



Vermont Forest Economy: A Primer

As kick-off to the REDWG legislative summer study

Michael Snyder, Commissioner and VT State Forester

7 July 2021



VERMONT IS FOREST STRONG



Ecological



Cultural



Economic



THE FORESTS OF VERMONT

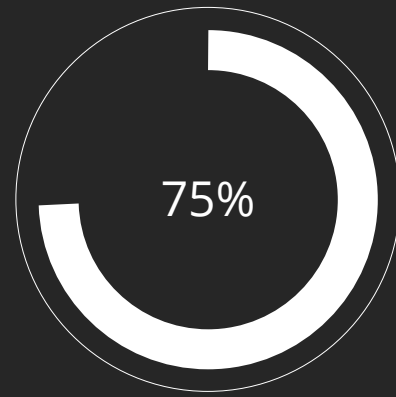
State of Vermont's Forests:

- 4th most forested state
- 4.5 million acres
- 75% forest cover





FOREST COVER



5 DEVELOPED

20 AGRICULTURE

75 FORESTED



Future changes in Vermont's forestland base will depend on the pace of the land development, particularly in the northwestern and southern parts of

OWNERSHIP OF FORESTS IN VERMONT

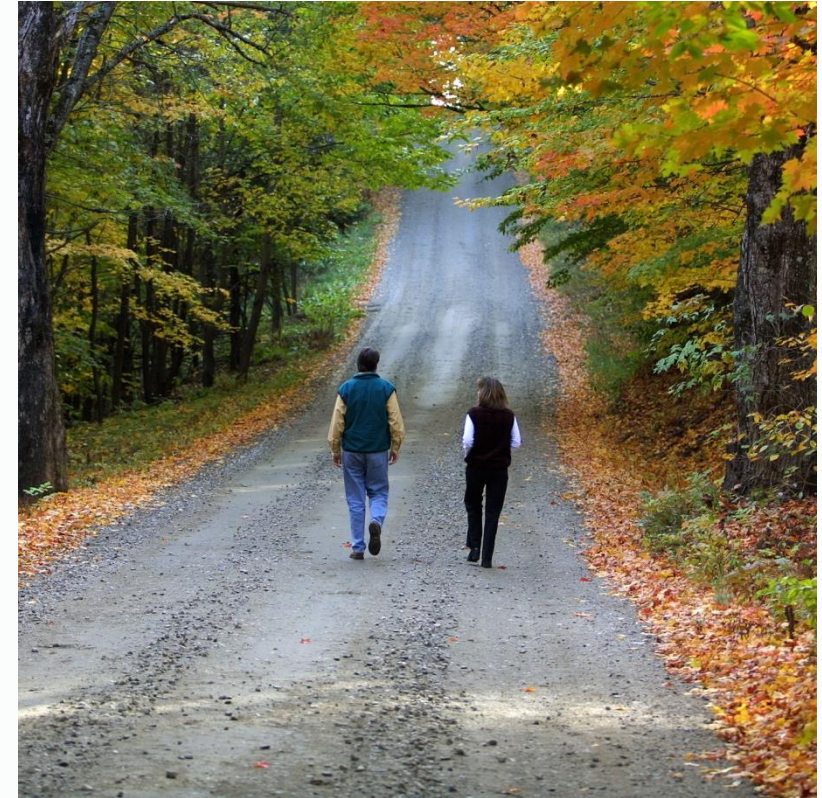
FAMILY AND INDIVIDUAL **64%**

OTHER PRIVATE **15%**

FEDERAL **11%**

STATE **8%**

LOCAL **2%**

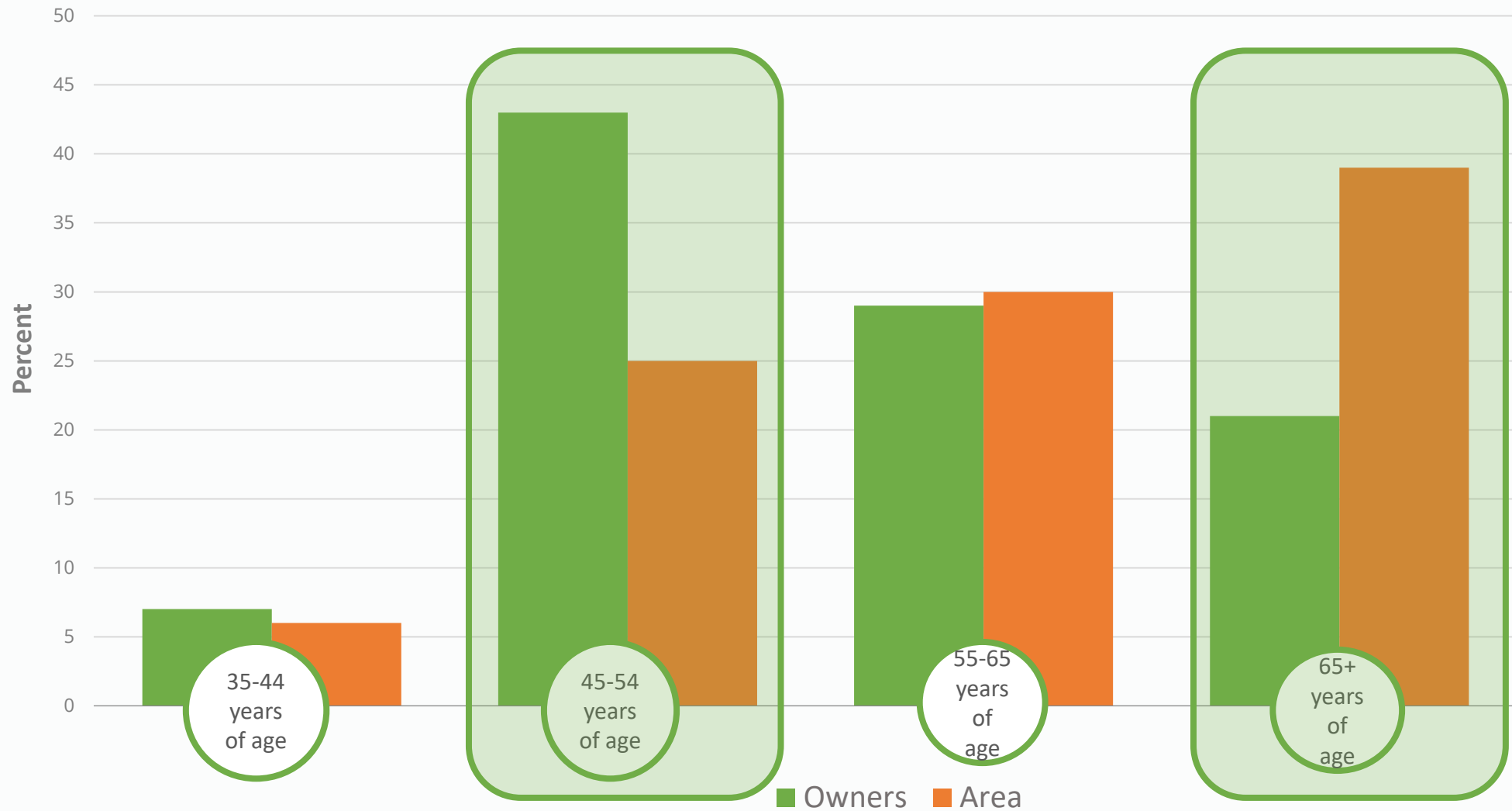


**PRIVATE
LANDOWNERS**

own 3.6 million acres

79%

AREA AND OWNERS OF VERMONT'S FORESTS BY AGE CLASS



THE number of landowners is increasing, parcel sizes are decreasing and the age of owners is increasing.

