

Wisconsin's Forests and Forest Industries

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Extension Northwoods Forum

Track 2: Enhancing Natural Resources

Northwoods Forest Economy, Workforce, and Markets

Tuesday, May 7, 2024

Lac du Flambeau, WI



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UNIVERSITY OF WISCONSIN-MADISON

Outline

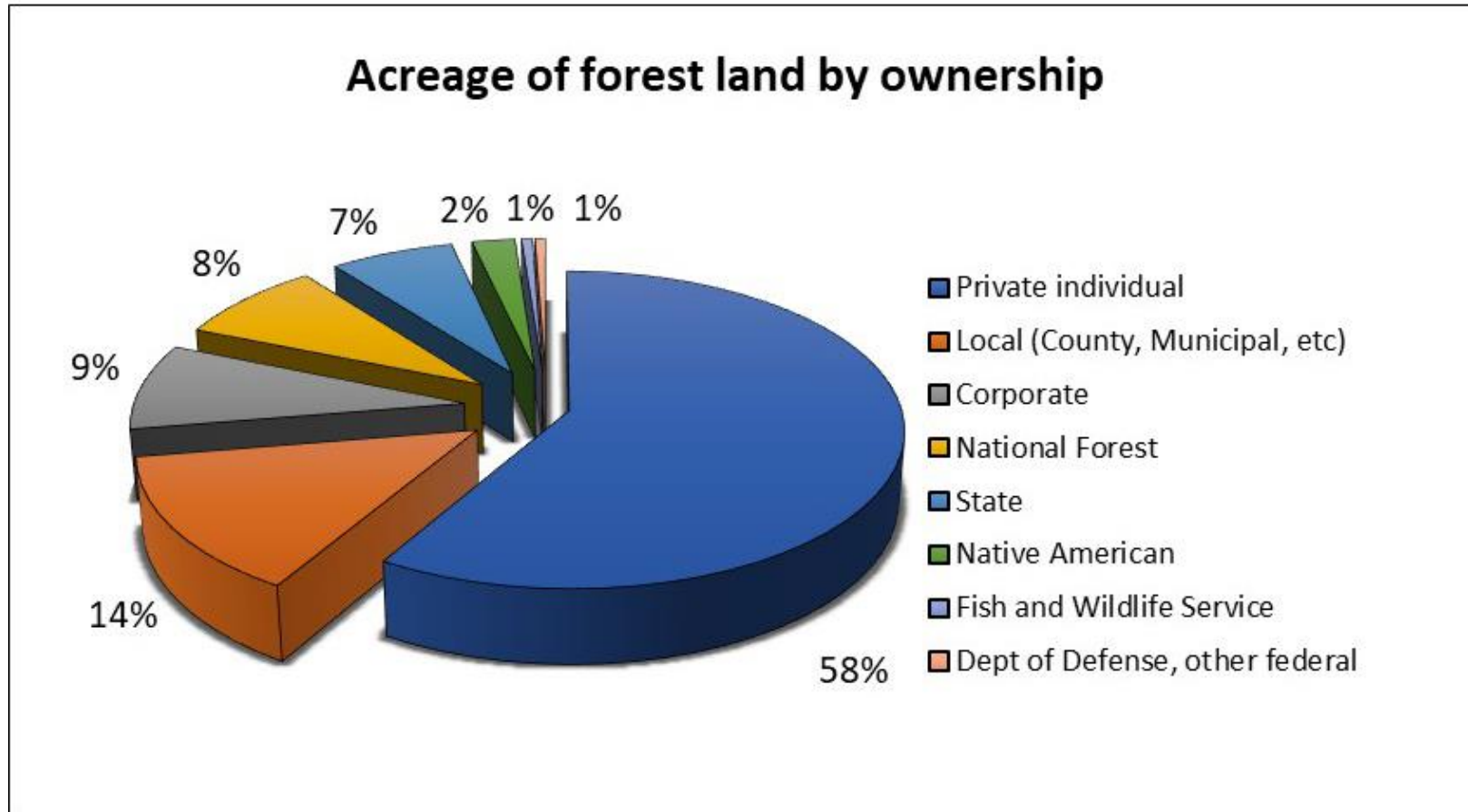
- Brief Review of Wisconsin's Forests
- Brief Review of Wisconsin's Forest Product Markets
 - Hardwood and Softwood Markets
 - Pulp & Paper Markets
- Commentary on Future Markets

Brief Review of Wisconsin's Forests



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Forest Ownership in Wisconsin



Source: 2021 WI DNR

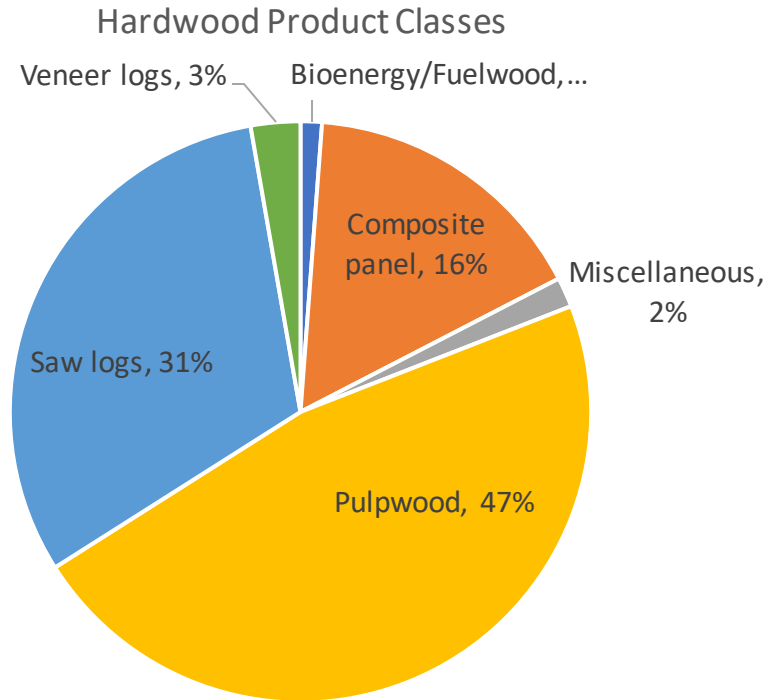
Forest Harvests by Ownership

Ownership category	Minnesota		Wisconsin	
	2016	2021	2016	2021
Non Industrial Private Forest (NIPF)	20%	37%	52%	66%
Industrial	15%	3%	4%	5%
National	7%	4%	6%	3%
State	27%	29%	10%	6%
County/Municipal	30%	25%	27%	18%
Tribal	1%	2%	1%	1%

(Source: 2022 WI Loggers Study)



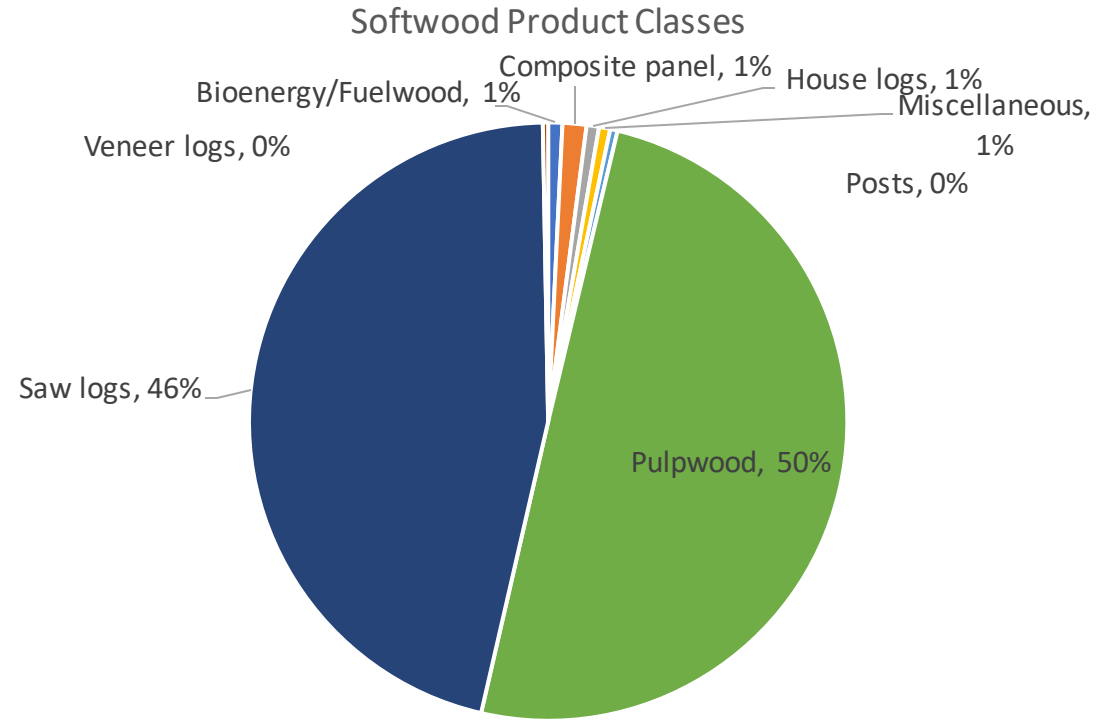
Wisconsin Production



- Bioenergy/Fuelwood
- Composite panel
- Miscellaneous
- Pulpwood
- Saw logs
- Veneer logs

