

# Freight Moves Florida: Planning for Trade & Logistics in Our Changing Economy

*September 11, 2013*

*Florida APA Conference*



*Juan Flores, FDOT*

*Alexander Trauger, MetroPlan Orlando*

*Patricia Steed, Central Florida RPC*

*John Kaliski, Cambridge Systematics*

*Rob Palmer, RS&H*

# Agenda



## Statewide Initiatives

- ❖ Florida Trade & Logistics Study: 2.0
- ❖ Florida Freight Mobility & Trade Plan

## Regional Plans/Perspectives

- ❖ North Florida - Framework Plan
- ❖ Central Florida - Economy in Motion
- ❖ Heartland - 2060 Building a Resilient Region

## Panel Discussion

- ❖ Moderated Session
- ❖ Q/A from Audience

# **FLORIDA**

## **Freight Mobility & Trade Plan**

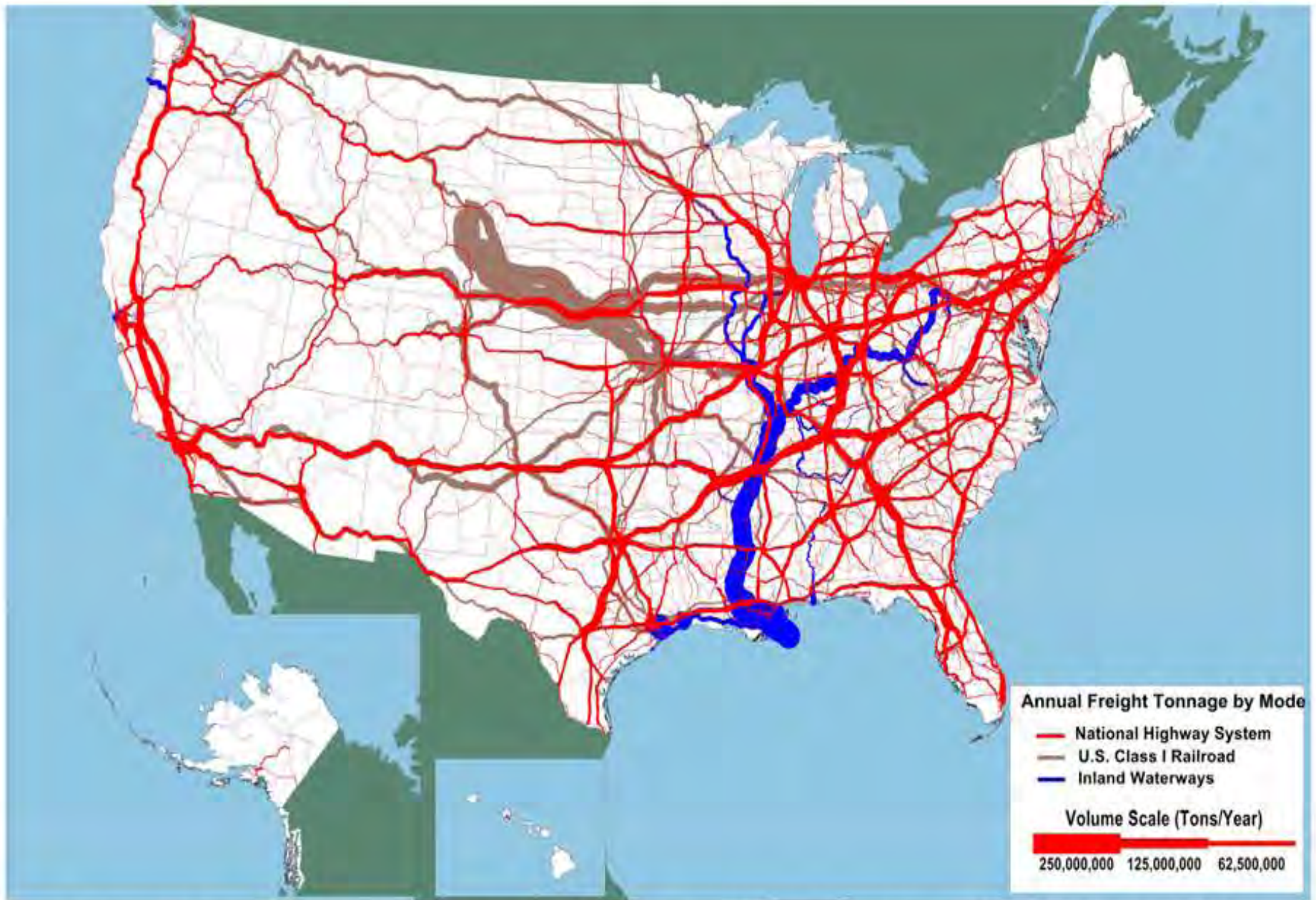


**FLORIDA DEPARTMENT OF TRANSPORTATION**

**2013 APA Florida Annual Conference  
September 11, 2013  
Orlando, FL**







Sources: Highways: U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework, Version 3.4, 2012. Rail: Based on Surface Transportation Board, Annual Carload Waybill Sample and rail freight flow assignments done by Oak Ridge National Laboratory. Inland Waterways: U.S. Army Corps of Engineers (USACE), Annual Vessel Operating Activity and Lock Performance Monitoring System data, as processed for USACE by the Tennessee Valley Authority; and USACE, Institute for Water Resources, Waterborne Foreign Trade Data, Water flow assignments done by Oak Ridge National Laboratory.

### LATTS Strategic Highway System



LATTS Strategic Airport System



### LATTS Strategic System: Water Ports



LATTS Strategic Rail System





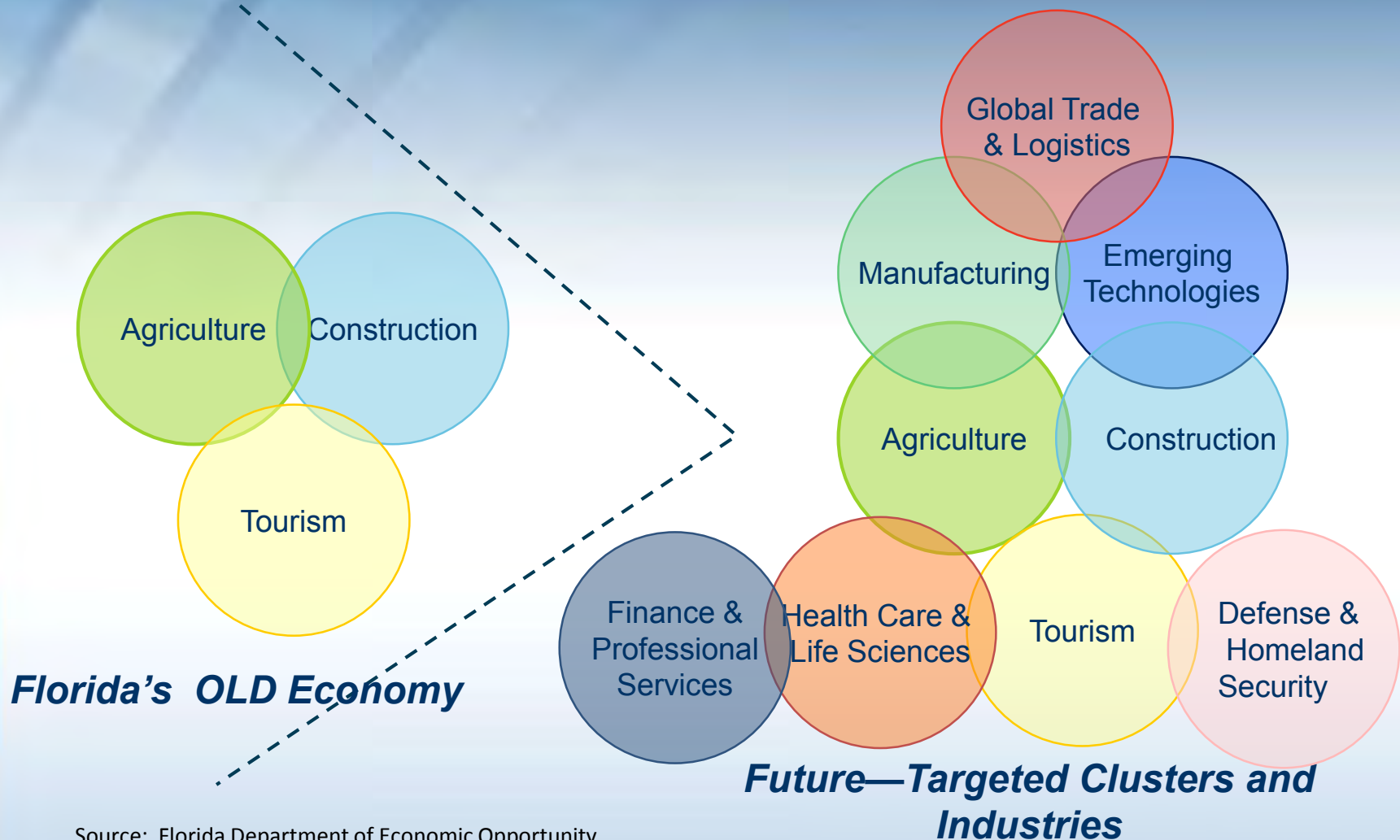
# State of Florida by the #s Freight and the Economy—so *what?*

## Florida .....

**3<sup>rd</sup> largest Logistics and Distribution in the Nation**  
**5<sup>th</sup> number of Logistics and Distribution jobs**

<u>Component</u>	<u>Owner/Operator</u>	<u>Facilities</u>
State Highways	State of Florida	12,076 centerline miles; 6,661 bridges
Local Roads	Local governments	109,683 centerline miles; 5,326 bridges
Public Transit	Local agencies/ SFRTA	29 urban fixed-route transit agencies 6 rural fixed-route transit agencies
Rail	Private sector*	2,786 railway miles
Seaports	Local agencies	15 seaports, 7 with cruises “Gateways”
Waterways	Federal & state governments	3,475 miles of intracoastal & inland routes
Aviation	Local agencies	19 commercial airports 110 public general aviation 650 private general aviation
Spaceports	Special District	2 spaceports; 5 active launch facilities

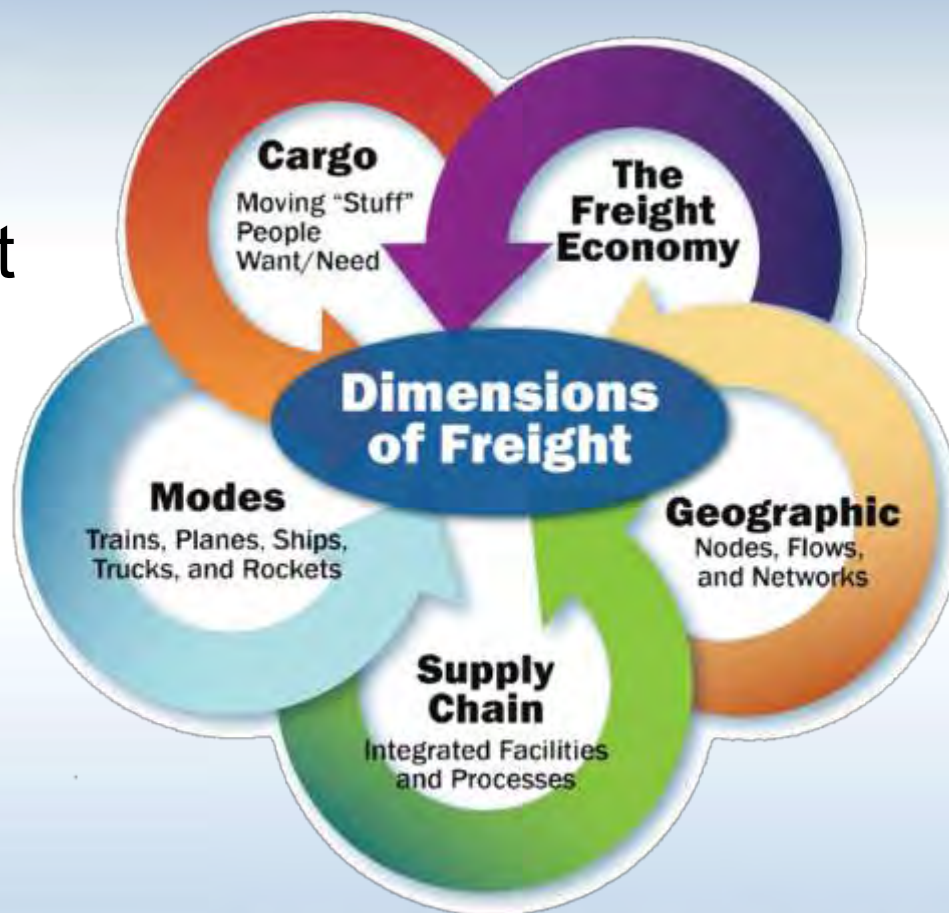
# Changing Industry Composition



Source: Florida Department of Economic Opportunity

# Florida's Freight System: System Demand, Trends, and Performance

- WHAT freight is—  
A deeper look at what Florida Freight System looks like now and in the future





# Legal Mandates

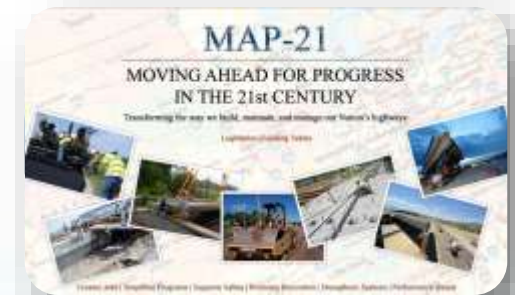


## Florida House Bill 599

- Increasing
  - the flow of domestic and international trade through the state's seaports and airports
  - the development of intermodal logistic centers in the state
  - the development of manufacturing industries in the state
  - the implementation of compressed natural gas (CNG), liquefied natural gas (LNG), and propane energy policies

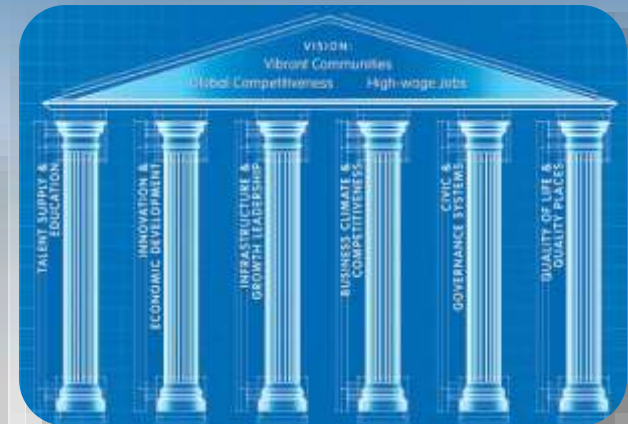
## Federal MAP-21 – Section 1118

- Identify trends, needs and issues
- Describe policies, strategies and performance measures to guide investment decisions
- Describe how plan will improve state ability to meet national freight goals
- Consider innovative technologies and operational strategies
- Describe improvements required to reduce deterioration of heavy truck routes
- Provide an inventory of facilities with freight mobility issues and strategies to address those issues.



