

CHANGE...Can't Live With It, Can't Live Without It

By Jim Gauntt

Can any company or association survive for nearly a century without experiencing change? It is a pretty safe bet that without growth and change over such a time period, any such entity would not exist today.

On the other hand, there are certain things that RTA does every year that, in principle, haven't changed (much) for nearly 100 years.

No litany here, just a focus on one of these items: Continuity in publication of annual Class 1 tie usage data (<https://tinyurl.com/y7z6ap85>). And here in 2017, RTA is doing it yet again. But, unlike past years, there is a change to be reckoned with.

Yes, after decades of vital R-1 reporting on tie usage and costs, by each and every Class 1 road, broken down by maintenance and new construction ties, the STB acquiesced to a Class 1 request to eliminate R-1 forms 721/722 in 2016.

By vital data, we don't just mean that it's important from a historical standpoint, which it is, but also that this data is



important in the regular calibration of the RTA econometric tie demand forecast. Maybe RTA could create a model without such calibration, but with this data there comes the ability to apply an annual measure to the model's performance. This, in turn, allows the RTA economic team to

enhance the model's accuracy by making nuanced adjustments when necessary.

Fortunately, RTA and AAR's economic teams, (very specifically) Clyde Crimmel and those he works for and with, have maintained a strong, mutually beneficial relationship for many years. In the process of alerting us to this change, Clyde, and others, heard our concerns about the loss of this information and developed a survey to report past years' tie usage (separate from the RTA's exclusive future usage survey), which Class 1 roads now submit annually to AAR. While RTA does not wish to suggest our inquiry was the impetus for this new survey, as there were many other AAR/RR reasons for maintaining tie usage data continuity, we are thankful to have had an opportunity to be heard and additive to the process.

The data is now no longer broken down by maintenance (replacement) ties and new construction (in addition) ties, but most of the key usage data is there (see Table 1). ➤

Table 1

Crossties Laid In Replacement Or In Addition - 2016				Track Operated by Reporting RR			Rail Laid In Replacement Or In Addition - 2016		
District & Railroad	New Wood Ties	New Ties (Other than Wood)	Second-Hand Ties (All Types)	Miles Occupied	Crossties Per Mile	Avg. Spend Per Tie*	New Rail Laid (Tons)	Relay Rail Laid (Tons)	Avg. Weight Rail (lbs/yd)
Eastern District									
CSX Transportation	2,908,131	62,824	0	29,786	99.7	110.5	121,985	4,487	135.9
Grand Trunk Corp. (CN)	753,254	164	997	9,275	81.3	144.0	37,037	17,141	135.1
Norfolk Southern	2,250,034	38,388	143,270	28,471	85.4	112.3	110,120	13,480	136.0
Total Eastern Dist.	5,911,419	101,376	144,267	67,532	n/a**	n/a**	269,142	35,108	n/a**
Western District									
BNSF	3,683,460	138,933	0	40,140	95.2	117.1	190,338	2,160	135.2
KCS	488,438	30,404	0	4,043	128.3	165.3	14,950	805	133.6
Soo Line Corp. (CP)	311,508	0	0	4,478	69.6	180.7	7,445	4,172	
UP	4,064,245	418,502	15,695	43,454	103.5	128.2	178,189	22,599	136.3
Total Western Dist.	8,547,651	587,839	15,695	92,115	n/a**	n/a**	390,922	29,736	n/a**
Total U.S.	14,459,070	689,215	159,962	159,647	95.9	122.5	660,064	64,841	n/a**

Source: Association of American Railroads

* This is a measure of installed costs

** Not calculated by district

This year's article won't delve as deeply as previous years' work in comparing 2015 to 2016 or commenting on ins-and-outs of RTA's future demand surveys (see Tables 2 & 3). The reason is that recent events—Harvey, Irma, Maria and incoming (at the time of this writing) Nate—led our economists to contemplate these hurricanes' impact on the U.S. economy and also rerun the forecast model to see if these disasters might have an impact on tie demand (see see article that follows).

The short answer for tie demand is that

no significant impact can be predicted with so little new data on the economy available. One thing that can be reported, though, is that rebuilding efforts have generated pricing pressures in pallet lumber and cants (pallet industry field reports). Other reports to RTA suggest woefully low log inventories in many sawmill yards. Will these things occurring at the same time, as suppliers head into winter, lead to a 2018 that could mirror the stresses felt by suppliers in 2013-2014? While it is much too early to cry wolf on that scenario, there

are some members who have privately expressed nervousness about such prospects.

So, we present without further comment AAR's 2016 tie usage survey and RTA's forward-looking demand surveys for 2018-2021, along with our economist's article on the RTA forecast model update and his analysis on the effects of Harvey and Irma.

As for Clyde, RTA wishes to thank him and the entire AAR economic team for everything he and they provide to help our model stay calibrated and as accurate as possible. ■

Table 2—Railway Tie Association Annual Survey

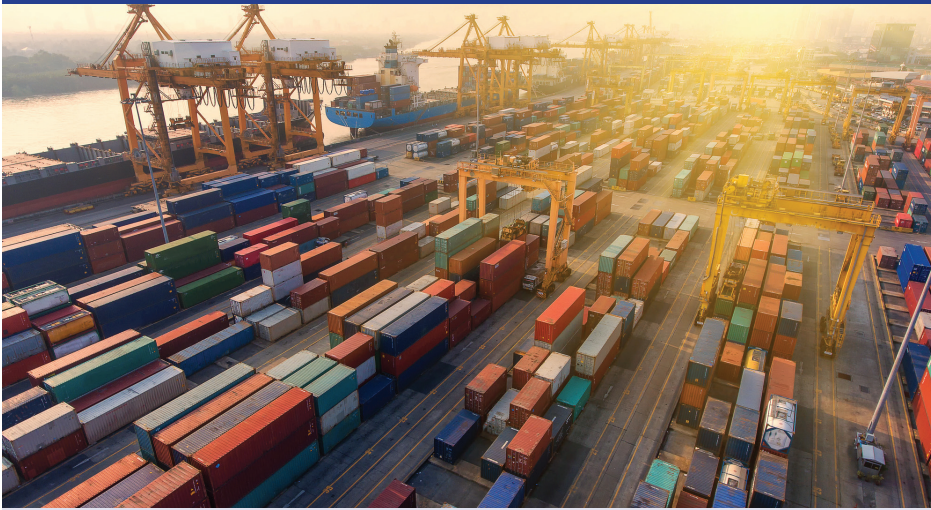
Estimated Crosstie Requirements • Class I Railroads
2017-2019 Inclusive

Authorized Crossties for 2017										
District and Railroad	Total Track	New Wood Crossties		Wood Relay	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers
	Mileage	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	33,100	3,350,000	0	30,000	72,000	3,000	0	85,000	0	28,500
Western U.S.	98,223	6,611,385	600,000	185,000	900,000	15,000	50,000	305,000	125	75,000
Canada	49,255	4,900,000	0	160,000	0	15,000	0	120,000	0	51,740
TOTAL	180,578	14,861,385	60,000	375,000	972,000	33,000	50,000	510,000	125	155,240
Authorized Crossties for 2018										
District and Railroad	Total Track	New Wood Crossties		Wood Relay	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers
	Mileage	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	49,255	5,300,000	0	160,000	0	15,000	0	120,000	0	52,000
Western U.S.	98,223	6,650,000	600,000	25,000	900,000	0	50,000	305,000	125	75,000
Canada	32,600	3,300,000	0	0	82,500	1,000	10,000	80,000	0	20,000
TOTAL	180,078	15,250,000	60,000	185,000	982,500	16,000	60,000	505,000	125	147,000
Authorized Crossties for 2019										
District and Railroad	Total Track	New Wood Crossties		Wood Relay	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers
	Mileage	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	49,255	5,100,000	0	160,000	0	15,000	0	120,000	0	52,000
Western U.S.	98,223	6,720,000	500,000	25,000	940,000	0	100,000	330,000	125	80,000
Canada	32,600	3,300,000	0	0	82,500	1,000	10,000	80,000	0	20,000
TOTAL	180,078	15,120,000	50,000	185,000	1,022,500	16,000	110,000	530,000	125	152,000