237,916,000 ft³

~70:30



- Bioenergy/Fuelwood
- Composite panel
- House logs
- Posts
- Pulpwood
- Saw logs
- Miscellaneous
- Veneer logs

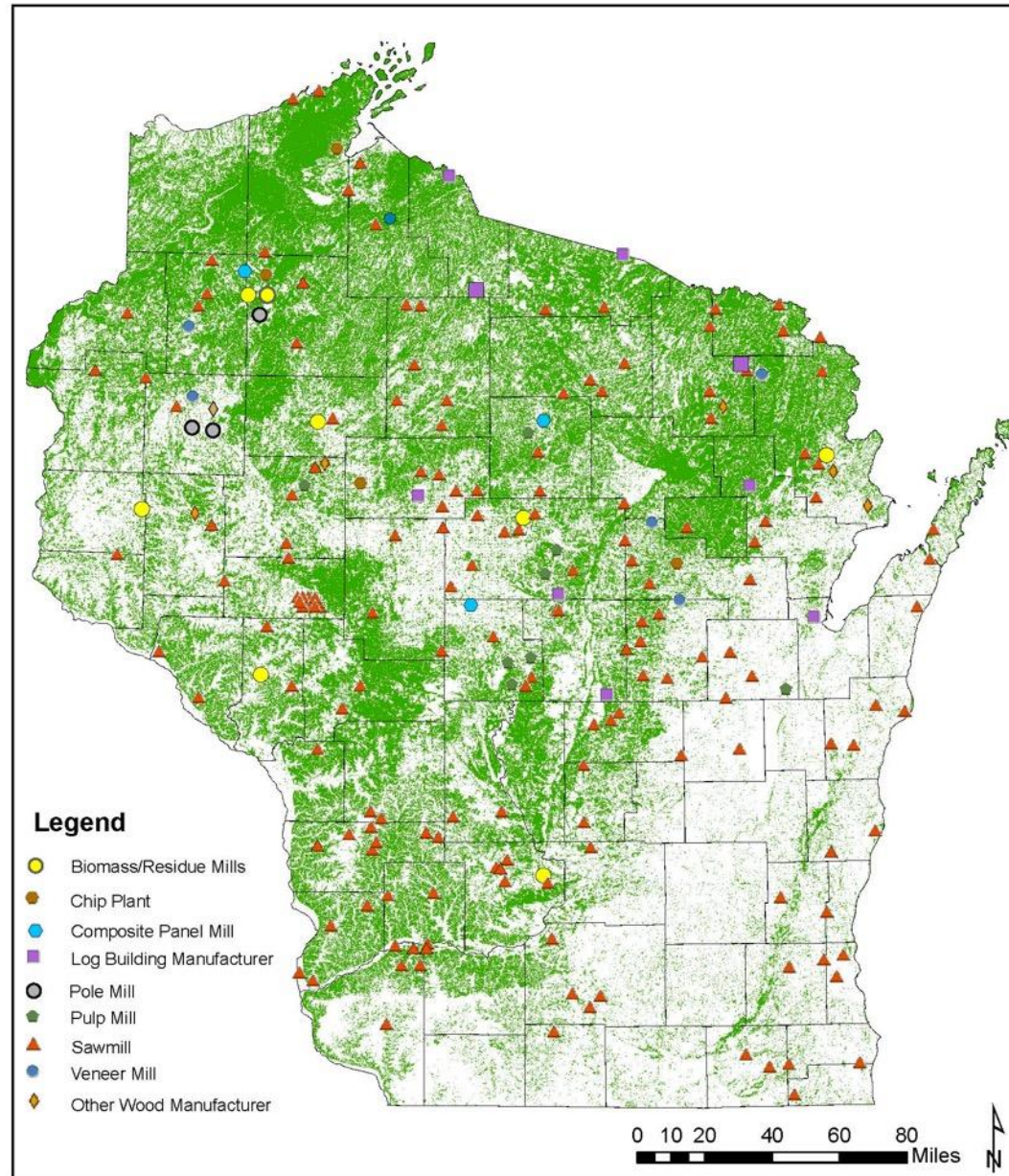
94,903,000 ft³

Forest Products Industry Listings

Preparation Date: 05/22/2020

Prepared By: Forest Products Services (FPS) Staff

Data Taken from 2019 Timber Products Output (TPO) Survey



Brief Review of Wisconsin's Forest Product Markets



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Raw Materials from WI Forests

- Veneer Logs
- Sawlogs
- Specialty Logs (normally softwoods)
- Boltwood
- Pulpwood
- Fuel Rods
- Chips (whole tree or debarked chips)
- Biomass (chips or grindings from slash)

Economic Contribution Of Forest Products Industry Reported In 2020 Dollars

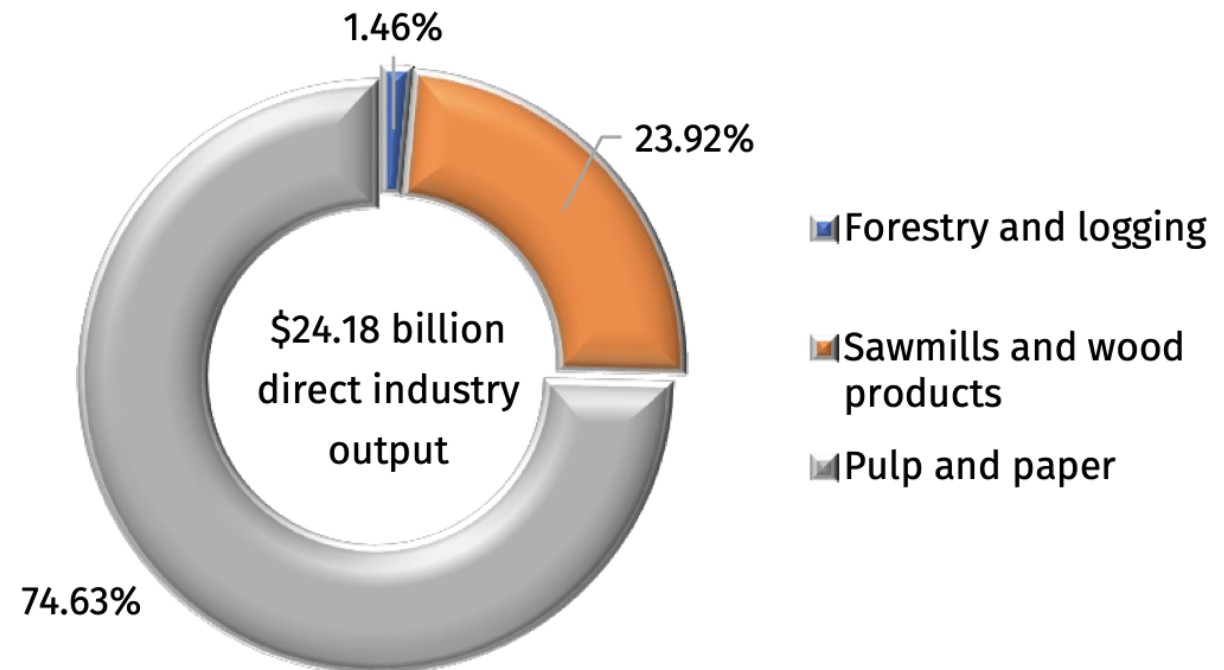
Forest products industry	Employment		Labor Income		Industry Output		Value-added	
	Number	% of State	MM \$	% of State	MM \$	% of State	MM \$	% of State
Direct effect	58,000	1.61	4,194.70	1.94	24,181.08	3.55	7,190.83	2.12
Indirect and induced effect	71,950	2.00	4,369.50	2.02	12,890.01	1.89	6,996.42	2.06
Total effect	129,950	3.61	8,564.20	3.95	37,071.08	5.44	14,187.25	4.18
Multiplier	2.24		2.04		1.53		1.97	0.00
County total (all industries)	3,601,328		216,640.20		681,384.47		339,531.41	

