

First Stop on the Think Wood Mobile Tour: Washington, D.C.

The first leg of the highly anticipated Think Wood Mobile Tour kicked off at the National Building Museum in Washington, D.C., in late October. This museum-quality traveling exhibit opened with remarks from several guest speakers, including Jon Gartman from Sierra Pacific Industries, Arkansas Rep. Bruce Westerman, Jennifer Cover of WoodWorks, and architect Susan Jones—whose CLT house is one of the featured models in the mobile unit.

The one-of-a-kind exhibit showcases the environmental and economic benefits of wood products and their expanding potential for commercial, multifamily, and residential construction. With interactive building models, information on wood's capacity to withstand fire, compelling video content, and design inspiration, the Think Wood Mobile Tour is an exciting opportunity to tell wood's story from the forest to the market.

Over 60 visitors attended the exhibit launch, including:

- Vicki Christensen, Chief of the U.S. Forest Service (USFS)
- Melissa Jenkins, USFS Natural Resource Specialist
- Carlton Owen, President and CEO of the U.S. Endowment for Forestry and Communities (Endowment)
- Michael Goergen, Endowment Vice President – Innovation Director, P3Nano
- Chase Rynd, Executive Director of the National Building Museum

"The future, I think, looks very bright for CLT and mass timber."

- Arkansas Rep. Bruce Westerman

In addition, staffers of senators and the Senate agriculture committee, staff from the USDA and the USFS, as well as a mix of architects, developers, contractors, and engineers, came to celebrate the Think Wood Mobile Tour and experience the exhibit.

After the event, the Think Wood Mobile Tour was featured in several notable publications, including *PRISM* magazine, *ProSales*, and *TreeFrog* (syndication of *PRISM*). Additionally, John Matel, president of the Virginia Tree Farm Foundation, posted a story on his personal blog about the event.



Think Wood Mobile Tour in 2020

The Think Wood Mobile Tour will continue to travel across the country during 2020 with scheduled stops at the International Builder Show in Las Vegas from January 21 to 23, the Mass Timber Conference in Portland from March 24 to 26, and the AIA Convention from May 14 to 16. For more information, visit thinkwood.com/tour.

WHAT'S INSIDE?

2 Program Updates

4 Program Highlights

6 Program News

8 SLB Impact

Program Updates

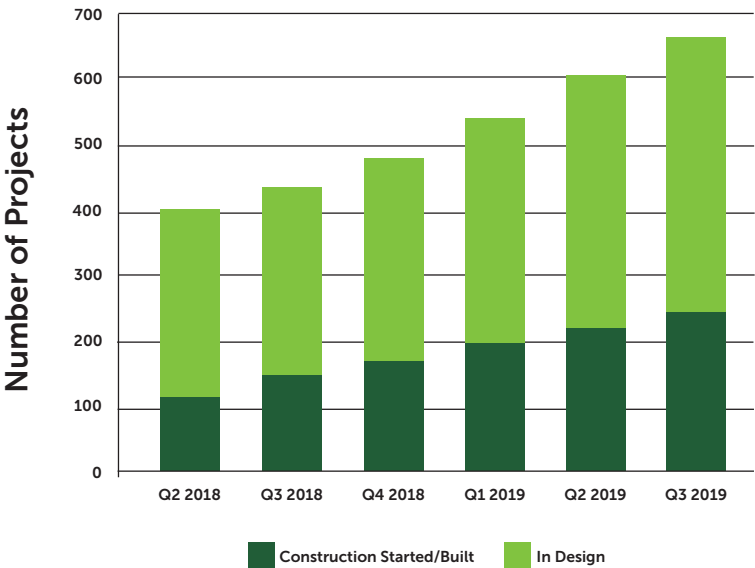
WoodWorks – Traction of Mass Timber Across the United States

Mass timber construction continues to expand across the United States, and WoodWorks provides project assistance in every region. While mass timber projects continue to see a heavier concentration in California, Washington, Oregon, Florida, and Texas, WoodWorks is now tracking 664 mass timber projects in design or construction across the United States.

As of the end of Q3 2019, WoodWorks is aware of 427 projects in which the design team is considering the use of mass timber and 237 mass timber projects that have been constructed. These early adopters have paved the way for future developers, designers, architects, and builders. With the completion of each mass timber project, the path for additional projects becomes easier to navigate.

