# A Blueprint for Forest Products Industry Economic Development


Richard Vlosky

Forest Products Marketing Program
Louisiana Forest Products Laboratory
Louisiana State University Agricultural Center


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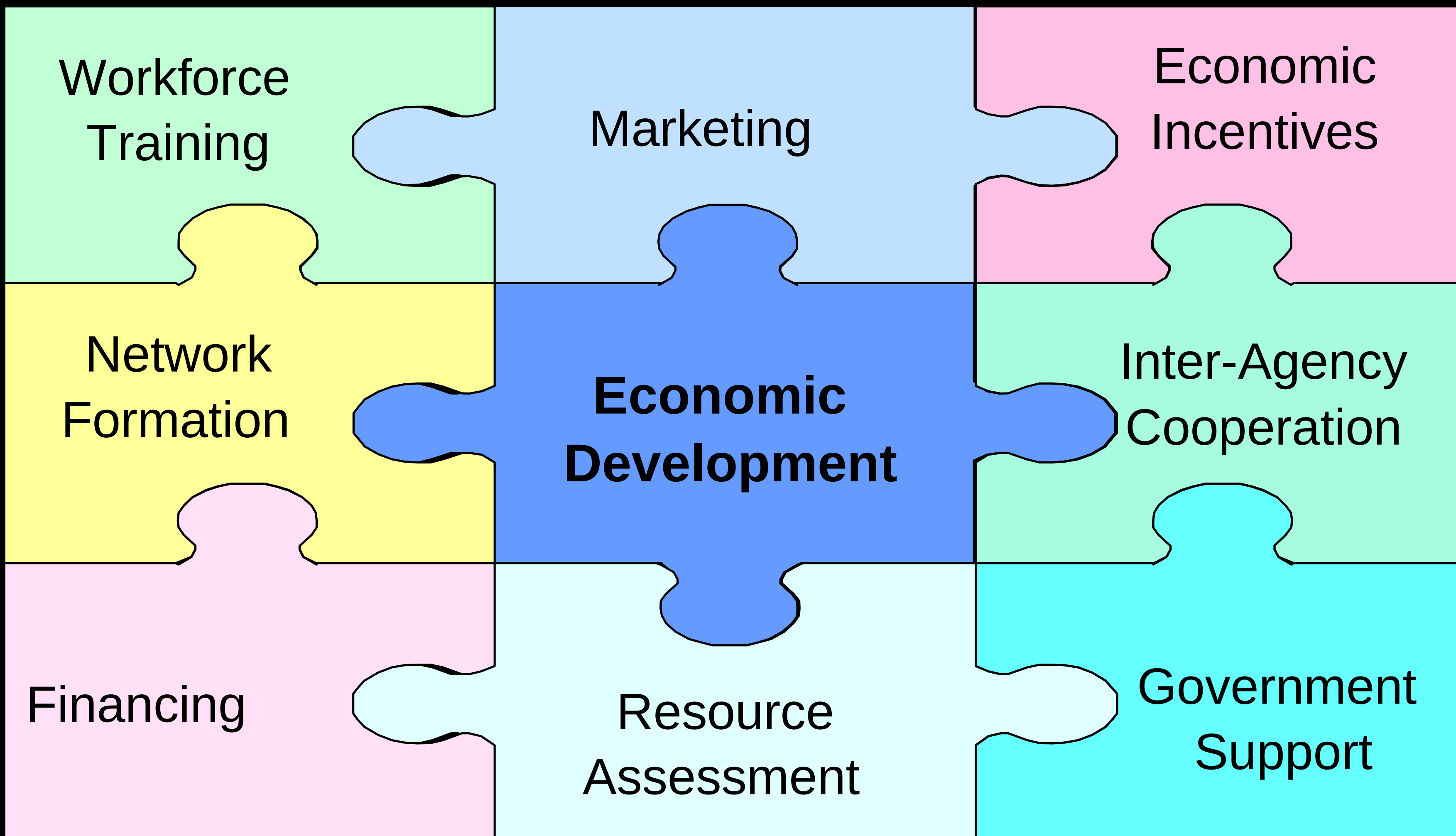
# Presentation Outline

- ◆Overview
- ◆Integrated Development & Planning Model
- ◆Major Model Components
  - Resource Assessment
  - Industry Structure
  - Product/Market Strategy
  - Economic Impacts
  - Social Interactions
- ◆Getting from Analysis to Action

# Industry Development is Multi-Faceted



# Integrated Market-Based Value-Added Forest Sector Economic Development

**Resource Assessment**
- Current & projected
- Commercial species
- Lesser-used species

**Industry Structure Profile**
- Current products
- Potential products
- Business development
- Technology
- Profitability

**Market Assessment**
- Domestic
- Regional
- Global

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**Economic Effects**
- Downstream multipliers
- Sensitivity analysis

**Training & Development**
- Skilled, semi-skilled, Mgt.
- Basic & remedial

**Social Structure**
- Demographics
- Work readiness

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- Stakeholder Inclusiveness
- Interaction

**Other Issues**
- Environmental
- Political

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**Sustainability**

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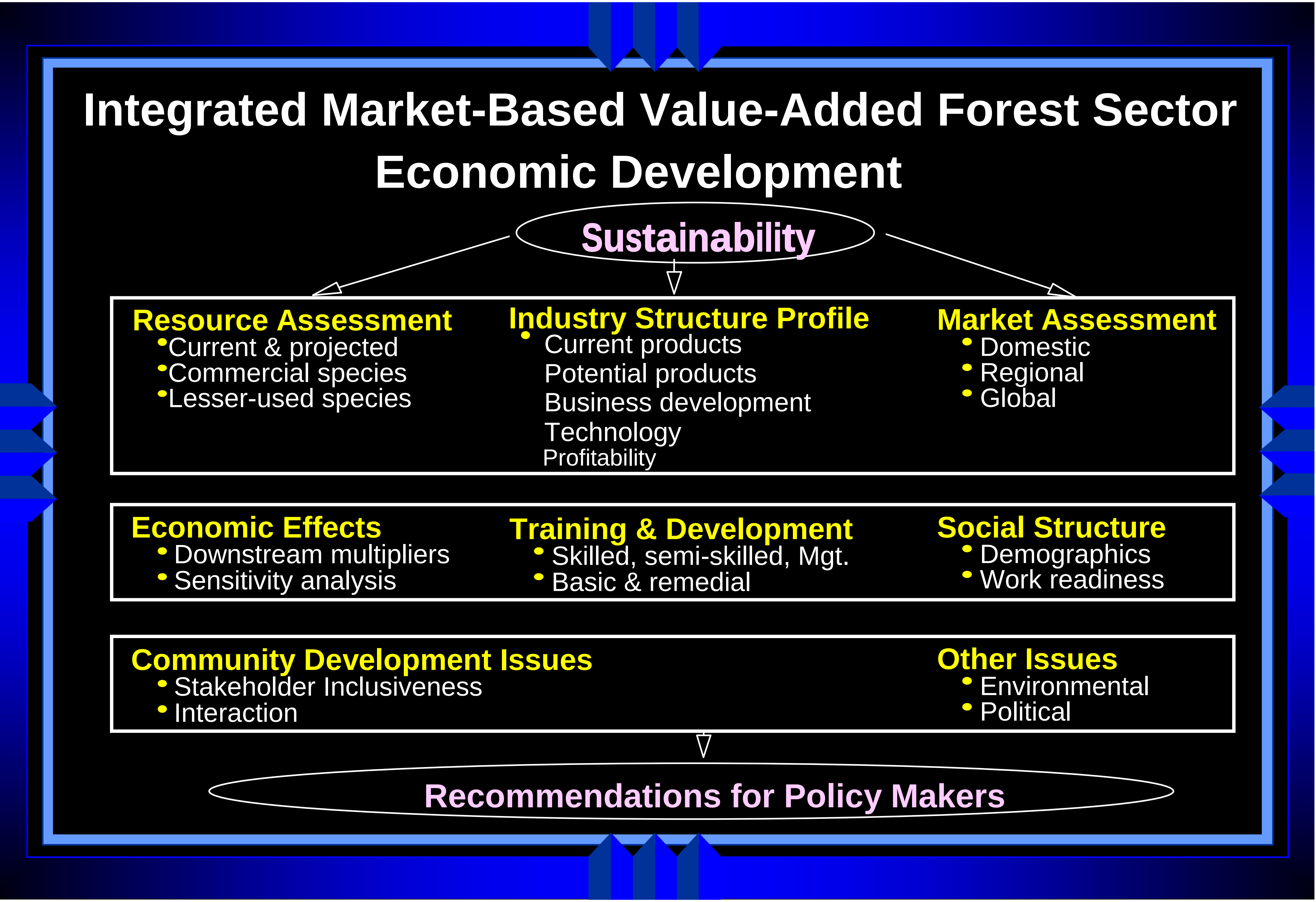
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Other Issues
• Environmental
• Political
Recommendations for Policy Makers

# Overview

In general, forest products companies located in rural areas provide jobs with wages competitive with other industries.

In places where jobs are scarce, forest products jobs often provide alternatives to forced migration or commuting.

**<u>Major Model Components</u>**

**Resource Assessment**

Industry Structure

Product/Market Strategy

Economic Impacts

Social Interactions

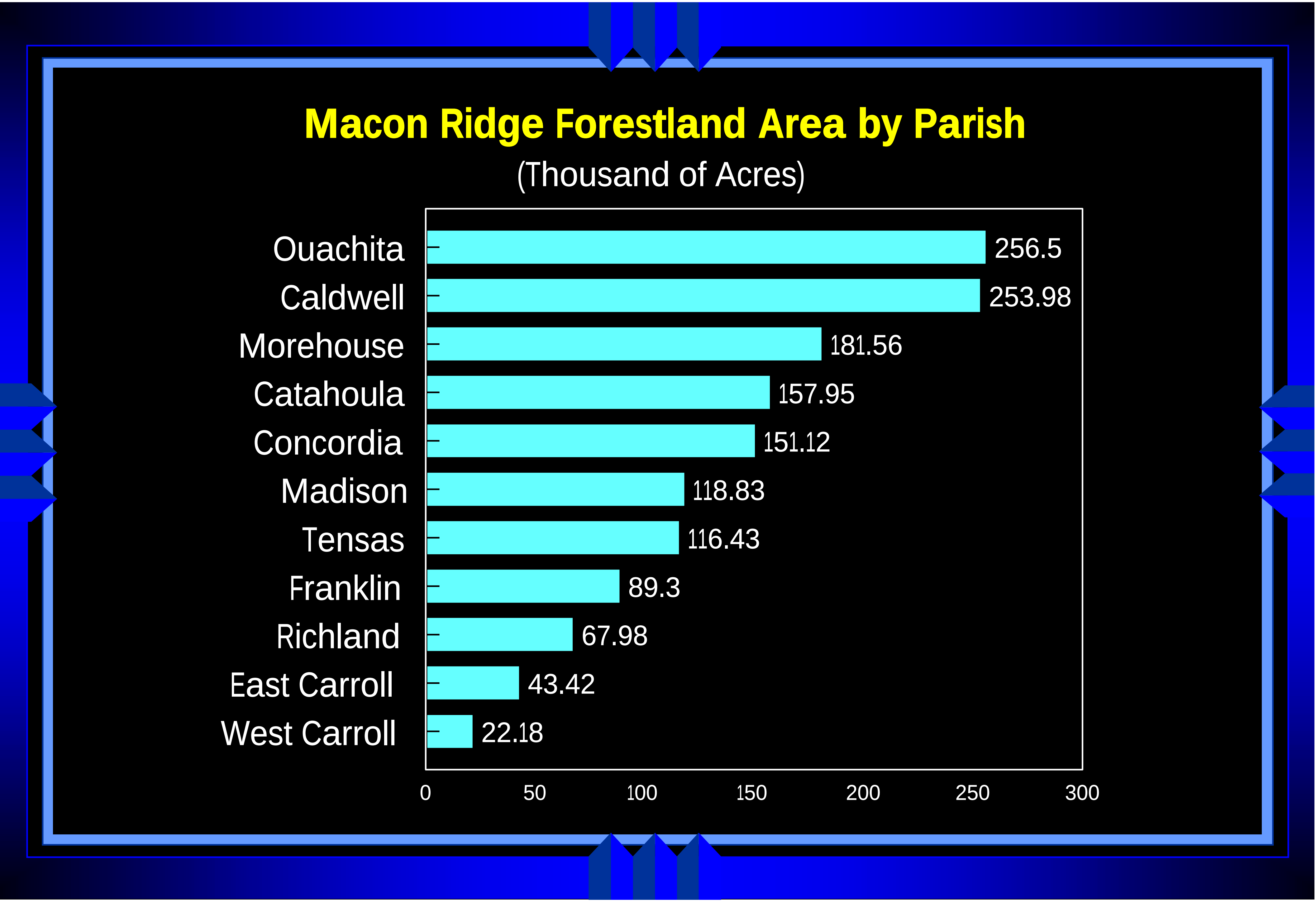
Structural Impediments

# Key Questions
# Resource Assessment

Is the availability of timber resources a barrier to the development of the value-added secondary forest products industry?

Is the focal region located within reasonable transporting distance of significant standing timber inventories?

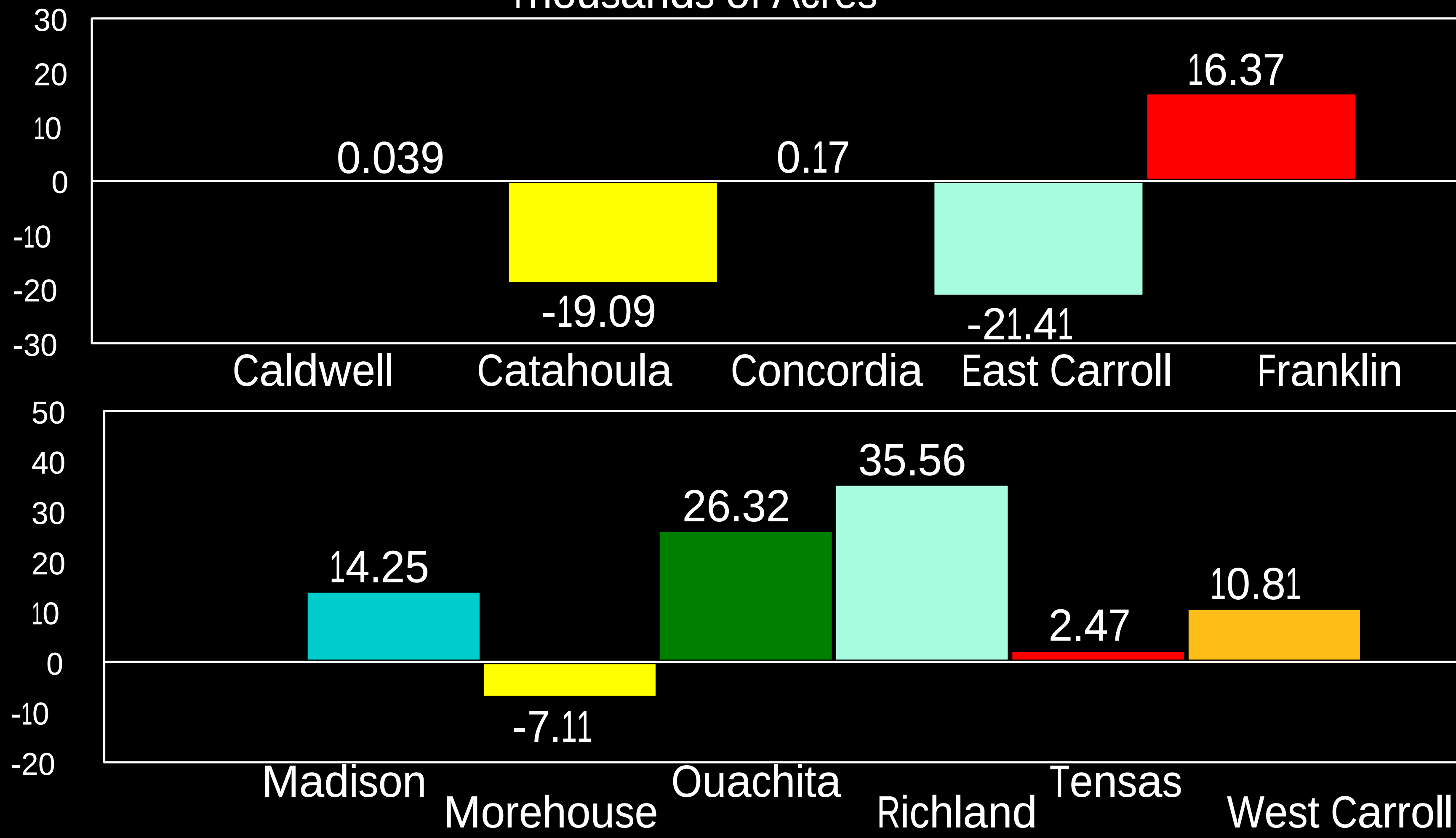
What are the trends: ownership, forestland acreage, growing stock, growth/removals, sawtimber, diamater classes, species, etc.


Macon Ridge Forestland Area by Parish
(Thousand of Acres)
Ouachita 256.5
Caldwell 253.98
Morehouse 181.56
Catahoula 157.95
Concordia 151.12
Madison 118.83
Tensas 116.43
Franklin 89.3
Richland 67.98
East Carroll 43.42
West Carroll 22.18
0
50
100
150
200
250
300

## Change in Timberland Area 1984-1991

**by Parish**

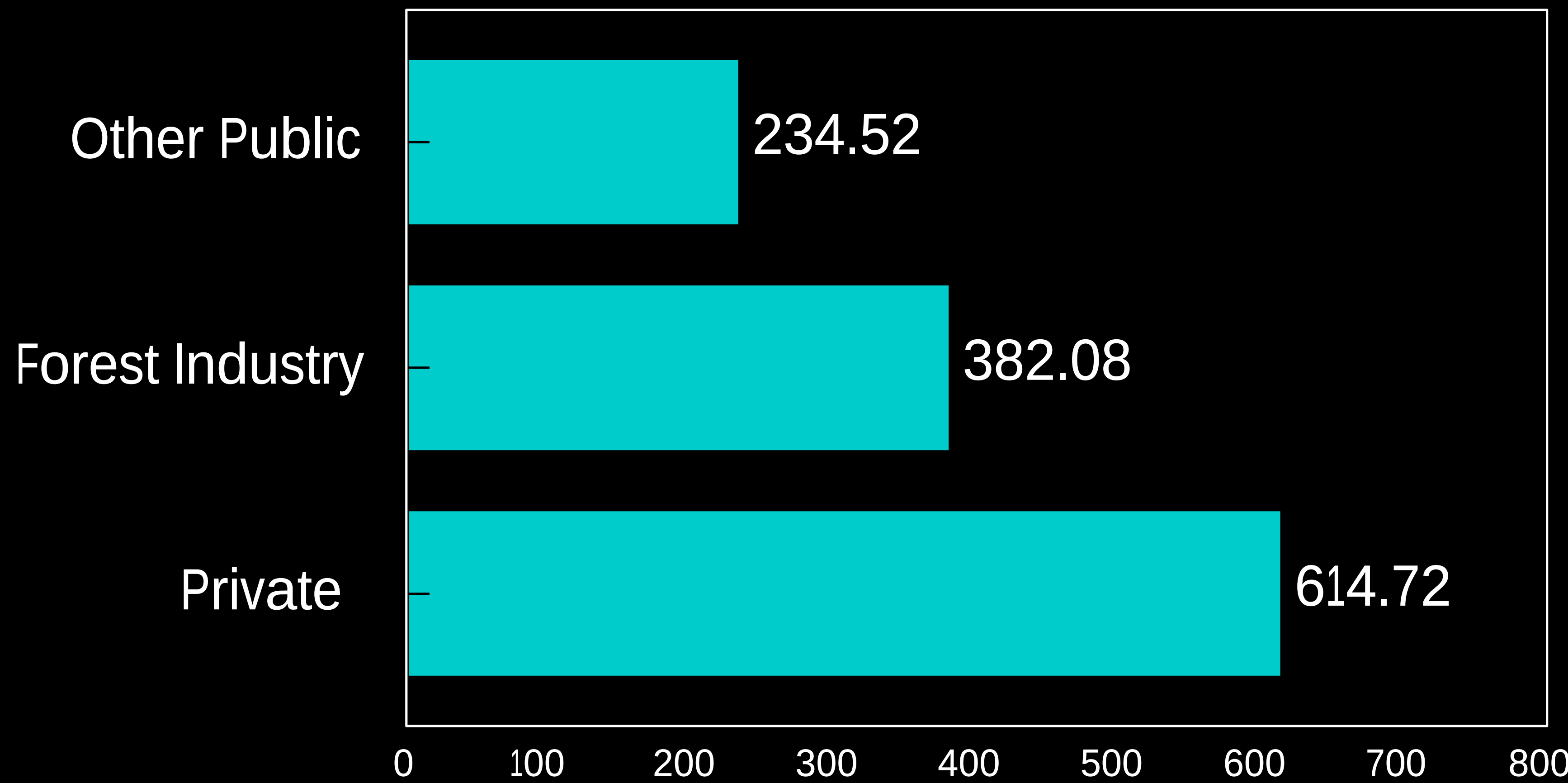
Thousands of Acres



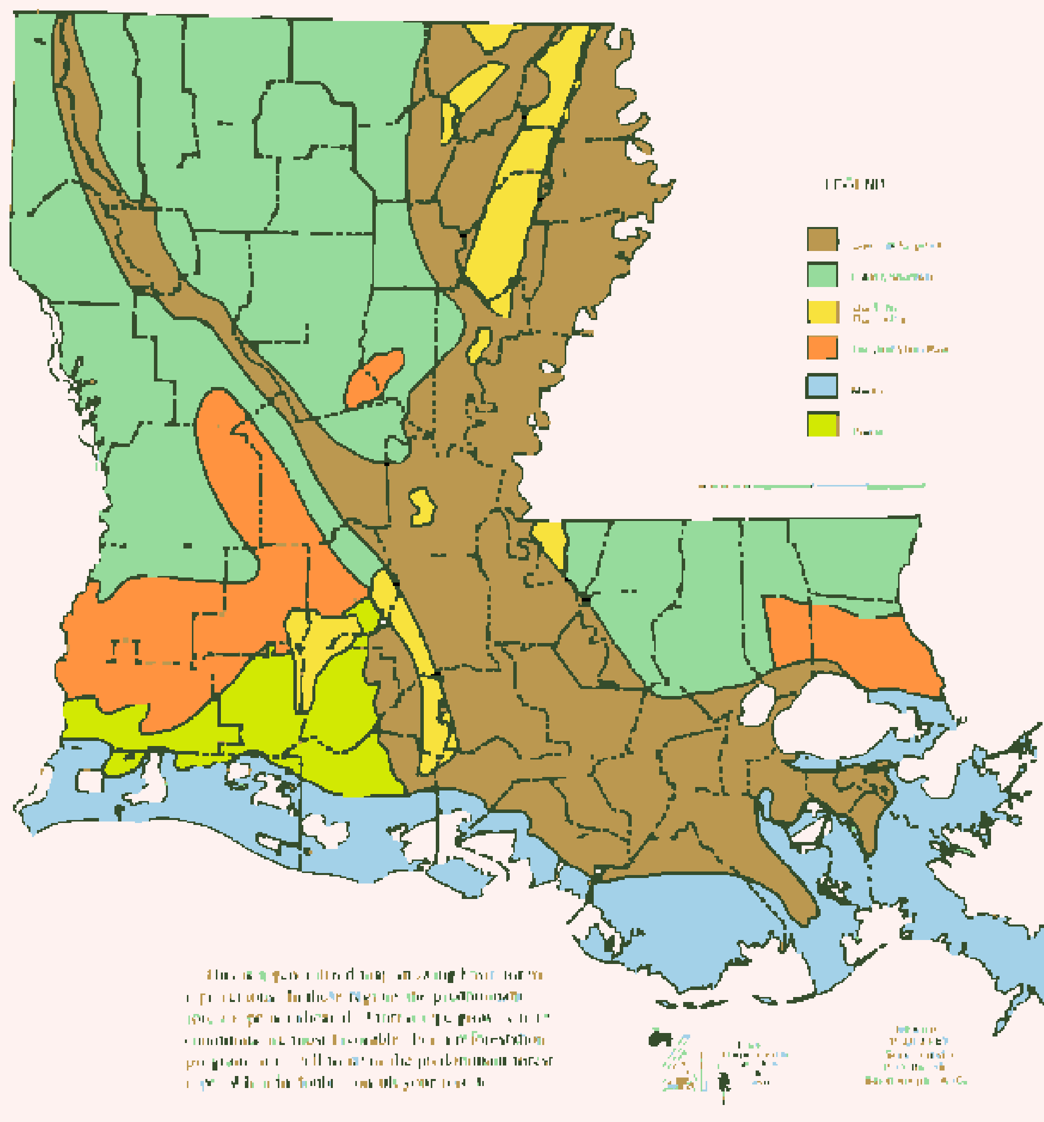
# 1991 Macon Ridge Timberland Area

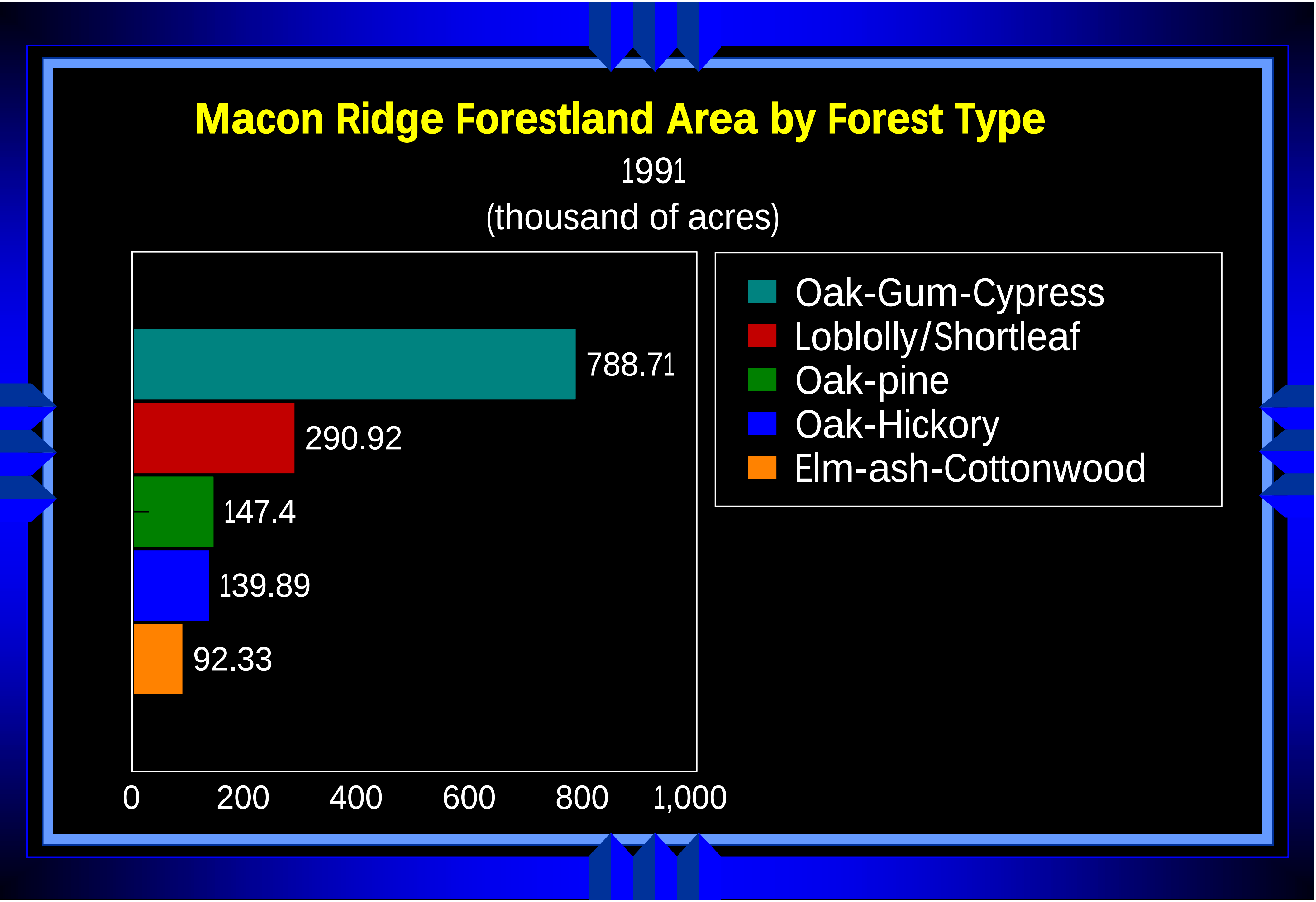
by Ownership

Thousands of Acres



# LOUISIANA FOREST TYPES

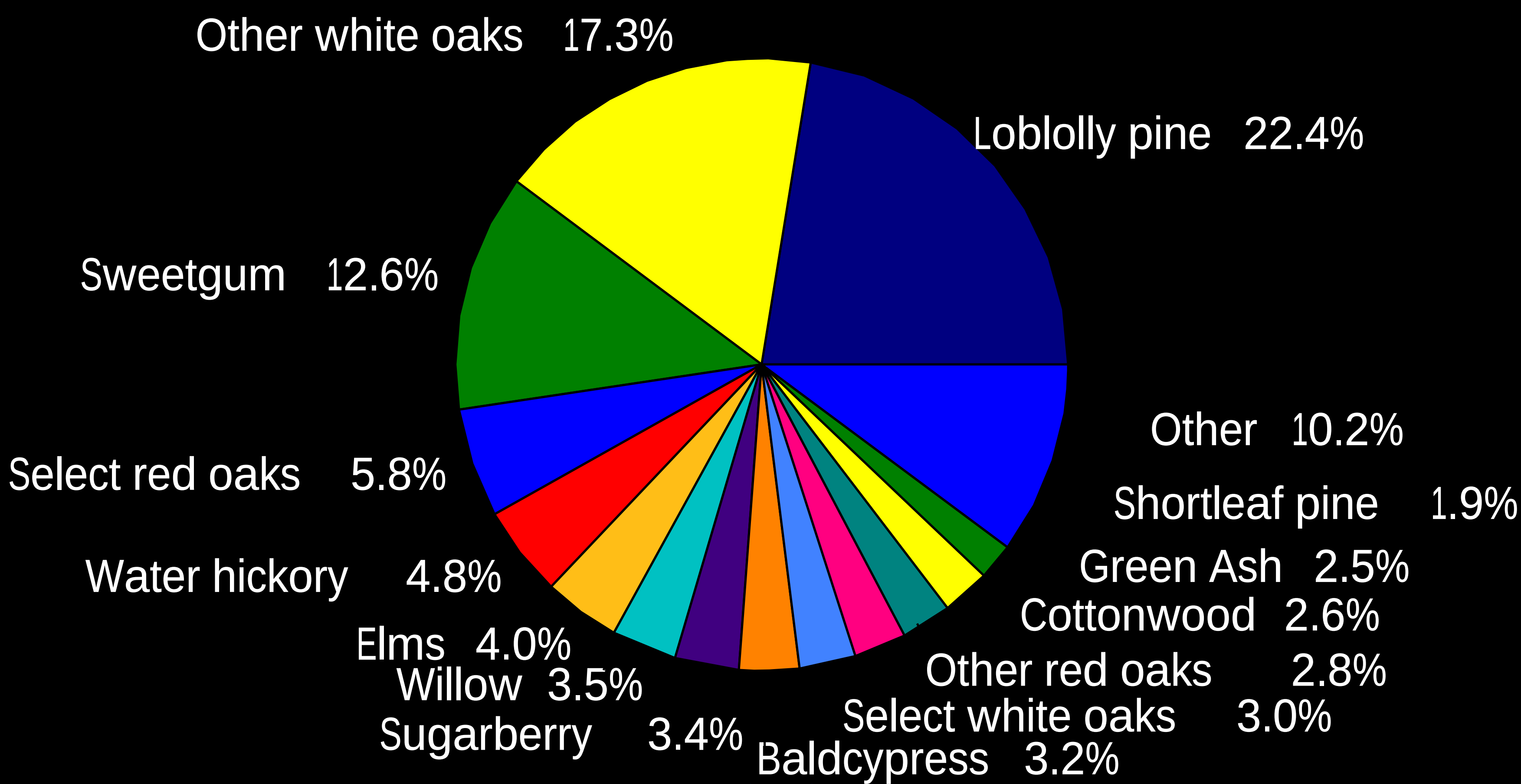



Macon Ridge Forestland Area by Forest Type
1991
(thousand of acres)
788.71
290.92
147.4
139.89
92.33
0
200
400
600
800
1,000
Oak-Gum-Cypress
Loblolly/Shortleaf
Oak-pine
Oak-Hickory
Elm-ash-Cottonwood

