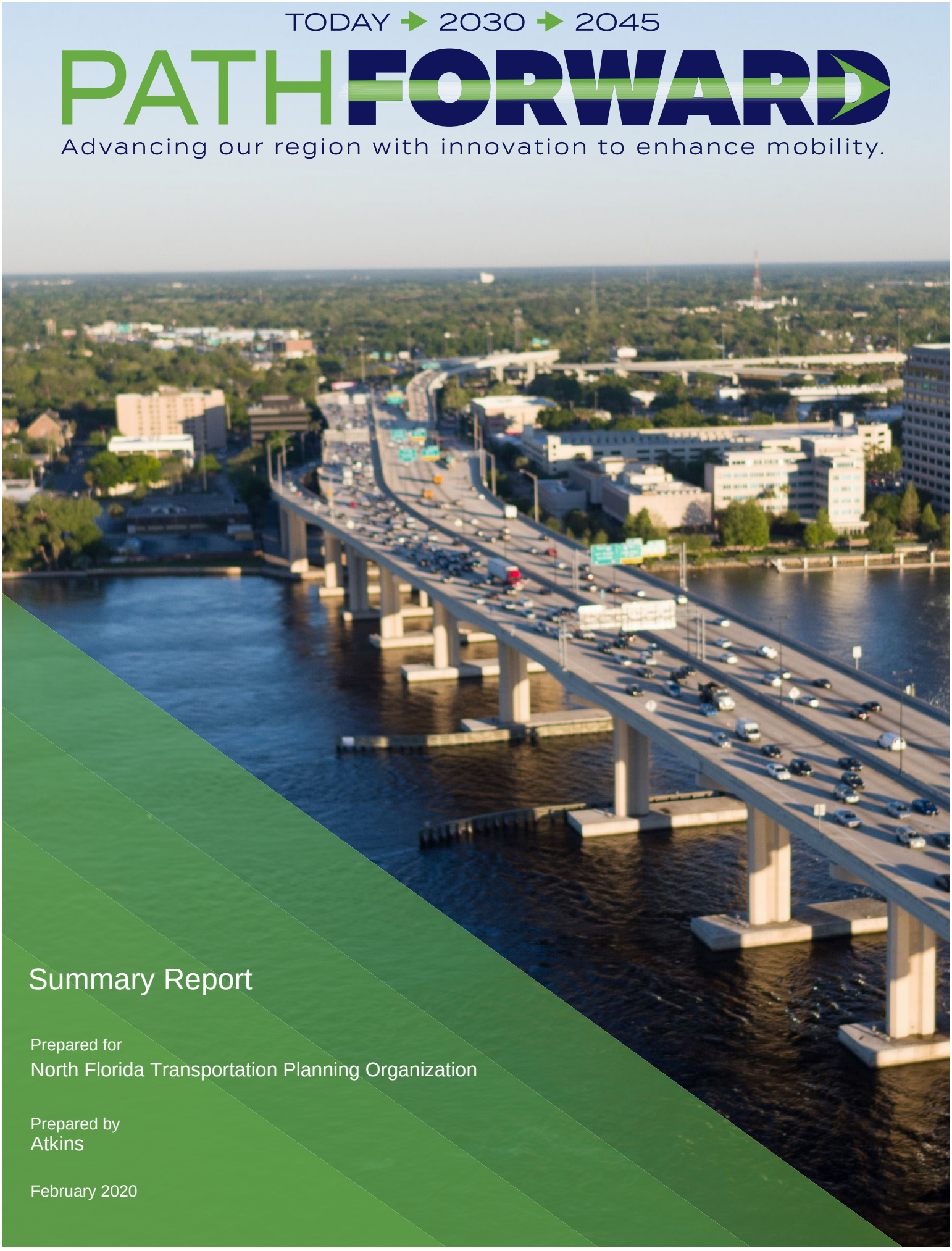
TODAY → 2030 → 2045

PATH FORWARD

Advancing our region with innovation to enhance mobility.



Summary Report

Prepared for
North Florida Transportation Planning Organization

Prepared by
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1 Introduction

The North Florida Transportation Planning Organization (TPO) is a federally-mandated agency responsible for setting policy on local transportation issues, providing a forum for a coordinated, comprehensive, and continuous planning process for all transportation-related issues within the region and determining how to prioritize State and Federal transportation dollars within the region.

The North Florida TPO uses the Long Range Transportation Plan (LRTP) to guide the use of Federal, State, and other funds to create a transportation system that moves people and goods creates jobs and strengthens communities within its planning area. The North Florida TPO also works with citizens, the private sector, and its planning partners to ensure that the transportation options funded in the PathForward 2045 plan best represent the direction chosen in the context of policy direction from the North Florida TPO Board.

The North Florida TPO produces several core products to advance the mobility of the region; the LRTP is a critical guiding document for all other core products. These products include:

- **Long Range Transportation Plan (LRTP)** – guides investment in the region's transportation system for the next 25 years.
- **List of Priority Projects** – Annual list of multimodal transportation priorities.
- **Transportation Improvement Program (TIP)** – Five-year comprehensive list of Federal, State, and local funded transportation projects, including transit, roadways, bridges, aviation, seaport, rail and commuter rail, bicycle facilities, pedestrian provisions, and enhancement projects such as landscaping and greenways.
- **Unified Planning Work Program (UPWP)** – Two-year operational budget of the TPO (operations, work program development, and transportation and related planning responsibilities).
- **Public Participation Plan** – Plan to guide the public participation activities of TPO staff to achieve the TPO Board's Mission and Vision.

1.1 Path Forward 2045 Overview

The 2045 LRTP defines the transportation vision for the future of the region, establishes goals and policies that will lead to achieving the vision, and allocates projected revenue to transportation programs and projects that implement those goals and policies. The plan will explore several questions; What will transportation look like in the year 2045? Will we still be driving alone in our automobiles? Will we have cars that can drive themselves? Will we even own cars? These and many other questions have been explored during the development of the 2045 Long Range Transportation Plan (LRTP) for the First Coast.

The North Florida Transportation TPO is charged with developing and maintaining a long-range transportation plan with a forward vision of 25 years. Federal and state metropolitan planning regulations require the North Florida TPO to update the regional transportation plan every five

years. The plan will allocate financial resources to mobility projects and programs that implement those goals and strategies.

Fundamentally, the 2045 LRTP is about making mobility choices for the region. Choices about how we will travel in the future, choices about where to allocate limited financial resources, and choices about the region's connectivity in the future. This plan continues to build on the solid multimodal and regional foundation of previous long-range transportation plans. The 2045 LRTP update will allow the TPO to continue to shape the region's transportation network over the next 25 years.

1.1.1 Study Area

The North Florida TPO study area encompasses all of Clay, Duval, Nassau and St Johns Counties including the incorporated cities of Atlantic Beach, Neptune Beach, Jacksonville Beach, St. Augustine, St. Augustine Beach, Fernandina Beach, Green Cove Springs, Keystone Heights and the towns of Baldwin, Callahan, Hillard, Orange Park and Penney Farms.

The land area within the North Florida TPO study area is approximately 3,000 square miles and has 1.4 million residents. Figure 1.1 presents the North Florida TPO Study Area.

1.1.2 Plan Development Process

The PathForward 2045 LRTP update was initiated in March of 2018. Federal and state metropolitan planning regulations require the North Florida TPO to develop a regional transportation plan every five years. The LRTP defines the transportation vision for the region, establishes goals and strategies that will lead to achieving the vision, and allocates projected revenues to transportation programs and projects that implement those goals and strategies.

The major components of the plan include three milestones to be adopted by the North Florida TPO Board:

1. Goals and Objectives of the Plan (adopted August 12, 2019)
2. 2040 Needs Plan (adopted September 12, 2019)
3. 2040 Cost Feasible Plan (adopted November 14, 2019)

A summary of the planning process and major milestones associated with the plan are shown in Figure 1.2. PathForward 2045 was developed using a process designed to respond to the following:

- Policy guidance from the North Florida TPO Board
- FAST Act Metropolitan Transportation Planning and Programming (23 C.F.R., Part 450, Subpart C)
- Florida statutory requirements (Florida Statutes Title XXVI; Public Transportation, Chapter 339, Section 175)
- Federal Highway Administration (FHWA) / Federal Transit Administration (FTA) 2045 Long Range Transportation Plan Expectations (October 2017)

Figure 1.1: Study Area

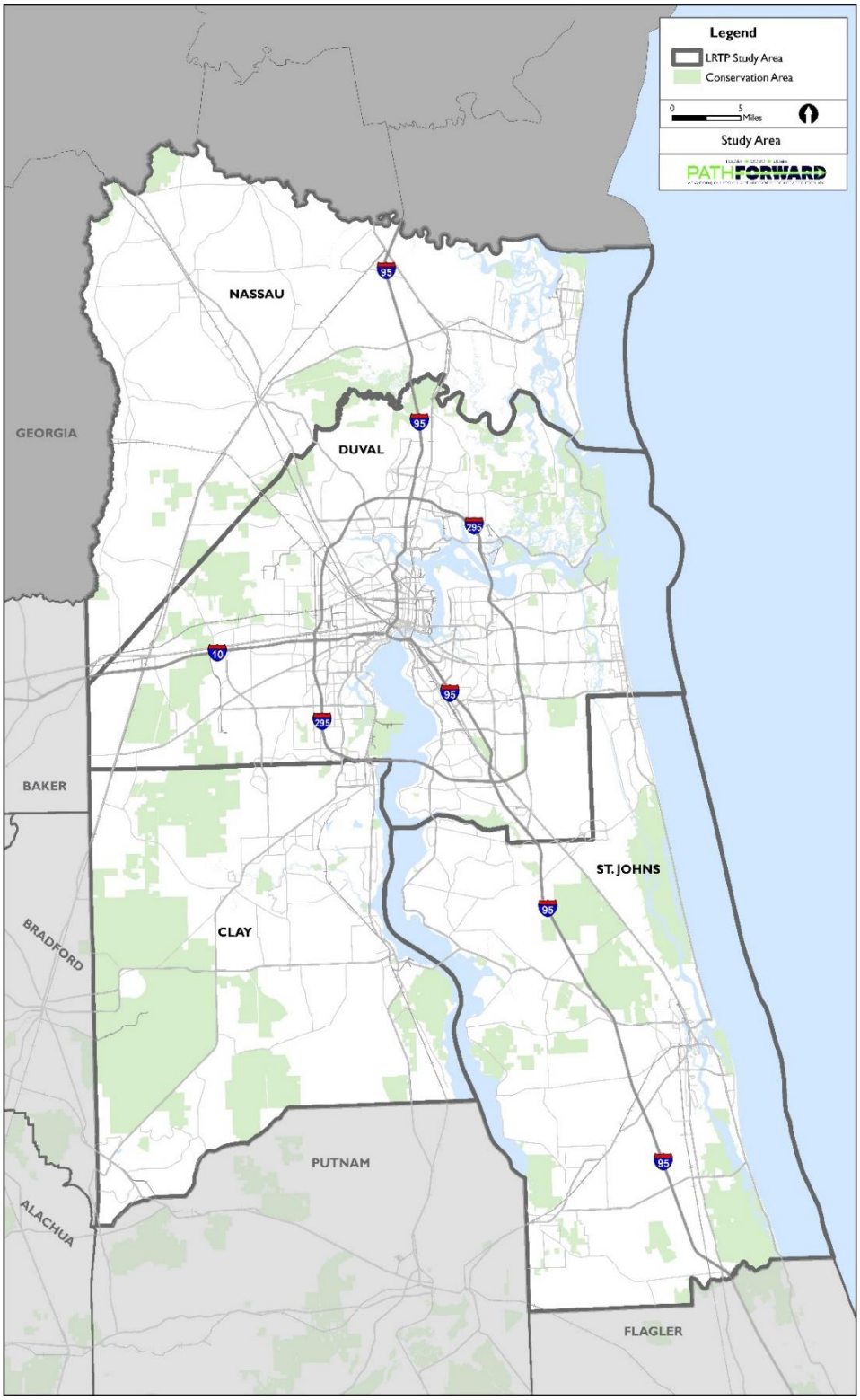
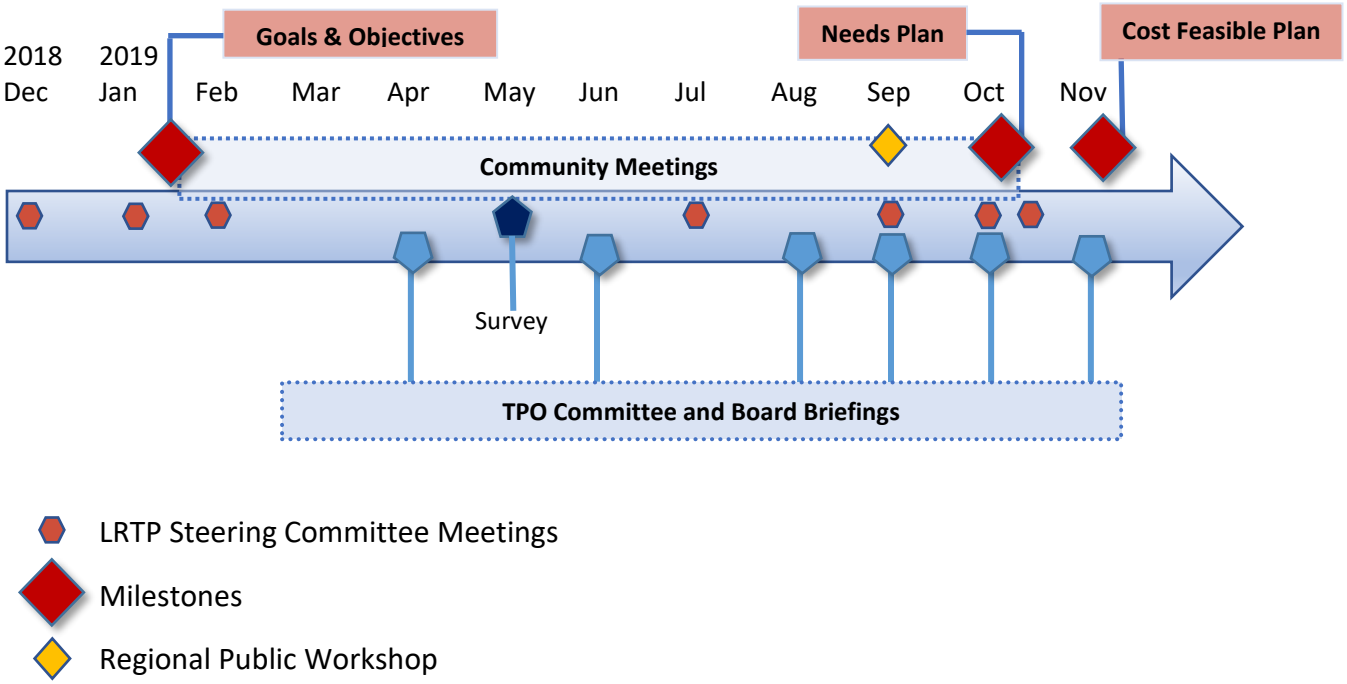


Figure 1.2: Planning Process



- Florida MPO Advisory Council (MPOAC), Financial Guidelines for MPO 2045 Long-Range Transportation Plans (July 13, 2017)

As illustrated in Figure 1.2, the plan development process for PathForward 2045 is organized into five major steps, with ongoing input from the public, TPO committees, and the TPO Board occurring throughout. Section 3, Tables 3.1 and 3.3 present the LRTP checklist showing how and where the federal and state long-range transportation planning requirements are addressed in PathForward 2045.

1.2 Planning Assumptions

1.2.1 Growth

The average population of the region is getting older and household sizes are getting smaller. As older populations are unable to or choose to discontinue use of private automobiles, more mobility options will be necessary. The growth in the region is expected to continue to lead the state in St. Johns and Nassau Counties. With the First Coast Expressway opening up access to more areas in Clay County, higher growth than in recent years is expected there as well.

1.2.2 Roadways

Northeast Florida is served by a number of major roadway facilities. These include interstate and arterial roadways.

Interstate 95

Interstate 95 is the backbone of eastern Florida's transportation system and a critical resource for the region's economic vitality as a component of Florida's Strategic Intermodal System (SIS). I-95 runs from Miami, Florida north along the eastern Florida Coast to Jacksonville and it continues north to the Canadian border. I-95 provides quick and convenient highway travel between dozens of cities located along Florida's east coast. I-95 directly connects the largest cities located along Florida's east coast, including Jacksonville, West Palm Beach, and Miami. The I-95 Florida corridor also indirectly connects most of the smaller cities located along the Florida coastline. I-95 is a vital part of Florida's economy serving the needs of local commuters, shipping companies and tourists alike.

Interstate 295

I-295 is the beltway around central Jacksonville. The 60.9 miles long beltway consists of two segments, the West Beltway and the East Beltway, with I-95 serving as the dividing line between the two. As of the summer of 2019, tolled express lanes are being constructed from Exit 58 at I-795/SR 9B to Exit 53 at J. Turner Butler Boulevard (SR-202). Originally this work was expected to be completed in the fall of 2019, however, in the summer of 2019, the FDOT extended construction by a year in order to increase the scope of the project to provide for an additional non-tolled general purpose lane in each direction between SR 9B and JTB (for a total of three contiguous general purpose lanes along the entire section, eliminating the current lane drops at the Baymeadows Road and Gate Parkway interchanges).

Interstate 10

I-10 is the major east/west interstate highway in north Florida. Beginning in downtown Jacksonville at I-95, I-10 runs west through Duval County. It serves as a commuter route for residents of Baker and Clay Counties working in Jacksonville and it is a major freight corridor connecting to I-95, I-75 in northeast Florida. The section of I-10 from I-295 east to I-95 is scheduled to be widened beginning in late 2019 to 10 lanes. The project proposes to widen the existing highway, which is basically six lanes wide, to a 10-lane roadway. Two 12-foot general purpose lanes will be added in each travel direction to the outside of the existing travel lanes within the existing right of way.

1.2.3 Public Transportation

The Jacksonville Transportation Authority (JTA) is the independent agency responsible for public transit in the region. JTA has several types of bus service, local bus service, Express Bus service, Bus Rapid Transit (BRT) service, paratransit service and the Jacksonville Skyway.

Joint Regional Transportation Center (JRTC)

The JRTC is a multimodal center that will connect the Skyway/U2C, FCF, local bus, regional and intercity bus, intercity rail and future commuter rail. It will serve as JTA's future administrative headquarters. JTA has funding in place for the projects. Construction of the Intercity Bus Terminal

is complete and Greyhound commenced service in April 2018. Construction of the Administrative Building and Bus Transfer Facility is underway.

Bus Rapid Transit (BRT)

The First Coast Flyer (Flyer) will connect 57 miles of destination travel downtown and in the north, southeast, east and west areas of Jacksonville. Flyer service requires minimal use of schedules and features fewer stops, shorter waits, easier transfers and frequent trips. As the Northeast Florida region expands, the Flyer will be an essential part of a streamlined transit system that can grow and improve with the times. JTA has developed 4 routes serving the region:

1. Green Line/North Corridor
2. Blue Line/Southeast Corridor
3. Red Line/East Corridor
4. Orange Line/Southwest Corridor (2020)

Ultimate Urban Connector

For nearly 30 years, the Skyway has transported Jacksonville's commuters throughout the urban core. However, emerging technology and the evolving needs of Jacksonville's downtown development present a unique opportunity to reevaluate existing infrastructure and provide greater connectivity, mobility, and sustained economic growth.

This can be achieved by utilizing investment in the existing elevated Skyway, expanding the area it serves and employing autonomous transit technology. The Ultimate Urban Circulator (U2C) program can cost-effectively reach beyond the current system to serve existing and planned downtown development. The U2C will provide:

- High-frequency service and accessibility
- Service flexibility
- Extensions that can serve at both elevated and street levels

The U2C takes full advantage of the existing Skyway assets and fully integrates advancing technologies. Implementing this bold but necessary vision to enhance the transportation system will require successful agency partnerships, community buy-in and essential financial resources. JTA will continue to coordinate with federal, state and local agencies to evaluate funding, right-of-way requirements, environmental compliance and modifications to the street conditions.

JTA continues to advance the design of the Bay Street Innovation Corridor. The federally funded project will be the initial phase of the U²C program and will introduce autonomous vehicles along a key transportation corridor in Downtown Jacksonville.

The second iteration of the Transit Concepts and Alternatives Review (TCAR) planning exercise is underway. The study will identify alternatives for each of the proposed Skyway corridor extensions including:

- West Corridor to Riverside and Five Points
- East Corridor to the Sports Complex
- North Corridor to UF Health and VA Outpatient Clinic
- South/Medical Complex Corridor to the Baptist Medical Complex and San Marco
- Southbank Corridor to the Southbank, The District and San Marco

The project will include extensive outreach in the form of public meetings and events, as well as online public engagement through an interactive survey tool.

1.2.4 Rail Facilities

The Jacksonville region is served by three major railroads with approximately forty trains per day. There are two intermodal container transfer facilities and forty rail freight stations in Duval County.

The three major railroads serving the region are:

1. CSX - is a Class I freight railroad operating in the eastern United States and the Canadian provinces of Ontario and Quebec. CSX serves major markets in the eastern United States and has access to over 70 ocean, river and lake port terminals along the Atlantic and Gulf Coasts, the Mississippi River, the Great Lakes and the St. Lawrence Seaway. The company also has access to Pacific ports through alliances with western railroads.
2. Norfolk Southern - operates approximately 19,500 route miles in 22 states and the District of Columbia, serves every major container port in the eastern United States, and provides efficient connections to other rail carriers. Norfolk Southern is a major transporter of industrial products, including chemicals, agriculture, and metals and construction materials. In addition, the railroad operates the most extensive intermodal network in the East and is a principal carrier of coal, automobiles, and automotive parts.
3. Florida East Coast Railway (regional service) - is a Class II railroad operating 351 miles of mainline track along the east coast of Florida. It is the exclusive rail provider to South Florida's ports, linking them with the rest of the U.S. rail network. The railroad provides intermodal and carload service and moves commodities such as aggregate, automobiles, bulk liquids, building materials, orange juice, electronics and other items.

1.2.5 Passenger Rail Service

Currently, AMTRAK provides rail passenger service in Jacksonville. The Silver Service provides connections south to Miami and north to New York with daily train service.

Virgin Trains is exploring service to Jacksonville in the future which would provide for connections to Tampa, Orlando, West Palm Beach and Miami.

1.2.6 Intermodal Facilities

There are a number of intermodal facilities located within the North Florida TPO area. These facilities move people, goods, and services into, through and with the study area.

JAXPORT

JAXPORT is an international trade seaport on the St. Johns River. The newest port in the United States, it carries over 21 million tons of cargo each year and has an annual impact of over $19 billion, including 65,000 jobs. It serves the Greater Jacksonville Metropolitan Area and is the second-largest handler of vehicles in the United States.

Jaxport has three separate cargo facilities:

Blount Island lies 9 nautical miles from the Atlantic Ocean and is one of the largest vehicle import/export centers in the United States. The United States Marine Corps uses 1,100 acres on the east side of the island for its Maritime Prepositioning Force operations, and the public Blount Island Marine Terminal, which is JAXPORT's largest container facility, occupies 754 acres on the west half of the island. Blount Island can also process Ro/Ro, heavy lift, breakbulk and liquid bulk cargoes on 6,600 feet of deep-water berths.

Talleyrand

The oldest marine facility at JAXPORT is the Talleyrand Marine Terminal, located 21 nautical miles from the Atlantic. The 173-acre facility handles automobiles (import), liquid bulk commodities, breakbulk cargo and containerized cargo. With six container cranes, on-dock rail service and a 160,000 sq. ft transit shed, the terminal can process frozen, refrigerated or ambient cargo on 4,780 feet of deep-water berthing space.

Dames Point

The newest marine facility at JAXPORT is the nearly 600-acre Dames Point Marine Terminal. Situated one-mile upstream from Blount Island on the main shipping channel, Dames Point presently has two tenants: the 158-acre TraPac Container Terminal used by Mitsui O.S.K. Lines and Hanjin Shipping operating on 90 acres for their container terminal.

Jacksonville International Airport (JIA)

The airport covers 7,911 acres and has two primary runways. The airport's two runways form a "V" pattern (with the tip of the "V" pointing west). A plan exists to build two more runways, each paralleling one existing runway. The one alongside the existing southern runway will be built first. No date has been set.

In the fiscal year ending September 2016 the airport had 101,575 aircraft operations, an average of 278 per day: 58% scheduled commercial, 19% air taxi, 15% general aviation and 8% military. In August 2017, there were 54 aircraft based at this airport: 3 single-engine, 8 multi-engine, 25 jet and 18 military.

In 2018, the airport handled 6,460,253 passengers, breaking the previous record set in 2007. This increase in traffic prompted the JAA to revive the plan to rebuild concourse. The new concourse could open as early as 2022, providing six additional gates and could be expanded later with six more. The design of concourses A and C also allow them to be extended to accommodate additional gates.

The Jacksonville Air National Guard operates at JIA as well. Located in the southwest quadrant of the airport, they have approximately 300 full-time military personnel and 1,000 part-time personnel who are traditional air national guardsmen.

Herlong Recreational Airport

A home of Jacksonville's aviation enthusiasts since the 1960s, Herlong Recreational Airport (HEG) is Northeast Florida's primary location for light sport aircraft, skydiving, gliders and other experimental aircraft. The airport was originally built during World War II to facilitate pilot training for the Navy and Air Force. After the war, the property was given to the city, and subsequently the JAA.

Cecil Airport

Cecil Airport is a public joint civil-military airport and spaceport located in Jacksonville, Florida. The airport is owned by the Jacksonville Aviation Authority and services military aircraft, corporate aircraft, general aviation, and air cargo. The Florida Army National Guard's primary Army Aviation Support Facility and the U.S. Coast Guard's Helicopter Interdiction Tactical Squadron (HITRON) are also located here, the former operating CH-47 Chinook, UH-60 Blackhawk, UH-72 Lakota and C-12 Huron aircraft, while the latter operates the MH-65C Dolphin helicopter.

Cecil Airport also houses the FSCJ (Florida State College Jacksonville) aviation course hangar and associated training aircraft. Sunrise Aviation, a flight training school and pilot supplies vendor is the flight training provider for FSCJ's aviation program. Facilities operated by major aerospace firms such as Logistic Services International (LSI), Boeing and Flightstar Aircraft Services are also

located at Cecil, providing major training, maintenance and overhaul services for a variety of U.S. military aircraft.

In 2010, Cecil Airport became the United States' eighth licensed commercial spaceport and the first in Florida authorized to fly space vehicles that take off and land horizontally.

Jacksonville Executive at Craig Airport

Formerly known as Craig Municipal Airport, Jacksonville Executive at Craig Airport (JAXEX) is a mid-sized general aviation facility. To better reflect its role as a corporate reliever for Jacksonville International, Craig Municipal Airport's name was changed to Jacksonville Executive at Craig Airport (JAXEX) in 2011.

JAXEX was originally built in the 1940s, one of six airports in the area developed for military training. In 1946, under the Federal Surplus Properties Act, the US Military gave the airport to the City of Jacksonville, which named the airport after fallen Navy Lt. Commander James Edwin Craig (1901-1941) who was killed in action during the Japanese attack on Pearl Harbor.

1.3 Tourism

Tourism is an economic driver for northeast Florida through leisure and business travel with visitor spending accounting for billions of dollars for the destination's businesses. Florida and the First Coast experienced another year of record-breaking tourist visits in 2018, keeping pace with the last half-decade of record-setting visitation numbers. Visit Florida, the state's tourism bureau reported the first nine months of 2018 had more visitors coming to the Sunshine State than ever before, with that period seeing a 6.7 percentage point increase over 2017. That accounts for 95.8 million tourists visiting Florida between January through September.

Local numbers of visitors on the First Coast were also up in never-before-seen levels. Tourism officials in Duval, St. Johns and Nassau counties all saw record tourism figures in 2018

Duval County and Visit Jacksonville officials saw a 75.1 percent hotel occupancy rate through September, a 1.9 percent increase for the same period in 2017. The average daily rate was $96.92 per room, which was a 5.3 percent increase from 2017, and the revenue generated per available room was $72.80, a 7.3 percent increase over the year before.

The Amelia Island Convention and Visitors Bureau also enjoyed a robust year. The agency provided figures through November which shows the occupancy rate was 74.9 percent, a 0.8 percentage point increase over the year before. The average daily rate was $240.42, up by 6.7 percentage points over a year ago. Revenue per available room came in at $180.16, an increase of 7.7 percentage points from 2017.

The St. Augustine, Ponte Vedra and The Beaches Convention & Visitors Bureau recorded a 67 percent occupancy rate in those local hotels with an average daily rate of $139.92 and revenue per available room at $93.26. All of those figures are records. There also was a 3 percent increase

in hotel rooms in St. Johns County due to more facilities opening, and that corresponded to a jump in demand to the tune of 3.8 percent.

As the 2045 LRTP was developed, the LRTP team had several meetings with tourism officials in the region to discuss the needs of visitors to the First Coast. Overwhelmingly, the sentiment was that visitors need ways to travel around the region without having an automobile. Each area's goal is to have visitors stay in lodging in their area and have easy access to the rest of the region allowing them to venture out and return to the same place each night. Rail service between St. Augustine as well as transit service between downtown and the beaches was supported as well as mobility as a service and the future of autonomous vehicles.

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2 Federal Performance Measures and System Performance Report

Pursuant to MAP-21, enacted in 2012, and the FAST Act, enacted in 2015, state DOTs and MPOs must apply a transportation performance management approach in carrying out their federally-required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the Federal-aid highway and public transportation programs.

On May 27, 2016, FHWA and FTA issued the Final Rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning (Planning Rule). This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including transportation performance management provisions.

In accordance with the Planning Rule, the North Florida TPO must include a description of the performance measures and targets that apply to the TPO planning area and a System Performance Report as an element of the LRTP. The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports.

There are several milestones related to the required content of the System Performance Report:

- In any LRTP adopted on or after May 27, 2018, the System Performance Report must reflect Highway Safety (PM1) measures.
- In any LRTP adopted on or after October 1, 2018, the System Performance Report must reflect Transit Asset Management measures.
- In any LRTP adopted on or after May 20, 2019, the System Performance Report must reflect Pavement and Bridge Condition (PM2) and System Performance (PM3) measures.
- In any LRTP adopted on or after July 20, 2021, the System Performance Report must reflect Transit Safety measures.

PathForward 2045 was adopted on November 14, 2019. Per the Planning Rule, the System Performance Report for the North Florida TPO includes the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management, Safety and Transit Safety targets.

2.1 Highway Safety Measures (PM1)

Statewide targets for highway-related measures were adopted by FDOT on August 31, 2018, and the North Florida TPO agreed to plan and program projects, so they contribute toward the accomplishment of FDOT targets. These performance measures are:

1. Number of fatalities;

2. Rate of fatalities per 100 million vehicle miles traveled (VMT);

3. Number of serious injuries;

4. Rate of serious injuries per 100 million vehicle miles traveled (VMT); and

5. Number of non-motorized fatalities and non-motorized serious injuries.

The Florida Department of Transportation (FDOT) publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2018 and are based on a five-year rolling average (2011-2015). For the 2018 HSIP annual report, FDOT established statewide HSIP interim safety performance measures and FDOT's 2019 safety targets, which set the target at "0" for each performance measure to reflect the Department's vision of zero deaths.

The North Florida TPO adopted/approved safety performance targets on 10 October 2019. Table 2.1 indicates the areas in which the transportation planning organization (TPO) is expressly supporting the statewide target developed by FDOT, as well as those areas in which the TPO has adopted a target specific to the TPO planning area.

Table 2.1: Highway Safety (PM1) Targets

Performance Target	North Florida TPO agrees to plan and program projects so that they contribute toward the accomplishment of the FDOT safety target of zero
Number of fatalities	✓
Rate of fatalities per 100 million vehicle miles traveled (VMT)	✓
Number of serious injuries	✓
Rate of serious injuries per 100 million vehicle miles traveled (VMT)	✓
Number of non-motorized fatalities and non-motorized serious injuries	✓

Statewide system conditions for each safety performance measure are included in Table 2.2, along with system conditions in the North Florida TPO metropolitan planning area. System conditions reflect baseline performance, which for this first system performance report is the same as the current reporting period (2011-2015). The latest safety conditions will be updated annually on a rolling 5-year window and reflected within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

Table 2.2: Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average 2012-2016)	Calendar Year 2019 Florida Performance Targets
Number of fatalities	2,533	0
Rate of fatalities per 100 million vehicle miles traveled (VMT)	1.287	0
Number of serious injuries	20,552	0
Rate of serious injuries per 100 million vehicle miles traveled (VMT)	10.452	0
Number of non-motorized fatalities and non-motorized serious injuries	3,173	0

2.1.1 Baseline Conditions

The tables below illustrate a rolling five-year average for safety performance the North Florida TPO and each county therein compared with the same for District 2, Florida Turnpike Enterprise and the State of Florida.

The tables that follow demonstrate performance since 2011. All data is provided by the Florida Department of Transportation.

Table 2.3: FHWA Safety Performance Measures for the North Florida TPO

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average 2012-2016)	North Florida TPO Performance (Five-Year Rolling Average 2012-2016)
Average number of fatalities	2,685.6	201.4
Average annual serious injuries	20,830.0	1,371.0
Average annual fatality rates	1.313	5.2
Average annual serious injury rates	10.222	29.5
Average annual Ped/Bike fatalities & serious injuries	3,253.0	196.2

A more detailed breakdown of this data, including county-level data, may be found in the North Florida TPO 2045 Long Range Transportation Plan Systems Performance Report.

Generally, regional fatality and serious injury rates are below those of the state. Nevertheless, the number of fatal and injury crashes, particularly those involving vulnerable road users are of concern to the North Florida TPO. For the 2045 Update of the Long Range Transportation Plan, the North Florida TPO recently updated the Regional System Safety Plan. This plan is available on the North Florida TPO's web site.

2.2 Coordination with Statewide Safety Plans and Processes

The North Florida TPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the North Florida TPO 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are available and described in other state and public transportation plans and processes; specifically, the Florida Strategic Highway Safety Plan (SHSP), the Florida Highway Safety Improvement Program (HSIP), and the Florida Transportation Plan (FTP).

- The 2016 Florida Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP was developed in coordination with Florida's 27 metropolitan planning organizations (TPOs) through Florida's Metropolitan Planning Organization Advisory Council (MPOAC). The SHSP guides FDOT, TPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the State.
- The FDOT HSIP process provides for a continuous and systematic process that identifies and reviews traffic safety issues around the state to identify locations with potential for improvement. The ultimate goal of the HSIP process is to reduce the number of crashes, injuries and fatalities by eliminating certain predominant types of crashes through the implementation of engineering solutions.
- Transportation projects are identified and prioritized with the TPOs and non-metropolitan local governments. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The FDOT Project Development and Environment Manual requires the consideration of safety when preparing a proposed project's purpose and need, and defines several factors related to safety, including crash modification factor and safety performance factor, as part of the analysis of alternatives. TPOs and local governments consider safety data analysis when determining project priorities.

2.3 LRTP Safety Priorities

The North Florida TPO 2045 LRTP increases the safety of the transportation system for motorized and nonmotorized users as required. The LRTP aligns with the Florida SHSP and the FDOT HSIP with specific strategies to improve safety performance focused on prioritized safety projects, pedestrian and/or bicycle safety enhancements, and traffic operation improvements to address

our goal to reduce fatalities and serious injuries. The Florida SHSP and HSIP strategies and goals are reflected in the TPO's Regional System Safety Plan.

The LRTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The North Florida TPO has developed a project selection process that scores projects on a number of performance metrics. These metrics are outlined in Technical Report 2 Goals, Objectives and Performance Measures. These measures are consistent with those in the recently updated Congestion Management Process. These include the following:

Goal 3: Encourage Safe and Secure Travel, which includes Objective 3.1, reduce crashes, Objective 3.2, to reduce fatal crashes, Objective 3.3, to promote the implementation of safety and security improvements and Objective 3.4, to enhance security for all modes. To satisfy this objective, the TPO will identify projects and programs that will enhance safety and security and lead to a reduced number of crashes and lower crash severity.

Pavement and Bridge Condition Measures (PM2)

In January 2017, USDOT published the Final Rule on Pavement and Bridge Condition Performance Measures, also referred to as the PM2 Rule. This rule establishes the following six performance measures:

1. Percent of Interstate pavements in good condition
2. Percent of Interstate pavements in poor condition
3. Percent of non-Interstate National Highway System (NHS) pavements in good condition
4. Percent of non-Interstate NHS pavements in poor condition
5. Percent of NHS bridges (by deck area) classified as in good condition
6. Percent of NHS bridges (by deck area) classified as in poor condition

For pavement measures, five pavement metrics are used to assess condition:

- International Roughness Index (IRI) – an indicator of roughness; applicable to all asphalt and concrete pavements;
- Cracking percent – the percentage of pavement surface exhibiting cracking; applicable to all asphalt and concrete pavements;
- Rutting – the extent of surface depressions; applicable to asphalt pavements;
- Faulting – vertical misalignment of pavement joints; applicable to certain types of concrete pavements;
- Present Serviceability Rating (PSR) – quality rating applicable only to certain lower speed roads.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Pavement condition is assessed for each 0.1-mile section of the through travel lanes of mainline

highways on the Interstate or the non-Interstate NHS using these metrics and thresholds. A pavement section is rated as good if all three metric ratings are good and poor if two or more metric ratings are poor. Sections that are not good or poor are considered fair.

The good/poor measures are expressed as a percentage and are determined by summing the total lane-miles of good or poor highway segments and dividing by the total lane-miles of all highway segments on the applicable system. Pavement in good condition suggests that no major investment is needed and should be considered for preservation treatment. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

Bridge condition measures refer to the percentage of bridges by deck area on the NHS that are in good or poor condition. The measures assess the condition of four bridge components—deck, superstructure, substructure, and culverts. Each component has a metric rating threshold to establish good, fair, or poor condition. Each bridge on the NHS is evaluated using these ratings. If the lowest rating of the four metrics is greater than or equal to 7, the structure is classified as good. If the lowest rating is less than or equal to 4, the structure is classified as poor. If the lowest rating is 5 or 6, it is classified as fair.

The bridge measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on but is nearing a point where substantial reconstruction or replacement is needed.

Federal rules require state DOTs and TPOs to coordinate when setting pavement and bridge condition performance targets and monitor progress towards achieving the targets. States must establish:

- Four-year statewide targets for the percent of Interstate pavements in good and poor condition;
- Two-year and four-year targets for the percent of non-Interstate NHS pavements in good and poor condition; and
- Two-year and four-year targets for the percent of NHS bridges (by deck area) in good and poor condition.

TPOs must establish four-year targets for all six measures. TPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the TPO's planning area.

The two-year and four-year targets represent pavement and bridge condition at the end of calendar years 2019 and 2021, respectively.

2.4 Pavement and Bridge Condition Baseline Performance and Established Targets

This System Performance Report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the TPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this first North Florida TPO LRTP System Performance Report highlights performance for the baseline period, which is 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

Table 2.4 presents baseline performance for each PM2 measure for the State and for the TPO planning area as well as the two-year and four-year targets established by FDOT for the State.

Table 2.4: Pavement and Bridge Conditions (PM2) Performance and Targets

Performance Measures	Statewide Performance (2017 Baseline)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)
Percent of Interstate pavements in good condition	66%	n/a	60%
Percent of Interstate pavements in poor condition	0.1%	n/a	5%
Percent of non-Interstate NHS pavements in good condition	76.4%	40%	40%
Percent of non-Interstate NHS pavements in poor condition	3.6%	5%	5%
Percent of NHS bridges (by deck area) in good condition	67.7%	50%	50%
Percent of NHS bridges (by deck area) in poor condition	1.2%	10%	10%

FDOT established the statewide PM2 targets on May 18, 2018. In determining its approach to establishing performance targets for the federal pavement and bridge condition performance measures, FDOT considered many factors. To begin with, FDOT is mandated by Florida Statute 334.046 to preserve the state's pavement and bridges to specific standards. To adhere to the statutory guidelines, FDOT prioritizes funding allocations to ensure the current transportation system is adequately preserved and maintained before funding is allocated for capacity

improvements. These statutory guidelines envelop the statewide federal targets that have been established for pavements and bridges.

In addition, MAP-21 requires FDOT to develop a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP must include investment strategies leading to a program of projects that would make progress toward achievement of the state DOT targets for asset condition and performance of the NHS. FDOT's TAMP was updated to reflect MAP-21 requirements in 2018.

Further, the federal pavement condition measures require a new methodology that is a departure from the methods currently used by FDOT and uses different ratings and pavement segment lengths. For bridge condition, the performance is measured in the deck area under the federal measure, while the FDOT programs its bridge repair or replacement work on a bridge by bridge basis. As such, the federal measures are not directly comparable to the methods that are most familiar to FDOT.

In consideration of these differences, as well as the unfamiliarity associated with the new required processes, FDOT took a conservative approach when setting its initial pavement and bridge condition targets.

The North Florida TPO agreed to support FDOT's pavement and bridge condition performance targets on 11 October 2018. By adopting FDOT's targets, the North Florida TPO agrees to plan and program projects that help FDOT achieve these targets.

The North Florida TPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the North Florida TPO 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Transportation Asset Management Plan.

- The FTP is the single overarching statewide plan guiding Florida's transportation future. It defines the state's long-range transportation vision, goals, and objectives and establishes the policy framework for the expenditure of state and federal funds flowing through FDOT's work program. One of the seven goals defined in the FTP is Agile, Resilient, and Quality infrastructure.
- The Florida Transportation Asset Management Plan (TAMP) explains the processes and policies affecting pavement and bridge condition and performance in the state. It presents a strategic and systematic process of operating, maintaining, and improving these assets effectively throughout their life cycle.

The North Florida TPO 2045 LRTP seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. The 2045 Long Range Transportation includes the following goal related to system preservation.

Goal 6: Preserve and maintain our existing system. This goal and its supporting objectives recognize that preserving and maintaining the existing system is integral to the optimization of mobility. The FHWA and FDOT established formal goals and objectives for systems preservation that are proposed for adoption as part of this LRTP. They include:

1. Have 95 percent of the Strategic Intermodal System in good or better condition.
2. Have 85 percent of other arterials in good or better condition.
3. Strengthen bridges that are either (1) structurally deficient or (2) posted for weight restriction within six years on FDOT facilities.
4. Replace bridges that require structural repair and are more cost-effective to replace within nine years on FDOT facilities.
5. Satisfy FDOT's off-system bridge replacement goals.
6. Maintain signing and pavement markings to accommodate all users including automated vehicles.
7. Maintain technology/infrastructure introduced to accommodate connected vehicles.

In addition, the objective of the systems preservation and maintenance goal is to provide a transit fleet that meets FTA's requirements for system preservation, vehicle age and maintenance.

On or before October 1, 2020, FDOT will provide FHWA and the North Florida TPO with a detailed report of pavement and bridge condition performance covering January 1, 2018, to December 31, 2019. FDOT and the North Florida TPO also will have the opportunity at that time to revisit the four-year PM2 targets.

The North Florida TPO reports bridge and pavement conditions in the Annual Mobility Report.

2.5 System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program Measures (PM3)

In January 2017, USDOT published the Final Rule on System Performance/Freight/CMAQ Performance Measures to establish measures to assess passenger and freight performance on the Interstate and non-Interstate NHS and traffic congestion and on-road mobile source emissions in areas that do not meet federal National Ambient Air Quality Standards (NAAQS). The rule, referred to as the PM3 Rule, requires MPOs to set targets for the following six performance measures.

National Highway Performance Program (NHPP)

1. Percent of person-miles on Interstate system that are reliable (Level of Travel Time Reliability) (LOTTR)
2. Percent of person-miles on non-Interstate NHS that are reliable (LOTTR)

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR)

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

4. Annual hours of peak hour excessive delay per capita (PHED)
5. Percent of non-single occupant vehicle (SOV) travel; and
6. Cumulative 2- and 4-year reduction of on-road mobile source emissions (NOx, VOC, CO, PM10, and PM2.5) for CMAQ-funded projects

In Florida, only the two LOTTR performance measures and the TTTR performance measure apply. Because all areas in Florida meet current NAAQS, the last three measures listed pertaining to the CMAQ Program do not currently apply in Florida.

Data used to calculate these PM3 measures are provided by FHWA via the National Performance Management Research Data Set (NPMRDS), which contains travel times, segment lengths, and Annual Average Daily Travel (AADT) for Interstate and non-Interstate NHS roads.

2.6 PM3 Baseline Performance and Established Targets

The System Performance Report discusses the condition and performance of the transportation system for each applicable PM3 target and the progress achieved by the TPO in meeting targets in comparison with system performance recorded in previous reports. Because the Federal performance measures are new, performance of the system for each measure only recently has been collected and targets only recently have been established.

Accordingly, this first LRTP System Performance Report highlights performance for the baseline period of 2017. FDOT will continue to monitor and report performance on a biennial basis. Future System Performance Reports will discuss progress towards meeting the targets since this initial baseline report.

Table 2.5 presents baseline performance for each PM3 measure for the state and for the TPO planning area as well as the two-year and four-year targets established by FDOT for the state.

Table 2.5: Baseline Performance

Performance Measures	Statewide Performance (2017 Baseline)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)
Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR)	82.2%	75.0%	70.0%
Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR	84.0%	n/a	50.0%
Truck travel time reliability index (TTTR)	1.43%	1.75%	2.00%

FDOT established the statewide PM3 targets on May 18, 2018. In setting the statewide targets, FDOT reviewed external and internal factors that may affect reliability, conducted a trend

analysis for the performance measures, and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable within the time period for setting targets. One key conclusion from this effort is that there is a lack of availability of extended historical data with which to analyze past trends and a degree of uncertainty about future reliability performance. Accordingly, FDOT took a conservative approach when setting its initial PM3 targets.

The North Florida TPO agreed to support FDOT's PM3 targets on 11 October 2018. By adopting FDOT's targets, the North Florida TPO agrees to plan and program projects that help FDOT achieve these targets. The North Florida TPO recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the North Florida TPO 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Freight Mobility and Trade Plan.

On or before October 1, 2020, FDOT will provide FHWA and the North Florida TPO a detailed report of performance for the PM3 measures covering the period of January 1, 2018 to December 31, 2019. FDOT and the North Florida TPO also will have the opportunity at that time to revisit the four-year PM3 targets.

2.7 Transit Asset Management Measures

On July 26, 2016, FTA published the Final Rule on Transit Asset Management (TAM), which applies to all recipients and sub-recipients of Federal transit funding that own, operate, or manage public transportation capital assets. The TAM Rule defines the term "state of good repair," requires that public transportation providers develop and implement TAM plans and establishes state of good repair standards and performance measures for four asset categories—transit equipment, rolling stock, transit infrastructure, and facilities. The TAM Rule became effective on October 1, 2018. Table 2.6 identifies performance measures outlined in the TAM Rule.

Table 2.6: FTA TAM Performance Measures

Asset Category	Performance Measure and Asset Class
1. Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark.
2. Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark.
3. Infrastructure	Percentage of track segments with performance restrictions.
4. Facilities	Percentage of facilities within an asset class rate below condition 3 on the Transit Economic Requirements Model (TERM) scale.

The North Florida TPO has the following Tier I and Tier II providers operating in the region:

- Jacksonville Transportation Authority, Duval County, Tier I
- Sunshine Bus, St. Augustine/St. Johns County
- Clay Transit (service now provided by Jacksonville Transportation Authority)
- Nassau Transit

On 8 November 2019, the North Florida TPO agreed to support Clay and Nassau County Transit Systems Transit asset management targets established in the Florida Department of Transportation Group Transit Asset Management Plan, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the transit provider targets.

The Jacksonville Transportation Authority and Sunshine Bus established the transit asset targets identified in Table 2.7 on 2 February 2018:

Table 2.7: Jacksonville Transportation Authority (JTA) & Sunshine Bus Targets and Measures

Performance Measures		2019 Target	2020 Target	2021 Target	2022 Target	2023 Target
Revenue Vehicles	Cutaway Bus	38%	32%	27%	22%	16%
	Mini Van	20%	20%	20%	20%	20%
Equipment	Non-Revenue/Service Automobile	100%	50%	50%	50%	
Facilities	Transit Center (Admin & Maintenance)	None 0%	None 0%	None 0%	None 0%	None 0%

The transit asset management targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities. The targets reflect the most recent data available on the number, age, and condition of transit assets, as well as expectations and capital investment plans for improving these assets. Table 2.8 summarizes asset condition for Jacksonville Transportation Authority rolling stock. Table 2.9 summarizes the same for the Sunshine Bus.

Table 2.8: Jacksonville Transportation Authority (JTA) Asset Condition Summary

Asset Category	Total Number	Average Age	Average Mileage	Average TERM Condition	Average Value	% At or Past ULB
Revenue Vehicles	**43**	**5.2**	**131,147**	**n/a**	**$92,627.91**	**47%**
Cutaway Bus	38	5.5	143,083	n/a	$95,473.68	50%
Mini-van	5	2.8	40,433	n/a	$71,000.00	20%
Equipment	**2**	**16.5**	**191,463**	**n/a**	**$35,000.00**	**100%**
Non- Revenue /Service Automobile	2	16.5	191,463	n/a	$35,000.00	100%
Facilities	**1**	**11.0**	**n/a**	**4.0**	**$1,369,000.00**	**n/a**
Transit Center (Admin & Main)	1	11.0	n/a	4.0	$1,369,000.00	n/a

Table 2.9: Sunshine Bus Asset Condition Summary

Asset Category	Total Number	Average Age	Average Mileage	Average TERM Condition	Average Value	% At or Past ULB
Revenue Vehicles	**43**	**5.2**	**131,147**	**n/a**	**$92,627.91**	**47%**
Cutaway Bus	38	5.5	143,083	n/a	$95,473.68	50%
Mini-van	5	2.8	40,433	n/a	$71,000.00	20%
Equipment	**2**	**16.5**	**191,463**	**n/a**	**$35,000.00**	**100%**
Non- Revenue /Service Automobile	2	16.5	191,463	n/a	$35,000.00	100%
Facilities	**1**	**11.0**	**n/a**	**4.0**	**$1,369,000.00**	**n/a**
Transit Center (Admin & Main)	1	11.0	n/a	4.0	$1,369,000.00	n/a

Clay Transit and Nassau Transit are part of the Group TAM Plan for Fiscal Years 2018/2019-2022/2023 developed by FDOT for Tier II providers in Florida. The FY 2019 asset conditions and 2020 targets for the Tier II providers are shown in Table 2.10. Table 2.11 is the Group TAM Asset Summary by Class.

Table 2.10: Group TAM Targets and Measures (Clay Transit and Nassau Transit)

Asset Category – Performance Measure	Asset Class	FY 2019 Asset Conditions	FY 2020 Performance Target
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Automobile	55%	45%
	Bus	15%	13%
	Mini-Bus	28%	28%
	Mini-Van	13%	11%
	SUV	0%	0%
	Van	47%	34%
Equipment			
Age - % of equipment or non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/ Service Automobile	67%	67%
	Trucks and Other Rubber Tire Vehicles	50%	40%
	Maintenance Equipment	50%	50%
	Routing and Scheduling Software	100%	100%
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	0%	9%
	Maintenance	6%	12%

Table 2.11: Group TAM Asset Summary by Class

Asset Category Class	Total Number	Average Age	Average Miles	Average Value	Number Exceeding ULB
Rolling Stock					
Automobile	26	7	88,450	$20,664	16
Bus	40	8	129,434	$288,108	7
Cutaway Bus	401	5	136,977	$75,152	121
Minibus	33	5	70,556	$84,507	10
Minivan	108	4	97,799	$52,370	14
SUV	16	4	104,850	$28,023	0
Van	128	7	94,648	$34,894	55
Equipment	13	7	74,642	$55,219	12
Facility	48	21	n/a	$918,867	0

The statewide group TAM targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities over the next year. The targets reflect the most recent data available on the number, age, and condition of transit assets, and expectations and capital investment plans for improving these assets during the next fiscal year, using the asset inventory and investment prioritization process incorporated in the Group TAM Plan.

Key findings of the Group TAM Plan include the following:

- Approximately 27 percent of all inventoried assets have met or exceeded their ULB.
- The asset inventory includes a total of 752 revenue vehicles with an average age of 5.5 years, of which 271 (or 35 percent) have met or exceeded their ULB.
- Based on the investment prioritization, vehicles that are rated poor or marginal in the cutaway class and the van class will be prioritized for replacement.

As required by FTA, FDOT will update this TAM Plan at least once every four years. FDOT will update the statewide performance targets for the participating agencies on an annual basis and will notify the participating transit agencies and the TPOs in which they operate when the targets are updated.

To support progress towards TAM performance targets, transit investment and maintenance funding in 2045 totals $471 million (not including SIS funds programmed by FDOT), approximately 15.5 percent of total LRTP funding (not including SIS funding) and 35 percent of requested Jacksonville Transportation Authority funding for transit preservation. Improving the State of Good Repair (SGR) of capital assets is an overarching goal of this process.

2.8 Transit Safety Performance

FTA published the Final Rule on Public Transportation Agency Safety Plan (PTASP) and related performance measures as authorized in MAP-21. The PTASP Rule requires operators of public transportation systems that receive Federal financial assistance to develop and implement a PTASP based on a safety management systems approach. The development and implementation of PTSAPs is anticipated to help ensure that public transportation systems are safe nationwide.

The PTASP Rule was published on July 19, 2018, with an effective date of July 19, 2019. Transit operators subject to the rule must have a PTASP and safety targets in place by July 20, 2020.

2.9 Transit Safety Performance Measures

The transit agency sets targets in the PTASP based on the safety performance measures established in the National Public Transportation Safety Plan (NPTSP). The required transit safety performance measures are:

1. Total number of reportable fatalities.
2. Rate of reportable fatalities per total vehicle revenue miles by mode.
3. Total number of reportable injuries.
4. Rate of reportable injuries per total vehicle revenue miles by mode.
5. Total number of reportable safety events.
6. Rate of reportable events per total vehicle revenue miles by mode.
7. System reliability - Mean distance between major mechanical failures by mode.

The North Florida TPO will coordinate with the Jacksonville Transportation Authority, Sunshine Bus, and FDOT on behalf of Clay and Nassau Transit to adopt transit safety performance targets within 90 days of their adoption by each transit agency.

2.10 Integration of Performance Management in the 2045 LRTP

On 20 June 2019 the North Florida TPO formally endorsed the Transportation Planning Performance Measures Consensus Planning Document developed by the Florida Metropolitan Planning Organization Advisory Committee and Florida Department of Transportation.

The purpose of the document is to outline the minimum roles of FDOT, the TPOs, and the providers of public transportation in the TPO planning areas to ensure consistency to the maximum extent practicable in satisfying the transportation performance management requirements promulgated by the United States Department of Transportation in Title 23 Parts 450, 490, 625, and 673 of the Code of Federal Regulations (23 CFR). Specifically:

- 23 CFR 450.314(h)(1) requires that “The TPO(s), State(s), and providers of public transportation shall jointly agree upon and develop specific written procedures for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward achievement of critical

outcomes for the region of the TPO, and the collection of data for the State asset management plan for the National Highway System (NHS)."

- 23 CFR 450.314(h)(2) allows for these provisions to be "Documented in some other means outside the metropolitan planning agreements as determined cooperatively by the TPO(s), State(s), and providers of public transportation."

As was the 2040 Long Range Transportation Plan adopted in November 2014, the 2045 Long Range Transportation Plan adopted November 14, 2019 is performance-based.

To ensure consistency with this agreement and in all TPO plans, programs and activities, in 2019 the North Florida TPO updated both the Congestion Management Process (CMP) (clink the image at right to view the CMP) and Regional System Safety Plan in incorporate federal performance measures and targets. Historically, the North Florida TPO reports progress in attaining these measures in the Annual Mobility Report. The current Annual Mobility Report and all prior reports documented progress in achieving performance measures adopted in the previous Congestion Management Process (CMP). As noted, the CMP was updated to include all federal performance measures and targets all of which were incorporated in Path Forward 2045, the recently updated Long Range Transportation Plan. These measures were utilized in project evaluation and prioritization.

The 2020 Annual Mobility Report will be linked to both the measures utilized in the updated CMP, 2045 Long Range Transportation Plan and Regional System Safety Plan.

The 2019 CMP update included developing an Integrated Data Exchange (IDE) with a real-time system performance dashboard.

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3 2045 Long Range Transportation Plan Goals, Objectives and Measures

The North Florida TPO's mission is to provide a regional forum for developing a transportation system that moves people and goods safely, economically and efficiently while maintaining a high quality of life in North Florida. The North Florida TPO's vision is to promote the regional optimization of mobility consistent with the values of local communities through the Long Range Transportation Plan (LRTP). The LRTP identifies the transportation improvements necessary for optimal movement of people and goods, based on current needs and forecasted future growth. The recommended transportation improvement projects in the plan are guided by defined goals, objectives, and performance measures.

Specifically, the LRTP goals and objectives are to enhance the following:

- Economic Competitiveness
- Livability
- Safety
- Mobility and Accessibility
- Equity in Decision Making
- System Preservation
- Resilient Multimodal Infrastructure
- Tourism Transport Management

The goals, objectives, and performance measures proposed are based on the transportation user's point of view as explained in the pages that follow. The order of the goals and objectives do not indicate priority.

3.1 2045 Goals, Objectives and Measures

GOAL 1: INVEST IN PROJECTS THAT ENHANCE ECONOMIC COMPETITIVENESS

Investing in projects that enhance economic competitiveness focusing on improving the following: travel time reliability (the most important factor for freight operators), enhance access to jobs, and maximizing return on investment.

The objectives associated with this enhancing economic competitiveness are listed below.

- **OBJECTIVE 1.1:** Improve travel reliability on major freight routes.

Performance Measure		Benchmark
1.1.1	Truck Travel Time Reliability The sum of maximum Truck Travel Time Reliability (TTTR) for each reporting segment, divided by the total Interstate System miles	Maintain or improve Truck Travel Time Reliability The calculation is only available on corridors with Blue Toad devices (I-10, I-95, SR 10, SR 21, SR 200, US 17, US 90, SR 13, I-295, US 1) Existing values are reported in the Congestion Management Process.

- **OBJECTIVE 1.2:** Enhance access to jobs, services, and retail for all.

Performance Measure		Benchmark
1.2.1	Jobs within a half-mile of a major arterial	Maintain or improve access to jobs Existing value is reported in the Congestion Management Process.
1.2.2	Projects that enhance access to jobs through transit	Evaluation of projects/scenarios

- **OBJECTIVE 1.3:** Maximize return on investment.

Performance Measure		Benchmark
1.3.1	Benefit/Cost ratio	Rank benefit to cost ratio in evaluation of projects/scenarios
1.3.2	Return on Investment	Rank return on investment in evaluation of projects/scenarios

GOAL 2: INVEST IN LIVABLE AND SUSTAINABLE COMMUNITIES

There is no single definition of what constitutes a "livable" or "sustainable" transportation system. However, the North Florida TPO has adopted the following definition of a sustainable transportation system endorsed by the Transportation Research Board Sustainable Transportation Indicators Subcommittee:

> *Allows the **basic access** and development needs of individuals, companies, and society to be met **safely** and in a manner consistent with **human and ecosystem health** and **promotes equity** within and between successive generations.*
>
> *Is **affordable**, operates fairly and **efficiently**, offers a **choice of transportation modes**, and supports a **competitive economy**, as well as **balanced regional development**.*
>
> ***Limits air, water, noise emissions, waste and resource use**. Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise.*

The goals associated with livability and sustainability are listed below.

- **OBJECTIVE 2.1:** Enhance transit accessibility.

Performance Measure		Benchmark
2.1.1	Percent of Population within a quarter mile walk of a transit stop	Maintain or improve the percent of population within a quarter mile walk of a transit stop. Existing value is reported in the Congestion Management Process.
2.1.2	Population within 5 miles of park and ride lots	Maintain or improve the population within 5 miles of park and ride lots. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 2.2:** Enhance transit ridership.

Performance Measure		Benchmark
2.2.1	Passengers per vehicle revenue mile	Maintain or improve passengers per revenue mile. Existing value is reported in the Congestion Management Process.
2.2.2	Passengers per vehicle revenue hour	Maintain or improve passengers per revenue hour. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 2.3:** Enhance bicycle and pedestrian quality of service.

Performance Measure		Benchmark
2.3.1	Lane miles with bicycle and pedestrian facilities	Maintain or improve lane miles with bicycle and pedestrian facilities. Existing values are reported in the Congestion Management Process.

- **OBJECTIVE 2.4:** Reduce the cost of congestion per capita.

Performance Measure		Benchmark
2.4.1	Cost of congestion	Maintain or reduce the cost of congestion. Existing value is reported in the Congestion Management Process.
2.4.2	Congestion cost per capita	Maintain or reduce congestion cost per capita. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 2.5:** Reduce the impacts of investments on the natural environment.

Performance Measure		Benchmark
2.5.1	Environmental screening and mitigation	Apply Efficient Transportation Decision Making Process to all projects in LRTP.

- **OBJECTIVE 2.6:** Reduce emissions from automobiles.

Performance Measure		Benchmark
2.6.1	Carbon dioxide, nitrous oxides, and volatile organic compound emissions due to reduced delay.	Estimate emission reduction due to reduced delay in the evaluation of projects/scenarios. Existing value is reported in the Congestion Management Process.
2.6.2	Emissions due to vehicle electrification	Estimate emission reduction due to electrification of the vehicle fleet.[1]

[1]The TPO has an Alternative Fuels Master Plan and a Clean Fuels Program promoting alternative fuels and alternative fuel vehicles.

- **OBJECTIVE 2.7:** Ensure consistency with land use planning.

Performance Measure		Benchmark
2.7.1	Includes active transportation design principles in context sensitive solutions	Include walkability standards in context sensitive solutions.
2.7.2	Land Use scenarios are consistent with county comprehensive plans	Ensure consistency with comprehensive plans.

- **OBJECTIVE 2.8:** Support regional evacuation needs.

Performance Measure		Benchmark
2.8.1	Projects that improve evacuation routes.	Evaluation of projects/scenarios.

- **OBJECTIVE 2.9:** Support micro transit, mobility as a service (MaaS) and other new and innovative transit options

GOAL 3: ENCOURAGE SAFE AND SECURE TRAVEL

Investing in projects that enhance safety will lead to reduced crashes and lower crash severity for all modes.

- **OBJECTIVE 3.1:** Reduce crashes for all modes.

Performance Measure		Benchmark
3.1.1	Number of vehicle crashes	Reduce the number of vehicle crashes. Existing value is reported in the Congestion Management Process.
3.1.2	Crash rate per million vehicle miles	Reduce the crashes rate. Existing value is reported in the Congestion Management Process.
3.1.3	Number of serious injuries	Reduce the crashes rate. Existing value is reported in the Congestion Management Process.
3.1.4	Rate of serious injuries per million vehicle miles	Reduce the number of serious injuries. Existing value is reported in the Congestion Management Process.
3.1.5	Number of non-motorized fatalities and non-motorized serious injuries	Reduce the number of non-motorized fatalities and non-motorized serious injuries. Existing value is reported in the Congestion Management Process.
3.1.6	Number of bicycle crashes	Reduce the number of bicycle crashes. Existing value is reported in the Congestion Management Process.

3.1.7	Number of pedestrian crashes	Reduce the number of pedestrian crashes. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 3.2:** Reduce fatal crashes for all modes.

Performance Measure		Benchmark
3.2.1	Number of fatalities	Reduce the number of fatalities. Existing value is reported in the Congestion Management Process.
3.2.2	Fatality rate per million vehicle miles	Reduce the fatality rate. Existing value is reported in the Congestion Management Process.
3.2.3	Number of bicycle fatalities	Reduce the number of bicycle fatalities. Existing value is reported in the Congestion Management Process.
3.2.4	Number of pedestrian fatalities	Reduce the number of pedestrian fatalities. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 3.3**: Promote the implementation of safety and security improvements in the design or retrofit of all transportation systems.

Performance Measure		
3.3.1	Implemented safety measures on high crash corridors identified in the Regional Strategic Safety Plan.	Reported in the Regional Strategic Safety Plan.

- **OBJECTIVE 3.4:** Enhance security for all modes through the appropriate use of authorized access, surveillance systems and Intelligent Transportation Systems (ITS).

Performance Measure		
3.4.1	All transit projects are required to have a Threat and Vulnerability Assessment.	A Threat and Vulnerability Assessment considers the full spectrum of threats (natural, criminal, terrorist, accidental, etc) for a given facility/location as well as the vulnerability of the facility/location to an attack.

GOAL 4: ENHANCE MOBILITY AND ACCESSIBILITY

Enhancing mobility includes addressing the four dimensions of mobility – quantity of travel, quality of travel, system accessibility and system utilization. Several of these measures also support other goals and objectives (such as livability and sustainability).

Mobility is about more than increasing the volume of persons served and managing congestion. Users want a less stressful commute, but they also want improved reliability of their travel, more choices including transit, walking, and bicycling and to ensure we optimize system operations before we invest in new infrastructure. Understanding the trade-offs of these goals in the context of each corridor being considered is an essential element to identifying the right mobility solution for any project.

- **OBJECTIVE 4.1:** Optimize the quantity of travel.

Performance Measure		Benchmark
4.1.1	Vehicle-miles traveled	Generally, increases in the quantity traveled (throughout) are preferred. However, consistent with livability and sustainability goals, one objective is to reduce the amount of travel needed. Therefore, no benchmarks are proposed, but monitoring is recommended. Existing values are reported in the Congestion Management Process.
4.1.2	Person-miles traveled	
4.1.3	Truck-miles traveled	
4.1.4	Vehicle Occupancy	
4.1.5	Transit ridership	Increase transit ridership Existing values are reported in the Congestion Management Process.

- **OBJECTIVE 4.2:** Optimize the quality of travel.

Performance Measure		Benchmark
4.2.1	Average Travel Speed	Maintain or improve the average travel speed Existing value is reported in the Congestion Management Process.
4.2.2	Average Vehicle Delay	Maintain or reduce the average vehicle delay Existing value is reported in the Congestion Management Process.
4.2.3	Average Commute Time	Maintain or reduce the average commute time Existing value is reported in the Congestion Management Process.

Performance Measure		Benchmark
4.2.4	Interstate Level of Travel Time Reliability - Percent of person-miles traveled on the Interstate that are Reliable	Maintain or improve the Interstate Level of Travel Time Reliability. Calculation is only available on corridors with Blue Toad devices (I-10, I-95, I-295) Existing values are reported in the Congestion Management Process.
4.2.5	Non-Interstate Level of Travel Time Reliability - Percent of person-miles traveled on the Non-Interstate that are Reliable	Maintain or improve the Non-Interstate Level of Travel Time Reliability. Calculation is only available on corridors with Blue Toad devices (SR 10, SR 21, SR 200, US 17, US 90, SR 13, US 1) Existing values are reported in the Congestion Management Process.
4.2.5	Level of service on rural facilities	Maintain the level of service standard (FDOT standard for Strategic Intermodal System facilities and local government standards for other facilities) Existing values are reported in the Congestion Management Process.

- **OBJECTIVE 4.3:** Improve the accessibility to mode choices.

