

Utah's Forest Products Industry and Timber Harvest, 2020

The University of Montana's Bureau of Business and Economic Research (BBER), in conjunction with the Interior West Forest Inventory and Analysis (IW-FIA) program of the USDA Forest Service, conducted a census of Utah's timber processors operating during calendar year 2020. Through a written questionnaire and through phone or in-person interviews, timber-processing and residuals-utilizing facilities provided information about their 2020 operations, including:

- Plant location, production, capacity, and employment.
- Volume of raw material received, by county and ownership.
- Species of timber received and live/dead proportions.
- Finished product volumes, types, sales value, and market locations.
- Volume, uses, and sales of manufacturing residuals.

This research traces the flow of Utah's 2020 timber harvest through the primary wood products industry and characterizes the structure and condition of Utah's forest products industry sectors. Historical changes in the forest products industry, as well as trends in timber harvest, milling capacity and production, volume of mill residuals, and sales value of products and residuals are presented. Employment and worker earnings in the state's primary and secondary forest products industries are also discussed. Periodic survey data collected from the forest products industry provide detailed information on Utah's timber sources, wood utilization and the economic contributions of the industry to the state economy through time.

A comprehensive report is currently being prepared that will include selected tables along with historical information and current industry trends. This is the fifth analysis conducted for Utah. All BBER reports on Utah's forest products industry can be found at: https://www.bber.umt.edu/FIR/S_UT.asp.

We are providing these core tables in anticipation of the actual report being finalized, and encourage you to contact us if you have any questions or comments about the data.

However, firm-level data are confidential and will not be released.

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Report Highlights

 The 2020 timber harvest in Utah was 15 percent higher than in 2016, primarily due to an increase in the harvest of industrial fuelwood, furniture logs, fiber logs, and posts and poles on National Forest System lands.

- Sanpete, Sevier, and Beaver counties saw the largest increases in timber harvests in 2020, as compared to 2016.
- San Juan, Rich, and Duchesne counties saw the largest decreases in timber harvests in 2020, as compared to 2016.
- Utah saw an increase of 77 percent in spruces harvested in 2020, caused in part by the
 decline in the harvest of other species. The proportion of spruce harvested went from
 31 percent in 2016 to 48 percent in 2020.
- Net outflow of timber products from Utah was 25 percent lower in 2020 than in 2016,
 dominated by a decline in the outflow of sawlogs.
- In 2020, 92 percent of the timber received by Utah mills came from National Forest System lands, compared to 72 percent in 2016.
- Volume of timber received by Utah facilities for "other products" was 3,375 percent higher in 2020 than in 2016, primarily due to an exponential increase in firewood processing as a result of the opening of a new processing facility.
- Active Utah primary wood product facilities totaled 23 in 2020, up from 18 in 2016. The
 growth includes 2 new lumber mills, 1 new log homes and house logs facility, and 2
 new log furniture, posts poles, and bark facilities.
- Sales receipts for finished products from Utah's primary wood products facilities was
 20 percent greater in 2020 than in 2016, due to large increases in receipts from
 sawmills (up 25 percent) and from other products such as posts and poles, log
 furniture and residuals (up 38 percent).

 Utah's sawmill lumber output declined by 20 percent between 2016 and 2020, with average production per mill declining by 35 percent.

- Total capacity of active sawmills in Utah was 46 percent lower in 2020 than in 2016.
- Total residuals produced by Utah's primary wood products facilities were 21 percent greater in 2020 than in 2016. Total residual utilization was 26 percent greater in 2020, with volume of unused residuals being 48 percent lower in 2020.
- Sales receipts from within Utah indicate that total primary wood products and residuals consumed within the state were 94 percent greater in 2020 than in 2016.
- Direct labor income from paper manufacturing facilities was 22 percent higher in 2020 than in 2016, while direct labor income increased by 9 percent for wood products manufacturing and by 252 percent for forestry support activities. Forestry and logging saw a 19 percent decrease.

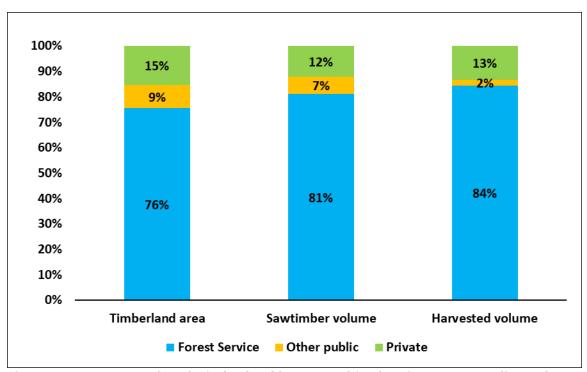


Figure 1. Percentage of Utah timberland by ownership class in acres, standing volume and volume of harvest, 2020.

