
Centennial
FDOT
1915 ★ 2015
FLORIDA TRANSPORTATION PLAN
POLICY ELEMENT
DECEMBER 2015
FloridaTransportationPlan.com
FTP
Florida Transportation Plan
SIS
Strategic Intermodal System

Three Elements of the Florida Transportation Plan

Vision Element *(August 2015)*

Trends, uncertainties, and themes that will shape the future of transportation in Florida (50 years)

Policy Element *(December 2015)*

Goals and objectives to guide the Florida Department of Transportation and partners toward the vision (25 years)

Coming Soon

Implementation Element *(2016)*

Emphasis areas with key actions (5-25 years)

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Introduction and Overview

Florida's transportation system faces significant opportunities and challenges over the next few decades. The Sunshine State's population and economy are projected to continue to expand at a strong pace, leading to growth in demand for moving people and freight. Changing demographic patterns –including high growth of both the baby boomer and millennial populations – along with a diversifying economy will reshape the transportation needs and preferences of residents, visitors, and businesses. Changing technologies – from automated vehicles to unmanned aerial vehicles to mobile commerce – will transform how we consume and provide transportation.

Working together, Florida's transportation partners have the opportunity to increase the safety and security of the transportation system; improve the efficiency and reliability of travel; and provide more transportation choices to meet the needs of our diverse population and economy. As we do so, we can support the state's broader economic development, quality of life, and environmental stewardship goals.

What Is the FTP?

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 FTP Policy Element is Florida's long-range transportation plan as required by both state and federal law. Florida law requires FDOT to work with transportation partners and the public to update the plan every five years. This update occurs as FDOT celebrates the 100th anniversary of its formation as the State Road Department, and points toward a future transportation system that embraces all modes of travel, innovation, and change.

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Introduction and Overview

35 Member Steering Committee

4 Advisory Groups

3 Statewide Events

One Website with over **4k** Page views per month

13 Regional Forums or Workshops

350 Briefings to Partner Meetings

15,000 Event Participants

1 Plan for all of Florida

7 Long-Range Goals

30 Long-Range Objectives

All numbers estimated as of 12/31/2015

How Is the FTP Developed?

The FTP is a collaborative effort of state, regional, and local transportation partners in the public and private sectors. The development process included:

- A 35-member **steering committee** provided overall guidance for the process. The committee members represented all levels of government, multiple modes of transportation, business and economic development organizations, and community and environmental interests (see list of members on page 40). The committee met six times in 2015 in locations around Florida.
- Four **advisory groups** identified issues and potential strategies in the areas of Infrastructure and Growth Leadership, Innovation and Economic Development, Quality of Life and Quality Places, and the Strategic Intermodal System. These advisory groups involved steering committee members and 22 additional partners (see list of members on inside back cover). The groups were organized using the Six Pillars of Florida's Future Economy, which were developed by the Florida Chamber Foundation and incorporated into state, regional, and local plans. Each group met three times.
- A statewide summit, a statewide open house, a statewide webinar, 13 regional forums or workshops, over 350 briefings at regularly scheduled meetings of transportation partners, and an interactive website helped gather input and feedback from more than **15,000 participants** throughout this process. These partners and public involvement activities sought to make Floridians aware of the FTP update process; obtain input on trends, issues, and opportunities that should be considered during the plan update process; and gather feedback on draft plan elements.

In addition to the stakeholder and public input, the steering committee and advisory groups considered:

- Existing state, regional, and local visions and plans related to transportation, economic development, land use, and the environment;
- Available data on trends, conditions, and forecasts impacting transportation in Florida;
- A survey of millennials living inside and outside of Florida to document preferences for transportation and technology; and
- Five alternative futures for Florida's transportation system, which were intended to help understand and prepare for the range of possibilities facing Florida's transportation system.

In conjunction with the FTP update, FDOT is working with the steering committee, an additional advisory group, partners, and the public to update the Strategic Intermodal System (SIS) Policy Plan. The FTP provides guidance for other state, regional, and local plans, including the SIS Policy Plan. The SIS is the high-priority network of transportation facilities critical to Florida's economic competitiveness. The integrated update process ensures that FTP implementation focuses first and foremost on the transportation facilities most critical for connecting Florida's regions and connecting Florida to other state and nations.

Introduction and Overview

What Does the FTP Include?

This new Florida Transportation Plan includes three elements:

1. **The Vision Element** (released in August 2015) provides a longer-term view of major trends, uncertainties, opportunities, and desired outcomes shaping the future of Florida's transportation system during the next 50 years.
2. **The Policy Element** (this document) defines goals and objectives for Florida's transportation system over the next 25 years. The Policy Element establishes the policy framework for expenditure of state and federal transportation funds flowing through FDOT's work program. The Policy Element also provides guidance to other transportation partners as they develop and implement policies, plans, and projects.
3. **The Implementation Element** (to be developed in 2016) will define the roles of state, regional, and local transportation partners in implementing the FTP, including specific short- and medium-term actions and performance measures that will build on the *Indicators to Watch* identified in this document.

Transportation System Performance

The Policy Element is organized around seven long-range goals. The first four goals focus on the performance of Florida's transportation system:

- The goal of **safety and security for residents, visitors, and businesses** maintains the longstanding priority for ensuring the safety and security of transportation customers. This goal also addresses how transportation can support broader needs – for example, response to and recovery from extreme weather events or pandemics, or helping prevent human trafficking or spread of biological weapons.
- A second goal – **agile, resilient, and quality infrastructure** – is substantially enhanced from prior FTPs, which focused on maintaining Florida's infrastructure, primarily pavement and bridges, in good condition. This FTP addresses conditions for all modes and also emphasizes responsiveness to changing technologies and market trends, resiliency to risks, and customer service and other measures of quality.
- The goal of **efficient and reliable mobility for people and freight** shifts from a focus on reducing travel time and delay to making the entire transportation system more efficient and reliable, including all modes as well as supporting regulatory processes.
- This FTP includes a new goal of **more transportation choices for people and freight.** This goal recognizes widespread partner and public input on the need for a fuller range of options for moving people and freight, with emphasis on walking, bicycling, transit, and rail, as well as emerging mobility options such as shared and automated vehicles.

Transportation Support for Statewide Priorities

The next three goals focus on how transportation supports statewide priorities:

- The goal of **transportation solutions that support Florida's global economic competitiveness** maintains the state's recent emphasis on trade and logistics, while also supporting Florida's visitor industry and diversification into innovation industries. This also is the first FTP to focus attention on Florida's transportation workforce.
- The goal of **transportation solutions that support quality places to live, learn, work, and play** extends beyond prior efforts to avoid or minimize impacts of transportation on Florida's communities. The goal emphasizes how transportation decisions can contribute to stronger communities, including greater emphasis on transportation's contribution to public health and the changing needs of a diverse population.
- The goal of **transportation solutions that enhance Florida's environment and conserve energy** also extends beyond prior efforts to avoid, minimize, or mitigate potential impacts of transportation on the environment. This goal emphasizes how transportation decisions can enhance the environment by restoring and connecting natural systems, reducing the overall footprint of the transportation system, and conserving energy.

The goals are not listed in priority order. Indeed, the goals are interrelated, and all seven together create Florida's transportation future.

How Is the FTP Policy Element Organized?

The core of the Policy Element is organized around these seven goals (pages 6-33). For each goal area, the Policy Element addresses three questions:

- **Why does it matter?** A brief narrative highlighting the importance of each goal.
- **What do we want to achieve?** Four to five long-range objectives that support each goal, one to two indicators to watch to track progress toward each goal, and one to two examples of current initiatives related to each goal.
- **How will we get there?** A set of ideas and approaches for accomplishing each goal, with opportunities to continue key emphasis areas, embrace innovation, collaborate with our partners, serve our customers, and improve data and processes.

The final sections of the Policy Element discuss the transition to implementation (pages 34-37).

Goal: Safety and Security for Residents, Visitors, and Businesses

Why Does It Matter?

Highlights

Traffic fatalities are declining but remain high, especially for vulnerable road users

Transportation security issues are becoming more complex

Florida's transportation system needs to remain prepared for extreme weather and other emergencies

A key element of Florida's long-term transportation vision is a fatality-free transportation system. Traffic fatalities account for the majority of transportation-related deaths, with almost 2,500 people dying on Florida's highways in 2014. Many of these fatalities are the result of human behavior, such as impaired, distracted, or aggressive driving or failure to use safety equipment. With almost 100 million visitors a year and year-round sunny and warm weather, Florida ranks higher than its peers in deaths of vulnerable road users – bicyclists, pedestrians, and motorcyclists.