Performance Measure		Benchmark
4.3.1	Percent of system miles with bicycle accommodations	Maintain or improve the percent of system miles with bicycle accommodations. Existing value is reported in the Congestion Management Process.
4.3.2	Percent of system miles with pedestrian accommodations	Maintain or improve the percent of system miles with pedestrian accommodations. Existing value is reported in the Congestion Management Process.
4.3.3	Transit coverage – Percent of population within quarter mile of a transit route	Increase the percent of population within quarter mile of a transit route. Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 4.4:** Optimize the utilization of the system.

Performance Measure		Benchmark
4.4.1	Percent of system heavily congested	Maintain or reduce the percent of system heavily congested. Existing value is reported in the Congestion Management Process.
4.4.2	Percent of travel heavily congested	Maintain or reduce the percent of travel heavily congested. Existing value is reported in the Congestion Management Process.
4.4.3	Vehicles per lane mile	Optimize the vehicles per lane mile for a desired LOS Existing value is reported in the Congestion Management Process.
4.4.4	Duration of congestion	Maintain or reduce the duration of congestion Existing value is reported in the Congestion Management Process.
4.4.5	Transit average load (Passengers per transit vehicle)	Optimize the transit average load for a desired quality of service Existing value is reported in the Congestion Management Process.

GOAL 5: ENHANCE EQUITY IN DECISION MAKING

Enhancing equity in decision making emphasizes the principle of 'Environmental Justice'. The United States Environmental Protection Agency (EPA) defines Environmental Justice as follows.

> *Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation [sic]. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.*

Additionally, the United States Department of Transportation defines three fundamental Environmental Justice principles for the Federal Highway Administration and the Federal Transit Administration as follows:

1. *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.*

2. *To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.*

3. *To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.*

To address these goals, these three principles are adopted as objectives for this LRTP listed below. The performance measures associated with each objective are less quantifiable than the objectives associated with other goals and are more process-oriented. These three factors will be considered as part of the Needs Plan and Cost Feasible Plan and will be implemented using Geographic Information Systems techniques to identify the minority and low-income populations and by designing outreach programs to involve minority and low-income populations.

- **OBJECTIVE 5.1:** Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects (including social and economic effects) on minority and low-income populations.

The performance of this objective is qualitative.

- **OBJECTIVE 5.2**: Ensure full and fair participation by all potentially affected communities in the transportation decision-making process.

Performance Measure	
5.2.1	Adherence to the Public Involvement Plan

- **OBJECTIVE 5.3**: Prevent the denial of, reduction in, or significant delay of the receipt of benefits by minority and low-income populations.

Performance Measure		Benchmark
5.3.1	Number of projects in low income and minority census tracts	Evaluation of projects/scenario

- **OBJECTIVE 5.4**: Provide Ladders of Opportunity.

Performance Measure		Benchmark
5.4.1	Number of projects in low income and minority census tracts	Evaluation of projects/scenario
5.4.2	Jobs within a half-mile of a state road	Maintain or improve access to jobs Existing value is reported in the Congestion Management Process.
5.4.3	Projects that enhance access to jobs through transit	Evaluation of projects/scenarios

GOAL 6: PRESERVE AND MAINTAIN OUR EXISTING SYSTEM

Preserving and maintaining the existing system is integral to the optimization of mobility. The Federal Highway Administration (FHWA) and Florida Department of Transportation (FDOT) established formal goals and objectives for systems preservation that are proposed for adoption as part of this LRTP. They include:

1. Have 95 percent of the Strategic Intermodal System in good or better condition.

2. Have 85 percent of other arterials in good or better condition.

3. Strengthen bridges that are either (1) structurally deficient or (2) posted for weight restriction within six years on FDOT facilities.

4. Replace bridges that require structural repair and are more cost-effective to replace within nine years on FDOT facilities.

5. Satisfy FDOT's off-system bridge replacement goals.

6. Maintain signing and pavement markings to accommodate all users including automated vehicles.

7. Maintain technology/infrastructure introduced to accommodate connected vehicles.

In addition, the objective of the systems preservation and maintenance goal is to provide a transit fleet that meets Federal Transit Administration's (FTA's) requirements for system preservation, vehicle age and maintenance.

The objectives for preserving and maintaining the existing system are listed below.

- **OBJECTIVE 6.1:** Maintain and update roadways to current standards.

Performance Measure		Benchmark
6.1.1	Percent of Interstate Pavement in Good Condition	Maintain or improve Existing value is reported in the Congestion Management Process.
6.1.2	Percent of Interstate Pavement in Poor Condition	Maintain or reduce Existing value is reported in the Congestion Management Process.
6.1.3	Percent of Non-Interstate Pavement in Good Condition	Maintain or improve Existing value is reported in the Congestion Management Process.
6.1.4	Percent of Non-Interstate Pavement in Poor Condition	Maintain or reduce Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 6.2:** Maintain and update bridges to current standards

Performance Measure		Benchmark
6.2.1	Percent of National Highway System Bridges in Good Condition	Maintain or improve Existing value is reported in the Congestion Management Process.
6.2.2	Percent of National Highway System Bridges in Poor Condition	Maintain or reduce Existing value is reported in the Congestion Management Process.
6.2.3	Percent of State Highway Bridges in Good Condition	Maintain or improve Existing value is reported in the Congestion Management Process.
6.2.4	Percent of State Highway Bridges in Poor Condition	Maintain or reduce Existing value is reported in the Congestion Management Process.
6.2.5	Percent of Non-State Highway Bridges in Good Condition	Maintain or improve Existing value is reported in the Congestion Management Process.
6.2.6	Percent of Non-State Highway Bridges in Poor Condition	Maintain or reduce Existing value is reported in the Congestion Management Process.

- **OBJECTIVE 6.3:** Maintain and update transit systems to current standards

Performance Measure		Benchmark
6.3.1	Average Age of Vehicles	Maintain or reduce Existing value is reported in the Congestion Management Process.
6.3.2	Average Rating of Facilities on TERM Scale	Maintain or improve Fall below 3.0

GOAL 7: CREATE RELIABLE AND RESILIENT MULTIMODAL INFRASTRUCTURE

A reliable and resilient multimodal transportation infrastructure provides accessible and diverse transportation options that ensure mobility, system preservation, supports evacuation needs, and addresses social equity.

The objectives for reliable and resilient multimodal infrastructure are listed below.

- **OBJECTIVE 7.1:** Incorporate climate risk in project planning, system preservation and maintenance and determine appropriate measures to mitigate risk or repurpose threatened facilities.

Performance Measure		Benchmark
7.1.1	Consideration for vulnerable, at-risk facilities	Evaluation of projects/scenarios

- **OBJECTIVE 7.2:** Provide reliable mobility access and minimize impact of disruptions to regional mobility.

The performance of this objective is qualitative.

- **OBJECTIVE 7.3:** Support regional evacuation needs as reflected in municipal Emergency Management Plans.

Performance Measure		Benchmark
7.3.1	Number of projects on an evacuation route	Evaluation of projects/scenarios

- **OBJECTIVE 7.4:** Address social equity in adaptation/resilience strategy implementation.

Performance Measure		Benchmark
7.4.1	Number of projects in low income census tracts	Evaluation of projects/scenarios

GOAL 8: ENHANCE TOURISM TRANSPORT MANAGEMENT

Tourism Transport Management involves improving transportation options for recreational, event, and general tourism travel to enhance the overall transportation system while improving mobility and transportation options.

The objectives for tourism transport management are listed below.

- **OBJECTIVE 8.1:** Develop a Regional Tourism Transport Management Program.

Performance Measure	
8.1.1	Complete Regional Tourism Transport Management Plan

- **OBJECTIVE 8.2:** Improve and provide diverse tourism transportation options.

Performance Measure		Benchmark
8.2.1	Number of projects in high tourism areas	Evaluation of projects/scenarios

- **OBJECTIVE 8.3:** Encourage the integration of alternative transportation into tourist activities.

Performance Measure	
8.3.1	County comprehensive plans include alternative transportation for tourists

GOAL 9: ENSURE NORTH FLORIDA IS READY FOR CONNECTED AND AUTONOMOUS VEHICLES AND INTERNET OF THINGS (IOT) TECHNOLOGIES THAT SUPPORT TRANSPORTATION

The North Florida Region will continue to embrace emerging technologies, including connected and automated vehicles, Internet of Things (IoT) components and advanced data management and analytics, preparing the transportation infrastructure in the region for these advances in transportation technology.

FDOT's Office of Policy Planning has recently developed "Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use (ACES) Vehicles" that outlines 33 elements that Transportation Planning Organizations (TPO's) in Florida should consider in their short, medium and long-range planning. These elements should be adopted by the TPO in future work efforts.

The objectives to ensure North Florida is ready for Connected and Autonomous Vehicles (CAV) and IoT technologies are listed below.

- **OBJECTIVE 9.1:** Deploy a regional data exchange

Performance Measure	
9.1.1	Complete Phase 1 of the data exchange
9.1.2	Develop a CV module for CV data storage and analytics

- **OBJECTIVE 9.2:** Prepare infrastructure for connected and automated vehicles

Performance Measure		Benchmark
9.2.1	Miles of vehicle to infrastructure (V2I) technology (DSRC, C-V2X, or 5G)	Increase miles of V2I technology
9.2.2	Miles of fiber optic cable	Increase miles of fiber optic cable

- **OBJECTIVE 9.3:** Implement cybersecurity measures and best practices throughout the system to protect user privacy and data and to ensure safe operations.

Performance Measure	
9.3.1	Complete Cybersecurity Plan
9.3.2	Develop and Implement Strategy for Security Credential Management Plan (SCMS)

- **OBJECTIVE 9.4:** Develop and implement policies that support connected and automated vehicles

Performance Measure	
9.4.1	Complete a Connected and Autonomous Vehicle Policy Plan

- **OBJECTIVE 9.5:** Deploy strategies to support First Mile/Last Mile travel options.

Performance Measure	
9.5.1	Complete First Mile/Last Mile Plan

- **OBJECTIVE 9.6:** Incorporate CAV into the North Florida Travel Demand Model.

Performance Measure	
9.6.1	CAV included in the North Florida Travel Demand Model

- **OBJECTIVE 9.7:** Implement scenario planning activities surrounding Connected, Automated, Electric and Shared vehicles to determine the impacts on network usage, funding and other performance measures.

Performance Measure	
9.7.1	Develop scenarios surrounding ACES
9.7.2	Develop scenario planning methodology to determine impacts on the network usage, funding, and other performance measures

- **OBJECTIVE 9.8:** Consider Autonomous Vehicle only lanes or zones to support enhanced mobility opportunities resulting from automated vehicles.

Performance Measure	
9.8.1	Complete a study on autonomous vehicle only lanes or zones

3.2 Consistency with State and Federal Requirements

Federal Guidance

Signed into law on December 4, 2015, the FAST Act builds upon the previous Federal transportation act, Moving Ahead for Progress in the 21st Century Act (MAP-21), by continuing to focus on transportation system condition and performance with greater emphasis on intermodal strategies that contribute to safety, security, efficiency, productivity, reliability, and resiliency. The FAST Act also aims to reduce the environmental impacts of freight movement while providing the US with a platform to compete in the global marketplace.

The FAST Act continues the long-standing requirement for a long-range plan and a short-term transportation improvement program (TIP). Both LRTPs and statewide plans are now required to include facilities that support intercity transportation, including intercity buses. These plans must

be performance-based including performance measures and targets to be used by States and MPOs in assessing system performance and progress in achieving the goals set. Additionally, the FAST Act also requires the planning process to consider projects/strategies to improve the resilience and reliability of the transportation system, stormwater mitigation, and enhance travel and tourism.

Finally, in an effort to insure all sectors and users of the transportation network are engaged in the planning process, the FAST Act requires public ports and private transportation providers, and further encourages MPOs to be consulted during planning activities, including tourism agencies and professionals and natural disaster and emergency management agencies. These groups are represented on the North Florida TPO Board and advisory committees. MAP-21 and the FAST Act also change criteria for MPO officials to provide transit providers with equal authority and allow the representative to also serve as the representative of a local municipality.

A significant part of the reforms made by MAP-21 included transitioning to a performance-based planning program, including establishing national performance goals for Federal-aid highway programs, and incorporating performance goals, measures, and targets into the process of identifying needed transportation improvements and project selection. The FAST Act supports and continues this overall performance management approach, with states investing resources in projects that collectively will make progress toward national goals.

The following table presents the Federal Planning Requirements and how they were addressed in the 2045 LRTP.

Table 3.1: Federal Planning Requirements

Federal Planning Requirement	Where and How Addressed
A-1. Does the plan cover a 20-year horizon from the date of adoption?	Yes. The planning horizon for the plan is 2045.
A-2. Does the plan address the planning factors described in 23 C.F.R. 450.306(b)? ***Risk and Resiliency*** Does the plan improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation? ***Travel and Tourism*** Does that plan enhance travel and tourism?	• The North Florida TPO has developed and adopted a risk and resiliency plan which is summarized in section 6 of this document. This plan has identified areas that are at risk for sea-level rise and stormwater impacts. The plan has incorporated this plan and any program or project that is located within the risk areas will be planned and designed to mitigate those risks. Additionally, the plan includes a Mobility Program that will provide funding to mitigate existing infrastructure and harden it against risk. The Risk and Resiliency Plan is available on the PathForward2045.com website. • Goal 7 of the 2045 LRTP addresses risk and resiliency. Please see section 3 of this document. The cost feasible element, section 9 of this document, includes a mobility program that funds resiliency initiatives identified in the TPO's Resiliency Plan.

	• Goal 8 addresses tourism and the North Florida TPO is developing a Regional Tourism Transport Management Plan. The LRTP met with tourism agencies for the City of Jacksonville, St Johns County and Nassau County as part of the LRTP development to understand the travel needs and desires of visitors to the region.
A-3. Does the plan include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand?	Yes. The North Florida TPO has developed several plans and programs that address multi-modal transportation systems. The Cost Feasible Plan includes mobility programs that will fund projects from the Bicycle and Pedestrian Master Plan, the Greenways and Trails Master Plan, projects identities in the Congestion Management Plan (CMP), the North Florida Freight, Logistics and Intermodal Framework Plan, the Regional System Safety Plan and the SMART North Florida Plan. Goals 2, 3 and 4 found in section 3 of this report and in the Goals, Objectives and Performance Measures Technical Report address these issues.
A-4. Was the requirement to update the plan at least every five years met?	Yes. The 2040 plan was adopted in November of 2014 and the 2045 plan was adopted in November of 2019. Please see section 9.5 of this report.
A-5. Did the MPO coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP)?	The SIP (State Implementation Plan) is required in states that are non attainment for NAAQS standards. Florida is not. No SIP, no required TCMs.
A-6. Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity?	Yes. The North Florida TPO worked in partnership with the local governments to develop estimates for population, land use and economic activity. The North Florida TPO updated the Northeast Florida Regional Planning Model (travel demand model) which was used to estimated congestion in 2030 and 2045. Please refer to the Technical Reports on the Model Development and the Needs Plan for additional information. This information is summarized in sections 7.1 and 7.2 of this document.
A-7. Does the plan include the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan?	Yes. The North Florida TPO updated the Northeast Florida Regional Planning Model NERPM-AB (Activity-Based Travel Demand Model) which was used to estimated congestion in 2030 and 2045. Please refer to the Technical Reports on the Model Development and the Needs Plan for additional information. This information is summarized in section 7.5 of this document.

Federal Planning Requirement	Where and How Addressed
A-8. Does the plan include existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan?	Yes. The Needs Plan includes the Existing plus Committed projects which are projects that are funded by the Florida Department of Transportation, the Jacksonville Transportation Authority (JTA) and the local governments. These projects include roadway and transit (regional and intercity) improvements that are funded in the Five-year Work Program, Transit Development Plan (TDP) and the Capital Improvement Programs. Please see section 7.4 and the Needs Plan Development Technical Report for additional information. The proposed projects included in the Needs and Cost Feasible Plans (sections 7 and 9 of this document) are projects that have both a regional and local function. They also include projects on the national Interstate system. Please see the Needs Plan and the Cost Feasible Plan Technical Reports for additional information.
A-9. Does the plan include a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with §450.306(d)?	Yes. Please see section 3.1 on Performance Measures for additional information and the Goals, Objectives and Performance Measures Technical Report.
A-10. Does the plan include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in §450.306(d), including progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data?	Yes. Please see section 3.1 on performance measures and the Goals, Objectives and Performance Measures Technical Report for additional information.

Federal Planning Requirement	Where and How Addressed
A-11. Did the MPO integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program including: (i) The State asset management plan for the NHS, as defined in 23 U.S.C. 119(e) and the Transit Asset Management Plan, as discussed in 49 U.S.C. 5326; (ii) Applicable portions of the HSIP, including the SHSP, as specified in 23 U.S.C. 148; (iii) The Public Transportation Agency Safety Plan in 49 U.S.C. 5329(d); (iv) Other safety and security planning and review processes, plans, and programs, as appropriate; (v) The Congestion Mitigation and Air Quality Improvement Program performance plan in 23 U.S.C. 149(l), as applicable; (vi) Appropriate (metropolitan) portions of the State Freight Plan (MAP-21 section 1118); (vii) The congestion management process, as defined in 23 CFR 450.322, if applicable; and (viii) Other State transportation plans and transportation processes required as part of a performance-based program.	Yes. Please see section 3 of this document on Goals and Objectives and performance measures. Additional information and data are also available in the TPO's System Performance Plan, Congestion Management Plan and Regional Systems Safety Plan. All of these documents are available on the TPO's website.
A-12. Does the plan include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods?	Yes. The Cost Feasible Plan (section 9 of this document) includes a mobility program to fund projects from the SMART North Florida Plan which include operational and management projects and programs geared towards relieving congestion and increasing safety and mobility for all users.
A-13. Does the plan include consideration of the results of the congestion management process in TMAs, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide?	Yes. The Cost Feasible Plan found in section 9 of this document includes funding for a number of mobility programs that will be implementing projects and programs that will address congestion and delay. The North Florida TPO maintains a Congestion Management Plan which was updated in 2019 concurrent with the 2045 LRTP Update. The CMP is available on the TPO's website. Projects and programs identified in this plan will also receive funding through the Cost Feasible Plan through a variety of Mobility Programs. Please see section 9 on the development of the Cost Feasible Plan for additional information or the Cost Feasible Plan Technical Report.

Federal Planning Requirement	Where and How Addressed
A-14. Does the plan include assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters?	Yes. In partnership with the Florida Department of Transportation the North Florida TPO developed revenue forecasts for the 2045 LRTP. Please see section 8 and Appendix A of this document. The FDOT has made the preservation of the existing system a high priority and as such the revenue estimates provided to the TPO included O&M and capacity estimates. The capacity revenues for the TPO's LRTP were programmed to projects of regional significance. The TPO's Resiliency Study identified areas of risk. Any project or program identified in these areas will be planned and designed in such a manner that these risks will be minimized or eliminated. Additional information is available in the Financial Resources Technical Report.
A-15. Does the plan include transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a)?	Yes. Regional transit projects are identified in the Needs Plan and are funded in the Cost Feasible Plan found in sections 7 and 9 of this document. This included BRT and Commuter Rail projects that serve all parts of the region. In the case of commuter rail the service area parallel to major commuting corridors such as I-95 and US17. The Cost Feasible Plan found in section 9 of this document includes mobility programs that will increase access to transit through the expansion of bicycle and pedestrian projects as well as complete street projects. Many of these programs will focus on underserved areas thought out the region. Please see the Needs Plan and Cost Feasible Plan Technical Reports for additional information. Additionally, Intercity bus service (Greyhound, Red Bus and Mega Bus) connect with local bus service (fixed route, bus rapid transit, the Skyway and future commuter rail service), at the newly opened Jacksonville Regional Transportation Center.
A-16. Does the plan describe all proposed improvements in sufficient detail to develop cost estimates?	Yes. Please see the Cost Feasible Plan found in section 9 of this document and the Cost Feasible Plan Technical Report for additional detail. Please note the cost estimates were developed using general costs based on the Florida Department of Transportation costs unless specific project costs were available.
A-17. Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan?	Yes, Please see the environmental mitigation section of this report found in section 7.11, 7.12 and 7.13 of this document for additional documentation on the mitigation strategies.

Federal Planning Requirement	Where and How Addressed
A-18. Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented?	Yes. Based on the transportation revenues provided by the FDOT, the Cost Feasible Plan was developed in a manner consistent with the funding expected to be available in each band. The funding for each band or period was not exceeded. Please see the documentation of the Cost Feasible Plan development found in section 9 of this document and the Cost Feasible Plan Technical Report for additional information.
A-19. Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation?	Yes. Cost estimates were developed for each roadway and transit project. The costs were reviewed by the FDOT, the area transit providers and the local governments. Please see section 9 summarizing the development of the Cost Feasible Plan and the Cost Feasible Plan technical report for additional information.
A-20. Did the MPO, public transportation operator(s), and State cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a)?	Yes. The Florida Department of Transportation and the Florida Metropolitan Planning Organization Advisory Council developed revenue estimates for each MPO including the North Florida TPO. The local transportation agencies also provided revenue estimates. Please see section 8 of this document and the Financial Recourses Technical Report. These revenue estimates were used in the development of the 2045 LRTP. Appendix A presents the forecasts developed by the FDOT for the North Florida TPO.
A-21. Does the financial plan include recommendations on additional financing strategies to fund projects and programs included in the plan, and, in the case of new funding sources, identify strategies for ensuring their availability?	The Financial Resources are shown in section 8 of this document and in the Financial Resources technical report. It includes an analysis of potential revenues if additional fuel and transportation taxes were levied. This was considered for analysis purposes only. No new funds were assumed to be available for the 2045 LRTP.
A-22. Does the plan's revenue and cost estimates use inflation rates that reflect year of expenditure dollars, based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s)?	Yes. Working with the Florida Department of Transportation inflation factors were developed for use in estimating the year of expenditure costs. Please see the Financial Resources technical report and the Cost Feasible technical report for additional details. Appendix A of this document presents the financial data provided by the FDOT.
A-23. Does the financial plan address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP?	The SIP (State Implementation Plan) is required in states that are non attainment for NAAQS standards. Florida is not. No SIP, no required TCMs.

Federal Planning Requirement	Where and How Addressed
A-24. Does the plan include pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C.17(g)?	Yes. The North Florida TPO working with the Florida Department of Transportation and their planning partners ensures that every new facility includes appropriate bicycle and pedestrian facilities. Additionally, the 2045 LRTP includes funding for projects identified in the Regional Multi-Use Trail Master Plan and the various bicycle and pedestrian area studies the TPO has completed. These studies and plans are available on the TPO's website. In addition to the funding set aside for bicycle and pedestrian projects in the Cost Feasible Plan (please see section 9 of this document), the TPO generally applies the Transportation Alternative Program (TAP) funding to multi-use trails and school safety walk projects.
A-25. Does the plan integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP, the Public Transportation Agency Safety Plan, or an Interim Agency Safety Plan?	Yes. The LRTP includes safety and security goals and objectives and is consistent with partner agency's safety plans. The TPO's Regional Safety Plan was adopted in 2019 concurrent with the 2045 update. Section 3 of this document and the Goals, Objectives and Performance Measures Technical Report provides additional details. The Cost Feasible Plan also identified just over $98 million (in YOE $) for safety projects. Please see section 9 for additional information on the Mobility Programs.
A-26. Does the plan identify the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan?	Yes. The 2045 LRTP uses information from the Northeast Florida Regional Planning Activity-Based Model (NERPM-AB) to forecast travel demand in 2030 and 2045. This data was used to develop the plans and programs included in the 2045 Needs Plan. Please see the Model Development and the Needs Plan technical reports for additional information.
A-27. Did the MPO provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a)?	Yes. The North Florida TPO afforded everyone an opportunity to comment on the development of the plan. A Public Involvement Plan was developed to guide the efforts. Efforts included a transportation survey, project website, community meetings, a telephone town hall, information tables and community events, an LRTP podcast, and meetings with community leaders. The North Florida TPO also established focus groups and a steering committee to assist in the development of the plan. The Public Involvement Plan for the LRTP is available on the PathForward 2045 website. A summary of the public involvement activities is included in section 4 of this document and fully documented in the Public Involvement Technical Report.

Federal Planning Requirement	Where and How Addressed
A-28. Did the MPO publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web?	Yes. Materials were placed on the project website and made available at the TPO's offices for public review. Local government partners also provided links to the LRTP materials on their websites. Hard copies of LRTP materials were available at each community meeting and at the regional public workshop and presented at the public meeting prior to adoption. Please see section 4 of this document and the Public Involvement Technical Report for additional details.
A-29. Did the MPO provide adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan?	Yes. Public notice for all meetings, workshops and public hearings was done in accordance with state and federal regulations. All meetings were advertised in the Florida Times Union. The public was afforded opportunities to comment on all elements of the plan prior to the TPO Board taking action. Please see the Public Involvement section and the Public Involvement technical report for additional information. Please see section 4 of this document and the Public Involvement Technical Report for additional details.
A-30. In developing the plan, did the MPO seek out and consider the needs of those traditionally underserved by existing transportation systems such as low-income and minority households?	Yes. Efforts were taken to reach out to the traditionally underserved communities throughout the region to ensure their voices were heard. The LRTP team attended community events that were located in underserved communities to promote the plan update and to provide participants the opportunity to complete the transportation survey. The regional public workshop was held in an underserved area and postcards were sent to surrounding areas that are considered underserved inviting them to attend the meeting. The LRTP team also meet with community leaders and community groups that provide services to the underserved and had conversations as to the type of mobility projects and programs that would provide benefits to those communities. Please see section 4 of this document and the Public Involvement Technical Report for additional details.

Federal Planning Requirement	Where and How Addressed
A-31. Has the MPO demonstrated explicit consideration of and response to public input received during development of the plan? If significant written and oral comments were received on the draft plan, is a summary, analysis, and report on the disposition of the comments part of the final plan?	Yes. The North Florida TPO solicited comments at each meeting, gathering, briefing, etc. Where appropriate the TPO responded answering the question or providing the desired information. All of the written comments and electronic comments received have been preserved. None of the comments received would be considered significant meaning to individual or group expressed significant concern over a proposed project or program. Most feedback was in general support of projects and programs. This feedback and input assisted the TPO and the LRTP team in the development of the Needs Plan and the Cost Feasible Plan. There was significant support for safety projects and programs as well as for commuter rail and BRT projects. These programs and projects were included in the Cost Feasible Plan. Please see section 4 of this document and the Public Involvement Technical Report for additional details.
A-32. Did the MPO provide an additional opportunity for public comment if the final plan differs significantly from the version that was made available for public comment and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts?	NA. The final plan did not differ from the version that was presented to the TPO Board and Committees as a draft the month prior to the adoption of the 2045 Plan.
A-33. Did the MPO consult with agencies and officials responsible for other planning activities within the MPO planning area that are affected by transportation, or coordinate its planning process (to the maximum extent practicable) with such planning activities?	Yes. The North Florida TPO coordinates continuously with partner agencies and officials. The LRTP team meet with and coordinated with these agencies and partners which included planning staff and local officials from each county, throughout the LRTP process. This was accomplished through one-on-one meetings, focus group meetings, steering committee and advisory committee meetings. Including meetings with JAXPORT, Jacksonville Aviation Authority (JAA), Jacksonville Transportation Authority (JTA), the Northeast Florida Regional Airport and the US Navy. Section 4.11 and 4.13 and 4.14 provides additional details on the coordination efforts with planning agencies and officials from around the region.
A-34. If the MPO planning area includes Indian Tribal lands, did the MPO appropriately involve the Indian Tribal government(s) in the development of the plan?	NA. The planning area does not include any tribal lands.
A-35. If the MPO planning area includes Federal public lands, did the MPO appropriately involve Federal land management agencies in the development of the plan?	There are a number of national parks and preserver lands in the planning area. Representatives from the Florida Department of Environmental Protection and the National Park Service participate on the Technical Coordinating Committee and were invited to participate on the LRTP Steering Committee.

Federal Planning Requirement	Where and How Addressed
A-36. In urbanized areas that are served by more than one MPO, is there written agreement among the MPOs, the State, and public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent plans across the planning area boundaries, particularly in cases in which a proposed transportation investment extends across those boundaries?	The North Florida TPO serves the Jacksonville and St. Augustine urbanized areas. There are no other MPOs serving the urbanized areas.

State of Florida Guidance

The Florida Transportation Plan (FTP) is the single overarching statewide plan guiding Florida's transportation future. It is a plan for all of Florida created by, and providing direction to, the Florida Department of Transportation (FDOT) and all organizations that are involved in planning and managing Florida's transportation system, including statewide, regional, and local partners.

The current FTP has three distinct elements:

- Vision Element – Florida's transportation system vision (50-year horizon)
- Policy Element – builds upon the Vision and outlines the goals and objectives for Florida's transportation system (25-year horizon)
- Implementation Element – provides specific direction, identifies roles and responsibilities for each planning partner, and calls for performance measures as a means of implementing and evaluating the progress of the FTP.

FDOT developed the FTP in partnership with public and private stakeholders to define transportation goals, objectives, and strategies to make the Florida economy more competitive, its communities more livable, and its environment more sustainable for future generations.

The current FTP includes the following six goals:

A. Goal: Invest in transportation systems to support a prosperous, globally competitive economy.
B. Goal: Make transportation decisions to support and enhance livable communities.
C. Goal: Make transportation decisions to promote responsible environmental stewardship.
D. Goal: Provide a safe and secure transportation system for all users.
E. Goal: Maintain and operate Florida's transportation system proactively.
F. Goal: Improve mobility and connectivity for people and freight.

Table 3.2 below illustrate the relationship between the 2045 LRTP goals and the goals of the 2060 FTP Please note that the 2060 Florida Transportation Plan is currently being updated by the FDOT.

Table 3.2: Incorporation of FTP Goals in the 2045 LRTP

FTP Goal	Corresponding LRTP Goal(s)
A	1, 6 &7
B	2,4,5 &7
C	2
D	6 & 9
E	4, 5, 7 & 8
F	4, 5, 7 & 8

The state planning principles considered in the LRTP are: preserving the existing transportation infrastructure; enhancing Florida's economic competitiveness; and improving travel choices to ensure mobility.

Table 3.3 below summarizes the state planning requirements and how they addressed in this plan.

Table 3.3: State Planning Requirements

State Planning Requirement	Where and How Addressed
B-1. Are the prevailing principles in s. 334.046(1), F.S. – preserving the existing transportation infrastructure, enhancing Florida's economic competitiveness, and improving travel choices to ensure mobility – reflected in the plan?	Yes. The LRTP's Goals and Objectives address each principle. The revenue forecasts provided by the Department of Transportation had funds for preserving the system taken off the top. The Needs Plan and the Cost Feasible Plan include projects and programs that provide mobility choices and strengthen the economic competitiveness of the region. Please refer to section 3.1 of this document and the Goals, Objectives and Measures Technical Report for additional details.
B-2. Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities?	Yes. The Florida Department of Transportation funds the SIS at the state level. The North Florida TPO does not have a direct voice in the projects funded. The 2045 LRTP does include all of the SIS projects included in the SIS Needs and Cost Feasible plans developed by the FDOT. The Mobility Programs included in the Cost Feasible Plan support the Transportation Regional Incentive Program (TRIP) and regionally significant facilities identified for the program. The North Florida TPO reviews and updates its TRIP program on an annual basis. Please refer to sections 7 and 9 in this document and the Needs Plan Development and Cost Feasible Plan Development Technical Reports for additional information.

Federal Planning Requirement	Where and How Addressed
B-3. Is the plan consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies of the approved comprehensive plans for local governments in the MPO's metropolitan planning area?	Yes. The local comprehensive plans were reviewed as the goals and objectives were drafted for the 2045 LRTP. Additionally, the partner local governments were asked to review the goals and objectives for consistency with their comprehensive plans. No inconsistencies were noted. Please refer to section 3.1 of this document and the Goals, Objectives and Measures Technical Report for additional details.
B-4. Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions?	No land-use scenarios were considered as part of the 2045 LRTP. However, a scenario considering how emerging technology might impact travel was considered. The 2045 LRTP included an exercise where the market penetration of Connected and Autonomous Vehicles was considered. A low and high market penetration scenario was considered and the impacts on the travel statistics were evaluated. the impact of Mobility as a Service on VMT and congestion are mixed. VMT and average travel speed are the two greatest variables in determining greenhouse gas emissions and therefore, the impacts cannot be known. Ideally, many of the external costs of Mobility as a Service for air pollution and greenhouse gas emissions will be captured in the payment for the services. External costs are things not directly paid for by the user such as health care costs from air pollution. Growth in VMT will negatively impact greenhouse gas emissions. VMT is anticipated to increase through 2045 by most researchers. However, the replacement of gasoline-powered vehicles with electric vehicles is anticipated to have a significant off-set on emissions. Please see section 7.11 of this document and the Impact of Emerging and Innovative Technologies Technical Report for additional information.

State Planning Requirement	Where and How Addressed
B-5. Were the goals and objectives identified in the Florida Transportation Plan considered?	Yes. Please refer to section 3 of this document and the Goals and Objectives Technical Report discusses how the FTP goals and LRTP goals are supportive of each plan.
B-6. Does the plan assess capital investment and other measures necessary to 1) ensure the preservation of the existing metropolitan transportation system, including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities; and 2) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods?	Yes. Funding for measures necessary for the preservation of the system are taken off the top of the revenues provided to the North Florida TPO for use in developing the LRTP. Funding levels necessary for operation and maintenance of the existing system are identified by the Florida Department of Transportation. Those funds are excluded from the estimates used to fund the programs and projects included in the LRTP. The North Florida TPO recognizes that there are insufficient funds to meet all the mobility needs through the year 2045. As such it is imperative that the existing transportation network function as efficiently as possible. To that end, the 2045 LRTP includes mobility programs that provide funding for operational projects and programs geared towards relieving vehicular congestion and maximizing the existing system. Section 8 of this report discusses the financial resources for the LRTP and the FDOT's approach to funding the preservation of the system. Section 9 discusses the Mobility Programs funded in the Cost Feasible Plan that seeks to maximize the efficiency of the existing system. The Financial Resources and Cost Feasible Technical Reports present additional details as well.
B-7. Does the plan indicate, as appropriate, proposed transportation enhancement activities, including, but not limited to, pedestrian and bicycle facilities, scenic easements, landscaping, historic preservation, mitigation of water pollution due to highway runoff, and control of outdoor advertising?	The plan includes bicycle and pedestrian projects and programs in both the Needs and Cost Feasible elements. Please see Sections 7 and 9 of this document. The TPO has developed a Greenways and Trails master plan, bicycle and pedestrian master plan and safety plan that all identify enhancement projects. These documents are available on the TPO's website. The TPO works with local governments to advance TAP projects from the plan into the FDOT Five Year Work Program through the Annual List of Priority Projects. The North Florida TPO and its partner agencies work together during the planning and design phases of projects to ensure proper mitigation and environmental impacts are addressed. The plan does not address outdoor advertising or landscaping directly.
B-8. Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present?	Yes. The plan was adopted at the regular November meeting of the North Florida TPO. A quorum was present and the adoption of the 2045 Plan passed unanimously with a rollcall vote. Please see section 9.5 of this document and the Cost Feasible Plan Technical Report for additional information.

Proactive Recommendations	Where and How Addressed
C-1. Does the plan attempt to improve the resilience and reliability of the transportation system or mitigate the impacts of stormwater on surface transportation?	Yes. The North Florida TPO has developed a regional Resiliency Plan. Please see section 6 of this document for a summary of this report. This plan has identified the areas at risk for sea-level rise, flooding, etc. Any project located within one of these areas will be designed in such a way as to mitigate the associated risk. Additionally, the Cost Feasible Plan includes a mobility program that funds the Resiliency Program that will continue to review projects and identify mitigate or design changes to improve the resilience of the transportation system. This report is available on the PathForward2045 project website.
C-2. Does the plan proactively identify climate adaptation strategies including—but not limited to—assessing specific areas of vulnerability, identifying strategies to reduce emissions by promoting alternative modes of transportation, or devising specific climate adaptation policies to reduce vulnerability?	Yes. The North Florida TPO has developed a regional Resiliency Plan. Please see section 6 of this document. This plan has identified the areas at risk for sea-level rise, flooding, etc. Any project located within one of these areas will be designed in such a way as to mitigate the associated risk. Additionally, the Cost Feasible Plan includes a mobility program that funds the Resiliency Program that will continue to review projects and identify mitigate or design changes to improve the resilience of the transportation system. This report is available on the PathForward2045 project website.
C-3. Does the plan consider the transportation system's accessibility, mobility, and availability to better serve an aging population?	Yes. Throughout the plan update process the LRTP team meet with groups and individuals that support the elderly and aging populations and people themselves that are in that group. This included the United Way, the Continuum of Care and the Transportation Disadvantaged Board. The plan includes projects and programs that will increase people's mobility choices. Additional transit and pedestrian projects are included in the cost feasible plan and programs to increase safety for all users are also included. The plan also recognizes that Mobility as a Service will be more prevalent in the future and will likely provide expanded mobility options for every age group. Please see sections 7 and 9 for the projects and programs as well as the Cost Feasible Plan Technical Report.
C-4. Does the plan consider strategies to promote inter-regional connectivity to accommodate both current and future mobility needs?	Yes. There are improvements in the Needs and Cost Feasible Plans (Sections 7 and 9) that improve inter-regional connectivity via the interstate and arterial systems. The plan includes inter-regional transit service in the form of commuter rail and BRT. Please see the Needs and Cost Feasible Plan technical reports for additional information.
C-5. Is the MPO considering the short- and long-term effects of population growth and or shifts on the transportation network?	Yes. Northeast Florida is growing and the North Florida TPO worked with local governments, population forecasts for 2030 and 2045 were developed and an analysis was done to identify the travel demand associated with each period. Please see section 7 of this report and the Needs and Cost Feasible Plan Technical Reports for additional information.

Consistency with Other Plans

The North Florida TPO and their partners develop plans that both shape and help implement the spirit of PathForwad 2045. These include:

Plans that were considered as part of the update include:

- City of Jacksonville Mobility Plan
- Nassau County Mobility Plan
- City of St. Augustine Mobility Plan
- North Florida Freight, Logistics and Intermodal Framework Plan
- Regional Multi-Use Trail Master Plan
- SMART North Florida Plan
- Regional System Safety Plan
- Coordinated Mobility Plan
- Regional Resiliency Plan
- Transit Development Plan for the Jacksonville Transportation Authority (JTA)
- St. Augustine Airport Master Plan
- JAXPORT Master Plan
- Jacksonville Aviation Authority Master Plan
- Local Comprehensive Plans
- North Florida TPO Congestion Management Process (CMP) 2019

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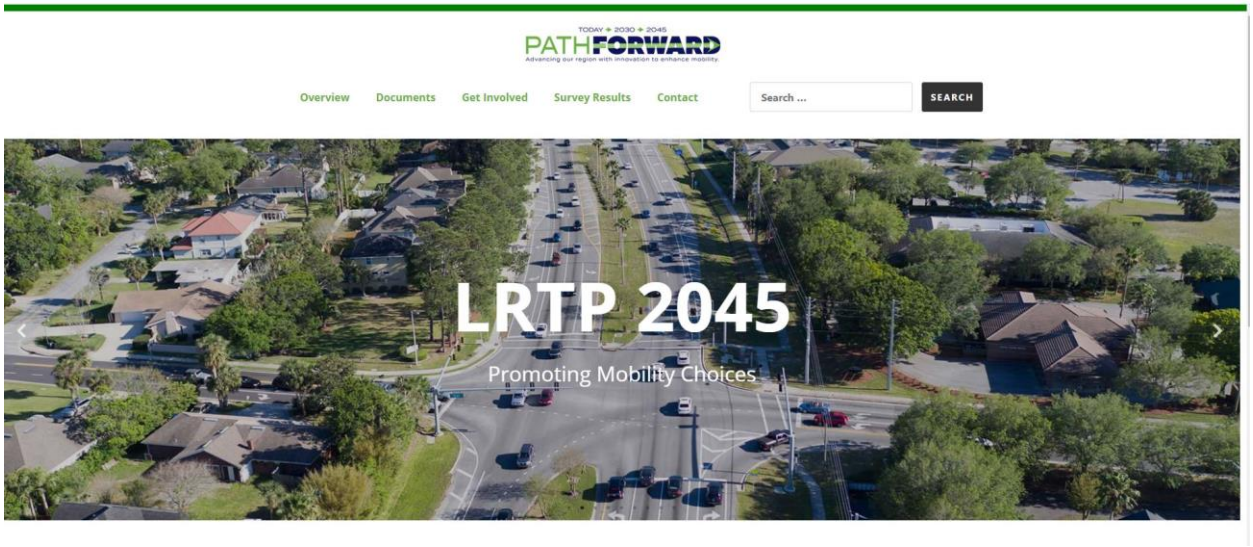
4 Public Involvement

A plethora and a broad array of public involvement activities were undertaken to inform and engage the public during this planning process. The program elements are described further in the following sections.

4.1 Public Involvement Plan

A Public Involvement Plan (PIP) was developed to guide the interaction with the public throughout the update. The PIP outlined a strategy to inform the public and interested parties and solicit input to identify transportation needs and prioritize projects. A number of methods were used to do so. These are summarized in the sections that follow. For additional detail see the Public Involvement Technical Report available on the LRTP project website at www.pathforward2045.com. The Public Involvement Plan is available on the website as well.

4.2 2045 LRTP Web Site



The North Florida TPO maintained a project-specific website throughout the LRTP update process; www.pathforward2045.com. This site was developed to provide an overview of the LRTP process, to serve as a repository for project documents and to provide information and news on the LRTP update. While the website was a stand alone site, the North Florida TPO and their planning partners included links to it from their websites. The website is included:

- Home page with news, events and social media feed, overview video and link to the meeting calendar
- Plan development overview with news and frequently asked questions
- Project lists, maps and documents
- Public involvement opportunities including the online survey and social media

- Project team contact information

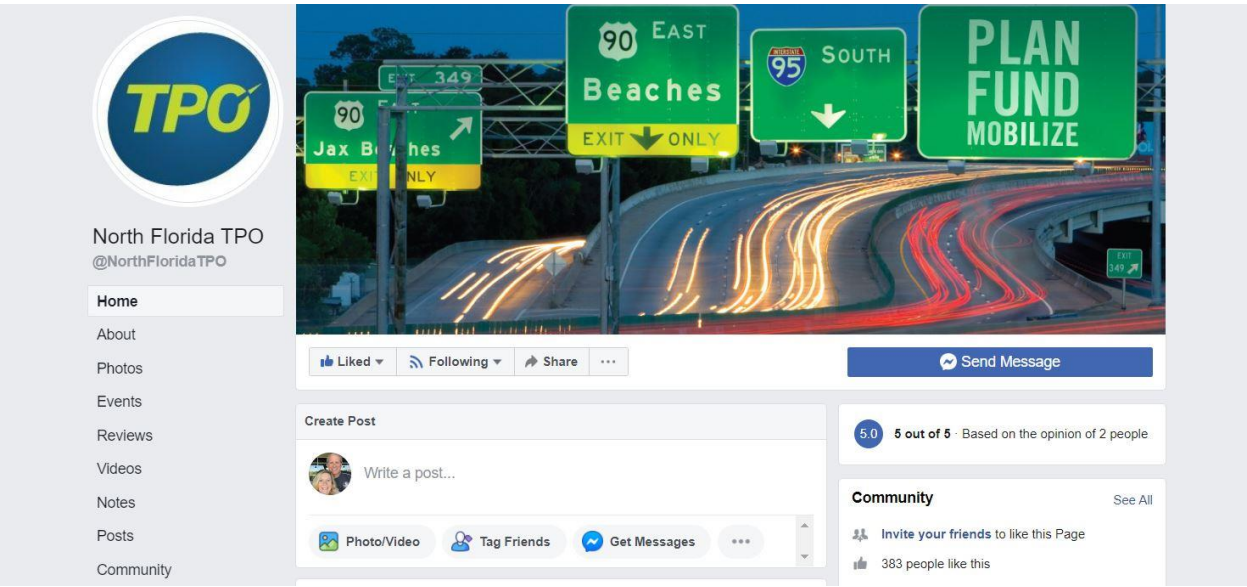
Through the project website, the public could e-mail comments or request to be added to the TPO mailing lists. A link on the website led viewers to the updated schedule, project goals and objectives, interim documents, maps, project listings, and a calendar of public events. Materials on this site will eventually be integrated to www.northfloridatpo.com

4.3 Overview Video

A brief two-minute overview video was created to explain and promote the LRTP process. The video was posted on the website and used for presentations, meetings and workshops. The video can be viewed at www.pathforward2045.com.

4.4 Social Media

The North Florida TPO uses Facebook and Twitter as its primary social media presence (https://www.facebook.com/NorthFloridaTPO). Throughout the LRTP update process, information on current planning activities, news and information on the LRTP was posted and shared with partner agencies, many of whom have an active presence on social media. The public was able to post comments and pose questions via Facebook.



4.5 Overview Brochure

An overview brochure was created to introduce the LRTP update process and participation opportunities and distributed at meetings and events throughout the project. The brochure cover is shown below. The brochure may be viewed on the LRTP website or in the Public Involvement technical report in Appendix B.

4.6 2045 LRTP Survey

At the onset of the 2045 LRTP update, the North Florida TPO conducted a survey asking residents to share their current and long-term transportation needs. The survey was a follow-on to the 2017 North Florida Travel survey completed by the North Florid TPO. Survey input was used to guide the development of the 2045 LRTP.

The survey was widely promoted by the North Florida TPO and its partners. Numerous counties, cities and organizations promoted the survey on their webpage and social media sites. Additionally, the LRTP team attended numerous events, such as Art Walk, Orange Park Farmers Market and distributed postcards promoting the on-line survey.

A total of 1,958 residents in the region participated in the Path Forward Travel Survey. The survey sampled participants from the 3,093 households that completed the 2017 North Florida Travel Survey. The Path Forward Travel Survey recruited additional participants through email social

media and public outreach. Additional promotions of the survey occurred at farmer's markets and other local events including radio and television spots.

Below are some of the key takeaways from the survey. A full summary of responses is presented in Appendix C of the Public Involvement Technical Report.

- Only 3 percent of respondents use transit 1 to 3 days a week, while 55 percent of respondents drive to work or school alone 4-5 days per week.
- 24 percent of respondents have a one-way commute to work over 20 miles
- 91 percent drive in their car alone
- When asked what the top three most critical transportation issues facing the community were, these three ranked highest:
    1. Reliving traffic congestion
    2. Controlling distracted driving
    3. Using technology to improve traffic flow and traveler information
- When asked what the top three transportation challenges will be over the next 25 years, these were the highest-ranking responses:
    1. Increased traffic congestion and delay
    2. Aging and deteriorating infrastructure
    3. Lack of travel options
- When asked if we should invest more or less of our transportation dollars in various types of programs and projects, the overwhelming majority said that more investment is needed.

4.7 Newsletter

While an LRTP specific newsletter was not created for this effort, the North Florida TPO's established newsletter, *North Florida TPO News,* was utilized. Throughout the LRTP process articles were run in the North Florida TPO's newsletter. This centered around key points in the update process such as the survey kickoff, the telephone town hall, and the regional workshop.

The TPO strives to include organizations that represent low-income, minority, and other traditionally underserved populations as subscribers of the *North Florida TPO News*. Subscribers of the *North Florida TPO News* are continually examined by the TPO staff for inclusiveness and usefulness, and opportunities to subscribe to the email newsletter will be offered to all individuals who take an interest in participating in the TPO's transportation planning and programming processes.

Currently, the following departments and agencies are receiving the TPO's Newsletter:

The TPO attempts to ensure that the *North Florida TPO News* subscribers include representatives of the following:

- Traffic agencies
- Private providers of transportation services
- Ridesharing agencies
- Parking agencies
- Transportation safety agencies
- Traffic enforcement agencies
- Transit operators
- Airport and port authorities
- Freight companies
- Railroad companies
- Environmental organizations
- Neighborhood associations
- Local Health Departments
- City, County, and Municipal departments
- Advocacy Groups
- Interested citizens
- Public/Private/Parochial/Charter Schools
- Employers
- Organizations representing the interests of:
    - Older Adults
    - Minority populations
    - Transportation agency employees
    - Users of various modes of transportations
    - Persons with disabilities
    - Economically disadvantaged persons
    - Others underserved by the transportation system

4.8 Podcast

The North Florida TPO staff and LRTP team developed a podcast that provided an overview of the long-range planning process as well as an overview of the purpose of the TPO. This podcast was published on the LRTP web site. It can be heard at www.pathforward2045.com.

4.9 Telephone Townhall

The North Florida TPO hosted a telephone town hall (teletownhall) event on June 12 and 13, 2019. These events were a live virtual forum that connected the North Florida TPO and its partners, the Florida Department of Transportation (FDOT) and the Jacksonville Transportation Authority (JTA) with a target audience. These Teletownhalls were produced over the phone and web, and allowed participants to learn about the 2045 LRTP, engage in live Q&A, and vote in real-time polls.

Participants preregistered and were called with a recorded message explaining the forum's purpose, then they join automatically. Participants submitted questions throughout the forum which then panel addressed.

Participants were polled on seven different topics for preferences and opinions on issues related to mobility throughout the region. Additional audiences joined the forum via our Web Simulcast and Spanish Simulcast. These participants also had the opportunity to submit questions and vote in polls while listening.

Between the two calls over 8,000 calls were answered with 1,400 of those accepted. With each call over 50 participants stayed on the call the entire time. The panel was asked over 30 questions from participants throughout the region.

Appendix D in the Public Involvement Technical Report presents the analytics from the Telephone Townhall meetings.

4.10 Community Meetings

Meeting with and hearing from community groups was critically important for the North Florida TPO and the LRTP team. The North Florida TPO proactively sought opportunities to meet with diverse groups for the purpose of presenting plans and receiving feedback.

Team members attended community meetings and made presentations to civic, professional and special interest groups. This included presentations to Rotary Clubs, Kiwanis Clubs, Chambers of Commerce and like groups.

Below is a list of some of the groups that were provided briefings on the development of the 2045 LRTP:

- United Way of St. Johns County
- Jacksonville Exchange Club
- St. Johns County Board of County Commissioners
- Clay County Board of County Commissioners
- Nassau County Board of County Commissioners
- Jacksonville City Council
- Southside Businessmen's Club
- Downtown Vision (City of Jacksonville)
- Southwest District Citizens Planning Advisory Committee
- North District Citizens Planning Advisory Committee
- Nassau County Planning and Zoning Board
- St. Johns County Civic Roundtable
- St. Johns County Continuum of Care
- Transportation Disadvantaged Board
- Regional Transit Coordinating Committee

4.11 Focus Groups

Several Focus Groups were utilized during the LRTP update to hon in on particular agencies and services within the region. At each meeting, the current and future transportation needs and plans were discussed. In cases where deficiencies or additional needs were identified, appropriate programs or projects were also identified for inclusion in the plan. Meetings were held with the following groups:

- Military
- Ports
- Environmental Agencies
- Aviation Authorities
- Tourism

4.12 Elected Officials Coordination

The 2045 Long Range Transportation Plan team kept local, state, county and federal officials briefed and engaged throughout the update process. This occurred through various avenues including newsletters and the distribution of 2045 Long Range Transportation Plan materials, as well as through briefings and/or periodic presentations to the North Florida TPO and its partners. Presentations were made to the TPO Board at regular intervals to keep them abreast of the progression of the LRTP update as well as detailed presentations as they considered the adoption of the Needs and Cost Feasible Plans.

Presentations were also made to the North Florida TPO's local government partners. This included the Clay, St. Johns and Nassau Board of County Commissioners and the City of Jacksonville City Council.

4.13 Advisory Committees

The North Florida TPO maintains two advisory committees; the Technical Coordinating Committee (TCC) and the Citizens Advisory Committee (CAC). Presentations were made to each committee throughout the plan update. These briefings updated the committees, promoted upcoming public outreach activities and solicited their input.

4.14 Steering Committee

In addition to the advisory committee, a 2045 LRTP Steering Committee was formed with representatives from the TPO Technical Coordinating and Citizens Advisory Committees, TPO Board, agencies, environmental, business and community groups. The plan update the Steering Committee met seven (7) times during the project. These meetings were more in-depth than the briefings provided to the TCC and CAC and allowed the members an opportunity to examine issues more closely and provide direction to the update team.

4.15 Regional Public Workshop

The North Florida TPO hosted a Regional Public Workshop at the WJCT Studios in downtown Jacksonville. The workshop ran from 6:30 to 7:30 pm on September 26, 2019. Nearly 50 people attended the workshop and interacted with consultant planners and TPO staff. As part of the workshop, the attendees participated in an interactive poll and provided valuable feedback to the LRTP team. Information stations were set up around the room presenting information on the following topics:

- Proposed roadway projects
- Proposed transit projects
- Proposed safety programs
- Traffic Management and Operational Projects
- Resiliency programs

4.16 Summary Brochure

Subsequent to LRTP adoption, a fold-out brochure was created to summarize the study process and present the 2045 Plan. The brochure includes a project list and map for easy reference. The summary brochure was distributed in print (500 copies) and electronic versions as well as posted on the North Florida TPO website. It was distributed to all local governments and copies are available at the North Florida TPO offices.

4.17 Using Public Input in the LRTP Process

Great effort was taken to gather public and agency input to develop the 2045 LRTP Needs and Cost Feasible elements. At events, meetings and workshops throughout the process, the team

heard support for every type of project and program included in the plan: widened roadways, commuter rail, safety programs, operational projects, freight enhancement projects, bicycle facilities and expanded transit service to name a few.

This input helped determine the projects that should be included in the Needs Plan and assisted in budgeting the limited financial resources available for the Cost Feasible Plan. Based on public and agency feedback, additional funding was added to the Safety Program and to transit, funding close to 35 percent of the transit needs.

Appendix F of the Public Involvement Technical Report contains general correspondence the team received over the course of the update.

4.18 Public Hearing

The plan was adopted by the North Florida TPO Board as part of the **November 14, 2019** regularly scheduled board meeting. A unanimous vote was recorded to approve the plan. The meeting materials are provided in Appendix G of the Public Involvement Technical Report.

4.19 Environmental Justice and Title VI

Executive Order 12898, signed by President Clinton in February 1994, directed all Federal agencies to make environmental justice a key part of its mission by identifying and addressing the impacts of programs, policies, and activities on both minority and low-income populations.

In 1999, the U.S. Department of Transportation (USDOT) issued a memorandum to all federally-funded transportation agencies, including state DOTs and MPO, and required such agencies to comply with Title VI and environmental justice. Noting that issues of Title VI and environmental justice were raised by concerned citizens primarily during project development phases of projects, the USDOT urged that compliance be evaluated as early as possible, specifically, in the planning stages of the transportation process.

Throughout the LRTP study process, the provisions of environmental justice, as defined by the Federal Highway Administration, were followed to ensure consistency with environmental justice and Title VI of the Civil Rights Act. North Florida TPO staff and consultants made every effort to include all affected parties from varying socioeconomic groups to ensure that their input was considered in the planning process. The planning process was also conducted in compliance with the following related legislation:

- 23 CFR 450.316, providing interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.
- Chapter 286, Florida Statutes (Florida Sunshine Law) requiring public access to governmental meetings at the state and local level and requires meetings of boards and commissions to be open to the public, adequately noticed, and recorded via minutes.

4.20 Strategies and Efforts

As part of the planning process, extensive efforts were made to engage minority and underserved populations through demographic analysis, targeted outreach, using web sites with interactive opportunities to provide information on needs and priorities, social media, telephone surveys and outreach to organizations and elected officials. The process and performance measures deployed are summarized in the following sections.

4.21 Identification of Minority and Underserved Populations

The location of minority and underserved population communities were identified using 2010 Census data by census tract. Areas with minority or underserved populations of 50 percent or more were mapped and identified as communities for special consideration. The following communities were identified.

1. Low-income households making less than $25,000 per year.
2. Populations greater than 65 years old.
3. Black: a person having origins in any of the black racial groups of Africa.
4. Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
5. Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent.
6. American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition.
7. Native Hawaiian and Other Pacific Islander: a person having origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

Multiple strategies were implemented as part of the public involvement process to engage the underserved and minority populations as summarized in the prior section. The organizations solicited for participation in the planning process related to minority and underserved populations are summarized below.

4.22 Survey Outreach

In an effort to have traditionally underserved populations participate in the 2045 LRTP survey, the LRTP team developed both print and electronic versions of the survey and promoted the survey at community events that focused on or were held in underserved communities. Surveys were sent to local church and business leaders that are located in underserved areas and they assisted in the promotion of and distribution of the surveys.

4.23 Community Meetings

The LRTP team identified community groups that are active in the areas that are underserved and made presentations on the LRTP and solicited input on projects and programs that would

increase mobility in those areas. This included meeting with business groups, health care providers and local non-profit groups.

4.24 Direct Mailings

For the Regional Public Workshop, which was held in downtown Jacksonville, the North Florida TPO sent postcard invitations to areas that were previously identified as underserved. Mailing was done based on zip codes and areas within proximity to the meeting location were targeted.

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5 Safety and Security

A safe and secure transportation system is vital to the overall health and well-being of the residents of the First Coast. The primary goal of safety planning is to improve safety by supporting efforts to develop policies, programs, and projects related to pedestrians, bicyclists, transit users, truckers and motorists on all transportation facilities in the North Florida TPO area.

In January 2019 the North Florida TPO updated the Regional System Safety Plan incorporating performance measures and establishing TPO safety policies.

The goals, objectives and policies related directly to safety in the 2045 Plan Update are intended to improve the safety of the transportation system within the North Florida TPO area through Engineering, Education, Enforcement and Emergency Services. The benefits realized from an effective safety program include safer roadways and intersections, reduced fatalities and injuries, improved mobility and improved air quality.

Highway safety has always been the highest priority of the North Florida TPO and the Florida Department of Transportation. This priority was incorporated as one of the MAP-21 eight (8) planning factors. The TPO's and FDOT's programs and activities strive to reduce the unacceptable numbers of traffic crashes, injuries, and fatalities.

Safety is an integral component of the 2045 LRTP and it is addressed in several elements of the plan, directly and indirectly. Projects referenced in the Existing-Plus-Committed (E+C) section of the plan are prioritized based on a number of factors, including safety and security considerations. These factors are also incorporated into the project selection for the Needs Plan and Cost Feasible Plans. The evaluation criteria for project evaluation and prioritization are based on the performance measures identified for the goals and objectives.

Each year the Highway Safety Grant Program Section of the Florida Department of Transportation Safety Office develops a comprehensive Highway Safety Plan that describes the projects recommended for federal funding during the upcoming federal fiscal year. The needs identified in this plan are local priorities for FDOT to consider in the process. FDOT funds subgrants that address traffic safety priority areas are also available. These programs include:

- Aging Road Users
- Community Traffic Safety
- Impaired Driving
- Motorcycle Safety
- Occupant Protection and Child Passenger Safety
- Pedestrian and Bicycle Safety
- Police Traffic Services
- Speed and Aggressive Driving
- Teen Driver Safety

With the projects being determined on an annual basis, funding was not allocated to specific projects or programs listed above in this Plan. However, a regional safety program is included in the 2045 Needs and Cost Feasible Plan.

Federal requirements for metropolitan planning include consideration of security as a factor in the LRTP. The planning process should provide for consideration and implementation of projects, strategies, and services that will increase the security of the transportation system for motorized and non-motorized users. Security goes beyond safety and includes planning to prevent, manage, or respond to threats of a region and its transportation system and users.

USDOT defines transportation system security as the freedom from intentional harm and tampering that affects both motorized and non-motorized travelers and may also include natural disasters. In addition to the possibility of man-made security issues, the North Florida TPO planning area is highly vulnerable to hurricanes, floods, and other severe weather events. The TPO has developed a resiliency plan that identifies at-risk corridor and strategies to mitigate those risks. This is discussed in Section 6 and there is additional information on this effort documented in a series of technical memorandums that are located on the LRTP website at www.pathfrward2045.com.

Homeland Security – Attention to man-made and natural disaster security concerns has inevitably increased due to events such as September 11, 2001, and major hurricanes over the past 20 years. The vulnerability of the transportation system and its use in emergency evacuations have become key concerns for the Department of Homeland Security (DHS). Established by DHS, the Urban Areas Security Initiative (UASI) focuses on enhancing regional preparedness in major metropolitan areas. The Miami/Fort Lauderdale UASI was established to coordinate with the Florida Division of Emergency Management on expanding regional collaboration and developing integrated regional systems for prevention, protection, response, and recovery.

North Florida TPO Security Strategies – Numerous TPO strategies integrate security aspects into the metropolitan planning process of the TPO, including the following:

- Promote the implementation of safety and security improvements in the design or retrofit of all transportation systems.
- Enhance security for all modes through the appropriate use of authorized access, surveillance systems and Intelligent Transportation Systems (ITS).

6 Resiliency

Any increase in sea levels impacts infrastructure – whether it is nuisance flooding or increased vulnerability to storm surge. Roads, bridges, rails, airports, and other transportation facilities, in inland locations as well as in coastal areas, can be vulnerable to climate-related events. For example, storm-related flooding—exacerbated by rising sea levels in coastal areas—close-lying roads, and port facilities, either temporarily or permanently. Flooding from increasingly frequent heavy downpours can disrupt traffic, damage culverts, and reduce the service life of stormwater infrastructure. High temperatures can accelerate the deterioration of pavement on roads and runways, and cause failures of the railroad. This section provides an overview of the North Florida TPO's *Resiliency & Vulnerability Assessment* which identifies vulnerable roadways based on event likelihood, magnitude of consequence, and asset adaptive capacity. Using available environmental and asset data, a list of affected segments and their calculated relative vulnerability is presented for each county within the North Florida TPO area.

While existing transportation infrastructure was designed to handle a broad range of conditions based on historic climate, the frequency and intensity of some extreme weather events are increasing. Transportation planners are likely to face difficult choices about how and where to invest resources to bolster or replace existing infrastructure. Strategies that will be considered in adapting to climate change include:

- Integrate climate change considerations into asset management.
- Strengthen or abandon infrastructure that is vulnerable to flooding.
- Raise standards for the resilience of new infrastructure.

- Add redundant infrastructure to increase system resiliency.

The North Florida TPO's Resiliency & Vulnerability Assessment was completed in October of 2019. It was divided into two phases:

- Phase I, identified objectives, refined scope, and reviewed key climate variables and available data.
- Phase II provides a methodology to assess risk, identify vulnerabilities and provide a toolbox of potential solutions.

The assessment determined that the North Florida transportation network, due to its proximity to the ocean and relatively flat terrain, is susceptible to these impacts as storms and hurricanes approach the region. Physical assets such as roads, bridges and facilities may be vulnerable to damage or failure as a result of flooding or other impacts.

The following tables summarized the most critical vulnerability index value associated with a facility/roadway. Roadway data includes major existing facilities at the time of UF Geoplan analysis or most recent available information (2017 or earlier).

