Not-So-Great Expectations

By Fred Norrell

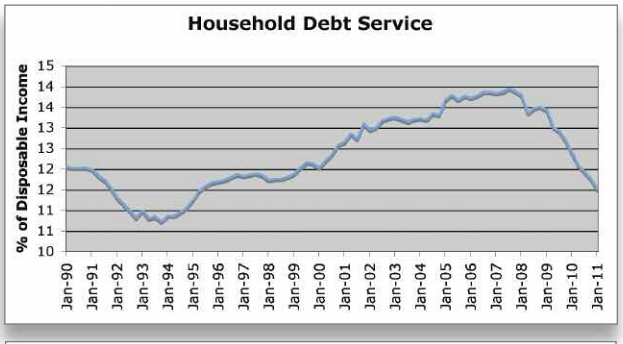
Recent developments cast a shadow of doubt over the world economy, the U.S. economy, the railroad business, and the crosstie market. Charles Dickens might not have chosen the title of this article, but perhaps he would find it fitting.

The Bureau of Economic Analysis (BEA) estimates Gross Domestic Product (GDP) and its components, collecting data from a myriad of sources. The source data is subject to revisions and updates; it is to be expected that GDP will also be revised. On July 29, BEA published an update involving considerable downward revisions to GDP and related data, stretching back to 2003. This embraces the period of the most recent recession: December 2007 to June 2009. The primary conclusion from the revisions is that the recession was deeper than previously thought.

Standard & Poor's (S&P) is a prominent firm involved in forecasting the economy, among other activities. Given the significant change to the historical record, S&P and other forecasters were thrown a challenge to chart the future. Forecasts begin at a lower starting point and grow more slowly than before. The GDP graph below illustrates the point. This measure of production is particularly important to the Railway Tie Association (RTA) model's forecast of crosstie purchases. RTA relies on S&P to provide economic forecast information.

The recent recession is what economists call a "balance sheet recession." Debt offsets a large portion of gross assets so that net assets are meager, leaving little in the way of financial reserves. A large number of households borrowed so extensively that financial reserves disappeared.

The graph (right) shows consumer debt service payments as a percentage of disposable income. It is important to keep in mind the graph represents all households in the United States. Some households carried much heavier debt burdens than the graph indicates. Notice the debt burden, as measured, reached about 14 percent of income during 2007. The return to more normal levels is said to be, to a significant degree, a result of mortgage write-offs and write-downs. Nonetheless, this is a positive sign for future consumer spending.

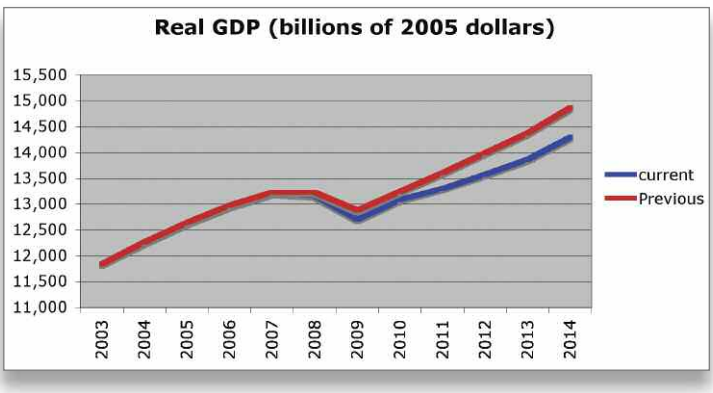


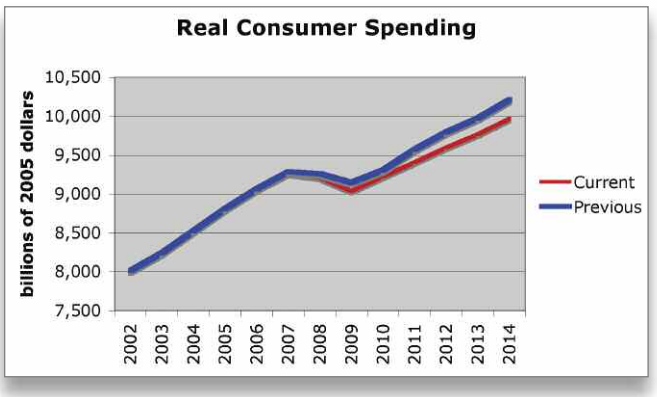
Mortgage payments are included in the debt service payments shown above. Indeed, much borrowing took that form. Housing experienced an investment bubble, induced by tax benefits, low interest rates, and policies designed to make housing more accessible to low-income groups. New privately owned housing starts peaked at about 2 million units per year but fell to about one quarter of that amount. The housing start graph (above) reveals this, as well as the expectation of a weak, partial recovery.