Both in Florida and nationally, traffic fatalities have declined overall in the last couple of decades due to safer vehicles, better road design, improved incident response, public education, and stronger enforcement. While these tools will continue to play a role in reducing fatalities, emerging technologies, like automated and connected vehicles and intelligent transportation systems, will play a larger role in the future. As Florida's transportation system becomes increasingly multimodal, emphasis on safety for other modes, like water, air, rail, bicycle, pedestrian, and transit, is increasingly important.

Another key element of Florida's long-term transportation vision relates to security – not only of the transportation system itself, but also supporting the security of our state as a whole. Continuing emphasis on homeland security to prevent terrorist attacks is critical. Florida's transportation system also is a conduit for criminal activity, including cargo theft, human trafficking, and drug and goods smuggling; and for biohazards, including infectious diseases and invasive species. As demand for moving people and freight continues to increase, addressing these security needs while also providing efficient and reliable customer service becomes more challenging. As more technology is incorporated into transportation, the scope of security broadens to include cybersecurity, data breaches, and system reliability.

Our transportation system also plays an essential role in preparing for, responding to, and recovering from emergencies like extreme weather events and catastrophic incidents. Our ability to evacuate residents and visitors, and provide medical supplies, food, and fuel to distressed communities depends on the transportation system. The ability of the transportation system to resume normal travel directly correlates to the ability of our communities to recover – economically and otherwise – after an emergency.

What Do We Want To Achieve?

Objectives

- ***Prevent transportation-related fatalities and injuries***
- ***Reduce the number of crashes on the transportation system***
- ***Prevent and mitigate transportation-related security risks***
- ***Provide transportation infrastructure and services to help prepare for, respond to, and recover from emergencies***

Indicators to Watch

Number of
Transportation-Related
Fatalities and Serious Injuries

Florida's Safety Plans and Programs

The state is committed to improving the safety of Florida's transportation system through various programs and plans. The Pedestrian and Bicycle Strategic Safety Plan is designed to focus funding and resources on the areas that have the greatest opportunity to reduce pedestrian and bicycle fatalities, injuries, and crashes. The plan provides guidance to FDOT, partners, and stakeholders to develop a safer environment for walking and bicycling. The Pedestrian and Bicycle Safety Plan is supported by the Safe Mobility for Life program, which is focused on the development of safety strategies for the state's aging population, and the Alert Today, Alive Tomorrow program, a media campaign reminding transportation customers to pay attention and follow the rules of the road.

Safety is Golden
Safe Mobility for Life Coalition

DRIVING DOWN FATALITIES

ALERT TODAY FDOT ALIVE TOMORROW

Goal: Safety and Security for Residents, Visitors, and Businesses

How Will We Get There?

What's New?

Safer environment for pedestrians, bicyclists, and other vulnerable road users

Automated and connected passenger and freight vehicles

Cybersecurity for transportation

Emphasis Areas

- Combine design, engineering, enforcement, education, and emergency response strategies to reduce fatalities, injuries, and crashes involving:
  - » **Vulnerable and at-risk road users,** including pedestrians, bicyclists, motorcyclists, aging road users, and teenagers;
  - » **Unsafe, distracted, and impaired** driver and operator behavior; and
  - » **Lane-departure and intersection crashes.**
- Increase safety and security for **public transportation users.**
- Increase safety and security for **users with limited mobility.**
- Increase the safety and security of **freight movement** using all modes, including safe and secure truck parking and other logistics facilities, and separation of or reduced conflict between freight and passenger vehicles.
- Increase the efficiency and capacity of **customs, immigration, and other security processes** at airports, seaports, and other hubs to accommodate growth in demand including peak flows related to larger vehicles.
- Provide transportation connectivity to Florida's **military facilities** to support their national security and emergency response functions.

Innovation

- Expand the use of **context-sensitive design** to improve safety for all customers, especially pedestrians and bicyclists.
- Continue to support research, testing, policy, and deployment activities to realize the anticipated safety benefits of **automated and connected vehicle** technologies.
- Use **technology, information, and operations** strategies for all modes to improve transportation security and emergency preparedness and response.
- Enhance transportation security systems to address **continuing, new, and emerging threats,** such as biosecurity, food security, invasive species, nuclear materials, and human trafficking.
- Provide more **diversity and redundancy** in the transportation system to allow alternatives for evacuation and response during emergencies.
- Reduce the vulnerability of transportation technologies to **hacking, cyberattacks, system failure,** and other disruptions.

Collaboration

- Continue to develop and implement **safety and security improvement plans** for all modes of transportation at the state, regional, and local levels, such as Florida's Strategic Highway Safety Plan.
- Strengthen state and local **enforcement and prosecutorial capabilities** to ensure compliance with transportation safety and security laws and regulations.
- Develop and implement comprehensive **emergency response and recovery plans** involving state, regional, and local transportation, law enforcement, and emergency management agencies.
- Coordinate transportation and land use decisions to ensure that transportation corridor improvements intended to enhance emergency evacuation and response are not used to promote additional **development in high hazardous areas** or areas not planned for growth.
- Identify opportunities to work with federal, military and civil, state, and local partners and the private sector to integrate **new aviation and space technologies** while ensuring the safety and security of the airspace.

Customers

- **Educate all customers,** including visitors, about safety and security issues and improvement strategies for all modes.
- Enhance security regulations, processes, communications, information systems, and infrastructure to **improve customer service** and reduce customer wait time.

Data and Processes

- Support accurate, timely, and complete **data collection and reporting** of safety and security incidents and exposure for all modes.
- Identify risk factors and develop targeted plans that consider the **benefits and costs** of potential safety and security improvements.

Goal: Agile, Resilient, and Quality Infrastructure

Why Does It Matter?

Highlights

State highway and bridge condition remains a strength

Customer needs and expectations are rapidly changing

Infrastructure may need to adapt to extreme weather and other risks

Maintaining the transportation system in good condition is one of Florida's basic commitments to its residents, visitors, and businesses. The physical condition of Florida's transportation system is important to meet customer expectations for safe and reliable travel and to support the state's quality of life and economic competitiveness.

Maintaining these assets requires both routine activities, such as filling potholes, removing litter, and inspecting vehicles; and major preservation activities, such as resurfacing roadways and runways, maintaining channel depths, and rehabilitating rail lines, bridges, and bulkheads at seaports. Proactive maintenance can improve safety, reduce operating costs for customers, delay the need for costly reconstruction or replacement, and protect the public's investment in infrastructure.

The physical condition of Florida's state highways and bridges is among the best in the nation. Florida law requires FDOT to meet the annual needs for resurfacing of the State Highway System and for repair and replacement of bridges on the system. Florida has exceeded the statutorily defined targets for the state highway system pavement and state maintained bridges for the past several years. These excellent conditions may be more difficult to maintain in the coming decades due to increasing demand for moving people and freight, rising costs, funding constraints, changing environmental conditions, and the aging of Florida's infrastructure. Less information is available about the condition of local roads, but funding constraints have made even routine maintenance a challenge for many local governments.

Over time, the emphasis of Florida's maintenance and asset management activities will broaden to encompass all modes of transportation. In addition, the definition of what constitutes "good" or "quality" infrastructure is broadening to address operational performance and customer service. As customer needs, technologies, and the size and characteristics of passenger and freight vehicles change, so too will the expectations for the condition and performance of infrastructure. Some transportation hubs or corridors will face the challenges of accommodating significant increases in demand or significantly larger vehicles. Some hubs or corridors may shift over time to accommodate multiple modes or uses; still others may see a new emphasis serving a different function, such as local rather than through travel. Other facilities may reflect changing demand by reducing the number of road lanes and creating more space for sidewalks or bicycle paths. Because technologies and market trends are changing so quickly, agility in adapting plans will be essential.

As our economy becomes more globally integrated we are at a greater risk from global instability and market shifts. As our economy and transportation system become more dependent on technology, we are more at risk to cyberattacks. We must continue to be prepared for extreme weather events such as more frequent or severe tropical storms; flood risks in coastal areas resulting from high-tide events, storm surge, flash floods, stormwater runoff, and related impacts; changes in precipitation patterns and temperatures; and other environmental conditions that could impact transportation infrastructure, such as sinkholes. Ongoing research, collaboration, and innovative solutions are needed to ensure Florida's transportation system and the economy and communities it serves are prepared for and resilient to these and other risks.

What Do We Want To Achieve?

