



Exploring Florida's Transportation Future

presented to

**TRB Use of Scenario Planning in
Transportation Planning Conference**

presented by

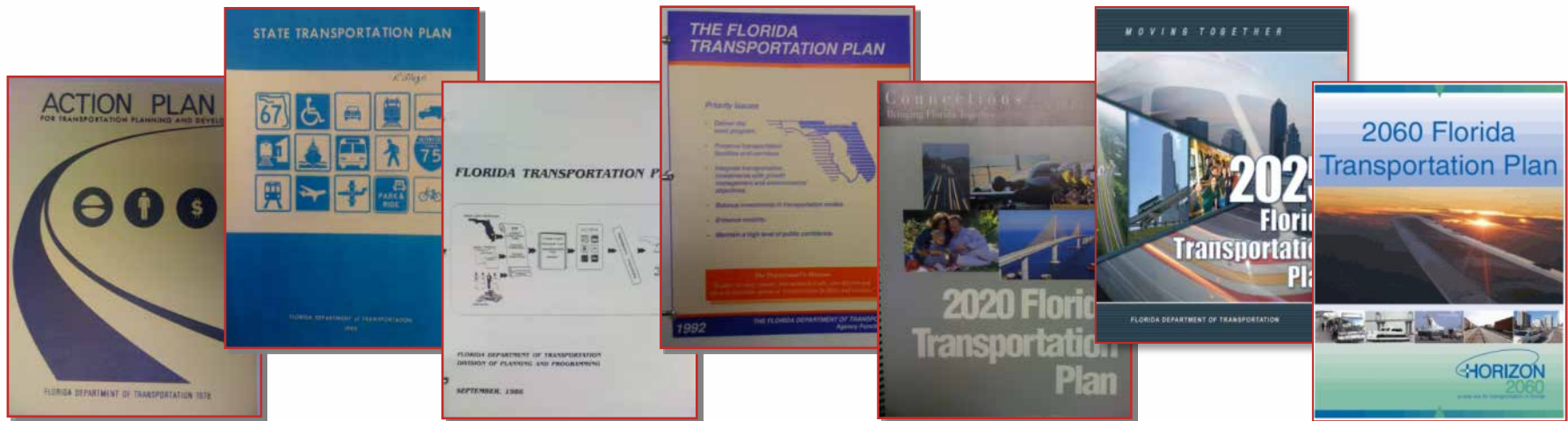
**Brian Watts, Florida Department of Transportation
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Presentation Outline

- **Florida's transportation planning process**
- **Scenario planning approach**
- **Results: 2015 Florida Transportation Plan**

Florida Transportation Plan

- Florida's long-range transportation plan
- A plan for all of Florida
- Defines policy framework and launches key initiatives



Florida's Transportation System



State Highways

12,099 Centerline Miles
6,783 Bridges



Rail

2,753 Railway Miles



Local Roads

107,674 Centerline Miles
5,091 Bridges



Seaports/Waterways

15 Public Seaports
3,475 Miles of Intracoastal
and Inland Routes



Public Transit

30 Urban Transit Systems
23 Rural Transit Systems



Aviation

780 Airports
129 Public General Aviation
19 Commercial
651 Private General Aviation



Bicycle/Pedestrian Network

7,282 Miles of Bicycle Facilities
3,286 Miles of Pedestrian Facilities



Spaceports

2 Spaceports
10 Launch Facilities

Transportation Partners

410 Municipalities

67 Counties

27 Metropolitan planning organizations

10 Regional planning councils

53 Transit operators

15 Public seaports

129 Public airports

Transportation authorities

Special districts

7 FDOT districts and 2 enterprises



5 County and Municipal, Census Metropolitan Statistical Areas, Regional Planning Councils, FDEP Ecosystem Management Districts, Water Management Districts, FDOT Districts, Statutorily created transportation authorities, regional visioning initiatives

