

Exploring Florida's Transportation Future

presented to

**Committee for a
Study of Future
Interstate
Highway System**

presented by

Brian Watts, Florida DOT



December 20, 2016

Outline

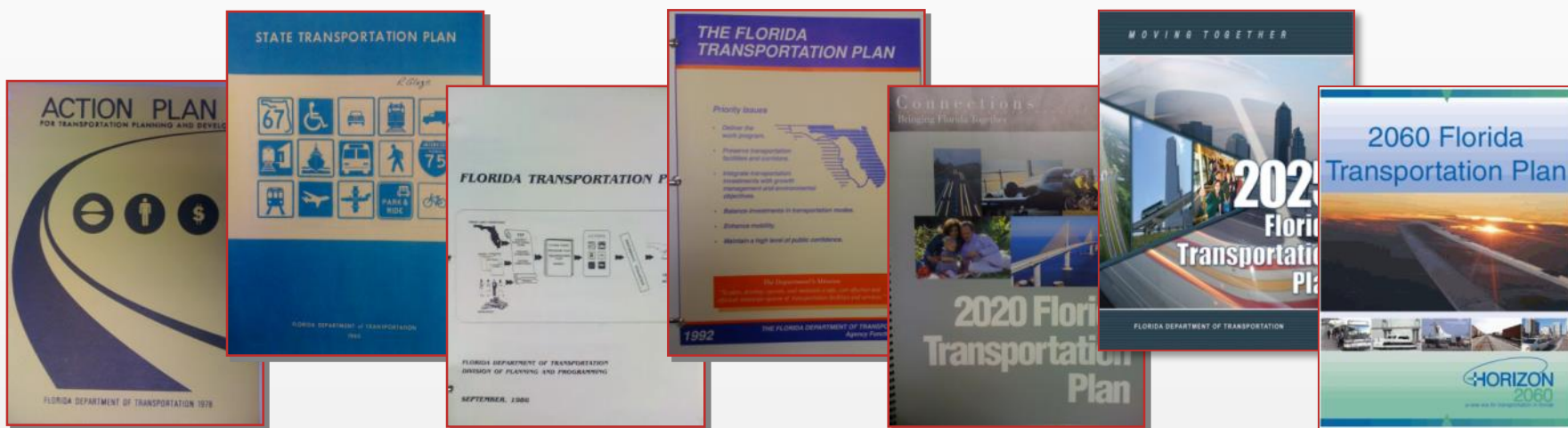


- **Overview of the Florida Transportation Plan**
- **Scenario Planning in the FTP**
 - » Background
 - » Approach
 - » Results

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



Partner and Public Outreach Process

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
Participants at Events

1 Plan
for all of Florida

7
Long-Range Goals

30
Long-Range Objectives

The Future Can Be Hard to Predict...



Off Track?

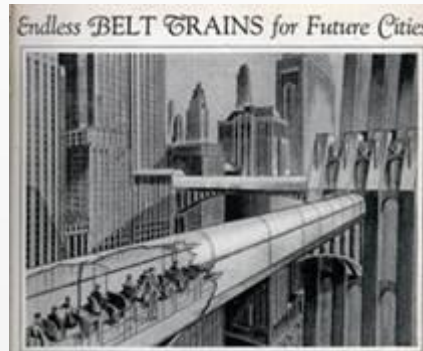
"All intercity travel under 300 miles will be by helicopter."



*Eddie Rickenbacker, Chairman,
Eastern Air Lines, 1953*

Ahead of the Times?

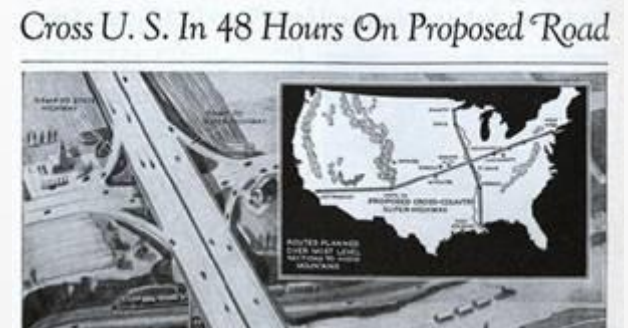
"Mass transit in urban areas is vital to the future of Florida."



*Joseph P Taravella, Chair,
Council of 100, 1973*

Looking Ahead?

"One day you will be in one continental city – driving from Boston to Miami."