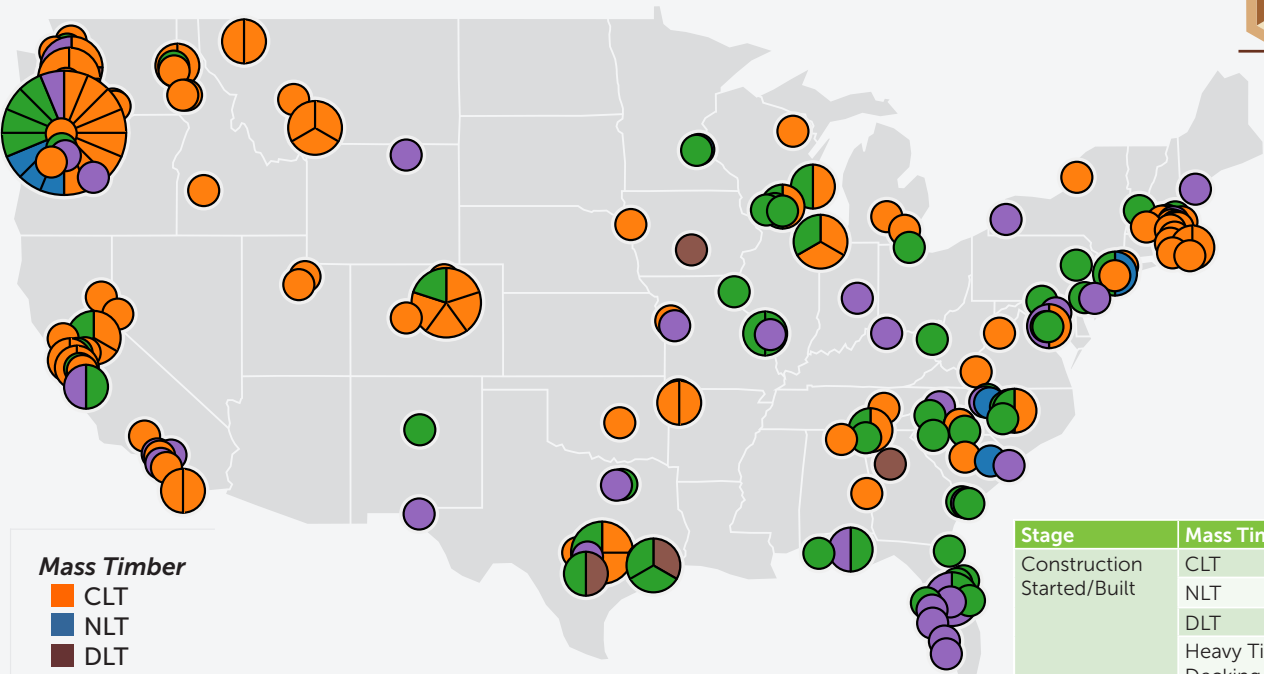
WoodWorks has tracked mass timber projects over the past six quarters and has shown staggering growth. From Q3 2018 to Q3 2019, the number of projects included—both Construction Started/Built and In Design—has grown by 51%. Overall growth shows a 16% increase each quarter. WoodWorks assists on many different project types in the

Mass Timber Map Data



multifamily, commercial, and institutional space, and the projects with mass timber are clearly growing faster than other products and segments.

Mass Timber Projects Constructed in the US (September 2019)



- Mass Timber**
- CLT
 - NLT
 - DLT
 - Heavy Timber Decking
 - Post & Beam

Stage	Mass Timber	# of Projects
Construction Started/Built	CLT	113
	NLT	8
	DLT	6
	Heavy Timber Decking	65
	Post & Beam	45
Grand Total		237