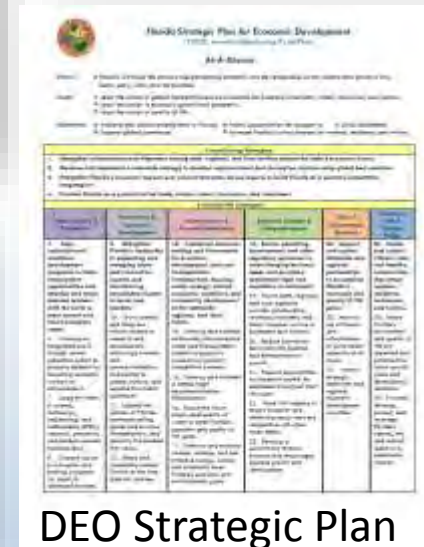
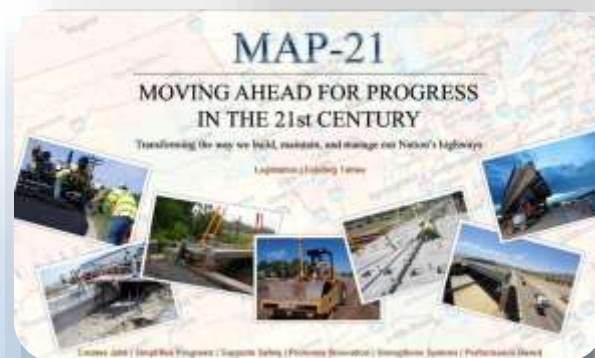
# Addressing the Challenges: Policy Directions

- HOW do we accomplish our goals: Objectives and Strategies developed with stakeholder help



FL Chamber 6 Pillars

House Bill 599

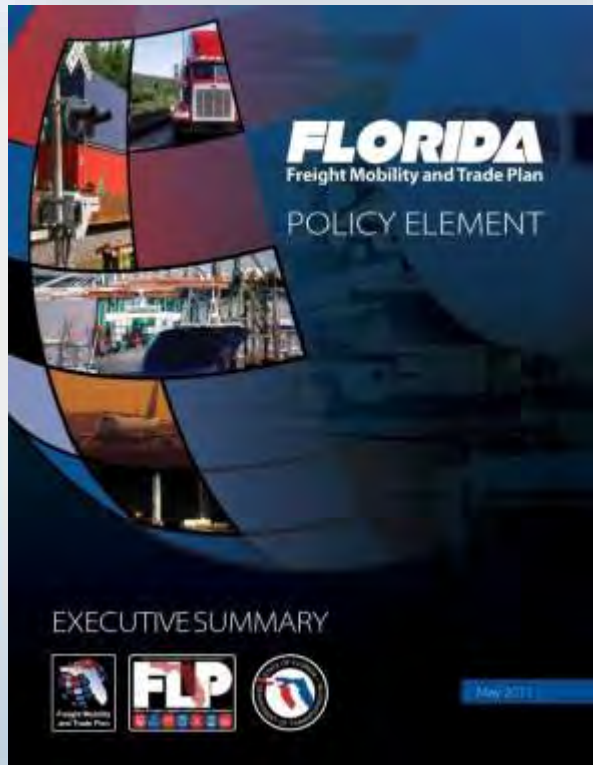


DEO Strategic Plan

# Framing Florida's Freight Mobility & Trade Plan

***“Florida has a once in a lifetime opportunity, with the expansion of the Panama Canal, to transform the state’s economy to become a global hub of trade, logistics and export oriented manufacturing activities...”***

**– Governor Rick Scott**



## **Policy Element : Adopted 6/19/13**

- *Lays out policy framework*
- *Identifies responsibilities for implementation*
- *Meets requirements of HB 599*

## **Investment Element – By 7/1/14**

Identifies freight needs

Identifies criteria for state investment in freight

Prioritizes freight investments across modes

Meets requirements of MAP-21



# Extensive Partner Involvement

## *Over 750 Floridians Participated*



- The FMTP was developed with the participation of public and private sector representatives **from all regions of the state, and included many MPO/TPOs.**
- The strategies developed will help guide future freight investments and allow the state to select freight projects strategically.

# **FMTP Policy Objectives & Strategies**

- 1** Capitalize on the Freight Transportation Advantages of Florida Through Collaboration on Economic Development, Trade, and Logistics Programs
- 2** Increase Operational Efficiency of Goods Movement
- 3** Minimize Costs in the Supply Chain
- 4** Align Public and Private Efforts for Trade and Logistics
- 5** Raise Awareness and Support for Freight Movement Investments
- 6** Develop a Balanced Transportation Planning and Investment Model That Considers and Integrates All Forms of Transportation
- 7** Transform the FDOT's Organizational Culture to Include Consideration of Supply Chain and Freight Movement Issues

# Just Deliver it...

Modal Selection Criteria by Industry—

**Transit Times**

**Reliability**

**Cost**

**Capacity**

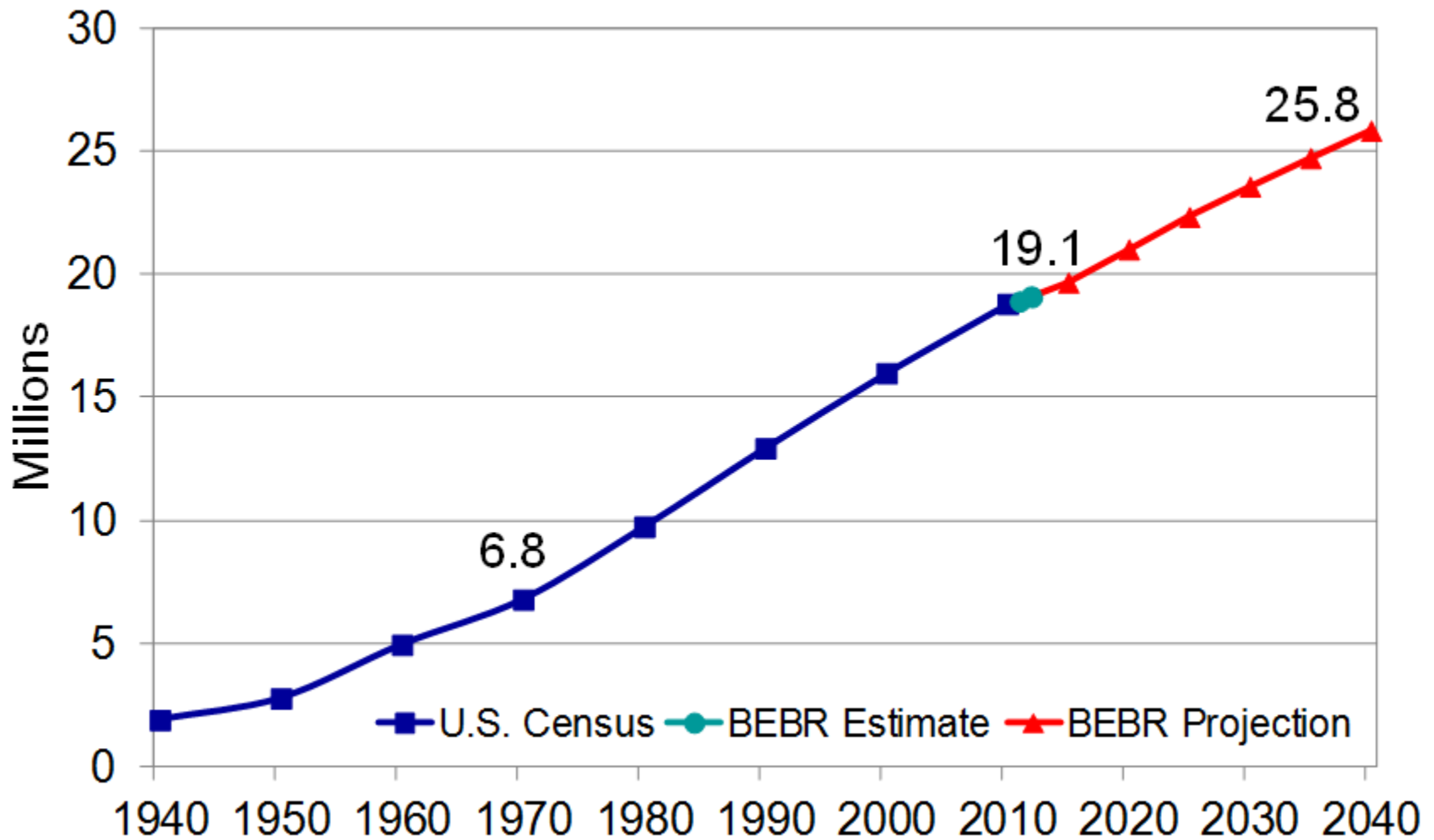
**Safety**

**Accessibility**



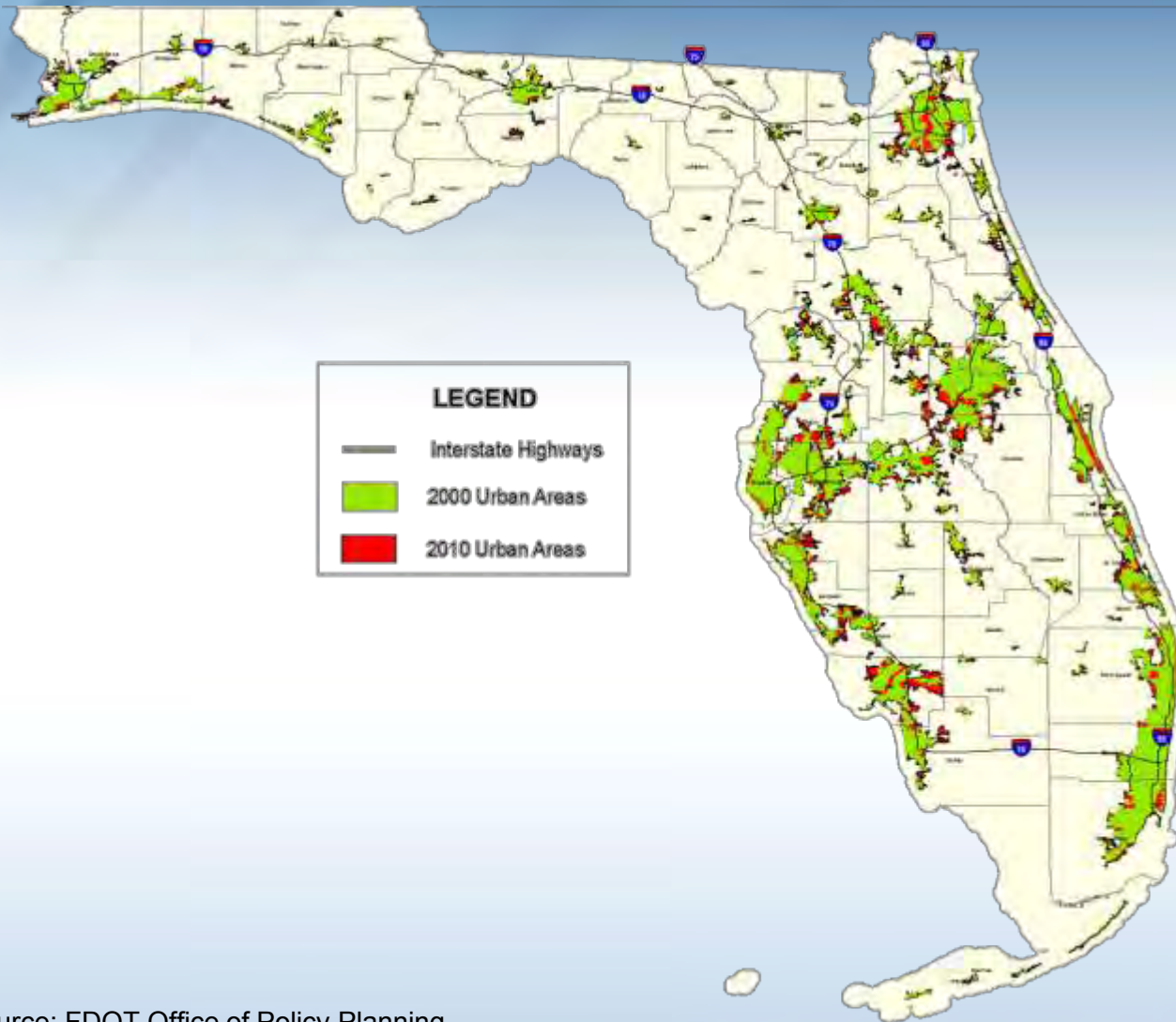


# Population is still Growing



Sources: Census Bureau; University of Florida, Bureau of Economic and Business Research (BEBR)

