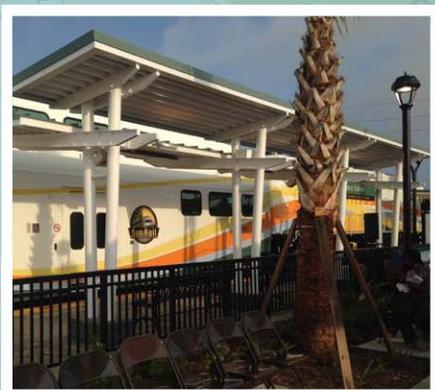




Chapter 3

DEMOGRAPHIC, SOCIOECONOMIC AND LAND USE DATA



3. DEMOGRAPHIC, SOCIOECONOMIC AND LAND USE DATA

Transportation and land use are closely associated. Changes to land use have transportation implications while every transportation action affects land use. To that end, demographics, socio economics and land use are important building blocks in the foundation of the 2040 LRTP. Understanding the users of the transportation system and their mobility needs can help inform public policy as it relates to the delivery of transportation projects and services.

The communities within the River to Sea TPO MPA are dynamic places, changing and evolving as the 21st century economy unfolds. This chapter identifies and examines demographic, socio economic, and land use trends and implications to inform the transportation planning process in accordance with [23 C.F.R. 450.322(e)], which states that the *MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity.*

3.1. DEMOGRAPHICS

Based on the U.S. 2010 Census, the population of the River to Sea TPO's Metropolitan Planning Area (MPA) includes:

River to Sea TPO's MPA includes:

Volusia County – 503,851 total population with a median age of 47 years

Flagler County – 99,121 total population with a median age of 49.1 years

Race Includes:

- White – 82.5%
- Black or African Alone – 10.5%
- Others – 7%

Ethnicities include:

- Hispanic or Latino (of any race) – 11.2%
- Not Hispanic or Latino – 88.8%

Race Includes:

- White – 82.3%
- Black or African Alone – 11.4%
- Others – 6.3%

Ethnicities include:

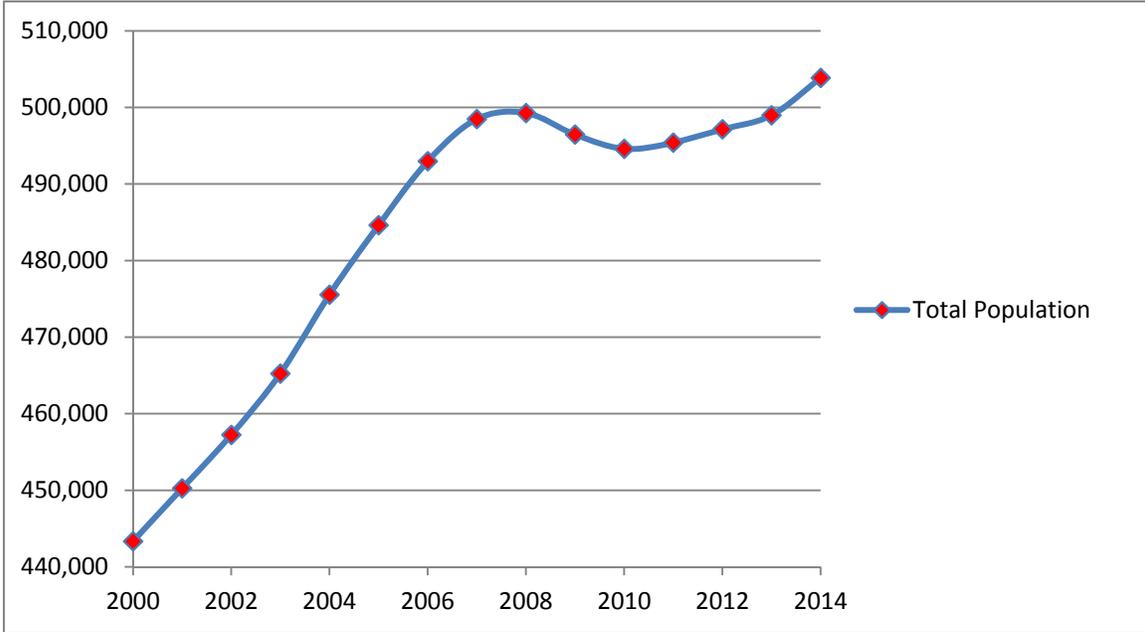
- Hispanic or Latino (of any race) – 8.6%
- Not Hispanic or Latino – 91.4%

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In recent years, population in the planning area held steady or decreased slightly due to economic conditions. However, as the economy recovers and construction and tourism rebound, the populations of Volusia and Flagler Counties are expected to rise steadily in the foreseeable future. This trend is illustrated in Tables 3 and 4.

