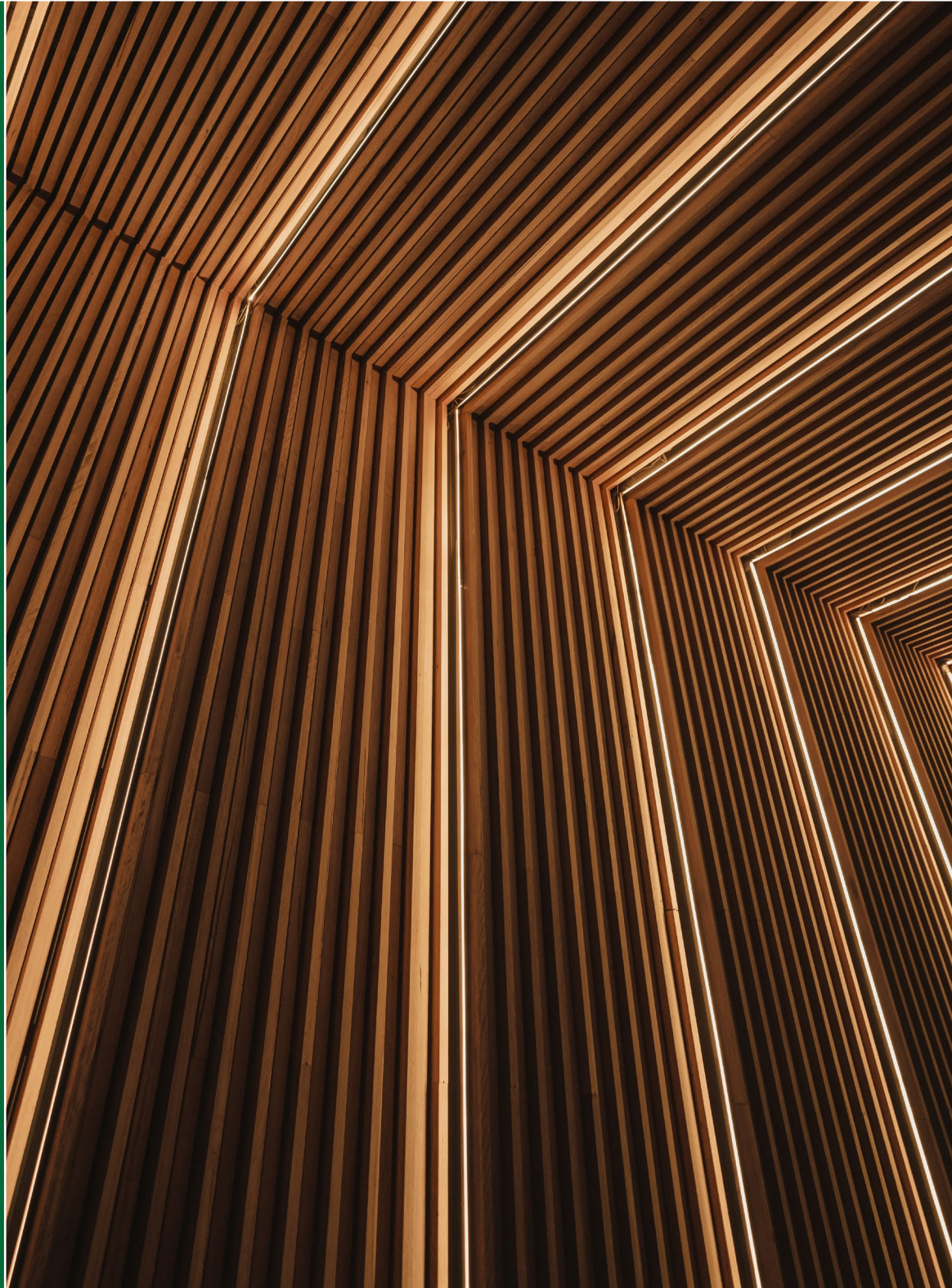




2021

AMERICAN
WOOD COUNCIL
ANNUAL REPORT



Letter from the Chairman & CEO

Dear AWC Members and Friends:

As we turn to 2022 and the implementation of our new Strategic Plan, we take a moment to look back at 2021 and the notable accomplishments achieved by AWC's remarkable staff across a wide range of areas foundational to the success of this industry.