# Urbanized Areas Expanding



Source: FDOT Office of Policy Planning

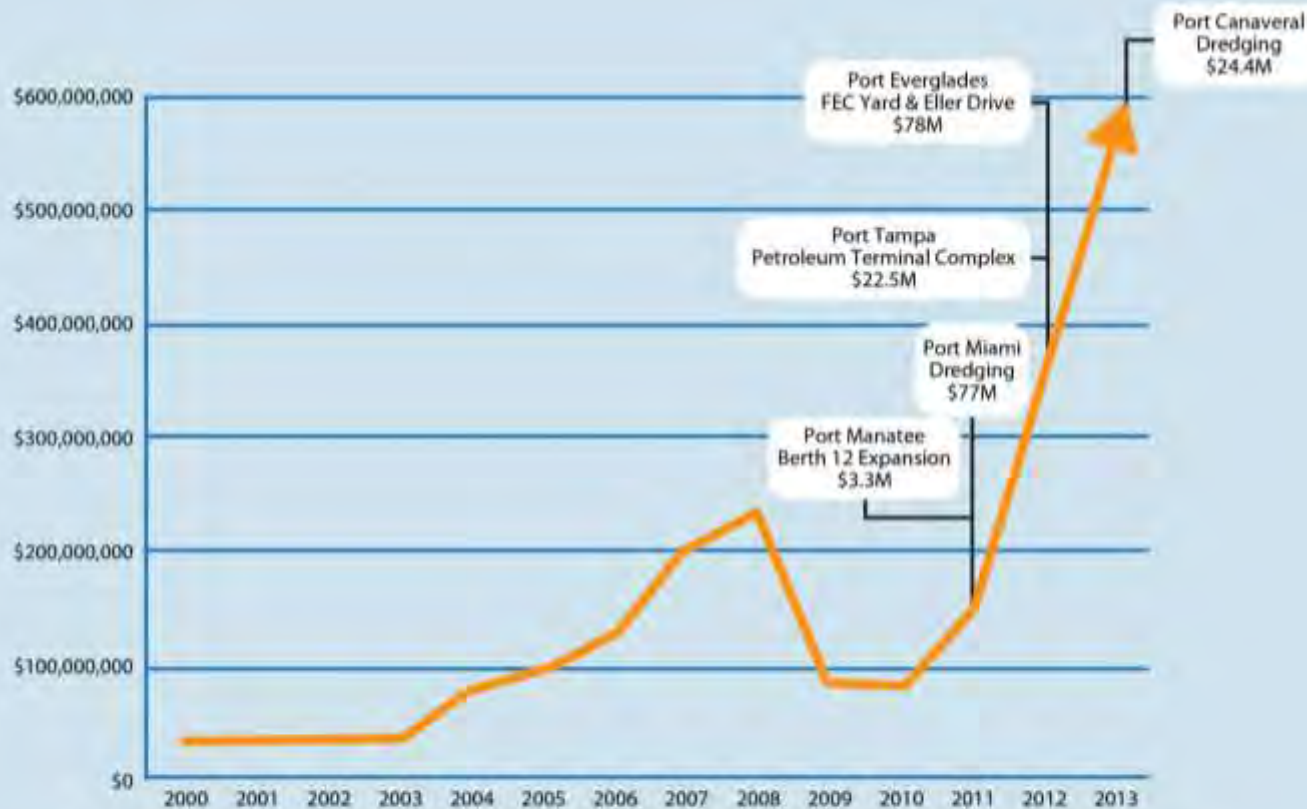
# SIS Adopted Work Program - Modal

- **\$1.2 Billion** in SIS Modal Funds
  - \$702 Million State Managed
  - \$515 Million Matching Funds
- Funding by Mode
  - **Aviation** - \$343.7 Million
  - **Space** - \$23.5 Million
  - **Rail**- \$321.2 Million
  - **Seaport** - \$413.9 Million
  - **Transit** - \$101.6 Million
  - **Intermodal** - \$13 Million





# Florida is already Investing in International Trade



In the past 20 Months, Florida has nearly tripled its investments in the state's port system. Under Governor Scott's leadership and FDOT's initiatives, Florida's investment in expanding and modernizing its seaports has grown from **\$148.8 million in 2011**, to **\$562.7 million in 2013**.

# Regional Freight Plans

- North Florida Freight, Logistics and Intermodal Framework Plan
- Tampa Bay Regional Goods Movement Study
- Central Florida Freight, Goods and Services Mobility Strategy Plan (update underway)
- Southeast Florida Regional Freight Plan (update underway)



# Freight PARTNERSHIPS





# Metropolitan Planning Organization Advisory Council (MPOAC)

26 MPO/TPOs in Florida

- Regional 'Freight' Planning
- State Trade Freight Plan
- Trade and Logistics 2.0

MPOAC Freight Committee

- Election of Chairs—
  - Greg Stuart, Broward MPO
  - Gary Huttman, Metroplan Orlando
  - FHWA and FDOT involvement



# Freight Coordinators

**District 1:** Terry Beacham, [Terry.beacham@dot.state.fl.us](mailto:Terry.beacham@dot.state.fl.us), 863-519-2388 (Fort Myers)

**District 2:** Thomas Hill, [Thomas.hill@dot.state.fl.us](mailto:Thomas.hill@dot.state.fl.us), 904-360-5414 (Jacksonville)

**District 3:** Mike Lewis, [Mike.lewis@dot.state.fl.us](mailto:Mike.lewis@dot.state.fl.us), 850-330-1545 (Panama City)

**District 4:** Jeff Weidner, [Jeff.weidner@dot.state.fl.us](mailto:Jeff.weidner@dot.state.fl.us), 954-777-4670 (Ft. Lauderdale)

**District 5:** John Zielinski, [John.zielinski@dot.state.fl.us](mailto:John.zielinski@dot.state.fl.us), 407-482-7868 (Orlando)

**District 6:** Dionne Richardson, [Dionne.richardson@dot.state.fl.us](mailto:Dionne.richardson@dot.state.fl.us), 305-470-5292 (Miami)

**District 7:** George Boyle, [George.boyle@dot.state.fl.us](mailto:George.boyle@dot.state.fl.us), 813-975-6409 (Tampa)

**Turnpike:** Eric Gordon, [Eric.gordin@dot.state.fl.us](mailto:Eric.gordin@dot.state.fl.us), 407-264-3316 (Orlando)

**FHWA:** Greg Hall, D2 Transportation Engineer and Freight Team Lead, [glhall@dot.gov](mailto:glhall@dot.gov) (Tallahassee)

**Central Office:** Ed Lee, Project Manager [robert.lee@dot.state.fl.us](mailto:robert.lee@dot.state.fl.us), 850-414-4535 (Tallahassee)

# Intermodal Logistic Centers Investment

- ***FDOT Investment of \$5 Million***
- ***“Skin in the Game”***
  - ***\$42 Million of Private Sector Contribution***
  - ***Creation of an Est. 1,213 total Florida Jobs***

## INTERMODAL TRANSFER IMPROVEMENT

### PORT OF PANAMA CITY INTERMODAL DISTRIBUTION CENTER



12.6%  
Project  
ROI

23

Jobs Created



## TRANSFER & BULK RAIL EXPANSION

### KEYSTONE ILC TERMINAL



2,100

Linear Feet  
of Rail  
Constructed

+



1

Bulk  
Transloading  
Facility

99

Jobs  
Created



## ILC GRANT HIGHLIGHTS

### PORT MANATEE COMMERCE CENTER

76 New Direct  
High Wage Jobs



## INVESTING IN A BIG RETURN

### SOUTH FLORIDA LOGISTICS CENTER

27.4%

Project  
ROI

\$5.9 M

Increase  
in tax  
revenues



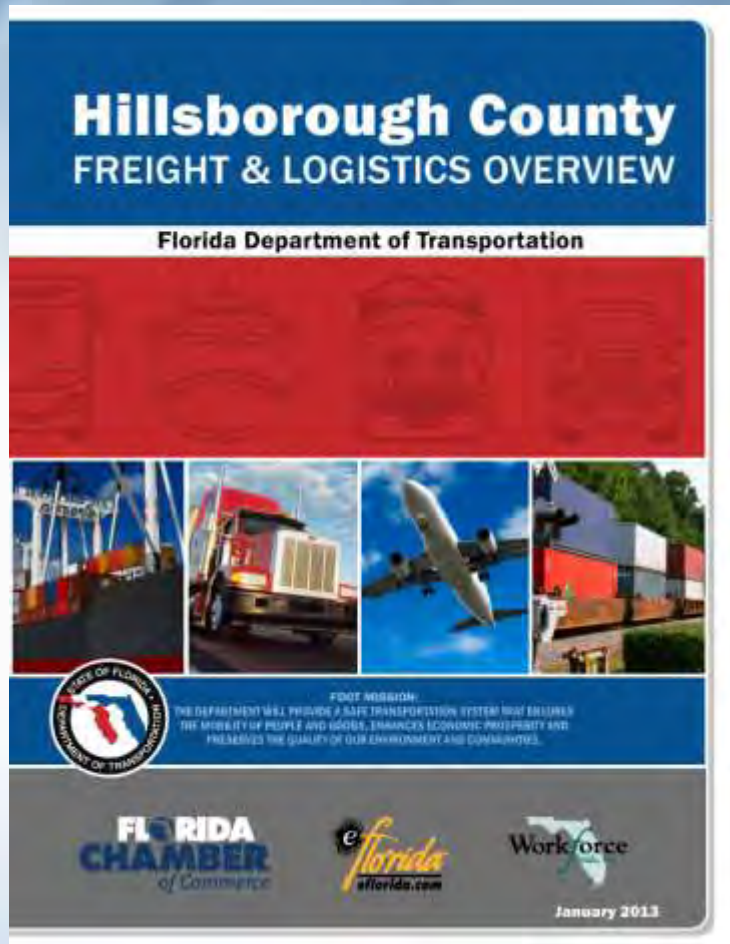
1,015

Jobs Created





# 67 County Freight and Logistics brochures



- Imports/Exports
- County Map
- Top Employment Sectors
- Top Business Sectors for Retention and Promotion
- Top International Trade Partners
- Scan Code & Contacts

[www.FreightMovesFlorida.com](http://www.FreightMovesFlorida.com)

# No Silver Bullet approach...

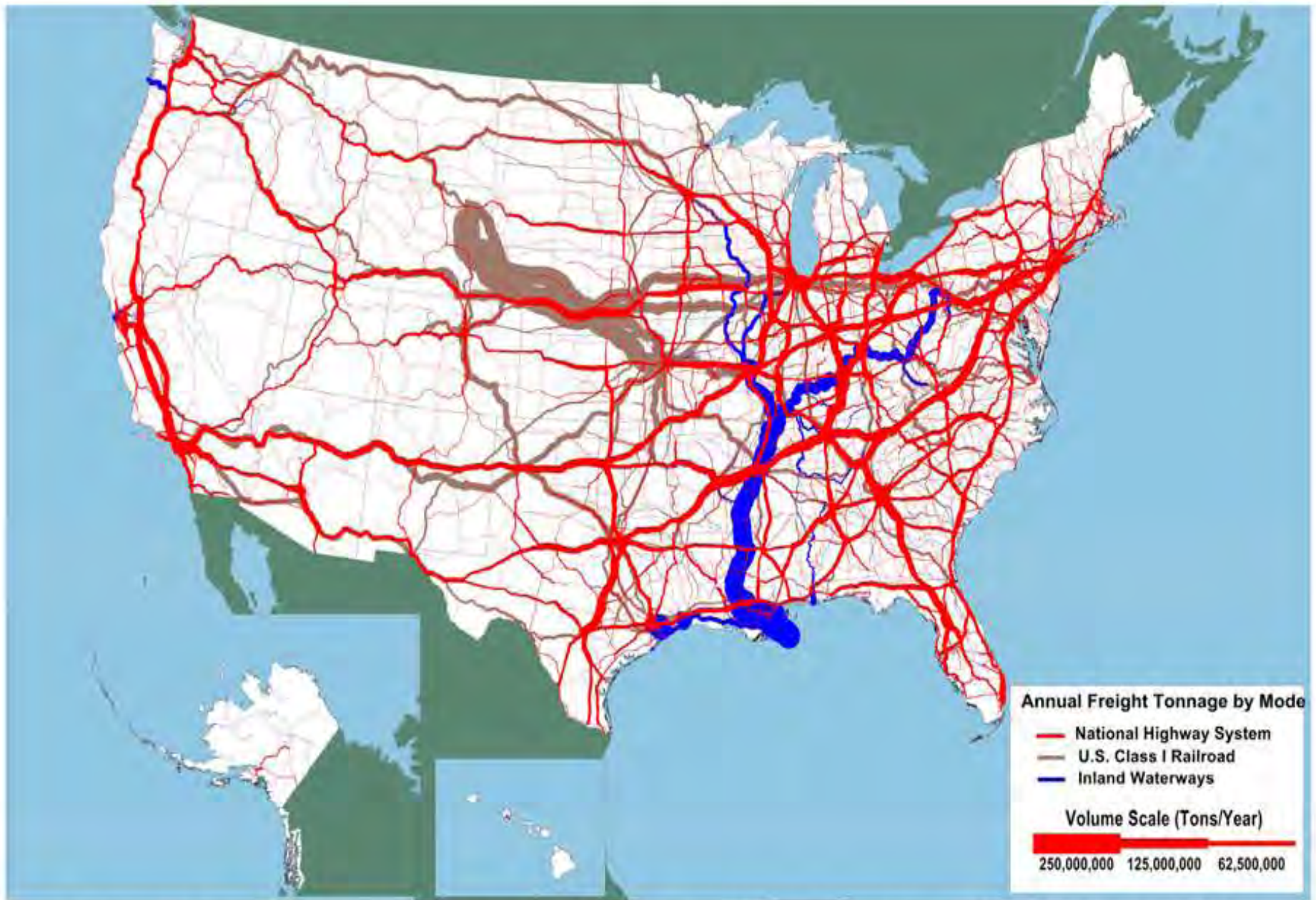


Tool box approach with a mix of solutions—PPP, Land Use, Mode selection, Workforce, Regional Niche, Business Climate Economic Development etc..etc..

