

# Montana's Wood Products, National Forests & Affordable Housing

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# Montana's Wood Products Facilities

~140 establishments

~80 timber users

- 8 larger, 20+ small sawmills
- Plywood, MDF, particleboard
- Log homes, post & pole, chipping
- Pellets, bark, fuels-for-schools

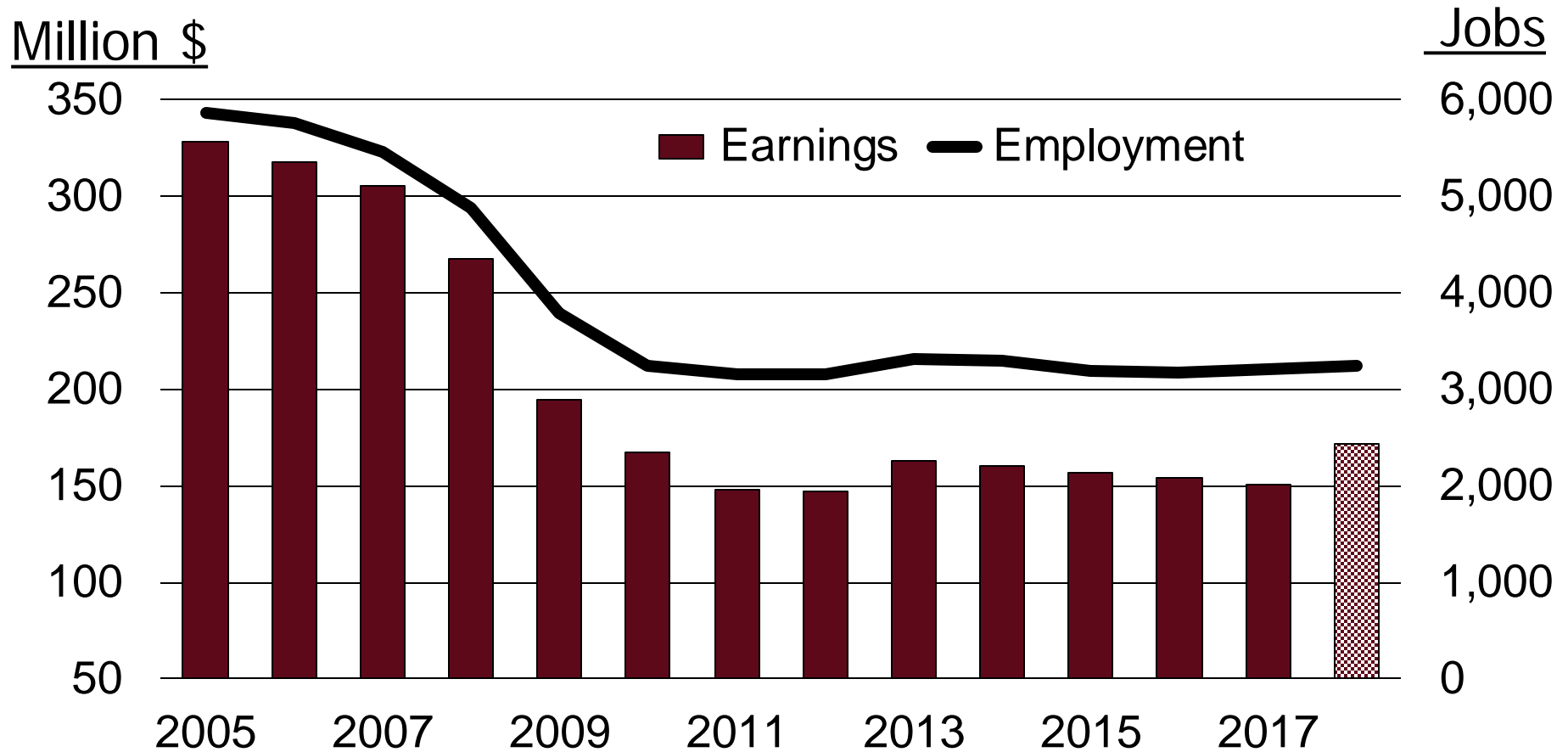


- Mostly small, privately held
- Most don't own forest land
- Nearly all rely on some timber from public lands



# Montana

## Wood Products Manufacturing



Sources: Bureau of Economic Analysis, Western Wood Products Association, BBER.

\*2018 Estimated.