Note: MM \$ stands for million dollars

Tax Contribution (MM \$)

Total state/local	977.13
Total federal	1,478.08
Total tax contributions	2,455.21

Note: MM \$ stands for million dollars



Forest products industry direct gross output share

Hardwood and Softwood Markets

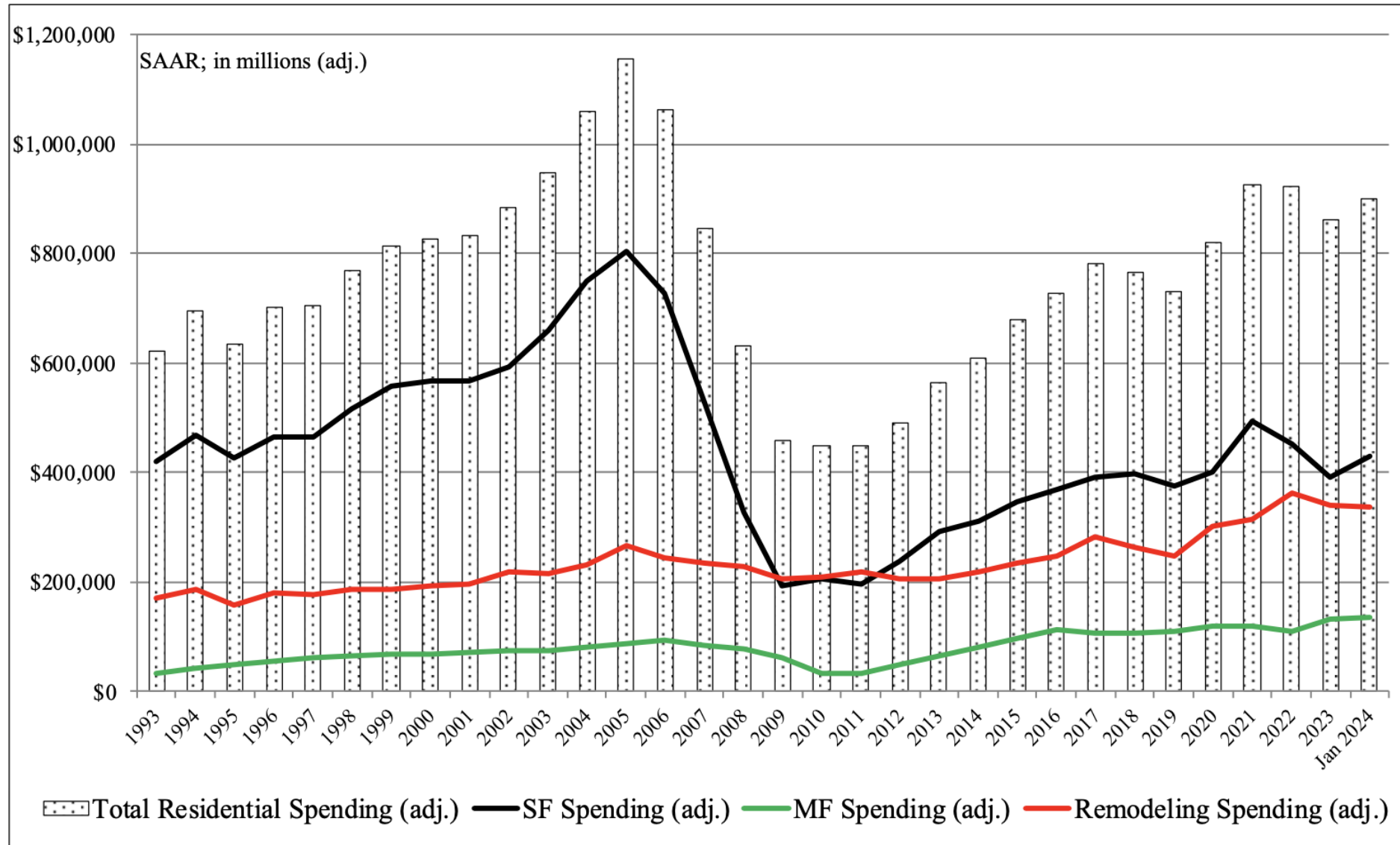


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US Housing

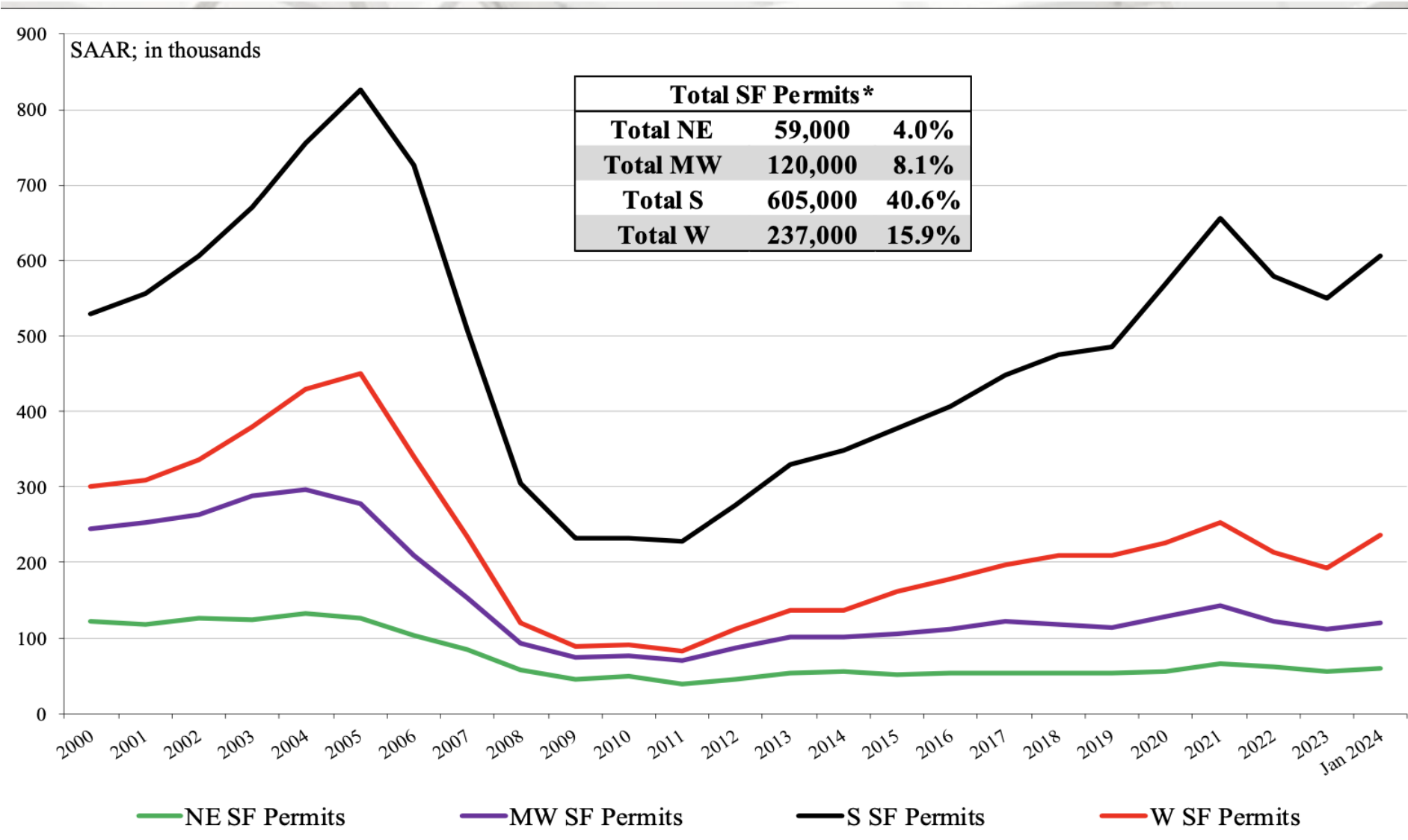
- New construction is the driver for the softwood/hardwood markets – and remodeling for hardwoods.
- Existing home sales will have a tough time gaining real momentum in a limited inventory environment where **most homeowners are rate-locked** into their homes – you can't buy what is not for sale.
- A higher mortgage rate environment resulting in a bifurcated market – the haves and have nots. The former are the ones building and buying.
- 77% of agents report that buyers outnumber sellers - reignited bidding wars for the limited supply of homes.
- Millennials will drive 12.7 new households in the 2020s, ~17.1 million new homes will be needed during the decade to meet demand and make up for the current shortage of 1.7 million homes.

