An Overview of the Louisiana
Secondary Wood Products Industry

Working Paper #1
Louisiana Forest Products Laboratory
Louisiana State University
Baton Rouge, LA

Dr. Richard P. Vlosky
Assistant Professor
Louisiana Forest Products Laboratory
Louisiana State University
Baton Rouge, LA

Mr. Paul Chance
Executive Director
Louisiana Furnishings Industry Association
Ponchatoula, LA

Dr. O. Victor Harding
Assistant Specialist
Louisiana Cooperative Extension Service
Louisiana Agricultural Center
Louisiana State University
Baton Rouge, LA
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Introduction

A research initiative targeting the Louisiana secondary wood products industry is underway at the Louisiana Forest Products Laboratory, Louisiana State University Agricultural Center. The broad goals of this research are to: 1) identify sources of competitive advantage and; 2) determine ways to encourage development and growth of this important industry sector. This report combines the findings of two recently completed research projects. The primary purpose of these studies, conducted jointly with the Louisiana Furnishings Industry Association and the Louisiana Cooperative Extension Service, was to determine the industry structure and find out how the Louisiana Forest Products Laboratory can better serve industry participants. Findings include quantities, sources, grades and mix of raw materials used in the production of secondary wood products in the State of Louisiana. Marketing issues were also addressed such as the value of products shipped, market areas served by the industry, the mix of products shipped, distribution channels employed for finished goods and application of marketing techniques.
Executive Summary

* The secondary wood products industry in Louisiana can be characterized as fragmented and consisting of many small establishments with over 75 percent of companies surveyed having 10 employees or less.

* Geographically, marketing of secondary wood products is primarily limited to Louisiana with a minority of companies with national sales and fewer yet selling internationally.

* Many response categories indicate a rudimentary application of marketing principles or strategic planning with most companies relying on word-of-mouth to promote products directly to consumers.

* Respondents indicated that nearly 27 percent of the time, they sourced raw material inputs from outside the State of Louisiana. In addition, because the origin of material purchased from in-state suppliers cannot be traced, the percent of out-of-state purchases indicated is probably a conservative estimate.

* Primary issues identified by respondents regarding the secondary wood product industry improvement are production oriented and include: the need for improved grading; improving the quality of the raw material input and improved kiln drying capacity and capabilities.

* This study has revealed a number of issues that warrant further investigation including: 1) identify characteristics of secondary wood products industries in other states that have similar resource profiles; 2) investigate reasons that out-of-state suppliers are used and what percentage of in-state supply originates elsewhere; 3) investigate plausibility of the development of buying or manufacturing cooperatives that could create purchasing and sales/marketing leverage through increased economies of scale and; 4) expand the roles of the Louisiana Furnishings Industry Association, the Louisiana Forest Products Laboratory and the Louisiana Cooperative Extension Service as providers of information and training to the secondary wood products industry.
Methodology

Study 1

Using a directory of Louisiana secondary wood products industries compiled by the Louisiana Forest Products Laboratory and the Louisiana Furnishings Industry Association with a known population of 512 companies, 225 companies were surveyed. Companies were selected from the population in an effort to adequately represent the industry and cover the spectrum of products comprising the secondary wood products industry.

The surveys were conducted over the telephone by personnel trained in the wood products industry to minimize response misinterpretation. Contact time averaged five minutes with many conversations in excess of ten minutes. Companies were called during normal business hours on all days of the week. In an effort to maximize response rates, up to four follow up calls were conducted if calls went unanswered or if the primary contact person was not available. A response rate of 44 percent (88 companies) was achieved.