Increasing Diversity in Building Types, Heights, and Solutions

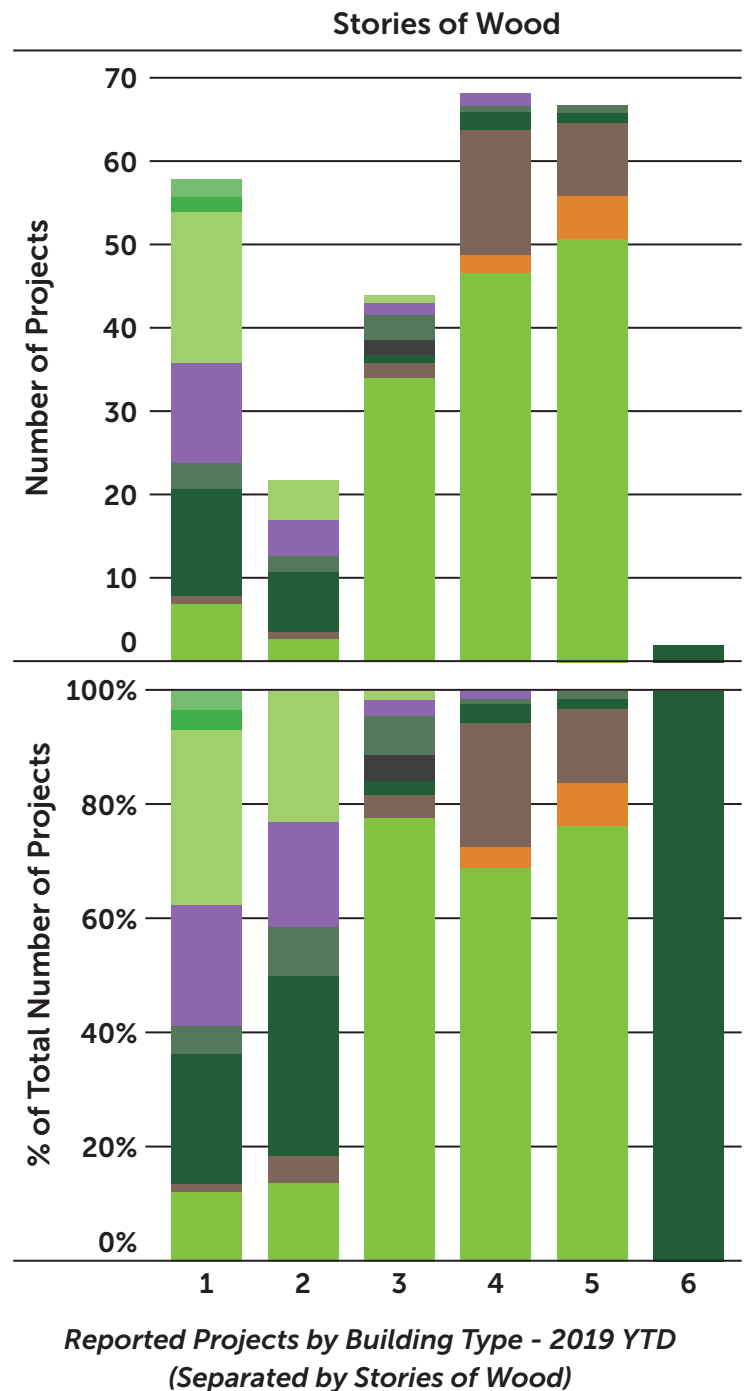
The types of buildings and heights that mass timber is being used in is also increasing in variety. During Q3 2019, mass timber multifamily occupancies remain strong at 26%, compared with 11% looking at the same time period in 2018. While 54% of WoodWorks' reported projects in the past quarter were three-, four-, and five-story multifamily projects, WoodWorks also saw increased project type diversification and conversions in one- and two-story projects in the retail, business, education, and assembly categories.

The continued adoption of mass timber in three- to five-story construction demonstrates that wood is being used in more places because of WoodWorks' efforts and due to building types having varying demands for wood structure. Looking forward to 2020, WoodWorks will continue to evolve its offerings to include a variation of WoodWorks' education topics, programs, and technical solutions.

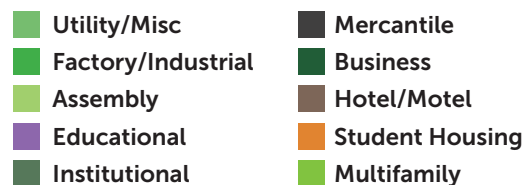
WoodWorks also helps project teams design larger and taller light wood-frame buildings with innovative building techniques. Hybrid construction combines light-frame wood construction with structural steel components and concrete podiums. As the adoption of mass timber construction continues to grow, many design teams are turning to a new form of hybrid construction. Combining light wood framing and mass timber is an excellent way to achieve project design goals that include cost competitiveness. The Canyons, a new type of assisted living building located in Portland, Ore., is a shining example of this innovative hybrid approach. The team was able to transfer lateral forces through light-frame shear walls while reducing construction time with CLT floor systems.

