



## Developing Louisiana's Forest Products Industry: Adding Value for the Future

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### Outline

- Industry Development & Adding Value
- Overview of Louisiana Forest Sector
- Where is Louisiana Positioned?
- Louisiana Forest Products Development Center
- Summary Comments

## Overview

If managed properly, forests can provide a sustainable source of products, services and employment.

In areas where jobs are scarce, forest-related jobs may provide alternatives to forced migration or commuting.

There is unfulfilled potential for jobs creation and expansion of the existing forest products industry in Louisiana.

The challenge is to identify high potential sectors for further expansion, new development, and adding value.

## Industry Development & Adding Value



## What is Value-Added?

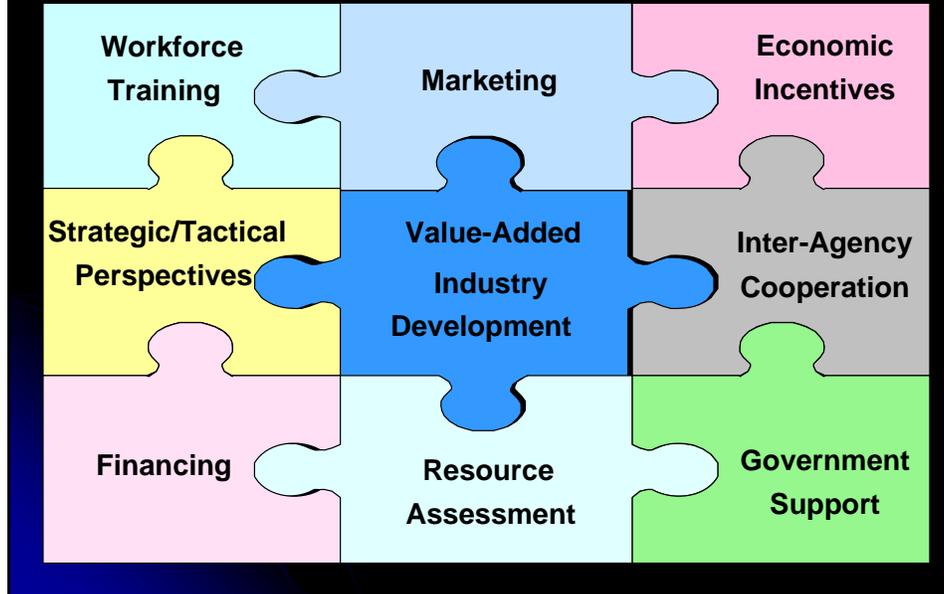
- The increased value at each stage of a manufacturing assembly process
- Those activities or steps which add to or change a product or service as it goes through a process; these are the activities or steps that **the market** views as important and necessary
- Addition of net economic value
- Value can be added through manufacturing or marketing

## Why Add Value?

- Value-added wood products typically require more employees than primary products -- that means more jobs.
- They usually require more than one mill to complete the process-- that means more companies fueling a wood products economy.
- The added processing typically means higher valued products -- that means more money stays in-state.
- For these reasons, value-added wood products are an important link between the timber harvested from the forest and the wood products consumers buy in stores.

Adapted from: [http://www.forestlearn.org/mills/valu\\_add/](http://www.forestlearn.org/mills/valu_add/)

## Value-Added Industry Development is Multi-Faceted



## Traditional Perspective: Primary vs. Secondary (Value-Added) Wood Products

- **Primary products:**
  - produced directly from raw timber input. Examples include chips, lumber, veneer, plywood and their by-products.
- **Secondary (value-added) products:**
  - use primary products as input for remanufacturing. Examples include various types of panels, engineered composites, or dimension stock.
  - secondary products also includes final consumer products such as furniture, cabinets, flooring, etc.

