Pennsylvania 2016 Timber Product Output Survey Fact Sheet

Introduction

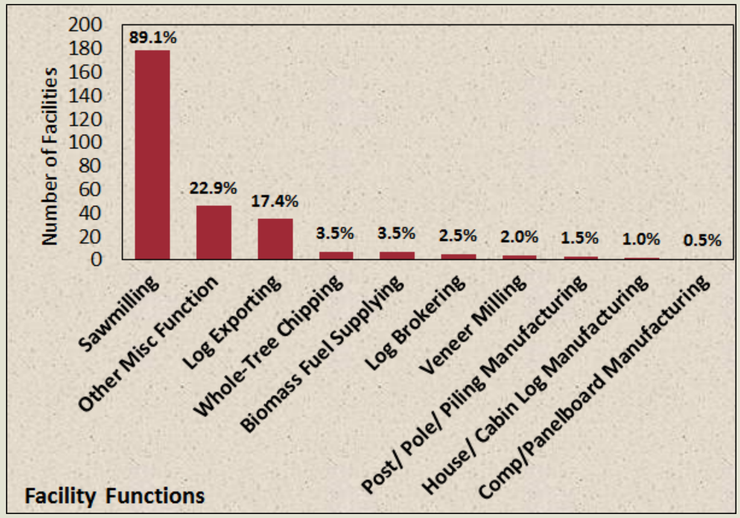
During 2017, the PA DCNR Bureau of Forestry conducted a Timber Product Output Survey, gathering information for the 2016 production year from primary "breakdown" sawmills and wood processors, whole-tree chippers, pulp & paper mills, panelboard mills, and log buyers exporting logs outside the U.S.

Participation & Facility Information

- 418 known primary wood processors are known across 62 of Pennsylvania's 67 counties. 203 facilities participated in the survey for a 49% statewide participation rate.
- Over a quarter of the surveyed facilities had been in business less than 10 years. Two businesses had been in business over 100 years.
- There were 4,655 workers employed at 192 surveyed facilities. Total employees was greater in 2016, even with fewer mills reporting.

	Total employees	Number of facilities
2012	4,394	211
2016	4,655	192

- Most facilities (61%) had less than 10 employees.



Distribution of facilities/mills by their functions, based on 203 surveys. Percentages are proportion of mills of that type to the total number of respondents. Participants could choose more than one function. Misc. Function includes handles, live edge and other specialty items.

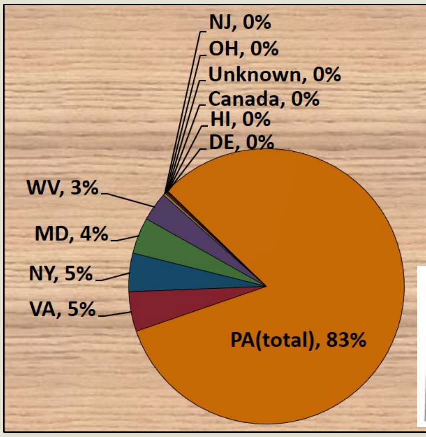
Volumes Processed

- Total volume processed (based on 186 mills that reported volumes) equals 146 million cubic feet, which is equivalent to 924 million board feet.
- Based on knowledge of the industry and other published data, we estimate that these totals represent about 61% of the total volumes statewide.

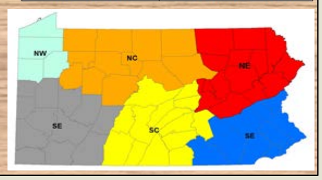
Total 2016 reported volume processed by species group & product type						2012
	Species Group					
Product Type	Hardwood	Softwood	Total	Total Vol (MM ft^3)	Percentage of Total Vol	Percentage of Total Vol
	------------Million bd ft----------					
Lumber/Dimension						
Lumber	368.7	16.8	385.5	60.9	41.7%	36.4%
Veneer	16.1	<0.1	16.1	2.5	1.7%	1.1%
Cants	141.7	6.2	148.0	23.4	16.0%	13.0%
Other Lumber	54.2	1.4	55.6	8.8	6.0%	4.1%
Uncategorized	7.5	0.0	7.5	1.2	0.8%	--
Total	**588.2**	**24.5**	**612.7**	**96.8**	**66.3%**	**54.6%**
Exports						
Exported Logs	38.0	0.0	38.0	6.0	4.1%	1.3%
Total	**38.0**	**0.0**	**38.0**	**6.0**	**4.1%**	**1.3%**
	-------Million Green Tons--------					
Pulp/Chips						
Pulp	0.7	0.2	1.0	31.8	21.8%	39.9%
Composite Chips	0.1	<0.1	0.1	2.1	1.4%	1.3%
Energy Chips	<0.1	<0.1	0.1	2.0	1.4%	1.0%
Other Pulp/Chip	0.2	0.1	0.2	7.3	5.0%	1.9%
Total	**1.0**	**0.3**	**1.3**	**43.2**	**29.6%**	**44.1%**
2016 Total Volume processed Lumber/Dimension, Exported logs, Pulp/Chips=**146 million cubic ft**						**2012: n=253 184.7 MMCF**

