Michigan Department of Natural Resources

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MICHIGAN FOREST PRODUCTS SECONDARY MANUFACTURER SURVEY 2015

Forest Resources Division

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INTRODUCTION

Michigan's forest product secondary or value-added manufacturers were surveyed in 2016 through 2021 as part of a periodic census conducted by the Michigan Department of Natural Resources (MDNR), supported by a 2016 Wood Innovations Grant from the U.S. Department of Agriculture, Forest Service. Manufacturers were canvassed to determine status and composition of the industry, volume of wood products received, type of finished products produced, and amount and uses of manufacturing residues. Data from the survey has been summarized in this report. Only companies that processed paper and wood products were canvassed. Companies, such as distributors, brokers, retailers, and sawmills, were not included if they did not engage in further value-added processing beyond production of a first-order product. Survey data were used to update the manufacturer listings in the Michigan Forest Products Industry Directory, or MFID. MFID is a free directory of Michigan forest products industry facilities, maintained by the MDNR, at www.michigan.gov.

DEFINITIONS

Primary Manufacturer: Companies that purchase unprocessed raw materials such as sawlogs or pulpwood and process them with equipment or tools to produce a first order raw material, such as green lumber, pulp, or paper. Generally, these products are sold to other manufacturers for additional value-added manufacturing, although some companies are vertically integrated, and perform value-added manufacturing.
Roundwood: wood harvested from forests in the form of sawlogs, cabin logs, posts, poles, bolts, pulpwood, or chips.
Secondary or Value-Added Manufacturer: Companies that process raw materials using tools and equipment to produce a value-added product, then sell these products to wholesalers, distributors, brokers, or direct to consumers. Most manufacturers purchase their raw materials from other primary manufacturers; however, some are vertically integrated and perform primary manufacturing as well.

SURVEY METHODS AND RESPONSES

MDNR undertook the survey with the goals of developing better information on the composition and status of the value-added manufacturing sector of the forest products industries, assessing the volumes of wood- and paper- raw materials used, identifying opportunities for expansion of markets for raw wood materials, and identifying opportunities to assist the forest products industry in Michigan. The last MDNR survey of the secondary manufacturing sector was conducted prior to 2008, and significant change was believed to have occurred during the recession in 2008 to 2009.

With the receipt of a grant from the Forest Service, a survey was initiated with 2015 calendar year identified as the temporal reference. A survey instrument was developed with input from several state, regional, and national forest products industry associations, as well as input from university faculty. An initial survey population of 2,142 was identified and list compiled using records from the Michigan Wood Industry Directory, various manufacturers directories, and internet searches.

MDNR mailed a pre-survey postcard, revised the survey list, and conducted two land mailings of hardcopies of the four-page survey form in 2016, however the initial response rate was about 22%. A contractor was hired to conduct phone surveys to non-respondents, resulting in an overall response rate of about 70%. Plans for additional phone surveys and site visits were curtailed due to the COVID-19 pandemic in 2020 through 2021. Most of the remaining non-respondents' records were verified using internet searches to determine status, key products, and employment estimates.

The survey instrument asked respondents to provide information on company location and contact information, average annual sales, employment in 2015, types of products produced and the company's primary or key product, types of raw materials processed and the volume used in 2015, percentage of raw materials sourced from Michigan vs. other states, wood species and equipment used, interest in exploring use of wood heat and/or power systems for their facility, volumes of wood residues produced and means of their disposal, interest in export marketing assistance, and interest in workshops or future training on dry kilns, forest certification systems, urban wood, and use of Pure Michigan branding. Most survey respondents completed the more general portions of the survey – company contact information, location, markets served, jobs in 2015, average annual sales, products produced, a key or primary product, and types of raw materials used. About 1/3 of respondents provided estimates of volumes of raw materials processed, and there was inconsistency in how those materials were quantified – some companies provided dollar values for quantities purchased rather than volumes. Companies using composite panel products such as particleboard gave responses in terms of square feet and/or number of pieces. Companies using moldings or trim responded in terms of lineal feet. There were fewer responses on volumes for companies processing paper, paperboard and corrugated board materials. Consequently, the results that follow focus on portions of the survey that had better response rates.