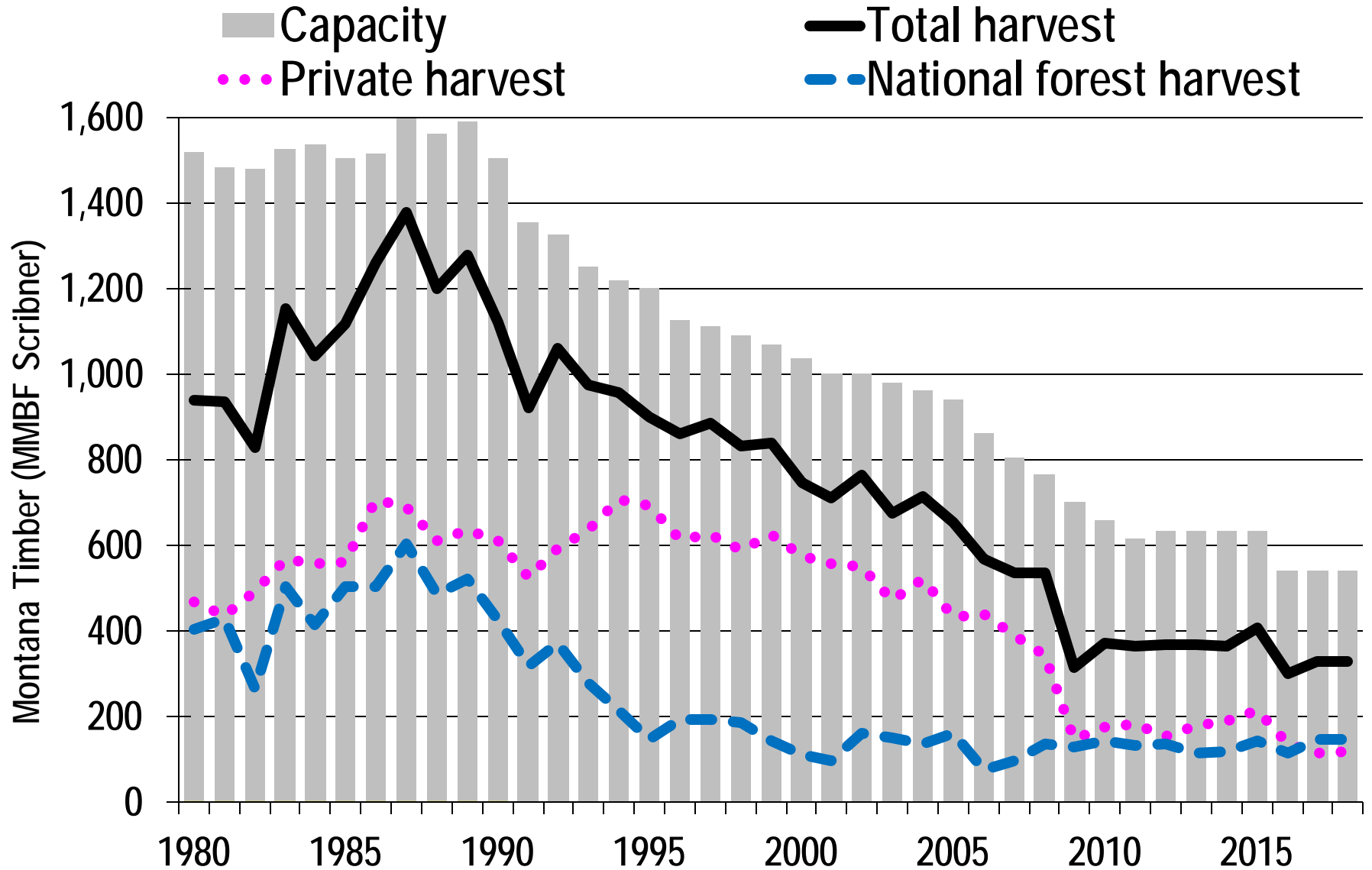
# Montana Forest Industry (Private Sector)

	<u>2004</u>	<u>2010</u>	<u>2017</u>
<b>Workers (mills &amp; forest)</b>	<b>10,006</b>	<b>7,030</b>	<b>7,732</b>
<b>Earnings (millions)</b>	<b>\$489</b>	<b>\$294</b>	<b>\$341</b>
<b>Primary sales (millions)</b>	<b>\$1,518</b>	<b>\$497</b>	<b>\$569</b>
<b>Lumber production (MMBF)</b>	<b>985</b>	<b>503</b>	<b>480</b>

Sources: Bureau of Economic Analysis, Western Wood Products Association, BBER.