Partner and Public Outreach Process



A Look Back

Florida's Population

19.5m



4.9m

1960

1970

1980

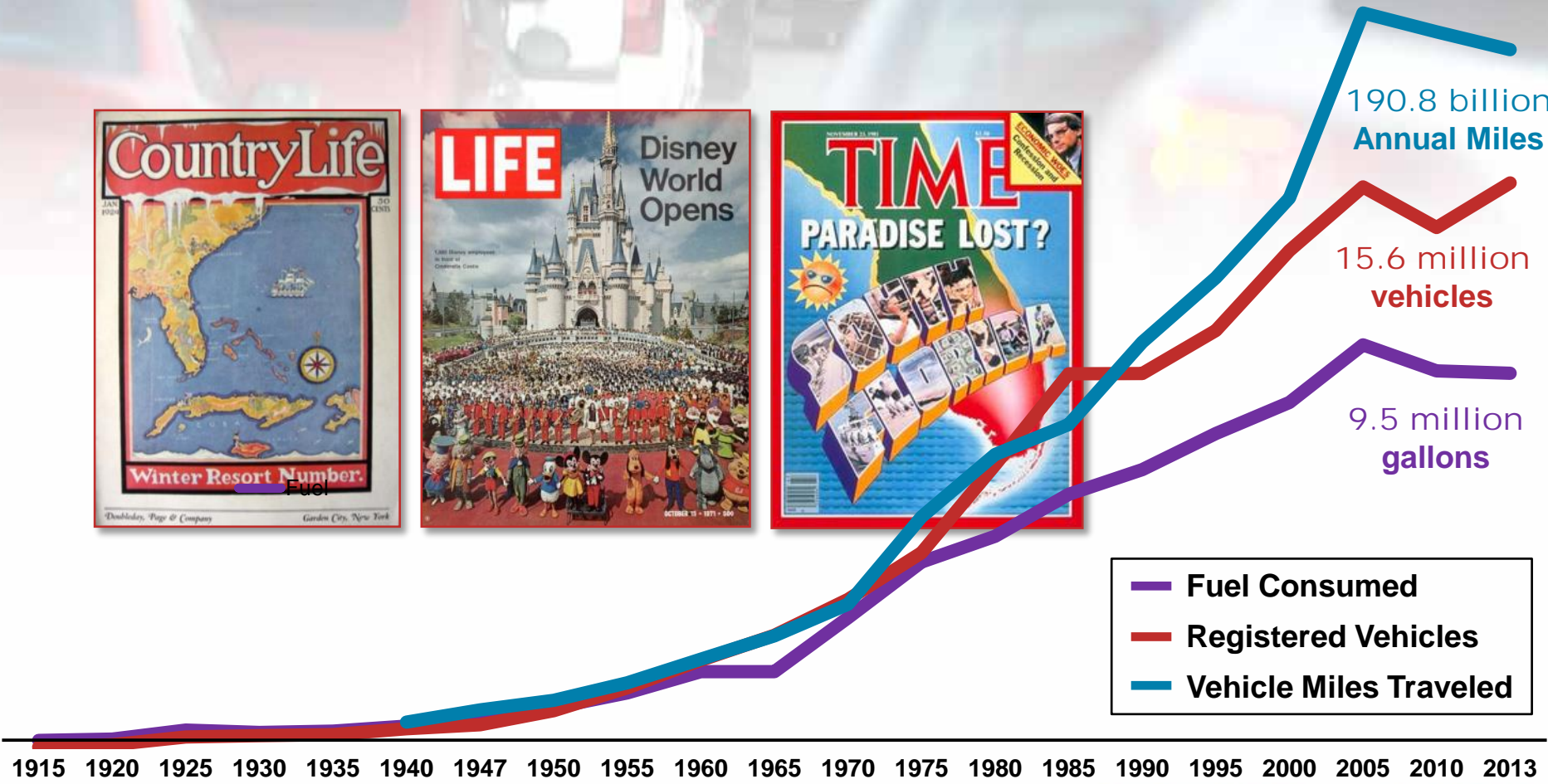
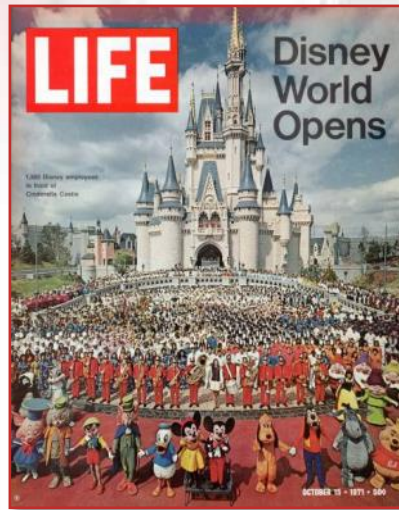
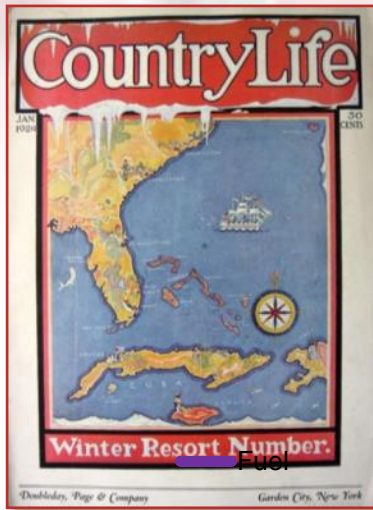
1990

2000

2010

A Look Back

Transportation Trends



- Fuel Consumed
- Registered Vehicles
- Vehicle Miles Traveled

1915 1920 1925 1930 1935 1940 1947 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2013

Scenario Planning Approach

Analyze Key Drivers of Change



Describe Alternative Futures

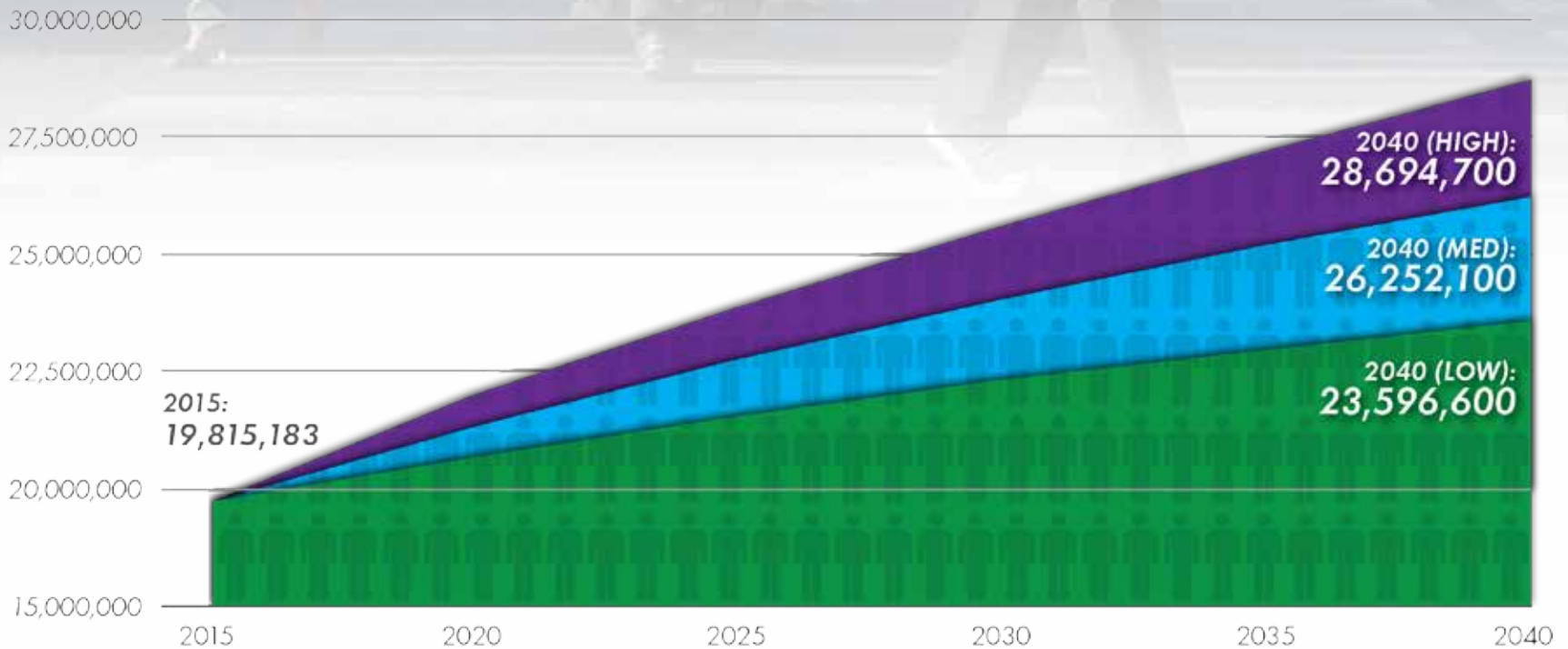


Identify Key Themes Across Futures



Define Goals, Objectives, Strategies

Florida's Population: Larger and More Diverse?



Source: Bureau of Economic and Business Research (2015).