Study 2

Using a directory of Louisiana secondary wood products industries compiled by the Louisiana Forest Products Laboratory and Louisiana Cooperative Extension Service, 713 companies were surveyed. The surveys were conducted using structured mail questionnaires. One mailing was made with a resulting response rate of 26 percent (187 companies).
Results

Demographics

The secondary wood products industry in Louisiana can be characterized as fragmented and consisting of many small establishments. As seen in Figure 1, over 75 percent of companies surveyed have less than 10 employees or less with over 50 percent having 4 employees or less. As seen in Figure 2, fifty-five percent of the companies surveyed plan to add new employees in the next five years. If these numbers are extrapolated to the entire Louisiana secondary wood products industry, 413 companies would add 1,941 new employees by 1999.

Figure 1.

Louisiana Secondary Wood Product Manufacturers

Number of Employees by Establishment
(Percent of respondent companies in each category)
(n=88 respondent companies)

Figure 2.
Louisiana Secondary Wood Product Manufacturers

Number of Employees
(n=187 respondent companies)

- In the next year: 103 employees
- In the subsequent 4 years: 484 employees

No. of Companies Adding New Employees

No. of Added Employees
In an industry estimated to have $485.2 million in annual sales in 1993, nearly 62 percent of respondent companies in the first study had annual sales in 1993 of $250,000 or less with only 13 companies with sales over one million dollars (Figure 3), while fifty percent of respondent companies in the second study had annual sales in 1993 of $150,000 or less with only 18 companies with sales over one million dollars (Figure 4). This indicates a need to segment the secondary industry in order to tailor information and assistance programs to meet specific needs.

Figure 3.

**Louisiana Secondary Wood Product Manufacturers**

**Annual Sales**

(Percent of respondent companies in each (n=73 respondent companies)
Louisiana Secondary Wood Product Manufacturers

Annual Sales
(n=183 respondent companies)
Twenty-seven of the 64 Louisiana parishes are represented by study respondents with eight (35 percent) located in parishes North of Alexandria and the balance to the South (Table 1). Represented parishes, with the exception of Orleans, East Baton Rouge and Jefferson, can be characterized as rural. In addition, only Lafayette, East Baton Rouge, Orleans, Jefferson, Caddo, Rapides, Calcasieu and Bossier parishes have metropolitan populations larger than 50,000.

Table 1. Respondent Companies By Parish

<table>
<thead>
<tr>
<th>Parish</th>
<th>Number of Respondent Businesses</th>
<th>Number of Employees Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acadia</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ascension</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Avoyelles</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Beauregard</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Bossier</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Caddo</td>
<td>4</td>
<td>85</td>
</tr>
<tr>
<td>Calcasieu</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>East Baton Rouge</td>
<td>11</td>
<td>132</td>
</tr>
<tr>
<td>Iberia</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Iberville</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jefferson</td>
<td>6</td>
<td>92</td>
</tr>
<tr>
<td>Lafayette</td>
<td>9</td>
<td>288</td>
</tr>
<tr>
<td>Lafourche</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Livingston</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Natchitoches</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Orleans</td>
<td>11</td>
<td>67</td>
</tr>
<tr>
<td>Quachita</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Rapides</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Richland</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Tangipahoa</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>St. Helena</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>St. Landry</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>St. Tammany</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Washington</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Webster</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>West Baton Rouge</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>West Feliciana</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Raw Material Inputs

Respondents were asked to estimate the percentage of company raw material inputs that are either lumber or composites (medium density fiberboard, plywood or particleboard). Twenty-two companies indicated using composites (Figure 5) and forty-four companies (50 percent of all respondent companies) use lumber (Figure 6) for 80 percent or more of total company raw material requirements.

Figure 5.

Louisiana Secondary Wood Product Manufacturers

Composites as a Percent of Material Input
(Percent of respondent companies in each category)
(n=70 respondent companies)
Figure 6.

Louisiana Secondary Wood Product Manufacturers

Lumber as a Percent of Material Input
(Percent of respondent companies in each category)
(n=88 respondent companies)

- 0-10%: 17.0%
- 11-20%: 8.0%
- 21-30%: 9.1%
- 31-40%: 4.5%
- 41-50%: 1.1%
- 51-60%: 4.5%
- 61-70%: 3.4%
- 71-80%: 2.3%
- 81-90%: 6.8%
- 91-100%: 43.2%
- 101-100%: 17.0%
Of those respondent companies that used lumber as a raw material, monthly volume averaged 500 board feet and totaled 3.54 million board feet. As seen in Figure 7, over 50 percent of respondent companies use 1,000 board feet or less of lumber each month (softwood and hardwood combined).