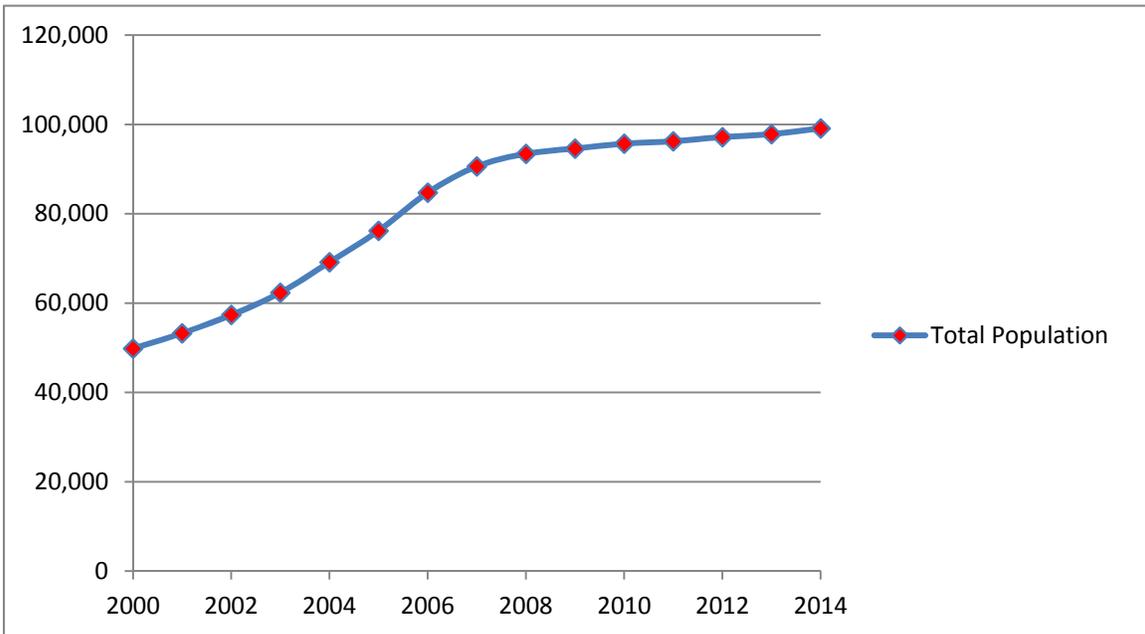
The increase in population is anticipated to result in increased demand for transportation and mobility. It is the main objective of the River to Sea TPO to forecast these needs and provide high quality transportation options for the citizens and visitors of Volusia and Flagler Counties.