Table 6.1: Vulnerability Index by Segment/County (1 Low-75 Highest)

	ADAPTIVE CAPACITY		
RISK	High (1)	Medium (2)	Low (3)
Low (5)	LOW (5)	LOW (10)	LOW (15)
Moderate (10)	LOW (10)	MODERATE (20)	MODERATE (30)
High (15)	LOW (15)	MODERATE (30)	MODERATE (45)
Extreme (20)	MODERATE (20)	MODERATE (40)	HIGH (60)
Extreme (25)	MODERATE (25)	HIGH (50)	HIGH (75)

US ROUTES	CLAY	DUVAL	NASSAU	ST JOHNS
A1A	-	45	45	45
US-1	-	45	30	30
US-17	45	30	18	-
US-23	-	45	-	-
US-301	9	6	-	9
US-90	-	45	-	-

INTERSTATES	CLAY	DUVAL	NASSAU	ST JOHNS
I-10	-	6	6	-
I-295	-	30	-	-
I-95	-	45	45	27

STATE ROUTES	CLAY	DUVAL	NASSAU	ST JOHNS
SR-9B	-	2	-	-
SR-10	-	30	6	-
SR-100	3		-	-
SR-102	-	4	-	-
SR-103	-	12	-	-
SR-104	-	24	-	-
SR-105	-	30	-	-
SR-109	-	18	-	-
SR-111	-	18		-
ST-115	-	30	18	-
SR-116	-	45	-	-
SR-13	-	24	-	-
SR-152	-	8	-	
SR-16	15	-	-	45
SR-200	-	6	45	-
SR-202	-	30	-	-
SR-206	-	-	-	45
SR-207	-	-	-	45
SR-21	27	27	-	-
SR-212	-	45	-	-
SR-224	2	-	-	-
SR-228	-	9	-	-
SR-230	1	-	-	-
SR-312	-	-	-	30
SR-23*	6	4	-	-

Figure 6.1: Risk Assessment - Nassau County

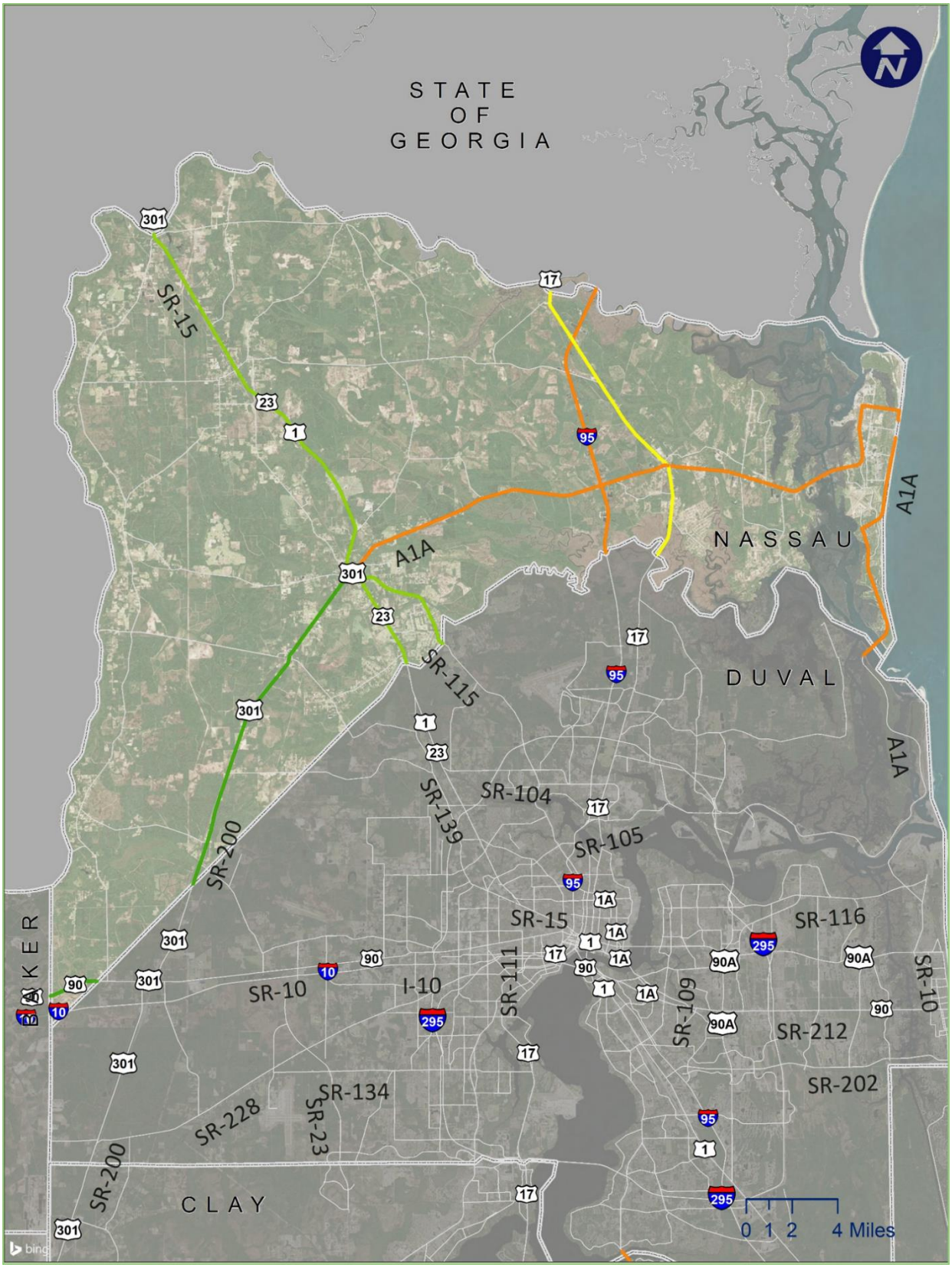


Figure 6.2: Risk Assessment - Duval County

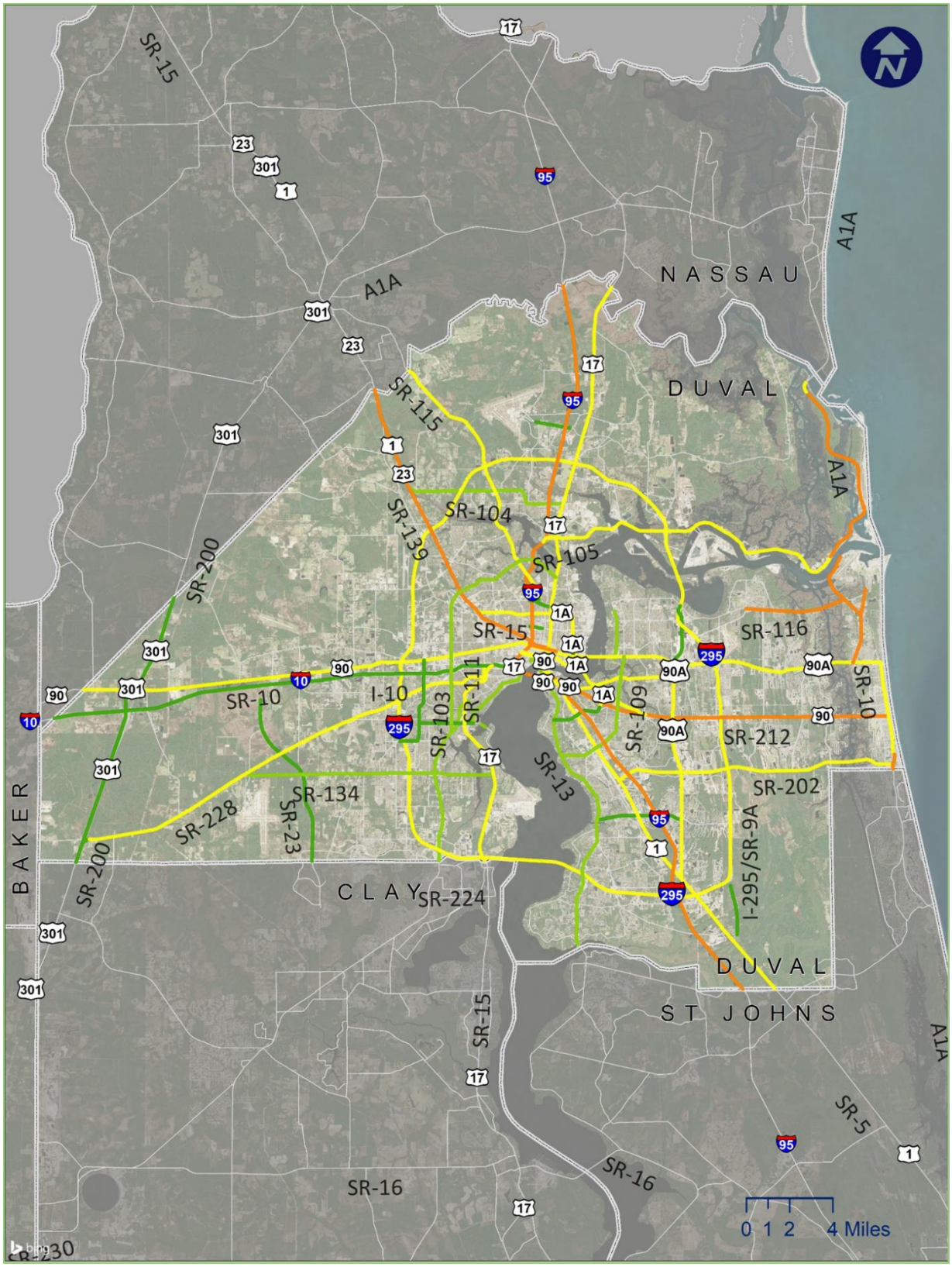


Figure 6.3: Risk Assessment - Clay County

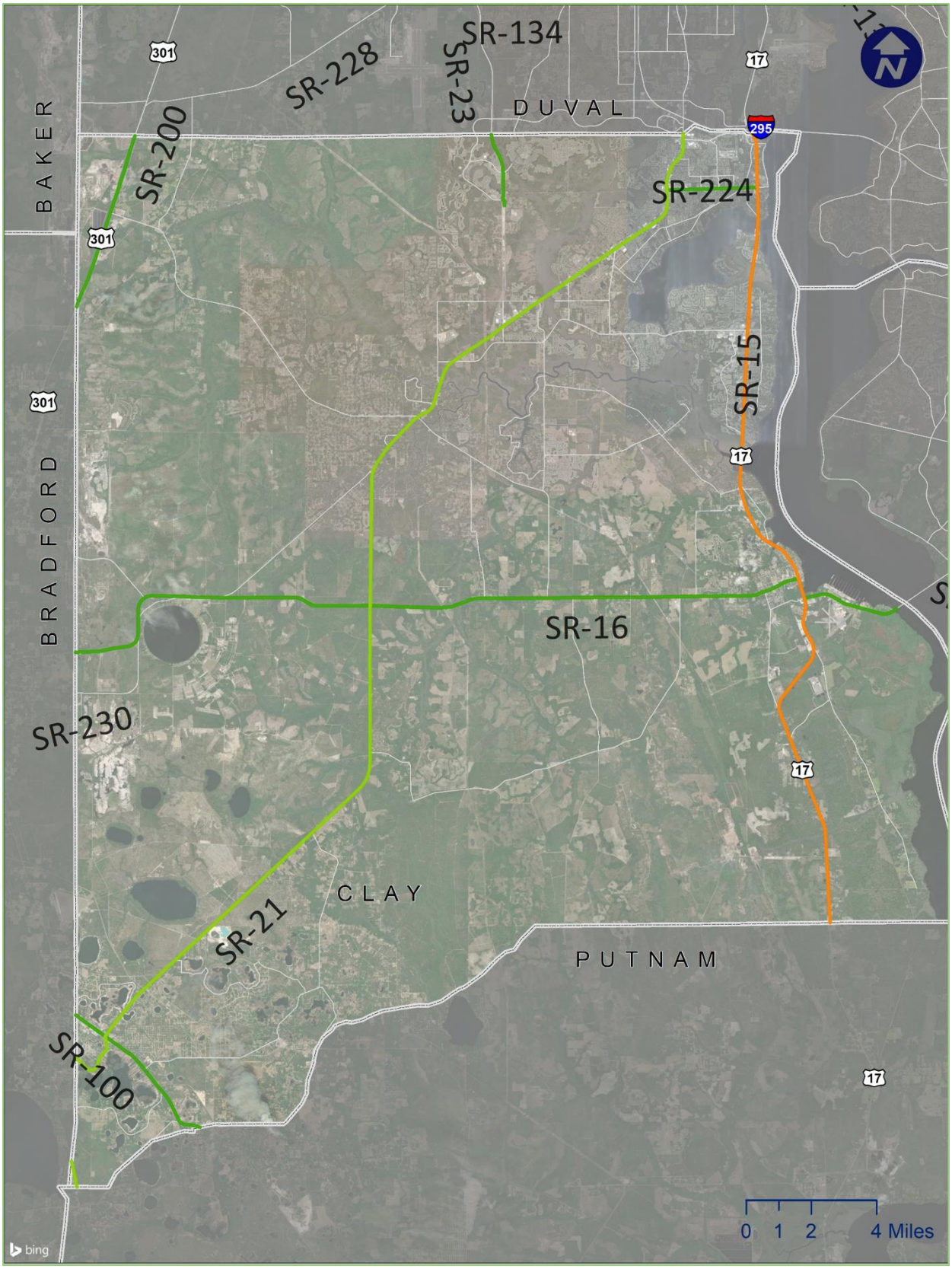
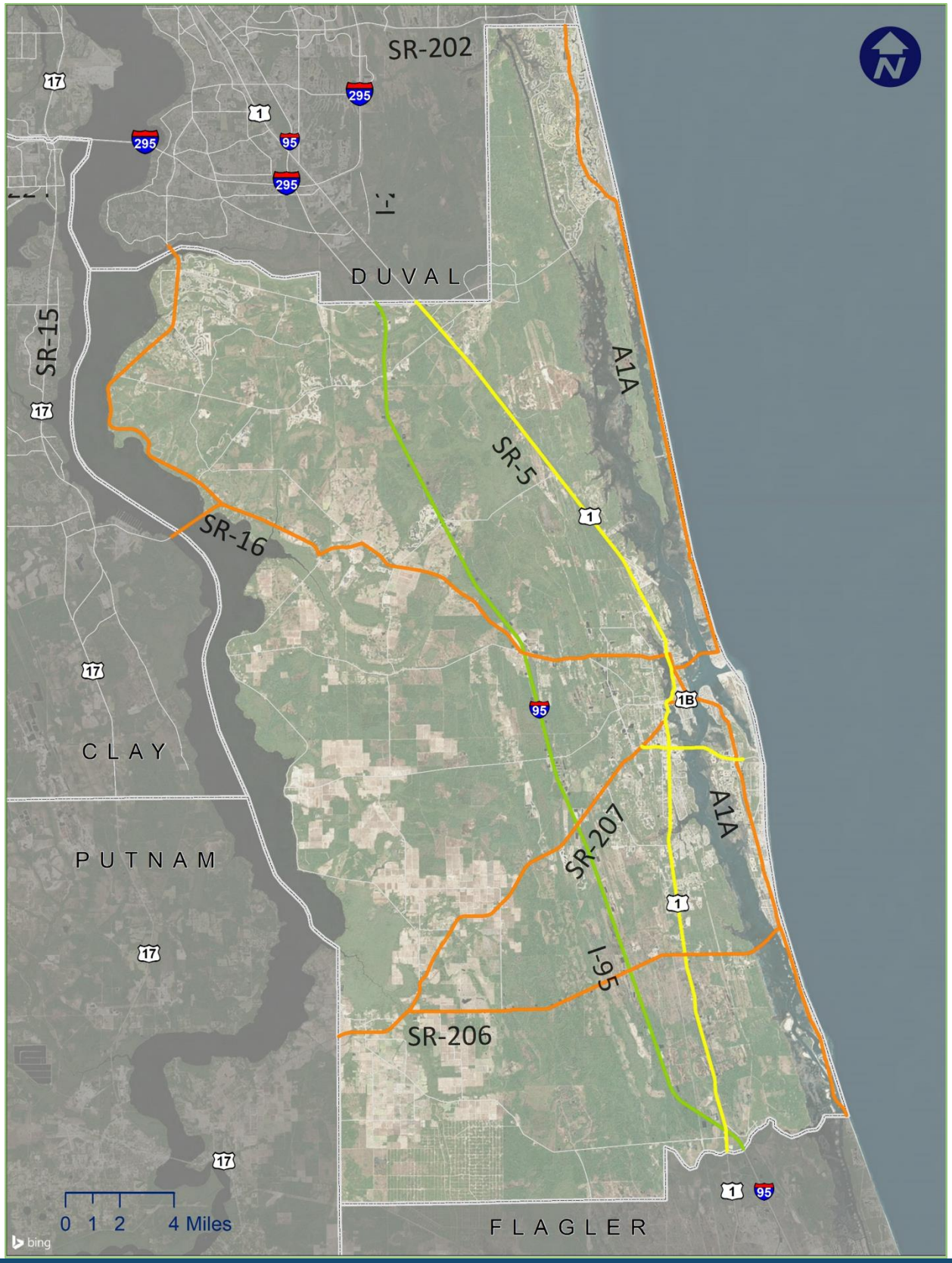


Figure 6.4: Risk Assessment - St. Johns County



The North Florida region is characterized by a multimodal, multi-asset network that can be subject to coastal flooding, riverine flooding, and stormwater issues. Different transportation elements may require different types of adaptation strategies to increase resilience. A high-level vulnerability assessment may consider different stressors and the likelihood of their occurrence. Employing storm surge for a Category 3 storm and understanding that there may be some likelihood of these conditions occurring within the next 20 years, this report identified roadways that may require additional attention, including hardening. Considering several impacts, such as the importance of the route (evacuation routes), urban environments and network resilience (detour length), the overall system vulnerability is moderate.

Among major thoroughfares and state routes, the following segments have been identified to be at risk:

- In Clay County, US-17 stands out as a segment of moderate-high vulnerability.
- In Duval County, I-95, A1A, SR-212 (Beach Blvd) and SR-116, have been identified as the segments of moderate-high vulnerability.
- In Nassau County, A1A and I-95 have been identified as moderate-high vulnerability roadways.
- In St Johns County, A1A, SR-206 and SR-207 stand out as moderate-high vulnerability roadways.

Capacity projects and mobility programs that are identified for these segments will consider the vulnerability risk during the planning, engineering and design phases to ensure the risk is minimized. When successfully planned and implemented, adaptation strategies can potentially reduce future economic, environmental and social costs associated with these vulnerability risks

7 Development of the 2045 Needs Plan

The 2045 Needs Plan represents all the mobility projects and programs that are needed to accommodate future transportation demands regardless of any funding limitations. It is not a prioritized list of projects, but a list of projects that seeks to leverage studies and projects developed by the North Florida Transportation Planning Organization (TPO) and its partners. While the 2045 Needs Plan is not constrained by funding, it does place special emphasis on local constraints including policy and environmental limitations.

The 2045 Needs Plan incorporates all primary modes of transportation, including roadways, transit, commuter rail, bicycle, pedestrian, freight mobility projects, Transportation Systems Management and Operations (TSM&O) and other smart technology investments. It begins to consider the needs of Mobility on Demand services and Automated/Connected/Electric/Shared (ACES) vehicles.

The development of the Needs Plan began with a review and confirmation of previous and ongoing studies throughout the region. The following sources were used to define the needs:

- FDOT's Strategic Intermodal Systems Needs Plan and Cost Feasible Plan (includes 1st Five Years and 2nd Five Years)
- FDOT's Adopted Work Program
- FDOT's Freight Mobility and Trade Plan
- North Florida TPO Transportation Improvement Program
- North Florida TPO List of Project Priorities
- 2035 Long Range Transportation Plan (LRTP)
- Northeast Florida Regional ITS Master Plan
- North Florida TPO Congestion Management Process Plan
- North Florida TPO Regional Bicycle and Pedestrian Plan
- North Florida Regional Greenways and Trails Plan
- Alternatives Fuels Master Plan
- Smart Region Master Plan
- Regional System Safety Plan
- Regional Freight Network Plan
- Local Government Comprehensive Plans
- Local Government Mobility Plans
- Committed Development Projects Provided by Local Governments
- Coordination with local governments and stakeholders on additional needs

The rationale for developing a Needs Plan is twofold. First, transportation revenue allocations could change in future years, affecting the amount of financial resources available to fund needed improvements. Second, the Needs Plan allows the TPO's partners to develop a future

transportation vision for the community that reflects social, environmental, and economic policy objectives and helps local governments see the effects of land-use decisions.

The development of the 2045 Needs Plan included extensive public outreach, coordination with local governments and the TPO advisory committees, and evaluation of various roadway and transit alternatives. This process included developing a list of constrained corridors, committed mobility projects, 2045 mobility deficiencies, and mobility alternatives.

7.1 Growth Forecasts

Land use and transportation are inextricably linked. How communities develop over time greatly influences transportation choices as well as the efficiency and the livability of the transportation systems. Where and how the region grows sets the foundation for the type and location of future transportation investments.

The first step in travel demand forecasting is the development of a future land use scenario, and the first step in the land-use scenario process involves the development of a Trend Scenario. The Trend Scenario is intended to illustrate the build-out potential of the region by 2045 based on existing land use policies and current development patterns. The trend analysis estimates future population, household, and employment data for all the study area through 2045. The trend scenario served as the base condition from which alternative land use and transportation scenarios were developed and compared.

The base year for the 2045 LRTP is 2015 and all base year data for the 2045 LRTP is based on conditions on the ground as of 2015. Forecast data for this plan update is at the microzone level and served as input to the Northeast Florida Regional Planning Model. The model utilized this data to forecast mobility deficiencies expected for 2045. These deficiencies are critical information used in the development of the Needs Plan.

7.2 Growth Allocation

Population estimates were used to determine control totals for each county. The TPO obtained future year population estimates from the University of Florida, Bureau of Economic and Business Research (BEBR), Volume 46, Bulletin 165 (Appendix 1) for use as control totals for each of the counties within the study area.

The BEBR Medium population estimates were utilized as the control totals for Projected Year data. The recommended control totals for each county are shown below.

County	2010	2015	2030	2040	2045
Nassau	73,314	76,536	98,918	111,283	116,513
Duval	864,263	905,574	1,008,324	1,129,785	1,164,640
St. Johns	190,039	213,566	292,217	382,701	409,339
Clay	190,865	201,277	247,223	304,669	320,265

Following the determination of control totals, forecasted growth was allocated to the individual Traffic Analysis Zone (TAZ) level. Working closely with their local government partners, the North Florida TPO and its partners collaborated to distribute the growth throughout the region. The allocation of the region's growth was based upon the local land-use policies and current and anticipated growth trends. These outreach and coordination efforts with the various planning partner agencies helped to ensure the best available data was utilized in the development of the future year socioeconomic data for the region.

A separate technical report has been prepared for the data and transportation model development. Please refer to the NERPM-Activity Based Update Technical Report for additional information on the growth forecasts, model updates and the model validation information.

7.3 Land Use Subcommittee

An important aspect of the LRTP update was the Land Use Subcommittee. The North Florida TPO Land Use Subcommittee made up of local planning staff, TPO staff, and FDOT were tasked with the development of the inputs used in the land use model and to provide policy direction on model inputs and assumptions. The Land Use Subcommittee also reviewed the results from the model and provided recommendations on adjustments to the model to more accurately reflect local land-use policies. This outreach and coordination with various planning agencies helped to ensure the best available data was used in the development of these land-use projections and for LRTP.

7.4 Committed Transportation Projects

To determine which roadway projects are initially needed, an Existing plus Committed Network is established. The Existing plus Committed Network is comprised entirely of major arterial and collector roads within the study area, plus new or expanded (committed) roadways funded for construction between 2018 and 2021.

The North Florida TPO's Transportation Improvement Program (TIP) and the FDOT's Five-Year Work Program were also reviewed for capacity projects meeting the prescribed criteria to be considered committed. The Transportation Improvement Programs may be viewed at the TPO's website: http://northfloridatpo.com/planning-studies/tip/

A comprehensive list of the projects that are considered committed (constructed or scheduled for construction) is shown in Table 7.1. The committed projects for the 2040 LRTP Update are depicted in Figure 7.1. These projects are included in the regional travel demand model as projects that will be open to traffic before the year 2045. Therefore the deficiency analysis presented later in this section considers these projects to be completed and operational.

Table 7.1: Committed Projects

Clay County				
Roadway	**From**	**To**	**Description**	**FY Funded**
SR 21 Blanding Boulevard	CR 218	Black Creek	Widen to 6 lanes	FY 2018/19
SR 21 Blanding Boulevard	Black Creek	Long Bay Road (CR 220)	Widen to 6 lanes	FY 2018/19
SR 21 Blanding Boulevard	Long Bay Road (CR 220)	Allie Murry Road	Widen to 6 Lanes	FY 2018/19
CR 218	Cosmos Avenue	Pine Tree Lane	Widen to 4 lanes	FY 2020/21
CR 220	Henley Road	Knight Boxx Road	Widen to 4 lanes	FY 2020/21
First Coast Expressway	North of SR 16	North of Blanding Boulevard (SR 21)	New 4 lane expressway	FY 2018/19
First Coast Expressway	South of US 17	North of SR 16	New 4 lane expressway	FY 2018/19
First Coast Expressway	West of SR 16A	East of CR 209	New 4 lane expressway	FY 2018/19
First Coast Expressway	At CR 218		Construct new interchange	FY 2019/20
First Coast Expressway	At SR 16		Construct new interchange	FY 2019/20
First Coast Expressway	At CR 739		Construct new interchange	FY 2019/20
Duval County				
Roadway	**From**	**To**	**Description**	**FY Funded**
I-295	I-10	Commonwealth Avenue	Add lanes and reconstruct	FY 2020/21
I-295	at Collins Road		Modify Interchange	FY 2019/20
I-295	I-95 South	SR 13 San Jose Boulevard (Buckman Bridge)	Add 2 Express Lanes	Complete
I-295	J T Butler Boulevard (SR 202)	SR 9B	Add 2 Express Lanes	Underway
I-95	at Baymeadows Road		Modify Ramps	FY 2020/21
I-95	St Johns County Line	I-295	Add lanes and reconstruct	FY 2021/22
I-95	J T Butler Boulevard	Atlantic Boulevard	Add lanes and reconstruct	FY 2021/22
I-10	First Coast Expressway	I-295	Add lanes and reconstruct	Complete

Table 7.1: Committed Projects, Continued

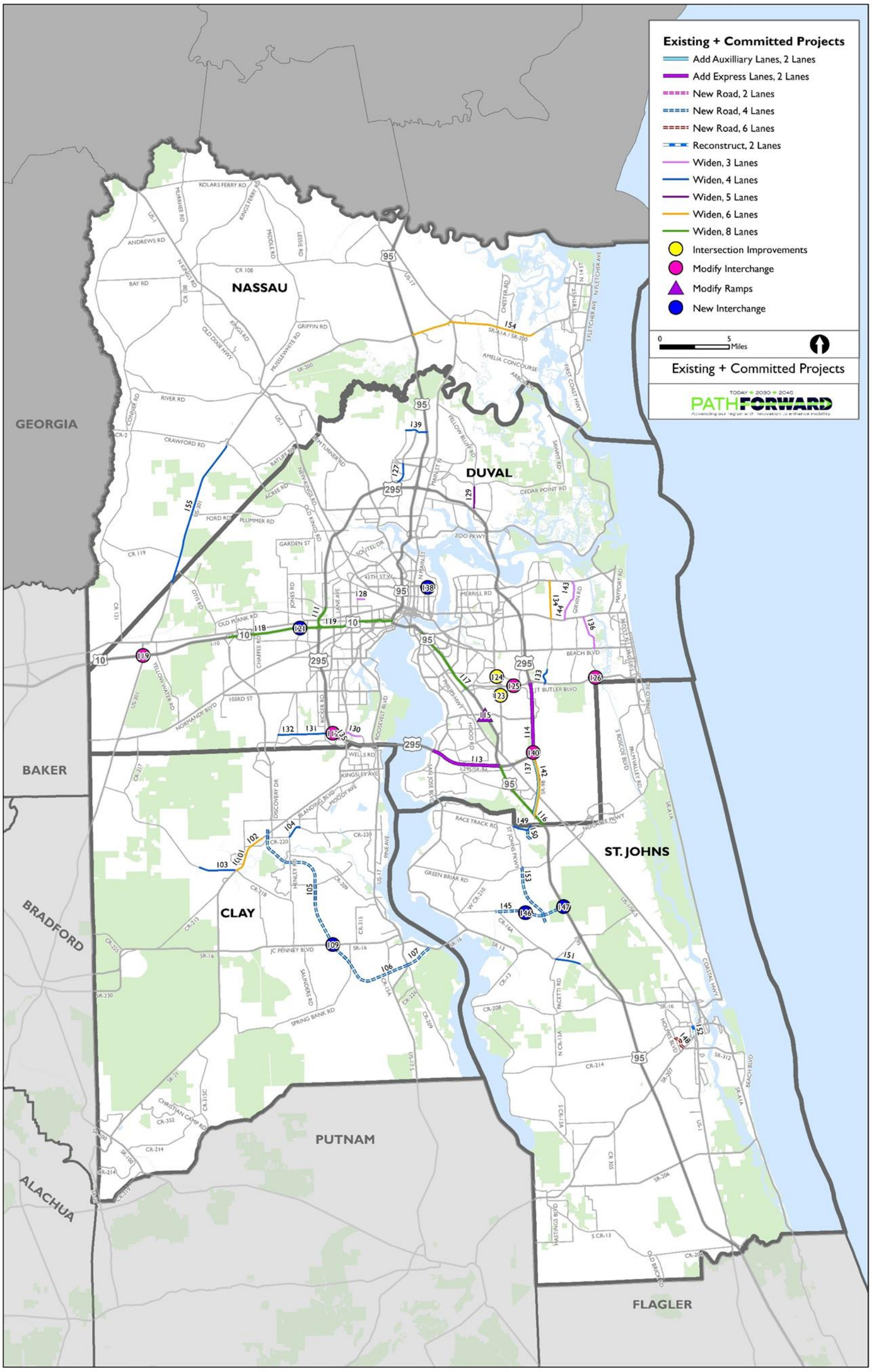
Duval County				
Roadway	**From**	**To**	**Description**	**FY Funded**
I-10	at US 301 (SR 200)		Interchange Modification	Complete
I-10	I-295	I-95	Add lanes and reconstruct	FY 2019/20
I-10	at Hammond Boulevard (Marietta)		New Interchange	Complete
Jacksonville National Cemetery Road	Lannie Road	Arnold Road	New 2 Lane Roadway	FY 2018/19
Southside Boulevard (SR 115)	at Deerwood Park Boulevard		Modify Intersection	FY 2018/19
Southside Boulevard (SR 115)	at Gate Parkway		Modify Intersection	FY 2018/19
J Turner Butler Boulevard (SR 202)	at Gate Parkway		Modify Interchange	FY 2017/18
J Turner Butler Boulevard (SR 202)	at San Pablo Road		Modify Interchange	FY 2019/20
JIA North Access Road (SR 243)	Airport Road (SR 102)	Pecan Park Road	Widen to 4 Lanes	FY 2017/18
5th Street (McDuff Avenue Phase 3)	Melson Avenue	Huron Street	Widen to 3 Lanes	FY 2019/20
Alta Drive	Faye Road	Burkit Lane	Widen to 5 Lanes	FY 2019/20
Collins Road	SR 21 Blanding Boulevard	Pine Verde	Widen to 3 Lanes	FY 2019/20
Collins Road	Shindler Drive	Rampart Road	Widen to 4 Lanes	Complete
Collins Road	Old Middleburg Road South	Shindler Drive	Widen to 4 Lanes	Complete
Kernan Boulevard	SR 202 J. T. Butler Boulevard	Glen Kernan Parkway	Widen to 4 Lanes	FY 2019/20
Kernan Boulevard	SR 10 Atlantic Boulevard	McCormick Road	Widen to 6 Lanes	Complete
Paramore Road Extension	Paramore Road	Youngerman Circle	New Road	FY 2020/21
San Pablo Road	US 90 Beach Boulevard	SR 10 Atlantic Boulevard	Widen to 3 Lanes	FY 2019/20

Table 7.1: Committed Projects, Continued

Duval County				
Roadway	**From**	**To**	**Description**	**FY Funded**
SR 9B	Phillips Highway (US 1)	I-295	Add 2 Auxiliary Lanes	FY 2019/20
Martin Luther King Jr. Parkway	at 21st St./Talleyrand Avenue		New Interchange	Complete
Pecan Park Rd. (SR 243)	Pecan Park Rd. (SR 243)	I-95	Widen to 4 Lanes	Underway
SR 9B	at I-295		Interchange Modification	Underway
SR 9B	Philips Hwy. (US1)	I-295	New 4 Lane Limited Access Roadway	Complete
SR 9B	Philips Hwy. (US1)	I-295	Widen to 6 Lanes	Underway
Girvin Road	Ashley Melisse	Wonderwood Dr.	Widen to 3 lanes	Complete
Girvin Road	Atlantic Boulevard	Ashley Melisse	Widen to 3 Lanes	Complete
St Johns County				
Roadway	**From**	**To**	**Description**	**FY Funded**
First Coast Expressway	I-95	West of CR 16A	New 4 Lane Expressway	FY 2022/23
First Coast Expressway	Interchange with CR 2209		New interchange	FY 2022/23
First Coast Expressway	Interchange with I-95		New interchange	FY 2022/23
SR 313	SR 207	Holmes Road	New 6 Lane Road	FY 2020/21
Racetrack Road	CR 2209	Bartram Park Blvd	Widen to 4 Lanes	Complete
Payton Parkway	SR 9B	Racetrack Road	New 4 Lanes Road	Complete
South Dixie Highway / Pellicer Lane	CR 214 King Street	SR 207	Reconstruct 2 Lanes and Widen to add Sidewalks and Bike Lanes	FY 2019/20
CR2209	CR210	SR 16 Connector	Construct new 4 lanes roadway	Underway
Nassau County				
SR 200 (SR A1A)	I-95	Amelia River Bridge	Widen to 6 Lanes	Underway
US 301 (SR 200)	Duval County Line	City of Callahan	Widen to 4 Lanes	Complete

These projects are included in the North Florida TPO's current Transportation Improvement Program (TIP).

Figure 7.1: Committed Projects



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7.5 2045 Roadway Deficiency Analysis

Future roadway deficiencies were identified through an evaluation of anticipated levels of congestion using the Northeast Florida Regional Planning Model (NERPM) Activity Based (AB) as the primary analysis tool. The congestion assessment was performed using the existing plus committed scenario in the year 2045 which represents a No Build Scenario. This method considers only the projects that are committed for construction within the Transportation Improvement Program (TIP), local government Capital Improvement Programs (CIP) and the FDOT Adopted Five-Year Work Program.

Deficiencies are based on the volume to capacity ratios depicted in Table 7.2. To determine the transportation needs for the year 2045, the traffic model is run using the Existing plus Committed Network and projected future land use in 2045.

Table 7.2: Congestion Levels

Daily Volume to Capacity Raito	Congestion Level
0.9 -1.1	Light Congestion
1.1 -1.3	Heavy Congestion
Higher than 1.3	Severe Congestion

One of the outputs developed from the model output is a series of maps showing the forecasted roadway deficiencies. The deficiency map is one of the tools to help determine where and what type of mobility improvements are needed to meet the demand of future growth on the infrastructure.

The 2045 deficiency analysis yielded a substantial number of roadways expected to experience some degree of congestion if no additional improvements are made through the year 2045.

Figures 7.2 – 7.5 depict the results of the roadway deficiency analysis.

7.6 2045 Needs Plan Development

The results of the 2045 deficiency analysis were used to develop the 2045 needs alternatives. Similar to the previous LRTP update, the 2045 LRTP strived to create a multi-modal plan in that there would not be an emphasis on one mode or another, but a marrying of all modes. The vision was to create a Needs Plan where the roadway projects supported the high capacity transit projects and the high capacity transit projects supported the roadway projects. In addition, projects from the bicycle/pedestrian plans, the Regional ITS Master Plan, and other transportation plans were incorporated into the 2045 Needs Plan.

The local government partners, LRTP Steering Committee and the TPO Advisory Committees considered these deficiencies and opportunities at several meetings throughout the Spring and Summer of 2019. Based on their feedback, adjustments were made to the project list prior to presenting the draft 2045 Needs Plan to the public in August of 2019.

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Figure 7.2: Roadway Deficiencies - Clay County

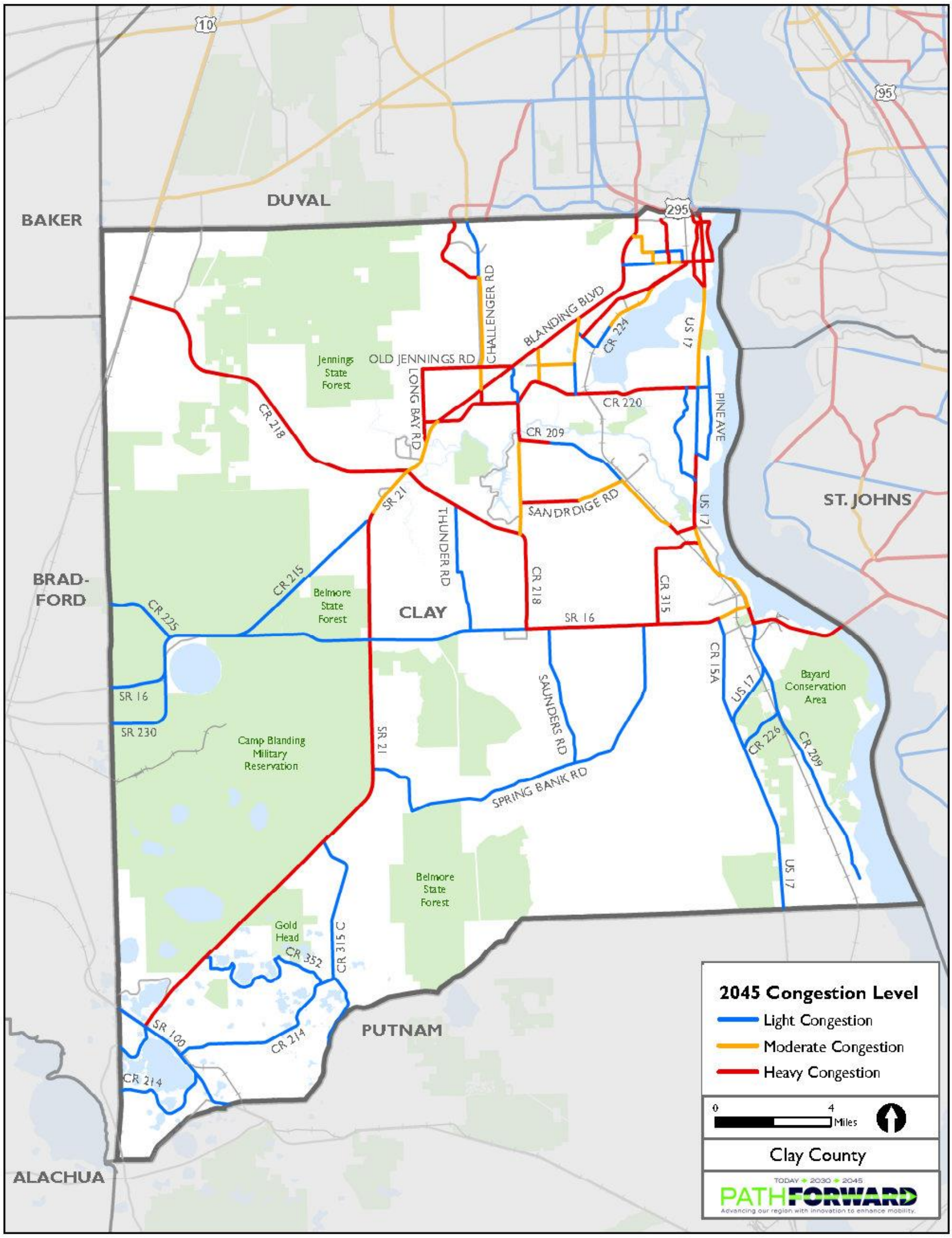

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Figure 7.3: Roadway Deficiencies - Duval County

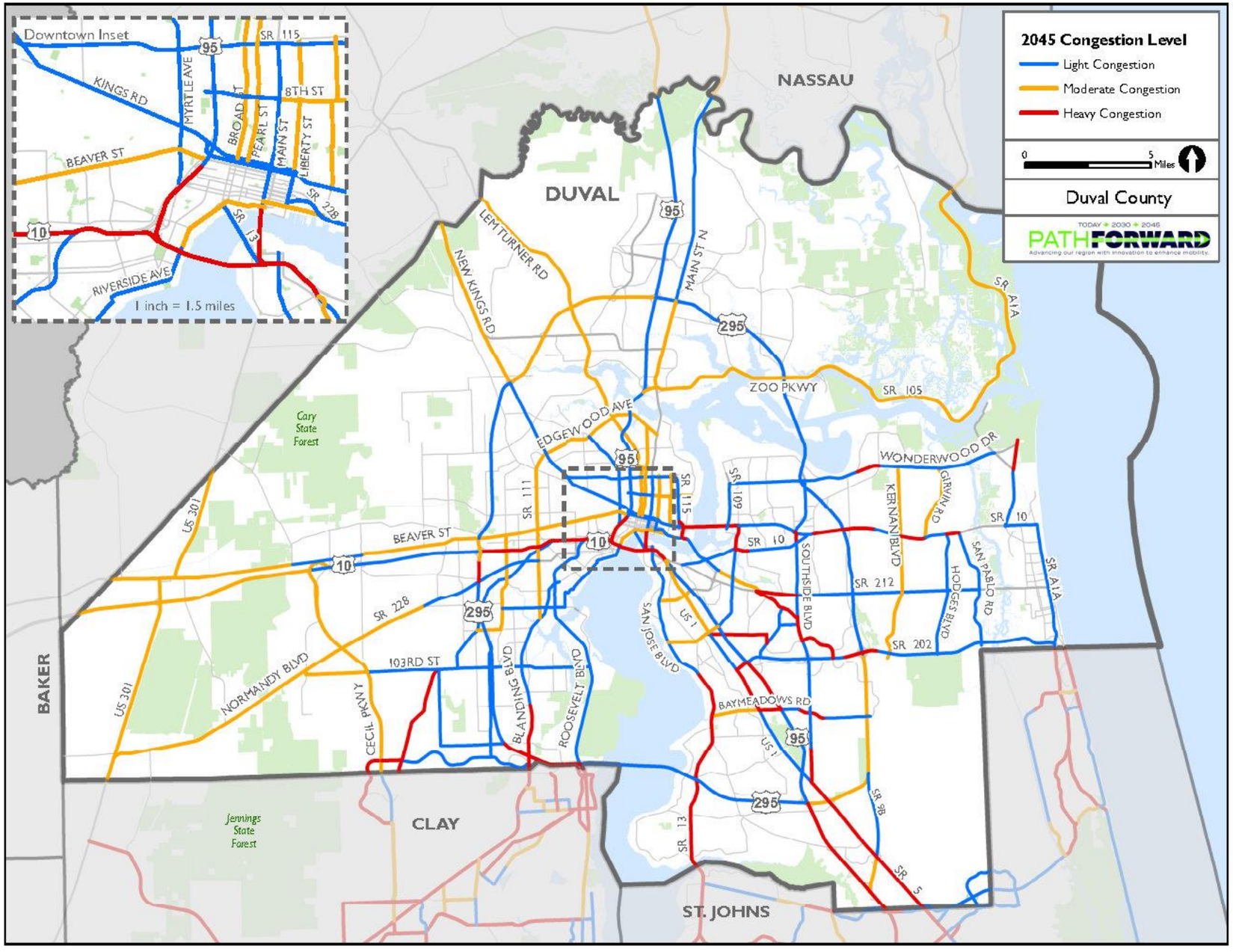

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Figure 7.4: Roadway Deficiencies - Nassau County

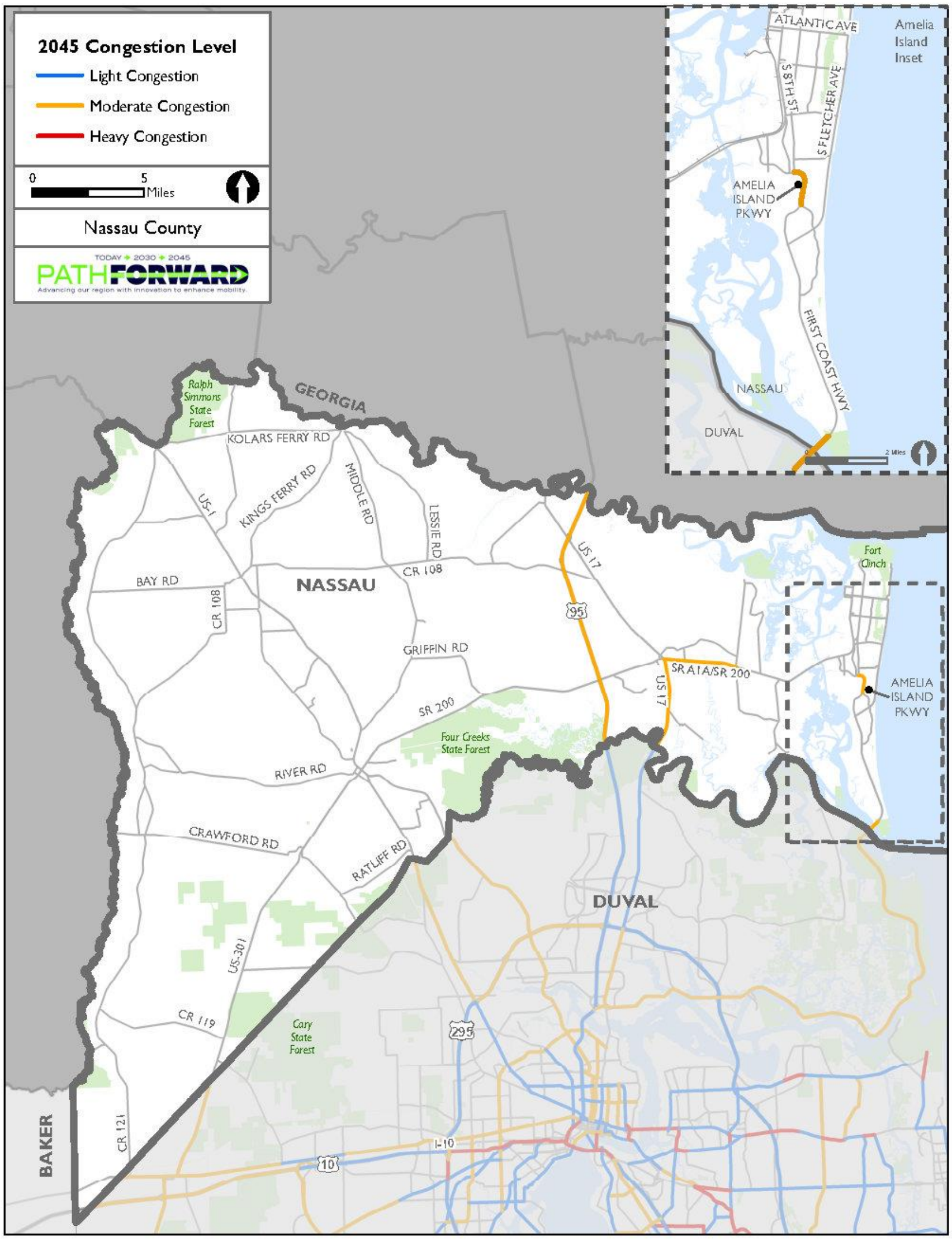
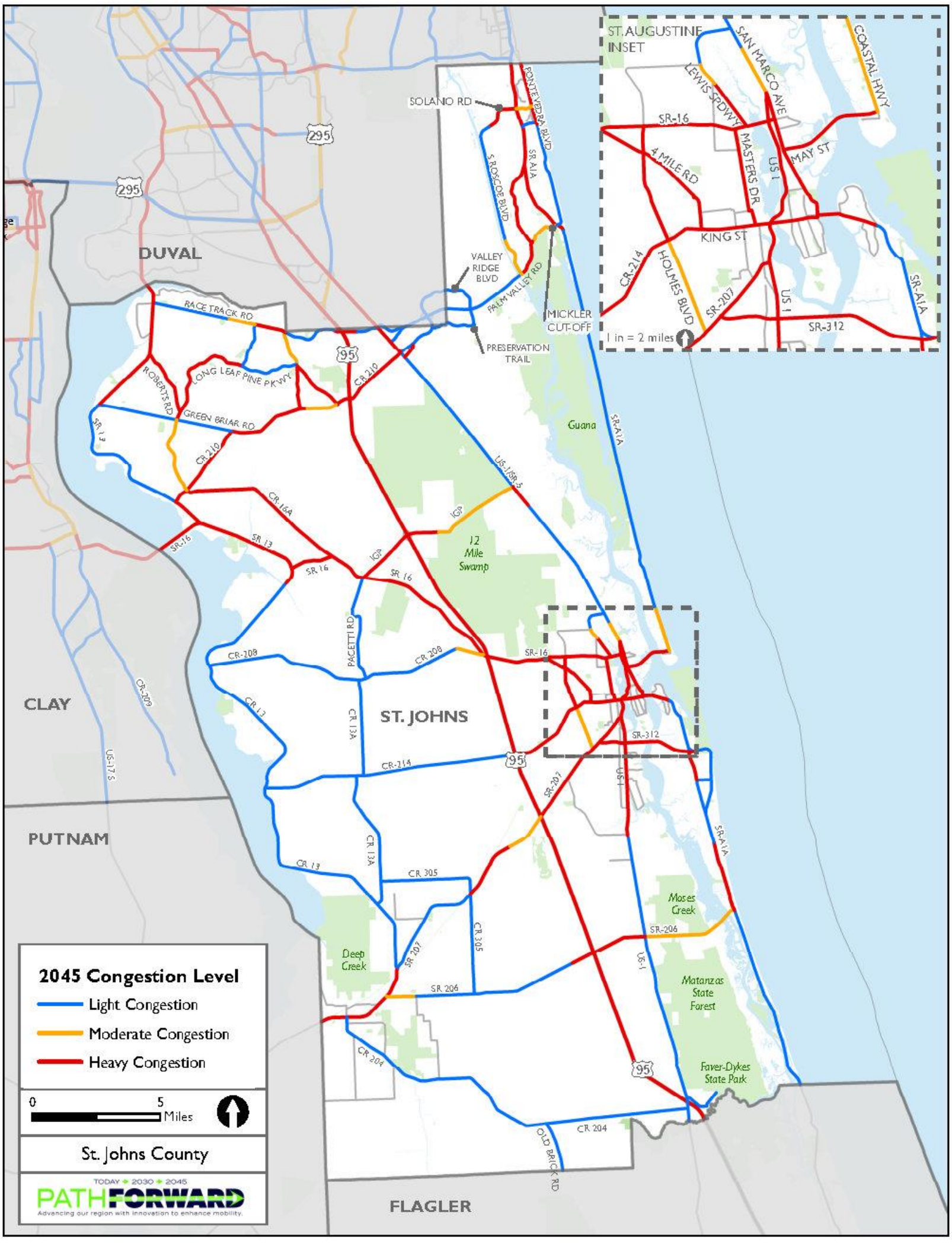


Figure 7.5: Roadway Deficiencies - St. Johns County



7.7 Roadway Projects

The roadway projects included in the 2045 Needs Plan address the mobility demands forecasted for corridors throughout the region. The Needs Plan includes a variety of project types. These include arterial roads that have been identified for lane additions and new roadways in Nassau and St. Johns Counties. General purpose and express lane additions have also been identified for the interstate system.

For projects on arterial and collector roadways, the plan assumes that these improvements will include appropriate bicycle and pedestrian features. This may include sidewalks, bike lanes, and separate multi-use trails.

7.8 Transit Projects

Throughout the plan update process, the North Florida TPO heard support for expanded regional transit services. The Jacksonville Transportation Authority (JTA) recently introduced several successful express bus routes. Public comment supports additional express bus and commuter rail service. Based on this feedback and the recently updated Transit Development Plan (TDP), the 2045 Needs Plan includes additional express bus service or Bus Rapid Transit (BRT) to areas throughout Duval County, Clay and St. Johns County, commuter rail to Clay, St Johns and Nassau Counties, as well as autonomous circulators in downtown Jacksonville and the City of St Augustine.

7.9 Transportation Systems Management and Operations (TSM&O)

The North Florida Intelligent Transportation Systems (ITS) Coalition was formed in 2003 to develop and deploy a coordinated system of operational programs and projects. Since that time the North Florida TPO has invested more than $50 million in ITS technology throughout the region. The ongoing collaboration government agencies, private businesses and jurisdictional boundaries enable the North Florida TPO to efficiently mobilize these resources.

The North Florida region's ITS needs for the next five to 10 years were developed by prioritizing corridors and considering existing and programmed ITS projects. The ITS Master Plan (2010) identified increased regional needs in freeway surveillance and roadside traveler information, including vehicle detection sensors, dynamic message signs and traffic cameras to complete coverage on key roadways in the region. The combination of technology and operational strategies is called Transportation Systems Management and Operations (TSM&O). These multi-modal strategies are designed to maximize the efficiency, safety and use of existing and planned transportation infrastructure. TSM&O alternatives are considered prior to investing in new capacity. These strategies are highly competitive with capacity projects funding in many settings. TSM&O strategies encompass many activities, such as traffic incident management, arterial traffic management, freight management (included in the freight section of the LRTP), special event management, connected and automated vehicle technology and applications, road weather management, congestion pricing, managed lanes, ridesharing and demand management programs, parking management, electronic toll collection and transit.

The North Florida TPO completed and update to the ITS Master Plan in 2016 and expanded it to cover emerging technologies. The update is now referred to as the SMART Region Master Plan and focuses is on transportation, specifically the needs of the community and how transportation is integrated with other public assets to define a regional vision for information technologies and communications. Implementing new technologies and strategies will create a safer, more efficient, and more reliable transportation system to improve the region's economic competitiveness, sustainability and quality of life.

7.10 Bicycle and Pedestrian Projects

The North Florida TPO regularly develops and maintains bicycle and pedestrian studies for the region. Below are the studies and plans used in the development of the 2045 Needs Plan.

7.10.1 Regional Multi-Use Trail Study

This study documents the multi-use trail planning efforts in the North Florida TPO region and establishes proposed trails in Clay, Duval, Nassau, and St. Johns counties. The study established a regionally-endorsed network of trails to be used as a guide for applying for competitive funding and grant opportunities including SUN Trail funding.

The 570-mile network of existing and proposed trails is included in the 2045 LRTP.

7.10.2 Amelia Island Bicycle and Pedestrian Focus Area Study

This project identifies a comprehensive network of bicycle and pedestrian facilities across Amelia Island, including the City of Fernandina Beach. The island's oceanfront setting, with extensive beaches, large natural areas including two State Parks, and popular greenway, all drive high demand for recreational bicycling and walking. The compact settlement pattern found on the northern half of the island—and even the dense development internal to the large resorts on the south end of the island—also make utilitarian bicycling and walking for shopping and commute trips a realistic option if comfortable facilities were understood to be available to the general public.

The primary recommendation is development of a network of routes to guide bicyclists and pedestrians to the most comfortable and direct connections between important community destinations. The study also addresses bicycle parking on the island and the interface between the recommended network of biking and walking routes with both existing and proposed transit service on the island.

7.10.3 Orange Park Bicycle and Pedestrian Sub-Area Plan

The Orange Park Bicycle and Pedestrian Study is intended to serve as a guide for projects and policies to improve the quality and function of the pedestrian and bicycle system within greater Orange Park. The study area included within this project is approximately 11 square miles, encompassing the Town of Orange Park, and unincorporated areas of Clay County.

The study offered recommendations for low impact (projects without large infrastructure modification) and cost-effective strategies that can improve the use of the pedestrian and bicycle

system within the study area. While the Orange Park Bicycle and Pedestrian Sub-Area Plan include some recommendations for more extensive infrastructure improvements, the focus is on investments that offer the greatest return on investment. It focused on developing a primary bicycle and pedestrian system and the development of specific routes that benefit connectivity.

7.10.4 Regional Freight Projects

With the convergence of major interstates, railroads, seaports and airports, our region is a major logistics hub. The entire Southeastern market, with more than 50 million consumers, is accessible within eight hours. As the region's economy continues to become more global, our needs for infrastructure improvements will increase. The North Florida TPO studies these trends and issues to identify needs and develop solutions.

Along with our partners, the Jacksonville Port Authority; Nassau County Ocean, Highway and Port Authority; Jacksonville Aviation Authority; Northeast Florida Regional Airport; CSX; Florida East Coast Railroad; and Norfolk Southern, a number of freight studies have been developed for the region.

These include:

- Tallyrand Avenue Study
- Port of Fernandina Truck Circulation Study
- St. Augustine Truck Parking Study
- North Rail Corridor Alternatives
- North Florida Freight, Logistics and intermodal Framework Plan

In addition to the North Florida TPO's freight studies, the LRTP team coordinated with the FDOT Freight and Multimodal Operations (FMO) Office and the on-going Freight Mobility and Trade Plan. This plan is a comprehensive plan that identifies freight transportation facilities critical to the State's economic growth and guides multimodal freight investments in the State. To receive funding under the National Highway Freight Program (23 U.S.C. 167), the FAST Act requires the development of a state freight plan which must address the state's freight planning activities and investments, both immediate and long-range. More information on the FMTP can be found on the FDOT's website www.fdot.gov/multimodal/fmtp.

The Cost Feasible Plan includes several Mobility Plans that provide funding for projects and programs that have been identified through TPO studies. Freight projects identified through this process will ultimately be funded through the Freight Mobility Program included in the 2045 Cost Feasible Plan vs. calling out the individual freight-related projects in the Needs or Cost Feasible Plans.

7.11 2045 Planning Scenarios

The 2045 LRTP did not include traditional land use or funding scenario exercise. Instead, the 2045 LRTP considered the impact to demand and vehicle miles traveled that Connected and

Autonomous/Automated Vehicles (CAVs) will have on the network. Using the Northeast Florida Regional Planning Model: Activity Based (NERPM-AB) which was developed for the 2045 LRTP update, an exploratory analysis was undertaken. The research took an Exploratory Modeling and Analysis (EMA) approach, which is a systematic approach to perform sensitivity analyses using models when users cannot assert many of the model inputs with confidence.

The approach adopts the travel demand model to simulate households' decisions whether to purchase CAVs (connected and automated vehicles) instead of conventional vehicles and to simulate travelers' decisions whether to use CAV-based carsharing and Transportation Network Companies (TNC) services. The dynamic network model used for the exercise simulates operating characteristics of CAVs—depending on network vehicle mix—and simulates the performance of CAV-only infrastructure under different demand scenarios. The integrated model system simulated dozens of different scenario combinations to explore the possible outcomes and find critical input assumptions while identifying future policy directions.

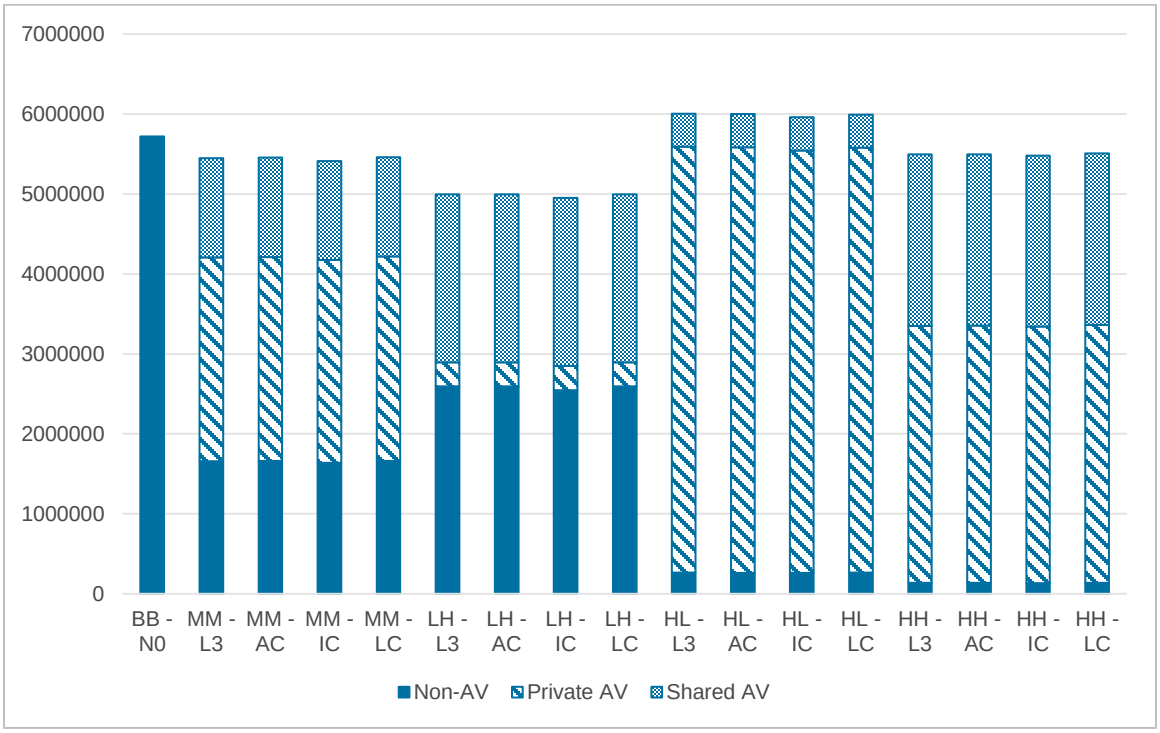
The purpose of this analysis is to understand the relative difference with respect to transportation planning needs between business as usual, moderate adoption of CAVs and transportation network companies (TNCs) or shared mobility providers like UBER and LYFT, and rapid adoption of CAVs and TNCs in the North Florida TPO region.

7.11.1 Findings

Based on the EMA analysis of the scenarios defined above, several findings were made that are of interest to NFTPO's long-range transportation planning needs. The key findings were:

- VMT increases with growth in private AVs due to increases in trips
- VMT goes decreases as shared AV (TNC) usage increases due to rising
- The introduction of new types of network users like CAVs only becomes significant once they reach high market penetration
- The relative use of private and shared CAVs and their occupancy levels greatly influence the scenario results (VMT, delays, etc.)
- These findings hold true for future year forecasts.

Figure 7.6: Vehicle Miles Traveled by Scenario & Vehicle Type



The key insight from this analysis is that the market penetration of AVs is likely the single most important factor in the transportation planning process in North Florida when considering the impacts of CAVs.

This is correlated by recent events at the 2020 National TRB meeting in which the standing committee on Highway Capacity and Quality of Service (AHB40), which maintains the de facto standard for highway capacity analysis, the Highway Capacity Manual, shared their draft updates to the HCM. The next version of the HCM will include highway capacity lookup tables that are a function of CAV market penetration by facility type. Expected system performance improvements or degradation depends on the market saturation of CAVs, which is consistent with the findings from the NFTPO exercise.

The CAV EMA analysis was somewhat of an experiment in making assumptions, which applies to all modeling, but here it was more explicit because many significant assumptions had to be made, for example, assumed rates of market penetration. Nevertheless, preparing for an uncertain future requires significant effort and a solid understanding of travel demand system relationships in order to provide relevant information to the transportation planning process.

The purpose of this analysis was to better understand the relative difference with respect to transportation planning needs between business as usual, moderate adoption of CAVs and TNCs, and rapid adoption of CAVs and TNCs in the NFTPO region. Under moderate adoption of CAVs, VMT either goes up or down depending on the mix of private versus TNC owned CAVs. The same

is true for the rapid adoption of AVs. Network capacities increase only modestly under low to medium levels of CAV adoption and begin to show significant improvements as adoption approaches market saturation. Finally, based on the definitions and assumptions in the EMA modeling exercise, these relationships are expected for future year analyses as well. As the outlook and expected saturation rate for CAVs is better defined, so will the exercise of evaluating the impacts of disruptive technology such as CAVs on the transportation system

7.12 Environmental Mitigation

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands, and groundwater resources. In situations where impacts cannot be completely avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs. The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts.

The North Florida TPO is committed to minimizing and mitigating the negative impacts of transportation projects on the natural and built environment in order to preserve and enhance the quality of life. In the State of Florida, environmental mitigation for transportation projects is completed through a partnership between the North Florida TPO, FDOT, and state and federal environmental resource and regulatory agencies, such as the Water Management Districts (WMDs) and the Florida Department of Environmental Protection (DEP). These activities are directed through Section 373 Florida Statutes (F.S.), which establishes the requirements for mitigation planning as well as the requirements for permitting, mitigation banking, and mitigation requirements for habitat impacts.

Throughout the LRTP update process, the North Florida TPO shared information with environmental agencies and professionals and made them aware of all meetings and comment opportunities. This was accomplished through the LRTP Steering Committee. The following agencies are included on the Steering Committee:

- US Environmental Protection Agency (EPA)
- Florida Fish and Wildlife Commission
- US Army Corps of Engineers
- The Northeast Florida Water Management District
- National Marine Fisheries Service
- Florida Department of State
- Local government environmental departments

When addressing mitigation there is a general rule to avoid all impacts, minimize impacts, and mitigate impacts when impacts are unavoidable. Additionally, land use and natural features of the region require thoughtful planning to provide an interconnected transportation network.

The following were considered and will continue to need to be considered as transportation projects are developed:

- Wildlife and Habitat – The Northeast Florida region is sometimes referred to as a "biological hotspot" because there are many rare species found only in small areas in northeast Florida. The Florida Fish and Wildlife Conservation Commission defined Strategic Habitat Conservation Areas (SHCAs) in Florida based on the habitat needs of listed species for their survival. The highest priority SHCAs are mostly located within public lands. SHCAs are important to be aware of in planning projects. Figure 7.6 depicts these lands.

- Wetlands and Floodplains – Wetlands and floodplains are protected resources. Transportation projects should be designed to avoid wetlands and floodplains, where possible, and mitigation is required where impacts are unavoidable. Thus, wetlands and floodplains influence the location of new transportation corridors, the design of improvements, and the cost of construction due to environmental mitigation and design requirements. Figures 7.7 and 7.6 present the wetlands and floodplains within the study area.

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Figure 7.7: Critical Habitat

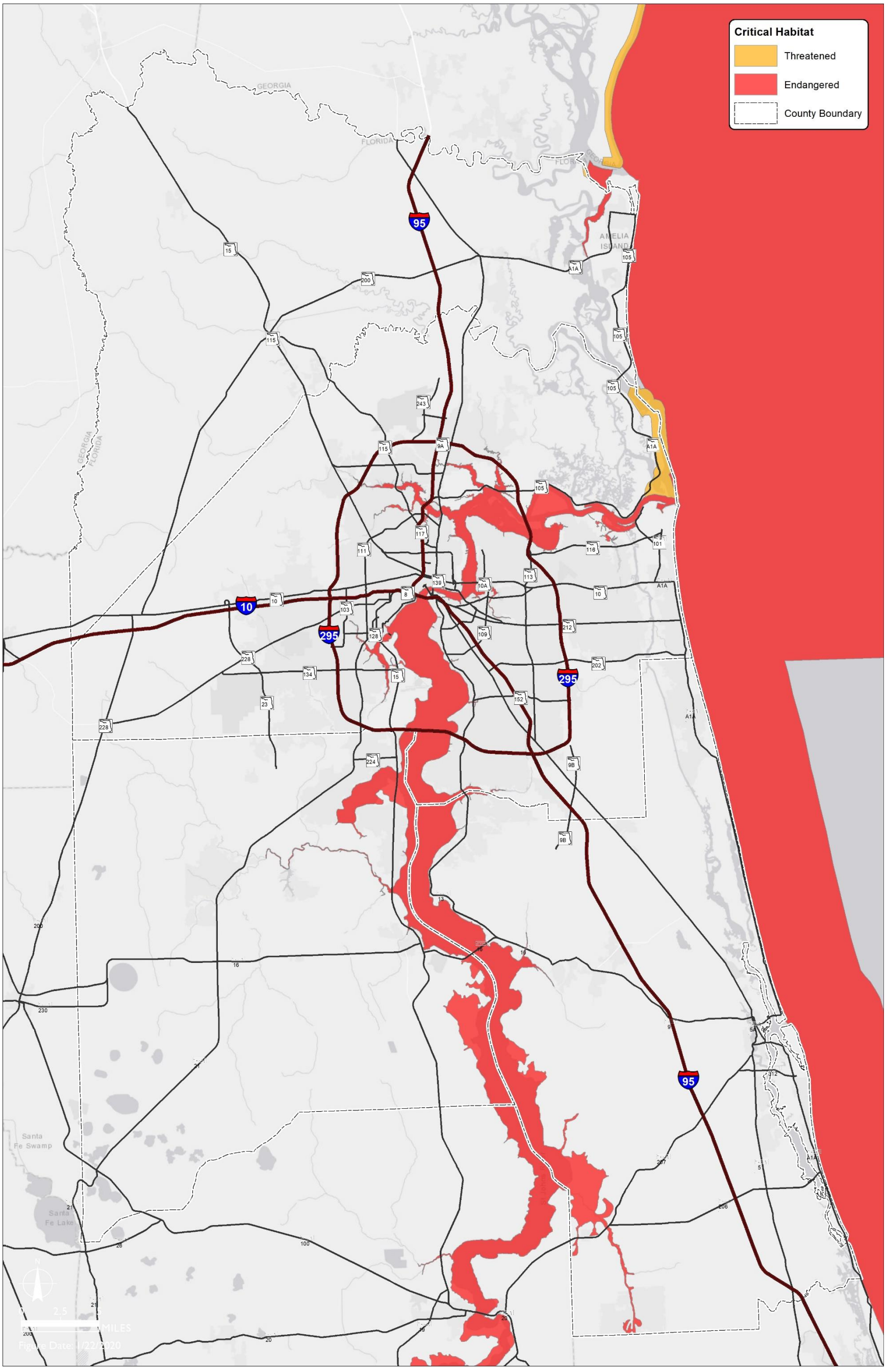


Figure 7.8: Wetlands

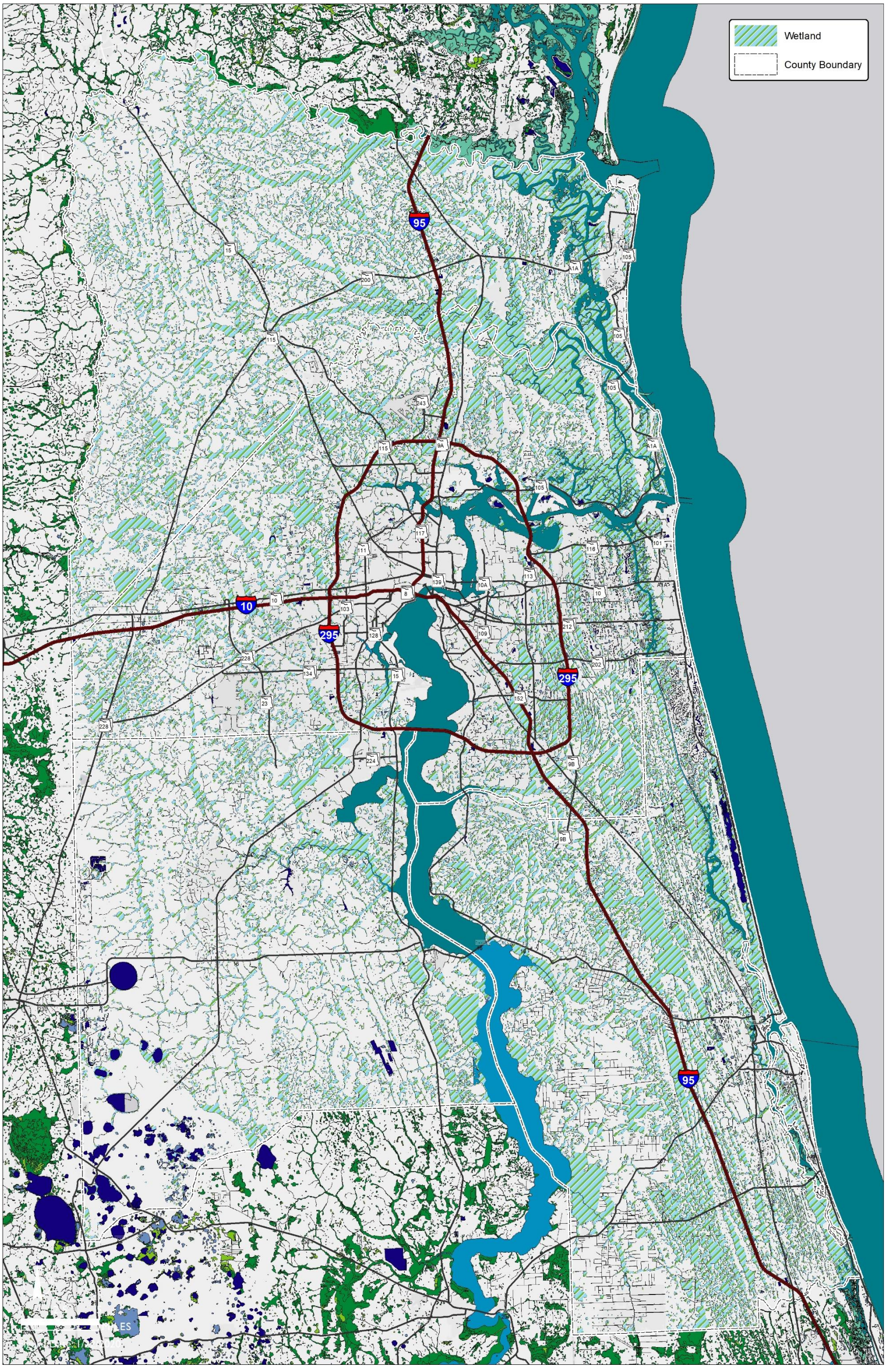
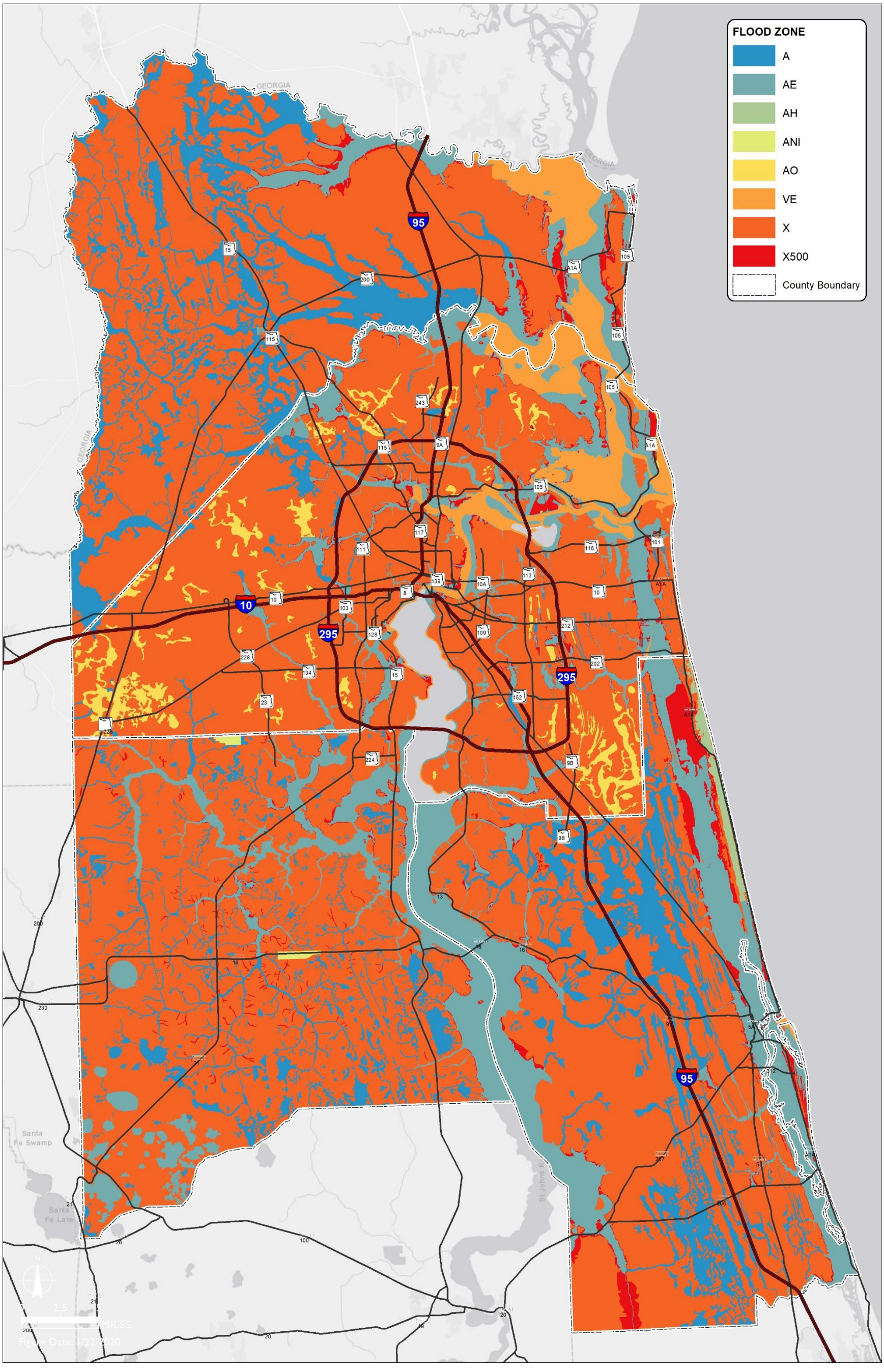


Figure 7.9: Flood Plains



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Sections 373.47137 and 373.4139, F.S. require that impacts to habitat be mitigated through a variety of mitigation options, which include mitigation banks and mitigation through the Water Management District(s) and the DEP. Potential environmental mitigation opportunities that could be considered when addressing environmental impacts from future projects proposed by the North Florida TPO may include but are not limited to the strategies identified in Table 7.3.

Table 7.3: Mitigation Strategies

Resource/Impacts	Potential Mitigation Strategy
Wetlands and Water Resources	• Restore degraded wetlands • Create new wetland habitats • Enhance or preserve existing wetlands • Improve stormwater management • Purchase credits from a mitigation bank
Forested and other natural areas	• Use selective cutting and clearing • Replace or restore forested areas • Preserve existing vegetation
Habitats	• Construct underpasses, such as culverts • Other design measures to minimize potential fragmenting of animal habitats
Streams	• Stream restoration • Vegetative buffer zones • Strict erosion and sedimentation control measures
Threatened or Endangered Species	• Preservation • Enhancement or restoration of degraded habitat • Creation of new habitats • Establish buff areas around existing habitat

In addition to the process outlined in the Florida Statutes and implemented by the North Florida TPO and its partner agencies, the Efficient Transportation Decision Making (ETDM) process is used for seeking input on individual qualifying long-range transportation projects allowing for more specific commentary. This provides assurance that mitigation opportunities are identified, considered and available as the plan is developed and projects are advanced. Through these approaches, the North Florida TPO and its partners ensure that mitigation will occur to offset the adverse effects of proposed transportation projects.

7.13 Efficient Transportation Decision Making (ETDM) Process

Florida's ETDM process was developed as a framework to fulfill federal and state consultation and environmental planning requirements. The ETDM process uses a multi-agency team approach to identify transportation solutions that are responsive to environmental and cultural

preservation goals and community quality of life objectives. The overall intent of the process is to improve transportation decision-making by integrating a balanced consideration of potential project effects to natural, cultural and community resources within the realm of transportation planning and by providing for early coordination with tribal nations, environmental resource agencies and the public. The tool features a wealth of environmental and sociocultural data that allows a comprehensive review of projects and their potential impacts. The ETDM process essentially allows the North Florida TPO to:

- Facilitate early, continuous and meaningful consultation with stakeholders.
- Evaluate the relative environmental effects of transportation projects that are being considered for inclusion in the 2045 Plan Update and identify fatal flaws/impacts as early as possible in the planning phase.
- Easily obtain comments from stakeholders about potential effects of transportation projects proposed for federal and state funding.
- Identify an array of mitigation strategies for the different types of potential project impacts in coordination with environmental resource agencies.
- Facilitate early NEPA reviews/approvals of projects and effective/timely decisions.

7.14 Other Mitigation Strategies

There are a number of mitigation strategies available in the North Florida TPO planning area to mitigate environmental impacts related to transportation projects. These include private mitigation banks, public Surface Water Improvement and Management (SWIM) Programs, as well as FDOT's mitigation statue 373.4137.

Surface Water Improvement and Management (SWIM)

In 1987, the Florida Legislature created the Surface Water Improvement and Management program (SWIM) as one mechanism to address these nonpoint pollution sources. The SWIM program is implemented by the Northwest Florida Water Management District, which works cooperatively with the Department of Environmental Protection and several other state agencies, local governments and private organizations to accomplish SWIM objectives.

SWIM was the first major state program to address a waterbody's needs as a system of connected resources rather than simply as isolated wetlands or water bodies. To accomplish this, SWIM cuts across governmental responsibilities, forging important partnerships in water resource management. While the state's five water management districts are directly responsible for the SWIM program, they work in concert with DEP, federal, state, and local governments and the private sector. All the partners contribute--with funding or in-kind services. In fact, in many areas, state-appropriated money is not the biggest part of program funding.

SWIM develops carefully crafted plans for at-risk water bodies and directs the work needed to restore damaged ecosystems, prevent pollution from stormwater runoff and other sources, and educate the public. SWIM plans are used by other state programs, like Save Our Rivers, to help

make land-buying decisions, and by local governments to help make land-use management decisions.

Since its inception, SWIM has made great strides toward improving the quality of a number of troubled water bodies and increasing our understanding of healthy water bodies. The initial legislation identified specific water bodies that would fall under SWIM-- Lake Apopka, Tampa Bay, the Indian River Lagoon System, Biscayne Bay, the St. Johns River, Lake Okeechobee and the Everglades. Today, twenty-nine water bodies are now on the SWIM waterbody priority list.

Originally, the Florida Legislature funded the SWIM program annually, matched by funds raised by the water management districts. This original dedicated annual funding was ended after the 1997-98 fiscal year. However, many SWIM water bodies have benefited from significant individual legislative appropriations throughout the years, associated with the Community Budget Issue Request water project funding process under s. 403.885, F.S.

The Northeast Florida Water Management District (NEFWMD), in addition to FDEP, utilizes the watershed approach to provide water quality improvements through mitigation. The NWFWMD helps the FDEP implement the SWIM plans through their own funding resources and through the FDOT mitigation statute. Specific mitigation areas may be found on the NWFWMD's website under wetlands.

As transportation projects are developed within the North Florida TPO study area, state and federal funds are usually required to fund design, right-of-way acquisition, and ultimately construction. For projects utilizing the FDOT Work Program, environmental mitigation can occur through the mitigation statue noted above in Florida. This statute allows for environmental mitigation to be carried out by the NWFWMD with funds from the FDOT.

Early assessments of mitigation needs can be identified during the ETDM planning review of projects. The Environmental Screening Tool (EST) contains both public and private mitigation banks and SWIM programs available in the area. The ETDM process is discussed in detail later in this section. The Environmental Technical Assessment Team (ETAT) members and identify

specific requirements in their responses during and Planning and Programming Summary Report that will carry forward into the Design and permitting phases.

Each county within the North Florida TPO region has mitigation provisions contained within their Comprehensive Plans. Specifically, the Land Development Codes provide developers guidance as to how wetland impacts can be mitigated within the county. These plans call for the natural functions of wetlands and threatened and endangered species habitat shall be protected. If a person proposes to impact wetlands or threatened and endangered species habitat, then he or she shall deliver to the county an application which will provide written documentation to demonstrate that impacts to wetlands and threatened and endangered species habitat has been avoided to the maximum extent possible. If impacts are unavoidable, the applicant shall demonstrate that impacts to wetlands and threatened and endangered species habitat has been minimized to the maximum extent possible. If the applicant has demonstrated adequate minimization of unavoidable impacts, then, and only then, the applicant may submit a mitigation plan for review and consideration.

Mitigation procedures are required in any case where development degrades estuaries, wetlands, bayous, harbors, rivers, surface waters, submerged aquatic vegetation, and threatened and endangered species habitat. Mitigation usually consists of measures which compensate for or enhance, the aspects of the project that do not otherwise meet permitting criteria or to compensate for unavoidable natural resource losses. It may include purchase, creation, restoration, and/or enhancement of wetlands, performing works or modification that causes a net improvement in water quality or aquatic habitat, or enhancement of the hydrology of wetland areas which have been altered, impounded or drained. Before considering mitigation, all reasonable measures must first be taken to avoid and minimize the adverse impacts to natural resources which otherwise rendered the project unpermittable.

Compensatory mitigation, by which wetlands and threatened and endangered species habitat are purchased, created, enhanced and/or restored to compensate for the loss of such lands, should be of the same type, or should replace the same functions and values, as that destroyed or degraded.

7.15 Adopted 2045 Needs Plan

As stated earlier, the 2045 Needs Plan was presented at a series of public meetings and posted to the website to gain public comment. Based on this feedback and input from the LRTP Steering Committee, local governments, CAC, TCC, and North Florida TPO Board, a balanced Needs Plan was recommended. The recommended Needs Plan addressed the mobility needs of each part of the Study Area. The final recommended 2045 Needs Plan, with a total estimated cost of $6.6 billion, was presented to the North Florida TPO and adopted **on September 12, 2019.** Figures 7.6 - 7.9 presents the roadway and transit projects included in the Adopted 2045 Needs Plan. Table 7.4 is a comprehensive listing of projects included in the 2045 Needs Plan.

Listed below are the summary costs of the projects included in the 2045 Needs Plan for Highways, Transit, and Non-Motorized. The total cost of the 2045 Needs Plan is $6.63 billion. Detailed project cost estimates may be found in Appendix B.

2045 Needs Plan Costs Shown by Project Category

Roadway Projects	$5,980,400,600
Strategic Intermodal System (SIS) Projects	$3,611,799,000
Public Transportation Projects	$ 110,000,000
Mobility Programs	$ 540,000,000
Total	**$6,630,400,600**

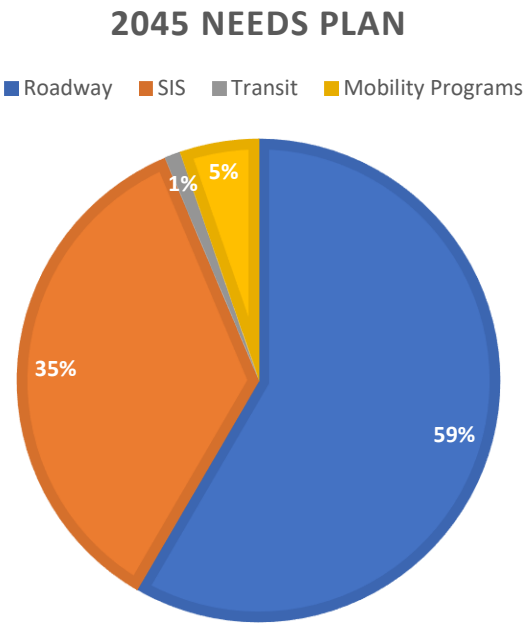

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Table 7.4: Adopted 2045 LRTP Needs Plan – Clay County

Map ID	Facility	From	To	Improvement Type
100	Baxley Road	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Widen to 4 Lanes
101	Cheswick Oak Avenue Extension	Oakleaf Plantation Parkway	Savannah Glen Boulevard	New 4 Lane Road
102	College Drive	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Widen to 6 Lanes
103	College Drive Extension	SR 21 Blanding Boulevard	Challenger Drive	New 4 Lane Road
104	CR 209 Russell Road	CR 739 Henley Road	US 17	Widen to 4 Lanes
105	CR 209 South	Decoy Road	US 17	Reconstruct 2 Lanes
106	CR 218	US 301	Cosmos Avenue	Widen to 4 Lanes
107	CR 218	Cosmos Avenue	Pine Tree Lane	Widen to 4 Lanes
108	CR 218	SR 21 Blanding Boulevard	CR 739 Henley Road	Widen to 4 Lanes
109	CR 218	CR 739 Henley Road	SR 16	Widen to 4 Lanes
111	CR 218 Extension	SR 23 First Coast Expressway	CR 315	New 4 Lane Road
112	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Knight Boxx Road (end of four lane)	Widen to 4 Lanes
113	CR 220 Doctors Inlet Road	College Drive	US 17	Widen to 6 Lanes
114	CR 315	SR 16	CR 315B	Widen to 4 Lanes
115	CR 315	CR 315B	US 17	Widen to 4 Lanes

Table 7.5: Adopted 2045 LRTP Needs Plan – Clay County

Map ID	Facility	From	To	Improvement Type
116	CR 739B Sandridge Road	CR 739 Henley Road	CR 209 Russell Road	Widen to 4 Lanes
117	Decoy Road	US 17	CR 209 South	Reconstruct 2 Lanes
118	Governors Park Road	US 17	SR 16	New 4 Lane Road
119	Knight Boxx Road	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Widen to 6 Lanes
120	Lake Asbury East West 1	NS3	CR 209 Russell Road	New 2 Lane Road
121	Lake Asbury North South Road 3	CR 739B Sandridge Road	CR 209 Russell Road	New 2 Lane Road
122	Long Bay Road Extension North	Old Jenkins Road	Long Bay Road	New 2 Lane Road
123	Oakleaf Village Parkway Extension	Oakleaf Plantation Parkway	Oakleaf Village Parkway	New 2 Lane Road
124	SR 100	Clay/Bradford County Line	Clay/Putnam County Line	Widen to 4 Lanes
125	SR 16	FCX	SR 15A Oakridge Avenue	Widen to 4 Lanes
126	SR 16	US 17	Shands Bridge	Widen to 4 Lanes
127	SR 21 Blanding Boulevard	SR 16	CR 215 Blanding Boulevard	Widen to 4 Lanes
128	Town Center Boulevard	US 17	CR 220 Doctors Inlet Road	Widen to 4 Lanes
129	US 17	CR 315	Town Center Boulevard	Widen to 6 Lanes
130	US 17	Orion Road	SR 16	Context Sensitive Solutions

Table 7.6: Adopted 2045 LRTP Needs Plan – Clay County

Map ID	Facility	From	To	Improvement Type
131	US 301/SR 200	Clay/Bradford County Line	Duval/Clay County Line	Widen to 6 Lanes
132	Wells Road	Aquarius Concourse	SR 21 Blanding Boulevard	Reconstruct and New 2 Lane Road
133	NS 1	Sandridge Road	CR 218 Extension	New Road, 2 Lanes

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Figure 7.10: 2045 Needs Plan Projects - Clay County

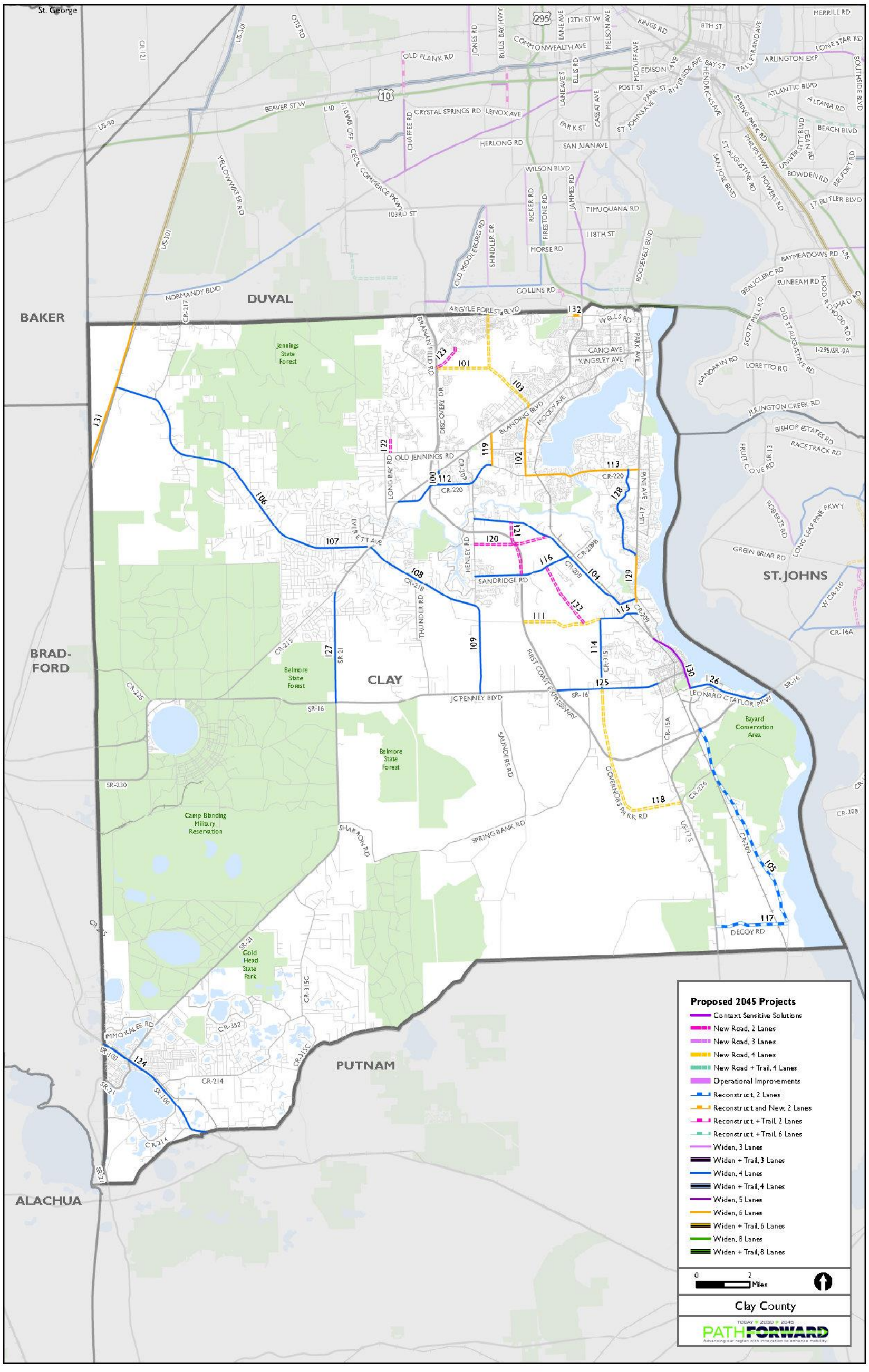

Figure 7.11: 2045 Needs Plan Projects - Clay County

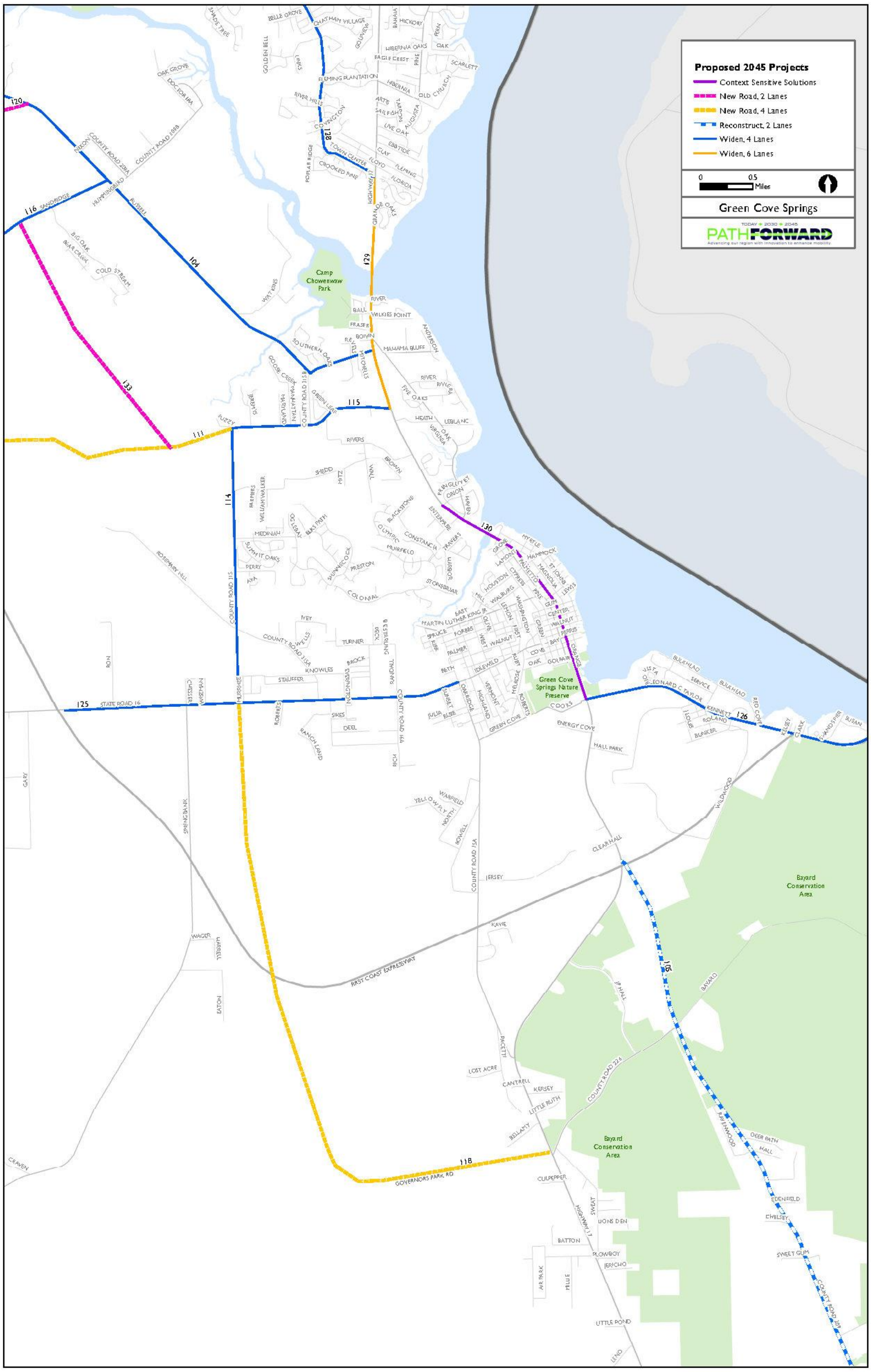

Table 7.7: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
200	Alta Drive	Heckscher Drive (SR 105)	I-295	Widen to 4 Lanes + Trail
201	Alta Drive Realignment	Zoo Parkway (SR 105)	North of New Berlin Road (south)	New 4 Lane Road + Trail
202	Alta Drive / Yellow Bluff Road	I-295	New Berlin Road (north)	Widen to 4 Lanes
203	Argyle Forest Boulevard	Old Middleburg Road	First Coast Expressway (SR 23)	Context Sensitive Solutions
204	Arlington Expressway (SR 115)	University Boulevard (SR 109)	Atlantic Boulevard (SR 10)	Context Sensitive Solutions
205	Arlington Expressway (SR 115)	at University Boulevard (SR 109)		Modify Interchange + Trail
206	Atlantic Boulevard (SR 10)	at Girvin Road		Intersection Improvements
207	Atlantic Boulevard (SR 10)	at Hodges Boulevard		Intersection Improvements
208	Atlantic Boulevard (SR 10)	at San Pablo Boulevard		Intersection Improvements
209	Baymeadows Road (SR 152)	I-95	Southside Boulevard (SR 115)	Context Sensitive Solutions
210	Baymeadows Road (SR 152)	Philips Highway (US 1 /SR 5)	I-95	Context Sensitive Solutions
211	Beaver Street (US 90)	First Coast Expressway (SR 23)	Cahoon Road	Widen to 4 Lanes + Trail
212	Beaver Street (US 90)	Cahoon Road	McDuff Avenue	Widen to 4 Lanes + Trail
213	Blanding Boulevard (SR 21)	at 103rd Street (SR 134)		Intersection Improvements
214	Blanding Boulevard (SR 21)	at Cedar Hills Boulevard		Intersection Improvements
215	Blanding Boulevard (SR 21)	at Collins Road		Intersection Improvements

Table 7.8: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
216	Blanding Boulevard (SR 21)	I-295	Wilson Boulevard	Widen to 6 Lanes
217	Braddock Parkway	Lem Turner Road (SR 115)	Pecan Park Road	New 2 Lane Road + Trail
218	Cahoon Road	Lenox Avenue	Beaver Street (US 90)	Reconstruct 2 Lanes + Trail
219	POW-MIA Parkway	First Coast Expressway (SR 23)	Commerce Center	New 2 Lane Road
220	Chaffee Road	Normandy Boulevard (SR 228)	Crystal Springs Road	Widen to 5 Lanes
221	Collins Road	Old Middleburg Road S	Shindler Drive	Widen to 4 Lanes
222	Collins Road	Shindler Drive	Rampart Road	Widen to 4 Lanes
223	Collins Road	at Roosevelt Boulevard (US 17)		New Interchange
224	Collins Road	Blanding Boulevard (SR 21)	Pine Verde	Widen to 4 Lanes
225	Collins Road Realignment	Pine Verde	Roosevelt Boulevard (US 17)	New Road/Interchange + Trail, 4 Lanes
226	Dunn Avenue (SR 104)	New Kings Road (US 1/SR 15)	I-295	Widen to 4 Lanes
227	Duval Road	I-295	Pecan Park Road	Context Sensitive Solutions
228	Duval Station Road	Main Street (US 17/SR 5)	Starratt Road	Widen to 4 Lanes + Trail
229	Eastport Road	Heckscher Drive (SR 105)	Pulaski Road	Widen to 3 Lanes + Trail
230	Florida Boulevard	Penman Road	Atlantic Boulevard (SR 10)	Widen to 3 Lanes + Trail
233	Harlow Boulevard	103rd Street (SR 134)	Lane Avenue	Widen to 3 Lanes

Table 7.9: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
234	Hartley Road	San Jose Boulevard (SR 13)	Old St. Augustine Road	Widen to 3 Lanes + Trail
235	Heckscher Drive/Zoo Parkway	I-295 Main Street (US 17/SR 5)	Blount Island Boulevard Ferry Entrance	Context Sensitive Solutions
236	I-10	at I-295		Modify Interchange
237	I-10	First Coast Expressway (SR 23)	I-295	Widen to 8 Lanes
238	I-10	I-295	I-95	Widen to 4 Lanes
239	I-10	Nassau/Duval County Line	US 301	Widen to 8 Lanes
240	I-10	US 301	First Coast Expressway (SR 23)	Widen to 8 Lanes
241	I-295	103rd Street (SR 134)	I-10	Widen to 8 Lanes
242	I-295	at Roosevelt Boulevard (US 17)		Modify Interchange
243	I-295	I-10	South of New Kings Road (US 1)	Widen to 8 Lanes
244	I-295	I-95	SR 9B	Widen to 8 Lanes
245	I-295	I-95 North	Dames Point Bridge/Heckscher Drive	Widen to 8 Lanes
246	I-295	I-95 South	San Jose Boulevard (SR 13)	Widen to 8 Lanes
248	I-295	New Kings Road (US 1)	North of Trout River	Widen to 8 Lanes
249	I-295	North of Trout River	I-95	Widen to 8 Lanes
250	I-295	Roosevelt Boulevard (US 17)	103rd Street (SR 134)	Widen to 8 Lanes

Table 7.10: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
251	I-295	San Jose Boulevard (SR 13)	W of Roosevelt Boulevard (US 17)	Widen to 8 Lanes + Trail
252	I-295	J. T. Butler Boulevard (SR 202)	Southside Connector (SR 113)	Widen to 8 Lanes
253	I-95	Airport Road (SR 102)	Duval/Nassau County Line	Widen to 6 Lanes
254	I-95	at Airport Road (SR 102)		Modify Interchange
255	I-95	at MLK (US 1/SR 15)		Modify Interchange
256	I-95	at Southside Boulevard (SR 115)		Modify Interchange
257	I-95	Dunn Avenue (SR 104)	Airport Road (SR 102)	Widen to 8 Lanes
258	I-95	Duval/St. John's County Line	I-295	Widen to 8 Lanes
259	I-95	I-295	J. T. Butler Boulevard (SR 202)	Widen to 8 Lanes
260	I-95	J. T. Butler Boulevard (SR 202)	Atlantic Boulevard (SR 10)	Widen to 8 Lanes
261	I-95	North of Fuller Warren Bridge	Dunn Avenue (SR 104)	Widen to 8 Lanes
262	Jones Road	Pritchard Road	Beaver Street (US 90)	Operational Improvements
263	Kernan Boulevard	Atlantic Boulevard (SR 10)	McCormick Road (SR 116)	Context Sensitive Solutions
264	Kernan Boulevard	J. T. Butler Boulevard (SR 202)	Glen Kernan Parkway	Context Sensitive Solutions
265	Lem Turner Road (SR 115)	I-295	Nassau County Line	Widen to 4 Lanes + Trail
266	Lem Turner Road (SR 115)	I-295	Golfair Boulevard	Context Sensitive Solutions

Table 7.11: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
267	Main Street (US 17)	at Eastport Road		New Interchange + Trail
268	Main Street (US 17)	I-295	New Berlin Road	Widen to 4 Lanes + Trail
269	Main Street (US 17)	New Berlin Road	Pecan Park Road	Widen to 4 Lanes + Trail
270	Main Street (US 17)	Pecan Park Road	Nassau/Duval County Line	Widen to 4 Lanes + Trail
271	Mayport Road (SR 101)	at Wonderwood Drive (SR 116)		Intersection Improvements + Trail
272	Mayport Road (SR 101)	Wonderwood Drive (SR 116)/SR A1A	Mayport Main Gate	Context Sensitive Solutions
273	McDuff Avenue / 5th Street	Melson Avenue	Huron Street	Widen to 3 Lanes
274	Merrill Road	Hartsfield Road	Southside Connector (SR 113)	Context Sensitive Solutions
275	Monument Road	I-295	Tredinick Parkway	Context Sensitive Solutions
276	Monument Road	Lee Road	I-295	Context Sensitive Solutions
277	New Berlin Road	Pulaski Road	Yellow Bluff Road	Widen to 4 Lanes + Trail
278	New Berlin Road	Yellow Bluff Road	Cedar Point Road	Widen to 3 Lanes + Trail
279	New Kings Road (US 1/SR 15)	Edgewood Avenue (SR 111)	I-295	Context Sensitive Solutions
280	New Kings Road (US 1/SR 15)	I-295	Old Kings Road	Context Sensitive Solutions
281	New Road A	Valley Ridge Boulevard	9B (E-Town Boulevard)	New 4 Lane Road + Trail
282	New Road B	Valley Ridge Boulevard	SR 202 J Turner Butler Boulevard	New 4 Lane Road + Trail

Table 7.12: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
283	New Road C	Pecan Park Road	Woodwings Road	New 2 Lane Road + Trail
285	New World Avenue (POW-MIA Parkway)	Chaffee Road	First Coast Expressway (SR 23)	Widen to 4 Lanes + Trail
286	Norfolk Southern Railroad Overpass	West 12th Street	New Kings Road (US 23)	New 3 Lane Road / Bridge + Trail
287	Normandy Boulevard (SR 228)	First Coast Expressway (SR 23)	Cassat Avenue (SR 111)	Context Sensitive Solutions
288	Normandy Boulevard (SR 228)	US 301	Bell Road (Equestrian Park)	Widen to 4 Lanes
290	Old Kings Road	Edgewood Avenue (SR 111)	Plummer Road	Context Sensitive Solutions (Bike/Ped Overpass)
291	Old Middleburg Road	103rd Street (SR 134)	Argyle Forest Boulevard	Widen to 4 Lanes + Trail
292	Old St. Augustine Road	at Greenland Road		Intersection Improvements / Add 1 Lane
293	Old St. Augustine Road	Bartram Park Boulevard	Phillips Highway (US 1/SR 5)	Widen to 6 Lanes and Overpass + Trail
294	Parramore Road Extension	Youngerman Circle	Collins Road	New 2 Lane Road
295	Pecan Park Road	Braddock Boulevard	JIA North Access Road	Widen to 4 Lanes + Trail
296	Pecan Park Road	I-95	Main Street (US 17)	Widen to 4 Lanes + Trail
297	Philips Highway (US 1/SR 5)	I-95 at the Avenues	J. T. Butler Boulevard (SR 202)	Widen to 6 Lanes + Trail
298	Philips Highway (US 1/SR 5)	J. T. Butler Boulevard (SR 202)	Emerson Street (SR 126)	Widen to 6 Lanes + Trail
299	Philips Highway (US 1/SR 5)	Nocatee Parkway / Racetrack Road	SR 9B	Widen to 6 Lanes + Trail
2000	Philips Highway (US 1/SR 5)	SR 9B	I-295	Widen to 6 Lanes + Trail

Table 7.13: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
2001	Pulaski Road	Eastport Road	I-295	Widen to 4 Lanes + Trail
2002	Pulaski Road / Starratt Road	I-295	Duval Station Road	Widen to 4 Lanes + Trail
2003	Ramona Boulevard	Hammond Boulevard	Cahoon Road South	Widen to 5 Lanes
2004	Rampart / Firestone Road	Collins Road	103rd Street (SR 134)	Widen to 4 Lanes
2005	Ricker Road	Morse Avenue	Old Middleburg Road	Widen to 3 Lanes
2007	San Pablo Road	Beach Boulevard (US 90)	Atlantic Boulevard (SR 10)	Widen to 3 Lanes
2008	Shindler Drive	Collins Road	103rd Street (SR 134)	Widen to 3 Lanes
2009	Southside Boulevard (SR 115)	at Atlantic Boulevard (SR 10)		Intersection Improvements + Trail
2010	Southside Boulevard (SR 115)	at Baymeadows Road (SR 152)		Construct a continuous flow intersection
2011	Southside Boulevard (SR 115)	at J. T. Butler Boulevard (SR 202)		Modify Interchange + Trail
2012	Southside Boulevard (SR 115)	Beach Boulevard (US 90)	Atlantic Boulevard (SR 10)	Widen to 6 Lanes
2014	Southside Boulevard (SR 115)	J. T. Butler Boulevard (SR 202)	Beach Boulevard (US 90)	Widen to 6 Lanes
2015	Southside Boulevard (SR 115)	Philips Highway (US 1/SR 5)	I-95 Ramps	Widen to 6 Lanes
2016	SR 9B	Philips Highway (US 1/SR 5)	I-295	Widen to 6 Lanes
2017	SR 9B	Phillips Highway (US 1)	I-295	Widen to 6 Lanes
2018	SR A1A	Wonderwood Drive (SR 116)	Naval Station Mayport North Gate	Widen to 4 Lanes + Trail, Bridge Replacement

Table 7.14: 2045 Adopted LRTP Needs Plan - Duval County

Map ID	Facility	From	To	Improvement Type
2019	St Johns River Ferry (SR A1A)			Ferry Slip Replacement
2020	Starratt Road	Duval Station Road	Yellow Bluff Road	Widen to 4 Lanes + Trail
2021	Touchton Road	Belfort Road	Southside Boulevard (SR 115)	Widen to 4 Lanes + Trail
2022	Trout River Boulevard	Old Kings Road	New Kings Road (US 23)	Widen to 4 Lanes + Trail
2023	US 301 (SR 200)	Duval/Clay County Line	I-10	Widen to 6 Lanes + Trail
2024	US 301 (SR 200)	South of Baldwin	North of Baldwin	Widen to 4 Lanes + Trail
2025	US 301 (SR 200)	US 90	Duval/Nassau County Line	Widen to 4 Lanes + Trail
2026	Yellow Bluff Road	Starratt Road	New Berlin Road (north)	Context Sensitive Solutions
2027	Cecil Connector Road Extension	Branan Field Road	Aviation Avenue	New 4 Lane Road + Trail
2028	SR A1A	Atlantic Boulevard (SR 10)	Wonderwood Drive (SR 116)	Reconstruct + Trail
2029	Penman Road	Beach Boulevard (SR 212)	Atlantic Boulevard (SR 10)	Reconstruct + Trail
2030	Penman Road	At Florida Avenue/Forest Avenue		Intersection Improvements + Trail
2031	Chaffee Road	I-10	Old Plank Road	Reconstruct + Trail 2 Lanes
2032	Beach Boulevard (SR 212)	St. Johns Bluff Road	Atlantic Boulevard (SR 10)	Reconstruct + Trail
2033	US 17 Bridge	Nassau County Line		Bridge Improvements
2034	J Turner Butler Boulevard	Southside Boulevard	Hodges Boulevard	Add Eastbound General Purpose Lane
2035	Mathews Bridge			Bridge Replacement

Figure 7.12: 2045 Needs Plan Projects - Duval County

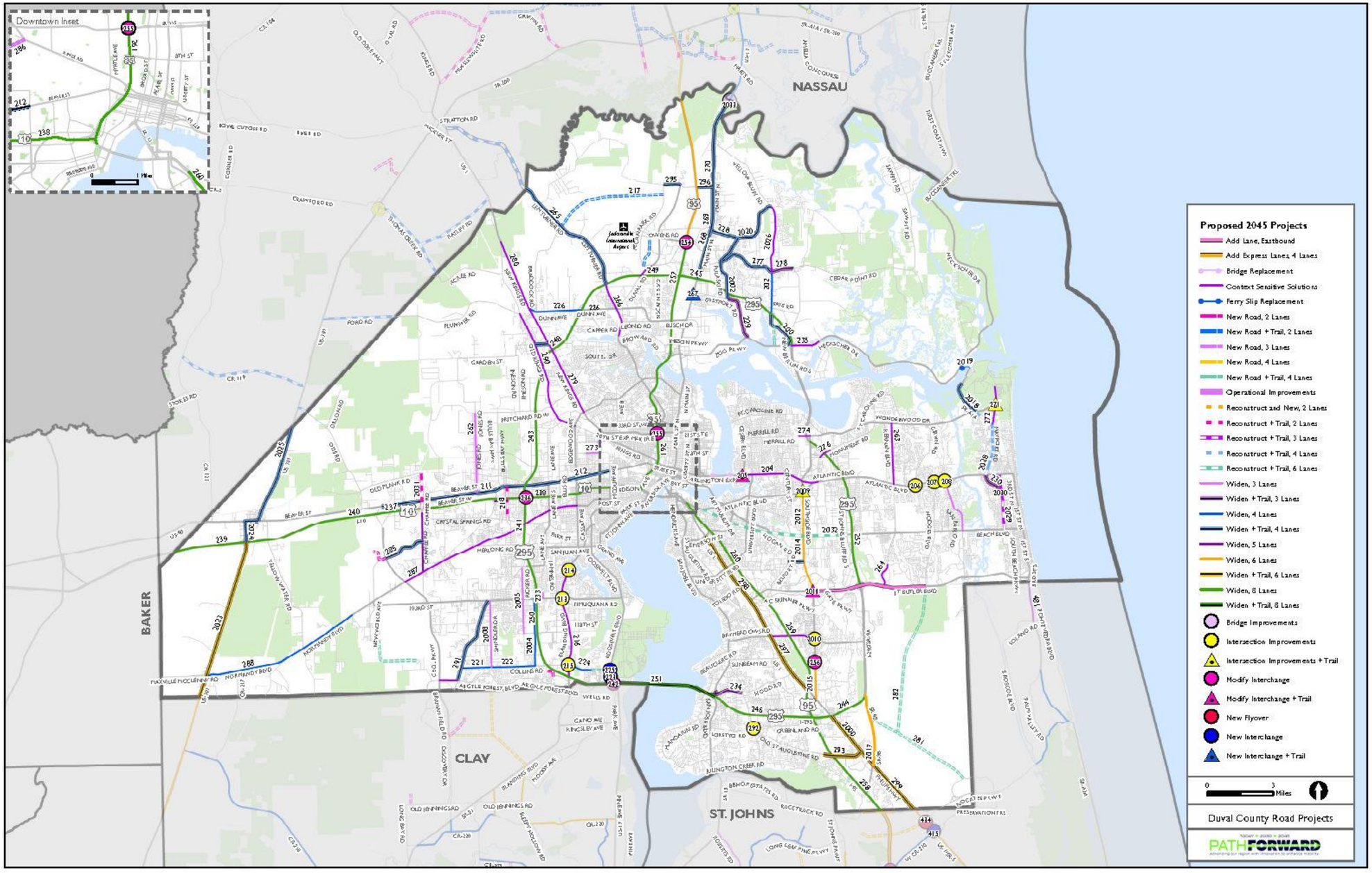

Figure 7.13: 2045 Needs Plan Projects - Duval County

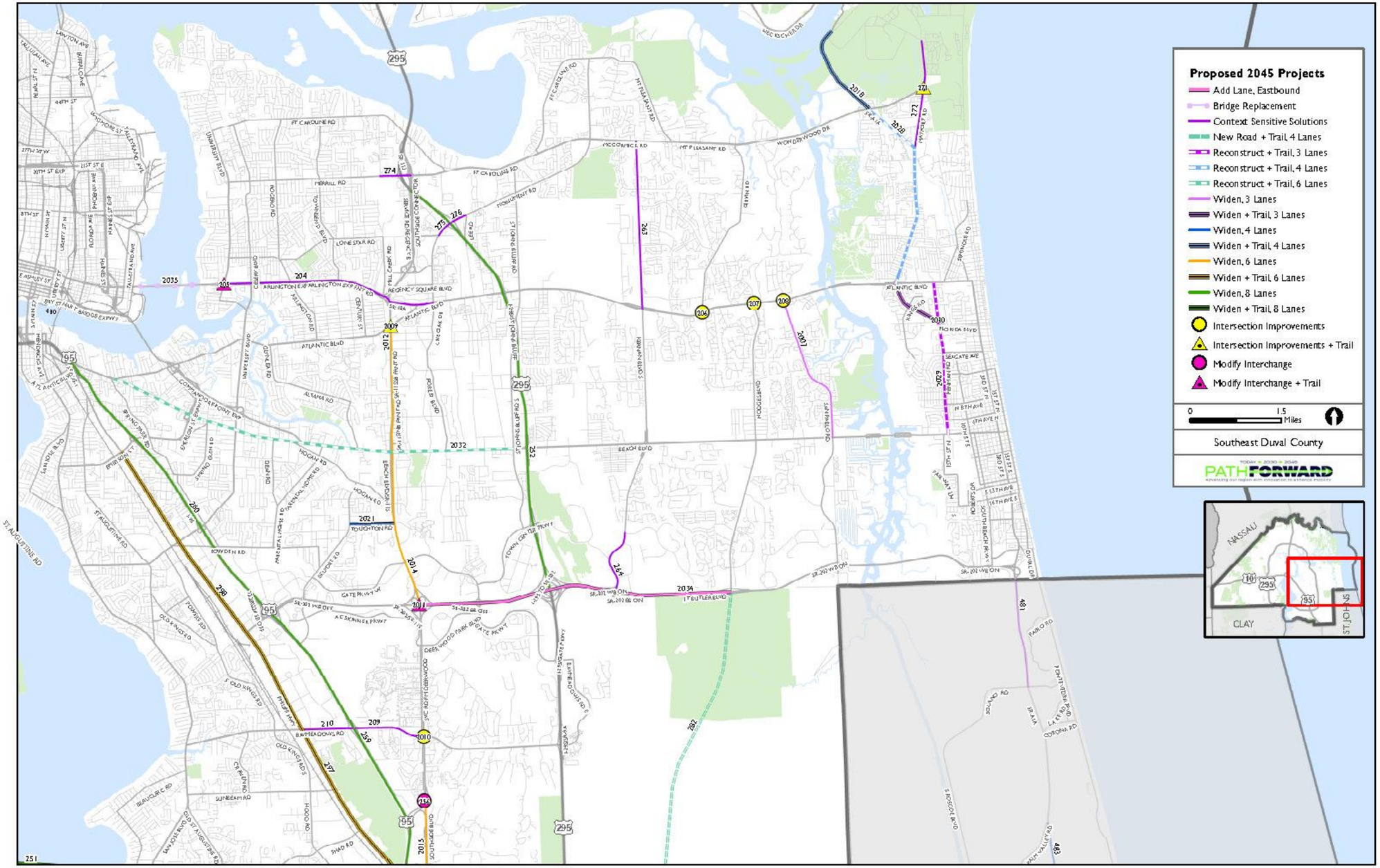

Figure 7.14: 2045 Needs Plan Projects - Duval County

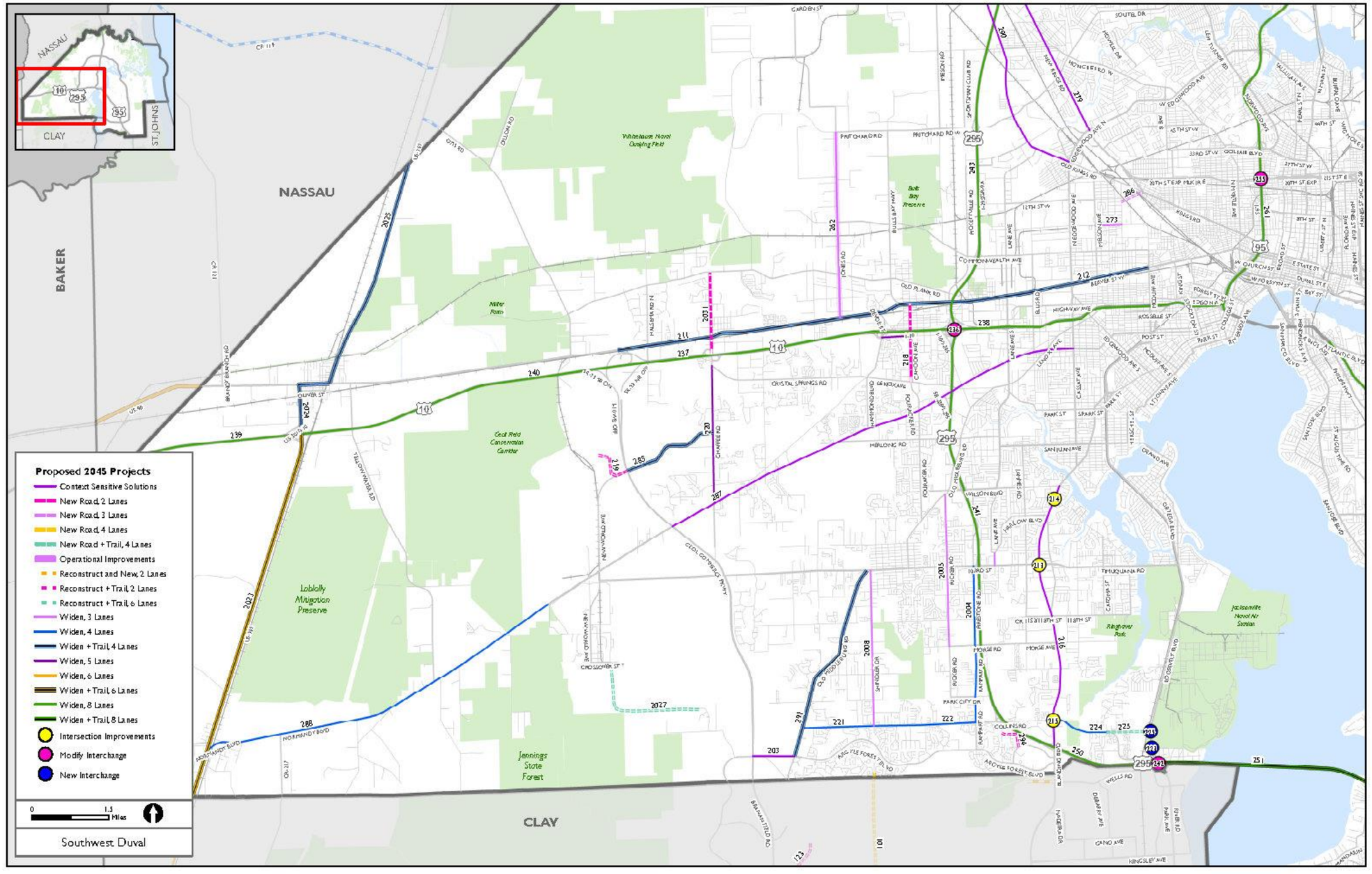

Figure 7.15: 2045 Needs Plan Projects - Duval County

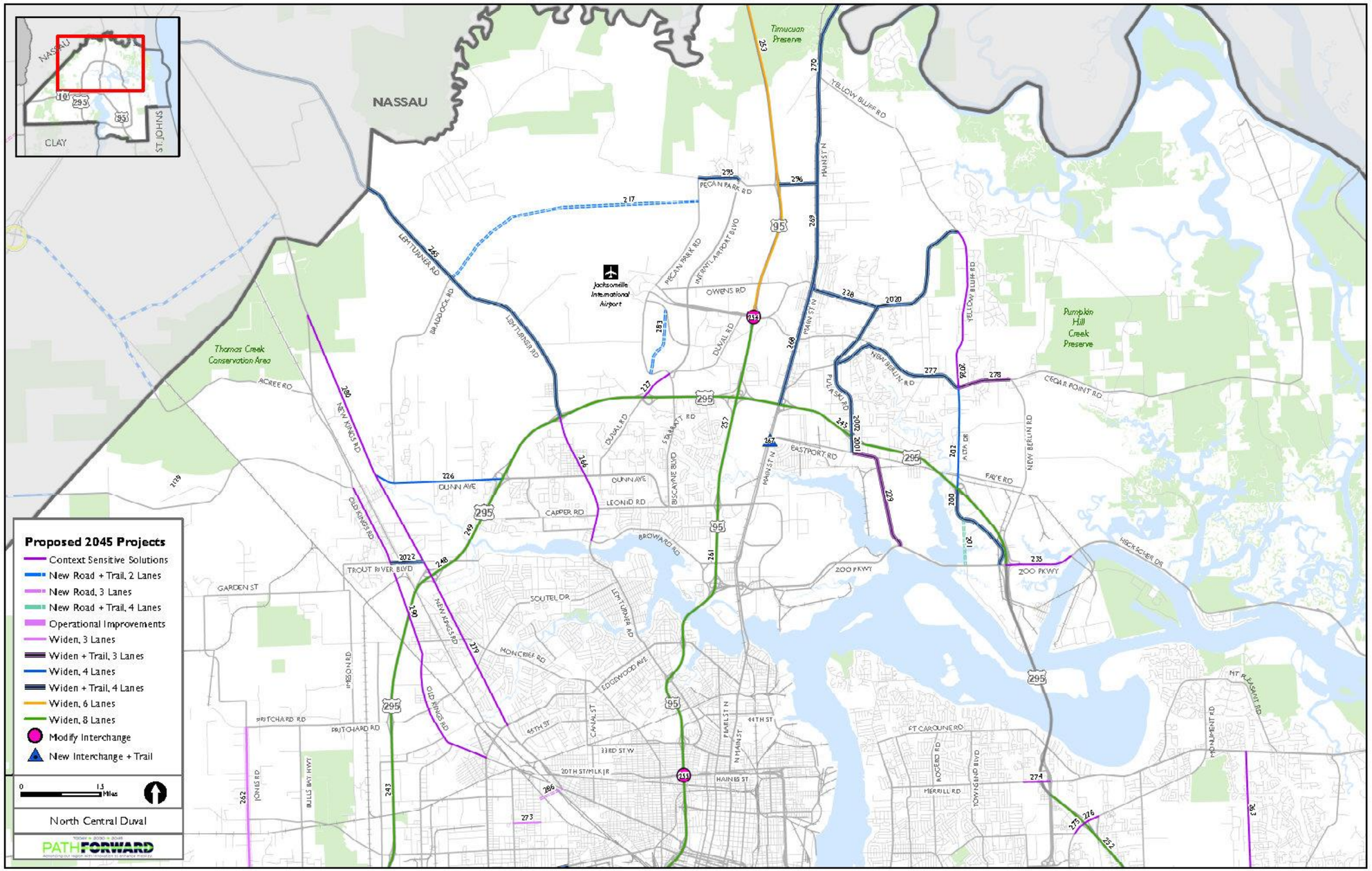

Table 7.15: Adopted 2045 LRTP Needs Plan Projects - Nassau County

Map ID	Facility	From	To	Improvement
300	14th Street	Sadler Road	A1A/200/Atlantic Avenue	Reconstruct
301	Amelia Concourse (ex)	Frank Ward Road	Old Nassauville Road	New Road + Trail
302	Amelia Concourse Ex P2	SR 200	Frank Ward Road	New Road + Trail
303	Amelia Island Parkway	at Buccaneer Trail		Intersection Improvements
304	US 17	at Pages Dairy Road		Intersection Improvements
305	Chester Road	Pages Dairy Road	Green Pine Road	Widen
306	Clyde Higginbotham Road	Harvester Street	Harts Road	Reconstruct + Trail
307	CR-107	Amelia Concourse	SR 200	Widen
308	CR-108	US 1/SR 23/US 17	US 17	Reconstruct + Trail
309	CR-108 Extension	US 17	Chester Road	New Road + Trail
310	CR-119 (OTIS Rd)	CR 121	US 301	Reconstruct
311	Crawford Road	at CR 121		Intersection Improvements
312	Edwards Road	Easy Street	SR 200	Reconstruct + Trail
313	Edwards Road (ex)	SR 200	New Road X	New Road + Trail
314	Felmor Road	Pages Dairy Road	SR 200	Reconstruct
315	Felmor Road	School	SR 200	Reconstruct

Table 7.16: Adopted 2045 LRTP Needs Plan Projects - Nassau County

Map ID	Facility	From	To	Improvement
316	Ford Road	US 301/SR 200	Duval County Line	Reconstruct
317	Griffin Road	Griffin Road (Bend)	SR 200	Reconstruct + Trail
318	Harper Chapel Road	SR 200	New Road X	Reconstruct and New
319	Harvester Street	William Burgess Boulevard	Harvester Street (Bend)	Reconstruct + Trail
320	Kings Ferry Road	CR 108	Kolars Ferry Road	Reconstruct
321	Lem Turner	US 1/SR 15	Duval County Line	Reconstruct
322	Mentoria Road	SR 200/Buccaneer Trail	Harvester Street	New Road + Trail
323	Musslewhite Road	US 1/New Kings Road	Griffin Road	Reconstruct + Trail
324	New Road X	William Burgess Boulevard	Mentoria Road	New Road + Trail
325	New Road X	Middle Road/Griffin Road	I-95	New Road + Trail
326	New Road X	William Burgess Boulevard	New Road X	New Road + Trail
327	New Bridge X	Semper FI Drive	Mentoria Road	New Bridge + Trail
328	Cardinal Road	SR 200	William Burgess Boulevard	New Road + Trail
329	New Interchange X	I-95	New Road X	New Interchange
330	New Interchange Road East	I-95	US 1	New Road + Trail
331	Old Baldwin Road	Old Baldwin Road	Sandy Ford Road	New Road

Table 7.17: Adopted 2045 LRTP Needs Plan Projects - Nassau County

Map ID	Facility	From	To	Improvement
332	Pages Dairy Rd (ex)	Chester Road	Blackrock Road	New Road + Trail
333	Pages Dairy Road	US 17	Chester Road	Widen + Trail
334	Pages Dairy Road	at Chester Road		Intersection Improvements
335	Pratt Siding Road	Old Dixie Highway	US 1	New Road
336	Ratliff Road	Thomas Creek Road	US 1	Reconstruct
337	Sauls Road	US 1	Musselwhite Road	New Road
338	Semper Fi	Semper Fi Ext	Johnson Lake Road	Reconstruct + Trail
339	Semper Fi (ex)	SR 200	Semper Fi Drive	New Road + Trail
340	Sundberg Rd	CR 121	Andrews Road	New Road
341	Thomas Creek Road	US 301	Duval County Line	Reconstruct
342	US-17	CR 108	Duval County Line	Widen
343	Wildewood Connection to Edward Rd	Edwards Road Ext	SR 200	New Road + Trail
344	William Bugess Blvd (redev)	SR 200	US 17	Reconstruct
345	William Burgess	at Harts Road		Intersection Improvements
346	William Burgess Blvd (ex ph 2)	Miner Road	Hampton Club Way	New Road + Trail

Table 7.18: Adopted 2045 LRTP Needs Plan Projects - Nassau County

Map ID	Facility	From	To	Improvement
347	William Burgess Blvd (ex)	US 17	Miner Road	New Road + Trail
348	I-10	Baker County Line	Duval County Line	Widen
349	I-95	Duval County Line	SR 200 (A1A)	Widen

Figure 7.16: 2045 Needs Plan Projects - Nassau County

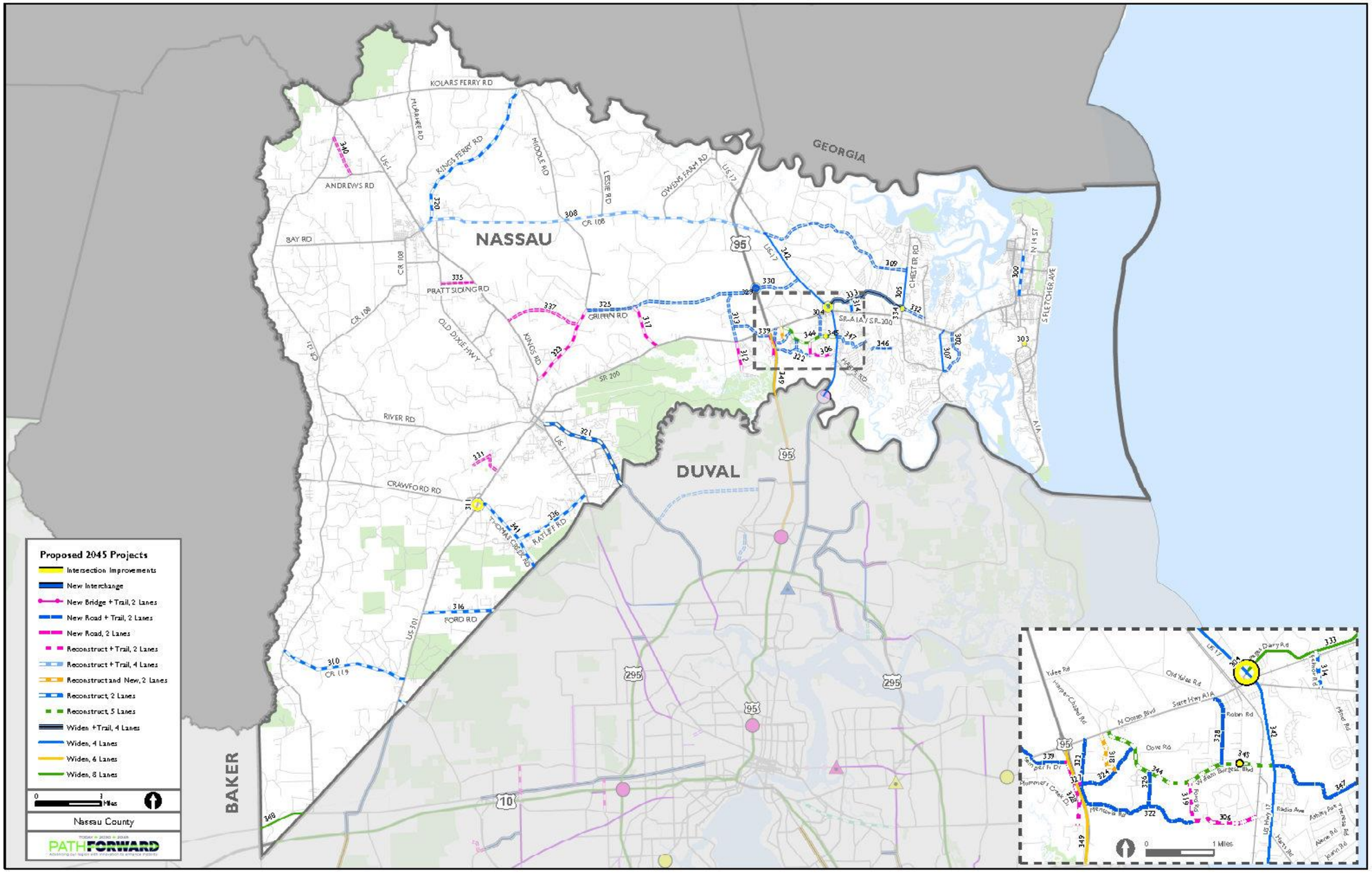

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Table 7.19: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
400	Aerial Tramway	East Parking Garage	West Parking Garage	Aerial Tramway
401	Anastasia Boulevard (A1A)	N St. Augustine Boulevard	Comares Avenue	Multimodal Way
402	Anastasia Boulevard (A1A)	Comares Avenue	Red Cox Road	Multimodal Way
403	Big Oak Road	Dixie Highway (US 1/SR 5)	SR 313	New 4 Lane Road
404	Big Oak Road	at I-95		New Interchange
405	Big Oak Road Extension	SR 313	I-95	New 4 Lane Road
406	Bridge Street	Avenida Menendez	Riberia Street	Complete Street
407	Carrera Street	Cordova Street	North Ponce De Leon Blvd (US 1)	Complete Street
408	Cathedral Place	Avenida Menendez (A1A)	Cordova Street	Shared Street
409	Charlotte Street	King Street	S Castillo Drive	Shared Street
410	Cordova Street	King Street	Orange Street	Complete Street
411	Cordova Street	King Street	St. Francis Street	Complete Street
412	CR 16A	SR 16 Connector	SR 13	Widen to 4 Lanes
413	CR 210	I-95	near US 1	Widen to 6 Lanes
414	CR 210	Cimarrone Road	Greenbriar Road	Widen to 4 Lanes

Table 7.20: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
415	CR 210	at US 1/SR 5		New Interchange
416	CR 210 W	Greenbriar Road	Longleaf Pine Parkway	Widen to 4 Lanes
417	CR 214	US 1	Holmes Boulevard	Widen to 3 Lanes
418	CR 2209	at CR 210		New Interchange
419	CR 2209	SR 16 Connector	International Golf Parkway	New 4 Lane Road
420	CR 2209	International Golf Parkway	SR 16	New 4 Lane Road
421	CR 2209	SR 16	CR 208	New 4 Lane Road
422	CR 2209	CR 208	CR 214	New 4 Lane Road
423	CR 2209	CR 214	SR 207/CR 305	New 4 Lane Road
424	CR 305	SR 207	SR 206	Widen to 4 Lanes
425	CR 305	SR 206	CR 204	New 4 Lane Road
426	Cuna Street	Avenida Menendez (A1A)	Charlotte Street	Shared Street
427	Cuna Street	Charlotte Street	Cordova Street	Shared Street
428	Leonardi Street	King Street	South Dixie Highway	Shared Street
429	Dixie Highway (US 1/SR 5)	SR 206	Lewis Point Road	Widen to 6 Lanes

