



CREC CENTER FOR
REGIONAL ECONOMIC
COMPETITIVENESS



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Mapping Manufacturing Supply Chains: Tools for Analysis and Business Development



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Agenda

My Presentation

- * Manufacturing in PA: A Quick Look
- * Why Supply Chains? Why Value Chains?
- * What can you learn from Supply/Value Chain Analysis?
- * What Works? What Doesn't Work?
- * Lessons Learned

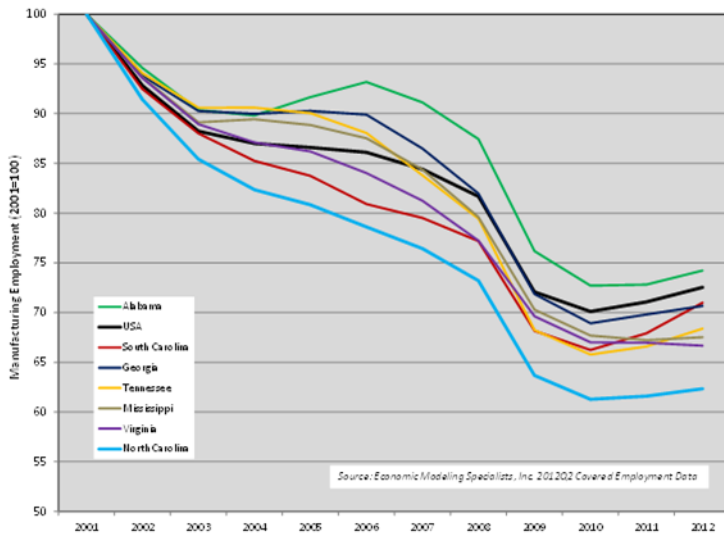
Our Panel

- * Introduction to Key Issues (Pages)
- * Data Tools and Resources (White)
- * Using Results to Drive Economic Development Programs (Zellers)

Competing Perspectives on Manufacturing

Continued Decline?

A Shale Energy Revolution?