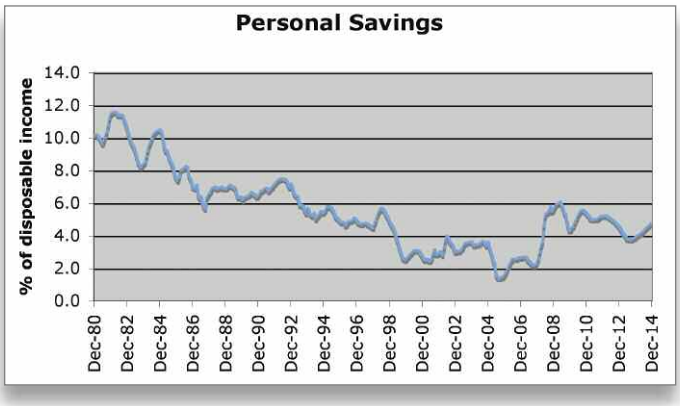
New housing construction adds to GDP, but it is categorized as investment spending. Yet, housing reflects problems within the household sector. A large portion of the GDP revisions comes from reduced estimates of consumer spending. As the consumer spending graph below illustrates, consumer spending was over-estimated during the recession, and S&P has trimmed its outlook over the next few years.

Consumer spending is expected to remain weak while balance sheets are in the process of being repaired. Personal savings declined during the 1980s and 1990s, and remained at a low level just prior to the recession of 2000 until mid 2007. At that time, savings rebounded, indicating a strengthening of balance sheets.

Unfortunately, this may not last; the







six-month moving average graph (above) reveals expectations that savings are not continuing to increase and that further balance sheet repair will be postponed.

With the household sector in bad shape, and sales weak, businesses are not inclined to expand. Indeed, S&P forecasts payroll employment growing little better than 1 percent a year until 2014, when there is a slight pickup.

On all levels, government spending is expected to decline for the next couple of years, further depressing the economic outlook.

Major railroads expressed optimism in terms of their commitments to maintain road and track despite the discouraging recent economic climate. One wonders if this optimism will sustain. New wood crosstie installations by Class 1's increased 1 percent in 2010, but the RTA model suggests no increase in the current year and a decline in the next (see Table 1 above). The RTA model predicts freight movement will not reach pre-recession levels until 2012. Given the time lag between freight and maintenance, the results appear in the 2013 projection of crossties.

TABLE 1—Forecast Summary

New Wood Crossties (in thousands)

Year approx.	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct.
2006	2.7%	15,937	5,110	21,047	11.7%
2007	1.9%	15,285	5,349	20,634	-2.0%
2008	-0.3%	16,761	3,907	20,668	0.2%
2009	-3.5%	16,216	3,432	19,648	-4.9%
2010	3.0%	16,379	3,200	19,579	-0.4%
2011	1.7%	16,358	3,758	20,117	2.7%
2012	2.0%	16,235	3,244	19,479	-3.2%
2013	2.1%	16,608	3,444	20,052	2.9%
2014	3.1%	17,019	3,510	20,530	2.4%

Small railroads and other buyers are predicted to increase purchases by a little more than 3 percent in the current year but to fall off as tax incentives are assumed to end.

Other issues are at play and could well influence crosstie purchases in ways the tie forecast model does not anticipate. Among these are positive train control requirements, environmental regulation of coal burning, tax incentives targeting road and track investment, and changes to public/private partnership participation. ■

Chugging Along A Bumpy Road

Railroads Make Tie Demand Ride Relatively Smooth

By Jim Gauntt

Throughout the last few years, the Railway Tie Association (RTA) has reported how steady railroads have been in comparison to an economic and legislative operating environment that has more resembled a roller coaster than tangent track. This has had two very important and worthwhile effects.

First, the railroad industry has been able to improve its overall track structure not only preparing for better economic times ahead but also spending to optimize current operating conditions to a greater degree than at any other time in the modern era of railroading.

