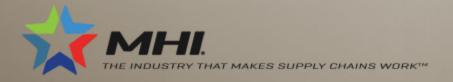
POOLE COLLEGE OF SCRC

NORTH CAROLINA'S SUPPLY CHAIN Conduit for Commerce & Economic Development An Economic Impact Statement & Analysis

Legislative Preview: 1 February 2016

Dana Magliola & Lindsay Schilleman NC State University SCRC Supply Chain Scholars 2015-16





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Introduction

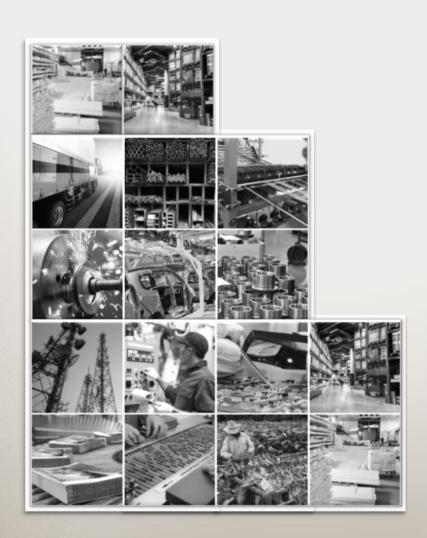






- The SCRC is an academic-industry partnership dedicated to advancing the supply chain industry & the professionalism of its practitioners
- Key Project Advisors & Scholar Sponsors
 - Material Handling Industry (MHI)
 - NC Center for Global Logistics
- Students presenting today conducted research, analysis & authored the report

Clyde Crider, MBA Director, Supply Chain Resource Cooperative, NC State University



- Context for the Analysis & Report
- Scope of the Report
- Defining the Supply Chain
- Key Findings
- NC's Supply Chain Leading Sectors
- Report Release Dates
- Questions & Answers

Context for Analysis & Report

To better understand the dynamic industries of the supply chain is to better understand a significant driver of statewide economic health.

Goals for the Project:

- Quantify the economic impact of the supply chain in North Carolina
- Identify key connections, trends & context
- Limited prior investigations, research & analysis.
- Provide perspective for planning, investment & policy to strengthen this vital conduit for prosperity in North Carolina.



A gauge for economic impact

Scope of Report

Contribution analysis:

- Input-output methodology highlights connectivity
- "Just the facts" snapshot, a conservative approach
- Multipliers & their implications
- Academic/industry research, subjectmatter experts & IMPLAN data
- 14 key supply chain sectors by:
 - Employment
 - Labor Income
 - Output
 - Value Added (GDP Contribution)
 - Taxes



Industries linked together

Defining the Supply Chain

The Supply Chain encompasses:

...those activities, stakeholders, or organizations engaged from the sourcing of inputs, including raw materials, continuing through production, distribution and delivery of goods and services to downstream or consumer markets.



- Represents a more holistic view of the supply chain
- Does not include finance, customer service, real estate, wholesale, retail, food/beverage & most agricultural sectors

Defining the Supply Chain

The 14 Sectors of the Supply Chain in North Carolina:



Chemical Manufacturing



Building Materials



Wood Products



Electronics



Tobacco & Foodstuffs



Textiles



Pharmaceutical, Biologics & Medical Products



Paper Products



Metal Products



Transportation, Distribution & Logistics



Industrial Machinery



Household Goods & Furniture

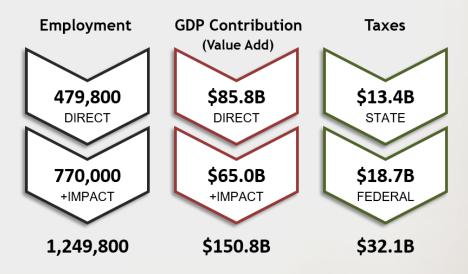


Communications & Computer



Manufacturing N.E.S

Key Findings



RANK	<u>EMPLOYMENT</u>	GDP CONTRIBUTION (Value Add)	STATE TAX
1	Transportation, Distribution & Logistics	Pharmaceutical, Biologics & Medical Products	Tobacco & Foodstuffs
2	Industrial Machinery & Transportation Equipment	Chemical Manufacturing	Transportation, Distribution & Logistics
3	Textiles	Industrial Machinery & Transportation Equipment	Industrial Machinery & Transportation Equipment
4	Chemical Manufacturing	Tobacco & Foodstuffs	Pharmaceutical, Biologics & Medical Products
5	Household Goods & Furniture	Transportation, Distribution & Logistics	Chemical Manufacturing

Leading Sectors

NC's Supply Chain Leading Sectors:



Transportation, Distribution & Logistics:

- *Employment* represents >23% of the state's manufacturing workforce
- Nearly \$5.7B in Labor Income



Pharmaceutical, Biologics & Medical Products:

- Value Added GDP contribution of more than \$19.4B
- \$2.9B paid in federal *Tax*



Industrial Machinery & Transportation Equipment:

- Direct Output of nearly \$38.4B



Tobacco & Foodstuffs:

- \$5.1B paid in state & local Tax



Leading Sectors: Trends

Key trends facing North Carolina's supply chain:

- Rising residential, commercial & infrastructure growth
- Increased environmental & efficiency efforts
- Strong U.S. dollar bolsters purchasing on imports, creates domestic price pressure
- Consolidations maximize economies of scale
 & curb costs, industries changing
- Foreign markets for export growth & increased supply chain utilization
- Highly skilled labor demands as industries modernize
- Research & development infrastructure
- Changes in the regulatory environment



Report Release Dates

- February 1, 2016:
 NC General Assembly Preview
 Select Committee on Strategic
 Transportation Planning and Long
 Term Funding Solutions
- February 9, 2016:
 Council of Supply Chain Management
 Professionals Charlotte Roundtable
- February 9, 2016:
 Public release of the full report on MHLRoadmap.org
- April 4, 2016:
 Supply Chain Education Summit at MODEX 2016 (Atlanta, GA)



Questions & Answers