# Growing Stock Volume by Species

1991

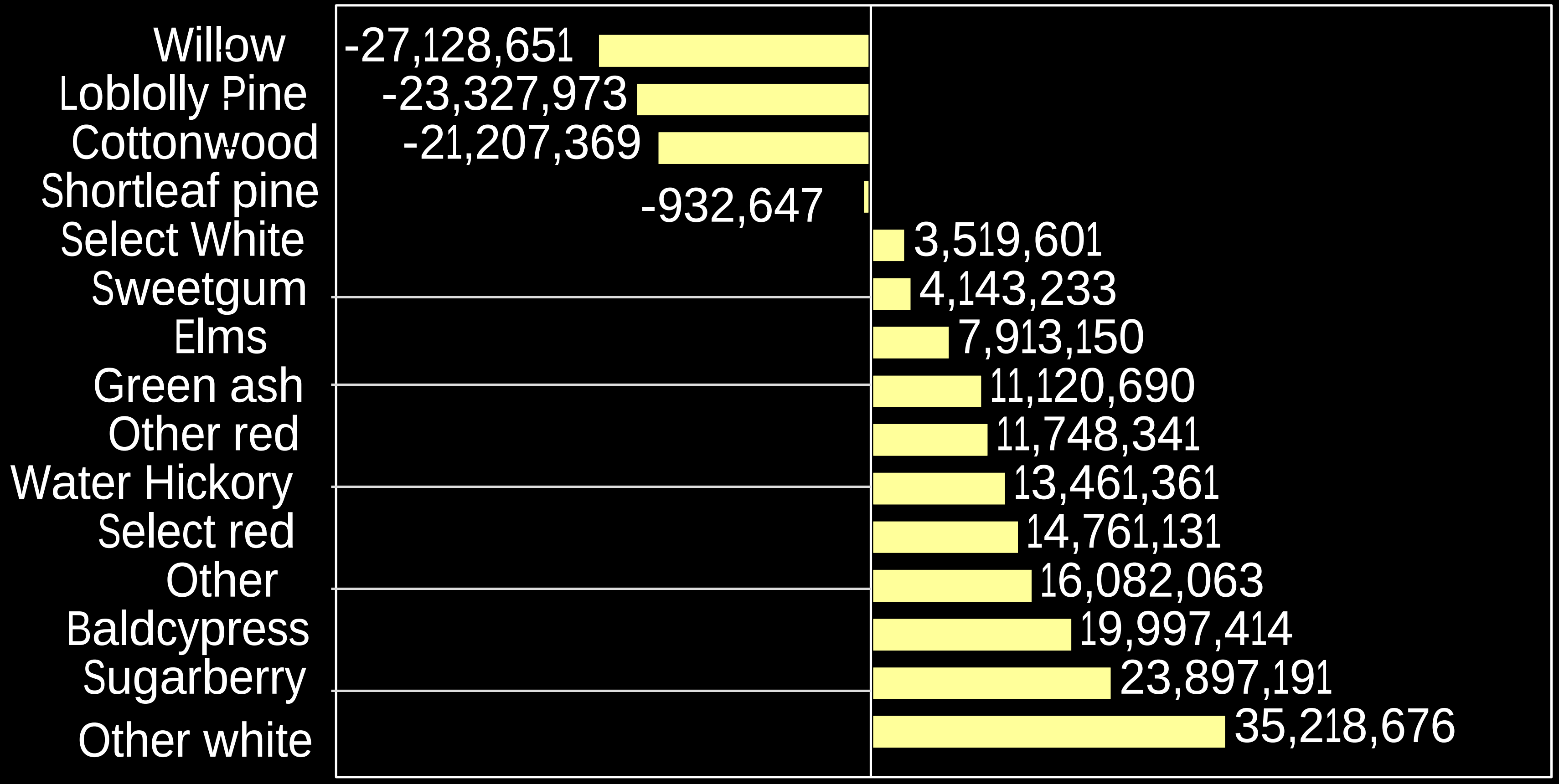
1.98 Billion Cubic Feet Total



# Change in Growing Stock Volume by Species

From 1984 to 1991

Million Cubic Feet



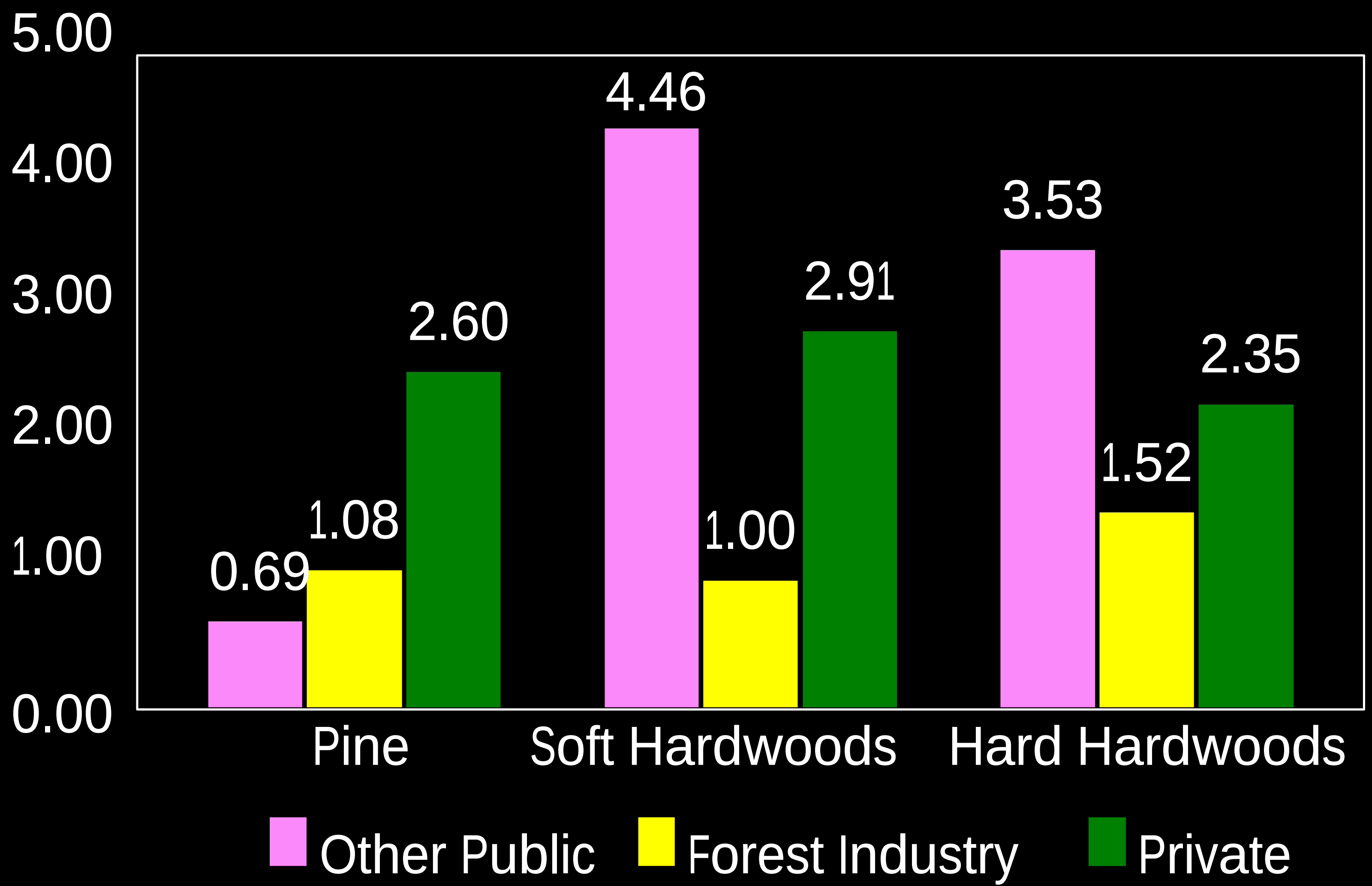
# Change in Sawtimber Volume 1984-91
## by Diameter Class and Species Group
### (Billion Board Feet)

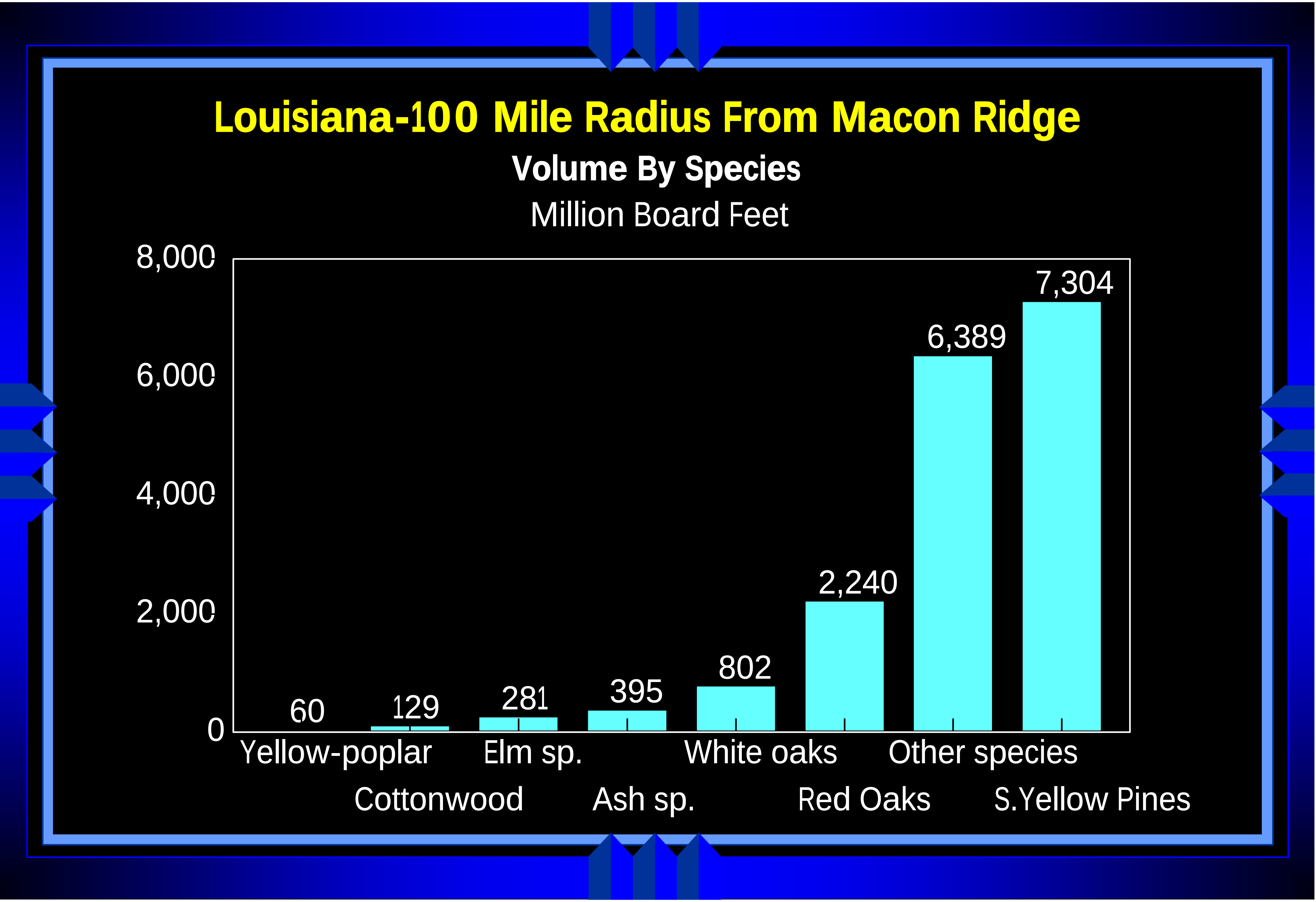
**Diameter Class (inches)]**

| | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | >31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pine | -0.0679 | -0.0192 | 0.0375 | -0.1603 | -0.1443 | -0.0477 | 0.0181 | 0.0166 | 0.0118 | 0.0110 | -0.0280 | 0.0254 |
| Cypress | -0.0105 | -0.0027 | 0.0384 | 0.0420 | 0.0088 | 0.0146 | 0.0022 | -0.0006 | 0.0187 | 0.0015 | -0.0040 | 0.0015 |
| Soft Hardwood | 0.0000 | -0.0065 | 0.0232 | 0.0070 | 0.0020 | -0.0159 | 0.0189 | -0.0593 | 0.0121 | -0.0107 | 0.0287 | -0.0980 |
| Hard Hardwood | 0.0000 | 0.0217 | 0.0199 | 0.1310 | 0.0056 | 0.1531 | 0.0140 | 0.0396 | 0.0484 | 0.0210 | 0.0492 | 0.0625 |

