

# Georgia's Statewide Freight & Logistics Plan



Tom McQueen, AICP  
GDOT Office of Planning

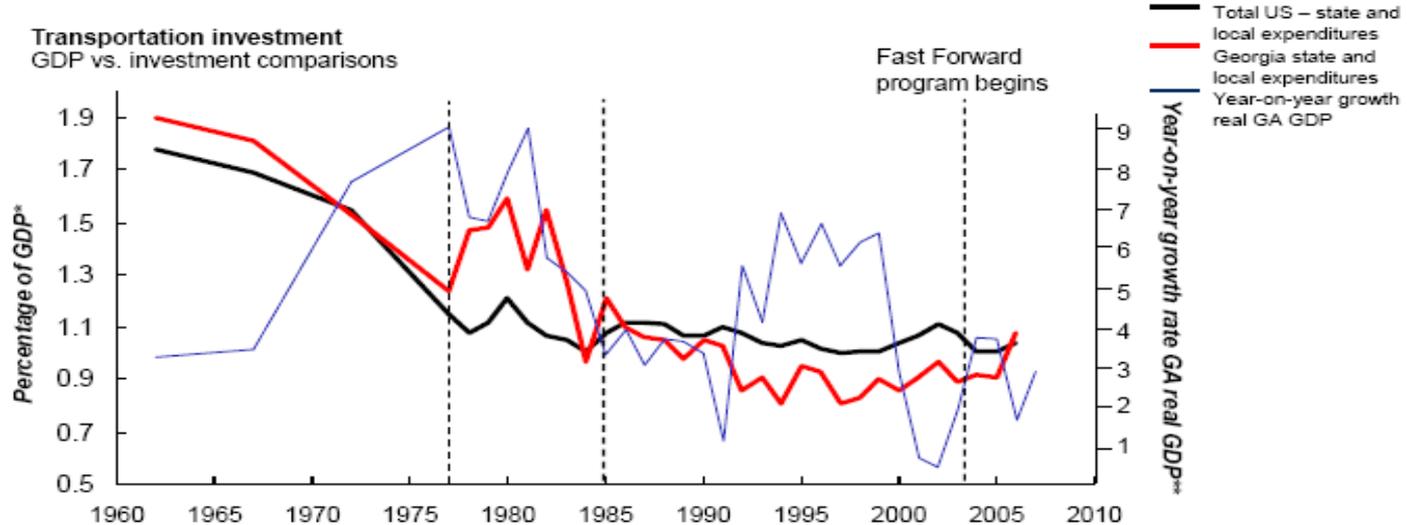
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# Benchmarking Investment -- Georgia vs. U.S.



- Increased investment in transportation increases GDP

## GA'S TRANSPORTATION INVESTMENTS RELATIVE TO GDP HAVE BEEN INSUFFICIENT FOR MAINTAINING MOBILITY AND ECONOMIC GROWTH



End of interstate system investment: 1962-1977

- Slow growth in lane miles per capita

Major investment: 1977-1985

- "Free the Freeways"
- MARTA

Reaping the benefits of past investments: 1985-2004

- GA investment lower than US investment despite growth
- Investment increase after 2004 primarily financed through bonds

Future investment?

- What is the sustainable investment path for the future?

\* Used 5-year CAGR to estimate 2001 and 2003 local expenditures data

\*\* GA real GDP growth rate assumptions: 1962-1977 - used 30-year average CPI rate forecasts from 2000-2030 and subtracted from nominal GA GDP growth rate from 1962-1977. 1978-2007 - used GA real GDP growth rate

Source: U.S. Bureau of Economic Analysis, U.S. Census Bureau, Georgia Department of Audits and Reports (FY 2003-06)

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Source: *GDOT Statewide Strategic Transportation Plan, 2010.*

# Commission for a New Georgia's Freight & Logistics Task Force



## THE COMMISSION FOR A NEW GEORGIA

### Recommendations summarized by category

**OC**

Outreach and  
Collaboration

#### OC: OUTREACH & COLLABORATION

- 1 Identify and market Georgia's differentiating advantages
- 2 Establish a Statewide "Freight Mobility Information Exchange"

**DTT**

Data, Tools,  
and Talent

#### DTT: DATA, TOOLS & TALENT

- 1 Identify establish and promote statewide freight corridors and hubs
- 2 Promote and support workforce, training, and educational programs
- 3 Conduct an inventory of all public and private rail assets in the State

**PI**

Planning and  
Infrastructure

#### PI: PLANNING & INFRASTRUCTURE

- 1 **Develop a demand driven strategic statewide freight and logistics plan**
- 2 Make future infrastructure plans more durable
- 3 Create a supportive business model
- 4 Establish a focused freight and logistics division within the GDOT

# Georgia's Freight & Logistics Plan

## *Project Understanding*



- Build upon preceding state initiatives
  - “IT3”, and subsequent ***State Strategic Transportation Plan***
  - Governor’s Commission For A New Georgia: ***Freight & Logistics Taskforce***
- Maximize freight’s economic development potential
  - Identify **funding strategies** to advance freight program



# Georgia's Freight & Logistics Plan

## Work Tasks



### Plan Development Advisory Committee & Stakeholder Outreach

#### Make a Business Case for Freight & Logistics

- Link to *State Strategic Transportation Plan* ("IT3")
- Identify high-level benefits of state's logistics industries

#### Strategic Freight & Logistics Framework

- Analyze Freight supply & demand
- Identify strategic freight network

#### Economic Evaluation & Projection

- Refine forecasts with private sector
- Describe economic value of freight investment

#### Recommendations & Project Evaluation

- Develop freight performance measures
- Prioritize projects & packages

**Freight and Logistics Action Plan**

*Adopted: Spring 2012*



# Georgia's Freight & Logistics Plan

## *Broad-based Outreach*



- **Public Sector**

- » Office of the Governor \*
- » Georgia Ports Authority
- » Georgia Dept. of Economic Development \*
  - Logistics Innovation Center
- » FHWA Georgia Division \*
- » GDOT Office of Intermodal \* (rail, ports)
- » Hartsfield Jackson International Airport
- » Georgia Association of MPOs

- **Private Sector**

- » Coca-Cola
- » CSX Railroad
- » Delta Airlines
- » Georgia Motor Trucking Assoc.
- » The Home Depot
- » Norfolk Southern Railroad
- » Southern Freight
- » UPS