*Charles Rovetta, Dean, Florida
State School of Business, 1955*

Exploratory Scenarios



Where Are We Now?	Where Could We Be Going?	How Could We Prepare?	What's Our Best Path Forward?
 A map of Florida with a blue background and a network of white lines representing roads or infrastructure.	 A map of Florida with a red background and a network of white lines. Several white circles of varying sizes are overlaid on the map, representing different future scenarios or locations.	 A map of Florida with a blue background and a network of white lines. Several colored circles (red, green, orange) are overlaid on the map, representing different ideas or solutions.	 A map of Florida with a green background and a network of white lines. Several white circles of varying sizes are overlaid on the map, representing different policies and strategies.
Current Snapshot	Multiple Futures	Ideas and Solutions	Policies and Strategies

A Look Back Florida's Population



19.5m



4.9m

1960

1970

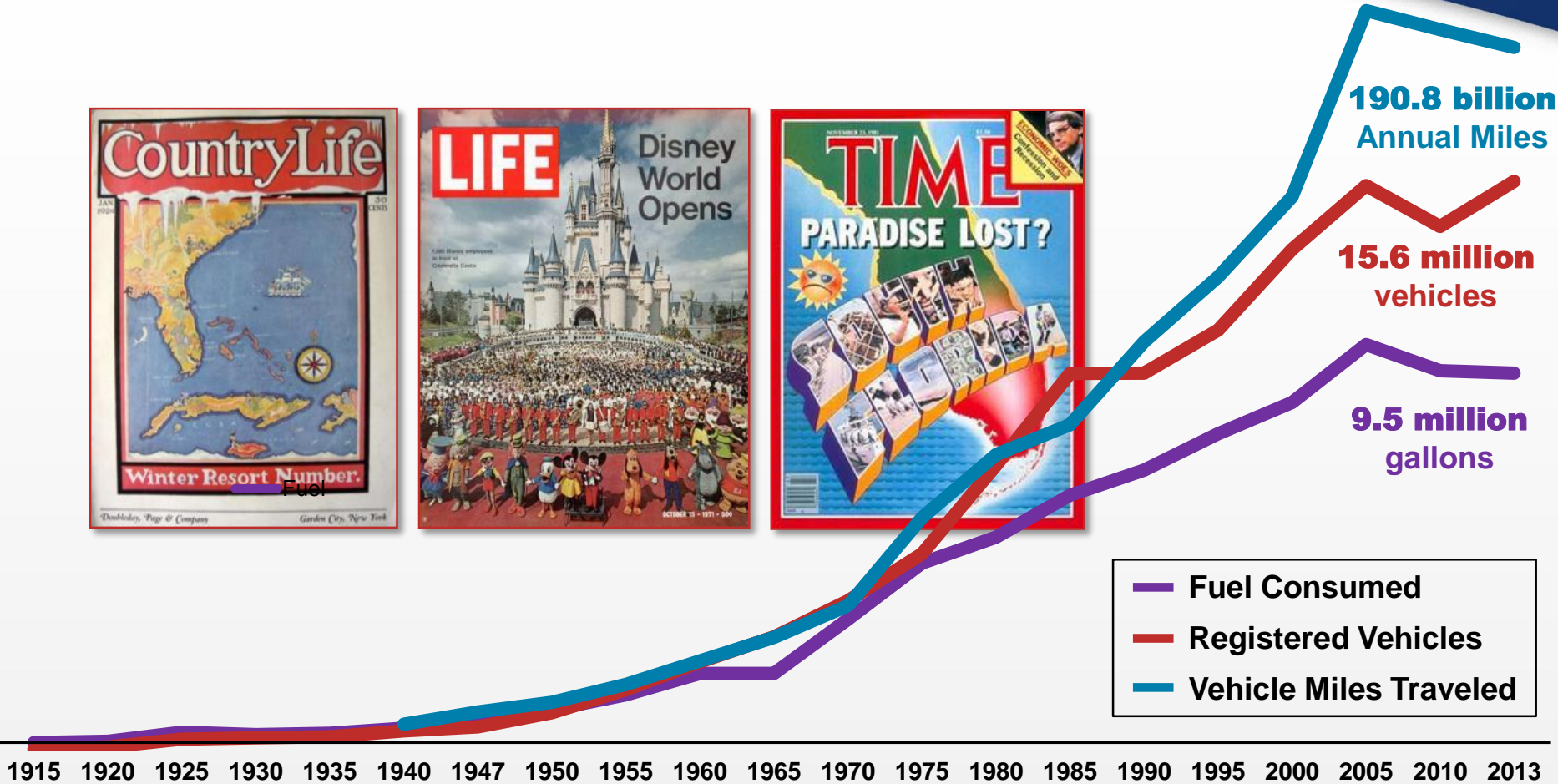
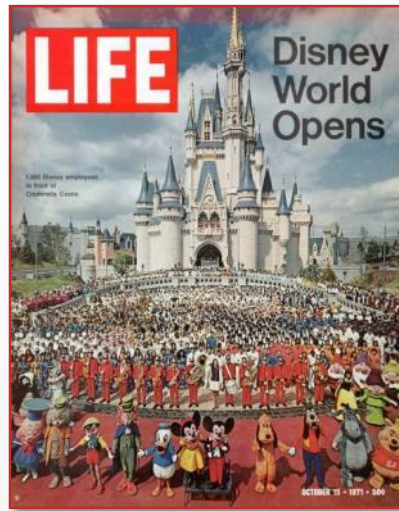
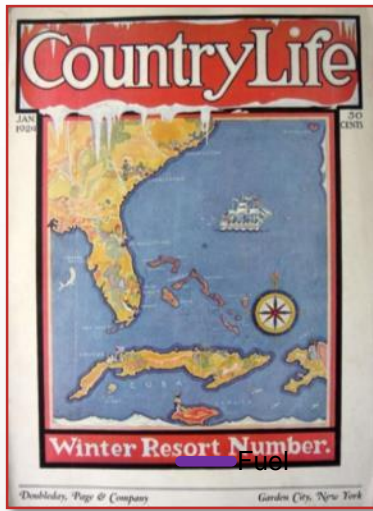
1980