Second, by staying as steady as possible while traversing a pretty rough economic trail, railroads provided a buffer for tie producers who otherwise would have been at the mercy of the plummeting demand for other low-grade hardwood products. This gave most tie suppliers a margin of insulation from the big recession.

This year's recap of 2010 Class 1 data, produced using data provided by the Association of American Railroads (AAR) and RTA's exclusive surveys of the entire rail community suggests a similar path going forward. Yes, as the economic outlook article (pgs. 12-13) reports, there will be some modest swings the next couple of years. But, with some good fortune, tie suppliers can look forward to an unusually smooth road comparatively speaking.

2010 For The Class 1 Market

Table 1 (laid in replacement/maintenance ties) and Table 2 (laid in addition/new construction) illustrate the 2010 installations of new wood ties by U.S. and Canadian Class 1s in U.S.-owned track. The total of new wood ties installed by Class 1s for these activities was 14.3 million. In 2010, Canadian track installs totaled around 2.1 million for an overall total of 16.4 million new wood ties. That compares to 16.2 million for 2009 and 16.8 million in 2008. That's a pretty good track record for Class 1 roads throughout arguably the toughest economic times America has seen in six or more decades.

So, what will 2011 and beyond bring? RTA's forecast model suggests that Class 1s will purchase 16.4 million new wood ties in 2011, 16.2 million in 2012, and 16.6 million in 2013.

TABLE 1—Crossties Laid In Replacement Statistics For Class 1 Railroads In The U.S. In 2010

District & Railroad	Treated wooden crossties laid in replacement (#) New Ties (1)	Treated wooden crossties laid in replacement (#) Second-Hand Ties (2)	New crossties laid in replacement other than wooden (#) (3)	Track maintained by reporting railroad: Miles occupied by crossties (a) (4)	Track maintained by reporting railroad: Total crossties (b) (5)	Crossties per mile (1967) (6)	New crosstie replacement avg.: % renewal to all ties (7)	New crosstie replacement avg.: # laid per mile (8)	Switch and bridge ties laid in addition (board ft.) (9)
Eastern District									
CSX	3,359,882	0	5,519 (c)	30,500	91,134,000	2,988	3.69%	110	9,997,058
Grand Trunk Corp. (CN)	664,503	0	0	8,882	28,022,710	3,155	2.37%	75	950,615
Norfolk Southern	2,542,617	345,030	748 (d1)	29,404	90,446,704	3,076	2.81%	86	7,792,310
Total Eastern District	**6,567,002**	**345,030**	**6,267**	**68,786**	**209,603,414**	**3,047**	**3.14%**	**96**	**18,739,983**
Western District									
Burlington Northern Santa Fe	3,158,823	0	201,866 (d2)	39,936	123,601,920	3,095	2.72%	84	6,106,210
Kansas City Southern	517,384	0	21 (c)	3,999	12,792,801	3,199	4.04%	129	28,980
Soo Line (CPR)	242,411	210	0	5,649	17,054,331	3,019	1.42%	43	491,968
Union Pacific	3,646,053	92,874	547,511 (d3)	43,062	128,324,760	2,980	3.27%	97	8,820,942 (e)
Total Western District	**7,564,671**	**93,084**	**749,398**	**92,646**	**281,773,812**	**3,041**	**2.95%**	**90**	**15,448,100**
Total United States	**14,131,673**	**438,114**	**755,665**	**161,432**	**491,377,226**	**3,044**	**3.03%**	**92**	**33,188,083**

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

General Notes: *Beginning 2010, Soo Line Corporation includes Soo Line Railroad, Delaware and Hudson Railway, Dakota, Minnesota & Eastern Railroad, and small rail-related companies. Zero Second-Hand Other-Than-Wooden ties, not shown in the table above, were laid in replacement in 2010.

Footnotes: (a) Total mileage operated at the end of the year, excluding mileage under trackage rights. (b) Based on crossties per mile of track in 1967, the last year reported. (c) Concrete ties. (d1) 460 concrete ties and 288 non-wooden-non-concrete ties. (d2) 168,319 concrete ties and 33,547 non-wooden-non-concrete ties. (d3) 373,398 concrete ties and 174,113 non-wooden-non-concrete ties. (e) Includes 126 concrete or steel switch ties, all assigned 65 board feet per tie.

