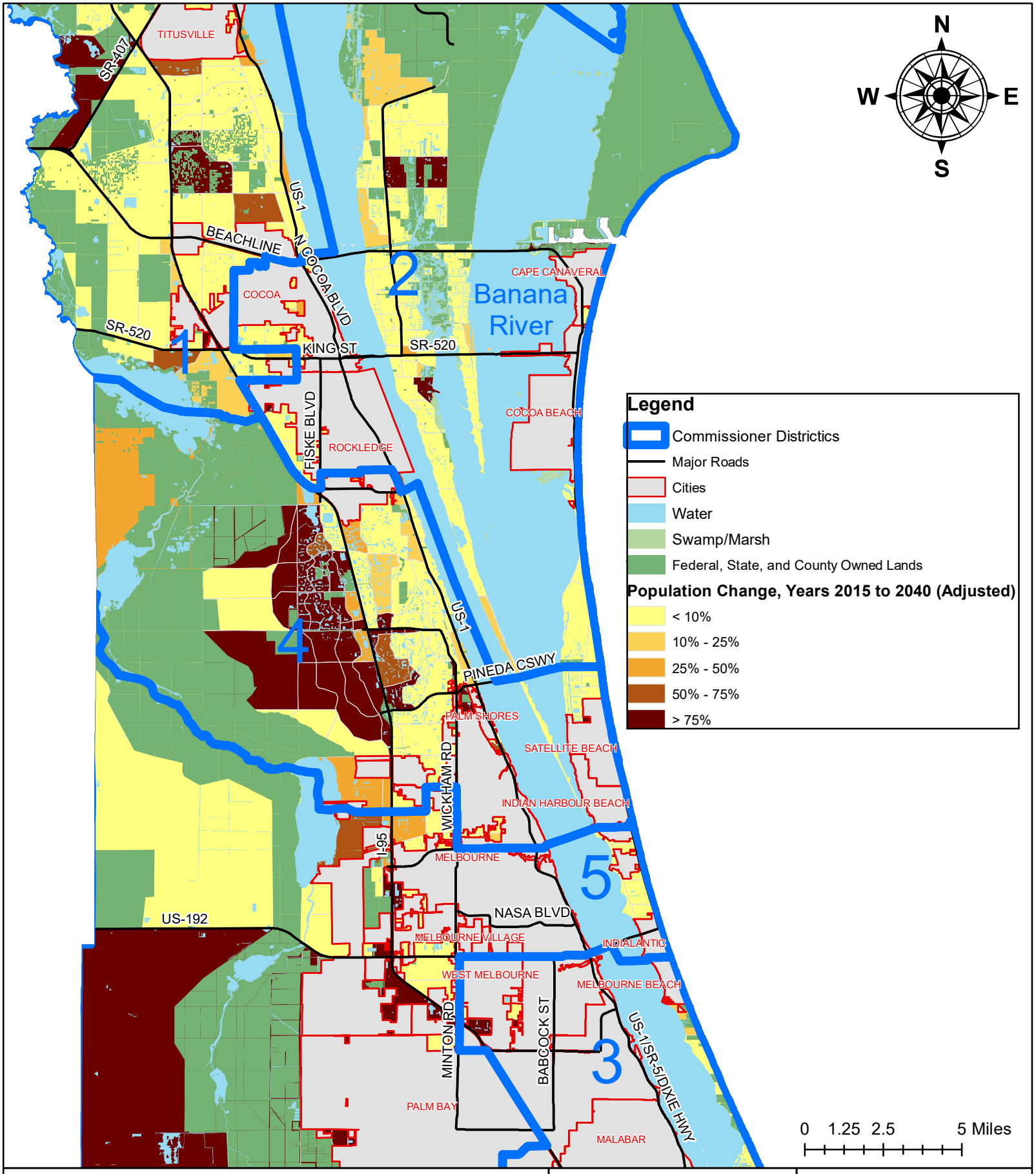
Brevard COUNTY

MAP 8.2
Year 2040
Population Change
Northern County



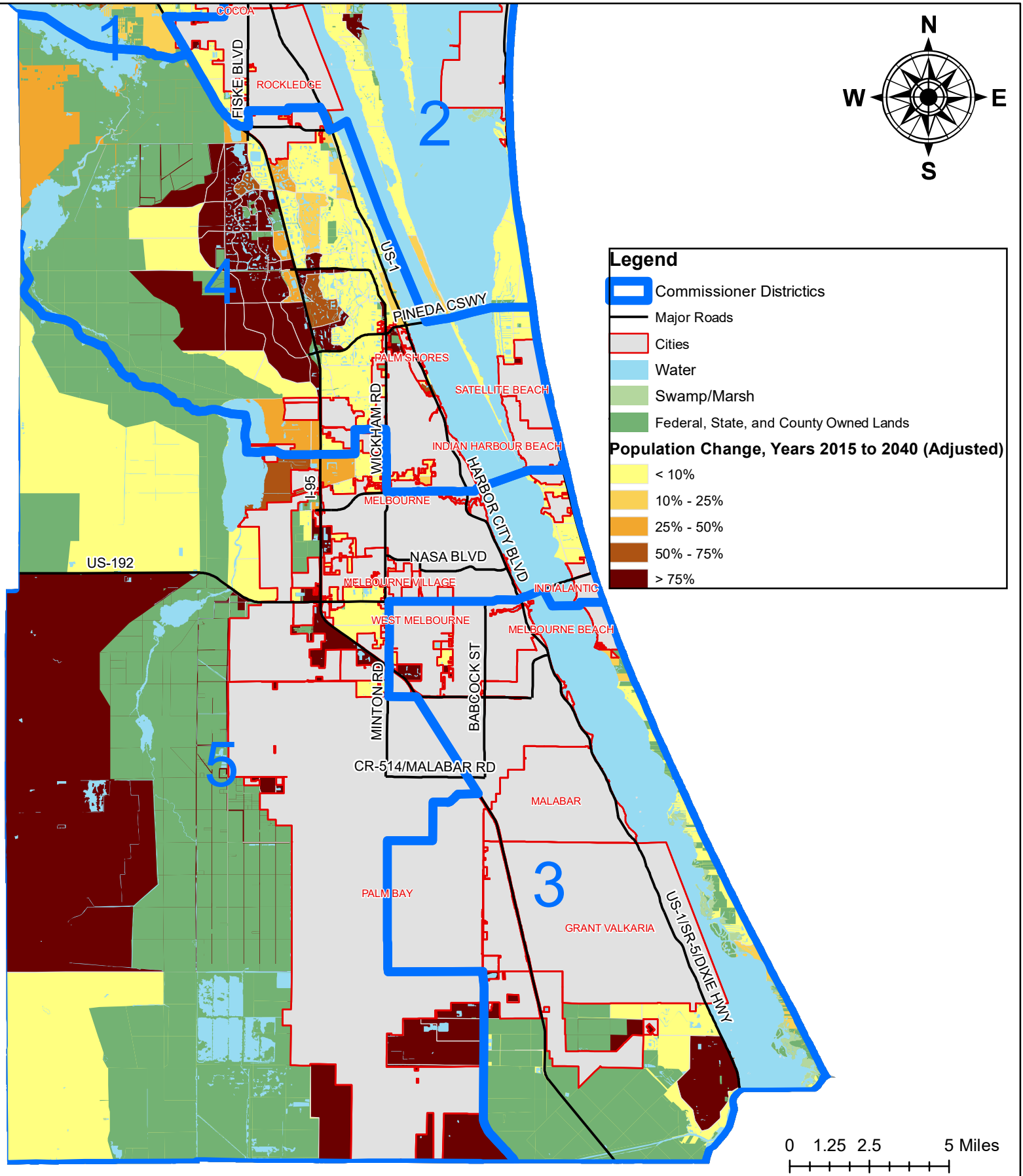
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & Business Research (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.3