While there were a number of important wins during last year's code process, one is particularly noteworthy given it was years in the making. AWC completed a multi-year plan to achieve fully exposed mass timber ceilings in Type IV-B construction during the International Code Council (ICC) code development process. This strategy cut across our programs, relying on our engineering team to conduct additional fire tests on cross-laminated timber, our education team to present the testing results to ICC eligible voters, leveraging our field staff's expertise and credibility within the ICC process, and engaging against an aggressive misinformation campaign attempting to overturn the result. This code change will not only significantly reduce costs of construction but also provide architects with new creative options to showcase the beauty of wood.

AWC also stepped up to address challenging issues that extended beyond our typical focal areas. We led the industry response to concerns raised by policymakers and the media regarding lumber supply, ultimately changing the narrative to focus on real challenges like transportation and workforce. AWC also worked with the appropriate partners to develop urgently needed technical information to diffuse concerns surrounding multi-species grademarks commonly used in Europe. AWC's efforts prevented potentially major disruptions to home building across North Carolina and in other jurisdictions.

Finally, AWC developed a robust climate strategy over the course of 2021 for the industry and became a leading technical voice on issues related to carbon in the built environment. We made significant progress in designing and launching the most robust database ever established for the wood products industry, which when fully realized, will provide the foundation for AWC and the industry's climate advocacy in a world demanding greater transparency. We engaged both Congress and the Administration to educate and shape policy around data management and carbon accounting to inform future procurement for federal buildings. We also supported wood building demonstration projects, successfully securing a pilot project requiring the Department of Defense to utilize tall mass timber as a means of achieving a lower embodied carbon footprint.

We invite you to read through the full report detailing the many accomplishments achieved on behalf of our members, and we are excited to build on these successes in 2022. Thank you for your support, and we look forward to continuing to serve your company and the industry.

Sincerely,



ERIC CREMERS
CEO, PotlatchDeltic
AWC Chairman of the Board



JACKSON MORRILL
President & CEO
American Wood Council



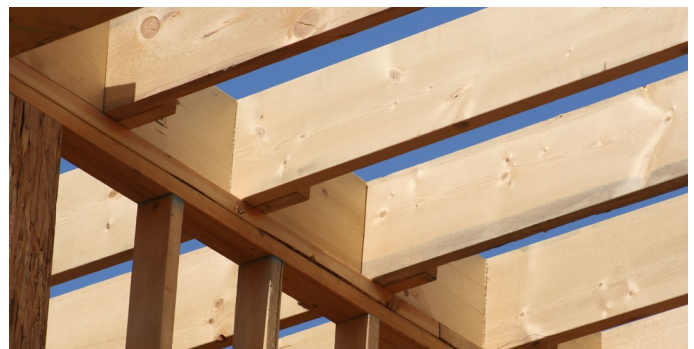
AWC Sets the Stage for Mass Timber Advances in the IBC and IFC Process

Group A Process: AWC scored major wins for our industry as part of the 2024 I-Codes Development process. The 2024 International Building Code (IBC) and International Fire Code will allow for fully exposed mass timber ceilings in buildings up to 12 stories. Voters also approved a change delaying the application of non-combustible floor covering during construction to later phases - a change that could reduce construction costs without elevating fire risk.

AWC played a pivotal role on several fronts in these successes, particularly in a multi-year plan to achieve fully exposed mass timber ceilings in Type IV-B construction. AWC secured a Wood Innovation Grant in 2019 to conduct more fire testing on cross-laminated timber (CLT) to study the fire behavior of PRG 320-compliant CLT compartments. The original fire tests conducted and cited in the approval of tall mass timber in the 2021 codes used an older iteration of CLT than is required in the codes. This fire research was completed in 2021, and AWC presented the findings to our code official audience as part of our lineup of free monthly webinars prior to the ICC voting process. This helped inform code and fire officials voting on the code revision, and in fact, was cited many times in testimony supporting the change.

