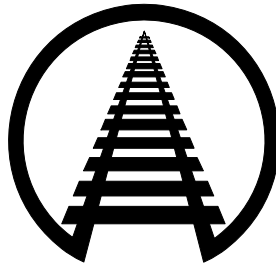


Rail Time Indicators

*A Review of Key Economic Trends
Shaping the Demand for Rail Transportation*



**Policy & Economics Department
Association of American Railroads
Washington, DC**

February 9, 2010

Rail Time Indicators is a non-technical summary of many of the key economic indicators potentially of interest to U.S. freight railroads. It is issued monthly by the Policy & Economics Department of the Association of American Railroads.

To get on the e-mail distribution list for Rail Time Indicators, send a request (including your name and business affiliation, if any) to Beth Eagney at beagney@aar.org. If you have questions or comments about the content of Rail Time Indicators, please contact Dan Keen (dkeen@aar.org) or Shannon Stare (ssstare@aar.org).

SUMMARY OF MOST RECENT DATA

Economic Indicator	Most Recent Data
U.S. Freight Rail Traffic (p. 2)	Carloads: In Jan. 2010, ↓ 0.7% from Jan. 2009 and ↓ 17.7% from Jan. 2008 . Intermodal: In Jan. 2010, ↑ 2.5% from Jan. 2009 and ↓ 11.2% from Jan. 2008.
Canadian Freight Rail Traffic (p. 3)	Carloads: In Jan. 2010, ↑ 16.2% from Jan. 2009 and ↓ 8.6% from Jan. 2008 . Intermodal: In Jan. 2010, ↑ 3.7% from Jan. 2009 and ↓ 9.2% from Jan. 2008.
Gross Domestic Product (p. 15)	↑ 5.7% in Q4 2009 (first preliminary estimate, subject to potentially large revision).
Purchasing Managers Index (p. 16)	↑ to 58.4 in January 2010 from 54.9 in December 2009.
Manufacturing Inventories and Sales (p. 17)	From Nov. 2009 to Dec. 2009, manufacturing sales ↑ 1.9% , inventories ↓ 0.1% , and inventory-to-sales ratio ↓ 1.9% .
Industrial Production (p. 18)	↑ 0.6% in December 2009 from November 2009.
Capacity Utilization (p. 19)	↑ to 72.0% in Dec. 2009 from 71.5% in Nov. 2009.
Non-Farm Employment (p. 20)	↓ 20,000 in January 2010 from December 2009.
Unemployment Rate (p. 20)	↓ to 9.7% in January 2010 from 10.0% in December 2009.
Class I Railroad Employment (p. 21)	↓ to 146,725 in December 2009 from 147,097 in Nov. 2009.
Index of Consumer Confidence (p. 22)	↑ to 55.9 in January 2010 from 53.6 in December 2009.
Retail Sales (p. 23)	↓ 0.3% in December 2009 from November 2009.
Light Vehicle Sales (p. 24)	↓ 4.0% in January 2010 from December 2009.
Housing Starts (p. 24)	↓ 4.0% in December 2009 from November 2009.
Consumer Price Index (p. 25)	↑ 0.1% in December 2009 from November 2009.
U.S. Dollar Exchange Rate (p. 26)	↑ 0.4% in January 2010 from December 2009.
Rail Freight Cars in Storage (p. 26)	↓ to 439,631 on Feb. 1, 2010 (28.2% of the fleet) from 448,555 (28.7%) on Jan. 1, 2010.

U.S. AND CANADIAN FREIGHT RAILROAD TRAFFIC

Who releases it and when?

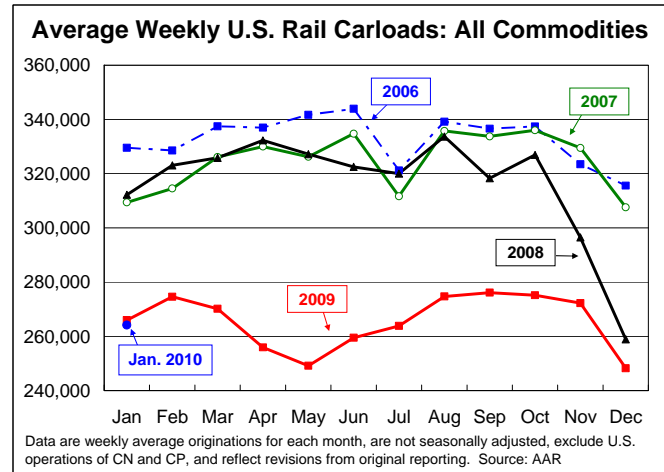
- The Association of American Railroads (AAR) releases its Weekly Railroad Traffic report every Thursday morning. The report contains rail traffic data for the previous week. Weekly data are aggregated into monthly figures in Rail Time Indicators.

What is it and why is it important?

- The AAR traffic report details rail carloadings for 19 different major commodity categories, as well as intermodal units (trailers and containers), by railroad. Railroads that report their data to the AAR collectively account for the vast majority of total U.S. and Canadian freight rail traffic.
- Freight railroading is a “**derived demand**” industry — demand for rail service occurs as a result of demand elsewhere in the economy for the products that railroads haul. Thus, rail traffic is a useful gauge of the health of the overall economy.

What are the latest numbers for U.S. railroads?

- U.S. freight railroads originated 1,056,684 carloads in January 2010, an average of 264,171 carloads per week — **down 0.7% from January 2009** (265,983 average) and **down 17.7% from January 2008's** 321,040 average.

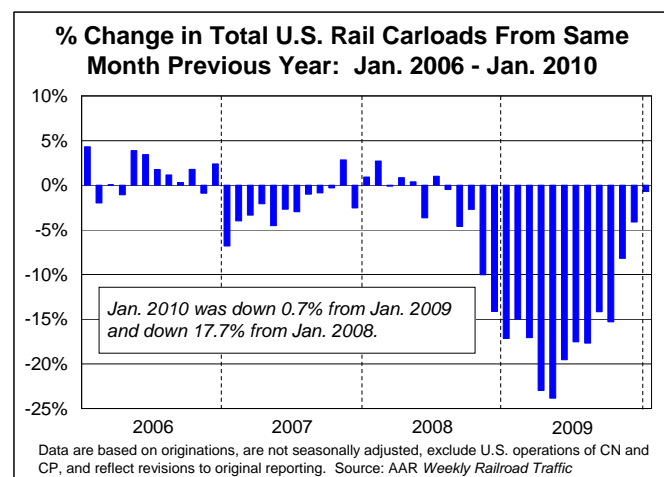


- Coal carloads were 65,713 (12.1%) lower in January 2010 than in January 2009 as high utility stockpiles continue to limit coal demand. It remains to be seen what the exceptionally cold winter in many regions of the country will mean in terms of coal stockpiles going forward. While most home heating uses natural gas or fuel oil, electricity is sometimes used in heating (for example, in heat pumps or space heaters).

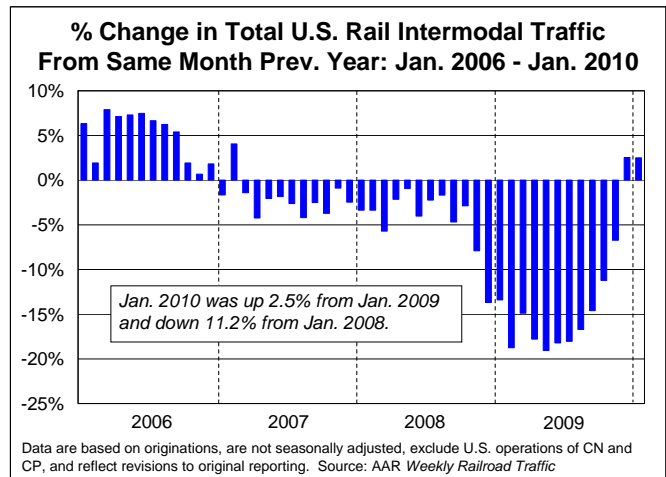
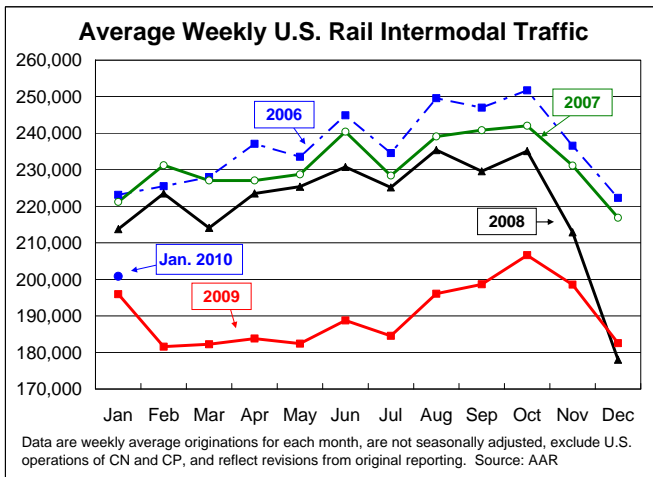
- Carloads excluding coal **were up 11.3%** (58,467 carloads) in January 2010 from January 2009, though they were still down 19.9% from January 2008.

- In January 2010, **13 of the 19 major commodity categories** tracked by the AAR **saw carload gains** compared with January 2009. Carloads of chemicals were up 13.2% from last year, while carloads of primary metal products (predominantly steel) were up 28.0%. See the tables and charts beginning on page 6 for more commodity-level detail.

- The biggest carload percentage gain in January 2010 went to motor vehicles and parts, carloads of which were up 65.7% in January 2010 from January 2009's severely depressed level.

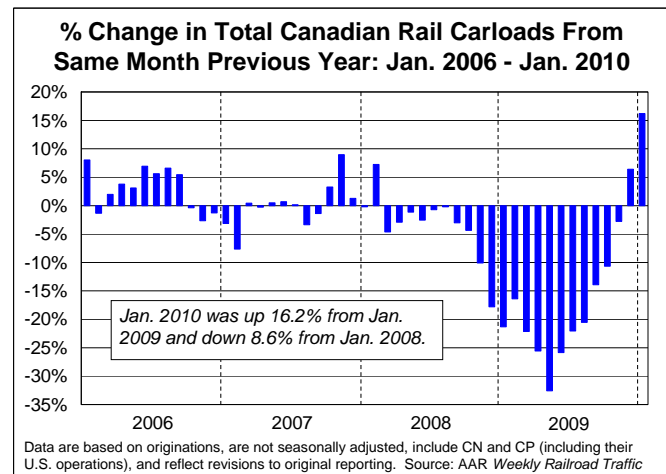
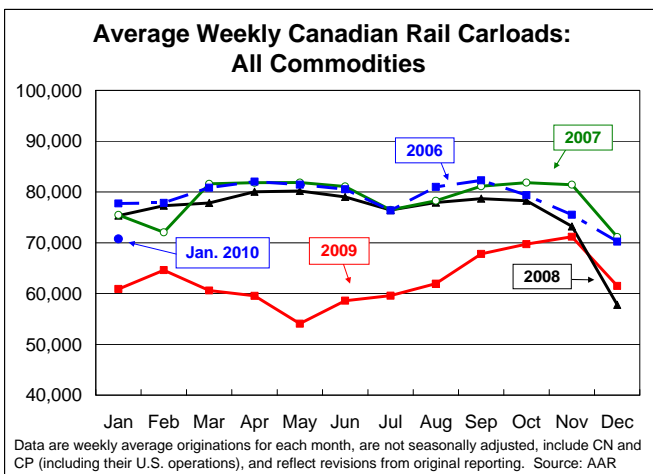


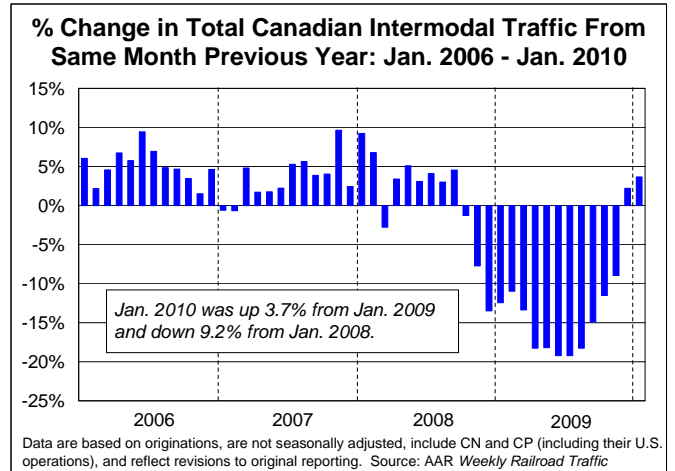
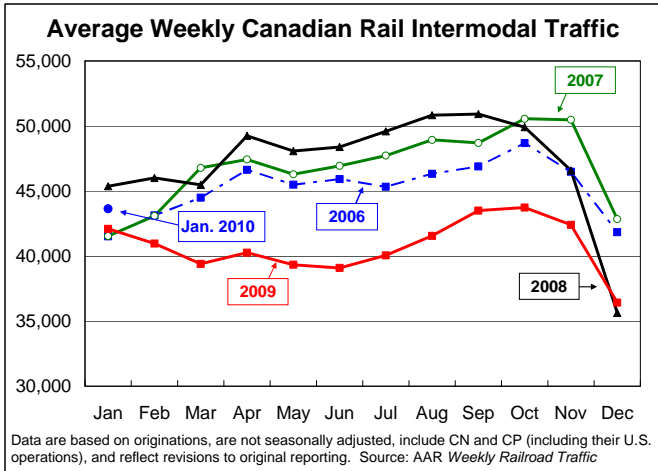
- U.S. railroads originated 803,275 intermodal trailers and containers in January 2010, an average of 200,819 per week. That's **up 2.5%** from January 2009 but **down 11.2%** from January 2008. Intermodal traffic is not included in carload figures.



What are the latest numbers for Canadian railroads?