1990

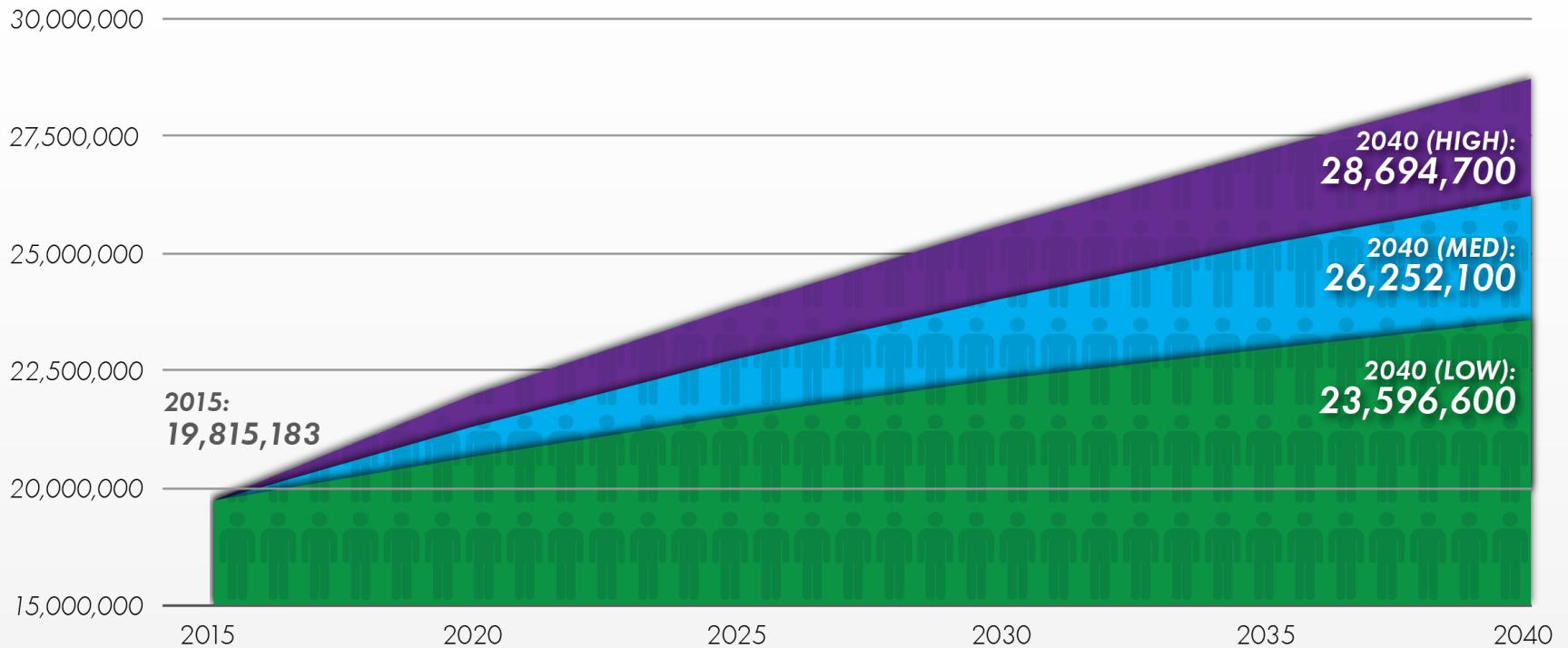
2000

2010

A Look Back Transportation Trends



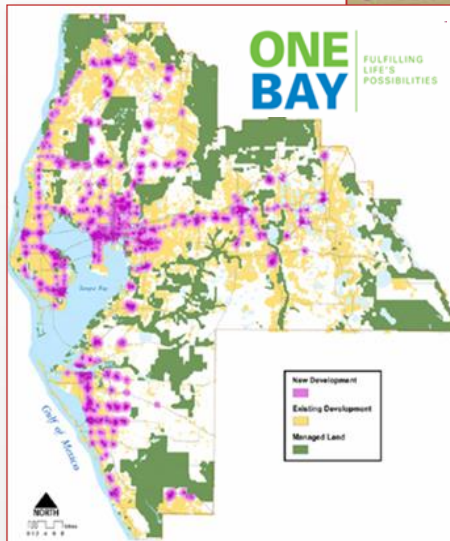
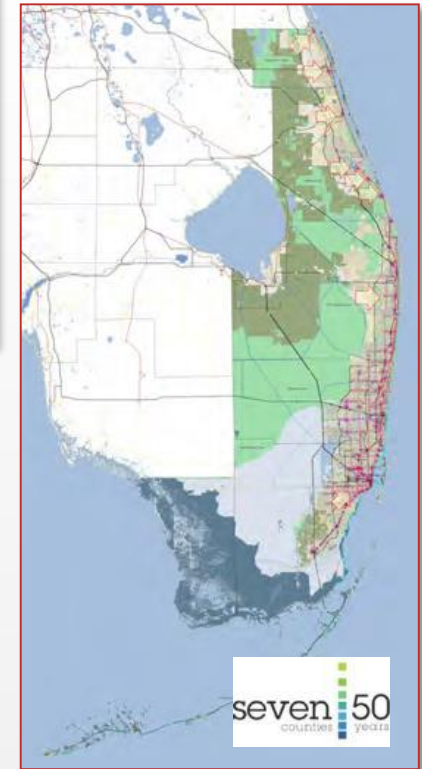
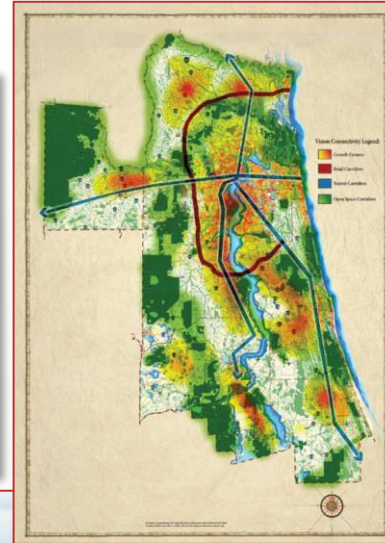
Florida's Population *Larger and More Diverse?*



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

Florida's Development Patterns

More Urban?



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**

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