Figure 7.

**Louisiana Secondary Wood Product Manufacturers**

**Lumber Monthly Board Foot Usage**

<table>
<thead>
<tr>
<th>Board Feet</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-250</td>
<td>18.3%</td>
</tr>
<tr>
<td>251-500</td>
<td>28.0%</td>
</tr>
<tr>
<td>501-1,000</td>
<td>8.5%</td>
</tr>
<tr>
<td>1,001-3,000</td>
<td>22.0%</td>
</tr>
<tr>
<td>3,001-10,000</td>
<td>9.8%</td>
</tr>
<tr>
<td>10,001-30,000</td>
<td>7.3%</td>
</tr>
<tr>
<td>30,001-100,000</td>
<td>3.7%</td>
</tr>
<tr>
<td>100,001-500,000</td>
<td>1.2%</td>
</tr>
<tr>
<td>&gt;500,000</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

(n=88 respondent companies)
Respondents in the second study were asked to estimate the volumes of company raw material inputs used in 1993. Figure 8 indicates that for survey respondents, softwood lumber is by far the predominant raw material followed by hardwood lumber.

Figure 8.

**Louisiana Secondary Wood Product Manufacturers**

**Raw Material Inputs**

**By Major Product Group**

(n=187 respondent companies)
Species Used

Louisiana secondary wood products manufacturers use a wide variety of species that originate from many states and countries. As seen in Figure 9, oak at 25.2 percent of the species mix is the predominant species group followed by cypress (13.8%), poplar (12.1%), pine (10.5%), maple (8.6%) and mahogany (8.1%). The balance of species combined account for only 17 percent of respondent species mix.

Figure 9.

Louisiana Secondary Wood Product Manufacturers

Species Used in Production

Percent of Total Lumber Usage
(n=88 respondent companies)

* Includes red oak and white oak
** Includes white pine
*** Includes hard maple
When one examines the species mix for only the companies that use a particular species as a raw material (Figure 10), the relative importance of each species can be determined. For example, for those companies that used the top five species in the study, the contribution to their mix was over 30 percent. This analysis also identifies the importance of cedar (73 percent of the mix) to the three respondent companies that used this species, and white pine (85 percent of the mix) for the one company that indicated using this species.

Figure 10.

**Louisiana Secondary Wood Product Manufacturers**

*Average Percent of Species Mix By Companies That Use These Species*

*(n=88 respondent companies)*
The second study confirmed that red oak is the predominant hardwood species followed by cypress, white oak and poplar (Figure 11). The balance of the species listed account for a much less significant contribution to respondent species mix.

Figure 11.

<table>
<thead>
<tr>
<th>Louisiana Secondary Wood Product Manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Hardwood Raw Material Inputs</td>
</tr>
<tr>
<td>MBF By Species</td>
</tr>
<tr>
<td>(n=187 respondent companies)</td>
</tr>
</tbody>
</table>

Total Hardwood Respondent Volume= 14,788 MBF
Similarly, when the raw material mix for softwood species is examined, of the 26.2 million board feet used by respondents in 1993, over 90 percent was Southern pine. (Figure 12.)

**Figure 12.**

**Louisiana Secondary Wood Product Manufacturers**

**Annual Softwood Raw Material Inputs**

**MBF By Species**

*(n=187 respondent companies)*

Total Softwood Respondent Volume = 26,184 MBF
Raw Material Sourcing

Due to the small size of companies in the industry and accompanying low materials requirement, the main criterion for raw material supplier selection are convenience and price (Figure 13). Quality and availability of product were also listed as important but secondary attributes. The development of buying cooperatives may be a way to secure consistent supplies of quality raw material inputs to the secondary wood products industry.