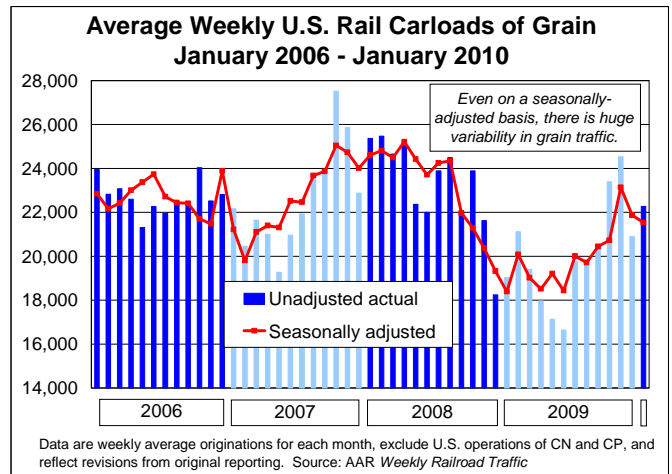
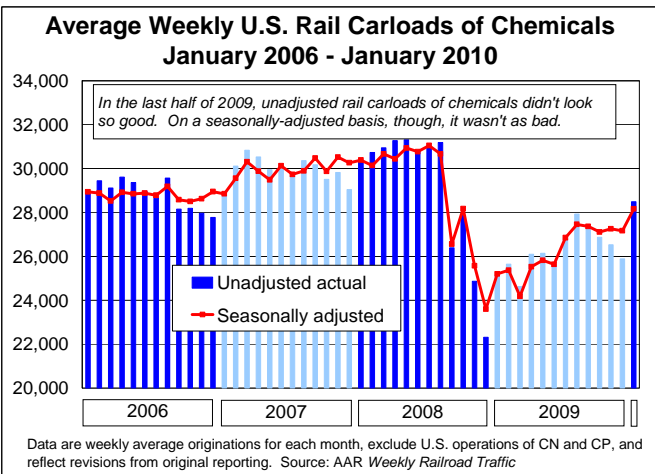
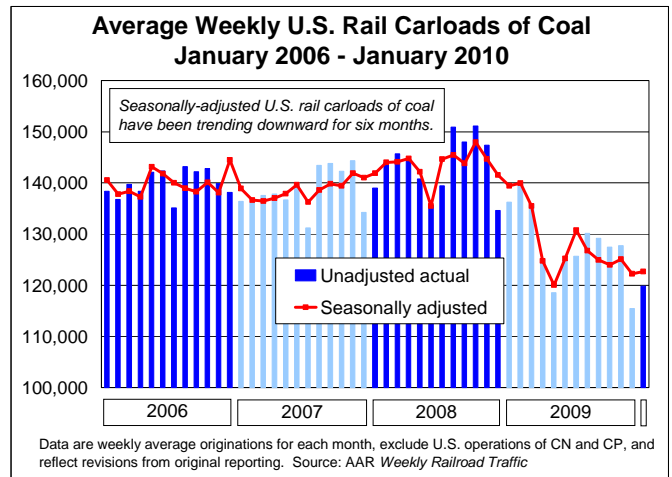
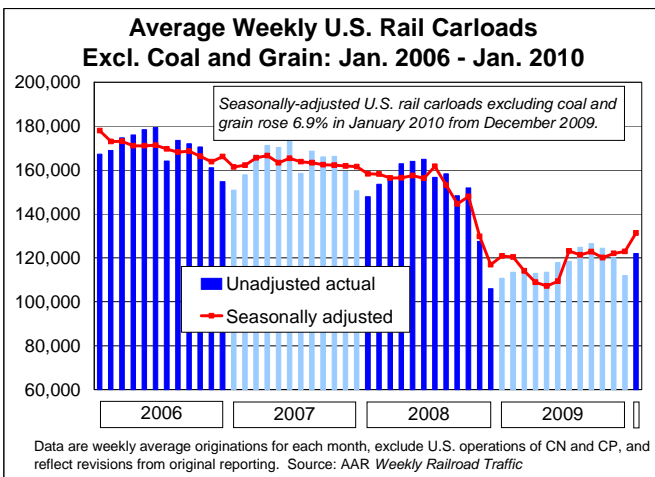
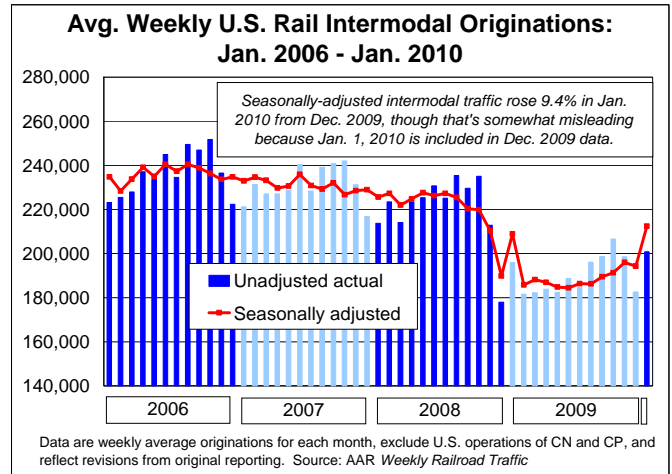
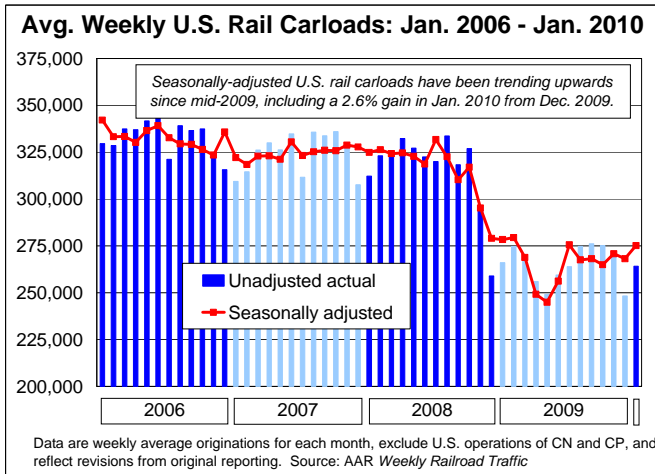
- In January 2010, Canadian freight railroads that report to the AAR originated 283,104 carloads, for an average of 70,776 carloads per week. That's **up 16.2%** from the weekly average of 60,906 in January 2009 but **down 8.6%** from January 2008's 77,419 weekly average. Data for Canadian railroads include their combined U.S. and Canadian operations.
- 14 of the 19** major commodity categories tracked by the AAR saw Canadian rail carload gains in January 2010 compared to January 2009. Commodities showing gains included metallic ores (up 25.1%, or 10,204 carloads), chemicals (up 19.2%, or 9,552 carloads), coal (up 31.4%, or 7,232 carloads), and motor vehicles and parts (up 56.5%, or 6,170 carloads). See the table on page 7 for more commodity-level detail.
- Canadian intermodal traffic totaled 174,536 trailers and containers in January 2010, or 43,634 units per week. That's **up 3.7%** from January 2009 but **down 9.2%** from January 2008.





Seasonal Adjustment of U.S. Rail Traffic Data

- Many economic time series are “seasonally adjusted” to remove seasonal components that can mask underlying trends, including changes in the direction of the time series. Seasonal adjustment also often allows more meaningful comparisons of data for neighboring months. The Census Bureau uses a sophisticated computer program called “X-12-ARIMA” to seasonally-adjust the many economic time series it produces. (See [here](#) for more from the Census Bureau.)
- There’s no doubt that U.S. rail traffic overall and certain individual commodities are affected by seasonality issues — e.g., intermodal traffic tends to peak in the fall as stores stock up for holiday sales; coal mines undergo maintenance in the summer, leading to a decline in rail coal carloadings; auto factories often retool in July to get ready to produce new models, leading to a decline in rail auto carloadings that month; and so on.
- Even in the best of circumstances, seasonal adjustment produces estimates — sophisticated estimates, to be sure, but still estimates. Because of the nature of the AAR’s weekly rail traffic data and the characteristics of rail traffic patterns themselves (e.g., daily data are not available; some months have four weeks of rail data and some have five; holidays may be in one month one year and a different month a different year; traffic levels vary depending on the day of the week, and more), the seasonal-adjustment process for rail traffic may well involve more complications than most other economic time series.
- Nevertheless, based on the can-do spirit that has defined U.S. railroading throughout its 180-year history and because we thought it would be interesting to try, we’ve used the Census Bureau’s X-12-ARIMA model to seasonally adjust U.S. rail traffic. Charts with the results from our initial efforts are on the next page; if all goes according to plan, more will appear next month. We used U.S. rail traffic from January 1988 to December 2009 as the basis for the seasonal adjustment.
- We’re also now using seasonally-adjusted rail traffic data in charts elsewhere in this report that examine the correlation between various economic indicators and rail traffic. Prior to now, we’ve usually compared seasonally-adjusted indicators with non-adjusted rail traffic. Using seasonally-adjusted data for both should yield a better comparison, and that seems to be the case here.
- Based on our calculations, **seasonally-adjusted U.S. rail carloads in January 2010 were up 2.6%** from December 2009 and were the second highest of any month in the past 11 months. **Carloads excluding coal** (as noted above, coal carloads were down sharply in January) were **up 5.8% in January 2010 from December 2009** and were at their highest level since October 2008.
- Please note that [Rail Time Indicator’s](#) rail traffic seasonal-adjustment effort is still a work in progress. It is designed to provide what we hope is a **useful refinement** to rail traffic data — which is why we’re offering it here — but it should be viewed as a **complement** to the actual data, **not a replacement**. We reserve the right to make further refinements.



Where to go for more information:

- Weekly AAR press releases on railroad traffic are available on the AAR web site [here](#). For a sample copy of an AAR Weekly Railroad Traffic report, e-mail Paul Posey at pposey@aar.org. Weekly Railroad Traffic is free to AAR members and available by subscription to others. For information on our seasonal-adjustment process, contact Shannon Stare at ssstare@aar.org.

U.S. RAIL TRAFFIC: JANUARY 2010*

(4 weeks ending January 30, 2010)

Commodity	Jan '10	Jan '09	Jan '08	Difference		% Change	
				'10-'09	'10-'08	'10-'09	'10-'08
Agricultural & food products	160,634	142,590	179,811	18,044	-19,177	12.7%	-10.7%
Grain	89,085	76,109	104,270	12,976	-15,185	17.0%	-14.6%
Farm products excl. grain	3,613	3,074	5,905	539	-2,292	17.5%	-38.8%
Grain mill products (1)	35,895	31,903	34,889	3,992	1,006	12.5%	2.9%
Food products	32,041	31,504	34,747	537	-2,706	1.7%	-7.8%
Chemicals and petroleum	137,514	123,793	150,493	13,721	-12,979	11.1%	-8.6%
Chemicals	113,956	100,653	124,316	13,303	-10,360	13.2%	-8.3%
Petroleum products	23,558	23,140	26,177	418	-2,619	1.8%	-10.0%
Coal	479,337	545,050	563,819	-65,713	-84,482	-12.1%	-15.0%
Forest products	38,345	39,107	52,550	-762	-14,205	-1.9%	-27.0%
Primary forest products (2)	6,547	6,808	9,049	-261	-2,502	-3.8%	-27.6%
Lumber & wood products	9,216	8,812	14,135	404	-4,919	4.6%	-34.8%
Pulp & paper products	22,582	23,487	29,366	-905	-6,784	-3.9%	-23.1%
Metallic ores and metals	59,059	45,991	83,897	13,068	-24,838	28.4%	-29.6%
Metallic ores (3)	14,380	9,125	20,506	5,255	-6,126	57.6%	-29.9%
Coke	12,791	11,957	14,649	834	-1,858	7.0%	-12.7%
Primary metal products (4)	31,888	24,909	48,742	6,979	-16,854	28.0%	-34.6%
Motor vehicles & parts	43,644	26,332	71,131	17,312	-27,487	65.7%	-38.6%
Nonmetallic minerals & prod.	89,926	94,226	122,124	-4,300	-32,198	-4.6%	-26.4%
Crushed stone, gravel, sand	47,099	56,459	70,140	-9,360	-23,041	-16.6%	-32.9%
Nonmetallic minerals (5)	19,706	11,879	22,870	7,827	-3,164	65.9%	-13.8%
Stone, clay & glass prod. (6)	23,121	25,888	29,114	-2,767	-5,993	-10.7%	-20.6%
Other	48,225	46,841	60,333	1,384	-12,108	3.0%	-20.1%
Waste & scrap materials (7)	31,274	28,029	41,408	3,245	-10,134	11.6%	-24.5%
All other carloads	16,951	18,812	18,925	-1,861	-1,974	-9.9%	-10.4%
TOTAL ALL CARLOADS	1,056,684	1,063,930	1,284,158	-7,246	-227,474	-0.7%	-17.7%
Trailers	125,919	138,827	194,401	-12,908	-68,482	-9.3%	-35.2%
Containers	677,356	644,881	710,537	32,475	-33,181	5.0%	-4.7%
TOTAL ALL INTERMODAL	803,275	783,708	904,938	19,567	-101,663	2.5%	-11.2%

(1) - flour, animal feed, corn syrup, corn starch, soybean meal, etc.

(2) - wood raw materials such as pulpwood and wood chips

(3) - overwhelmingly iron ore, but some aluminum ore, copper ore, etc.

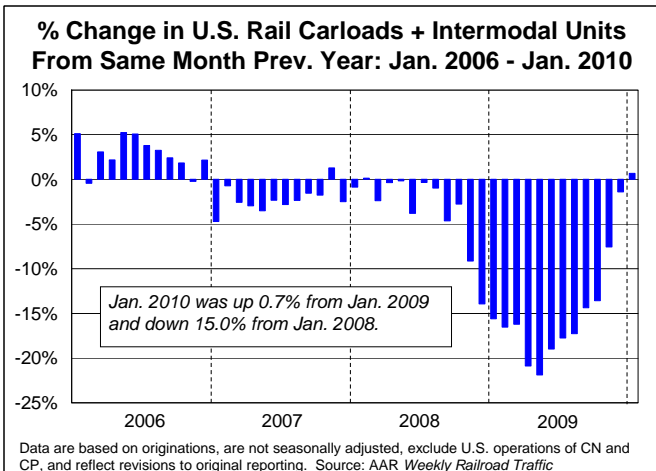
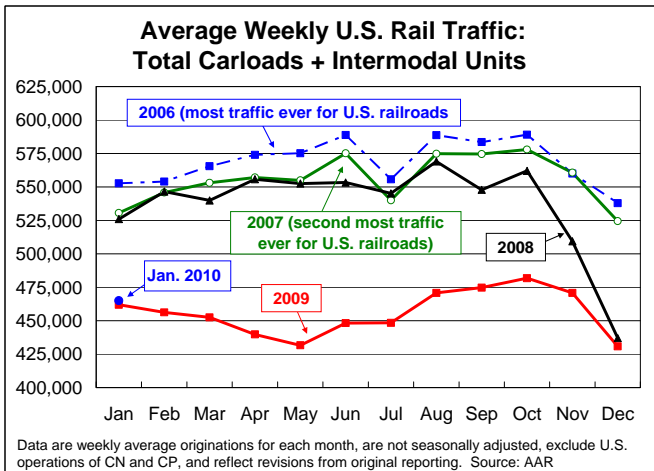
(4) - primarily iron & steel products; some aluminum, copper, etc.

(5) - phosphate rock, rock salt, crude sulphur, clay, etc.

(6) - cement, ground earths or minerals, gypsum products, etc.

(7) - scrap metal and paper, construction debris, ashes, etc.

