

# Feuding With Economic Growth Prospects? Surprises Abound For 2016 & The Survey Says... By Jim Gauntt

In the September/October 2015 *Crossties* article on the state of the industry, numerous warnings were posted for tie demand going forward. Some of these issues were reiterated in the two 2016 RTA market update articles.

Recently, the International Monetary Fund (IMF) wrote:

*The American economy will expand by only 1.6 percent this year, down from 2.6 percent in 2015... [That latest forecast is 0.6 percentage points lower than what the fund predicted just three months ago, predicting]... global growth will also slow in 2016, prompting interest rates to stay lower for longer... [IMF expects growth of 3.1 percent in 2016, down from 3.2 percent last year, suggesting that global] ...growth will pick up slightly in 2017.*

Yet, in defiance of this anemic U.S. and World GDP growth, Brexit, Zika, and

electoral mania, railroads and tie suppliers have forged ahead. 2016 procurement has remained robust, maybe too much so, and purchases? Well, purchases through the end of August are almost in pedal-to-the-metal range with the 12-month rolling purchases total at the third highest level of the last 30 years.

Will this continue? Will a probable December U.S. Fed Funds interest rate hike have any effect?

Since the RTA econometric model won't be updated again for a few weeks, maybe this year's exclusive RTA surveys and most recent data, provided by the Association of American Railroads (AAR) in joint, long-standing cooperative efforts, will cast a different light on the path forward.

### U.S. Class 1 Historical R-1 Data

2014 saw disappointing U.S. Class 1 tie

installations of new wood ties compared to 2013. Speculation swirled around the idea that this reduction in installs was a result of constrained tie supply. If that supposition was correct, it then wouldn't be a surprise if 2015 tie installations saw some kind of rebound as tie supplies increased. While railroads did install more ties in 2015, the increase was a paltry 1.5 percent (see Tables 1 and 2, with data provided courtesy of Clyde Crimmel, AAR Director - Statistical Information).

To be fair, tie inventories remained well short of railroad demand well into 2015, so it's quite possible the lingering effects of supply issues played a continuing role in 2015. Note: 2015 installations of new wood ties did not even measure up to 2013.

With 2016 tie purchases remaining so high with a rolling 12-month total exceeding 25 million ties (see RTA Industry Statistics ►

**Table 1 - Crossties Laid in Replacement Statistics for Class I Railroads in the United States in 2015**

District and Railroad	Treated wooden crossties laid in replacement (number)		New crossties laid in replacement other than wooden (number) (3)	Track maintained by reporting railroad		Crossties per mile (6)	New crosstie replacement average		Switch and bridge ties laid in replacement (board ft. ) (9)
	New ties (1)	Second-hand ties (2)		Miles occupied by crossties (4)	Total crossties (5)		Percent renewal to all ties (7)	Number laid per mile (8)	
<b>Eastern District</b>									
CSX	2,989,531	0	2,250 (d1)	29,978	89,574,264	2,988	3.34%	100	8,685,946
Grand Trunk Corp. (CN)	754,908	0	21,052 (c)	9,277	29,268,935	3,155	2.65%	84	1,013,660
Norfolk Southern	2,372,395	161,603	20 (c)	29,066	89,407,016	3,076	2.65%	82	8,993,881
<b>Total Eastern District</b>	<b>6,116,834</b>	<b>161,603</b>	<b>23,322</b>	<b>68,321</b>	<b>208,250,215</b>	<b>3,048</b>	<b>2.95%</b>	<b>90</b>	<b>18,693,487</b>
<b>Western District</b>									
BNSF Railway	3,215,403	0	127,348 (d2)	39,926	123,570,970	3,095	2.71%	84	6,703,840
Kansas City Southern	545,715	0	0	4,041	12,927,159	3,199	4.22%	135	164,831
Soo Line Corp. (CP)	402,938	0	42 (c)	4,490	13,555,310	3,019	2.97%	90	987,700
Union Pacific	3,594,832	89,338	314,782 (d3)	43,420	129,391,600	2,980	3.02%	90	6,307,788
<b>Total Western District</b>	<b>7,758,888</b>	<b>89,338</b>	<b>442,172</b>	<b>91,877</b>	<b>279,445,039</b>	<b>3,042</b>	<b>2.93%</b>	<b>89</b>	<b>14,164,159</b>
<b>Total United States</b>	<b>13,875,722</b>	<b>250,941</b>	<b>465,494</b>	<b>160,198</b>	<b>487,695,254</b>	<b>3,044</b>	<b>2.94%</b>	<b>90</b>	<b>32,857,646</b>

Source: R-1 Annual Reports to the Surface Transportation Board

General Notes: 2,564 Second-Hand Other-Than-Wooden ties, which are not shown in the table above, were laid in replacement in 2015.