# Georgia's Freight & Logistics Plan

## *"Making the Business Case"*

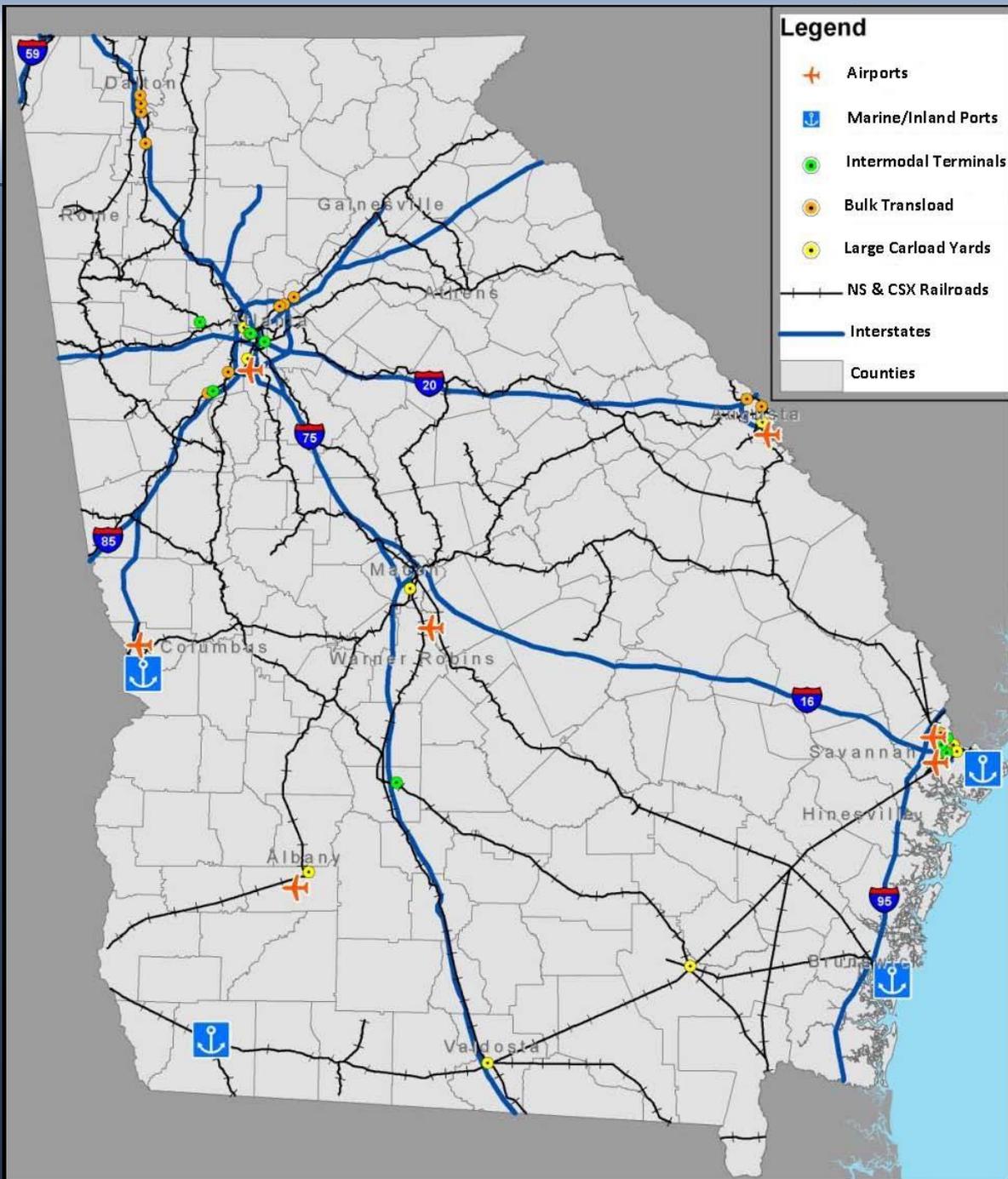


**If Georgia can regain its historical 21% market share of the Southeast's freight-related industries...**

**... the State would gain \$20 Billion in economic output over the next 10 years.**

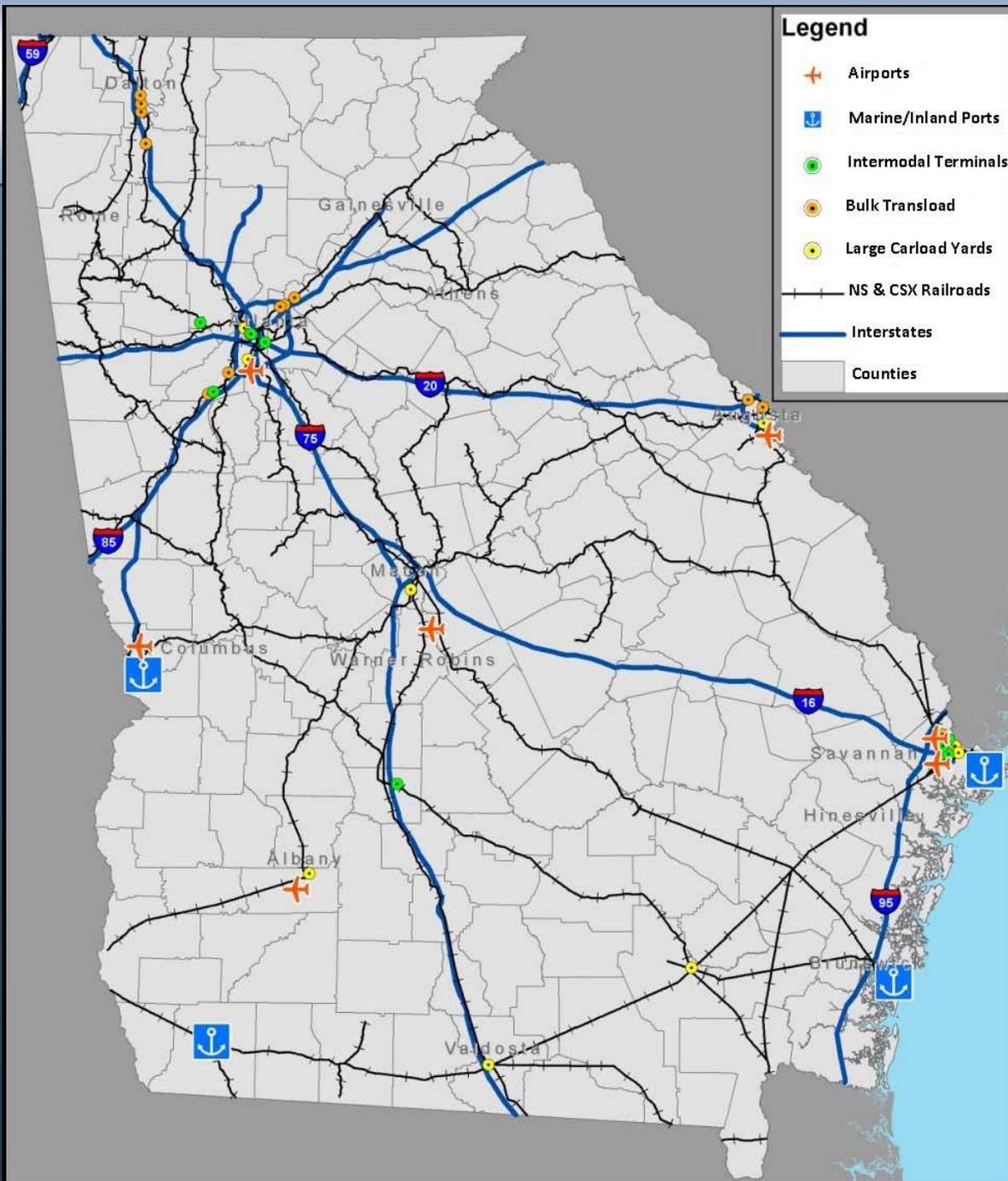
# Freight System Assets

- Port of Savannah complex
  - » 4<sup>th</sup> busiest U.S. container port
  - » Fastest -growing U.S. container port over last 8 years
  - » #2 in U.S. container exports, by tonnage (after Los Angeles)
- Port of Brunswick complex
  - » 3<sup>rd</sup> in U.S. for auto imports
  - » #5 for total U.S. auto & vehicle imports/exports



# Freight System Assets (cont'd.)

- Atlanta is S.E. rail hub for two “Class One” railroads (CSX & NS)
  - » Also distribution center hub for many truck-based logistics operators
- Hartsfield Jackson is 10<sup>th</sup> busiest U.S. air cargo airport
- Georgia’s newest intermodal yard in Cordele (direct connection to Savannah Port via shortline RR)