A SNAPSHOT OF VERMONT'S FORESTS

Encouraging News



- Stocking levels **increasing**.
- Tree crowns are **healthy** and **stable**.
- Trees are getting **bigger**.
- Net tree growth **exceeds** removals.

A SNAPSHOT OF VERMONT'S FORESTS

Issues to Watch



- **Loss** of forestland to conversion to other uses.
- Invasive plants and pests are **increasing**.
- **More** landowners and **smaller** parcels.
- Forest landowners are **aging**.



Markets
and
Workforce
Challenges

LET'S KEEP VERMONT FOREST STRONG



Conversion to
Non-Forest Use

Poor Regeneration
and
Over Browsing



Invasive Plants,
Pests &
Pathogens



FUTURE OF VERMONT'S FORESTS

Livable communities, functioning natural systems, and quality of life rely on maintaining large blocks of contiguous forests across Vermont's landscape and a viable, modern forest economy.

**Decisions and actions
made today will
influence Vermont's
forests for years to
come.**

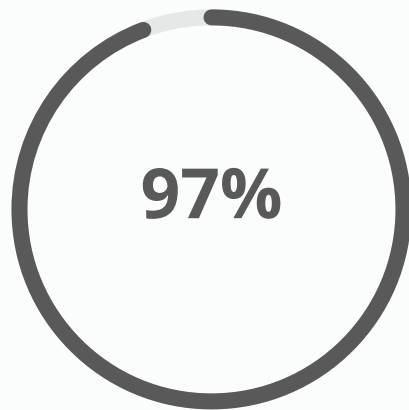


STRATEGIES FOR THE FUTURE

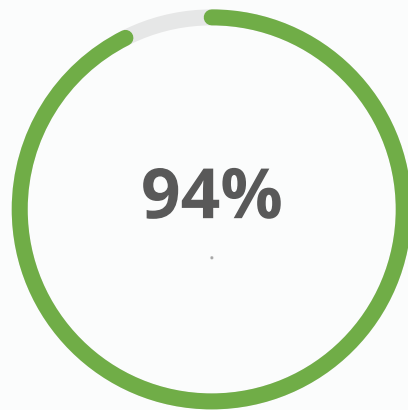
All are still particularly important

- Support Sustainable Forestry and the Vermont Forest Economy
- Increase Landowner Incentives to Keep Forests Forested
- Invest in Strategic Forestland Conservation
- Outreach and Education on Forest Values and Benefits

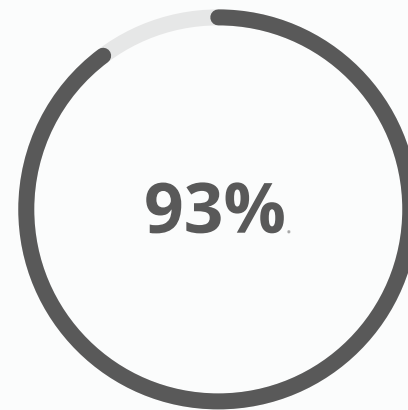
VERMONTERS SUPPORT THE WORKING LANDSCAPE



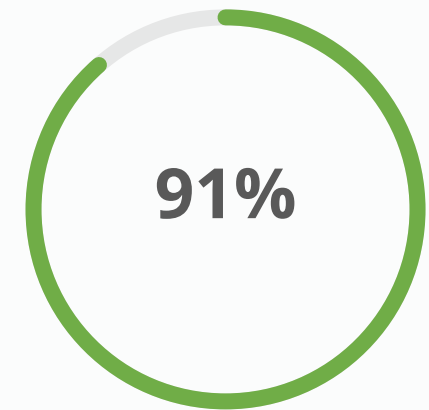
Value the working landscape and its heritage