Objectives

Meet or exceed industry, state, national, or international standards for infrastructure quality, condition, and performance for all modes of transportation

Optimize the functionality and efficiency of existing infrastructure and right-of-way

Adapt transportation infrastructure and technologies to meet changing customer needs

Increase the resiliency of infrastructure to risks, including extreme weather and other environmental conditions

Indicators to Watch

Bridge, Pavement,
and other
Infrastructure Condition

I-4 Ultimate

The I-4 Ultimate project, made possible through a public-private partnership, will improve the existing Interstate 4 corridor to better connect communities, improve the economy, and enhance quality of life throughout the Central Florida region. Improvements will be made to a 21-mile section of the corridor between Kirkman Road and State Road 434 that will incorporate the use of recycled materials, bridge and interchange reconstruction, and intelligent transportation systems. The project includes the integration of tolled express lanes that will provide reliable travel conditions, reduced travel times, improved driver safety, and direct connections to key interchanges. Express lane tolling will be completely automated to further increase efficiency and reliability on the corridor. The I-4 Ultimate is the most recent in a series of projects to transform the state's major transportation corridors, including the I-95 Express and I-595 Express projects in Southeast Florida. Additional managed lanes projects are being planned in Tampa Bay, Jacksonville, and other areas.

Goal: Agile, Resilient, and Quality Infrastructure

How Will We Get There?

What's New?

Next-generation transportation corridors incorporating new technologies and design practices

Faster response to changing market trends, including the increasing size of passenger and freight vehicles and vessels and growing peak flows of people and freight

Adaptation of bridges, roads, and other infrastructure to be more resilient to risks

Emphasis Areas

- **Proactively manage transportation assets** to achieve acceptable conditions, expanding from our traditional focus on highways to encompass all modes.
- Plan and develop investments in **terminal and corridor capacity** that are consistent with regional and local visions and plans and are anticipated to provide economic benefits.

Innovation

- Lead the nation in the research, development, and deployment of **state-of-the-art materials, technology, and methodologies** for transportation infrastructure design, construction, maintenance, and operations.
- Develop **multimodal hubs** to provide access to multiple modes and services at a single location and accommodate larger or advanced commercial passenger and freight vehicles.
- Develop enhanced transportation corridors that:
  - » Incorporate and support **emerging technologies** such as connected vehicles or alternative fuel sources;
  - » Include managed or **special-use lanes;**
  - » Enable **separation** of freight and passenger vehicles, where appropriate, to improve safety and mobility;
  - » Enable **separation** of through and local trips, where appropriate, to improve safety and mobility;
  - » Support integration of compatible uses such as **utility infrastructure;** and
  - » Maximize use of existing right-of-way by providing flexible or **multi-level infrastructure.**
- **Retrofit, adapt, or provide more diversity** in the location of critical infrastructure to reduce vulnerability to extreme weather and other environmental conditions.

Collaboration

- **Assist local governments** in documenting the condition of road, transit, and other infrastructure and developing strategies to improve infrastructure quality, condition, and performance.
- Coordinate with local governments when making major infrastructure investment and development decisions to consider the **risks of investing** in areas vulnerable to extreme weather, flood risks, and other environmental conditions, including consideration of areas identified as priorities for mitigation of risks or adaptation of infrastructure in regional and local plans.
- **Coordinate with local governments** to determine how to use excess transportation capacity if demand decreases over time.

Customers

- Adapt planning, design, construction, maintenance, and operations practices to reflect **changing customer expectations,** new technologies, changes in the size and characteristics of vehicles, and locations of major developments.

Data and Processes

- Improve the availability and consistency of **infrastructure data** across modes and levels of government.
- Actively participate in setting and updating industry, national, and international standards and monitoring **global best practices** for infrastructure quality, performance, and condition.
- Implement FDOT's **Transportation Asset Management Plan** and expand this plan over time to include all modes; encourage local governments and other modal providers to develop asset management plans.
- **Incorporate the risks of extreme weather** and other environmental conditions into long-range planning, project development, design, operations, and asset management decisions for all modes.
- Continue to **support research** to better understand the potential impacts of extreme weather events, flood risks in coastal areas, and other climate trends on transportation infrastructure.
- **Reduce the time and improve the predictability** of the process for planning and developing major transportation projects.

Goal: Efficient and Reliable Mobility for People and Freight

Why Does It Matter?

Highlights

Travel delay on all modes impacts Florida's economic competitiveness and quality of life

Customers have increasing expectations for reliable travel for people and freight

Efficiency of regulatory processes may impact mobility

The efficiency and the reliability of transportation is increasingly important as Florida's economy and society move at the speed of life. Florida's residents and visitors experienced nearly 257 million person-hours of delay on the State Highway System in 2014 – a figure that does not include delay on local roads or other transportation modes. Delay affects freight activity as well, creating impacts on the state's economic competitiveness. Delay is down significantly from the peak of the last economic expansion, but appears to be trending upward again.

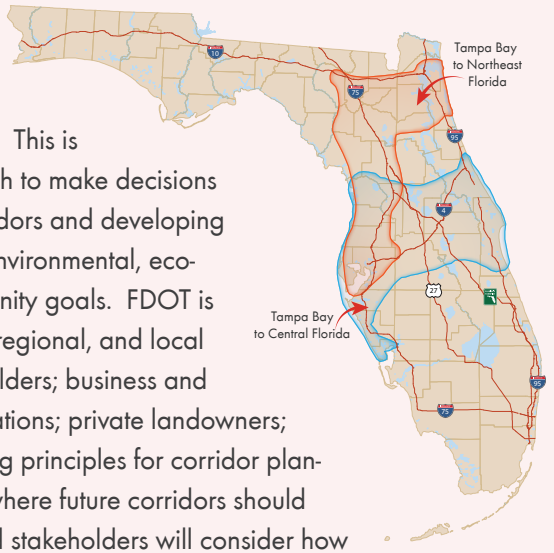
National studies suggest that about one-half of all highway congestion is related to nonrecurring sources, including crashes and other incidents, construction activity, and special events. The remainder is the result of bottlenecks, system deficiencies, and other recurring sources. Some level of congestion is a sign of a healthy economy, but our goal is to eliminate unnecessary delay and improve reliability.

Florida's residents, visitors, and businesses are signaling the importance of more reliable travel times and schedules. Today, about 81 percent of all highway travel during peak periods occurs at or near the posted speed limit. About 80 percent of all scheduled commercial air departures leave on time.

The efficiency of travel also is affected by regulatory processes, including commercial vehicle safety, weight, and agricultural inspections; permits and licenses; tolling and fare payment; and customs and immigration processes for people and freight entering the United States via Florida. Electronic tolling is a good example of how technology can be used to streamline and reinvent transportation-related regulatory transactions.

While the efficiency and reliability of individual trips and transactions is important to the customer, it also is important to look at the efficiency of the entire system. Florida's transportation system today operates with significant inefficiencies – from the large number of motor vehicles that carry only a single occupant and sit idle for most of each day to the large number of trucks and rail cars that enter the state full and leave empty. Emerging technologies and a changing economy create opportunities to more fully use the available capacity of Florida's transportation system to meet the state's changing needs.

Florida's Future Corridor Planning Process



The Future Corridors Planning Process is planning for Florida's major statewide transportation corridors over the next 50 years. This is a long-term, large-scale approach to make decisions about transforming existing corridors and developing new corridors in the context of environmental, economic development, and community goals. FDOT is collaborating closely with state, regional, and local agencies; environmental stakeholders; business and economic development organizations; private landowners; and the public to develop guiding principles for corridor planning and recommendations on where future corridors should be located. FDOT, partners, and stakeholders will consider how corridors relate to conservation, countryside, and centers when developing these recommendations.

What Do We Want To Achieve?

Objectives

- ***Reduce delays related to bottlenecks, gaps, and crashes and other incidents for all modes of Florida's transportation system***
- ***Increase the reliability of all modes of Florida's transportation system***
- ***Increase customer satisfaction with Florida's transportation system and regulatory processes for residents, visitors, and businesses***
- ***Increase the efficiency of the supply chain for freight moving to, from, and through Florida***
- ***Increase the efficiency and flexibility of transportation-related regulatory processes***

Indicators to Watch

Person- and **Freight-**
Hours of Delay

Percent of **passenger rail** and percent of **commercial air departures**
Occurring On Time

Automated and Connected Vehicles

Florida is on the cusp of a technological revolution in the transportation industry. Automated and connected vehicle technologies hold unprecedented opportunities to help reduce congestion and eliminate transportation related fatalities. FDOT is planning for the deployment of automated and connected vehicle technologies on public roadways with the establishment of the Florida Automated Vehicles initiative. This initiative was created to help build the framework for automated and connected vehicle implementation by engaging stakeholders, developing research and pilot projects, and creating awareness of the technologies.