Footnotes:

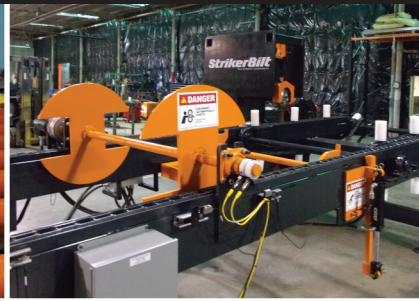
(a) Total mileage operated at the end of year, excluding mileage under trackage rights. (b) Based on crossties per mile of track in 1967, the last year reported. (c) Concrete ties (d1) 1350 concrete ties and 900 non-wooden non-concrete ties (d2) 123,738 concrete ties and 3,610 non-wooden non-concrete ties (d3) 303,085 concrete ties and 11,697 non-wooden non-concrete ties (e) Includes 6,242,268 bd ft of wooden ties plus 1008 concrete or steel switch ties assigned 65 board feet per tie.

DIP TANK SYSTEMS

GRADE DECKS

KERF SAWS

PLATE PRESSES



INCISORS



# Machinery *Bilt* To Endure

At StrikerBilt, we supply well-constructed, efficient, production-oriented equipment that is also user and maintenance friendly.

Licensed in several states for full turnkey systems, we install our equipment electrically and mechanically. And **StrikerBilt's** commissioning team fully tests the installed equipment to ensure on-time start up.

Envision your company's future with **StrikerBilt**. As technology, standards and practices evolve, ingenuity empowers manufacturing companies to rise above the standard.

At **StrikerBilt**, we hold ourselves to the highest level of integrity while offering our clients innovative solutions to their manufacturing challenges. Our team of multi-disciplined personnel has the intelligence, insight and experience to help your company stay ahead of the pack in today's competitive world market.

**StrikerBilt** gives you more than a vision. **We give you results.**



at www.rta.org), one might conjecture that a catch-up, or as postulated in June, an opportunity effect for Class 1s drove market demand further than RR traffic numbers would suggest. More on this later.

Another surprise is that U.S. Class 1s installed some 17.5 percent fewer new non-wood ties in 2015 compared to 2014. Were those alternative tie expenses shifted to wood ties, or elsewhere, such as Positive Train Control? Or, is the tone being set for a secular shift back to higher wood tie demand vs. alternatives?

**U.S. Class 1 Survey Data**

And, the survey says...2016 will see only the same number of new wood tie installations as 2015 (see Table 3). Does this suggest that maybe the installations are optimal or “steady-state” at that level? How can this info be reconciled with current elevated tie purchases?

More importantly, what are Class 1s projecting for the next two years right now? The surveys show a bias to the upside in the estimates for new wood installs in both 2017 and 2018. That’s a positive sign that railroads at least for now are planning for

**Table 2—For Calendar Year 2015**  
Crossties Laid In Addition Statistics for Class I Railroads In The United States

District and Railroad	Treated wooden crossties laid in replacement (number)		New crossties laid in replacement other than wooden (number) (12)	Switch and bridge ties laid in replacement (board ft.) (13)
	New ties (10)	Second-hand ties (11)		
<b>Eastern District</b>				
CSX	42,215	0	17,538 (c)	0
Grand Trunk Corp. (CN)	0	0	0	0
Norfolk Southern	40,246	0	15,432 (s)	170,496
<b>Total</b>	<b>82,461</b>	<b>0</b>	<b>32,970</b>	<b>409,785</b>
<b>Western District</b>				
BNSF Railway	60,038	0	362,550 (c)	829,480
Kansas City Southern	12,397	0	3,347 (s)	21,700
Soo Line Corp. (CP)	57,742	0		204,119
Union Pacific	200,094	412,732	70,872	132,462
<b>Total</b>	<b>330,271</b>	<b>412,732</b>	<b>436,769</b>	<b>1,187,761</b>
<b>Total United States</b>	<b>412,732</b>	<b>412,732</b>	<b>469,739</b>	<b>1,358,257</b>

**Source: R-1 Annual Reports to the Surface Transportation Board**  
Footnotes: (c) Concrete ties (d) Includes 66,728 concrete ties and 4,144 steel ties (s) Steel ties

growth in traffic and in tie demand.