NO such thing as a TKO “one mode solution” within Transportation Global Market







Sources: Highways: U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework, Version 3.4, 2012. Rail: Based on Surface Transportation Board, Annual Carload Waybill Sample and rail freight flow assignments done by Oak Ridge National Laboratory. Inland Waterways: U.S. Army Corps of Engineers (USACE), Annual Vessel Operating Activity and Lock Performance Monitoring System data, as processed for USACE by the Tennessee Valley Authority; and USACE, Institute for Water Resources, Waterborne Foreign Trade Data, Water flow assignments done by Oak Ridge National Laboratory.





## Corridors: Economic Engines

Trading Block Perspective—  
U.S. Freight Flows

### Members:

- Transport Canada
- US DOT
- Secretaria De Comunicaciones Y Transportes

# ***Florida's freight future is bright.***

***Leadership and desire to improve freight mobility-*** Its there with Governor Scott supported by Ananth Prasad

***Policy Element has laid out*** the direction with maximum private sector input

***Next step is the Investment Element,*** which will prioritize projects to best invest state dollars





# FLORIDA

## Freight Mobility & Trade Plan



FLORIDA DEPARTMENT OF TRANSPORTATION

**2013 APA Florida Annual Conference**  
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**Juan Flores**

State Freight Administrator,  
FDOT

[Juan.Flores@dot.state.fl.us](mailto:Juan.Flores@dot.state.fl.us)

850-414-5244

[www.freightmovesflorida.com](http://www.freightmovesflorida.com)

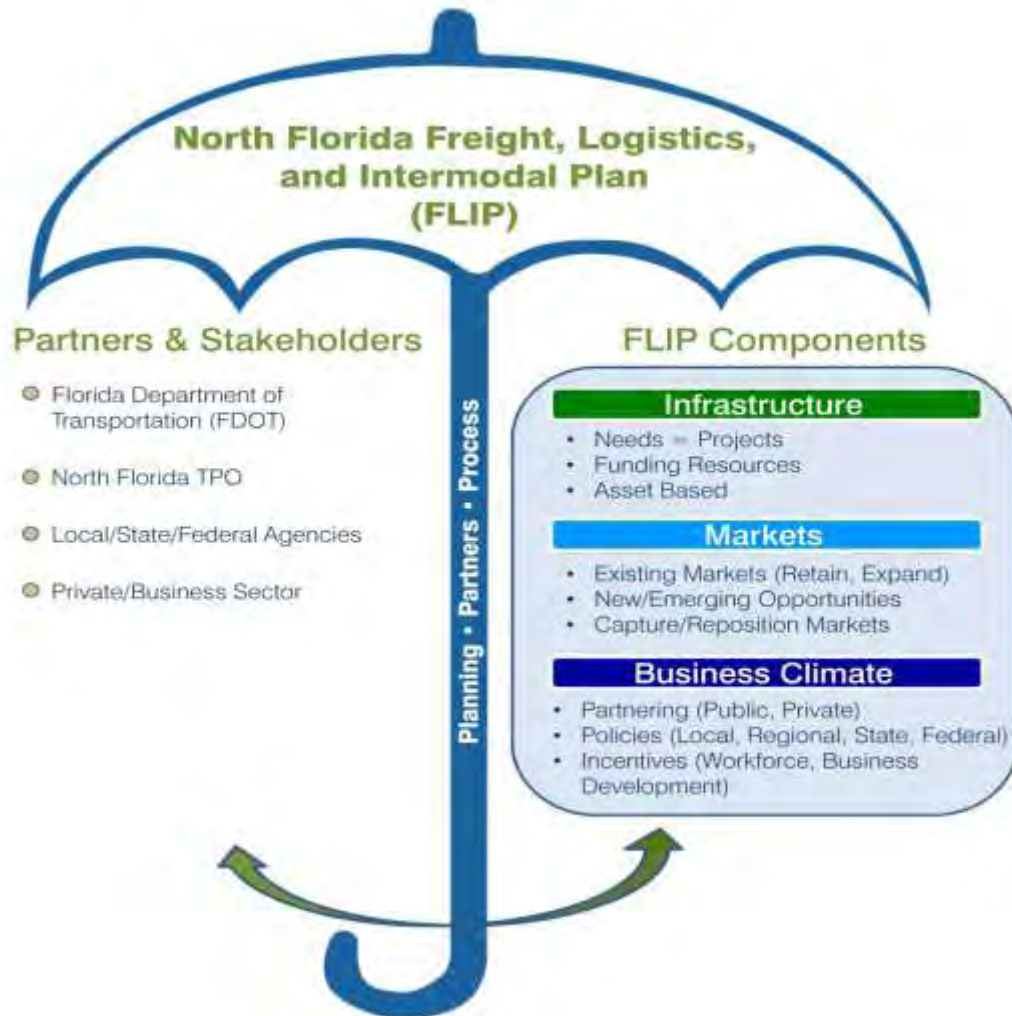




# North Florida Freight, Logistics & Intermodal Framework Plan

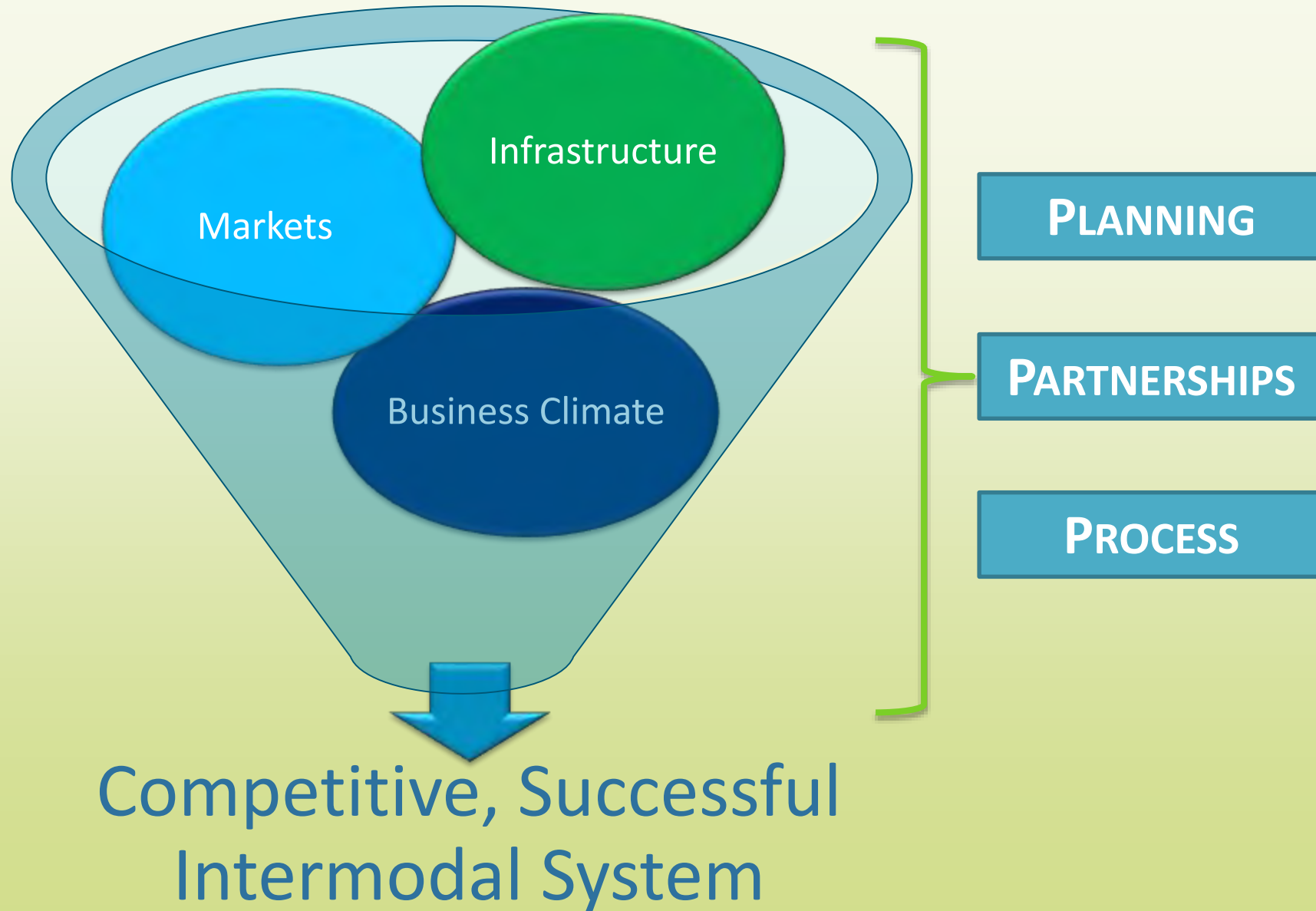


# Overview



Holistic plan designed to provide a clearinghouse document for partnering, funding and strategic planning.

# What We Have Learned





# Timeline of Key Activities



Over the next few years, JAXPORT is looking to invest more than \$1.25 billion in infrastructure, including \$600 million targeted for harbor

# Marine Infrastructure

No. 1 container port in Florida

No. 1 vehicle exporter port in United States

Leader in Steel Exports

Primary Florida port handling military (STRANET)