# Montana Timber Capacity & Harvest, 1980-2018



# Montana Forests & Timber

**25.9 million acres**

**19.8 million acres  
of timberland**

## **National Forests**

61% of timberland

76% of timber volume

20-25% of annual harvest

60% of burned forest area

80% of insect impact area

County	Forest acres (thousand)	National Forest
Cascade	332	53%
Flathead	2,794	63%
Gallatin	902	66%
Lewis & Clark	1,391	71%
Lincoln	2,182	80%
Missoula	1,410	51%
Ravalli	1,192	88%
Silver Bow & Deer Lodge	534	63%
Yellowstone	143	0%
<b>All counties</b>	<b>25,912</b>	<b>60%</b>

Source: USDA Forest Service, FIA Program

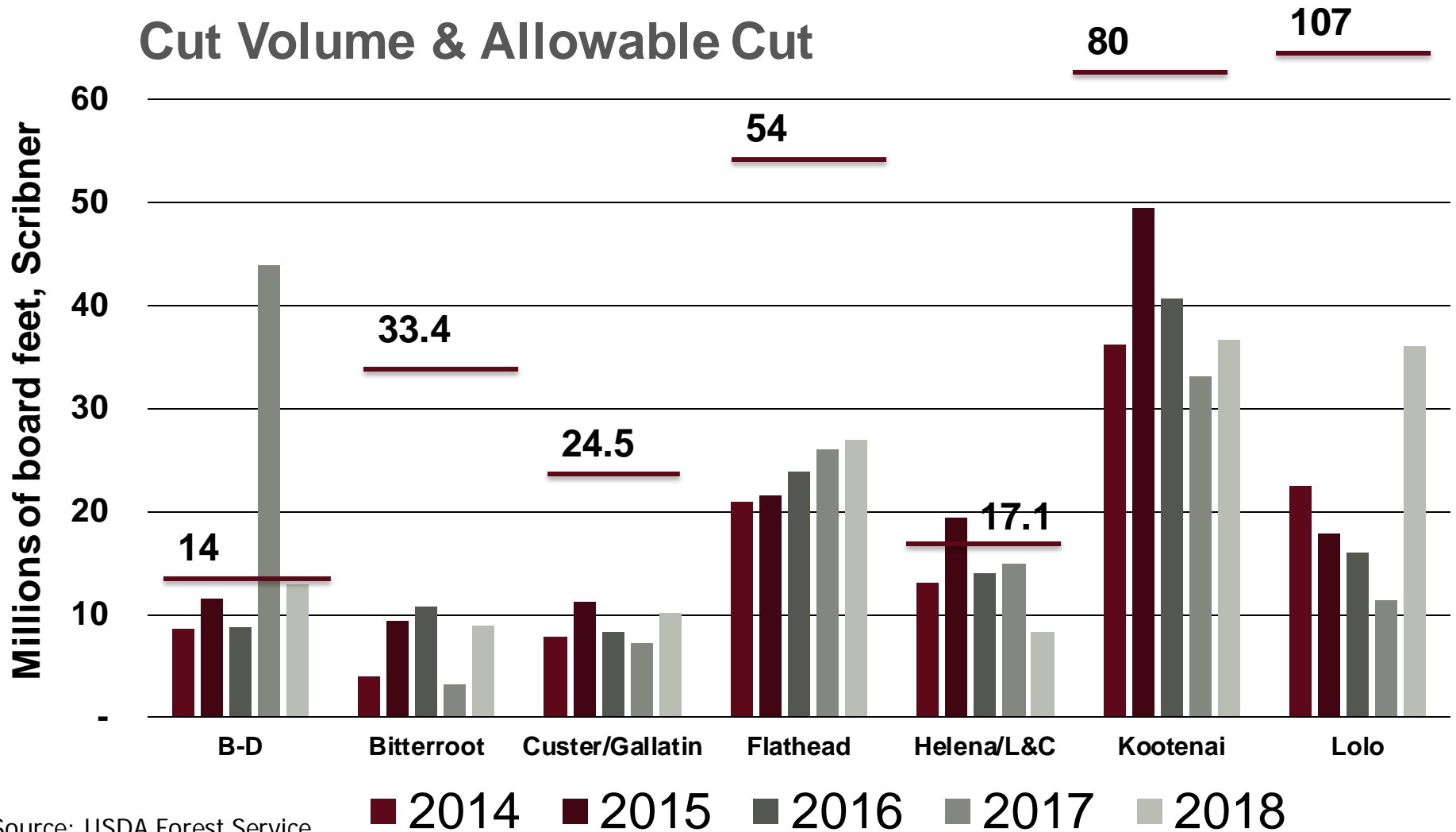


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# National Forests in Montana