*Data are originations and are not seasonally adjusted. Includes BNSF, CSX, KCS, NS, UP, Birmingham Southern, Florida East Coast, Lake Superior & Ishpeming, and Paducah & Louisville. Does not include CN's and CP's U.S. operations. Source: AAR *Weekly Railroad Traffic*



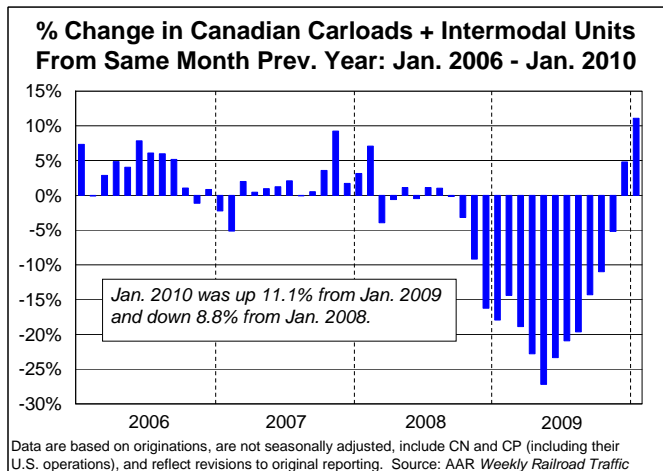
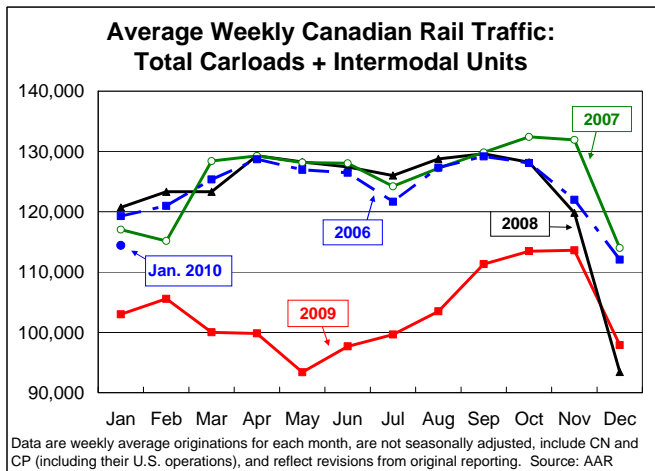
CANADIAN RAIL TRAFFIC: JANUARY 2010*

(4 weeks ending January 30, 2010)

Commodity	Jan '10	Jan '09	Jan '08	Difference		% Change	
				'10-'09	'10-'08	'10-'09	'10-'08
Agricultural & food products	62,757	56,828	67,051	5,929	-4,294	10.4%	-6.4%
Grain	37,309	35,013	42,152	2,296	-4,843	6.6%	-11.5%
Farm products excl. grain	10,681	8,476	9,826	2,205	855	26.0%	8.7%
Grain mill products (1)	5,626	5,398	6,684	228	-1,058	4.2%	-15.8%
Food products	9,141	7,941	8,389	1,200	752	15.1%	9.0%
Chemicals and petroleum	62,368	52,087	66,408	10,281	-4,040	19.7%	-6.1%
Chemicals	59,336	49,784	63,841	9,552	-4,505	19.2%	-7.1%
Petroleum products	3,032	2,303	2,567	729	465	31.7%	18.1%
Coal	30,260	23,028	28,182	7,232	2,078	31.4%	7.4%
Forest products	27,406	28,610	35,096	-1,204	-7,690	-4.2%	-21.9%
Primary forest products (2)	5,756	5,958	6,646	-202	-890	-3.4%	-13.4%
Lumber & wood products	8,054	7,774	10,078	280	-2,024	3.6%	-20.1%
Pulp & paper products	13,596	14,878	18,372	-1,282	-4,776	-8.6%	-26.0%
Metallic ores and metals	61,723	49,640	63,302	12,083	-1,579	24.3%	-2.5%
Metallic ores (3)	50,828	40,624	50,103	10,204	725	25.1%	1.4%
Coke	1,784	1,411	1,364	373	420	26.4%	30.8%
Primary metal products (4)	9,111	7,605	11,835	1,506	-2,724	19.8%	-23.0%
Motor vehicles & parts	17,081	10,911	22,454	6,170	-5,373	56.5%	-23.9%
Nonmetallic minerals & prod.	14,332	13,978	17,041	354	-2,709	2.5%	-15.9%
Crushed stone, gravel, sand	5,274	4,656	5,457	618	-183	13.3%	-3.4%
Nonmetallic minerals (5)	4,542	5,166	6,097	-624	-1,555	-12.1%	-25.5%
Stone, clay & glass prod. (6)	4,516	4,156	5,487	360	-971	8.7%	-17.7%
Other	7,177	8,541	10,140	-1,364	-2,963	-16.0%	-29.2%
Waste & scrap materials (7)	4,172	4,619	6,839	-447	-2,667	-9.7%	-39.0%
All other carloads	3,005	3,922	3,301	-917	-296	-23.4%	-9.0%
TOTAL ALL CARLOADS	283,104	243,623	309,674	39,481	-26,570	16.2%	-8.6%
Trailers	5,804	6,138	7,165	-334	-1,361	-5.4%	-19.0%
Containers	168,732	162,233	185,115	6,499	-16,383	4.0%	-8.9%
TOTAL ALL INTERMODAL	174,536	168,371	192,280	6,165	-17,744	3.7%	-9.2%

- (1) - flour, animal feed, corn syrup, corn starch, soybean meal, etc. (5) - phosphate rock, rock salt, crude sulphur, clay, etc.
 (2) - wood raw materials such as pulpwood and wood chips (6) - cement, ground earths or minerals, gypsum products, etc.
 (3) - overwhelmingly iron ore, but some aluminum ore, copper ore, etc. (7) - scrap metal and paper, construction debris, ashes, etc.
 (4) - primarily iron & steel products; some aluminum, copper, etc.

*CN and CP, including their U.S. operations. Data are originations and are not seasonally adjusted. Source: AAR Weekly Railroad Traffic



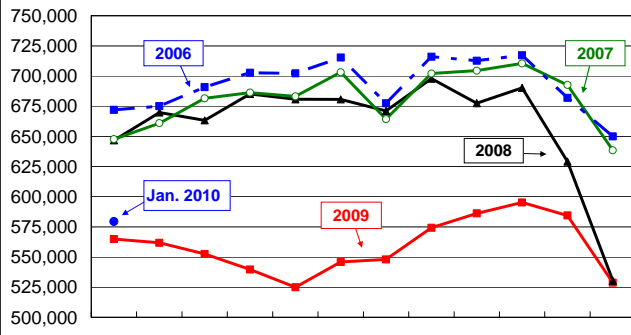
COMBINED U.S. AND CANADIAN RAIL TRAFFIC: JANUARY 2010*
(4 weeks ending January 30, 2010)

Commodity	Jan '10	Jan '09	Jan '08	Difference		% Change	
				'10-'09	'10-'08	'10-'09	'10-'08
Agricultural & food products	223,391	199,418	246,862	23,973	-23,471	12.0%	-9.5%
Grain	126,394	111,122	146,422	15,272	-20,028	13.7%	-13.7%
Farm products excl. grain	14,294	11,550	15,731	2,744	-1,437	23.8%	-9.1%
Grain mill products (1)	41,521	37,301	41,573	4,220	-52	11.3%	-0.1%
Food products	41,182	39,445	43,136	1,737	-1,954	4.4%	-4.5%
Chemicals and petroleum	199,882	175,880	216,901	24,002	-17,019	13.6%	-7.8%
Chemicals	173,292	150,437	188,157	22,855	-14,865	15.2%	-7.9%
Petroleum products	26,590	25,443	28,744	1,147	-2,154	4.5%	-7.5%
Coal	509,597	568,078	592,001	-58,481	-82,404	-10.3%	-13.9%
Forest products	65,751	67,717	87,646	-1,966	-21,895	-2.9%	-25.0%
Primary forest products (2)	12,303	12,766	15,695	-463	-3,392	-3.6%	-21.6%
Lumber & wood products	17,270	16,586	24,213	684	-6,943	4.1%	-28.7%
Pulp & paper products	36,178	38,365	47,738	-2,187	-11,560	-5.7%	-24.2%
Metallic ores and metals	120,782	95,631	147,199	25,151	-26,417	26.3%	-17.9%
Metallic ores (3)	65,208	49,749	70,609	15,459	-5,401	31.1%	-7.6%
Coke	14,575	13,368	16,013	1,207	-1,438	9.0%	-9.0%
Primary metal products (4)	40,999	32,514	60,577	8,485	-19,578	26.1%	-32.3%
Motor vehicles & parts	60,725	37,243	93,585	23,482	-32,860	63.1%	-35.1%
Nonmetallic minerals & prod.	104,258	108,204	139,165	-3,946	-34,907	-3.6%	-25.1%
Crushed stone, gravel, sand	52,373	61,115	75,597	-8,742	-23,224	-14.3%	-30.7%
Nonmetallic minerals (5)	24,248	17,045	28,967	7,203	-4,719	42.3%	-16.3%
Stone, clay & glass prod. (6)	27,637	30,044	34,601	-2,407	-6,964	-8.0%	-20.1%
Other	55,402	55,382	70,473	20	-15,071	0.0%	-21.4%
Waste & scrap materials (7)	35,446	32,648	48,247	2,798	-12,801	8.6%	-26.5%
All other carloads	19,956	22,734	22,226	-2,778	-2,270	-12.2%	-10.2%
TOTAL ALL CARLOADS	1,339,788	1,307,553	1,593,832	32,235	-254,044	2.5%	-15.9%
Trailers	131,723	144,965	201,566	-13,242	-69,843	-9.1%	-34.7%
Containers	846,088	807,114	895,652	38,974	-49,564	4.8%	-5.5%
TOTAL ALL INTERMODAL	977,811	952,079	1,097,218	25,732	-119,407	2.7%	-10.9%

- (1) - flour, animal feed, corn syrup, corn starch, soybean meal, etc. (5) - phosphate rock, rock salt, crude sulphur, clay, etc.
 (2) - wood raw materials such as pulpwood and wood chips (6) - cement, ground earths or minerals, gypsum products, etc.
 (3) - overwhelmingly iron ore, but some aluminum ore, copper ore, etc. (7) - scrap metal and paper, construction debris, ashes, etc.
 (4) - primarily iron & steel products; some aluminum, copper, etc.

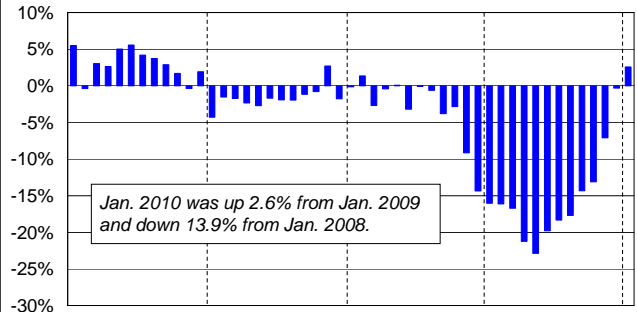
*Data are originations and are not seasonally adjusted. Source: AAR Weekly Railroad Traffic

**Average Weekly U.S. + Canadian Rail Traffic:
Total Carloads + Intermodal Units**



Data are weekly average originations for each month, are not seasonally adjusted, and reflect revisions from original reporting. Source: AAR Weekly Railroad Traffic

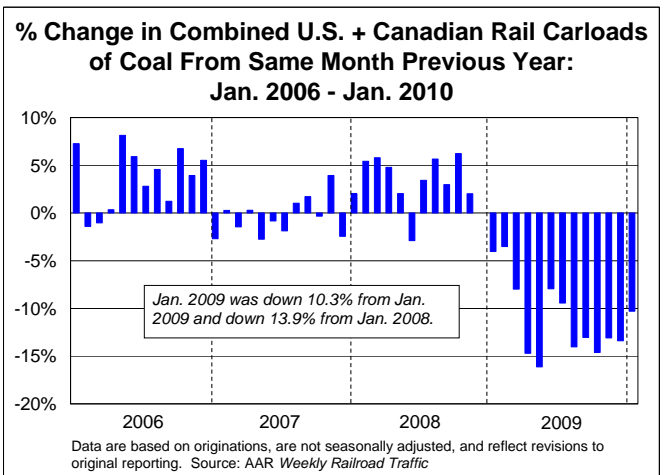
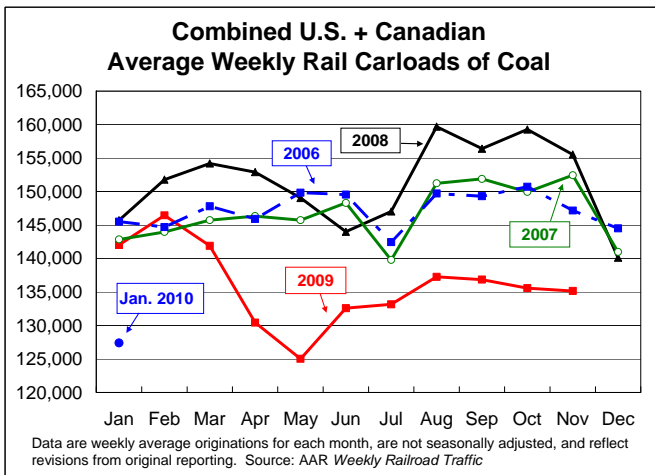
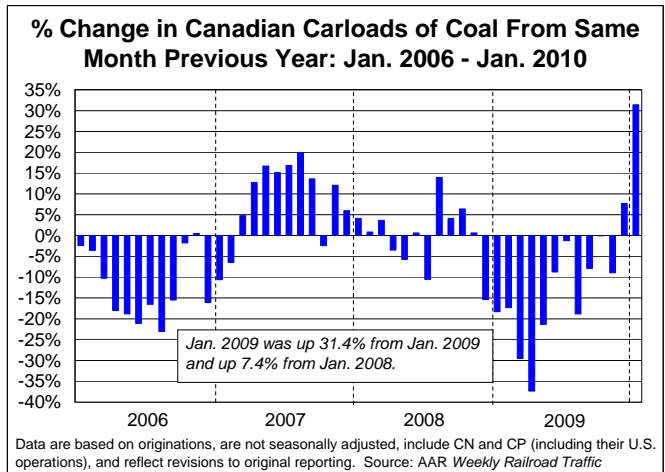
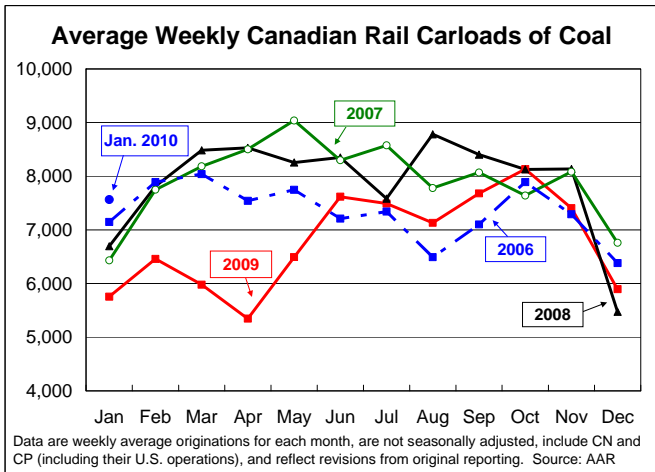
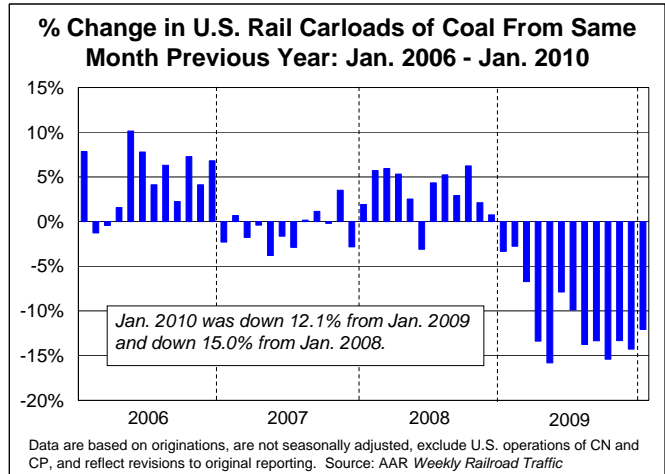
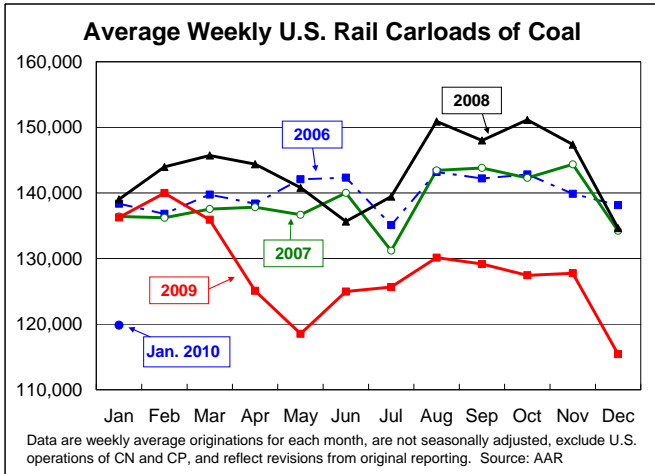
**% Change in Combined U.S. + Canadian Rail Carloads
+ Intermodal Units From Same Month Prev. Year:
Jan. 2006 - Jan. 2010**