Just as critical was AWC's effort to counter a disinformation campaign designed to influence voters and overturn the proposal to increase allowable exposed mass timber in Type IV-B ceilings in the last stretch of the Group A process. To neutralize the campaign, we provided testimony throughout the public hearing process and developed an online voting guide for eligible code officials, fire officials and other voters. In addition, AWC produced special e-newsletters, leveraged social media, direct mail, and monthly webinars to educate

code officials during the hearing process. These efforts ultimately ensured AWC's success in protecting the code change proposal, which will be incorporated in the 2024 IBC.



Fire Design Specification

After six years of work, AWC released its new *2021 Fire Design Specification for Wood Construction (FDS)*, which contains all the need-to-know fire design information for wood members, assemblies, and connections to meet code requirements. The FDS also provides calculation procedures to address the added fire resistance and thermal benefits of protection by use of additional wood cover, gypsum panel products, and insulation. The additional calculation provisions were developed to allow for standardized methods of calculating thermal separation and burn-through requirements as outlined in the ASTM E119.

The current provisions for no more than 20% exposed mass timber ceilings in Type IV-B construction has been revised to allow for fully exposed mass timber ceilings.

Multi-Species Lumber Grade Mark Resolution

AWC worked with the American Lumber Standards Committee to develop a new table of design values for multi-species lumber grade marks. The new table was urgently needed after the North Carolina Department of Insurance (NCDOI) issued a press release warning of the potential for catastrophic failure of wood structures built with European lumber, which eventually escalated to lumberyards in surrounding states refusing North American lumber with a specific gravity of less than 0.42.

The new table of design values diffused the situation and helps designers and regulators navigate the complications that have emerged in grade marking and stamps, which may sometimes indicate more than a single species of wood, with each species having its own, distinct design values. These stamps are more common with European producers but are also permitted in North American species combinations. AWC's work also included prompting NCDOI to issue another press release clarifying their original statement.

AWC also worked with NCDOL to resolve confusion over wall framing provisions and design wind speeds that can be referenced by the agency. AWC now has an [FAQ](#) on its website addressing the issue, which we believe will prevent confusion. AWC engaged NCDOL after it sent out a press release in June warning of the potential for catastrophic failure of wood structures built with European lumber.



Design Values for Multi-Species Lumber Grade Marks

[VIEW HERE](#)



AWC Engages Leaders on Pandemic Supply Chains, Labor and Transportation

Leading the Industry Response: AWC led the industry response to lumber supply concerns, including being active with Congress, the Biden Administration, and media publications. President & CEO Jackson Morrill participated in several meetings with the White House Supply Chain Disruptions Task Force and high-level representatives from the Department of Commerce and Department of Labor to discuss challenges the industry was facing - many of which were felt by other industries during the pandemic. Information shared during these meetings were compelling in the Administration and informed Agencies' understanding of the issues facing the industry.

AWC released regular media statements highlighting the significant investments companies made to expand mill capacity, a step that resulted in 1.4 billion board feet of additional capacity in 2021. AWC also developed an informative two-pager, which was included in federal legislators' briefing packets to prepare for the House Agriculture Committee's Subcommittee on Conservation & Forestry hearing, entitled, "The U.S. Wood Products Industry: Facilitating the Post COVID-19 Recovery." Subcommittee leadership expressed support for the industry from an environmental and economic perspective, and questions raised by subcommittee members explored volatility in the

lumber market. Industry testimony also explored ongoing concerns about transportation and labor shortages, as well as efforts to highlight the importance of the U.S. Dept. of Agriculture to be a leader in procuring more wood products in the built environment and the federal building portfolio.

Finally, AWC formed a workgroup consisting of member human resource leaders to share concerns and ideas related to filling employment positions, existing state and federal programs to assist and new ideas for the Administration to consider. AWC also used these contacts as an opportunity to introduce WoodWorks to the Labor and Commerce departments to position future collaboration on its Mass Timber Construction Management and Installer Training programs.