## Cut Volume & Allowable Cut



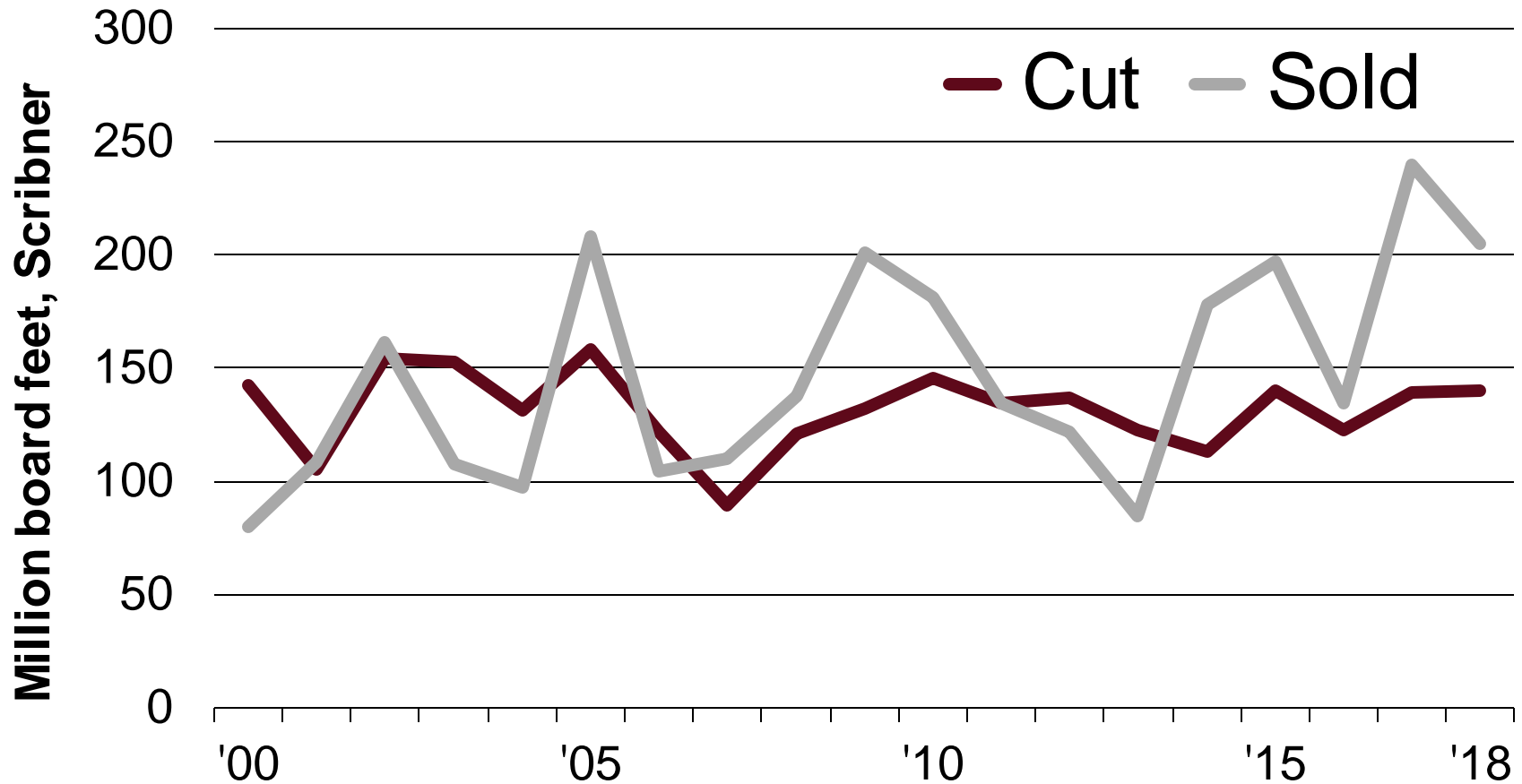
Source: USDA Forest Service.



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# National Forests in Montana



Source: USDA Forest Service.