# Growth/Removals By Species Group by Ownership

**1974-1984**

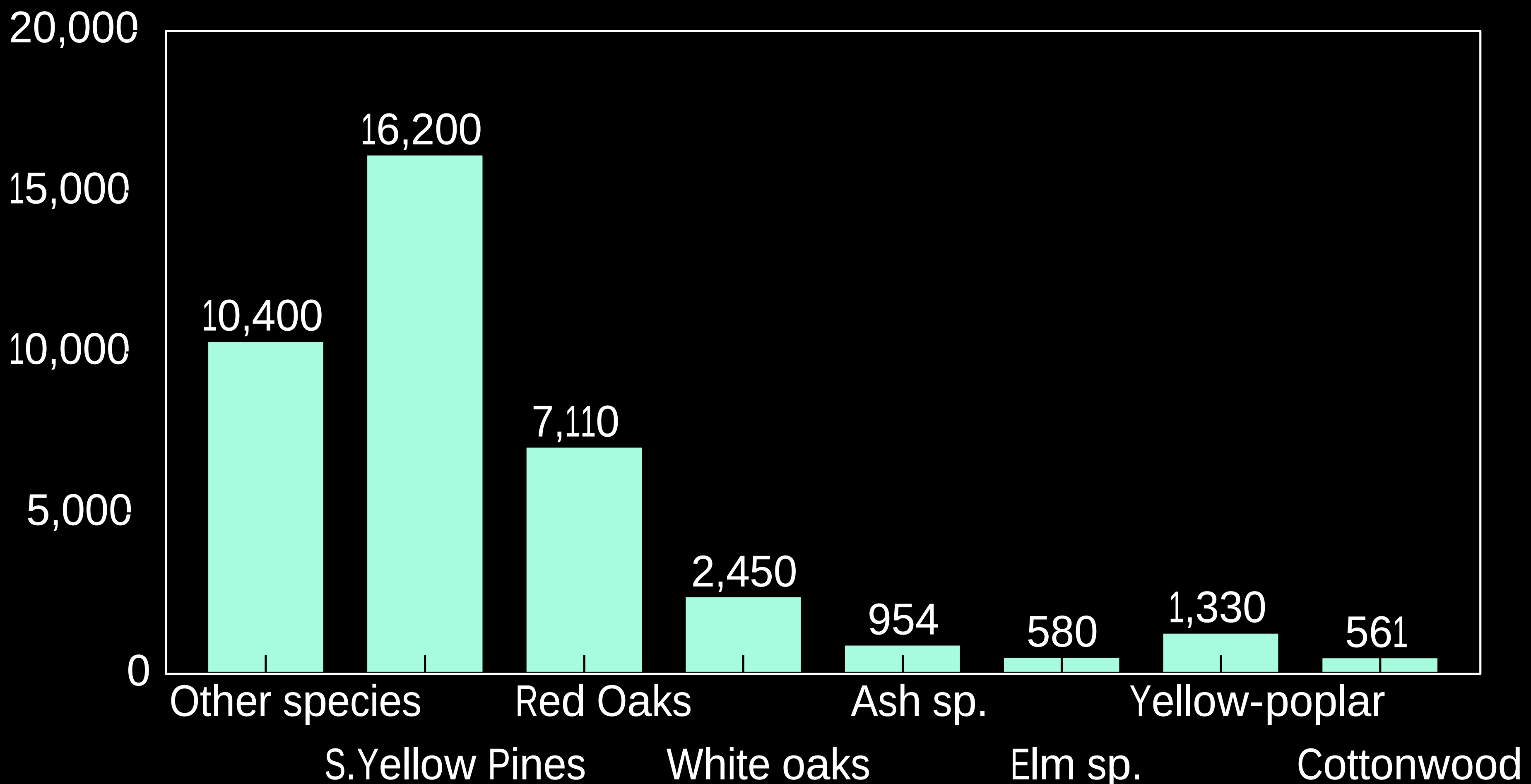



Louisiana-100 Mile Radius From Macon Ridge
Volume By Species
Million Board Feet
8,000
6,000
4,000
2,000
0
60
129
281
395
802
2,240
6,389
7,304
Yellow-poplar
Cottonwood
Elm sp.
Ash sp.
White oaks
Red Oaks
Other species
S.Yellow Pines

# Mississippi-100 Mile Radius from Macon Ridge

**Volume By Species**

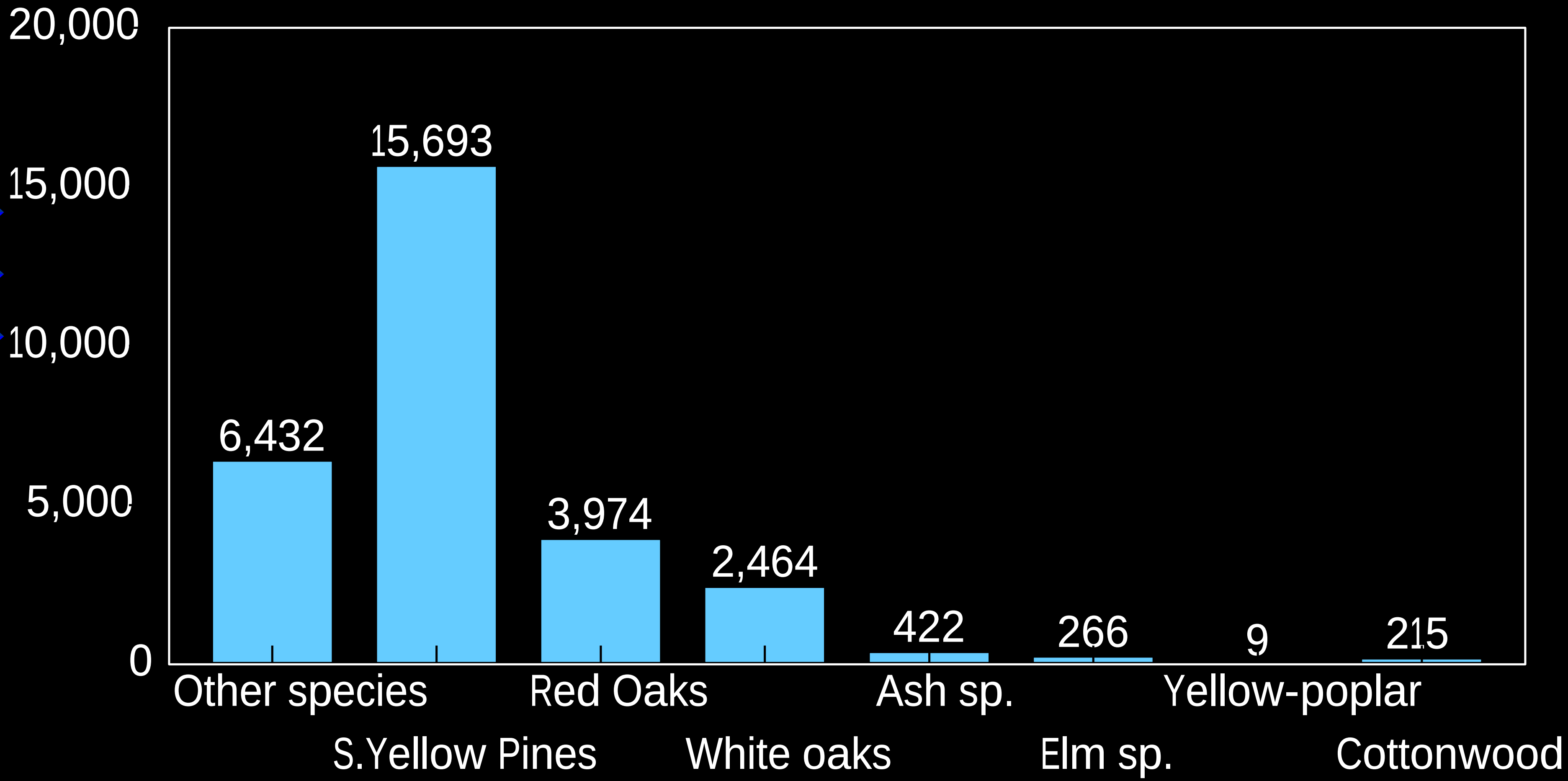
Million Board Feet



# Arkansas-100 Mile Radius from Macon Ridge

**Volume By Species**

Million Board Feet



# Target Species

- Southern Yellow Pine
- Ash
- Cottonwood/Basswood
- Elm
- Sweetgum
- Red Oak
- White oak

- Other Utility Grade Species

Based on wood characteristics of the species and not simply on the basis of grading. The woods are 1) sugarberry (hackbery), 2) tupelo-blackgum, 3) water hickory, and 4) willow.

# Target Species

- Current and Projectected Supply
- Uses
- Markets
- Competitive Issues

## Major Model Components

Resource Assessment

**Industry Structure**

Product/Market Strategy

Economic Impacts

Social Interactions

Structural Impediments

# Key Questions-Industry Structure

What is the structure of the established primary and secondary forest products industry base?

What types of manufacturing processes and equipment do current companies use?