# Surface Infrastructure

I-95

I-295

I-10

I-75





# Surface Infrastructure



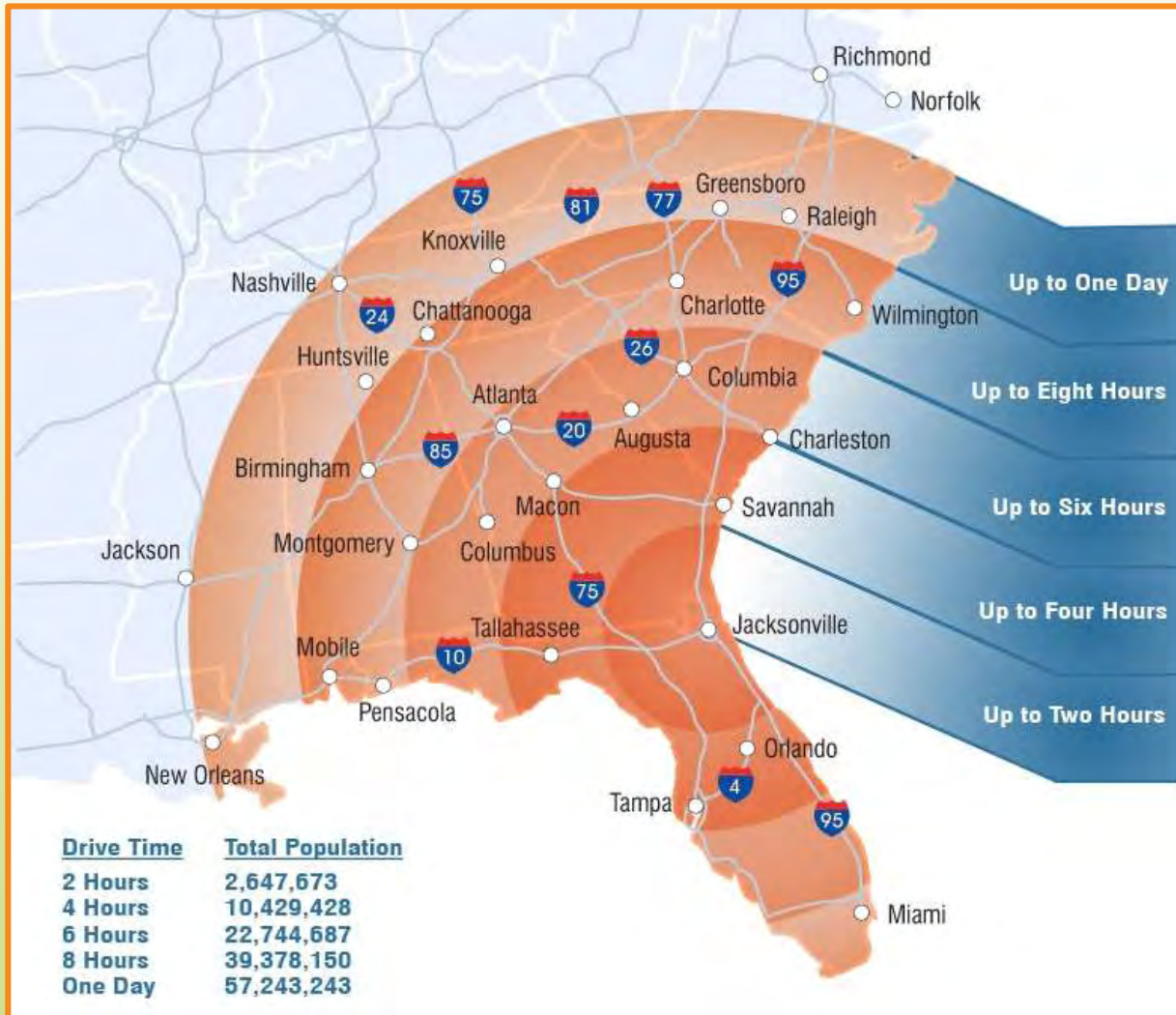
2012

SanMar  
Bedrosians  
Samsung

1.1 m SF

2<sup>nd</sup> Quarter, 2012 Cushman and Wakefield

# Gateway via Truck

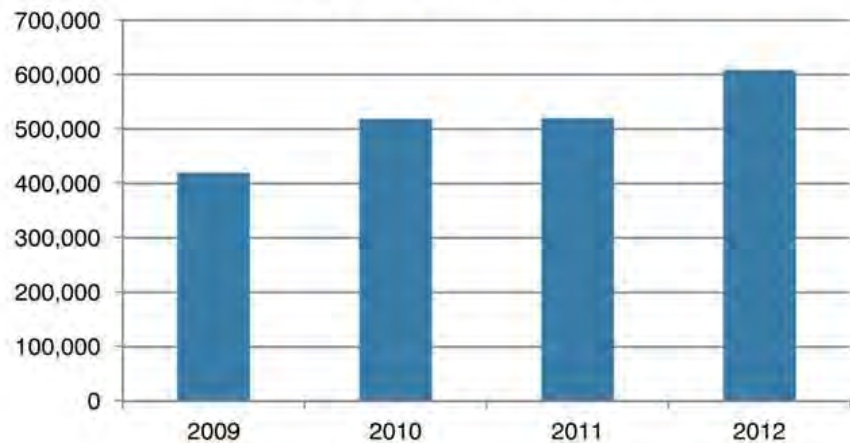


**Truck Transit Time**  
**One Day Reach**  
**60 million**  
**consumers**  
**20% of U.S.**  
**Population**

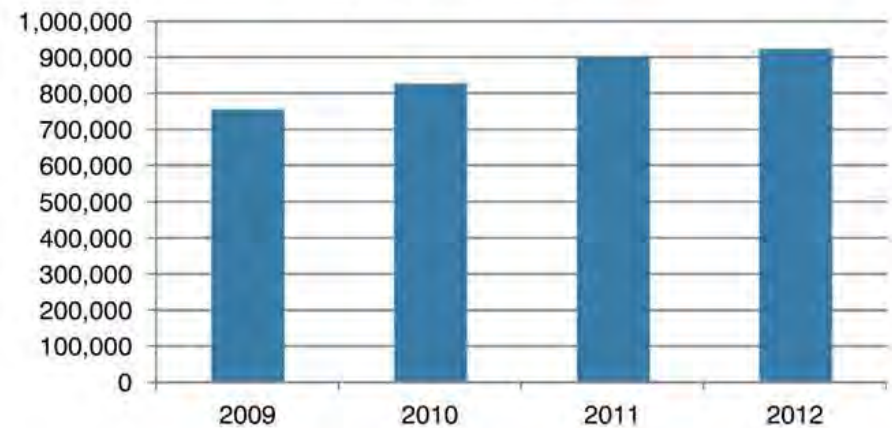


## ■ Recent Trends

**JAXPORT Auto Units**



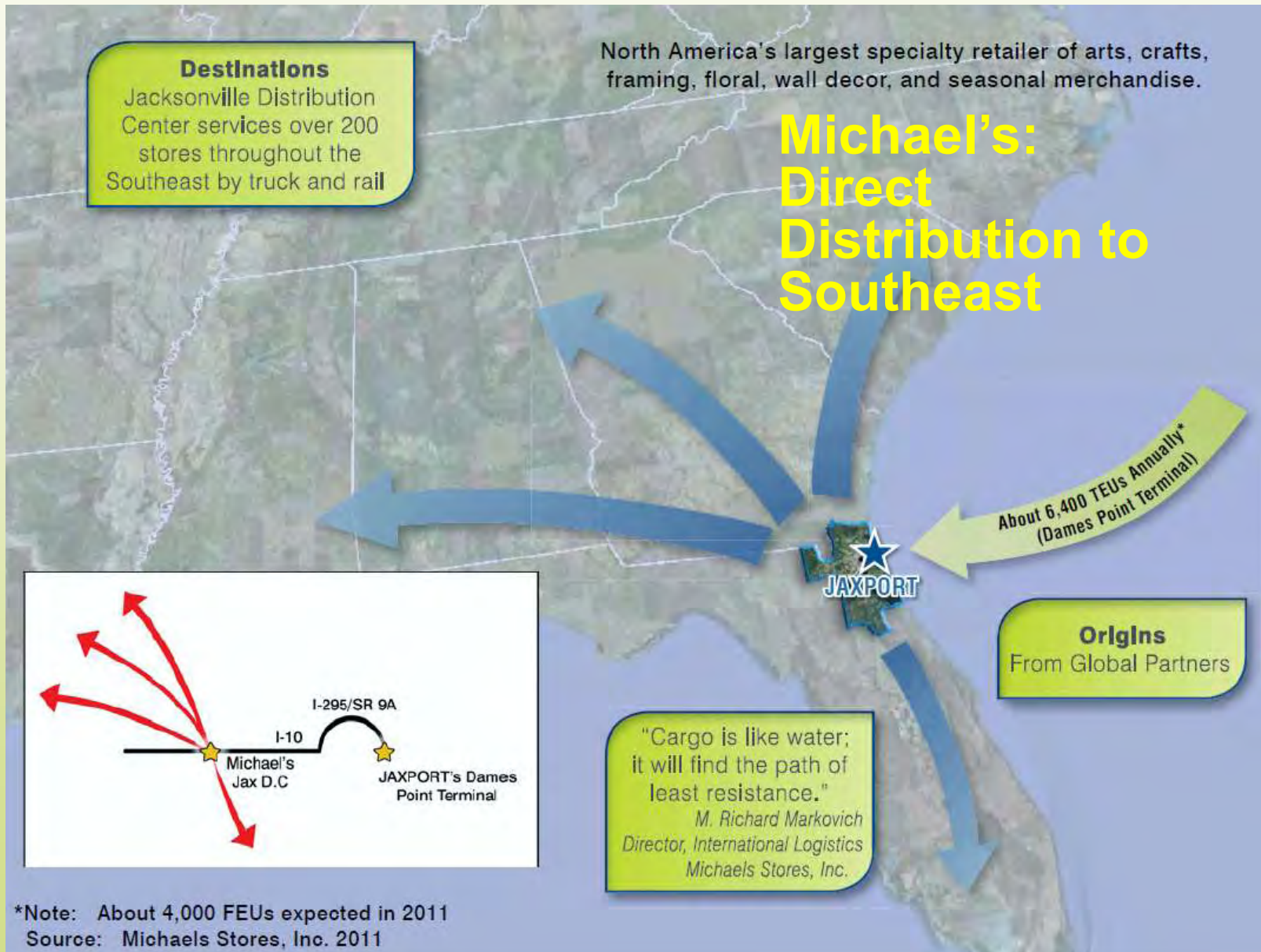
**JAXPORT TEUs**



2009	2010	2011	2012
419,691	518,880	520,142	608,726

2009	2010	2011	2012
754,352	826,580	900,433	923,660

# “Face of Freight”—Dames Point Imports

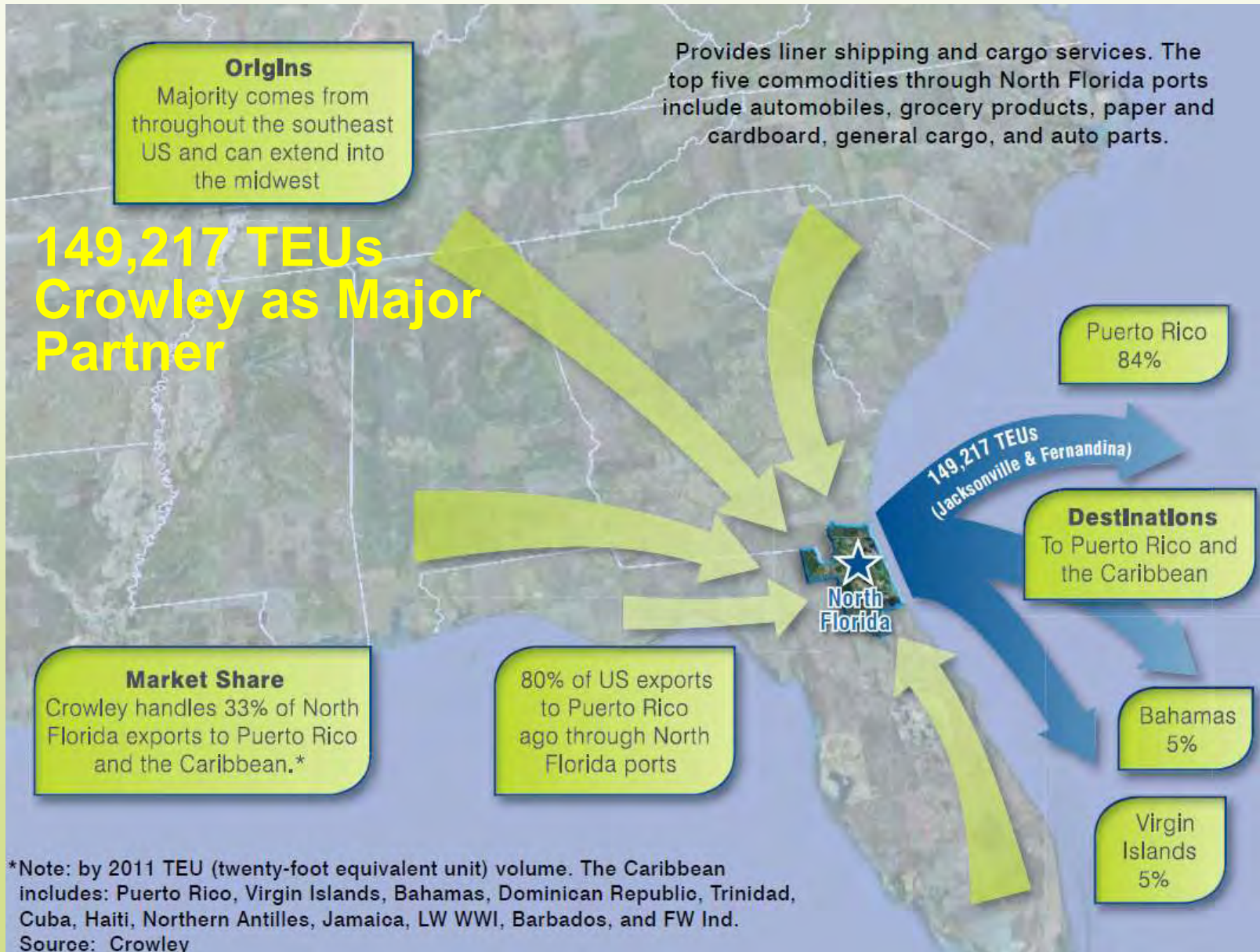


# “Face of Freight”—Fernandina Exports





# “Face of Freight”—Crowley/Puerto Rico Exports



# What is a Gateway?

**gate•way** /'gāt,wā/  
*n.*

1. Something that serves as an entrance or a means of access....allows an entity to achieve a desired goal.

# Overarching Directive





# Guiding Principles

- **Gateway Role for State and Nation**
  - This is a given based on geography and infrastructure
  - Recognition of leading roles at current channel depths
- **Coordination/Collaboration as an Asset**
  - Unique North Florida TPO, FDOT, JAXPORT relationships
  - Expansion of LAG responsibilities
- **One Florida Business Approach**
  - JAX and Miami Chamber MOU
  - Include ***National /State Significance*** “metrics” for decisions

# Recommendations – MARKETS

- **Protect Existing Markets & Developing Niche**
  - Leverage the strength of “existing markets” (40’ channel)
  - Strategic Plan Priority for JAXPORT and Port of Fernandina
- **Asian Containers Recapture**
  - Identify next 3 Disney “redirects”
  - Define **goal** for 3.1 m TEU “leakage”
- **Manufacturing/Distribution Center Expansion**
  - Update 2005 Industrial Land Use Plan (COJ)
  - Develop **regional** Intermodal Logistics Center, “inland port” & DC Plan



- **Return on Investment (ROI) Assessment for**
  - Completed Infrastructure + Future Investments
  - Opportunity Costs related to “capacity in system”
  
- **Enhanced Logistics Advisory Group (LAG)**
  - Industry Led Executive Committee
  - Host Quarterly Industry Forums
  
- **Regional Transportation Initiatives**
  - JAXUSA led Regional Business Alliance
  - Expand RTSC regional dialogue on freight/logistics



# Priorities for North Florida: Next 12 months

## POSITION NORTH FLORIDA AS NATIONAL, STATE AND REGIONAL GATEWAY

### ■ National Freight Network & Strategic Plan



- Work with FDOT and partners to **maximize** North Florida's network mileage and facilities on the *National Freight Network*
- Demonstrate national **significance** of North Florida

### ■ Florida's Freight Mobility and Trade Plan



- Provide leadership and high level of engagement in Plan
- Conduct analysis and studies to demonstrate State **significance**

Cooperation is  
civil....