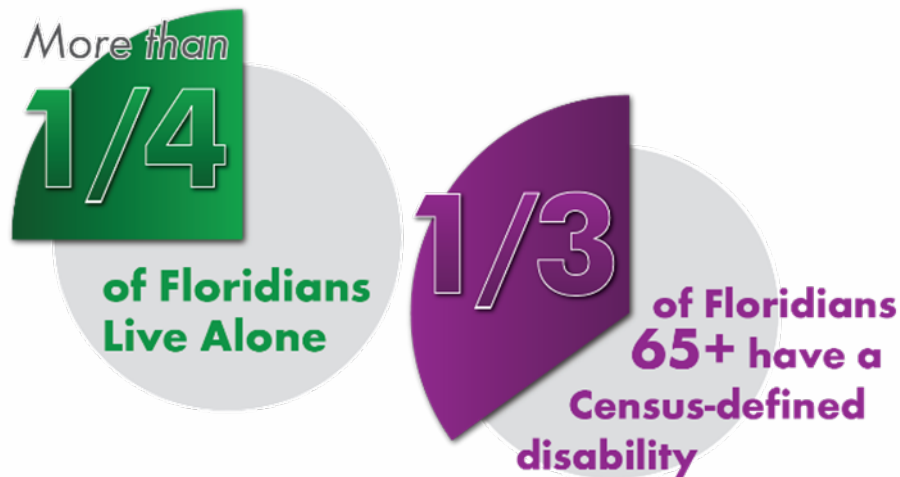
Florida's Population: Larger and More Diverse?

Population is Getting Older

24%
Over 65 in 2040

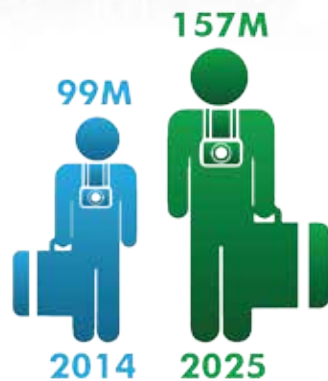


Source: University of Florida Bureau of Economic and Business Research (2014).



Florida's Economy: More Diverse?

Attracting
More Visitors



Source: Office of Economic and Demographic Research (2015).

Growth in Freight



Source: Federal Highway Administration, Freight Analysis Framework 3.4 (2011).

Florida's Economy: More Diverse?