Podium projects offer a particular opportunity to meet strict urban density requirements at an incremental cost. Seattle is currently the only jurisdiction to allow six stories of residential wood construction, instead of five, over multiple stories of concrete without special approval.

With this offering, designers now have a viable eight-story option that is mostly wood, as opposed to an entirely non-wood alternative for projects that require eight stories. This is an incredible opportunity for wood construction in the multifamily housing area to solve the space and affordable housing objections with decreased construction costs on an overbuild project. WoodWorks invited a Seattle building official and a code consultant to present on six-over-two buildings to designers at the recent Seattle Wood Design Symposium, and the team is also developing a case study on a six-over-two project in Sacramento that was built with special approval.



Building Occupancy



Q3 Program Highlights



Point at Hudson, a 5-story, 212,212 square feet.
Courtesy: RA Schaefer & DM White Architects



Georgia
Courtesy: Brain Patrick Flynn

Code:

American Wood Council

- The AWC developed 11 public comments in response to action taken by the International Code Council (ICC) code development committees (CDC) in April—reviewing almost 650 comments, nearly 200 of which affect positions established by the industry during the initial phase of the Group B process.
- The AWC has been appointed to several ICC committees, including the ICC Off-Site and Modular Construction Standards Committee and the ICC Multi-Hazard Resiliency for Residential Construction Standard Committee.
- The first draft of a new Fire Design Standard for Wood Construction has been completed.
- The AWC is developing a new compliant Product Category Rule under contract with Underwriters' Laboratories Environment (ULE) that is now awaiting final ULE approval, becoming publicly available during Q4 2019.

Communications:

Think Wood

- Q3 2019 marked the Think Wood campaign's strategic reset. In 2020, Think Wood will move to a new execution model that relies on more tightly integrated talent, using both dedicated contractors and specialty agencies.
- Think Wood reached the Prospect goal for the year by the end of August, generating 674 (87% net new) prospects, and improving campaign efficiency by 14% over the quarter.
- The Learning Management System (LMS) Steering Committee met for its kickoff meeting with the vendor RFP and selection consultant in mid-September. Attendees included Think Wood, the AWC, and WoodWorks. In the final weeks of September, the group advised on system needs, content, and use cases to inform consultant development of an RFP.
- Think Wood is now nurturing contacts with educational and industry-specific information to cultivate interest in using wood as a construction material. Several targeted email campaigns were launched in Q3 2019, resulted in 4,043 net new contacts.

Q3



19



EDUCATION
EVENTS

8,054



CONTACT HOURS
PROVIDED

5,184



EDUCATION
ATTENDEES

43



UNIVERSITIES
TEACHING WOOD

Q3

THINK WOOD®

10.9
MILLION



EARNED & SOCIAL
MEDIA REACH

5,405



COURSE HOURS

2,399



CEU TEST TAKERS

94,246



TOTAL WEBSITE
VISITS



The Aberdeen, a 5-over-1, 49,769 square feet.
Courtesy: Tise Design Associates

Construction and Conversion: WoodWorks

- WoodWorks influenced 822 interactions, creating 342 new influenced projects (which will be reported when they go to construction) and 89 directly influenced projects, resulting in 113 million board feet (mbf) of consumption in Q3 2019.
- WoodWorks acquired 836 new contacts in Q3, which generated 356 new contact leads.
- Through its Greenprint Innovation Partnership, WoodWorks has been asked to contribute information for several publications.
- WoodWorks was invited to participate in a ULI Sustainable Development Council meeting. The goal is to become a member of this council.
- Construction management training (CMT) is off to a strong start in Q3 as the new mass timber presentation was delivered five times by WoodWorks staff across the country. In Q3, it generated two new project leads. The full-day CMT will begin in Q4 2019.



Webberville Mixed-Use - Austin, Texas

WoodWorks Helps an Engineer Set His New Firm Apart With Mass Timber

In 2016, when Forrest Bratton joined Big Red Dog to help establish its structural engineering team, he planned to leverage his mass timber experience to set his new firm apart in the market. Widely known for civil engineering and transportation services, Big Red Dog was growing the structural part of its business in Austin.