Does that mean tie suppliers will benefit? Well, that depends on what kind of tie supplier is being discussed. If you’re a sawmiller, and depending on where you are

located in the country, you may see some softness in orders if the air-dry yards at the treating plants you serve are now at or approaching capacity.

If you’re a treater, on the other hand, ➤

**Table 3—Railway Tie Association Annual Survey**  
Estimated Crosstie Requirements • Class I Railroads  
2016-2018 Inclusive

District and Railroad	Authorized Crossties for 2016									
	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	7,032,190	800,000	55,000	965,000	0	10,000	330,000	125	40,000
Canada <small>&amp; Canadian Owned U.S. Track</small>	49,978	4,800,000	0	180,000	30,000	36,000	0	240,000	0	20,000
<b>TOTAL</b>	<b>181,301</b>	<b>15,182,190</b>	<b>800,000</b>	<b>265,000</b>	<b>1,067,000</b>	<b>39,000</b>	<b>10,000</b>	<b>655,000</b>	<b>125</b>	<b>88,500</b>
Authorized Crossties for 2017										
	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	0	74,000	3,000	0	85,000	0	28,500
Western U.S.	98,223	7,322,471	600,000	150,000	915,000	0	50,000	330,000	125	80,000
Canada <small>&amp; Canadian Owned U.S. Track</small>	49,978	5,000,000	0	180,000	30,000	31,000	0	250,000	0	21,000
<b>TOTAL</b>	<b>181,301</b>	<b>15,672,471</b>	<b>600,000</b>	<b>330,000</b>	<b>1,019,000</b>	<b>34,000</b>	<b>50,000</b>	<b>665,000</b>	<b>125</b>	<b>129,500</b>
Authorized Crossties for 2018										
	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	3,150,000	0	0	74,000	3,000	0	85,000	0	28,500
Western U.S.	98,223	7,325,000	600,000	150,000	915,000	0	50,000	330,000	125	80,000
Canada <small>&amp; Canadian Owned U.S. Track</small>	49,978	5,000,000	0	180,000	30,000	31,000	0	250,000	0	21,000
<b>TOTAL</b>	<b>181,301</b>	<b>15,575,000</b>	<b>600,000</b>	<b>330,000</b>	<b>1,019,000</b>	<b>34,000</b>	<b>50,000</b>	<b>665,000</b>	<b>125</b>	<b>129,500</b>

**Notes:** From CP Rail: Pre-plated ties approximately 50,000 in 2016 or approximately half of 2015’s quantities. Overall tie demand down approximately 10% versus 2015. Demand not expected to increase for 2017. From CN: Depending on funding, CN is looking to replace all wood ties on curves of 4 degrees and greater with concrete. That program would add another 100,000 concrete ties annually to the basic program of 65,000. From NS: NS does not provide forward-looking guidance beyond the current capital year.



# RÜTGERS: a partner you can count on

RÜTGERS is a leading manufacturer of coal-tar based chemical feedstocks with production facilities throughout Europe and in Canada and has been a supplier of AWPA-standard creosote products to North America for over 100 years. RÜTGERS produces specialty grade creosotes for applications required to meet demanding environmental standards. We believe in long-term business relationships, and when we commit to a partnership, we're in it for the long haul. Contact us!

[www.ruetgers-group.com](http://www.ruetgers-group.com)

RÜTGERS Canada: 905 544 2891



with a full air-dry yard and demand stable or increasing, even marginally, the glasses you're wearing for treated tie output in 2017 may be a little rosier.

All three RTA January 2016 forecasts (base, downside and upside cases) suggested that 2017 demand would be substantially higher than 2016. By June, the economic data and traffic were so weak that all three cases predicted a decline in tie demand for 2017. Now, with this new survey data in-hand, it certainly looks as if a more bullish case for tie demand is in play (see Table 4 – upside case from June).

