

Wood Supply Chain Component Cost Analysis; A Comparison of Wisconsin and U.S. Regional Costs

Principle Investigator

Forrest M. Gibeault, ACF
Analysis and Investments Operations Director
Steigerwaldt Land Services, Inc.
Tomahawk, WI

Statement of Objectives

To complete an assessment of wood fiber supply chain costs in Wisconsin, including a comparison to other U.S. regions, in order to address the question of how Wisconsin can continue to provide sustainably-grown wood fiber to support a competitive wood-using industry and attract investment in primary forest-based manufacturing. An initial study was completed in the fall of 2014, and a second report was published in November 2015 that included an extended study period.

Summary of Key Findings

When compared to the U.S. Northeast region, Wisconsin's total delivered fiber cost for pulpwood was lower for aspen and mixed hardwood and higher for conifer. However, the total delivered prices for aspen and hardwood increased substantially in the Lake States between the initial and extended study periods, while prices remained relatively stable in the Northeast. Both northern regions generally incurred higher delivered costs compared to the U.S. South and Pacific Northwest. Stumpage costs increased for all species groups in Wisconsin relative to the initial study period, and Wisconsin had the highest Stumpage cost for conifer and hardwood pulpwood. Harvesting costs in the Lake States were lower than the Northeast and the Pacific Northwest, but higher than the South. Wisconsin delivered fiber costs typically include higher Freight and "Other" costs (handling, procurement, etc.) in most instances. Results of this study reflect a snapshot for a period of time, as the data set included a summary of eight quarters (Q3 2013 through Q2 2015) and are included in Table 1 below.

Wisconsin and the U.S. Northeast will be at a competitive disadvantage when total delivered pulpwood fiber costs are compared to the South, due largely to differences in seasonal weather-related impacts on operability, such as prolonged spring breakup periods, along with other unique forest and operational characteristics. The expanded data period for this study revealed this fact, as Stumpage cost and Margin increased substantially in Wisconsin, likely due to operations limitations resulting from weather-related events. Wisconsin also has inherent challenges that appear to increase Freight and Other costs. Lowering costs or, minimally, being mindful of issues that increase these costs, such as restrictions limiting activity to winter months, will be a factor in maintaining Wisconsin's position in the U.S and global timber industry.

Table 1 – Cost Components as a Percent of Total Delivered Cost, Q3 2013 through Q2 2015

Supply Chain Cost Component (%)						
Aspen Pulpwood						
Region	Total Delivered (\$ per ton)	Other	Harvesting	Freight	Margin	Stumpage
Lake States	\$ 47.74	4%	34%	27%	6%	30%
Northeast	\$ 53.08	1%	38%	27%	5%	28%
Hardwood Pulpwood						
Region	Total Delivered (\$ per ton)	Other	Harvesting	Freight	Margin	Stumpage
Lake States	\$ 51.62	12%	32%	25%	4%	28%
Northeast	\$ 51.87	3%	40%	28%	4%	24%
South	\$ 40.95	7%	30%	24%	11%	27%
Pacific Northwest	\$ 40.17	25%	47%	22%	4%	2%
Conifer Pulpwood						
Region	Total Delivered (\$ per ton)	Other	Harvesting	Freight	Margin	Stumpage
Lake States	\$ 49.67	10%	34%	25%	5%	26%
Northeast	\$ 43.75	2%	48%	31%	5%	15%
South	\$ 33.63	2%	35%	24%	5%	33%
Pacific Northwest	\$ 46.48	22%	38%	21%	5%	15%