Year 2040
Population Change
Central County



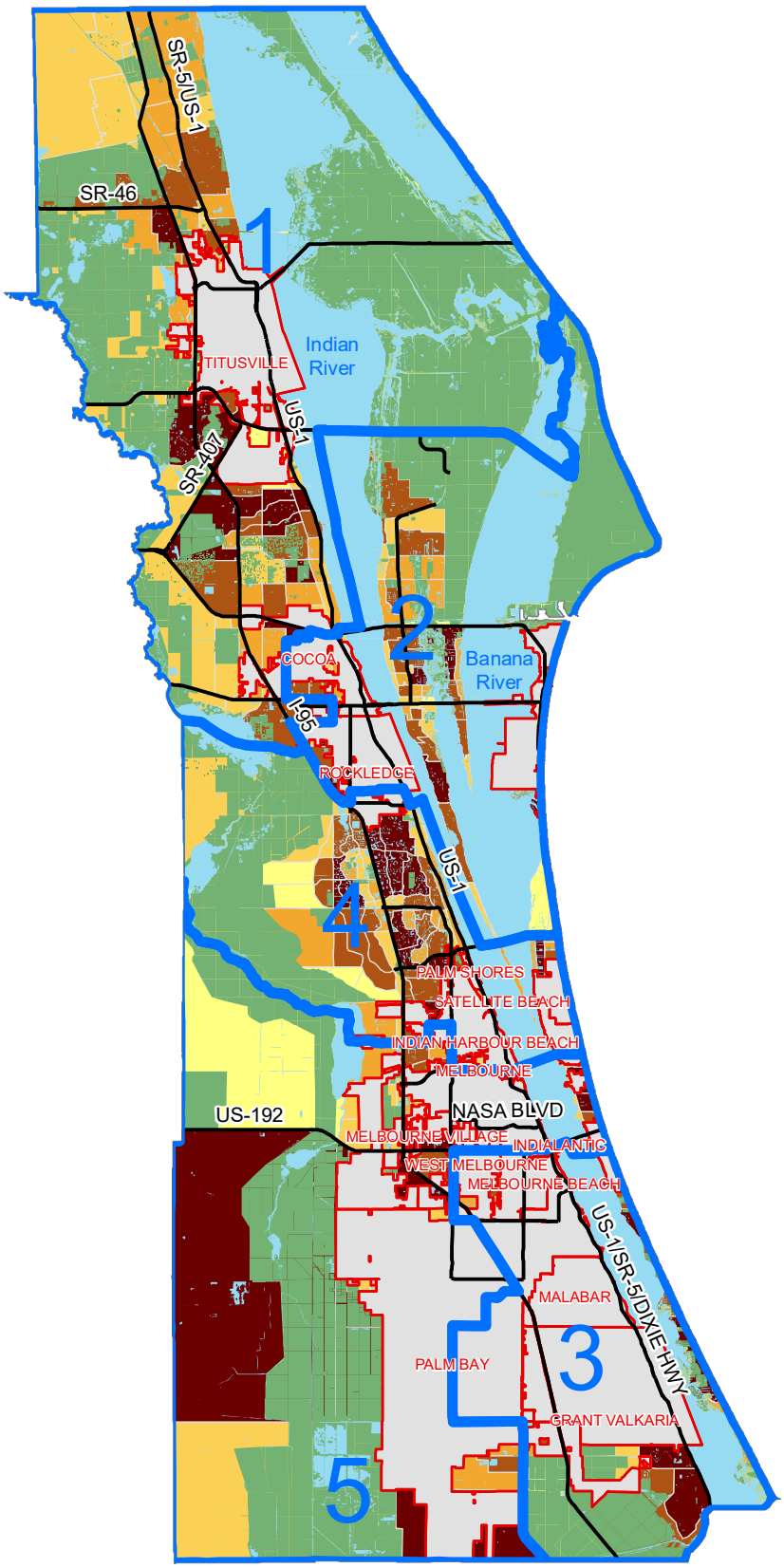
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & Business Research (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.4
Year 2040
Population Change
Southern County