Of course, the economy may finally have reached that for-better-or-worse inflection point for U.S. and world GDP growth. With the Fed and the stock market essentially treading water for much of the past 12 months, and a momentous election at hand, it's anyone's guess how economic growth will measure in the near-term.

At the risk of using a very tired phrase, RTA members should know that the data-dependent-mode switch is definitely turned on at RTA HQ regarding forecasts. There will be more input coming in the next few weeks that could impact the econometric model-generated forecast for 2017 and beyond.

Speaking of data, what are the short lines telling us about 2016 and 2017?

**The Rest Of The Market**

In the 2015 survey of short lines, 2016 looked to be abysmal with a drop in

**TABLE 4 - UPSIDE SCENARIO (FROM CROSSTIES MAY/JUN '16 ISSUE)**

New Wood Crossties (in thousands)					
Year	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct
2012	2.2%	16,968	6,054	23,023	5.2%
2013	1.5%	17,131	7,317	24,448	6.2%
2014	2.4%	15,931	7,083	23,014	-5.9%
2015	2.4%	16,566	7,417	23,983	4.2%
2016	2.7%	16,612	6,426	23,038	-3.9%
2017	2.8%	17,342	5,568	22,910	-0.6%

demand of 21.6 percent. And as of the completion of this year's survey would suggest, this drop in tie demand did occur, just not quite to the extent projected. The 2016 class of survey respondents suggested tie demand ~5 percent ahead of the 2015 projections (see Table 5).

This still would suggest that 2016 has been a tough year for short lines even with the 45G Tax Credit in effect. And, it would seem that RTA's 2016 forecast for a 13 percent drop in smaller market purchases is roughly in line with what short lines experienced this year.

The survey results from short lines do not provide the whole picture of the markets outside Class 1 purchases. There are export markets, government and industrial markets, plus markets for track work that contractors perform beyond those. Unfortunately, there are not any reliable measures of this activity; thus,

RTA must rely on only overall economic activity and member reports to gauge those sectors.


It's a given that any survey is likely to be less than perfect. Not every road that reports in a given year will report in the next, and some that didn't report previously will start reporting. This happened, for example, in 2016 with 30 more short lines reporting than in 2015. In that regard, the survey projections may be more telling.

With those thoughts in mind, what do short lines expect for 2017? Apparently, short lines expect a further softening in their demand for ties, down 14 percent. This would match RTA's forecast as well (the latest June upside scenario forecast is still -13.4 percent for the smaller market).

It's probably safe to assume that any increase the Class 1 market may provide tie suppliers in 2017 could be offset by what short lines and the other markets experience. An extension of the 45G Tax Credit would certainly help moderate any downside trends for short lines.

**Confounding? Not Really...**

There are a couple of points to reconcile with regard to all of this data. Tie procure-



# Wheeler Lumber

Committed to performance since 1892

## QNAP™

COPPER NAPHTHENATE

Treated Ties & Timbers

Proven oil-borne preservative preferred for environmentally sensitive areas

Engineering and Shop Drawings services available

800.843.8304    [www.wheeler-con.com](http://www.wheeler-con.com)    [dkoch@wheeler1892.com](mailto:dkoch@wheeler1892.com)

AWPA Standards

AREMA Approved

Cleaner Handling

No Corrosion Concerns

TPI Certified Facility

**Table 5 - Short Line Survey Summary 2016**

Tie Categories	2015 Usage	2016 Projected	2017 Projected	2018 Projected
New 6" and 7" Ties	3,302,286	2,586,361	2,295,355	2,169,108
Relay 6" and 7" Ties	255,167	157,310	61,616	449,133
<b>Grand Total All Wood Ties</b>	<b>3,557,453</b>	<b>2,743,671</b>	<b>2,356,970</b>	<b>2,618,241</b>
Switch Ties	70,340	44,197	45,545	39,456
Bridge Timbers	44,339	38,064	41,375	35,357
Concrete Ties	3,102	0	1,300	500
Steel Ties	55,060	0	700	1,275
Composite/Plastic Ties	0	0	0	0