*Targeted Industries Have Different
Transportation Needs*

Aviation and
Aerospace

Advanced
Manufacturing

Logistics
and Distribution

Defense and
Homeland Security

Information
Technology

Clean
Technology

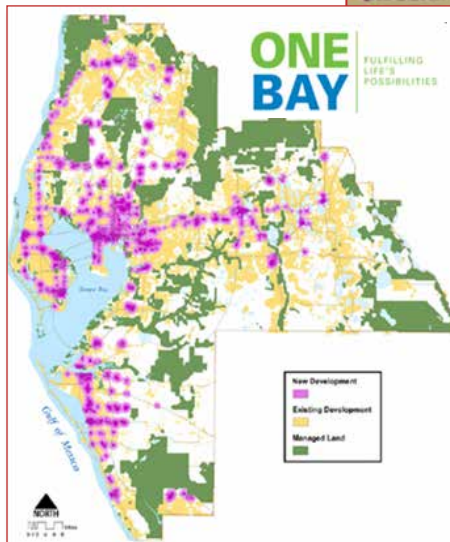
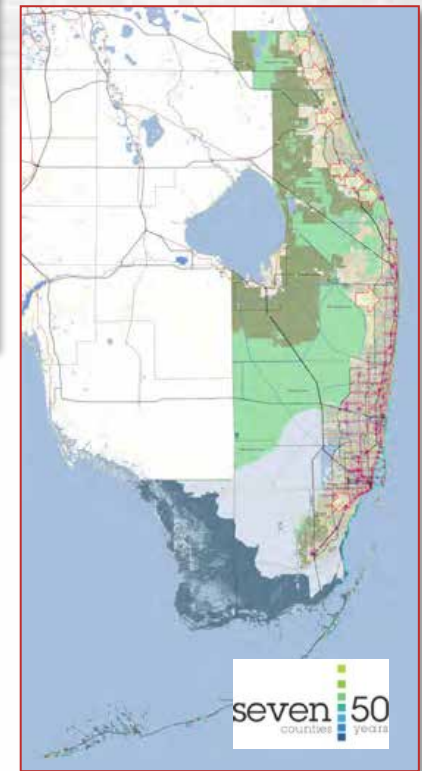
Life
Sciences

Financial and
Professional Services

Corporate
Headquarters

Source: Enterprise Florida (2014).

Florida's Development Patterns: More Urban?

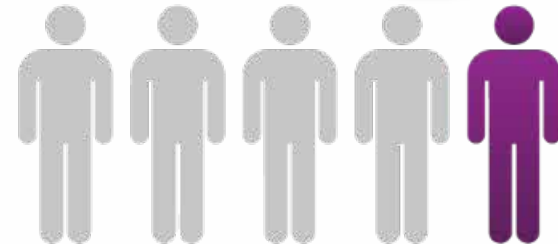


Florida's Development Patterns: Growing Risks?



Source: National Oceanic and Atmospheric Administration (2014).

1 out of 5



Floridians live in **Special Flood Hazard Areas**

Source: Federal Emergency Management Agency (2014).

Technology: What's Next?

Becoming More Connected

1 out of 5 vehicles on the road worldwide

will have some form of wireless network connection by 2020

Source: Gartner, Inc., "Predicts 2015: The Internet of Things," (2014)



Becoming More Mobile

90% of the U.S. population owns a cell phone

20% use their phone for real time traffic or transit information

Source: Pew Research Center (2014).



Increasing Automation

\$11.5 billion will be invested in drone technology in the next 10 years

Robotics and automation could revolutionize transportation system maintenance and freight delivery practices

Source: U.S. Department of Transportation (2015).