Bratton and WoodWorks have a long-standing relationship. Regional Director Sherry Mundell provided technical support on three of his previous projects—including two light-frame projects followed by a mass timber hotel. Forrest has also made use of WoodWorks education and the Heights & Areas Calculator.

A mixed-use development in Webberville was Forrest's first opportunity to use mass timber for a complete structural system. It is also the first commercial building in Texas to use CLT for both the lateral and gravity system, including the podium.

Early in the design, Mundell provided information on suppliers, costs, and building code requirements. Later, she helped the team respond to comments from building officials, who were questioning proposed fire ratings for the CLT shaft walls. Sherry provided a rationale for the team's proposed one-hour rating and engaged the AWC to contact the city. Ultimately, the city maintained a conservative stance that required an independent shaft wall liner but allowed the project to proceed.

The developer, Jake Harris of Harris Bay, also contacted Sherry independently. They'd spoken in the past, and he reached out to Sherry to discuss the Webberville project at several points during its design.

The Webberville mixed-use development in Austin includes a glulam post-and-beam frame at Level 1, light-frame upper walls, and CLT floors/ceilings and shear walls. It is currently under construction.



PROJECT DETAILS

Description:	Type V-A, four stories of mass timber
Size:	44,700 square feet
Value of construction:	\$9 million
Value of wood products:	\$464,921
Volume of lumber:	779,429 board feet (equivalent)
Status:	Under construction

Program News

Think Wood Implements Lead Scoring Strategy

Think Wood manages a database with nearly 60,000 contacts and has leveraged the organization's CRM investment to deploy a lead nurture framework and scoring methodology. The strategy is designed to identify, qualify, rank, and grow developer and architect leads. This process gives Think Wood a stronger understanding of each contact's intent to specify wood in upcoming projects.

Think Wood nurtures contacts with education and practical information regarding wood as a construction material. Contacts are enrolled in a Welcome email series after taking one of the Think Wood Continuing Education Units (CEUs) or engaging in paid social media activity, and then are funneled, based on job title, into a second, more targeted series. The weekly email campaigns are designed to increase interest in designing and building with wood.



As contacts engage and interact with Think Wood content, they earn a higher lead score and move down the funnel from "prospect" to "lead" to "marketing qualified lead." With continued assessment of the data and dialogue with the WoodWorks team, the methodology will be refined in Q4 to ensure Think Wood cultivates and shares high-value, project-ready leads with the technical experts at WoodWorks.

TOP ACTIVE COMPANIES

Gensler
AECOM
BASE4

TOP ACTIVITY BY STATE

California
New York
Washington

TOP ACTIVITY BY COUNTRY

USA - 96%
Canada - 2%
Ireland - 1%

TOP JOB TITLES

Architects
Designer/Engineer
Principal

TOP DOWNLOADS

CLT Handbook
NLT Handbook (US)
Mass Timber
Stands Tall Brief

Think Wood Paid Search Advertising Reaches Residential Contractors

Paid search advertising, or search engine marketing (SEM), is a strategic marketing tactic that enables Think Wood to bring new, relevant visitors to the Think Wood website, where they can enter the established lead-nurturing framework. When architects, developers, and residential contractors search the internet for wood content and specific keywords or phrases, they're presented with relevant advertisements. Once the user clicks on the ad, they are directed to the Think Wood website where they are served with relevant information and collateral on wood.

To target residential contractors during deck season, Think Wood launched an SEM campaign focused on wood outdoor-living projects. The campaign drove more than 5,800 visits to the Think Wood website in September alone, with a significant portion

of the traffic coming from users who searched specifically for pergola content. The keyword “Pergolas” drove the 1,931 clicks at an efficient \$2.10 cost per click (CPC), 64% cheaper than the year-to-date total. When users clicked the pergolas ad, they visited a landing page on the Think Wood website titled “Why You’ll Want a Pergola and How to Build One.”

The landing page enticed visitors with engaging articles and how-to guides, and invited visitors to navigate to other areas of the site to engage further with opportunities to watch YouTube videos, download resources, and visit SLB partner sites such as the AWC and WoodWorks. To date, the SEM ads have a click-through rate of 3%, which is 80% higher than the 2.4% business-to-business industry average, and a CPC of \$2.23, 67% lower than average—indicating that Think Wood is reaching contractors effectively and efficiently.