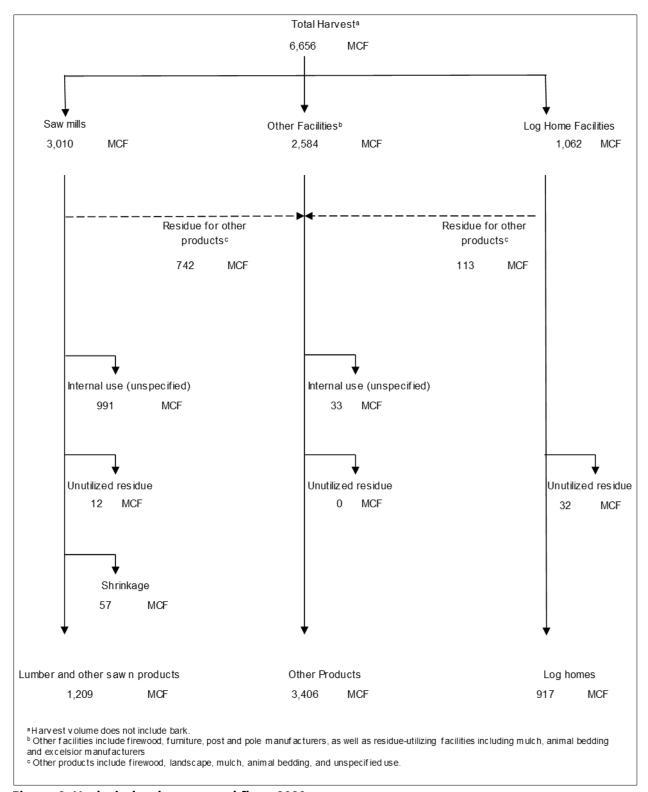


Figure 2. Utah timber harvest and flow, 2020

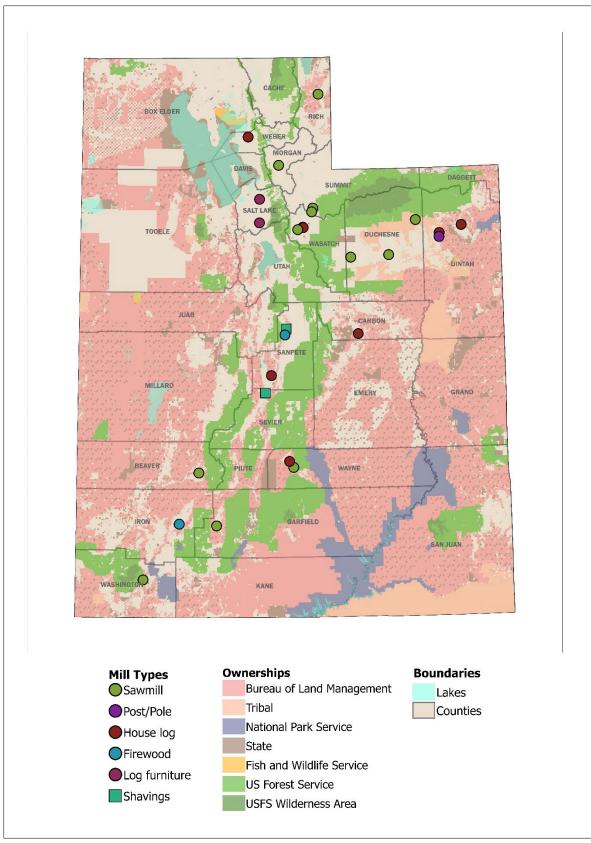


Figure 3. Location of facilities by type, Utah 2020.

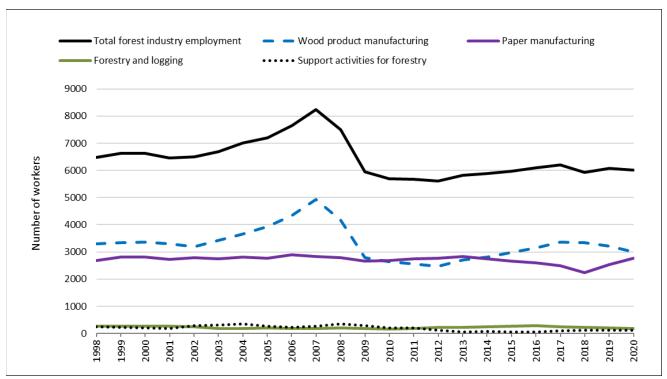


Figure 4. Forest industry employment, Utah 1998-2020

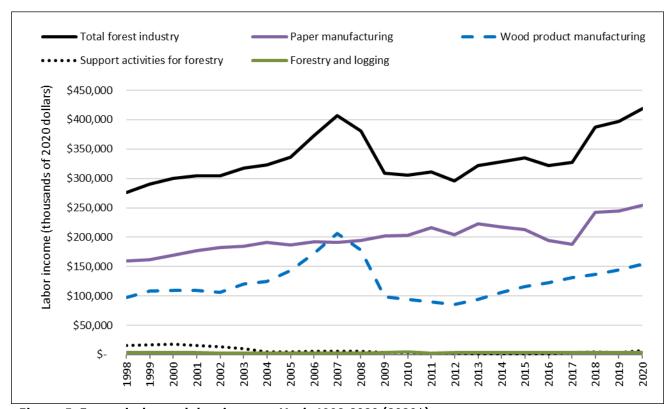


Figure 5. Forest industry labor income, Utah 1998-2020 (2020\$)

Table 1. Utah nonreserved timberland by ownership class, 2019 (Source: USDA Forest Service, Shaw 2022)

Ownership class	Thousand acres	Percentage of nonreserved timberland
National forest	2,791	76
Private and Tribal	572	15
Other public ^a	332	9
Total	3,695	100

^a Other public ownerships include BLM and state.

Table 2. Utah timber harvest by ownership class, 2007, 2012, 2016 and 2020 (Sources: Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021)

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	2007	2012	2016	2020		2007	2012	2016	2020
Ownership class	Tho	usand boar	rd feet, Scri	ibner		Pe	ercentage	e of harve	est
Private and Tribal timberland	11,669	6,292	3,581	3,773		38	33	14	13
Public timberland	18,652	13,064	21,297	24,734		62	67	86	87
National forest	15,490	10,117	19,848	24,054		51	52	80	84
Other publica	3,162	2,947	1,449	680		11	15	6	3
All owners	30,321	19,356	24,878	28,507		100	100	100	100

^a Other public ownerships include BLM and state.

Table 3. Utah timber products harvest by ownership class, 2020

Ownership class	Sawlogs	House logs	Other products ^a	All products
	Th	ousand boar	d feet, Scribn	er
National forests	11,127	2,605	10,322	24,054
Private and Tribal	3,265	502	6	3,773
Other public ^b	500	_	180	680
All owners	14,892	3,107	10,508	28,507
	Per	centage of h	arvested prod	uct
National forests	74.7	83.8	98.2	84.4
Private and Tribal	21.9	16.2	0.1	13.2
Other public ^b	3.4	_	1.7	2.4
All owners	52.2	10.9	36.9	100

^a Other products include industrial fuelwood, furniture logs, fiber logs, posts, and poles.

^b Other public ownerships includes BLM and state.

Table 4. Utah timber harvest by county, 2007, 2012, 2016 and 2020 (Sources: Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021)