Proud of living in Vermont



Value Vermont's spirit of independence



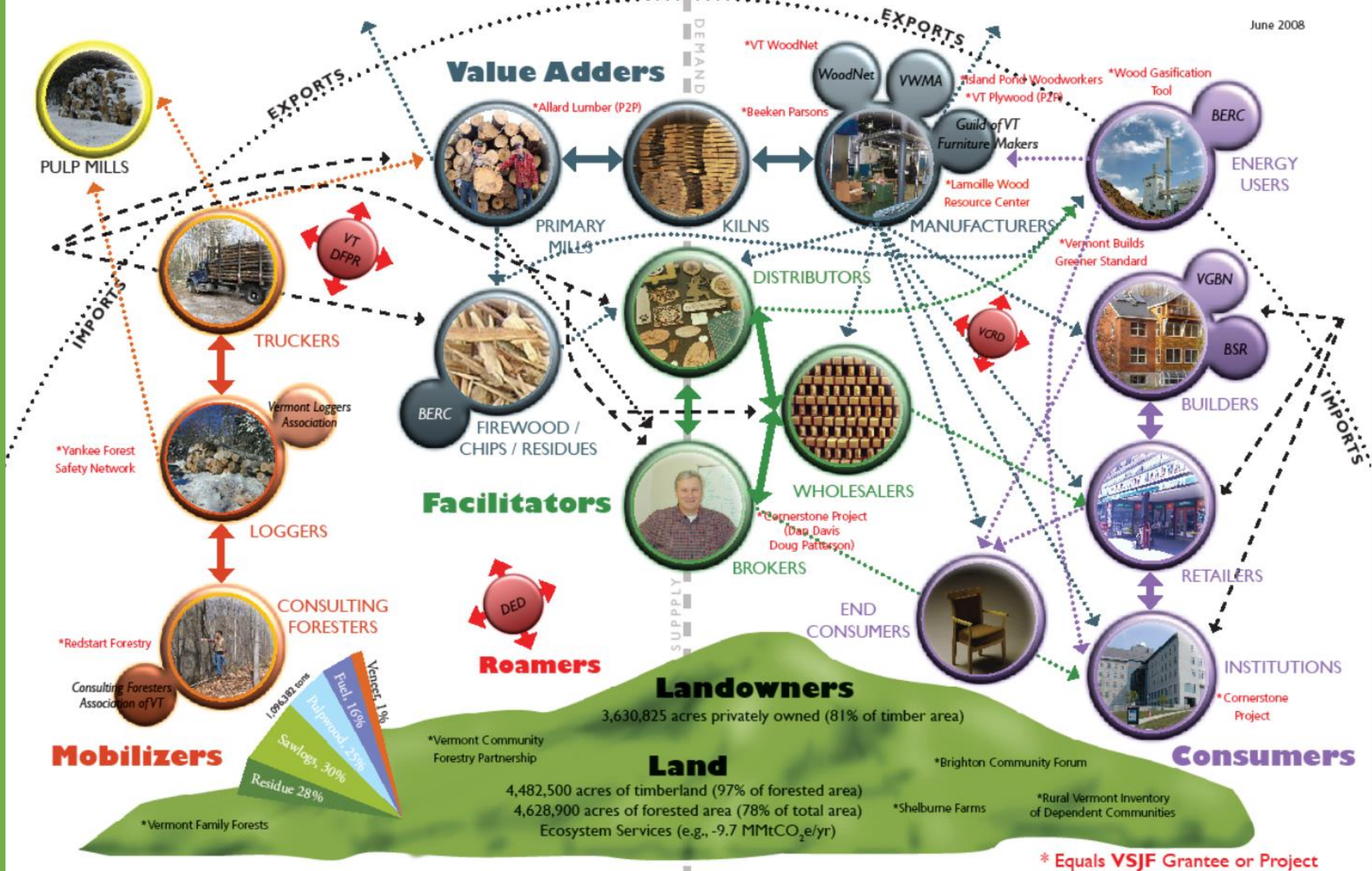
Value the privacy in Vermont

What is the Forest Economy?



FOREST
ECONOMY
SYSTEM
ANALYSIS

June 2008





A SNAPSHOT OF VERMONT'S FOREST ECONOMY

Economic contributions



- Provided more than **13,000** jobs.
- Provided more than **2.1 billion** in total the economy.
 - Forestry direct sales: **1.37 billion**.
 - Agriculture direct sales: **884 million**.
- Accounted for **12%** of manufacturing jobs.
- Contributed to a regional forest products economy of **95,000 workers** and **27 billion** in direct output.

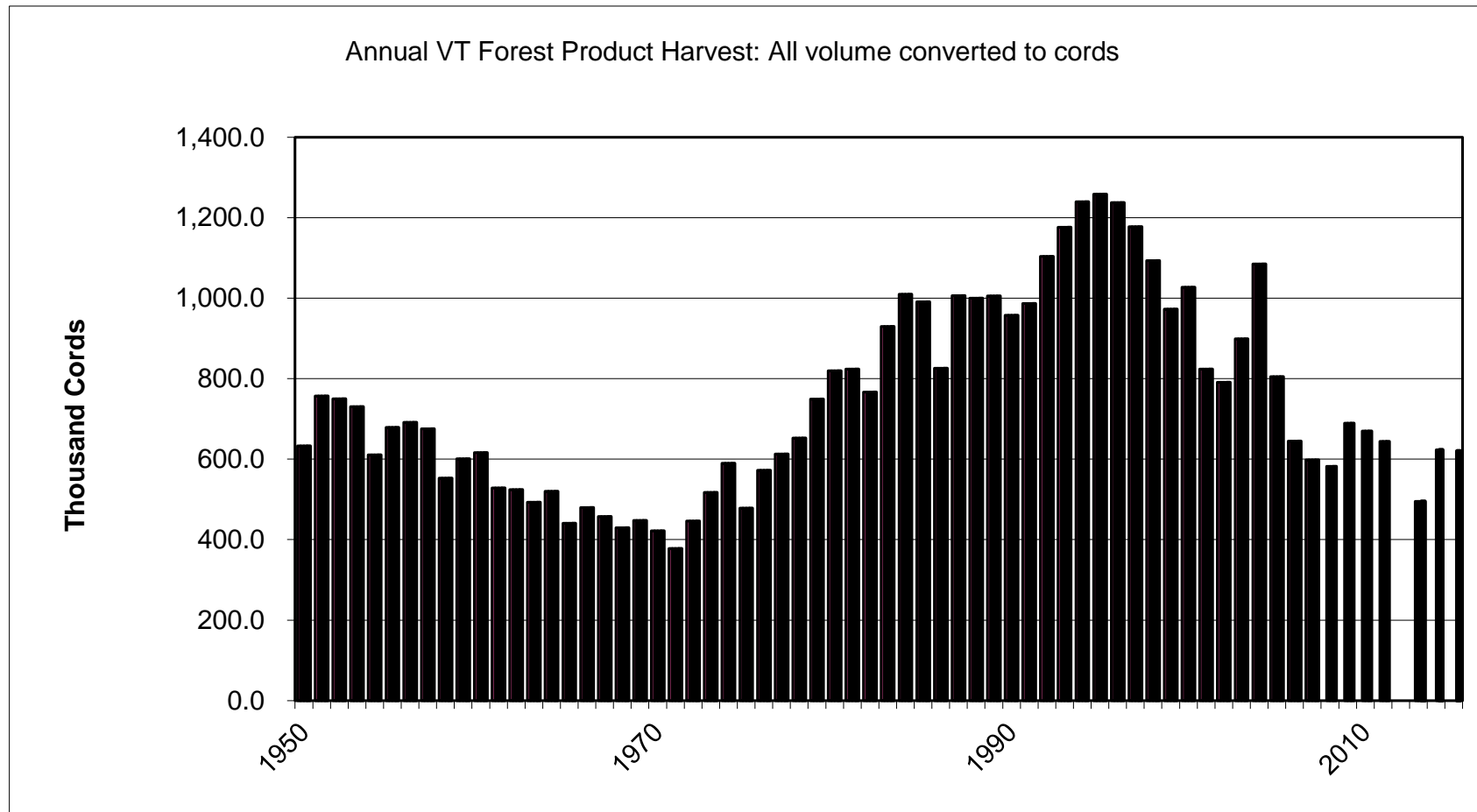
DIRECT ECONOMIC CONTRIBUTIONS BY INDUSTRY GROUP, 2017