SEM is an effective marketing tool as it provides measurable results, allowing an assessment of every aspect of a campaign, including the number of clicks, the cost per click, and how many conversions are coming from these clicks. Additionally, an advertiser pays only when a user clicks on the ad or chooses to engage with the promoted content. This allows for strategic changes to improve performance while minimizing budget waste.

SEM also allows marketers to improve brand awareness over time, given that some search engine users will notice the ad but not visit the site until later. Since launching the FY19 campaign targeting architects, developers, and residential contractors, Think Wood has appeared for over 190,000 relevant SEM searches.

California State Fire Marshal Makes Positive Recommendations on Wood Use

The California Office of the State Fire Marshal finalized its recommendations to update the 2017 California Building Code to include tall mass timber code provisions as well as updates to the wildland-urban interface (WUI) requirements.

Throughout 2019, the AWC and other industry partners participated in two Office of the State Fire Marshal working groups charged with reviewing and making recommendations on ICC 2021 tall mass timber code changes and California WUI provisions. Earlier this month, the State Fire Marshal held hearings on code-change recommendations being proposed by the agency to the California Building Code, which will next be considered by the California Building Commission during 2020. The process will then lead to adoption of a 2019 supplement to California’s statewide building code with an effective date of July 1, 2021.

During the hearings, the State Fire Marshal’s office presented its recommendation to adopt the ICC tall mass timber code changes. Despite opposition from state fire-protection officers, seeking a one-third reduction in allowable height and stories, the Fire Marshal finalized its recommended adoption of ICC’s maximum of 18 stories for mass timber construction.

The State Fire Marshal recommendation does, however, include a building area reduction consistent with current provisions of the California statewide building code for just the tallest of these buildings.

Additionally, with respect to WUI provisions, some initial proposals would have required only noncombustible or ignition-resistant materials for all decking and siding applications. However, in a positive step for wood products resulting from industry’s direct engagement, WUI building construction requirements remained, for the most part, unchanged. While there was considerable debate on the need for new and revised construction provisions in the code, there was agreement that it was difficult to assess the effectiveness of proposed changes without further research, which is expected to take place for the next (2022 Supplement) review. One provision being recommended this cycle will require metal flashing where exterior decks attach to exterior walls. Ember accumulation at this location has been identified as a cause of combustible siding ignition.

The tall mass timber recommendation from the Fire Marshal bodes well for taller mass timber projects in California, and the recommendation on WUI provisions is positive for protecting the continued appropriate use of wood in California’s wildland-urban interface areas.

Architecture 2030 to Support Mass Timber as a Carbon Solution

WoodWorks President and CEO Jennifer Cover recently participated in a workshop to determine whether Architecture 2030, a nonprofit established to address climate change, should support mass timber as an important carbon-reduction opportunity. Architecture 2030 reports that, globally, embodied carbon will be responsible for 50% of total carbon emissions related to new construction between now and 2050. Its goal is to help the architecture community achieve carbon neutrality in all new buildings by 2030—and leaders wanted insight on the specific benefits of mass timber. Cohosted by the Nature Conservancy and the Climate and Land Use Alliance, the workshop also included participation from the U.S. Forest Service, World Resources Institute, ClimateWorks, American Forests, National Alliance of Forest Owners, New England Forestry Foundation, Resources for the Future, Lendlease, Arup, Kaiser Group, HOK, HDR, the City of Portland, and several universities.

As a result of this meeting, Architecture 2030 will take a position that mass timber can be a key part of the climate change solution. The Architecture 2030 leadership now has a group of organizations they can call on for support related to mass timber, and there is greater awareness of WoodWorks as a technical resource and education provider among these influential groups.