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Legend

Commisioner Districts

- Commisioner Districts
- Major Roads
- Cities
- Water
- Swamp/Marsh
- Federal, State, and County Owned Lands

Total Population by 2040 (Adjusted)

- 0
- < 500
- 501 - 1,000
- 1,001 - 2,000
- > 2,000

0 2.25 4.5 9 Miles

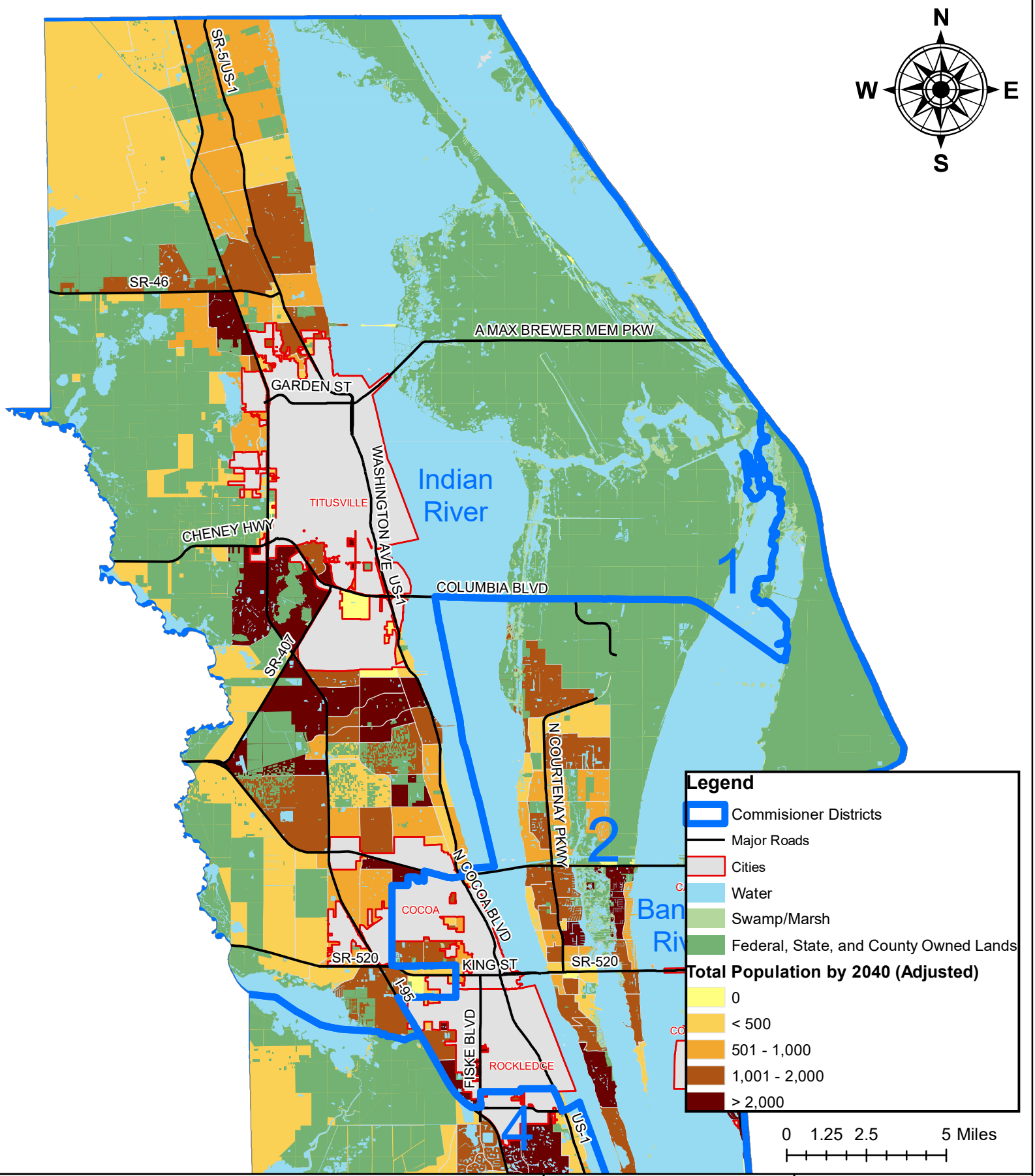
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

