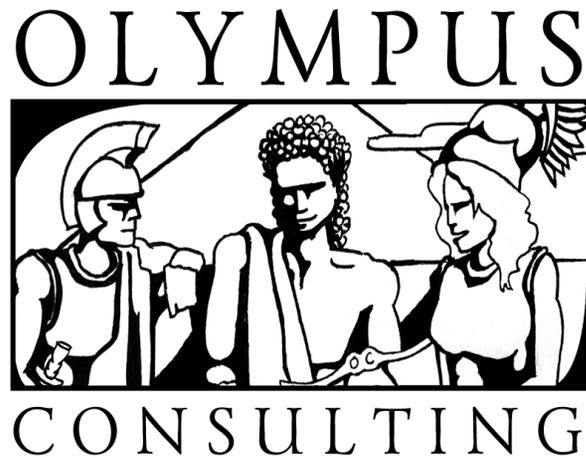


An Overview of the Economic Impacts of the Forest Products Industry



Daniel Underwood, Ph.D.
Revised November 28, 2017

2016

201.4 MMBF

Local Export

What are the economic impacts of this flow of private forest harvest?

The Economic Impacts of Private Timber Harvests: An Exploratory Investigation of Harvests, Exports, Employment, Income and Tax Remittances

Report to: Port of Port Angeles

Prepared by:



Daniel Underwood, Principal

Jason Cross, Mathematician

November 2017

Forest Management and Commercial Logging

Highway 101

Pacific Rim Scales

Port Scales

Wood Products

MR

Exports

Wood Products

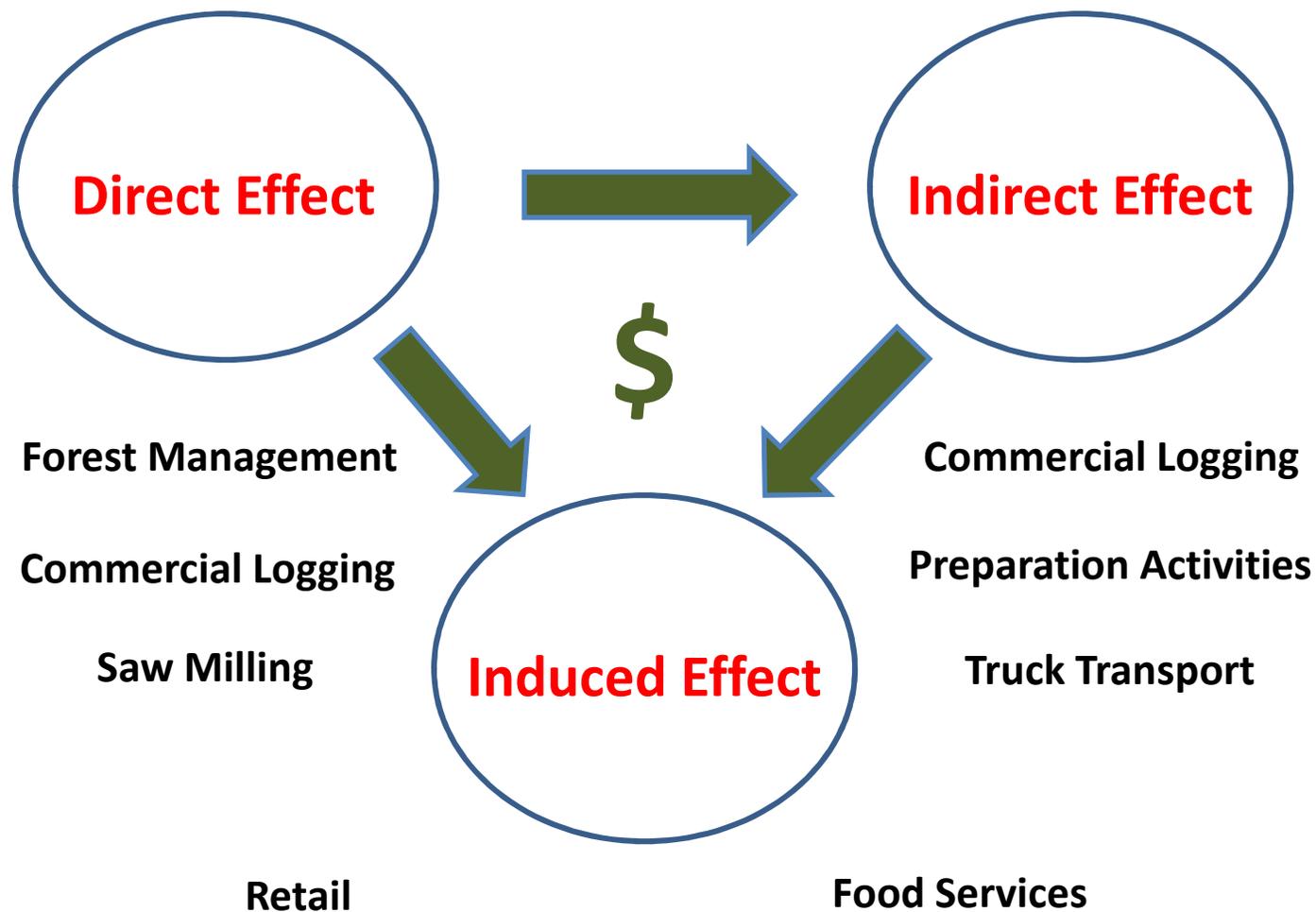
Distribution

International

Domestic

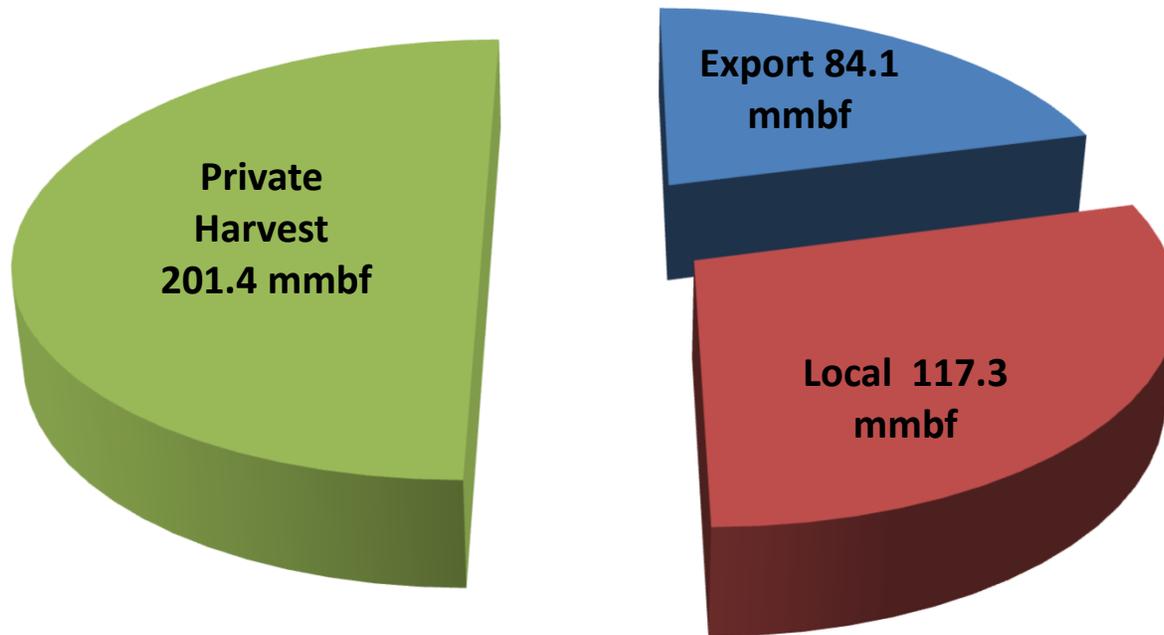
Distribution

Economic Impacts: Follow the Flow of Expenditures



Economic Impacts Private Harvests

Flow Private Timber



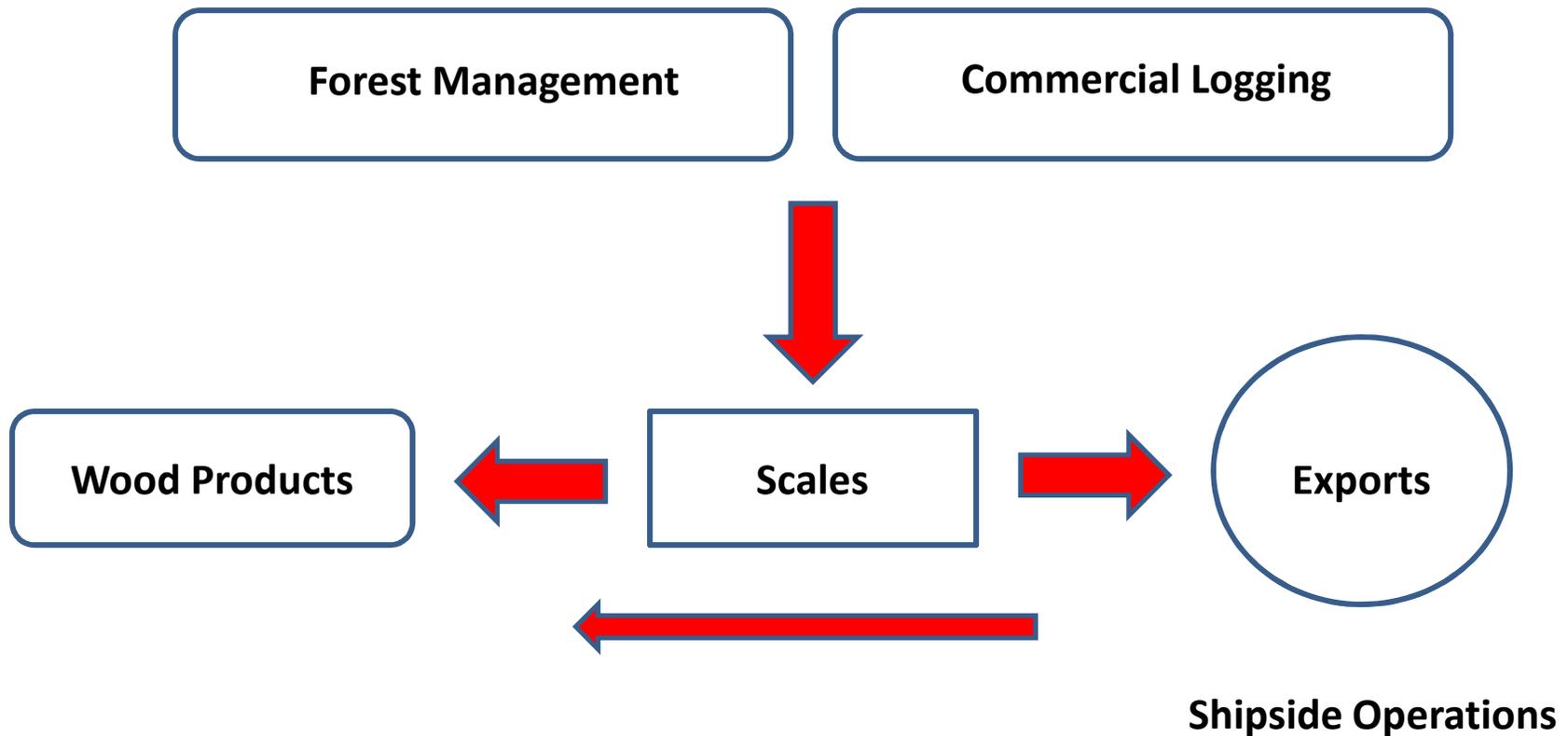
58% Local and 42% Exported

Economic Impacts Private Harvests

Total Economic Impacts of 117.3 MMBF of Private Timber Harvest, 2016				
Effect	FTE	Wage	LWP	PI
NAICS 115	10.6	\$4,526	\$539	\$90,271
NAICS 113	137.2	\$4,794	\$807	\$1,876,784
NAICS 321	227.6	\$4,448	\$461	\$43,082
Indirect Effects	210.8	\$3,007	-\$980	\$914,995
Induced Effects	272.8	\$1,839	-\$2,148	\$117,390
Total Effects	859.0	\$3,322	-\$665	\$3,042,522

Living Wage = \$3,987

Economic Impacts Export Market



Economic Impacts Export Market

Monthly Economic Impacts of Log Exports, 2016				
Sector	FTEs	Wages	LWP	PI
NAICS 115	7.6	\$4,536	\$549	\$64,994