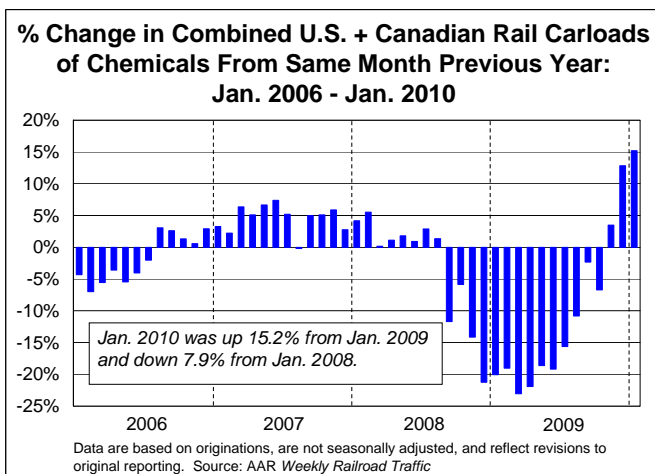
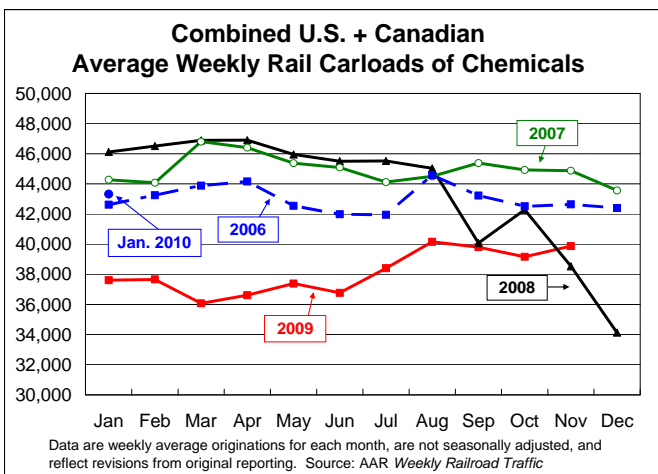
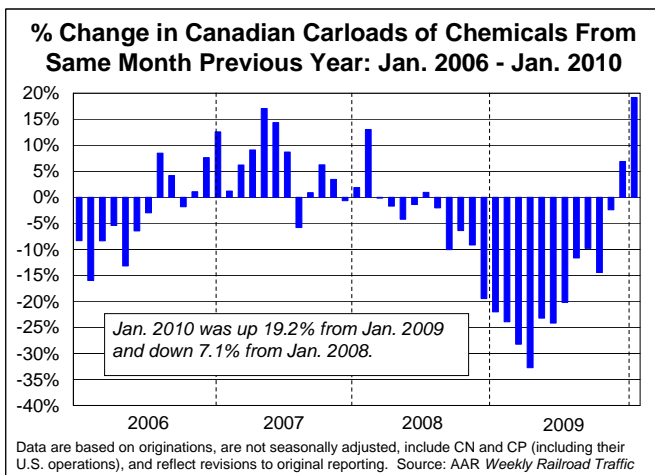
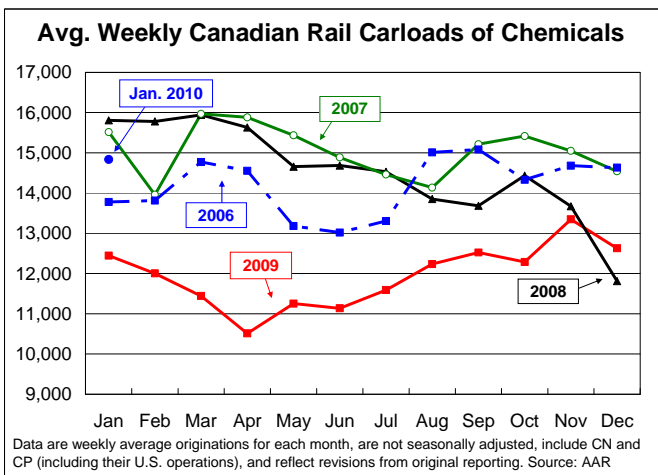
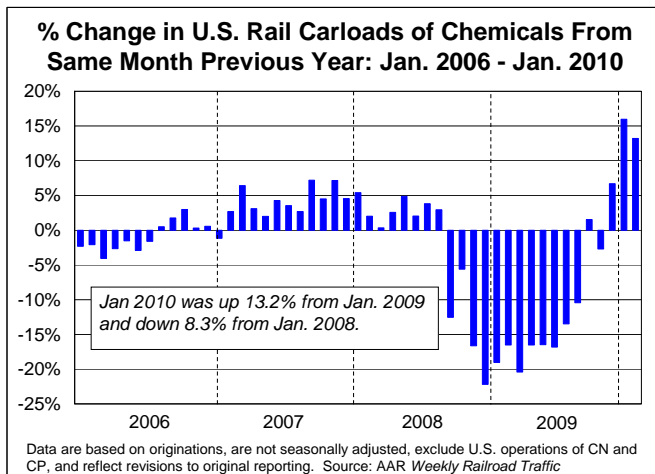
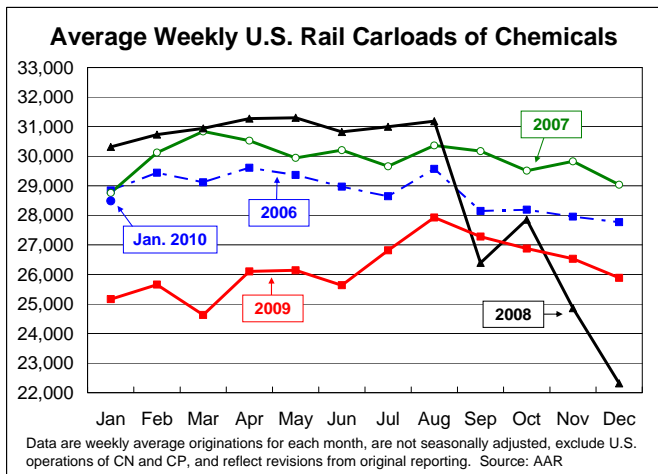
Jan. 2010 was up 2.6% from Jan. 2009 and down 13.9% from Jan. 2008.

Data are based on originations, are not seasonally adjusted, and reflect revisions to original reporting. Source: AAR Weekly Railroad Traffic

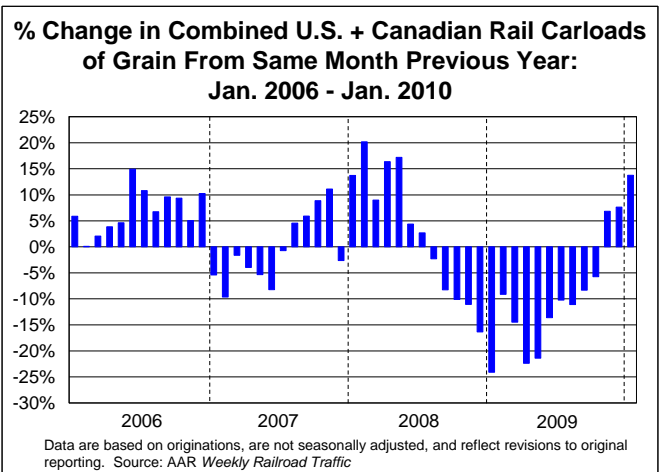
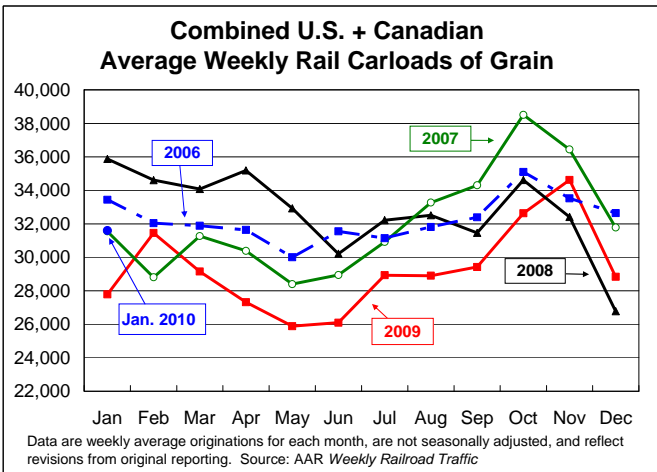
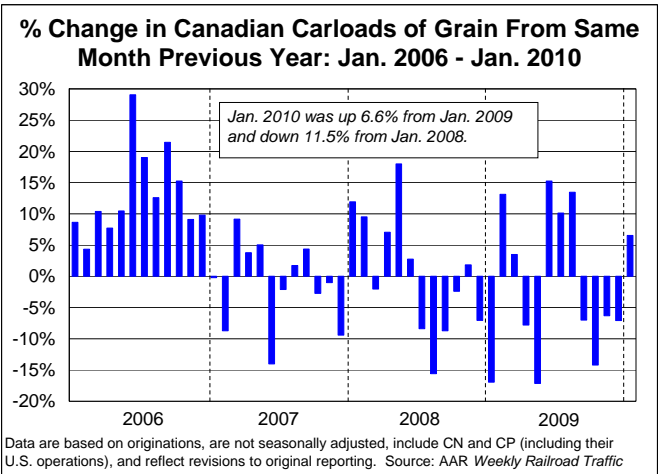
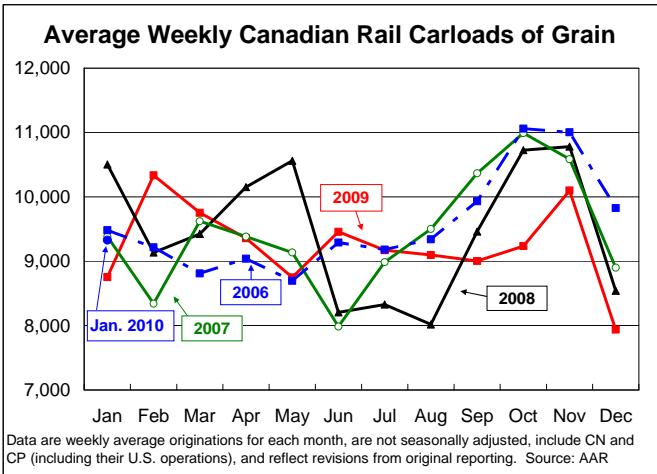
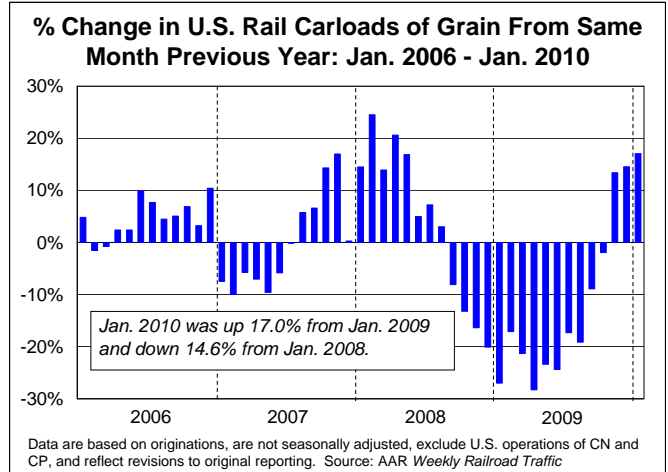
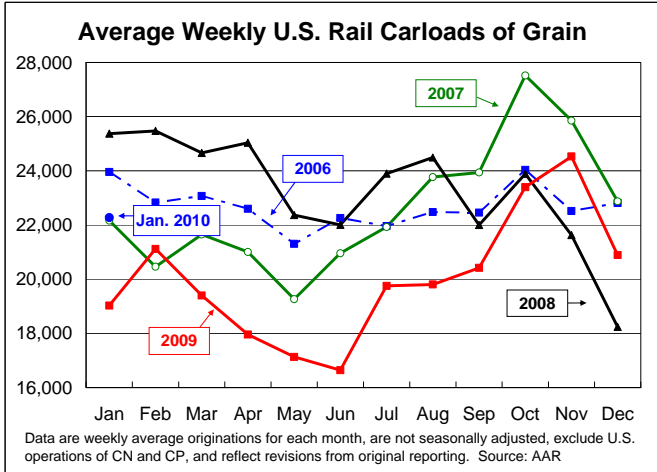
COAL



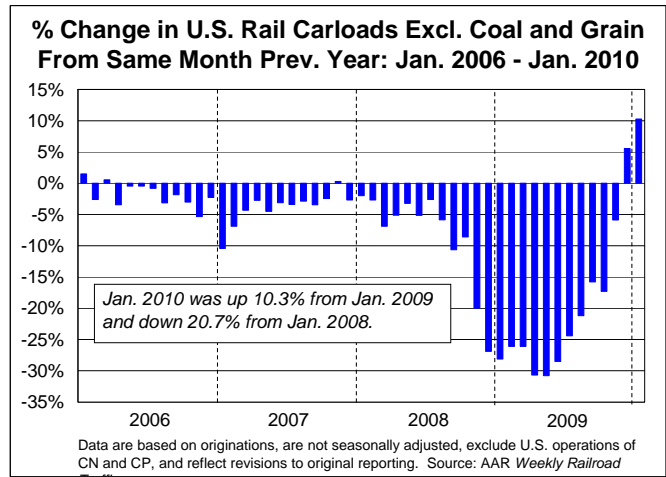
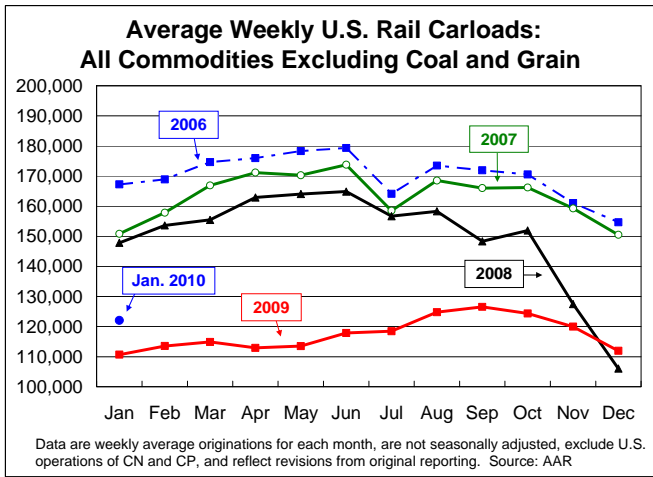
CHEMICALS