Map 8.5
Year 2040
Total Population



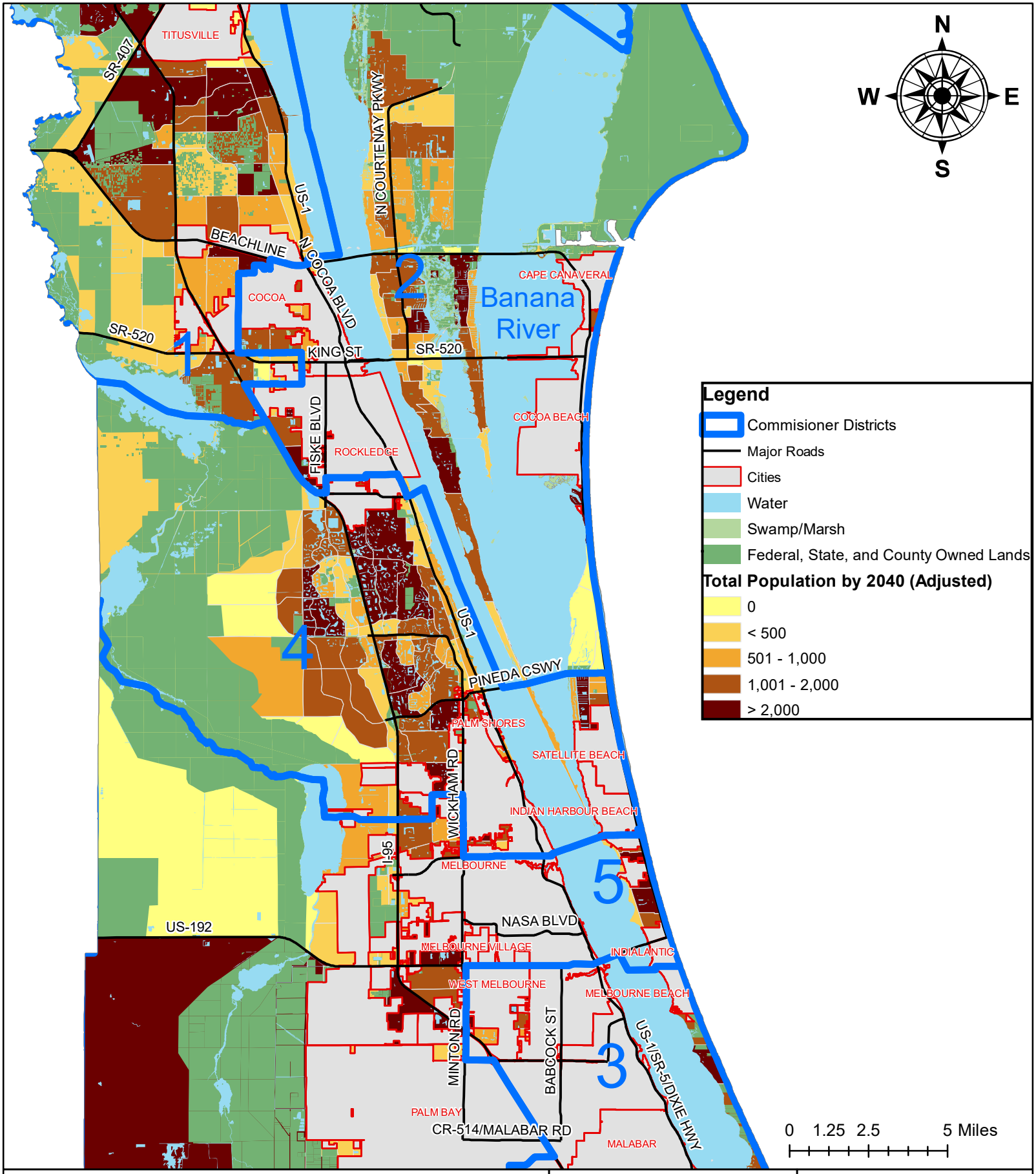
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