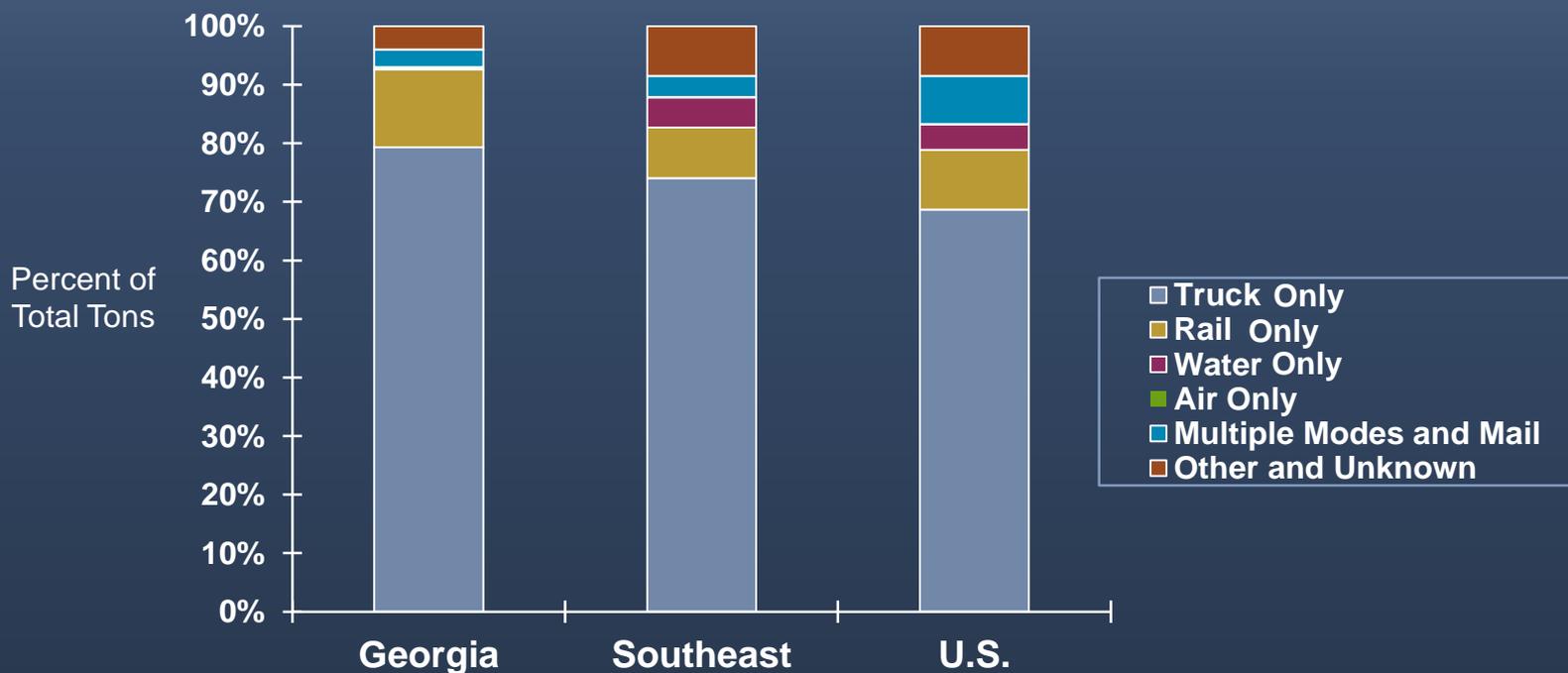


# Statewide Perspective

## Freight Mode Distribution



- Georgia's modal distribution:
  - » Higher truck mode share
  - » Higher rail carload (*non-intermodal*) mode share
  - » Lower inland waterway flows share



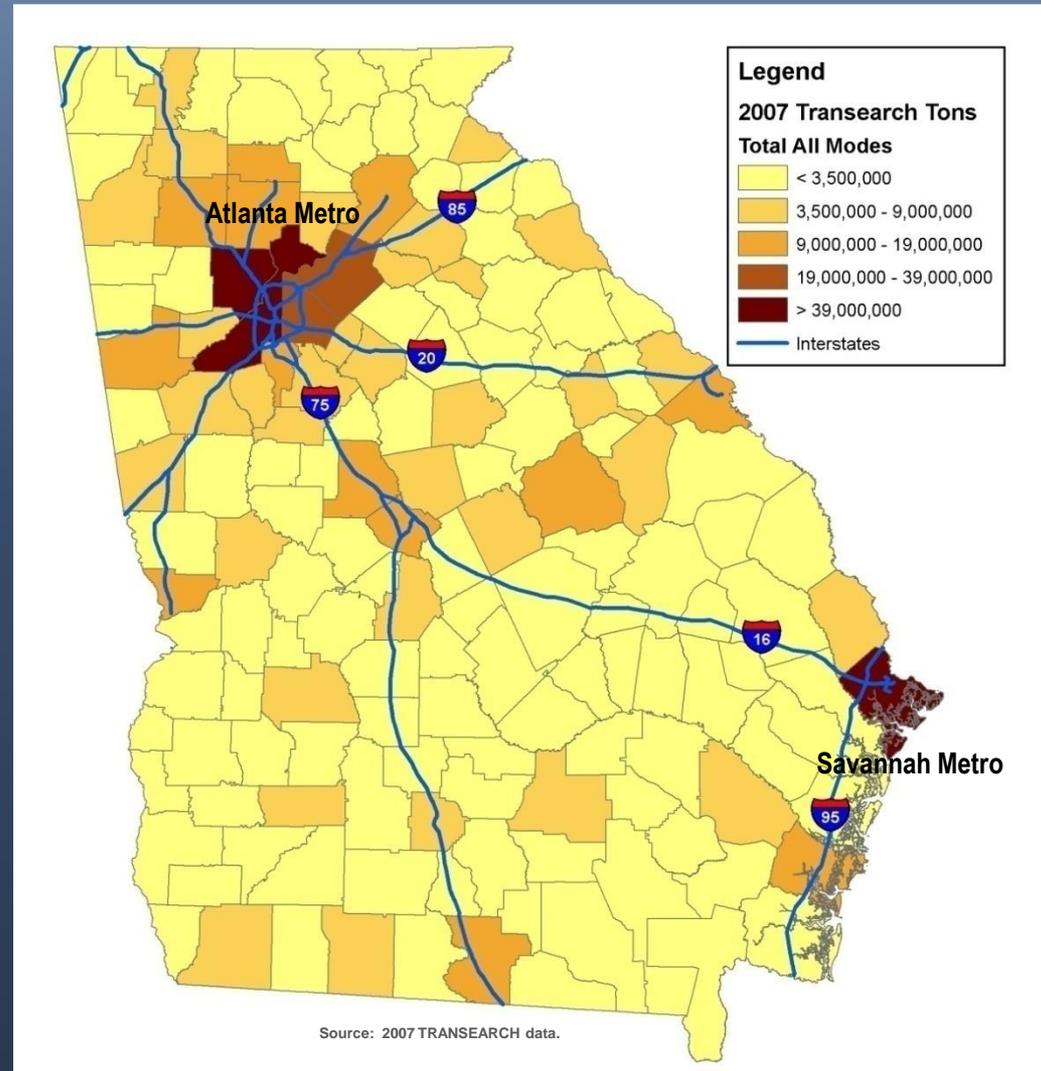


# Statewide Perspective

## Georgia's Primary Freight Hubs



- Most freight flows generated at two hubs
  - » Savannah Metro
  - » Atlanta Metro
- Economic Relationships?

