Presenters Address Economy, Short Line & Class 1 Issues, Environment & Much More

Packed with information, RTA’s 2011 Symposium & Technical Conference held in Lake Tahoe, Nev., was very well attended. The educational sessions comprised a major component of the program. The sessions presented information about the recovering economy, the importance of short line railroads, Class 1 purchasing plans, and much more. If you were unable to attend the symposium, presenters’ remarks are briefly excerpted below.

The Economy Session
Beth Ann Bovino, Standard & Poor’s, “Economic Outlook: Fasten Your Seatbelt” Because of the weak dollar, exports are improving and businesses are returning to the United States. However, fear is making people afraid to spend. With regard to housing, it has been a very slow recovery. People are scared. The job market is still weak, and people who have jobs are afraid they’ll lose them next week. They’re worried that if they buy assets now, those assets could lose value in the next few months. At the same time, equipment spending has been a bright spot for this recovery.

Mark Barford, NHLA, “Challenges to the Future of the Domestic Hardwood Lumber Industry” The hardwood lumber business is about half of what it was a few years ago, which means a change in the way the industry meets the need in the future. You’re the future of our hardwood industry. We are very dependent on pallets and ties.

Anthony Hatch, ABH Consulting, “Railroads’ Capital Spending Shows Confidence in Future” Railroad growth in the future is in intermodal—both international and domestic—because of market share from highway to railway; grain—we are America’s breadbasket; and coal, especially in exports. It now looks like you can expect more out of the export business. We are seeing capital being put into undercapitalized ports, and the shale business has its own terrific opportunities for the railroad industry. Also, I don’t think we’re in the last inning of global outsourcing in moving goods to China. The rail industry is approaching solvency for the future.

Short Line & Regional Railroads Session
Jalene Forbis, California Short Line Railroad Association The outlook in California is fairly good right now. I would say that, generally speaking, we didn’t get hit as hard by the recession in California as some other states did. In California, the news is that there is an uptick in the economy, and that is affecting the short lines in a positive way.

Richard Timmons, American Short Line and Regional Railroad Association While economic indicators are unclear for the future, rail volumes are moderating. As the Class 1’s do well, so do the short lines. The short line rail network has never been better. Investments in infrastructure are solid. Short line railroads have been working on this, particularly with the short line tax credit. Grants and loans are available, and short lines are taking advantage of them.

Eric Jakubowski, Canadian National Railways Today, we are working to build very solid relationships with key customers based on the interface between our service product and their business. We have started breaking new ground in working with customers, and I believe the next phase of this will involve some of our strategic short line partners. We are going to start talking about how best to do business. We’ve invested time in IT work and in market intelligence work to understand what happens before the shipment comes to us and after it leaves us. CN is starting to deal with some real issues that I hope will create capacity for our industries and us. Our customers want to know that we’re partners in moving their freight for them. The next issue we’re going to confront is how we’re going to meet the gigantic demand.

Paul McDonald, Union Pacific Railroad Short lines are very critical to the UP. One of the reasons short lines are such a big part of the UP system is that they are extremely customer focused. They have a lot of market knowledge. Every carload is like gold. These short lines are out there struggling, shipping away trying to get carloads onto their system. They have a creative approach to service and have a very good marketplace reputation.
Environmental & Legislation Session

Colin McCown, American Wood Protection Association, “AWPA Standards in Industrial Applications”
AWPA is the gold standard for treated wood throughout the world. The important thing to know about AWPA is that the people who serve on our committees are the experts in wood protection. These are the wood treaters who have spent years figuring out how to get a liquid into a solid as well as the chemists who understand interactions. Railroads can rely on the fact that their ties meet AWPA standards.

I’ve been at AAR for 18 years, and this is the most aggressive EPA administration I’ve seen. EPA made its final ruling on the definition of solid waste and has declared used creosote-treated wood as solid waste. What that means is that creosote-treated wood can no longer ultimately be burned for cogeneration but would have to go to solid waste incinerators, meaning it would increase the cost of disposal. EPA has said that there are hazardous air pollutants in creosote-treated wood that exceed what you would find in other fuels.

Ted LaDoux, Western Wood Preservers Institute, “Use of Treated Wood in Aquatic Environments. Where Are We Today?”
We still contend that treated wood is the most economical and structurally desired product in most tie applications. The environmental impacts of using treated wood, especially in, over, or near aquatic and sensitive wetland areas, continue to be a growing concern. We need to remain vigilant and address emerging issues. We need to continue to collaborate as an industry group and support ongoing research as an industry. It’s important we continue to maintain and build technical and scientific expertise.