Industry Group	Employment*	Labor Income (Thousands of Dollars)	Value-added (Thousands of Dollars)	Output (Thousands of Dollars)
Forestry**	3,342	\$34,873	\$43,968	\$75,732
Logging	1,737	\$50,332	\$52,799	\$90,979
Primary solid wood products	941	\$47,374	\$79,769	\$305,966
Secondary solid wood products	1,053	\$45,676	\$75,042	\$217,960
Wood furniture	1,318	\$58,983	\$57,502	\$173,733
Pulp, paper, and paperboard mills	641	\$49,841	\$78,548	\$474,397
Secondary paperboard and other paper products	76	\$4,393	\$5,779	\$32,082
Total	9,107	\$291,472	\$393,406	\$1,370,850

NATURAL RESOURCE AND AG PRODUCTION INDUSTRIES. 2017

Industry	Employment	Labor Income (Thousands of Dollars)	Value-added (Thousands of Dollars)	Output (Thousands of Dollars)
Forest & wood products*	9,107	\$291,472	\$393,406	\$1,370,850
Commercial fishing, hunting, and trapping	72	\$123	\$460	\$564
Mining, and oil and gas production**	1,190	\$48,502	\$299,698	\$396,414
Agricultural production (plant crop and animal)	9,860	\$151,487	\$304,909	\$884,188
Total	20,229	\$491,584	\$998,473	\$2,652,016

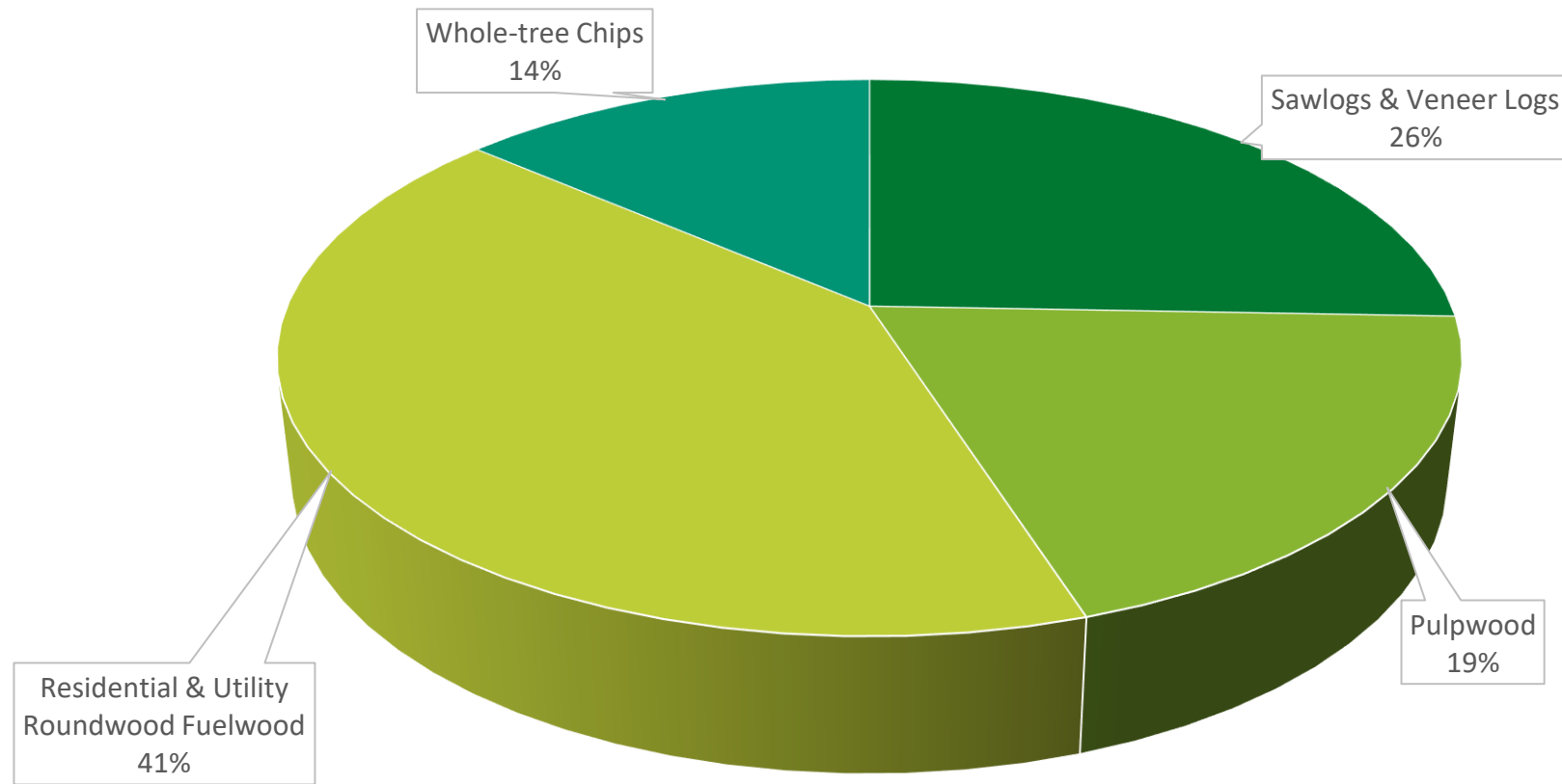
VERMONT FOREST HARVEST



*Volumes do not include residential firewood volume.

HARVESTS

Total Forest Product Harvest by Product in Vermont: 2019
(997,880 cords)

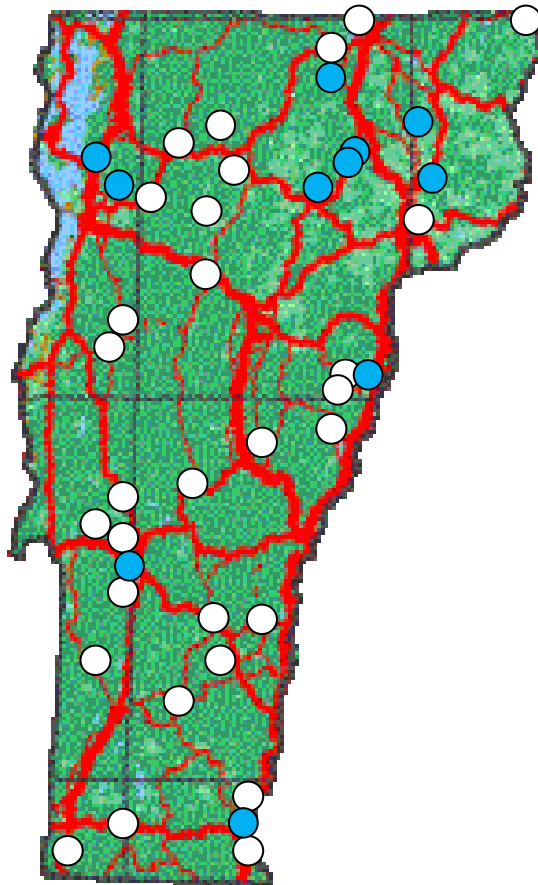


SAWMILLS

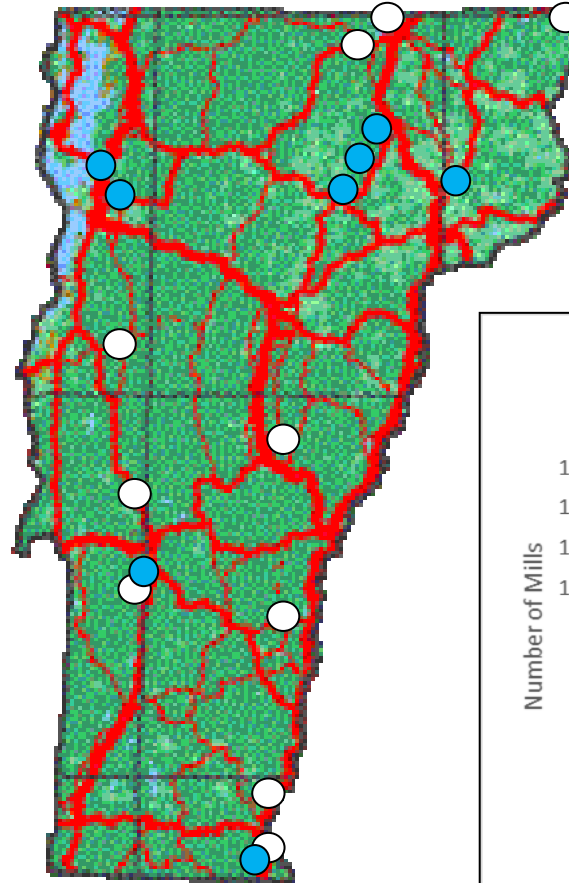
Active Medium to Large Sawmills

1990

2020



190,945 MBF

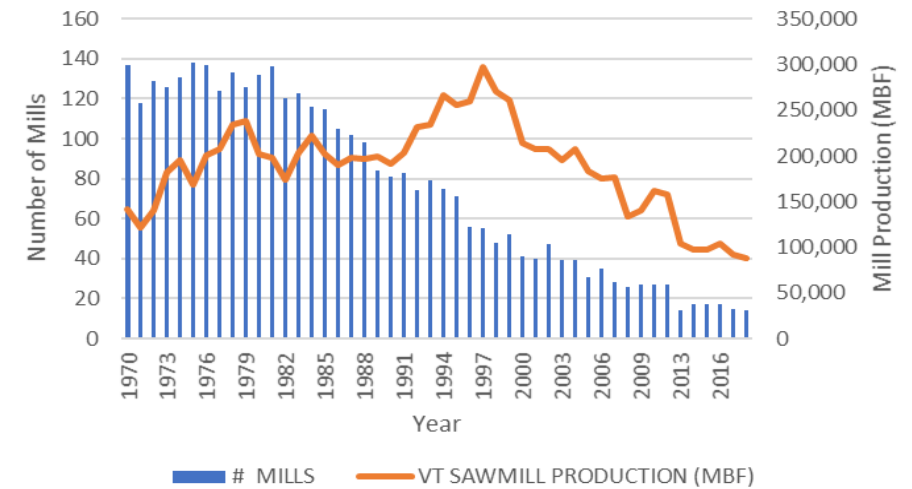


87,890 MBF

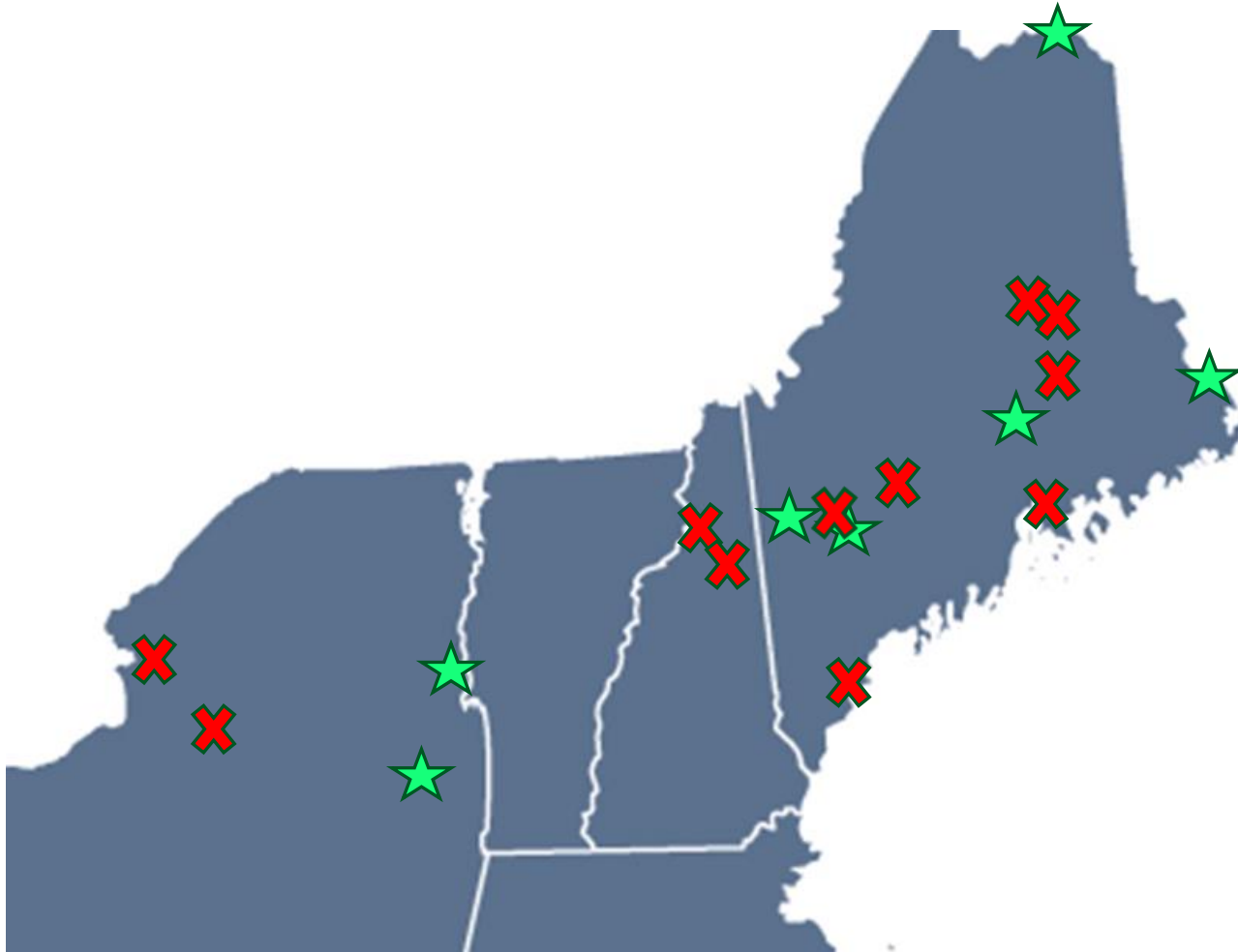
Softwood Mills
Hardwood Mills



Vermont Commercial Sawmill Numbers and Production Levels: 1970-2016



REGIONAL PULPWOOD MARKETS



Since 1999, the Northern Forest region has lost 11 pulp mills

New York

- Deferiet
- Lyons Falls

