



Comprehensive Program ROI 2012-2015



Executive Summary – Marketplace Impact

This Softwood Lumber Board (SLB) 2011-2015 measurement was developed to satisfy both the 5 year review requirements of the USDA and the SLB Board needs in advance of the 2016 referendum. The evaluation involved custom survey data from a sample of Architects and Structural Engineers in the non-residential and multi-family markets. Respondents provided information about their involvement with SLB programs and use of wood as a structural element before the SLB program (2011) and during 2015.

SLB activities and the \$38.3 million spent have delivered the following results to investors:

- **Incremental softwood lumber volume of 1.683 billion board feet or \$596 million.**
- The amount of wood (BF /SqFt) used by professionals involved with SLB programs grew +22.9%, versus -5.9% for those with minimal/no involvement.
- **The resulting return on investment has been \$15.55 of incremental sales for every \$1 spent.**
- In addition to the incremental sales returns:
 - Wood’s share of structural materials rose 4-8 share points, depending upon involvement level, while share for those with minimal involvement rose only +0.8 points.
 - Numerous markets were retained and new opportunities opened for the future through code and standard efforts.

Cause of Change by Involvement Level

Survey respondents were categorized based on their involvement with SLB programs.

Those involved with various components of SLB programs experienced a +22.9% increase in the amount of lumber Board Feet used per Sq.Ft. (BF/SqFt) in their projects. This compares to -5.9% among their peers with minimal involvement with the programs.

The involved group also compares favorably to the +11% industry-wide usage change as reported by Forest Economic Advisors (FEA).

GROUP	PORTION OF RESPONDENTS		2015 vs 2011 % CHANGE IN		CHANGE IN BF/SqFT	2015 vs BASE* M BF	2012-15 4 Yr. IMPACT M BF
	2011 BF	2011 BF	SqFt **	BF			
Low	20%	14.5%	+49.0%	+67.0%	+12.1%	57	143
Medium	29%	39.8%	+82.7	+105.6	+12.6%	243	608
High	<u>32%</u>	<u>38.2%</u>	<u>+28.0</u>	<u>+72.0</u>	<u>+34.4%</u>	<u>373</u>	<u>932</u>
SLB Involved	81%	92.5%	+50.4%	+84.9%	+22.9%	673	1,683
Minimal Involvement	19%	7.5%	+29.7%	+22.0%	-5.9%		
Industry (per FEA)			+48%	+64%	+11%		

* 2011 was designated the "base" year.

** Total SqFt change over 2011-15 was +47.5% across the sample compared to 48.2% per FEA.

Softwood Lumber ROI Calculation - Sales

SLB 2015 Influenced Lumber Volume Gains from Cause of Change analysis	673	BF in Millions
2015 as % of 2011-15 Reported Growth ¹	÷	<u>40%</u>
4 Year Projection of SLB Impact on Lumber Volume	1,683	BF in Millions
Average Wholesale Price ²	X	<u>\$ 354</u> Per 1,000 Board Feet
INCREMENTAL SALES \$596 MILLION		



SLB Expenditures Inception thru 2015 ³ ÷ \$ 38.3
INCREMENTAL SALES PER DOLLAR SPENT \$15.55

Sources:

¹ Projection for Multi-Family and Non-Residential lumber use: FEA

² Average wholesale price 2011-2015 for Random Length Lumber: FEA

³ Expenditures information from Softwood Lumber Board

What Competitors Are Saying

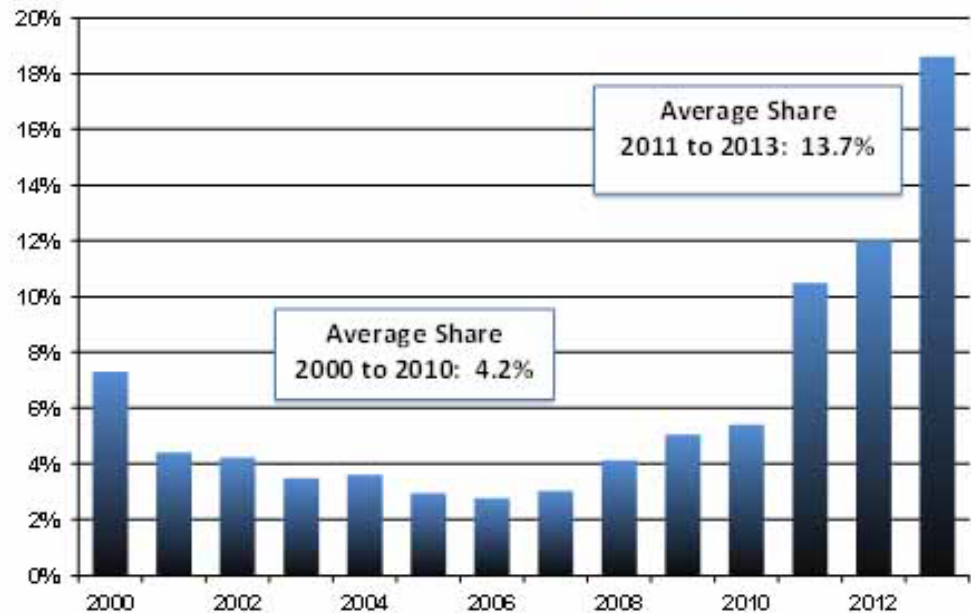


America's Cement Manufacturers™

Cement's share in "mid-rise remains at substantial risk."

D. Zwicke
Director of Market Intelligence
Sr. Regional Economist

Lumber Framing Shares: Mid-Rise Lodging (6-10 Stories)



Lumber is concrete's largest competitor in the housing market and displaces more than 40 million metric tons of potential cement consumption.

Because of weak lumber prices, coupled with aggressive promotion, lumber has gained significant market share at the expense of concrete. Concrete's share of the above-grade wall market has declined from 14% in 2005 to about 7% currently.

Bruce McIntosh, June 12, 2015

What Competitors Are Saying (cont'd)

CONCRETE CONSTRUCTION

“The wood industry is taking a very aggressive approach that could take some of concrete’s market share... organizations (such as reThink Wood and WoodWorks) are... redefining for architects where wood is an appropriate building material.”

Wood or Concrete – B. Palmer

... and Third-Parties

“Use wood wherever possible as a structural substitute for steel and concrete”

US National Climate Assessment

“Wood based wall systems entail 10-20% less embodied energy than concrete and steel”

IPPC Working Group III

“Increasing Wood Usage: An Environmental Win-Win”

Yale University

“With a carbon footprint that’s 75% less than that of concrete or steel, is it any wonder that wood has become a top contending material for green builders?”

US Green Building Council

... and Trade Publications



November 9, 2015

Architects embrace the beginning of the timber age

“If the 19th Century was the century of steel, and the 20th century the century of concrete, then the 21st century is about timber”
UK architect Alex de Rijke November 9, 2015

“Over the past 10 years, the softwood industry, through its calculated and extremely well-funded [WoodWorks campaign](#), has steadily increased market share in the low/mid-rise market sector, culminating in a now-alarming shift of demand for low/mid-rise building materials. **Concrete’s share of the low/mid-rise building sector has deteriorated significantly, from 30% in 2004 to 22% in 2014, whereas the increase in wood’s share has increased from 23% to 40% during that same period.**

NRMCA’s board of directors recently voted in favor of an increase in membership dues to fund an aggressive five-year, \$20.5 million plan aimed at recovering market share specifically in the low/mid-rise sector...

On a wider focus, Portland Cement Association (PCA) has hired a strategic marketing firm to develop a collaborated plan for promoting concrete in all market segments.

December 29, 2015 and January 6, 2016