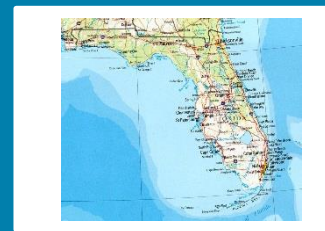
Robotics and automation could revolutionize transportation system maintenance and freight delivery practices

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

The Approach

Analyze Key Drivers of Change

Describe Alternative Futures



Identify Key Themes Across Futures

Define Goals, Objectives, Strategies



Groundhog Day



It's a Small World



Tomorrowland



Back to the Future

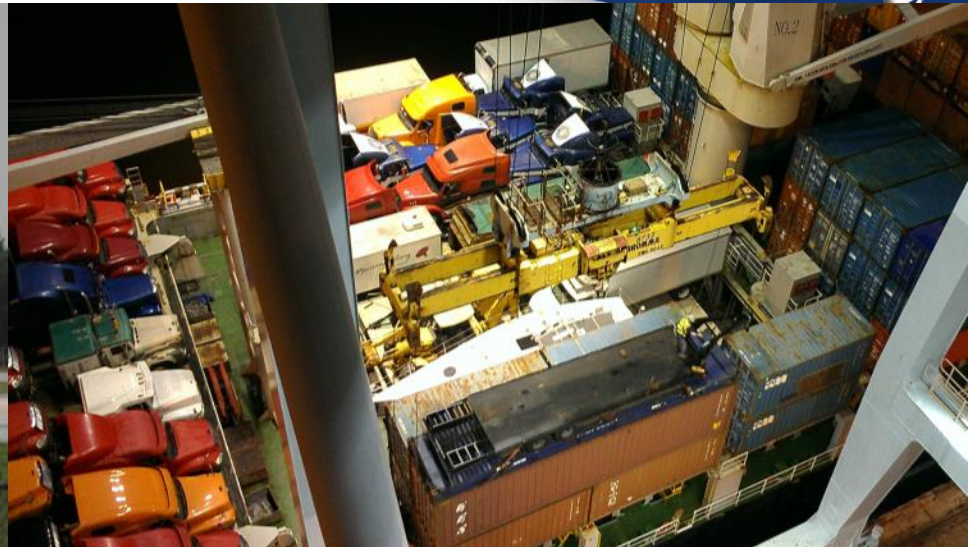
Closing down **SALE** *Everything must go*