FLORIDA AUTOMATED VEHICLES

Goal: Efficient and Reliable Mobility for People and Freight

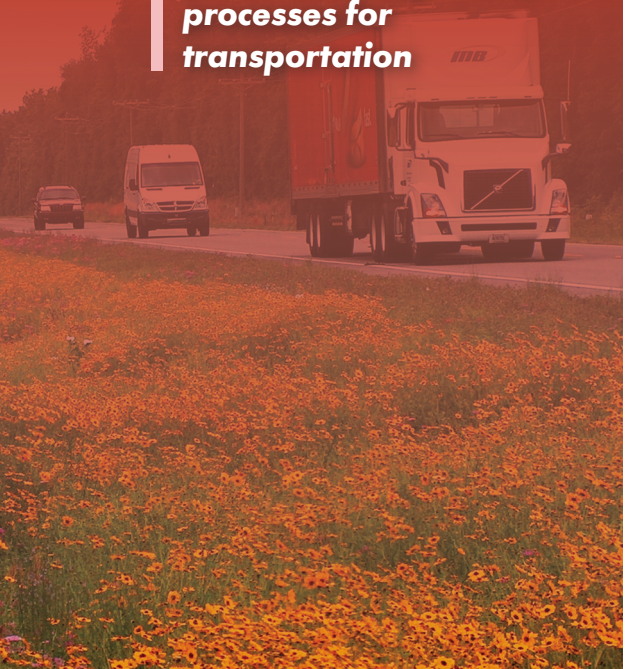
How Will We Get There?

What's New?

Seamless information, routing, and payment across modes

More efficient supply chain including real-time load matching

More efficient and predictable regulatory processes for transportation



Emphasis Areas

- Reduce delays associated with bottlenecks, crashes, work zones, special events, and other incidents through:
  - » **Improved management** of existing infrastructure;
  - » **"Quick fix" improvements;** and
  - » **Strategic investments** in additional system capacity.
- Continue the **Future Corridor Planning Process** to transform existing interregional corridors and to close interregional connectivity gaps, building on guiding principles developed cooperatively with state, regional, and local agencies and environmental stakeholders.
- Increase the **efficiency and capacity** of Florida's major airports, seaports, spaceports, and other freight and passenger terminals through strategic investments in new capacity and enhanced operations.
- Improve **last-mile connectivity** to Florida's major airports, seaports, spaceports, and other freight and passenger terminals from other modes.
- Increase the efficiency, capacity, and connectivity of major **truck, rail, and water corridors** through targeted capacity improvements, accommodations for heavy freight movement, and separation of freight and passenger traffic on shared corridors.

Innovation

- Use **emerging technologies** to reduce delay and improve reliability and customer service, such as:
  - » Intelligent transportation systems;
  - » Automated, connected, or shared vehicles;
  - » Origin to destination trip planning for all customers; and
  - » A universal, customer friendly payment system that works across transportation modes and jurisdictional boundaries.
- Increase the **efficiency of the supply chain** and distribution network to, from, and through Florida, including:
  - » Improving the balance of inbound and outbound freight flows by manufacturing more goods in Florida;
  - » Expanding intermodal logistics centers and other freight terminals;
  - » Enhancing real-time route planning, asset tracking, and load matching;
  - » Facilitating off peak freight movement; and
  - » Expanding use of new technologies such as automated and connected truck technologies and unmanned aerial vehicles.

Collaboration

- Continue to support the high-priority role of the **Strategic Intermodal System (SIS)** connecting Florida's regions and connecting Florida to other states and nations.
- Strengthen programs such as the **Transportation Regional Incentive Program (TRIP), Small County Outreach Program (SCOP), Small County Road Assistance Program (SCRAP),** and other programs that address regional and local mobility needs.
- Develop **multimodal corridor plans** that coordinate and leverage investments in the SIS, regional, and local transportation facilities.

Customers

- Protect and improve the **quality of the visitor experience** in Florida through safe, efficient, accessible, convenient, and comfortable transportation.
- Improve the clarity, readability, and design of **signage and other traveler information,** including multilingual or universal signage for a diverse resident and visitor population.
- Use **technology to enhance customer service,** such as providing schedule, incident, parking, and rerouting information to passengers.
- Improve the ability of businesses to accomplish transportation **regulatory transactions** through reducing transaction time, improving predictability, and adapting regulations and processes to reflect new technologies.
- Plan and develop Florida's infrastructure to better accommodate customers with **limited mobility.**

Data and Processes

- Adapt infrastructure **design and performance standards** to emphasize person and freight mobility rather than vehicle throughput.
- Establish a **framework for data sharing** to address emerging technologies such as automated and shared vehicles.
- Periodically reassess state and local **transportation-related laws and regulations** to reflect changing technologies and market trends.
- Actively participate in identifying potential enhancements to **federal regulatory processes** consistent with the goals and objectives of the Florida Transportation Plan.

Goal: More Transportation Choices for People and Freight

Why Does It Matter?

Highlights

Demand is growing for public transportation, walking, and bicycling

New mobility solutions and business models such as automated, connected, and shared vehicles are emerging

Changing business logistics practices, like mobile commerce and quick response-delivery, will impact choices for moving freight

This Florida Transportation Plan places a significant emphasis on providing more transportation choices for people and freight – an overarching concern of a wide range of transportation partners, stakeholders, and the public.

Roads and highways are the dominant form of transportation in Florida today. About 80 percent of all employees in the state drive to work alone. Trucking accounts for 80 percent of all tons of freight moved in the state. A total of 30 urban and 23 rural transit systems operate in Florida; few of these systems provide options beyond local bus service and few connect across county lines. Florida's railways, waterways, and airspace provide additional options in many parts of the state, with noteworthy gaps such as rail service in Northwest and Southwest Florida or commercial air service in most of rural Florida.

Changing demographics – including a larger aging population; a growing younger, technology-savvy population; and a growing foreign-born population – are increasing demand for a wider range of transportation options, including transit, walking, and bicycling. Changing development patterns could result in more population growth in dense urban areas, which tend to support a wider variety of transportation choices. Continued growth in the number of visitors is reinforcing demand for more travel options, including longer-distance rail, air, and water services.

More options are needed for residents and visitors who choose not to use a car, or are unable to drive due to disability, income, or age. At the same time, with growth in mobile commerce and changing logistics practices, businesses want efficient, convenient, and affordable choices for moving freight.

Over time, our mobility options will expand from traditional choices of highway, rail, and transit to a range of options, including new types of vehicles such as automated, connected, and shared vehicles, as well as newer public transportation services such as local circulators, personal rapid transit, and higher-speed intercity bus and rail services. In some cases, the mobility option will be to substitute technology for travel, with expanded use of telecommuting, distance learning, and similar systems. The emphasis of our transportation agencies may shift from building and operating infrastructure to catalyzing and managing a range of services.

New or expanded choices will be most effective where they support market demand or regional and community visions, and where there is information available to customers to make decisions. A key to success will be increasing connectivity and integration across modes and systems to support complete end-to-end trips. A second key to success will be coordination between transportation and land use decisions to support expanded transportation choices.

What Do We Want To Achieve?

Objectives

- ***Increase the use of new mobility options and technologies such as shared, automated, and connected vehicles***
- ***Increase the share of person trips using public transportation and other alternatives to single occupancy motor vehicles***
- ***Increase the number of quality options for visitor travel to, from, and within Florida***
- ***Increase the number of quality options for moving freight to, from, and within Florida***
- ***Increase the efficiency and convenience of connecting between multiple modes of transportation***

Indicators to Watch

Growth in

Public Transportation Ridership

Quality Modal Options

SunRail is a passenger rail system serving Central Florida. Once fully developed, SunRail will include 17 stations on a 61-mile corridor. SunRail trains feature quality amenities such as free Wi-Fi, power outlets with each seat, and luggage and bicycle storage. Many SunRail stations are located on regularly running bus routes and the downtown LYNX LYMMO bus rapid transit system, and provide customers with easy access to sidewalks, bike lanes, and recreational trails. Most stations are connected to park-and-ride facilities and Amtrak can be accessed from the Sanford, Winter Park, and Orlando Health SunRail stations. Future phases of the SunRail project will include double tracking, grade crossing improvements, the construction of additional stations to the north and south, and a connection to Orlando International Airport at an intermodal terminal where passengers can access air, intercity and commuter rail, local bus, and rental car options. SunRail is the state's most recent commuter rail system. Tri-Rail has been in operation in Southeast Florida for more than two decades, with expansion plans underway. Tampa Bay and Northeast Florida also are planning regional transit systems.

Goal: More Transportation Choices for People and Freight

How Will We Get There?

What's New?

More high-quality transportation choices that allow people to efficiently access their desired local and long-distance destinations

Seamless connectivity of infrastructure and information across different modes of transportation

More common use of technology as an alternative to transportation through teleconferencing and telemedicine

Emphasis Areas

- Increase the number of **high-quality options for walking and bicycling,** including buffered bike lanes, mixed use paths and off-road trails, and sidewalks and Americans with Disabilities Act (ADA)-compliant waiting areas for transit riders.
- Plan and develop transit, bicycle paths, and trails to deliver people within **walking distance of trip destinations.**
- Provide additional options for **shorter distance trips,** such as circulators and on-demand transit, that reflect regional and community visions.
- Improve the **efficiency and convenience of connections** among local transit systems, between local and regional transit systems, and between transit and other modes.
- Improve **public transportation services** within rural areas and between rural and urban areas.
- Expand **interregional travel options** for residents, visitors, and freight, including improved intrastate air, rail, transit, and water transportation services.