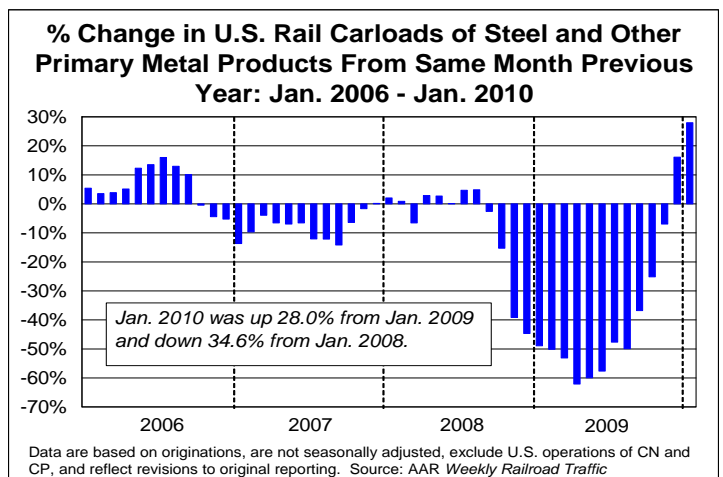
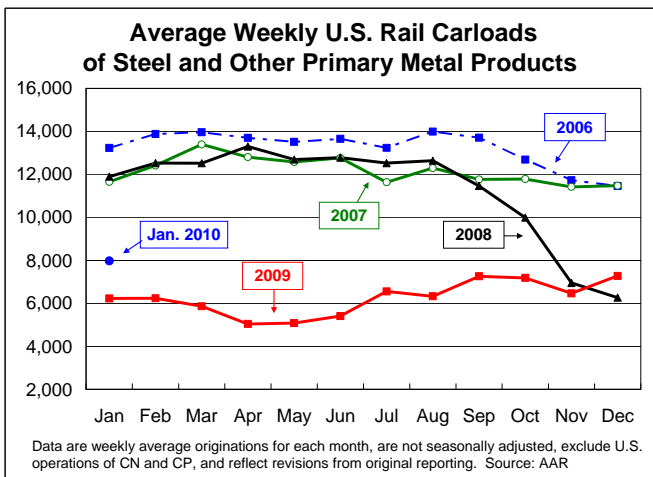
GRAIN



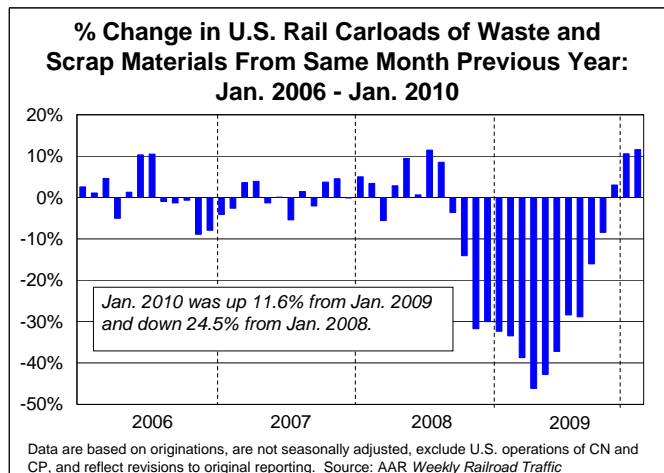
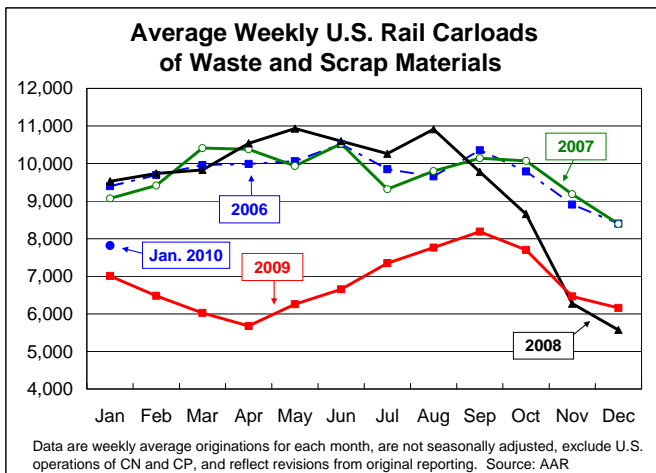
ALL COMMODITIES EXCLUDING COAL AND GRAIN



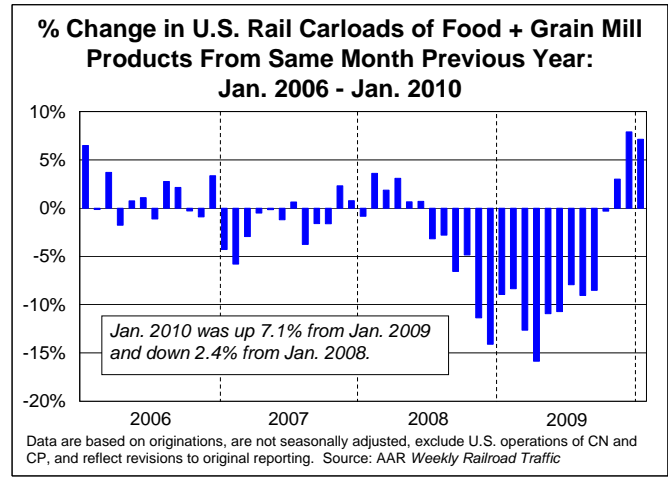
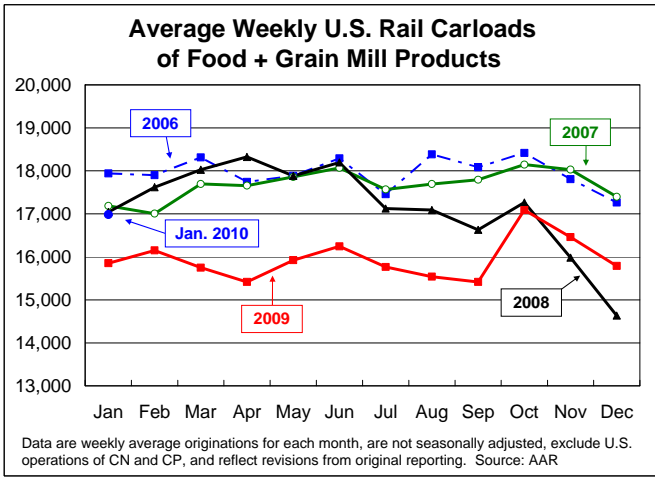
PRIMARY METAL PRODUCTS (MAINLY STEEL)



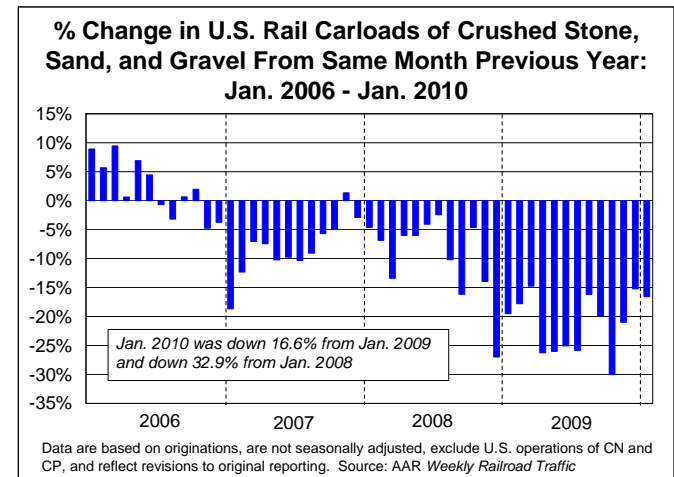
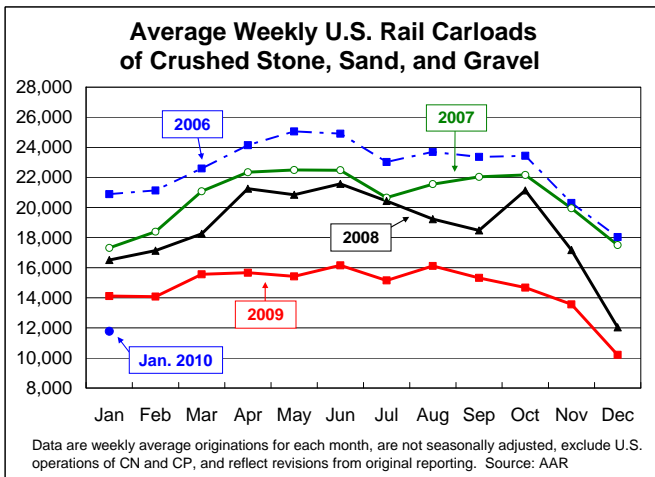
WASTE & SCRAP MATERIALS (SCRAP STEEL, SCRAP PAPER, CONSTRUCTION DEBRIS, ETC.)



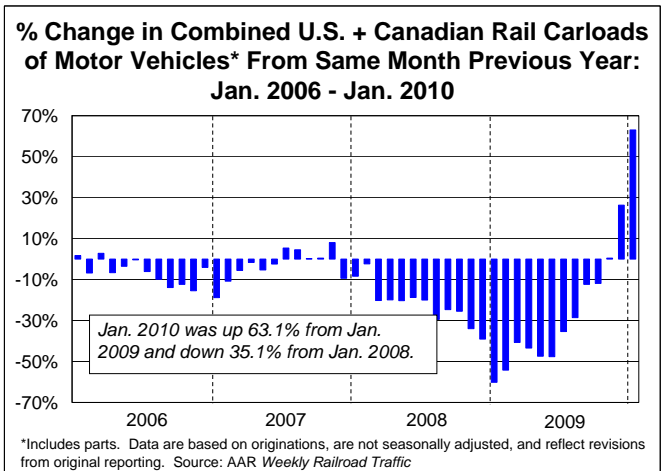
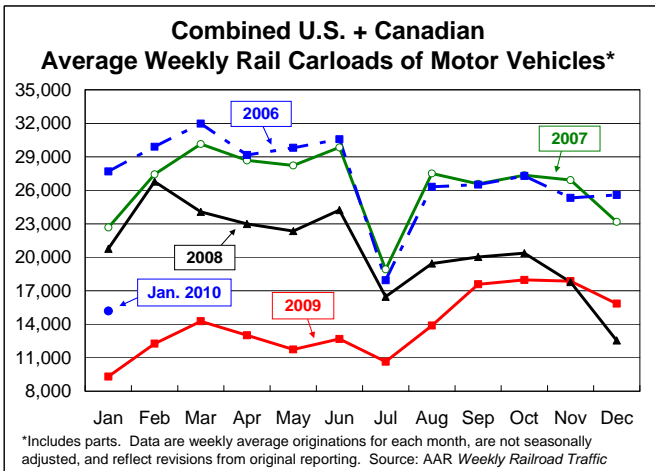
FOOD AND GRAIN MILL PRODUCTS



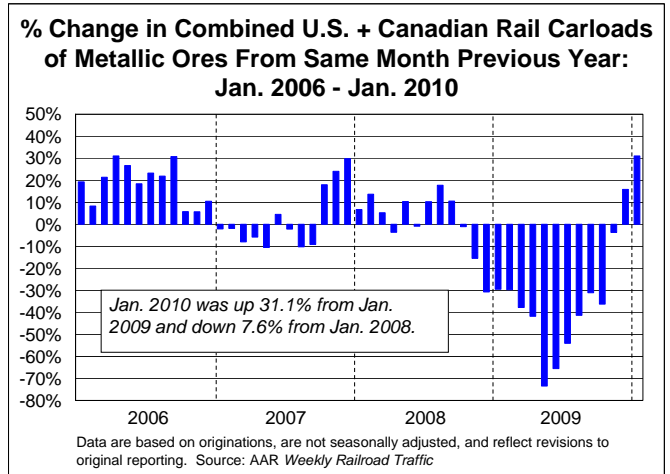
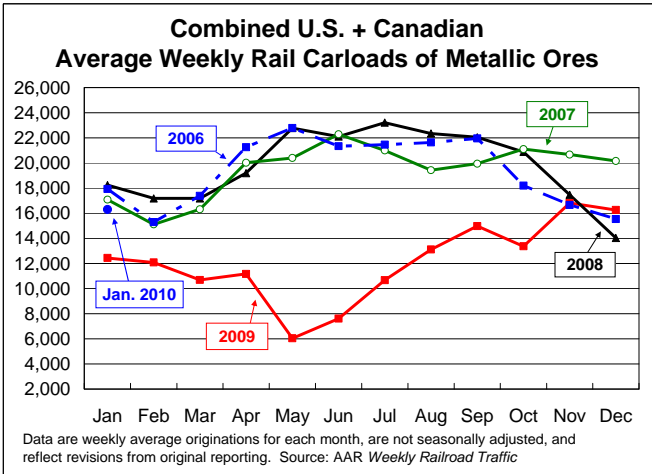
CRUSHED STONE, SAND, AND GRAVEL



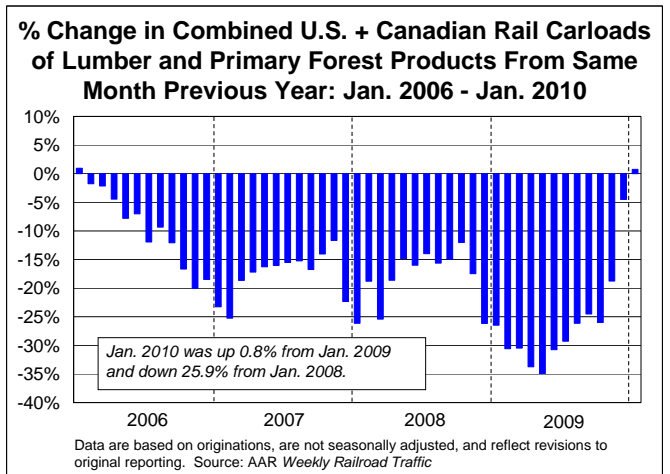
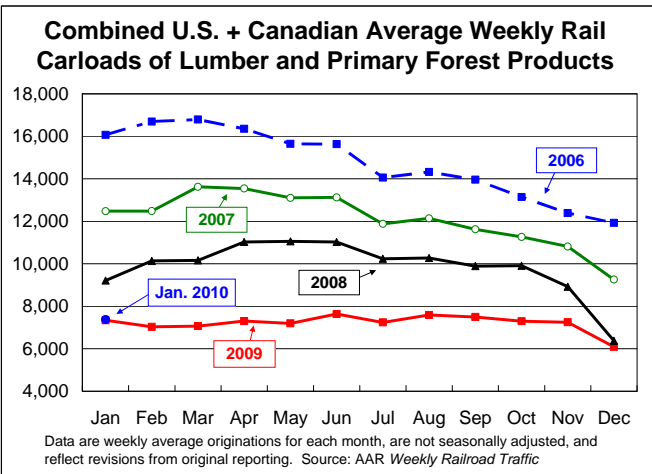
MOTOR VEHICLES AND EQUIPMENT



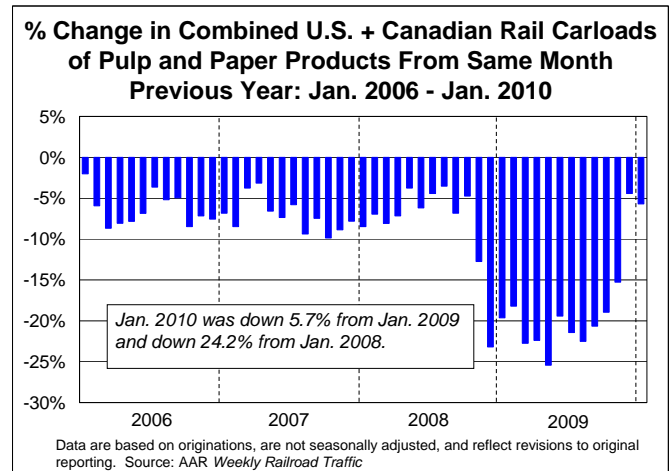
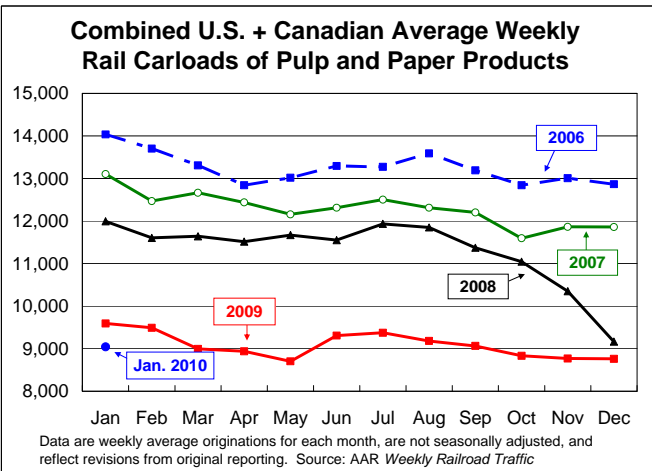
METALLIC ORES



LUMBER AND WOOD PRODUCTS AND PRIMARY FOREST PRODUCTS



PULP AND PAPER PRODUCTS



GROSS DOMESTIC PRODUCT (GDP)

Who releases it and when?