According to RTA's exclusive annual surveys, the Class 1s anticipate installing 16.3 million ties for 2011, 16.2 million in 2012, and 16.5 million in 2013 (See Table 3).

Aside from the remarkable similarity in the annual numbers from two different sources, it must be pointed out that if either of the two predictions occur, tie suppliers are in for a steady state of demand for the next 2.5 years.

What about beyond that? The surveys predict 16.9 million in 2014 as compared to the model's forecast of 17.0 million. So, both suggest even better days ahead.

All of this is good news to an industry that has seen more than its share of ups and downs in prior decades. And, it suggests that some of the gloomier news everyone is bombarded with daily is only one side of the story. On the other side, there's a lot to be thankful for.

What About Short Lines & Regionals?

Short lines and regional roads have ➤

TABLE 2—For Calendar Year 2010

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

District & Railroad	Treated wooden crossties laid in addition (number) New Ties (10)	Treated wooden crossties laid in addition (number) 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	22,443	0	0	0
Grand Trunk Western (CN)	0	0	0	0
Norfolk Southern	18,787	0	21,702 (s)	14,248
Total Eastern District	41,230	0	21,702	14,248
Western District				
Burlington Northern Santa Fe	4,564	0	63,401 (c)	0
Kansas City Southern	21,233	0	0	152,145
Soo Line (CPR)	0	0	0	0
Union Pacific	92,935	0	47,590 (d)	195,662
Total Western District	118,732	0	110,991	347,807
Total United States	**159,962**	**0**	**132,693**	**362,055**

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

General Notes: *Beginning 2010, Soo Line Corporation includes Soo Line Railroad, Delaware and Hudson Railway, Dakota, Minnesota & Eastern Railroad, and small rail-related companies

Footnotes: (c) Concrete ties (d) 36,171 concrete ties and (s) steel ties

TABLE 3—Railway Tie Association Annual Survey*

Estimated Crosstie Requirements • Class 1 Railroads 2011-2013 Inclusive

Authorized Crossties for 2011

Region	Total Track Miles	New Wood Crossties Hardwood	New Wood Crossties Softwood	Wood Relay Crossties	New Non-Wood Crossties Concrete	New Non-Wood Crossties Steel	New Non-Wood Crossties Other	Switch Ties (Units) Wood	Switch Ties (Units) Other	Bridge Timbers Units
Eastern U.S.	51,800	6,050,000	0	30,000	100	14,000	0	235,000	0	53,500
Western U.S.	84,978	7,500,000	200,000	15,000	650,000	15,000	20,000	375,000	0	80,000
Canada & Canadian Owned U.S. Track	36,900	2,770,000	220,000	25,000	55,000	70,000	0	70,000	0	21,000
TOTAL	**180,328**	**16,320,000**	**420,000**	**70,000**	**705,100**	**99,000**	**20,000**	**680,000**	**0**	**154,500**

Authorized Crossties for 2012

Region	Total Track Miles	New Wood Crossties Hardwood	New Wood Crossties Softwood	Wood Relay Crossties	New Non-Wood Crossties Concrete	New Non-Wood Crossties Steel	New Non-Wood Crossties Other	Switch Ties (Units) Wood	Switch Ties (Units) Other	Bridge Timbers Units
Eastern U.S.	37,000	6,050,000	0	30,000	100	6,000	0	230,000	0	48,500
Western U.S.	84,978	7,700,000	200,000	15,000	750,000	70,000	50,000	375,000	0	77,000
Canada & Canadian Owned U.S. Track	37,000	2,434,000	146,000	25,000	50,000	15,000	0	70,000	0	21,000
TOTAL	**180,328**	**16,184,000**	**346,000**	**70,000**	**800,100**	**91,000**	**50,000**	**675,000**	**0**	**146,500**

Authorized Crossties for 2013

Region	Total Track Miles	New Wood Crossties Hardwood	New Wood Crossties Softwood	Wood Relay Crossties	New Non-Wood Crossties Concrete	New Non-Wood Crossties Steel	New Non-Wood Crossties Other	Switch Ties (Units) Wood	Switch Ties (Units) Other	Bridge Timbers Units
Eastern U.S.	37,000	6,050,000	0	30,000	100	6,000	0	230,000	0	48,500
Western U.S.	84,978	7,700,000	200,000	15,000	750,000	10,000	50,000	425,000	0	77,000
Canada & Canadian Owned U.S. Track	37,000	2,745,000	226,000	25,000	55,000	5,000	0	70,000	0	21,000
TOTAL	**180,328**	**16,495,000**	**426,000**	**70,000**	**805,100**	**21,000**	**50,000**	**725,000**	**0**	**146,500**