Innovation

- Improve **connectivity of data, technology, and business processes** between transportation modes and systems.
- Support research, development, and testing of **automated and connected vehicles** and other emerging technologies.
- Accommodate **telework, telepresence,** distance learning, distance medicine, and similar approaches for using communications technologies to substitute for travel.

Collaboration

- Provide publicly available transportation system, incident, construction schedule, and other data to support new **private sector business models,** such as bicycle and vehicle sharing, automated and connected vehicles, transportation apps, and ride services.
- Expand **public-private partnerships** for multimodal terminals and corridors and other modal and system linkages.
- Provide state support for capital investments in public transportation systems that are consistent with regional and community visions, and demonstrate a **regional and local commitment** to ongoing operations and maintenance funding as well as supporting land use changes.

Customers

- Provide quality transportation options, including the coordinated statewide human services transportation system, to meet mobility expectations from a **more diverse population** of residents and visitors, including people who are aging in place, have limited mobility, are unable to drive or own a car, or choose not to own a car.
- Improve **public awareness** of the choices available to residents and visitors for both short and longer-distance trips.

Data and Processes

- Develop additional **performance measures** for all modes of transportation, including modal connectivity.
- Anticipate and prepare for changes in technology, and **societal shifts** in transportation preferences and needs, and provide quality facilities and services to support them.

Why Does It Matter?

Highlights

Growing global trade and visitor activity require efficient transportation connections

Economic development strategies are emphasizing innovation industries relying on speed-to-market transportation

Transportation workforce will require more specialized skills

From the Flagler and Plant railroad lines to the Interstate Highway System, from the first seaports to Cape Canaveral Spaceport, transportation investment has been a foundation of Florida's economic growth. As the economy changes, several trends are reinforcing the importance of transportation to Florida's economic competitiveness:

- Florida is expected to add between 4 million and 8 million more residents by 2040, creating more demand for consumer goods and services.
- Florida hosted 99 million out-of-state visitors in 2014 – a total projected to increase to as high as 157 million by 2025. About one-half of Florida's visitors arrive via highway and other surface modes and about one-half arrive via air, using Florida's road and transit systems to reach destinations across the state.
- Freight tonnage moving to, from, and within Florida is expected to experience a 69 percent increase by 2040, due in part to the increasing role Florida's airports and seaports have in global trade.
- Florida's statewide economic development strategy focuses on clusters of innovation-oriented industries such as life sciences, aerospace, and information technology – all of which rely on access to a skilled workforce and speed-to-market delivery of goods.

Connectivity is the glue that makes Florida competitive in these growing industries, as well as traditional activities such as agriculture and the military. Connectivity is important at multiple scales to connect people to jobs; visitors to attractions; and businesses to suppliers, customers, and partners in interrelated industry clusters. Over time, Florida's economy is becoming more regional in scale, requiring connectivity between businesses, research institutions, and universities in broad economic regions. Providing better connectivity, including more transportation choices for making these connections, can help create an economy with the size and scale to compete globally.

Connectivity to global markets also is critical for Florida's trade and tourism industries. Growth in trade with Latin America, the Caribbean, and Africa, along with the widening of the Panama and Suez Canals, position Florida to be at a crossroads for north-south and east-west trade. Many of the goods consumed by Florida's 20 million residents and 100 million visitors each year enter the United States through seaports in other states. The state's transportation and economic development organizations are working to bring more goods directly to Florida's seaports, and to double the value of Florida-origin exports every five years.

All of these opportunities will require a skilled workforce. Florida currently has more than 540,000 private sector jobs in transportation, trade, and logistics, as well as a large transportation engineering and construction industry. Both state and national projections suggest a need for significant hiring in these sectors to support growth in demand as well as to prepare for retirement and turnover. In addition, the mix of workforce skills is expected to evolve, with greater emphasis on technology, operations, and asset management.

What Do We Want To Achieve?

Objectives

- ***Provide transportation infrastructure and services to support job growth in transportation-dependent industries and clusters***
- ***Increase transportation connectivity between Florida's economic centers and regions***
- ***Increase transportation connectivity between Florida and global and national trading partners and visitor origin markets***
- ***Increase the number of skilled workers in Florida's transportation-related industries***

Indicators to Watch

Value of
Florida Origin Exports
as a percent of Gross Domestic Product

Number of
Out-of-State Visitors

Freight Mobility and Trade Plan

Florida's Freight Mobility and Trade Plan (FMTP) is a comprehensive plan developed by FDOT with private and public sector partners. The FMTP identifies objectives and strategies for improving freight mobility and trade activity in Florida, along with more than 700 identified freight investment needs with a total cost of $32 billion. In support of the FMTP, FDOT has established an Office of Freight, Logistics, and Passenger Operations; appointed a freight coordinator for each district; and established a Trade and Logistics Academy to train FDOT and partner staff on freight-related issues. The FMTP is being closely coordinated with regional freight plans developed by FDOT Districts, metropolitan planning organizations, and other partners across the state.

Goal: Transportation Solutions that Support Florida's Global Economic Competitiveness

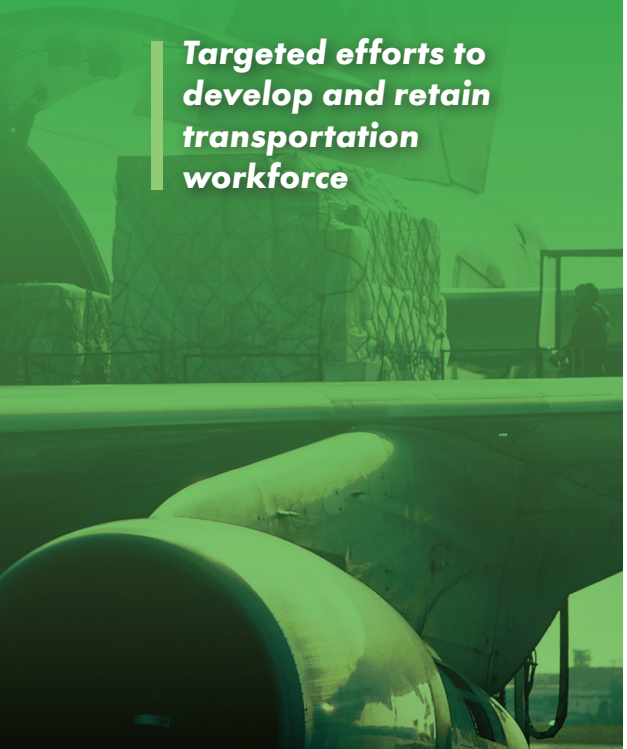
How Will We Get There?

What's New?

More direct service at Florida's seaports and airports

Transportation technology companies located in Florida and doing business worldwide

Targeted efforts to develop and retain transportation workforce



Emphasis Areas

- Improve the efficiency of connections between transportation hubs and existing and emerging **employment centers and visitor destinations.**
- Expand the options for connectivity between existing and emerging economic centers within common **economic regions.**
- Continue to plan proactively for **future statewide and interregional transportation corridors,** including coordination with regional visions, economic development and trade development plans, and land use plans.
- Improve terminal infrastructure and expand connectivity to other modes to make Florida's airports and seaports **more attractive for investment,** including opportunities for more direct international and domestic flights, ferry service and coastal shipping, home port and port-of-call cruise activity, and first-call import and last-call export ocean carrier service.
- Provide transportation connectivity to Florida's **military facilities** to support economic development, diversification, and privatization opportunities.

Innovation

- Invest in high-capacity public transportation systems that **connect Florida's urban centers.**
- Build on existing infrastructure assets to position Florida for enhanced public and private investments in the **commercial space industry.**
- Encourage private-sector companies involved in research, development, manufacturing, and service activities for **transportation equipment and technology** to locate and expand in Florida.
- Build transportation **workforce skills** to encourage innovation and support of adoption of new technologies that improve safety and mobility or increase the efficiency and reduce the cost of project delivery.

Collaboration

- Coordinate short-term transportation system maintenance, operations, and capacity decisions with **capital investment and job creation** activities involving Florida's statewide targeted industries.
- Coordinate long-term, strategic transportation investments to support development of statewide and regional **logistics, manufacturing, and innovation clusters,** consistent with the Florida Strategic Plan for Economic Development and regional economic development strategies.
- Formalize **institutional partnerships** and communication protocols between transportation, economic development, tourism development, and talent supply and educational organizations at the statewide, regional, and local levels.