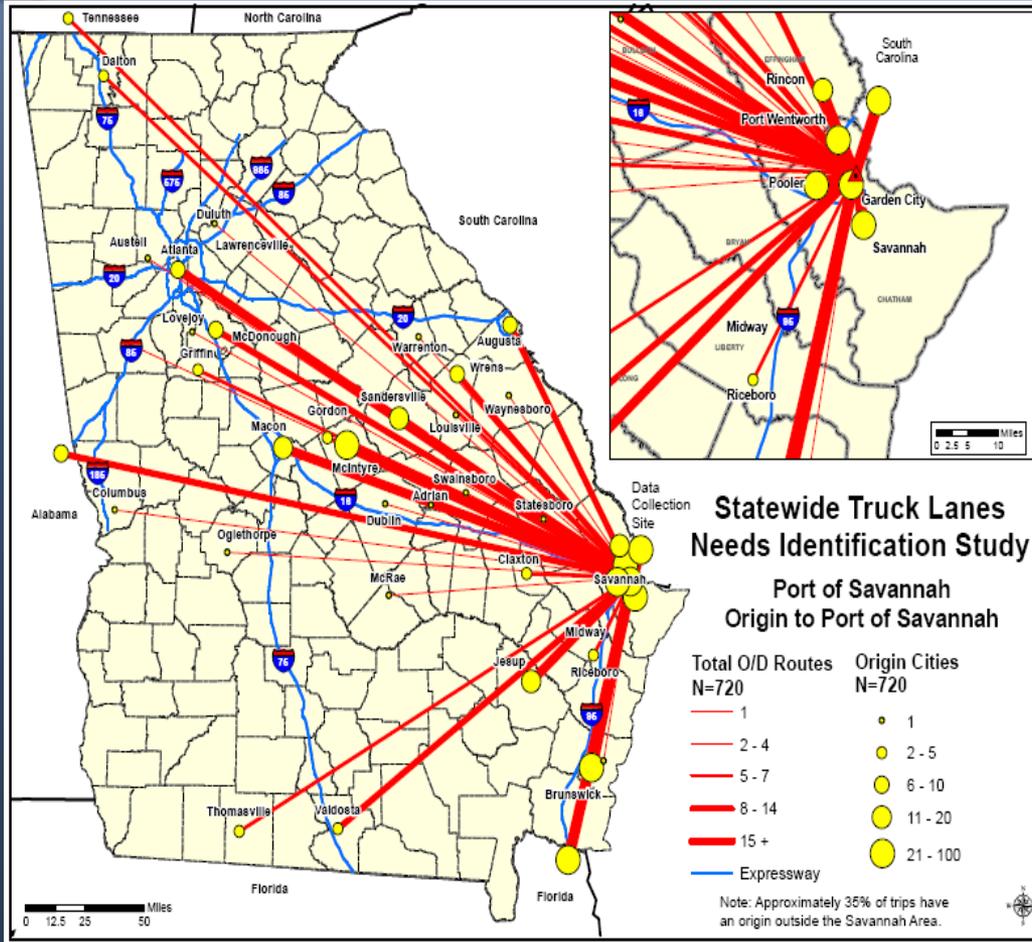


# Port of Savannah complex



# Port of Savannah complex

## Truck Origin-Destination Patterns



- Generates approx. 8,000 total daily truck trips
- 60+ % of trucks travel to/from a local warehouse
  - » Later distributed across GA and U.S.
- Local & long haul roads are critical

Source: GDOT Statewide Truck Lane Needs Identification Study: truck origin-destination surveys

# Port of Savannah's U.S. "Trading Partners" From a Rail Perspective...



Trading Partner	Rail Intermodal Tons	Percent of Total
<b>Atlanta</b>	<b>1,056,240</b>	<b>33%</b>
Tennessee	889,600	28%
Florida	375,240	12%
North Carolina	234,800	7%
Rest of U.S.	636,288	20%
<b>Total</b>	<b>3,193,168</b>	<b>100%</b>

Trading Partner	Rail Carload Tons	Percent of Total
<b>Rest of Georgia</b>	<b>5,181,072</b>	<b>50%</b>
North Carolina	775,212	8%
Florida	731,932	7%
Virginia	583,613	6%
Atlanta	305,872	3%
Rest of U.S.	2,732,460	26%
<b>Total</b>	<b>10,290,161</b>	<b>100%</b>

- For **rail intermodal**, the rail connection between Savannah and Atlanta is critical

- Rail carload** freight is vital to Georgia's **bulk** exporters... (e.g. kaolin clay, agriculture/wood products...)



# Freight Metro Regions

## *Significance of Atlanta*



- Atlanta is 2<sup>nd</sup> largest “inland port” region in the country

Top Metro Regions for Freight Tonnage	Total Tons (millions)
Houston, TX	976,088
L.A.-Long Beach, CA	860,836
Chicago, IL *	636,160
San Fran.-Oakland, CA	431,578
<b>Atlanta, GA *</b>	<b>428,103</b>
New Orleans, LA	406,461
Dallas, TX *	361,445
New York, NY	344,832
Miami, FL	324,128
Seattle, WA	294,384

Source: 2007 BTS Commodity Flow Survey.

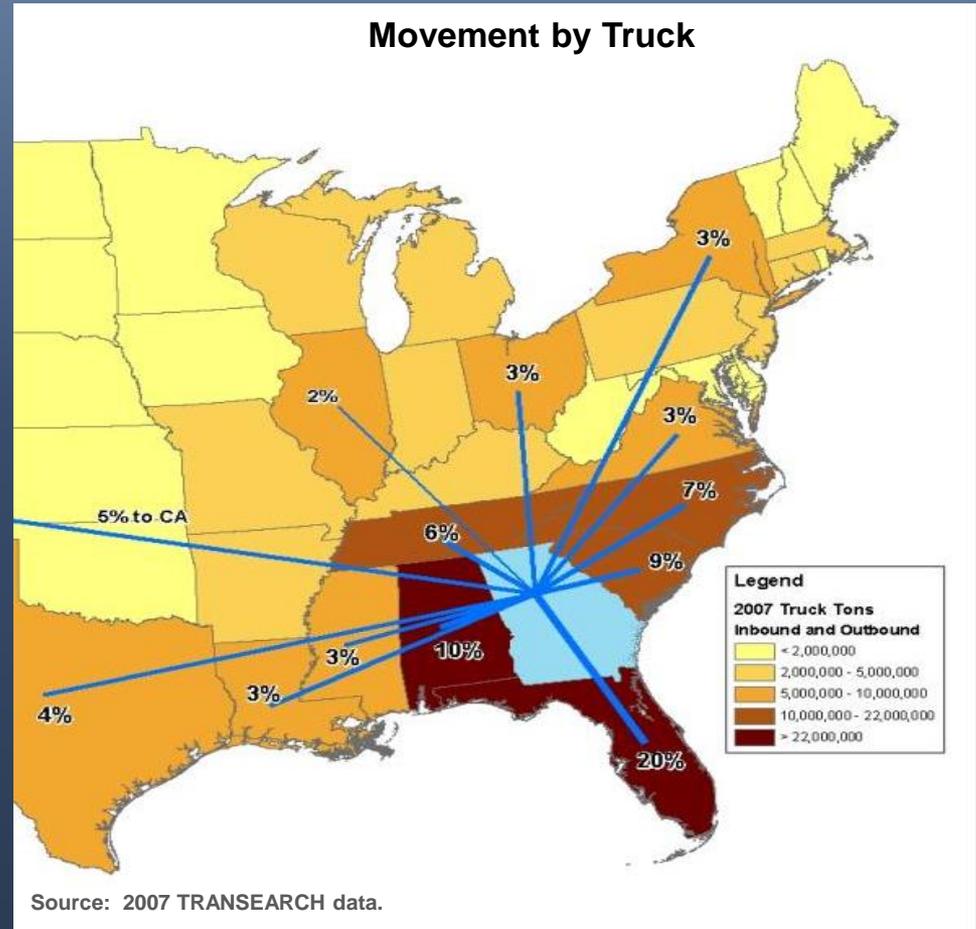
\* “Inland ports”

# Metro Atlanta's U.S. "Trading Partners"

## *Economic Relationships With Larger Region*



- » Truck: Almost  $\frac{2}{3}$  of all truck tonnage goes to/from the Southeast
- » Rail: Most freight rail to/from AL, KY, VA, LA, IL & throughout the U.S.



# U.S. Air Cargo Gateways

## Atlanta's Economic Potential



Airport	Market Type	*Tons, 2011 (millions)
Memphis	FedEx Integrator Hub	3.7
Anchorage	Trans-Pacific Transfer Operations	2.0
Louisville	UPS Integrator Hub	1.9
Miami	Primary Latin America Gateway	1.6
Los Angeles	Primary Asian Gateway	1.5
New York/Kennedy	Primary Gateway to Europe; some Asia	1.1
Chicago/O'Hare	Central U.S Core, General International Gateway	1.0
Indianapolis	FedEx Secondary Hub	0.9
Newark/Liberty	FedEx Secondary Hub	0.8
<b>Atlanta</b>	<b>Delta Hub, Southwest presence building...</b>	<b>0.6</b>

\*Source: Airport Council International Traffic Report, 2011



Asiana Air Cargo @ Hartsfield-Jackson



Air Cargo Germany @ Hartsfield-Jackson

# Georgia's Statewide Freight & Logistics Plan



## Needs and Recommendations...



# Georgia's Freight & Logistics Plan: *Summary of Key Needs and Issues*



- **Capability**
  - » Constraint of current Savannah Port depth for Post-Panamax ships
  - » Some rail weight & container double-stack limitations
  
- **Capacity**
  - » Rail congestion growth in key corridors
  - » Metro Atlanta roadway congestion
  
- **Connectivity**
  - » Performance limits of “last mile” roads connecting key intermodal facilities
    - Intermodal rail yards
    - Port of Savannah complex
    - Hartsfield Jackson airport