Industry Responding to
Surge in Lumber Demand

[VIEW HERE](#)

Lumber Supply Podcast

Over the year, AWC responded to more than 20 media inquiries on lumber supply, including eight fielded on behalf of AWC's membership. One of those was from a new podcast, Construction Revolution, geared toward helping those in the construction industry build long-term success. AWC's Heather Stegner was invited to be a guest on the podcast's second show. During the interview, Stegner covered a range of topics, from the lumber supply chain challenges to long-term capacity effects of the Great Recession as well as industry innovations and the carbon storage potential of wood products.



See how AWC ensured the facts
were at the center of the lumber
supply challenge

[LISTEN HERE](#)



03 CARBON

The Public-Private Partnership Behind a Stunning Mass Timber Basketball Arena

Video Case Study on Public-Private Partnerships a Hit:

AWC kicked off National Forest Products Week (NFPW) with a robust [panel discussion](#) highlighting the public-private partnerships critical to the construction of the University of Idaho's new mass timber basketball arena. The virtual event began with a viewing of a 10-minute video highlighting the vision of the project, the role of Wood Innovation Grants in proving the concept, the carbon benefits of building with wood products, and the industry's strong role in seeing the project to fruition. The university received two Wood Innovation Grants that were critical to the project. The discussion built upon the Biden Administration's [proclamation](#) for NFPW, which called out support for opportunities to advance forest conservation and creating

jobs by expanding markets for innovative forest products through federal programs like Wood Innovation Grants.

The video was shared with members, promoted on social media platforms and distributed to key Congressional offices. The video has been viewed nearly 110,000 times on YouTube.



Public-Private Partnerships
– ICCU Basketball Arena

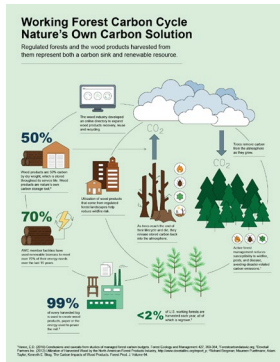
[WATCH HERE](#)



substituting wood for conventional building materials can reduce emissions by 70%



using wood in half of new urban construction can achieve emissions goals by 70%



Working Forest Carbon Cycle Infographic

[VIEW HERE](#)

NDA

In the 2022 National Defense Authorization Act (NDA), AWC and the forest products industry worked to include a pilot project for five mass timber buildings to be constructed by military branches. In final negotiations, the relevant section of the NDA – Section 2861 – was broadened to include other materials outside of mass timber under the term "sustainable building materials." While the expansion of the definition could maintain a business-as-usual approach for the Department of Defense (DoD), it will now be required by law under this program to consider tall mass timber pilot projects as a means of achieving a lower embodied carbon footprint in the DoD's building portfolio. AWC members of the forest products industry built strong bipartisan support for the mass timber pilot program and are looking to build on this momentum to push for further adoption and acceptance of wood products by the DoD in the 2023 NDA.

Shoring Up Industry Data

AWC uses data related to harvesting and manufacturing operations to communicate the good performance of the industry in both policy and the marketplace, and both are demanding increased transparency. Because of this, AWC gathered the industry and generated strong consensus that the process needed improvement if industry was going to maintain its ability to demonstrate superior environmental performance. With that agreement, in 2021, AWC launched

an online platform for collecting confidential mill-level environmental data. The next phase of the platform is the calculation of Environmental Product Declaration data, which has started and will continue through 2022.

Federal Push & Beyond

Throughout the year, AWC worked with Capitol Hill and federal agencies to ensure we were a trusted resource when it came to conversations about reducing embodied carbon in the built environment. A Sustainability Committee was also convened to allow member companies to guide AWC's actions on issues related to carbon, climate, and sustainability.