Stormy Weather

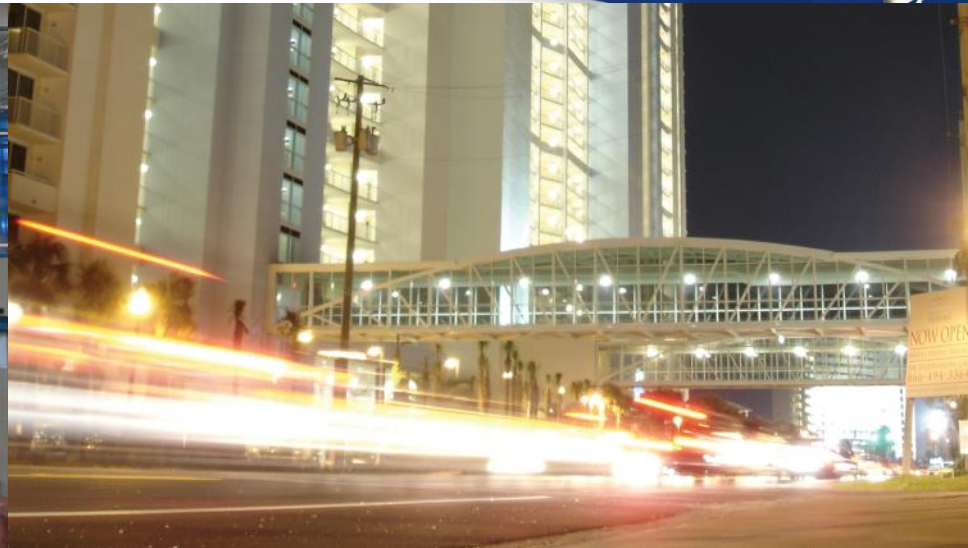
Groundhog Day *Return to Historic Growth*



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

Common Themes Community Whiteboard

- TECHNOLOGY
- INNOVATIVE FINANCING/FUNDING
- MOBILITY / MULTIMODAL
- QUALITY OF EXPERIENCE
- Mode Options
- Technology
- Infrastructure, Connections, Financing

TomorrowLand!
TEAM 18 (i.e. best team): Looking forward while sustaining our strengths

Small World

Team17: Florida: The Global Digital Distribution Hub of the Planet Serving Visitors, Workers, Residents & Businesses

- Moving People
Enhance Efficient Multi-Modal Transportation System for Tourists, etc.
- Moving Freight
Enhanced Multi-Modal systems to optimize receipt & delivery
- Investment
Target investments in digital networks

ADVANCED MULTIMODAL SOLUTIONS
ALTERNATIVE ENERGY
HIGH TECH CORRIDORS
INVESTMENT IN SMART FACILITIES NOT BIGGER ONES

Engaging the Public



- **Five regional workshops, January-February 2015**
- **Targeted workshops for key stakeholder groups (MPOAC, FRCA, FPTA, etc.)**
- **Florida Transportation Commission**
- **Steering Committee**



Potential Strategies



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 Structure



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)

FTP Vision & Policy Elements



Florida Transportation Plan Goals



Safety and Security for residents, visitors, businesses



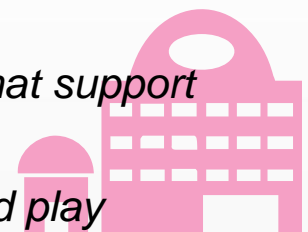
Transportation solutions that support Florida's global **Economic Competitiveness**