# Georgia's Freight & Logistics Plan: *Recommended Marine Strategy*



- Deepening the Port of Savannah is the top freight priority
- Developing the Jasper Port is important in the longer-term

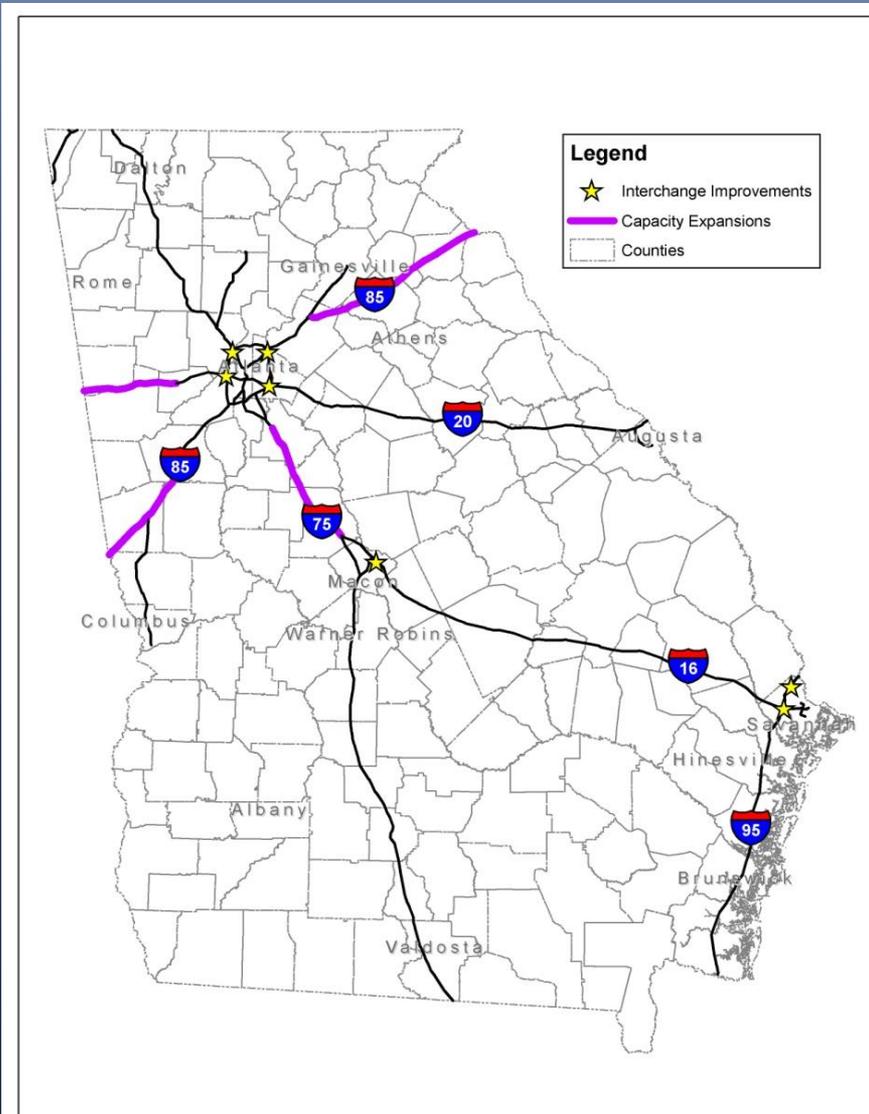




# Georgia's Freight & Logistics Plan: *Recommended Highway Strategy*



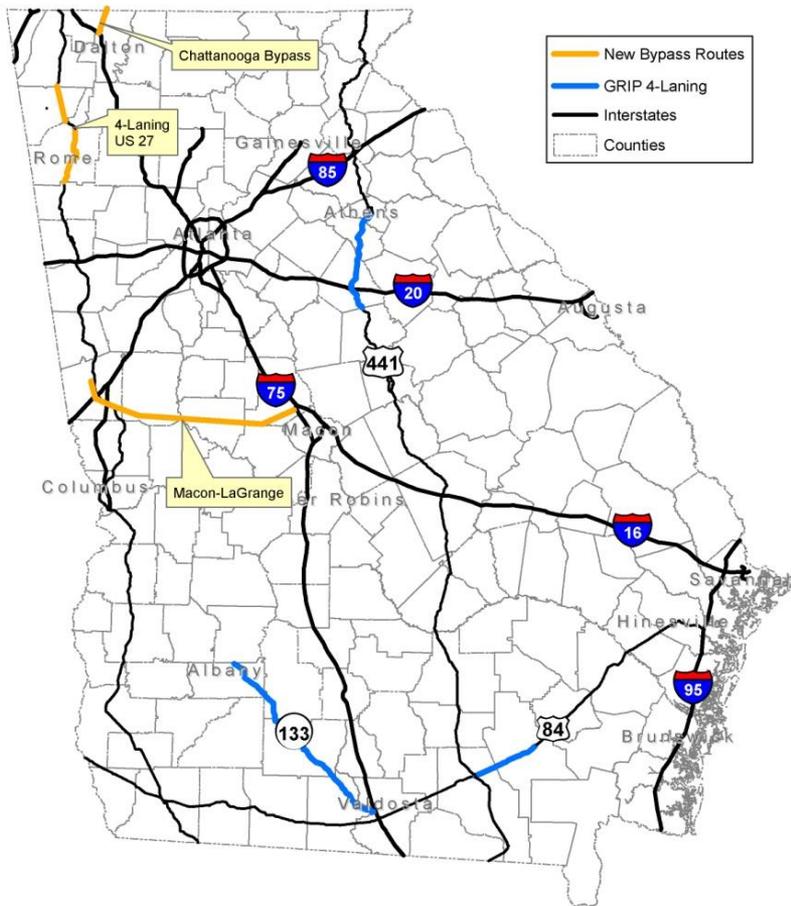
- Select Long-Haul Interstate Capacity Expansions
- Improve Key Interstate Interchanges



# Georgia's Freight & Logistics Plan:

## Recommended Highway Strategy

(cont'd.)

