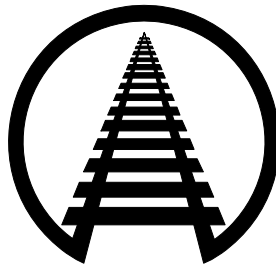


Rail Time Indicators

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



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

October 14, 2009

***Rail Time Indicators 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
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](mailto:ssstare@aar.org)).***

SUMMARY FOR OCTOBER 2009

Economic Indicator	Most Recent Data
U.S. Freight Rail Traffic (p. 2)	↓ 14.2% (carloads), ↓ 14.6% (intermodal) in September 2009 from September 2008.
Canadian Freight Rail Traffic (p. 3)	↓ 13.9% (carloads), ↓ 14.9% (intermodal) in September 2009 from September 2008.
Gross Domestic Product (p. 13)	↓ 0.7% in Q2 2009 (final estimate).
Purchasing Managers Index (p. 14)	↓ to 52.6 in September 2009 from 52.9 in August 2009.
Manufacturing Inventories and Sales (p. 15)	From July 2009 to August 2009, manufacturing sales were flat , inventories ↓ 0.8% , and inventory-to-sales ratio ↓ 0.5% .
Index of Industrial Production (p. 17)	↑ 0.8% in August 2009 from July 2009.
Capacity Utilization (p. 18)	↑ to 69.6% in August 2009 from 69.0% in July 2009.
Non-Farm Employment (p. 19)	↓ 263,000 in September 2009 from August 2009.
Unemployment Rate (p. 19)	↑ to 9.8% in September 2009 from 9.7% in August 2009.
Class I Railroad Employment (p. 20)	↓ to 150,064 in August 2009 from 150,400 in July 2009.
Index of Consumer Confidence (p. 20)	↓ to 53.1 in September 2009 from 54.5 in August 2009.
Retail Sales (p. 21)	↓ 1.5% in September 2009 from August 2009.
Light Vehicle Sales (p. 22)	↓ 35% on annualized basis in September 2009 from August 2009.
Housing Starts (p. 23)	↑ 1.5% in August 2009 from July 2009.
Consumer Price Index (p. 23)	↑ 0.4% in August 2009 from July 2009.
Railroad Cost Index (p. 24)	From Q2 '09 to Q3 '09, wages ↑ 1.5% ; wage supplements ↓ 0.1% ; fuel ↑ 21.1% ; materials & supplies, ↑ 2.7% .
Value of the U.S. Dollar (p. 24)	↓ 0.2% in September 2009 from August 2009.
Dow Jones Economic Sentiment Indicator (p. 25)	↓ to 34.1 in September 2009 from 35.5 in August 2009.
Rail Freight Cars in Storage (p. 26)	↓ to 462,410 on Oct. 1, 2009 from 478,046 on Sept. 1, 2009.

U.S. AND CANADIAN FREIGHT RAILROAD TRAFFIC

Who releases it and when?

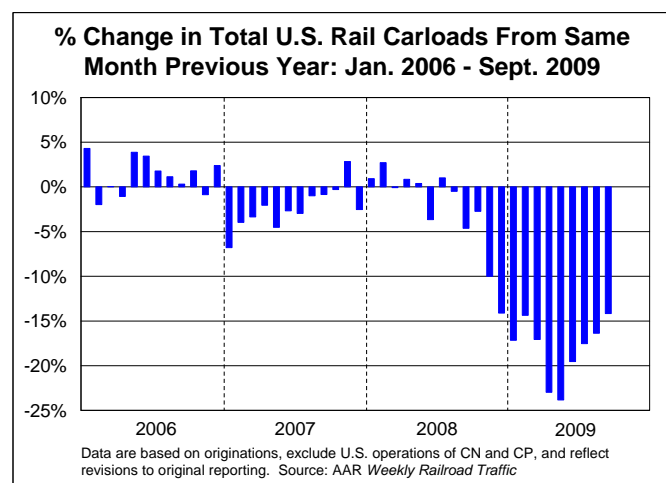
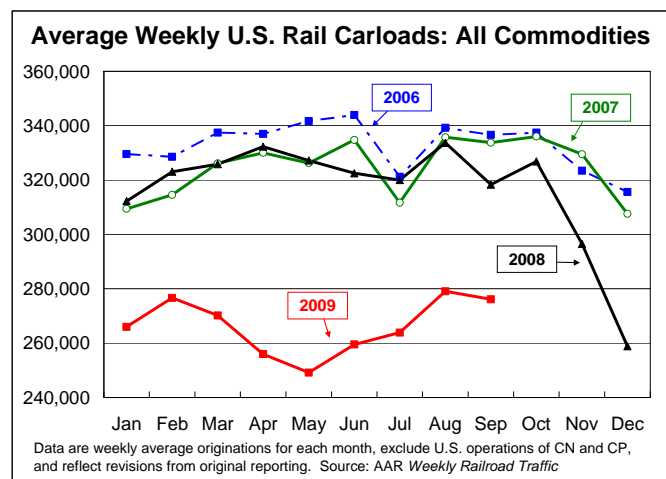
- The Association of American Railroads (AAR), every Thursday morning, in the AAR's *Weekly Railroad Traffic* report.