County	2007	2012	2016	2020	2007	2012	2016	2020
	Thou	sand board	d feet, Scri	bner	Per	centage c	f harvest	
Beaver	468	200	290	1,452	1.5	1.0	1.2	5.1
Cache	1,150	_	_	262	3.8	_	_	0.9
Carbon	1,564	1,480	213	50	5.2	7.6	0.9	0.2
Daggett	_	25	103	_	_	а	0.4	-
Davis	_	_	_	_	_	_	_	а
Duchesne	1,793	515	1,301	640	5.9	2.7	5.2	2.2
Emery	284	1,500	1,778	1,200	0.9	7.7	7.1	4.2
Garfield	3,141	965	840	1,097	10.4	5.0	3.4	3.8
Grand	1,925	_	5	0	6.3	_	0.0	а
Iron	1,554	200	718	370	5.1	1.0	2.9	1.3
Juab	_	_	_	_	_	_	_	а
Kane	60	_	3,192	2,292	0.2	_	12.8	8.0
Millard	_	_	144	_	_	_	0.6	_
Morgan	150	100	60	90	0.5	0.5	0.2	0.3
Piute	500	_	_	270	1.6	_	_	0.9
Rich	_	1,500	808	_	_	7.7	3.2	-
Salt Lake	59	74	253	180	0.2	0.4	1.0	0.6
San Juan	1,865	1,400	1,400	_	6.2	7.2	5.6	-
Sanpete	3,800	1,500	1,875	4,950	12.5	7.7	7.5	17.4
Sevier	1,483	155	1,707	3,330	4.9	8.0	6.9	11.7
Summit	2,700	6,430	7,258	8,091	8.9	33.2	29.2	28.4
Uintah	1,398	2,300	539	1,119	4.6	11.9	2.2	3.9
Unknown	_	_	_	80	_	_	_	0.3
Utah	793	_	546	_	2.6	_	2.2	_
Wasatch	4,300	1,012	1,333	1,998	14.2	5.2	5.4	7.0
Washington	1,334	_	224	224	4.4	_	0.9	8.0
Wayne	_	_	292	812	_	_	1.2	2.8
Weber	_	_	_	_	_	_	_	а
Total	30,321	19,356	24,878	28,507	100	100	100	100

^a Less than 0.05 percent

Table 5. Utah timber harvest by species, selected years (Sources: Setzer and Throssell 1977b; Keegan and others 1995; Morgan and others 2006; Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021).

Species	1974	1992	2002	2007	2012	2016	2020
-			Percenta	age of harve	st		
Spruces	22	35	44	42	31	31	48
Ponderosa pine	33	5	13	3	4	25	20
Lodgepole pine	27	46	23	13	41	22	16
Douglas-fir	8	4	8	11	11	15	7
Aspen and cottonwood	4	5	10	29	10	6	_
True firs ^a	3	5	2	2	2	1	7
Other species ^b	3	С	С	С	1	0	2
All species	100	100	100	100	100	100	100

^a True firs include white, subalpine and corkbark fir.

Table 6. Utah timber harvest by species and timber product, 2020

Species	Sawlogs	House logs	Other products ^c	All products
		Thousand boa	ard feet, Scribne	er
Spruces	5,338	2,051	6,384	13,773
Ponderosa pine	2,688	23	3,018	5,729
Lodgepole pine	2,790	757	965	4,513
Douglas-fir	1,851	155	25	2,032
True firs ^a	1,833	46	9	1,889
Other species ^b	392	75	105	572
All species	14,892	3,107	10,508	28,507
		Percentage	e of product	
Spruces	35.8	66.0	60.8	48.3
Ponderosa pine	18.0	0.7	28.7	20.1
Lodgepole pine	18.7	24.4	9.2	15.8
Douglas-fir	12.4	5.0	0.2	7.1
True firs ^a	12.3	1.5	0.1	6.6
Other species ^b	2.6	d	d	2.0
All species	52.2	10.9	36.9	100

^a True firs include white, subalpine and corkbark fir.

^b Other species include juniper and western white pine.

^c Less than 0.05 percent.

^b Other species include western red cedar, aspen and western larch.

^c Other products include industrial fuelwood, furniture logs, fiber logs, posts and poles.

^d Less than 0.1 percent.

Table 7. Timber product flow into and out of Utah, 2020

Timber Product	Log flow into Utah	Log flow out of Utah	Net inflow (net outflow)
	Thous	and board feet, So	cribner
Sawlogs		5,533	(5,533)
House logs		392	(392)
Other products ^a		3,164	(3,164)
All products		9,089	(9,089)

^a Other products include industrial fuelwood, furniture logs, fiber logs, posts and poles.

Table 8. Timber products received by Utah mills, by ownership of timberland, selected years (Source: Morgan and others 2006; Sorenson and others 2016; Hayes and others 2021)

Ownership class	2002	2012	2016	2020	20	02	2012	2016	2020
	Thous	and board f	eet, Scribne	r		-Perc	entage of	f total	
Private timberland	9,241	5,177	3,333	1,446	28	.4	45.1	26.2	7.4
Public timberland	23,245	6,264	9,217	17,792	71	.5	54.5	72.4	91.6
National forest	21,898	6,034	8,542	17,292	67	.3	52.5	67.1	89.1
State lands	1,346	230	675	500	4	.1	2.0	5.3	2.6
Other ownerships ^a	33	47	181	180	C	.1	0.4	1.4	0.9
All owners	32,518	11,488	12,731	19,418	10	00	100	100	100

^a Other ownerships include BLM and Canada.