Martin Rollins, HM Rollins Co. Inc., “Creosote and Regulatory Issues”
With regard to the IFIRA Data Call-In, EPA will require new workplace monitoring to validate adopted risk mitigation measures as part of re-registration. Creosote treating plants are going to have to monitor for worker exposure and ensure that exposures are lower than they were prior to the mitigation measures being put into place. It is extremely important that treating plants are following risk mitigation measures. The Creosote Council has prepared a training video for workers at creosote-treating plants on how to handle creosote-treated wood.

Engineered Wood Solutions for Railroad Applications Forum
Dr. Habib Dagher, University of Maine, “Reinforced and Pre-Stressed Glulam Technologies”
This presentation will address the composites of conventional materials with fiber-reinforced polymers for use in transportation applications. For example, the bridge in a backpack. The arch rolls up, then you put it over a mold, and it cures in about three hours. It gives you essentially two composites that are hollow that you can lift with a backpack and place across the hollow arches. Then, a concrete truck comes in and you pump concrete into the arch. You don’t need any rebar, there’s no corrosion, and the concrete in the composite tube acts as rebar. This can reduce costs and waste and increase the life of the structure. There are bridges with more than 15 years of life using FRP-glulams, and we feel good about that.

Dr. BJ Yeh, APA Engineered Wood Association, “Glulam in Railroad Applications”
Glulam is a very diversified material in its applications, which are not limited to railroads. Glulams can be used in vehicular bridges, trusses, walkways, covered bridges, railroad girders and even roller coasters. Some of the advantages include minimal checking and splitting; it can be prefabricated; it’s available year-round with no seasonal shortage; there are unlimited sizes and quantity; and it is environmentally friendly. To find glulam manufacturers, log on to www.apawood.org, or e-mail us at help@apawood.org.

Jeff Morrison, Rosboro LLC, “Glulam Beams as Crossties and Switch Ties”
Our mill is located in Springfield, Ore., about 100 miles south of Portland. We made 50 samples of laminated Douglas fir crossties, had them treated, and installed them into a short line in Washington. These ties were very uniform, making installation easy. Spiking was easier because there were no large knots. We have the operation and ability to produce laminated ties; we just need more guidance on how we can help this industry.
about a third of our capital dollars go toward ties. UP consumes 3.5 million wood ties annually, and we anticipate that will continue.

**Leo Kreisel, CSX Transportation**

We challenge our suppliers to continually improve. Bring us your good ideas. Capital is always tight, and we want to do better with what we have. We are always looking for alternative sources and do our best to monitor second- and third-tier suppliers. Let us know who your key people are and if there has been a change in control. Let the customer know if you’re making a major shift in where you’re producing something. Typically, we find out that something has shifted from one location to another because we have a nonconforming product and then realize it was due to a move.

**John Bosshart, Burlington Northern Santa Fe**

When we place an order, we are looking for a quality product delivered on time. Make sure you meet the requirements of AREMA and have a proven track record with other Class 1 railroads. Comply with safety requirements when you’re out in the field. Be proactive in developing new products. BNSF changes a plan of some type almost daily to improve. The best suppliers are prepared and embrace changes.

**Jeff McCracken, Norfolk Southern**

Thanks to RTA and its follow up, borate has prolonged the life of the tie longer than it would have with just creosote. Let’s make sure there are alternatives available, get them approved, and keep our industry strong. Strength comes from competition, which also keeps prices down and keeps everybody honest and on the same playing field. We need a lot of players in this game.

**Todd Wimmer, Union Pacific Railroad**

UPRR is currently investigating future use of borate-treated ties. We still need to understand the various methods of treatment. We have almost 26,000 miles of wood track. Ever year, currently fail between 8.5 and 25.5 years. With dual treatments, this would be extended to 18 to 54 years. The economic benefit is clearly achieved in Zones 4 & 5.

**Tim Carey, Arch Wood Protection, “ACZA & Railroads: Past, Present and Future”**

We have come up with a concentrate for ammoniacal copper zinc arsenate (ACZA) and have submitted for approval from AWPA for pine and hardwood ties. Because it’s an alkaline system, we can blend borates in with it, making for nice treatment in a single step. ACZA has performed in many applications for many years, and the soil block test shows efficacy in hardwood as good as other standard treatments.

