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Railroads Continue To Strengthen Market Position

Surprise Increase In 2002 Class 1 Mileage Results In Tie Installations

By Jim Gauntt

A fter steady declines in the number of maintained miles of track reported by Class 1 railroads, 2002 saw an unusual up-tick, according to data provided by the Association of American Railroads (AAR). The 2,279-mile increase from 167,275 to 169,554 was not expected and can be considered rather significant for two reasons.

First, it means that railroad traffic continues to strengthen and that additional track is required to push all the trains through to their destinations. Second, it suggests that with more mileage to maintain, suppliers of track maintenance materials should expect more demand for their products.

Since this is exactly what seems to be happening, this year's exclusive series of industry surveys, conducted by the Railway Tie Association (RTA) in conjunction with Class 1 railroads and the American Short Line and Regional Railroad Association, may be the most important in years. The big question, of course, is whether the trends will continue.

2002 Data

The increase in track mileage was not the only surprise for 2002. Last year was the first time in recent history that the Class 1 railroad surveys hit the target smack dab in the middle of the bullseye.

Typically, the surveys are more optimistic than what actually happens—sometimes as much as 8 to 10 percent. This is not an indictment of survey respondents, but is rather a reflection of the real world where end-of-the-fiscal-year goals often impact the final quarter of the year's tie installations.

The official figures indicate that U.S. Class 1 railroads installed 12.5 million ties in 2002. That is an astounding increase of over 1.5 million ties in a single year. Kinshofer, Liftall 3 5/8 x 9 5/8 BW PU nov/dec 02 p11

Table 1—Crossiles Laid in Replacement Statistics For Class 1 Railoads in the 0.5. In 2002									
	Treated wooden crossties laid in replacement (#)		New cross- ties laid in replacement		intained by g railroad	tained by railroad		sstie nt avg.	Switch and
	New Ties	Second- Hand Ties	other than wooden (#)	Miles occupied by crossties (a)	Total crossties (b)	per mile (1967)	% renewal to all ties	# laid per mile	bridge ties laid in replacement (board fast)
District & Railroad	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Eastern District									
CSX	2,806,582	19,227	69,230	33,794	100,976,472	2,988	2.85%	85	5,909,288
Grand Trunk Corp.	389,983	5,086	0	8,981	28,308,112	3,152	1.38%	43	973,317
Norfolk Southern	2,647,918	129,269	0	31,069	95,568,244	3,076	2.77%	85	8,801,820
Total Eastern District	5,844,483	153,582	69,230	73,844	224,852,828	3,045	2.63%	80	15,684,425
Western District	1 000 128	0	220 129	41 457	129 200 415	2 005	1 7/0/	54	2 844 224
Kansas City Southern	201 036	0	229,120	41,437	120,309,415	3,095	1.74/0	/0	2,044,334
Soo Line	201,030	0	694	2 747	8 203 103	3,133	2 55%	77	308 334
Union Pacific	4 080 079	1 088	296 403	47,384	141 204 320	2 980	3 10%	92	8 290 744 (c)
	4,000,070	1,000	200,400	47,004	141,204,020	2,000	0.1070	52	0,200,744 (0)
Total Western District	6,491,298	1,088	526,225	95,710	290,993,206	3,040	2.41%	73	11,946,339
Total United States	12,335,781	154,670	595,455	169,554	515,846,034	3,042	2.51%	76	27,630,764

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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) Includes 126 concrete ties and 881 steel ties that were assigned 65 board feet per tie.

Brewer 2 3/8 x 4 3/4 BW PU july/aug 03 p13 Not so in 2002. In fact, a case could be made that the surveys were so accurate that any fiddling with the figures to adjust for the "optimism factor" was completely unnecessary. But fiddle we did, and our prediction (Sept/Oct 2002 *Crossties*) of 12.1 million ties was outpaced to the tune of 400,000 ties.