Figure 13.

**Louisiana Secondary Wood Product Manufacturers**

**Criteria For Raw Material Vendor Selection**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Number of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>49</td>
</tr>
<tr>
<td>Price</td>
<td>48</td>
</tr>
<tr>
<td>Quality</td>
<td>36</td>
</tr>
<tr>
<td>Availability</td>
<td>35</td>
</tr>
<tr>
<td>Exclusive Provider</td>
<td>18</td>
</tr>
<tr>
<td>Dependability</td>
<td>17</td>
</tr>
<tr>
<td>Delivery</td>
<td>15</td>
</tr>
<tr>
<td>Terms</td>
<td>3</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0</td>
</tr>
</tbody>
</table>
The source of raw materials for the secondary wood products industry has long been suspected to be from out-of-state suppliers. The first study indicates that for all species used, respondent companies were supplied by out-of-state vendors 26.7 and 21.3 percent of the time, respectively (Figure 14). However, for in-state supply occurrences, it was not possible to identify origination source for the raw material within the scope of the study. In other words, although a supplier is from Louisiana, it may play an intermediary role for raw materials produced elsewhere.

Figure 14.

**Louisiana Secondary Wood Product Manufacturers**

**Sourcing Location**

**In-State vs. Out-of-State**

All Species

(n=333 Sourcing Occurrences)

In-State 73.3%

Out-of-State 26.7%
Regardless of the exact in-state/out-of-state sourcing question, the fact that there is any out-of-state sourcing for the primary species produced by the industry is disturbing. Figure 15 shows that for the eight major species used as raw materials by the industry, out-of-state sourcing occurred an average of 41 percent of the time.

![Figure 15. Louisiana Secondary Wood Product Manufacturers Sourcing Location In-State vs. Out-of-State By Major Species](image)
**Products Produced**

For all respondents taken as a group in the first study, the primary products produced are custom furniture, custom millwork and custom cabinetry (Figure 16). Given the skewing to custom production, it is not surprising that the main production method is to produce limited edition “one of” products. There were few instances of batch production or large-scale production (13 percent and 7 percent of total occurrences, respectively) (Figure 17).

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**Figure 16.**

**Louisiana Secondary Wood Product Manufacturers**

**Primary Products Produced**

*Average Percent in each Category for All Respondents (n=88 respondent companies)*

- **Furniture-Custom**: 34.4%
- **Furniture-Specialty**: 1.2%
- **Furniture-Component**: 0.1%
- **Cabinetry-Custom**: 29.9%
- **Cabinetry-European**: 1.0%
- **Millwork-Standard**: 1.5%
- **Millwork-Custome**: 32.0%
Louisiana Secondary Wood Product Manufacturers

Production Processes
Number of Occurrences
(n=88 respondent companies)
The second study further conveys the diversity of the Louisiana secondary wood products industry (Figure 18). In addition, most companies do not have a narrow product line. For all respondents taken as a group, the primary products produced are cabinetry, millwork and furniture.

Figure 18.

Louisiana Secondary Wood Product Manufacturers

Products Produced

Number of Occurrences of 5 or More

(n=183 respondent companies)
Markets Served

Although the study did not identify customer base characteristics, information regarding market scope and channels of distribution were collected. The market effective scope was identified in two ways. First, the effective market radius was determined. As seen in Figure 19, nearly 65 percent of respondents market their products within a 250-mile radius, a very limited market. Looking at market scope another way, a majority of companies market their products in Southeast Louisiana, with very few occurrences of respondent companies selling products in international markets (Figures 20 and 21).

Figure 19.

Louisiana Secondary Wood Product Manufacturers

Market Radius in Miles
(Percent of respondent companies in each category)
(n=88 respondent companies)
Figure 20.