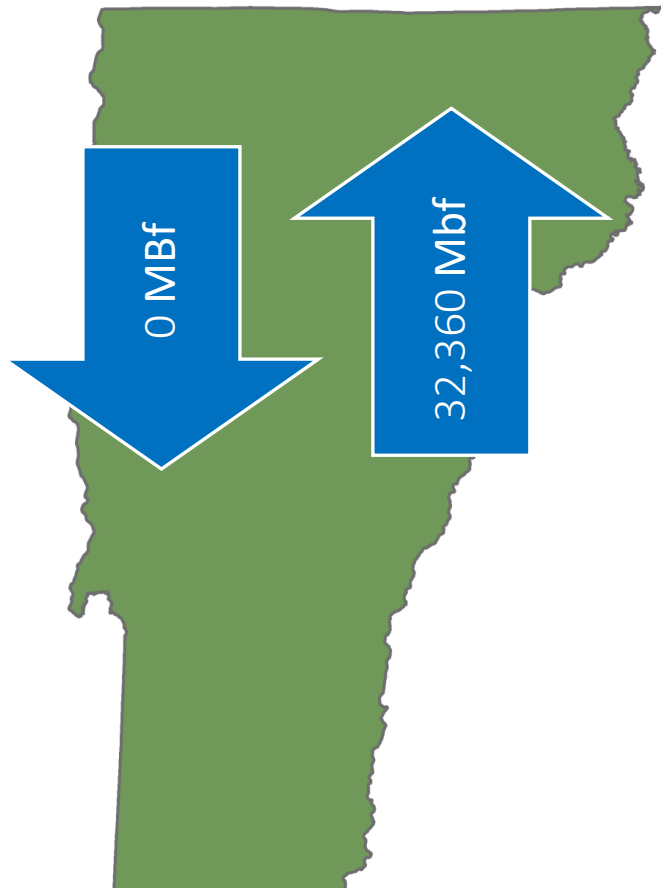
New Hampshire

- Groveton
- Berlin

Maine

- Westbrook
- Bucksport
- Lincoln
- Millinocket
- East Millinocket
- Madison
- JAY

2019 WOOD FLOWS



- Sawlog Harvest: 127,658 Mbf
- Processed in VT: 82,558 Mbf
- Exported: 70,326 Mbf
- Imported: 25,226 Mbf

25,226

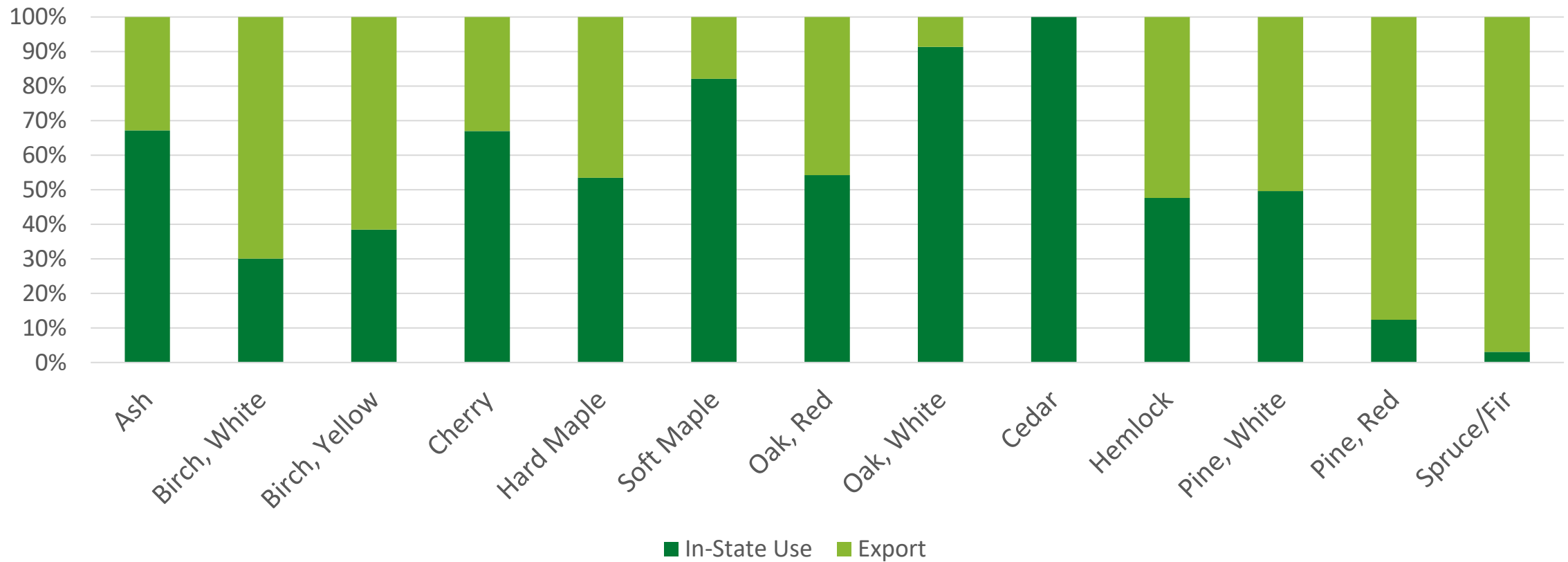
Imported from other states: 25,226 Mbf
Exported to other states: 35,943 Mbf

35,943

- Imported from QC: 0 Mbf
- Exported to QC: 32,360 Mbf
- Exported Overseas : 2,023 Mbf