Table 7.21: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
430	Dixie Highway (US 1/SR 5)	SR 313	International Golf Parkway	Widen to 6 Lanes
431	Dixie Highway (US 1/SR 5)	International Golf Parkway	Racetrack Road	Widen to 6 Lanes
432	Dixie Highway / Pellicer Lane	West of King Street (CR 214)	SR 207	Context Sensitive Solutions
433	Durbin Parkway	9B Extension	Nocatee Parkway	New 4 Lane Road
434	Durbin Parkway	at Dixie Highway (US 1/SR 5)		New Flyover
435	East Garage	Anastasia Blvd & Comares Avenue Vicinty		Parking Garage
436	Holmes Boulevard	CR 214	Four Mile Road	Widen to 6 Lanes
437	Hypolita Street	Avenida Menendez (A1A)	North Ponce De Leon Blvd (US 1)	Shared Street
438	I-95	at Ponce De Leon Boulevard (US 1/SR 5)		Modify Interchange
439	I-95	at SR 206		Modify Interchange
440	I-95	St. Johns/Flagler County Line	SR 206	Add 4 Express Lanes
441	I-95	SR 206	International Golf Parkway	Add 4 Express Lanes
442	I-95	at CR 210		Modify Interchange
443	I-95	International Golf Parkway	St. Johns/Duval County Line	Add 4 Express Lanes
445	International Golf Parkway	SR 16	I-95	Widen to 6 Lanes

Table 7.22: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
446	King Street	Avenida Menendez (A1A)	N Rodriquez Street	Multimodal Way
447	Longleaf Pine Parkway	CR 210	Roberts Road	Widen to 4 Lanes
448	Mickler Road	Palm Valley Road	SR A1A	Widen to 4 Lanes
449	ML King Ave	King Street	South Street	Complete Street
450	North Garage	Florida East Coast Rail / TOD Vicinity		Parking Garage
451	North San Sebastian Bridge	Charles Usinas Memorial Hwy (SR 16)	North Ponce De Leon Boulevard (US 1)	New Multimodal Bridge
452	Old Moultrie Road	SR 207	SR 312	Multimodal Improvements
453	Old Moultrie Road	SR 312	US 1	Widen to 3 Lanes
454	Orange Street	Avenida Menendez (A1A)	North Ponce De Leon Boulevard (US 1)	Complete Street
455	Palm Valley Road	Intracoastal Waterway	Mickler Road	Widen to 4 Lanes
456	Park & Ride	SR 312 @ Anastasia Blvd		Park & Ride Station
457	Pedestrian Crossing	The Amp		Pedestrian Crossing
458	Racetrack Road	Bartram Park Boulevard	Bartram Springs	Widen to 6 Lanes
459	Roberts Road	SR 13	Longleaf Pine Parkway	Widen to 3 Lanes
460	San Marco Avenue	May Street (A1A)	Rambla Street	Multimodal Way

Table 7.23: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
461	San Marco Avenue (A1A)	W Castillo Drive	May Street (A1A)	Multimodal Way
463	San Sebastian Riverwalk	King Street	Ice Plant Road	Riverwalk
464	San Sebastian Riverwalk	Ice Plant Road	Matanzas River	Riverwalk
465	Shearwater Parkway	CR 210	CR 16A	New Road, 2 Lanes
466	South Dixie Highway	SR 16	King Street	Context Sensitive Solutions
467	South Garage	Ice Plant Road Vicinity		Parking Garage
468	Spanish Street	Cuna Street	Orange Street	Shared Street
469	SR 16	I-95	SR 313	Widen to 6 Lanes
470	SR 16	International Golf Parkway	South Francis Road	Widen to 4 Lanes
471	SR 16	South Francis Road	Outlet Mall (CR 208)	Widen to 4 Lanes
472	SR 206	I-95	Dixie Highway (US 1)	Widen to 4 Lanes
473	SR 206	Dixie Highway (US 1/SR 5)	SR A1A	Widen to 4 Lanes
474	SR 207	I-95	South Holmes Boulevard	Widen to 6 Lanes
475	SR 207	Holmes Boulevard	SR 312	Widen to 6 Lanes
476	SR 312	Anastasia Blvd (A1A)	Matanzas River	Protected Bike Lane
477	SR 312	US 1		New Interchange

Table 7.24: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
478	SR 313	SR 207	SR 16	New 4 Lane Road
479	SR 313	SR 16	Dixie Highway (US 1)	New 4 Lane Road
480	SR 313	at Dixie Highway (US 1/SR 5)		New Interchange
481	SR A1A	Solano Road	Duval County Line	Context Sensitive Solutions
482	SR A1A	at Red Cox/Coquina Rd		Intersection Improvements
483	SR A1A	Mickler Road	Palm Valley Road	Widen to 4 Lanes
484	St. Francis Street	Avenida Menendez	Cordova Street	Shared Street
485	St. George Street	Cordova Street	South Street	Shared Street
486	St. Johns Parkway	CR 2209	9B Extension	Widen to 6 Lanes
487	US 1	San Sebastian View	Lewis Speedway	Protected Bike Lane
488	US 1	King Street	Charles Usinas Memorial Hwy (SR 16)	Protected Bike Lane
489	US 1	Charles Usinas Memorial Hwy (SR 16)	San Sebastian View	Protected Bike Lane
490	Veterans Parkway	Greenbriar Road	Longleaf Pine Parkway	New 4 Lane Road
491	Veterans Parkway	Longleaf Pine Parkway	4-laned segment	Widen, 4 lanes
492	Vilano Parkway/A1A	Vilano Parkway/A1A		Intersection Improvements
493	Water Taxi Docks	Various Locations		Water Taxi Docks
494	West Castillo Drive	San Marco Avenue (A1A)	North Ponce De Leon Boulevard (US 1)	Widen to four lanes

Table 7.25: Adopted 2045 Needs Plan Projects - St. Johns County

Map ID	Facility	From	To	Improvement Type
495	West Garage	Kings St & SR 207 Vicinity		Parking Garage
497	Granada Street	King Street	Bridge Street	Complete Street
498	Anastasia Boulevard (A1A)	Red Cox Avenue	SR 312	Protected Bike Lane/Cycle Track
499	I-95	at CR 214		New Interchange

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Figure 7.17: 2045 Needs Plan Projects - St. Johns County

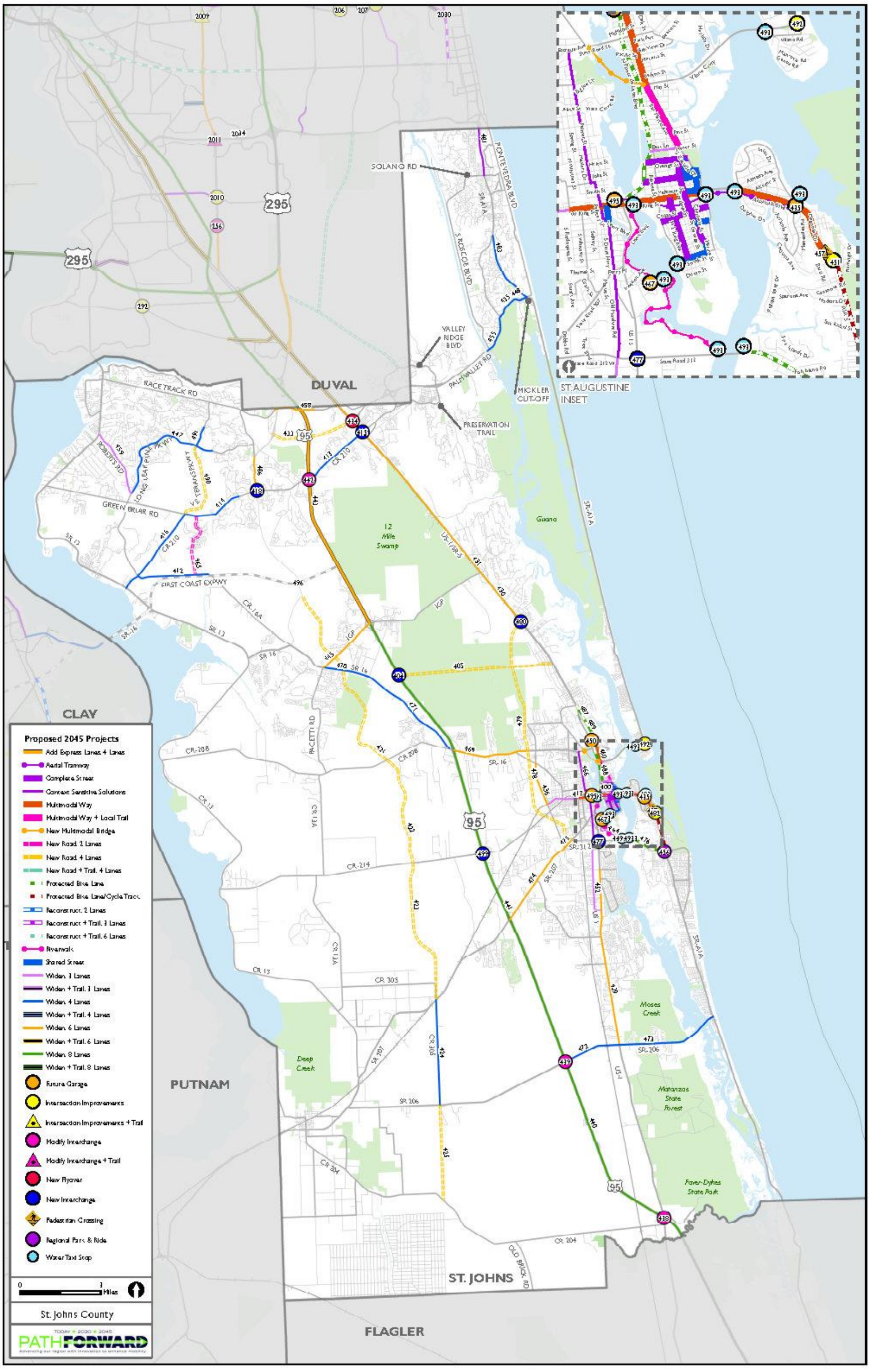

Figure 7.18: 2045 Needs Plan Projects - St. Johns County

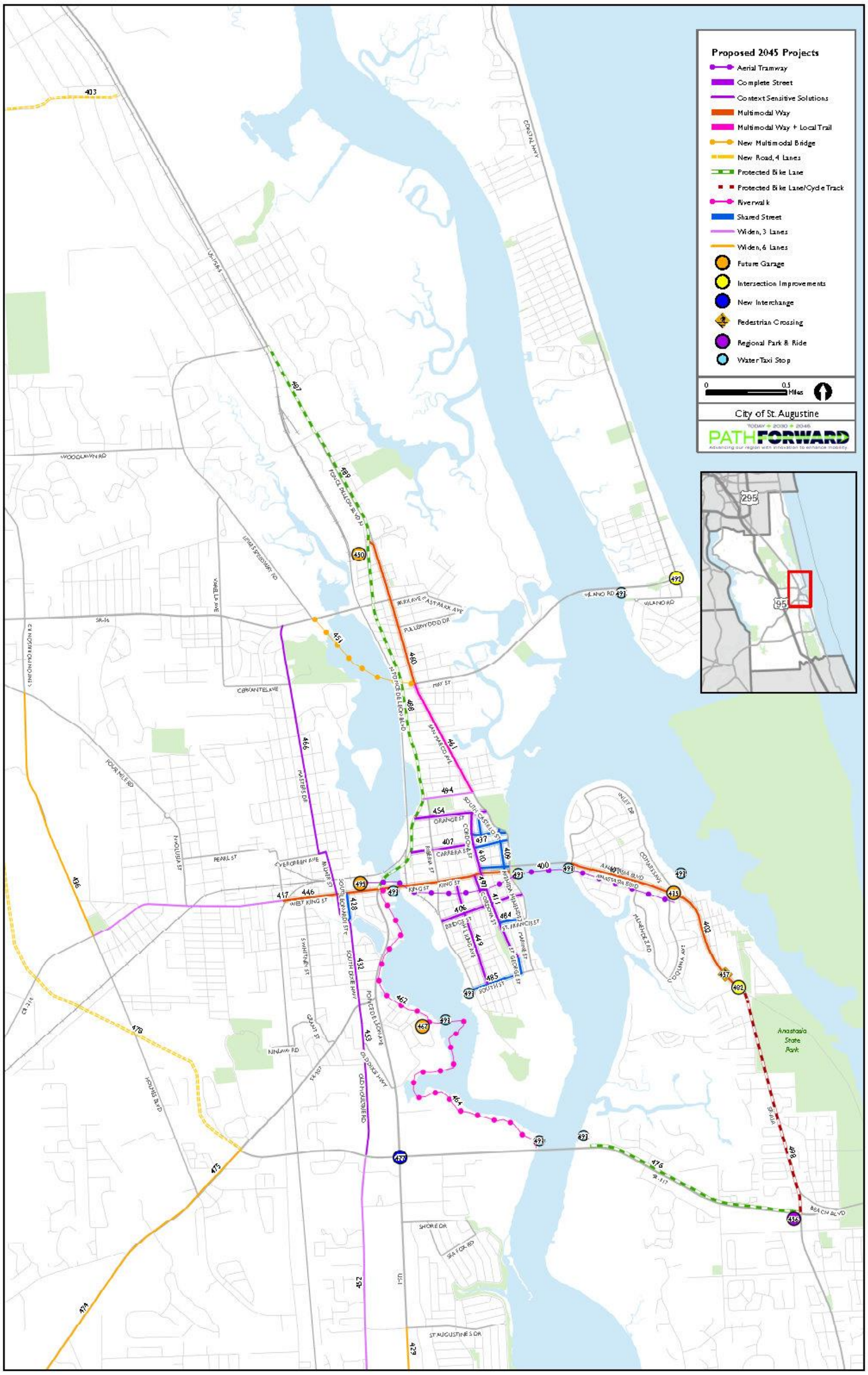

Table 7.26: Adopted 2045 Needs Plan Projects – Transit

Map ID	County	Facility	From	To	Improvement Type
600	Duval	Mayport Ferry	A1A	A1A	Additional Ferry; increase frequency by 50%
601	Duval	Water Taxi & Bike/Ped Bridge	The District	Shipyard Development	New Water Taxi Service & Bike/Ped Bridge
602	Duval	U2C	Central	Brooklyn/Five Points	U2C Service
603	Duval	U2C	Central	Springfield	U2C Service
604	Duval	U2C	Kings Avenue	San Marco	U2C Service
605	Duval/Nassau	North Commuter Rail	Downtown Jacksonville	Yulee	Commuter Rail
606	Duval	Express Bus	NS Rail on Main	JIA	Express Bus Service
607	Clay/Duval	SW Commuter Rail	Downtown Jacksonville	Wells Road	Commuter Rail
608	Clay/St. Johns	Shands Bus Service	Clay County	St. Johns County	Bus Service
615	Duval	Arlington BRT Line	Downtown Jacksonville	Arlington	Bus Rapid Transit
616	Duval	Atlantic BRT Line	Downtown Jacksonville	Beaches/Ponte Vedra	Bus Rapid Transit
617	Duval	103rd BRT Line	Cecil Field	Blanding Boulevard	Bus Rapid Transit
618	Duval	Edgewood BRT Line	New Kings Road	Downtown Jacksonville	Bus Rapid Transit
619	Duval	Normandy BRT Line	Cecil Field	Downtown Jacksonville	Bus Rapid Transit
620	Duval	Southside BRT Line	Regency Square Mall	Avenues Mall	Bus Rapid Transit
621	Clay	Clay County BRT Line	Orange Park Mall	Middleburg	Bus Rapid Transit

Table 7.27: Adopted 2045 Needs Plan Projects – Transit

Map ID	County	Facility	From	To	Improvement Type
622	Duval	Commonwealth/Cassat BRT Line	Cecil Field	Downtown Jacksonville	Bus Rapid Transit
623	Duval	Commonwealth/Lane BRT Line	Downtown Jacksonville	103rd Street	Bus Rapid Transit
625	Duval	Moncrief BRT Line	Busch Drive	Downtown Jacksonville	Bus Rapid Transit
627	Duval	North Main BRT Line	Florida State College North Campus	Downtown Jacksonville	Bus Rapid Transit
628	Duval	Post/Normandy BRT Line	Normandy Boulevard	Downtown Jacksonville	Bus Rapid Transit
630	Duval	St. Augustine/San Jose BRT Line	Downtown Jacksonville	Mandarin	Bus Rapid Transit
631	Duval	University BRT Line	Jacksonville University	St. Augustine Road	Bus Rapid Transit
635	Duval/St. Johns	SE Commuter Rail	Downtown Jacksonville	St. Augustine	Commuter Rail
636	St. Johns	Intermodal Transfer Facility	St. Augustine Airport		Intermodal Transfer Facility

Figure 7.19: 2045 Needs Plan Projects - Transit

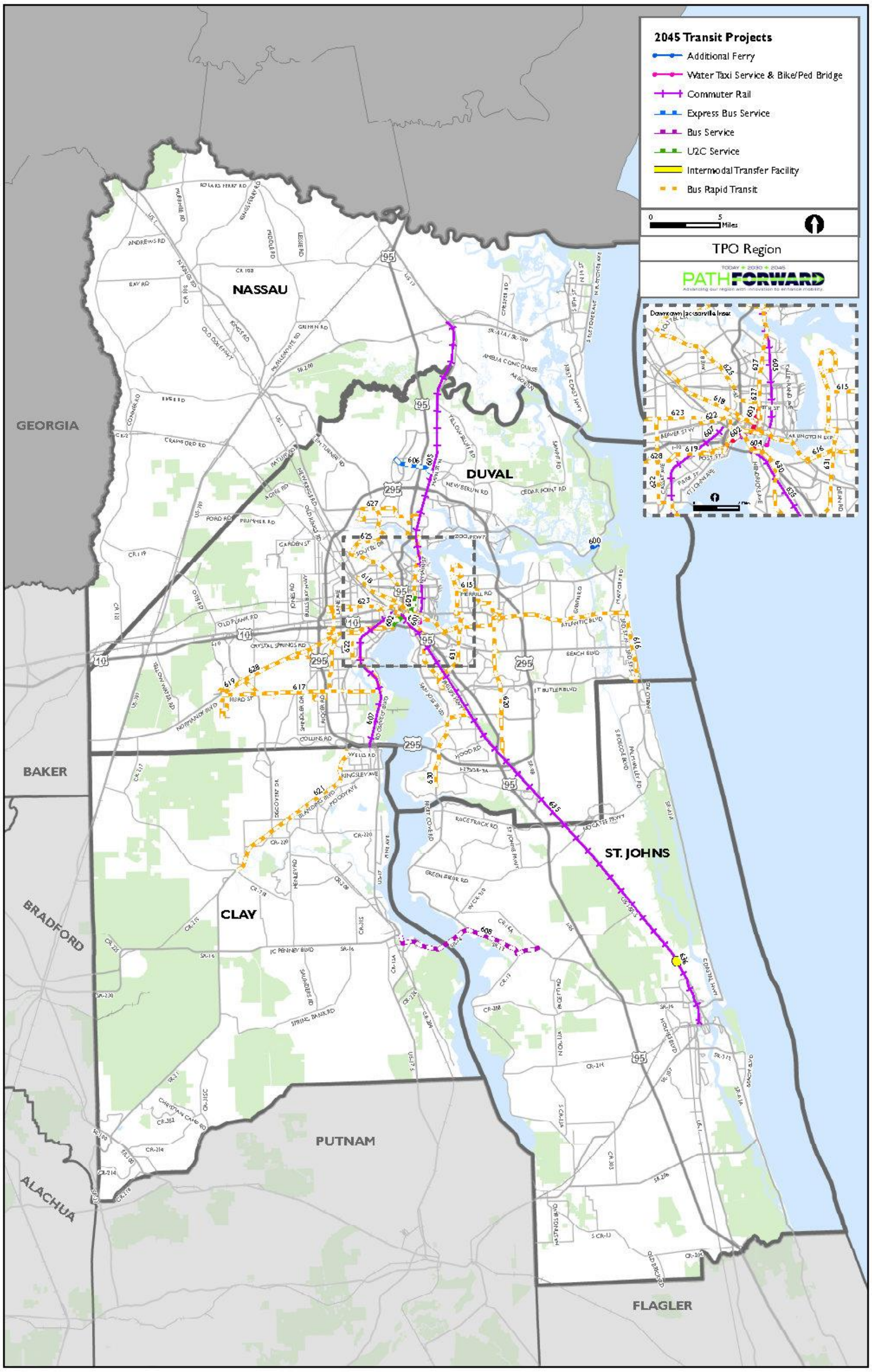

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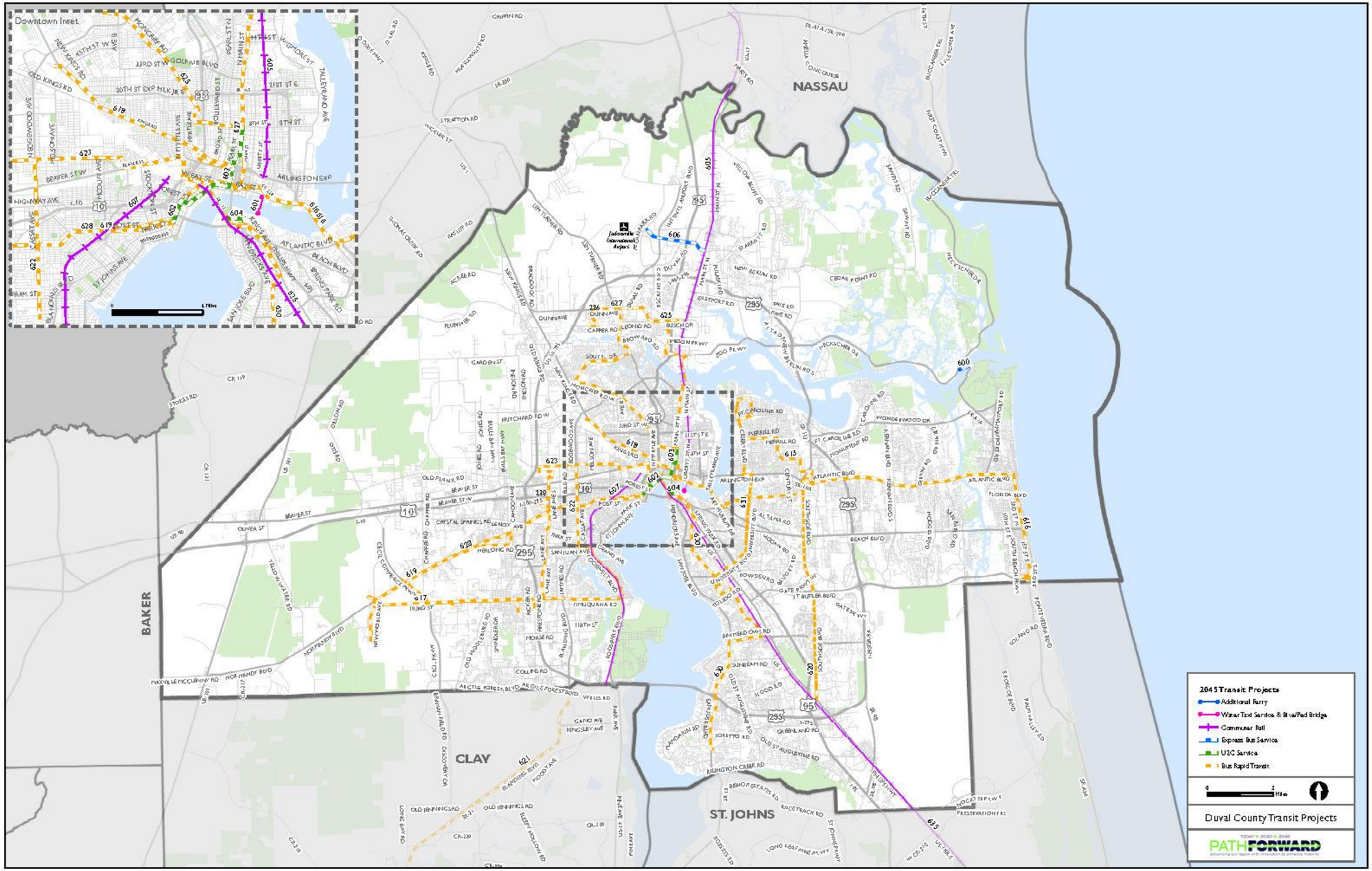
Figure 7.20: 2045 Needs Plan Projects Transit



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8 Financial Resources

The analysis of financial resources is an important element of the North Florida TPO's PathForward2045 Transportation Plan Update. This section summarizes financial resources that are both committed and potential transportation revenues at the federal, state, and local level, including funding sources dedicated to existing maintenance and operations activities for various types of transportation facilities and services in the community. The purpose of this financial resource analysis is to provide the basis for determining how many of the Transportation Needs Assessment projects might be affordable and included in the 2045 Cost Feasible Plan. It contains a detailed analysis of existing and potential transportation revenue sources and projected revenue sources to the Year 2045.

This section will provide financial information for the preparation of the Year 2045 Cost Feasible Plan, by presenting a summary of traditional and alternative revenue sources and providing a forecast of revenues anticipated for the North Florida TPO area through the year 2045. The Cost Feasible Plan serves as an implementation tool for policy and decision-makers.

The Florida Department of Transportation (FDOT) has provided revenue estimates for use in the development of the 2045 Long Range Transportation Plans (LRTP). These forecasts have produced a 26-year total for state and federal revenue sources of $2.603 billion for highways (non-SIS) and $993 million for transit projects as shown below in Table 8.1. These sources are those that have historically been considered by the North Florida TPO during the preparation of the 2045 LRTP.

Based on information provided by FDOT, the 2045 LRTP's 26-year total for state and federal revenue sources is $2.6 billion for highways and some transit projects (Non-SIS Construction and Right-of-Way), in inflation-adjusted revenues, plus an additional $993 million for only transit, for a total of $3.6 billion. This total covers the years from 2020 to 2045. The breakdown by five-year period and revenue source is shown in Table 8.1**.** These sources are those that have historically been considered by the TPO during the preparation of the LRTP.

Table 8.2 details the level of funding estimated by FDOT to be available to the North Florida TPO area in each of the capacity program categories as discussed above.

Table 8.1: Capacity Program Estimates

State and Federal Funds from 2045 Revenue Forecast (Millions of Dollars)
Florida Department of Transportation

Capacity Programs		2045 Revenue Forecast				
	2020	2021-2025	2026-2030	2031-2035	2036-2045	26 Year Total
Other Arterials Construction & ROW	$47.88	$391.55	$494.08	$539.87	$1,130.31	$2,603.70
Transit	$26.69	$148.28	$186.98	$204.77	$426.60	$993.31
Total Capacity Programs	**$74.57**	**$539.94**	**$681.07**	**$744.64**	**$1,556.91**	**$3,597.02**

See Table 5 and guidance in the 2045 Revenue Forecast Handbook for use of these funds.

Forecasted revenues to support other capacity programs include other arterial construction and right-of-way funding for improvements on the State Highway System (SHS) and roadways that are not designated as FIHS/SIS and for transit programs. Eligible activities include capacity and traffic operations improvements and land acquisition and funding assistance for operations and capital investments of transit, paratransit, and rideshare programs.

The FDOT does not provide forecasted revenues for non-capacity programs at the TPO level. These programs support and maintain the state transportation system like safety, resurfacing, bridge maintenance and replacement, engineering and design, operations and maintenance and administrative activities. Table 8.2 contains districtwide estimates for State Highway System Operations and Maintenance expenditures for information purposes. These estimates are provided pursuant to an agreement between FDOT and the Federal Highway Administration Division Office regarding the reporting of estimates of Operations and Maintenance costs for the State Highway System at the district level in MPO long-range plans. Guidance on documenting these funds is included in the 2045 Revenue Forecast Handbook.

Table 8.2: Statewide Non-Capacity Expenditure

State and Federal Funds from 2045 Revenue Forecast (Millions of Dollars)
Florida Department of Transportation

Major Categories	2045 Revenue Forecast					
	2020	2021-2025	2025-2030	2031-2035	2036-2045	26 Year Total
Safety	$141	$820	$826	$825	$1,659	**$4,271**
Resurfacing	$633	$4,354	$4,150	$4,241	$8,756	**$22,135**
Bridge	$1,035	$1,051	$2,403	$2,946	$6,122	**$13,556**
Product Support	$1,302	$6,576	$6,709	$7,096	$14,614	**$36,299**
Operations & Maintenance	$1,384	$7,442	$8,596	$9,162	$18,939	**$45,523**
Administration & Other	$429	$2,770	$2,891	$2,891	$5,559	**$14,468**
Statewide Total Forecast	**$4,923**	**$23,013**	**$25,576**	**$27,089**	**$55,650**	**$136,251**

For informational purposes. See guidance for documenting these funds in the 2045 Revenue Forecast Handbook.

8.1 Transportation Alternative Program (TAP)

FDOT forecasted revenues for Transportation Alternative funds are shown in Table 8.3. Table 8.3 provides estimates of Transportation Alternatives funds, as defined by MAP-21, to assist the TPO in developing their plan. The estimates are based on Schedule A of the Work Program Instructions and long-range estimates of federal funds. These funds are not included in the estimates for Other Arterials Construction & Right of Way shown in Table 8.1. Guidance regarding planning for these funds in the long-range plan is included in the *2045 Revenue Forecast Handbook*. The use of these funds in the LRTP must be consistent with federal and state policy.

The North Florida TPO has identified TAP funding for transportation alternatives including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving pedestrian/bicycle access to public transportation and enhanced mobility, recreational trail program projects and safe routes to school projects. The North Florida TPO generally applies TAP funding to multi-use trails and school safety walk projects.

Table 8.3: Transportation Alternatives Estimates

State and Federal Funds from 2045 Revenue Forecast (Millions of Dollars)
Florida Department of Transportation

Transportation Alternatives		2045 Revenue Forecast				
	2020	2021-2025	2026-2030	2031-2035	2036-2045	26 Year Total
TALU (Urban)	$1.39	$6.96	$6.96	$6.96	$13.92	**$36.19**
Districtwide TALL (<200,000 Population)	$0.69	$3.44	$3.44	$3.44	$6.87	**$17.86**
Districtwide TALT (Any Area)	$2.78	$13.86	$13.86	$13.86	$27.77	**$72.20**

The use of these funds must be consistent with federal and state policy. See guidance in the 2045 Revenue Forecast Handbook.

8.2 Transportation Regional Incentive Program (TRIP)

The purpose of the program is to encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners. TRIP funds are to be used to match local or regional funds on a 50/50 basis or to match up to 50% of the total project costs for public transportation projects. Table 8.4 illustrates the FDOT forecast TRIP funds available to District 2.

Table 8.4: TRIP Estimates

State and Federal Funds from 2045 Revenue Forecast (Millions of Dollars)
Florida Department of Transportation

Transportation Regional Incentive Program		2045 Revenue Forecast				
	2020	2021-2025	2026-2030	2031-2035	2036-2045	26 Year Total
Districtwide TRIP Funds	$2.5	$17.6	$26.3	$29.2	$59.9	$135.5

For informational purposes. Estimates are for TRIP Funds not included in an FDOT Work Program as of July 31, 2018. See guidance in the 2045 Revenue Forecast Handbook for planning for use of these funds.

Additional information on the financial resources is available in the Financial Resources Technical Report.

9 Development of the 2045 Cost Feasible Plan

The final step in developing the 2045 Long Range Transportation Plan (2045) is developing the Cost Feasible Plan. Federal guidance requires the adopted plan to be fiscally constrained. This means it can only include as many projects and programs as revenue is anticipated, in this case, approximately $3.5 billion. The projects in the Needs Plan exceed $18 billion. This plan must be prioritized to identify the best performing projects. This evaluation is based on measures established for the goals and objectives adopted for the study. Revenue is estimated in five-year increments over the life and projects are budgeted accordingly.

The Cost Feasible Plan establishes priorities for needed mobility projects and underscores the value the community places on investments in various modes of travel. How an area chooses to spend its limited financial resources presents the clearest picture of its priorities for long-range mobility improvements as a means to achieve community objectives, such as quality of life, economic development, and protecting the environment. Public input is vital in establishing both the community vision and priorities represented in the plan. On-line surveys, telephone town halls, workshops, public meetings and events are means by which the TPO solicits public input in plan development. The TPO's Citizen Advisory Committee, the LRTP Steering Committee and outreach to each local government in the region do the same. Prior to adoption of the plan on **November 14, 2019** the TPO also held a formal public hearing. This section documents the development of the Cost Feasible Plan and identifies transportation system improvements associated with the adopted 2045 LRTP Cost Feasible Plan for the region.

9.1 Project Costs

The first step in the development of the Cost Feasible Plan is to develop project cost estimates for all capacity projects included in the adopted Needs Plan. This task was completed with assistance from the North Florida TPO staff, FDOT staff, and local government staff. Project costs were developed with the following resources:

- FDOT District Two general transportation costs
- Capital costs from the transit agencies
- Specific project costs from completed PD&E studies
- Specific project costs from local government design plans

Project costs are primarily based on estimates developed through the use of the FDOT District Two general costs per mile. This is a publication developed by the District to develop planning-level project costs and is regularly updated based on actual costs the District is incurring. Where specific data was unavailable from a completed PD&E study, an assumption was made about the costs per mile for new construction or widening an existing facility and whether the project was in an urban or rural area.

Project cost estimates were developed for each phase of the project. These typical phases include the following:

- The first phase is the Project Development and Environmental (PD&E) study which must be completed for transportation projects to evaluate corridor alternatives, solicit public input, and receive concept approvals.
- The second phase is Final Design which is the development of a complete set of detailed design drawings of the selected corridor concept. Final Design also is referred to as Preliminary Engineering (P.E.)
- The third phase is Right-of-Way (ROW) which involves purchasing needed land and easements for construction and wetland or drainage mitigation.
- The fourth phase is Construction which involves the actual construction of the mobility project.
- A parallel phase is Construction Engineering and Inspection (CEI) which involves inspection of the construction project to ensure compliance with the final design specifications.

The total cost for a new project is the summation of costs for all five phases. Therefore, to develop total project costs, estimates for all phases are required. Costs for different phases have been assumed to be within a range of the percentage of construction cost, as outlined below:

- PD&E – 2% to 10% of Construction Cost (This funding is a combination of State and Federal dollars)
- Final Design – 10% to 20% of Construction Cost
- Right-of-Way – 10% to 125% of Construction Cost
- CEI – 10% to 15% of Construction Costs

Each project was reviewed to determine the complexities and issues facing it in order to estimate the appropriate percentage for each phase. These assumptions were reviewed by the LRTP Steering Committee, the TCC, the TPO staff, and the FDOT Staff.

Construction costs, where possible, were obtained from authoritative studies either completed or underway. These studies include the Florida Strategic Intermodal System (SIS), local Capital Improvement Programs (CIP), or the FDOT Work Program. Project costs presented in this section were estimated by applying the above-mentioned assumptions, wherever applicable, to PD&E, final design, ROW, or construction costs obtained from PD&E and or final design studies from the before mentioned sources. Costs for transit projects were provided by the transit providers and are based on information developed for their Transit Development Plans (TDPs).

Barring any readily available cost estimates from these sources, costs for construction phases were estimated by using cost data available from the FDOT. The unit cost method estimates the total construction cost of a roadway project by multiplying the total length of a project by the unit cost of construction for the particular facility type. Unit costs for highway are categorized based on construction type (new or widening project), location (urban or rural), existing number

of lanes (ranging from zero to six), proposed number of lanes (ranging from two to eight), and facility type (divided or undivided, arterial or interstate).

The estimated project costs were reviewed by the LRTP Steering Committee and the Technical Coordinating Committee and accepted for use in the development of planning-level costs for the 2045 LRTP update.

Appendix B contains the detailed cost estimates prepared for the 2045 LRTP.

9.2 Project Selection

The Needs Plan is not fiscally constrained. It identifies a long list of projects needed to address anticipated congestion. Congestion is expected to increase as the population continues to grow. More people, more people commuting to work, more trips to the doctor, grocery store, school and more home deliveries and more service vehicles. As discussed previously, the adopted plan can only include as many projects as revenue is anticipated, in this case, $3.5 billion. To pare the $18 billion Needs Plan to a fundable list of projects, the projects in the plan were prioritized to identify the best performing. Prioritization is based on measures adopted with the goals and objectives of the study. This resulted in an initial list of projects for the region. The LRTP team then met with local government partners, transit agencies and others to further refine the list. Potential impacts on the underserved community were evaluated and the equitable distribution of projects was considered.

After prioritization, the list was adjusted to ensure that the adopted plan is equitable, as discussed in the following section.

9.3 Cost Feasible Plan Equity

Equity in the development of the 2045 Cost Feasible Plan is of paramount importance to the North Florida TPO. Equity was considered from several points of view. Geographic equity was considered to ensure no one area was impacted or received more benefits than another. Social equity was considered to ensure that no one segment of the population was impacted disproportionately. Financial equity was also considered to ensure no one area received more resources than another.

This presented challenges developing the projects and programs included in the 2045 Cost Feasible Plan. Lower-income and economically challenged neighborhoods are generally located in established areas that are experiencing less congestion than the rapidly growing “suburbs”; these areas, however, still require improved safety and mobility. To address this Mobility Programs, including Complete Street and Safety programs will target these areas where we do have mobility needs that can be met through other transportation and/or mobility projects. Investments may include sidewalks and/or bicycle lanes, road diets and lane reduction projects will be considered.

9.4 Non-Capacity Program (Operating and Maintenance)

Non-capacity programs refer to FDOT programs designed to support, operate and maintain the state highway system: safety, resurfacing, bridge, product support, operations, and maintenance, and administration. Table 10 in Appendix A includes a description of each non-capacity program and the linkage to the program categories used in the Program and Resource Plan.

Metropolitan estimates have not been developed for these programs. Instead, the FDOT has included sufficient funding in the 2045 Revenue Forecast to meet the following statewide objectives and policies:

- Resurfacing program: Ensure that 80% of state highway system pavement meets Department standards;
- Bridge program: Ensure that 90% of FDOT-maintained bridges meet Department standards while keeping all FDOT-maintained bridges open to the public safe;
- Operations and maintenance program: Achieve 100% of acceptable maintenance condition standard on the state highway system;
- Product Support: Reserve funds for Product Support required to construct improvements (funded with the forecast's capacity funds) in each district and metropolitan area; and
- Administration: Administer the state transportation program.

The Department has reserved funds in the 2045 Revenue Forecast to carry out its responsibilities and achieve its objectives for the non-capacity programs on the state highway system in each district and metropolitan area. The Department has identified the statewide estimates for non-capacity programs. About $106 billion (49% of total revenues) is forecast for the non-capacity programs.

9.4.1 Transit Operations and Maintenance

Operations and maintenance for transit projects, both existing and planned, will be funded through Federal Transit Agency (FTA) grants and local revenue sources. This is based on discussions with local transit operators. This is also consistent with the current funding methodology used by the agencies.

Furthermore, as transit projects are advanced from the LRTP into the Transportation Improvement Program (TIP), the local providers, FDOT and FTA will work together to identify operations and maintenance funding. If sufficient funding is not available, the project will be reevaluated and may be deferred until such time as funding is available.

9.5 Adopted 2045 Cost Feasible Plan

The 2045 Cost Feasible Plan commits resources to a variety of mobility programs and projects to provide a multi-modal transportation system that supports both the motorized and nonmotorized travelers in the region. The Cost Feasible Plan includes roadway widening projects, congestion mitigation and educational programs, as well as operational improvements through implementation of ITS strategies and corridor improvements.

The North Florida TPO has a long history of partnering with local governments and FDOT to advance priority projects. When possible, TMA funding is leveraged to move projects from the LRTP into the FDOT 5-Year Work Program, through the TPO's Annual List of Priority Projects. Early and continuing coordination is key to all TPO planning activities and critical to the success of achieving the vision outlined in the LRTP.

The North Florida TPO unanimously adopted the 2045 Cost Feasible Plan on November 14, 2019.

The tables and figures on the following pages present the adopted 2045 Cost Feasible Plan and projects graphically by county. In addition to the projects, the 2045 Cost Feasible Plan contains mobility programs that will be utilized to fund projects and programs from the various North Florida TPO plans. These include:

- Bicycle and Pedestrian Plans
- Freight Parking and Circulation Plans
- Greenways and Trail Master Plan
- Regional System Safety Plan
- Infrastructure Resiliency Plan
- Intelligent Transportation Systems (ITS) Plans
- SMART Region Master Plan
- Transportation Systems Management & Operations (TSM&O) Plans

Each of these programs will receive funding for implementation of projects in the 2045 Cost Feasible Plan through boxing of funds. The funding will be used to implement various projects and strategies identified in the studies and plans that the North Florida TPO maintains. These programs are typically updated more frequently than the LRTP and are therefore more reflective of the current trends and conditions in the region.

The 2045 Cost Feasible Plan includes seven (7) mobility programs. They are as follows:

- Bicycle and Pedestrian Mobility Program
- Greenways and Trails Mobility Program
- ITS/TSM&O/Smart Cities Mobility Program
- Safety Program
- Context Sensitive Solutions (Complete Street) Program
- Freight Enhancement Program
- Resiliency Program

Additional information on the Mobility Programs is available in the Cost Feasible Plan Technical Report.

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Table 9.1: Committed Projects

Facility	County	From	To	Improvement	FY Construction is Funded
SR 21 Blanding Boulevard	Clay	CR 218	Black Creek	Widen to 6 lanes	FY 2018/19
SR 21 Blanding Boulevard	Clay	Black Creek	Long Bay Road (CR 220)	Widen to 6 lanes	FY 2018/19
SR 21 Blanding Boulevard	Clay	Long Bay Road (CR 220)	Allie Murry Road	Widen to 6 Lanes	FY 2018/19
CR 218	Clay	Cosmos Avenue	Pine Tree Lane	Widen to 4 lanes	FY 2020/21
CR 220	Clay	Henley Road	Knight Boxx Road	Widen to 4 lanes	FY 2020/21
First Coast Expressway	Clay	North of SR 16	North of Blanding Boulevard (SR 21)	New 4 lane expressway	FY 2018/19
First Coast Expressway	Clay	South of US 17	North of SR 16	New 4 lane expressway	FY 2018/19
First Coast Expressway	Clay	West of SR 16A	East of CR 209	New 4 lane expressway	FY 2018/19
First Coast Expressway	Clay	At CR 218		Construct new interchange	FY 2019/20
First Coast Expressway	Clay	At SR 16		Construct new interchange	FY 2019/20
First Coast Expressway	Clay	At CR 739		Construct new interchange	FY 2019/20
I-295	Duval	I-10	Commonwealth Avenue	Add lanes and reconstruct	FY 2020/21
I-295	Duval	at Collins Road		Modify Interchange	FY 2019/20
I-295	Duval	I-95 South	SR 13 San Jose Boulevard (Buckman Bridge)	Add 2 Express Lanes	Complete

Table 9.1: Committed Projects

Facility	County	From	To	Improvement	FY Construction is Funded
I-295	Duval	J T Butler Boulevard (SR 202)	SR 9B	Add 2 Express Lanes	Underway
I-95	Duval	at Baymeadows Road		Modify Ramps	FY 2020/21
I-95	Duval	St Johns County Line	I-295	Add lanes and reconstruct	FY 2021/22
I-95	Duval	J T Butler Boulevard	Atlantic Boulevard	Add lanes and reconstruct	FY 2021/22
I-10	Duval	First Coast Expressway	I-295	Add lanes and reconstruct	Complete
I-10	Duval	at US 301 (SR 200)		Interchange Modification	Complete
I-10	Duval	I-295	I-95	Add lanes and reconstruct	FY 2019/20
I-10	Duval	at Hammond Boulevard (Marietta)		New Interchange	Complete
Jacksonville National Cemetery Road	Duval	Lannie Road	Arnold Road	New 2 Lane Roadway	FY 2018/19
Southside Boulevard (SR 115)	Duval	at Deerwood Park Boulevard		Modify Intersection	FY 2018/19
Southside Boulevard (SR 115)	Duval	at Gate Parkway		Modify Intersection	FY 2018/19
J Turner Butler Boulevard (SR 202)	Duval	at Gate Parkway		Modify Interchange	FY 2017/18
J Turner Butler Boulevard (SR 202)	Duval	at San Pablo Road		Modify Interchange	FY 2019/20

Table 9.1: Committed Projects

Facility	County	From	To	Improvement	FY Construction is Funded
JIA North Access Road (SR 243)	Duval	Airport Road (SR 102)	Pecan Park Road	Widen to 4 Lanes	FY 2017/18
5th Street (McDuff Avenue Phase 3)	Duval	Melson Avenue	Huron Street	Widen to 3 Lanes	FY 2019/20
Alta Drive	Duval	Faye Road	Burkit Lane	Widen to 5 Lanes	FY 2019/20
Collins Road	Duval	SR 21 Blanding Boulevard	Pine Verde	Widen to 3 Lanes	FY 2019/20
Collins Road	Duval	Shindler Drive	Rampart Road	Widen to 4 Lanes	FY 2019/20
Collins Road	Duval	Old Middleburg Road South	Shindler Drive	Widen to 4 Lanes	FY 2019/20
Kernan Boulevard	Duval	SR 202 J. T. Butler Boulevard	Glen Kernan Parkway	Widen to 4 Lanes	FY 2019/20
Kernan Boulevard	Duval	SR 10 Atlantic Boulevard	McCormick Road	Widen to 6 Lanes	FY 2019/20
Paramore Road Extension	Duval	Paramore Road	Youngerman Circle	New Road	FY 2020/21
San Pablo Road	Duval	US 90 Beach Boulevard	SR 10 Atlantic Boulevard	Widen to 3 Lanes	FY 2019/20
SR 9B	Duval	Phillips Highway (US 1)	I-295	Add 2 Auxiliary Lanes	FY 2019/20
Martin Luther King Jr. Parkway	Duval	at 21st St./Talleyrand Avenue		New Interchange	FY 2019/20
Pecan Park Rd. (SR 243)	Duval	Pecan Park Rd. (SR 243)	I-95	Widen to 4 Lanes	FY 2019/20
SR 9B	Duval	at I-295		Interchange Modification	Underway
SR 9B	Duval	Philips Hwy. (US1)	I-295	New 4 Lane Limited Access Roadway	Complete

Table 9.1: Committed Projects

Facility	County	From	To	Improvement	FY Construction is Funded
SR 9B	Duval	Philips Hwy. (US1)	I-295	Widen to 6 Lanes	Underway
Girvin Road	Duval	Ashley Melisse	Wonderwood Dr.	Widen to 3 lanes	Complete
Girvin Road	Duval	Atlantic Boulevard	Ashley Melisse	Widen to 3 Lanes	Complete
First Coast Expressway	St. Johns	I-95	West of CR 16A	New 4 Lane Expressway	FY 2022/23
First Coast Expressway	St. Johns	Interchange with CR 2209		New interchange	FY 2022/23
First Coast Expressway	St. Johns	Interchange with I-95		New interchange	FY 2022/23
SR 313	St. Johns	SR 207	Holmes Road	New 6 Lane Road	FY 2020/21
Racetrack Road	St. Johns	CR 2209	Bartram Park Blvd	Widen to 4 Lanes	Complete
Payton Parkway	St. Johns	SR 9B	Racetrack Road	New 4 Lanes Road	Complete
SR 16	St. Johns	International Golf Parkway	South Francis Road	Widen to 4 Lanes	FY 2019/20
South Dixie Highway / Pellicer Lane	St. Johns	CR 214 King Street	SR 207	Reconstruct 2 Lanes and Widen to add Sidewalks and Bike Lanes	FY 2019/20
CR2209	St. Johns	CR210	SR 16 Connector	Construct new 4 lanes roadway	Underway
SR 200 (SR A1A)	Nassau	I-95	Amelia River Bridge	Widen to 6 Lanes	Underway
US 301 (SR 200)	Nassau	Duval County Line	City of Callahan	Widen to 4 Lanes	Complete

These projects are included in the North Florida TPO's current Transportation Improvement Program (TIP).

The TIP may be viewed at the TPO's website http://northfloridatpo.com/planning-studies/tip/

Figure 9.1: Committed Projects

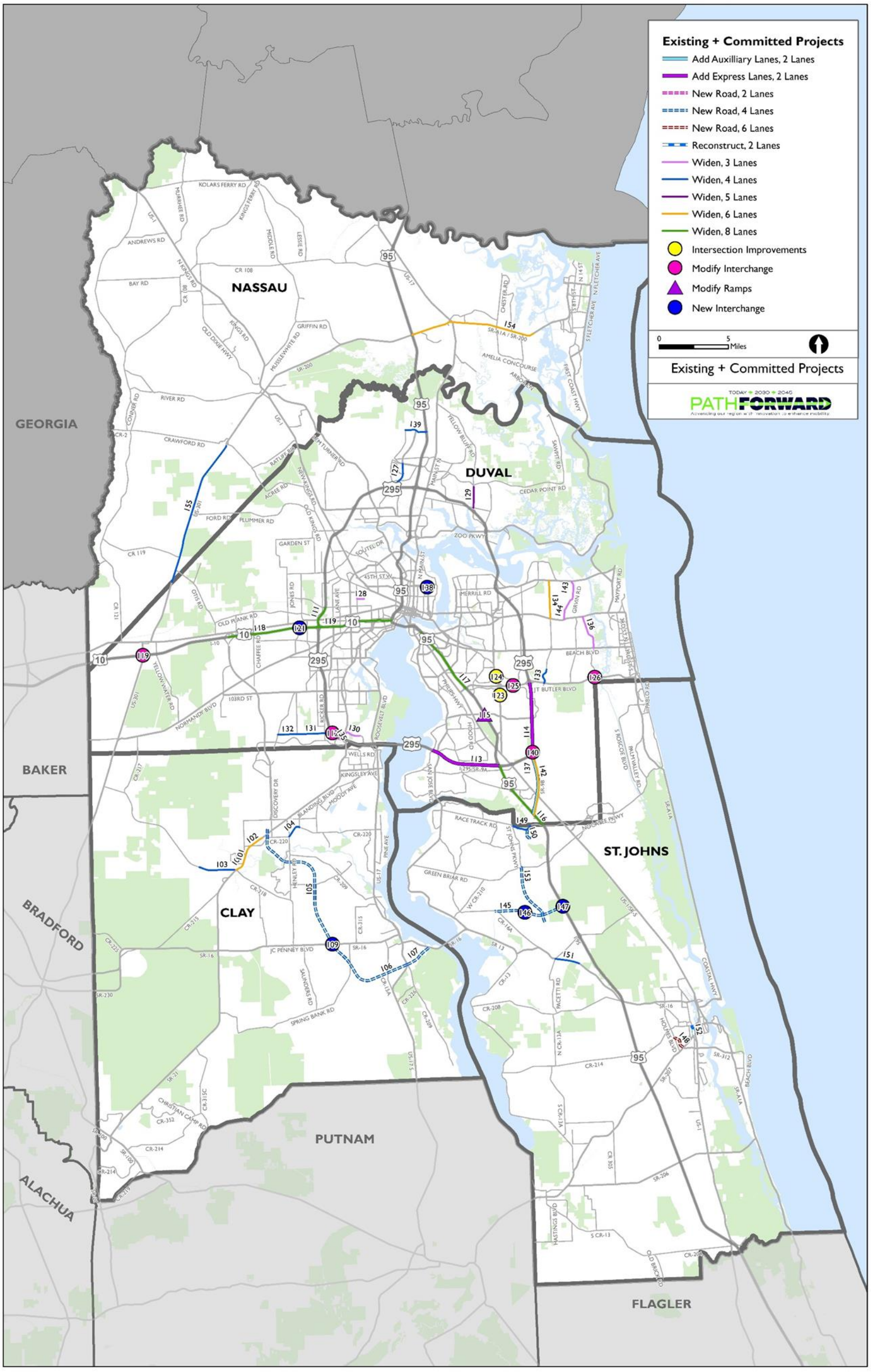

Table 9.2: Adopted 2045 Cost Feasible Plan – SIS Projects (State and Federally Funded Projects)

Facility	County	ID	From	To	Improvement	TIP Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045	Phases Funded
First Coast Expressway (SR 23)	Duval/Clay/ St Johns	800	I-95 (SR 9)	I-10 (SR 8)	Construct New Road	$10				PE
First Coast Expressway (SR 23)	Clay	801	SR 15 (US 17)	SR 21 (Blanding Boulevard)	Construct New Road	$88,470				ENV, ROW
First Coast Expressway (SR 23)	Clay	802	North of SR 16	SR 21 (Blanding Boulevard)	Construct New Road	$367,549				CST
First Coast Expressway (SR 23)	Clay/ St Johns	803	East of CR 209	North of SR 16	Construct New Road	$232,645				PE, CST
First Coast Expressway (SR 23)	St. Johns/Clay	804	I-95 (SR 9)	SR 15 (US 17)	Construct New Road	$49,847				ENV, ROW
First Coast Expressway (SR 23)	St Johns	805	I-95 (SR 9)	West of CR 16A	Construct New Road	$398,784				PE, CST
First Coast Expressway (SR 23)	St Johns/ Clay	806	West of CR 16A	East of CR 209	Construct New Road	$370,913				PE, CST
I-10 (SR 8)	Baker/ Nassau/ Duval	807	CR 125 (Baker County)	US 301	Add Lanes and Reconstruct	$511				PD&E, PE
I-10 (SR 8)	Duval	808	I-295 (SR 9A)	I-95 (SR 9)	Add Lanes and Reconstruct	$134,247				PD&E, PE, CST
I-10 (SR 8)	Duval	809	Nassau/Duval County Line	US 301	Add Lanes and Reconstruct	$2,650		$3,588	$128,645	PE, ROW, CST
I-10 (SR 8)	Duval	810	US 301	SR 23 (Cecil Commerce Center Parkway)	Add Lanes and Reconstruct	$520		$10,250	$266,968	PE, ROW, CST
I-10 (SR 8)	Duval	811	US 301	I-295 (SR 9A)	Add Lanes and Reconstruct	$1,625				PD&E
I-10 (SR 8)	Duval	812	SR 23 (Cecil Commerce Center Parkway)	I-295 (SR 9A)	Add Lanes and Reconstruct			$25,200	$433,542	PE, ROW, CST
I-295 (SR 9A)	Duval	813	SR 13 (San Jose Boulevard)	SR 21 (Blanding Boulevard)	Add Lanes and Reconstruct	$12,800	$102,143			PD&E, PE, ROW, CST
I-295 (SR 9A)	Duval	814	at Collins Road		Modify Interchange	$12,085				PD&E, PE, ROW, CST
I-295 (SR 9A)	Duval	815	at US 17	South of Wells Road	Modify Interchange	$21,788				PD&E, PE, ROW, CST
I-295 (SR 9A)	Duval	816	Dames Point Bridge	North of Pulaski	Add Lanes and Reconstruct	$2,157				PD&E, PE, ROW
I-295 (SR 9A)	Duval	817	SR 113 (Southside Connector)	SR 202 (J. Turner Butler Boulevard)	Add Lanes and Reconstruct	$23,316	$370,071			PD&E, PE, ROW, CST
I-295 (SR 9A)	Duval	818	SR 202 (J. Turner Butler Boulevard)	SR 9B	Add Lanes and Reconstruct	$40				CST
I-295 (SR 9A)	Duval	819	SR 9B	South Interchange	Add Lanes and Reconstruct	$10				PD&E
I-295 (SR 9A)	Duval	820	North of Commonwealth Drive	North of New Kings Road	Add Lanes and Reconstruct			$96,417		PE, ROW, CST

Table 9.2: Adopted 2045 Cost Feasible Plan – SIS Projects (State and Federally Funded Projects) Continued

Facility	County	ID	From	To	Improvement	TIP Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045	Phases Funded
I-295 (SR 9A)	Duval	821	I-95 (SR 9)	SR 113 (Southside Connector)	Add Lanes and Reconstruct			$126,781		PE
I-295 (SR 9A)	Duval	822	North of Collins Road Interchange	North of Commonwealth Lane	Add Lanes and Reconstruct			$20,719	$486,269	PD&E, PE, ROW, CST
I-295 (SR 9A)	Duval	823	North of New Kings Road	South of I-95 (SR 9) Interchange	Add Lanes and Reconstruct			$20,323	$382,345	PE, ROW, CST
I-95 (SR 9)	Duval	824	at SR 202 (J. Turner Butler Boulevard)		Modify Interchange	$17				ROW
I-95 (SR 9)	Duval	825	at SR 152 (Baymeadows Road)		Add Turn Lane	$1,239				PE, CST
I-95 (SR 9)	Duval	826	at US 1/MLK/20th Street		Modify Interchange	$32,881				PE, ROW, CST
I-95 (SR 9)	Duval	827	Duval County Line	I-295 (SR 9A)	Add Lanes and Reconstruct	$138,218				PE, ENV, ROW, CST
I-95 (SR 9)	Duval	828	SR 202 (J. Turner Butler Boulevard)	Atlantic Boulevard	Add Lanes and Reconstruct	$346,886				PD&E, PE, ROW, CST
I-95 (SR 9)	Duval	829	South of the Duval/St. Johns County Line	SR 202 (J. Turner Butler Boulevard)	Add Lanes and Reconstruct			$682,431		ROW, CST
I-95 (SR 9)	Duval	830	I-10 (SR 8)	South of US 1/SR 115/MLK	Add Lanes and Reconstruct		$187,238	$214,230		PE, ROW, CST
I-95 (SR 9)	Duval	831	I-295 (SR 9A)	SR 202 (J. Turner Butler Boulevard)	Add Lanes and Reconstruct	$20,004				PD&E, PE, ROW, CST
I-95 (SR 9)	St Johns	832	International Golf Parkway	Duval County Line	Add Lanes and Reconstruct	$457,600				PE, ROW, CST
I-95 (SR 9)	St Johns	833	at SR 16		Modify Interchange			$12,212		PE, CST
SR 200 (US 301)	Nassau	834	at Crawford Road (Crawford Diamond Industrial Park)		Modify Interchange/Flyover	$604				PD&E, PE, ROW
SR 200 (A1A)	Nassau	835	US17	CR 107	Add Lanes and Reconstruct	$16				PE
SR 202 (J. Turner Butler Boulevard)	Duval	836	I-95 (SR 9)	SR 200 (A1A)	Planning Study	$770				PD&E
US 17	Duval	837	Collins Road	NAS Birmingham Gate	Add Lanes and Reconstruct			$42,427		PE, ROW, CST
					Totals	**$2,718,192**	**$659,452**	**$1,254,578**	**$1,697,769**	

PD&E = Project, Development and Environmental

PE= Project Engineering

ROW = Right of Way

ENV = Environmental Mitigation

CST = Construction

Figure 9.2: 2045 Adopted Cost Feasible Plan - Strategic Intermodal System (SIS) Projects

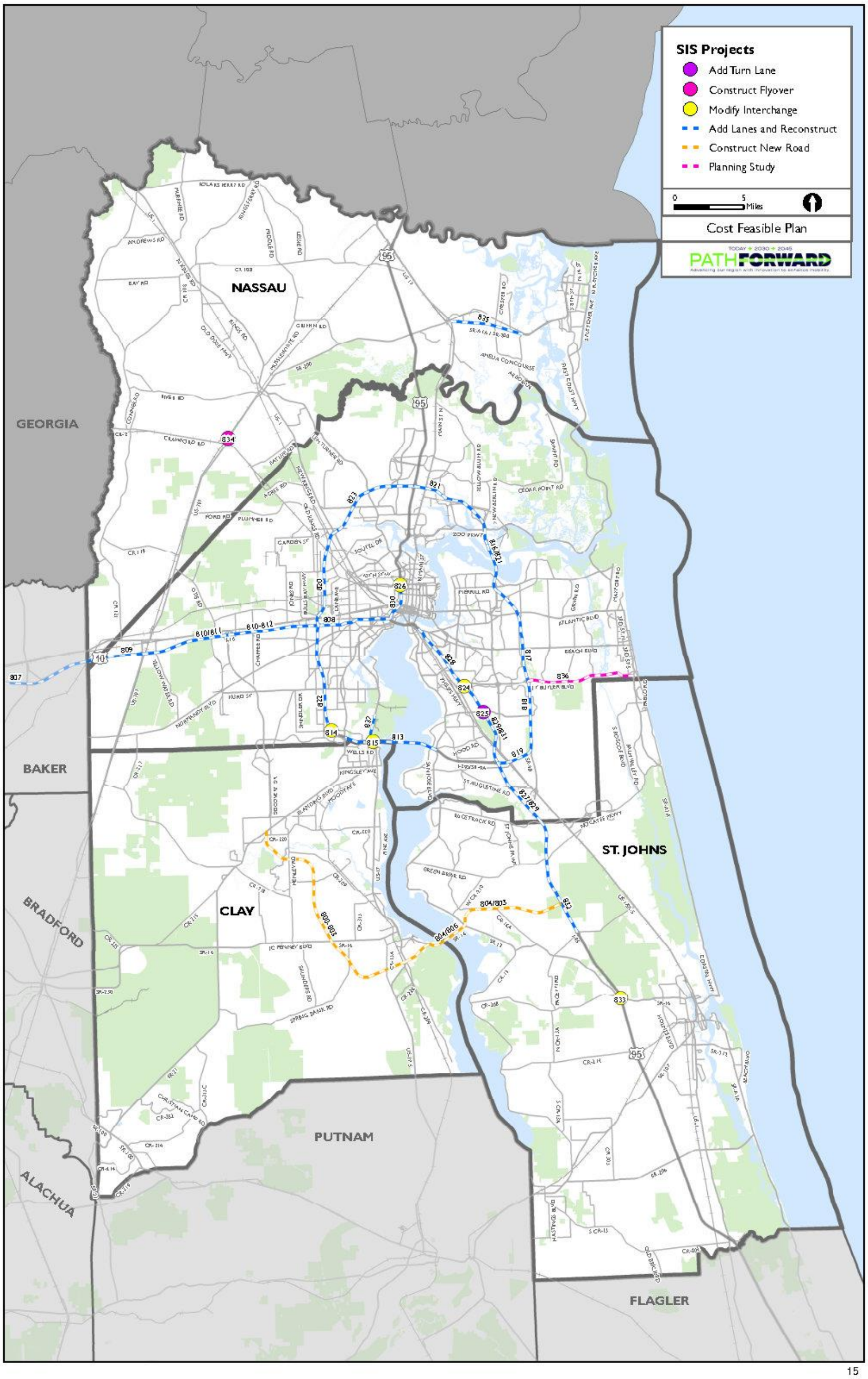

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Table 9.3: 2045 Adopted Cost Feasible Plan - Other Arterial Projects (State and Federally Funded Projects)

Facility	County	ID	From	To	Improvement	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
J Turner Butler Boulevard (SR 202)	Duval	NA	I-95	SR A1A	Planning Study	$2,000			
J Turner Butler Boulevard (SR 202)	Duval	NA	@ San Pablo		Major intersection improvement	$13,125			
Jacksonville National Cemetery Access Road	Duval	NA	Lannie Road	Arnold Road	Construct new 2 lane road	$164			
SR 115 (Southside Boulevard)	Duval	NA	@ Gate Parkway		Major intersection improvement	$9,331			
SR 115 (Southside Boulevard)	Duval	NA	@ Deerwood Park		Major intersection improvement	$9,526			
SR 212 (Beach Boulevard)	Duval	NA	@ Southside Boulevard		Major intersection improvement	$5,606			
SR 16	St. Johns	NA	@ International Golf Parkway		Major intersection improvement	$5,500			
SR 16	St. Johns	NA	SR 313	I-95	Widen to 4 lanes	$500			
SR 313	St Johns	NA	SR 207	South Holmes Boulevard	Construct new 2 lane road	$12,421			
SR 21 (Blanding Boulevard)	Clay	NA	CR 218	Black Creek	Widen to 6 lanes	$20,327			
CR 220	Clay	NA	Henley Road (CR 209)	Knight Boxx Road (CR 220B)	Widen to 4 lanes	$16,643			
US 17 Main Street	Duval	269	New Berlin Road	Pecan Park Road	Widen to 4 lanes + trail	$6,000	$6,090		
US 17 Main Street	Duval	270	Pecan Park Road	Nassau County Line	Widen to 4 lanes + trail			$21,083	
SR 115 Southside Boulevard	Duval	2014	SR 202 J T Butler Boulevard	US 90 Beach Boulevard	Widen to 6 lanes			$18,583	
SR 115 Southside Boulevard	Duval	2010	at SR 152 Baymeadows Road		Continuous Flow Intersection			$7,500	$20,000
SR 115 Southside Boulevard	Duval	2011	at J T Butler Boulevard		Modify Interchange				$28,200
US 1 SR 5 Phillips Highway	Duval	297	I-95 at the Avenues Mall	SR 202 J T Butler Boulevard	Widen to 6 lanes + Trail			$43,985	
US 1 SR 5 Phillips Highway	Duval	2000	SR 9B	I-295	Widen to 6 lanes + Trail				$12,347
SR 115 Lem Turner Road	Duval	265	I-295	Nassau County Line	Widen to 4 lanes + trail				$55,330
Atlantic Boulevard (SR 10)	Duval	206	at Girvin Road		Intersection Improvements		$1,455		
Atlantic Boulevard (SR 10)	Duval	207	at Hodges Boulevard		Intersection Improvements		$1,455		
Atlantic Boulevard (SR 10)	Duval	208	at San Pablo Boulevard		Intersection Improvements		$1,455		
Arlington Expressway	Duval	205	University Boulevard (SR 109)		Modify Interchange + Trail			$1,725	
Normandy Boulevard (SR 228)	Duval	288	US 301	Bell Road (Equestrian Park)	Widen to 4 lanes		$15,300		
SR 16	Clay	125	First Coast Expressway	SR 15A Oakridge Avenue	Widen to 4 lanes		$42,600		
SR 16	Clay	126	US 17	Shands Bridge	Widen to 4 lanes				$39,445
SR 100	Clay	124	Clay/Bradford County Line	Clay/Putnam County Line	Widen to 4 lanes				$4,633
SR 21 Blanding Boulevard	Clay	127	SR 16	CR 215 Blanding Boulevard	Widen to 4 lanes			$19,496	
US 17	Clay	130	Orion Road	SR16	Context Sensitive Solutions			$1,300	
US 17	Nassau	342	Duval County Line	CR 108	Widen to 4 lanes				$41,891
US 17	Nassau	304	at Pages Dairy Road		Major Intersection Improvement				$8,200
SR 115 Lem Turner Road	Nassau	321	Duval County Line	US 1/ SR 15	Widen to 4 lanes + trail			$4,860	
US 301	Nassau	350	at Crawford Road		Major Intersection Improvement				$2,200
SR 16	St Johns	471	Grand Oaks Eastern Entrance	Western Outlet Mall Entrance	Widen to 4 lanes		$7,800		

Table 9.3: 2045 Adopted Cost Feasible Plan - Other Arterial Projects (State and Federally Funded Projects)

Facility	County	ID	From	To	Improvement	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
SR 16	St Johns	470	San Giacomo Road	Grand Oaks Eastern Entrance	Widen to 4 lanes		$6,951	$3,000	
SR 207	St Johns	474	I-95	South Holmes Boulevard	Widen to 6 lanes			$16,106	
SR 207	St Johns	475	South Holmes Boulevard	SR 312	Widen to 6 lanes		$4,400		
SR 313	St Johns	478	SR 207	SR 16	New 4/6 lane road		$140,100		
SR 313	St Johns	479	SR 16	US 1 Dixie Highway	New 4 lane road			$101,787	
SR A1A	St Johns	483	Mickler Road	Palm Valley Road	Widen to 4 lanes			$15,364	
SR A1A	St Johns	401	N St Augustine Boulevard	Comares Avenue	Multimodal Way			$3,241	
SR A1A	St Johns	482	at Red Cox/Coquina Road		Intersection Improvement			$,120	
SR A1A	St Johns	402	Comares Avenue	Red Cox Road	Multimodal Way			$3,140	
Big Oak Road	St Johns	403/404	US 1	I-95	Feasibility Study for new road and interchange with I-95		$250		
I-95	St Johns	442	at CR 210		Interchange Modification		$4,050		
					Other Arterial Totals	**$102,162**	**$224,705**	**$262,290**	**$210,046**