Total Construction Spending (adjusted): 1993 – January 2024



Reported in adjusted \$US: 1993 – 2021 (adjusted for inflation, BEA Table 1.1.9); January 2024 reported in nominal US\$.

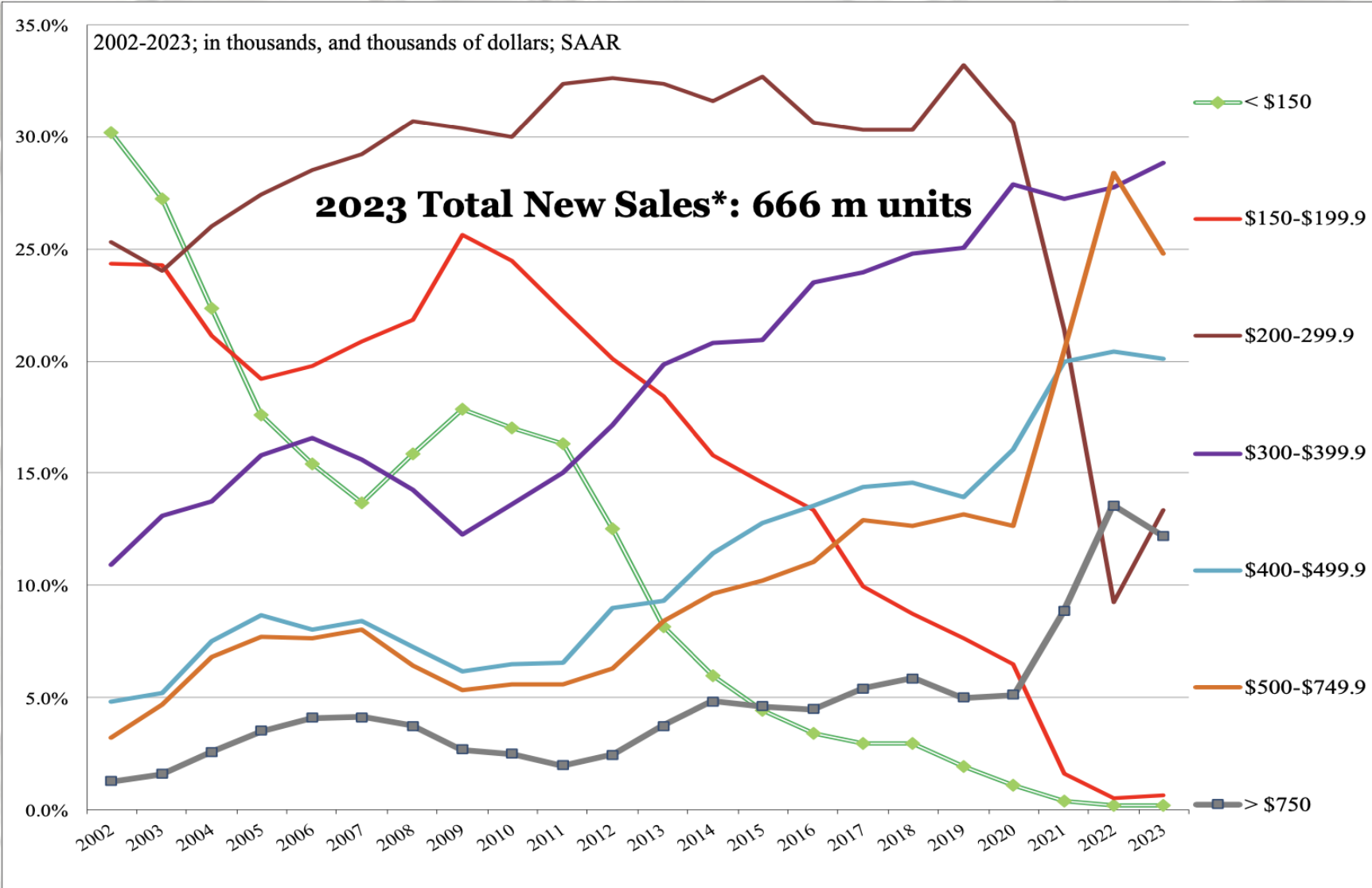
SF Housing Permits by Region



NE = Northeast, MW = Midwest, S = South, W = West

* Percentage of total permits.

New SF House Sales by Price Category



* Sales tallied by price category, nominal dollars.

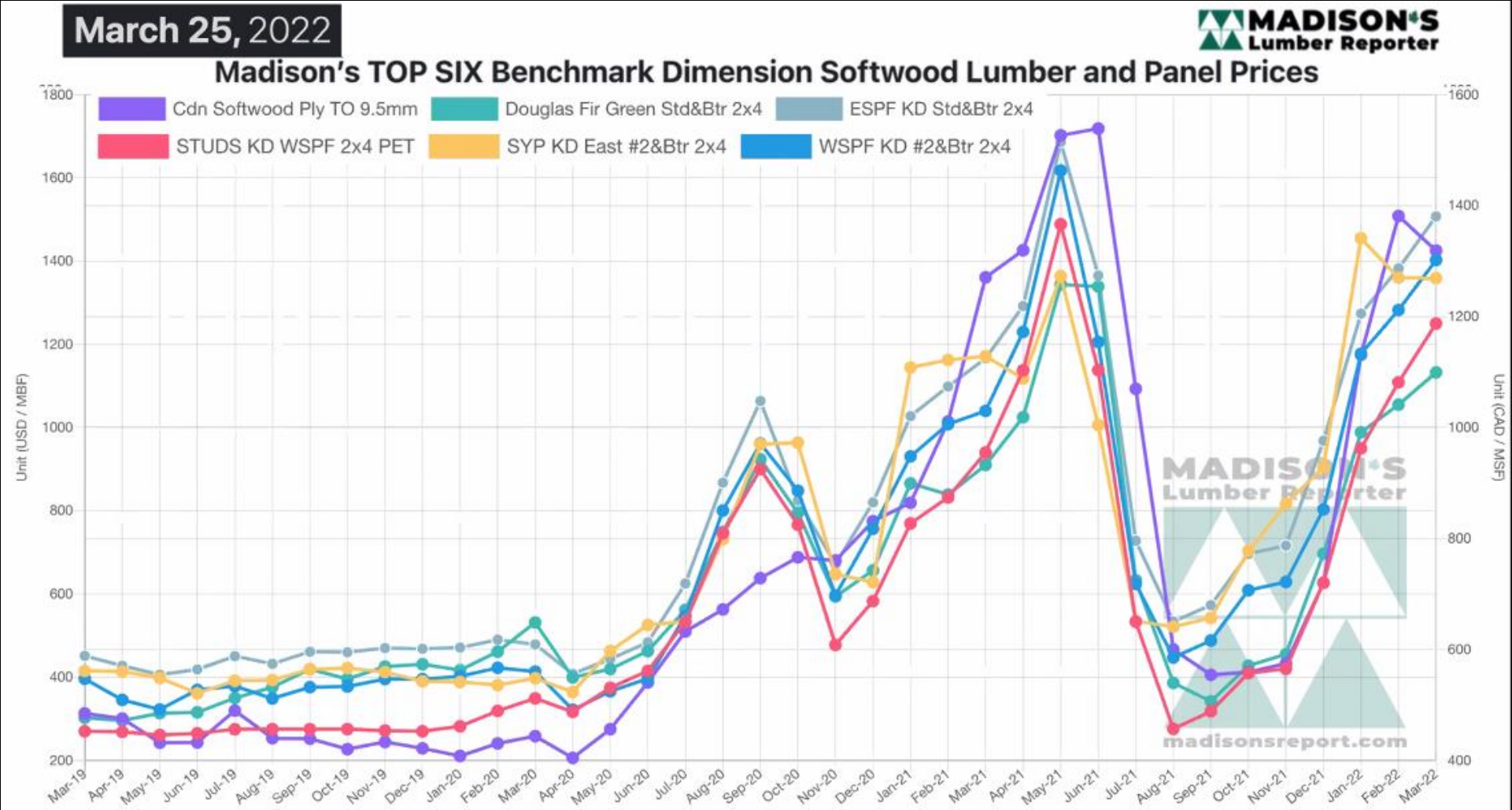
<https://woodproducts.sbio.vt.edu/housing.html>