Map 8.6
Year 2040
Total Population
Northern County



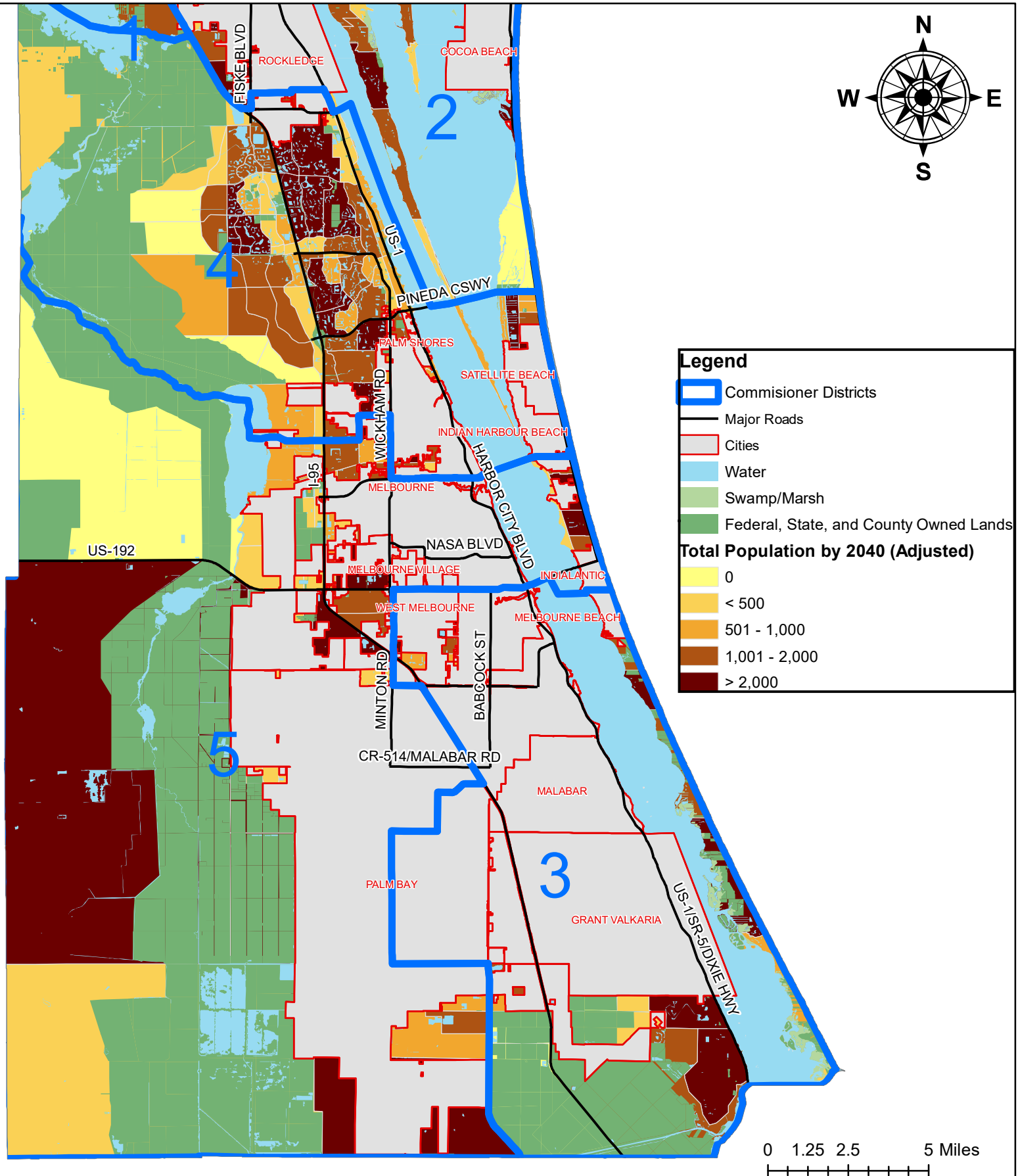
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