NAICS 113	98.4	\$4,794	\$807	\$1,349,863
NAICS 4883	16.4	\$8,479	\$4,492	\$56,007
Indirect Effects	30.6	\$2,486	-\$1,501	\$61,161
Induced Effects	117.1	\$1,840	-\$2,147	\$50,437
Total Effects	270.1	\$3,468	-\$519	\$1,582,462

Living Wage = \$3,987

Economic Impacts Export Ship

Annualized Impacts per ship: 5.6 MMBF				
Effect Type	Employment FTEs	Mean Monthly Income		
		Wages	LWP	Proprietors
Forestry	0.5	\$4,526	\$539	\$4,258
Logging	6.6	\$4,793	\$806	\$90,283
Shipside	1.1	\$8,479	\$4,492	\$3,757
Indirect	2.0	\$2,969	-\$1,018	\$4,090
Induced	7.8	\$1,839	-\$2,148	\$3,371
Total	18.0	\$3,529	-\$458	\$105,759

Living Wage = \$3,987

Total Economic Impacts Private Timber

Monthly Economic Impacts of 201.4 MMBF Private Harvest, 2016				
Sector	FTE	Wage	LWP	PI
Forestry	18.2	\$4,530	\$543	\$155,265
Logging	235.6	\$4,794	\$807	\$3,226,647
Wood Products	227.6	\$4,448	\$461	\$43,082
Shipside	16.4	\$8,479	\$4,492	\$56,007
Indirect Effects	241.4	\$2,941	-\$1,046	\$976,156
Induced Effects	389.9	\$1,839	-\$2,148	\$167,827
Total Effects	1129.1	\$3,357	-\$630	\$4,624,984

Living Wage = \$3,987