**The Virginia Tech–USDA Forest Service
Housing Commentary: Section I
June 2023**

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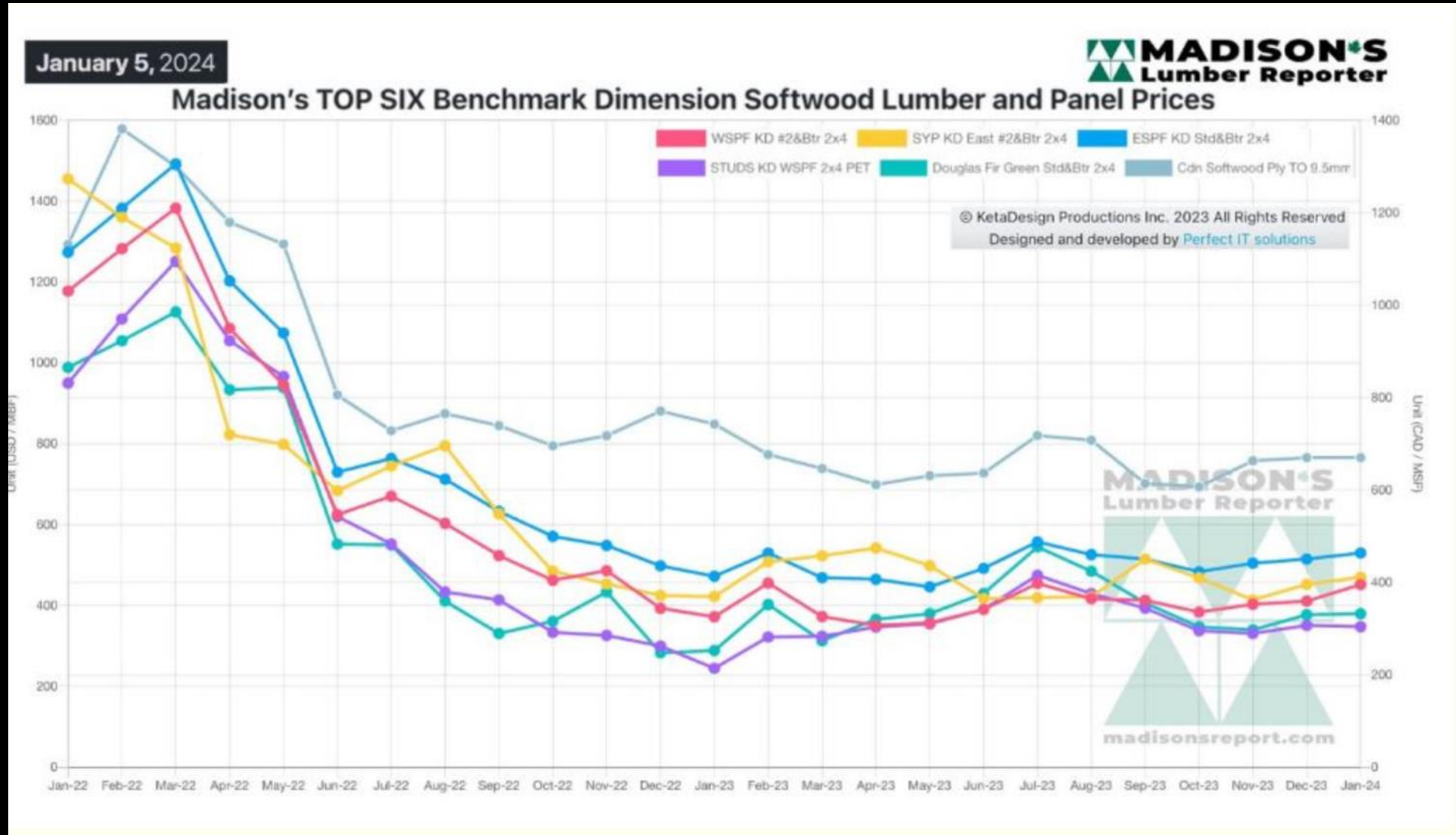
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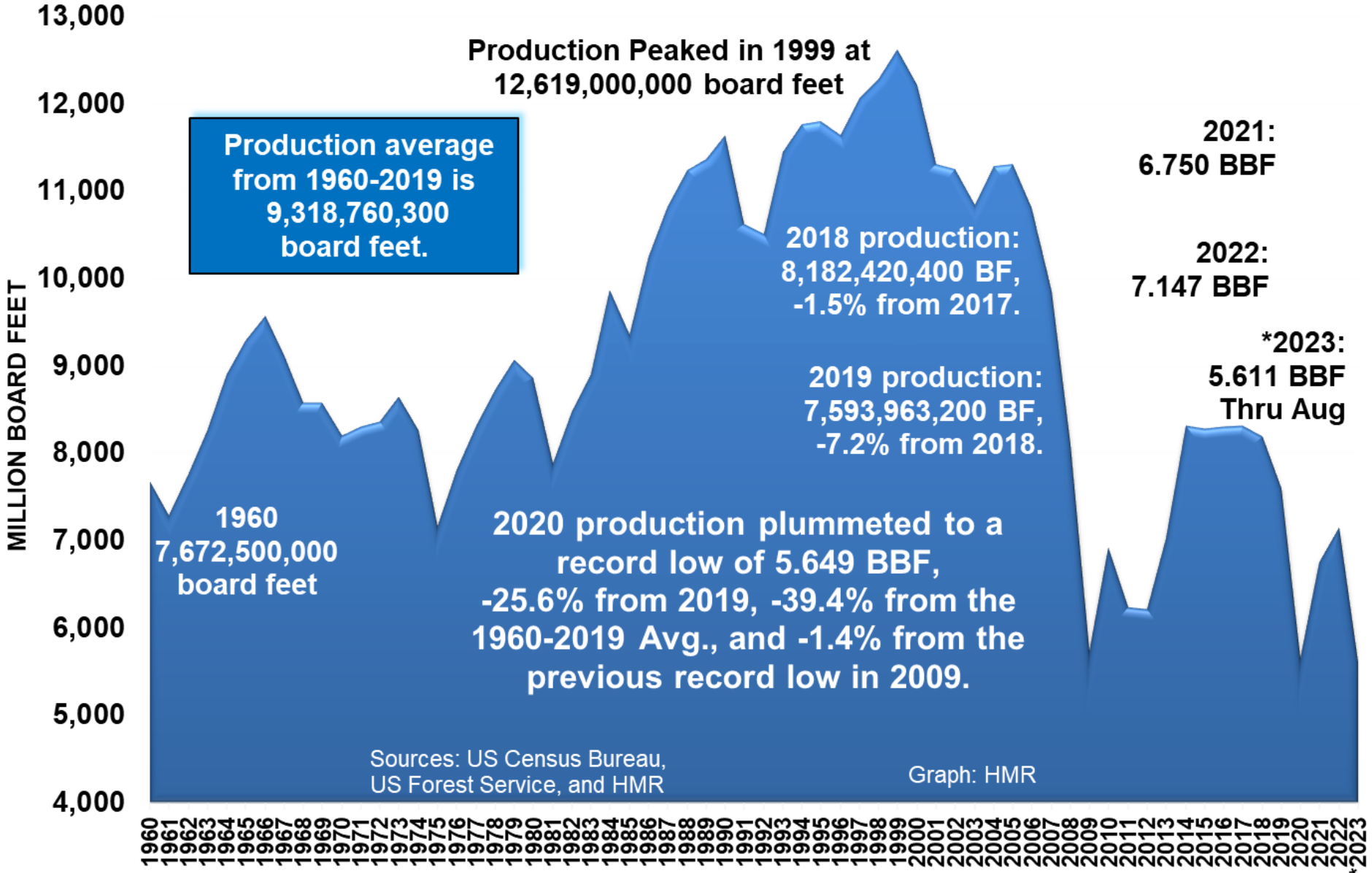
Source: Keta Kosman, Editor/Owner, Madison's Lumber Reporter

