### Locally Focused – Globally Driven

Supply Chain DEMANDS
Strategic Transportation
Planning – US 70 Corridor



NC DOT Board of Transportation US70 working group

4 February 2016

North Center For Global Logistics

**Charles Edwards, Executive Director** 

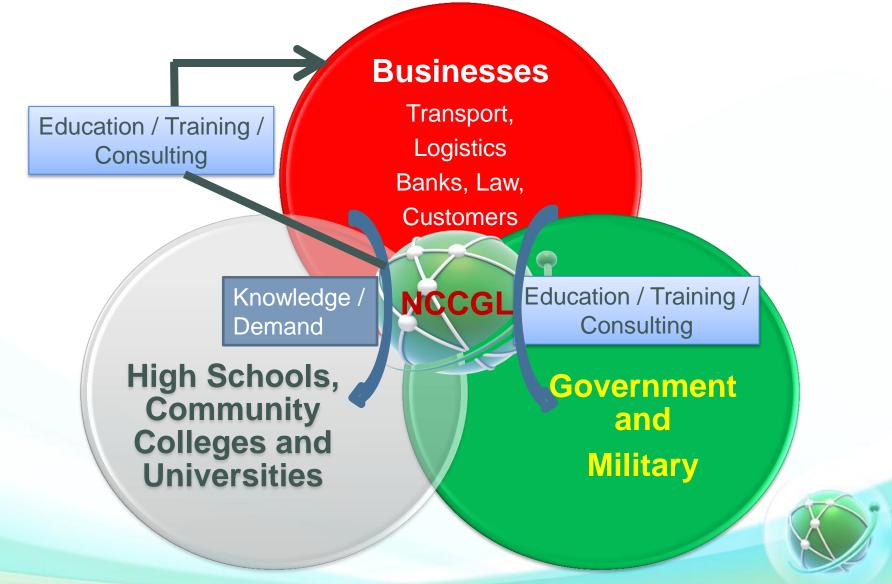
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#### **Presentation Outline**

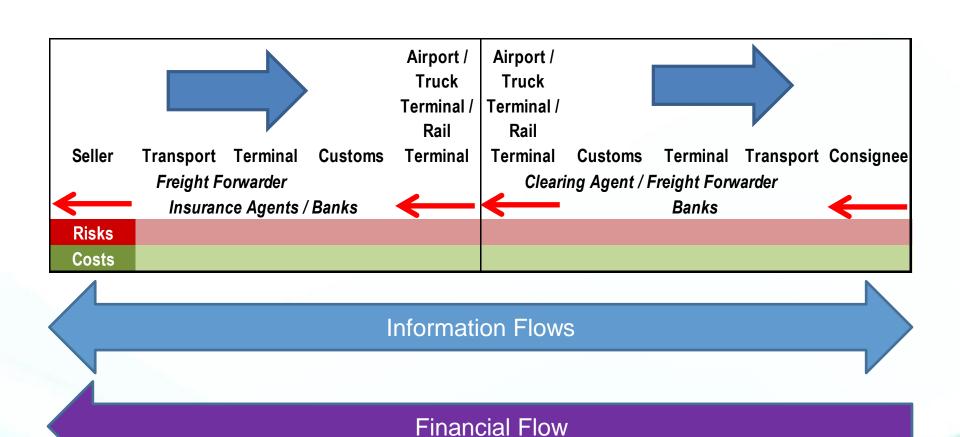
- NC Center for Global Logistics
- What is Supply Chain?
- Impact of Crumbling / Insufficient Infrastructure
- Leverage FAST Act and National Freight Strategic Plan