The official figures indicate that U.S. Class 1 railroads installed 12.5 million ties in 2002. That is an astounding increase of over 1.5 million ties in a single year.

Should industry watchers expect the unexpected in 2003 and beyond? A look

at this year's survey data is in order.

To arrive at what the surveys tell us about just the U.S. portion of Class 1 installations, we have to do a little figuring. The surveys suggest that in 2003 the total of all Class 1s, including all Canadian-owned track, will be upwards of 14.3 million ties. Backing out the amount that will be installed in Canada, an estimated 1.2 million ties, the Class 1's report that U.S. installations will be around 13.1 million ties for 2003.

Although we have urged caution along the way in previous articles, data generated by forecasting models recently sug-

Reports are now circulating that tie production is beginning to meet the underlying demand...installations in the 12.8 to 13 million tie range for just the U.S. Class 1 trackage could be a reasonable expectation. gest that an increase of 300,000 to 400,000 installations for 2003 could be possible. So installations in the 12.8 to 13 million tie range for just the U.S. Class 1 trackage could be a reasonable expectation.

Will that actually happen? Well, the spirit is definitely willing, but can the railroads "deliver?"

Reports are now circulating that tie production is beginning to meet the underlying demand. But, for some railroads, getting track time to do the maintenance-and maybe more importantly the cars to deliver the ties-have some people wondering about installations in the fourth and final quarter of 2003. If a slowdown occurs in installations for these reasons, reaching 12.8 to 13.0 million installations could be problematic.

How about 2004 and beyond? The surveys say increased demand by as much as 300,000 to 400,000 ties is possible.

In fact, the only possible bump in the road that is predicted is in 2005 by Union Pacific (UP), when certain offsets to the capital plan could occur and slightly impact wood tie demand. But that is so far off and-the way the railroads continue to improve market share-this is not a concern at this point. Others, Burlington Northern Santa Fe (BNSF) for one, indicate that even if that happens their increase in demand will more than offset any drop by UP.

Speaking of BNSF, reports now indicate that the demand for wood will steadily increase for the next four years, starting with a whopping 500,000-tie increase for 2004.

Some of these future developments depend on what the balance holds for 2003. Should tie installations suffer in 2003...will 2004 live up to the increases in demand predicted by the survey?

As in previous articles on the subject, we take the conservative view. This is not just because the ability to peer beyond 6 to 12 months is clouded by the usual uncertainties about U.S. economic growth, but also because events typically conspire to alter budgets and scenarios. For example, who would have thought just when purchasing departments are beginning to see supply and demand

reach an equilibrium point, that getting track time for actually doing the maintenance could negatively impact tie installations and possibly short-term demand?

Thus, an estimate for actual installations that considers mitigating factors is probably a better way to approach forecasting. Using such a conservative approach, it is reasonable to think that U.S. Class 1 installations will hover between 12.4 and 12.8 million for 2003 and 2004. This does not mean though,

The surveys say increased demand is possible for 2004 by as much as 300,000 to 400,000 ties is possible.

Table 2—For Calendar Year 2002

Crossties Laid In Addition Statistics For Class 1 Railroads In The U.S.

	Treated wood laid in addition	den crossties on (number)		
District & Railroad	New Ties (10)	Second-hand ties (11)	New crossties laid in replacement other than wooden (number) (12)	Switch and bridge ties laid in addition (board ft.) (13)
Eastern District				
CSX	22,900	149	561	50,326
Grand Trunk Western	0	0	0	0
Norfolk Southern	127,953	0	0	382,493
Total Eastern District	150,853	149	561	432,819
Western District				
Burlington Northern Santa Fe	20,329	0	0	54,395
Kansas City Southern	1,535	0	0	168
Soo Line	0	0	0	0
Union Pacific	33,184	320	63,834	213,245 (c)
Total Western District	55,048	320	63,834	267,808
Total United States	205,901	469	64,395	700,627

Source: R-1 Annual Reports to the Surface Transportation Board (Furnished to RTA by AAR) (c) Includes 126 concrete ties and 881 steel ties that were assigned 65 board feet per tie.



that the underlying fundamentals of demand have lessened. Installations at the mid-12 million tie level are likely not enough when compared to what the railroad engineering community feels is optimal.

