

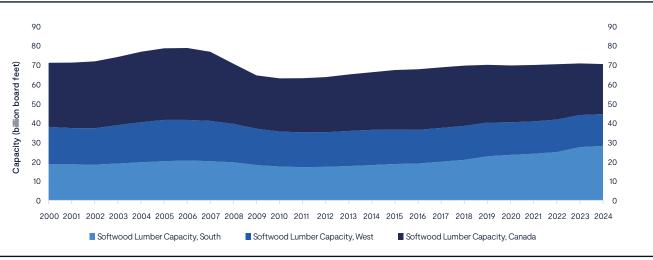
# U.S. South Sawtimber Inventory Overhang Update

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#### **Executive Summary**

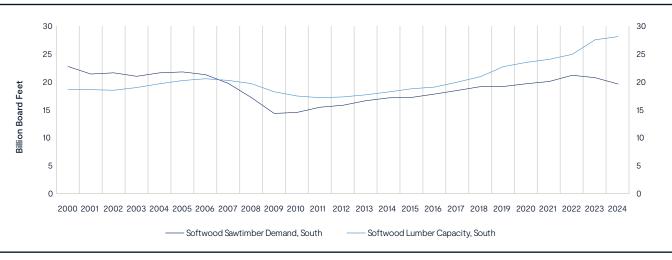
Following the recession of the late 2000s, the US South experienced a sustained oversupply of softwood sawtimber. This trend resulted in an inventory overhang of a scale that TIG estimates could take up to two decades to revert to pre-recession levels. The market has seen significant changes since TIG's 2019 update to its sawtimber overhang forecast for the region. Softwood lumber manufacturing capacity in the South was ~16 billion board feet in 2008, ~22 billion board feet at the time of TIG's last update in 2019, and currently sits at ~26.7 billion board feet with announced expansions and greenfield investments expected to push capacity to ~27.4 billion board feet (Figure 1). This shift in capacity is due to a consistently decreasing annual allowable cut ("AAC") in British Columbia ("BC") coupled with a post-pandemic increase in housing starts and remodel/repair spending. Rising regional sawmill capacity has driven more final harvests, moving supply and demand towards balance for the first time since 2008. Recently, the impacts of these pandemic related tail—winds to lumber demand have been offset by the US interest rate environment which has influenced housing starts and repair/remodel spending. However, market fundamentals including Canadian forest policies and the US housing shortage support the alignment of inventory levels with harvest demand in the coming decades, bringing the market closer to equilibrium (Figure 2).

FIGURE 1: US SOUTH CAPACITY EXPANSION



Source: Forest Economic Advisors

FIGURE 2: US SOUTH LUMBER CAPACITY AND SAWTIMBER DEMAND



Source: Forest Economic Advisors

#### Introduction

Before 2007, supply and demand for the US South's softwood sawtimber (measured as sawtimber harvest removals as a percentage of growth) were relatively balanced, leading to consistent stocking removals and strong pricing. The primary end use for US South sawtimber is dimensional lumber used in new construction or renovations and remodels, and the 2008 recession's impact on housing resulted in significantly diminished demand. While the reduction in housing starts and renovation spending curtailed sawtimber demand, improved silvicultural practices implemented over preceding decades increased supply. This prolonged supply and demand imbalance has kept inventory levels high in the region and prices below pre-recession levels.



Loblolly pine stand. Source: Caddo Sustainable Timberlands

#### **Demand Drivers and Sawmilling Capacity**

The two largest markets for US softwood lumber are new residential construction (33%) and repair and remodeling (42%) (Figure 3). Average annual housing starts from 2019–2024 were 45% higher than the average for 2008–2018, hitting a peak of ~1.6 million units in 2021 (approximately 1.13 million single-family units and approximately 470,000 multi-family units). By 2024, housing starts had returned to near the 50-year average of approximately 1.43 million units (Figure 4). Based on TIG's updated analysis, each single-family start uses approximately 17.1 thousand board feet ("MBF") of softwood lumber and panels while each multifamily start uses approximately 5.6 MBF of softwood lumber and panels. Average spending for repair and remodeling surged 9% in 2020 and 11% in 2021. Although this rate of increase has slowed, there has been sustained growth in 2022 and 2023.<sup>2</sup>

Nonresidential
4%

Industrial
and Other
21%

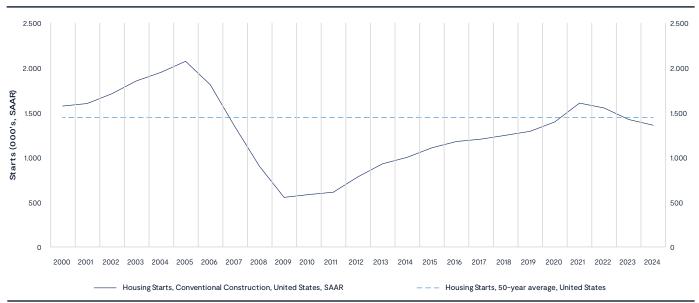
Remodeling
42%

New Residential
Construction
33%

FIGURE 3: SHARES OF US SOFTWOOD LUMBER CONSUMPTION

Source: RISI, 2023





Source: U.S. Census Bureau

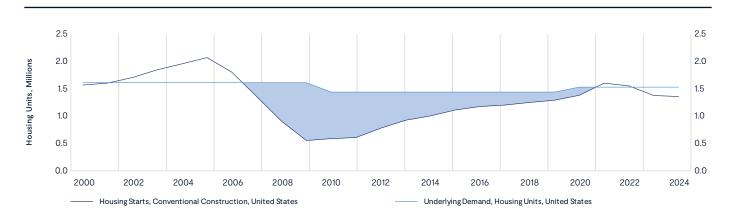
<sup>1</sup> Forest Economic Advisors, TIG Analysis

<sup>2</sup> Harvard Joint Center for Housing Studies

The rapid growth in housing starts and repair spending after the pandemic further encouraged Canadian firms to invest in US South lumber capacity through both greenfield projects and the purchase or upgrading of existing mills. Recently, interest rates have risen to 20-year highs, putting pressure on housing starts and repair spending. Participants in the regional lumber market have responded by curtailing production or closing less efficient mills or those in sub-optimal markets.

