Experts from all facets of the railroad, hardwood and wood tie industries were on hand at the 2014 RTA Conference & Technical Symposium to share their insight with attendees. Not only did they identify challenges the industry would face over the coming year, but they also brought attendees up to speed on bright spots such as an improving economy and filled everyone in on the latest research and development and legislative initiatives.

**Economics Session**
Jonathan MacKay, Morgan Stanley
There’s a next to zero risk of a recession right now. Meanwhile, inflation remains fairly muted. This is a pretty good environment for growth and markets.

Tony Hatch, ABH Consulting
The new energy world is shaking up freight railroading. Crude by rail increased from 4,000 cars in 2009 to 400,000 cars in 2014. There is “gi-normous” railroad capital spend. There is targeted business spend—chemicals, fertilizers, steel, autos, Mexico. Can the rails handle it now and also in the future? The answer is, I believe, yes, they can.

**Procurement, Resource & Utilization**
Pat Rita, Hardwood Federation
EPA is going to come out any day with a carbon accounting framework for biomass energy. Biomass combustion could be lumped in with coal and fossil fuel. This has become an issue of primary focus for us.

John Ed Anthony, Anthony Timberlands
One of our major problems is shortage of logging capacity. When we get logs to the mill, it’s a question of what we choose to do with them and why. The hardwood industry is evolving in ways that may only be obvious to us on the ground. There are plenty of hardwoods for a healthy tie market.

Larry Jones, IndusTREE Timber Inc
Logging is a weak link. We have aging fleet equipment, and new equipment technology is much more expensive to purchase and maintain. Sawmilling worries me tremendously in general with what’s coming down the pipe. Even if I produce more, I’ve got to find the labor, the trucking.

Darrell Beasley, Beasley Forest Products
We need financial support for startup logging crews. We must identify individuals with potential, and somebody will have to take the risk to help them start up. Local banks will not do it. It will fall to the industry to take risk.

**Business Luncheon**
Joseph C. Szabo, FRA
Passenger and freight rail are the future of transportation. At the foundation of this growth is the foundation of railroading—the crosstie. This is literally the tie that binds together the very infrastructure that created a national economy in the 19th century.

**Special Presentation**
Dallin Brooks, WWPI
The Washington Department of Ecology has done a study or railroad crossties and pH levels in the Puget Sound. They accuse crossties of the decline of life in the Puget Sound. RTA, WWPI, Jeff Morrell, BNSF, UP and Tacoma Rail will continue to work with Washington Department of Ecology to make sure they understand the creosote-treated tie is not at the base of this issue.

Mike Ogborn, Ogborn Consulting Group & ASLRRA
In cooperation with the FRA, ASLRRA will establish a six-month pilot project to improve and strengthen safe operations on short lines handling crude oil. The goal will be to establish a commitment to enhancing a strong safety culture, operating practices and compliance.

Ed Hamberger, AAR
There was $25 billion in spending last year and $26 billion this year. We are hiring people, buying locomotives, putting steel in the ground, buying ties. What we don’t need is the heavy hand of government to tell us what to do.

Keith Hartwell, Chambers, Conlon & Hartwell
All the drama this year in the election is in the
U.S. Senate, where there is a good chance Republicans will take over the Senate. There is an increase in the S&P 500 the year after a Republican flip, so the Republicans taking the Senate is a positive step.

**Engineering Forum**

**Randy Bowman, Norfolk Southern & AREMA President**

AREMA just completed our annual conference and exposition in Chicago Oct. 1. We beat our past record of attendance of more than 3,500 attendees. Our exposition was a sell out, and we had a waiting list. In 2016, AREMA will be back here in Orlando at the Hilton Orlando.

**Walt Smith, BNSF**

There’s always going to be a place for wood ties at BNSF, especially where we have unique crossing components such as in the Tower 55 Diamond installation. Wood ties are more resilient, more forgiving.

**Philip Merilli, Norfolk Southern**

With negative reinforcement, people do just enough to get by. Today, we look for behaviors we want to see repeated, and we also coach. We identify risk and share consequences. Positive reinforcement for good performance leads to going above and beyond. We quickly embarked on a cultural change starting with our executives and following through with all employees.

**Jim Holder, Union Pacific**

Beginning in 2015, all high-decay areas will receive borate-treated crossties. Currently, UP specifies a two-step borate treatment process requiring green ties to be borate treated prior to the air drying process. Next year, we will put in 800,000 borate ties, and our demand will be in that 700,000-900,000 range looking out over the next couple of years.