Short Line Railroads

Thanks to the superb efforts of Kathy

Cassidy at the ASLRRA, this year's surveys of the short line industry are the best in years. Not only did we receive significantly higher survey returns, it appears that the respondents placed renewed importance on their participation and the quality of the results.

This is encouraging because it helps RTA and others pinpoint the impact of short lines on the industry and to determine what role they play in the global transportation network. This role is a sizable one as short lines continue to represent 20 to 25 percent of the total marketplace.

This is not lost on tie suppliers who remain committed to this segment of the industry because of the balance it provides for the overall production community.

Table 3—Railway Tie Association Annual Survey*

Estimated Crosstie Requirements Class 1 Railroads (000's omitted) 2003-2006 Inclusive										
Authorized Crossties for 2003										
Decien	Total Track	New Wood	Crossties	Wood Relay	New Non-	Wood C	rossties	Switch Tie	es (Units)	Bridge Timbers
Eastorn II S	65 640	5 020 700	10.000	70,000		10 500	Other	102 509	500	01113 011 277
Western U.S.	67 112	5,520,700	965,000	70,000	505,000	10,500	71 000	174 050	0	41,377
Canada & Canadian Owned	34.086	1 462 800	248 800	109 500	25 150	750	300	60,000	2 760	5 630
	166 847	12 933 500	1 223 800	179,500	718 150	21 750	71 300	129 358	3 260	64 407
	100,047	12,300,000	1,220,000	175,500	710,100	21,700	11,000	423,000	0,200	04,407
			AUTHOR	IZED CROSST	TES FOR 2	004				
	Total Track	New Wood	Crossties	Wood Relay	New Non-	Wood C	rossties	Switch Tie	s (Units)	Bridge Timbers
Region	Miles	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	65,649	5,900,500	10,000	60,000	93,000	5,500	0	193,308	500	44,377
Western U.S.	67,112	5,750,000	965,000	0	755,000	5,500	109,000	238,950	0	19,500
Canada ^{& Canadian Owned} U.S. Track	34,086	1,651,000	198,000	70,500	30,000	1,200	500	59,000	2,700	5,480
TOTAL	166,847	13,301,500	1,173,000	130,500	878,000	12,200	109,500	491,258	3,200	69,357
Authorized Crossties for 2005										
	Total Track New Wood Crossties Wood Relay New Non-Wood Crossties Switch Ties (Units)					Bridge Timbers				
Region	Miles	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	65,649	5,500,500	10,000	60,000	93,000	5,500	0	193,308	500	46,377
Western U.S.	67,112	6,135,000	780,000	0	970,000	5,500	110,000	204,950	0	17,600
Canada & Canadian Owned U.S. Track	34,086	1,656,000	213,000	67,700	25,000	1,260	1,000	62,000	2,850	5,730
TOTAL	166,847	13,291,500	1,003,000	127,700	1,088,000	12,260	111,000	460,258	3,350	69,707
AUTHORIZED CROSSTIES FOR 2006										
Total Track New Wood Crossties Wood Relay New Non-Wood Crossties Switch Ties (Units) Bridge Ti						Bridge Timbers				
Region	Miles	Hardwood	Softwood	Crossties	Concrete	Steel	Other	Wood	Other	Units
Eastern U.S.	65,649	5,500,500	10,000	60,000	93,000	5,500	0	193,308	500	48,377
Western U.S.	67,112	6,325,000	690,000	0	970,000	5,500	113,000	219,950	0	17,800
Canada & Canadian Owned U.S. Track	34,086	1,751,000	238,000	92,000	25,000	1,200	1,000	66,800	3,300	6,680
TOTAL	166,847	13,576,500	938,000	152,000	1,088,000	12,200	114,000	480,058	3,800	72,857
* Eastern Railroads reporting - CSX Transporation; Elgin, Joliet and Eastern; Florida East Coast; and Norfolk Southern. Western Railroads reporting - Burlington Northern Santa Fe, Kansas										