Figure 9.3: Adopted 2045 Cost Feasible Plan – Other Arterial Projects - Clay County

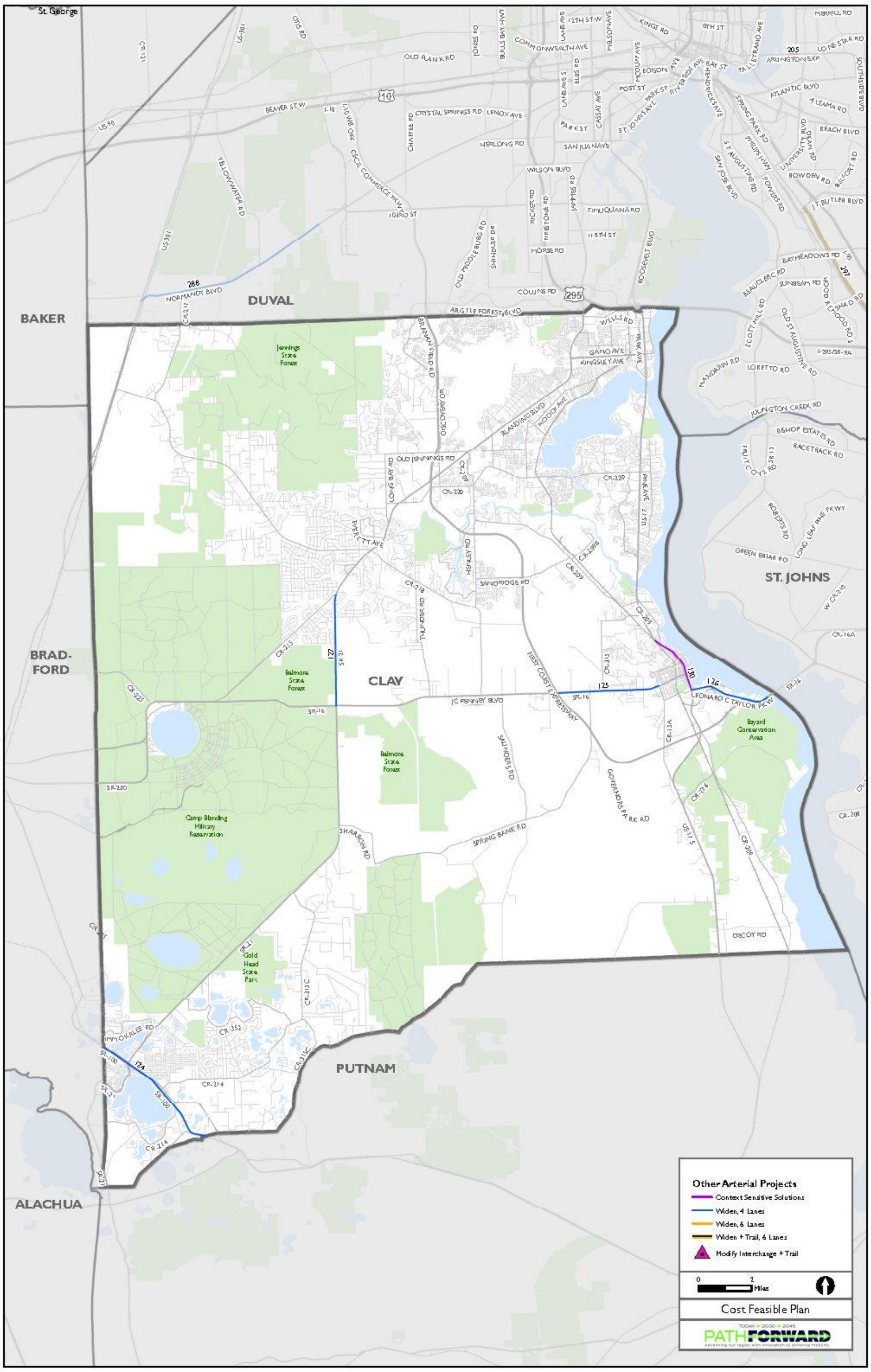


Figure 9.4: Adopted 2045 Cost Feasible Plan - Other Arterial Projects - Duval County

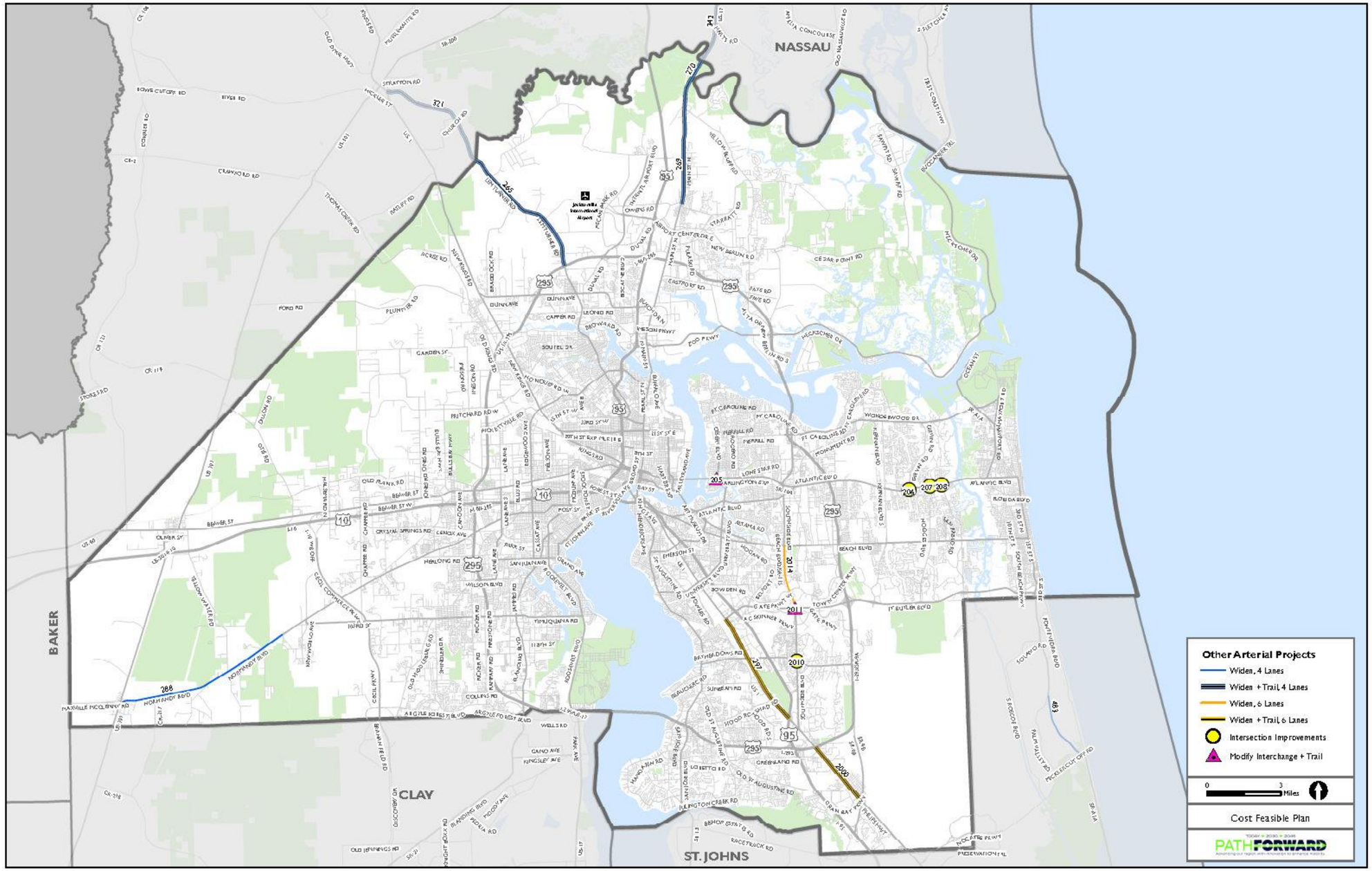


Figure 9.5: Adopted 2045 Cost Feasible Plan - Other Arterial Projects - Nassau County

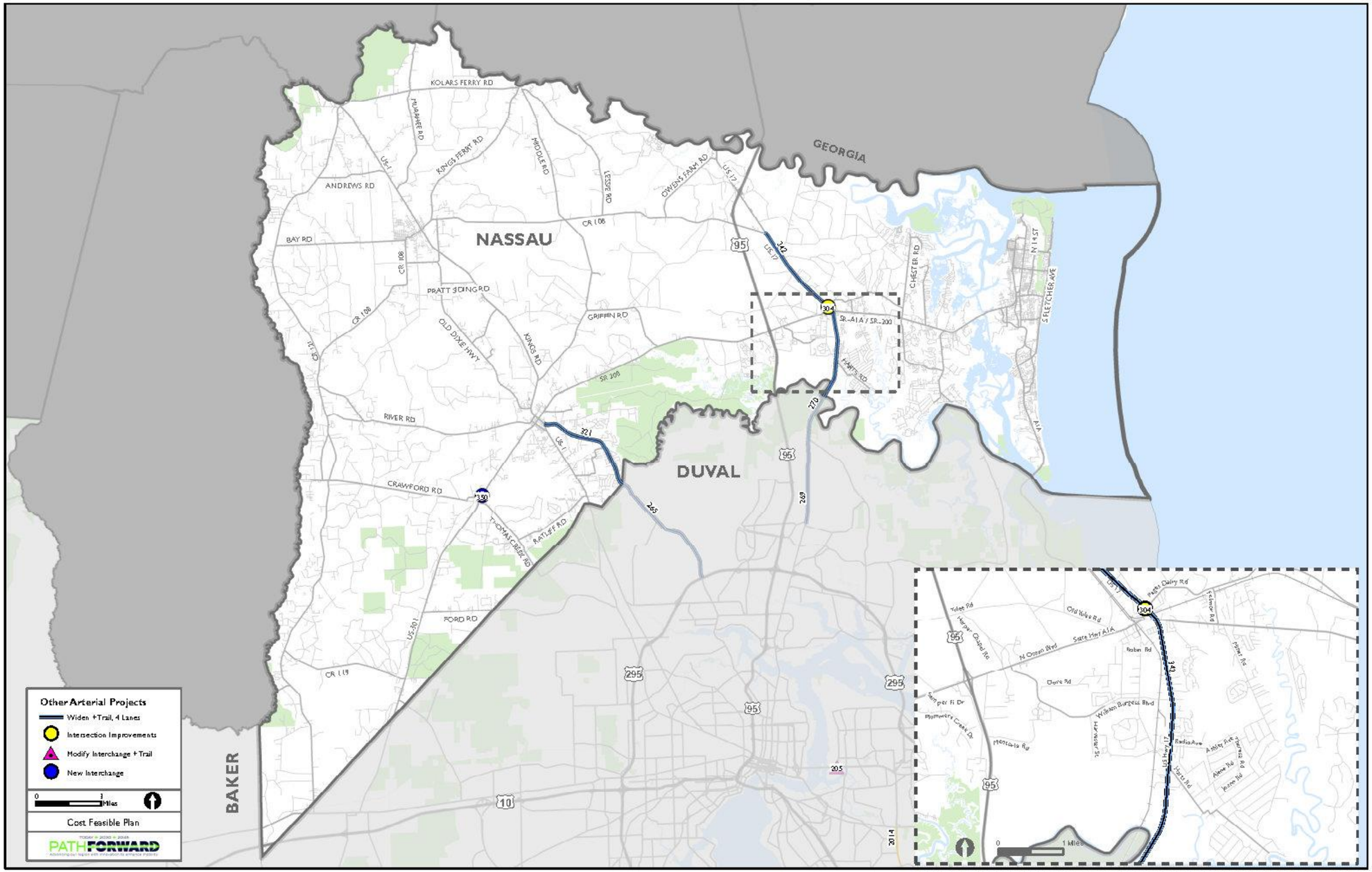


Figure 9.6: Adopted 2045 Cost Feasible Plan - Other Arterial Projects - St. Johns County

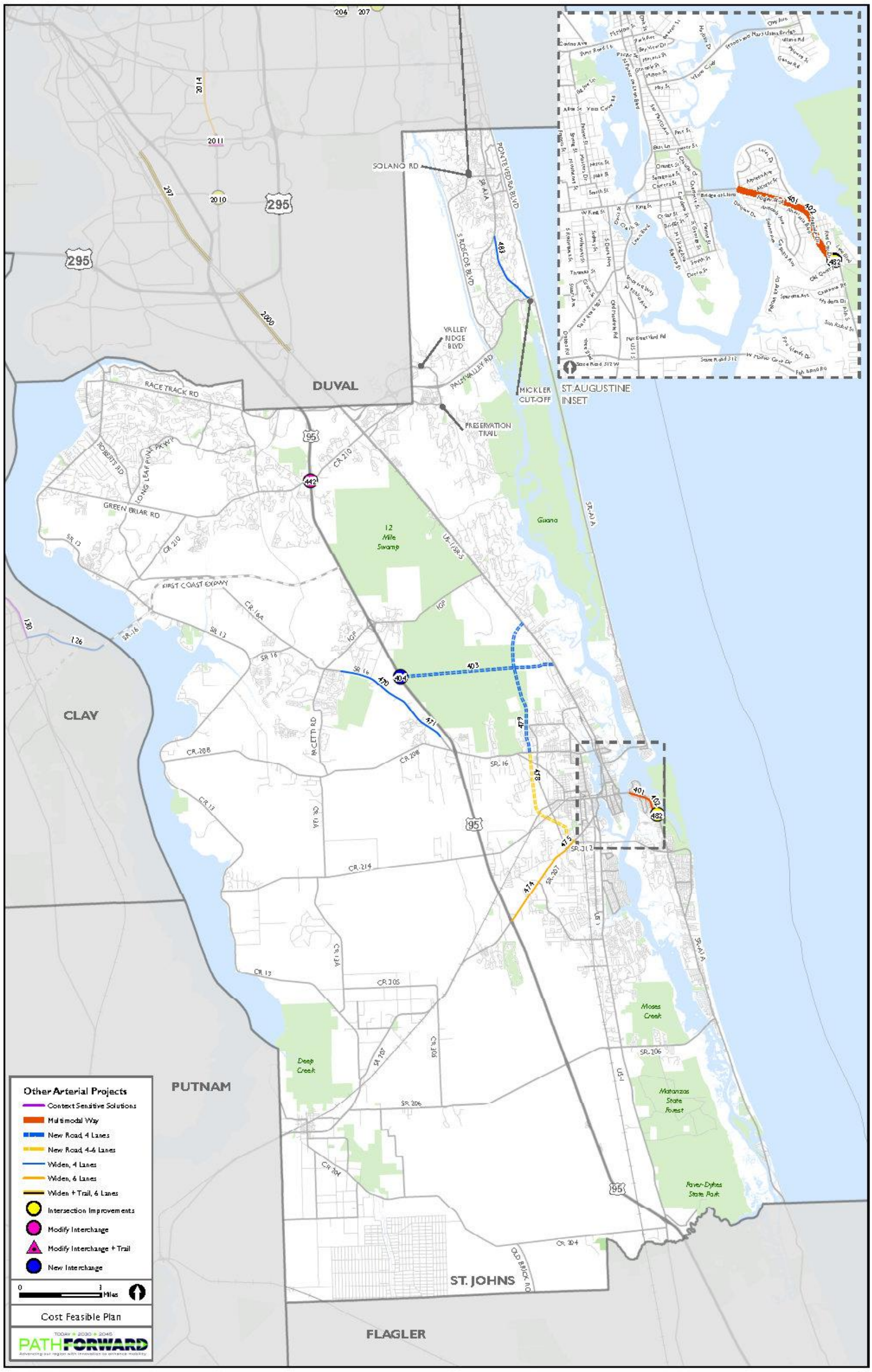


Table 9.4: 2045 Adopted Cost Feasible Plan - Transportation Management Area (TMA) Projects (State and Federally Funded Projects)

Facility	County	Map Id	From	To	Improvement Type	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
Cheswick Oaks Avenue Extension	Clay	101	Challenger Drive	Wilford Preserve Entrance	New 4 lane road		$11,762	$8,088	$16,422
CR 220	Clay	112	SR 21 Blanding Boulevard	Henley Road	Widen to 4 lanes			$23,200	
CR 218	Clay	107	Aster/Pine Tree Road	Cosmos	Widen to 4 lanes		$7,610		
Alta Drive Realignment	Duval	201	SR 105 Zoo Parkway	North of New Berlin Road (south)	New 4 lane road				$9,417
SR A1A	Duval	2018	SR 116 Wonderwood Drive	Naval Station Mayport North	Widen to 4 lanes + Trail		$16,729		
Pecan Park Road	Duval	296	I-95	Main Street (US 17)	Widen to 4 lanes + Trail				$3,792
New Berlin Road	Duval	278	Yellow Bluff Road	Cedar Point Road	Widen to 4 lanes + Trail				$5,117
Penman Road	Duval	2029	Beach Boulevard (SR 212)	Atlantic Boulevard (SR 10)	Reconstruct (2 lane) + Trail				$4,200
Mayport Road (SR 101)	Duval	272	Atlantic Boulevard	Dutton Island Road	Context Sensitive Solutions		$1,675		
Williams Burgess Boulevard Extension	Nassau	346	Miner Road	Hampton Club Way	New 2 lane road + trail				$28,153
New Road	Nassau	324	William Burgess Boulevard	Mentoria Road	New 2 lane road + trail		$6,416		
New Bridge over I-95	Nassau	327	Semper Fi Drive	Mentoria Road	New 2 lane road + trail		$6,616		
Semper Fi	Nassau	338	Semper Fi Extension	Johnson Lake Road	Reconstruct 2 lane road + trail		$6,999		
Semper Fi Extension	Nassau	339	SR 200 (A1A)	Semper Fi Drive	New 2 lane road + trail		$2,916		
Sauls Road	Nassau	337	US 1	Musselwhite Road	New 2 lane road + trail			$4,000	
Sundberg Road	Nassau	340	CR 121	Andrews Road	New 2 lane road			$900	
CR 2209	St Johns	418	at CR 210		New interchange/Intersection improvement		$6,570		
CR 2209	St Johns	419	SR 16 Connector (Silverleaf Boulevard)	International Golf Parkway	New 4 lane road			$10,244	
CR 2209	St Johns	420	International Golf Parkway	SR 16	New 4 lane road				$5,500
Racetrack Road	St Johns	458	Bartram Park Boulevard	I-95 overpass	Widen to 4 lanes			$7,500	
US 1	St Johns	415	at CR 210		Add interchange ramps				$15,000
					TMA Totals		**$59,683**	**$49,032**	**$87,601**

Figure 9.7: Adopted 2045 Cost Feasible Plan -Transportation Management Area (TMA) Projects- Clay County

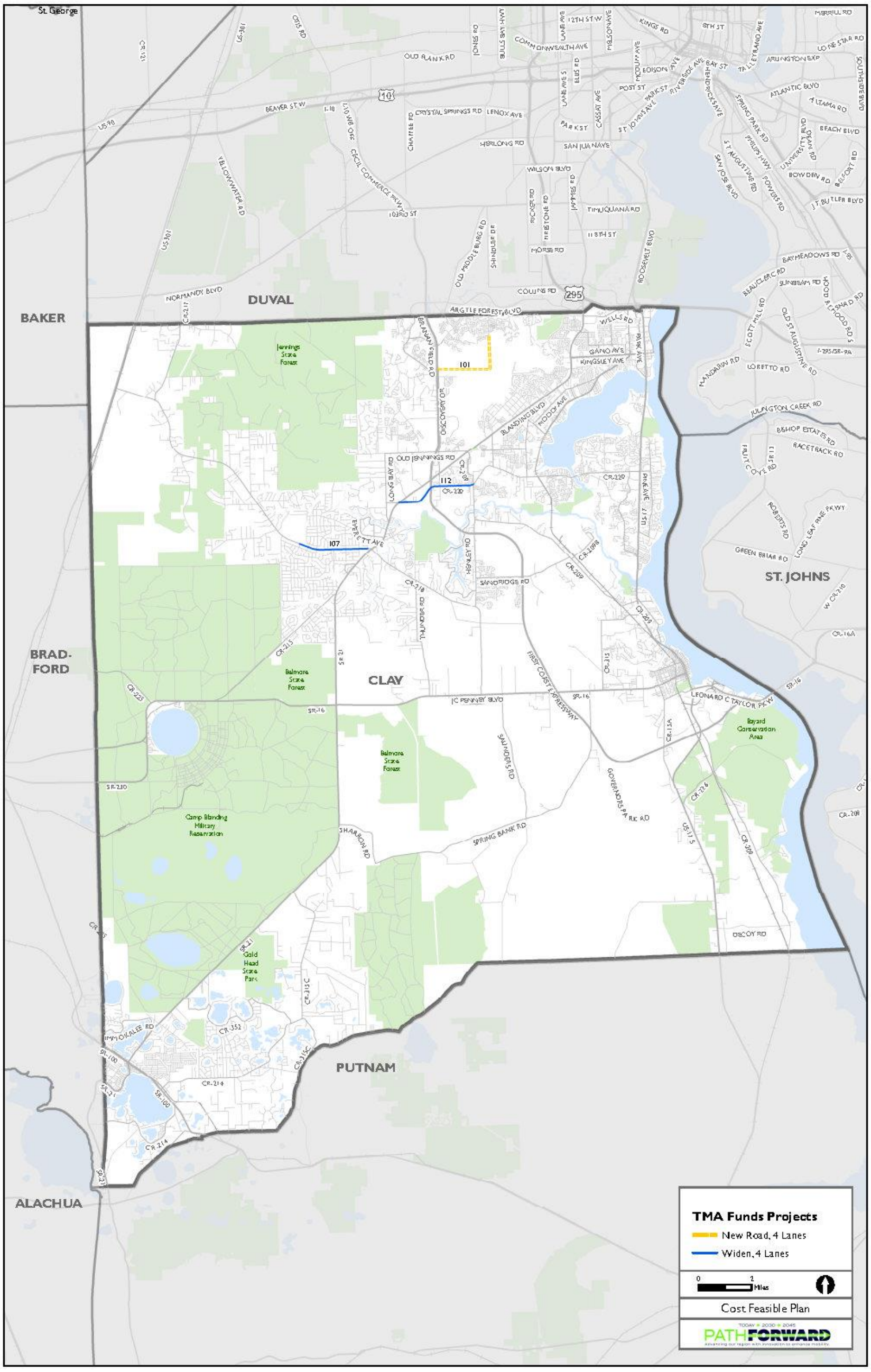


Figure 9.8: Adopted 2045 Cost Feasible Plan – Transportation Management Area (TMA) Projects – Duval County

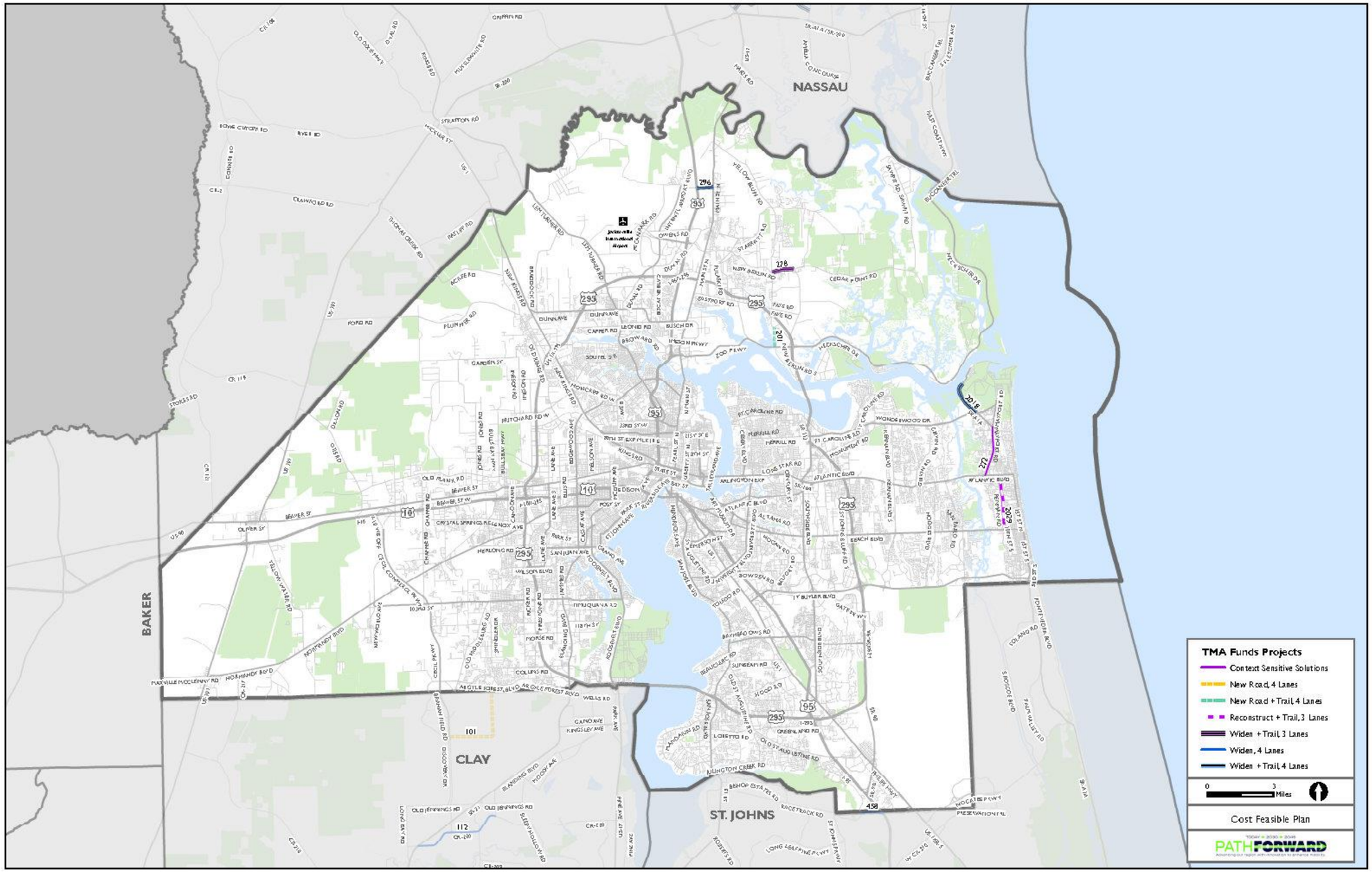


Figure 9.9: Adopted 2045 Cost Feasible Plan – Transportation Management Area (TMA) Projects - Nassau County

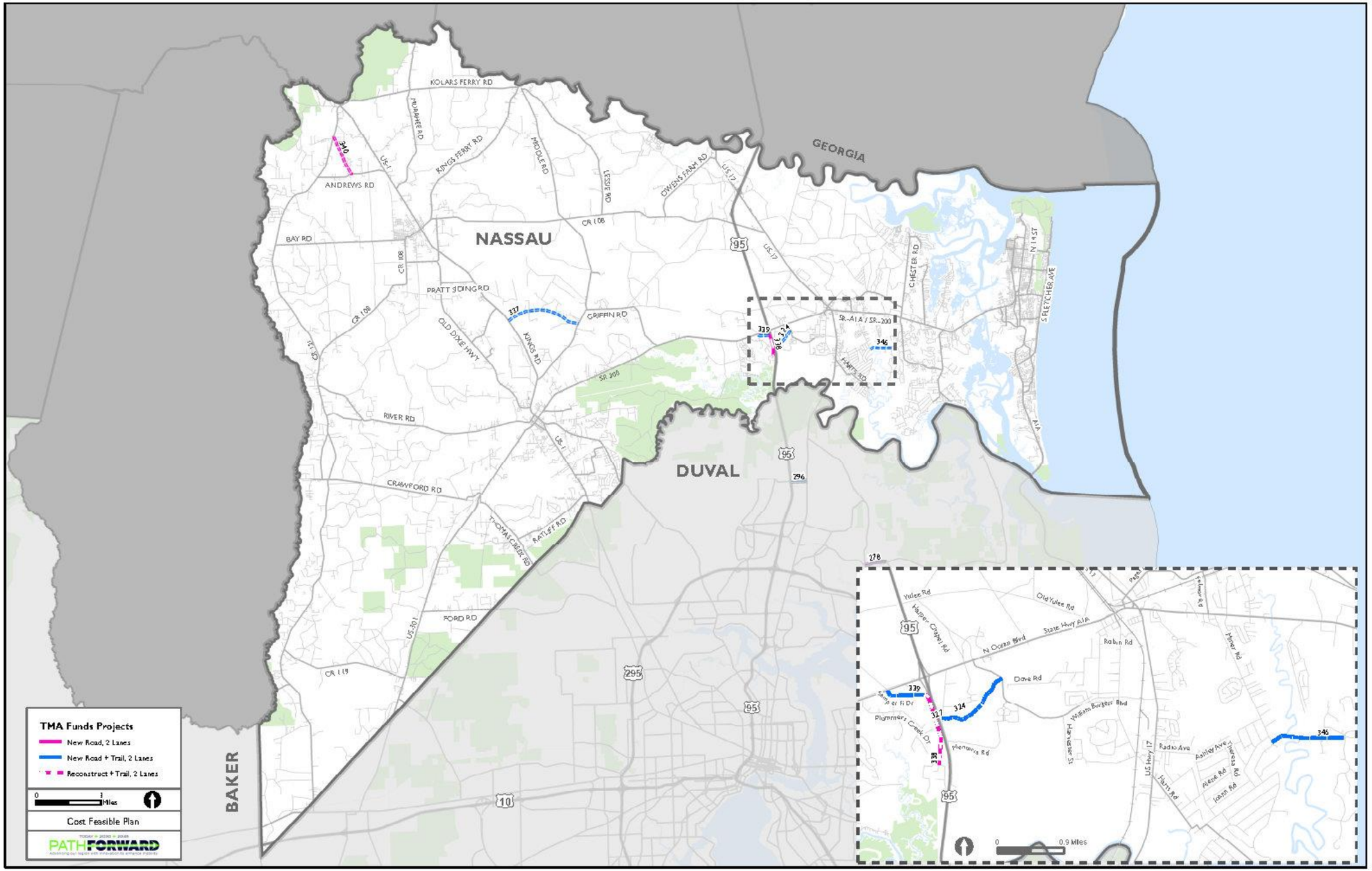


Figure 9.10: 2045 Adopted Cost Feasible Plan - Transportation Management Area (TMA) Projects - St. Johns County

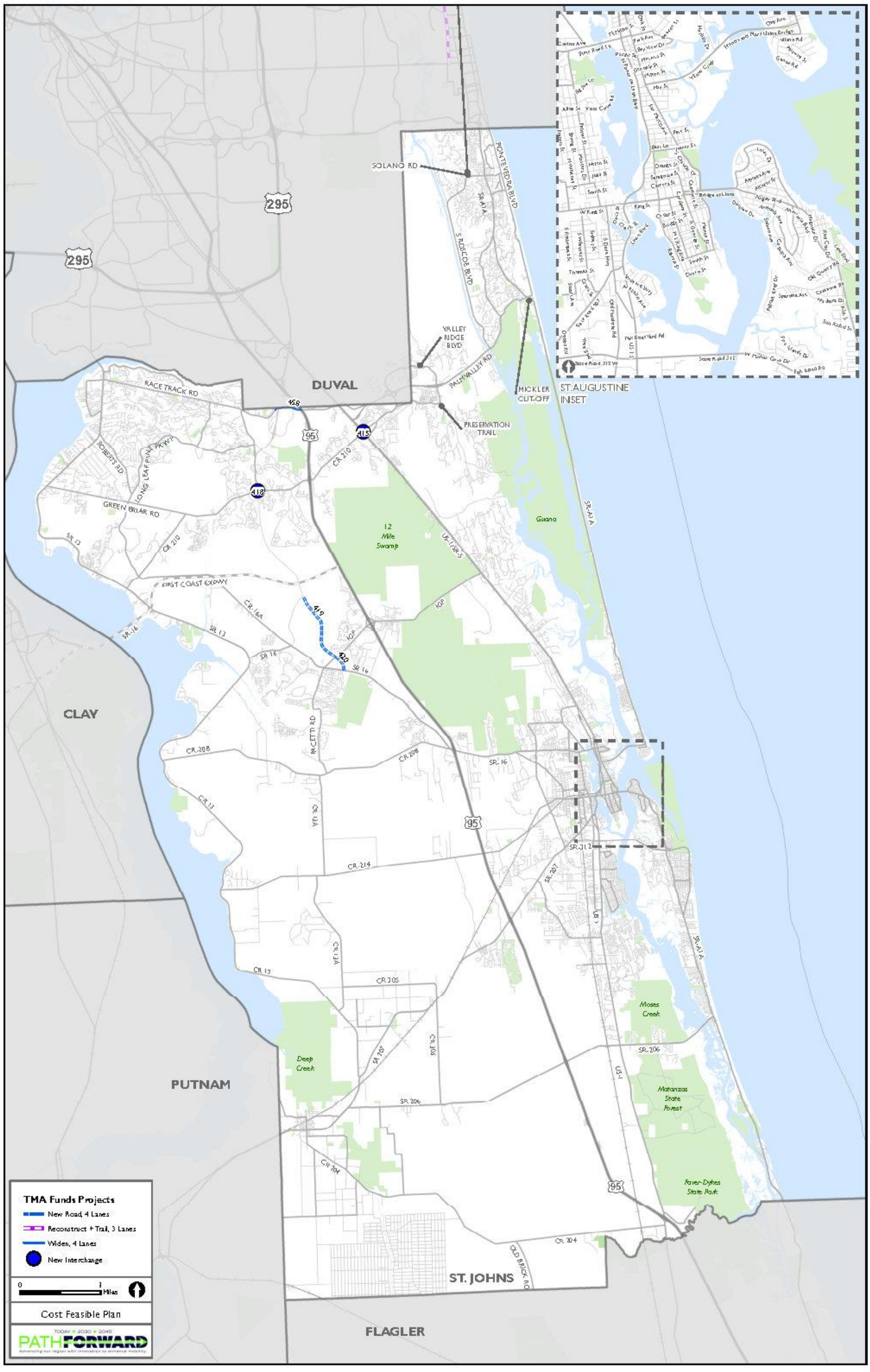


Table 9.5: 2045 Adopted Cost Feasible Plan - Toll Funded Projects (State and Federally Funded Projects)

Facility	County	ID	From	To	Improvement	TIP Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045	Phases Funded
First Coast Expressway (SR 23)	Duval/Clay/ St Johns	800	I-95 (SR 9)	I-10 (SR 8)	Construct New Road	$10				PE
First Coast Expressway (SR 23)	Clay	801	SR 15 (US 17)	SR 21 (Blanding Boulevard)	Construct New Road	$88,470				ENV, ROW
First Coast Expressway (SR 23)	Clay	802	North of SR 16	SR 21 (Blanding Boulevard)	Construct New Road	$367,549				CST
First Coast Expressway (SR 23)	Clay/ St Johns	803	East of CR 209	North of SR 16	Construct New Road	$232,645				PE, CST
First Coast Expressway (SR 23)	St. Johns/Clay	804	I-95 (SR 9)	SR 15 (US 17)	Construct New Road	$49,847				ENV, ROW
First Coast Expressway (SR 23)	St Johns	805	I-95 (SR 9)	West of CR 16A	Construct New Road	$398,784				PE, CST
First Coast Expressway (SR 23)	St Johns/ Clay	806	West of CR 16A	East of CR 209	Construct New Road	$370,913				PE, CST

Figure 9.11: 2045 Adopted Cost Feasible Plan - Toll Funded Projects

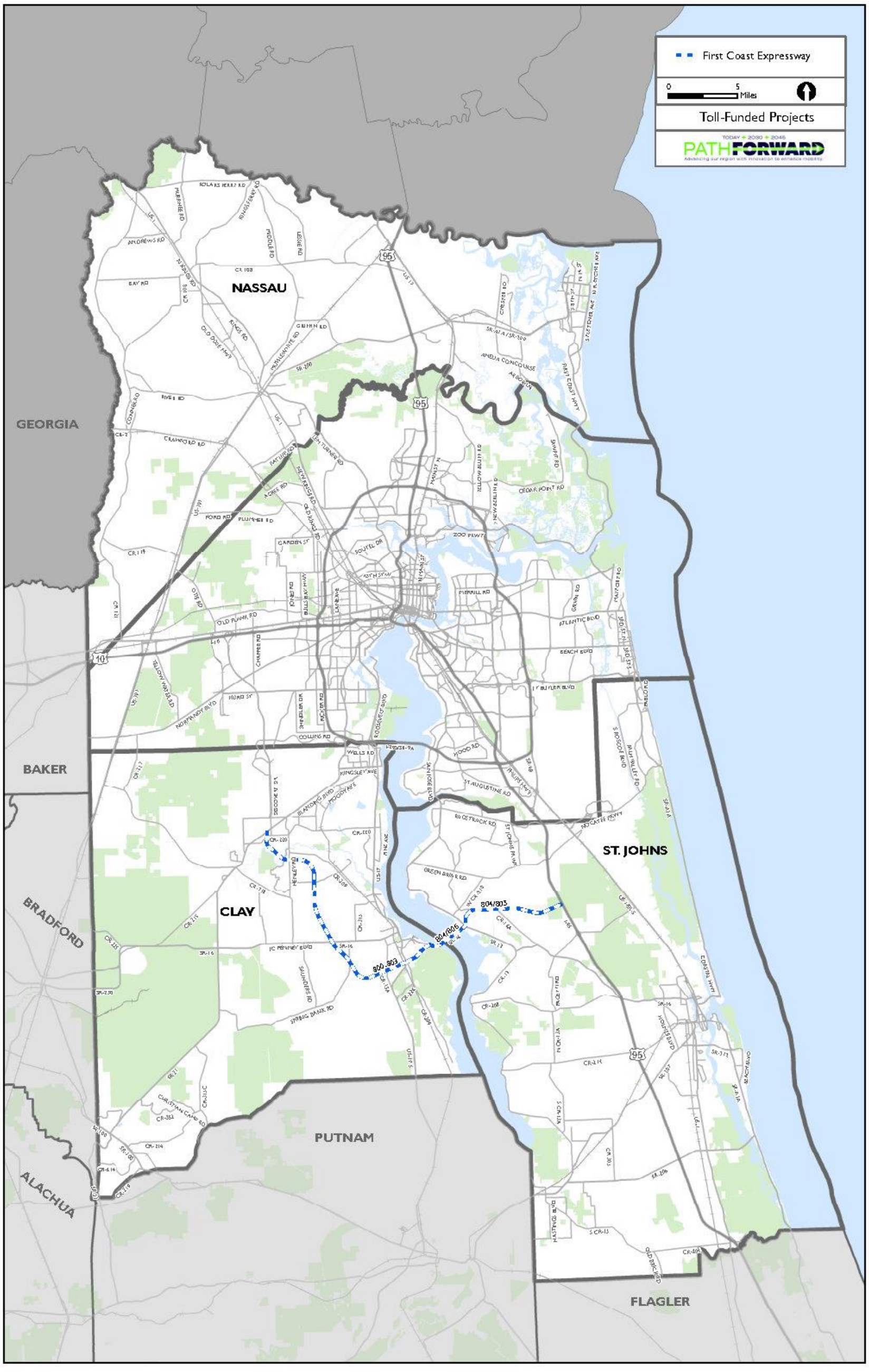


Table 9.6: Adopted 2045 Cost Feasible Plan - Locally Funded Projects

Facility	County	ID	From	To	Improvement	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
GCB Bypass	Clay	LP100	US 17	SR 16	Construction of new 2 lane roadway	6,000			
CR 220	Clay	LP101	Knight Boxx Road	Henley Road	Widen to 4 lanes	15,000			
Chaffee Road	Duval	LP200	Normandy Boulevard	I-10	Widen to 4 lanes	$38,000			
Soutel Drive Road Diet	Duval	LP201	New Kings Road	Lem Turner Road	Reduce from a 4 lane to a 3 lane typical section	$5,280			
Edgewood Avenue	Duval	LP202	US 17	Cassat Avenue	Reduce from a 4 lane to a 3 lane typical section	$5,200			
Collins Road	Duval	LP203	Old Middleburg Road	Rampart Road	Widen to 4 lanes	$17,000			
Kernan Boulevard	Duval	LP204	Atlantic Boulevard	McCormick Road	Widen to 6 lanes	$16,700			
Edwards Road	Nassau	LP300	Police Lodge Road	SR 200	Reconstruct 2 lane road + trail	$6,600			
Pages Dairy Road	Nassau	LP301	Felmor Road	Chester Road	Reconstruct 2 lane road + trail	$3,782			
William Burgess Road Ext	Nassau	LP302	US 17	Miner Road	Construction of new roadway	$14,250			
CR 210	St. Johns	LP400	I-95	US 1	Widen to 4 lanes	$2,500			
CR 210	St. Johns	LP401	Greenbriar Road	Cimarrone Boulevard	Widen to 4 lanes	$2,942			
Longleaf Pine Parkway	St. Johns	LP402	Roberts Road	Oxford Estates	Widen to 4 lanes	$2,251			
CR 2209	St. Johns	LP403	CR 210	CR 16A	Construct new 4 lane roadway	$10,000			
					Locally Funded Totals	**$145,505**			

Figure 9.12: Adopted 2045 Cost Feasible Plan - Locally Funded Projects

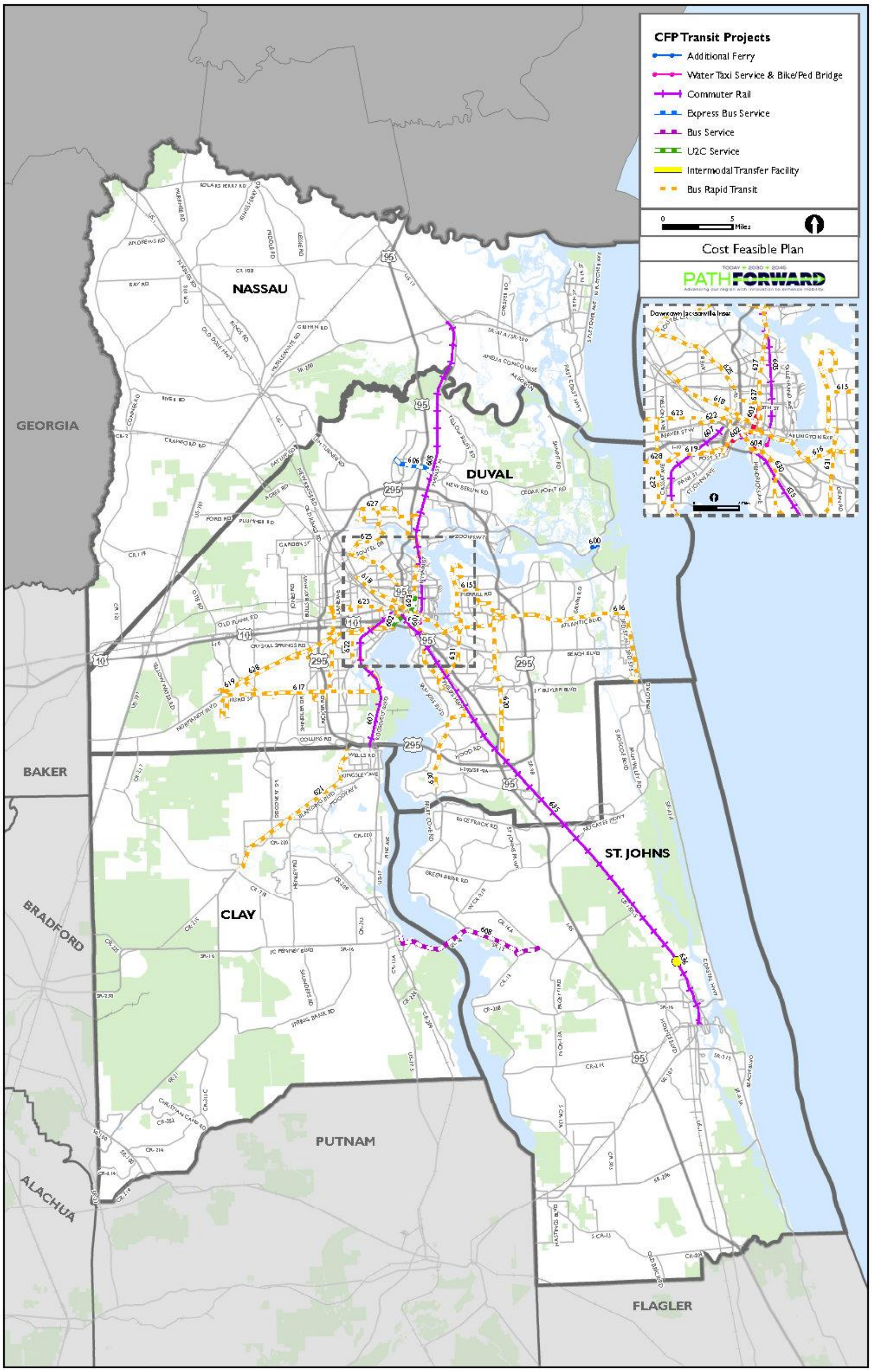
Table 9.7: Adopted 2045 Cost Feasible Plan - Transit Projects (State and Federally Funded Projects)

Facility	County	ID	From	To	Improvement	Phase	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
Southwest BRT Line	Duval	NA	Downtown Convention Center	Florida State College – Kent Campus	Bus Rapid Transit	Capital	$46,145			
U2C	Duval	602	Central	Brooklyn/Five Points	U2C Service	Capital		$40,000		
U2C	Duval	603	Central	Springfield	U2C Service	Capital		$40,000		
U2C	Duval	604	Kings Avenue	San Marco	U2C Service	Capital		$40,000		
Southeast Commuter Rail	Duval/St Johns	635	Downtown Jacksonville	St. Augustine	Commuter rail service	Capital				$250,000
Mayport Ferry	Duval	600	A1A	A1A	Additional Ferry; increase frequency by 50%	Capital		$6,500		
Water Taxi	Duval	601	The District	Shipyard Development	New Water Taxi Service	Capital			$1,550	
Shands Bus Service	Clay/St. Johns	608	Clay County	St. Johns County	Bus Service	Capital		$26,40		
Atlantic BRT Line	Duval	616	Downtown Jacksonville	Beaches/Ponte Vedra	Bus Rapid Transit	Capital			$30,000	
Moncrief BRT Line	Duval	625	Busch Drive	Downtown Jacksonville	Bus Rapid Transit	Capital			$30,000	
North Main BRT Line	Duval	627	Florida State College North Campus	Downtown Jacksonville	Bus Rapid Transit	Capital			$30,000	
					Transit CFP Totals		**$46,145**	**$129,140**	**$91,550**	**$250,000**

Table 9.7B Transit Projects Funded with Grant or Other Funds

Facility	County	ID	From	To	Improvement	Phase	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
North Commuter Rail	Duval/Nassau	605	Downtown Jacksonville	Yulee	Commuter rail service	Capital				$250,000
Southwest Commuter Rail	Duval/Clay	607	Downtown Jacksonville	Orange Park	Commuter rail service	Capital				$250,000
Express Bus	Duval	606	NS Rail on Main	JIA	Express Bus Service	Capital				$30,000
Arlington BRT Line	Duval	615	Downtown Jacksonville	Arlington	Bus Rapid Transit	Capital				$30,000
103rd BRT Line	Duval	617	Cecil Field	Blanding Boulevard	Bus Rapid Transit	Capital				$30,000
Edgewood BRT Line	Duval	618	New Kings Road	Downtown Jacksonville	Bus Rapid Transit	Capital				$30,000
Southside BRT Line	Duval	620	Regency Square Mall	Avenues Mall	Bus Rapid Transit	Capital				$30,000
Commonwealth/Cassat BRT Line	Duval	622	Cecil Field	Downtown Jacksonville	Bus Rapid Transit	Capital				$30,000
Commonwealth/Lane BRT Line	Duval	623	Downtown Jacksonville	103rd Street	Bus Rapid Transit	Capital				$30,000
Post/Normandy BRT Line	Duval	628	Normandy Boulevard	Downtown Jacksonville	Bus Rapid Transit	Capital				$30,000
St. Augustine/San Jose BRT Line	Duval	630	Downtown Jacksonville	Mandarin	Bus Rapid Transit	Capital				$30,000
University BRT Line	Duval	631	Jacksonville University	St. Augustine Road	Bus Rapid Transit	Capital				$30,000
Normandy BRT Line	Duval	619	Cecil Field	Downtown Jacksonville	Bus Rapid Transit	Capital				$30,000
Clay County BRT Line	Clay	621	Orange Park Mall	Middleburg	Bus Rapid Transit	Capital				$30,000
					Totals			**$ -**	**$ -**	**$860,000**

Figure 9.13: Adopted 2045 Cost Feasible Plan - Transit Projects



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10 Emerging Issues

The transportation/mobility landscape is ever-evolving. Technology and mobility are merging. From hybrid cars taking the auto industry by storm to the growing capabilities of artificial intelligence (AI) in everyday life, exciting possibilities are beginning to flourish, and the transportation/mobility landscape will be forever reshaped. These technologies introduce more uncertainty and risk than has not been seen since the metropolitan planning process began in the 1960s. Mobility is becoming more personal, and technology innovations are focused more on the purpose of the trip and how the need can be met through innovative technologies. The private sector is organizing to meet these needs.

There are a number of emerging trends in transportation and mobility that are leading the way in reshaping how we travel from place to place. Below are some of the leading trends.

10.1 Mobility as a Service

It's estimated that by 2050, populations in urban areas will increase by 68%. Much of the increase will be from in-migration. With the influx of newcomers, the challenge will be to minimize congestion and promote safety. Mobility as a Service (MaaS) can help achieve these aims. Most prognosticators predict the future of mobility will be an ecosystem of MasS built on a complex digital infrastructure that will provide each traveler the information needed to choose the mode, route and price associated with all trip purposes. MaaS attempts to satisfy the need for mobility with a network of mobility solutions from public and private organizations. MaaS companies will work with cities to provide mobility options that are accessible, affordable, and timely for all users.

The integration of various modes of transportation services into a single mobility service may result in a shift away from personally-owned vehicles. If not properly managed, it will also discourage the use of traditional mass transit.

As these services automate and the costs begin to decrease, the convenience of inexpensive door to door service will reduce ridership on fixed-route transit service. Services will be scaled back as farebox revenue decreases. Agencies like the Jacksonville Transportation Authority (JTA) may be the MaaS provider. In so doing JTA may be able to expand service overall. JTA is currently operating similar services in portions of its service area.

In North Florida some of the MaaS provided now include:

- Uber and Lyft launched their services in Northeast Florida in 2014.

- Uber Express Pool began service in North Florida in 2018.

10.2 Autonomous Vehicles

Self-driving cars are no longer something seen in futuristic movies or in comic books. Today we are on the cusp of developing entire fleets of autonomous vehicles.

Major corporations like Google, Uber, General Motors (GM), and Tesla are investing billions of dollars in perfecting the concept of self-driving cars, and some are already testing the market. In Pittsburgh, Uber's Advanced Technologies Group headquarters is already in the process of rolling out several autonomous SUVs to perform short trips around the city and collect data on road and traffic conditions. GM's self-driving car division, Cruise, is attracting a bevy of investors, such as Honda and Japan's Softbank, to launch a fleet of Chevy Bolts throughout California and put them toward commercial use by 2020. The race to create a sustainable autonomous vehicle is on, and companies are aggressively spending in hopes of gaining market advantage.

Of all the changes facing mobility, autonomous vehicles are the most profound. Not only will this technology expand mobility to everyone, but it also has the potential to reshape our urban and suburban landscape. Because driverless vehicles will drop off passengers and move on, prime real estate now used for parking lots and garages could be freed up for more housing, parks, public plazas and open space. Local elected officials need to begin discussing how to regulate curb space, plan for the repurposing of parking lots and structures now in order to stay ahead of these changes.

Autonomous vehicles may increase car-sharing, this could reduce traffic congestion and emissions. This technology will allow these vehicles to travel closer together. Cities could use the extra space for bike lanes and wider sidewalks, making walking and biking safer and more appealing. In addition, by making it easier to forgo owning a car, living in cities and close-in suburbs would potentially become more attractive and affordable. Increasing mobility and alternatives to auto ownership will make urban and suburban living more attractive and affordable.

Most predict widespread adoption of autonomous vehicles will take 20 to 30 years, depending on their safety record, affordability and the public's willingness to cede control to computers. Nevertheless, communities must begin planning for these emerging technologies today by considering these critical questions: How much parking will autonomous vehicles require? Will most people own them or participate in a car-sharing service? Will people travel when they don't have to drive? These will be difficult questions to answer.

As a first step in answering these questions, the North Florida TPO used the NERPM-AB model to test moderate and rapid adoption of automated vehicles.

There is a legitimate concern that empty driverless vehicles will roam the streets in search of passengers, adding to traffic. Driverless vehicles won't need to park close to their users. That would allow garages to be moved to less expensive outlying or industrial areas, leaving city centers for pedestrians and cyclists. Cars could park behind strip malls, allowing suburban roads to be lined with grass and landscaping. Because autonomous vehicles can be packed together

when parked — there's no need to open a driver's door — garages and lots would potentially eat up significantly less land.

While this technology has just as many pros as it does cons, it seems inevitable that autonomous vehicles will be part of our transportation systems sooner than later. It is something that needs to be followed closely and we must partner with the industry to make sure we understand and plan for the infrastructure needed to support them.

10.3 Micromobility

Micromobility is a category of transportation modes provided by very light vehicles such as electric scooters, electric skateboards and shared bicycles. While opinions of these types of vehicles vary and their acceptance can be rocky, they do provide options for short trips and expand the opportunities for completing the first mile/last mile portion of transit trips.

If you think about it, micromobility vehicles have a long history, going back at least two centuries from the invention of the bicycle through to the Razor kick scooter of the 1990s and, more recently, a variety of personally owned vehicles powered by small electric motors, ranging from hoverboards to scooters to skateboards, all with between one and four wheels. But it is only in the last few years that these modes have emerged as a true potential solution for urban mobility, enabled by advances in GPS tracking, connectivity, mobile payments, battery cost and longevity, and the growing ubiquity of smartphones.

The industry is clearly in its infancy and is, unsurprisingly, experiencing growing pains. While the economics of the e-scooter business, in particular, appear attractive given the vehicles' relatively low cost and potential return on investments, a host of business-model challenges remain. Vandalism and theft are persistent issues. Retrieving, charging, and balancing the fleet each night can be a costly and labor-intensive exercise. Some providers are opting to simply flood the market with vehicles rather than bear the full cost associated with constantly redistributing assets to make sure a scooter or bike is nearby when a rider wants one. Ensuring user compliance with company and government-mandated policies—from helmet use to parking—is fraught, with providers experimenting with a range of measures from the punitive (additional fees) to the pedagogic (mandatory educational exercises and materials and behavioral nudges).

Local governments can implement local regulations to determine the future of micromobility in their communities.

Industry leaders have made it clear that we are only scratching the surface with what is possible in terms of vehicle shape, size, and capability; we expect to see a variety of new designs emerging in the near future that stretch the definition of what might be considered micromobility.

10.4 Microtransit

Microtransit provides demand responsive services offering flexible routing and/or flexible scheduling of minibus vehicles. These services provided by individuals or private fleets have operated in third world countries such as India and in South America for many years. Microtransit operations, which operate as personalized transit for the public, are bringing mobility to under-serviced areas through the use of technology. A minibus or van is dispatched upon request. Riders meet the vehicle at a designated pick up location, usually in a predefined, geofence area and head to their destination. Successful microtransit uses intelligent systems to increase efficiency and viability. As more intelligent systems become available, microtransit will integrate into everyday mobility.

Additionally, better data on mobility patterns and wide smartphone access have made flexible, on-demand transit more possible than ever. Social trends toward city living and away from car-ownership have also spurred demand for the service. There are several key items that will need to be fostered is microtransit is to become a viable transportation option:

1. Microtransit must be operated as part of an integrated system. Ideally, microtransit providers will feed public transportation's central routes, providing first mile/last mile service.
2. More transit riders. If the integration is successful, the result could be fewer cars on the road and more fares in the fare box. This could foster better service and more riders. This would increase the attractiveness of JTA's BRT and commuter rail services.
3. Niche service. Markets can be targeted to attract private microtransit operators with ridership. Income classes, geographic areas and employment zones can be targeted. Services can be provided to cater to like-minded riders, underserved populations, large employers, service industry employers or students.

IThe flexibility of microtransit may play a key role in helping people live well without owning a car. The challenge for cities, operators, and advocates moving forward will be how to regulate these services – and how to leverage their benefits and tech for the greater public good.

Microtransit services currently operating in North Florida include:

- Beach Buggy
- EZ Airport Shuttle
- Floridian Transportation airport shuttle service

In St. Augustine, there are several tourist-related transportation company operators using other

modes that include:

- Bicycle rentals

- Low-speed vehicles
- Pedicab
- Scoot coupe
- Scooter/moped

These rentals are not provided by traditional microtransit service companies. They are for hire services to meet the first-mile last-mile needs of travelers.

10.5 Electric Hybrid Vehicles

Electric vehicles are at the forefront of the automotive industry with Tesla Volkswagen, Jaguar, Audie, BMW and other offering electric automobiles. But electric hybrid vehicles represent more than just cars.

Electric hybrid vans, buses and trains are available to move both people and freight. With continued efforts to reduce auto emissions and increase sustainability, transportation options that provide a more exceptional service to the public are a necessity. Many countries are developing newer train systems to maintain existing railways with greater efficiency. In Japan, the Maglev train uses electrically charged magnets to create a hover-like connection. Speeds can reach up to 374 miles per hour. It's expected to go public in 2027.

Electric passenger cars continue to gain in popularity and estimates are that by 2040 half of the new cars produced will be electric. These vehicles come close to matching gasoline-powered cars in purchase price and cost less to operate.

As the number of electric vehicles increases and fuel efficiency of gasoline and diesel powered vehicles improves, traditional transportation revenues, which are based on gas taxes, will shrink.

10.6 Summary

Currently, these technologies are advancing somewhat independently of one another Moving forward these technologies will converge and merge into one offering. When this occurs, the result will be full mobility in the palm of your hand. All services, a car, a van, a bus, a bike or scooter will be hailed and paid for by a smartphone. Special accommodations will be needed for the underserved who may not have a smartphone or a credit card.

The future of mobility will rely on emerging technologies in Connected Vehicles (CV), Electric Vehicles (EV), Automated Vehicles (AV), the Internet of Things (IoT), and the digital infrastructure to create smart communities. The implementation of these emerging and innovative technologies are anticipated to result in revolutionary changes for mobility over the next 25 years.

Seamless and reliable transportation. This is our future.

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APPENDIX A

2045 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans

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Office of Policy Planning November 20, 2018

2045 REVENUE FORECAST
NORTH FLORIDA TPO

WITH STATEWIDE, DISTRICTWIDE
AND COUNTY-SPECIFIC PROJECTIONS
2045 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans

Overview

This report documents the Florida Department of Transportation (FDOT) revenue forecast through 2045. Estimates for major state programs for this metropolitan area, for FDOT Districts, and for Florida as whole are included. This includes state and federal funds that "flow through" the FDOT work program. This information is used for updates of Metropolitan Planning Organization (MPO[1]) Long Range Transportation Plans (LRTPs) and related documents.

Background

In accordance with federal statute, longstanding FDOT policy and leadership by the Metropolitan Planning Organization Advisory Council (MPOAC), the Office of Policy Planning (OPP) provides projections of future available funding to Florida's 27 MPOs. This data is known as the Revenue Forecast. Consistent data is being applied to the development of the FDOT Strategic Intermodal System (SIS) Highway Cost Feasible Plan.

The department developed a long-range revenue forecast through 2045. The forecast is largely based upon recent federal legislation (e.g., the FAST Act[2]) and changes in multiple factors affecting state revenue sources and current policies. This 2045 forecast incorporates (1) amounts contained in the department's work program for FYs 2018 through 2022, (2) the impact of the department's objectives and investment policies, and (3) the Statutory Formula (equal parts of population and motor fuel tax collections) for distribution of certain program funds. All estimates are expressed in nominal dollars, also known as year of expenditure (YOE) dollars.

Purpose

This version of the forecast (in word processing or portable document format) provides one specific MPO, and all interested parties, with dollar figures that will be necessary and useful as it prepares its 2045 LRTP. If more detail or particular additional numbers are needed, these may subsequently be delivered in spreadsheet format. This document does not forecast funds that do not "flow through" the state work program. Further information concerning local sources of revenue is available from State of Florida sources, particularly *Florida's Transportation Tax Sources: A Primer,* and the *Local Government Financial Information Handbook.*[3]

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[1] In this document, the general term MPO is used to refer to organizations whose names take different forms, including TPO, TPA and MTPO.

[2] Fixing America's Surface Transportation (FAST) Act, Public Law 114-94, December 4, 2015.

[3] FDOT's tax source primer is available at http://www.fdot.gov/comptroller/pdf/GAO/RevManagement/Tax%20Primer.pdf. The financial information handbook is prepared by the Office of Economic and Demographic Research, part of the Florida Legislature; it is available at http://edr.state.fl.us/Content/local-government/reports/lgfih17.pdf.

This forecast features county level estimates for major FDOT capacity programs, specifically Other Roads and Transit. If an MPO includes more than one county, the county level estimates are totaled to produce an overall MPO estimate. If an MPO's boundary doesn't match county boundaries, the FDOT District will determine appropriate funding totals for that MPO. OPP is available for consultation and support, and Districts are asked to share their method and results with our office. However, final responsibility rests with the appropriate District.

There is a long-term goal to focus planning on metropolitan areas which do not correspond to county or city boundaries. In some cases, analyses and plans are based on census designated urbanized areas (UZAs). But for most sources of funding, it is more practical to define geographic areas by county boundaries.

This forecast does not break down SIS Highway expenditures to the county or District level. SIS Highway expenditures are addressed in the SIS Cost Feasible Plan (CFP), which is under preparation by the FDOT Systems Implementation Office.[4] Districts always inform MPOs of projects that are proposed to be included in the CFP, and, conversely, CFP projects need to be included in the appropriate MPO LRTP(s) to receive federal funding.

This Forecast lists funding for FDOT programs designed to support, operate, and maintain the state transportation system. The FDOT has set aside sufficient funds in the 2045 Revenue Forecast for these programs, referred to as "non-capacity programs" here, to meet statewide objectives and program needs in all metropolitan and non-metropolitan areas. Specific District level amounts are provided for existing facilities expenditures. Funding for these programs is not included in the county level estimates.

2045 Revenue Forecast (State and Federal Funds)

The 2045 Revenue Forecast is the result of a three-step process:

1. State and federal revenues from current sources were estimated.
2. Those revenues were distributed among appropriate statewide capacity and non-capacity programs consistent with statewide priorities.
3. County level estimates for the Other Roads and Transit programs were developed, along with County, District or Statewide estimates for other funding categories that are of particular interest to the 27 Florida MPOs.

Forecast of State and Federal Revenues

The 2045 Revenue Forecast includes program estimates for the expenditure of state and federal funds expected from current revenue sources (i.e., new revenue sources were not added). The forecast estimates revenues from federal, state, and Turnpike sources included in the Department's 5-Year Work Program.

The forecast does not estimate revenue from other sources (i.e., local government/authority taxes, fees, and bond proceeds; private sector participation; and innovative finance sources). Estimates of state revenue sources were based on estimates prepared by the State Revenue

[4] Formerly known as the Systems Planning Office.

Estimating Conference (REC) in September 2017 for state fiscal years (FYs) 2019 through 2028. Estimates of federal revenue sources were based on the Department's Federal Aid Forecast for FYs 2018 through 2027. In this forecast, Surplus Toll Revenue is only projected for Miami-Dade County, but that category may apply to more counties in future Revenue Forecasts. Assumptions about revenue growth are shown in Table 1:

Table 1
Revenue Sources and Assumptions

Revenue Sources	Years	Assumptions*
State Taxes (includes fuel taxes, tourism-driven sources, vehicle-related taxes and documentary stamp taxes)	2019-2028	Florida REC Estimates; these average in the range from 2.5% to 3.0% per year
	2029-2045	Annual 1.93% increase in 2029, gradually decreasing to -0.44% in 2045
Federal Distributions (Total Obligating Authority)	2018-2027	FDOT Federal Aid Forecast
	2028-2045	Annual 0.0% increase through 2045
Turnpike	2018-2028	Turnpike Revenue Forecast
	2029-2045	Annual 1.93% increase in 2029, gradually decreasing to -0.44% in 2045

* Note all growth rates show nominal, or year of expenditure, dollar figures. Consistent with REC assumptions, a constant annual inflation rate of 2.60% is projected forward indefinitely. Therefore, *an assumption of nominal growth of 1.93% signifies a real decline of about 0.65% per year.*

A summary of the forecast of state, federal and Turnpike revenues is shown in Table 2. The *2045 Revenue Forecast Guidebook* contains inflation factors that can be used to adjust project costs expressed in "present day cost" to "year of expenditure" dollars.

Table 2
Forecast of Revenues
2045 Revenue Forecast (Millions of Dollars)
(Percentages reflect percentage of total period funding produced by that source. For example, Federal funding is projected to provide 24% of all funding for the period of 2021 through 2025)

Major Revenue Sources	Time Periods (Fiscal Years) 2020[1]	2021-2025[1]	2026-2030	2031-2035	2036-2045	26-Year Total[2] 2020-2045
Federal	2,353	10,884	11,878	12,108	24,217	61,440
	28%	24%	23%	21%	20%	22%
State	5,270	27,366	34,128	38,264	80,719	185,748
	62%	61%	65%	66%	66%	65%
Turnpike	814	6,572	6,688	7,861	16,518	38,453
	10%	15%	13%	14%	14%	13%
Total[2]	**8,437**	**44,823**	**52,694**	**58,233**	**121,454**	**285,641**

[1] Based on the FDOT Adopted Work Program for 2018 through 2022.
[2] Columns and rows sometimes do not equal the totals due to rounding.

Estimates for State Programs

Long range revenue forecasts assist in determining financial feasibility of needed transportation improvements, and in identifying funding priorities. FDOT policy places primary emphasis on safety and preservation. Remaining funding is planned for capacity programs and other priorities.

The 2045 Revenue Forecast includes the program funding levels contained in the July 1, 2017 Adopted Work Program for 2018 through 2022. The forecast of funding levels for FDOT programs for 2020-2045 was developed based on the corresponding Program and Resource Plan (PRP), which includes the Adopted Work Program and planned funding for fiscal years 2023-2026. This Revenue Forecast provides information for Capacity and Non-Capacity state programs. The information is consistent with "Financial Guidelines for MPO Long Range Plans" moved forward by the Metropolitan Planning Organization Advisory Council Policy and Technical Committee on July 13, 2017.

