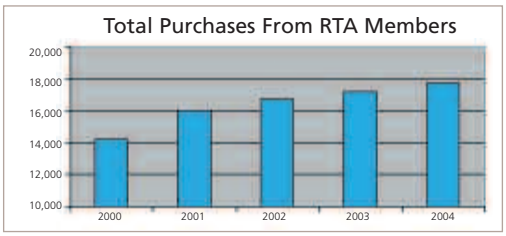
MARKET OUTLOOK

TIE PURCHASES ACHIEVE HISTORIC HIGH, MODELS SAY LOOK FOR MORE OF THE SAME

By Fred Norrell and Jim Gauntt

Wood crosstie purchases have been gaining momentum now for several years. After a couple of slow years ending in 2000, Railway Tie Association (RTA) members' customers have increased purchases by an amazing 3.5 million crossties.



Other than brief periods in 1988 and 1998, purchases are currently higher than at any time recorded by RTA. So, as alluded to in January's market outlook, one must wonder if a new chapter in railway history is unfolding. If so, what is driving this railroad renaissance?

RTA has employed econometric modeling to help better analyze the market forces and to help make forecasts. In doing so for various reasons, the market has been segmented into two groups of crosstie buyers: Class 1 railroads and what we call the "small market."

The Class 1 group is made up of U.S. Class 1 railroads, CN and CP; the small market is composed of the remaining buyers: North American local and regional railroads, transits, and industrial, railroad contractor, and other buyers. RTA has developed separate but interlinked models for both market groups.

The Class 1 Model

The Class 1 model consists of two equations. The first states that freight (in ton-miles) depends on U.S. real GDP, changes in coal shipments, and the real price of diesel fuel. As any of these variables increases, so does freight. GDP and coal represent the volume of business railroads generate each year. And, when diesel price goes up, some freight apparently shifts from highways to rail, adding to the freight volume. Taking Yale University's Fair model forecast of GDP, and making some assumptions about coal and diesel, a freight forecast can be assembled.

The next equation in the Class 1 model states that tie purchases depend on the miles of U.S. Class 1 track owned, and the amount of freight moved on those tracks. As either of these two variables increases, so do Class 1 purchases of ties. Our model's forecast is presented below, with purchases and track mileage in thousands.

Year	Real GDP	Coal	Freight	Track	Tie Purchases	%
2003	3.0%	-0.1%	2.9%	169	13,578	0.6%
2004	4.4%	-3.7%	7.0%	167	13,979	3.0%
2005	2.8%	0.0%	5.7%	165	15,154	8.4%
2006	2.7%	1.5%	3.7%	164	15,985	5.5%
2007	2.4%	1.5%	2.4%	163	16,376	2.4%
2008	2.6%	1.5%	2.6%	161	16,667	1.8%

Note that freight growth has recently peaked, and track (shown in thousands of miles) is declining very slowly. This follows years of more radical rationalizing—the shedding of track of lesser value to the Class 1 roads.

In fact, this slow-down in track rationalization may be a sign of the new chapter for rail transport and its supporting industries. With track mileage largely stable, future economic growth will drive freight expansion, which in turn should drive up tie purchases. Thus, the outlook for Class 1 purchases takes on the promise of steady sustainable growth constrained only by the performance of the general economy.

The Small Market Model

This model consists of one equation, which states that tie purchases depend on U.S. non-durable manufacturing (the level of real GDP originating in the sector) and the change in real price of diesel fuel. Non-durable manufacturing has grown slowly during the past decade, and RTA's analysis indicates it should continue this trend in the future. Thus, in the absence of tax change, the economic driving force for the small market is limited in its prospects.

Increasing diesel prices appear to hurt small market participants, who then purchase fewer ties. This is in contrast to the Class 1 model and suggests Class 1 buyers hedge effectively against fuel prices, while small market buyers, or short line railroads, appear to build this year's fuel prices into next year's prices.

Our outlook assumes no short-term relief from high fuel prices because, in contrast to past price spikes caused by supply disruptions, current prices are now thought to be the result of fast-

Year	Non-Durable Manufacturing	Real Price of Diesel	Tie Purchases	%
2003	2.4%	26.7%	2,888	-20.5%
2004	2.2%	24.9%	4,019	39.2%
2005	-0.5%	33.1%	3,375	-16.0%
2006	-0.4%	5.0%	3,975	17.8%
2007	-0.6%	0.0%	4,013	1.0%
2008	-0.1%	0.0%	3,945	-1.7%

increasing world demand for fuels. Our small market forecast is summarized to the left, with purchases in thousands. It must be emphasized that increased purchases due to tax relief is not included here; that is addressed in the companion article.

The Two Markets Combined

Our two market segments have contrasting aspects. Class 1's are stretching to provide service and are buying ties to support the freight movement; small market buyers are serving a slower growth segment of the freight market: U.S. manufacturers.

Also, whereas rising fuel prices seem to positively impact Class 1 tie demand as more freight moves from trucks to rail, the short line railroads appear to be hurt by rising fuel costs. Still, the picture that emerges appears to be very positive as illustrated below.

Year	Class 1 Purchases	Small Mkt Purchases	Total Purchases	%
2003	13,578	2,888	16,465	-3.9%
2004	13,979	4,019	17,998	9.3%
2005	15,154	3,375	18,529	3.0%
2006	15,985	3,975	19,960	7.7%
2007	16,376	4,013	20,389	2.1%
2008	16,677	3,945	20,622	1.1%

For the 12 months ended June 2005, purchases from RTA members are running at about 18,475 ties (in thousands.) This is just short of our forecast. It would appear that the model's forecasts are right on.

And, going forward, this outlook reveals the expectation for potentially significant growth in business. However, two important qualifications are in order. First, this is a forecast of "potential demand" for new wood ties; that is, supply constraints play no role in our model. Second, the anticipated effects of recent tax changes are not included in these projections. Since these issues are obviously important consideration, they are subjects of the companion article.

Additionally, one has several more questions. One must wonder when interest rates will stabilize and whether they will eventually cause a recession. Some economic forecasters worry that this could occur if the Federal Reserve overshoots the mark with interest rate hikes.

Furthermore, when will oil and steel prices moderate, and what economic pains will be endured if they don't?

And, then, what about infusion of federal dollars in the form of tax credits and newly enacted SAFTEA initiatives? How will this change the landscape?

The economic model we use calls for no recession and no major disruptions due to oil or other commodity prices and, for obvious reasons, cannot incorporate tax law or other legislative changes that may boost demand. All of these things could affect the railway business and throw our forecast off course. Thus, it is prudent to look at all the aspects of market drivers and not just the models to get a perspective on the range of possible demand for crossties.

The models do, however, suggest that if economic activity continues at or near the assumed pace then demand for rail services and thus ties will continue to grow for the foreseeable future. §