# Overview of Louisiana's Forest Sector

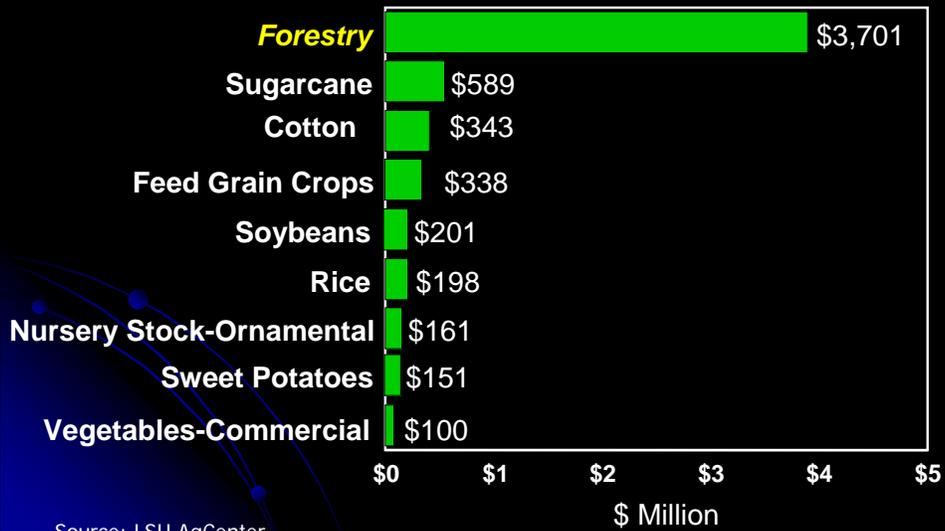


## Key Louisiana Forest Sector Facts

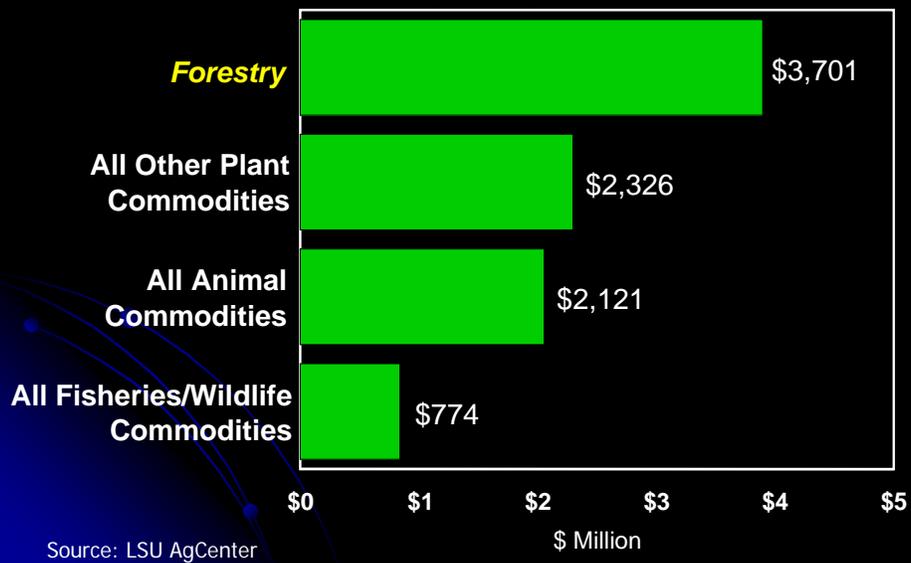
- 13.8 million acres of forests (48% of Louisiana land area)
- ½ Pine: ½ Hardwoods
- 59 of 64 parishes contain forest land
- 148,000 forest landowners
- ~180 Primary manufacturers
- ~750 Secondary manufacturers
- Louisiana's 2<sup>nd</sup> largest employer
  - 19,703 manufacturing jobs
  - 8,000 harvesting/transportation

Source: Louisiana Forestry Association

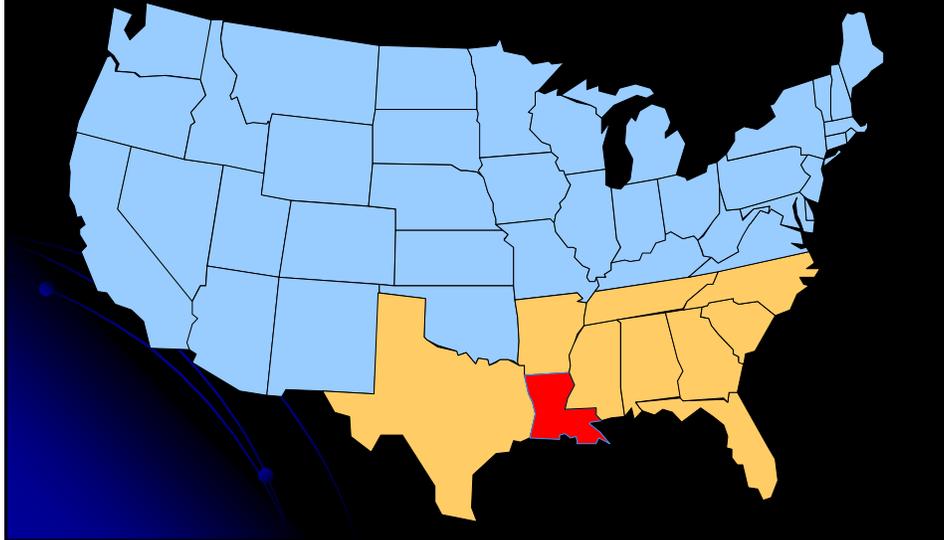
## Louisiana Agricultural Commodity Economic Contribution (2003)