**Dr. Adam Taylor, Tennessee Forest Products Center, “Dip/Diffusion of Borate Treatment of Green Ties”**

Borate dip diffusion is not new. The challenge is to get enough of it into the tie. The difference here is using a thickened borate system for green railroad ties. We performed a simple test over the last nine months to see how much borate we had to dip a tie into to get a sufficient amount into the tie. Once we found a concentrate we liked, we tried dipping tie sections and looked at the retention of borate over time. We used green railroad ties—gum, red oak and white oak. A Class 1 railroad has decided to go ahead with this application.

**Steve Smith, AquAeTer Inc., “Life Cycle Assessment of Creosote-Treated Ties”**

The costs of the environmental aspects of borate are far outweighed by the life extension of ties. The use of borate in treating wood significantly lowers the environmental impacts. Creosote-treated ties compare favorably to composite ties; favorably for concrete for all indicators; favorably to P/C for total energy, GHG, fossil fuel, acid rain, water use and ecological toxicity; about equal for smog; and less favorably for eutrophication. ➤
What a green idea. Forests soak in solar energy and act as a carbon trap for greenhouse gases to produce the only renewable foundation for our railroads – hard-working wood crossties. And when their decades of service in track are done, they give their all one final time – as biomass fuel in energy cogeneration plants across the land. From alternative fuel to alternative fuel. What could be greener than that?

Contact the Railway Tie Association for our free brochure to learn more about just how green wood crossties are by nature.
to reflect changes. This year, we’ve put in more ties than ever, and next year will be a little higher, which brings concerns about availability of raw material. In a market that continues to decline, we have an increasing demand for hardwood fiber. In 2011, we’ve spent $3.8 billion in capital improvements.

Gary Hunter,
Union Pacific
Our tie program runs from November to October. We will have installed 3.8 million ties by the end of the year. We’re going to continue to buy wood, concrete and composite. We’re still about 90 percent wood in our crosstie system.

Lisa Pleasants,
CSX Transportation
Our 2012 program has us buying 3.2 million wood ties. We ask our suppliers to be innovative. Before coming to CS engineering, I did indirect purchasing. I used to go to conferences with thousands of people, most of them women. At my first RTA conference, I was pretty nervous. However, by taking advantage of events and materials on your website, I’ve learned a lot about the industry. There are a lot of people coming in like me who need to learn these things, and there’s only one unbiased place to do it—RTA.

Doug Clary, Norfolk Southern
We have an annual use of ties of about 2.6 million. We’ve been consistent with our use. We do a 20/80 Boulton air-dry mix. We use seven treating plants—four are predominantly black. We’re looking at CuNap, Borate/CuNap, and Borate/Polymers. We continue to manage our costs by developing new sources, competitive bidding, and continued direct involvement with the green tie market.

Bruce Emberly,
Canadian National
Our 2012 crosstie replacement program calls for approximately 2 million ties and 50,000 switch ties for basic capital programs, special projects, and siding extensions and yard bypasses. With the exception of 50,000 concrete replacement ties, cross and switch tie purchases are hardwood with a small exception of softwood for low-density tangent.

Rob Churma,
Canadian Pacific
We used 934,000 ties in 2011. Still no borates yet. Our treatment is 50/50. We project our 2012 needs at approximately 900,000 wood ties. Our total tie use is projected at 912,000. We are a 100 percent black tie railroad. We will have a slightly reduced demand in 2012 but increased demand for 2013 and 2014. We will continue to use a hardwood and softwood combination.

RTA Honors TTCl’s Carmen Trevizo With Award Of Merit
Carmen Trevizo, assistant director of engineering services at the Transportation Technology Center Inc., was awarded the Railway Tie Association’s (RTA) Award of Merit at the Annual RTA Banquet and Awards Ceremony held during the recent Symposium & Technical Conference in Lake Tahoe, Nev.

Trevizo received the award for her dedication to research into the wood crosstie and her service to RTA, said RTA Executive Director Jim Gauntt.

“The Award of Merit was established a few years ago to recognize lifetime achievement in work conducted on behalf of RTA and the wood crosstie,” Gauntt said. “It was first awarded to Dr. Mike Barnes of Mississippi State University. Carmen’s is only the second such award the Executive Committee has ever made. “It is the highest award we offer to those individuals who have shown exemplary effort in their work to research, evaluate and report on the wood crosstie.”

Trevizo has 27 years of experience in engineering, management, railroad research, and marketing. She has been responsible for all phases of program administration, including personnel management, budgeting, planning, development, implementation, and documentation. Trevizo is responsible for the management of 23 professional civil and metallurgical engineering employees. She is also program manager for a number of on-site and off-site commercial projects.