



Building Florida's Long-Range Transportation Vision

Trends and Alternative Futures

presented to

FTP-SIS Steering Committee

presented by

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John Kaliski, Cambridge Systematics, Inc.

January 30, 2015

Outline

- **A Look Back: Where Have We Been?**
- **A Look at Today**
- **A Look Ahead: Where Are We Going?**
- **Potential Alternative Futures**

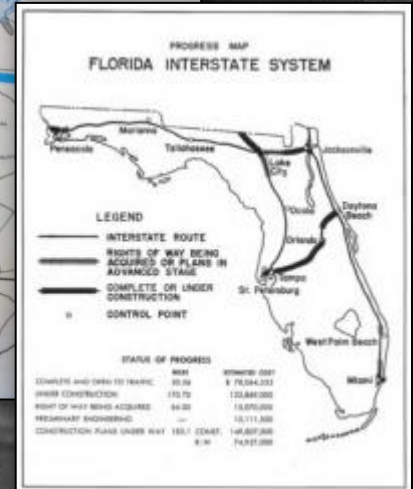
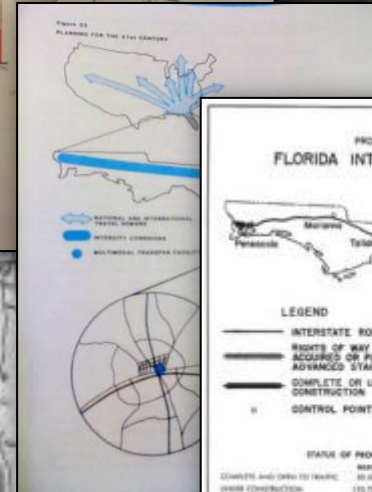
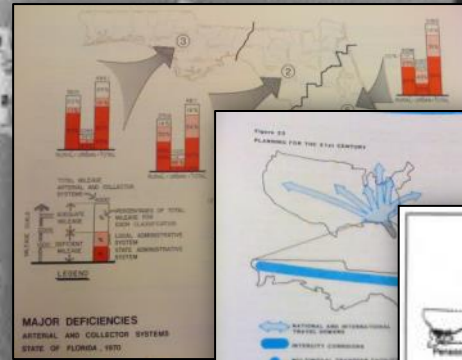
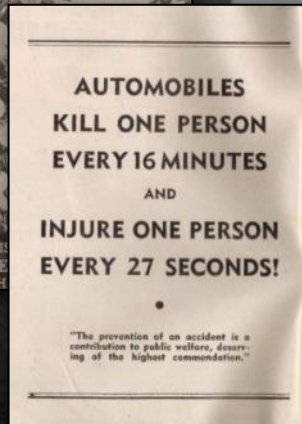
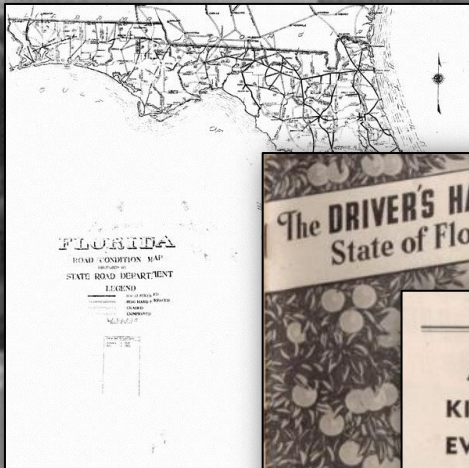


A LOOK BACK



Florida State Road Department

Established 1915



A Look Back: Where Have We Been?

Florida: 1950 to 1960



**Interstate Highway
System created**

1956



**Florida's
Turnpike opens**

1957



**NASA begins
operations in
Cape Canaveral**

1958

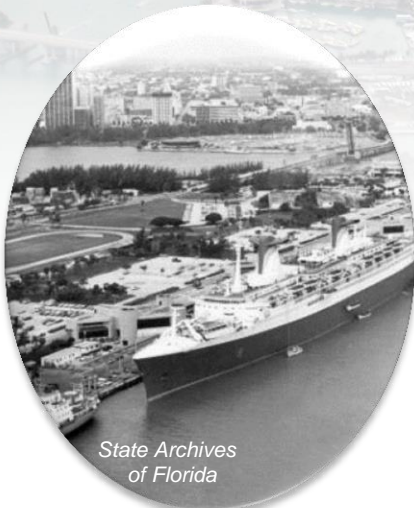


**First segment of
Interstate 4 opens**

1959

A Look Back: Where Have We Been?

Florida: 1960 to 1970



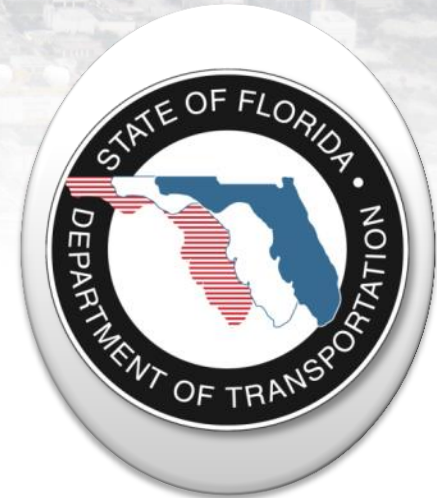
**Construction of new
Port of Miami begins**

1960



**Metropolitan Transit
Authority created in Miami**

1960



**Florida DOT
established**

1969

A Look Back: Where Have We Been?

Florida: 1970 to 1980



**First Metropolitan
Planning Organization
established**

1970



**Amtrak service to
Orlando begins**

1971



**Carnival Cruise
founded**

1972



**Orlando International
Airport opens**

1976

A Look Back: Where Have We Been?

Florida: 1980 to 1990



First Space Shuttle launches

1981



Interstate 95 completed

1987



Tri-Rail service begins

1989

A Look Back: Where Have We Been?

Florida: 1990 to 2000



**Interstate 75
completed**

1993



**Electronic Tolling via
SunPass begins**

1999

A Look Back: Where Have We Been?

Florida: 2000 to Today



**Strategic Intermodal
System created**

2003



**Space Florida
created**

2006



**Freight Mobility and
Trade Plan completed**

2014



SunRail opens

2014

A Look Back: Where Have We Been?