Table 3 – Volusia County Total Population



Source: Bureau of Economic and Business Research, University of Florida

Table 4 – Flagler County Total Population

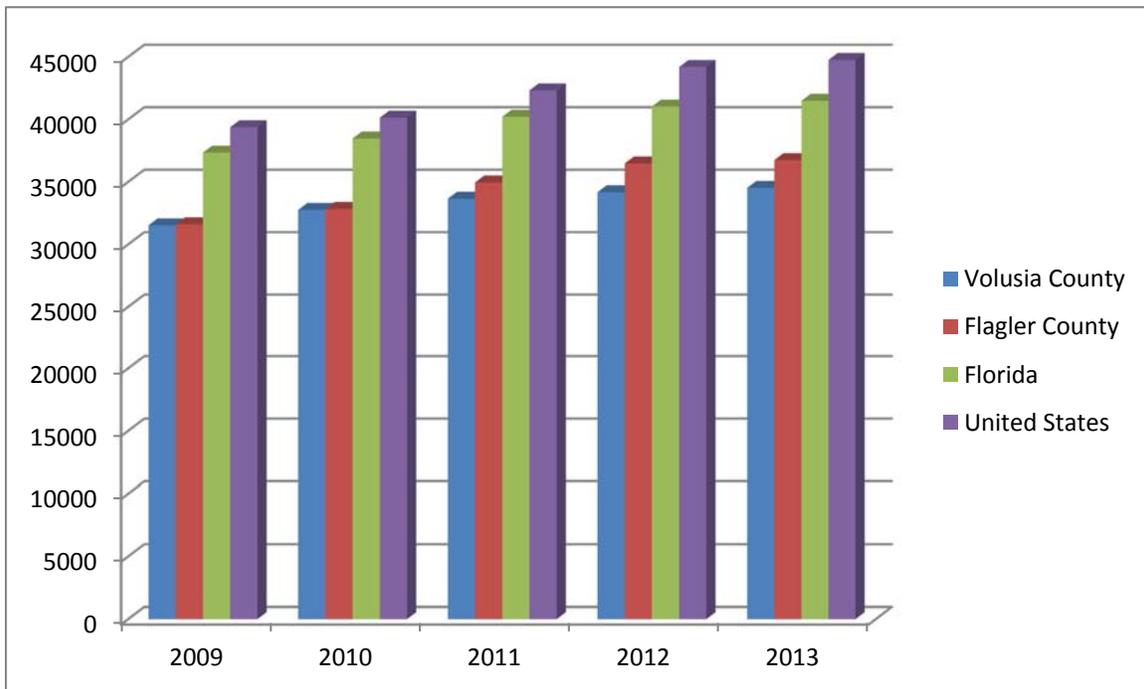


Source: Bureau of Economic and Business Research, University of Florida

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According to data from the U.S. Census Bureau and the Florida Department of Economic Opportunity, both income per capita and employment rates are increasing, which is a promising metric for the future. This is depicted in Table 5. At the same time, the median age of Volusia and Flagler citizens is 47 years and 49 years respectively; as that median is expected to rise in the future (source: 2010 U.S. Census Bureau), the TPO's focus to provide efficient, effective transportation systems for Volusia and Flagler's Counties dynamic population, aging residents and growing economy will continue in importance.

Table 5 – Income Per Capita



Source: Bureau of Economic and Business Research, University of Florida

3.2. SOCIOECONOMIC DATA

The TPO uses expected population and employment growth to project the road and transit needs for the 25-year planning horizon. This requires production of a Land Use dataset that describes the location of employees and residents in the target year. For this 2040 LRTP, two socioeconomic datasets were developed for the River to Sea TPO, both of which were used to inform the transportation modeling. These alternatives were the Constrained Trend Forecast and Alternative Land Use Forecast.

The level of analysis used by the Florida Standard Urban Transportation Model Structure (FSUTMS) is the Traffic Analysis Zone (TAZ), which can vary widely in size based on the intensity of the land use and transportation network: TAZs can range from several acres to thousands of acres. The level of output for each dataset is the TAZ showing population (ZDATA1) and employment (ZDATA2) data for each TAZ in five-year increments for year's 2015, 2020, 2025, 2030, 2035 and 2040.

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3.2.1. Constrained Trend Socioeconomic Forecast

The usual method for forecasting these values is to examine existing trends and local jurisdiction comprehensive plans. For the 2040 LRTP, the Constrained Trend Scenario and Socioeconomic Forecast was used to formulate a realistic population and employment projection for input to the transportation model to determine future transportation needs. The starting dataset was the socioeconomic data for the 2035 Volusia TPO Long Range Transportation Plan, which used a base year of 2005. An updated base year dataset for 2010 was produced as well as a 2040 dataset.

The methodology for this scenario is provided in Technical Appendix A.

3.2.2. Alternative Land Use Socioeconomic Forecasts

For the Alternative Land Use, the Land Use Working Group was tasked to envision a realistic future scenario where jobs and housing were located closer together to better utilize multimodal transportation options, including transit, walking and cycling. They also reviewed other land use techniques to improve efficient use of new and existing road networks. The goal was to organize land uses to improve the efficiency of the transportation networks and mobility options for the public.

With this goal in mind, the Alternative Land Use Forecast formulated a realistic land use projection that demonstrated lower Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT), reduced suburban sprawl, and use of investment in transit to the best advantage. To achieve these goals, the alternative land use emphasized compact development along corridors, infill and redevelopment, mixing land uses, improved jobs to housing balance within compact urban travel sheds, and configurations that support multi-modal transportation.

The scenario emphasized the use of transit and pedestrian-supportive intensities and a mix of uses in new medium or large projects and on key corridors as well as the inclusion of a jobs-to-housing balance. The study assumed the preservation of existing single family neighborhoods and did not attempt to make major changes to the pattern of industrial, light industrial and auto serviced existing land uses.

The methodology for this scenario is provided in Technical Appendix B.

3.3. ENVIRONMENTAL JUSTICE REVIEW

Effective transportation decision making depends upon understanding and properly addressing the unique needs of different socioeconomic groups, as these decisions directly and indirectly influence the health of people and the environment. Decision-making and policy implementation affect air and water quality, noise, and inter/intra-neighborhood connections. This element of the 2040 LRTP identified Environmental Justice populations and their locations within the River to Sea TPO's MPA. The River to Sea TPO has adopted and practiced planning strategies that align with the principles of Environmental Justice. These principles are:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.