Customers

- Document the transportation needs and requirements of Florida's **targeted industry sectors.**
- Collect and maintain data on **talent supply and demand,** including anticipated retirements of existing workforce, in transportation and related industries.
- Identify and close talent gaps in transportation related fields through targeted **workforce development,** retraining, attraction, and retention strategies.
- Create new or expand existing **centers of talent and innovation** in transportation-related fields.
- Adopt a comprehensive and aggressive outreach plan to attract businesses to Florida by **promoting the investments** the state has made in transportation infrastructure, technology, and workforce.

Data and Processes

- Continue to incorporate **economic development benefits** into transportation decision making processes.
- **Strengthen partnerships** and enable more efficient decision making at the scale of economic regions.
- Encourage transportation agencies and authorities to include **talent supply elements** in their long-range plans.

Why Does It Matter?

Highlights

Transportation solutions should reflect the context, needs, and values of our communities

Regional and community visions highlight the need for multimodal corridors connecting economic centers

Transportation decisions can contribute to improved public health and access to opportunity

Transportation decisions help shape our communities into places where we want to live, learn, work, and play. For the past several decades, our reliance on the motor vehicle has shaped our development patterns, with new growth often occurring on the fringes of existing urban development or along transportation corridors. A significant amount of the land available in urban areas is used for roads and parking, and in many cities, policies and standards focused on improving the flow of traffic have led to wider roads that create concerns about safety for pedestrians and bicyclists and appeal for retail, shopping, and other services.

We have an opportunity to rethink our transportation strategies to build stronger, more vibrant communities. A key principle is that our transportation plans should reflect the context, needs, and values of our communities. Many of Florida's cities and counties participate in long-range visioning processes, including large-scale regional visions developed for Central Florida, Tampa Bay, Northeast Florida, Southeast Florida, and the Heartland in primarily rural south Central Florida. These visioning processes reflect the diversity of each region and point to several common themes, including the importance of conserving regionally significant natural resources and agricultural lands; concentrating future growth in centers; and connecting these centers with multimodal transportation corridors. These visions also highlight the importance of choices – Florida's residents want to be able to choose where to live and are looking for a range of quality places from vibrant city centers to walkable neighborhoods to small towns and rural areas.

Transportation provides our residents with access to work, school, shopping, recreation, health care, arts and culture, and other resources. Transportation costs, combined with housing costs, are a key driver of whether Florida is an affordable place to live. As we continue to confront chronic poverty and unemployment, transportation can play a role creating access to opportunity for all of our residents.

Transportation decisions also can support the health and well-being of our residents. Limited physical activity in many communities is a key contributor to childhood and adult obesity and associated chronic diseases. Creating safer options for walking, bicycling, and other forms of active transportation can help improve public health. So too can providing better access to fresh food, parks, recreation, health care, and other resources.

A stronger link between transportation and land use decisions is a critical underpinning to achieve all of these outcomes. This will require closer coordination between transportation agencies and local governments, particularly at a regional scale.

What Do We Want To Achieve?

Objectives

- ***Plan and develop transportation systems that reflect regional and community values, visions, and needs***
- ***Provide convenient, efficient accessibility to the transportation system for Florida's residents and visitors***
- ***Increase customer satisfaction with Florida's transportation system***
- ***Provide transportation solutions that contribute to improved public health***

Indicators to Watch

Complete Streets

Complete Streets is a context-sensitive design concept that suggests roadways should be planned, designed, and operated consistent with surrounding community characteristics and roadway functions so that multiple modes of transportation and customers, regardless of age or ability, easily, comfortably, and safely can access and use the street. Complete Streets often involve wide sidewalks, bicycle lanes, landscaping, and bicycle and pedestrian amenities. Designing Florida's roadways in this way creates safer and more convenient environments for bicycle, pedestrian, and transit customers and is effective at increasing the use of these modes while accommodating the motor vehicle. Transportation facilities designed using Complete Streets strategies have shown positive economic impacts on the businesses located on or near the facility and improve community livability. Complete Streets designs also can encourage people to use active transportation, which can lead to improved public health.

How Will We Get There?

What's New?

Widespread use of Complete Streets, transit oriented development, and active transportation

Closer alignment of transportation and land use strategies

Greater consideration of community values in planning process

Emphasis Areas

- Plan for and **balance transportation** for the movement of people and freight with compatible land uses.
- Promote safe and comfortable walking, bicycling, and other forms of **active transportation** for all ages to improve public health.
- Incorporate sidewalks, crosswalks, shared use paths, and other accommodations to **improve accessibility** for all residents to jobs, schools, health care, food, parks, and other community resources.

Innovation

- Encourage **community design** and multi-modal transportation investments, including technology applications and multipurpose solutions that promote quality of life.
- Use nonhighway transportation modes and new technologies for moving people and goods to **reduce the need for road expansions** and potential negative impacts on communities.

Collaboration

- Continue to support regional and community **visioning processes,** and use these visions to guide transportation decisions.
- Continue to coordinate with local governments to better align transportation plans with existing and proposed **land use plans.**
- Coordinate with and provide technical assistance to local governments as they **create or retrofit mobility solutions** for their communities.

Customers

- Develop and implement **context-sensitive transportation solutions** that reflect community values, needs, and character, such as comprehensive solutions for corridors.
- Increase opportunities for residents to live in **compact urban settings** through creating an environment that supports transit and active transportation options, including walking and bicycling.
- Provide transportation options for visitors that promote **Florida's unique historic, cultural, and natural resources,** such as "Old Florida" historic roads, scenic highways, regional and interregional trails, and waterways.

Data and Processes

- Collect and monitor information on **community values** and transportation preferences.
- Expand practices for assessing the impacts of transportation decisions on **public health and access to opportunity.**
- Provide technical support to local governments to identify context sensitive solutions, including updates to **design, parking, zoning, access management,** and other policies and codes.

Why Does It Matter?

Highlights

Transportation solutions can contribute to a healthier, more sustainable environment

Florida continues to meet air quality standards, but water supply concerns are growing

Transportation can play a major role in conserving energy

Florida's natural environment is one of the most diverse in the world, and a key source of the state's quality of life and worldwide attraction to visitors. Florida's natural resources include 10.4 million acres of public and private conservation lands – almost 25 percent of the state's total land area; 2,400 species of mammals, birds, and fish; more than 4,200 native plants; 11,000 miles of rivers, streams, and waterways; and 1,350 miles of coastline – the most of any state.

Transportation decisions can impact the natural environment – either directly, by severing wildlife corridors and other natural systems or by increasing emissions or air quality pollutants – or indirectly, by facilitating growth and development in or near environmentally sensitive areas. Our transportation plans often focus on how we can avoid, minimize, or mitigate these impacts.

Moving forward, our goal is to align plans and coordinate decision making so transportation contributes to a healthier, more sustainable environment. This involves large-scale approaches to planning and mitigation, and earlier involvement of resource agencies and environmental stakeholders in the transportation planning process to help identify opportunities to advance mutual goals. At a project level, this could mean adapting corridor design practices to create wildlife crossings and bridge sensitive areas so natural systems continue to have needed connectivity; coordinating transportation and utility investments with land use decisions to reduce the overall footprint of infrastructure and development in the state; or taking steps to restore the function and character of the natural environment as part of reconstruction projects.

Florida has a long-standing commitment to maintaining air quality levels in compliance with National Ambient Air Quality Standards. Florida's air quality has continued to improve over the past decade even with growth in population and economic activity. Maximum concentrations, measured by the statewide air monitoring network, of carbon monoxide, nitrogen dioxide, ozone, and fine particles all declined from 2002 to 2013, while emissions of carbon dioxide, a greenhouse gas, were flat overall during this period. Impacts on water quality and availability are anticipated to become a more significant transportation planning issue in the years ahead.

Transportation also is a major consumer of energy in Florida. Between 2005 and 2013, Florida's transportation fuel consumption decreased by 7 percent. Consumption is expected to continue to decline as vehicles become more fuel efficient and customers choose to walk, bike, or take transit more often. A more diverse mix of fuels and energy sources can help improve air quality, reduce greenhouse gas emissions, and prepare for changing global and domestic markets.

What Do We Want To Achieve?