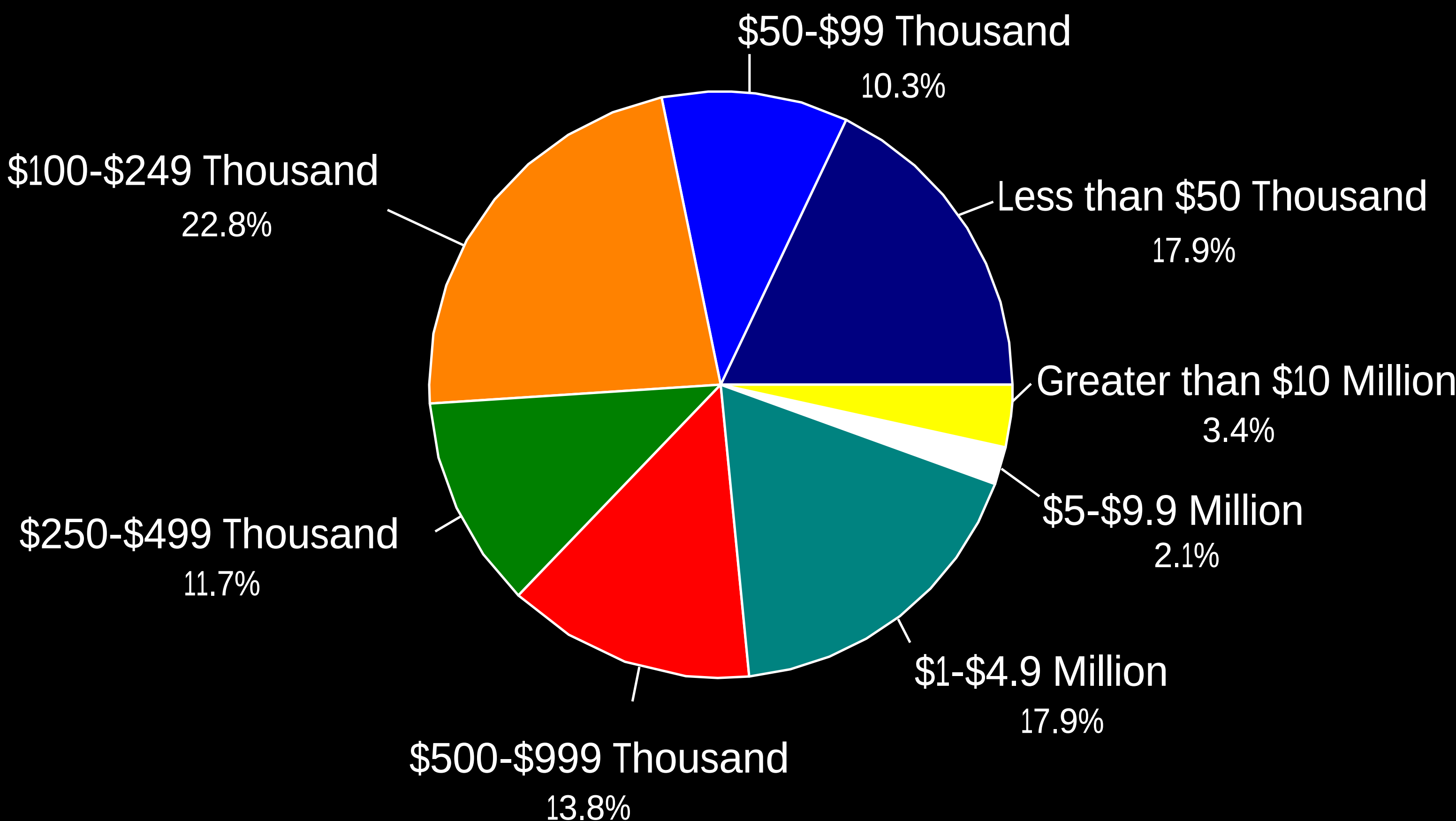
Is there the presence of sawmills, dry kilns, millwork plants, OSB production which could support significant development?

Are companies able to compete in the markets they serve.

How have those companies which have grown and prospered done so? (exploiting specialty niches, cutting costs, etc).

# Sales in 1995
# Percent of Companies By Sales Category

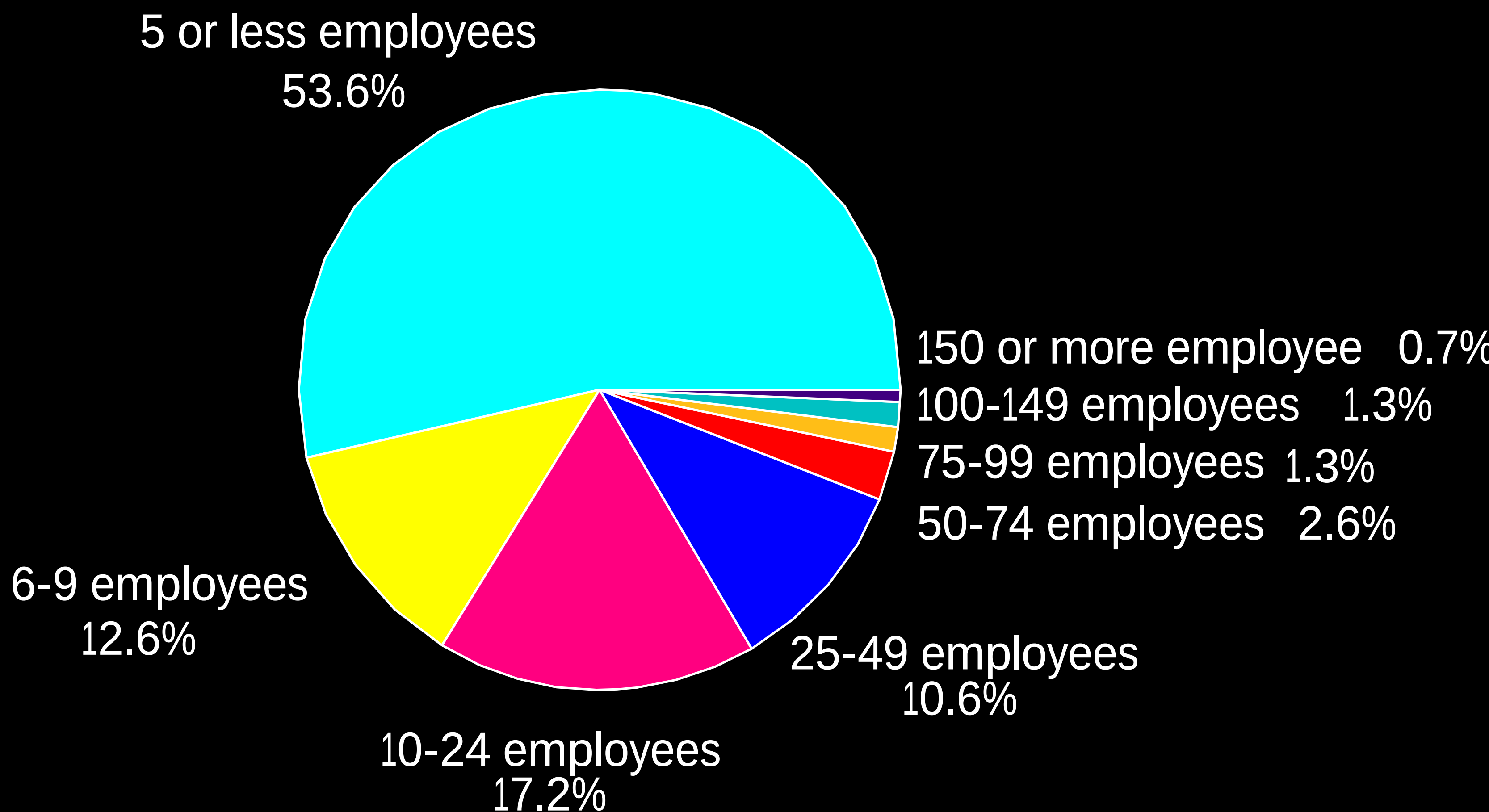
(n=145 respondent companies)



# Employment in 1995

## Percent of Companies By Employment Category

(n=151 respondent companies)



# Planned Employment Additions

## Number of Companies By Sales Category

(n=145 respondent companies)

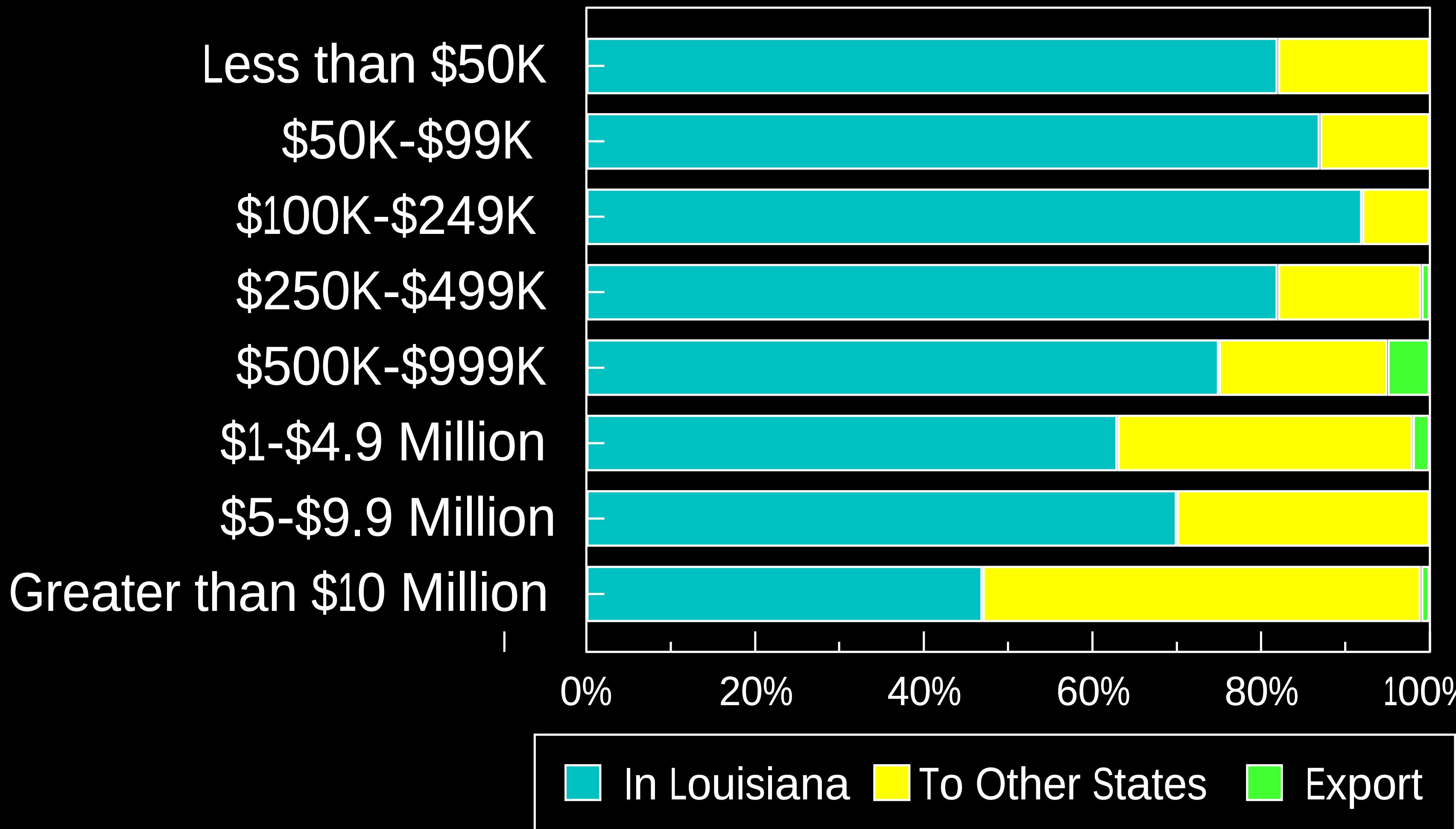

Employee Additions

| | Less than $50K | $50K -$99K | $100K-$249K | $250K -$499K | $500K-$999K | $1-$4.9 Million | $5-$9.9 Million | Greater than $10 Million |
|---|---|---|---|---|---|---|---|---|
| Add in 1997 | 7 | 8 | 13 | 6 | 11 | 13 | 0 | 3 |
| Add 1998 -2000 | 11 | 4 | 12 | 9 | 12 | 13 | 2 | 2 |
| Total | 18 | 12 | 25 | 15 | 23 | 26 | 2 | 5 |