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



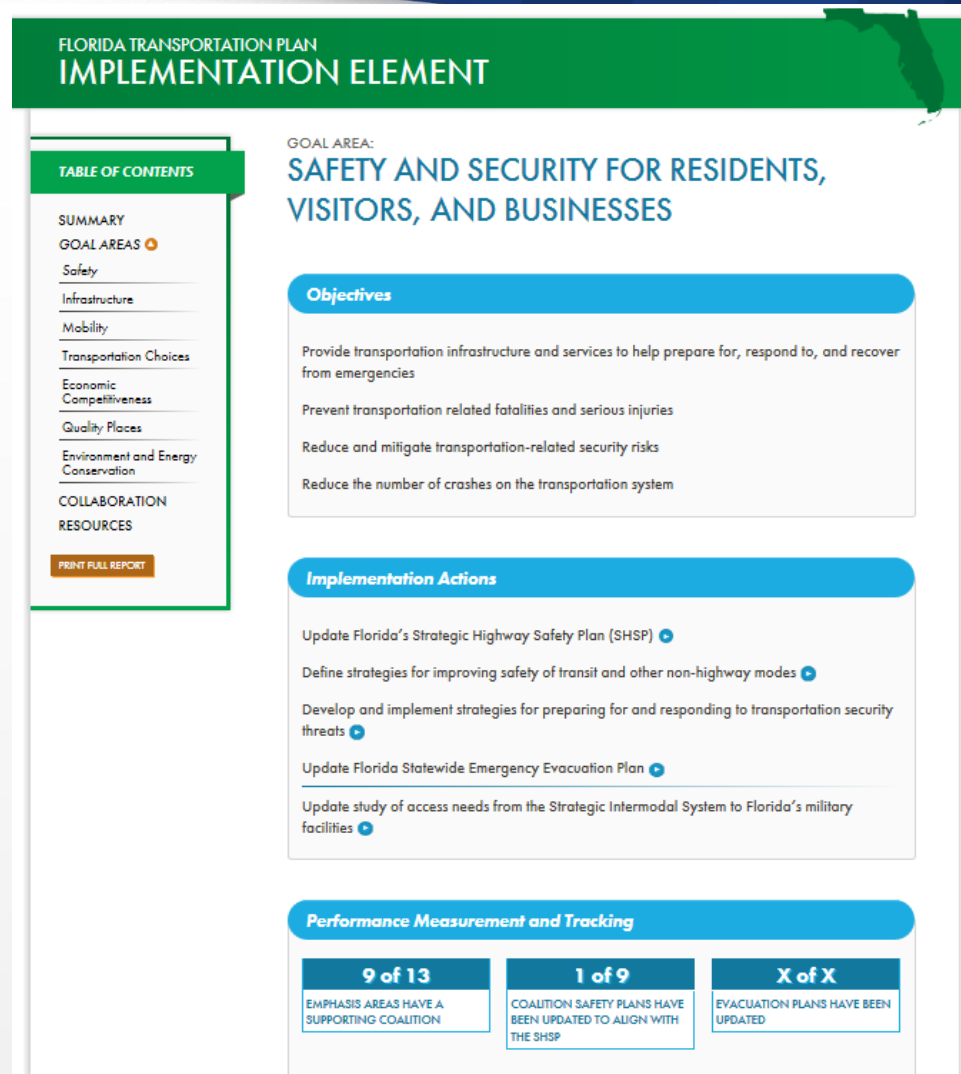
New Emphasis Areas



- **Innovation and technology**
- **Transportation workforce**
- **“Soft infrastructure” – regulatory processes**
- **Energy**
- **Public health**
- **Customer service**

FTP Implementation Element

- Real Time Updates
- Partner Input
- One Convenient Location



The screenshot shows a webpage titled "FLORIDA TRANSPORTATION PLAN IMPLEMENTATION ELEMENT". The main heading is "GOAL AREA: SAFETY AND SECURITY FOR RESIDENTS, VISITORS, AND BUSINESSES". On the left is a "TABLE OF CONTENTS" sidebar with a "PRINT FULL REPORT" button. The main content is divided into three sections: "Objectives", "Implementation Actions", and "Performance Measurement and Tracking".

**FLORIDA TRANSPORTATION PLAN
IMPLEMENTATION ELEMENT**

**GOAL AREA:
SAFETY AND SECURITY FOR RESIDENTS,
VISITORS, AND BUSINESSES**

TABLE OF CONTENTS

- SUMMARY
- GOAL AREAS **+**
 - Safety
 - Infrastructure
 - Mobility
 - Transportation Choices
 - Economic Competitiveness
 - Quality Places
 - Environment and Energy Conservation
- COLLABORATION
- RESOURCES

PRINT FULL REPORT

Objectives

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

Implementation Actions

- Update Florida's Strategic Highway Safety Plan (SHSP) **+**
- Define strategies for improving safety of transit and other non-highway modes **+**
- Develop and implement strategies for preparing for and responding to transportation security threats **+**
- Update Florida Statewide Emergency Evacuation Plan **+**
- Update study of access needs from the Strategic Intermodal System to Florida's military facilities **+**

Performance Measurement and Tracking

9 of 13 EMPHASIS AREAS HAVE A SUPPORTING COALITION	1 of 9 COALITION SAFETY PLANS HAVE BEEN UPDATED TO ALIGN WITH THE SHSP	X of X EVACUATION PLANS HAVE BEEN UPDATED
--	--	---