Table 9. Timber received by Utah forest products facilities, by timber product and ownership class, 2020

Ownership Class	Sawlogs	House logs	Other products ^b	All products
	T/	nousand boa	rd feet, Scribn	ner
Private timberland	1,290	150	6	1,446
Public timberland	8,069	2,565	7,158	17,792
National forest	7,569	2,565	7,158	17,292
State lands	500	_	_	500
Other ownerships ^a	_	_	180	180
All ownerships	9,359	2,715	7,344	19,418
		Percentage	of product	
Private and tribal timberland	13.8	5.5	0.1	7.4
Public timberland	86.2	94.5	97.5	91.6
National forest	80.9	94.5	97.5	89.1
State lands	5.3	_	_	2.6
Other ownerships ^a	_	_	2.5	0.9
All ownerships	48.2	14.0	37.8	100

^a Other ownerships include BLM and Canada.

^b Other products include furniture logs, fiber logs, posts and poles.

Table 10. Active Utah primary wood products facilities by county and product, 2020 (Sources: Keegan and others 1995; Morgan and others 2006; Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021).

County	Lumber	Log homes and house logs	Log furniture and other products ^a	Total
Beaver	1	_	-	1
Carbon	_	1	_	1
Duchesne	3	_	_	3
Garfield	1	_	_	1
Iron	1	_	1	2
Morgan	1	_	_	1
Rich	1	_	_	1
Salt Lake	_	_	1	1
Sanpete	_	1	1	2
Sevier	_	_	1	1
Summit	1	_	_	1
Uintah	_	2	1	3
Wasatch	1	1	_	2
Wayne	1	1	_	2
Weber	_	1	_	1
2020 Total	11	7	5	23
2016 Total	9	6	3	18
2012 Total	8	7	3	18
2007 Total	12	10	5	27
2002 Total	23	14	12	49
1992 Total	34	13	4	51

^a Other products include posts, poles and bark products.

Table 11. Sales of finished products from Utah's primary wood products sectors, 2002, 2007, 2012, 2016, 2020.

Sector	2002	2007	2012	2016	2020
		Thous	ands 2020 dolla	rs	
Sawmills	18,045	10,009	3,890	3,251	5,207
Log homes and other sectors ^a	29,972	23,707	13,207	18,033	22,725
Total ^b	48,017	33,716	17,098	21,284	27,932

^a Other sectors include producers of posts, poles and log furniture. Mill residuals, firewood, mulch, and bark products are not included to enable comparison to earlier years.

Table 12. Utah sawmills by production size class, selected years 1966-2020. (Sources: Setzer and Wilson 1970; Keegan and others 1995; Morgan and others 2006; Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021).

Year	Under 1 MMBF ^a	Over 1 MMBF ^a	Total
		Number of sawmills	
2020	(size classes com prevent di		11
2016	6	3	9
2012	4	4	8
2007	7	5	12
2002	17	6	23
1992	25	9	34
1966	37	13	50
	Percentage of	lumber output	Volume (MBFb)
2020	(size classes com prevent di		9,104
2016	14	86	11,431
2012	13	87	9,553
2007	6	94	22,892
2002	13	87	26,524
1992	13	87	63,637
1966	10	90	72,000

^a Size class is based on reported lumber production; MMBF=million bord feet lumber tally.

^b All sales are reported f.o.b. manufacturers' plants.

^b MBF = thousand board feet lumber tally.

Table 13. Number of Utah sawmills and average lumber production, selected years 1966-2020. (Sources: Setzer and Wilson 1970; Keegan and others 1995; Morgan and others 2006; Hayes and others 2012; Sorenson and others 2016; Hayes and others 2021).

Year	Number of sawmills	Average production per mill
		MMBFa
2020	11	8.0
2016	9	1.3
2012	8	1.2
2007	12	1.9
2002	23	1.2
1992	34	1.9
1966	50	1.4

^a MMBF = million board feet lumber tally.

Table 14. Active Utah sawmills, lumber production capacity, lumber production and capacity utilization by size class, 2020.