# Markets for Louisiana Secondary Wood Products Producers

**Percent to Each Market by Sales Category in 1995**

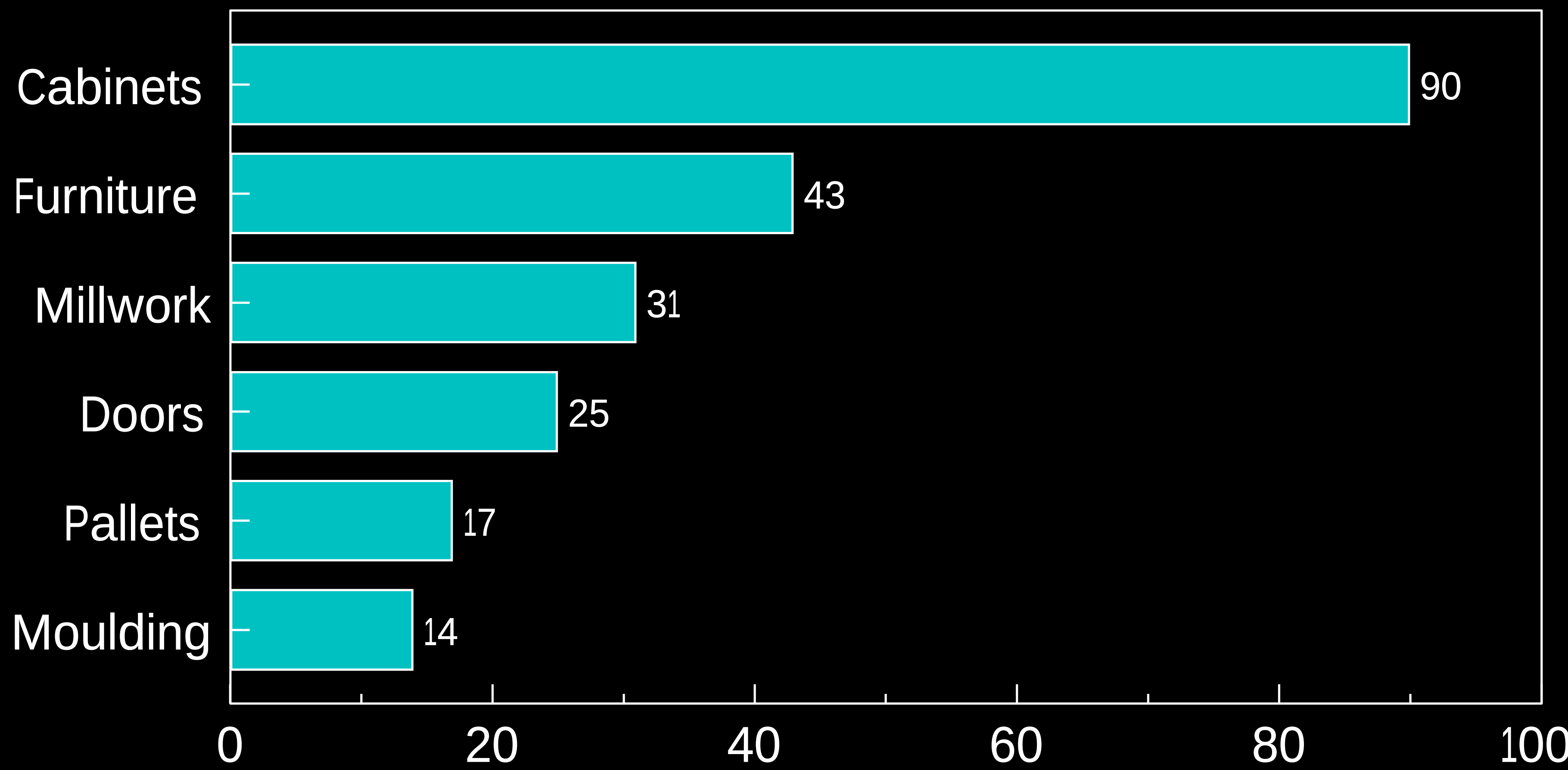
(n=145 respondent companies)



# Major Products Produced by

Louisiana Secondary Wood Products Manufacturers

(Number of Responses)



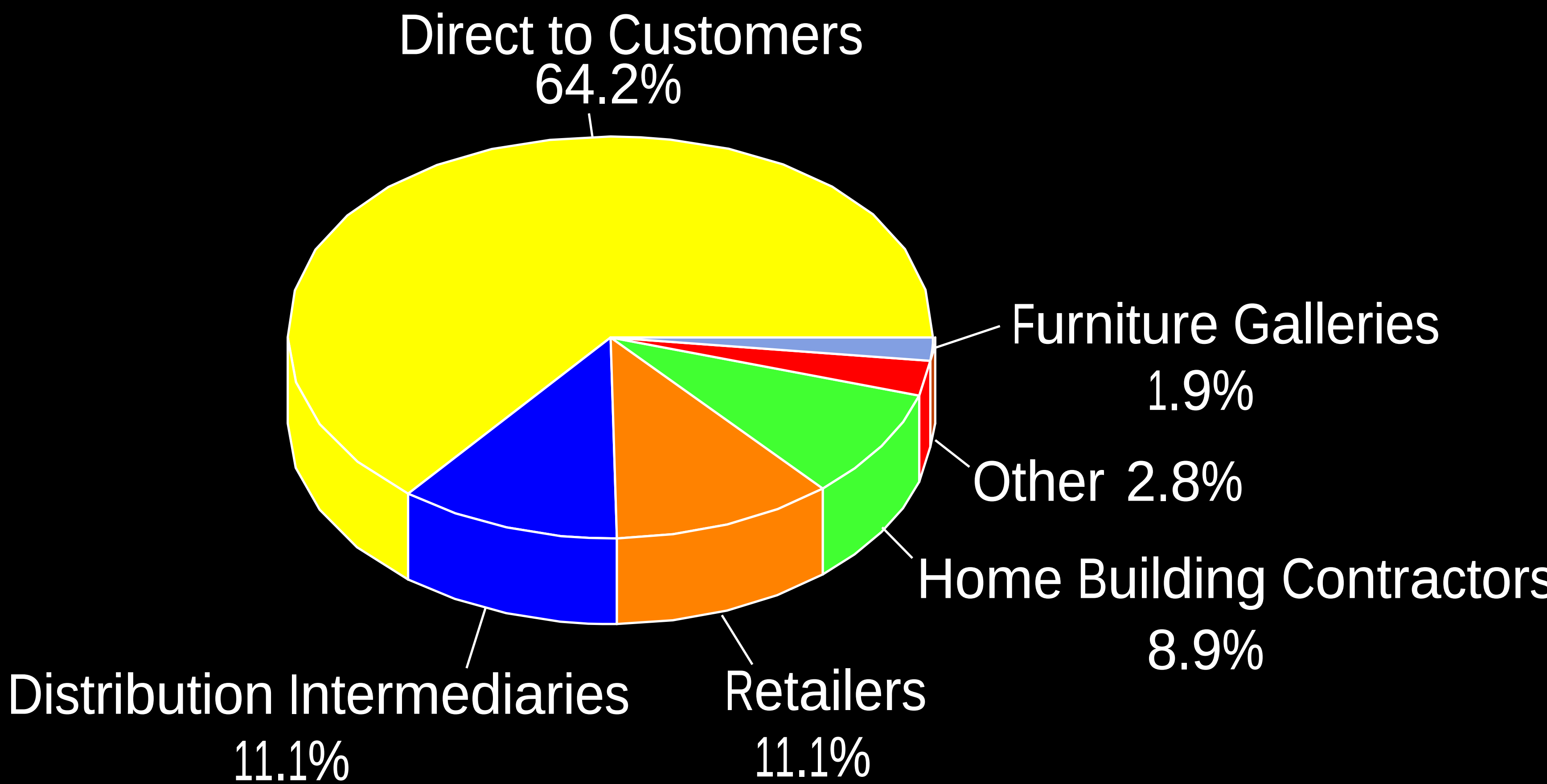
# Products Produced

- Architectural Millwork
- Cabinets
- Furniture
- Hardwood Lumber
- Pine Lumber
- Plywood
- Medium Density Fiberboard
- Oriented Strandboard
- Pallets
- Plugs

# Distribution Channels

Percent of 1995 Sales

(n=143)



# Company Success Factors

Levels of Importance

(n=150 companies)

**Major Model Components**

Resource Assessment

Industry Structure

**Product/Market Strategy**

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Structural Impediments

# Key Questions
# Product/Market

What is the product mix of the companies?

What are current markets and customer bases? (Both domestic and export).

What is the quality and level of acceptance in current markets?

What is the is the distribution reach?

# Market Opportunities Analysis

Review the Market

- Products
- Customers

- Segment the Market
- Select Segmentation Variables
- Prioritize Variables
- Develop Segment Requirements

Identify Attractive Segments

Align Segment & Product Strategies

Identify Product Enhancements & New Products

Develop Product Differentiation Strategies

Develop Segment Positioning Strategies

# Market Opportunities Analysis

Market based criteria were developed to assess potential wood products and industry segments long-term development potential.

The criteria used were:

-raw material availability
-available markets (local, Regional, national or global)
-market growth rate
-competitive factors
-provides employment opportunities
-distribution infrastructure exists or can be developed

# Market Opportunities Analysis

Additional criteria :

-Manufacturing facility requirements
-Waste facilities requirements (sewers, landfills)
-Capital requirements
-Workforce skill requirements
-Access to raw materials
-Consistency with overall economic development plan
-Consistency with manufacturing network strategy
-Complements existing businesses
-Other economic benefits
-Pollution concerns (air, water,noise)
-Environmental effects

# Summary Criteria Evaluation for Major Product Groups

| Product Sector | Score Sum of Ratings | Weight x Rating/ Total Possible Score |
|---|---|---|
| Ready-To-Assemble Furniture | 50 | 412/590=70 % |
| Architectural Millwork | 48 | 403/590=68% |
| Household Furniture | 46 | 380/590=64% |
| Pallets | 42 | 370/590=63% |
| Flooring | 37 | 316/590=54% |
| Cabinets | 33 | 280/590=47% |

# Generic
# Market Strategy Characteristics

## Competitive Strength

| Market Attractiveness | STRONG | MODERATE | WEAK |
|---|---|---|---|
| HIGH | **Extend Position**<br>• invest to grow at maximum digestible rate<br>• concentrate effort on maintaining strength | **Invest to Build**<br>• challenge for industry leadership<br>• build selectively on strengths<br>• reinforce vulnerable areas | **Build Cautiously**<br>• specialize around limited strengths<br>• seek ways to overcome weaknesses<br>• withdraw if indications of sustainable growth are lacking |
| MEDIUM | **Build Selectively**<br>• invest heavily in most attractive segments<br>• build ability to counter competition<br>• emphasize profitability by increasing productivity | **Invest Selectively**<br>• protect existing programs<br>• concentrate investments on segments where profitability is good and risk is relatively low | **Limit Expansion**<br>• look for ways to expand without high risk; otherwise minimize investment and rationalize operations |
| LOW | **Protect & Refocus**<br>• manage for current earnings<br>• concentrate on attractive segments<br>• defend strengths | **Harvest**<br>• protect position in most profitable segments<br>• upgrade product lines<br>• minimize new investments | **Divest**<br>• sell at the time that will maximize cash value<br>• cut fixed costs and avoid investments |