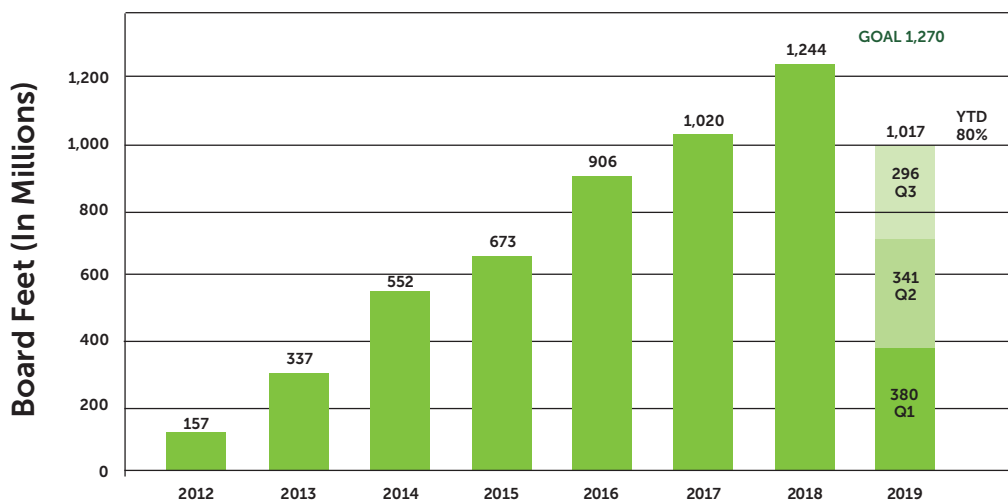
SLB Impact

Throughout the year, the SLB tracks changes in incremental softwood lumber demand that are driven by its funded programs and initiatives. Anecdotally, the SLB has long known that once building professionals try wood, they are more likely to use it again because of its excellent performance, ease of use, cost-efficiency, and other comparative advantages.

Prime Consulting, the SLB's third-party evaluation and metrics consultant, has been working to provide additional insight to measure wood's future value demand—or tail effect—brought about by the SLB's investments in code, communications, and conversion. The tail effect is realized when an individual or firm educated and trained by an SLB-funded program applies new knowledge in additional building projects without added training or support. Our work affects projects today and well into the future.

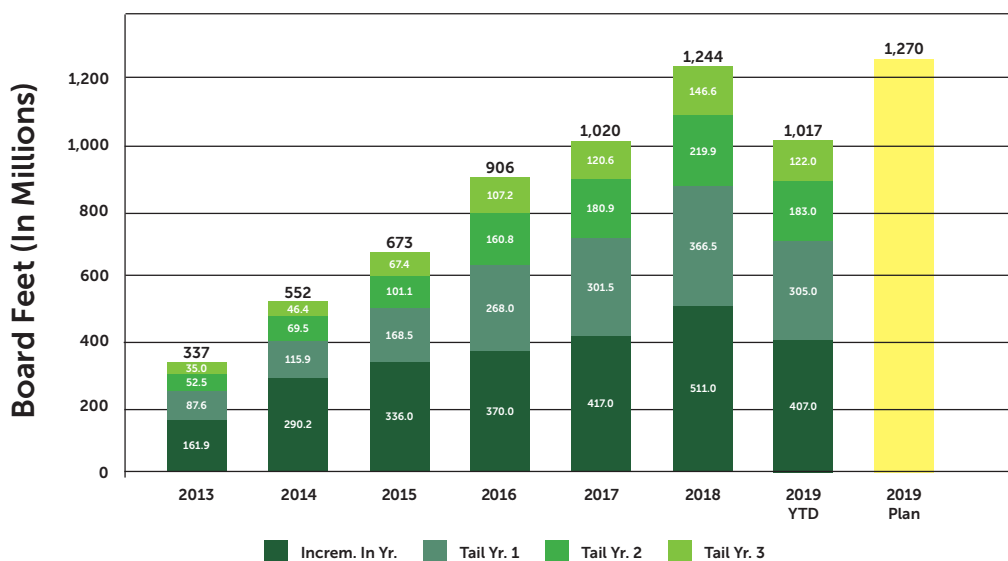
Prime Consulting developed a projection methodology based on several years of study and analysis of projects influenced by SLB-funded programs. By tracking direct incremental lumber consumption of converted projects in the year of construction and projected tail effect for three subsequent years, the SLB is better able to illustrate the impact of its investments and the return generated for the softwood lumber industry. We're seeing a trend: building with wood today inspires innovation and creativity in the wood projects of tomorrow.

Demand Generated By SLB-funded Programs



Source: 2019 Prime Consulting ROI Report

Incremental Consumption in Year of Construction & 3 Year Tail



Source: 2019 Prime Consulting ROI Report