Note: CSX: "Future concrete and steel needs are unknown at this time". CP: "Anticipate demand to decrease for 2012 but to then grow for 2013 and also 2014".

been a little less predictable unless you take into account the 45G Tax Credit that is sometimes on and sometimes off. For the years when the tax credit is in place, demand surges by several hundred thousand ties, as one would surmise. In 2011, the tax credit switch is in the on position, so that market segment will purchase once again at least 400,000-500,000 additional ties.

RTA's model has the ability to account for the positive effect of tax credits, but we have not plugged this stimulus into 2012-2014 right now because of the uncertainty in Washington, D.C. With short line and regional purchases forecast to fall back to the 3.2 million tie range in 2012, since the tax credit can't be counted on, almost all of the downturn in the market is due to the lack of a positive stimulus from 45G.

As an aside, even if you're reading this and you did not attend Railroad Day on the Hill to preach this gospel to your congressional leaders, it is not too late. There is still time to call and ask for your legislative leader's sponsorship of the bill to renew 45G. Another half million or more tie demand is plenty of reason to pick up the phone today and make those calls!

TABLE 4—The Railway Tie Association* 2011 Short Line Crosstie Survey

Tie Categories	2010 Usage	2011 Projected	2012 Projected	2013 Projected
New 6" & 7" Ties	1,061,288	2,677,123	2,720,834	2,715,261
Relay 6" & 7" Ties	163,876	615,915	448,390	301,574
Grand Total All Wood Ties	**1,225,164**	**3,293,038**	**3,169,224**	**3,016,836**
Switch Ties	39,040	54,940	43,402	42,099
Bridge Timbers	13,120	23,265	25,098	24,507
Concrete Ties	2,060	1,762	0	0
Steel Ties	1,812	7,620	7,620	7,620
Composite/Plastic Ties	0	0	0	0

	2011	2010	2009	2008	2007
Track Miles Reporting	21,116	26,696	15,116	14,966	28,516
Total Track Miles	**51,584**	**50,859**	**50,859**	**50,859**	**50,000**
% Reporting	41	30	30	29	57
Total Roads Reported	185	117	117	116	139
Total Short lines	**572**	**572**	**572**	**306**	**455**
% Reporting	32	33	21	38	31

***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.

Table 4 presents the results of this year's annual short line and regional road survey. Readers are cautioned that the projected numbers came from only 41 percent of reporting track miles, so making comparisons between previous years' surveys remains a difficult task.

Thoughts On The Tally

Let's say that the future for tie demand is as the RTA model suggests it will be. What does that do for the supply side of the equation? Last year, RTA indicated that tie supply could get squeezed by August of 2011 as railroads ramped up expected demand 3 percent. As it turns out, August 2011 is the month when the inventory-to-sales ratio (ISR) did set its lowest point since 2008 at 0.73.

If historical patterns are true to form, September's ISR should also stay around that mark. But even though that's a rather low ISR, any squeeze being felt is not as dramatic as it might have been with a year-to-year increase in demand by the end of 2011 that may exceed 3 percent. That's because suppliers surprised everyone by leaping into high gear and increasing the annual rate of production 38 percent through August to a rate approaching 22 million ties on a 12-month rolling total basis. Year-to-date August 2011 tie production is 46 percent higher than YTD August 2010. Remarkable!

Although the outlook for the U.S. economy is fraught with uncertainty and the high unemployment rate does not look to recede anytime soon, tie suppliers are in a position that many other business owners would envy. Small fluctuations and an expected slight downturn for 2012, primarily due to tax policy, provides the only real negative for the immediate future, and then only for 2012. And don't forget—tie suppliers can still have an effect on this by hammering on their elected leaders to renew the Section 45G Tax Credit, which produces real stimulus that results in real economic growth for American workers. ■

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. RTA would also like to thank AAR for their assistance in developing Tables 1 & 2.