**Tod Echler, CSX**

Last year, I asked what the industry is doing to support the railroad industry. The issues ➤
crosstie and switch tie availability, price volatility, and material research for the next step beyond borates. Thanks to you, our crossties have made it to us at CSX. We worked through the price volatility.

**Research Forum**

**Tim Carey, Arch Wood Protection**

We took four cores out of each tie from the Southeast Georgia site. We only sprayed one of the individual cores. Even after four years of exposure, there’s still a lot of borate present. It’s all about getting more ties out there. We are going to be working with more railroads to get them in place.

**Jeb Belcher, Georgetown Rail Equipment**

Georgetown Rail has developed an X-ray system to inspect ties in track. We have seen significant industry acceptance of automated tie inspection, because it gives the ability to assess tie condition at high rates of speed, consistent implementation, etc. In 2014 alone, we will surpass 20,000 miles in our inspections.

**Jeff Lloyd, Nisus Corp.**

We have seen fantastic borate diffusion after Boulton treatment. It is completely and utterly impossible to treat white oak heartwood to this level with any other treatment, and I have seen the best results of my career.

**Jeff Ellis, Chemist**

We did not find any significant difference in the crush strength between wood treated with creosote and polymeric additive and creosote alone. We did notice the various species of wood that the modulus of rupture was improved by 7 to 20 percent by the use of additive on red oak, gum and Douglas fir.

**Dave Webb, Creosote Council**

Creosote railroad crosstie usage peaked in 1929, with 203 plants treating 60 million wood crossties during the railroad expansion. Since the late 1980s, the annual average is 21 million wood crossties treated for maintenance. In 2013, North American railroads installed 24 million creosote-treated wood ties.

**Mike Sanders, MSU**

At site 1, MSU Dorman Lake, we are starting to see light decay in some of the untreated ties. There is even light decay on the top surface. Site 2 is the Formosan termite site. Overall, in year two, we see a lot of the ties are beginning to weather and are exposed to more direct sunlight. We are starting to see problems like checking and/or shake in some of the ties.

**Jeff Morrell, Oregon State University**

Creosote treatment improved moisture resistance while copper naphthenate treatment [without water repellent] did not. Creosote-treated and non-treated samples showed a similar degree of checking.

**Railroad Purchasing Forum**

**Chad Rolstad, BNSF**

Green tie procurement is a challenge right now. It’s a complicated market, with a lot of moving parts. The sellers have decisions and choices, as do buyers. Ultimately, those will come to equilibrium, and the market will respond to help us get the product we need.

**Nathan Irby, UP Railroad**

Tie demand this year is between 3.5 and 4 million. Next year, it will be about the same. In 2015, dual-treated demand is estimated at 800,000. Our dual-treated ties will come from AmeriTies in Hope, Ark.

**Lisa Pleasants, CSXT**

When switch tie inventories are dropping drastically, it’s a not a good time to go out to bid for long-term contracts. Just when you think you’ve got your strategy in place, be prepared for a merger that disrupts everything. Next year, we anticipate 3.3 million wood ties, about same as last year.

**Kristine Storm, Genesee & Wyoming**

We have forecast steady demand into 2015 for core capital, special projects, grants, etc. We project a need for 1 million wood crossties; 750,000 board feet of switch timbers; 800,000 board feet of bridge timbers; 150,000 board feet of crossing timbers; and 5,000 steel ties. Looking for about the same quantity next year.

**Corey Plunkett, Norfolk Southern**

By the end of the year, our standard will be 100 percent dual-treated crossties. Norfolk Southern believes it is good business to have multiple wood preservative options available; to focus on all aspects of the supply chain to make sure we have the wood ties we need for 2015 and beyond; and to sustain the hardwood crosstie as the tie of choice.

**Bill Blaise, KCS**

KCS has 6,100 track miles split between the U.S. and Mexico. We operate in 10 different states. Our growth is in our ability to move freight in and out of Mexico due to NAFTA. We are projecting on the wood side 850,000 ties.

**Bruce Emberly, CN**

Our 2015 tie replacement program will go up 10-15 percent growth in tie requirements over our 2014 program. We expect a 2.3 million tie program for 2015. We will spend $96,400,000 on hardwood and softwood ties in 2014; $3 million in switch ties; $8.3 million in concrete; and $3.7 million in crossings.

**Rob Churma, Canadian Pacific**

Our 2015 forecast is for 1.3 million ties for production crews, special projects and maintenance and 140,000 pre-plated ties for yards, sidings, crossings. We are projecting a total 1.4 million ties for 2015; 1.3 million for 2016; and 1.3 million for 2017.

**SAVE THE DATE: NOVEMBER 3-5, 2015**

97th Annual RTA Symposium
& Technical Conference