The survey identified 947 active forest products manufacturers, representing 44% of the initial survey list. About a quarter of the forest products manufacturers identified had closed, and 25% of the initial survey population were not wood products manufacturers – they were distributors, brokers, retailers, or manufacturers that used materials other than wood or paper. Three percent could not be verified as active or did not respond to the survey, and one percent were inactive, but not permanently closed.

Table 1: Survey responses as a percentage of initial survey population.

Survey Response	Count	Percentage
Active	947	44%
Closed	568	27%
Inactive	12	1%
Not a wood manufacturer	542	25%
No response/refusal	73	3%
Total	2,142	100%

NUMBER OF MANUFACTURERS BY LOCATION

Most active manufactures were in the southern portions of the state and concentrated near larger metropolitan areas (Figure 1). About ¾ of the companies were in the southern lower peninsula, followed by the northern lower peninsula with 17% of the manufacturers, the eastern upper peninsula with 5%, and the western upper peninsula with 3% (Table 2). Note that the data reflect the number of facilities – some companies had more than one manufacturing facility in Michigan.

Figure 1: Map of active Michigan forest products manufacturers, 2015.

The top ten counties ranked in order of number of forest products manufacturing facilities were Kent, Wayne, Ottawa, Oakland, Macomb, Kalamazoo, Washtenaw, Allegan, St. Joseph, and Menominee (Table 3). These ten counties half of the statewide number of forest products manufacturing facilities. Kent and Wayne counties respectively had 12% and 9% of the total number of manufacturing facilities.

Table 2: Number of Michigan forest products manufacturing facilities by region, 2015.

Region	Number of Facilities	Percentage of Facilities
Western Upper Peninsula	32	3%
Eastern Upper Peninsula	47	5%
Northern Lower Peninsula	163	17%
Southern Lower Peninsula	705	74%
Statewide Total	947	100%

Table 3: Top ten Michigan counties by number of forest products manufacturing facilities and percentage of statewide total forest products manufacturing facilities, 2015.

County	Number of Facilities	Percentage - Facilities
Kent	109	12%
Wayne	82	9%
Ottawa	67	7%
Oakland	65	7%
Macomb	36	4%
Kalamazoo	25	3%
Allegan	24	3%
Washtenaw	24	3%
St. Joseph	23	2%
Menominee	22	2%
Subtotal - Top 10 Counties	477	50%
Statewide Total	947	100%

NUMBER OF ACTIVE MANUFACTURERS BY PRIMARY PRODUCT AND TYPE

Overall, solid wood product manufacturing facilities provide 2/3 of the number of direct jobs in 2015, and paper product manufacturing including containers, paper packaging and other paper products provided about 1/3 of manufacturing jobs. Solid wood-related manufacturing accounted for about 85% of facilities, and paper-related manufacturing accounted for about 15% of facilities.

By number of direct jobs provided, the top ten primary products were paper, paperboard or corrugated board containers; other paper products manufacturing; office furniture; pallets, pallet cut stock and wooden crates; cabinets, household furniture; institutional furniture; displays; architectural millwork, and truss manufacturing. Paper, paperboard or corrugated board containers and other paper products manufacturing facilities together provided 34% of the total number of secondary manufacturer jobs. Facilities manufacturing office, household, institutional and contract furniture manufacturing provided 8, 5, 4, and 2 percent of statewide forest products manufacturing jobs. Pallet, pallet cut stock and wooden crate manufacturing, and cabinet manufacturing provided 9% and 5% of total jobs (Table 4).

By number of manufacturing facilities, the top ten key or primary products manufactured by Michigan facilities were pallets, pallet cut stock and wooden crates; cabinets; paper, paperboard, or corrugated board containers; architectural millwork, other paper products manufacturing; other miscellaneous solid wood products; household furniture; office furniture; manufactured homes and other prefabricated buildings or sheds; and institutional furniture manufacturing. Pallet wooden crate manufacturing, and cabinet makers had the most facilities, at 12% and 11% of the statewide total, followed by paper, paperboard, or corrugated board with 9% of facilities, and architectural millwork shops with 6%.

Table 4: Michigan secondary manufacturer number of direct jobs by primary product category, 2015.