- U.S. Bureau of Economic Analysis (BEA), measured quarterly and revised as better data become available.

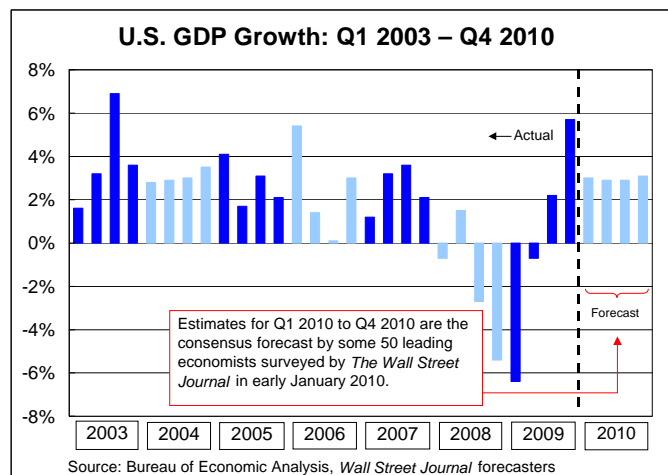
What is it and why is it important?

- GDP — the output of goods and services produced by labor and property located in a country — measures the size of an economy and how fast it's growing. Assuming it's measured accurately, it's probably the single most conclusive piece of information on the health of an economy. In the United States, GDP growth and freight railroad traffic are closely positively correlated.

What are the latest numbers?

- **U.S. GDP rose** at an annual rate of **5.7% in Q4 2009** compared with Q3 2009, according to the first preliminary estimate by the BEA released on January 29. If it holds — it is based on incomplete source data that is subject to further revision — it would be the highest quarterly gain since Q3 2003.

- According to BEA, of the 5.7 percentage point gain, 3.4 percentage points came from a change in private inventories (i.e., slower inventory liquidation).¹ This inventory contribution to GDP in Q4 2009 is atypically large, leading some to claim that the economy's underlying strength is much weaker than the 5.7% gain would imply.
- GDP minus the change in private inventories rose a much more modest 2.2% in Q4 2009. Increased auto production accounted for 0.6 percentage points of the Q4 gain.



- Each month, *The Wall Street Journal* surveys some 50 leading economists. In the most recent survey, released January 14, **the consensus was that GDP would grow around 3% in 2010** — essentially the same forecast growth as the past couple of months.
- What the WSJ said: “As 2010 wears on, it remains unclear whether there is enough demand in the economy to create significant growth, especially as the impact of fiscal stimulus wanes and the Federal Reserve begins to curtail its emergency programs in the second half of the year.” The economists surveyed put just a 16% chance that the economy will enter another recession in 2010 and expect inflation to be 1%-2%. The consensus was that the unemployment rate will be 9.9% in June and 9.5% in December, with about 1.4 million jobs created over the next 12 months.

Where to go for more information:

- The most recent BEA news release on GDP, including links to detailed data tables, is [here](#). The second preliminary Q4 2009 GDP figure will be released on February 26. Click [here](#) for more on the most recent WSJ survey of economists; a new survey will be released in mid-February.

¹ As we've noted in [Rail Time Indicators](#) before, $GDP = C$ (consumption) + I (investment) + G (government) + $(X-M)$ (exports minus imports). Investment includes investment in fixed assets as well as increases in inventories. Thus, an increase in inventories raises GDP, while a decrease in inventories lowers GDP because those goods were already counted in GDP when they were produced. See [here](#) for a more detailed (but still brief) discussion of the role of inventory in Q4 2010 GDP growth.

PURCHASING MANAGERS INDEX (PMI)

Who releases it and when?

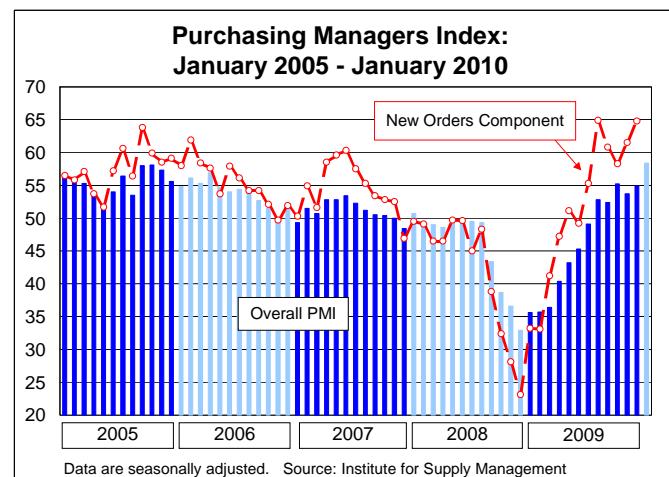
- Institute for Supply Management (ISM – formerly the National Association of Purchasing Managers), near the beginning of each month.

What is it and why is it important?

- The PMI combines data on new orders, inventory, production, supplier deliveries, and employment. It's based on a survey of several hundred supply managers at manufacturers throughout the country. (Supply managers typically handle purchasing/procurement, inventory control and management, and physical distribution and warehousing.) The PMI is considered an indicator both of actual "on-the-ground" conditions as well as near- to medium-term sentiment.
- Manufacturing accounts for approximately 12% of U.S. GDP — not as much as it used to be, but the United States is still the world's top manufacturer. In fact, by itself, U.S. manufacturing would still be around the eighth largest economy in the world.
- According to the ISM, a **PMI > 50** indicates that overall **manufacturing is expanding**; a **PMI < 50** indicates that **manufacturing is contracting**. Also according to the ISM, a PMI greater than 41.2, over a period of time, generally indicates an expansion of the overall economy.

What are the latest numbers?

- The **PMI rose again to 58.4 in January 2010** from 54.9 in December (see chart at right). Here at [Rail Time Indicators](#) we've given up trying to figure out how the PMI — which has been trending steadily upward for a year and is now at its highest level since September 2004 — can be painting such a rosy picture when virtually every other economic indicator gives a much less optimistic picture regarding the pace of economic recovery.
- The "new orders" component of the PMI **jumped in January 2010 to 65.9**, up from 64.8 in December 2009 and its highest point since February 2004. If you can figure that out too, let us know, because we can't.
- What the ISM said regarding the January PMI: "The ... PMI rose to 58.4 percent, its highest reading since August 2004 This month's report provides significant assurance that the manufacturing sector is in recovery. Both the New Orders and Production Indexes are above 60 percent, indicating strong current and future performance for manufacturing. This month, 13 of 18 industries reported growth, up from nine industries last month, and this is a good indication that the impact of the recovery is expanding."



Where to go for more information:

- The press release for the January PMI is [here](#) and includes much more detail than the summary above. The February PMI will be released on March 1, 2010.

MANUFACTURING INVENTORIES AND SALES

Who releases it and when?

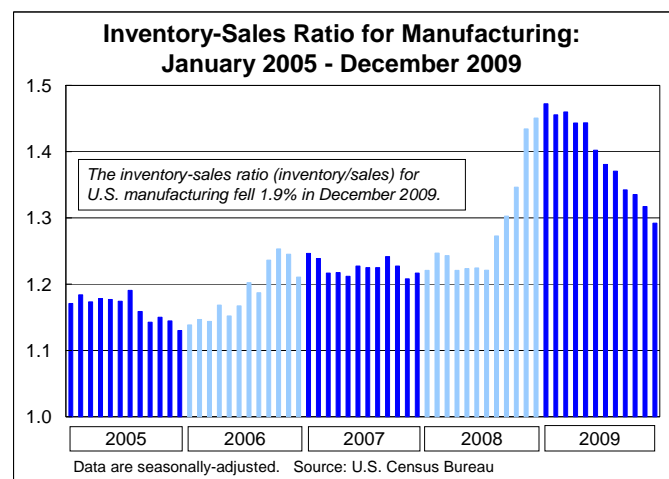
- The U.S. Census Bureau, near the beginning of each month, covering the month two months prior. (E.g., the report released in early February has data covering December.)

What is it and why is it important?

- The report is based on data reported from manufacturing establishments with \$500 million or more in annual shipments covering 89 industry categories. Figures are seasonally adjusted.
- Manufacturers **don't want to hold too much inventory** because it costs money to store it and it can become obsolete or spoil. Moreover, inventory earns no return on investment. But manufacturers **don't want too little inventory either**, or they could lose sales. Like Goldilocks, they want an inventory level that's "just right."
- When sales fall, inventories must rise if production is kept at the same pace. Eventually, when inventories are too high, "de-stocking" occurs via production cuts. This leads to job losses, fewer raw material purchases, and other negative economy-wide effects.
- When sales rise, either inventories must fall, production must increase, or both. Eventually, inventories becomes too low and "re-stocking" occurs via production increases. This means more employment, more raw material purchases, and other positive economy-wide effects.

What are the latest numbers?

- Seasonally-adjusted manufacturing sales continued their rebound after bottoming out in May 2009, **rising 1.9%** in December 2009 from November 2009. Meanwhile, seasonally-adjusted **manufacturing inventories fell 0.1%**.
- Putting those together, the **inventory-sales ratio fell 1.9%** in December to 1.29 (see chart below right), its 11th straight month with either a decline or no change. At this rate, in a few more months the ratio will be about where it was in 2007 and the first half of 2008.
- For months we've pointed out a strong positive correlation between rail carloads and the inventory-sales ratio. In previous charts showing this correlation, we compared a seasonally-adjusted inventory-sales ratio with unadjusted rail carloads. Since we now have seasonally adjusted rail carloads (see page 4), we're using those now. The results, in the chart on the top right of the next page, continue to show a very strong positive correlation. (The lines in previous charts were much smoother because we used a 3-month moving average, which we do not in the new version of the chart.)



Where to go for more information:

- The Census Bureau's full report on manufacturing sales and inventories in December is [here](#). Figures for January 2010 will be released on March 4, 2010.

INDUSTRIAL PRODUCTION

Who releases it and when?

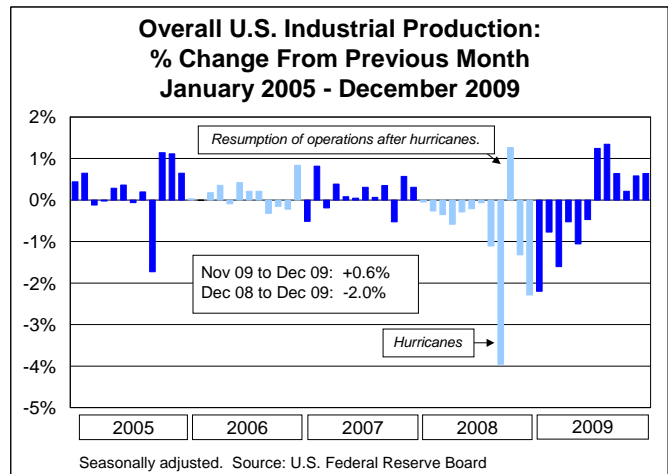
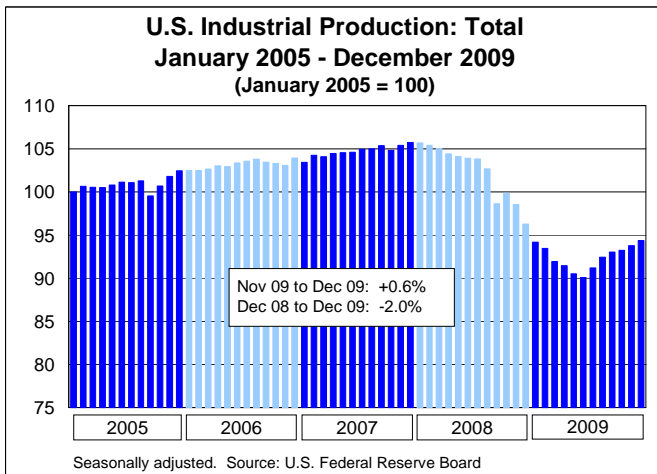
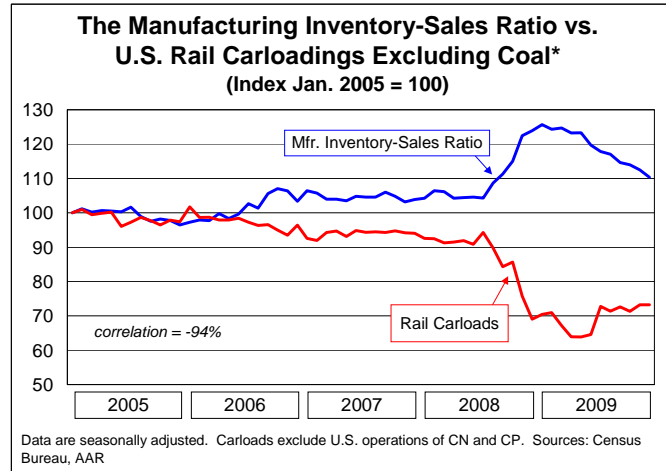
- The U.S. Federal Reserve Board, around the middle of each month.

What is it and why is it important?

- Industrial production figures are based on the monthly raw volume of goods produced by U.S. industrial firms such as factories, mines, and electric utilities. The industrial sector generally exhibits the most volatility in output during a business cycle.

What are the latest numbers?

- **Industrial production rose 0.6% in December 2009** from November 2009 (see charts below), mainly because of a sharp jump in utility output related to unseasonably cold weather in much of the country. December was the sixth straight monthly increase in industrial production. The manufacturing component of industrial production, though, actually fell 0.1% in December.
- Total industrial production fell 2.0% from December 2008 to December 2009, while the manufacturing component was down 1.4% for the year. As the table on the top left of the next page shows, different industrial sectors had different performances over the course of the year.
- The chart on the top right of the next page shows the strong correlation between industrial production and total rail carloads over the past few years. Strong positive correlations over the same time period exist for many individual commodity categories as well.