Louisiana Secondary Wood Product Manufacturers

Market Geographic Scope

Number of Occurrences

(n=88 respondent companies)

Figure 21.
Louisiana Secondary Wood Product Manufacturers

Product Sales In-State vs. Out-of-State

(n=187 Respondent Companies)

- In-State: 78.7%
- Out-of-State: 20.6%
- Out-of US: 0.7%
Channels of Distribution

The constrained geographic scope and small size of companies in the industry have created a limited system of distribution options. Respondent companies indicated that direct sales to consumers are the primary sales channel. Contractors, retailers and wholesalers, in that order are secondary channels of distribution (Figure 22).

Figure 22.

Louisiana Secondary Wood Product Manufacturers

Channels of Distribution for Products Produced

Number of Occurrences
(n=88 respondent companies)
Marketing

Marketing activities across a broad spectrum are virtually non-existent in the secondary wood products industry. Only 14 companies (15.9%) had any sort of a budget for marketing activities (Figure 23).

Figure 23.

Louisiana Secondary Wood Product Manufacturers

Existence of a Marketing Budget
(n=88 respondent companies)
Retaining any non-company entity to promote the company’s products and services was the exception to the rule with most companies (87.5%) engaging in self-promotion (Figure 24).

Figure 24.

**Louisiana Secondary Wood Product Manufacturers**

**Promotion Methods**

(n=88 respondent companies)

- Self-Promote: 87.5%
- Others: 12.5%
Because self-promotion prevails, the primary promotional method for respondent company products is word-of-mouth. The use of other modes of promotion, either printed media or other forms of outside support are minimal (Figure 25).

**Figure 25.**

Louisiana Secondary Wood Product Manufacturers

**Promotion Methods**

<table>
<thead>
<tr>
<th>Promotion Method</th>
<th>Number of Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word of Mouth</td>
<td>68</td>
</tr>
<tr>
<td>Network</td>
<td>13</td>
</tr>
<tr>
<td>Catalog</td>
<td>11</td>
</tr>
<tr>
<td>Sales Rep.</td>
<td>11</td>
</tr>
<tr>
<td>Tradeshow</td>
<td>7</td>
</tr>
<tr>
<td>Newspaper Ads</td>
<td>6</td>
</tr>
<tr>
<td>Distributor</td>
<td>2</td>
</tr>
<tr>
<td>Magazine Ads</td>
<td>1</td>
</tr>
</tbody>
</table>

(Number of Occurrences (n=88 respondent companies))
Outreach Needs

The last question asked of survey respondents deals with seminars or workshops that the Louisiana Forest Products Laboratory and the Louisiana Cooperative Extension Service might provide. As seen in Figure 26, there is a wide array of secondary wood products industry outreach needs. The top three categories are financial, marketing and production oriented, respectfully. This information will be useful in tailoring outreach efforts by the Louisiana Forest Products Laboratory.

Figure 26.
Louisiana Secondary Wood Product Manufacturers

Requested Workshop & Seminar Topics

Number of Occurrences
(n=187 respondent companies)

Summary

The Louisiana secondary wood products industry is primarily a group of small companies that produce limited volumes of custom products. The geographic scope of the industry markets is concentrated in the State of Louisiana with accompanying short distribution channels. Most companies are production oriented and do not rely on marketing techniques as part of their business strategy.

Recommendations

This study has revealed a number of issues that warrant further investigation. The following recommendations are intended to stimulate discussion on ways to increase competitiveness and development of the Louisiana secondary wood products industry.
1) Identify characteristics of secondary wood products industries in states that have similar resource profiles. Success factors as well as challenges and obstacles should be identified with this research.

2) Investigate reasons that out-of-state suppliers are used and what percentage of in-state supply originates elsewhere.

3) Investigate plausibility of the development of buying and manufacturing cooperatives that could create purchasing and sales/marketing leverage through economies of scale.

4) Expand the roles of the Louisiana Furnishings Industry Association, the Louisiana Forest Products Laboratory and the Louisiana Cooperative Extension Service as providers of information and training to the secondary wood products industry.