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# Affordable Housing & Wood Products

## The Five Ls impacting housing supply

- Labor
- Lots
- Lending
- Laws
- Lumber

Source: National Association of Homebuilders.

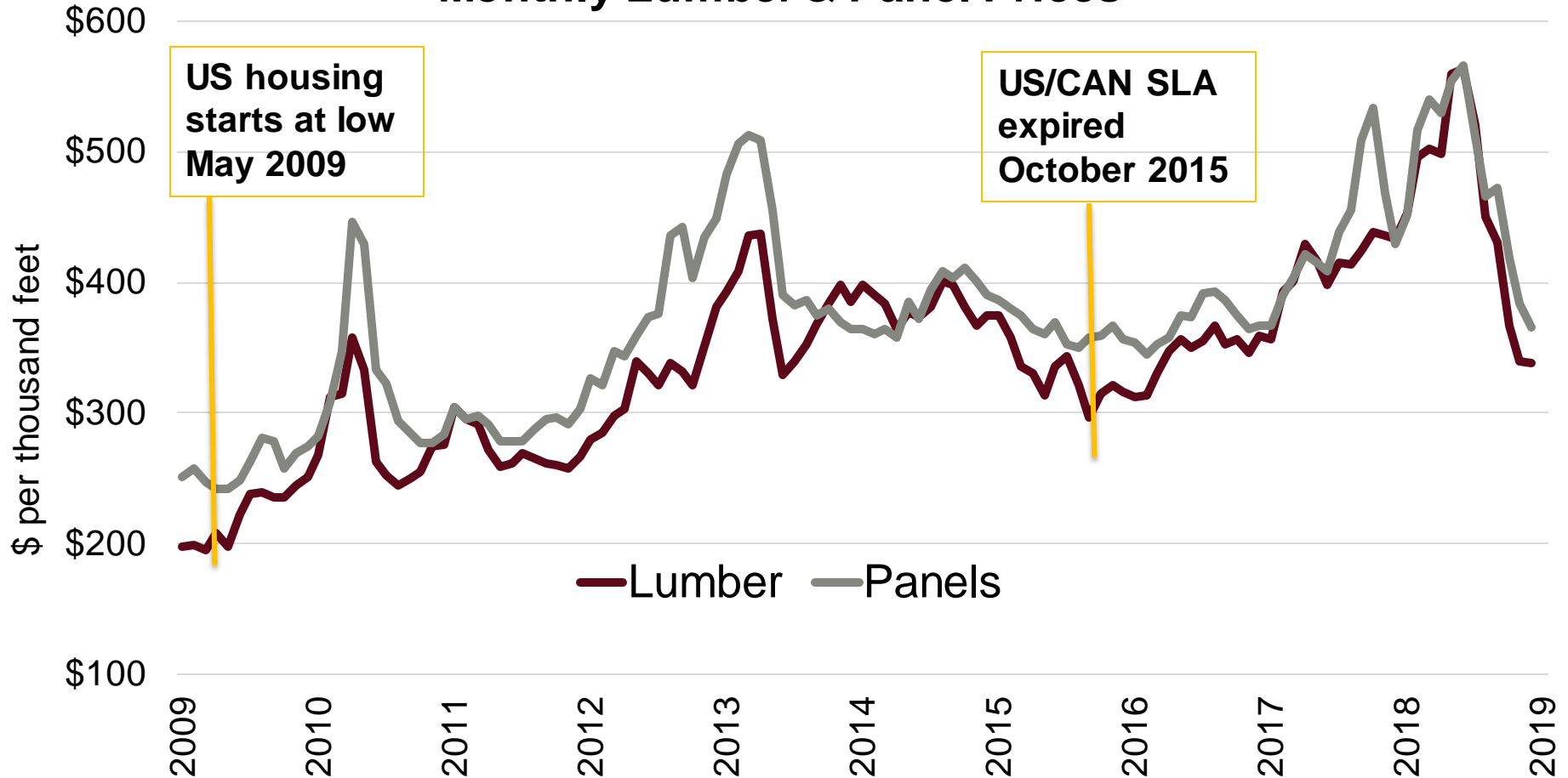


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# Affordable Housing & Wood Products

## Monthly Lumber & Panel Prices



Source: Random Lengths.