Product Category	Number of Facilities	Percentage of Facilities	Number of Jobs	Percentage of Jobs
Paper & Paper Packaging	145	15%	11,860	34%
Furniture	129	14%	7,838	22%
Millwork	174	18%	4,931	14%
Pallets & Wooden Crates	131	14%	3,164	9%
Other	124	13%	2,082	6%
Cabinets	116	12%	1,896	5%
Trusses & Prefab Buildings	47	5%	1,787	5%
Lumber	74	8%	1,412	4%
Pellets	7	1%	121	0%
Total	947	100%	35,091	100%

AVERAGE ANNUAL SALES

Survey respondents were asked to provide an estimate of average annual sales. About 10% of the active forest products secondary manufacturing facilities did not provide an estimate. About 1/3 of the active facilities had average annual sales less than $1 million and could be characterized as small manufacturing facilities. Another 1/3 had average annual sales between $1 and $10 million and could be called medium-sized facilities, and about 20% were large to very large manufacturing facilities that had sales greater than $10 million (Table 5). The distribution of manufacturing facilities by average annual sales class appeared to be fairly even among the state's northern regions, however there appeared to be a greater number of large and very large manufacturing facilities in the southern lower peninsula – facilities with average annual sales greater than $10 million. (Table 6)

Table 5: Number of Michigan secondary manufacturing facilities by primary product category and average annual sales class, 2015.

Product Category	No Response	Less than $1/2 Million	$1/2 to $1 Million	$1 to $5 Million	$5 to $10 Million	$10 to $50 Million	More than $50 Million
Cabinets	6	44	21	33	6	6	
Furniture	6	35	13	26	12	24	13
Lumber	17	14	8	20	6	7	2
Millwork	9	44	27	52	14	24	4
Other	12	52	22	28	5	4	1
Pallets & Wooden Crates	29	22	11	43	16	7	3
Paper & Paper Packaging	9	4	4	27	18	62	21
Pellets	1	0		5		1	
Trusses & Prefab Buildings	10	6	4	11	9	6	1
Total	99	221	110	245	86	141	45
Percentage	10%	23%	12%	26%	9%	15%	5%

Table 6: Percentage of Michigan forest products secondary manufacturing facilities by average annual sales category and region, 2015.

Average Annual Sales Category	WUP	EUP	NLP	SLP	Statewide
No Response	3%	5%	25%	67%	100%
Less than $100,000	6%	5%	31%	58%	100%
$100,000 to $500,000	6%	5%	21%	68%	100%
$500,000 to $1 Million	3%	8%	14%	75%	100%
$1 Million to $5 Million	3%	4%	20%	73%	100%
$5 Million to $10 Million	1%	6%	12%	81%	100%
$10 Million to $50 Million	2%	4%	9%	86%	100%
Greater than $50 Million	2%	7%	0%	91%	100%

Direct Employment by Location

Direct employment estimates were provided by survey respondents, and the number of jobs followed a similar pattern as number of facilities, though skewed more heavily toward the southern lower peninsula (Table 7). Most active manufacturers provided an estimate of the number of direct jobs at their facilities in 2015; about 1% did not provide an estimate. Forest products manufactures employed about 35,000 workers in 2015, with about 85% of those jobs at companies located in the southern lower peninsula, about 9% in the northern lower peninsula, and 6% in the upper peninsula.

Employment and number of manufacturing facilities were largely concentrated in southern lower peninsula counties, many of which have large populations. The top ten counties in terms of number of direct jobs provided by forest products manufacturing were Kent, Ottawa, Kalamazoo, Wayne, Oakland, Monroe, St. Joseph, Genesee, Macomb, and St. Clair (Table 8). The top five counties Kent, Ottawa, Kalamazoo, Wayne, and Oakland counties had 21%, 9%, 7%, 7% and 5% of the number of direct manufacturing jobs, respectively, comprising 49% of the forest products secondary manufacturing jobs.

The counties that had the lowest number of forest products manufacturing jobs as identified by the survey were Lake, Iosco, Ontonagon, Osceola, Arenac, Otsego, Schoolcraft, Keweenaw, Gogebic, and Luce. Lake County was the only county in which the survey did not capture any secondary manufacturers.

Table 7: Number of Michigan forest products direct jobs by region, 2015.