Population Growth

19.5m



4.9m

1960

1970

1980

1990

2000

2010

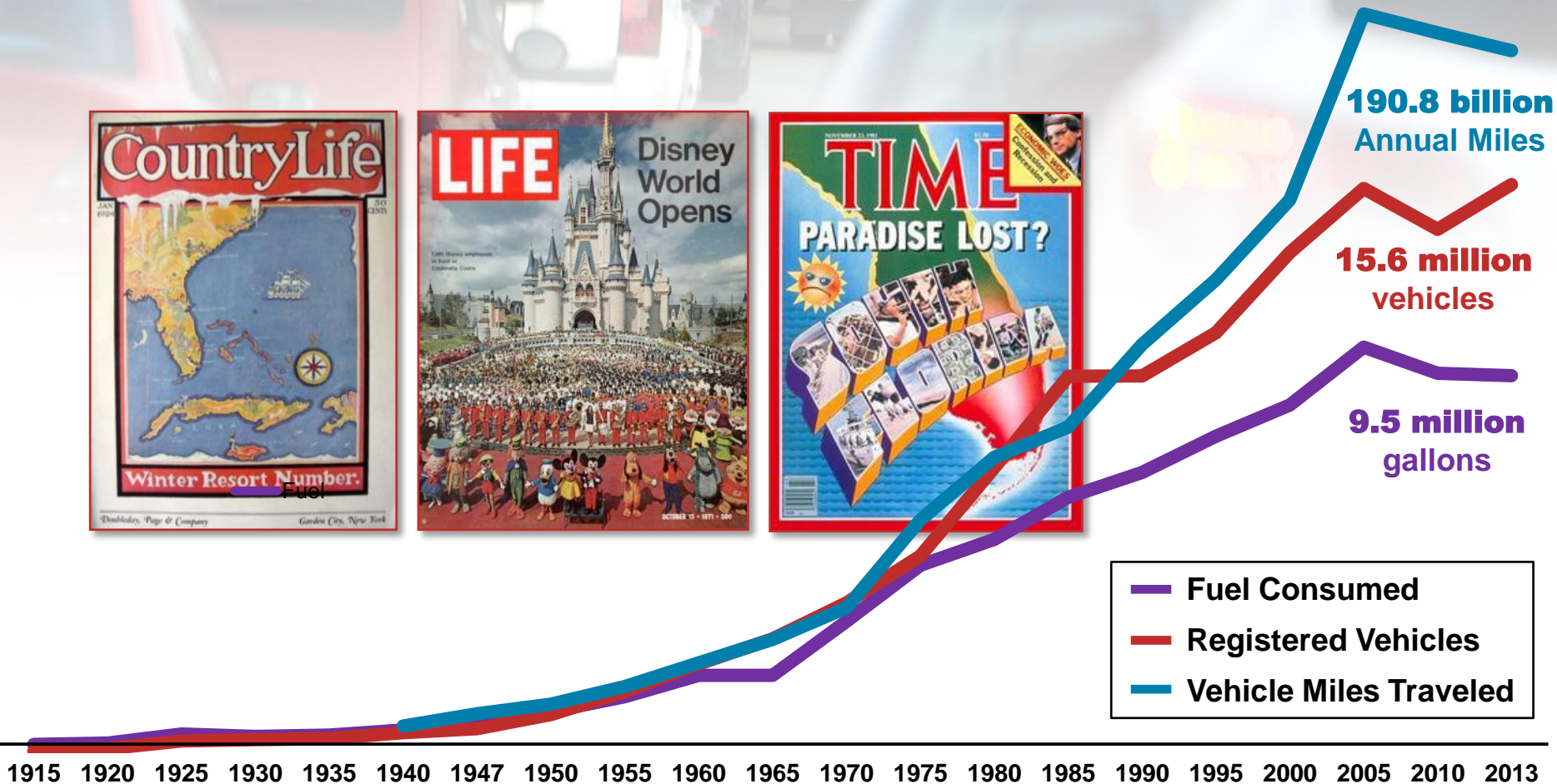
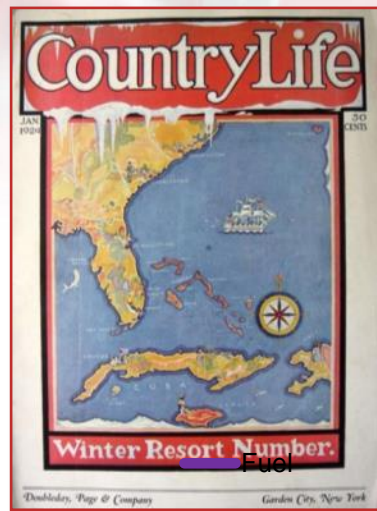
A Look Back: Where Have We Been?

Economic Growth (Gross Domestic Product)



A Look Back: Where Have We Been?

Transportation Trends





A LOOK AT TODAY

Florida's Transportation System



State Highways

12,099 Centerline Miles
6,783 Bridges



Local Roads

107,674 Centerline Miles
5,091 Bridges



Public Transit

30 Urban Transit Systems
23 Rural Transit Systems



Rail

2,753 Railway Miles



Seaports/Waterways

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



Aviation

19 Commercial Airports
110 Public General Aviation
620 Private General Aviation

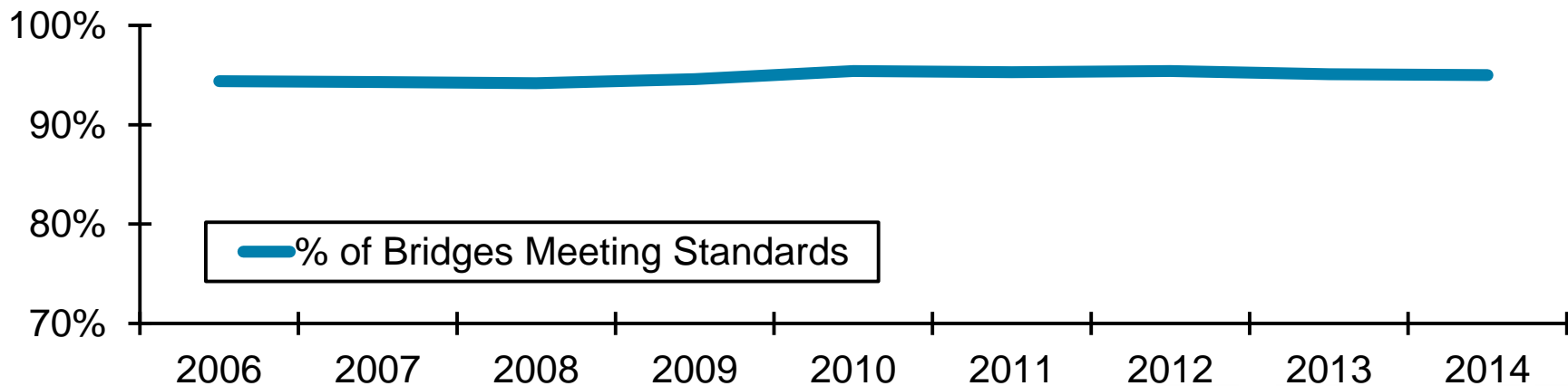
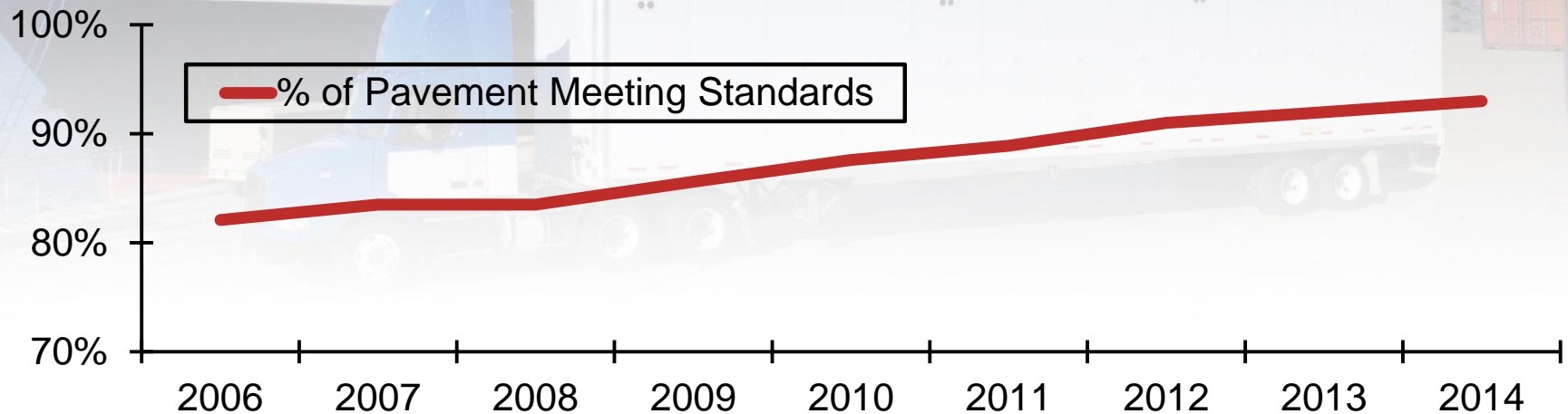