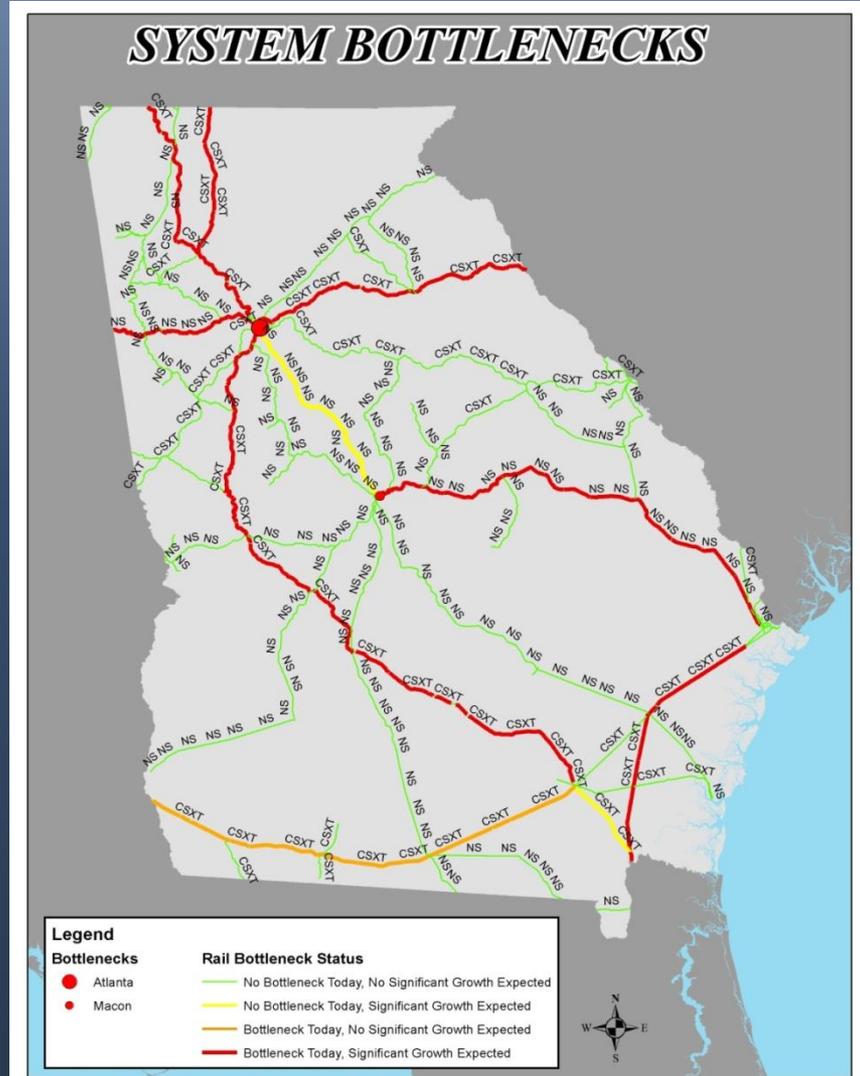


- Improve “bypasses” (alternates)
- Improve select rural/small urban corridors
  - » Rural 4-laning
  - » Safety improvements
- Last-mile connectors
  - » State Route 6 “truck-friendly” lane (metro Atlanta)
  - » Key roads around Savannah Port complex

# Georgia's Freight & Logistics Plan: Recommended Rail Strategy



- Expand line haul capacity
  - » Increase double tracking
  - » Lengthen sidings
- Upgrade to 286K lb. weight limit
- Ensure vertical clearances for double-stack container trains (primarily shortline railroads)

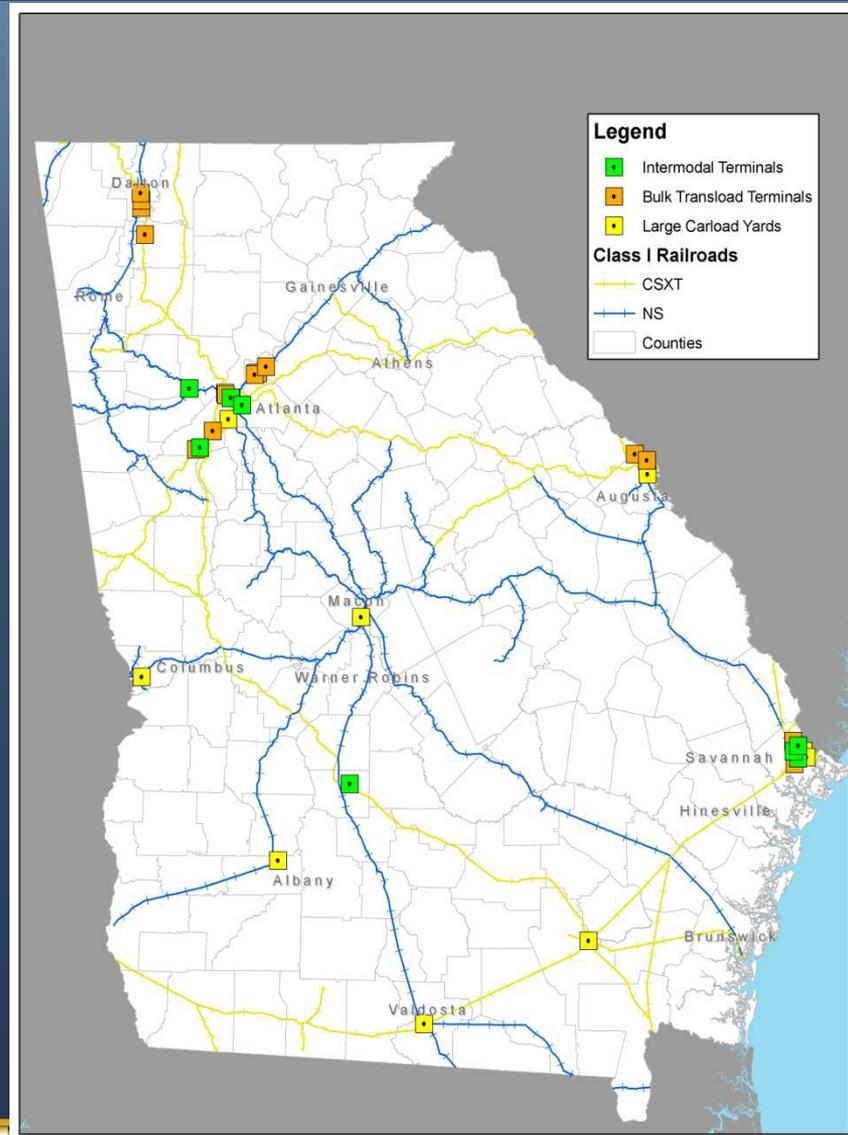


Source: Interviews w/ Class 1 RRs, Transearch data, Consultant analysis

# Georgia's Freight & Logistics Plan: *Recommended Rail Strategy (cont'd.)*



- Expand intermodal terminals in metro Savannah & Atlanta
  - » Existing terminals in urban areas are constrained
- Support continued development of new Cordele intermodal facility
- Expand bulk & carload rail terminals in metro Savannah & Atlanta





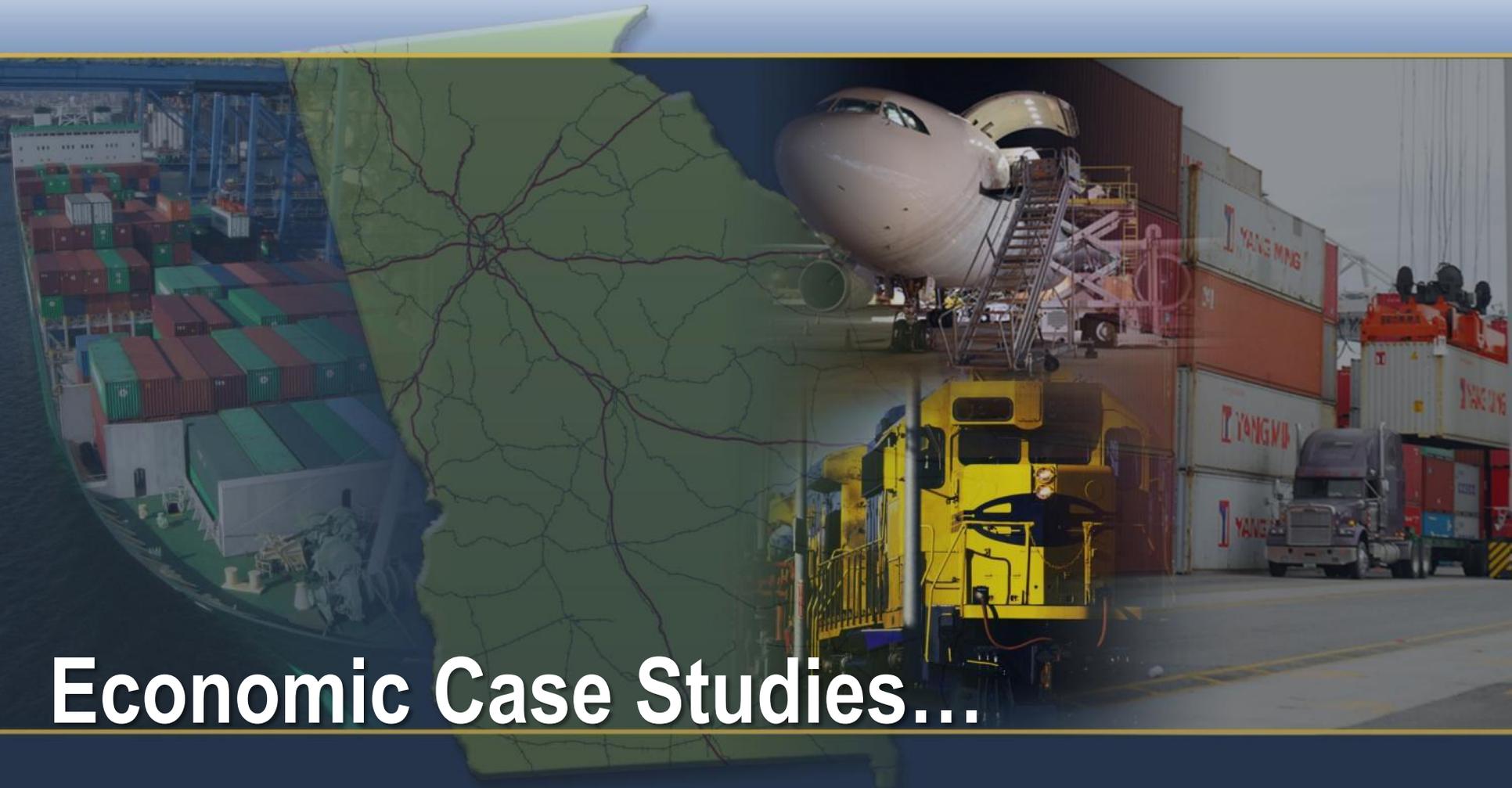
# Georgia's Freight & Logistics Plan: *Recommended Air Cargo Strategy*