Collaboration is  
**TACTICAL**



# Economy in Motion

## *Central Florida's Freight Experience*



Alexander Trauger  
Manager of Long Range Planning  
Florida APA Conference





# Freight Advisory Council

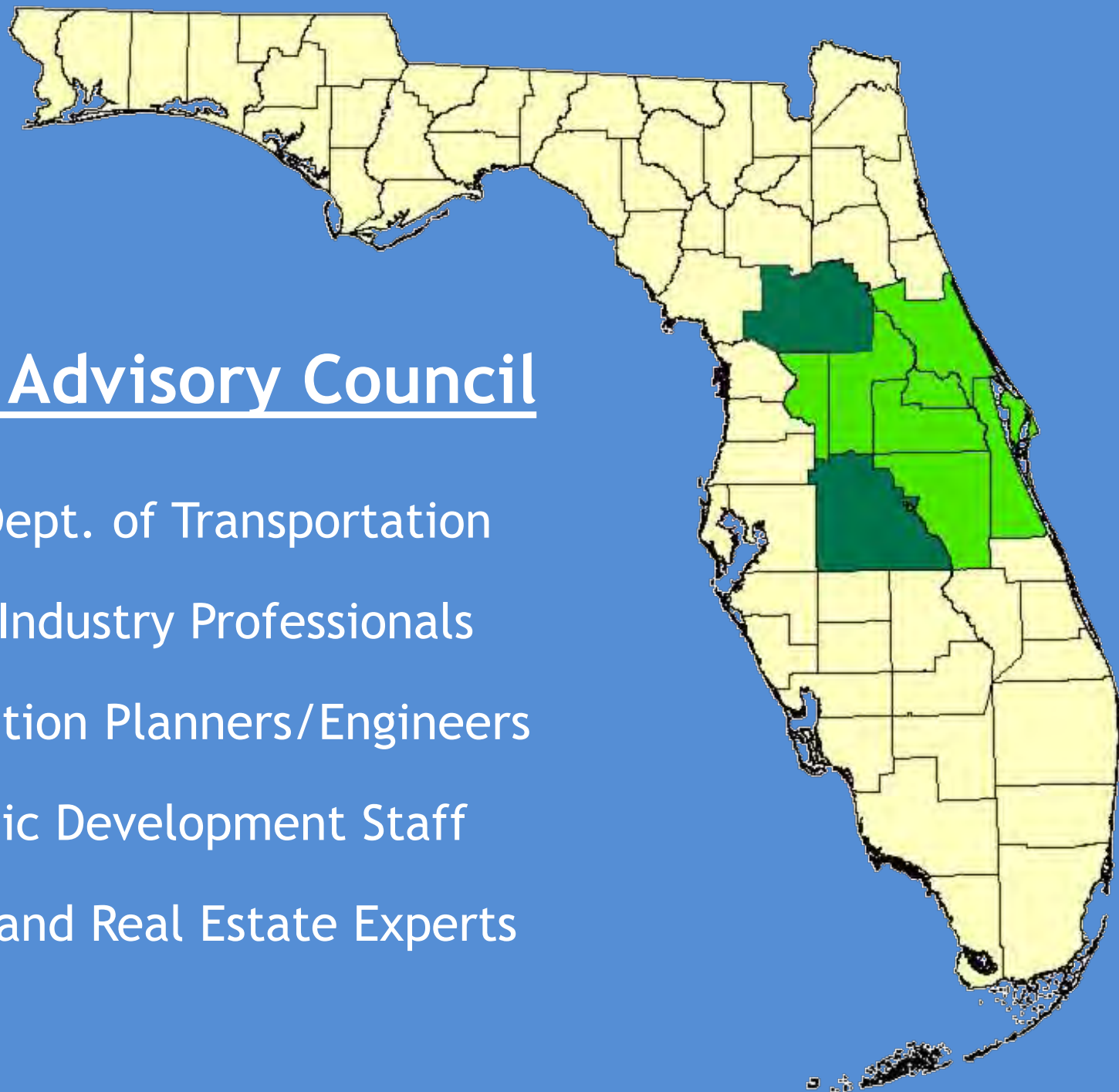
Florida Dept. of Transportation

Freight Industry Professionals

Transportation Planners/Engineers

Economic Development Staff

Land Use and Real Estate Experts



# Port Canaveral & Spaceport



# How Much Freight?

**IMPORTS**



**37.9 million tons**

**EXPORTS**



**23.1 million tons**

**WITHIN  
REGION**



**20.6 million tons**

**THROUGH**

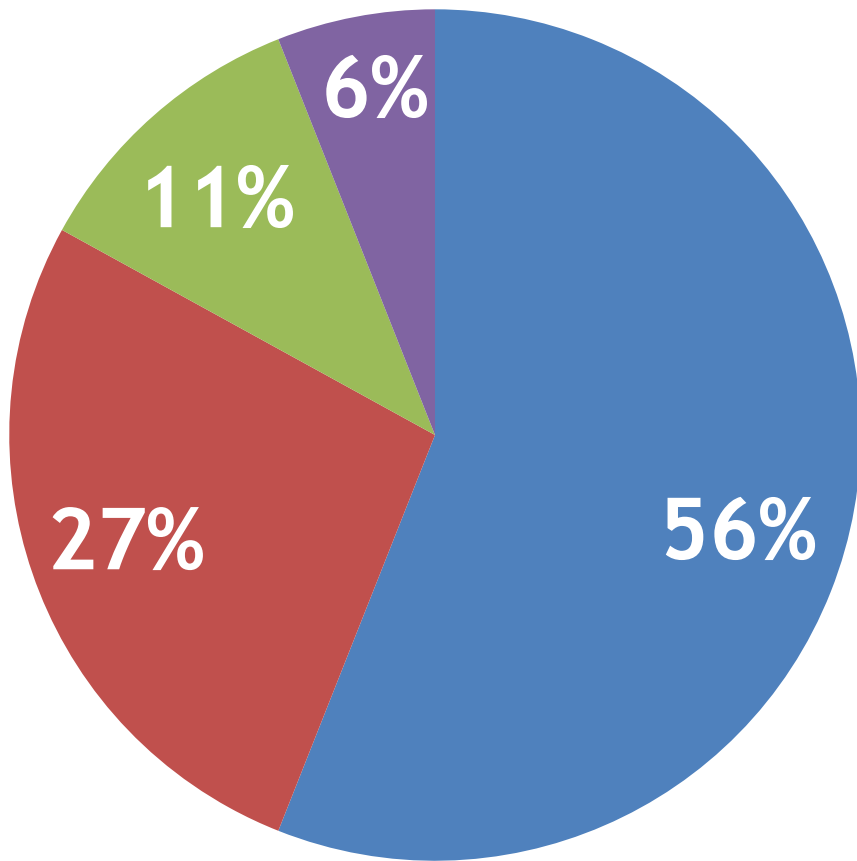


**120.6 million tons**



# What is Moving?

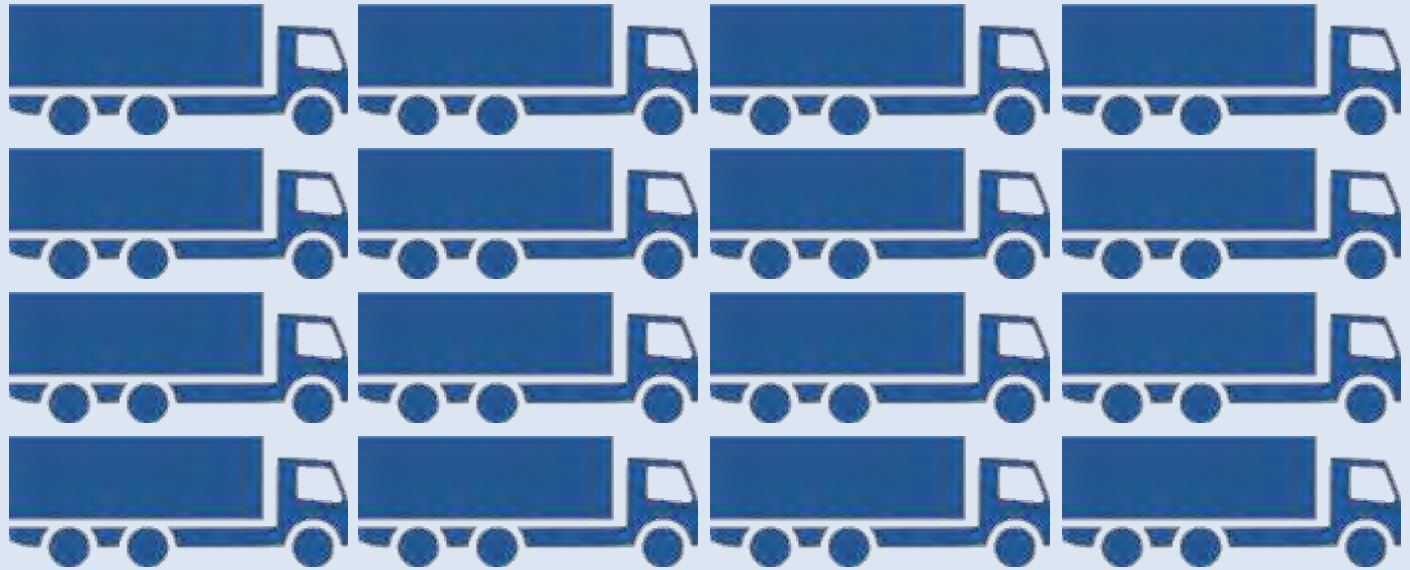
## *Top Commodities*



- **Construction Materials**
  - Non-metallic ores & minerals
  - Clay, concrete, glass, stone
  - Wood products
- **Consumer Goods**
  - Warehoused products
  - Food
  - Printed materials
  - Farm products
- **Fuels & Chemicals**
  - Petroleum
  - Coal
  - Chemicals
- **Other**