Spaceports

2 Spaceports

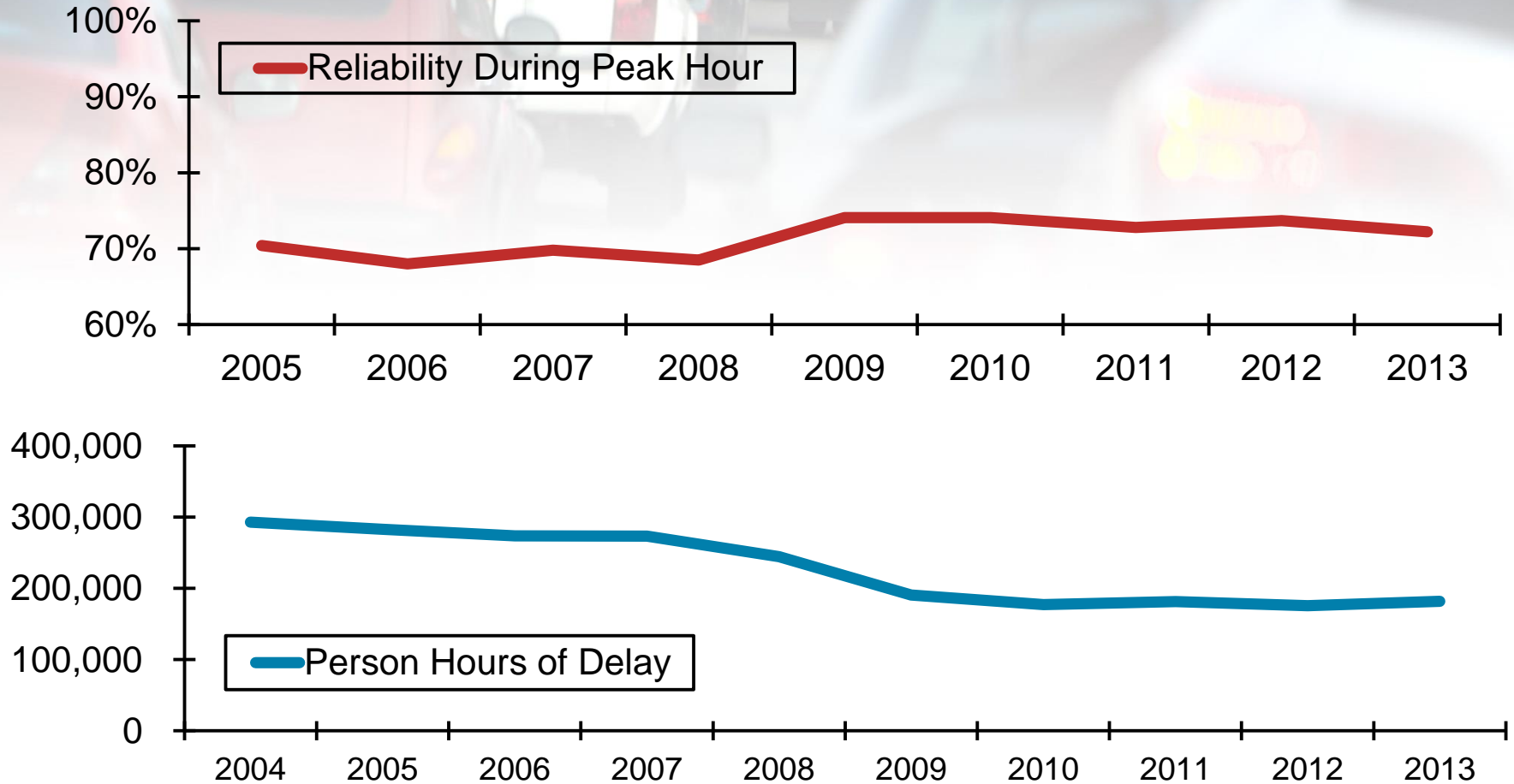
Transportation Trends

Infrastructure Condition Remains Strong



Transportation Trends

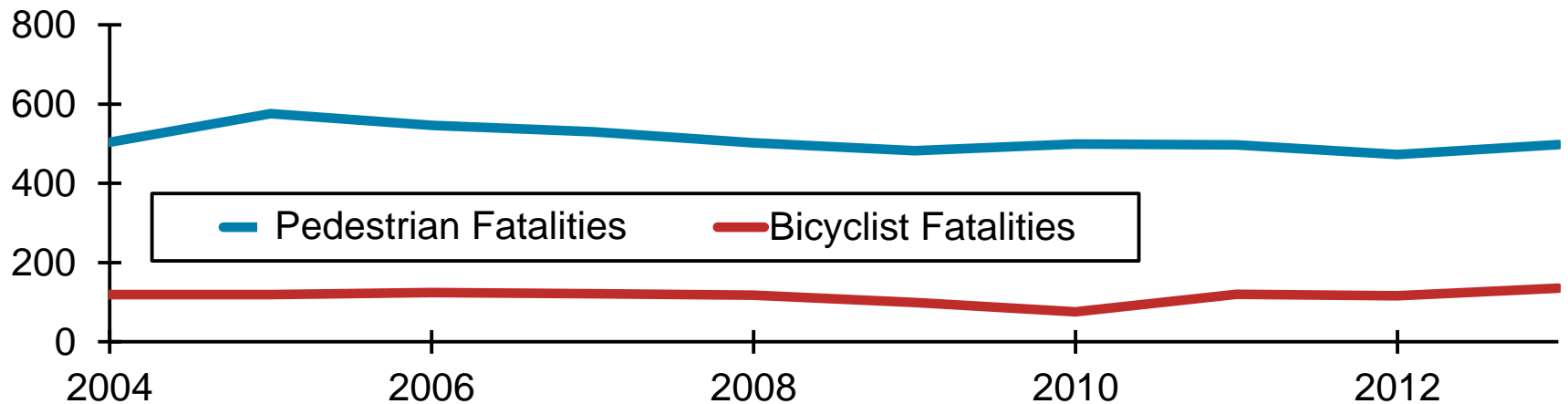
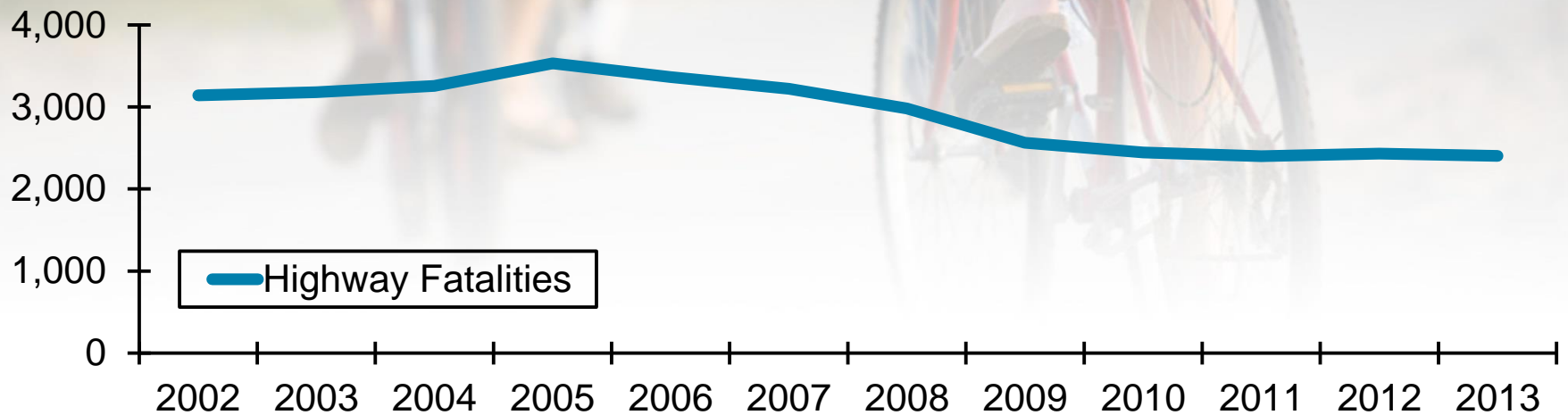
Reliability and Delay on Florida's Highways



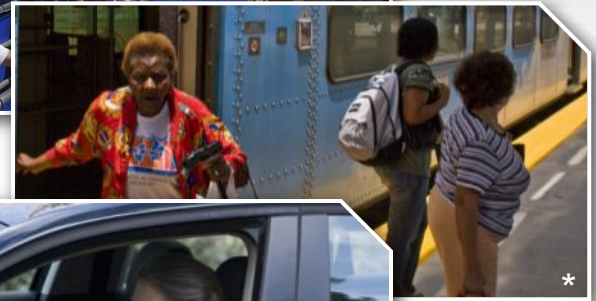
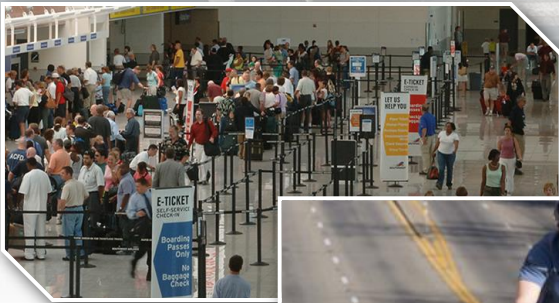
Source: FDOT.