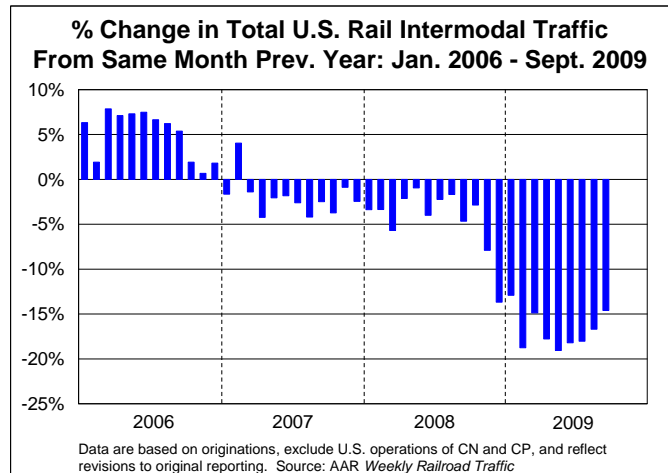
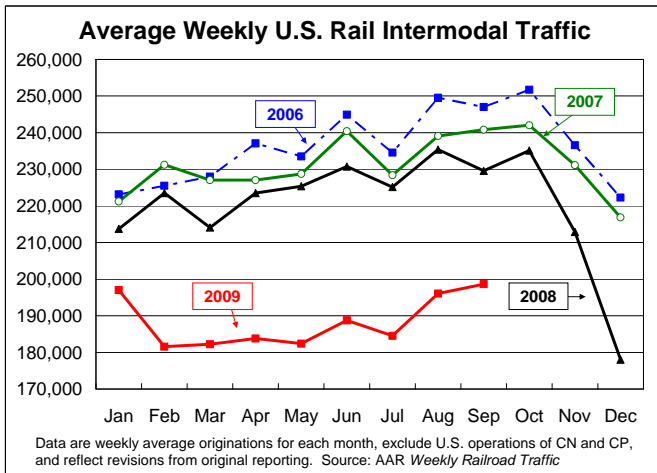
What is it and why is it important?

- The weekly AAR data detail rail carloadings for 19 different major commodity categories, as well as intermodal units (trailers and containers), for the previous week. Railroads that report their data to the AAR collectively account for the vast majority of total U.S. and Canadian freight rail traffic. Rail Time Indicators aggregates these data into monthly figures.
- Freight railroading is a "derived demand" industry — *i.e.*, demand for rail service occurs as a result of demand elsewhere in the economy for the products that railroads haul. Thus, freight rail traffic is a useful economic indicator, both for the overall economy and for specific sub-sectors.

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

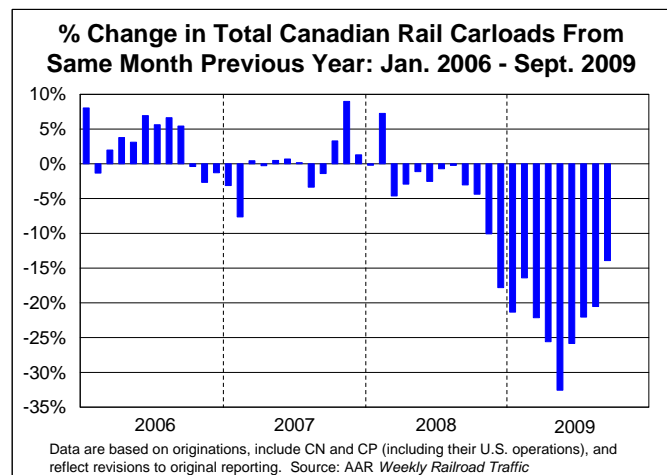
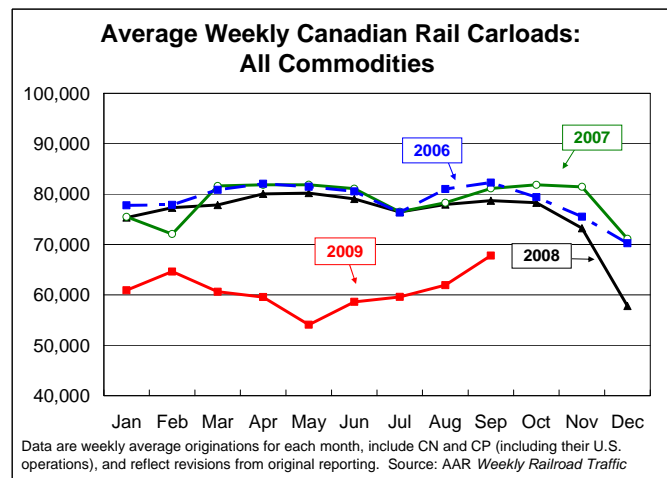
- U.S. freight railroads **originated** 1,380,684 carloads in September 2009, **down 14.2%** (227,837 carloads) **from September 2008** and the 11th straight double-digit monthly carload decline. The percentage decline in September was the **lowest since December 2008**.
- Average weekly carloads on U.S. railroads in September 2009 (276,137) were **2,900 less** than in August 2009. All or most of that decline can probably be attributed to severe flooding in the Southeast which shut down some rail lines for a period in September.
- In September 2009, U.S. **intermodal traffic** (which is not included in the carload figures discussed above) totaled 993,235 trailers and containers, **down 14.6%** (169,912 units) from September 2008 (see charts at top of next page).
- The **average weekly intermodal count** on U.S. railroads in September 2009 was 198,647 trailers and containers, **up 2,600 units from August 2009** and the **highest since November 2008**. The last three weeks of September were the three highest-volume intermodal weeks of 2009 for U.S. freight railroads.
- For the first nine months of 2009, U.S. rail carloadings were **down 18.1%** (2,301,087 carloads), while intermodal traffic was **down 16.8%** (1,480,358 trailers and containers). In Q3 2009, U.S. rail carloadings were down 16.0%, compared with a decline of 22.2% in Q2 2009 and 16.2% in Q1 2009.