- Additional air cargo space at Hartsfield Jackson Intl. airport
  - » 95% of Georgia's air cargo volume uses this airport
- Extend runway at Southwest Georgia Airport in Albany, Ga.
  - » UPS has package sorting facilities



# Georgia's Statewide Freight & Logistics Plan

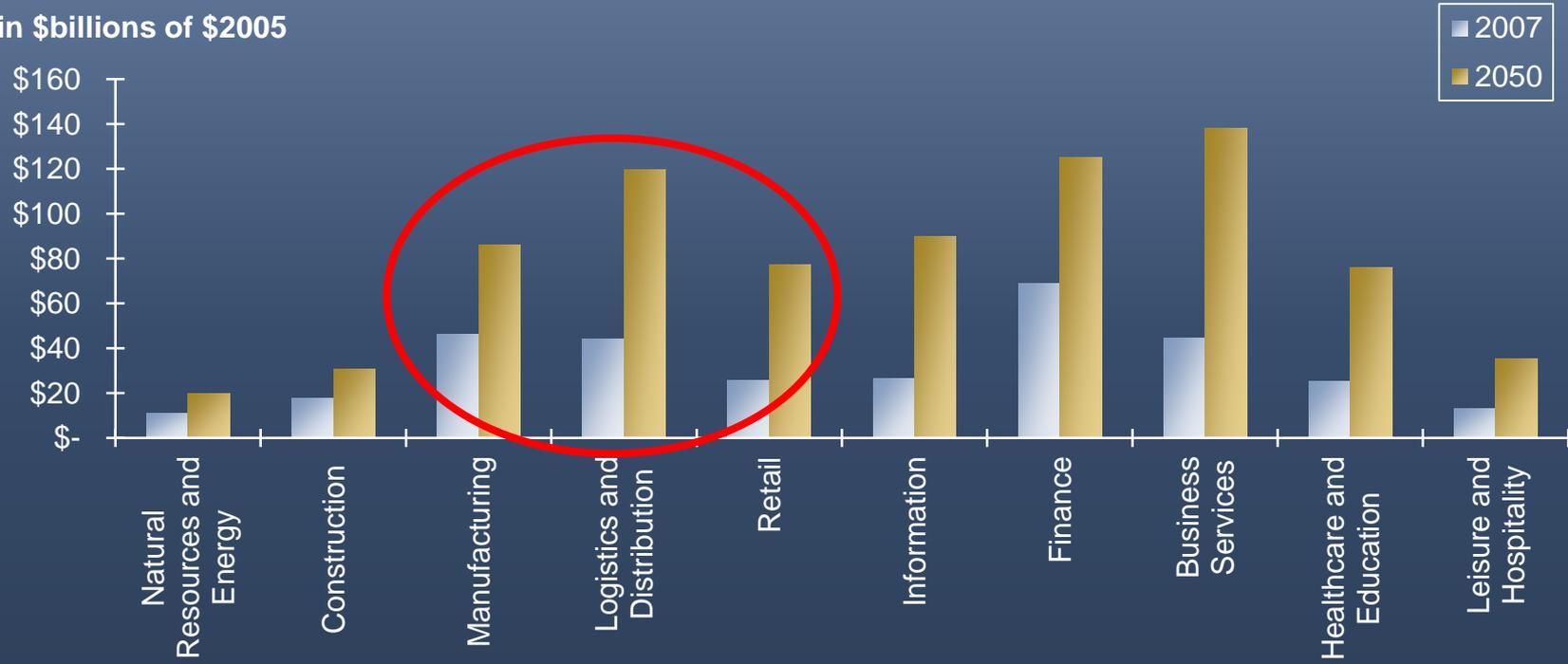


## Economic Case Studies...

# Georgia Freight & Logistics Plan: Economic Evaluation – Select Sectors



in \$billions of \$2005



*Growth in Freight-Intensive Sectors*



# Case Study: Broilers (cont'd.)

Annual value to Georgia's economy: \$4.4 Billion

- The case study focused on one production/distribution center in south-central Georgia. Domestically, this facility in Perry, Ga. supplies many Walmarts & Chick-Fil-A in the Southeast.
- Internationally, countries receiving U.S. broiler exports\*
  1. Mexico
  2. Hong Kong
  3. Russia



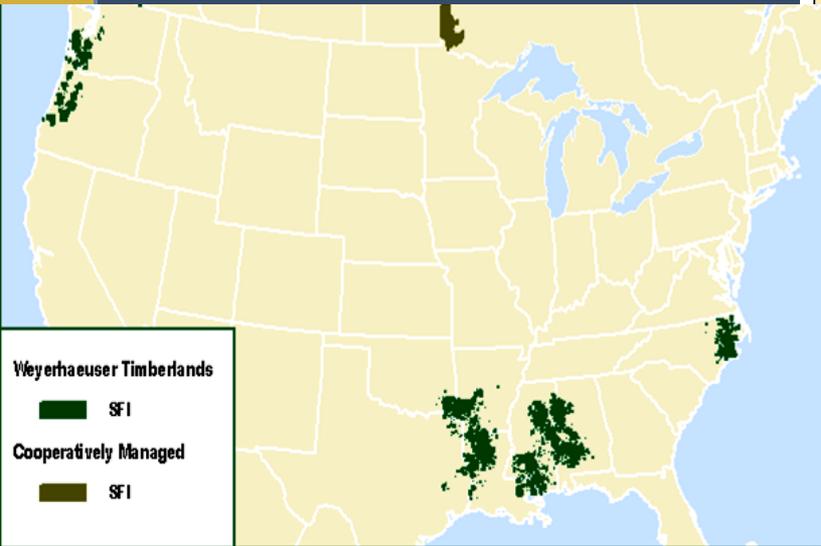
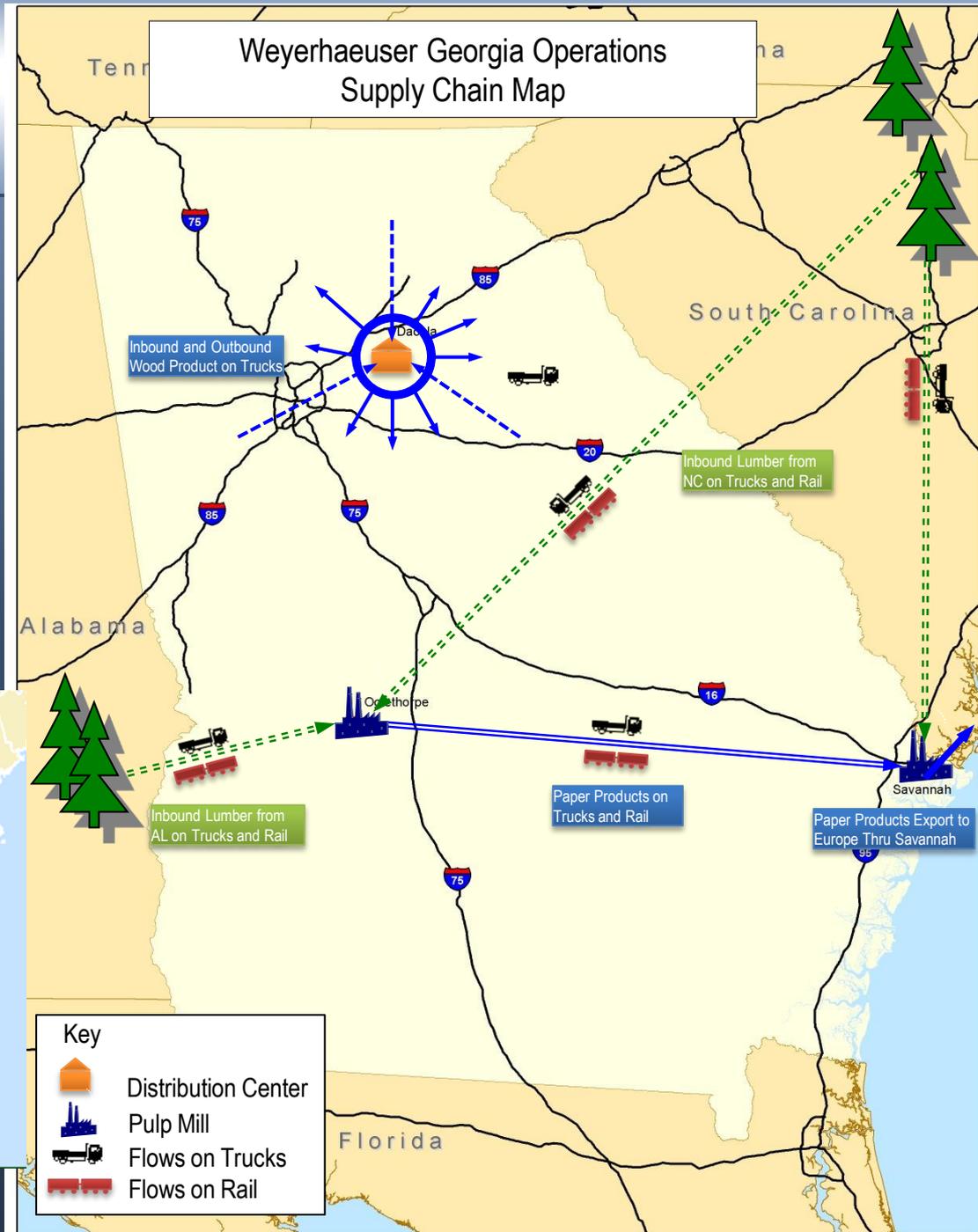
\*source: USDA Foreign Ag. Service 2010, by quantity