Groundhog Day

Return to Historic Growth



It's a Small World

Global Trade Hub



Tomorrowland *Innovation Hub*



Back to the Future

Rural Rediscovery



Stormy Weather

Risks on the Horizon



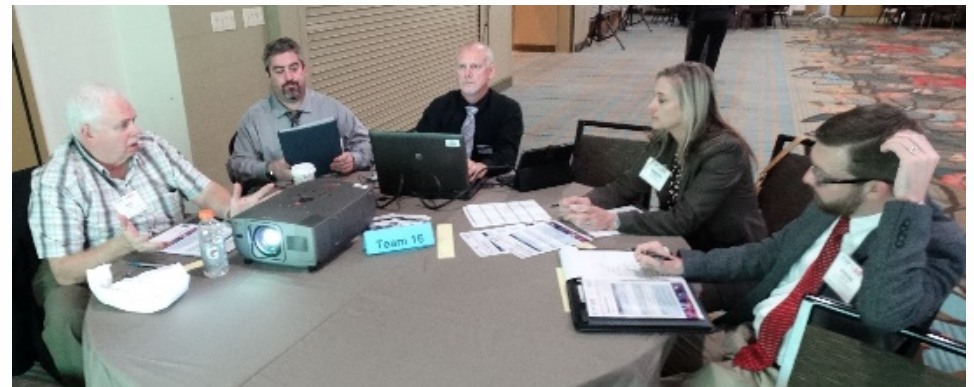
Engaging the Public

- **Statewide Transportation Visioning Summit, December 17, 2014**



Engaging the Public

- Five regional workshops, January-February 2015
- Targeted workshops for key stakeholder groups (MPOs, regional planning councils, etc.)
- FL Transportation Commission
- Steering Committee



Suggested Response

Global Hub

- Global gateways, intermodal logistics centers
- Trade corridors, intermodal connectors
- Supply chain technologies

Innovation Hub

- Urban mobility options
- High speed connections between urban areas
- Automated, connected, shared vehicles

Rural Rediscovery

- Truck routes, freight terminals, general aviation
- Rural-to-urban connectivity
- Trails, access to recreational areas

Risks on the Horizon

- Catalytic investments to support economic growth
- Asset management and adaptation
- Repurpose or abandon infrastructure

Florida Transportation Plan: 3 Elements



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)



Implementation Element *(2016)*

Emphasis areas with key actions (5-25 years)



FLORIDA TRANSPORTATION PLAN
VISION ELEMENT

AUGUST 2015
FloridaTransportationPlan.com

FTP  **SIS**
Florida Transportation Plan Strategic Intermodal System

FLORIDA TRANSPORTATION PLAN POLICY ELEMENT

Florida Transportation Plan Goals

Safety and Security for residents, visitors, businesses

Transportation solutions that support Florida's global **Economic Competitiveness**

Agile, Resilient, and Quality transportation infrastructure

Transportation solutions that support **Quality Places** to live, learn, work, and play

Efficient and Reliable Mobility for people and freight

Transportation solutions that enhance Florida's **Environment and Conserve Energy**

More Transportation Choices for people and freight

New Goal

More Transportation Choices

for people and freight



- Increase use of new mobility options and technologies
- Increase share of person trips using public transportation and other alternatives to single occupancy motor vehicles
- Increase number of quality options for visitor travel
- Increase number of quality options for moving freight
- Increase efficiency and convenience of connecting between multiple modes

Revised Goal

Agile, Resilient, *and* **Quality** *transportation infrastructure*

- 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

Florida Transportation Plan Goals

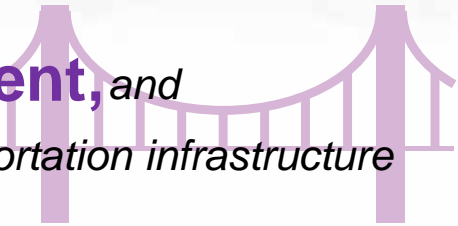
Safety and Security for residents, visitors, businesses



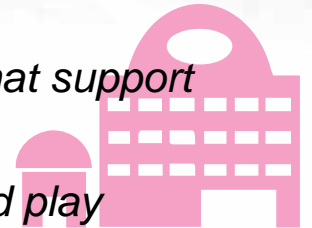
Transportation solutions that support Florida's global **Economic Competitiveness**



Agile, Resilient, and Quality transportation infrastructure



Transportation solutions that support **Quality Places** to live, learn, work, and play



Efficient and Reliable Mobility for people and freight



Transportation solutions that enhance Florida's **Environment and Conserve Energy**



More Transportation Choices for people and freight



How Do We Get There?