What are the latest numbers for Canadian railroads?

- Canadian carload traffic**, which includes the combined Canadian and U.S. operations of CN and Canadian Pacific, **fell 13.9%** (54,845 carloads) in **September 2009** to 339,067 carloads, while **Canadian intermodal traffic fell 14.9%** (38,035 units) to 217,452 trailers and containers in September (see charts on this page for carloads and at the top of page 10 for intermodal).
- Average weekly carloads on Canadian railroads in September 2009 (67,813 carloads) rose for the fourth straight month to the highest level since November 2008.
- Average weekly intermodal units on Canadian railroads in September 2009 (43,490 trailers and containers) were also the highest since November 2008 and **up approximately 1,900 units** from August 2009.
- In the third quarter of 2009, Canadian rail carloadings were down 18.7% (203,018 carloads) compared with the third quarter of 2008; intermodal traffic was down 17.4% (122,786 units). For the first nine months of 2009, Canadian rail carloadings were down 22.2% (677,181 carloads), while intermodal traffic was down 16.2% (308,217 trailers and containers).



Where to go for more information:

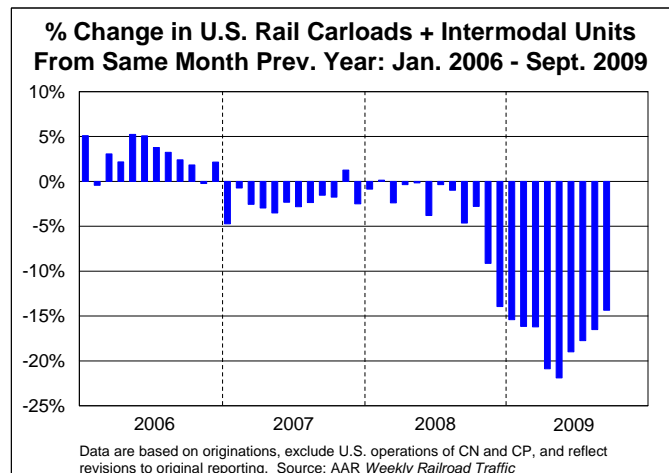
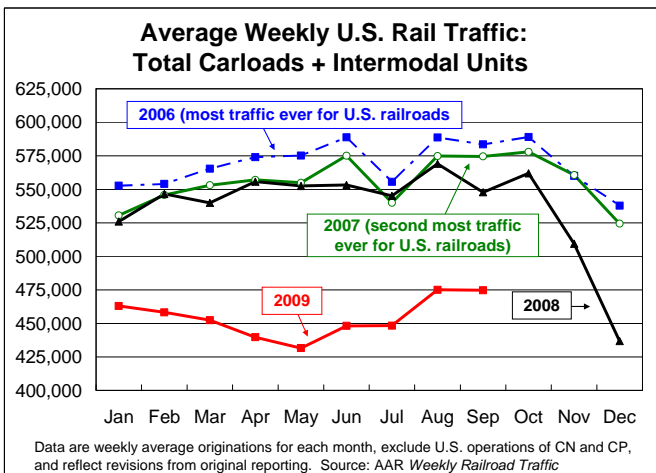
- Weekly AAR press releases on railroad traffic are available on the AAR web site [here](#).