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# Example New Single-Family Home Price & Construction Costs, 2017

**Sale price: \$427,892**

2,700 sq ft house; 11,300 sq ft lot

- **Construction cost** 55.6%
- Finished lot cost 21.5%
- Profit 10.7%
- Overhead expenses 5.1%
- Sales commission 4.1%
- Financing cost 1.8%
- Marketing cost 1.2%

**Construction cost: \$237,760**

- Site work 6.7%
- Foundation 10.8%
- **Framing** 17.3%
- **Exterior finishes** 13.9%
- Major systems 13.8%
- **Interior finishes** 28.6%
- Final steps 7.0%
- Other 2.0%

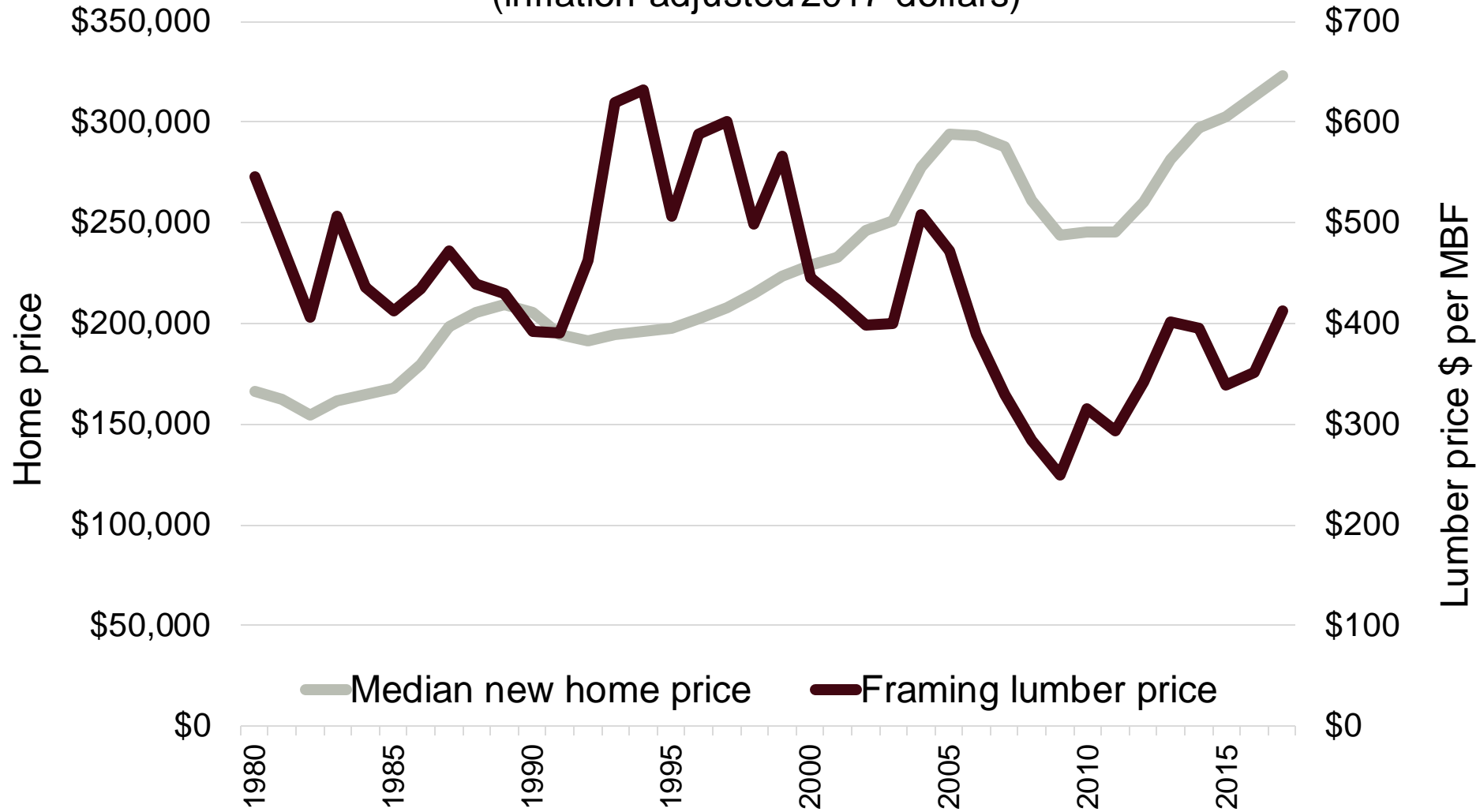
**Lumber & other wood materials estimated at \$12,000 to \$16,000 for 2,700 sq ft home = 5 to 6.5% of construction cost.**

Source: National Association of Homebuilders and BBER.