Table 3 - Short Line Survey Summary 2017

Tie Categories	2016 Usage					2017 Projected					2018 Projected					2019 Projected				
New 6" and 7" Ties	2,969,371					2,446,477					2,633,630					2,249,098				
Relay 6" and 7" Ties	61,990					49,343					48,488					44,729				
Grand Total All Wood Ties	3,031,361					2,495,820					2,682,118					2,293,827				
Switch Ties	37,031					37,685					37,070					32,892				
Bridge Timbers	28,455					23,547					22,328					18,590				
Concrete Ties	0					0					0					0				
Steel Ties	9,023					8,220					1,400					1,810				
Composite/Plastic Ties	0					200					200					200				
Track Miles Reporting	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002				
Total Track Miles	51,584	51,584	51,584	51,584	51,584	51,584	51,584	50,859	50,859	50,859	50,000	50,000	47,889	50,000	50,000	45,002				
% Reporting	52.15%	45.04%	39.97%	48.39%	49.22%	35.3%	40.9%	52.5%	30%	29%	57%	40%	37%	61%	60%	53%				
Total Roads Reported	223	206	176	197	192	157	185	191	117	116	139	130	115	170	111	114				
Total Short Lines	558	558	558	558	572	572	572	572	572	306	455	633	633	633	533	575				
% Reporting	39.96%	36.92%	31.54%	35.30%	33.57%	27.4%	32.3%	33.4%	20.5%	38%	31%	21%	18%	27%	21%	20%				

BREAKING NEWS



Crane Mats On Steroids?

RTA members may remember tie shortages from early 2013 through mid-2015 that created major issues for suppliers and railroads.

One of the causes for the initial market pressures was the rapid growth of crane mats and board road needed to service the North American oil industry.

Crane mats and board road allowed sawmills to minimize waste and maximize cash flow in comparison to other industrial products they might saw. Over that time period, a secular change occurred in the pallet markets with a fair amount of production moving successfully to softwoods.

For railroads, though, such a move wasn't possible given the specific properties that hardwoods offer vs. (most) softwood for track applications. Thus, the pressures were felt by tie producers and users more intensely than in some other hardwood markets.

So, what could be worse than mega-demand for crane mats in the tie production world? How about whole log exports (particularly oak) to China? There has been a lot written about this recently, but the most telling thing RTA has seen is a trade inquiry posted from the Missouri Forest Products Association entitled "Hardwood States Export Group at FMC Premium in Shanghai, China." The total count of containers sought for hardwood logs in this single inquiry exceeded 1,500 per month!

A recent report from the field indicated one sawmiller had never seen a situation where he couldn't saw all week because so many saw logs were being loaded into containers. One report suggests a secular change in the Chinese sawmill industry where parts for furniture and other needs are sawn at the head rig (as a board sawn to "metric" standards comes off the log it is cut into FAS and other grades and sizes right then and there).

In other words, Chinese manufacturers are getting exactly what they want, in-time, in metric sizes, more efficiently by purchasing logs than sawn US lumber products.

Another factor? A *Wall Street Journal* article from July 12, 2017, is entitled "China's Booming Housing Market Proves Impossible to Tame." There isn't enough space here to get into details, but just the title illustrates how more demand by the Chinese consumer may be affecting hardwood log demand.