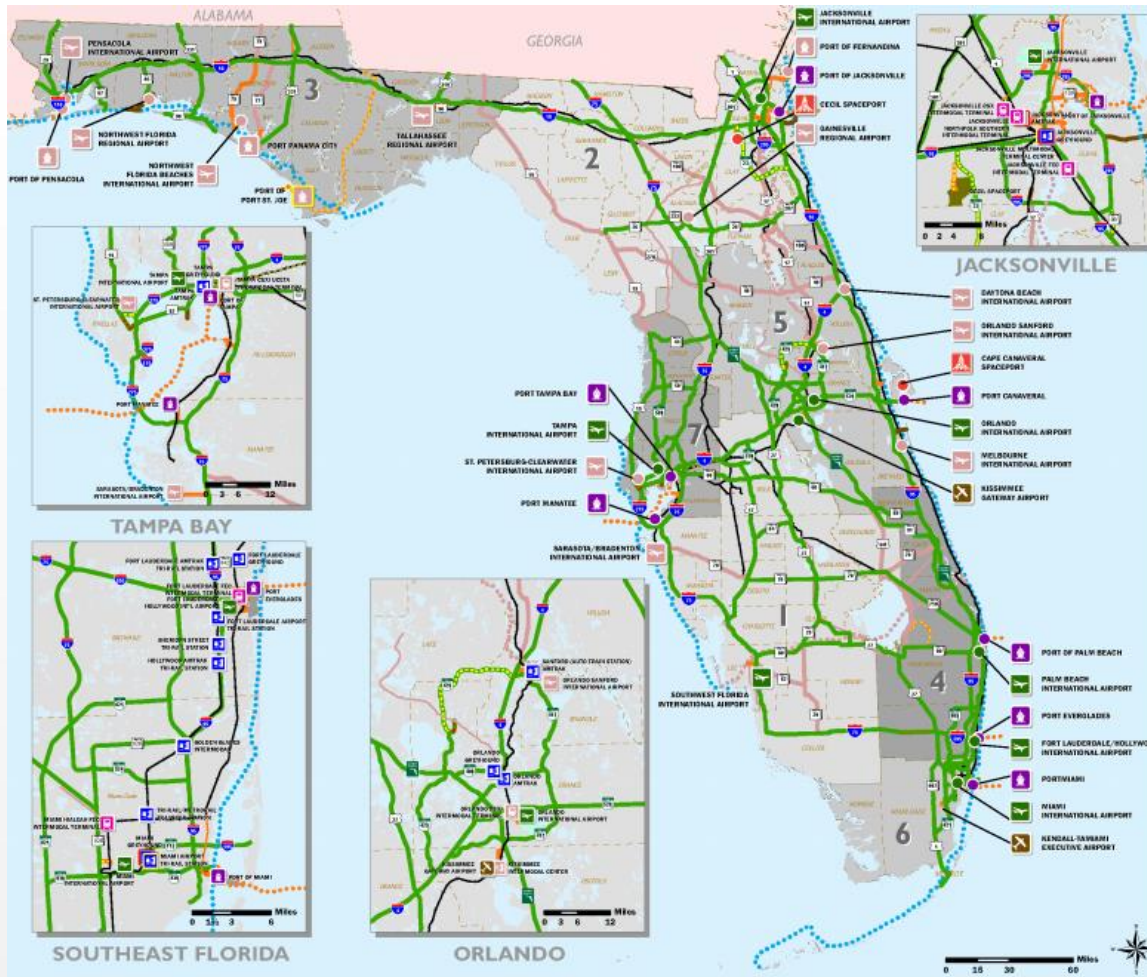


SIS

STRATEGIC INTERMODAL SYSTEM POLICY PLAN



Strategic Intermodal System (SIS) Statewide System of High-Priority Facilities



SIS Florida's Strategic Intermodal System

Airports & Spaceports

- SIS Airport
- Emerging SIS Airport
- SIS General Aviation/Reliever Airport
- SIS Spaceport

Seaports

- SIS Seaport
- Emerging SIS Seaport

Freight Rail Terminals

- SIS Freight Rail Terminal
- Emerging SIS Freight Rail Terminal
- Intermodal Logistics Center

Passenger Terminals

- SIS Passenger Terminal
- Emerging SIS Passenger Terminal

Highway

- SIS Highway Corridor
- Emerging SIS Highway Corridor
- SIS Highway Connector
- Military Access Facility