# Case Study: Forest Products

Annual value to Georgia's economy: \$25 Billion

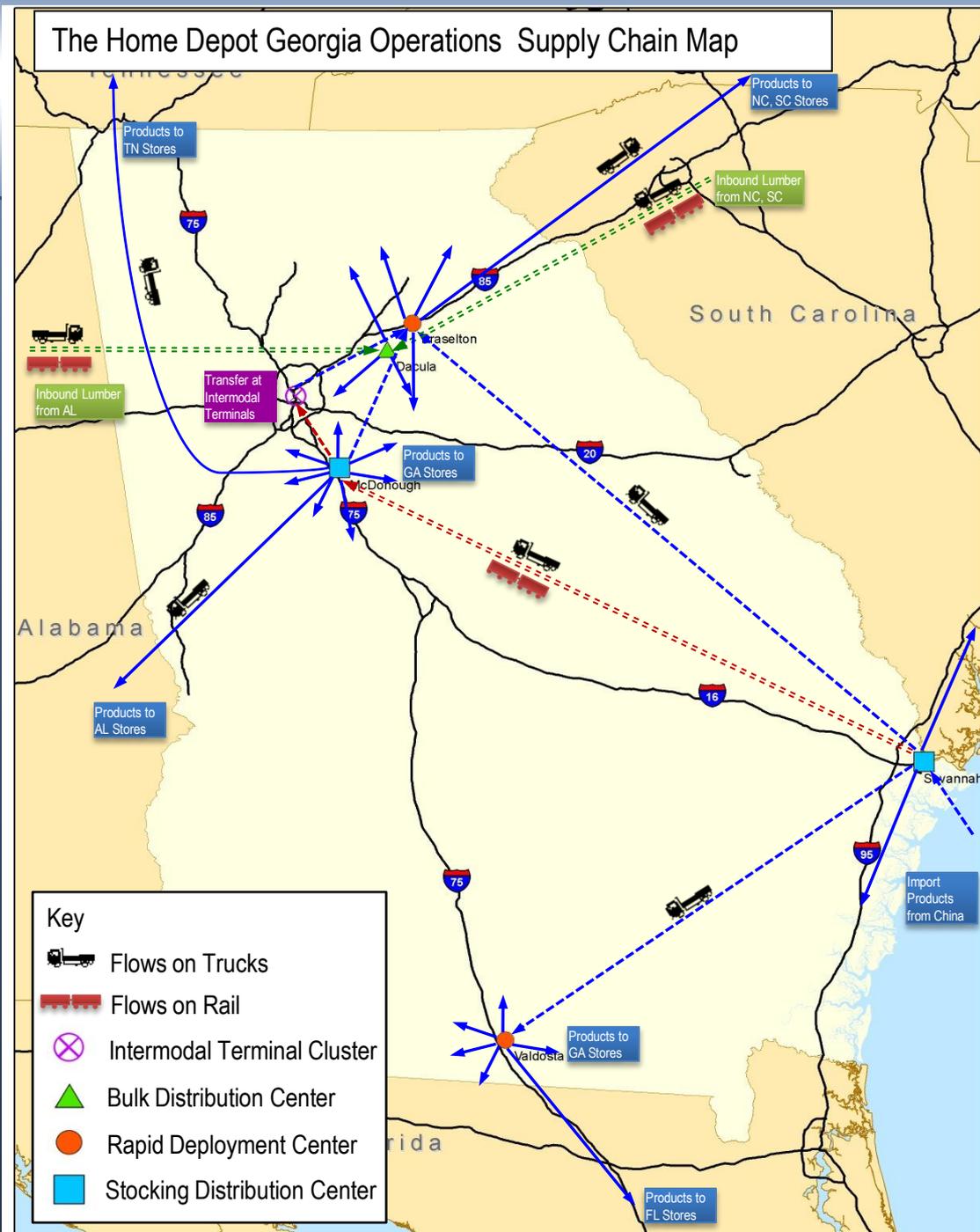
24% of State's total manufacturing output

Weyerhaeuser activities:



# Case Study: Retail

- The Home Depot is headquartered in Atlanta...stores in US, Canada, & Mexico
- Imports about 20% of their goods through Port of Savannah
- Rapid Deployment & Stocking Centers supply retail stores in Southeast
- Bulk Distribution Center
  - » lumber & building materials for retail stores



# Georgia's Statewide Freight & Logistics Plan



## Economic Impact of Recommendations

# Georgia's Freight & Logistics Plan: *Financial Summary*



	Recommendation	Cost	Economic Impact
<b>Port</b>	Savannah Harbor Deepening	\$550 Million	\$2.8 Billion transportation cost savings
	Jasper Port Development	\$4 Billion	\$9 Billion tax receipts (Ga. & S.C.)
<b>Rail</b>	Line Haul Expansion	\$4 - \$6 Billion	\$13.2 - \$19.8 Billion
	Terminal Expansion		
	Improve Weight Limits & Clearances		
<b>Highway</b>	All	\$9.5 Billion	\$52.5 Billion
<b>Air Cargo</b>	Atlanta Warehouse Capacity	\$15-\$20 Million	Additional air cargo capabilities
	Extend Runway at Albany Airport		

## *Economic Return-On-Investment*

# Example: State Route 307 / Rail Grade Separation



- Reduce truck delay from trains
- Recently opened to traffic
- Current expansion of Ga. Ports Auth. Intermodal Yard below...

***“...should cut rail time to Atlanta by 2 hours.”*** (Ga. Ports Auth.)

**Thank you for your time.**



**[www.dot.ga.gov/freight](http://www.dot.ga.gov/freight)**

**Tom McQueen, AICP**  
**[tmcqueen@dot.ga.gov](mailto:tmcqueen@dot.ga.gov)**