Staff testified during hearings at the General Service Administration's Green Building Advisory Committee helped prepare congressional staff for the infrastructure discussions, and provided multiple comments to promote policies that both incentivize the use of lowest-embodied carbon building materials and consider the long-term carbon storage capabilities of wood products. AWC also emphasized the importance of proper carbon accounting, especially in the growing landscape of "Buy Clean" legislation, which would require the agency to leverage its authority to improve the rigor and accuracy of carbon accounting and disclosure standards.

Beyond Capitol Hill, AWC also actively participates in several ISO Technical Committees where international standards are developed. In 2021, AWC has been able maintain the ability of renewable materials, such as wood products, to fit within the ISO Circular Economy standards. All six of the ISO Circular Economy standards are expected to be published by 2024.



85 educational events and trainings



96% of code officials agree that AWC is a trusted resource



21,996 app downloads



04 TALL MASS TIMBER

AWC Assists States and Localities with Tall Mass Timber Adoption

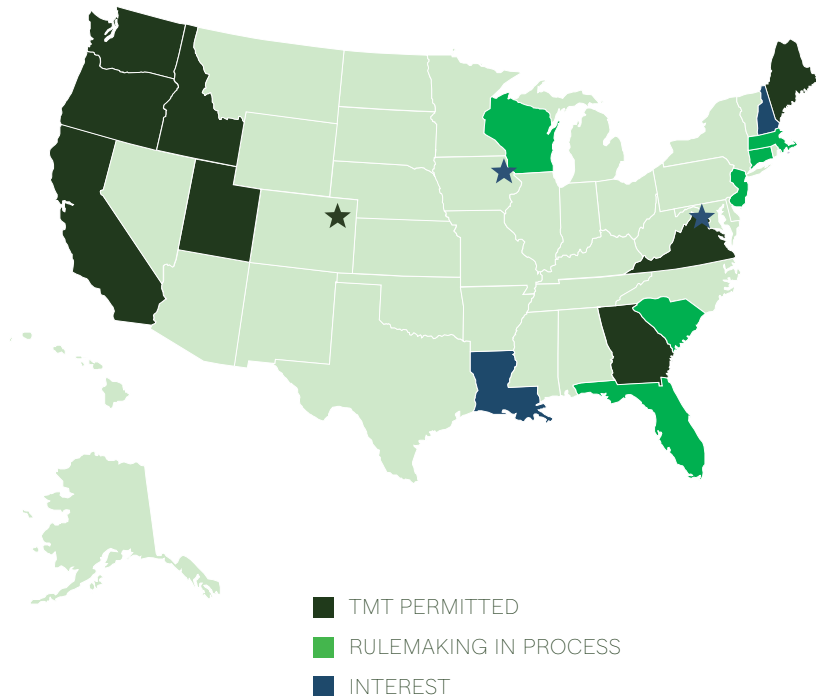
AWC continued to support states and localities interested in adoption of the tall mass timber provisions. In 2021, 13 more states or localities either began the process or reached out to AWC to indicate interest in adopting the tall mass timber provisions. In total, with the provisions having only been officially released for one year, 19 states and cities have taken action or shown interest in incorporating tall mass timber into code.

In addition to working with legislatures and building code departments on incorporating tall mass timber provisions in to state and local codes, AWC's Fire Service Engagement team has played a key role in educating local fire officials on all of the fire testing done prior to approval. For example, both AWC's field staff and fire service team were actively engaged in Wisconsin, home to the 25-story Ascent building, as the state researched tall mass timber.

AWC Details Approaches to TMT Adoption in Structure Magazine

Our work in supporting states and localities in adoption of the tall mass timber provisions has often prompted the question on the best method of incorporation. AWC's Ken Bland wrote an article in [Structure Magazine](#) on the three main approaches to incorporating the 2021 International Building Code tall mass timber provisions into state and local code. Each approach has the same end result, but the article makes it easier for building code departments to choose the right method for their area and consistency within their existing code. Bland also pointed out important information about some of the code changes moving through the 2024 development process jurisdictions should consider in any move for early adoption.