Map 8.7
Year 2040
Total Population
Central County



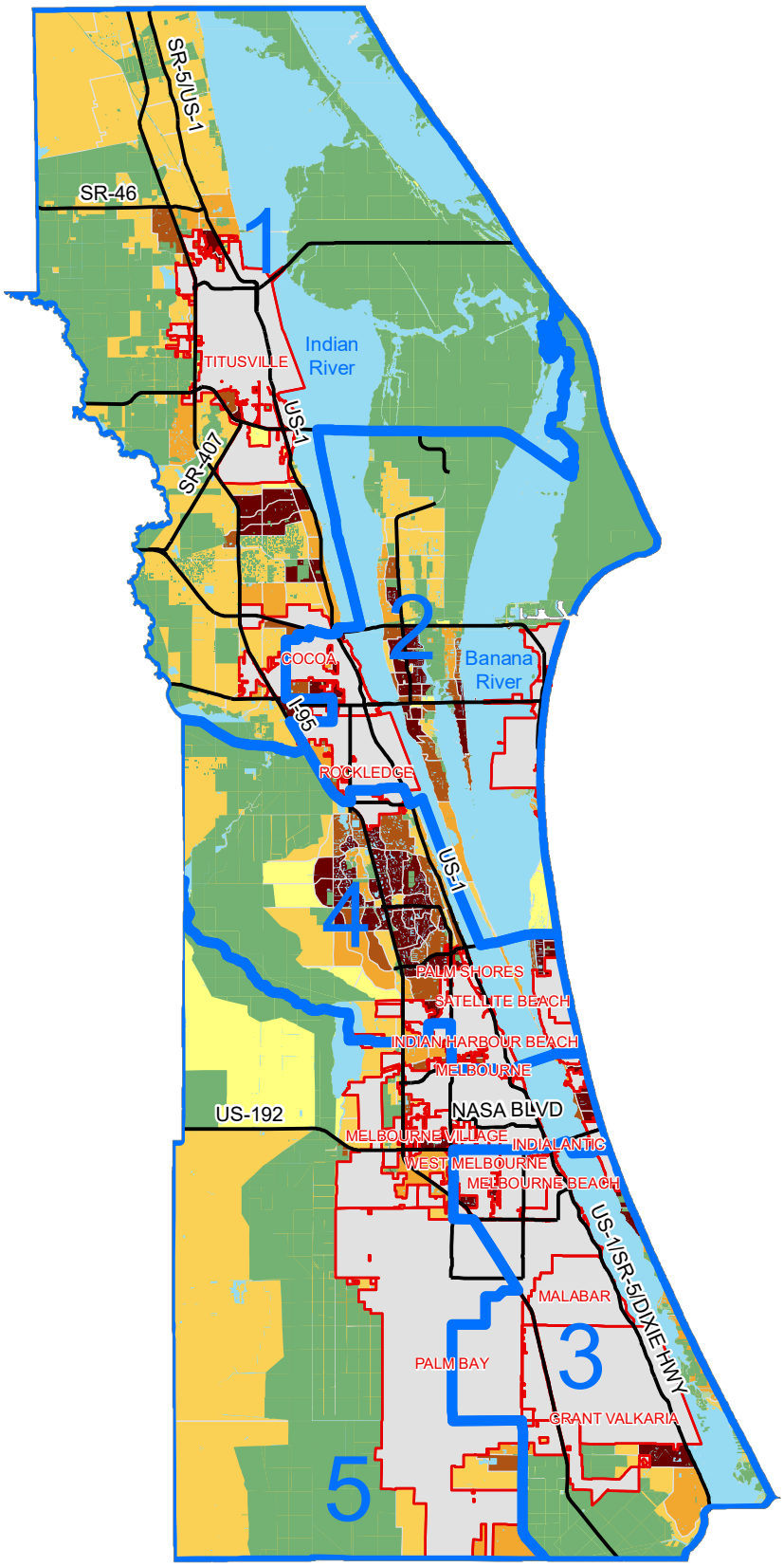
Brevard County, Florida
2040 Population Analysis

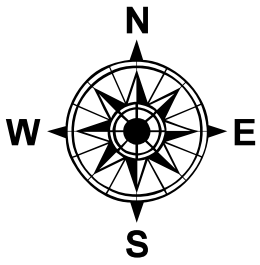
Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

Map 8.8
Year 2040
Total Population
Southern County





Legend

- Commisioner Districts
- Major Roads
- Cities
- Federal, State, and County Owned Lands
- Water
- Swamp/Marsh

Persons Per Acre 2040 (Adjusted)

- 0
- < 1
- 1 - 2
- 2 - 3
- > 3

0 2.25 4.5 9 Miles

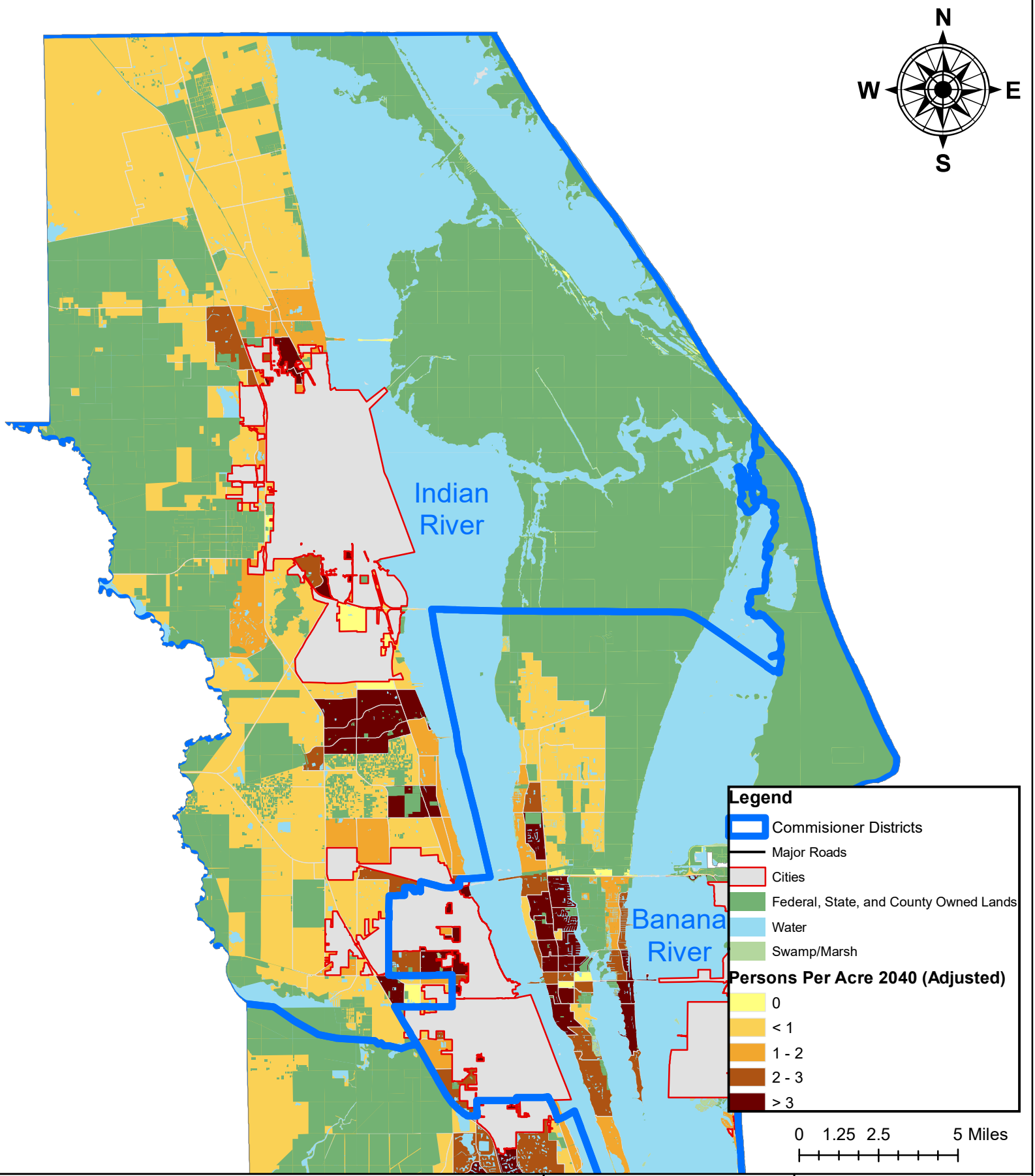
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.9
Year 2040
Persons Per Acre