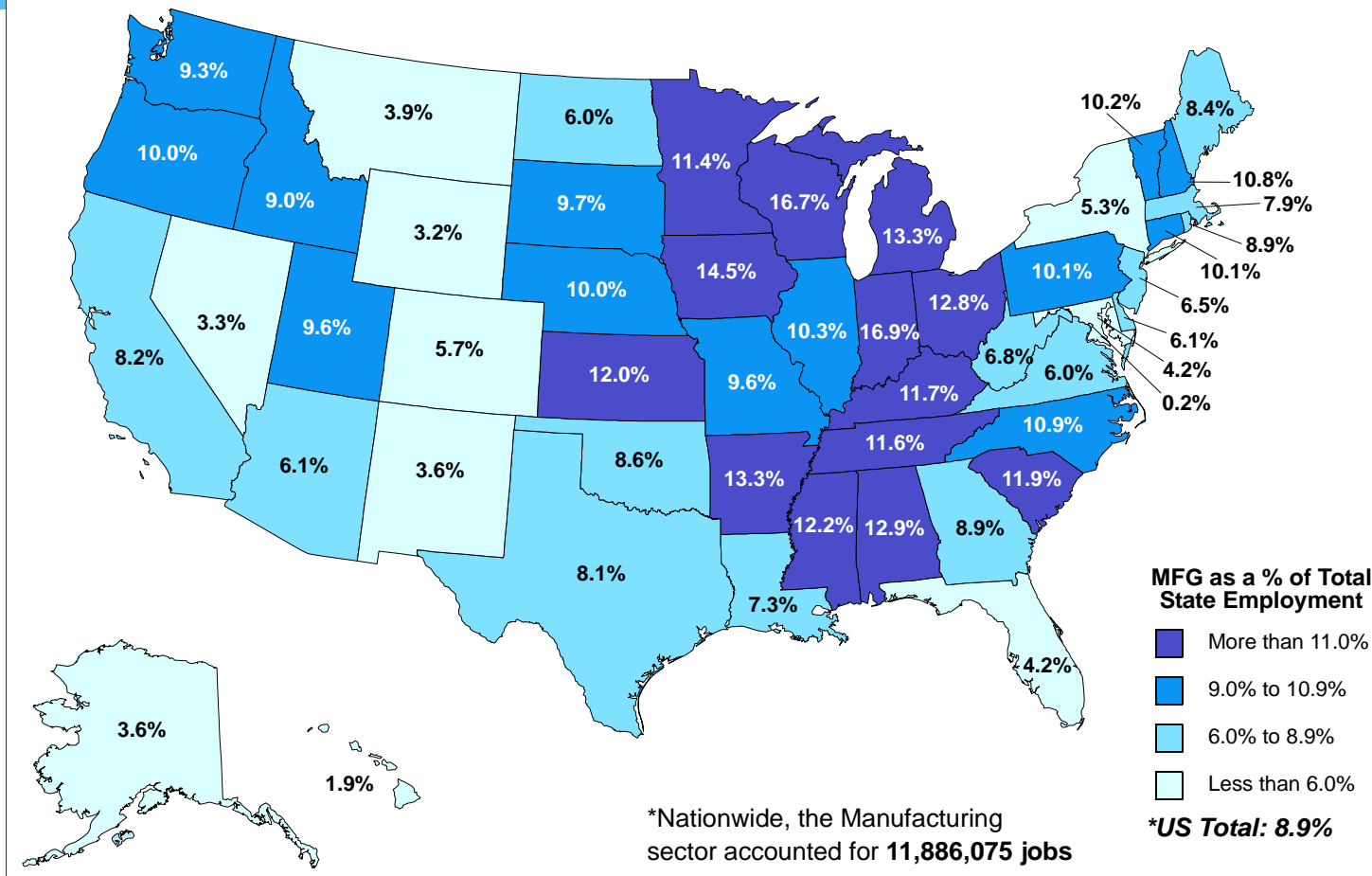


Manufacturing Employment in Southeastern States (2001=100)



Manufacturing remains an important part of the Pennsylvania economy

Manufacturing as a percent of total state employment



Source: Economic Modeling Specialists, Inc.

Center for Regional Economic Competitiveness

The manufacturing sector is especially important to the economy of NW Pennsylvania

| | PA | NW PA |
|---|----------|---------------|
| Manufacturing Jobs (2013) | 566,991 | 50,461 |
| MFG as a % of Total Employment | 9.7% | 17.0% |
| Avg. Annual Earnings (2013) | \$73,092 | \$67,672 |
| MFG Wages relative to Overall Avg. Wages | 125.6% | 158.3% |

Source: Economic Modeling Specials, Inc., Analysis by CREC

Supply Chain Issues & Concerns

- * Industry research suggests supply chain mgmt. is biggest challenge facing manufacturers. Firms are missing . . .
 - * Collaboration and visibility within supply chains,
 - * Full understanding of the total cost of ownership, and
 - * An overall synchronized plan for supply chain management.

Finding New Customers: Understanding the Supply Chain

- * Many manufacturers, esp. SMEs, lack. . .
 - * In-house business development capacity
 - * Capacity to follow-up & capture new opportunities from new markets, technologies or customers.
 - * Access to outside business development or consulting services.

PURPOSE: What is a Supply Chain Analysis?

- * **Data Analysis of Key Industries**
 - * **Backward and Forward Linkages**
 - * **Focus on Smaller Firms (2nd & 3rd Tier Suppliers)**
- * **Identify and Interview Key Firms in Each Target Sector**
 - * **Via Surveys, Interviews and other Research**
- * **Identify Growth Opportunities & Challenge Areas**
- * **Develop strategies to close gaps and exploit growth opportunities**

Other Questions: For Economic Development/Community Leaders

- * **What are major issues facing your local manufacturers?**
 - * **Are they connected to supply chain issues?**
- * **What kinds of support/technical assistance are firms seeking?**
- * **What growth opportunities exist in your region?**
- * **What are pressing gaps/challenge areas?**

Other Models?

Defense Industry



- * CONNECTORY
(www.connectory.com)
- * RADE Commons
 - * (<http://www.rade-commons.org/>)

Food Sectors



- * Wallace Center Food Hub Network
(<http://ngfn.org/resources/food-hubs/food-hubs>)

Key Lessons Learned

- * **Be Creative**

- * Developing Supply Chain Maps is Tough!

- * **Be Patient**

- * Creating Supply Chain Connections Takes Time

- * **Be Flexible**

- * Supplement Supply Chain Support Effort with other Business Development Tools.

Thank you

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