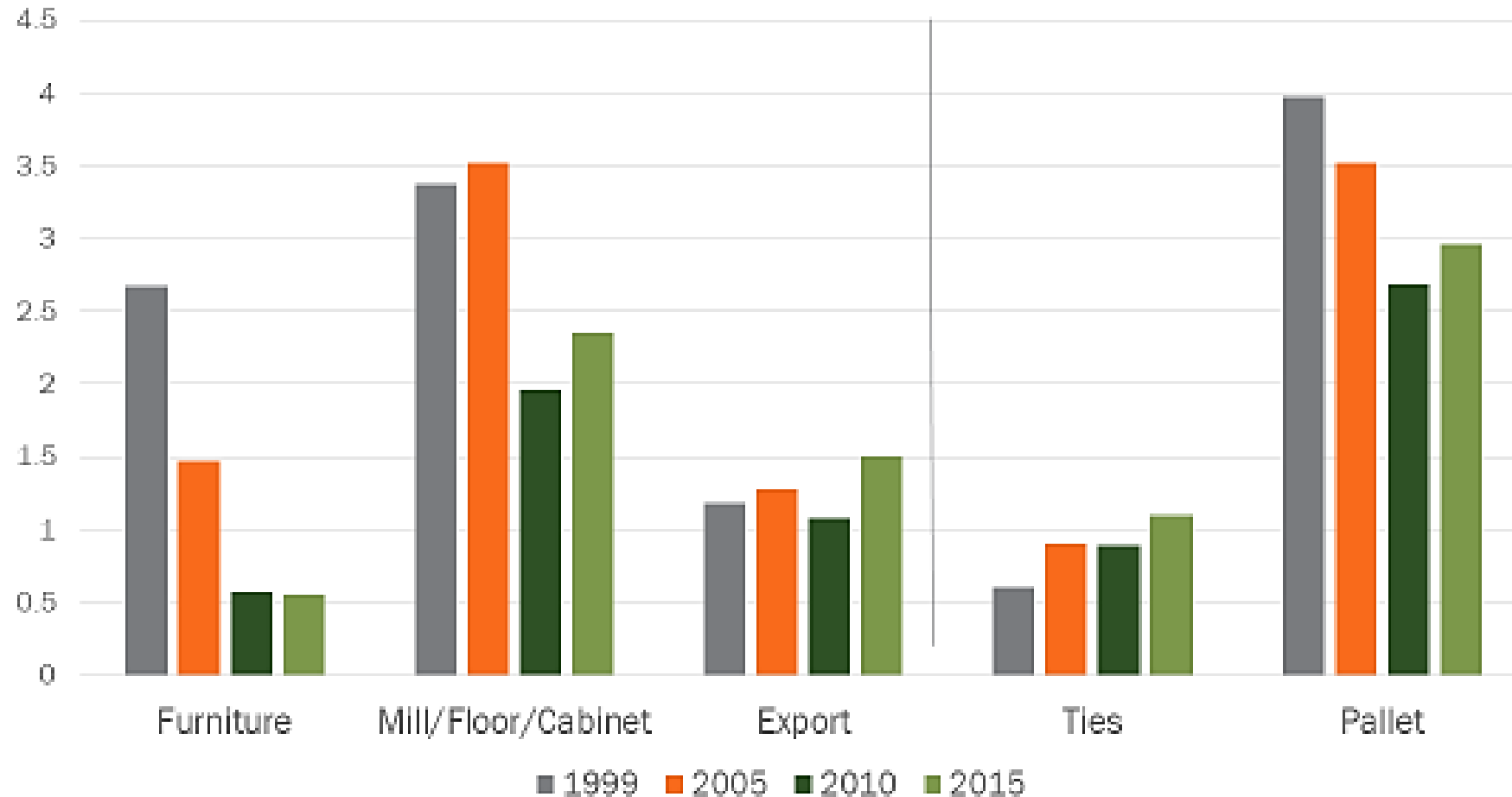
2019 SAWLOG PROCESSING

VT Sawlog Harvest: “Domestic” Processing vs. Export
(% of Total Harvest 2019)