Objectives

Plan and develop transportation systems and facilities in a manner that protects, and where feasible, restores the function and character of the natural environment and avoids or minimizes adverse environmental impacts

Decrease transportation-related air quality pollutants and greenhouse gas emissions

Increase the energy efficiency of transportation

Increase the diversity of transportation-related energy sources, with emphasis on cleaner and more efficient fuels

Indicators to Watch

Emissions of

Air Quality Pollutants

and

Greenhouse Gases

Diverse Transportation Energy Sources

Florida's transportation partners are actively participating in efforts to expand the diversity of the state's transportation related energy sources. An early emphasis is on compressed natural gas (CNG), liquefied natural gas (LNG), and propane, which are clean burning, domestically produced, and relatively safer and lower priced alternatives. Florida offers a rebate program to businesses and agencies using CNG, LNG, or propane fueled vehicles in their fleets. JAXPORT, one of the nation's top 25 container ports, made a major investment in infrastructure and equipment necessary to support container ships using LNG fuel. These ships are expected to reduce emissions significantly compared to container ships relying on traditional fuel sources.

How Will We Get There?

What's New?

Large-scale planning and mitigation and careful coordination and collaboration to accomplish transportation and environmental goals together

Design of transportation facilities to accommodate wildlife corridors and, where possible, improve ecosystems

Solar highways and other approaches for generating energy from transportation infrastructure

Emphasis Areas

- Continue coordination between transportation planning and **environmental planning,** including wildlife corridors, water quantity and quality, air quality including greenhouse gas emissions, noise, and recreational space.
- **Minimize energy** used to build, maintain, and operate transportation infrastructure.

Innovation

- **Reduce the footprint** of Florida's transportation system by optimizing the use of existing transportation infrastructure, incorporating new technologies, and using permeable, recycled, and other "green" materials.
- Support more **diversity in transportation energy sources,** including greater use of renewable or low-emission sources, through research, collaboration, enhanced infrastructure, public-private partnerships, education, and incentives.
- Collaborate between the public and private sectors to **generate energy from transportation facilities,** infrastructure, and right of way, such as pavement charging systems, solar highways, solar rooftops, and solar panels in medians or on noise abatement walls and paths.

Collaboration

- Better align large-scale transportation and conservation planning to maintain, and where possible, **restore and enhance** the integrity and connectivity of regionally significant lands and waters and to avoid, to the extent feasible, negative impacts on these lands and waters.

Customers

- Maximize the availability and the use of **public transportation, active transportation, alternatives to highway freight movement,** and other innovative mobility options that can contribute to a reduction in energy consumption and greenhouse gas emissions.

Data and Processes

- Work with partners to identify and develop **additional performance measures and analysis tools** to better understand transportation's impact on the environment and energy.
- Encourage advanced, **large-scale approaches to environmental mitigation** that accomplish transportation and environmental stewardship goals together, such as coordination on land purchases and easements and water storage, treatment, and drainage.

Transition to Implementation

Guiding Principles

In many ways, the implementation of the FTP has already begun. The Policy Element highlights existing initiatives that support the goals and objectives of this plan – from bicycle and pedestrian safety programs to automated vehicle research to future corridor planning. These key activities will continue, while additional implementation activities begin.

Five cross-cutting issues related to innovation, collaboration, customer service, data and performance measures, and strategic investments could determine our success in implementation. The FTP Policy Element provides principles to guide implementation in each of those areas.

How do we embrace innovation in all aspects of transportation?

Transportation, like many other industries, is at the cusp of a revolution in which technology and innovation may reshape every business practice. Innovation is an underlying theme for addressing all seven goal areas. Because the pace of change is accelerating, Florida's transportation partners must take steps to:

- Position Florida as a **global leader** in innovation in all aspects of transportation.
- **Invest in research, development, and evaluation** of new technologies and practices.
- Support public and private efforts to create an **entrepreneurial environment** that attracts and retains talent and capital in the state.
- Encourage **private-sector leadership** in developing and deploying new technologies; provide **public-sector support** through strategies such as providing access to public infrastructure or data for testing and deployment purposes or providing incentives for adoption of new technologies.
- Become more nimble in **adapting public-sector plans, regulations, and standards** to incorporate new technologies and innovation.

How do we collaborate across sectors, jurisdictions, modes, and disciplines?

Transportation decisions in Florida are made by an array of partners, including FDOT, 27 metropolitan planning organizations, 10 regional planning councils, 67 counties, 411 cities, 53 transit operators, 15 public seaports, 129 public airports, 2 spaceports, many other authorities and special districts, and private sector entities. FTP implementation will require creating and sustaining an agile and efficient institutional infrastructure:

- Continue to **improve collaboration** across jurisdictions, agencies, levels of geography, modes, and sectors.
- Continue to **strengthen coordination** between transportation and land use, economic development, and environmental stewardship decisions.
- Strengthen planning and coordination at the scale of **economic regions,** so our transportation decisions reflect market trends and economic development opportunities.
- Formalize **institutional partnerships** among agencies and jurisdictions through agreements, regular meetings, and similar strategies to ensure collaboration sustains beyond electoral or business cycles.

How do we better serve our customers?

Transportation providers are shifting from building infrastructure to supporting mobility for people and freight. This shift requires more attention to customer needs and service, including:

- **Involve the public and stakeholders** early and often in the transportation planning process.
- Base transportation planning decisions on the **values and needs** of Florida's residents, visitors, and businesses.
- Increase emphasis on **"soft" infrastructure** such as traveler information, signage, and regulatory processes.
- Continue to measure and improve **customer satisfaction** with Florida's transportation system.

How do we improve research, data, performance measures, and planning processes?

An ongoing emphasis on research, data, and performance measurement will underscore all of the state's future transportation outcomes. This includes efforts to:

- Commit to an ongoing emphasis on research and data collection and analysis, including innovative uses of **new and emerging data sources.**
- Create a long-term strategy for **managing data as a critical resource** for transportation agencies, including data storage, sharing, privacy, and quality issues.
- Expand the use of or create additional **performance measures** to monitor system condition, guide investment decisions, and demonstrate progress in achieving the FTP goals and objectives.
- **Continuously improve** transportation plans and decision-making processes at all levels.

How do we maintain a focus on strategic investments during a time of constrained resources?

Achieving Florida's transportation vision requires long-term, sustainable investment by the public and private sectors. Strong state leadership, a diverse revenue base, and an innovative approach have positioned Florida better than many other states, although future investment needs remain significant. In support of FTP implementation, transportation partners should consider principles, including:

- View transportation as an essential function of government and an **investment in Florida's future.**
- Recognize and prepare for the declining role of the Federal Highway Trust Fund and motor fuel taxes; **position Florida as a leader** in the discussion on this issue.
- Continue to encourage a **diverse mix of transportation revenue sources,** including market-based choices and public-private partnerships.
- Maximize and **leverage available revenue sources** between the public and private sectors, across modes, and across agencies and jurisdictions.
- Support efforts by Florida's government and business leaders to ensure Florida is an **attractive place for private capital.**
- Understand how innovation may change transportation needs and facilitate **new partnerships** and investments.
- Take a **systems approach** to identifying and prioritizing investment needs; recognize the role of all modes and importance of connectivity.
- Focus resources on **strategic investment needs** consistent with the FTP goals and objectives, including the use of tools such as return on investment.

Transition to Implementation

Roles and Responsibilities

The FTP will be implemented through specific actions by government, private, and civic partners at the state, regional, and local levels. The FTP Policy Element serves as Florida's long-range transportation plan under both state and federal law; it is a framework to guide FDOT's investment decisions. For other partners, the FTP provides guidance that can be incorporated into policies, plans, and programs.

Roles and responsibilities of partners during FTP implementation will vary by level of geography, corresponding to the major types of trips flowing through Florida's transportation system.

State

FDOT will play the lead role implementing the FTP at the statewide level, working with other state agencies, commissions, and partners. As a key emphasis of FTP implementation, FDOT will complete the update the Strategic Intermodal System (SIS) Policy Plan in early 2016 for consistency with the FTP. The SIS includes the transportation hubs, corridors, and connectors that are most important to Florida's economic competitiveness because they connect Florida's regions or they connect Florida to other states and nations. The SIS serves as the state's highest priority for statewide mobility.

FDOT also will update and implement the Freight Mobility and Trade Plan and the statewide modal plans covering aviation, motor carriers, rail, and seaports and waterways to align with the FTP and SIS Policy Plan. In addition, FDOT will continue to advance key initiatives such as the Future Corridor Planning Process to plan for the future of the state's major transportation corridors.

Regional

Regional agencies including metropolitan planning organizations, regional planning councils, and groups of counties and cities will play the lead role in implementing the FTP at the regional scale. Regional collaboration will be critical to maintain and update long-range regional visions; align transportation, economic development, workforce development, and environmental stewardship decisions; and identify needed improvements to regionally significant transportation facilities that connect population and economic centers within common regions.

Reflecting the importance of these regional needs, the FTP calls for strengthened planning and partnerships at the scale of economic regions. It also calls for targeted investments in regional projects prioritized through these partnerships, such as the Transportation Regional Incentive Program (TRIP).