The Revenue Forecast entails long-term financial projections for support of long-term planning. The forecast is delivered well in advance of the 5-year LRTP adoption schedule, roughly 18 months in advance of the first required adoption. This forecast is considered satisfactory for the remainder of the 5-year cycle; in other words, it is useful for MPOs whose adoptions come at the end of the cycle, about 3½ years after the first MPOs. However, FDOT reserves the right to consider adjustments to the Revenue Forecast during the LRTP adoption cycle, if warranted.

Capacity Programs

Capacity programs include each major FDOT program that expands the capacity of existing transportation systems (such as highways and transit). Table 3 includes a brief description of each major capacity program and the linkage to the program categories used in the PRP.

Statewide Forecast for Capacity Programs

Table 4 identifies the statewide estimates for capacity programs in the 2045 Revenue Forecast. $285 billion is forecast for the entire state transportation program from 2020 through 2045; about $149 billion (52%) is forecast for capacity programs.

Metropolitan Forecast for Capacity Programs

Pursuant to federal law, transportation management area (TMA) funds and certain Transportation Alternatives (TALU) funds are projected based on current population estimates. These 2 categories only apply to federally designated TMAs; 15 of the State's 27 MPOs qualify for these funds. District estimates for certain Transportation Alternatives (TA) funds and the Other Roads program were developed using the current statutory formula.[5] For planning purposes, transit program funds were divided between Districts and counties according to population.

[5] The statutory formula is 50% population and 50% motor fuel tax collections.

TABLE 3
Major Capacity Programs Included in the 2045 Revenue Forecast and Corresponding Program Categories in the Program and Resource Plan (PRP)

2045 Revenue Forecast Programs	PRP Program Categories
SIS Highways Construction & ROW - Construction, improvements, and associated right of way on SIS highways (i.e., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors).	Interstate Construction Turnpike Construction Other SIS Highway Construction SIS Highway Traffic Operations SIS Highway Right of Way (ROW) SIS Advance Corridor Acquisition
Other Arterial Construction/ROW - Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS. Also includes funding for local assistance programs such as the Transportation Regional Incentive Program (TRIP), and the County Incentive Grant Program (CIGP).	Arterial Traffic Operations Construction County Transportation Programs Economic Development Other Arterial & Bridge Right of Way Other Arterial Advance Corridor Acquisition
Aviation - Financial and technical assistance to Florida's airports in the areas of safety, security, capacity enhancement, land acquisition, planning, economic development, and preservation.	Airport Improvement Land Acquisition Planning Discretionary Capacity Improvements
Transit - Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.	Transit Systems Transportation Disadvantaged – Department Transportation Disadvantaged – Commission Other; Block Grants; New Starts Transit
Rail - Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	Rail/Highway Crossings Rail Capacity Improvement/Rehabilitation High Speed Rail Passenger Service
Intermodal Access - Improving access to intermodal facilities, airports and seaports; associated rights of way acquisition.	Intermodal Access
Seaport Development - Funding for development of public deep-water ports projects, such as security infrastructure and law enforcement measures, land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers.	Seaport Development
SUN Trail – FDOT is directed to make use of its expertise in efficiently providing transportation projects to develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS), which is planned by the Florida Department of Environmental Protection (FDEP).	Other State Highway Construction Other State Highway ROW Other Roads Construction Other Roads ROW Other SIS Highway Construction SIS Highway ROW

Table 4
Statewide Capacity Program Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Programs	Time Periods (Fiscal Years)					26-Year Total[2]
	2020[1]	2021-25[1]	2026-30	2031-35	2036-45	2020-2045
SIS Highways Construction & ROW	2,199	12,940	12,490	13,933	28,971	70,534
Other Roads Construction & ROW	892	6,538	8,006	8,650	18,103	42,188
Aviation	211	1,143	1,433	1,596	3,354	7,738
Transit	417	2,306	2,881	3,154	6,580	15,339
Rail	178	850	1,255	1,425	2,985	6,692
Intermodal Access	40	262	345	379	791	1,816
Seaports	114	622	837	938	1,970	4,481
SUN Trail	25	125	125	125	250	650
Total Capacity Programs	**4,075**	**24,786**	**27,372**	**30,200**	**63,004**	**149,438**
Statewide Total Forecast	**8,437**	**44,823**	**52,694**	**58,233**	**121,454**	**285,641**

[1] Based on the FDOT Tentative Work Program for 2018 through 2022.
[2] Columns and rows sometimes do not equal the totals due to rounding.

Estimates for the Other Roads and Transit program categories for this metropolitan area are included in Table 5.

Table 5
County Level Capacity Program Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)
Estimates for the North Florida Transportation Planning Organization

	Time Periods (Fiscal Years)					26-Year Total
Capacity Programs*	**2020**	**2021-25**	**2026-30**	**2031-35**	**2036-45**	**2020-2045**
Other Roads Construction & ROW	47.88	391.55	494.08	539.87	1130.31	2603.70
Transit	26.69	148.28	186.98	204.77	426.60	993.31
Total - Main Programs	74.57	539.84	681.07	744.64	1556.91	3597.02

* Estimates for 2018 through 2022 are contained in the FDOT Adopted Work Program.
# Other Roads estimates do not include projected funding for the TRIP program of the Federal TMA program (SU Fund Code).
^ Transit estimates do not include projected funding for the Florida New Starts program.

A few programs fund capacity projects throughout the state on a competitive basis. The two most prominent programs for MPOs are the Transportation Regional Incentive Program (TRIP) and the Florida New Starts Transit Program. Formerly, TRIP was referred to as a Documentary Stamp Tax program, but there are currently multiple sources of funding. With the economic recovery, the forecast funding for TRIP is now over five times the level of 5 years ago. Also, amounts for the federally funded TMA program (Fund Code SU) are provided in Table 6, and not included in Table 5. Neither TRIP, Florida New Starts or TMA funds are included above.

Table 6
Transportation Management Area (TMA) Funds Estimates
(Known as SU Funds in FDOT Work Program)
Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

North Florida Metropolitan Area (Defined as Clay, Duval, Nassau, and St. Johns Counties)	**Time Periods (Fiscal Years)**					**26 Year Total**
	2020	**2021-25**	**2026-30**	**2031-35**	**2036-45**	**2020-2045**
TMA / SU Funds	17.23	86.13	86.13	86.13	172.26	447.88

Projects which would be partially or entirely funded by TRIP or FL New Starts cannot be counted as "funded" in LRTPs. This is because there is no guarantee of any specific project receiving TRIP or FL New Starts funding in the future. Both programs are competitive, and only a small percentage of potentially eligible projects receive funding. However, these projects can be included in LRTPs as "illustrative" projects.[6] If MPOs have specific questions, they should consult with their District liaison and planning staff; District staff will contact the OPP, Work Program, or other Central Office staff as needed. Conditional estimates of TRIP funds by District are in Table 7. Statewide estimates of FL New Starts funds are in Table 8.

The FAST Act continued funding for Transportation Alternatives projects. Categories impacting MPOs include funds for (1) Transportation Management Areas (TALU funds); (2) areas with populations greater than 5,000 up to 200,000 (TALL funds), and (3) any area of the state (TALT funds). Estimates of Transportation Alternatives Funds are shown further below in Table 9.

Table 7
Districtwide Transportation Regional Incentive Program Estimates
State Funds from the 2045 Revenue Forecast (Millions of Dollars)

FDOT District	**5-Year Period (Fiscal Years)**					**26-Year Total**[2]
	2020[1]	**2021-25**	**2026-30**	**2031-35**	**2036-2045**	**2020-2045**
District 1	3.1	21.9	32.7	36.4	74.6	**168.8**
District 2	2.5	17.6	26.3	29.2	59.9	**135.5**
District 3	1.6	11.6	17.3	19.2	39.3	**89.0**
District 4	4.1	28.9	43.1	47.9	98.2	**222.3**
District 5	4.7	32.8	49.0	54.4	111.7	**252.6**
District 6	2.8	19.7	29.4	32.7	67.0	**151.6**
District 7	3.3	23.2	34.6	38.4	78.8	**178.2**
Statewide Total Forecast	**22.2**	**155.8**	**232.3**	**258.2**	**529.5**	**1,197.9**

[1] Estimates for 2018 through 2022 are contained in the FDOT Adopted Work Program.
[2] Columns and rows sometimes do not equal the totals due to rounding.

[6] Other projects for which funding is uncertain may also be included as illustrative projects.

Table 8
Transit - Florida New Starts Program Estimates
State Funds from the 2045 Revenue Forecast (Millions of Dollars)

Statewide Program	Time Periods (Fiscal Years)					26-Year Total
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
Statewide Total Forecast	41.8	226.3	259.2	282.4	593.4	1,403.1

Table 9
Transportation Alternatives Funds Estimates
Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

North Florida Metropolitan Area (Defined as Clay, Duval, Nassau, and St. Johns Counties)	Time Periods (Fiscal Years)					26 Year Total [1]
	2020 [1]	2021-25	2026-30	2031-35	2036-45	2020-2045
TALU (Urban); Funds for TMA	1.39	6.96	6.96	6.96	13.92	36.19
TALL (<200,000 population); Entire FDOT District	0.69	3.44	3.44	3.44	6.87	17.86
TALT (Any Area); Entire FDOT District	2.78	13.89	13.89	13.89	27.77	72.20

[1] Rows sometimes do not equal the totals due to rounding.

Other projects for which funding is uncertain may also be included in the LRTP as "illustrative" projects.

Non-Capacity Programs
Non-capacity programs refer to FDOT programs designed to support, operate and maintain the state highway system: safety, resurfacing, bridge, product support, operations and maintenance, and administration. Table 10 includes a description of each non-capacity program and the linkage to the program categories used in the Program and Resource Plan.

County level estimates are not needed for these programs. Instead, FDOT has included sufficient funding in the 2045 Revenue Forecast to meet the following statewide objectives and policies:

- **Resurfacing program:** Ensure that 80% of state highway system pavement meets Department standards;
- **Bridge program:** Ensure that 90% of FDOT-maintained bridges meet Department standards while keeping all FDOT-maintained bridges open to the public safe;
- **Operations and maintenance program:** Achieve 100% of acceptable maintenance condition standard on the state highway system;
- **Product Support:** Reserve funds for Product Support required to construct improvements (funded with the forecast's capacity funds) in each District and metropolitan area; and
- **Administration:** Administer the state transportation program.

The Department has reserved funds in the 2040 Revenue Forecast to carry out its responsibilities and achieve its objectives for the non-capacity programs on the state highway system.

TABLE 10
Major Non-Capacity Programs Included in the 2045 Revenue Forecast and Corresponding Program Categories in the Program and Resource Plan (PRP)

2045 Revenue Forecast Programs	PRP Program Categories
Safety - Includes the Highway Safety Improvement Program, the Highway Safety Grant Program, Bicycle/Pedestrian Safety activities, the Industrial Safety Program, and general safety issues on a Department-wide basis.	Highway Safety Grants
Resurfacing - Resurfacing of pavements on the State Highway System and local roads as provided by state law.	Interstate Arterial and Freeway Off-System Turnpike
Bridge - Repair and replace deficient bridges on the state highway system. In addition, not less than 15% of the amount of 2009 federal bridge funds must be expended off the federal highway system (e.g., on local bridges not on the State Highway System).	Repair - On System Replace - On System Local Bridge Replacement Turnpike
Product Support - Planning and engineering required to "produce" FDOT products and services (i.e., each capacity program; Safety, Resurfacing, and Bridge Programs).	Preliminary Engineering Construction Engineering Inspection Right of Way Support Environmental Mitigation Materials & Research Planning & Environment Public Transportation Operations
Operations & Maintenance - Activities to support and maintain transportation infrastructure once it is constructed and in place.	Operations & Maintenance Traffic Engineering & Operations Toll Operations Motor Carrier Compliance
Administration and Other - Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non-highway fixed assets (e.g., offices, maintenance yards). The "Other" category consists primarily of debt service.	Administration Fixed Capital Outlay Office Information Systems Debt Service

District and metropolitan area. Table 11 identifies the statewide estimates for non-capacity programs. About $136 billion (48% of total revenues) is forecast for non-capacity programs.

Table 11
Statewide Non-Capacity Expenditure Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Categories	Time Periods (Fiscal Years)					26-Year Total[1]
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
Safety	141	820	826	825	1,659	**4,271**
Resurfacing	633	4,354	4,150	4,241	8,756	**22,135**
Bridge	1,035	1,051	2,403	2,946	6,122	**13,556**
Product Support	1,302	6,576	6,709	7,096	14,614	**36,299**
Operations and Maintenance	1,384	7,442	8,596	9,162	18,939	**45,523**
Administration and Other	429	2,770	2,891	2,819	5,559	**14,468**
Statewide Total Forecast	**4,923**	**23,013**	**25,576**	**27,089**	**55,650**	**136,251**

[1] Columns and rows sometimes do not equal the totals due to rounding.

Table 12 contains District-wide estimates for State Highway System (SHS) existing facilities expenditures for information purposes. Existing facilities expenditures include all expenditures for the program categories Resurfacing, Bridge, and Operations and Maintenance (O&M). In the previous Revenue Forecast, these expenditures were described as SHS O&M, but the expenditures on the Resurfacing and Bridge categories, in combination, are about as much as those for O&M. These existing facilities estimates are provided pursuant to an agreement between FDOT and the Federal Highway Administration (FHWA) Division Office.

Table 12
State Highway System Existing Facilities Estimates by District
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Programs	Time Periods (Fiscal Years)					26-Year Total[1]
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
District 1	457	1,922	2,267	2,446	5,060	**12,151**
District 2	606	2,551	3,009	3,247	6,716	**16,129**
District 3	495	2,084	2,458	2,652	5,487	**13,176**
District 4	410	1,728	2,038	2,199	4,549	**10,924**
District 5	561	2,362	2,785	3,006	6,217	**14,931**
District 6	203	854	1,007	1,087	2,248	**5,399**
District 7	319	1,345	1,586	1,712	3,541	**8,503**
Statewide Total Forecast	**3,051**	**12,847**	**15,150**	**16,348**	**33,817**	**81,214**

Note: Includes Resurfacing, Bridge, and Operations & Maintenance Programs.
[1] Columns and rows sometimes do not equal the totals due to rounding.

Advisory Concerning Florida's Turnpike Enterprise

Within the framework of FDOT, Florida's Turnpike Enterprise (Turnpike) is given authority, autonomy and flexibility to conduct its operations and plans in accordance with Florida Statute and its Bond Covenants. The Turnpike's traffic engineering consultant projects Toll Revenues and Gross Concession Revenues for the current year and the subsequent 10-year period, currently FYs 2018-2028. The consultant's official projections are available at http://www.floridasturnpike.com/documents/reports/Traffic%20Engineers%20Annual%20Report/1_Executive%20Summary.pdf.

Projections of Turnpike revenues within the State of Florida Revenue Forecast beyond FY2028 are for planning purposes, and no undue reliance should be placed on these projections. Such amounts are generated and shared by the FDOT Office of Policy Planning (OPP) for purposes of accountability and transparency. They are part of the Revenue Forecast process, which serves the needs of MPOs generating required Long Range Transportation Plans (LRTPs).

MPOs do not program capital projects or make decisions concerning Turnpike spending. OPP projections are not part of the Turnpike's formal revenue estimating process and are not utilized for any purpose other than to assist MPOs and perform related functions. Such amounts do not reflect the Turnpike's requirement to cover operating and maintenance costs, payments to bondholders for principal and interest, long-term preservation costs, and other outstanding Turnpike obligations and commitments.

APPENDIX B

2045 Needs Plan Project Costs

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Clay County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
101	Cheswick Oak Avenue Extension	Oakleaf Plantation Parkway	Savannah Glen Boulevard	New Road	4 Lanes (N4)	$ 1,300,516.10	$ 975,387.07	$ 130,051.61	$ 130,051.61	$ 195,077.41	$ 2,731,083.80
102	College Drive	CR 220 Doctors Inlet	SR 21 Blanding Boulevard	Widen	6 Lanes (A2-6)	$ 13,533,981.60	$ 10,150,486.20	$ 1,353,398.16	$ 1,353,398.16	$ 2,030,097.24	$ 28,421,361.36
103	College Drive Extension	SR 21 Blanding Boulevard	Challenger Drive	New Road	4 Lanes (N4)	$ 7,293,098.72	$ 5,469,824.04	$ 729,309.87	$ 729,309.87	$ 1,093,964.81	$ 15,315,507.32
104	CR 209 Russell Road	CR 739 Henley Road	US 17	Widen	4 Lanes (N2-4)	$ 6,956,433.83	$ 5,217,325.38	$ 695,643.38	$ 695,643.38	$ 1,043,465.08	$ 14,608,511.05
105	CR 209 South	Decoy Road	US 17	Reconstruct	2 Lanes	$ 18,595,044.71	$ 13,946,283.53	$ 1,859,504.47	$ 1,859,504.47	$ 2,789,256.71	$ 39,049,593.88
106	CR 218	US 301	Cosmos Avenue	Widen	4 Lanes (A2-4)	$ 4,171,823.40	$ 3,128,867.55	$ 417,182.34	$ 417,182.34	$ 625,773.51	$ 8,760,829.14
107	CR 218	Cosmos Avenue	Pine Tree Lane	Widen	4 Lanes (A2-4)	$ 5,100,063.12	$ 3,825,047.34	$ 510,006.31	$ 510,006.31	$ 765,009.47	$ 10,710,132.55
108	CR 218	SR 21 Blanding Boulevard	CR 739 Henley Road	Widen	4 Lanes (A2-4)	$ 6,513,120.47	$ 4,884,840.36	$ 651,312.05	$ 651,312.05	$ 976,968.07	$ 13,677,552.99
109	CR 218	CR 739 Henley Road	SR 16	Widen	4 Lanes (A2-4)	$ 11,493,091.21	$ 8,619,818.41	$ 1,149,309.12	$ 1,149,309.12	$ 1,723,963.68	$ 24,135,491.54
111	CR 218 Extension	SR 23 First Coast Expressway	CR 315	New Road	4 Lanes (N4)	$ 8,569,759.09	$ 6,427,319.32	$ 856,975.91	$ 856,975.91	$ 1,285,463.86	$ 17,996,494.09
112	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Knight Boxx Road	Widen	4 Lanes (A2-4)	$ 9,724,163.11	$ 7,293,122.33	$ 972,416.31	$ 972,416.31	$ 1,458,624.47	$ 20,420,742.53
113	CR 220 Doctors Inlet Road	College Drive	US 17	Widen	6 Lanes (A2-6)	$ 12,110,711.40	$ 9,083,033.55	$ 1,211,071.14	$ 1,211,071.14	$ 1,816,606.71	$ 25,432,493.95
114	CR 315	SR 16	CR 315B	Widen	4 Lanes (A2-4)	$ 11,832,709.01	$ 8,874,531.75	$ 1,183,270.90	$ 1,183,270.90	$ 1,774,906.35	$ 24,848,688.91
115	CR 315	CR 315B	US 17	Widen	4 Lanes (A2-4)	$ 8,563,677.63	$ 6,422,758.22	$ 856,367.76	$ 856,367.76	$ 1,284,551.64	$ 17,983,723.02
116	CR 739B Sandridge Road	CR 739 Henley Road	CR 209 Russell Road	Widen	4 Lanes (A2-4)	$ 2,082,179.02	$ 1,561,634.26	$ 208,217.90	$ 208,217.90	$ 312,326.85	$ 4,372,575.93
117	Decoy Road	US 17	CR 209 South	Reconstruct	2 Lanes	$ 9,362,997.84	$ 7,022,248.38	$ 936,299.78	$ 936,299.78	$ 1,404,449.68	$ 19,662,295.46

Clay County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
118	Governors Park Road	US 17	SR 16	New Road	4 Lanes (N4)	$ 1,407,141.70	$ 1,055,356.28	$ 140,714.17	$ 140,714.17	$ 211,071.26	$ 2,954,997.57
119	Knight Boxx Road	CR 220 Doctors Inlet Road	SR 21 Blanding Boulevard	Widen	6 Lanes (A2-6)	$ 21,767,545.22	$ 16,325,658.91	$ 2,176,754.52	$ 2,176,754.52	$ 3,265,131.78	$ 45,711,844.95
120	Lake Asbury East West 1	NS3	CR 209 Russell Road	New Road	2 Lanes (N2)	$ 3,332,983.27	$ 2,499,737.45	$ 333,298.33	$ 333,298.33	$ 499,947.49	$ 6,999,264.87
121	Lake Asbury North South Road 3	CR 739B Sandridge Road	CR 209 Russell Road	New Road	2 Lanes (N2)	$ 6,311,480.04	$ 4,733,610.03	$ 631,148.00	$ 631,148.00	$ 946,722.01	$ 13,254,108.07
122	Long Bay Road Extension North	Old Jennings Road	Long Bay Road	New Road	2 Lanes (N2)	$ 4,615,034.09	$ 3,461,275.57	$ 461,503.41	$ 461,503.41	$ 692,255.11	$ 9,691,571.59
123	Oakleaf Village Parkway Extension	Oakleaf Plantation Parkway	Oakleaf Village Parkway	New Road	2 Lanes (N2)	$ 1,130,539.26	$ 847,904.44	$ 113,053.93	$ 113,053.93	$ 169,580.89	$ 2,374,132.44
124	SR 100	Clay/Bradford County line	Clay/Putnam County line	Widen	4 Lanes (A2-4)	$ 2,505,036.41	$ 1,878,777.31	$ 250,503.64	$ 250,503.64	$ 375,755.46	$ 5,260,576.46
125	SR 16	FCX	SR 15A Oakridge Avenue	Widen	4 Lanes (A2-4)	$ 13,538,713.42	$ 10,154,035.06	$ 1,353,871.34	$ 1,353,871.34	$ 2,030,807.01	$ 28,431,298.18
126	SR 16	US 17	Shands Bridge	Widen	4 Lanes (A2-4)	$ 9,616,334.52	$ 7,212,250.89	$ 961,633.45	$ 961,633.45	$ 1,442,450.18	$ 20,194,302.50
127	SR 21 Blanding Boulevard	SR 16	CR 215 Blanding Boulevard	Widen	4 Lanes (A2-4)	$ 7,660,973.58	$ 5,745,730.18	$ 766,097.36	$ 766,097.36	$ 1,149,146.04	$ 16,088,044.51
128	Town Center Boulevard	US 17	CR 220 Doctors Inlet Road	Widen	4 Lanes (A2-4)	$ 10,539,300.55	$ 7,904,475.41	$ 1,053,930.06	$ 1,053,930.06	$ 1,580,895.08	$ 22,132,531.16
129	US 17	CR 315	Town Center Boulevard	Widen	6 Lanes (A2-6)	$ 6,440,553.94	$ 4,830,415.46	$ 644,055.39	$ 644,055.39	$ 966,083.09	$ 13,525,163.28
130	US 17	Orion Road	SR 16	Context Sensitive Solutions		$ 6,131,386.84	$ 4,598,540.13	$ 613,138.68	$ 613,138.68	$ 919,708.03	$ 12,875,912.36

Clay County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
131	US 301/SR 200	Clay/Bradford County Line	Duval/Clay County Line	Widen	6 Lanes (A2-6)	$ 2,883,755.84	$ 2,162,816.88	$ 288,375.58	$ 288,375.58	$ 432,563.38	$ 6,055,887.26
132	Wells Road	Aquarius Concourse	SR 21 Blanding Boulevard	Reconstruct and New	2 Lanes	$ 15,231,091.94	$ 11,423,318.95	$ 1,523,109.19	$ 1,523,109.19	$ 2,284,663.79	$ 31,985,293.07
133	NS1	Sandridge Road	CR 218 Extension	New Road	2 Lanes (N2)	$ 312,241.09	$ 234,180.82	$ 31,224.11	$ 31,224.11	$ 46,836.16	$ 655,706.29
											$ 526,317,712.09

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
200	Alta Drive	Heckscher Drive (SR 105)	I-295	Widen + Trail	4 Lanes (A2-4)	$ 9,123,396.64	$ 6,842,547.48	$ 912,339.66	$ 912,339.66	$ 1,368,509.50	$ 23,936,594.85
201	Alta Drive Realignment	Zoo Parkway (SR 105)	North of New Berlin Road	New Road + Trail	4 Lanes (N4)	$ 4,485,009.22	$ 3,363,756.92	$ 448,500.92	$ 448,500.92	$ 672,751.38	$ 9,418,519.37
202	Alta Drive/Yellow Bluff Road	I-295	New Berlin Road	Widen	4 Lanes (A2-4)	$ 9,117,332.58	$ 6,837,999.44	$ 911,733.26	$ 911,733.26	$ 1,367,599.89	$ 19,146,398.42
203	Argyle Forest Boulevard	Old Middleburg Road	First Coast Expressway (SR 23)	Context Sensitive Solutions		$ 979,063.22	$ 734,297.41	$ 97,906.32	$ 97,906.32	$ 146,859.48	$ 2,056,032.76
204	Arlington Expressway (SR 115)	University Boulevard (SR 109)	Atlantic Boulevard	Context Sensitive Solutions		$ 4,249,319.30	$ 3,186,989.48	$ 424,931.93	$ 424,931.93	$ 637,397.90	$ 8,923,570.54
205	Arlington Expressway (SR 115)	University Boulevard (SR 109)		Modify Interchange + Trail		$ 650,000.00	$ 487,500.00	$ 65,000.00	$ 65,000.00	$ 97,500.00	$ 1,365,000.00
206	Atlantic Boulevard (SR 10)	Girvin Road		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
207	Atlantic Boulevard (SR 10)	Hodges Boulevard		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
208	Atlantic Boulevard	San Pablo Boulevard		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
209	Baymeadows Road (SR 152(	I-95	Southside Boulevard (SR 115)	Context Sensitive Solutions		$ 1,421,921.55	$ 1,066,441.16	$ 142,192.15	$ 142,192.15	$ 213,288.23	$ 2,986,035.25
210	Baymeadows Road (SR 152)	Philips Highway (US 1/SR 5)	I-95	Context Sensitive Solutions		$ 1,052,770.82	$ 789,578.11	$ 105,277.08	$ 105,277.08	$ 157,915.62	$ 2,210,818.72
211	Beaver Street (US 90)	First Coast Expressway (SR 23)	Cahoon Road	Widen + Trail	4 Lanes (A2-4)	$ 14,739,144.78	$ 11,054,358.59	$ 1,473,914.48	$ 1,473,914.48	$ 2,210,871.72	$ 30,952,204.04
212	Beaver Street (US 90)	Cahoon Road	McDuff Avenue	Widen + Trail	4 Lanes (A2-4)	$ 22,528,900.01	$ 16,896,675.01	$ 2,252,890.00	$ 2,252,890.00	$ 3,379,335.00	$ 47,310,690.02
213	Blanding Boulevard (SR 21)	103rd Street (SR 134)		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
214	Blanding Boulevard (SR 21)	Cedar Hills Boulevard		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
215	Blanding Boulevard	Collins Road		Intersection Improvements		$ 225,000.00	$ 168,750.00	$ 22,500.00	$ 22,500.00	$ 33,750.00	$ 472,500.00
216	Blanding Boulevard (SR 21)	I-295	Wilson Boulevard	Context Sensitive Solutions		$ 6,273,579.30	$ 4,705,184.48	$ 627,357.93	$ 627,357.93	$ 941,036.90	$ 13,174,516.54
217	Braddock Parkway	Lem Turner Road (SR 115)	Pecan Park Road	New Road + Trail	2 Lanes (N2)	$ 11,582,412.90	$ 8,686,809.68	$ 1,158,241.29	$ 1,158,241.29	$ 1,737,361.94	$ 24,323,067.09

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
218	Cahoon Road	Lenox Avenue	Beaver Street	Reconstruct + Trail	2 Lanes	$ 879,027.26	$ 659,270.45	$ 87,902.73	$ 87,902.73	$ 131,854.09	$ 1,845,957.25
219	Cecil Field Connector	First Coast Expressway (SR 23)	Commerce Center	New Road	2 Lanes	$ 1,966,942.43	$ 1,475,206.82	$ 196,694.24	$ 196,694.24	$ 295,041.36	$ 4,130,579.09
220	Chaffee Road	Normandy Boulevard (SR 228)	Crystal Springs Road	Widen	5 Lanes (A3-5)	$ 13,306,448.83	$ 9,979,836.62	$ 1,330,644.88	$ 1,330,644.88	$ 1,995,967.32	$ 27,943,542.55
221	Collins Road	Old Middleburg Road S	Shindler Drive	Widen	4 Lanes (A2-4)	$ 6,653,292.81	$ 4,989,969.61	$ 665,329.28	$ 665,329.28	$ 997,993.92	$ 13,971,914.90
222	Collins Road	Shindler Drive	Rampart Road	Widen	4 Lanes	$ 9,479,775.95	$ 7,109,831.96	$ 947,977.60	$ 947,977.60	$ 1,421,966.39	$ 19,907,529.50
223	Collins Road	Roosevelt Boulevard		New Interchange		$ 5,000,000.00	$ 3,750,000.00	$ 500,000.00	$ 500,000.00	$ 750,000.00	$ 10,500,000.00
224	Collins Road	Blanding Boulevard (SR 21)	Pine Verde	Widen	4 Lanes	$ 2,756,039.48	$ 2,067,029.61	$ 275,603.95	$ 275,603.95	$ 413,405.92	$ 5,787,682.90
225	Collins Road Realignment	Pine Verde	Roosevelt Boulevard (US 17)	New Road + Trail + Interchange	4 Lanes	$ 3,806,870.18	$ 2,855,152.64	$ 380,687.02	$ 380,687.02	$ 571,030.53	$ 7,994,427.38
226	Dunn Avenue (SR 104)	New Kings Road (US 1/SR 5	I-295	Widen	4 Lanes (A2-4)	$ 6,153,486.17	$ 4,615,114.63	$ 615,348.62	$ 615,348.62	$ 923,022.93	$ 12,922,320.96
227	Duval Road	I-295	Pecan Park Road	Context Sensitive Solutions		$ 794,307.89	$ 595,730.92	$ 79,430.79	$ 79,430.79	$ 119,146.18	$ 1,668,046.57
228	Duval Station Road	Main Street (US 17/SR 5)	Starratt Road	Widen + Trail	4 Lanes (A2-4)	$ 3,517,850.62	$ 2,638,387.96	$ 351,785.06	$ 351,785.06	$ 527,677.59	$ 7,387,486.30
229	Eastport Road	Hecksher Drive (SR 105)	Pulaski Road	Widen + Trail	3 Lanes (A1-3)	$ 1,198,623.53	$ 898,967.65	$ 119,862.35	$ 119,862.35	$ 179,793.53	$ 2,517,109.42
230	Florida Boulevard	Penman Road	Atlantic Boulevard (SR 10)	Widen + Trail	3 Lanes (A1-3)	$ 1,847,802.26	$ 1,385,851.70	$ 184,780.23	$ 184,780.23	$ 277,170.34	$ 3,880,384.75
233	Harlow Boulevard	103rd Street (SR 134)	Lane Avenue	Widen	3 Lanes (A1-3)	$ 449,735.14	$ 337,301.35	$ 44,973.51	$ 44,973.51	$ 67,460.27	$ 944,443.79
234	Hartley Road	San Jose Boulevard (SR 13)	Old St. Augustine Road	Widen + Trail	3 Lanes (A1-3)	$ 2,649,295.09	$ 1,986,971.32	$ 264,929.51	$ 264,929.51	$ 397,394.26	$ 5,563,519.69
235	Heckscher Drive	I-295	Blount Island Boulevard	Context Sensitive Solutions		$ 1,520,534.02	$ 1,140,400.52	$ 152,053.40	$ 152,053.40	$ 228,080.10	$ 3,193,121.45
236	I-10	I-295		Modify Interchange		$ 6,500,000.00	$ 4,875,000.00	$ 650,000.00	$ 650,000.00	$ 975,000.00	$ 13,650,000.00
237	I-10	First Coast Expressway (SR 23)	I-295	Widen	8 Lanes	$ 32,038,367.70	$ 24,028,775.78	$ 3,203,836.77	$ 3,203,836.77	$ 4,805,755.16	$ 67,280,572.17
238	I-10	I-295	I-95	Widen	8 Lanes	$ 56,010,401.38	$ 42,007,801.03	$ 5,601,040.14	$ 5,601,040.14	$ 8,401,560.21	$ 117,621,842.90

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
239	I-10	Nassau/Duval County Line	US 301	Widen	8 Lanes	$ 16,102,888.23	$ 12,077,166.17	$ 1,610,288.82	$ 1,610,288.82	$ 2,415,433.23	$ 33,816,065.27
240	I-10	US 301	First Coast Expressway (SR 23)	Widen	8 Lanes	$ 31,247,024.81	$ 23,435,268.60	$ 3,124,702.48	$ 3,124,702.48	$ 4,687,053.72	$ 65,618,752.09
241	I-295	103rd Street (SR 134)	I-10	Widen	8 Lanes	$ 49,394,739.84	$ 37,046,054.88	$ 4,939,473.98	$ 4,939,473.98	$ 7,409,210.98	$ 103,728,953.67
242	I-295	Roosevelt Boulevard (US 17)		Modify Interchange		$ 10,000,000.00	$ 7,500,000.00	$ 1,000,000.00	$ 1,000,000.00	$ 1,500,000.00	$ 21,000,000.00
243	I-295	I-10	South of New Kings Road (US 1)	Widen	8 Lanes	$ 34,502,050.39	$ 25,876,537.79	$ 3,450,205.04	$ 3,450,205.04	$ 5,175,307.56	$ 72,454,305.82
244	I-295	I-95	SR 9B	Widen	8 Lanes	$ 12,628,263.04	$ 9,471,197.28	$ 1,262,826.30	$ 1,262,826.30	$ 1,894,239.46	$ 26,519,352.39
245	I-295	I-95 North	Dames Point Bridge/Heckscher Drive	Widen	8 Lanes	$ 31,321,223.01	$ 23,490,917.26	$ 3,132,122.30	$ 3,132,122.30	$ 4,698,183.45	$ 65,774,568.33
246	I-295	I-95 South	San Jose Boulevard (SR 13)	Widen	8 Lanes	$ 48,929,834.81	$ 36,697,376.11	$ 4,892,983.48	$ 4,892,983.48	$ 7,339,475.22	$ 102,752,653.10
248	I-295	New Kings Road (US 1)	North of Trout River	Widen	8 Lanes	$ 4,790,203.76	$ 3,592,652.82	$ 479,020.38	$ 479,020.38	$ 718,530.56	$ 10,059,427.89
249	I-295	North of Trout River	I-95	Widen	8 Lanes	$ 31,352,036.38	$ 23,514,027.29	$ 3,135,203.64	$ 3,135,203.64	$ 4,702,805.46	$ 65,839,276.40
250	I-295	Roosevelt Boulevard (US 17)	103rd Street (SR 134)	Widen	8 Lanes	$ 66,418,267.15	$ 49,813,700.36	$ 6,641,826.72	$ 6,641,826.72	$ 9,962,740.07	$ 139,478,361.02
251	I-295	San Jose Boulevard (SR 13)	W of Roosevelt Boulevard	Widen + Trail	8 Lanes	$ 49,659,125.53	$ 37,244,344.15	$ 4,965,912.55	$ 4,965,912.55	$ 7,448,868.83	$ 104,284,163.61
252	I-295	J. T. Butler Boulevard (SR 202)	Southside Connector (SR 113)	Widen	8 Lanes	$ 76,292,108.57	$ 57,219,081.43	$ 7,629,210.86	$ 7,629,210.86	$ 11,443,816.29	$ 160,213,428.00
253	I-95	Airport Road (SR 102)	Duval/Nassau County Line	Widen	8 Lanes	$ 32,380,250.92	$ 24,285,188.19	$ 3,238,025.09	$ 3,238,025.09	$ 4,857,037.64	$ 67,998,526.93
254	I-95	Airport Road (SR 102)		Modify Interchange		$ 12,500,000.00	$ 9,375,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,875,000.00	$ 26,250,000.00
255	I-95	MLK (US 1/SR 15)		Modify Interchange		$ 12,500,000.00	$ 9,375,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,875,000.00	$ 26,250,000.00
256	I-95	Southside Boulevard (SR 115)		Modify Interchange		$ 12,500,000.00	$ 9,375,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,875,000.00	$ 26,250,000.00
257	I-95	Dunn Avenue (SR 104)	Airport Road (SR 102)	Widen	8 Lanes	$ 4,885,909.84	$ 3,664,432.38	$ 488,590.98	$ 488,590.98	$ 732,886.48	$ 10,260,410.66

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
258	I-95	Duval/St. Johns County Line	I-295	Widen	8 Lanes	$ 25,877,134.94	$ 19,407,851.21	$ 2,587,713.49	$ 2,587,713.49	$ 3,881,570.24	$ 54,341,983.38
259	I-95	I-295	J. T. Butler Boulevard (SR 202)	Widen	8 Lanes	$ 66,902,276.64	$ 50,176,707.48	$ 6,690,227.66	$ 6,690,227.66	$ 10,035,341.50	$ 140,494,780.94
260	I-95	J. T. Butler Boulevard (SR 202)	Atlantic Boulevard (SR 10)	Widen	8 Lanes	$ 56,094,901.05	$ 42,071,175.79	$ 5,609,490.10	$ 5,609,490.10	$ 8,414,235.16	$ 117,799,292.20
261	I-95	North of Fuller Warren Bridge	Dunn Avenue (SR 104)	Widen	8 Lanes	$ 87,732,045.79	$ 65,799,034.35	$ 8,773,204.58	$ 8,773,204.58	$ 13,159,806.87	$ 184,237,296.17
262	Jones Road	Pritchard Road	Beaver Street (US 90)	Operational Improvements		$ 1,269,165.56	$ 951,874.17	$ 126,916.56	$ 126,916.56	$ 190,374.83	$ 2,665,247.67
263	Kernan Boulevard	Atlantic Boulevard (SR 10)	McCormick Road (SR 116)	Context Sensitive Solutions		$ 3,317,881.25	$ 2,488,410.94	$ 331,788.13	$ 331,788.13	$ 497,682.19	$ 6,967,550.63
264	Kernan Boulevard	J. T. Butler Boulevard (SR 202)	Glen Kernan Parkway	Context Sensitive Solutions		$ 1,306,238.55	$ 979,678.92	$ 130,623.86	$ 130,623.86	$ 195,935.78	$ 2,743,100.97
265	Lem Turner Road (SR 115)	I-295	Nassau County Line	Widen + Trail	4 Lanes	$ 28,036,385.08	$ 21,027,288.81	$ 2,803,638.51	$ 2,803,638.51	$ 4,205,457.76	$ 58,876,408.67
266	Lem Turner Road (SR 115)	I-295	Broward Road	Context Sensitive Solutions		$ 2,997,553.63	$ 2,248,165.22	$ 299,755.36	$ 299,755.36	$ 449,633.04	$ 6,294,862.61
267	Main Street (US 17)	Eastport Road		New Interchange + Trail		$ 3,500,000.00	$ 2,625,000.00	$ 350,000.00	$ 350,000.00	$ 525,000.00	$ 7,350,000.00
268	Main Street (US 17)	I-295	New Berlin Road	Widen + Trail	4 Lanes	$ 6,585,935.39	$ 4,939,451.54	$ 658,593.54	$ 658,593.54	$ 987,890.31	$ 13,830,464.32
269	Main Street (US 17)	New Berlin Road	Pecan Park Road	Widen + Trail	4 Lanes	$ 4,872,145.43	$ 3,654,109.07	$ 487,214.54	$ 487,214.54	$ 730,821.81	$ 10,231,505.40
270	Main Street (US 17)	Pecan Park Road	Nassau/Duval County Line	Widen + Trail	4 Lanes	$ 10,542,374.06	$ 7,906,780.55	$ 1,054,237.41	$ 1,054,237.41	$ 1,581,356.11	$ 22,138,985.53
271	Mayport Road (SR 101)	Wonderwood Drive (SR 116)		Intersection Improvements + Trail		$ 320,000.00	$ 240,000.00	$ 32,000.00	$ 32,000.00	$ 48,000.00	$ 672,000.00
272	Mayport Road (SR 101)	Wonderwood Drive (SR 116)	Mayport Main Gate	Context Sensitive Solutions		$ 2,122,892.47	$ 1,592,169.35	$ 212,289.25	$ 212,289.25	$ 318,433.87	$ 4,458,074.19
273	McDuff Avenue/5th Stret	Melson Avenue	Huron Street	Widen	3 Lanes	$ 947,135.68	$ 710,351.76	$ 94,713.57	$ 94,713.57	$ 142,070.35	$ 1,988,984.93
274	Merrill Road	Hartsfield Road	Southside Connector (SR 113)	Context Sensitive Solutions		$ 606,563.53	$ 454,922.65	$ 60,656.35	$ 60,656.35	$ 90,984.53	$ 1,273,783.42
275	Monument Road	I-295	Tredinick Parkway	Context Sensitive Solutions		$ 322,766.33	$ 242,074.75	$ 32,276.63	$ 32,276.63	$ 48,414.95	$ 677,809.30
276	Monument Road	Lee Road	I-295	Context Sensitive Solutions		$ 324,077.44	$ 243,058.08	$ 32,407.74	$ 32,407.74	$ 48,611.62	$ 680,562.62

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
277	New Berlin Road	Pulaski Road	Yellow Bluff Road	Widen + Trail	4 Lanes	$ 6,981,317.53	$ 5,235,988.15	$ 698,131.75	$ 698,131.75	$ 1,047,197.63	$ 14,660,766.81
278	New Berlin Road	Yellow Bluff Road	Cedar Point Road	Widen + Trail	4 Lanes	$ 2,560,061.05	$ 1,920,045.79	$ 256,006.11	$ 256,006.11	$ 384,009.16	$ 5,376,128.21
279	New Kings Road (US 1/SR 15)	Edgewood Avenue (SR 111)	I-295	Context Sensitive Solutions		$ 3,812,458.43	$ 2,859,343.82	$ 381,245.84	$ 381,245.84	$ 571,868.76	$ 8,006,162.70
280	New Kings Road (US 1/SR 15)	I-295	Old Kings Road	Context Sensitive Solutions		$ 6,546,530.10	$ 4,909,897.57	$ 654,653.01	$ 654,653.01	$ 981,979.51	$ 13,747,713.21
281	New Road A	Valley Ridge Boulevard	9B (E-Town Parkway)	New Road + Trail	4 Lanes	$ 16,724,990.19	$ 12,543,742.64	$ 1,672,499.02	$ 1,672,499.02	$ 2,508,748.53	$ 35,122,479.40
282	New Road B	Valley Ridge Boulevard	SR 202 J Turner Butler Boulevard	New Road + Trail	4 Lanes	$ 22,484,358.40	$ 16,863,268.80	$ 2,248,435.84	$ 2,248,435.84	$ 3,372,653.76	$ 47,217,152.63
283	New Road C	Pecan Park Road	Woodwings Road	New Road + Trail	2 Lanes	$ 2,893,026.71	$ 2,169,770.04	$ 289,302.67	$ 289,302.67	$ 433,954.01	$ 6,075,356.10
285	New World Avenue	Chaffee Road	First Coast Expressway (SR 23)	Widen + Trail	4 Lanes	$ 5,630,653.94	$ 4,222,990.46	$ 563,065.39	$ 563,065.39	$ 844,598.09	$ 11,824,373.28
286	Norfolk Southern Railroad Overpass	West 12th Street	New Kings Road (US 23)	New Road	3 Lanes	$ 2,186,488.25	$ 1,639,866.19	$ 218,648.83	$ 218,648.83	$ 327,973.24	$ 4,591,625.33
287	Normandy Boulevard (SR 228)	First Coast Expressway (SR 23)	Cassat Avenue (SR 111)	Context Sensitive Solutions		$ 10,328,209.51	$ 7,746,157.13	$ 1,032,820.95	$ 1,032,820.95	$ 1,549,231.43	$ 21,689,239.97
288	Normandy Boulevard (SR 228)	US 301	Bell Road (Equestrian Park)	Widen	4 Lanes	$ 18,917,254.83	$ 14,187,941.12	$ 1,891,725.48	$ 1,891,725.48	$ 2,837,588.22	$ 39,726,235.14
290	Old Kings Road	Edgewood Avenue (SR 111)	Plummer Road	Context Sensitive Solutions		$ 7,174,321.80	$ 5,380,741.35	$ 717,432.18	$ 717,432.18	$ 1,076,148.27	$ 15,066,075.78
291	Old Middleburg Road	103rd Street (SR 134)	Argyle Forest Boulevard	Widen + Trail	4 Lanes	$ 10,123,767.58	$ 7,592,825.68	$ 1,012,376.76	$ 1,012,376.76	$ 1,518,565.14	$ 21,259,911.91
292	Old St. Augustine Road	Greenland Road		Intersection Improvements		$ 350,000.00	$ 262,500.00	$ 35,000.00	$ 35,000.00	$ 52,500.00	$ 735,000.00
293	Old St. Augustine Road	Bartram Park Boulevard	Philips Highway (US 1/SR 5)	Widen + Trail	6 Lanes	$ 4,991,086.80	$ 3,743,315.10	$ 499,108.68	$ 499,108.68	$ 748,663.02	$ 10,481,282.29
294	Parramore Road Extension	Youngerman Circle	Collins Road	New Road	2 Lanes	$ 1,177,096.18	$ 882,822.13	$ 117,709.62	$ 117,709.62	$ 176,564.43	$ 2,471,901.97
295	Pecan Park Road	Braddock Boulevard	JIA North Access Road	Widen + Trail	4 Lanes	$ 2,053,510.21	$ 1,540,132.66	$ 205,351.02	$ 205,351.02	$ 308,026.53	$ 4,312,371.45
296	Pecan Park Road	I-95	Main Street (US 17)	Widen + Trail	4 Lanes	$ 1,881,648.70	$ 1,411,236.52	$ 188,164.87	$ 188,164.87	$ 282,247.30	$ 3,951,462.26
297	Philips Highway (US 1/SR 5)	I-95 at the Avenues	J.T. Butler Boulevard (SR 202)	Widen + Trail	6 Lanes	$ 23,776,288.74	$ 17,832,216.55	$ 2,377,628.87	$ 2,377,628.87	$ 3,566,443.31	$ 49,930,206.35
Duval County Project Details											

Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
298	Philips Highway (US 1/SR 5)	J.T. Butler Boulevard (SR 202)	Emerson Street (SR 126)	Widen + Trail	6 Lanes	$ 17,739,564.97	$ 13,304,673.73	$ 1,773,956.50	$ 1,773,956.50	$ 2,660,934.75	$ 37,253,086.43
299	Philips Highway (US 1/SR 5)	Nocatee Parkway/Racetrack Road	SR 9B	Widen + Trail	6 Lanes	$ 7,636,040.61	$ 5,727,030.46	$ 763,604.06	$ 763,604.06	$ 1,145,406.09	$ 16,035,685.29
2000	Philips Highway (US 1/SR 5)	SR 9B	I-295	Widen + Trail	6 Lanes	$ 8,074,673.01	$ 6,056,004.76	$ 807,467.30	$ 807,467.30	$ 1,211,200.95	$ 16,956,813.33
2001	Pulaski Road	Eastport Road	I-295	Widen + Trail	4 Lanes	$ 750,710.13	$ 563,032.60	$ 75,071.01	$ 75,071.01	$ 112,606.52	$ 1,576,491.28
2002	Pulaski Road/Starratt Road	I-295	Duval Station Road	Widen + Trail	4 Lanes	$ 8,392,713.76	$ 6,294,535.32	$ 839,271.38	$ 839,271.38	$ 1,258,907.06	$ 17,624,698.90
2003	Ramona Boulevard	Hammond Boulevard	Cahoon Road South	Widen	5 Lanes	$ 1,418,208.91	$ 1,063,656.68	$ 141,820.89	$ 141,820.89	$ 212,731.34	$ 2,978,238.70
2004	Rampart/Firestone Road	Collins Road	103rd Street (SR 134)	Widen	4 Lanes (A1-4)	$ 1,653,705.87	$ 1,240,279.40	$ 165,370.59	$ 165,370.59	$ 248,055.88	$ 3,472,782.33
2005	Ricker Road	Morse Avenue	Old Middleburg Road	Widen	3 Lanes	$ 1,603,152.36	$ 1,202,364.27	$ 160,315.24	$ 160,315.24	$ 240,472.85	$ 3,366,619.96
2006	Salisbury Road Extension	Belfort Road	Baymeadows Road (SR 152)	New Road	3 Lanes	$ 3,105,229.31	$ 2,328,921.98	$ 310,522.93	$ 310,522.93	$ 465,784.40	$ 6,520,981.55
2007	San Pablo Road	Beach Boulevard (US 90)	Atlantic Boulevard (SR 10)	Widen	3 Lanes	$ 4,592,555.21	$ 3,444,416.41	$ 459,255.52	$ 459,255.52	$ 688,883.28	$ 9,644,365.94
2008	Shindler Drive	Collins Road	103rd Street (SR 134)	Widen	3 Lanes	$ 5,549,098.67	$ 4,161,824.00	$ 554,909.87	$ 554,909.87	$ 832,364.80	$ 11,653,107.20
2009	Southside Boulevard (SR 115)	Atlantic Boulevard (SR 10)		Intersection Improvements + Trail		$ 425,000.00	$ 318,750.00	$ 42,500.00	$ 42,500.00	$ 63,750.00	$ 892,500.00
2010	Southside Boulevard (SR 115)	Baymeadows Road (SR 152)		Major Intersection Improvement		$ 40,000,000.00	$ 30,000,000.00	$ 4,000,000.00	$ 4,000,000.00	$ 6,000,000.00	$ 84,000,000.00
2011	Southside Boulevard (SR 115)	J.T. Butler Boulevard (SR 202)		Modify Interchange + Trail		$ 5,000,000.00	$ 3,750,000.00	$ 500,000.00	$ 500,000.00	$ 750,000.00	$ 10,500,000.00
2012	Southside Boulevard (SR 115)	Beach Boulevard (US 90)	Atlantic Boulevard (SR 10)	Context Sensitive Solutions		$ 2,491,298.86	$ 1,868,474.15	$ 249,129.89	$ 249,129.89	$ 373,694.83	$ 5,231,727.61
2013	Southside Boulevard (SR 115)	Hogan Road	Gate Parkway	Intersection Improvements		$ 376,405.37	$ 282,304.03	$ 37,640.54	$ 37,640.54	$ 56,460.81	$ 790,451.29

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
2014	Southside Boulevard (SR 115)	J.T. Butler Boulevard (SR 202)	Beach Boulevard (US 90)	Context Sensitive Solutions		$ 3,099,999.86	$ 2,324,999.90	$ 309,999.99	$ 309,999.99	$ 464,999.98	$ 6,509,999.71
2015	Southside Boulevard (SR 115)	Philips Highway (US 1/SR 5)	I-95 Ramps	Context Sensitive Solutions		$ 1,940,737.14	$ 1,455,552.86	$ 194,073.71	$ 194,073.71	$ 291,110.57	$ 4,075,548.00
2016	SR 9B	Philips Highway (US 1/SR 5)	I-295	Widen	6 Lanes	$ 12,572,457.53	$ 9,429,343.15	$ 1,257,245.75	$ 1,257,245.75	$ 1,885,868.63	$ 26,402,160.81
2017	SR 9B	Philips Highway (US 1/SR 5)	I-295	Add Auxilliary Lanes	2 Lanes	$ 12,426,156.02	$ 9,319,617.02	$ 1,242,615.60	$ 1,242,615.60	$ 1,863,923.40	$ 26,094,927.65
2018	SR A1A	Wonderwood Drive (SR 116)	Naval Station Mayport North Gate	Widen + Trail	4 Lanes	$ 7,810,604.42	$ 5,857,953.32	$ 781,060.44	$ 781,060.44	$ 1,171,590.66	$ 16,402,269.29
2019	St. Johns River Ferry (SR A1A)			Ferry Slip Replacement		$ 2,085,094.42	$ 1,563,820.82	$ 208,509.44	$ 208,509.44	$ 312,764.16	$ 4,378,698.29
2020	Starratt Road	Duval Station Road	Yellow Bluff Road	Widen + Trail	4 Lanes	$ 6,321,170.59	$ 4,740,877.94	$ 632,117.06	$ 632,117.06	$ 948,175.59	$ 13,274,458.23
2021	Touchton Road	Belfort Road	Southside Boulevard (SR 115)	Widen + Trail	4 Lanes	$ 3,913,332.18	$ 2,934,999.13	$ 391,333.22	$ 391,333.22	$ 586,999.83	$ 8,217,997.58
2022	Trout River Boulevard	Old Kings Road	New Kings Road (US 23)	Widen + Trail	4 Lanes	$ 2,986,761.13	$ 2,240,070.85	$ 298,676.11	$ 298,676.11	$ 448,014.17	$ 6,272,198.37
2023	US 301 (SR 200)	Duval/Clay County Line	I-10	Widen + Trail	6 Lanes	$ 29,015,642.93	$ 21,761,732.20	$ 2,901,564.29	$ 2,901,564.29	$ 4,352,346.44	$ 60,932,850.16
2024	US 301 (SR 200)	South of Baldwin	North of Baldwin	Widen + Trail	4 Lanes	$ 3,972,352.29	$ 2,979,264.22	$ 397,235.23	$ 397,235.23	$ 595,852.84	$ 8,341,939.80
2025	US 301 (SR 200)	US 90	Duval/Nassau County Line	Widen + Trail	4 Lanes	$ 11,698,957.58	$ 8,774,218.19	$ 1,169,895.76	$ 1,169,895.76	$ 1,754,843.64	$ 24,567,810.92
2026	Yellow Bluff Road	Starratt Road	New Berlin Road (north)	Context Sensitive Solutions		$ 3,628,835.19	$ 2,721,626.39	$ 362,883.52	$ 362,883.52	$ 544,325.28	$ 7,620,553.89
2027	Cecil Connector Road Extension	Branan Field Road	Aviation Avenue	New Road + Trail	4 Lanes	$ 8,311,531.31	$ 6,233,648.48	$ 831,153.13	$ 831,153.13	$ 1,246,729.70	$ 17,454,215.75
2028	SR A1A	Atlantic Boulevard (SR 10)	Wonderwood Drive (SR 116)	Reconstruct + Trail	4 Lanes	$ 3,955,191.90	$ 2,966,393.93	$ 395,519.19	$ 395,519.19	$ 593,278.79	$ 8,305,903.00
2029	Penman Road	Beach Boulevard (SR 212)	Atlantic Boulevard (SR 10)	Reconstruct + Trail	3 Lanes	$ 1,887,274.22	$ 1,415,455.67	$ 188,727.42	$ 188,727.42	$ 283,091.13	$ 3,963,275.86
2030	Penman Road	at Florida Avenue/Forest Avenue		Intersection Improvements + Trail		$ 325,000.00	$ 243,750.00	$ 32,500.00	$ 32,500.00	$ 48,750.00	$ 682,500.00
2031	Chaffee Road	I-10	Old Plank Road	Reconstruct + Trail	2 Lanes	$ 820,025.78	$ 615,019.33	$ 82,002.58	$ 82,002.58	$ 123,003.87	$ 1,722,054.13

Duval County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
2032	Beach Boulevard (SR 212)	St. Johns Bluff Road	Atlantic Boulevard (SR 10)	Reconstruct + Trail	6 Lanes	$ 8,082,753.35	$ 6,062,065.02	$ 808,275.34	$ 808,275.34	$ 1,212,413.00	$ 16,973,782.04
2033	US 17 Bridge	Nassau County Line		Bridge Improvements		$ 50,000,000.00	$ 37,500,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 7,500,000.00	$ 105,000,000.00
2034	J Turner Butler Boulevard	Southside Boulevard (SR 115)	Hodges Boulevard	Add Auxiliary Lanes	1 Lane	$ 9,498,357.51	$ 7,123,768.13	$ 949,835.75	$ 949,835.75	$ 1,424,753.63	$ 19,946,550.76
2035	Mathews Bridge	US 1 Alt/MLK Jr. Parkway	University Boulevard (SR 109)	Bridge Replacement	6 Lane + Transit	$ 350,000,000.00	$ -	$ 35,000,000.00	$ 35,000,000.00	$ 52,500,000.00	$ 472,500,000.00
											$ 3,688,002,556

Nassau County Project Details										
Map ID	Facility	From	To	Improvement	Lanes	ROW	PD&E	ENV	PE	Total Construction Cost
300	14th Street	Sadler Road	A1A/200/Atlantic Avenue	Reconstruct	2 Lanes					$1,615,691.00
301	Amelia Concourse (ex)	Frank Ward Road	Old Nassauville Road	New Road + Trail	2 Lanes					$1,445,677
302	Amelia Concourse Ex P2	SR 200	Frank Ward Road	New Road + Trail	2 Lanes (N2)	$ 1,673,973.65	$ 223,196.49	$ 223,196.49	$ 334,794.73	$ 4,687,126.21
303	Amelia Island Parkway	at Buccaneer Trail		Intersection Improvements	Roundabout					$3,700,000.00
304	US 17	at Pages Dairy Road		Intersection Improvements	Traffic Light	$ -	$ 20,000.00	$ 20,000.00	$ 30,000.00	$270,000.00
305	Chester Road	Pages Dairy Road	Green Pine Road	Widen	4 Lanes					$14,366,622.00
306	Clyde Higginbotham Road	Harvester Street	Harts Road	Reconstruct + Trail	2 Lanes					$5,833,293.00
307	CR-107	Amelia Concourse	SR 200	Widen	4 Lanes					$12,646,603.00
308	CR-108	US 1/SR 23/US 17	US 17	Reconstruct + Trail	4 Lanes					$93,460,695.00
309	CR-108 Extension	US 17	Chester Road	New Road + Trail	2 Lanes	$ 13,056,994.43	$ 1,740,932.59	$ 1,740,932.59	$ 2,611,398.89	$36,559,584.41
310	CR-119 (OTIS Rd)	CR 121	US 301	Reconstruct	2 Lanes					$6,358,659.00
311	Crawford Road	at CR 121		Intersection Improvements						$1,308,000.00
312	Edwards Road	Easy Street	SR 200	Reconstruct + Trail						$3,350,000.00
313	Edwards Road (ex)	SR 200	New Road X	New Road + Trail	2 Lanes					$12,975,369.00
314	Felmor Road	Pages Dairy Road	SR 200	Reconstruct	2 Lanes					$853,170.00
315	Felmor Road	School	SR 200	Reconstruct	2 Lanes					$1,088,947.00
316	Ford Road	US 301/SR 200	Duval County Line	Reconstruct	2 Lanes					$5,043,892.00
317	Griffin Road	Griffin Road (Bend)	SR 200	Reconstruct + Trail	2 Lanes					$6,736,255.00
318	Harper Chapel Road	SR 200	New Road X	Reconstruct and New	2 Lanes					$4,809,558.00
319	Harvester Street	William Burgess Boulevard	Harvester Street (Bend)	Reconstruct + Trail	2 Lanes					$3,499,976.00
320	Kings Ferry Road	CR 108	Kolars Ferry Road	Reconstruct	2 Lanes					$5,722,725.00
321	Lem Turner	US 1/SR 15	Duval County Line	Reconstruct	2 Lanes	$ 1,937,310.90	$ 258,308.12	$ 258,308.12	$ 387,462.18	$5,424,470.51
322	Mentoria Road	SR 200/Buccaneer Trail	Harvester Street	New Road + Trail	2 Lanes					$15,002,925.00

Nassau County Project Details										
Map ID	Facility	From	To	Improvement	Lanes	ROW	PD&E	ENV	PE	Total Construction Cost
323	Musslewhite Road	US 1/New Kings Road	Griffin Road	Reconstruct + Trail	2 Lanes					$6,048,102.00
324	New Road X	William Burgess Boulevard	Mentoria Road	New Road + Trail	2 Lanes					$6,416,622.00
325	New Road X	Middle Road/Griffin Road	I-95	New Road + Trail	2 Lanes					$34,600,984.00
326	New Road X	William Burgess Boulevard	New Road X	New Road + Trail	2 Lanes					$2,916,646.00
327	New I-95 Bridge	Semper Fi Drive	Mentoria Road	New Bridge + Trail	2 Lanes					$6,616,260.00
328	Cardinal Road	SR 200	William Burgess Boulevard	New Road + Trail	2 Lanes					$6,999,951.00
329	New Interchange X	I-95	New Road X	New Interchange		$ 33,750,000.00	$ 4,500,000.00	$ 4,500,000.00	$ 6,750,000.00	$94,500,000.00
330	New Interchange Road East	I-95	US 1	New Road + Trail	2 Lanes (N2)	$ 3,465,125.45	$ 462,016.73	$ 462,016.73	$ 693,025.09	$9,702,351.25
331	Old Baldwin Road	Old Baldwin Road	Sandy Ford Road	New Road	2 Lanes					$9,101,033.00
332	Pages Dairy Rd (ex)	Chester Road	Blackrock Road	New Road + Trail	2 Lanes					$6,999,951.00
333	Pages Dairy Road	US 17	Chester Road	Widen + Trail	4 Lanes					$37,893,345.00
334	Pages Diary	at Chester Road		Intersection Improvements						$5,434,065.00
335	Pratt Siding Road	Old Dixie Highway	US 1	New Road	2 Lanes					$5,764,001.00
336	Ratliff Road	Thomas Creek Road	US 1	Reconstruct	2 Lanes					$5,362,619.00
337	Sauls Road	US 1	Musselwhite Road	New Road	2 Lanes					$3,322,490.00
338	Semper Fi	Semper Fi Ext	Johnson Lake Road	Reconstruct + Trail	2 Lanes					$1,369,176.00
339	Semper Fi (ex)	SR 200	Semper Fi Drive	New Road + Trail	2 Lanes					$2,916,646.00
340	Sundberg Rd	CR 121	Andrews Road	New Road	2 Lanes					$708,000.00
341	Thomas Creek Road	US 301	Duval County Line	Reconstruct	2 Lanes					$3,951,404.00
342	US-17	CR 108	Duval County Line	Widen	4 Lanes (A2-4)	$ 16,983,210.19	$ 2,264,428.03	$ 2,264,428.03	$ 3,396,642.04	$47,552,988.53
343	Wildewood Connection to Edward Rd	Edwards Road Ext	SR 200	New Road + Trail	2 Lanes	$ 4,821,044.10	$ 642,805.88	$ 642,805.88	$ 964,208.82	$13,498,923.47
344	William Bugess Blvd (redev)	SR 200	US 17	Reconstruct	5 Lanes					$22,284,839.00

Nassau County Project Details										
Map ID	Facility	From	To	Improvement	Lanes	ROW	PD&E	ENV	PE	Total Construction Cost
345	William Burgess	at Harts Road		Intersection Improvements	Roundabout					$3,348,800.00
346	William Burgess Blvd (ex ph 2)	Miner Road	Hampton Club Way	New Road + Trail	2 Lanes					$28,153,513.00
347	William Burgess Blvd (ex)	US 17	Miner Road	New Road + Trail	2 Lanes					$10,435,291.00
348	I-10	Baker County Line	Duval County Line	Widen	8 Lanes (A2-8)	$ 7,915,173.94	$ 1,055,356.53	$ 1,055,356.53	$ 1,583,034.79	$22,162,487.03
349	I-95	Duval County Line	SR 200 (A1A)	Widen	6 Lanes (A2-6)	$ 10,072,813.80	$ 1,343,041.84	$ 1,343,041.84	$ 2,014,562.76	$28,203,878.64
										$266,261,810.04

St. Johns County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
400	Aerial Tramway	East Parking Garage	West Parking Garage	Aerial Tramway	-	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
401	Anastasia Blvd (A1A)	N St. Augustine Road	Comares Avenue	Multimodal Way	-	$ 165,213.60	$ 123,910.20	$ 16,521.36	$ 16,521.36	$ 16,521.36	$ 338,687.88
402	Anastasia Boulevard (A1A)	Comares Avenue	Red Cox Drive	Multimodal Way	-	$ 170,002.40	$ 127,501.80	$ 17,000.24	$ 17,000.24	$ 17,000.24	$ 348,504.92
403	Big Oak Road	Dixie Highway (US 1/SR 5)	SR 313	New Road	4 Lanes (N4)	$ 4,827,916.71	$ 3,620,937.53	$ 482,791.67	$ 482,791.67	$ 482,791.67	$ 9,897,229.25
404	Big Oak Road	I-95		New Interchange	-	$ 35,000,000.00	$ 26,250,000.00	$ 3,500,000.00	$ 3,500,000.00	$ 3,500,000.00	$ 71,750,000.00
405	Big Oak Road Extension	SR 313	I-95	New Road	4 Lanes (N4)	$ 13,895,962.42	$ 10,421,971.81	$ 1,389,596.24	$ 1,389,596.24	$ 1,389,596.24	$ 28,486,722.95
406	Bridge Street	Avenida Menendez	Riberia Street	Complete Street		$ 638,920.57	$ 479,190.43	$ 63,892.06	$ 63,892.06	$ 63,892.06	$ 1,309,787.17
407	Carrera Street	Cordova Street	US 1	Complete Street		$ 472,781.67	$ 354,586.25	$ 47,278.17	$ 47,278.17	$ 47,278.17	$ 969,202.41
408	Cathedral Place	Avenida Menendez (A1A)	Cordova Street	Shared Street	NA	$ 44,629.67	$ 33,472.26	$ 4,462.97	$ 4,462.97	$ 4,462.97	$ 91,490.83
409	Charlotte Street	King Street	S Castillo Drive	Shared Street	NA	$ 64,648.80	$ 48,486.60	$ 6,464.88	$ 6,464.88	$ 6,464.88	$ 132,530.04
410	Cordova Street	King Street	Orange Street	Complete Street		$ 462,166.43	$ 346,624.83	$ 46,216.64	$ 46,216.64	$ 46,216.64	$ 947,441.19
411	Cordova Street	King Street	St. Francis Street	Complete Street		$ 693,215.35	$ 519,911.51	$ 69,321.53	$ 69,321.53	$ 69,321.53	$ 1,421,091.46
412	CR 16A	SR 16 Connector	SR 13	Widen	4 Lanes (A2-4)	$ 9,656,603.89	$ 7,242,452.92	$ 965,660.39	$ 965,660.39	$ 965,660.39	$ 19,796,037.98
413	CR 210	I-95	near US 1	Widen	6 lanes (A2-6)	$ 7,502,754.33	$ 5,627,065.74	$ 750,275.43	$ 750,275.43	$ 750,275.43	$ 15,380,646.37
414	CR 210	Cimarrone Road	Greenbriar Road	Widen	4 Lanes (A2-4)	$ 5,759,507.82	$ 4,319,630.87	$ 575,950.78	$ 575,950.78	$ 575,950.78	$ 11,806,991.03
415	CR 210	US 1/SR 5		New Interchange		$ 5,000,000.00	$ -	$ 500,000.00	$ 500,000.00	$ 500,000.00	$ 6,500,000.00
416	CR 210 W	Greenbriar Road	Longleaf Pine Parkway	Widen	4 Lanes (A2-4)	$ 7,390,193.42	$ 5,542,645.07	$ 739,019.34	$ 739,019.34	$ 739,019.34	$ 15,149,896.52
417	CR 214	US 1	Holmes Boulevard	Widen	3 Lanes (A1-3)	$ 1,000,229.96	$ 750,172.47	$ 100,023.00	$ 100,023.00	$ 100,023.00	$ 2,050,471.41
418	CR 2209	CR 210		New Interchange		$ 5,000,000.00	$ 3,750,000.00	$ 500,000.00	$ 500,000.00	$ 500,000.00	$ 10,250,000.00
419	CR 2209	SR 16 Connector	International Golf Parkway	New Road	4 Lanes (N4)	$ 8,908,622.45	$ 6,681,466.84	$ 890,862.25	$ 890,862.25	$ 890,862.25	$ 18,262,676.03