Transportation Trends

Safety Improving, But More To Do



A Look at Today: What Are We Moving?





A LOOK AHEAD: WHERE ARE WE GOING?

Key Trends Shaping Florida's Transportation Future

Demographics

Economy

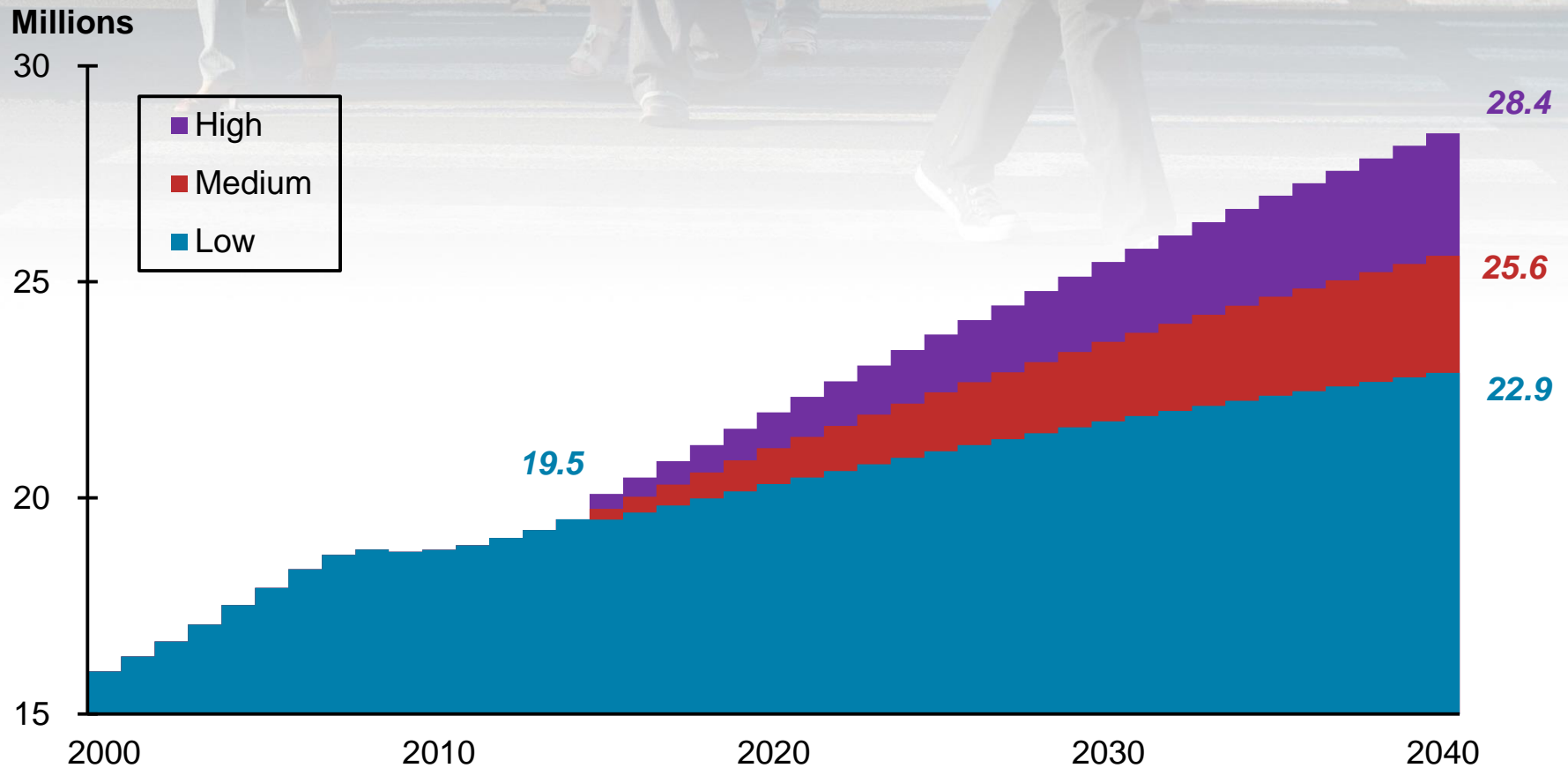
**Land Use and
Environment**

Technology

**Transportation
System**

Demographic Trends

Growing Population



Demographic Trends

Changing Population



Growing Older
24% Over 65 in 2040

Becoming Diverse
30% Hispanic in 2040
19% foreign born in 2010

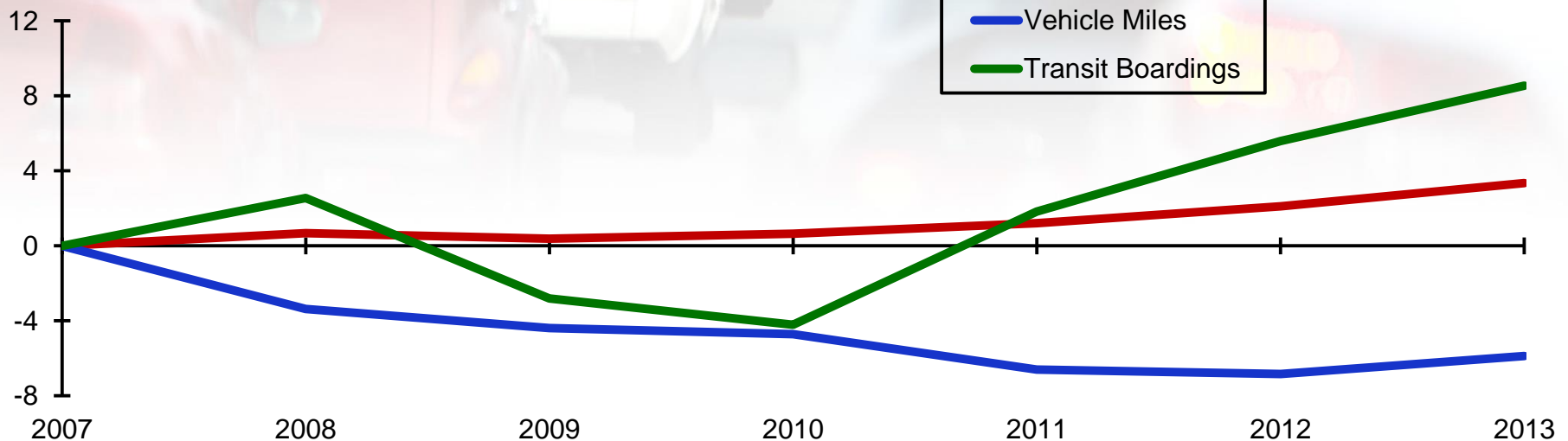


Getting Younger
33% of international immigrants
are under 25 in 2010

Demographic Trends

Uncertainty: Travel Behavior

**Percent Change
from 2007**



Demographic Trends

Uncertainty: Future of Vehicle Travel

Could increase because...

Population continues to grow

Economy continues to grow

Visitors continue to grow

New technologies make travel
safer and more convenient

Could decrease because...