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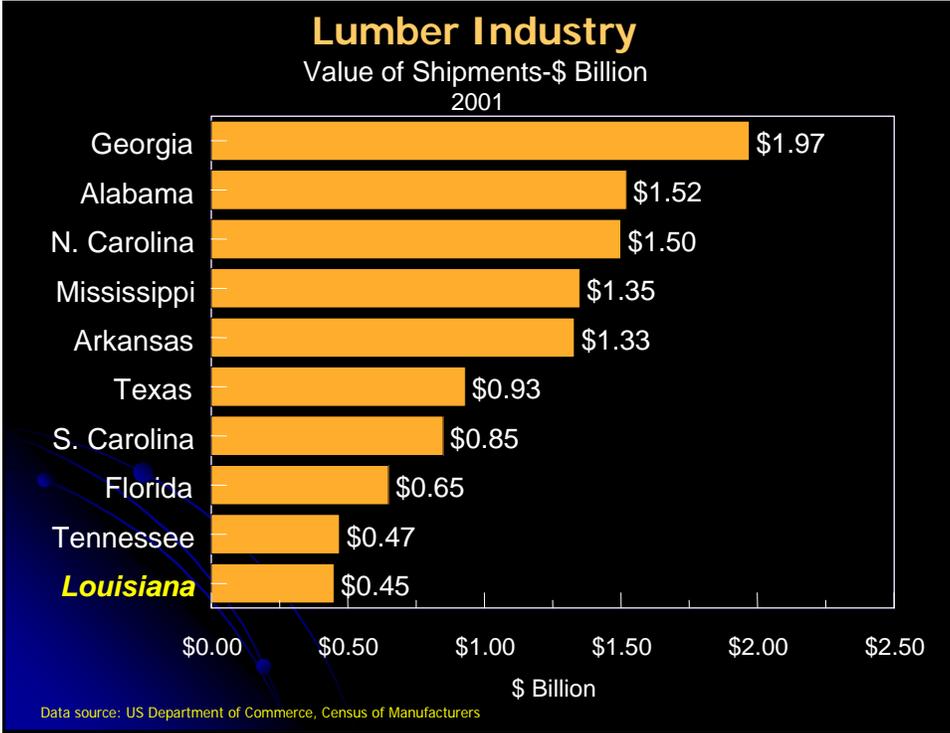


## Where is Louisiana Positioned?



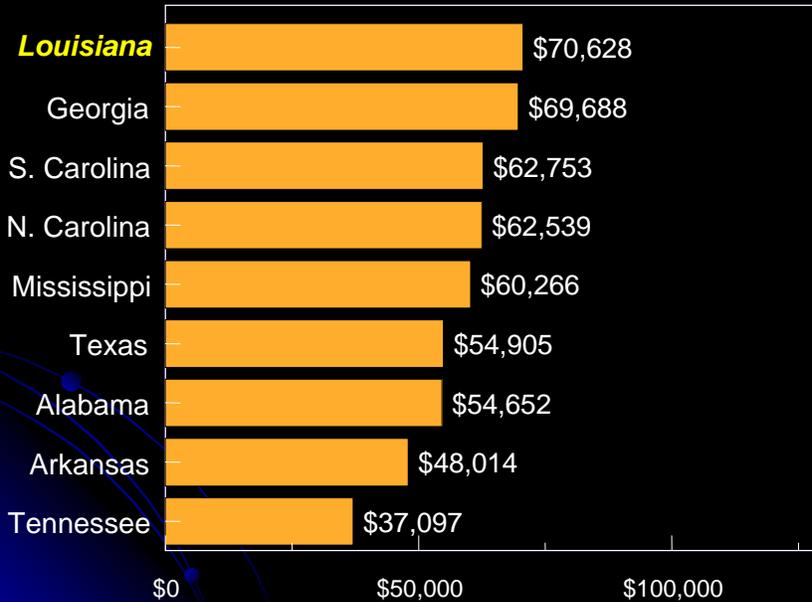
## Is Louisiana Adding Value?

- Yes, but.....
- Although timber is the number one agricultural crop in Louisiana, much of our harvested wood leaves the state in a raw form allowing value to be added elsewhere.
- Exporting raw materials reduces economic development potential from value-added industries.
- This concept is not unique to the forest sector.