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
<b>Track Miles Reporting</b>	<b>23,232</b>	<b>20,620</b>	<b>24,964</b>	<b>25,391</b>	<b>18,217</b>	<b>21,116</b>	<b>26,696</b>	<b>15,116</b>	<b>14,966</b>	<b>28,516</b>	<b>19,924</b>	<b>17,663</b>	<b>30,648</b>	<b>29,913</b>	<b>23,883</b>
<b>Total Track Miles</b>	<b>51,584</b>	<b>51,584</b>	<b>51,584</b>	<b>51,584</b>	<b>51,584</b>	<b>51,584</b>	<b>50,859</b>	<b>50,859</b>	<b>50,859</b>	<b>50,000</b>	<b>50,000</b>	<b>47,889</b>	<b>50,000</b>	<b>50,000</b>	<b>45,002</b>
% Reporting	45.04%	39.97%	48.39%	49.22%	35.3%	40.9%	52.5%	30%	29%	57%	40%	37%	61%	60%	53%

	206	176	197	192	157	185	191	117	116	139	130	115	170	111	114
<b>Total Roads Resported</b>	<b>206</b>	<b>176</b>	<b>197</b>	<b>192</b>	<b>157</b>	<b>185</b>	<b>191</b>	<b>117</b>	<b>116</b>	<b>139</b>	<b>130</b>	<b>115</b>	<b>170</b>	<b>111</b>	<b>114</b>
<b>Total Short Lines</b>	<b>558</b>	<b>558</b>	<b>558</b>	<b>572</b>	<b>572</b>	<b>572</b>	<b>572</b>	<b>572</b>	<b>306</b>	<b>455</b>	<b>633</b>	<b>633</b>	<b>633</b>	<b>533</b>	<b>575</b>
% Reporting	36.92%	31.54%	35.30%	33.57%	27.4%	32.3%	33.4%	20.5%	38%	31%	21%	18%	27%	21%	20%

In cooperation with the American Short Line and Regional Railroad Association.  
 Note: Calculation based on survey responses from 206 roads representing 45.04% of operating trackage.

ment has been at an all-time high in 2016. Tie purchases are near record highs. With traffic down and surveys less than robust, what gives?

For the past 18 months, RTA has pointed out in presentations that if tie procurement is 30 percent less than what the demand is for a period of 18-24 months, then air-dry inventories at treating plants will draw down to uncomfortable levels. In order to rebuild those inventories, procurement will have to exceed demand by a similar margin, for a long enough period of time, for air-dry yards to recover.

That appears to be what has happened regarding procurement, with an uptrend in the RTA Inventory-to-Sales Ratio (ISR) beginning ~12 months ago. It does not mean that every air-dry yard is at optimal levels, but in many cases they are. This, coupled with flat market demand potential, would suggest a reduction in the current torrid pace of white tie procurement beginning soon.

Producers and users alike are encouraged to visit [www.rta.org](http://www.rta.org) > Industry Statistics > Purchases Report & RTA Interactive Spreadsheet to look at the raw data and use the interactive spreadsheet to set up alternative scenarios. The ISR exists in a relatively happy place for producers and users at around 0.78-0.82. Any significant deviation above or below is indicative of some level of imbalance. The current default values in the interactive

spreadsheet have inventories rising to 0.86 by year end. That does not mean this will happen; it's just one scenario to consider.

Other factors to consider can be found at

[www.rtastats.org](http://www.rtastats.org), where field procurement staff input current data for trends-in-the-field (see the last page of this issue's Tie Trends for an example of what can be found on that RTA website). ■

## Want to make more ties?

**Quick, easy install**

MADE IN Moscow, TN USA

**Built solid and simple**

**Over 500 COMPLETE mills sold!**

**Consistent, proven performance**

Setting a new standard  
**MAGNUM LT**  
CARRIAGE

- 2 week build time so you can start production faster - Install in days not weeks
- Fast and efficient without complicated electronics
- Simplest, worry free carriage in the industry
- Mill packages for cutting logs from 6 - 30' long
- Engineering improvements for 40+ years
- Add up to 650 ties per 8 hr shift to your operation
- Replacement parts fully stocked and ready to ship

**CALL US NOW!**

**901.877.6251**

**HURDLE**  
machine works inc.

[www.youtube.com/HurdleMachineWorks](http://www.youtube.com/HurdleMachineWorks)

simple. dependable. affordable