* Eastern Railroads reporting - CSX Transporation; Elgin, Joliet and Eastern; Florida East Coast; and Norfolk Southern. Western Railroads reporting - Burlington Northern Santa Fe, Kansas City Southern Railway and Union Pacific. Canadian Railroads reporting - BC Rail, Canadian Pacific Railway (includes Soo Line) and CN/IC (includes GTW).

Volume of Timber Necessary To Produce Estimated Crosstie Requirements For Class 1 Railroads (000's omitted)

	Thousand Board Feet					
	2003	2004	2005			
Crossties - U.S. & Canada	524,692	532,060	571,780			
Switch Ties - U.S. & Canada	27,885	31,932	29,917			
Bridge Timbers - U.S. & Canada	8,372	9,016	9,062			
TOTAL BOARD FEET	560,949	573,008	610,759			

	Table 4—The Railwa	ay Tie Association*	2003 Regional & Sh	ort Line Crosstie Surv	/ey
Tie Categories		2002 Usage	2003 Projected	2004 Projected	2005 Projected
New 7" Ties		1,169,383	1,320,232	1,133,311	1,056,613
New 6" Ties		802,232	1,123,700	868,472	883,943
Sub-Total New		1,971,615	2,443,932	2,001,783	1,940,557
		070.004	040 500	004.000	047 547
Relay /" Ties		376,094	316,500	221,368	217,547
Relay 6" Ties		55,883	35,038	16,038	16,698
Sub-Total Relay	,	431,977	351,538	237,406	234,245
Inductrial 7" Tio	-		770.004		740.045
Industrial / Ties	5	654,525	772,094	760,755	719,245
Industrial 6" Ties	S	118,896	192,415	118,113	115,094
Sub-Total Indust	trial	773,421	964,509	878,868	834,340
Switch Tico		E1 700	74 495	60.629	64 706
Switch hes		51,730	71,465	69,636	04,790
Bridge Ties		31,389	37,708	34,958	33,845
Concrete Ties		0	0	0	0
Steel Ties		1,830	1,123	1,887	1,792
Grand Total All	Ties	3,143,351	3,729,565	3,224,540	3,109,575

*In cooperation with American Short Line and Regional Railroad Association

Note: Calculation based on survey responses from 114 Roads, representing approximately 53% of operating trackage.

It is important to note, though, that the future is much less clear for short line survey respondents. Whereas short lines typically answer the current-installationyear-demand question in the 3.6 million tie range, there is always a significant drop in the certainty for future years (see Table 4). This uncertainty factor has typically been in the 8 to 10 percent range.

This is understandable given the higher

More than one supplier has mentioned how important it will be to have decent weather this fall and into early next year in tie-producing regions.

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capital demand-to-revenue generated ratios for short lines. Short lines often can't easily predict what will happen because of this. The often reported need for federal assistance to upgrade and maintain track for the under-capitalized short lines is just as great as ever.

Then there is Mexico and the increasing activity there. New track construction planned to increase competition in the Rio Grande area, and increased maintenance requirements for all existing track continue to make this a market segment that cannot be ignored. An increase of 100,000 to 150,000 ties for this region next year may be in the offing.

Thus, the pressure may remain intense as tie suppliers move into the winter months. More than one supplier has mentioned how important it will be to have decent weather this fall and into early next year in tie-producing regions.

Does all this mean that RTA production could begin to push 18 million ties in 2004? With all the caveats previously mentioned in place, that seemingly huge figure could indeed be possible. If the weather is decent; if the cars that can move the ties can get to the plants; if the track time for maintenance can be squeezed out; if the reduced capacity in the tie treating industry does not create issues; if the weather is decent... §