Today

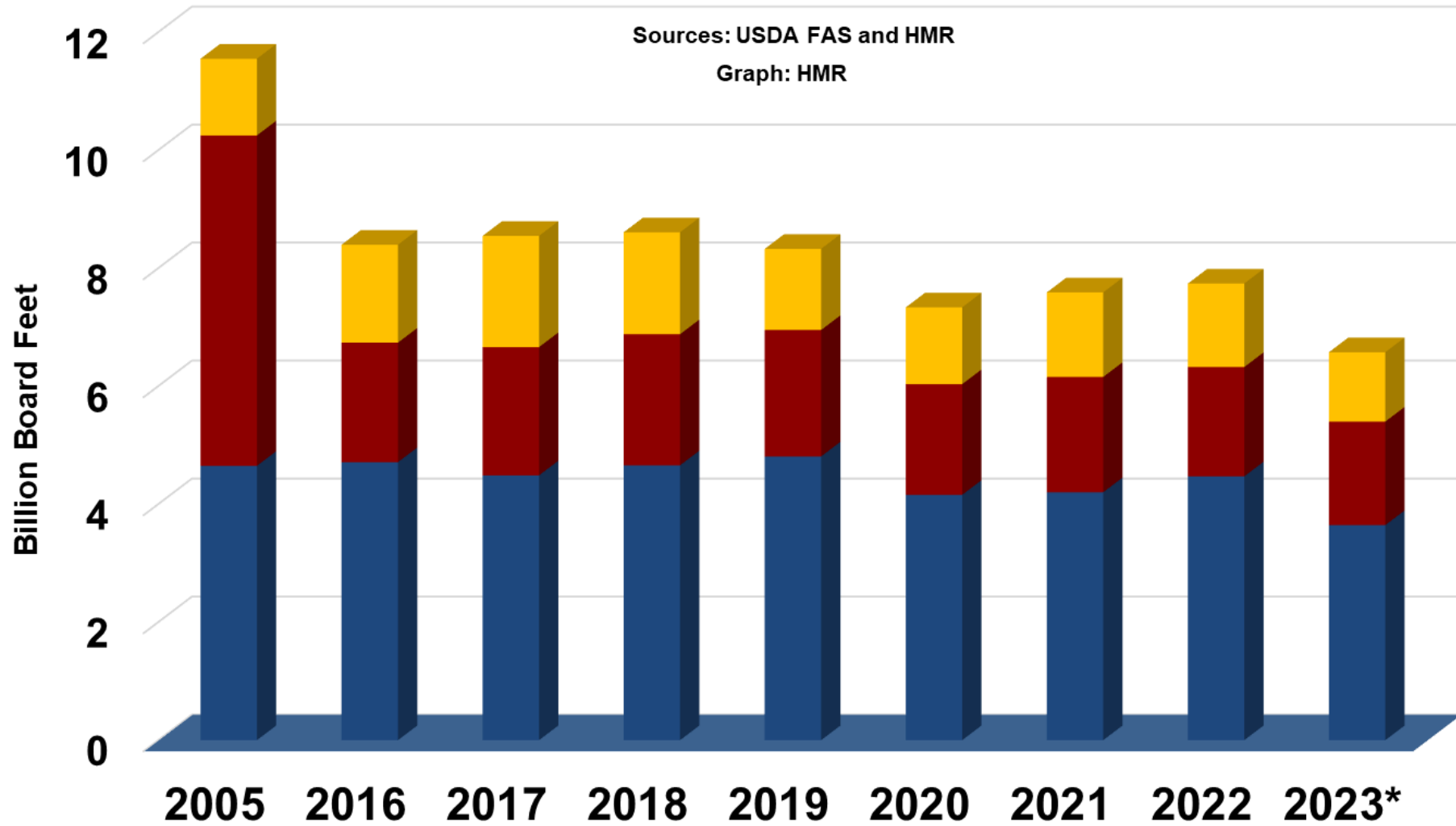


Source: 2024, Madison's Lumber Reporter

Eastern US Hardwood Sawmill Production



Hardwood Consumption by US Industrial and Grade Lumber Markets



■ Industrial lumber ■ Grade lumber - Domestic ■ Grade lumber - Export



Nearshoring and “Friendshoring”

Moving supply chains to “friendly countries” to limit operations risk

Fueled by logistics, Gov policy, overreliance on one market

- Apple
 - China -> Vietnam
- Samsung
 - China -> Vietnam
- Hasbro
 - China -> India and Vietnam
- Volvo
 - New EV factory in Slovakia for EU market