## Lumber Value-Added \$/Employee

2001

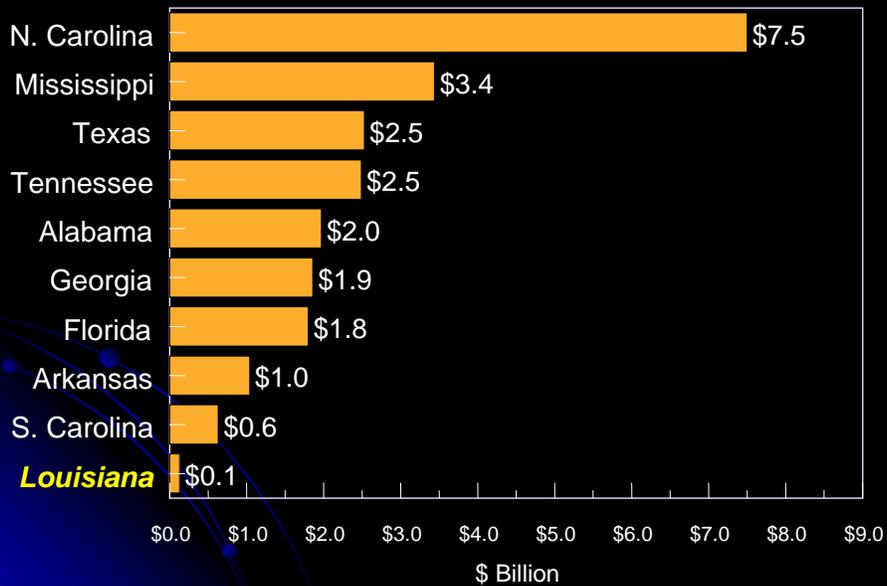


Data source: US Department of Commerce, Census of Manufacturers

## Furniture Industry

Value of Shipments-\$ Billion

2001



Data source: US Department of Commerce, Census of Manufacturers

## Furniture Value-Added \$/\$1 of Raw Materials

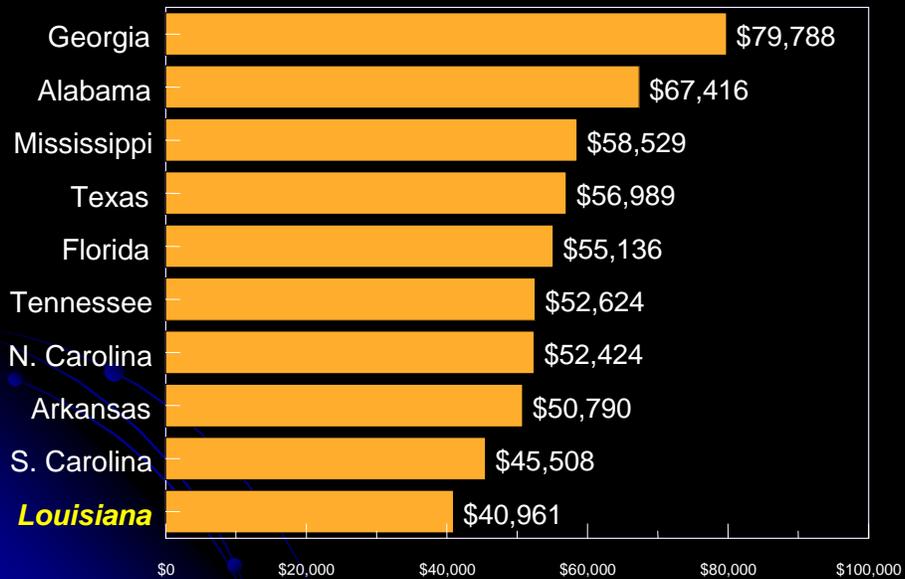
2001



Data source: US Department of Commerce, Census of Manufacturers

## Furniture Value-Added \$/Employee

2001



Data source: US Department of Commerce, Census of Manufacturers

# Louisiana Forest Products Development Center Research: Adding Value Through Innovation



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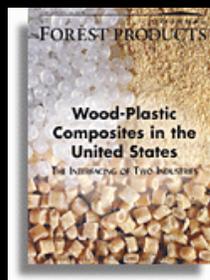
## Lumber Drying