More people choose to live in
compact, mixed use development

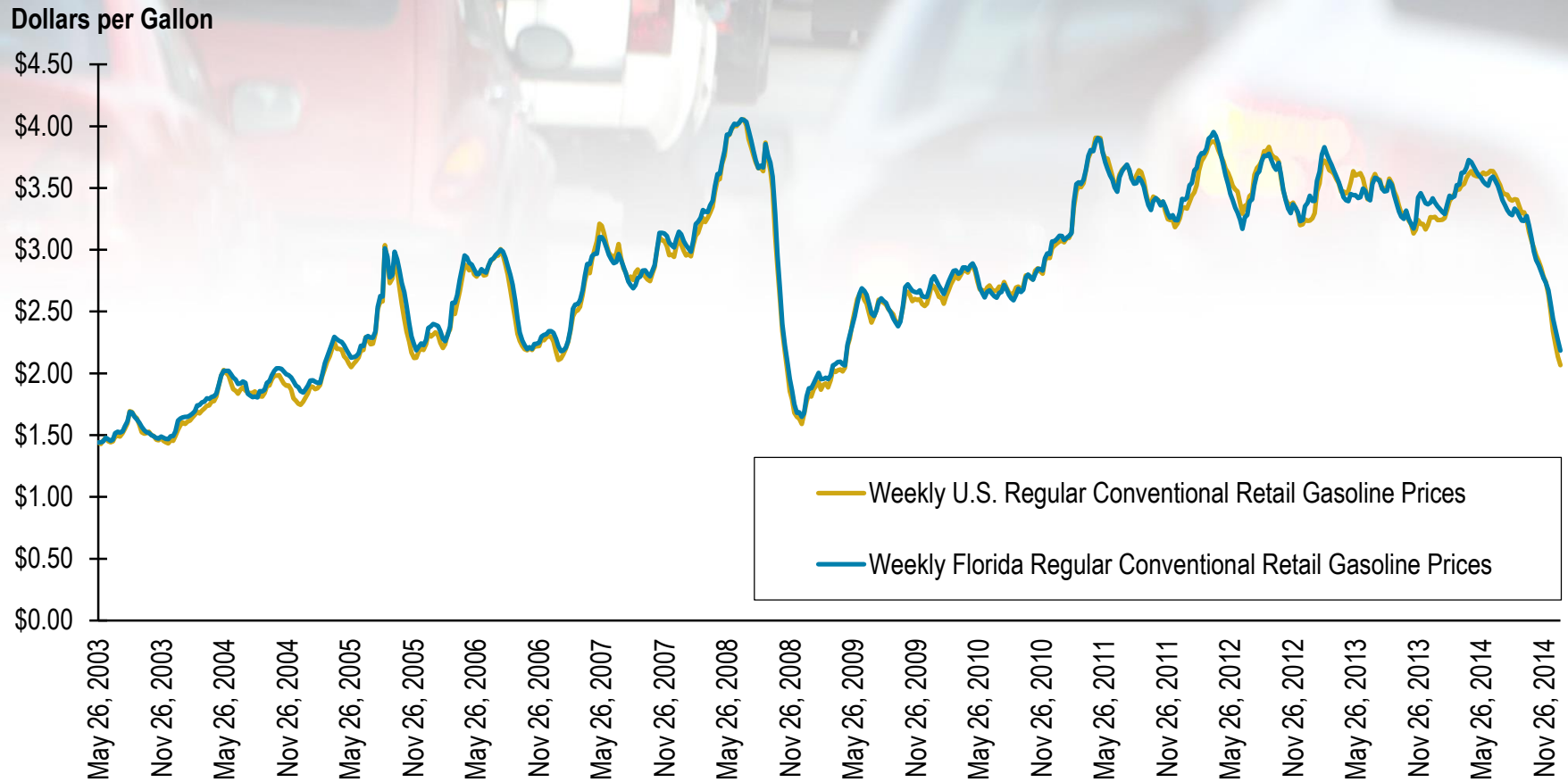
Aging population has limited
mobility needs

Millennials have different
preferences for where to live and
how to travel

Technology substitutes for travel

Economic Trends

Gasoline Prices Declining— for How Long?



Economic Trends

Growing Tourism and Visitors

Visitors to Florida (in millions)

130 (target)

74.6

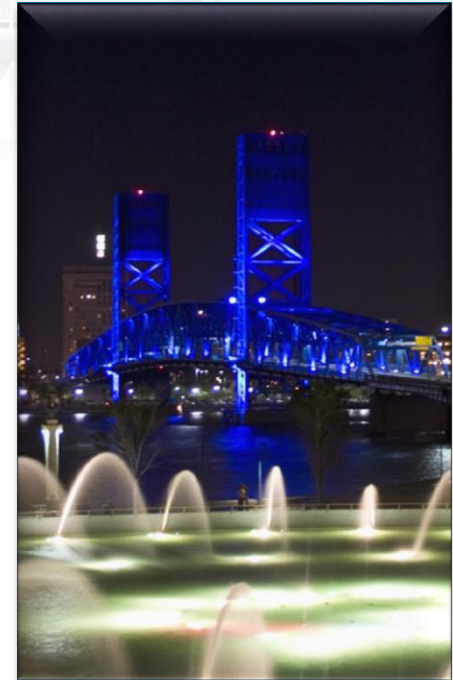


2003

93.7



2013



2030

Economic Trends

Growing Global Trade

Value of Florida-Origin Exports

\$25 Billion



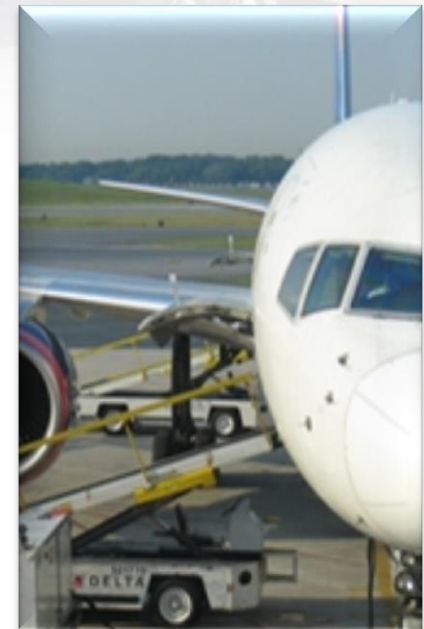
2003

\$55 Billion



2010

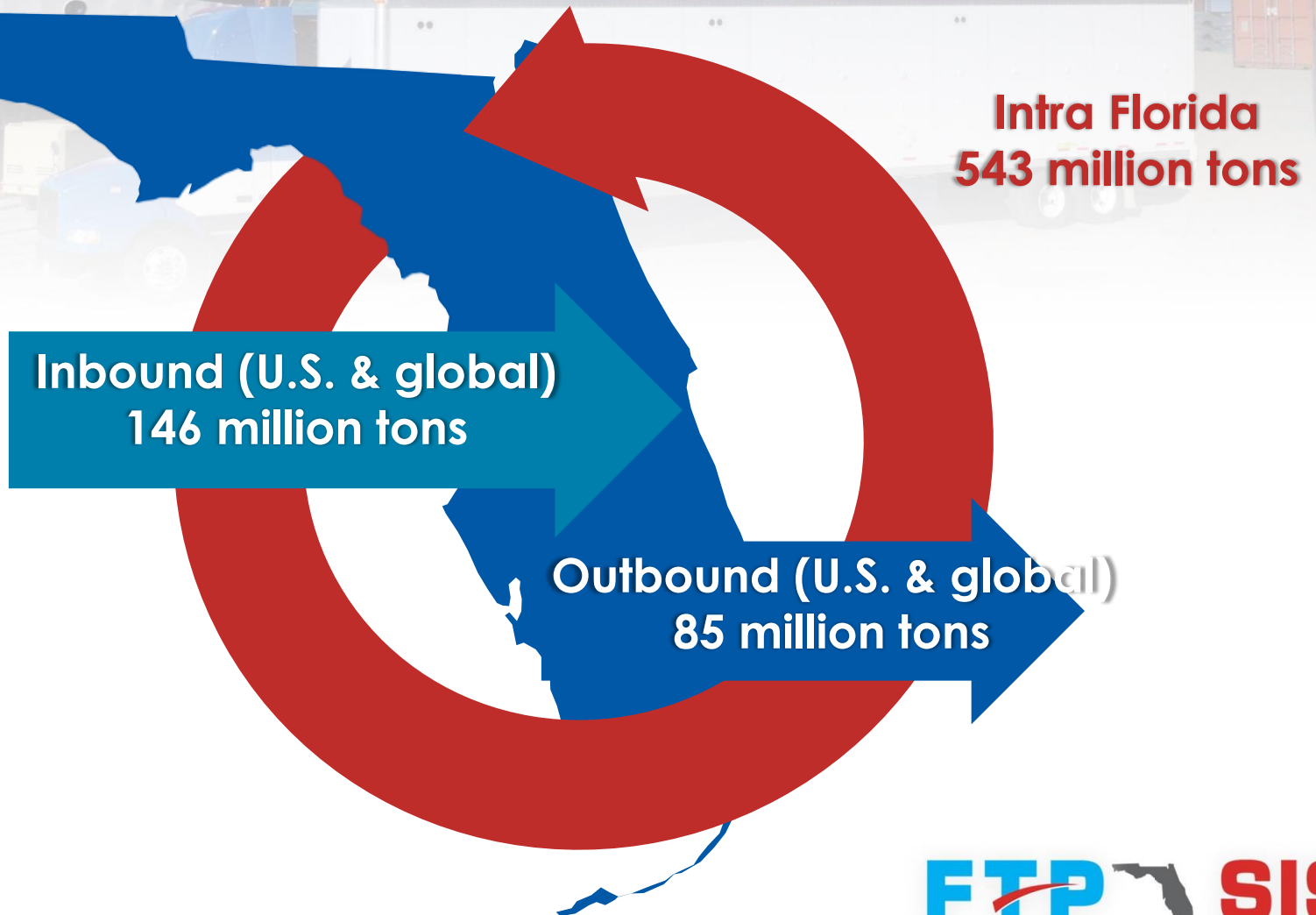
\$110 Billion



???