# How is Freight Moving?

95%



4%



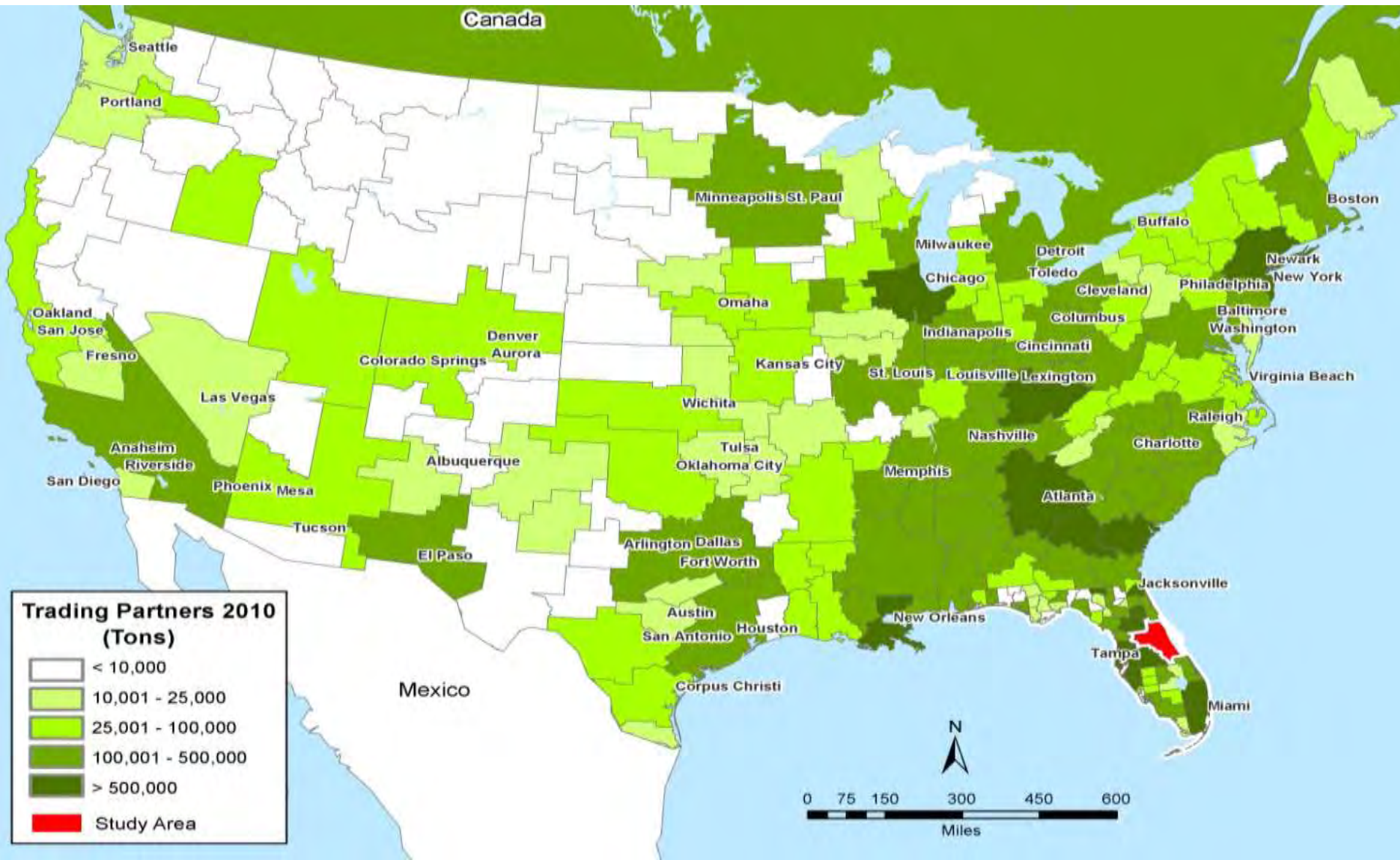
1%



<0.1%



# Who are our trading partners?





# Significant Florida & S.E. Trade

## TOP 10 TRADING PARTNERS

Miami-Dade County, FL

Marion County, FL

Polk County, FL

Hillsborough County, FL

Atlanta, GA

Duval County, FL

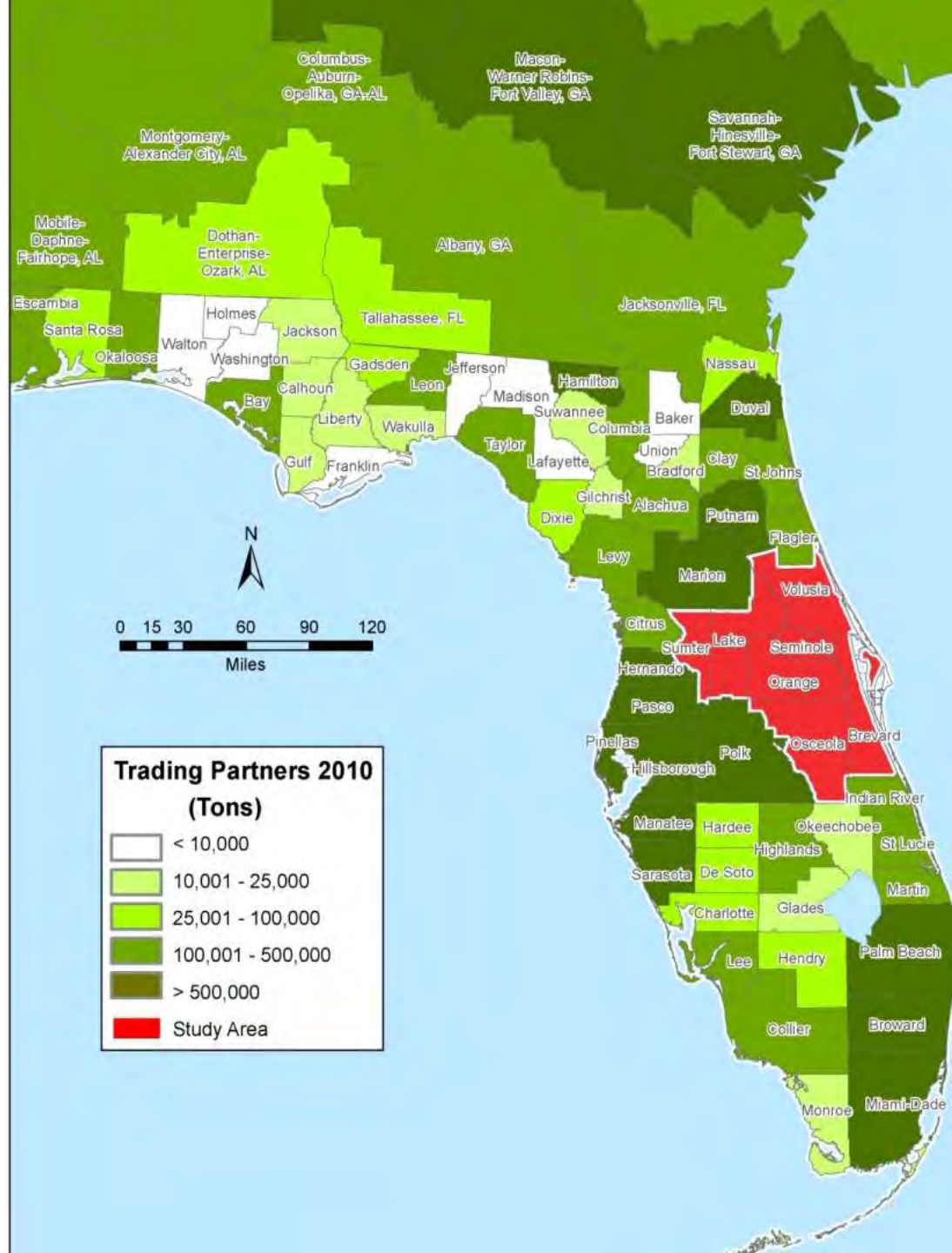
Lexington, KY

Hernando County, FL

Hamilton County, FL

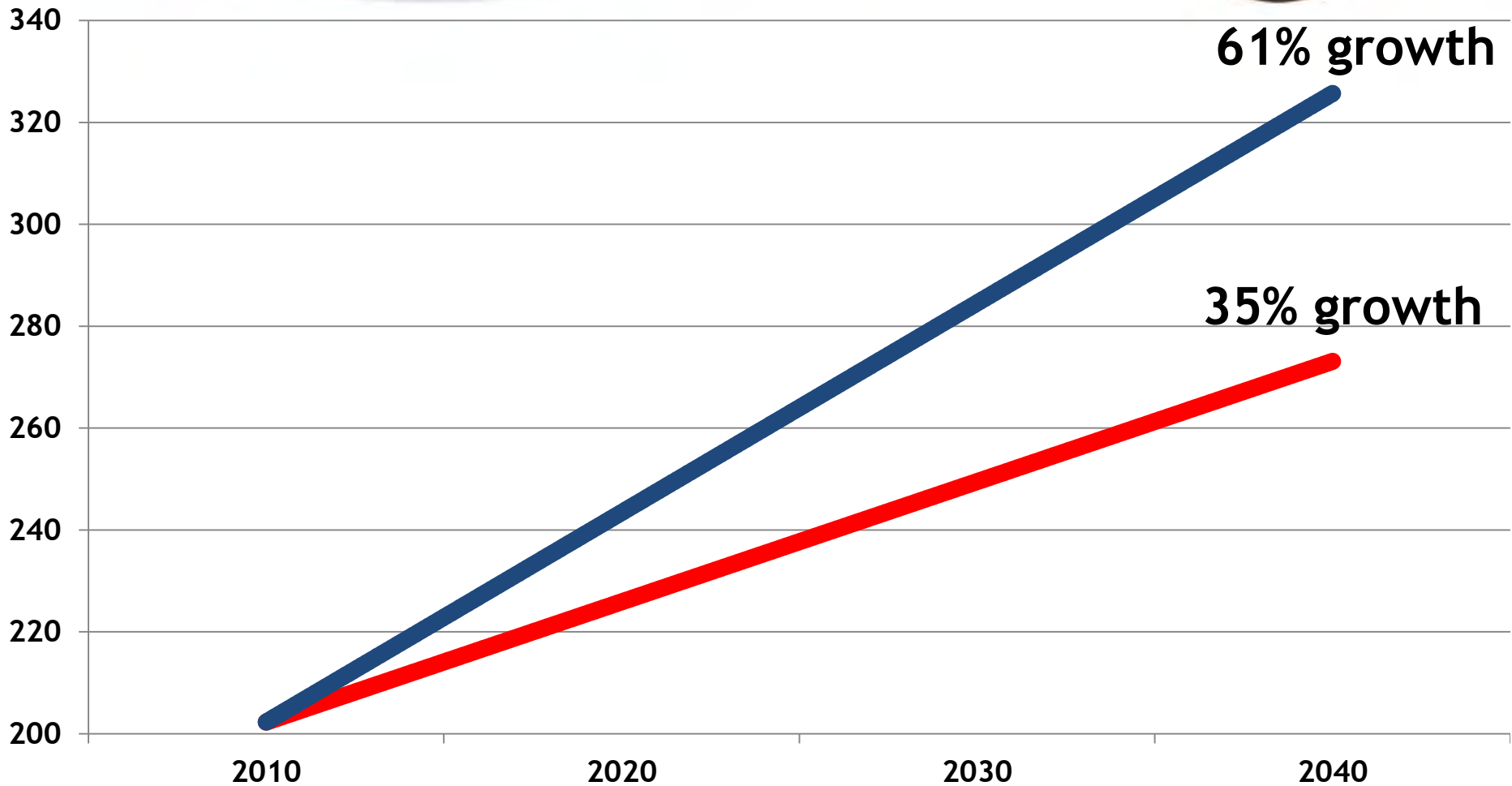
Savannah, GA

Other

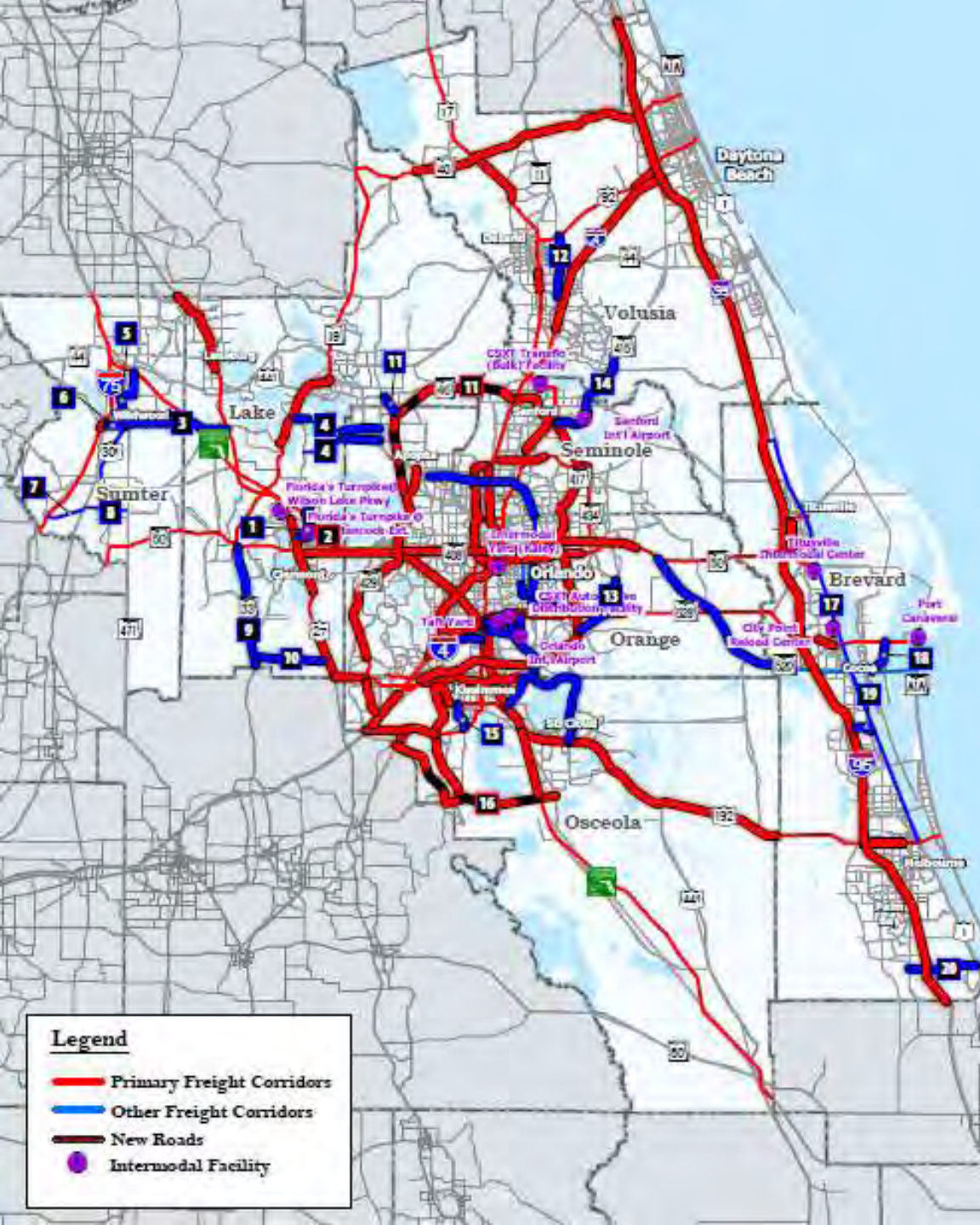


# Demand Driven Growth

## *Total Freight by Tonnage*



# Central Florida Regional Freight Subsystem





# Intermodal Logistic Centers & Freight Villages

Preserving existing  
industrial areas while  
mitigating community  
impact/concerns

Improved efficiency  
and connectivity





metroplan orlando  
A REGIONAL TRANSPORTATION PARTNERSHIP

**Alex Trauger**  
*Manager of Long Range Planning*

**407-481-5672 ext.324**  
**[atrauger@metroplanorlando.com](mailto:atrauger@metroplanorlando.com)**

**[www.metroplanorlando.com](http://www.metroplanorlando.com)**





# *Building a Resilient Region*



Patricia M. Steed

Executive Director

Central Florida Regional Planning Council





# Major Employers, 2011

## DeSoto

Wal-Mart Distribution (502)	DeSoto Medical Hospital (300)	Peace River Citrus (140)	Bethel Farms (87)	Sorrels Bros Packing (75)
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## Glades

Moore Haven Correctional (219)	Lykes Bros (100)	Brighton Seminole Bingo (80)	Glades Electric Co-op (65)	A Duda & Sons (25)
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## Hardee

Florida Institute for Rehabilitation (550)	Walmart (288)	MOSAIC (277)	C.F. Industries (175)	Peace River Electric (137)
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## Hendry

US Sugar Corp (1,800)	Southern Gardens (261)	A Duda & Sons (250)	Hendry Hospital Authority (140)	Alico Citrus/Cattle (128)
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## Highlands

Florida Hospital Heartland (1,300)	Highlands Regional Medical Center (500)	Cross Country Auto Services (500)	Wal-Mart (450)	Medical Data Systems (387)
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## Okeechobee

Columbia Raulerson Hospital (365)	Walpole, Inc. (300)	Larson Dairy, Inc. (225)	McArthur Farms, Inc. (160)	Okeechobee Health (140)
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## Polk

Publix Super Markets (9,500)	Wal-mart (5,100)	Lakeland Regional Medical Center (4,600)	MOSAIC (4,500)	Winter Haven Hospital (2,500)
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Healthcare Sector