# Wood Strand Composites



# Wood/Plastic Composites



## Stain, Mold & Fungi Prevention/Mitigation



## Recycle Out-of-Service Treated Wood/ Develop New Wood Preservatives

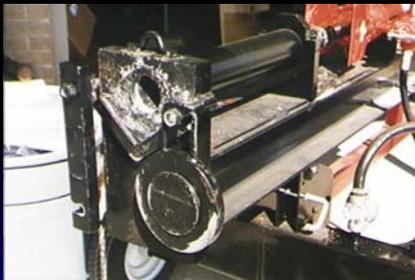


## Recycle Agricultural/Wood Residues into New Products

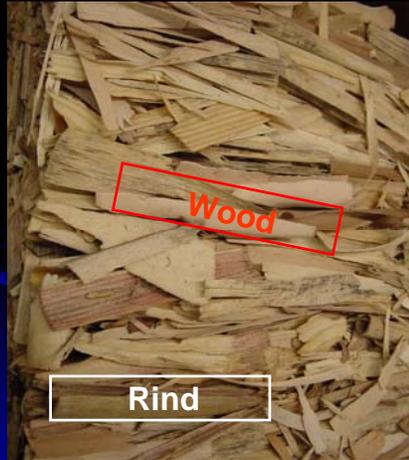


## "Environmentally Friendly" Firelogs

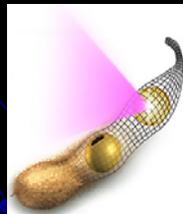
Ag/Wood Waste & Soybean-Based Adhesives



## Wood/Sugarcane Rind Structural Panels



## New Adhesives



## Housing Durability



Methods and Materials



Design criteria for termite infested areas & sub-tropical climates

## Housing Durability Termites

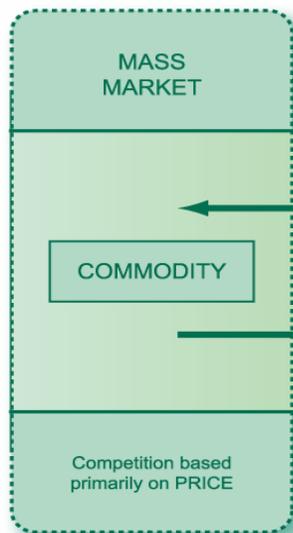


# Marketing & Business Development

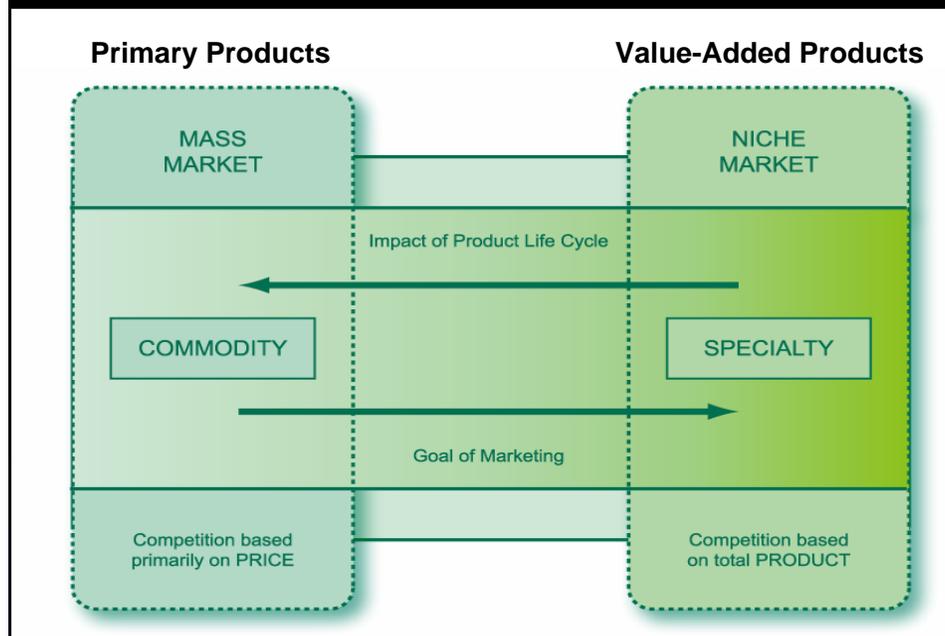


# Marketing

## Primary Products



## Marketing



## Identifying Opportunities to Add Value

Market-based criteria to assess wood product industry sectors for value-added development include:

- Raw material availability
- Markets (local, regional, national or global)
- Market growth rate
- Competitive environment
- Provides employment opportunities
- Infrastructure
- Business climate
- *Long-term viability*

## Summary

- The forest sector is a leading contributor to Louisiana's economy
- We lead other Southern states in adding value to logs in making lumber
- We lag other Southern states in adding value in manufacturing furniture
- Furniture "per se" is NOT the answer; value-added niches should be explored
- We **can** and **should** do better at adding value to our forest resources
- Innovation and a rational, systematic, strategic approach is the answer



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Louisiana Forest Products Development Center

Questions????