Economic Trends

But a Freight Imbalance



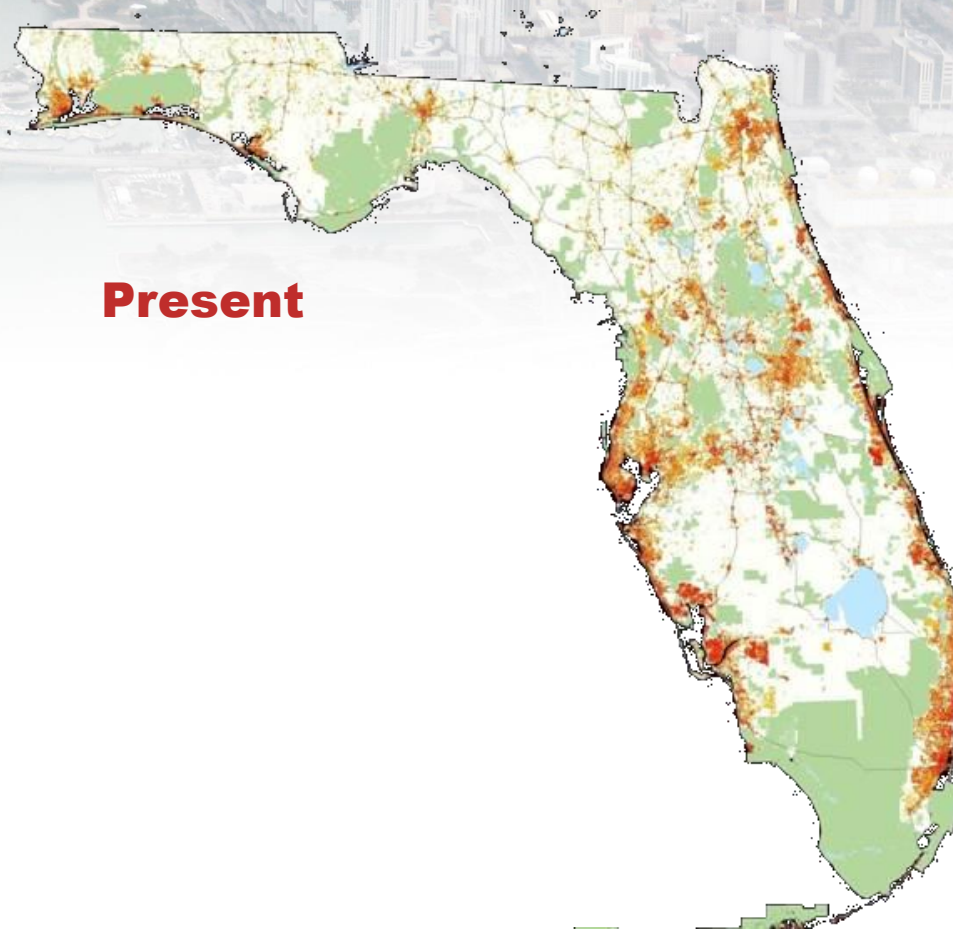
Economic Trends

Toward a More Diverse Economy



Land Use and Environmental Trends

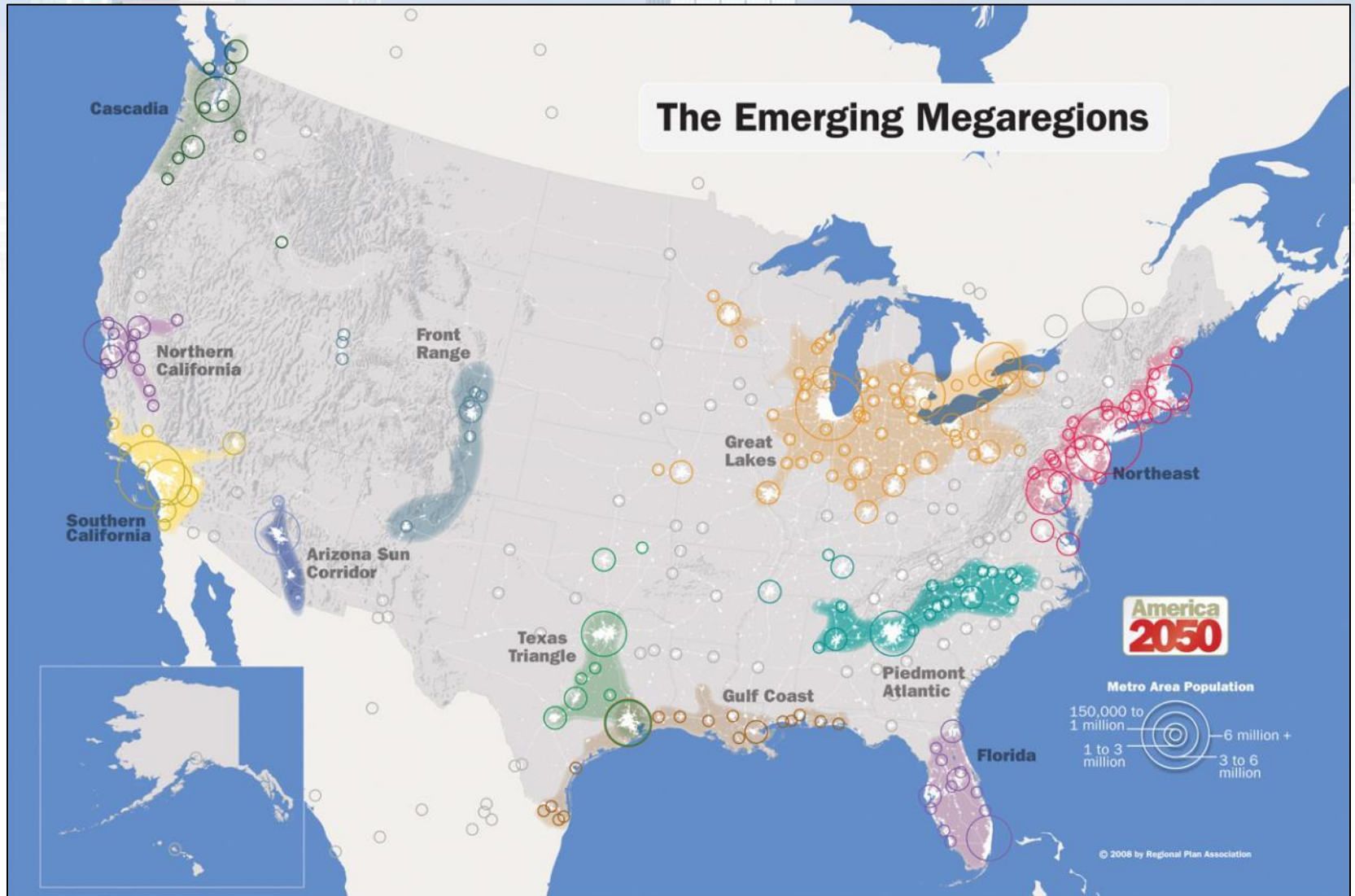
Development Patterns



Present

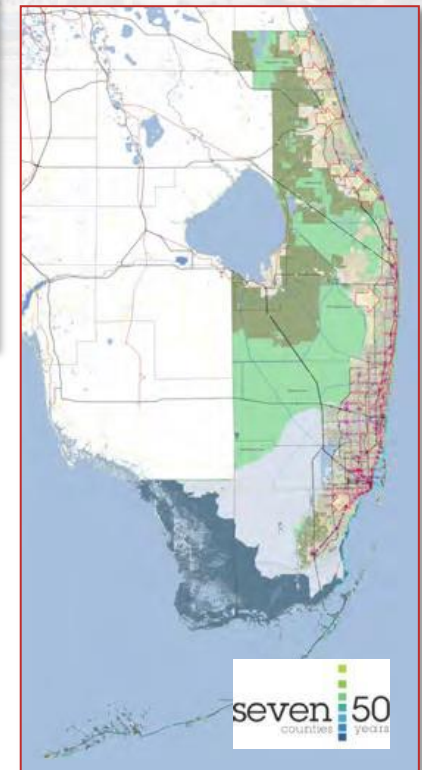
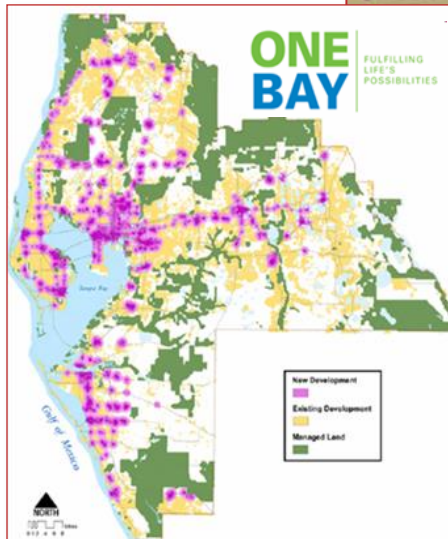
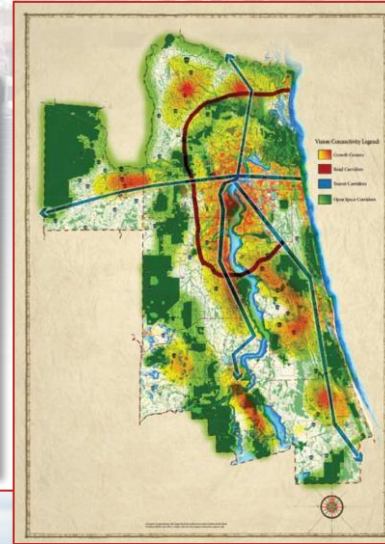
Land Use and Environmental Trends

Shift to Megaregions