TALL MASS TIMBER ADOPTION



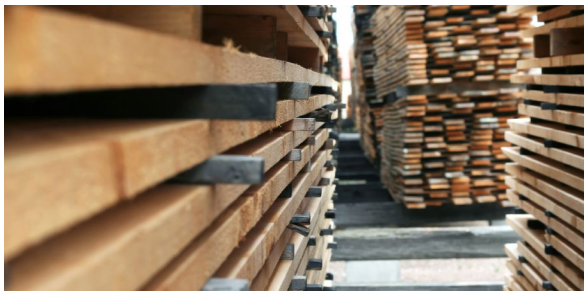


05 STATE & FEDERAL ACTIVITY

AWC Plays Major Role in State Building and Fire Codes

AWC continued to thwart attempts by competing building material groups to push anti-wood legislation, especially in what are now the typical targets of Los Angeles, Massachusetts, Maryland and New Jersey. In Los Angeles in particular, AWC enlisted support from prominent groups, including the American Institute of Architects, Los Angeles Business Council, and U.S. Green Building Council, and submitted a letter in opposition to the Los Angeles City Council. AWC also successfully encouraged the Environmental Defense Fund to oppose the motion in Los Angeles, adding an important environmental perspective to the debate and highlighting the potential negative environmental consequences of limiting wood construction.

Also in California, AWC staff successfully argued against making any revisions to ASTM E2632 that would have significantly altered a critical wood deck fire test in Wildland Urban Interface (WUI) areas. The current test is used in California to show the acceptance of certain wood decking surface materials in WUI areas. A proposal would have expanded ASTM E2632 to require testing of the entire deck assembly, including joists. AWC pushed against any change to the current standard, arguing doing so would have jeopardized the acceptance of recognized decking materials. The committee ultimately voted - with AWC's support - to write a new standard for the purpose of evaluating fire performance of the entire deck assembly. AWC is committed to participating in the development of this new standard.



PCWP MACT Testing Scope Narrowed

EPA is developing a hazardous air pollutant (HAP) testing plan to fill information gaps as part of its reconsideration of the Plywood and Composite Panel (PCWP) MACT. EPA sent three dozen air emission testing requests to nine companies primarily focused on OSB, particleboard and MDF. While burdensome, AWC's joint advocacy efforts with members resulted in the scope of testing shrinking by at least an order of magnitude compared to where EPA started, saving companies significant amounts of money. EPA had considered testing of pre- and post-press equipment, steam or gas fired dryers for multiple pollutants and other sources. The winnowing of testing should also pay dividends when it comes to regulation because by excluding these sources, EPA is signaling a more flexible approach to requirements rather than imposing strict limits.



PM NAAQs

The EPA's Clean Air Science Advisory Committee (CASAC) reviewed the health effects studies of low-level exposure to particulate matter and are recommending lowering the current limit of 12 ug/m³. AWC met with EPA to stress the significant scientific uncertainties in available health studies and the challenge of mills to meet the tighter limits that are expected during EPA's reconsideration. AWC is committed to work with our coalition to develop advocates and champions for moderation (not lower than 8 ug/m³) and keeping the standard closer to the current at the federal, state and local level.



06 FIRE SERVICE ENGAGEMENT

Addressing Negative Perception

After the Boston Globe's "Real Estate" blog posted an article with negative comments about wood construction and troubling statements attributed to a Massachusetts Fire Chief, AWC worked on several fronts to respond. First, AWC teamed with a Massachusetts-based mass timber expert who submitted a rebuttal highlighting the safety measures taken in wood construction and the carbon benefits of mass timber. AWC staff submitted a letter correcting the story's inaccurate characterization of code requirements and the code development process. The newspaper declined to publish the letter, so [AWC posted it to the website](#).

AWC's Fire Service Relations Manager Ray O'Brocki used the article as an opportunity to work behind the scenes to build relationships within the fire service and ensure AWC is seen as a resource. Ray reached out to the Fire Chief and set up an in-person meeting to hear his concerns and dispel some of the inaccuracies about engineered wood products mentioned in the blog piece and to offer training and resources. The

Chief shared that he had no grave concerns about wood construction and said the reporter cherry-picked his interview comments, leading to the misrepresentation and negative tone. The productive meeting ended with the Chief, who teaches a building construction course at a local community college, inviting Ray to make a presentation to the class.