St. Johns County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
420	CR 2209	International Golf Parkway	SR 16	New Road	4 Lanes (N4)	$ 1,980,830.74	$ 1,485,623.05	$ 198,083.07	$ 198,083.07	$ 198,083.07	$ 4,060,703.02
421	CR 2209	SR 16	CR 208	New Road	4 Lanes (N4)	$ 14,051,323.65	$ 10,538,492.73	$ 1,405,132.36	$ 1,405,132.36	$ 1,405,132.36	$ 28,805,213.47
422	CR 2209	CR 208	CR 214	New Road	4 Lanes (N4)	$ 13,646,845.41	$ 10,235,134.05	$ 1,364,684.54	$ 1,364,684.54	$ 1,364,684.54	$ 27,976,033.08
423	CR 2209	CR 214	SR 207/CR 305	New Road	4 Lanes (N4)	$ 17,862,511.05	$ 13,396,883.29	$ 1,786,251.10	$ 1,786,251.10	$ 1,786,251.10	$ 36,618,147.65
424	CR 305	SR 207	SR 206	Widen	4 Lanes (A2-4)	$ 9,985,878.22	$ 7,489,408.66	$ 998,587.82	$ 998,587.82	$ 998,587.82	$ 20,471,050.34
425	CR 305	SR 206	CR 204	New Road	4 Lanes (N4)	$ 11,658,487.39	$ 8,743,865.54	$ 1,165,848.74	$ 1,165,848.74	$ 1,165,848.74	$ 23,899,899.15
426	Cuna Street	Avenida Menendez (A1A)	Charlotte Street	Shared Street	NA	$ 1,068.03	$ 801.02	$ 106.80	$ 106.80	$ 106.80	$ 2,189.45
427	Cuna Street	Charlotte Street	Cordova Street	Shared Street	NA	$ 41,979.45	$ 31,484.59	$ 4,197.94	$ 4,197.94	$ 4,197.94	$ 86,057.87
428	S Leonardi Street	King Street	South Dixie Highway	Shared Street	NA	$ 43,099.20	$ 32,324.40	$ 4,309.92	$ 4,309.92	$ 4,309.92	$ 88,353.36
429	Dixie Highway (US 1/SR 5)	SR 206	Lewis Point Road	Widen	6 lanes (A2-6)	$ 18,819,123.25	$ 14,114,342.44	$ 1,881,912.33	$ 1,881,912.33	$ 1,881,912.33	$ 38,579,202.67
430	Dixie Highway (US 1/SR 5)	SR 313	International Golf Parkway	Widen	6 lanes (A2-6)	$ 6,741,447.22	$ 5,056,085.41	$ 674,144.72	$ 674,144.72	$ 674,144.72	$ 13,819,966.79
431	Dixie Highway (US 1/SR 5)	International Golf Parkway	Racetrack Road	Widen	6 lanes (A2-6)	$ 23,381,461.87	$ 17,536,096.41	$ 2,338,146.19	$ 2,338,146.19	$ 2,338,146.19	$ 47,931,996.84
432	Dixie Highway/Pellicer Lane	West of King Street (CR 214)	SR 207	Context Sensitive Solutions		$ 875,004.08	$ 656,253.06	$ 87,500.41	$ 87,500.41	$ 87,500.41	$ 1,793,758.37
433	Durbin Parkway	9B Extension	Nocatee Parkway	New Road	4 Lanes	$ 10,283,118.23	$ 7,712,338.67	$ 1,028,311.82	$ 1,028,311.82	$ 1,028,311.82	$ 21,080,392.37
434	Durbin Parkway	Dixie Highway (US 1/SR 5)		New Flyover		$ 4,250,000.00	$ 3,187,500.00	$ 425,000.00	$ 425,000.00	$ 425,000.00	$ 8,712,500.00
435	East Garage	Anastasia/Comares Vicinity		Future Garage		#N/A	#N/A	#N/A	#N/A	#N/A	$ -
436	Holmes Boulevard	CR 214	Four Mile Road	Widen	6 Lanes	$ 4,576,654.30	$ 3,432,490.73	$ 457,665.43	$ 457,665.43	$ 457,665.43	$ 9,382,141.32
437	Hypolita Street	Avenida Menendez	Cordova Street	Shared Street	NA	$ 51,126.48	$ 38,344.86	$ 5,112.65	$ 5,112.65	$ 5,112.65	$ 104,809.29
438	I-95	Ponce De Leon Boulevard		Modify Interchange		$ 3,500,000.00	$ 2,625,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 7,175,000.00
439	I-95	SR 206		Modify Interchange		$ 3,500,000.00	$ 2,625,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 7,175,000.00
440	I-95	St Johns/Flagler Co Line	SR 206	Add Express Lanes	4 Lanes (A2-8)	$ 39,807,283.96	$ 29,855,462.97	$ 3,980,728.40	$ 3,980,728.40	$ 3,980,728.40	$ 81,604,932.11

St. Johns County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
441	I-95	SR 206	International Golf Parkway	Widen	8 Lanes (A2-8)	$ 88,111,828.79	$ 66,083,871.60	$ 8,811,182.88	$ 8,811,182.88	$ 8,811,182.88	$ 180,629,249.03
442	I-95	CR 210		Modify Interchange		$ 3,500,000.00	$ 2,625,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 7,175,000.00
443	I-95	International Golf Parkway	St Johns/Duval County Line	Add Express Lanes	4 Lanes (A2-8)	$ 42,549,408.75	$ 31,912,056.56	$ 4,254,940.87	$ 4,254,940.87	$ 4,254,940.87	$ 87,226,287.93
445	International Golf Parkway	SR 16	I-95	Widen	6 lanes (A2-6)	$ 6,626,512.35	$ 4,969,884.26	$ 662,651.23	$ 662,651.23	$ 662,651.23	$ 13,584,350.32
446	King Street	Avenida Menendez (A1A)	N Rodriquz Street	Multimodal Way	NA	$ 341,496.20	$ 256,122.15	$ 34,149.62	$ 34,149.62	$ 34,149.62	$ 700,067.21
447	Longleaf Pine	CR 210	Roberts Road	Widen	4 Lanes (A2-4)	$ 12,007,817.88	$ 9,005,863.41	$ 1,200,781.79	$ 1,200,781.79	$ 1,200,781.79	$ 24,616,026.65
448	Mickler Road	Palm Valley Road	SR A1A	Widen	4 Lanes	$ 3,292,075.39	$ 2,469,056.54	$ 329,207.54	$ 329,207.54	$ 329,207.54	$ 6,748,754.55
449	ML King Avenue	King Street	South Street	Shared Street		$ 163,828.66	$ 122,871.49	$ 16,382.87	$ 16,382.87	$ 16,382.87	$ 335,848.75
450	North Garage	FEC/TOD Vicinity		Future Garage		#N/A	#N/A	#N/A	#N/A	#N/A	$ -
451	North San Sebastian Bridge	SR 16	US 1	New Multimodal Bridge		$ 50,598,206.46	$ 37,948,654.85	$ 5,059,820.65	$ 5,059,820.65	$ 5,059,820.65	$ 103,726,323.25
452	Old Moultrie Road	SR 312	US1	Widen	3 Lanes (A1-3)	$ 1,503,149.38	$ 1,127,362.03	$ 150,314.94	$ 150,314.94	$ 150,314.94	$ 3,081,456.22
453	Old Moultrie Road	SR 207	SR 312	Context Sensitive Solutions		$ 1,114,899.67	$ 836,174.75	$ 111,489.97	$ 111,489.97	$ 111,489.97	$ 2,285,544.31
454	Orange Street	Avenida Menendez (A1A)	US 1	Shared Street		$ 108,300.95	$ 81,225.71	$ 10,830.10	$ 10,830.10	$ 10,830.10	$ 222,016.95
455	Palm Valley Road	Intracoastal Waterway	Mickler Road	Widen	4 Lanes (A2-4)	$ 3,781,901.58	$ 2,836,426.18	$ 378,190.16	$ 378,190.16	$ 378,190.16	$ 7,752,898.23
456	Park & Ride	SR 312/Anastasia		Regional Park & Ride		$ 250,000.00	$ 187,500.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 512,500.00
457	The Amp			Pedestrian Crossing		$ 141,824.14	$ 106,368.11	$ 14,182.41	$ 14,182.41	$ 14,182.41	$ 290,739.49
458	Racetrack Road	Bartram Park Boulevard	Bartram Springs	Widen	6 lanes (A2-6)	$ 4,166,324.14	$ 3,124,743.10	$ 416,632.41	$ 416,632.41	$ 416,632.41	$ 8,540,964.48
459	Roberts Road	SR 13	Longleaf Pine	Widen	3 Lanes	$ 1,413,822.36	$ 1,060,366.77	$ 141,382.24	$ 141,382.24	$ 141,382.24	$ 2,898,335.84
460	San Marco Avenue	May Street (A1A)	North Ponce De Leon Blvd (US 1)	Multimodal Way		$ 229,949.98	$ 172,462.48	$ 22,995.00	$ 22,995.00	$ 22,995.00	$ 471,397.45
461	San Marco Avenue (A1A)	W Castillo Drive	May Street (A1A)	Multimodal Way	Local Trail	$ 185,132.15	$ 138,849.12	$ 18,513.22	$ 18,513.22	$ 18,513.22	$ 379,520.91
463	San Sebastian Riverwalk	King Street	Ice Plant Road	Riverwalk		#N/A	#N/A	#N/A	#N/A	#N/A	$ -

Nassau County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
464	San Sebastian Riverwalk	Ice Plant Road	Matanzas River	Riverwalk		#N/A	#N/A	#N/A	#N/A	#N/A	$ -
465	Shearwater Parkway	CR 210	16A	New Road	2 Lanes	$ 5,497,625.33	$ 4,123,219.00	$ 549,762.53	$ 549,762.53	$ 549,762.53	$ 11,270,131.92
466	South Dixie Highway	SR 16	King Street	Context Sensitive Solutions		$ 2,115,929.20	$ 1,586,946.90	$ 211,592.92	$ 211,592.92	$ 211,592.92	$ 4,337,654.87
467	South Garage	Ice Plant Road Vicinity		Future Garage		#N/A	#N/A	#N/A	#N/A	#N/A	$ -
468	Spanish Street	Cuna Street	Orange Street	Shared Street		$ 34,349.23	$ 25,761.92	$ 3,434.92	$ 3,434.92	$ 3,434.92	$ 70,415.92
469	SR 16	I-95	SR 313	Widen	6 lanes (A2-6)	$ 7,745,883.86	$ 5,809,412.90	$ 774,588.39	$ 774,588.39	$ 774,588.39	$ 15,879,061.92
470	SR 16	San Giacomo Rd	Grand Oaks Entrance	Widen	4 Lanes (A2-4)	$ 6,579,081.42	$ 4,934,311.07	$ 657,908.14	$ 657,908.14	$ 657,908.14	$ 13,487,116.92
471	SR 16	Grand Oaks Entrance	Outlet Mall (CR 208)	Widen	4 Lanes (A2-4)	$ 5,100,063.12	$ 3,825,047.34	$ 510,006.31	$ 510,006.31	$ 510,006.31	$ 10,455,129.40
472	SR 206	I-95	Dixie Highway (US 1)	Widen	4 Lanes (A2-4)	$ 5,471,282.12	$ 4,103,461.59	$ 547,128.21	$ 547,128.21	$ 547,128.21	$ 11,216,128.35
473	SR 206	Dixie Highway (US 1/SR 5)	SR A1A	Widen	4 Lanes (A2-4)	$ 9,804,150.32	$ 7,353,112.74	$ 980,415.03	$ 980,415.03	$ 980,415.03	$ 20,098,508.15
474	SR 207	I-95	South Holmes Boulevard	Widen	6 lanes (A2-6)	$ 9,373,279.50	$ 7,029,959.62	$ 937,327.95	$ 937,327.95	$ 937,327.95	$ 19,215,222.97
475	SR 207	Holmes Boulevard	SR 312	Widen	6 lanes (A2-6)	$ 1,064,255.91	$ 798,191.93	$ 106,425.59	$ 106,425.59	$ 106,425.59	$ 2,181,724.62
476	SR 312	Anastasia Boulevard (A1A)	Matanzas River	Protected Bike Lane		$ 187,037.42	$ 140,278.07	$ 18,703.74	$ 18,703.74	$ 18,703.74	$ 383,426.72
477	SR 312	US 1		New Interchange		$ 25,000,000.00	$ 18,750,000.00	$ 2,500,000.00	$ 2,500,000.00	$ 2,500,000.00	$ 51,250,000.00
478	SR 313	SR 207	SR 16	New Road	4 Lanes (N4)	$ 30,814,678.24	$ 23,111,008.68	$ 3,081,467.82	$ 3,081,467.82	$ 3,081,467.82	$ 63,170,090.40
479	SR 313	SR 16	Dixie Highway (US 1)	New Road	4 Lanes (N4)	$ 37,873,213.95	$ 28,404,910.46	$ 3,787,321.40	$ 3,787,321.40	$ 3,787,321.40	$ 77,640,088.60
480	SR 313	Dixie Highway (US 1/SR 5)		New Interchange		$ 15,500,000.00	$ 11,625,000.00	$ 1,550,000.00	$ 1,550,000.00	$ 1,550,000.00	$ 31,775,000.00
481	SR A1A	Solano Road	Duval Line	Context Sensitive Solutions		$ 2,119,426.25	$ 1,589,569.69	$ 211,942.63	$ 211,942.63	$ 211,942.63	$ 4,344,823.82
482	SR A1A	Red Cox/Coquina/Old Quarry Road		Intersection Improvements		$ 650,000.00	$ 487,500.00	$ 65,000.00	$ 65,000.00	$ 65,000.00	$ 1,332,500.00

Nassau County Project Details											
Map ID	Facility	From	To	Improvement	Lanes	Construction Cost	ROW	PD&E	ENV	PE	Total Construction Cost
483	SR A1A	Mickler Road	Palm Valley Road	Widen	4 Lanes (A2-4)	$ 7,014,230.57	$ 5,260,672.93	$ 701,423.06	$ 701,423.06	$ 701,423.06	$ 14,379,172.66
484	St. Francis Street	Avenida Menendez	Cordova Street	Shared Street		$ 37,492.39	$ 28,119.29	$ 3,749.24	$ 3,749.24	$ 3,749.24	$ 76,859.40
485	St. George Street	Cordova Street	South Street	Shared Street		$ 99,455.81	$ 74,591.86	$ 9,945.58	$ 9,945.58	$ 9,945.58	$ 203,884.41
486	St. Johns Parkway	CR 2209	9B Extension	Widen	6 lanes (A2-6)	$ 3,459,279.07	$ 2,594,459.31	$ 345,927.91	$ 345,927.91	$ 345,927.91	$ 7,091,522.10
487	US 1	San Sebastian View	Lewis Speedway	Protected Bike Lane		$ 81,550.35	$ 61,162.76	$ 8,155.03	$ 8,155.03	$ 8,155.03	$ 167,178.21
488	US 1 (N Ponce De Leon Blvd)	King Street	SR 16	Protected Bike Lane		$ 256,909.12	$ 192,681.84	$ 25,690.91	$ 25,690.91	$ 25,690.91	$ 526,663.69
489	US 1 (North Ponce De Leon Blvd)	SR 16	San Sebastian View	Protected Bike Lane		$ 153,950.97	$ 115,463.23	$ 15,395.10	$ 15,395.10	$ 15,395.10	$ 315,599.48
490	Veterans Parkway	Greenbriar Road	Longleaf Pine Parkway	New Road	4 Lanes (A2-4)	$ 10,222,160.86	$ 7,666,620.65	$ 1,022,216.09	$ 1,022,216.09	$ 1,022,216.09	$ 20,955,429.76
491	Veterans Parkway	Longleaf Pine	4 Lane portion	Widen	4 Lanes (A2-4)	$ 1,946,258.76	$ 1,459,694.07	$ 194,625.88	$ 194,625.88	$ 194,625.88	$ 3,989,830.46
492	A1A	Vilano Parkway		Intersection Improvements		$ 250,000.00	$ 187,500.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 512,500.00
493	Water Taxi Docks	Various Locations		Water Taxi Stop	9 Locations	#N/A	#N/A	#N/A	#N/A	#N/A	
494	West Castillo Drive	San Marco Avenue	US 1	Widen	3 Lanes (A1-3)	$ 568,434.52	$ 426,325.89	$ 56,843.45	$ 56,843.45	$ 56,843.45	$ 1,165,290.77
495	West Garage	Kings St/SR 207 Vicinity		Future Garage		#N/A	#N/A	#N/A	#N/A	#N/A	
497	Granada Street	King Street	Bridge Street	Complete Street		$ 500,000.00	$ 375,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 1,025,000.00
498	Anastasia Boulevard (A1A)	Red Cox Road	SR 312	Protected Bike Lane/Cycle Track		$ 194,428.20	$ 145,821.15	$ 19,442.82	$ 19,442.82	$ 19,442.82	$ 398,577.81
499	I-95	CR 214		New Interchange		$ 45,000,000.00	$ 5,000,000.00	$ 4,500,000.00	$ 4,500,000.00	$ 4,500,000.00	$ 63,500,000.00
											$ 1,497,848,569.52

APPENDIX C

Adopted 2045 Cost Feasible Plan Shown in Year of Expenditure

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Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
J Turner Butler Boulevard (SR 202)	Duval	Com	I-95	SR A1A	Planning Study	PLN	$2,000			
						Total	**$2,000**			
J Turner Butler Boulevard (SR 202)	Duval	Com	@ San Pablo		Major intersection improvement	RRU	$1,500			
						CST	$11,625			
						Total	**$13,125**			
Jacksonville National Cemetery Access Road	Duval	Com	Lannie Road	Arnold Road	Construct new 2 lane road	ROW	$139			
						CST	$25			
						Total	**$164**			
(SR 115) Southside Boulevard	Duval	Com	@ Gate Parkway		Major intersection improvement	ROW	$358			
						CST	$8,973			
						Total	**$9,331**			
(SR 115) Southside Boulevard	Duval	Com	@ Deerwood Park		Major intersection improvement	CST	$9,526			
						Total	**$9,526**			
(SR 212) Beach Boulevard	Duval	Com	@Southside Boulevard		Major intersection improvement	CST	$5,606			
						Total	**$5,606**			
SR 16	St. Johns	Com	@ International Golf Boulevard		Major intersection improvement	CST	$5,500			
						Total	**$5,500**			
SR 16	St. Johns	Com	SR 313	I-95	Widen to 4 lanes	PLN	$500			
						Total	**$500**			
SR 313	St. Johns	Com	SR 207	South Holmes Boulevard	Construct new 2 lane road	PE	$1,211			
						CST	$11,210			
						Total	**$12,421**			
SR 21 (Blanding Boulevard)	Clay	Com	CR 218	Black Creek	Widen to 6 lanes	ROW	$624			
						CST	$19,703			
						Total	**$20,327**			
SR 21 (Blanding Boulevard)	Clay	Com	CR 220 (Long Bay Road)	Allie Murray Road	Widen to 6 lanes	CST	$13			
						Total	**$13**			
CR 220	Clay	Com	Henley Road (CR 209)	Knight Boxx Road (CR 220B	Widen to 4 lanes	ROW	$3,725			
						ENV	$2,000			
						CST	$12,718			
						Total	**$16,643**			
US 17 Main Street	Duval	269	New Berlin Road	Pecan Park Road	Widen to 4 lanes + trail	PE				
						ROW	$6,000			
						ENV		$1,608		
						CST		$6,431		
						Total	**$6,000**	**$8,039**		

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
US 17 Main Street	Duval	270	Pecan Park Road	Nassau County Line	Widen to 4 lanes + trail	PE			$1,634	
						ROW			$12,254	
						ENV			$4,084	
						CST			$16,340	
						Total			**$34,312**	
SR 115 Southside Boulevard	Duval	2014	SR 202 J T Butler Boulevard	US 90 Beach Boulevard	Widen to 6 lanes	PE			$1,663	
						ROW			$8,320	
						ENV			$1,108	
						CST			$19,375	
						Total			**$30,467**	
SR 115 Southside Boulevard	Duval	2010	at SR 152 Baymeadows Road		Continuous Flow Intersection	PE	Complete			
						ROW			$7,750	
						ENV			$3,875	
						CST				$41,000
						Total			**$11,625**	**$41,000**
SR 115 Southside Boulevard	Duval	2011	at J T Butler Boulevard		Modify Interchange	PE				$2,460
						ROW				$2,460
						ENV				$1,025
						CST				$54,325
						Total				**$60,270**
US1 SR 5 Phillips Highway	Duval	297	I-95 at the Avenues Mall	SR 202 J T Butler Boulevard	Widen to 6 lanes + Trail	PE			$5,527	
						ROW			$27,640	
						ENV			$3,684	
						CST			$36,853	
						Total			**$73,704**	
US1 SR 5 Phillips Highway	Duval	2000	SR 9B	I-295	Widen to 6 lanes + Trail	PE				$5,453
						ROW				$5,125
						ENV				$3,635
						CST				$16,552
						Total				**$30,575**
SR 115 Lem Turner Road	Duval	265	I-295	Nassau County Line	Widen to 4 lanes + trail	PE				$8,620
						ROW				$43,105
						ENV				$5,746
						CST				$64,575
						Total				**$122,047**

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
Atlantic Boulevard (SR 10)	Duval	206	at Girvin Road		Intersection Improvements	PE		$66		
						ROW		$594		
						ENV		$40		
						CST		$1,287		
						Total		**$1,987**		
Atlantic Boulevard (SR 10)	Duval	207	at Hodges Boulevard		Intersection Improvements	PE		$66		
						ROW		$594		
						ENV		$40		
						CST		$1,287		
						Total		**$1,987**		
Atlantic Boulevard (SR 10)	Duval	208	at San Pablo Boulevard		Intersection Improvements	PE		$66		
						ROW		$594		
						ENV		$40		
						CST		$1,287		
						Total		**$1,987**		
Arlington Expressway	Duval	205	University Boulevard (SR 109)		Modify Interchange + Trail	PE			$152	
						ROW			$543	
						ENV			$194	
						CST			$1,938	
						Total			**$2,826**	
Normandy Boulevard (SR 228)	Duval	288	US 301	Bell Road (Equestrian Park)	Widen to 4 lanes *City has $14.5 M on this project*	PE		$3,745		
						ROW		$6,732		
						ENV		$1,452		
						CST		$11,880		
						Total		**$23,941**		
SR 16	Clay	125	First Coast Expressway	SR 15A Oakridge Avenue	Widen to 4 lanes	PE		$1,903		
						ROW		$7,260		
						ENV		$1,452		
						CST		$47,520		
						Total		**$58,135**		
SR 16	Clay	126	US 17	Shands Bridge	Widen to 4 lanes	PE				$2,355
						ROW				$11,777
						ENV				$2,460
						CST				$66,625
						Total				**$83,218**

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
SR 100	Clay	124	Clay/Bradford County Line	Clay/Putnam County Line	Widen to 4 lanes	PE				$1,486
						ROW				$3,850
						ENV				$513
						CST				$5,135
						Total				**$10,984**
SR 21 Blanding Boulevard	Clay	127	SR 16	CR 215 Blanding Boulevard	Widen to 4 lanes	PE			$2,449	
						ROW			$12,251	
						ENV			$1,632	
						CST			$16,335	
						Total			**$32,668**	
US 17	Clay	130	Orion Road	SR16	Context Sensitive Solutions	PE			$388	
						ROW			$155	
						ENV			$ -	
						CST			$1,860	
						Total			**$2,408**	
US 17	Nassau	342	Duval County Line	CR 108	Widen to 4 lanes	PE				$6,962
						ROW				$34,850
						ENV				$4,715
						CST				$46,535
						Total				**$92,838**
US 17	Nassau	304	at Pages Dairy Road		Major Intersection Improvement	PE				$2,255
						ROW				$5,330
						ENV				$1,230
						CST				$10,250
						Total				**$19,065**
US 301	Nassau		at Crawford Road		Major Intersection Improvement	PE	$394			
						ROW				$ -
						ENV				$ -
						CST				$4,510
						Total	**$394**			**$4,510**
SR 115 Lem Turner Road	Nassau	321	Duval County Line	US 1/ SR 15	Widen to 4 lanes + trail	PE			$856	
						ROW			$3,100	
						ENV			$403	
						CST			$4,030	
						Total			**$8,389**	

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
SR 16	St Johns	471	Grand Oaks Eastern Entrance	Western Outlet Mall Entrance	Widen to 4 lanes	PE		$132		
						ROW		$2,640		
						ENV		$1,056		
						CST		$6,600		
						Total		**$10,428**		
SR 16	St Johns	470	San Giacomo Road	Grand Oaks Eastern Entrance	Widen to 4 lanes	PE	Complete			
						ROW		$3,049		
						ENV		$582		
						CST		$5,544	$4,650	
						Total		**$9,175**	**$4,650**	
SR 207	St Johns	474	I-95	South Holmes Boulevard	Widen to 6 lanes	PE			$412	
						ROW			$10,850	
						ENV			$164	
						CST			$13,950	
						Total			**$25,377**	
SR 207	St Johns	475	South Holmes Boulevard	SR 312	Widen to 6 lanes	PE		$330		
						ROW		$2,310		
						ENV		$198		
						CST		$3,300		
						Total		**$6,138**		
SR 313	St Johns	478	SR 207	SR 16	New 6 lane road	PE	Complete			
						ROW	$2,612			
						ENV		$330		
						CST		$184,800		
						Total	**$2,612**	**$184,932**		
SR 313	St Johns	479	SR 16	US 1 Dixie Highway	New 4 lane road	PE			$4,844	
						ROW			$60,450	
						ENV			$6,200	
						CST				$120,950
						Total			**$71,164**	**$120,950**
SR A1A	St Johns	483	Mickler Road	Palm Valley Road	Widen to 4 lanes	PE			$2,717	
						ROW			$9,688	
						ENV			$3,255	
						CST			$10,872	
						Total			**$26,531**	

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
SR A1A	St Johns	401	N St Augustine Boulevard	Comares Avenue	Multimodal Way	PE			$37	
						ROW			$1,860	
						ENV			$64	
						CST			$3,100	
						Total			**$5,061**	
SR A1A	St Johns	482	at Red Cox/Coquina Road		Intersection Improvement	PE			$1,008	
						ROW			$2,325	
						ENV			$186	
						CST			$3,875	
						Total			**$7,394**	
SR A1A	St Johns	402	Comares Avenue	Red Cox Road	Multimodal Way	PE			$56	
						ROW			$1,705	
						ENV			$62	
						CST			$3,100	
						Total			**$4,923**	
Big Oak Road	St Johns	403/404	US1	I-95	Feasibility study to consider new 2 lane roadway from US 1 to I-95 Including new interchange	PE		$250		
						ROW				
						ENV				
						CST				
						Total		**$250**		
I-95	St Johns	442	at CR 210		Interchange Modification	PE	Complete			
						ROW		$1,056		
						ENV		$330		
						CST		$3,960		
						Total		**$5,346**		

Projects are to be funded with State and Federal Transportation Funds

Other Arterial Funded Projects (State/Federal Funds) – Mobility Programs

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
Bicycle and Pedestrian	Regional	-	Boxed Funds	$3 M per year	Projects from the Bicycle and Pedestrian Master Plan	CST	NA	$19,800	$23,250	$61,500
Greenways and Trails	Regional	-	Boxed Funds	$2 M per year	Projects from the Greenways and Trails Master Plan	CST	NA	$13,200	$15,500	$41,000
ITS/TSM&O/Smart Cities Programs	Regional	-	Boxed Funds	$8 M per year	Projects from the ITS and TSM&O Master Plan	CST	NA	$52,800	$62,000	$164,000
Safety Projects	Regional	-	Boxed Funds	$6 M per year	Projects from the Regional Safety Plan	CST	NA	$39,600	$46,500	$123,000
Context Sensitive Solutions (Complete Street Program)	Regional	-	Boxed Funds	$5 M per year	Projects from the Smart Region Plan	CST	NA	$33,000	$38,750	$102,500
Freight Enhancement Projects	Regional	-	Boxed Funds	$3 M per year	Projects from the Regional Safety Plan	CST	NA	$19,800	$23,250	$61,500
Resiliency Programs	Regional	-	Boxed Funds	$2 M per year	Projects from the Resiliency Plan	CST	NA	$10,000	$10,000	$20,000
					Totals *(Does not include PE Costs)*		**$102,162**	**$4984,064**	**$539,830**	**$1,129,778**
					YOE Budgets		NA	$494,080	$539,870	$1,130,310
					Difference		NA	$16	$40	$532

Projects are to be funded with State and Federal Transportation Funds

Strategic Intermodal System (SIS) Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	County	From	To	Improvement	TIP Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045	Total	Phases Funded
First Coast Expressway (SR23)	Duval/Clay/ St Johns	I-95 (SR9)	I-10 (SR8)	Construct New Road	$10				$10	PE
First Coast Expressway (SR23)	Clay	SR15 (US17)	SR21 (Blanding Boulevard)	Construct New Road	$88,470				$88,470	ENV, ROW
First Coast Expressway (SR23)	Clay	North of SR16	SR21 (Blanding Boulevard)	Construct New Road	$367,549				$367,549	CST
First Coast Expressway (SR23)	Clay/ St Johns	East of CR209	North of SR16	Construct New Road	$232,645				$232,645	PE, CST
First Coast Expressway (SR23)	Duval/Clay	I-95 (SR9)	SR15 (US17)	Construct New Road	$49,847				$49,847	ENV, ROW
First Coast Expressway (SR23)	St Johns	I-95 (SR9)	West of CR16A	Construct New Road	$398,784				$398,784	PE, CST
First Coast Expressway (SR23)	St Johns/ Clay	West of CR16A	East of CR209	Construct New Road	$370,913				$370,913	PE, CST
I-10 (SR8)	Baker/ Nassau/ Duval	CR125	US301	Add Lanes and Reconstruct	$511				$511	PD&E, PE
I-10 (SR8)	Duval	I-295 (SR9A)	I-95 (SR9)	Add Lanes and Reconstruct	$134,247				$134,247	PD&E, PE, CST
I-10 (SR8)	Duval	Nassau/Duval County Line	US301	Add Lanes and Reconstruct	$2,650		$3,588	$128,645	$134,883	PE, ROW, CST
I-10 (SR8)	Duval	US301	SR23 (Cecil Commerce Center Parkway)	Add Lanes and Reconstruct	$520		$10,250	$266,968	$277,738	PE, ROW, CST
I-10 (SR8)	Duval	US301	I-295 (SR9A)	Add Lanes and Reconstruct	$1,625				$1,625	PD&E
I-10 (SR8)	Duval	I-10 (SR8)	South of US1/SR115/MLK	Add Lanes and Reconstruct		$187,238			$187,238	PE, CST
I-295 (SR9A)	Duval	SR13 (San Jose Boulevard)	SR21 (Blanding Boulevard)	Add Lanes and Reconstruct	$12,800	$102,143			114,943	PD&E, PE, ROW, CST
I-295 (SR9A)	Duval	at Collins Road		Modify Interchange	$12,085				$12,085	PD&E, PE, ROW, CST
I-295 (SR9A)	Duval	at US17	South of Wells Road	Modify Interchange	$21,788				$21,788	PD&E, PE, ROW, CST
I-295 (SR9A)	Duval	Dame Point Bridge	North of Pulaski	Add Lanes and Reconstruct	$2,157				$2,157	PD&E, PE, ROW
I-295 (SR9A)	Duval	SR113 (Southside Connector)	SR202 (J Turner Butler Boulevard)	Add Lanes and Reconstruct	$23,316	$370,071			$393,387	PD&E, PE, ROW, CST
I-295 (SR9A)	Duval	SR202 (J Turner Butler Boulevard)	SR-9B	Add Lanes and Reconstruct	$40				$40	CST
I-295 (SR9A)	Duval	SR9B	South Interchange	Add Lanes and Reconstruct	$10				$10	PD&E
I-295 (SR9A)	Duval	SR23 (Cecil Commerce Center Parkway)	I-295 (SR9A)	Add Lanes and Reconstruct			$25,200	$433,542	$458,742	PE, ROW, CST
I-295 (SR9A)	Duval	North of Commonwealth Drive	North of New Kings Road	Add Lanes and Reconstruct			$96,417		$96,417	PE, ROW, CST
I-295 (SR9A)	Duval	I-95 (SR9)	SR113 (Southside Connector)	Add Lanes and Reconstruct			$126,781		$126,781	PE
I-295 (SR9A)	Duval	North of Collins Road Interchange	North of Commonwealth Lane	Add Lanes and Reconstruct			$20,719	$486,269	506,988	PD&E, PE, ROW, CST

Projects are to be funded with State and Federal Transportation Funds

Strategic Intermodal System (SIS) Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	County	From	To	Improvement	TIP Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045	Total	Phases Funded
I-295 (SR9A)	Duval	North of New Kings Road	South of I-95 (SR9) Interchange	Add Lanes and Reconstruct			$20,323	$382,345	402,668	PE, ROW, CST
I-95 (SR9)	Duval	at SR202 (J Turner Butler Boulevard)		Modify Interchange	$17				$17	ROW
I-95 (SR9)	Duval	at SR152 (Baymeadows)		Add Turn Lane	$1,239				$1,239	PE, CST
I-95 (SR9)	Duval	at US1/MLK/20TH Street		Modify Interchange	$32,881				$32,881	PE, ROW, CST
I-95 (SR9)	Duval	Duval County Line	I-295 (SR9A)	Add Lanes and Reconstruct	$138,218				$138,218	PE, ENV, ROW, CST
I-95 (SR9)	Duval	SR202 (J Turner Butler Boulevard)	Atlantic Boulevard	Add Lanes and Reconstruct	$346,886				$346,886	PD&E, PE, ROW, CST
I-95 (SR9)	Duval	South of the Duval County Line	SR202 (J Turner Butler Boulevard)	Add Lanes and Reconstruct			$682,431		$682,431	ROW, CST
I-95 (SR9)	Duval	I-10 (SR8)	South of US1/SR115/MLK	Add Lanes and Reconstruct		$187,238	$214,230		$401,468	PE, ROW, CST
I-95 (SR9)	St Johns	I-295 (SR9A)	SR202 (J Turner Butler Boulevard)	Add Lanes and Reconstruct	$20,004				$20,004	PD&E, PE, ROW, CST
I-95 (SR9)	St Johns	International Golf Parkway	Duval County Line	Add Lanes and Reconstruct	$457,600				$457,600	PE, ROW, CST
I-95 (SR9)	St Johns	at SR16		Modify Interchange			$12,212		$12,212	PE, CST
SR 200 (US301)	Nassau	at Crawford Road (Crawford Diamond Industrial Park)		Modify Interchange/Flyover	$604				$604	PD&E, PE, ROW
SR200 (A1A)	Nassau	US17	CR107	Add Lanes and Reconstruct	$16				$16	PE
SR202 (J Turner Butler Boulevard)	Duval	I-95 (SR9)	SR200 (A1A)	Planning Study	$770				$770	PD&E
US17	Duval	Collins Road	NAS Birmingham Gate	Add Lanes and Reconstruct			$42,427		$42,427	PE, ROW, CST
				Totals	**$2,718,192**	**$846,690**	**$1,254,578**	**$1,697,769**	**$6,517,229**	

Projects are to be funded with State and Federal Transportation Funds

Transit Projects (State/Federal Funds)

2045 Cost Feasible Plan										
Facility	**County**	**ID**	**From**	**To**	**Improvement**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
Corridor Southwest BRT Line	Duval	Com	Downtown Convention Center	Florida State College – Kent Campus	Bus Rapid Transit	Capital	$12,140			
					Fixed Guideway Improvements	Capital	$34,005			
U2C	Duval	602	Central	Brooklyn/Five Points	U2C Service	Capital		$52,800		
U2C	Duval	603	Central	Springfield	U2C Service	Capital		$52,800		
U2C	Duval	604	Kings Avenue	San Marco	U2C Service	Capital		$52,800		
Southeast Commuter Rail	Duval/St Johns	635	Downtown Jacksonville	St Augustine	Commuter rail service	Capital				$506,000
Mayport Ferry	Duval	600	A1A	A1A	Additional Ferry; increase frequency by 50%	Capital		$8,680		
Water Taxi	Duval	601	The District	Shipyard Development	New Water Taxi Service	Capital			$1,550	
Shands Bus Service	Clay/St. Johns	608	Clay County	St. Johns County	Bus Service	Capital		$2,640		
Atlantic BRT Line	Duval	616	Downtown Jacksonville	Beaches/Ponte Vedra	Bus Rapid Transit	Capital			$46,500	
Moncrief BRT Line	Duval	625	Busch Drive	Downtown Jacksonville	Bus Rapid Transit	Capital			$46,500	
North Main BRT Line	Duval	627	Florida State College North Campus	Downtown Jacksonville	Bus Rapid Transit	Capital			$46,500	
					Transit CFP Totals		**$46,145**	**$169,720**	**$141,050**	**$506,000**
					YOE Transit Budget	NA	$186,980	$222,030	$507,580	
					Balance	NA	$17,260	$80,980	$1,580	

Projects are to be funded with State and Federal Transportation Funds

Transit Projects (State/Federal Funds)

Projects to be Funded Through FTA Discretionary Transit Service Grants

2045 Cost Feasible Plan										
Facility	County	ID	From	To	Improvement	Phase	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
North Commuter Rail	Duval/Nassau	605	Downtown Jacksonville	Yulee	Commuter rail service	Capital				$387,500
Southwest Commuter Rail	Duval/Clay	605	Downtown Jacksonville	Orange Park	Commuter rail service	Capital				$387,500
Express Bus	Duval	606	NS Rail on Main	JIA	Express Bus Service	Capital				$46,500
Arlington BRT Line	Duval	615	Downtown Jacksonville	Arlington	Bus Rapid Transit	Capital				$46,500
103rd BRT Line	Duval	617	Cecil Field	Blanding Boulevard	Bus Rapid Transit	Capital				$46,500
Edgewood BRT Line	Duval	618	New Kings Road	Downtown Jacksonville	Bus Rapid Transit	Capital				$46,500
Southside BRT Line	Duval	620	Regency Square Mall	Avenues Mall	Bus Rapid Transit	Capital				$46,500
Commonwealth/Cassat BRT Line	Duval	622	Cecil Field	Downtown Jacksonville	Bus Rapid Transit	Capital				$46,500
Commonwealth/Lane BRT Line	Duval	623	Downtown Jacksonville	103rd Street	Bus Rapid Transit	Capital				$46,500
Post/Normandy BRT Line	Duval	628	Normandy Boulevard	Downtown Jacksonville	Bus Rapid Transit	Capital				$46,500
St. Augustine/San Jose BRT Line	Duval	630	Downtown Jacksonville	Mandarin	Bus Rapid Transit	Capital				$46,500
University BRT Line	Duval	631	Jacksonville University	St. Augustine Road	Bus Rapid Transit	Capital				$46,500
Normandy BRT Line	Duval	619	Cecil Field	Downtown Jacksonville	Bus Rapid Transit	Capital				$46,500
Clay County BRT Line	Clay	621	Orange Park Mall	Middleburg	Bus Rapid Transit	Capital				$46,500
Totals							$ -	$ -	$ -	**$1,333,000**

Projects are to be funded with State and Federal Transportation Funds

Transportation Management Area (TMA) Projects (TMA Funds)

2045 Cost Feasible Plan										
Facility	County	Map Id	From	To	Improvement Type	Phase	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
Cheswick Oaks Avenue Extension	Clay	101	Oakleaf Plantation	Savannah Glen Boulevard	New 4 lane road	PE		$1,443		
						ROW		$7,219		
						ENV		$6,864		
						CST			$12,537	$24,545
						Total		$15,526	$12,537	$24,545
CR 220	Clay	112	SR 21 Blanding Boulevard	Henley Road	Widen to 4 lanes	PE			$3,100	
						ROW			$13,950	
						ENV			$1,860	
						CST			$17,050	
						Total			$35,960	
CR 218	Clay	107	Aster/Pine Tree Road	Cosmos	Widen to 4 lanes	PE		$673		
						ROW		$2,640		
						ENV		$132		
						CST		$6,600		
						Total		$10,045		
Alta Drive Realignment	Duval	201	SR 105 Zoo Parkway	North of New Berlin Road (south)	New 4 lane road	PE				$2,298
						ROW				$6,894
						ENV				$918
						CST				$9,194
						Total				$19,305
SR A1A	Duval	2018	SR 116 Wonderwood Drive	Naval Station Mayport North Gate	Widen to 4 lanes + Trail	PE		$2,577		
						ROW		$6,336		
						ENV		$1,056		
						CST		$9,372		
						Total		$19,341		
Pecan Park Road	Duval	296	I-95	Main Street (US 17)	Widen to 4 lanes + Trail	PE				$578
						ROW				$2,954
						ENV				$385
						CST				$3,856
						Total				$7,774
New Berlin Road	Duval	278	Yellow Bluff Road	Cedar Point Road	Widen to 4 lanes + Trail	PE				$787
						ROW				$3,936
						ENV				$519
						CST				$5,248
						Total				$10,490

Transportation Management Area (TMA) Projects (TMA Funds)

2045 Cost Feasible Plan										
Facility	County	Map Id	From	To	Improvement Type	Phase	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
Penman Road	Duval	2029	Beach Boulevard (SR 212)	Atlantic Boulevard (SR 10)	Reconstruct (2 lane) + Trail	PE				$1,025
						ROW				$2,255
						ENV				$923
						CST				$4,408
						Total				$8,610
Mayport Road (SR 101)	Duval	272	SR A1A	Mayport Main Gate	Context Sensitive Solutions	PE		$495		
						ROW		$ -		
						ENV		$132		
						CST		$1,584		
						Total		$2,211		
Williams Burgess Boulevard Extension	Nassau	346	Miner Road	Hampton Club Way	New 2 lane road + trail	PE				NA
						ROW				NA
						ENV				NA
						CST				$57,714
New Road	Nassau	324	William Burgess Boulevard	Mentoria Road	New 2 lane road + trail	PE		NA		
						ROW		NA		
						ENV		NA		
						CST		$8,469		
New Bridge over I-95	Nassau	327	Semper Fi Drive	Mentoria Road	New 2 lane road + trail	PE		NA		
						ROW		NA		
						ENV		NA		
						CST		$8,733		
Semper Fi	Nassau	338	Semper Fi Extension	Johnson Lake Road	Reconstruct 2 lane road + trail	PE		NA		
						ROW		NA		
						ENV		NA		
						CST		$9,240		
Semper Fi Extension	Nassau	339	SR 200 (A1A)	Semper Fi Drive	New 2 lane road + trail	PE		NA		
						ROW		NA		
						ENV		NA		
						CST		$3,960		
Sauls Road	Nassau	337	US 1	Musselwhite Road	New 2 lane road + trail	PE			NA	
						ROW			NA	
						ENV			NA	
						CST			$6,200	
Sundberg Road	Nassau	340	CR 121	Andrews Road	New 2 lane road	PE			NA	
						ROW			NA	
						ENV			NA	
						CST			$1,395	

Transportation Management Area (TMA) Projects (TMA Funds)

2045 Cost Feasible Plan										
Facility	**County**	**Map Id**	**From**	**To**	**Improvement Type**	**Phase**	**Years 2019-2025**	**Years 2026-2030**	**Years 2031-2035**	**Years 2036-2045**
CR 2209	St Johns	418	at CR 210		New interchange/Intersection Improvements	PE		$1,584		
						ROW		$ -		
						ENV		$ -		
						CST		$6,996		
						Total		$8,580		
CR 2209	St Johns	419	SR 16 Connector (Silverleaf Parkway)	International Golf Parkway	New 4 lane road	PE			$1,500	
						ROW			$ -	
						ENV			$ -	
						CST			$13,950	
						Total			$15,450	
CR 2209	St Johns	420	International Golf Parkway	SR 16	New 4 lane road	PE				$615
						ROW				$ -
						ENV				$ -
						CST				$10,660
						Total				$11,275
Racetrack Road	St Johns	458	Bartram Park Boulevard	I-95 overpass	Widen to 4 lanes	PE			$500	
						ROW			$ -	
						ENV			$ -	
						CST			$11,315	
						Total			$11,815	
US 1	St Johns	415	at CR 210		Add interchange ramps	PE				$ -
						ROW				$ -
						ENV				$ -
						CST				$30,750
						Total				$30,750
					Total TMA			$86,105	$83,357	$179,462
					YOE TMA Budget			$86,130	$86,130	$172,260
					Balance			$25	$2,773	$1,798

Locally Funded Projects

2045 Cost Feasible Plan								
Facility	County	From	To	Improvement	Years 2019-2025	Years 2026-2030	Years 2031-2035	Years 2036-2045
GCB Bypass	Clay	US 17	SR 16	Construction of new 2 lane roadway	6,000			
CR 220	Clay	Knight Boxx Road	Henley Road	Widen to 4 lanes	15,000			
Chaffee Road	Duval	Normandy Boulevard	I-10	Widen to 4 lanes	$38,000			
Soutel Drive Road Diet	Duval	New Kings Road	Lem Turner Road	Reduce from a 4 lane to a 3 lane typical section	$5,280			
Edgewood Avenue	Duval	US 17	Cassat Avenue	Reduce from a 4 lane to a 3 lane typical section	$5,200			
Collins Road	Duval	Old Middleburg Road	Rampart Road	Widen to 4 lanes	$17,000			
Collins Road	Duval	Blanding Boulevard	Pine Verda	Widen to 4 lanes	$12,100			
San Pablo Road	Duval	Beach Boulevard	Atlantic Boulevard	Widen to 6 lanes	$10,900			
Parramore Road Extension	Duval	Parramore Road	Youngerman Circle	Construct new 2 lane road	$2,200			
McDuff Avenue Phase III	Duval	Huron Avenue	Melson Avenue	Reconstruct	$2,100			
Kernan Boulevard	Duval	Atlantic Boulevard	McCormick Road	Widen to 6 lanes	$16,700			
Edwards Road	Nassau	Police Lodge Road	SR 200	Reconstruct 2 lane road + trail	$6,600			
Pages Dairy Road	Nassau	Felmor Road	Chester Road	Reconstruct 2 lane road + trail	$3,782			
William Burgess Road Ext	Nassau	US 17	Miner Road	Construction of new roadway	$14,250			
CR 210	St. Johns	I-95	US 1	Widen to 4 lanes	$2,500			
CR 210	St. Johns	Greenbriar Road	Cimarrone Boulevard	Widen to 4 lanes	$2,942			
Longleaf Pine Parkway	St. Johns	Roberts Road	Oxford Estates	Widen to 4 lanes	$2,251			
CR 2209	St. Johns	CR 210	CR 16A	Construct new 4 lane roadway	$10,000			
				Locally Funded Totals	**$172,885**			

APPENDIX D

Adopted 2045 Master Project List

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Path Forward 2045 Long Range Transportation Plan
Master Project List
November 14, 2019

No.	Facility	ID	From	To	County	Improvement Type	Project Total (Year of Expenditure Millions of Dollars)	Project Completion
Committed Roadway Capacity Projects								
1	Bay Street	Committed	I-95	Festival Park Drive	Duval	Cameras and Flood Sensors	$10,100	2019-2025
2	Baymeadows Road	Committed	I-95	Baymeadows Circle East	Duval	Turn lane improvements	$1,805	2019-2025
3	Beach Boulevard SR 212	Committed	at Southside Boulevard		Duval	Modify intersection	$5,606	2019-2025
4	Blanding Boulevard SR 21	Committed	CR 218	Black Creek	Clay	Widen to 6 lanes	$20,709	2019-2025
5	Blanding Boulevard SR 21	Committed	Black Creek	Allie Murry Road	Clay	Widen to 6 lanes	$13,338	2019-2025
6	CR 220	Committed	Henley Road	Knight Boxx Road	Clay	Widen to 4 lanes	$12,917	2019-2025
7	First Coast Expressway (SR 23)	800	I-95 (SR 9)	I-10 (SR 8)	Duval/Clay/ St Johns	Construct New Road	$10	2019-2025
8	First Coast Expressway (SR 23)	801	SR 15 (US 17)	SR 21 (Blanding Boulevard)	Clay	Construct New Road	$88,470	2019-2025
9	First Coast Expressway (SR 23)	802	North of SR 16	SR 21 (Blanding Boulevard)	Clay	Construct New Road	$367,549	2019-2025
10	First Coast Expressway (SR 23)	803	East of CR 209	North of SR 16	Clay/ St Johns	Construct New Road	$232,645	2019-2025
11	First Coast Expressway (SR 23)	804	I-95 (SR 9)	SR 15 (US 17)	St. Johns/Clay	Construct New Road	$49,847	2019-2025
12	First Coast Expressway (SR 23)	805	I-95 (SR 9)	West of CR 16A	St Johns	Construct New Road	$398,784	2019-2025
13	First Coast Expressway (SR 23)	806	West of CR 16A	East of CR 209	St Johns/ Clay	Construct New Road	$370,913	2019-2025
14	First Coast Expressway (SR 23)	Committed	CR 16A	I-95	St Johns	New Roadway	$459,882	2019-2025
15	I-10 (SR 8)	807	CR 125 (Baker County)	US 301	Baker/ Nassau/ Duval	Add Lanes and Reconstruct	$511	2019-2025
16	I-10 (SR 8)	808	I-295 (SR 9A)	I-95 (SR 9)	Duval	Add Lanes and Reconstruct	$134,247	2019-2025
17	I-10 (SR 8)	811	US 301	I-295 (SR 9A)	Duval	Add Lanes and Reconstruct	$1,625	2019-2025
18	I-295 (SR 9A)	814	at Collins Road		Duval	Modify Interchange	$12,085	2019-2025
19	I-295 (SR 9A)	815	at US 17	South of Wells Road	Duval	Modify Interchange	$21,788	2019-2025
20	I-295 (SR 9A)	816	Dames Point Bridge	North of Pulaski	Duval	Add Lanes and Reconstruct	$2,157	2019-2025
21	I-295 (SR 9A)	818	SR 202 (J. Turner Butler Boulevard)	SR 9B	Duval	Add Lanes and Reconstruct	$40	2019-2025
22	I-295 (SR 9A)	819	SR 9B	South Interchange	Duval	Add Lanes and Reconstruct	$10	2019-2025
23	I-95	Committed	at SR 16		St Johns	Interchange modifications	$8,768	2019-2025
24	I-95 (SR 9)	824	at SR 202 (J. Turner Butler Boulevard)		Duval	Modify Interchange	$17	2019-2025
25	I-95 (SR 9)	825	at SR 152 (Baymeadows Road)		Duval	Add Turn Lane	$1,239	2019-2025
26	I-95 (SR 9)	826	at US 1/MLK/20th Street		Duval	Modify Interchange	$32,881	2019-2025
27	I-95 (SR 9)	827	Duval County Line	I-295 (SR 9A)	Duval	Add Lanes and Reconstruct	$138,218	2019-2025
28	I-95 (SR 9)	828	SR 202 (J. Turner Butler Boulevard)	Atlantic Boulevard	Duval	Add Lanes and Reconstruct	$346,886	2019-2025
29	I-95 (SR 9)	831	I-295 (SR 9A)	SR 202 (J. Turner Butler Boulevard)	Duval	Add Lanes and Reconstruct	$20,004	2019-2025
30	I-95 (SR 9)	832	International Golf Parkway	Duval County Line	St Johns	Add Lanes and Reconstruct	$457,600	2019-2025
31	J. Turner Butler Boulevard	Committed	at San Pablo		Duval	Modify Interchange	$13,125	2019-2025
32	SR 115 Southside Boulevard	Committed	at Deerwood Park Boulevard		Duval	Modify intersection	$9,525	2019-2025

No.	Facility	ID	From	To	County	Improvement Type	Project Total (Year of Expenditure Millions of Dollars)	Project Completion
33	SR 115 Southside Boulevard	Committed	at Gate Parkway		Duval	Modify intersection	$9,332	2019-2025
34	SR 16	Committed	at International Golf Parkway		St Johns	Modify intersection	$5,500	2019-2025
35	SR 200 (A1A)	835	US17	CR 107	Nassau	Add Lanes and Reconstruct	$16	2019-2025
36	SR 200 (US 301)	834	at Crawford Road (Crawford Diamond Industrial Park)		Nassau	Modify Interchange/Flyover	$604	2019-2025
37	SR 200/SR A1A	Committed	I-95	Amelia River Bridge	Nassau	Widen to 6 lanes	$0	2019-2025
38	SR 202 (J. Turner Butler Boulevard)	836	I-95 (SR 9)	SR 200 (A1A)	Duval	Planning Study	$770	2019-2025
39	SR 313	Committed	SR 207	Holmes Road	St Johns	New 2 lane road	$12,421	2019-2025
40	US 17	Committed	at Governors Creek Bridge		Clay	Sidewalks	$988	2019-2025
41	US 301	Committed	at Crawford Diamond IP		Nassau	New interchange	$394	2019-2025
LRTP Roadway Capacity Projects								
42	Alta Drive Realignment	201	SR 105 Zoo Parkway	North of New Berlin Road (south)	Duval	New 4 lane road	$19,305	2036-2045
43	Arlington Expressway	205	University Boulevard (SR 109)		Duval	Modify Interchange + Trail	$2,674	2031-2035
44	Atlantic Boulevard (SR 10)	206	at Girvin Road		Duval	Intersection Improvements	$1,921	2026-2030
45	Atlantic Boulevard (SR 10)	207	at Hodges Boulevard		Duval	Intersection Improvements	$1,921	2026-2030
46	Atlantic Boulevard (SR 10)	208	at San Pablo Boulevard		Duval	Intersection Improvements	$1,921	2026-2030
47	Big Oak Road	403/404	US1	I-95	St Johns	Feasibility study to consider new 2	$250	2026-2030
48	Cheswick Oaks Avenue Extension	101	Oakleaf Plantation	Savannah Glen Boulevard	Clay	New 4 lane road	$52,607	2036-2045
49	CR 218	107	Aster/Pine Tree Road	Cosomos	Clay	Widen to 4 lanes	$10,045	2026-2030
50	CR 220	112	SR 21 Blanding Boulevard	Henley Road	Clay	Widen to 4 lanes	$35,960	2031-2035
51	CR 2209	418	at CR 210		St Johns	New interchange/Intersection Improvements	$8,580	2026-2030
52	CR 2209	419	SR 16 Connector (Silverleaaf Parkway)	International Golf Parkway	St Johns	New 4 lane road	$15,450	2031-2035
53	CR 2209	420	International Golf Parkway	SR 16	St Johns	New 4 lane road	$11,275	2036-2045
54	Hart Bridge	Bridge	South Bank	North Bank	Duval	Bridge replacement	$0	2036-2045
55	I-10 (SR 8)	809	Nassau/Duval County Line	US 301	Duval	Add Lanes and Reconstruct	$134,883	2036-2045
56	I-10 (SR 8)	810	US 301	SR 23 (Cecil Commerce Center Parkway)	Duval	Add Lanes and Reconstruct	$277,738	2036-2045
57	I-10 (SR 8)	812	SR 23 (Cecil Commerce Center Parkway)	I-295 (SR 9A)	Duval	Add Lanes and Reconstruct	$458,742	2036-2045
58	I-295 (SR 9A)	813	SR 13 (San Jose Boulevard)	SR 21 (Blanding Boulevard)	Duval	Add Lanes and Reconstruct	$114,943	2026-2030
59	I-295 (SR 9A)	817	SR 113 (Southside Connector)	SR 202 (J. Turner Butler Boulevard)	Duval	Add Lanes and Reconstruct	$393,387	2026-2030
60	I-295 (SR 9A)	820	North of Commonwealth Drive	North of New Kings Road	Duval	Add Lanes and Reconstruct	$96,417	2031-2035
61	I-295 (SR 9A)	821	I-95 (SR 9)	SR 113 (Southside Connector)	Duval	Add Lanes and Reconstruct	$126,781	2031-2035
62	I-295 (SR 9A)	822	North of Collins Road Interchange	North of Commonwealth Lane	Duval	Add Lanes and Reconstruct	$506,988	2036-2045
63	I-295 (SR 9A)	823	North of New Kings Road	South of I-95 (SR 9) Interchange	Duval	Add Lanes and Reconstruct	$402,668	2036-2045
64	I-95	442	at CR 210		St Johns	Interchange Modification	$5,346	2026-2030
65	I-95 (SR 9)	830	I-10 (SR 8)	South of US 1/SR 115/MLK	Duval	Add Lanes and Reconstruct	$401,468	2031-2035

No.	Facility	ID	From	To	County	Improvement Type	Project Total (Year of Expenditure Millions of Dollars)	Project Completion
66	I-95 (SR 9)	833	at SR 16		St Johns	Modify Interchange	$12,212	2031-2035
67	I-95 (SR 9)	829	South of the Duval/St. Johns County Line	SR 202 (J. Turner Butler Boulevard)	Duval	Add Lanes and Reconstruct	$682,431	2031-2035
68	Main Street Bridge	Bridge	South Bank	North Bank	Duval	Bridge replacement	$0	2036-2045
69	Mathews Bridge	Bridge	South Bank	North Bank	Duval	Bridge replacement	$0	2036-2045
70	Mayport Road (SR 101)	272	SR A1A	Mayport Main Gate	Duval	Context Sensitive Solutions	$2,211	2026-2030
71	New Berlin Road	278	Yellow Bluff Road	Cedar Point Road	Duval	Widen to 4 lanes + Trail	$10,490	2036-2045
72	New Bridge over I-95	327	Semper Fi Drive	Mentoria Road	Nassau	New 2 lane road + trail	$8,733	2026-2030
73	New Road	324	William Burgess Boulevard	Mentoria Road	Nassau	New 2 lane road + trail	$8,469	2026-2030
74	Normandy Boulevard (SR 228)	288	US 301	Bell Road (Equestrian Park)	Duval	Widen to 4 lanes	$20,064	2026-2030
75	Pecan Park Road	296	I-95	Main Street (US 17)	Duval	Widen to 4 lanes + Trail	$7,774	2036-2045
76	Penman Road	2029	Beach Boulevard (SR 212)	Atlantic Boulevard (SR 10)	Duval	Reconstruct (2 lane) + Trail	$8,610	2036-2045
77	Racetrack Road	458	Bartram Park Boulevard	I-95 overpass	St Johns	Widen to 4 lanes	$11,815	2031-2035
78	Sauls Road	337	US 1	Musselwhite Road	Nassau	New 2 lane road + trail	$6,200	2031-2035
79	Semper Fi	338	Semper Fi Extension	Johnson Lake Road	Nassau	Reconstruct 2 lane road + trail	$9,240	2026-2030
80	Semper Fi Extension	339	SR 200 (A1A)	Semper Fi Drive	Nassau	New 2 lane road + trail	$3,960	2026-2030
81	SR 100	124	Clay/Bradford County Line	Clay/Putnam County Line	Clay	Widen to 4 lanes	$9,498	2036-2045
82	SR 115 Lem Turner Road	321	Duval County Line	US 1/ SR 15	Nassau	Widen to 4 lanes + trail	$7,533	2031-2035
83	SR 115 Lem Turner Road	265	I-295	Nassau County Line	Duval	Widen to 4 lanes + trail	$113,427	2036-2045
84	SR 115 Southside Boulevard	2014	SR 202 J T Butler Boulevard	US 90 Beach Boulevard	Duval	Widen to 6 lanes	$28,804	2031-2035
85	SR 115 Southside Boulevard	2010	at SR 152 Baymeadows Road		Duval	Continuous Flow Intersection	$52,625	2036-2045
86	SR 115 Southside Boulevard	2011	at J T Butler Boulevard		Duval	Modify Interchange	$57,810	2036-2045
87	SR 16	125	First Coast Expressway	SR 15A Oakridge Avenue	Clay	Widen to 4 lanes	$56,232	2026-2030
88	SR 16	471	Grand Oaks Eastern Entrance	Western Outlet Mall Entrance	St Johns	Widen to 4 lanes	$10,296	2026-2030
89	SR 16	470	San Giacomo Road	Grand Oaks Eastern Entrance	St Johns	Widen to 4 lanes	$13,837	2031-2035
90	SR 16	126	US 17	Shands Bridge	Clay	Widen to 4 lanes	$80,862	2036-2045
91	SR 207	475	South Holmes Boulevard	SR 312	St Johns	Widen to 6 lanes	$5,808	2026-2030
92	SR 207	474	I-95	South Holmes Boulevard	St Johns	Widen to 6 lanes	$25,033	2031-2035
93	SR 21 Blanding Boulevard	127	SR 16	CR 215 Blanding Boulevard	Clay	Widen to 4 lanes	$30,219	2031-2035
94	SR 313	478	SR 207	SR 16	St Johns	New 6 lane road	$185,130	2026-2030
95	SR 313	479	SR 16	US 1 Dixie Highway	St Johns	New 4 lane road	$187,600	2036-2045
96	SR A1A	2018	SR 116 Wonderwood Drive	Naval Station Mayport North Gate	Duval	Widen to 4 lanes + Trail	$19,341	2026-2030
97	SR A1A	401	N St Augustine Boulevard	Comares Avenue	St Johns	Multimodal Way	$5,239	2031-2035
98	SR A1A	402	Comares Avenue	Red Cox Road	St Johns	Multimodal Way	$5,084	2031-2035
99	SR A1A	482	at Red Cox/Coquina Road		St Johns	Intersection Improvement	$6,386	2031-2035
100	SR A1A	483	Mickler Road	Palm Valley Road	St Johns	Widen to 4 lanes	$23,814	2031-2035
101	Sundberg Road	340	CR 121	Andrews Road	Nassau	New 2 lane road	$1,395	2026-2030
102	US 1	415	at CR 210		St Johns	Add interchange ramps	$30,750	2036-2045

No.	Facility	ID	From	To	County	Improvement Type	Project Total (Year of Expenditure Millions of Dollars)	Project Completion
103	US 17	130	Orion Road	SR16	Clay	Context Sensitive Solutions	$2,015	2031-2035
104	US 17	837	Collins Road	NAS Birmingham Gate	Duval	Add Lanes and Reconstruct	$42,427	2031-2035
105	US 17	304	at Pages Dairy Road		Nassau	Major Intersection Improvement	$16,810	2036-2045
106	US 17	342	Duval County Line	CR 108	Nassau	Widen to 4 lanes	$86,100	2036-2045
107	US 17 Main Street	269	New Berlin Road	Pecan Park Road	Duval	Widen to 4 lanes + trail	$8,039	2026-2030
108	US 17 Main Street	270	Pecan Park Road	Nassau County Line	Duval	Widen to 4 lanes + trail	$32,679	2031-2035
109	US1 SR 5 Phillips Highway	297	I-95 at the Avenues Mall	SR 202 J T Butler Boulevard	Duval	Widen to 6 lanes + Trail	$68,177	2031-2035
110	US1 SR 5 Phillips Highway	2000	SR 9B	I-295	Duval	Widen to 6 lanes + Trail	$25,311	2036-2045
111	Williams Burgess Boulevard Extension	346	Miner Road	Hampton Club Way	Nassau	New 2 lane road + trail	$57,714	2036-2045
LRTP Transit Capacity Projects								
112	103rd BRT Line	617	Cecil Field	Blanding Boulevard	Duval	Bus Rapid Transit	$46,500	2036-2045
113	Arlington BRT Line	615	Downtown Jacksonville	Arlington	Duval	Bus Rapid Transit	$46,500	2036-2045
114	Atlantic BRT Line	616	Downtown Jacksonville	Beaches/Ponte Vedra	Duval	Bus Rapid Transit	$46,500	2031-2035
115	Clay County BRT Line	621	Orange Park Mall	Middleburg	Clay	Bus Rapid Transit	$46,500	2036-2045
116	Commonwealth/Cassat BRT Line	622	Cecil Field	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2036-2045
117	Commonwealth/Lane BRT Line	623	Downtown Jacksonville	103rd Street	Duval	Bus Rapid Transit	$46,500	2036-2045
118	Edgewood BRT Line	618	New Kings Road	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2036-2045
119	Express Bus	606	NS Rail on Main	JIA	Duval	Express Bus Service	$46,500	2036-2045
120	Mayport Ferry	600	A1A	A1A	Duval	Additional Ferry; increase frequency by 50%	$8,680	2026-2030
121	Moncrief BRT Line	625	Busch Drive	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2031-2035
122	Normandy BRT Line	619	Cecil Field	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2036-2045
123	North Commuter Rail	605	Downtown Jacksonville	Yulee	Duval/Nassau	Commuter rail service	$387,500	2036-2045
124	North Main BRT Line	627	Florida State College North Campus	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2031-2035
125	Post/Normandy BRT Line	628	Normandy Boulevard	Downtown Jacksonville	Duval	Bus Rapid Transit	$46,500	2036-2045
126	Shands Bus Service	608	Clay County	St. Johns County	Clay/St. Johns	Bus Service	$2,640	2026-2030
127	Southeast Commuter Rail	635	Downtown Jacksonville	St Augustine	Duval/St Johns	Commuter rail service	$506,000	2036-2045
128	Southside BRT Line	620	Regency Square Mall	Avenues Mall	Duval	Bus Rapid Transit	$46,500	2036-2045
129	Southwest Commuter Rail	605	Downtown Jacksonville	Orange Park	Duval/Clay	Commuter rail service	$387,500	2036-2045
130	St. Augustine/San Jose BRT Line	630	Downtown Jacksonville	Mandarin	Duval	Bus Rapid Transit	$46,500	2036-2045
131	U2C	602	Central	Brooklyn/Five Points	Duval	U2C Service	$52,800	2026-2030
132	U2C	603	Central	Springfield	Duval	U2C Service	$52,800	2026-2030
133	U2C	604	Kings Avenue	San Marco	Duval	U2C Service	$52,800	2026-2030
134	University BRT Line	631	Jacksonville University	St. Augustine Road	Duval	Bus Rapid Transit	$46,500	2036-2045
135	Water Taxi	601	The District	Shipyard Development	Duval	New Water Taxi Service	$1,550	2031-2035

No.	Facility	ID	From	To	County	Improvement Type	Project Total (Year of Expenditure Millions of Dollars)	Project Completion
LRTP Programs								
136	Bicycle and Pedestrian	Program	Boxed Funds	$3 M per year	Regional	Projects from the Bicycle and Pedestrian Master Plan	$104,550	The total funding is shown. There is funding in each period
137	Context Sensitive Solutions	Program	Boxed Funds	$5 M per year	Regional	Projects from the Smart Region Plan	$174,250	
138	Freight Enhancement Projects	Program	Boxed Funds	$3 M per year	Regional	Projects from the Regional Safety Plan	$104,550	
139	Greenways and Trails	Program	Boxed Funds	$2 M per year	Regional	Projects from the Greenways and Trails Master Plan	$69,700	
140	ITS/TSM&O/Smart Cities Programs	Program	Boxed Funds	$8 M per year	Regional	Projects from the ITS and TSM&O Master Plan	$278,800	
141	Resiliency Programs	Program	Boxed Funds	$2 M per year	Regional	Projects from the Resiliency Plan	$40,000	
142	Safety Projects	Program	Boxed Funds	$6 M per year	Regional	Projects from the Regional Safety Plan	$209,100	