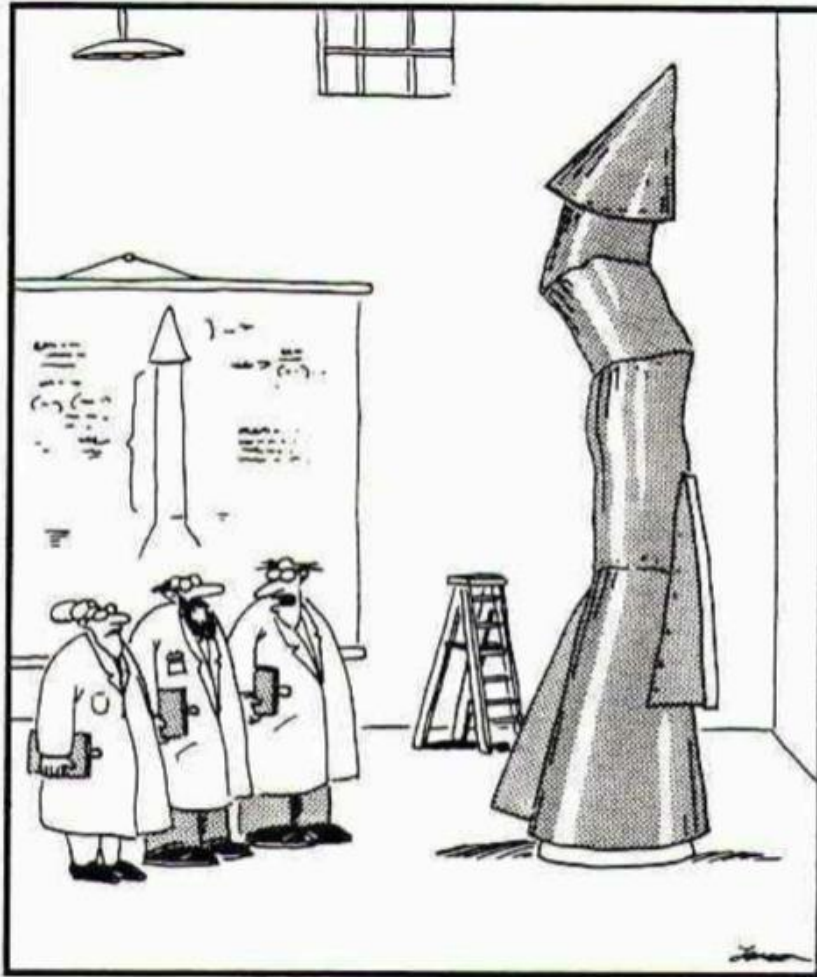


Pulp and Paper Markets



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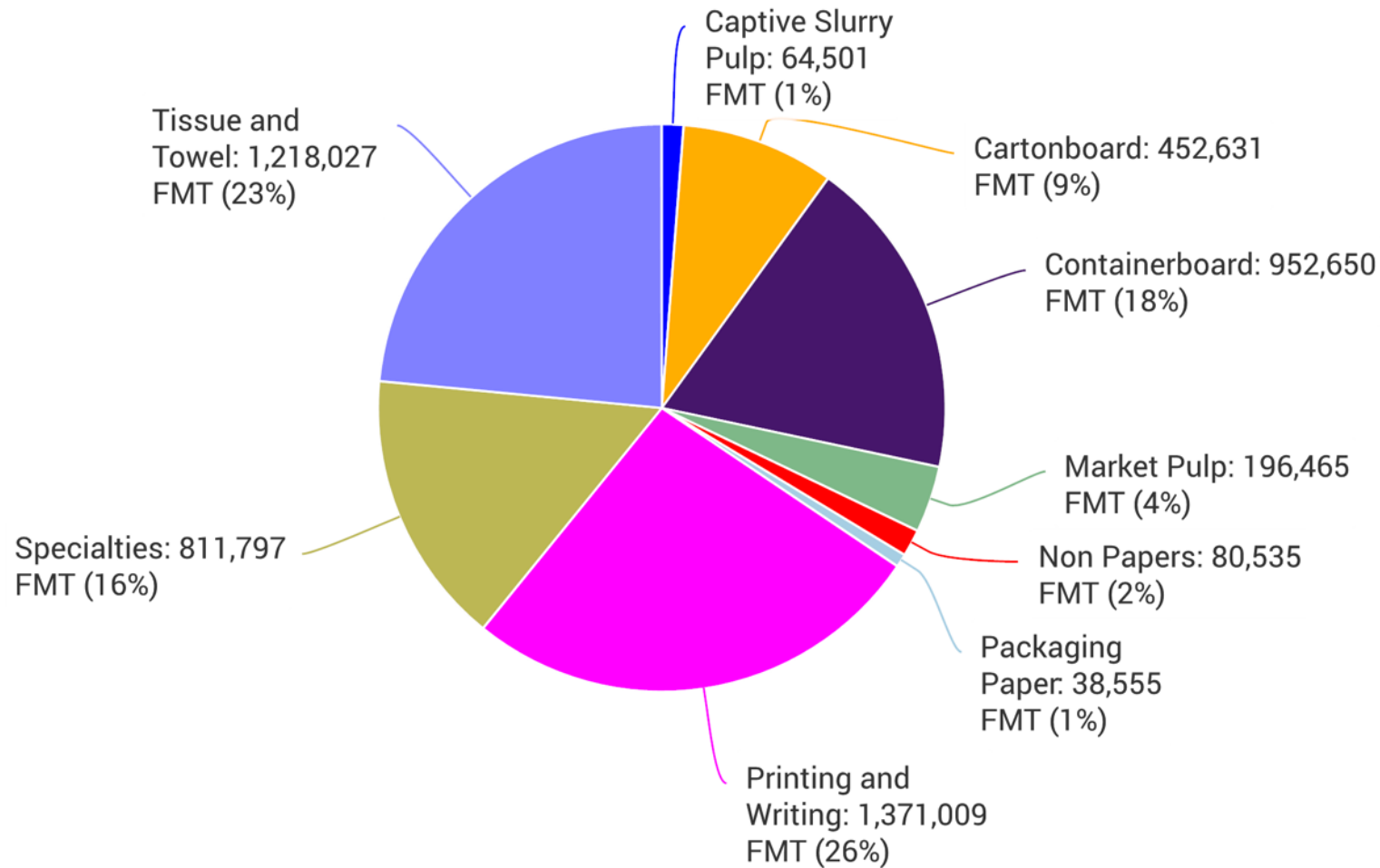
Pulp and Paper in WI



"It's time we face reality, my friends. ...
We're not exactly rocket scientists."

- The paper industry is complicated
- Just like softwood and hardwood markets, Paper markets are not bound by the borders of the state – It's Global!

Diversity of pulp & paper production in WI



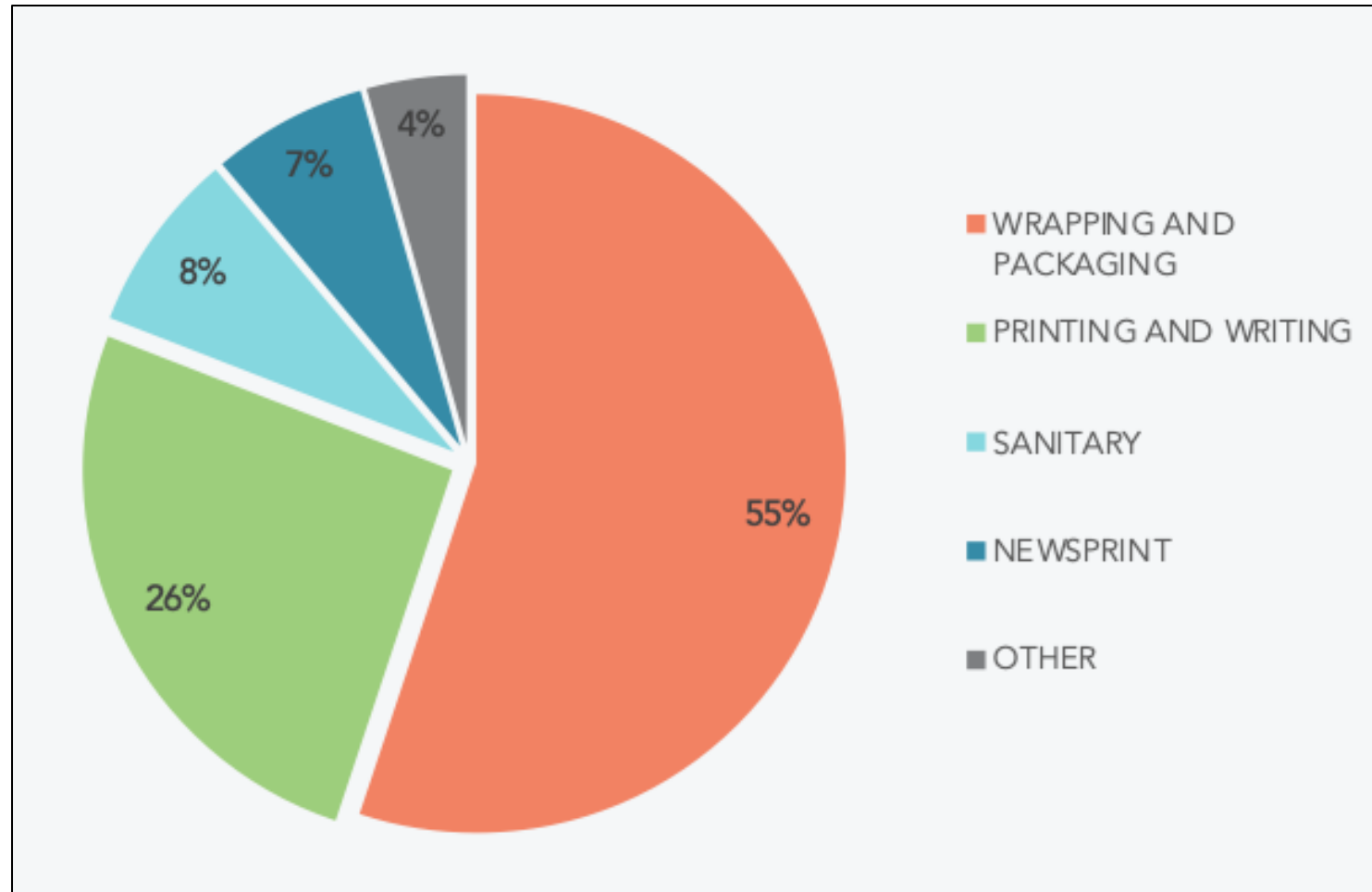
(Source: Wisconsin Institute of Sustainable Technology, 2019)

Specialty Papers in Wisconsin



(Source: Wisconsin Paper Council - www.wipaper.org)