- Because number of respondents is different for each survey year, it is useful to compare relative percentages of volume in each category between surveys. For each category, this indicates:
  - Small increase in Lumber/ Dimension (2012: 54.6%; 2016: 66.3%)
  - Large increase in Log Exports (2012: 1.3%; 2016: 4.1%)
  - Considerable decrease in Pulp/Chips relative volume (2012: 44.1%l 2016: 29.6%)
- Analyses using only facilities that participated in both years confirm these broad trends for each category.

Species & Origins



Region	Total Volume (million ft³)
NW	1.6 (1.5%)
NC	24.8 (231.%)
NE	6.8 (6.3%)
SW	8.6 (8.1%)
SC	26.9 (25.1%)
SE	4.4 (4.1%)
PA (unspecified)	34.1 (31.8%)
PA Total	**107.4 (100%)**



Distribution of harvest locations based on reported wood origins (173 mills reported this). PA volume is shown by region in the inset table.

- Of the total reported volume processed, 83% came from PA forests. Other sources include VA, NY, MD, and WV, with minimal volumes from NJ, OH, Canada, HI, DE, or unknown harvest origins.
- Approximately 52% of the wood volume that was reported as harvested from PA came from forests in north-central and south-central regions. A similar proportion (48%) of the wood processed in Pennsylvania was processed in facilities located in these regions.

- Noteable uptick in the rank and relative percentage of ash (likely due to EAB salvage) and white oak (possibly due to increasing cooperage demand.
- The relative rank of the 'mixed' categories (mixed HW, mixed SW, Other) decreased. These categories are most often utilized in Pulp/Chip processing. This tracks with the trend of decreasing processing in that product category.

The top 15 species groups (of 35 total) with the highest reported volumes, 2012 and 2016.

2012			2016		
Species	Volume (million cubic ft)	Pct	Species	Volume (million cubic ft)	Pct
Mixed hardwoods	39.2	21.5%	Red oak	24.4	18.8%
Red oak	24.2	13.3%	Mixed hardwoods	18.2	14.0%
Mixed softwoods	23.3	12.7%	White oak	13.1	10.0%
Other misc. species	15.8	8.7%	Ash	12.7	9.7%
Red/soft maple	15	8.2%	Red/soft maple	12.3	9.4%
Black cherry	12.6	6.9%	Yellow poplar	10.3	7.9%
Yellow poplar	12.5	6.8%	Black cherry	10.1	7.8%
White oak	11.1	6.1%	Mixed softwoods	7.9	6.1%
Sugar/hard maple	9	4.9%	Sugar/hard maple	7.5	5.8%
Ash	6.6	3.6%	Chestnut/rock oak	2.5	1.9%
Hemlock	2.4	1.3%	Black oak	1.9	1.5%
Chestnut/rock oak	1.8	1.0%	Hemlock	1.9	1.5%
Hickory	1.7	0.9%	Hickory	1.9	1.4%
Black oak	1.7	0.9%	White pine	1.5	1.2%
White pine	1.1	0.6%	Black walnut	1.2	0.9%

Residues

- There were 2.0 million green tons (56.2 million cubic feet or the equivalent of 356 million board feet) of residues generated by 148 reporting mills.
- Relative percentages of the residue types remained the same in both survey years. Lumber/Dimension volume and residue volume changes were positively correlated, as expected

	2012 (n=192)		2016 (n=148)	
Residue type	Total volume	% of total	Total volume	% of total
Bark	27.5	41.4%	22.0	39.1%
Coarse	20.9	31.5%	18.6	33.1%
Sawdust	15.5	23.3%	14.8	26.3%
Shavings	2.1	3.1%	0.4	0.7%
Logs/Short Sections	0.4	0.7%	0.4	0.7%
Total	66.3	100%	56.2	100%

- 43% of all residues reported were made into mulch/soil additive, 18% were used in manufacture of composite products, 12% were used as Industrial Fuels (on-site or elsewhere).
- Less than 0.4% of residues were unutilized (burned, landfill, etc.).

More Information

Please contact the Bureau of Forestry, Silviculture Section with any questions at:

Phone: 717-783-3322 Email: PAForester@pa.gov

pennsylvania DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES