

Economic Constraints To Weigh On 2011 Market

By Jim Gauntt

Using the Railway Tie Association's (RTA) exclusive survey data of the railroad markets, coupled with recent tie production and inventory updates, this article will attempt to assess the remainder of the year and offer insight into what to expect for 2011.

With few exceptions, however, the themes that will be followed are the same as RTA has reported for all of 2010—stagnant-to-slow growth in the U.S. economy, difficulties in raw material procurement, lack of tax credits in place for the short lines and Class 1 roads, and capital constraints due to federal mandates for Positive Train Control (PTC).

But, first, a bit of historical data.

2009 A Modest Year

Last year turned out to be a decent year for tie suppliers. Total purchases as calculated from member data came in at 19.6 million ties. Procurement was a stunning 22.2 million ties leaving the industry with a huge inventory-to-sales ratio around 1.0 in comparison to the five-year average of 0.78.

On closer inspection, though, 19.6 million ties sold looks anemic compared to the 20.9 million in 2008. Plus, it was just April of 2009 when the 12-month annual rolling total of purchases stood at 21.5 million ties. This means that from May on through the remainder of 2009 purchases suffered significant setbacks.

In 2009, actual tie installations for U.S. and Canadian Class 1 track came in 500,000 ties shy of the 2008 mark at 16.5 million ties (see Table 1). But even so, that installation rate is the second highest on record since 1986. Thus, the bulk of the slowdown in purchases most likely came from not only smaller buyers, but also from a realization by Class 1 buyers that inventory levels had exceeded optimal levels for the expected purchasing requirements for 2010-2011.

2010: The Dramatic Slowdown

So far in 2010 two significant trends have emerged.

The first is the rather dramatic slowdown in purchases from a starting point of 19.6 million at the end of 2009. The rolling 12-month total for purchases staggered downward 10.2 percent in just five short months to 17.6 million ties by May. The bright spot is that purchases have recovered to 18.3 million ties as of the end of August, but that's still a hefty loss in purchased ties from the beginning of the year.

The second is an even faster decline in production. With production at 22.2 million ties at the end of 2009 as the initial reference point, as of August, the 12-month rolling total for ties produced stands at a dismal 15.9 million ties. This has the effect of driving the inventory-to-sales ratio down by nearly 20 percent in seven months.

Thus, the starting point for this analysis is slowly recovering market demand during a time period when production levels continue to fall. The big question would appear to be, "When will production levels see a rebound?"

Class 1s Taking a Pause?

With production faltering and markets appearing to rebound, even if only slightly,

one has to wonder how Class 1 roads are viewing the picture. The surprising thing so far in 2010 is that Class 1s have reported being relatively content with their current levels of procurement. But now that the inventory-to-sales ratio is headed down toward the 5-year average, are they near a tipping point?

RTA's exclusive annual surveys (see Table 2 and 3) show that Class 1s in mid-2010 expected 2011 installations to be slightly stronger than 2010 to the tune of an additional 550,000 ties or so. But not so fast. Recent reports from the field indicate that PTC and other capital constraints may be having an impact on tie purchases. While one road says it will add 100,000 ties to next year's installs, three or more roads expect a slight pullback.

According to the Class 1 purchasing directors recently surveyed, the net result is that 2011 will not see a collective increase over 2010. In fact, there is a possibility Class 1s could buy 100,000-200,000 less ties than in 2010. Is this a clue to why Class 1s are not pulling the trigger to ramp-up procurement in more dramatic fashion?

TABLE 1—Wood Crossties in Thousands in the U.S.
Class 1 Railroads - Wood Crossties in Thousands

Year	Maintenance		Construction		Total US Ties	Canadian Wood installs	Total US & Canadian Ties	Total RTA Purchases	Small Market Purchases
	New Treated	Second Hand	New Treated	Second Hand					
1999	9,962	260	804	37	11,062	1,306	12,368	15,640	3,641
2000	10,143	100	513	47	10,803	1,051	11,854	14,235	3,045
2001	10,576	102	356	48	11,083	873	11,956	15,981	3,465
2002	12,336	155	206	0	12,697	956	13,653	16,686	3,486
2003	12,363	181	212	18	12,775	1,002	13,777	17,194	3,000
2004	12,468	204	236	1	12,909	1,303	14,212	17,749	3,910
2005	12,596	208	353	4	13,160	1,780	14,940	18,745	3,980
2006	13,692	278	325	9	14,304	1,921	16,225	21,333	4,848
2007	13,118	180	229	2	13,528	1,821	15,349	20,302	5,396
2008	14,127	312	273	1	14,713	2,360	17,073	20,896	4,003
2009	14,278	297	185	0	14,760	1,753	16,513	19,604	3,821

Short Lines & Contractors

What about this market segment? How do they view the future? RTA, with tremendous support from the American Short Line and Regional Railroad Association (ASLRRA), surveyed all short lines earlier this year and the results are shown in Table 4. The positive thing about this year's survey is that 42 percent of the short lines in the country responded accounting for 60 percent of short line track. This should mean that members can have even greater confidence in the results.

The downside is that 2011 is not viewed as a stellar year for short lines. Whether it is because they don't anticipate getting the tax credit for infrastructure investment extended in 2011, or their available capital is constrained, or projections for traffic are not rosy, or a combination or all three, there is no question that uncertainty still resides

firmly in these decision makers minds. The surveys indicate a further softening of the short line market by 12 percent or around 361,000 less ties for 2011.

Bottom Line

If the surveys are correct, then 2010 will end with a combined market demand a total of 18.6 million ties. Factoring in late information received from the Class 1 community with the short line survey, 2011 looks like it could require as few as 18.5 million ties.

RTA continues to believe that by the end of 2010 the mark for total purchases will be 18.4-18.6 million ties. This matches favorably with the survey results.

However, RTA actually remains slightly more optimistic for 2011 based on expected traffic increases and a few other factors. One of these factors is that in the past few years short line railroads have tended to under-forecast their future

needs. This may be because capital programs for the ensuing year are just a distant horizon at the time of the year these surveys are returned. Whatever the reason, short lines and smaller market estimates generated by the RTA model are typically higher than the surveys by a factor of 10-15 percent.

Thus, instead of a pessimistic 18.5 million tie total for 2011, RTA believes 18.6-18.8 is quite doable. That is, of course, if the U.S. economy continues to rebound and no double-dip recession appears.

So what happens if demand reaches the upper limit of 18.8 million ties? Based on current inventories and procurement levels, sawmills and producers would need to produce 19.1 million ties in the next 12 months to keep the inventory-to-sales ratio from falling any further than August 2010 levels. That would be a huge increase and one that given the current marketplace ►

TABLE 2—Railway Tie Association Annual Survey*

**Estimated Crosstie Requirements • Class 1 Railroads
2010-2012 Inclusive**

AUTHORIZED CROSSTIES FOR 2010

Region	Total Track Miles	New Wood Crossties		Wood Relay Crossties	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers Units
		Hardwood	Softwood		Concrete	Steel	Other	Wood	Other	
Eastern U.S.	58,350	5,900,000	0	50,000	22,100	6,000	0	217,000	0	44,000
Western U.S.	84,978	6,687,000	447,000	15,000	667,000	70,000	232,000	227,000	0	30,062
Canada & Canadian Owned U.S. Track	37,000	2,477,000	199,000	25,000	50,000	5,000	0	70,000	0	14,000
TOTAL	180,328	15,064,000	646,000	90,000	739,100	81,000	232,000	514,000	0	88,062

AUTHORIZED CROSSTIES FOR 2011

Region	Total Track Miles	New Wood Crossties		Wood Relay Crossties	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers Units
		Hardwood	Softwood		Concrete	Steel	Other	Wood	Other	
Eastern U.S.	37,000	5,950,000	0	50,000	20,1000	6,000	0	215,000	0	46,000
Western U.S.	84,978	7,150,000	450,000	15,000	660,000	6,000	50,000	242,000	0	30,462
Canada & Canadian Owned U.S. Track	37,000	2,590,000	161,000	25,000	70,000	5,000	0	70,000	0	16,000
TOTAL	180,328	15,640,000	611,000	90,000	750,1000	17,000	50,000	527,000	0	92,462

AUTHORIZED CROSSTIES FOR 2012

Region	Total Track Miles	New Wood Crossties		Wood Relay Crossties	New Non-Wood Crossties			Switch Ties (Units)		Bridge Timbers Units
		Hardwood	Softwood		Concrete	Steel	Other	Wood	Other	
Eastern U.S.	58,350	5,900,000	0	50,000	20,100	6,000	0	215,000	0	46,000
Western U.S.	84,978	7,350,000	450,000	15,000	660,000	6,000	50,000	242,000	0	31,462
Canada & Canadian Owned U.S. Track	37,000	2,630,000	170,000	25,000	95,000	5,000	0	70,000	0	14,000
TOTAL	180,328	15,880,000	620,000	90,000	775,100	17,000	50,000	527,000	0	96,462

Note: Eastern U.S. = CSX Transportation & Norfolk Southern. Western U.S. = Burlington Northern Santa Fe, Kansas City Southern Railway & Union Pacific Railroad. Canada = Canadian Pacific Railway & Canadian National. (CP Rail) Lower than average tie programs are expected to continue in 2010 and 2011 with the trend of modest increases in 2010 and 2011 and beyond from the lows of 2009; All in an effort to preserve capital. CP's involvement with High Speed Rail in Wisconsin will see a total of 75,000 concrete ties in total installed over two years - 2011 and 2012. (BNSF) Stimulus projects could increase these amounts.

TABLE 3—The Railway Tie Association* 2010 Short Line Crosstie Survey

<u>Tie Categories</u>	<u>2009 Usage</u>	<u>2010 Projected</u>	<u>2011 Projected</u>	<u>2012 Projected</u>
New 6" & 7" Ties	2,319,015	2,515,256	2,301,736	2,215,888
Relay 6" & 7" Ties	409,060	406,385	258,902	216,496
Grand Total				
All Wood Ties	2,728,075	2,921,641	2,560,638	2,432,384
Switch Ties	100,086	81,432	76,367	65,702
Bridge Timbers	31,242	39,460	33,783	31,414
Concrete Ties	6,382	5,013	0	248
Steel Ties	17,168	4,020	1,598	356
Composite/Plastic Ties	596	315	0	0
	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Track Miles Reporting	30,720	15,116	14,966	28,516
Total Track Miles	50,859	50,859	50,859	50,000
% Reporting	60.4	30	29	57
Total Roads Reported	240	117	116	139
Total Short lines	572	572	306	455
% Reporting	42	20	38	21

*In cooperation with the American Short Line and Regional Railroad Association.
 Note: Calculation based on Survey responses from 240 roads representing 60% of operating trackage.

conditions would be hard to fathom.

So, is the purchases forecast too high? Could we expect a 25 percent jump in production practically overnight in tie production timeframes? Will the inventory-to-sales ratio go to previously unknown lows?

The answer to all three questions is probably not. Try this scenario on for size and be the judge.

Say production for the remainder of 2010 is exactly the same as it was for September-December 2009 (that would give a year-end total of a paltry 15.9 million ties produced in 2010). Then say purchases for 2011 are at the upper limit of RTA's optimistic outlook at 18.8 million ties. Finally, say the 2011 year-end inventory-to-sales ratio falls to the 5-year average of 0.78. How much would production have to increase from year-end 2010 to year-end 2011 to make this happen?

The answer is a stout 8 percent increase. But, that at least seems plausible.

TABLE 4—Crossties Laid In Replacement Statistics For Class 1 Railroads In The U.S. In 2009

District & Railroad	Treated wooden crossties laid in replacement (#)		New crossties laid in replacement other than wooden (#)	Track maintained by reporting railroad		Crossties per mile (1967)	New crosstie replacement avg.		Switch and bridge ties laid in addition (board ft.)
	New Ties (1)	Second-Hand Ties (2)		Miles occupied by crossties (a) (4)	Total crossties (b) (5)		% renewal to all ties (7)	# laid per mile (8)	
Eastern District									
CSX	3,262,150	0	2,334 (d1)	30,671	91,644,948	2,988	3.56%	106	8,138,464
Grand Trunk Corp. (CN)	676,314	0	606 (c)	10,420	32,875,100	3,155	2.06%	65	1,216,505
Norfolk Southern	2,688,887	296,528	1,415 (d2)	29,612	91,086,512	3,076	2.95%	91	10,139,220
Total Eastern District	6,627,351	296,528	4,355	70,703	215,606,560	3,049	3.08%	94	19,494,189
Western District									
Burlington Northern Santa Fe	3,116,404	0	166,906 (d3)	39,880	123,428,600	3,095	2.66%	82	4,734,360
Kansas City Southern	333,887	0	38 (c)	3,991	12,767,209	3,199	2.62%	84	167,856
Soo Line (CPR)	114,259	660	0	2,541	7,671,279	3,019	1.49%	45	416,585
Union Pacific	4,085,761	0	548,197 (d4)	43,172	128,652,560	2,980	3.60%	107	8,369,125 (e)
Total Western District	7,650,311	660	715,141	89,584	272,519,648	3,042	3.07%	93	13,687,926
Total United States	14,277,662	297,188	719,496	160,287	488,126,208	3,045	3.07%	94	33,182,115

Note: 110,834 Second-Hand Other-Than-Wooden ties, not shown in the table above, were laid in replacement in 2009.

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

(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) 1,013 concrete ties and 1,321 non-wooden-non-concrete ties. (d2) 485 concrete ties and 930 non-wooden-non-concrete ties. (d3) 154,906 concrete ties and 12,000 non-wooden-non-concrete ties. (d4) 401,215 concrete ties and 146,982 non-wooden-non-concrete ties. (e) Includes 126 concrete or steel switch ties, all assigned 65 board feet per tie.

The Railway Tie Association wishes to thank the American Short Line and Regional Railroad Association for its expertise and assistance in conducting the Short Line Survey used in developing the tables for this report.

ble. RTA has created an interactive spreadsheet readers can download from the RTA web site home page at www.rta.org. In this spreadsheet one can adjust all the variables and create different scenarios to develop you own “forecast” for 2011.

The bottom line in this article is that 2011 does not look like it will be significantly different in purchases than 2010, say mid-18 million ties. However, to meet these railroad needs production must grow substantially, and do so starting now under almost any reasonable scenario. And, inventory-to-sales ratios over the next few months are likely to test and possibly dip below the 5-year average before stabilizing and growing once again.

RTA wishes to thank the AAR for the two charts provided here (Tables 4 and 5). These charts contain data from the R-1 reporting process that U.S. Class 1s must comply with annually. The data provided herein is used in many of the charts and forecasts RTA produces on a regular basis. §

Table 5—For Calendar Year 2009
Crossties Laid In Addition Statistics For Class 1 Railroads In The U.S.

District & Railroad	Treated wooden crossties laid in addition (number)		New crossties laid in replacement other than wooden (number) (12)	Switch and bridge ties laid in addition (board ft.) (13)
	New Ties (10)	Second-hand ties (11)		
Eastern District				
CSX	38,924	0	2,700 (c)	24
Grand Trunk Western (CN)	0	0	0	0
Norfolk Southern	20,873	0	10,235 (c)	15,026
Total Eastern District	59,797	0	12,935	15,050
Western District				
Burlington Northern Santa Fe	2,229	0	24,284 (c)	24,660
Kansas City Southern	68,076	0	174,742 (c)	35,199
Soo Line (CPR)	0	0	0	0
Union Pacific	55,266	0	124,964 (d)	356,557
Total Western District	125,571	0	323,990	416,416
Total United States	185,368	0	336,925	431,466

*Source: R-1 Annual Reports to the Surface Transportation Board
(c) Concrete ties (d) 67,012 concrete ties and 67,952 steel ties



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