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- To ensure the full and fair participation by all potentially affected communities in the transportation decision making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

An Environmental Justice approach to transportation planning and project development recognizes the fair treatment of all groups within the community. This includes ensuring the involvement of the entire community in public outreach and participation efforts. The Department of Transportation is the lead agency charged with ensuring non-discrimination stemming from Environmental Justice issues, related to transportation planning. The statutory language of DOT Order 5610.2(a) focuses on minority and low-income populations. However, the 2040 LRTP recognized the need to consider all affected populations when making responsible planning decisions, including those who are elderly and those without access to a personal vehicle. Steps shall be taken to provide the public, including members of minority populations and low-income populations, access to public information relevant to human health or environmental impacts stemming from programs, policies, and activities, including information that will address the concerns of minority and low-income populations regarding the health and environmental impacts of the proposed action.

The full Environmental Justice report is included in Technical Appendix C. The following summary of findings highlights critical areas within the River to Sea TPO MPA where Environmental Justice concerns should be considered before undertaking planning efforts and focuses on the two Environmental Justice categories that are covered by Executive Order 12898 and subsequent DOT statutes and regulations: low-income and minority populations.

- An area of concern is the City of Bunnell, at the intersection of SR 100 and US 1, bordered by Hyman Circle in the southeast and South Knight Street in the west. This portion of Flagler County has a median household income of \$28,594 and is composed of 65.8% minorities.
- Low-income, minority overlap is also prevalent in and around Daytona Beach. All of the following areas are located east of I-95: south of US 92, north of Beville Road, and west of Clyde Morris Boulevard, residents have a median income of \$29,583 and are comprised of 42% minorities.
- Bisected by US 92, areas east of SR 5A, west of US 1, north of Shady Place, and south of 3rd Street have a median household income of approximately \$12,000 and average nearly 90% minority populations.
- North of US 92, west of SR 5A, east of Bill France Boulevard, and south of LPGA Boulevard between Jimmy Ann Drive and Derbyshire Road. This selected portion of the TPO MPA is comprised of 73.5% minority populations; with 26% of residents living below the poverty level.
- US 1 (east), Wayne Avenue (north), Milford Place (west), and SR 44 (south) are the borders for an area with low-income populations and which has a high minority percentage. Median income is approximately \$20,000 and minority populations average over 55%.
- Northwest of Deltona and southwest of Orange City is another area with an overlap of low-income and minority population. This area, with US 17-92 as the western edge and I-4 on the east, averages greater than 40% minority populations and less than \$25,000 in median household income. Saxon Boulevard in the southern edge of this defined area and East Graves Avenue is the northern border.

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- Portions of DeLand also merit attention. US 17-92 bisects an area bordered by South Hill Avenue in the east and SR 15 in the west. Northern edges of this area are West Howry Avenue and East Wisconsin Avenue. Median income figures in this area are approximately \$24,000 and minority populations range from 45% to above 90%.

3.3.1. Implementation

The Environmental Justice findings highlight critical areas within the River to Sea TPO MPA where environmental justice concerns should be considered before undertaking planning efforts, conducting public involvement activities, and when screening projects for inclusion in the 2040 LRTP. This allows the TPO to identify any disadvantaged populations that may be negatively impacted.

For the carry over projects from the 2035 LRTP that are also included in the 2040 Cost Feasible Plan (CFP), either a PD&E has been completed and will be updated prior to project design or the project has been screened through the Efficient Transportation Decision Making (ETDM) process. All new projects will be subject to the same process.

The River to Sea TPO exercised the option to use up to 20% of Other Arterial funds for local, off-system projects. The screening process used to rank candidate projects included Environmental Justice concerns as a ranking criteria. This process is further described in Section 6.2.

3.3.2. Additional Activities and Considerations

The TPO sets aside 30% of its XU funding for bicycle and pedestrian projects and another 30% for public transit to support mobility options. Many of these directly improve conditions for the populations identified under environmental justice. The TPO visions, plans, funds, and implements improvements to walking and bicycling networks, including linkages to transit within the service area. Pedestrian and bicycle facilities expand the travel opportunities for residents who, either by choice or by circumstance, do not use an automobile. These groups often include, but are not limited to, disabled individuals, children, the elderly, and the financially disadvantaged.

The TPO also involves the aging, disabled, and disadvantaged populations in the process through the Transportation Disadvantaged Local Coordinating Board (TDLCB), the Center for Visually Impaired (CVI) and the Council on the Aging (COA). The primary purpose of the TDLCB is to assist the designated official planning agency in identifying local service needs and providing information, advice, and direction to the Community Transportation Coordinator on the coordination of services to be provided to the transportation disadvantaged. The TPO has also completed studies, such as the Elder Mobility Study, to ensure understanding of the impacts to certain populations.