Region	Number of Jobs	Percentage of Jobs
Western Upper Peninsula	599	2%
Eastern Upper Peninsula	1,478	4%
Northern Lower Peninsula	3,176	9%
Southern Lower Peninsula	29,838	85%
Statewide Total	35,091	100%

Table 8: Top ten Michigan counties by number of direct jobs and percentage of statewide total forest products manufacturing jobs, 2015.

County	Number of Direct Jobs	Percentage - Direct Jobs
Kent	7,353	21%
Ottawa	3,281	9%
Kalamazoo	2,629	7%
Wayne	2,438	7%
Oakland	1,747	5%
Monroe	1,363	4%
St. Joseph	1,333	4%
Genesee	1,029	3%
Macomb	971	3%
St. Clair	794	2%
Subtotal - Top 10 Counties	22,938	65%
Statewide Total	35,091	100%

SIZE AND DISTRIBUTION OF EMPLOYERS

Nearly 70% of the state's forest products manufacturers could be characterized as small from a direct employment perspective – facilities that provided 1 to 30 jobs (Tables 9 & 10). About 20% of the manufacturing facilities could be characterized as medium-sized, employing between 31 and 100 workers, and about 10% as large employers – providing greater than 100 jobs. Only 3 very large secondary manufacturing facilities were captured in the survey – companies providing more than 500 jobs.

The southern lower peninsula had 87% of the state's large employers, as well as the three very large employers. About 82% of the medium-sized employers and 70% of the small employers were in the southern lower peninsula. The northern lower peninsula had about 10% of the medium-sized employers and 20% of the small employers. About 73% of the upper peninsula's manufacturing facilities were small employers.

Table 9: Number of Michigan forest products secondary manufacturing facilities by direct employment range class and region, 2015.

Employment Class	WUP	EUP	NLP	SLP	Statewide	Statewide Percentage
No response			2	12	14	1%
1-5	13	13	73	187	286	30%
6-15	11	12	40	154	217	23%
16-30	2	7	22	115	146	15%
31-50	1	7	9	81	98	10%
51-100	4	4	10	73	91	10%
101-200	1	3	6	58	68	7%
201-500		1	1	22	24	3%
501-1000				3	3	0%
Total	32	47	163	705	947	100%

Table 10: Number of Michigan forest products secondary manufacturing facilities by employer size class and region, 2015.

Employer Size	WUP	EUP	NLP	SLP	Statewide	Statewide Percentage
No response			2	12	14	1%
Small - 1 to 30 jobs	26	32	135	456	649	69%
Medium - 31 to 100 jobs	5	11	19	154	189	20%
Large - 101 to 500 jobs	1	4	7	80	92	10%
Very Large - 501 to 1,000 jobs	0	0	0	3	3	0%
Total	32	47	163	705	947	100%

SUMMARY AND DISCUSSION

The 2015 Forest Products Industry Secondary Manufacturer survey that the DNR conducted in 2016 through 2021 identified a total of 947 active facilities that produce wood or paper products. These companies provided about 35,000 direct jobs in 2015, based on survey responses. Solid wood-related manufacturing accounted for about 85% of facilities, and 15% of the facilities produced paper or paper packaging products. The top five product categories by employment were paper, paperboard or corrugated board containers; other paper products manufacturing; office furniture; pallets, pallet cut stock and wooden crates; cabinets. The top five product categories by number of manufacturing facilities were pallets, pallet cut stock and wooden crates; cabinets; paper, paperboard, or corrugated board containers; architectural millwork, other paper products manufacturing. The majority of facilities and direct jobs provided by forest products manufacturing were concentrated in the southern lower peninsula. The top five counties Kent, Ottawa, Kalamazoo, Wayne, and Oakland counties had 21%, 9%, 7%, 7% and 5% of the number of direct manufacturing jobs, respectively, comprising 49% of the forest products secondary manufacturing jobs. About 2/3 of the forest products manufacturing occurred in small to medium sized facilities, plants with less than $10 million in average annual sales. The survey likely captured the majority of large manufacturing firms, but it is likely that there are a significant number of small manufacturing facilities that were not captured by the survey.