Land Use and Environmental Trends

Changing Development Patterns



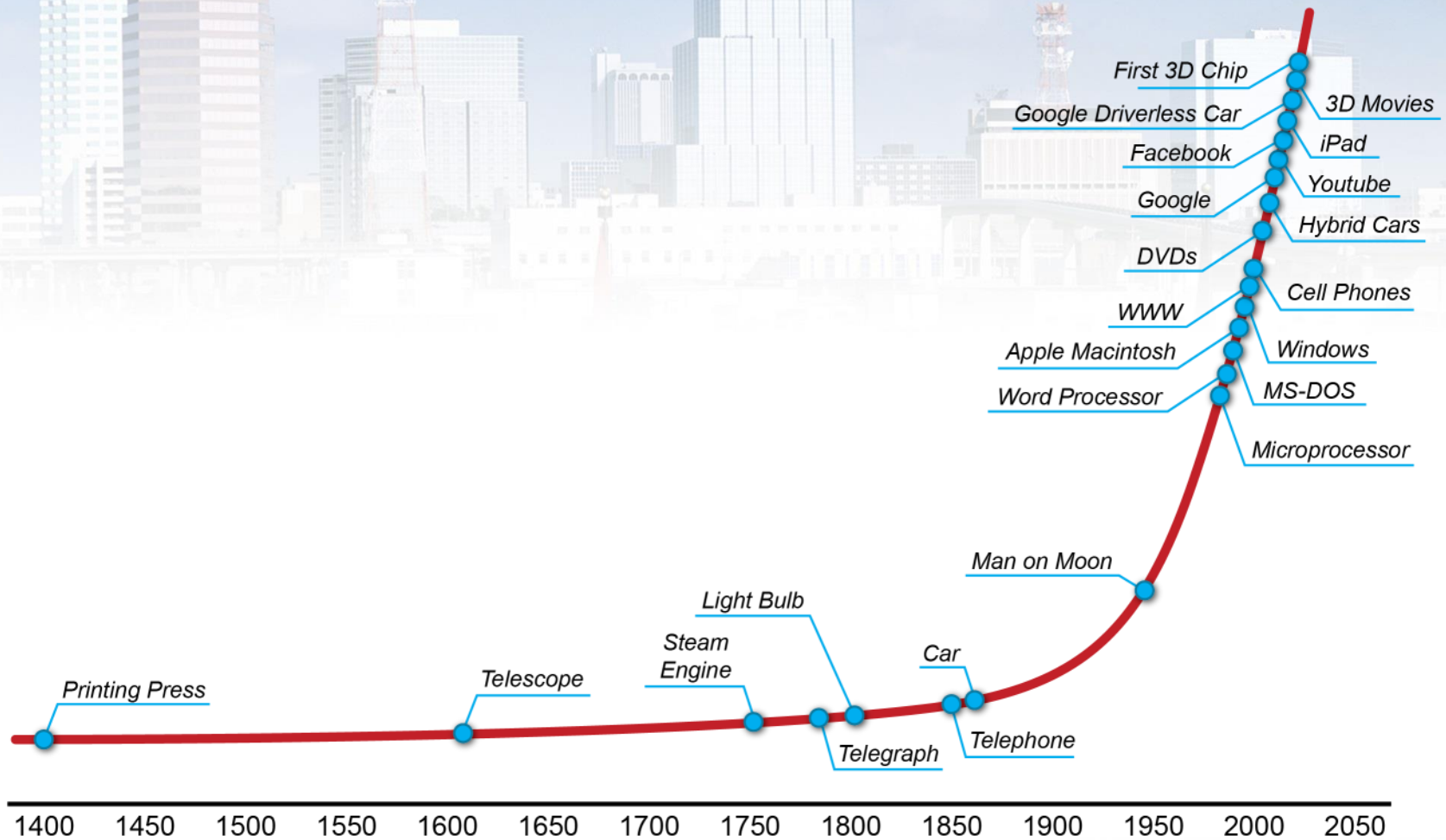
Land Use and Environmental Trends

Environmental Stewardship and Resiliency



Technology Trends

Increasing Pace of Change



Technology Trends

Personal Vehicles



Technology Trends

Public Transportation Vehicles



Technology Trends

Freight Vehicles



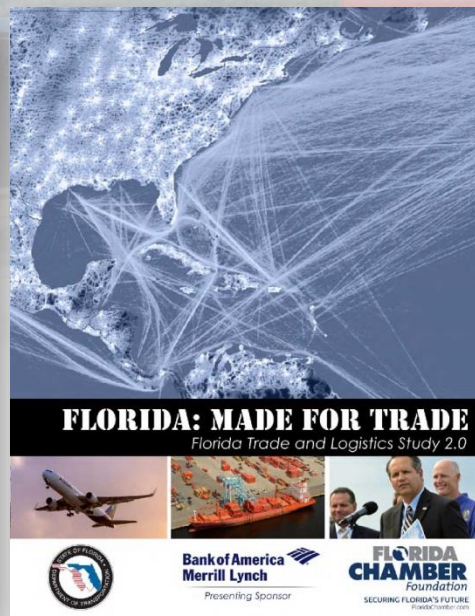
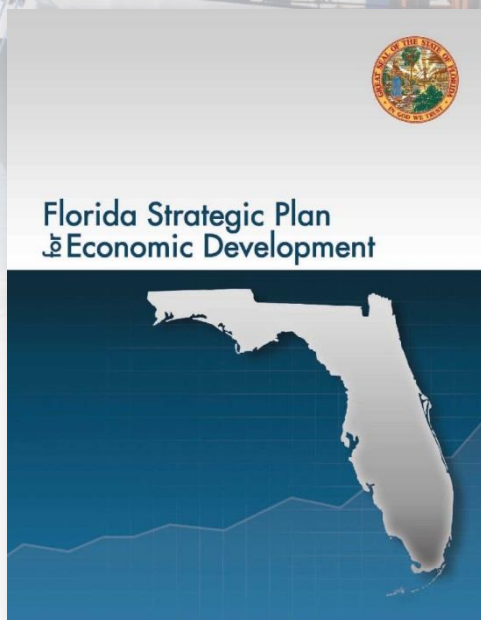
1900-1950