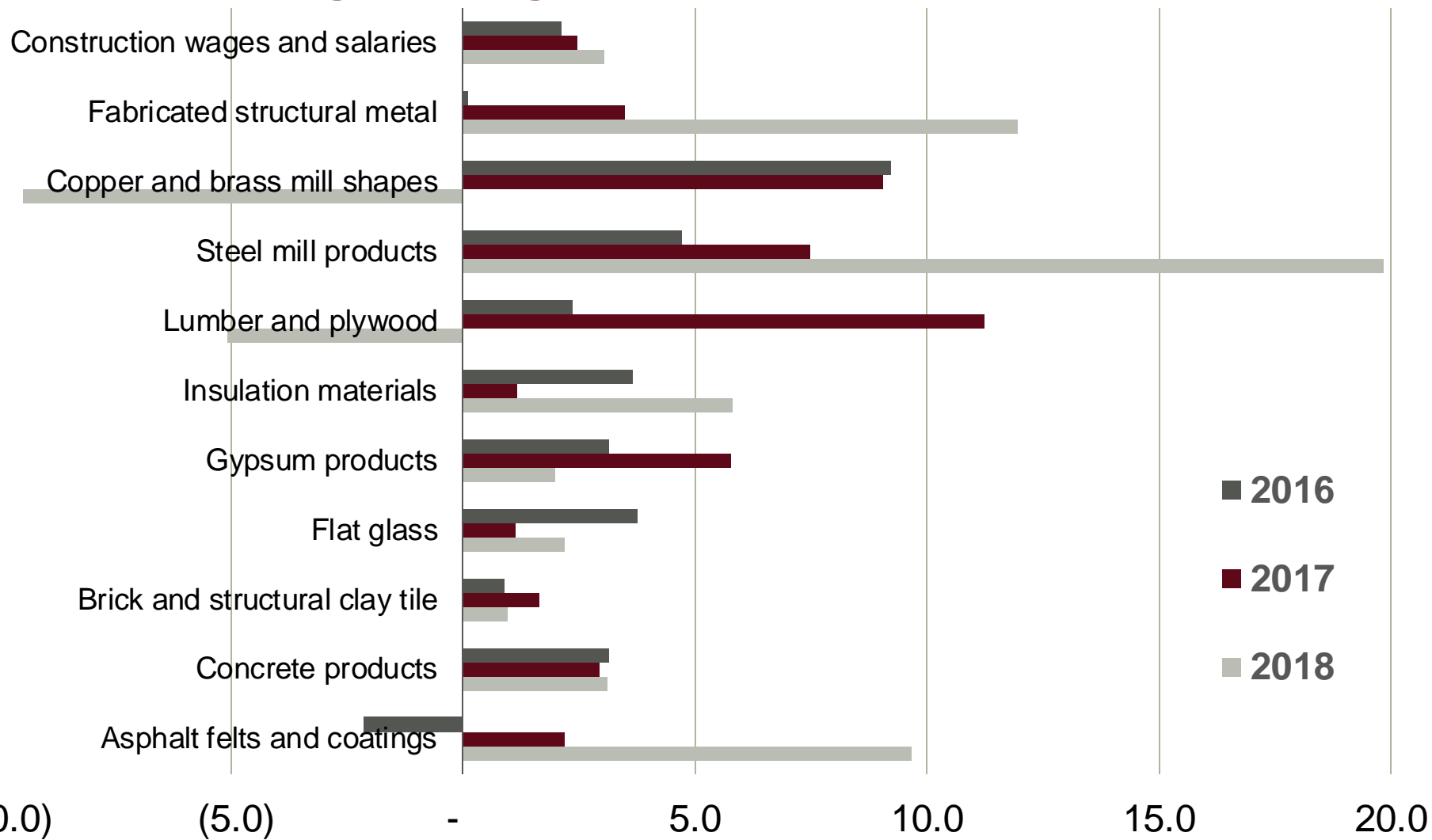
# Median U.S. new home price & lumber price, 1980-2017

(inflation-adjusted 2017 dollars)



Sources: US Census Bureau and Random Lengths.

# Percentage Changes of Construction Input Costs



■ 2016  
 ■ 2017  
 ■ 2018

Sources: US Bureau of Labor Statistics and Association of General Contractors of America.