U.S. FOREST SERVICE NONDISCRIMINATION STATEMENT

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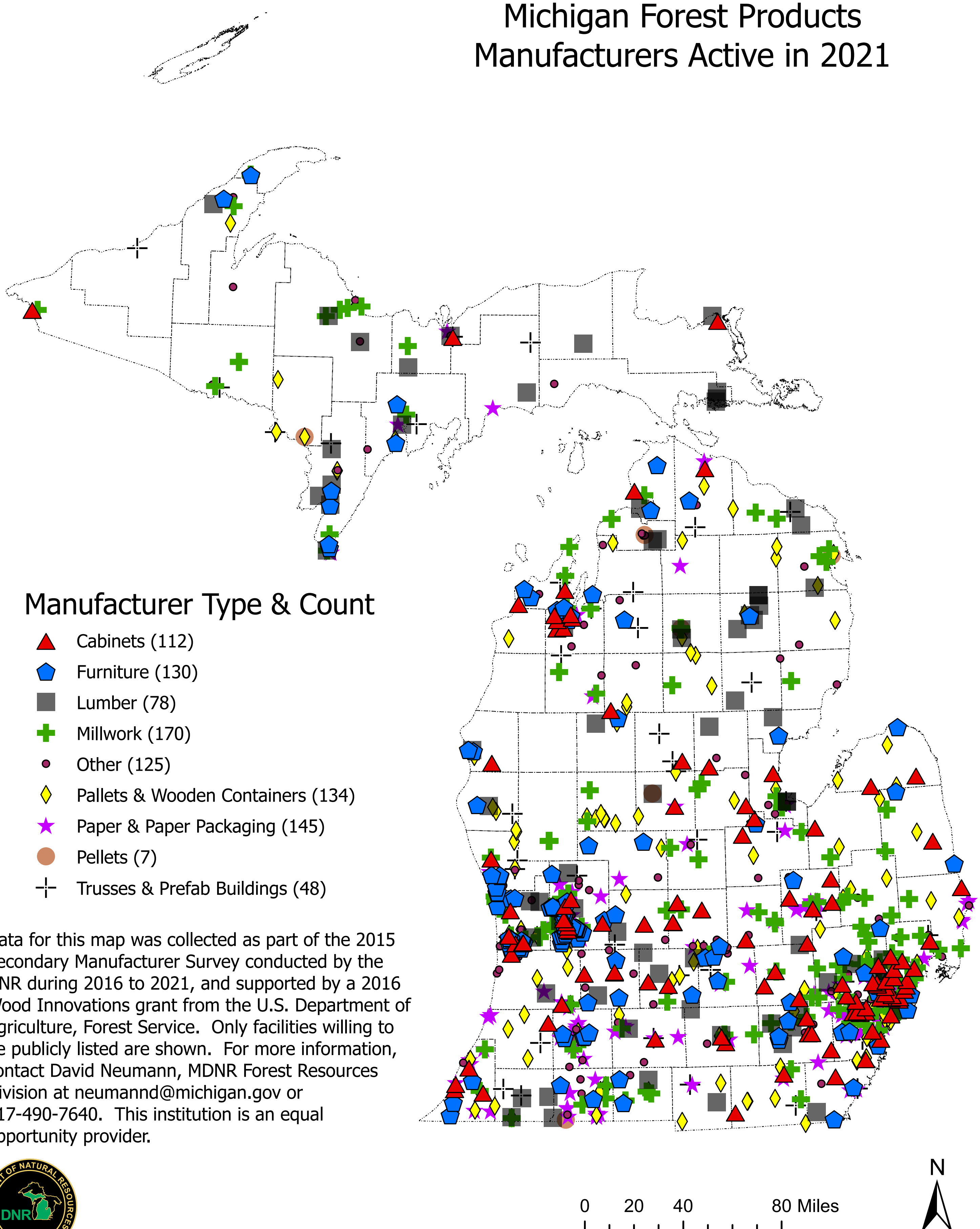
Michigan Forest Products Manufacturers Active in 2021



Data for this map was collected as part of the 2015 Secondary Manufacturer Survey conducted by the DNR during 2016 to 2021, and supported by a 2016 Wood Innovations grant from the U.S. Department of Agriculture, Forest Service. Only facilities willing to be publicly listed are shown. For more information, contact David Neumann, MDNR Forest Resources Division at neumannd@michigan.gov or 517-490-7640. This institution is an equal opportunity provider.

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