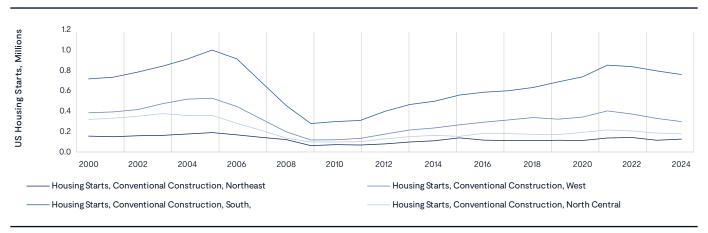
However, despite near-term setbacks, several fundamental issues support sustained sawmill capacity in the US South. The first of these is the long-term nature of factors leading to the reduction in AAC in Canada and the resulting shift in capacity from BC to the US South, specifically: 1) the Mountain Pine Beetle infestation that destroyed over 50% of commercial volume in BC, 2) major wildfire seasons in 2017, 2018, and 2023, and 3) land set aside for the Mountain Caribou that further reduced the stock of harvestable sawtimber.<sup>3</sup> Long-term optimism for maintaining sawmill capacity is further reinforced by the severe housing shortage in the US, particularly acute in the South. Following 2007, the annual number of US housing starts has consistently fallen below the yearly underlying demand for housing units – leading the US to have a housing deficit of an estimated 3-4 million housing units (Figure 5). Additionally, the lack of new construction has led to a rapid increase in the age of owner-occupied homes, raising the median age to 41 years.<sup>4</sup> This older housing stock leads to increased spending on residential improvements, supporting softwood lumber. Regionally, the US South's consumption of softwood lumber is 77% higher than the next highest region (US West).<sup>5</sup>

FIGURE 5: HOUSING STARTS AGAINST UNDERLYING DEMAND



Source: Forest Economic Advisors/TIG Analysis

FIGURE 6: US HOUSING STARTS BY REGION



Source: RISI

5 Harvard Joint Center for Housing Studies

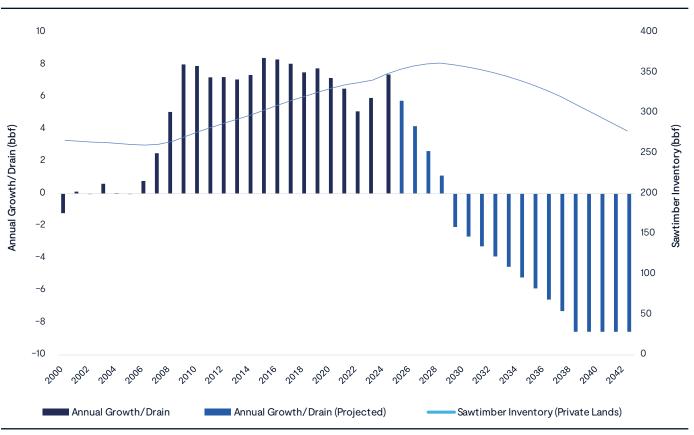
<sup>3</sup> Canadian Council of Forest Ministers

<sup>4</sup> US Census Bureau

#### **US South Sawtimber Inventories**

The inventory of softwood sawtimber on private land has continued to increase. However, this excess supply has been increasing at a slower pace than in the period before 2019. From 2008 to 2019, the inventory was increasing by an average of 1.86% per year while from 2020 to 2024 the inventory increase was averaging 1.08% per year. Before 2019, any slowing in the growth rate of softwood inventory was a result of increased harvest levels. The impact of increased harvests was tempered by sawtimber growth from productivity gains and harvesting via thinning treatments rather than final harvests. Since 2019, harvest levels have continued to increase (2.7%), while sawtimber growth has recently begun to decline (-4.1%) due to increased final harvests driven by expanded sawlog capacity. With demand and supply moving towards each other for the first time since 2008, these trends suggest that sawtimber inventory will reach equilibrium with harvest demand in the next three to four years. However, capacity has the potential to increase at least marginally in the medium term to address the need for more housing starts. Should interest rates decline, supply and demand could approach equilibrium more rapidly. Assuming similar trends hold in the coming years, US South softwood inventory should reach 2006 levels (the last year of inventory reduction) in approximately 17-18 years (Figure 7).

FIGURE 7: US SOUTHERN SAWTIMBER SURPLUS/DEFICIT & FORECAST



Sources: Forest Economic Advisors; TIG Forecast

## Conclusion

Our updated analysis indicates that while the equilibrium between sawtimber supply and demand in the U.S. South may take an additional three to four years to achieve, the peak in sawtimber inventories appears to have been reached and a gradual decline is anticipated. It is noteworthy that some specific micro markets are already showing signs of balancing. As inventory becomes more aligned with demand, upward pressure on sawtimber prices should make timberlands characterized by younger age classes more favorable for investment. This perspective remains consistent with ongoing market dynamics and is informed by TIG insights into lumber capacity adjustments, housing market demands, and the evolving economic factors discussed throughout this paper.



Sawtimber in transport to mill. Source: Caddo Sustainable Timberlands

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