Local

Local governments will play the lead role in implementing the FTP within individual communities. The strong local role reflects the importance of making transportation decisions that reflect the context, values, and needs of each community. Local action will help align design, engineering, operational, land use, and other decisions to improve safety, accessibility, and reliability and create transportation solutions that build stronger communities.

Call to Action

The transportation decisions we make today will shape the future of our economy, communities, and environment over the next few decades. Working together, we have the opportunity to provide a safer and more secure system; increase the efficiency and reliability of travel for both people and freight; and expand transportation choices to meet the needs of our residents, visitors, and businesses.

To initiate FTP implementation, all transportation partners should commit to:

- Align other statewide, regional, and local transportation and related plans to reflect the FTP goals and objectives;
- Establish short-range objectives and actions for addressing the FTP goals and objectives during the next 5 to 10 years;
- Refine and, where needed, update existing planning processes and guidelines for consistency with the FTP goals and objectives; and
- Document and report progress on specific commitments made by each partner toward FTP implementation, including use of performance measures building on state and federal law.

FDOT will continue to work with partners to develop the FTP Implementation Element and to adjust strategies as needed to reflect changing trends and events. The FTP Steering Committee periodically will convene to review progress in implementing the FTP and address emerging or outstanding issues.

For more information or to provide comment on the FTP, please visit:

FloridaTransportationPlan.com

Glossary

Accessibility – Ability to reach desired destinations, activities, goods, and services.

Active Transportation – Any self propelled, human-powered mode of transportation, such as walking or bicycling.

Agile – The ability to move or adapt quickly and easily.

Asset Management – A process used for managing transportation infrastructure with the objective of improved decision making for resource allocation.

Autonomous Vehicle Technology – Technology installed on a motor vehicle that has the capability to drive the vehicle on which the technology is installed without the active control or monitoring by a human operator.

Bottleneck – A segment of a transportation facility that experiences significant operational deficiencies such as oversaturated congestion, when compared to the rest of the facility.

Capacity – The maximum number of vehicles that reasonably can be expected to traverse a point or a uniform section of a facility during a given period under prevailing conditions.

Community Livability – Those elements that contribute to welfare, health, convenience, mobility, and recreation and are valued by a specific community.

Complete Streets – Streets that are planned, designed, and operated consistent with surrounding community characteristics and roadway functions so that multiple modes of transportation and customers, regardless of age or ability, easily, comfortably, and safely can access and use the street.

Congestion – A condition in which traffic demand is sufficient to cause the level of service to be or at or below adopted standards.

Context Sensitive Solutions – A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. This approach considers the total context within which a transportation improvement project will exist.

Corridor – Any land area designated by the state, a county, or a municipality which is between two geographic points and is used or is suitable for the movement of people and goods by one or more modes of transportation.

Delay – Additional travel time beyond some norm experienced by a traveler; any additional travel time experienced by a traveler.

Economic Competitiveness – A state or region's ability to compete in global markets, as evidenced in the attraction of new businesses and the expansion of existing businesses.

Economic Development – Sustained increase in the economic standard of living of the population of a country (or any other defined geographic region), normally accomplished by increasing its stocks of physical and human capital and improving its technology.

Economic Regions – Regions that are defined by commuting patterns, supply chains, and other business-to-business relationships rather than by political boundaries or natural systems.

Emergency Preparedness, Management, and Response – Actions taken to prepare for, respond to, and recover from an incident threatening life, property, operations, or the environment (natural and man-made hazards).

Environmental Stewardship – A philosophical concept of government, the public, resource users and businesses all taking responsibility and working together to conserve natural resources.

Express Lanes – A type of managed lane with few access points using dynamic pricing through electronic tolling based on changing traffic conditions. Express lanes can be located on non-tolled facilities to manage congestion and provide more reliable trip times.

Goal – A long-term (20-50 years) desired result toward which programs and activities are ultimately directed.

Hub – Ports and terminals that move goods or people between Florida regions or between Florida and other origin/destination markets in the U.S. and the rest of the world.

Impacts – The effects of a transportation project, including direct (primary) effects, indirect (secondary) effects, and cumulative effects.

Incident – An event that causes a temporary, significant disruption in transportation services.

Intelligent Transportation Systems (ITS) – A wide range of advanced technologies and ideas, which, in combination, can improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources, and reduce adverse environmental effects.

Intermodal – Relating to the connection between any two or more modes of transportation.

Interregional – Relating to the connection between any two or more regions.

Intraregional – Relating to the connections that have both ends within a single region.

Load Matching – A tool used to increase efficiency in the supply chain by matching available freight loads with available freight vehicles scheduled to arrive in the same destination.

Maintenance – Activities undertaken to keep the state's transportation infrastructure and equipment operating as intended, to eliminate deficiencies, and to extend or achieve the expected life of facilities before reconstruction is needed.

Managed Lane – Highway facilities or a set of lanes where operational strategies are proactively implemented and managed in response to changing conditions.

Metropolitan Planning Organization and Transportation Planning Organization (MPO and TPO) – An organization made up of local elected and appointed officials responsible for developing, in cooperation with the state, transportation plans and programs in metropolitan areas containing 50,000 or more residents. MPOs are responsible for the development of transportation facilities that will function as an intermodal transportation system and the coordination of transportation planning and funding decisions.

Mobility – The movement of people and goods.

Mode – Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger and freight), transit, space, and water.

Multimodal – More than one travel mode potentially including auto, bicycle, bus, pedestrian, aviation, rail, seaports, and transit.

Natural Environment – The surroundings not made by humans within which the transportation system operates. This includes both physical and ecological aspects, including traditional cultural resources.

Non-Highway Modes – Modes of transportation that do not utilize highway right-of-way. Examples include fixed guideway transit, air, rail, and water modes.

Objective – A long-term (20-50 years) general outcome that is achievable, measurable, and marks progress toward a goal.

Partners – Those parties with interests in transportation facilities and services including the public, local governments, metropolitan planning organizations, public and private sector users and providers, Native American Nations, the Florida Department of Transportation, and other federal and state agencies.

Performance Measurement – Includes the process of collecting analyzing, and reporting information regarding the performance of an aspect of the transportation system.

Public-Private Partnerships – A contractual agreement formed between a public agency and a private sector entity that allows for greater private sector participation in the delivery and financing of transportation projects.

Public Transportation – The transporting of people by conveyances, or systems of conveyances, available for use by the public. In Florida public transportation modes include transit, rail, water, and aviation.

Quality of Life – All of the characteristics of an area's living conditions, including such things as housing, education, transportation infrastructure, leisure time offerings, climate, employment opportunities, medical and health care infrastructure, and environmental resources.

Quick Fix Improvements – Low-cost solutions that can be applied on a short timeframe that have a significant positive impact on the transportation system.

Region – An area of distinctive communities, cities, and counties where residents share: a geographic identity and are socially, economically, and culturally interdependent; a capacity for planning and function; and a capacity to create competitive advantage.

Reliability – The percent of trips that meet a predetermined performance standard for time or speed.

Resilience – The ability for the transportation system to absorb the consequences of disruptions, to reduce the impacts of disruptions and maintain mobility.

Stakeholders – Individuals and groups with an interest in the outcomes of policy decisions and actions.

State Highway System (SHS) – A network of approximately 12,000 miles of highways owned and maintained by the State of Florida or state-created authorities. Major elements include Interstate highways, Florida's Turnpike and other toll facilities operated by transportation authorities and arterial highways.

Strategic Intermodal System (SIS) – Florida's transportation system composed of facilities and services of statewide and interregional significance, including appropriate components of all modes.

Sustainability – Meeting the needs of the present without compromising the ability to meet the needs of the future.

Target Industry – An industry or group of industries identified as a priority for economic development and job creation activities. Enterprise Florida has identified nine statewide targeted industries.

Vehicle Miles Traveled (VMT) – The total number of miles traveled by vehicles using a roadway system.

Vulnerable Road Users – Bicyclists, pedestrians, and motorcycles.

Work Program – The five-year listing of all transportation projects planned for each fiscal year by the Florida Department of Transportation, as adjusted for the legislatively approved budget for the first year of the program.

FDOT would like to thank all those who participated in the FTP/SIS update process. Without partner and public input, this update would not be possible. Input received from Florida's Transportation Visioning Summit, Florida's Transportation Visioning Regional Forums, FTP/SIS Regional Workshops, the FTP/SIS Open House, partner presentations and working sessions, and the FTP/SIS Advisory Groups was crucial in developing the FTP Policy Element. Specifically, the FTP/SIS Steering Committee provides a leadership role to the FTP process as a whole and represents a wide variety of stakeholders.

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In developing the Florida Transportation Plan Policy Element, public participation was solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Accommodations for people under the Americans with Disabilities Act or persons who required translation services were made available upon request.

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SIS Strategic Intermodal System