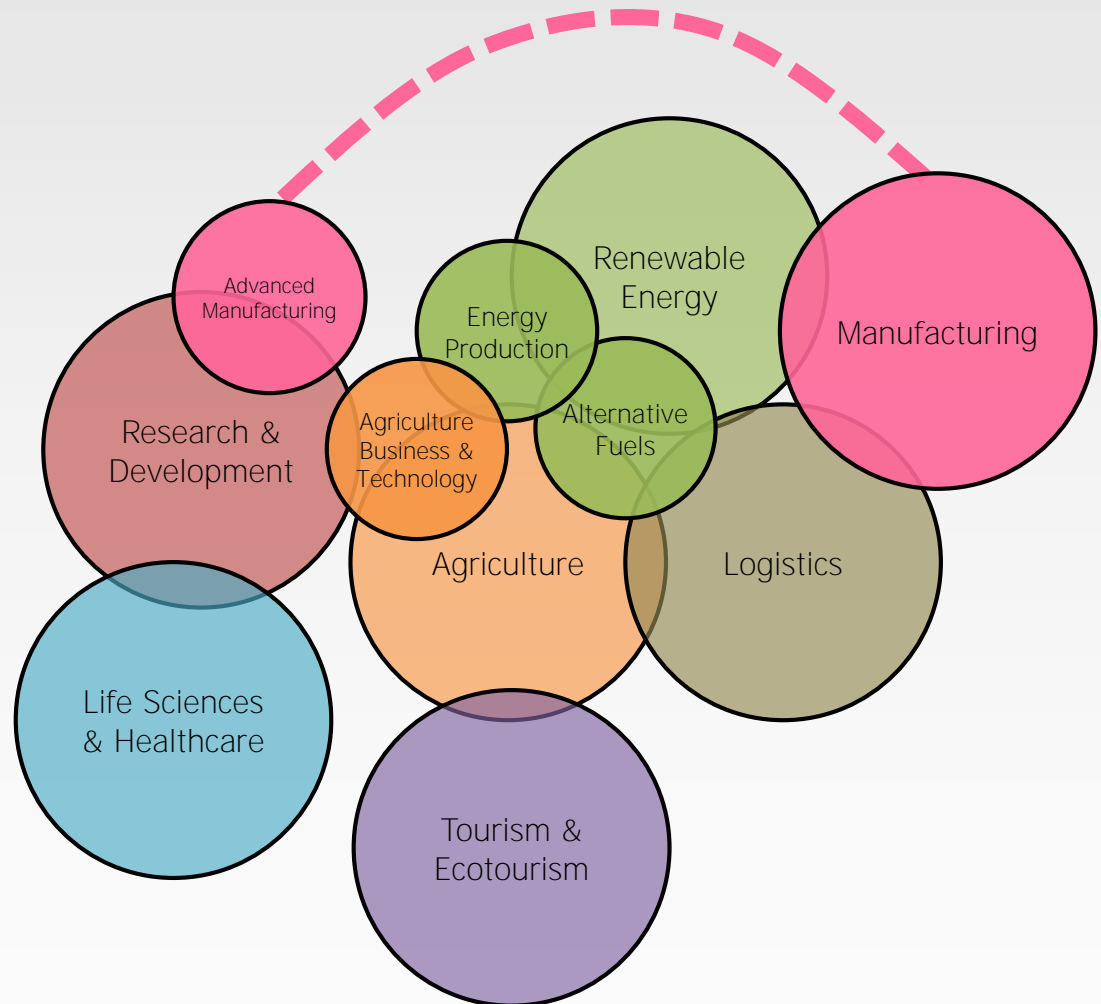
Natural Resources Sector

# The Heartland Tomorrow...

## Future Industry Clusters

*Where we could be going...*

Economic  
Opportunities  
(from the CEDS)



# Current Economy

*A future that...*

***Resembles the Present.***

*"If we continue with business-as-usual, including healthcare, natural resources, and ecotourism, then we can expect our future to look like..."*



- Following current and historical trends in:
  - population
  - employment
  - land use
- Continuing economic prominence of agriculture, healthcare, mining, warehousing, ecotourism, and service industries

Stewardship of  
Natural Resources

Our Water  
Resources

Respect for  
Agriculture

Our Communities

Future for Our  
Children

heartland2060



# *Goals guide Scenarios = ENERGY*



Solar Farm  
Alternative Fuel Crops



*A future that is...*

***Focused on Energy.***

*“If we focus on supplying technologies and goods that create energy and become energy exporters, then we can expect our future to look like...”*



- Developing an alternative fuels industry based on agriculture
- Manufacturing and installing renewable energy technologies
- Using high-tech energy technologies to become an energy exporter
- Energy efficiency and conservation technologies

# Goals guide Scenarios = *TRADE*



U.S. Department of Transportation  
Federal Highway Administration  
Office of Freight Management and Operations  
Operations Core Business Unit

## MIAMI

Total International Truck Flows  
(1998)





*A future that is...*

## ***Making & Moving Goods.***

*“If we focus on employment hubs for manufacturing, transportation, and warehousing, then we can expect our future to look like...”*



- Using current and future industrial areas and logistics and trade networks
- Maintaining high capacity transportation networks for moving goods
- Enhancing distribution of air cargo
- Connecting ports
- Establishing advanced manufacturing and warehousing facilities



# ECONOMIC DEVELOPMENT DISTRICTS

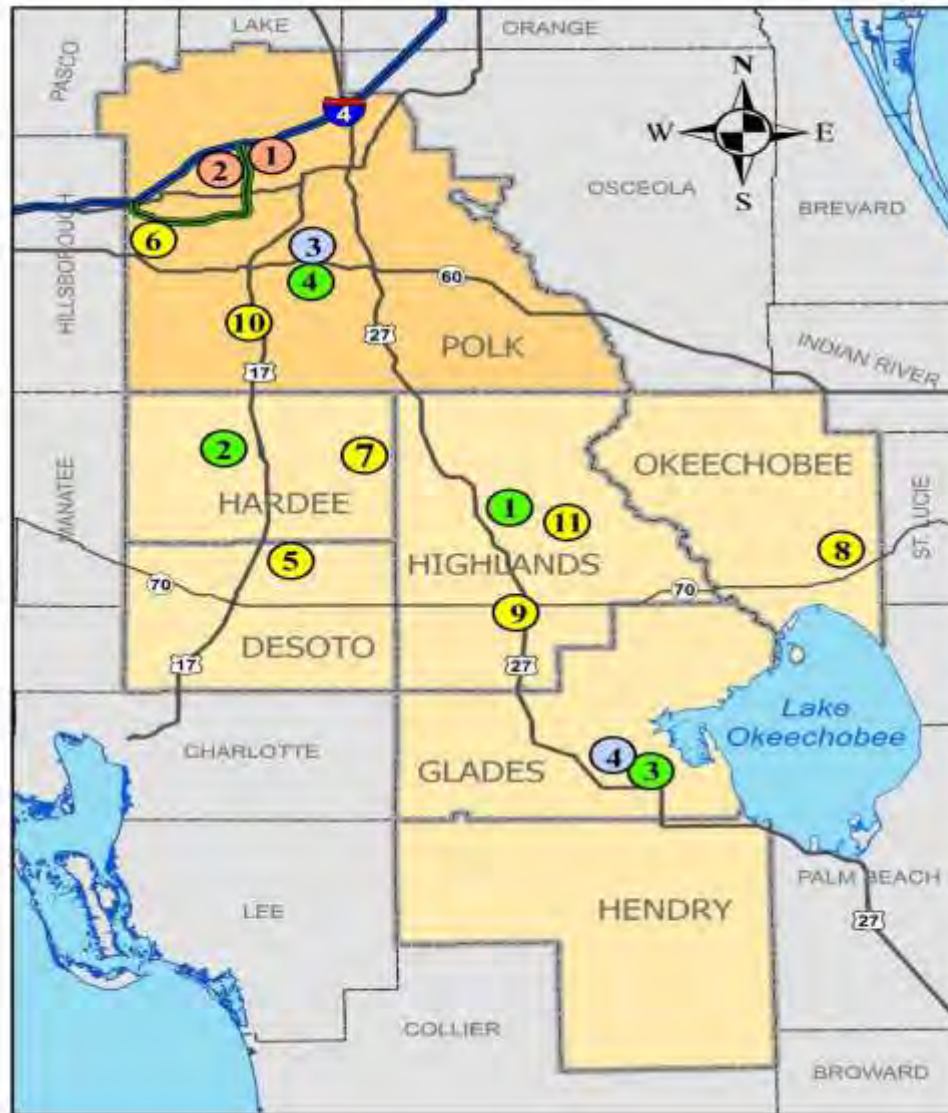
## Florida's 11 Regional Planning Councils

- Economic Development Districts
- Each region has an adopted **Comprehensive Economic Development Strategy (CEDS)**





# Regional Economic Development Investments



## Key Projects and Investments

(Numbers do not imply priority)

### Key Projects

- ① RACEC Catalyst Project
- ② FINR Expansion
- ③ Americas Gateway
- ④ Polk Gateway (CSX)

### Investments

#### Research and Development

- ① Polk Commerce Center
- ② Florida Polytechnic

#### Logistics

- ③ CSX Logistics Center
- ④ Americas Gateway

#### Renewable Energy

- ⑤ DeSoto Next Gen. Solar Farm
- ⑥ Lakeland Electric Solar Farm
- ⑦ National Solar
- ⑧ LS9 Biofuels Facility
- ⑨ US EnviroFuels
- ⑩ US EcoGen Polk
- ⑪ BP Biofuels

#### Broadband

- ⑤ Broadband Polk
- ⑤ FRBA

0 10 20 Miles





# Ensuring Multi-Modal Connectivity: Future connections, future choices



**Develop** transportation systems to support a prosperous, globally competitive economy and improves the quality of life for Heartland residents while minimizing impacts to the natural environment.



# Cross-Modal Integration = Florida's Future?

## Urban + Rural, Coastal + Inland, Region to Region

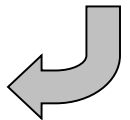
Ocean transit



Port discharge to rail



Rail line-haul



Distribution center



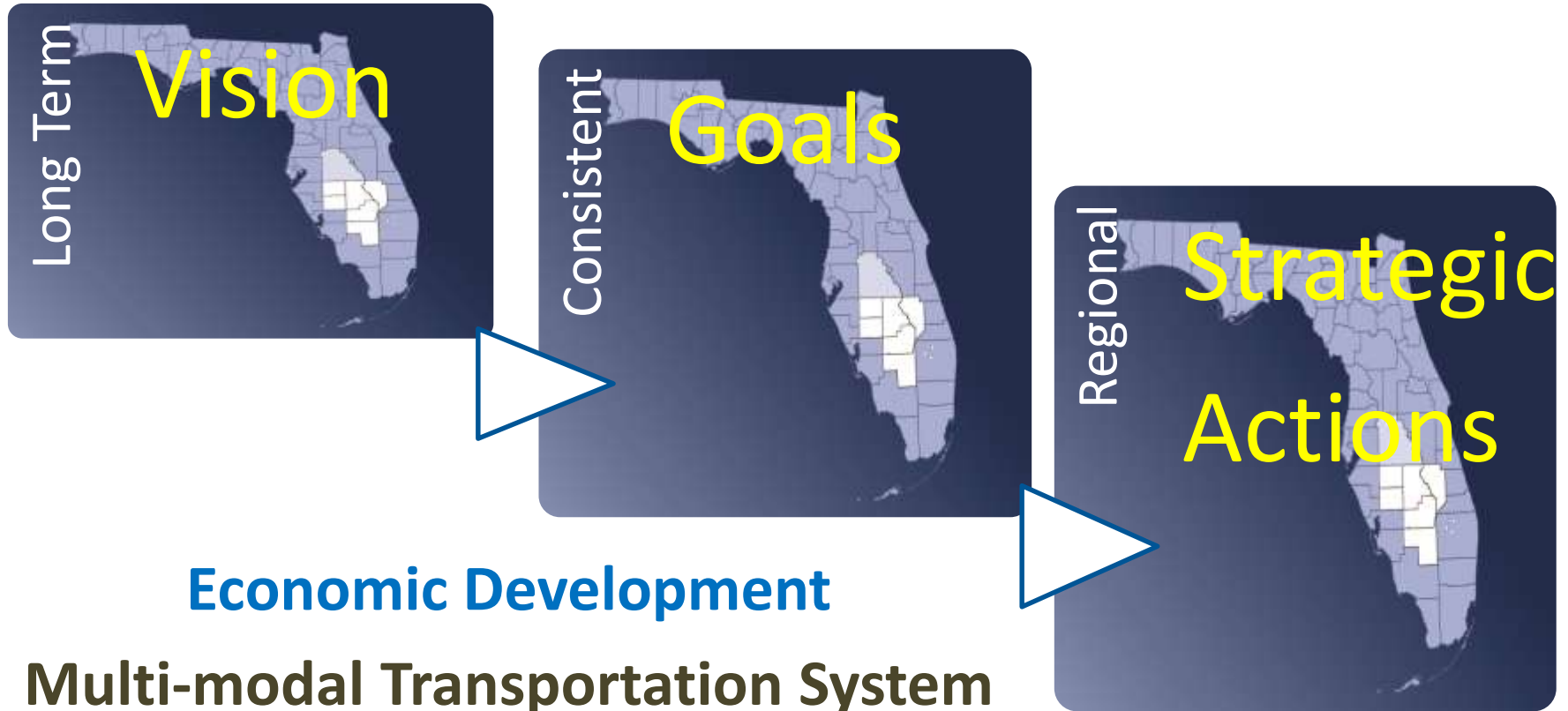
Highway delivery



Inland  
Rail  
Terminal



## Regional Logistics and Trade Clusters



**Economic Development**

**Multi-modal Transportation System**

**Natural Resource Planning**

**Prepared Workforce**



# Readying the State for One Florida



Positioning State as  
National Gateway

Consistent modal  
metrics & reporting

Connecting  
Transportation to  
Economic Goals



Real-time data &  
transponder based

MApp2 Cloud or  
other Web-based

Modeling that  
recognizes cross  
borders and costs



Plans & Programs to  
encourage partners

Public Private  
Partnerships (P3)

Build trust with  
ports, 3PLs, MPOs,  
& stakeholders

# Freight Moves Florida: Planning for Trade & Logistics in Our Changing Economy

*September 11, 2013*

*Florida APA Conference*



*Questions & Answers*