Annual capacity						Annual p	oroduction	
Production capacity size class	Number of mills	Capacity (MBF ^{a)}	Percentage of total capacity	Average mill capacity by size class	Production (MBF ^{a)}	Percentage of total production	Average mill production by size class	Percentage of capacity utilization
≥ 1 MMBF ^b	5	19,000	85	3,800	6,501	71	1,300	34
<1 MMBF ^b	6	3,280	15	547	2,603	29	434	79
Total	11	22,280	100	2,025	9,104	100	828	41

^a MBF = thousand board feet lumber tally.

^b MMBF = million board feet lumber tally.

Table 15. Production and disposition of Utah mill residuals, 2020.

Residual type	Total utilized	Pulp and board	Energy	Mulch/ bedding	Unspecified use	Unused	Total produced	
			Bone-dry units ^a					
Coarse	10,495	_	4,215	_	6,280	298	10,793	
Fine	6,904	_	4,117	2,177	610	70	6,974	
Sawdust	4,957	_	3,810	1,147	0	45	5,002	
Planer shavings	1,947	_	307	1,030	610	26	1,973	
Bark	2,992		788	1,020	1,184	273	3,266	
Total	20,391	_	9,120	3,197	8,074	642	21,033	
			Percei	ntage of resid	dual type			
Coarse	97.2	_	39.1	_	58.2	2.8	51.3	
Fine	99.0	_	59.0	31.2	8.7	1.0	33.2	
Sawdust	99.1	_	76.2	22.9	0.0	0.9	23.8	
Planer shavings	98.7	_	15.6	52.2	30.9	1.3	9.4	
Bark	91.6		24.1	31.2	36.3	8.4	15.5	
Total	96.9	_	43.4	15.2	38.4	3.1	100	

^a Bone-dry unit=2,400 lbs oven-dry wood.

Table 16. Utah sawmill residual factors, selected years 2002-2020.

Type of residual	2002	2007	2012	2016	2020
Coarse	0.48	0.44	0.64	0.62	0.67
Sawdust	0.19	0.21	0.14	0.14	0.09
Planer shavings	0.10	0.15	0.10	0.11	0.10
Bark	0.21	0.20	0.25	0.21	0.21
Total	0.98	1.00	1.13	1.08	1.07

Table 17. Destination and sales value of Utah's primary wood products and mill residuals, 2020.

Product	Utah	Other 4-Corner states	Other Rocky Mountain states ^a	Far West ^b	Northeast ^c	South ^d	North Central ^e	Total
				Thousand 2020	dollars			
Lumber, timbers, and other sawn products	4,597	1,050	665	5	650	648	1,503	9,118
House logs and log homes	2,853	1,476	977	99	991	941	941	8,279
Other products ^f	5,762	75	-	-	1,560	1,040	2,080	10,517
Total	13,212	2,601	1,642	104	3,201	2,629	4,524	27,914
			Per	centage of region	onal sales			
Lumber, timbers, and other sawn products	34.8	40.4	40.5	4.7	20.3	24.6	33.2	32.7
House logs and log homes	21.6	56.7	59.5	95.3	31.0	35.8	20.8	29.7
Other products ^f	43.6	2.9	_	_	48.7	39.6	46.0	37.7
Total	47.3	9.3	5.9	0.4	11.5	9.4	16.2	100

^a Other Rocky Mountain states include Idaho, Montana and Nevada.

^b Far West includes Alaska, California, Hawaii, Oregon, and Washington.

^c Northeast includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

^d South includes Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

^e North Central includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

^f Other products include posts, poles, log furniture, firewood and mill residuals.

Table 18. Average annual employment and labor income contributions from Utah's forest industry, 2020.

Sector	Direct employment	Indirect and induced employment	Total employment contribution	Direct labor income	Indirect and induced labor income	Total labor income contribution
Forestry and logging	193	102	295	\$ 4,017	\$ 2,601	\$ 6,618
Forestry support activities	129	38	167	\$ 7,109	\$ 3,667	\$ 10,776
Wood products manufacturing	3,008	3,408	6,416	\$ 153,783	\$ 209,684	\$ 363,467
Primary wood products mfg	781	941	1,722	\$ 36,135	\$ 50,047	\$ 86,182
Secondary wood products mfg	2,227	2,467	4,694	\$ 117,648	\$ 159,637	\$ 277,285
Paper manufacturing	2,771	7,440	10,211	\$ 254,559	\$ 382,042	\$ 636,601
Total forest industry	6,101	а	а	\$ 419,468	а	а

^a Indirect and induced employment and labor income should not be summed for multiple sectors due to some employment and income contributing directly to one sector and indirectly to others.