Rail

- SIS Railway Corridor
- Emerging SIS Railway Corridor
- SIS Railway Connector

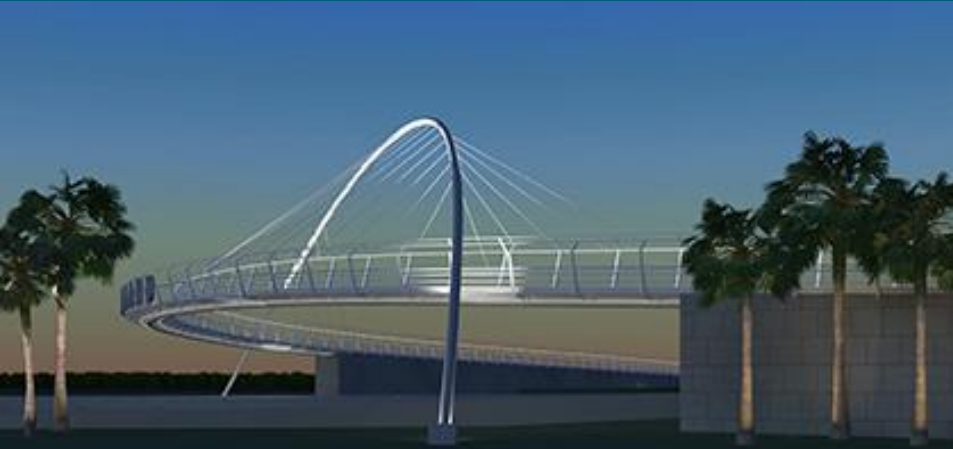
Waterways

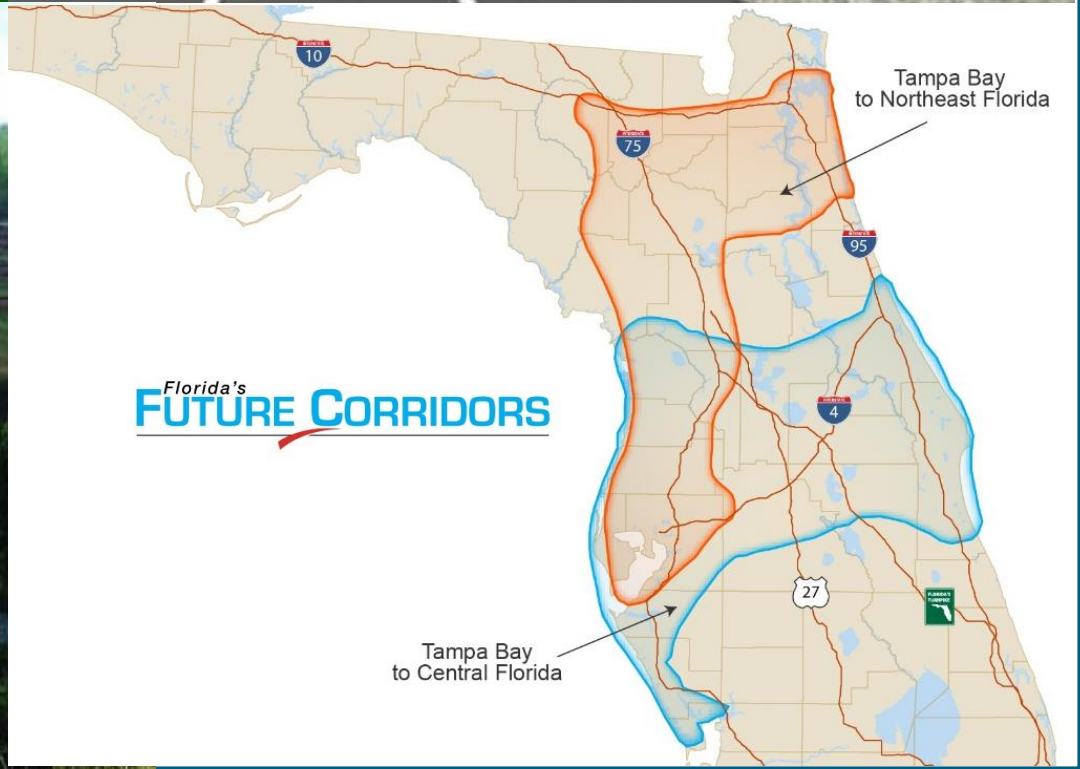
- SIS Waterway
- Emerging SIS Waterway
- SIS Waterway Connector

Facilities: Planned Add & Drop

- Planned Add
- Planned Drop

Florida Department of Transportation
Strategic Intermodal Systems Program
September 2014
<http://www.dot.state.fl.us> 850-414-4900





Online Resources: www.floridatransportationplan.com



Florida Department of
TRANSPORTATION

[E-Updates](#) | [FL511](#) | [Mobile](#) | [Site Map](#)

Search FDOT...



[Home](#) [About FDOT](#) [Contact Us](#) [Maps & Data](#) [Offices](#) [Performance](#) [Projects](#)

Florida Transportation Plan (FTP) and Strategic Intermodal System (SIS)

Dana Reiding
*Administrator,
Intergovernmental
Programs*

Tel: (850) 414-4719
[E-Mail Us](#)



Brian.Watts@dot.state.fl.us
(850) 414-4818