### NC Center for Global Logistics Services and Functional Organization



### **Supply Chain Flows**



### **Supply Chain Industry**

10 – 13 million Americans in supply chain occupations

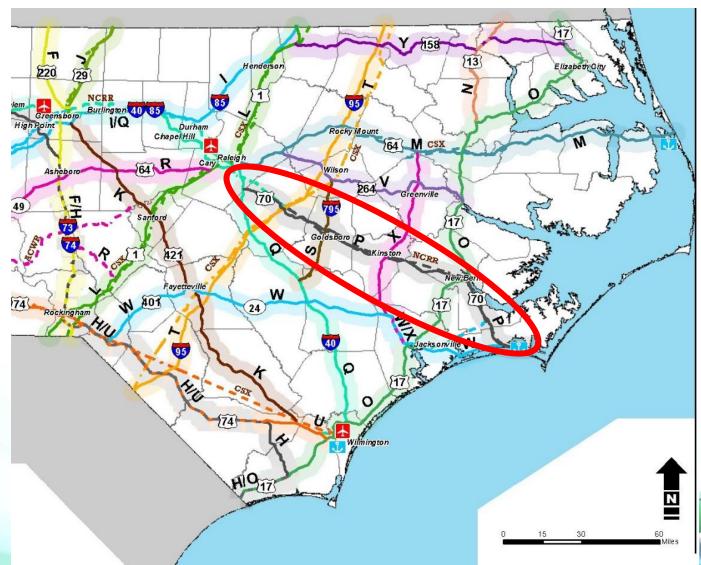
220,000 open positions nationwide

275,000 North Carolinians in supply chain occupations

5,000 open positions In North Carolina



# **Impact of Crumbling / Insufficient Physical Infrastructure**

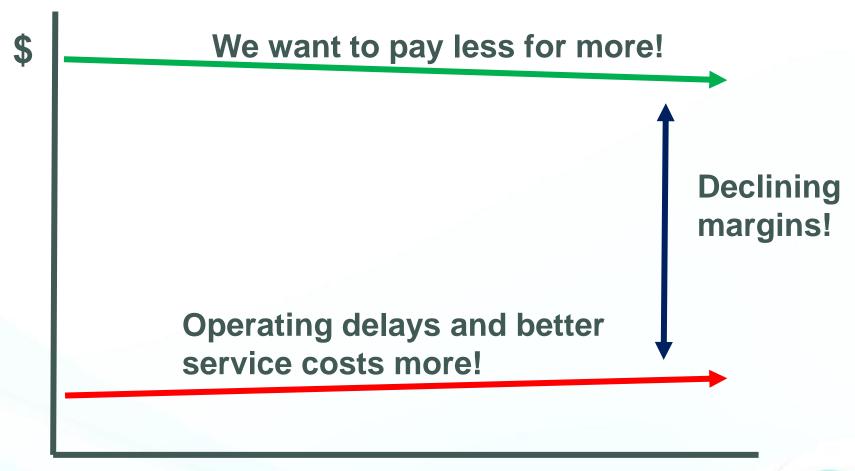


#### **US 70 Corridor**

- Too many traffic signals
- Under-utilized rail line
- Morehead City vs. Wilmington
- CCX facility
- GTP



## **Economic Impact of Crumbling / Insufficient Infrastructure**





## **Financial Impacts of Transport-Driven Shifts**

Transport-Driven Changes		Supply Chain Performance Impacts			
Guiding Transport & Logistics Principle	Supply-Chain Strategy Change	Freight Costs	Inventory Costs	Customer Service Responsiveness	Space Need and Utilization
Count the miles	Sourcing: shift towards near-shoring	Yes	Yes	Yes	
Don't ship air / Don't ship water	Product and package designs: shift towards shipability design	Yes			Yes
Consolidate shipments	Inventory: shift toward lean inventory / transport combination	Yes		Yes	
Source: "The real impact of high transportation costs", D. Russell, J. Coyle, K. Ruamsook, E. Thomchick, CSCMP Supply		Cost of goods sold	Current assets	Sales volume	Fixed assets
Chain Quarterly, Q1/2014, Pgs. 30-54,		Return on capital employed (ROCE)			

# **Leverage FAST Act and National Freight Strategic Plan – Key Programs**

- Coordinated and comprehensive program
  - Leadership of NC DOT
  - Utilize recent and current studies
- Supply chain knowledge
  - Value of supply chain sector
  - Educate NC DOT, RPO, MPO and other planners
- Infrastructure
  - Expand corridors (rural and urban) and intermodal facilities
  - Update STI
  - Highlight North Carolina
  - Employ PPP for nodes and links
  - Federal credit assistance