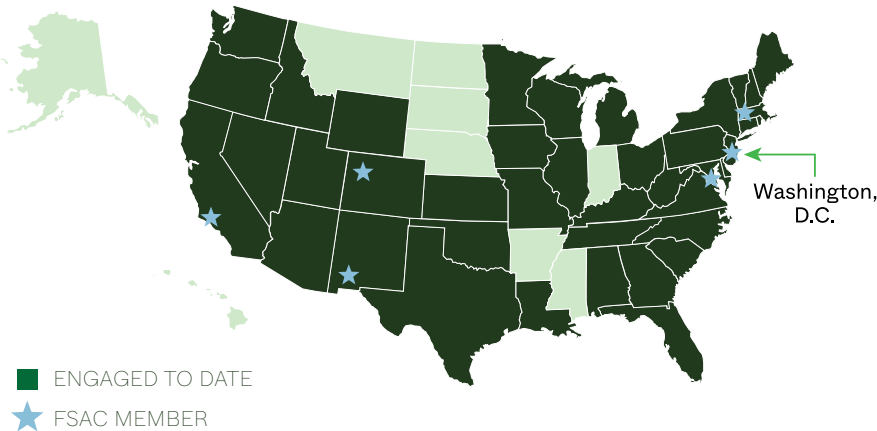
“AWC has been a true partner to the fire service community for the nearly two decades I've been involved. AWC's proactive outreach and measured approach is highly valued and it remains a great fire service resource for training and best practices.

—SHANE RAY, PRESIDENT OF THE NATIONAL FIRE SPRINKLER ASSOCIATION AND FORMER STATE FIRE MARSHAL

Building Relationships

In 2021, AWC's Fire Service Engagement team has built relationships with fire officials in 39 states and Washington, D.C. In addition to building out a wide network, the team continues to focus on building out new relationships in states such as New Jersey and Massachusetts that have been traditional targets for competitors attempting to limit wood construction. To date, no such limitations have been successful.

FIRE SERVICE ENGAGEMENT TO DATE





Courtesy of FDIC International

from around the country for training and industry product and services. The tall mass timber presentation was selected from more than 900 proposals and allowed AWC to showcase its ongoing efforts to educate on wood products and fire safety to a broader network of fire officials. Another presentation of note was at the annual Congressional Fire Institute (CFI) National Symposium, which educates federal members of Congress on fire and emergency service.

TMT at FDIC International

AWC's Fire Service Relations Manager has become a known quantity in educating the fire service about wood construction, tall mass timber and construction fire safety practices. In 2021, among his almost 30 training events, he presented at [FDIC International](#), a prestigious fire service meeting that attracts thousands of fire and rescue officials



28 Fire Service Trainings



40 Meetings with Targets



07 STRATEGIC PLAN



Leading Strategically

As AWC moves into its second decade, we continue to be uniquely positioned to advocate for the wood products industry on the front lines of codes and standards development and legislative and regulatory policymaking. What is new today, however, is that the industry sits at an important inflection point, with tremendous opportunities to expand through tall mass timber construction and an emerging carbon-conscious built environment. It is with this in mind that AWC's Board of Directors crafted our next five-year strategic plan to direct our work on behalf of the industry.

AWC staff will be working hard over the next five years, and beyond, to implement this robust Plan and continue to ensure

wood products are properly recognized in building codes and standards, while also providing strong advocacy support to protect the industry from overreaching federal environmental regulations under the current Administration and beyond. AWC will also be expanding our staff to support the newer initiatives related to securing national adoption of the tall mass timber code provisions and ensuring the rules of the game for carbon accounting properly credit all of the benefits wood products provide. It is a truly exciting time, and AWC is ready to take up the mantle and help lead the industry in this new era of opportunity under our new Strategic Plan.