Through July 2017, China's year-over-year imports of U.S. Logs were up 114% for Red Oak, 85% for Maple, 73% for White Oak...(source: Hardwood Review)

What this portends for the tie producer in 2018 and beyond is hard to gauge. However, it is yet one more pressure point that could affect tie users if tie inventories fall too low at the same time growth in demand manifests. ■

HURRICANE DISASTERS: Good Or Bad For The Economy?

By Petr Ledvina

In recent weeks, the United States and its territories were struck by three hurricanes that killed more than 100 people and caused property damage estimated at \$240 to \$340 billion. Of the property damage, about \$100 billion can be attributed to non-flood related insured losses (fortune.com, wsj.com).

The initial impact on the economy is negative due to a disruption of businesses, including the rail industry, which resulted in an inability to service customers. Because of this, it is estimated that the third quarter GDP will be 0.4 percent to 0.8 percent lower than previously predicted (cnbc.com). In the midterm, however, some argue that the reconstruction and replacement of damaged properties may increase GDP above its original estimates for the fourth quarter and beyond.

While there will be some who will benefit from the recovery, there will be others who won't.

The rail industry may be on the winning side as it is needed to bring material and goods to the devastated areas and transport material to the companies that produce them. As one railroad CEO indicated, they expect the windfall to materialize from the fourth quarter onward (Reuters, progressiverailroading.com).

The automotive industry may also benefit as people need to replace their damaged vehicles. As a matter of fact, autos and light truck sales jumped from 16.14 million in July to 18.57 million in August (FRED). All this demand will create more jobs and more wages in the associated industries.

So, what's the catch? Beside the initial disruption of lives and business production, ►

there are some factors that are not immediately obvious.

First, the resources spent on the renovation could have been spent elsewhere in the economy. For example, as the affected companies and individuals pay to replace damaged property, they cannot spend the money on previously planned purchases. Even someone who donates to the Red Cross may have to forego other expenditures.

Second, the tragic loss of life, though small relative to the U.S. population, lowers the production possibility of the whole economy.

Last (but not least), the demand for money marginally increases borrowing costs in the economy.

To extend this thought, insurance companies will need to sell some assets, about 60 percent of which are invested in bonds (naic.org).

At the same time, the government, which is paying for flood insurance claims and

TABLE 4

New Wood Crossties (in thousands)

Year	Base-Case Scenario	Upside Scenario	Downside Scenario
2015	23,983 (actual)	n/a	n/a
2016	24,611 (actual)	n/a	n/a
2017	22,575	22,725	22,329
2018	22,907	23,300	22,421

other relief efforts, will need to issue more bonds, consequently putting some degree of upward pressure on the prevailing interest rates. Between Sept. 7 and Oct. 2, the 10-Year Treasury yield rose from 2.05 percent to 2.34 percent (FRED). As a consequence, marginal borrowers elsewhere in the United States may be discouraged from taking out loans.

While the events described above will cause some “noise” in the economic indicators for the near future, such as

33,000 jobs lost in September while the unemployment rate is declining to 4.2 percent, they may have little effect on annual tie demand.

What will have more significant effects are the FED policies and the government’s success, or lack of it, in passing promised policies.

Due to slow progress on this front, the RTA forecast team presents a relatively unchanged, yet fine-tuned updated outlook for 2017 and 2018 tie demand (Table 4). ■

GOING THE EXTRA MILE

WITH SERVICE

The Industry's BEST





MEET THE ROAD CREW



From left to right:
 Richard Piper, Welder/Fabricator for 25 years
 Rick Moore, Welder/Fabricator for 32 years
 Rick “Killer” Yeomans, Hydraulic Specialist for 34 years, 20 in the US Army
 David Piper, Equipment Designer and Sawmill, 50 years
 David “Dave” Broussard, PLC Automation Specialist, 25 years

HEADQUARTERS
607 Front St. • Central City, KY 42330

800.237.6880
www.brewcoinc.com



BREWCO
INCORPORATED
RUGGED • RELIABLE • DEPENDABLE