# Market Strategy Map

## Competitive Strength

| Market Attractiveness | STRONG | MODERATE | WEAK |
|---|---|---|---|
| HIGH | Extend Position | Invest to Build<br>• Architectural Millwork<br>• RTA Furniture | Build Cautiously |
| MEDIUM | Build Selectively | Invest Selectively<br>• Hardwood Flooring<br>• Household Furniture | Limit Expansion<br>• Cabinets<br>• Pallets |
| LOW | Protect & Refocus | Harvest | Divest |

# Major Model Components

Resource Assessment

Industry Structure

Product/Market Strategy

**Economic Impacts**

Social Interactions

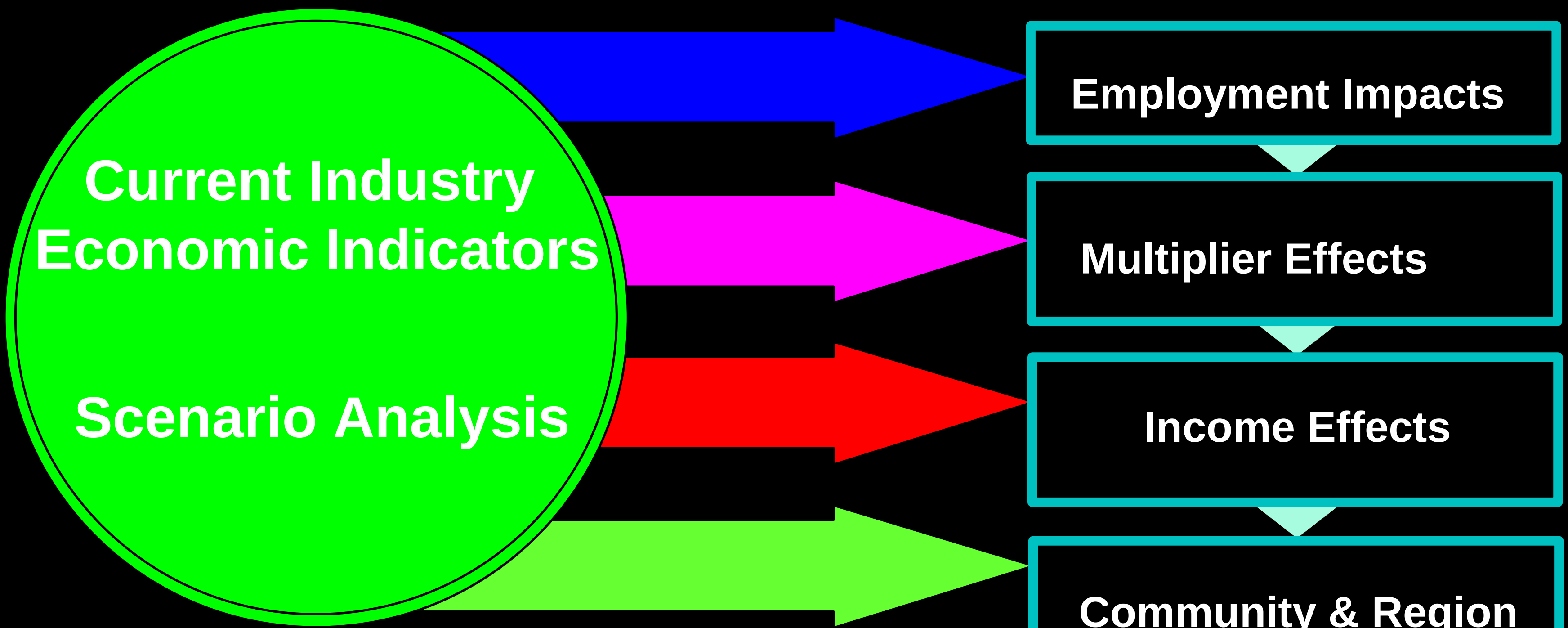
Structural Impediments

# Key Questions
# Economic Impacts

What economic impacts result from forest based industry development?

What are the ramifications at the community, regional and state levels?

# Economic Impacts



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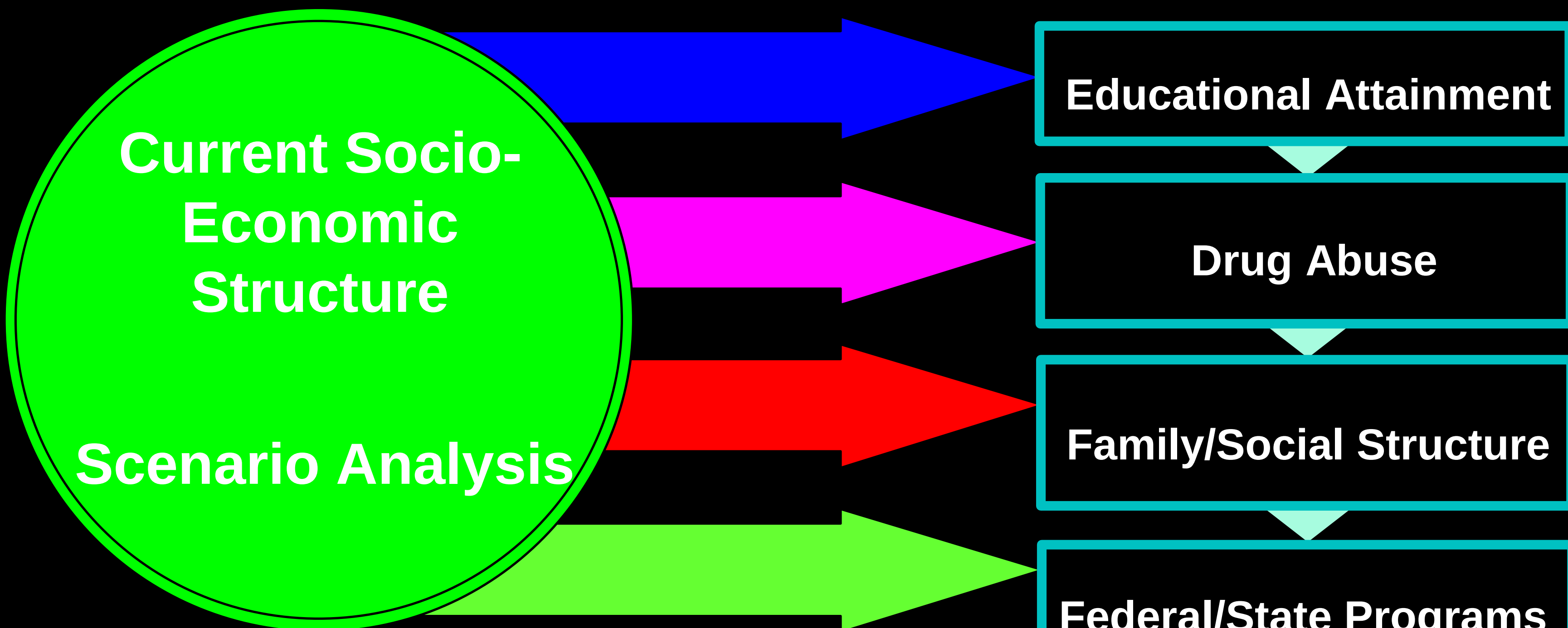
# Key Questions
# Social Structure

What are the underlying socio-economic issues that influence forest based industry development?

What are current policies and programs?

What changes in policies & programs would facilitate development efforts?

# Social Impacts



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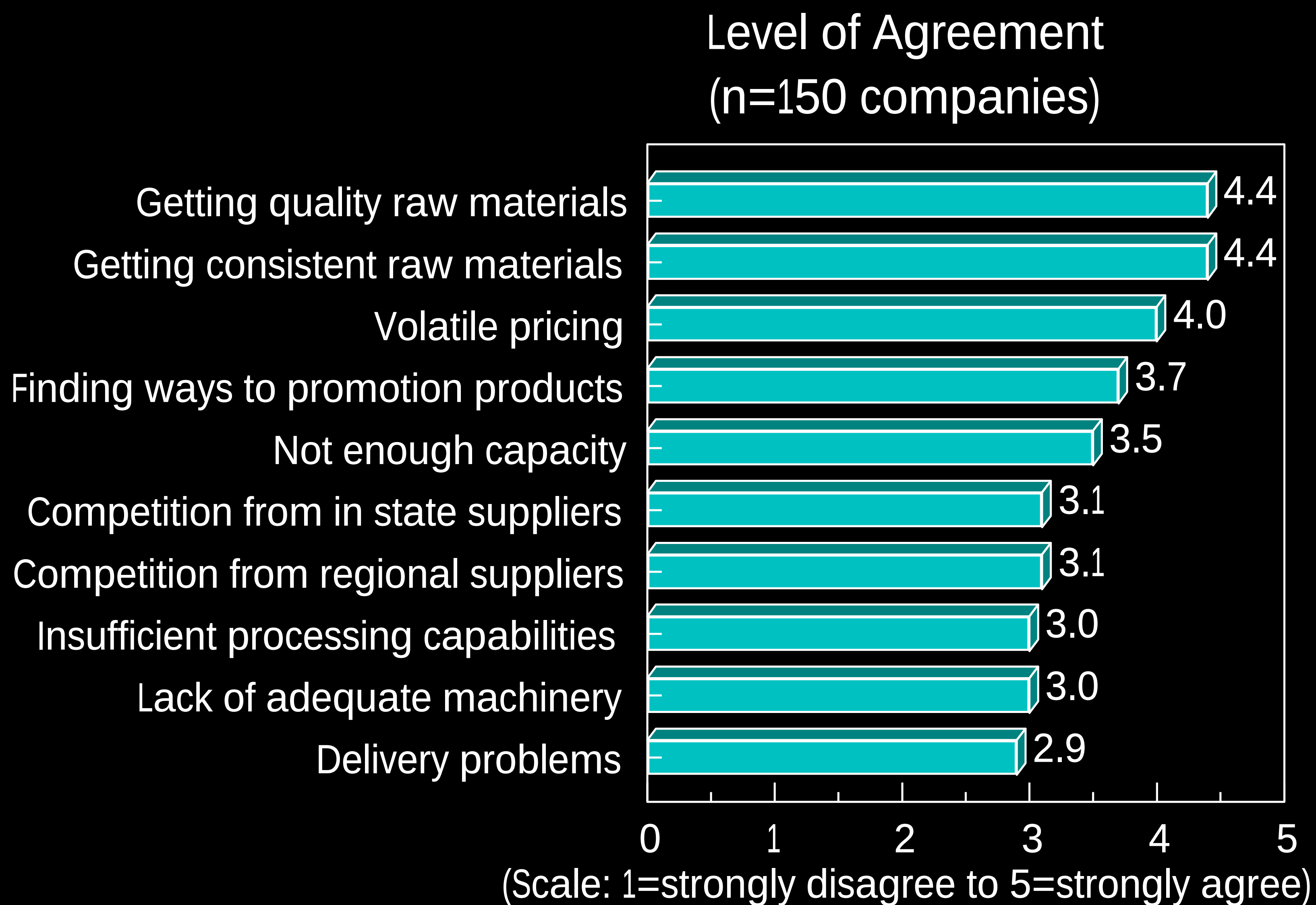
**Structural Impediments**

# Key Questions
# Structural Impediments

What are the most important factors preventing manufacturing industry development?

What will it take to encouraging manufacturing?

# Impediments to Company Success



# Where do we go from here?
# Getting From Analysis to Action

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  - Stakeholders
  - Social interaction
- **Other Issues**
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  - Political

**Recommendations for Policy Makers**

**Implementation Support**

Questions?