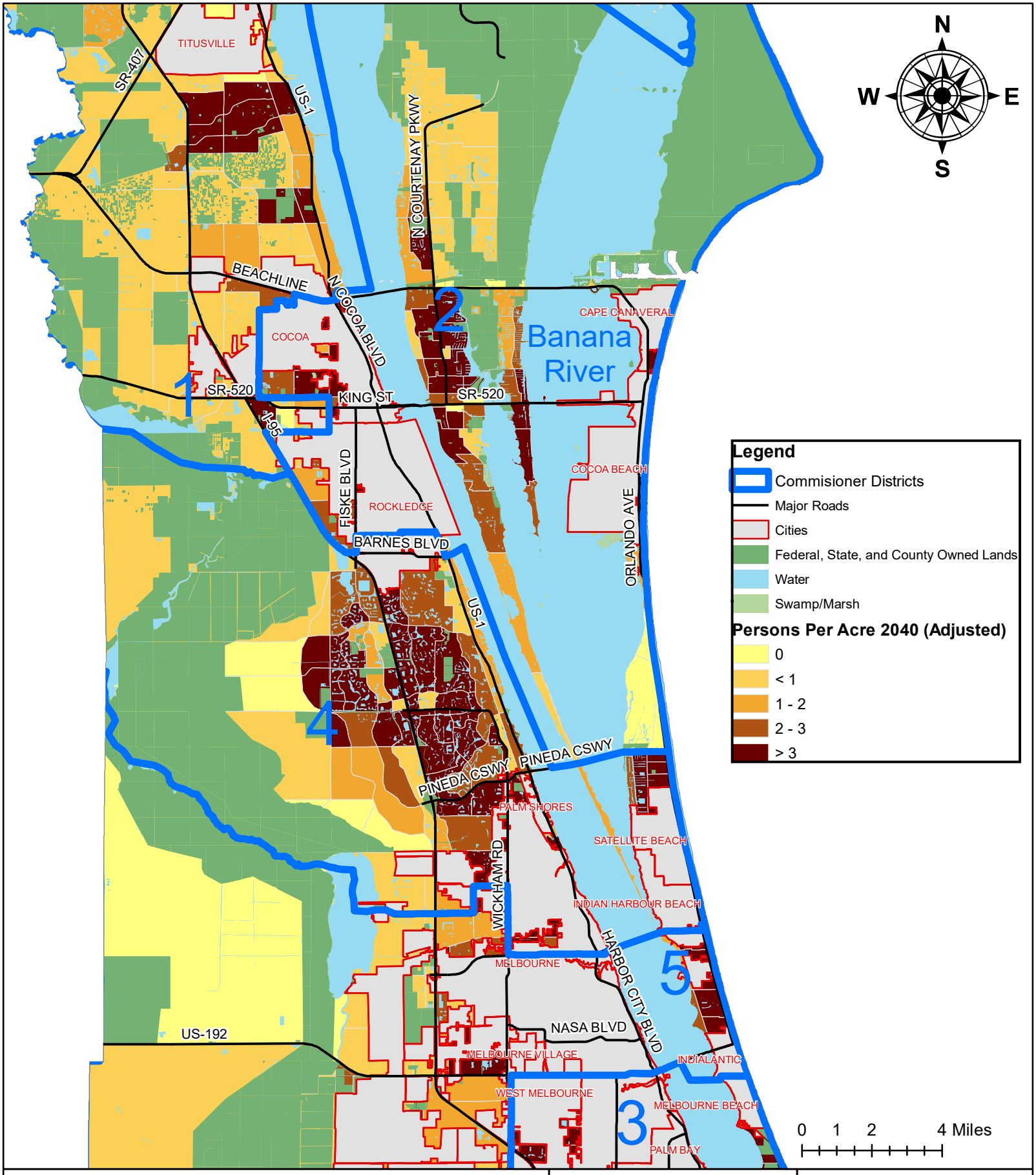
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.10
Year 2040
Persons Per Acre
Northern County