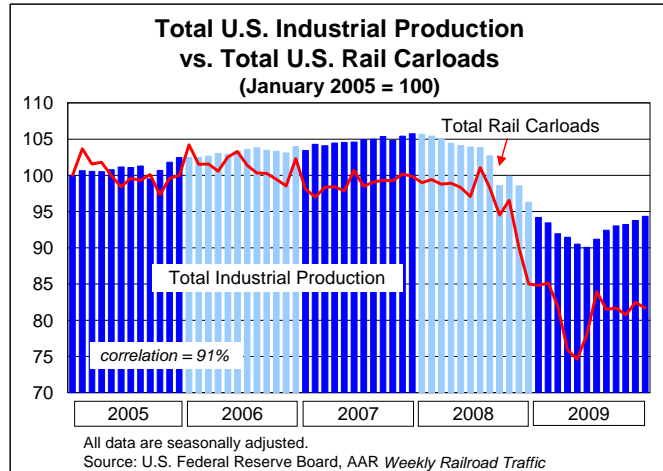
Where to go for more information:

- The Federal Reserve release on industrial production in December is [here](#). January 2010 data will be released on February 17, 2010.

% Change in U.S. Industrial Production December 2008 vs. December 2009

Total industrial production	-2.0%
Manufacturing	-1.4%
Iron and steel products	30.1%
Wood products	-2.6%
Motor vehicles and parts	-1.3%
Paper	3.4%
Chemicals	11.1%
Coal mining	-12.5%
Railroad rolling stock	-28.5%

Source: Federal Reserve Board



CAPACITY UTILIZATION

Who releases it and when?

- The U.S. Federal Reserve Board, around the middle of each month.

What is it and why is it important?

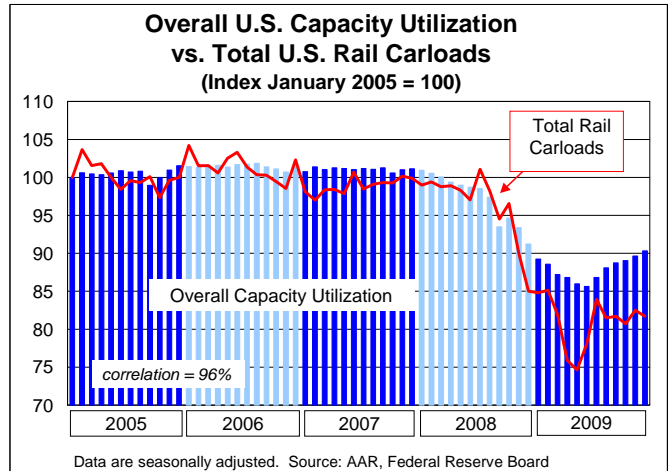
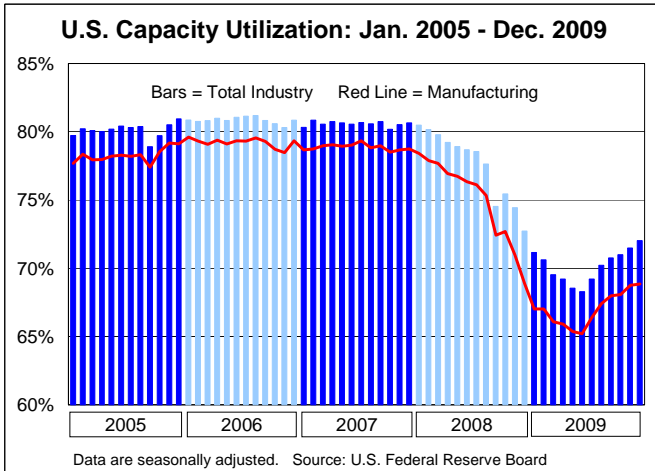
- Capacity utilization attempts to capture the concept of sustainable maximum output — *i.e.*, the highest output a plant can maintain assuming a realistic work schedule, normal downtime, and sufficient availability of inputs to operate the capital in place.
- In theory, a capacity utilization rate of, say, 70% means there is room to increase production up to 100% without having to build new plants or add equipment. In practice, capacity utilization rates (at least on an economy-wide basis) never come close to 100%. Utilization levels above 82%-85% are generally considered "tight" and forecast price increases or supply shortages in the near future. The farther below this level, the more slack there is in the economy or particular sector.

What are the latest numbers?

- Capacity utilization for total industry** (mining, manufacturing, and gas and electric utilities) **rose to 72.0% in December 2009**, its highest point in a year and up from 71.5% in November 2009. It's now risen for six straight months (see chart top left next page).
- Capacity utilization for manufacturing rose fractionally to 68.8% in December 2009, also its highest point since December 2008 and up from a low of 65.2% in June 2009.
- The chart on the top right of the next page is similar to a chart shown in previous Rail Time Indicator reports, but in this case the rail carload figure is seasonally-adjusted total U.S. carloads. (See page 4 for a discussion of rail carloads and seasonal adjustment.) As this chart shows, there is a very strong positive correlation (96%) between capacity utilization and total rail carloads for the time period covered. Similarly large co-relationships are found when comparing capacity utilization and rail carloads of a variety of individual commodities, including iron and steel products, motor vehicles, nonmetallic minerals, and more.

Where to go for more information:

- The Federal Reserve release on capacity utilization in December is [here](#). January 2010 data will be released on February 17, 2010.



NUMBER OF EMPLOYED PERSONS AND UNEMPLOYMENT RATE

Who releases it and when?

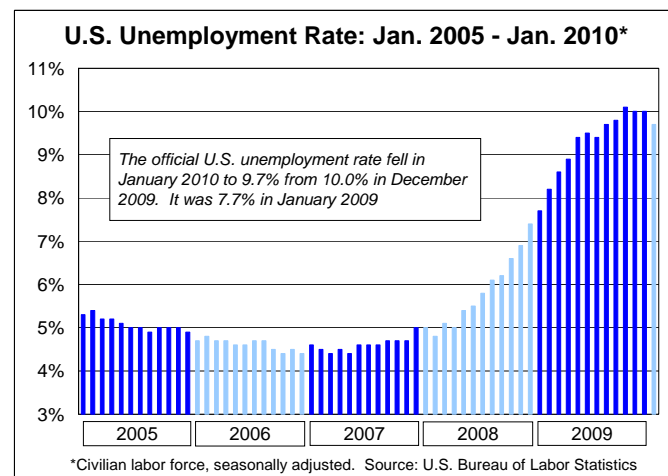
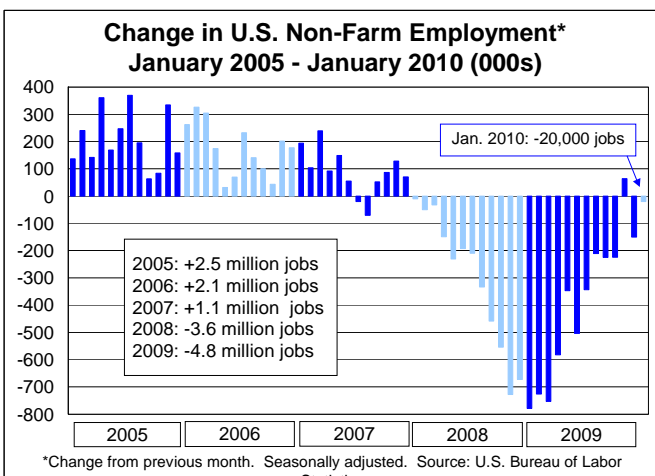
- U.S. Bureau of Labor Statistics (BLS) near the beginning of each month.

What is it and why is it important?

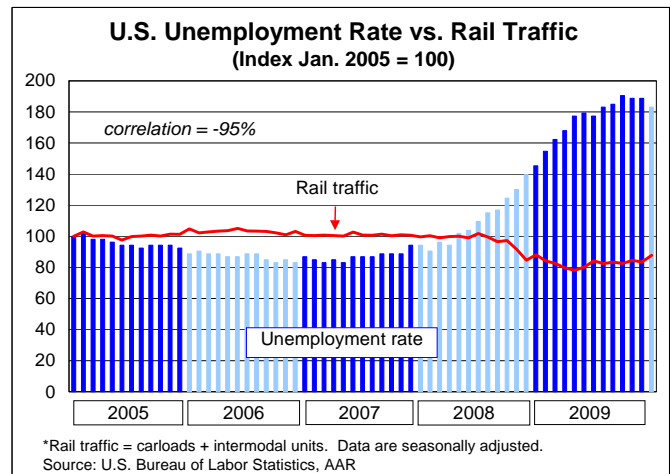
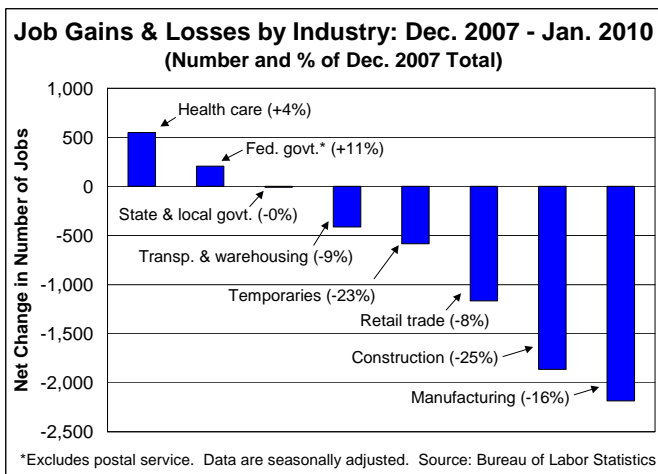
- The figures provide a snapshot of the strength of the U.S. labor market and are based on surveys of tens of thousands of households and businesses. In the United States, a gain of at least **150,000 or more jobs from one month to the next is generally considered solid job growth.**
- Employment is often considered a lagging indicator because employers often decide to wait until they're sure an economic recovery is here to stay before making new hires.
- Weak job numbers cause even the still-employed to become less confident of the future, and, therefore, less prone to spend money (see "Consumer Confidence" and "Retail Sales" below).

What are the latest numbers?

- Net U.S. **non-farm employment fell by 20,000 in January 2010** from December 2009, following a revised loss of 150,000 in December 2009. BLS employment data underwent a number of not insignificant revisions prior to the release of the January figures.



- Different industry sectors have seen different employment changes during the recession. For example, there were actually 549,000 (4%) more health care employees in January 2010 than in December 2007; the federal government had 207,000 (11%) more employees. On the other hand, the transportation and warehousing sector lost 412,000 jobs (9%) from December 2007 to January 2010, construction lost 1.9 million (25%), and manufacturing lost 2.2 million (16%).
- The official **unemployment rate in January 2010 was 9.7%, down from December 2009's 10.0%**. Is that good news? Sure it is, but, as is always the case with employment data, there are other considerations to keep in mind. Just a few examples:
 - ✓ The labor force participation rate (those in the labor force as a percentage of the working-age civilian population) was a near-record low 64.7% in January 2010, largely because many people have simply given up on finding work. A person not in the labor force is not counted as unemployed.
 - ✓ The number of unemployed for at least 27 weeks was a record 6.3 million in January 2010, equal to 42.5% of the total unemployed and up from 2.7 million in January 2009.
 - ✓ The manufacturing sector actually added 11,000 jobs in January 2010, **the first gain in manufacturing jobs since January 2007**. Construction lost 75,000 jobs in January, state and local governments lost 41,000, the federal government gained 19,000 (some of which are new hires for the upcoming Census), retail sales gained 42,000, and temporary workers gained 52,000 jobs — the fourth straight monthly gain in temp jobs.
- For the past few years, there has been a strong negative correlation between rail traffic and the unemployment rate (see chart below right).



Where to go for more information:

- The BLS press release on the employment situation in January 2010 is [here](#). Data for February 2010 will be released on March 5, 2010.

CLASS I RAILROAD EMPLOYMENT

Who releases it and when?

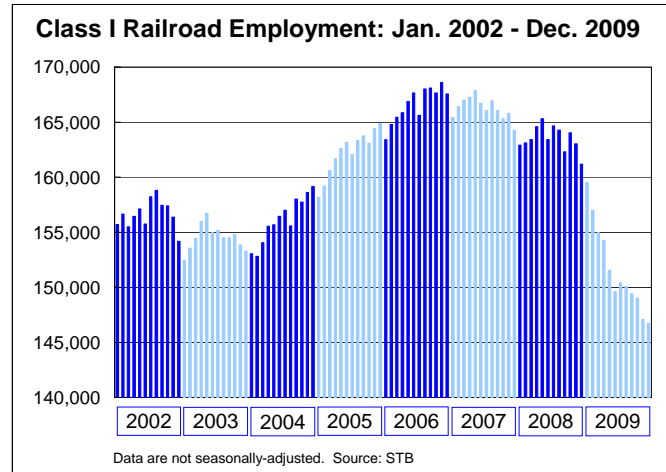
- Surface Transportation Board (STB), around the middle of the month.

What is it and why is it important?

- Report showing the average number of Class I employees at mid-month. These numbers are not seasonally adjusted. As in other industries, employment in the rail industry is in large part a function of the level of business — *i.e.*, how much freight is being hauled.

What are the latest numbers?

- Class I freight railroad employment **fell to 146,725 in December 2009**, down 372 from the 147,097 recorded the previous month. The industry is now down nearly 22,000 employees from November 2006, the industry's most recent employment peak.
- Maintenance of way employment (the people who maintain track and related structures) typically falls in the winter for seasonal reasons. That happened this time around too — maintenance of way employees were down 915 in December. On the other hand, train and engine employees (mainly engineers and conductors who operate the trains) were up 386 in December.



Where to go for more information:

- The STB web site for employment data is [here](#).

CONSUMER CONFIDENCE

Who releases it and when?

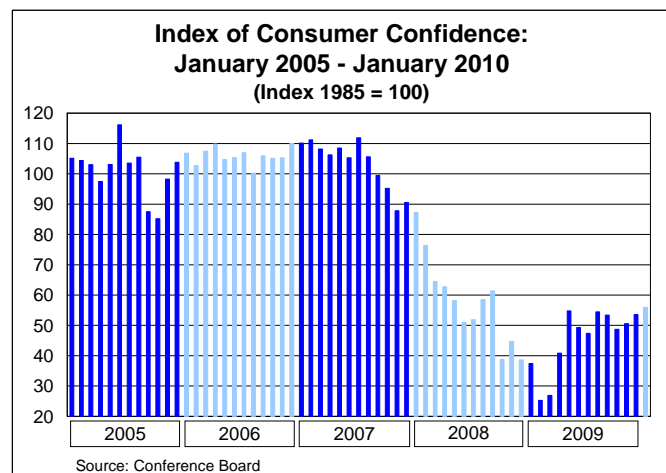
- The Conference Board, last Tuesday of the month.

What is it and why is it important?

- An index based on a monthly survey of 5,000 U.S. households designed to gauge the financial health, spending power, and confidence of the average consumer. Respondents are asked about current conditions (“Present Situation Index”) and their expectations for the next six months (“Expectations Index”).
- The index is designed to predict **future consumer spending**, on the theory that the more confident consumers are about their job prospects, income, etc. the more likely they are to make purchases, especially big-ticket items.