Florida's transportation vision can be achieved through collaborative efforts between FDOT and other state, regional, and local partners in the public, private, and civic sectors. Key emphasis areas for implementing all seven goal areas include:

- **Innovation** Transportation is at a cusp of a revolution driven by new and converging technologies. From the first commercial space in 1961, Florida has long been a leader in new approaches to transportation. The state must lead innovation to all aspects of transportation – from automated vehicles to alternative energy sources and trip planning and payment. Transportation partners have the opportunity to examine innovative approaches to all transportation activities, from planning and design to construction to maintenance and operations.
- **Collaboration** Led by an array of state, regional, and local partners, including FDOT, 27 metropolitan counties, 410 cities, 53 transit operators, 15 public seaports, 129 public airports, 2 spaceport, and many additional agencies and plans at all levels. In particular, careful collaboration between all partners is essential to the success of this vision. Increasingly, transportation solutions involve partnerships between the public and private sectors, including railroads, utilities, landowners, developers, and financial institutions. The state's transportation strategy should involve creating and sustaining effective collaboration and partnerships – in effect, an agile and efficient institutional infrastructure that supports the vision.
- **Customer Service** In Florida, we have begun to shift our focus from building infrastructure to providing better customer service. As part of achieving the state's vision, transportation partners must determine how to improve customer service – enhancing opportunities for stakeholders and the public to provide input into transportation decisions; better identifying and responding to the values and needs of residents, visitors, and businesses; improving communication to users; providing more options; and streamlining licensing, permitting, and other business and regulatory transactions.
- **Strategic Investments** Local partners already face a significant backlog of existing priorities. The vision must recognize that revenue sources based on motor fuel taxes. FDOT, local governments, transportation authorities, the private sector, and other partners must make strategic investments in Florida's transportation system that lead toward the state's transportation vision and accomplish broader economic, quality of life, and environmental goals. This includes a continued focus on the Strategic Intermodal System, the state's high priority network of transportation hubs, corridors, and connectors.
- **Research, Data and Performance** The amount and quality of data available to transportation customers and providers. Data access, connectivity, and integration may soon be as important to the operation of our transportation system as the physical infrastructure itself.

Online Resources: www.floridatransportationplan.com

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FTP Florida Transportation Plan **SIS** Strategic Intermodal System

HOME OPEN HOUSE REGIONAL WORKSHOPS ALTERNATIVE FUTURES STEERING COMMITTEE ADVISORY GROUPS FTP SIS POLICY PLAN RESOURCES COMMENTS

Review Our Previous Plans

- Florida Transportation Plan
- SIS Strategic Plan

[Learn More](#)

About Us

The Florida Department of Transportation (FDOT) has updated the Florida Transportation Plan (FTP) and the Strategic Intermodal System (SIS) Policy Plan. The FTP defines Florida's future transportation vision and identifies goals, objectives, and strategies to accomplish that vision. The FTP is the statewide long-range transportation plan for all of Florida. The SIS Policy Plan identifies policies for planning and implementing Florida's Strategic Intermodal System, the statewide high-priority network of transportation facilities critical to Florida's economic competitiveness.

Recent News

The SIS Policy Plan has been adopted by the FDOT Secretary and is available for download. FDOT would like to thank everyone that contributed to the SIS Policy Plan update process. This plan would not be possible without the extensive input from Florida's residents, visitors, businesses, and many more partners and stakeholders. Click [here](#) to view the SIS Policy Plan.

The FTP Policy Element has been finalized and is available for

FDOT SIS Policy Plan (Click the cover to download)

FTP Policy Element (Click the cover to download)