1980

2000

2020

New Plans Since FTP 2060



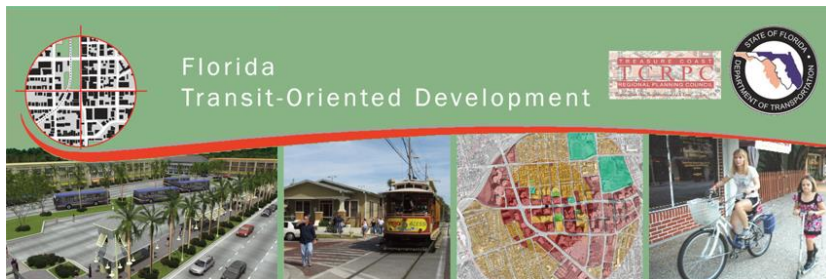
Prevailing Issues



Bike/Pedestrian Safety



Aging Population



Rise of Transit



Complete Streets

Prevailing Issues



Managed Lanes



Future Corridors



Automated Vehicles



Commercial Space



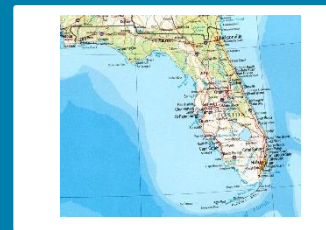
CONVERGENCE



ALTERNATIVE FUTURES

Planning for Multiple Futures

Alternative Futures



Determine Common Themes Among All Futures

Goals, Objectives, Strategies



Groundhog Day



It's a Small World



Tomorrowland



Back to the Future

**Closing
down**

SALE
Stormy Weather

**Everything
must go**

Groundhog Day

Prerecession Trends Return



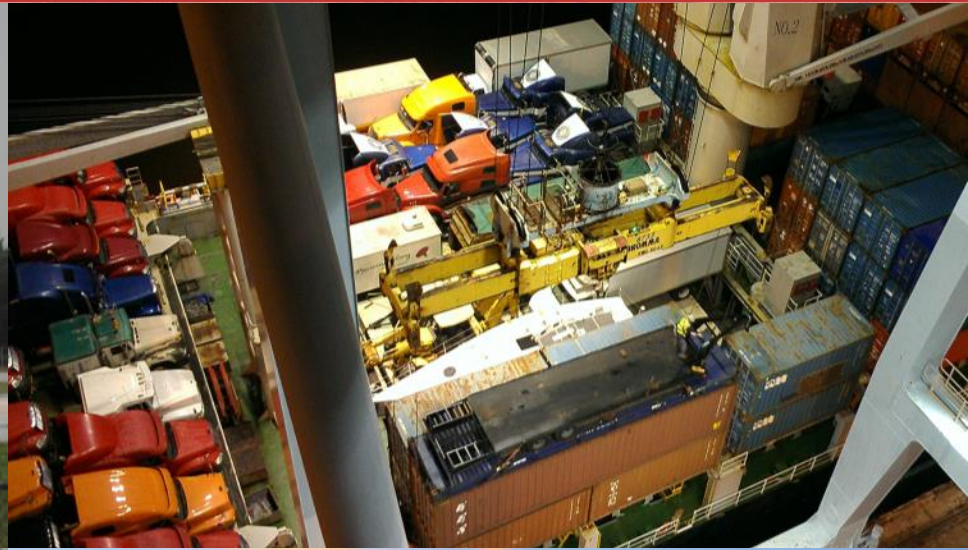
Groundhog Day

Prerecession Trends Continue

Trend	Key Assumptions
Demographics	<ul style="list-style-type: none">• Continued strong population growth• Aging, more diverse population
Economics	<ul style="list-style-type: none">• Agriculture, tourism, construction, services
Land Use and Environment	<ul style="list-style-type: none">• Emphasis on lower density development• Growing pressures on water and natural resources
Technology	<ul style="list-style-type: none">• Current energy mix• Incremental changes to technology
Transportation Demand	<ul style="list-style-type: none">• Reliance on motor vehicles• Return to historic growth in vehicle-miles traveled• Reliance on inbound freight to serve consumer market

It's a Small World

Florida as a Global Trade Hub



It's a Small World

Florida as a Global Trade Hub

Trend	Key Assumptions
Demographics	<ul style="list-style-type: none">• Strong population growth• Shift toward more diverse population
Economics	<ul style="list-style-type: none">• Trade, logistics, manufacturing, related industries
Land Use and Environment	<ul style="list-style-type: none">• Growth in globally connected cities• Growth in inland manufacturing and distribution centers
Technology	<ul style="list-style-type: none">• Advanced logistics systems• Larger freight vehicles/infrastructure
Transportation Demand	<ul style="list-style-type: none">• Increased demand for Florida's air and sea gateways and major rail and truck corridors• Growth in long-distance travel

Tomorrowland

Florida as an Innovation Hub



Tomorrowland

Florida as an Innovation Hub

Trend	Key Assumptions
Demographics	<ul style="list-style-type: none">• Strong population growth• Increasing skilled workers, millennials
Economics	<ul style="list-style-type: none">• Knowledge-based and creative industries
Land Use and Environment	<ul style="list-style-type: none">• Growth in urban centers and around universities and research facilities• Live/work/play/learn neighborhoods
Technology	<ul style="list-style-type: none">• Shift toward automated vehicles and other advanced transport systems• Alternative, renewable energy sources
Transportation Demand	<ul style="list-style-type: none">• Emphasis on travel choices within urban areas• Connections between urban areas• Some substitution of technology for travel

Back to the Future

Return to Focus on Agriculture and Rural Lifestyle



Back to the Future

Return to Focus on Agriculture and Rural Lifestyle

Trend	Key Assumptions
Demographics	<ul style="list-style-type: none">• Continued strong population growth
Economics	<ul style="list-style-type: none">• Agriculture, eco-tourism, specialized manufacturing
Land Use and Environment	<ul style="list-style-type: none">• Some population shift to inland locations• Revitalization of historic communities
Technology	<ul style="list-style-type: none">• Renewable energy and other Florida-based energy sources• Telecommuting, telemedicine, distance learning
Transportation Demand	<ul style="list-style-type: none">• Continued growth in vehicle miles traveled; reliance on cars and trucks• Connectivity to rural areas• Increase in long-distance travel

Stormy Weather

Slow or No Growth in the Future



Stormy Weather

Slow or No Growth in the Future

Trend	Key Assumptions
Demographics	<ul style="list-style-type: none">• Slowing in-migration• Net loss of younger workers
Economics	<ul style="list-style-type: none">• Loss of one or more key industries• Stagnation or decline in number of visitors
Land Use and Environment	<ul style="list-style-type: none">• Growth slows or stalls in some regions
Technology	<ul style="list-style-type: none">• Current energy mix• No widespread adoption of new technologies
Transportation Demand	<ul style="list-style-type: none">• Stagnation or decline in overall vehicle miles traveled

Questions?

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FORUMS](#)[ALTERNATIVE
FUTURES](#)[STEERING
COMMITTEE](#)[ADVISORY
GROUPS](#)[FTP](#)[SIS POLICY
PLAN](#)[RESOURCES](#)[COMMENTS](#)

Review Our Previous Plans

[Florida Transportation Plan](#)[SIS Strategic Plan](#)

About Us

The Florida Department of Transportation (FDOT) is updating 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

Florida's Transportation Visioning Summit took place on December 17, 2014 in Orlando. More than 200 people participated

A Look at Today: Florida's Transportation System



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State of Florida
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6,763 Bridges



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Spaceports
Special District
2 Spaceports
5 Active Launch Facilities