What are the latest numbers?

- The consumer confidence index **rose in January 2010 to 55.9** from a revised 53.6 in December 2009 (see chart at right).
- What the Conference Board said regarding the January index:



"Consumer confidence rose for the third consecutive month, primarily the result of an improvement in present-day conditions. Consumers' short-term outlook, while moderately more positive, does not suggest any significant pickup in activity in the coming months. Regarding their financial situation, while consumers were less dire about their income prospects than in December, the number of pessimists continues to outnumber the optimists."

Where to go for more information:

- The Conference Board's press release on the consumer confidence index in January is [here](#). February's consumer confidence index will be released on February 23.

RETAIL SALES

Who releases it and when?

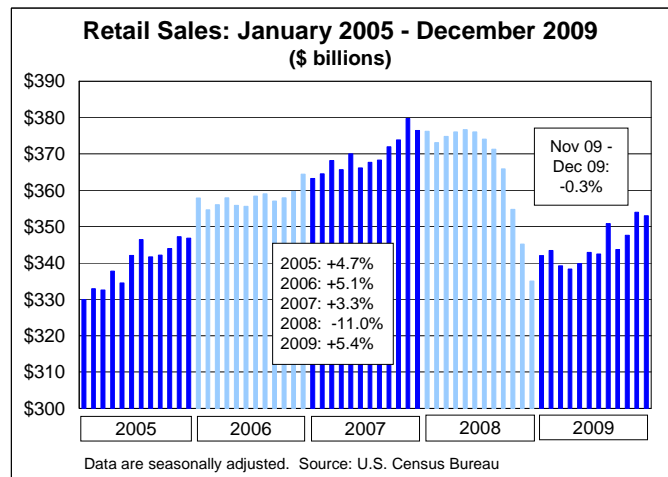
- The U.S. Census Bureau, around the ninth business day of each month.

What is it and why is it important?

- Uses a monthly survey of 5,000 retailers of all types to track the dollar value of physical merchandise sold. The data are adjusted for holiday differences and seasonal variations but are not adjusted for inflation. Revisions to prior data can be sizable.
- Personal consumption accounts for approximately 70% of U.S. GDP. Thus, the health of the economy depends largely on how much "stuff" people buy.
- It often takes time for consumers to recover from and respond to economic events. Thus, an increase in spending today may reflect the results of an economy that began to recover a few months earlier. A decrease in spending today may confirm an ongoing or worsening recession.

What are the latest numbers?

- Total retail sales were down 0.3% (\$1.0 billion) in December 2009 from November 2009. They were up a revised 1.8% in November from October. For all of 2009, retail sales were up 5.4%
- Retail sales plummeted in late 2008 and have been slowly clawing their way back. As of December 2009, they had not yet made up half the difference between where they were in late 2007/the first half of 2008 and where they had fallen to by the end of 2008. No doubt, though, the trend is in the right direction — it's just not moving terribly quickly.



Where to go for more information:

- The Census Bureau's press release on December retail sales is [here](#). December retail sales will be released on February 11, 2010.

LIGHT VEHICLE SALES

Who releases it and when?

- The U.S. Bureau of Economic Analysis.

What is it and why is it important?

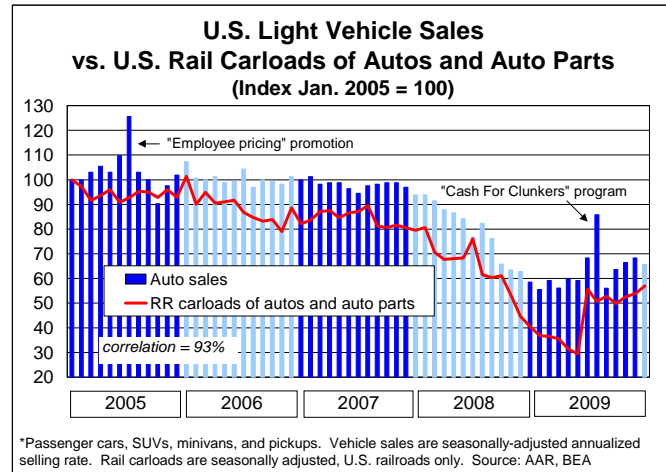
- Covers U.S. sales of cars and light trucks, including pickups and SUVs. Over the past 50 years, spending on motor vehicles has accounted, on average, for about 3.7% of U.S. GDP.
- In 2008, 6% of U.S. Class I railroad revenue came from hauling autos and auto parts.

What are the latest numbers?

- U.S. light vehicle sales **fell 4.0% in January 2010** from December 2009 to a seasonally-adjusted annualized selling rate (SAAR) of **10.8 million** (see chart top left next page). Despite the sales decline in January, both U.S. auto production and U.S. rail carloads of autos and auto parts have been trending upward for a several months.

Where to go for more information:

- BEA data on auto sales are [here](#).



HOUSING STARTS

Who releases it and when?

- Census Bureau, around the middle of each month.

What is it and why is it important?

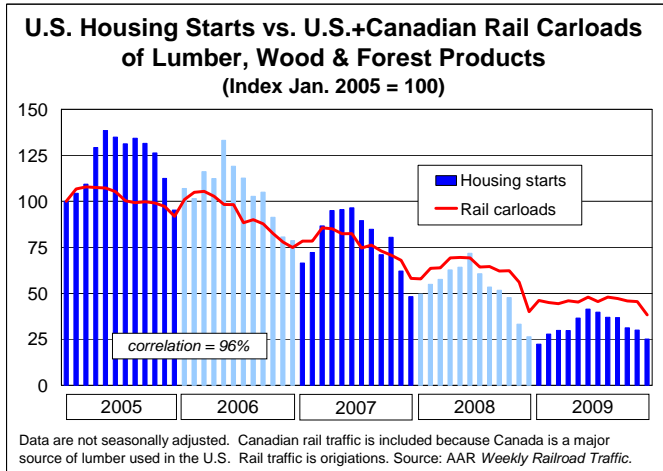
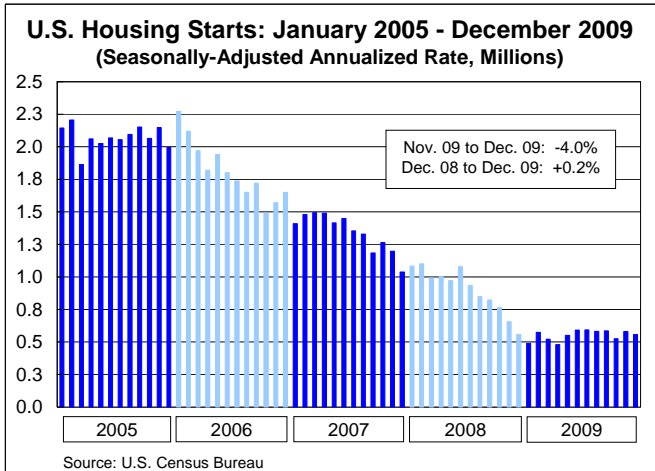
- A housing start is beginning the foundation of a residential home.
- Housing directly accounts for around 5% of the overall economy and has large spillover effects on other sectors, such as retail sales and manufacturing, since people buying new homes tend to spend on other goods such as furniture, lawn and garden supplies, and appliances.
- Housing starts are generally considered to be a “leading indicator” because construction growth usually picks up at the beginning of a business cycle.

What are the latest numbers?

- Seasonally-adjusted housing starts **fell 4.0% in December 2009 to an annualized 557,000**, down from 580,000 in November 2009 (see chart top left of the next page). Housing starts were basically flat throughout 2009 after falling for most of 2007 and 2008. Thus, it's not surprising that the construction sector has lost more than 2 million jobs over the past three years.

Where to go for more information:

- The Census Bureau's press release on housings starts in December is [here](#). January's housing starts will be released on February 17, 2010.



CONSUMER PRICE INDEX (CPI)

Who releases it and when?

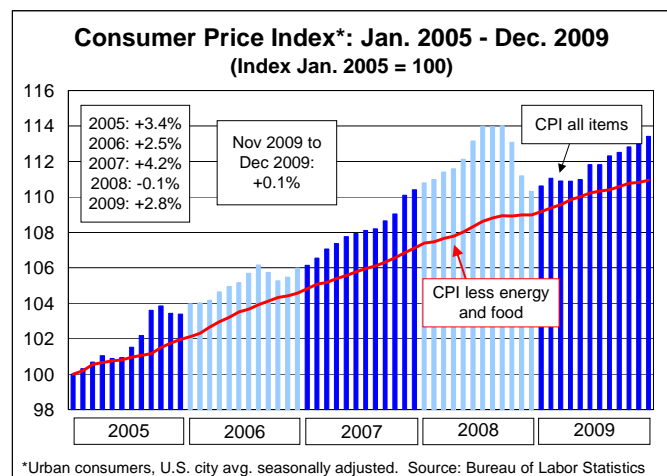
- U.S. Bureau of Labor Statistics (BLS), mid-month.

What is it and why is it important?

- The CPI is the benchmark inflation guide for the U.S. economy. It measures the changes in the cost of a representative basket of consumer goods and services. The BLS collects prices from 23,000 retail and service establishments throughout the country.
- It's hard not to have at least a little inflation when an economy is growing, but inflation can harm economies in many ways. Just one example: inflation confuses price signals — producers don't know if higher prices are simply part of an inflation-related adjustment or if they signal higher demand that warrants expanded production. Inflation also erodes the value of wages and savings, adds to uncertainty, and complicates business planning.
- The CPI is the basis for cost-of-living adjustments for Social Security, federal retirement payments, many private pensions, and food stamps.

What are the latest numbers?

- **The consumer price index** for all urban consumers (CPI-U) **was up just 0.1%** on a seasonally-adjusted basis in December 2009 from November 2009 and **up 2.8%** on a **year-over-year basis**.
- What BLS said: "The seasonally adjusted increase in the all items index was broad based, with the indexes for food, energy, and all items less food and energy all posting modest increases. Within the latter group, a sharp rise in the index for used cars and trucks was the largest contributor to the 0.1 percent increase... Grocery store food indexes showed broad-based increases, leading to the food index



rising 0.2 percent, its largest one-month advance in over a year. The energy index also rose 0.2 percent; this was its smallest increase in five months.”

Where to go for more information:

- The BLS press release on the December CPI is [here](#). January’s CPI will be released on February 19, 2010.

U.S. DOLLAR EXCHANGE RATE

Who releases it and when?

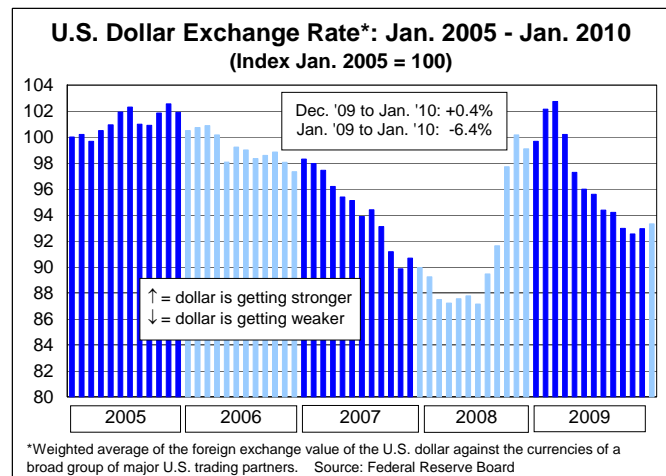
- The Federal Reserve Board, daily.

What is it and why is it important?

- An index comprised of a weighted average of the value of the U.S. dollar against the currencies of a group of major U.S. trading partners.
- An exchange rate is the **price of one currency against another**. A weaker U.S. dollar (“depreciation”) means that U.S. imports become relatively more expensive and U.S. exports become relatively less expensive abroad. All else equal, that means fewer U.S. imports and more U.S. exports. Because the U.S. is such a huge market, prolonged weakness in the dollar’s value could harm the economies of export-driven countries around the world.
- Conversely, a stronger dollar (“appreciation”) means U.S. imports become relatively cheaper and U.S. exports become more expensive. All else equal, that means more U.S. imports and fewer U.S. exports.

What are the latest numbers?

- The U.S. dollar **rose 0.4% in January 2010**, the second straight monthly increase following eight months of weakening.
- The dollar’s strengthening over the past two months has been slight. Some economists and policymakers have expressed concern that, if it continues, it could constrain exports and, therefore, limit a factor that could assist U.S. economic recovery.



Where to go for more information:

- Exchange rate data from the Federal Reserve is [here](#).

RAIL FREIGHT CARS IN STORAGE

Who releases it and when?

- The Association of American Railroads, each month in [Rail Time Indicators](#).

What is it and why is it important?

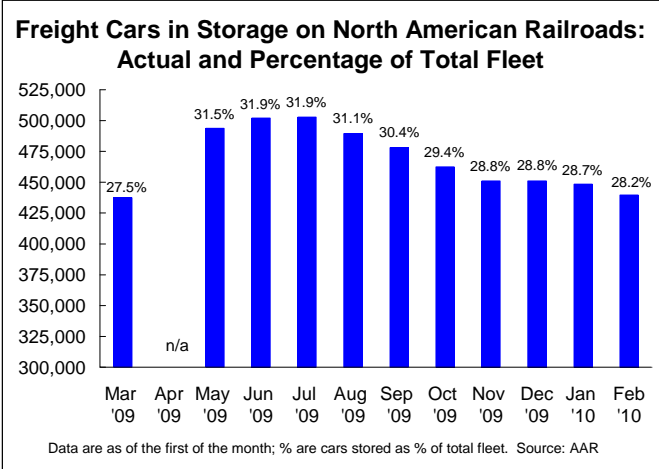
- The AAR began measuring this in March 2009. (Data for previous periods are not available.) A freight car is deemed to be “in storage” if it has not had a loaded revenue move in more than 60 days. Rail cars are stored when they are not needed; they come out of storage when they are. Figures are for the entire North American rail freight car fleet.

What are the latest numbers?

- As of February 1, 2010, there were 439,631 freight cars in storage — 8,924 cars fewer than on January 1 and equal to 28.2% of the total fleet. Cars in storage as a percentage of the total fleet has now fallen or stayed level for eight straight months. The number of cars in the fleet dropped by about 2,000 during January, so the number of active cars rose by just over 6,900.

Where to go for more information:

- Contact Frank Hardesty of the AAR's Policy and Economics Department at 202-639-2321 or fhardesty@aar.org.



To get on the e-mail distribution list for Rail Time Indicators, send a request (including your name and business affiliation, if any) to Beth Eagney at beagney@aar.org.

If you have questions or comments about the content of Rail Time Indicators, please contact Dan Keen (dkeen@aar.org) or Shannon Stare (sstare@aar.org).

Information in Rail Time Indicators is obtained from sources that are believed to be reliable. However, the Association of American Railroads makes no representations as to the accuracy or completeness of such information and assumes no liability for errors or omissions.

Any opinions in Rail Time Indicators, expressed or implied, do not necessarily represent those of the Association of American Railroads or its members.

Copyright © 2010 by the Association of American Railroads. Reproduction or re-transmittal within a company for internal use is permitted. Except for brief quotations, reproduction or re-transmittal outside a company (for example, posting on a public web site or forwarding to clients) is prohibited without the explicit written consent of the Association of American Railroads.

Previous editions of Rail Time Indicators are available on the AAR web site [here](#).