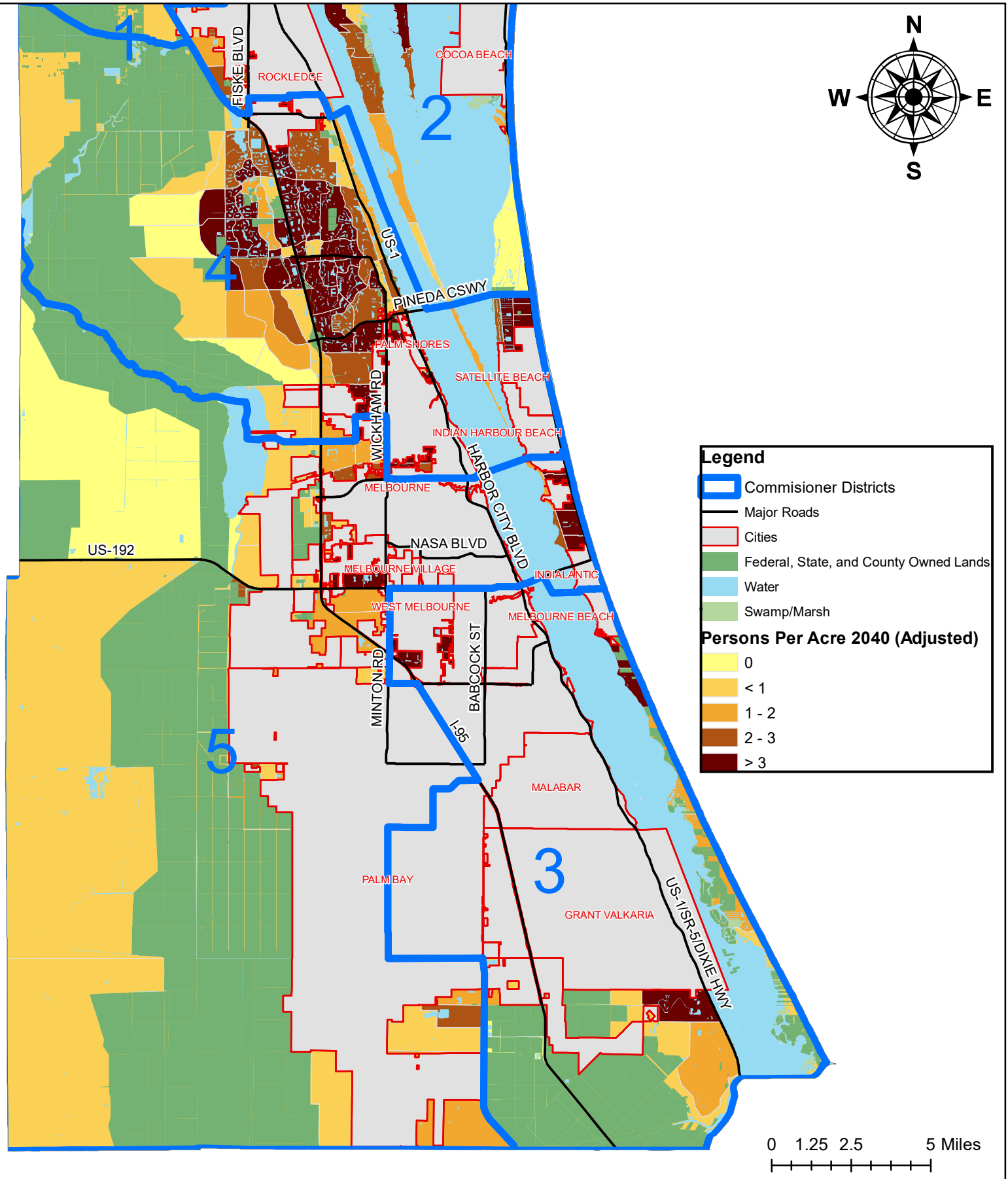
Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.11
Year 2040
Persons Per Acre
Central County



Brevard County, Florida
2040 Population Analysis

Data Source: Space Coast Transportation Planning Organization (SCTPO), Long-Range Transportation Plan (LRTP) Traffic Analysis Zone (TAZ) countywide data ("ZData1" files); TAZ data adjusted by share of total countwide population taking into consideration historic growth rates and future linear progression based on population data obtained from the Bureau of Economic & BusinessResearch (BEBR) and Shimberg Center for Housing Studies. Florida Housing Data Clearinghouse.

WADE TRIM

Brevard COUNTY

MAP 8.12
Year 2040
Persons Per Acre
Southern County