# Affordable Housing & Wood Products

## Wood use in construction

- Costs of nearly all inputs to construction have been rising since 2015.
- Two-thirds of lumber & over 85% of structural panels are used in construction, including repair & remodeling.
- Wood is a **renewable** construction material and **stores carbon** long term.

Source: U.S. Forest Products Lab.



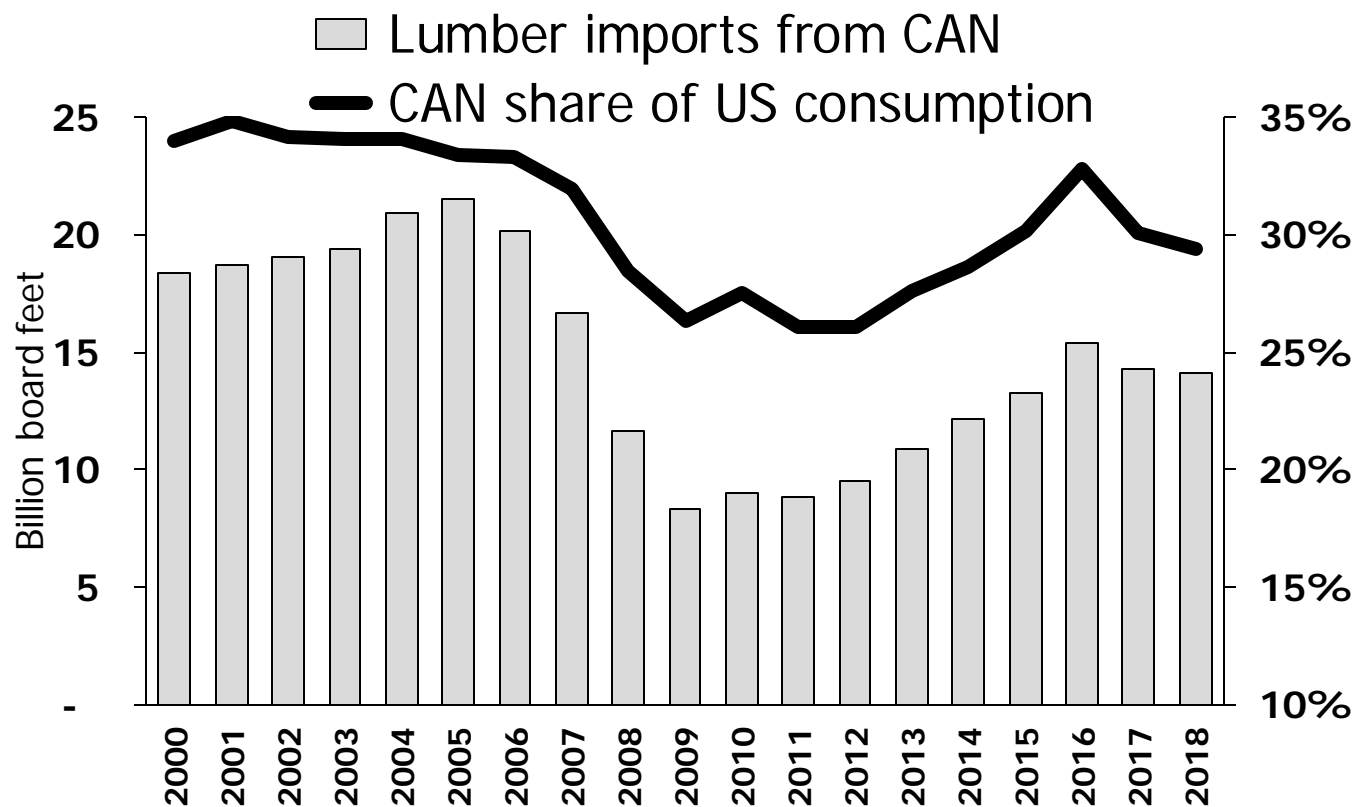
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# Canadian Lumber

## Volume & share of US market down in '17 & '18

- Tariffs & CAN mills in US are having an impact.
- Bark beetles & fires reduced BC timber & lumber supply.
- Eastern CAN expected to increase lumber as BC declines.



# Montana's Forest Industry & Wood Products Outlook

## Issues impacting the industry in 2019

- Broader US economy
- Homebuilding & interest rates
- Softwood lumber & other trade issues
- Good Neighbor Authority (GNA) projects
- Wildfires & weather
- Timber & labor availability





# Thank you!

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