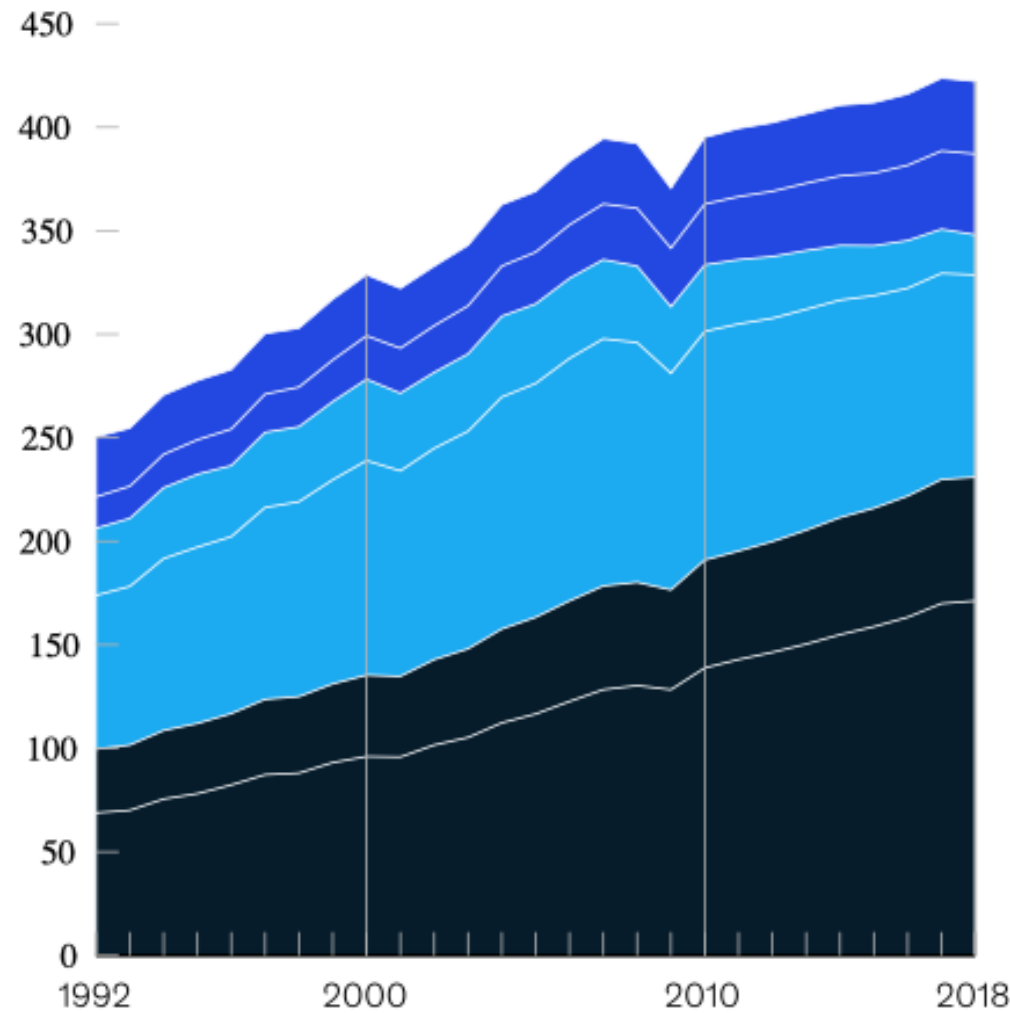
Global consumption by paper category?



(Source: EPN - State of the Global Paper Industry, 2018)

The global paper and paperboard industry continues to grow despite decline in the graphic-paper segment.

Global paper and paperboard market, million metric tons



		CAGR, ¹ 1992–2007, %	CAGR, 2010–18, %
Other	Others	0.6	1.1
	Tissue	3.9	3.6
Graphic paper	Newsprint	1.1	-6.1
	Printing and writing	3.2	-1.5
Packaging	Carton-board	3.3	1.7
	Container-board	4.3	2.7
Average per annum		3.0	1.0

¹Compound annual growth rate.

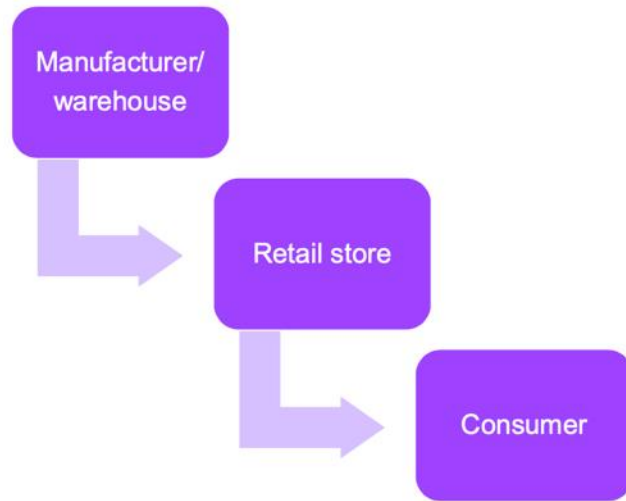
Source: Resource Information Systems Inc (RISI), Feb 2019



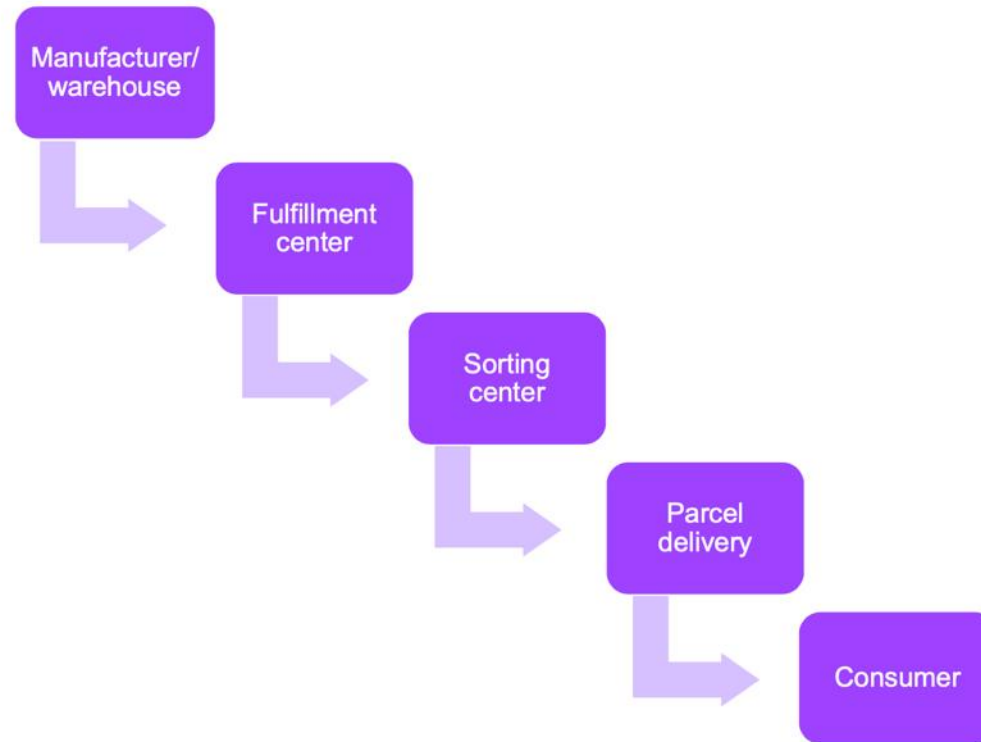
E-commerce retail uses seven times more corrugated per dollar than traditional retail



BRICK-AND-MORTAR LOGISTICS



E-COMMERCE LOGISTICS



Commentary on Future Markets



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Pulpwood in Wisconsin

- Is there a future for Wisconsin specialty engineered products?
- They don't compete with the big sawmills in USA and Canada.
- They would provide markets for Wisconsin pulpwood.

Future for Pulp & Paper

- Be vigilant and watch for the declining market segments.
- Build upon our strengths - specialty and packaging:
 - Market pulp
 - Food packaging & virgin fiber

Closing Remarks

- Healthy forests depend upon a healthy forest industry!
- We live and operate in a global marketplace.
- Domestic markets driving hardwood and softwood lumber.
- Expanding pulpwood options is an important goal for Wisconsin.

Questions?

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