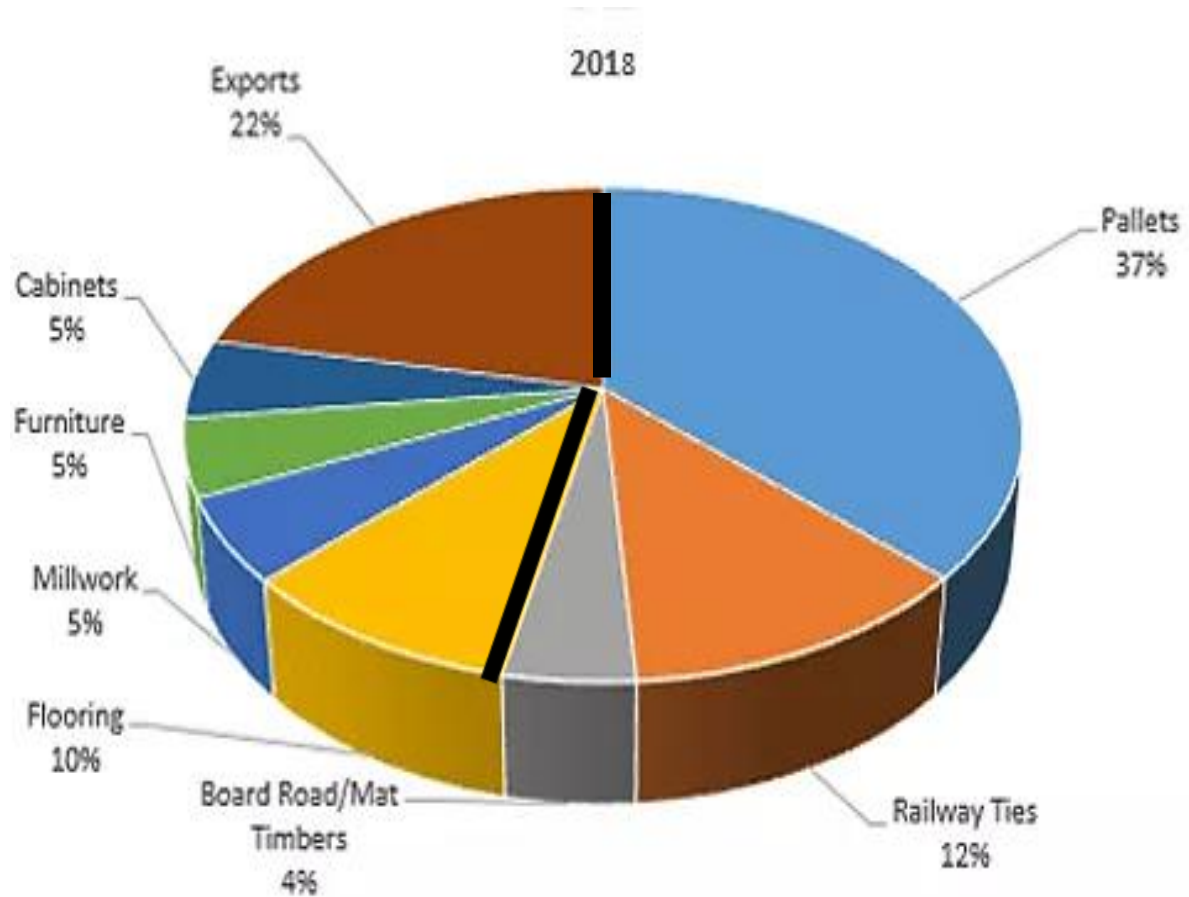


DOMESTIC HARDWOOD LUMBER MARKETS

Hardwood Lumber Consumption in Billions of Board Feet



HARDWOOD LUMBER END USES

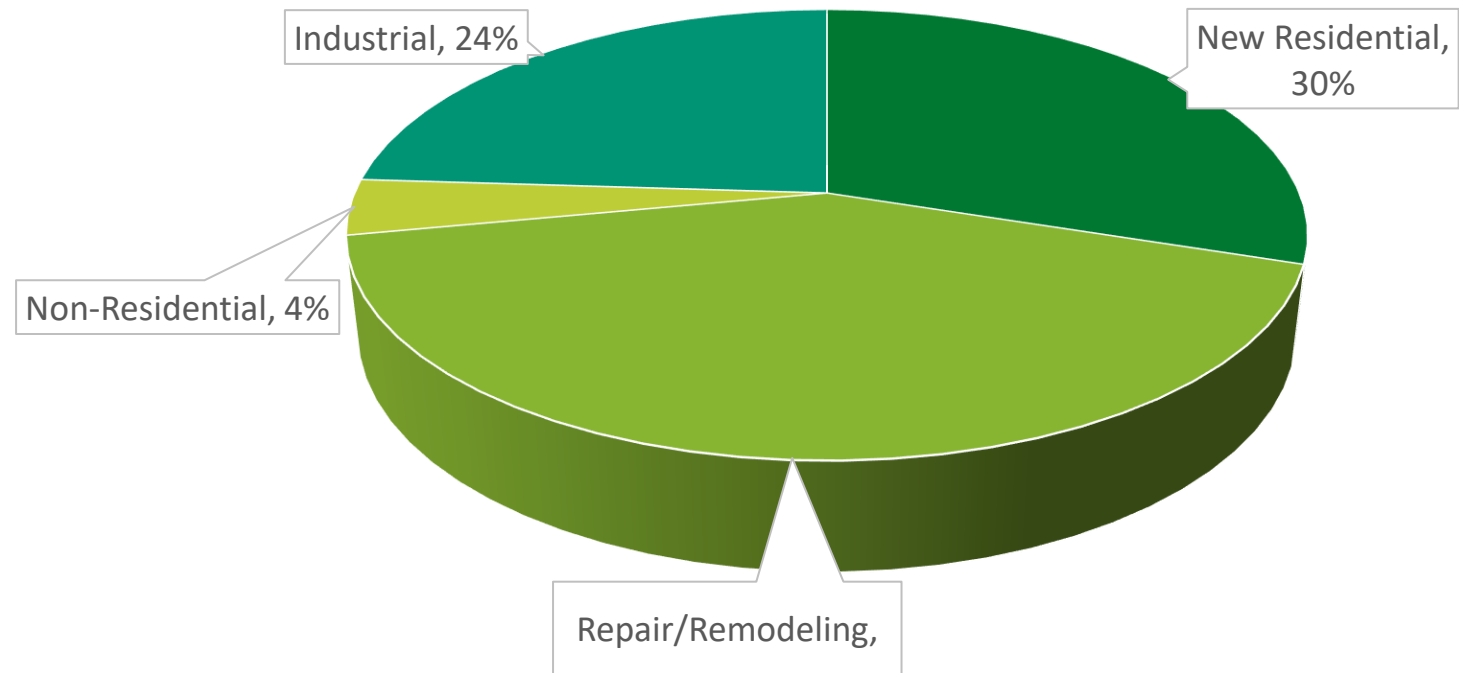


US Hardwood Lumber Consumption by Major Markets: 2018



SOFTWOOD LUMBER END USES

Softwood Lumber End-Use Category : 2015



WOOD HEAT

Supporting our local economy



- **78 cents** of every fossil fuel heating dollar *leaves* VT.
- **80 cents** of every locally sourced wood heat dollar *stays* in VT.
- **90%** Renewable Energy by 2050.
- **35%** of VT's *thermal* energy needs from wood heat by 2030.
- If we reach our goal: **40 million gallons** of fossil fuel displaced annually, saving Vermonters **120 million/ year**

FOREST ECONOMY CHALLENGES: 2021



TRUCKING



Permitting/regulatory costs

Access to capital

LABOR

POSITIONS

SEEKING MECHANIZED and/or SKIDDER INDEPENDENT HARVESTING CREWS
to work in the following areas:
 Berkshire County, MA
 Dutchess County, NY
 Sullivan County, NY
Call 413-281-5364

OCTOBER MOUNTAIN
 Timber, Log & Veneer. Buyers of
 Standing Timber, Sawlogs & Veneer
 Located in Stormville NY/Cheshire MA
 fellowsbill93@gmail.com

Address change?
 Please notify us at The Northern
 Logger when your address
 changes. Call 315-369-3078
 or e-mail your address change
 to Nancy at npetrie@northernlogger.com.

VERMONT SAWMILL SEEKING ADDITIONAL QUALIFIED EMPLOYEES

**LOG BUYER, LOG SCALER,
TRUCK DRIVER, MILL
MAINTENANCE PERSON, AND
FORKLIFT OPERATOR**
 Seeking employees who have
 the following qualities: work
 ethic, good attitude, and a
 willingness to contribute to a
 team effort, to learn, and to take
 on added responsibilities.
 Compensation, including
 benefits, are competitive and
 commensurate with experience,
 skill, work ethic, and attitude.
 Health insurance and 401K.
Please send resumes and inquiries to:
 HR Department, Attn: Luella
 The A. Johnson Co. LLC
 106 Andrew Johnson Rd.
 Bristol, VT 05443
 by phone: 802-453-4884
 by email: lueajco@ajohnsonco.com



PULP & CHIP MARKETS





Create new
markets
within the
industry and
beyond

Develop local
markets



Vermont
Sustain a
viable
workforc
e



Working Land Enterprise
Initiative

SUPPORT SUSTAINABLE FORESTRY AND VERMONT FOREST ECONOMY

ENSURE that forest
landowners can get economic value
from their forested land through
policies that promote sustainable
forestry and develop and create
markets for Vermont forest
products



Sustainable Forestry and the Vermont Forest Economy

- Support & Improve Training for Loggers
- Protect and improve infrastructure that supports the local wood industry
- Expand modern wood heating in Vermont
- Expand markets for Vermont wood products
- Recognize and promote the value of forests in outdoor recreation and tourism





THANK YOU