U.S. RAIL TRAFFIC*
(5 weeks ending October 3, 2009)

Commodity	Sept. 09	Sept. 08	Differ.	% Chng	YTD 2009	YTD 2008	Differ.	% Chng
Agricultural & food products	183,371	200,730	-17,359	-8.6%	1,385,796	1,662,269	-276,473	-16.6%
Grain	102,085	112,041	-9,956	-8.9%	741,744	936,940	-195,196	-20.8%
Farm products excl. grain	4,196	4,425	-229	-5.2%	30,078	38,929	-8,851	-22.7%
Grain mill products (1)	38,626	41,721	-3,095	-7.4%	312,877	340,786	-27,909	-8.2%
Food products	38,464	42,543	-4,079	-9.6%	301,097	345,614	-44,517	-12.9%
Chemicals	162,529	162,540	-11	0.0%	1,233,526	1,433,127	-199,601	-13.9%
Chemicals	136,395	134,348	2,047	1.5%	1,022,896	1,189,892	-166,996	-14.0%
Petroleum products	26,134	28,192	-2,058	-7.3%	210,630	243,235	-32,605	-13.4%
Coal	645,843	745,131	-99,288	-13.3%	5,053,740	5,596,054	-542,314	-9.7%
Forest products	47,931	62,594	-14,663	-23.4%	374,040	513,379	-139,339	-27.1%
Primary forest products (2)	8,030	10,964	-2,934	-26.8%	59,003	85,272	-26,269	-30.8%
Lumber & wood products	11,264	15,876	-4,612	-29.1%	92,182	145,870	-53,688	-36.8%
Pulp & paper products	28,637	35,754	-7,117	-19.9%	222,855	282,237	-59,382	-21.0%
Metallic ores and metals	72,046	115,075	-43,029	-37.4%	467,734	906,934	-439,200	-48.4%
Metallic ores (3)	21,988	39,682	-17,694	-44.6%	124,458	271,662	-147,204	-54.2%
Coke	13,757	17,992	-4,235	-23.5%	106,642	147,422	-40,780	-27.7%
Primary metal products (4)	36,301	57,401	-21,100	-36.8%	236,634	487,850	-251,216	-51.5%
Motor vehicles & parts	66,438	75,965	-9,527	-12.5%	372,537	645,092	-272,555	-42.3%
Nonmetallic minerals & prod.	136,712	168,414	-31,702	-18.8%	1,033,252	1,322,619	-289,367	-21.9%
Crushed stone, gravel, sand	76,622	95,681	-19,059	-19.9%	595,644	762,349	-166,705	-21.9%
Nonmetallic minerals (5)	26,700	29,167	-2,467	-8.5%	181,126	229,856	-48,730	-21.2%
Stone, clay & glass prod. (6)	33,390	43,566	-10,176	-23.4%	256,482	330,414	-73,932	-22.4%
Other	65,814	78,072	-12,258	-15.7%	461,280	603,518	-142,238	-23.6%
Waste & scrap materials (7)	40,943	48,755	-7,812	-16.0%	269,401	402,224	-132,823	-33.0%
All other carloads	24,871	29,317	-4,446	-15.2%	191,879	201,294	-9,415	-4.7%
TOTAL ALL CARLOADS	1,380,684	1,608,521	-227,837	-14.2%	10,381,905	12,682,992	-2,301,087	-18.1%
Trailers	156,136	244,921	-88,785	-36.3%	1,230,479	1,903,643	-673,164	-35.4%
Containers	837,099	918,226	-81,127	-8.8%	6,116,820	6,924,014	-807,194	-11.7%
TOTAL ALL INTERMODAL	993,235	1,163,147	-169,912	-14.6%	7,347,299	8,827,657	-1,480,358	-16.8%

- (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. 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*

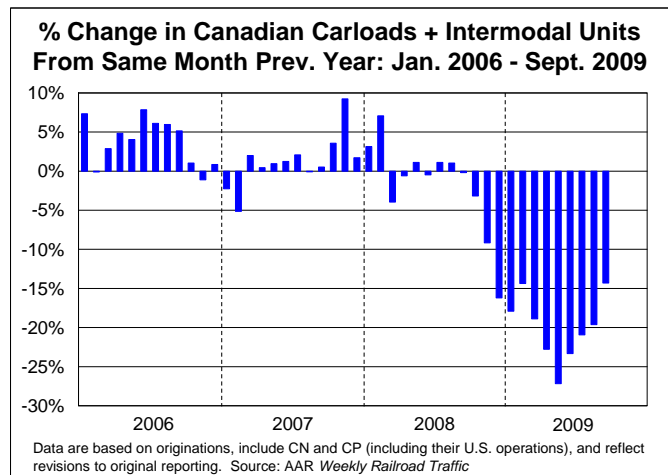
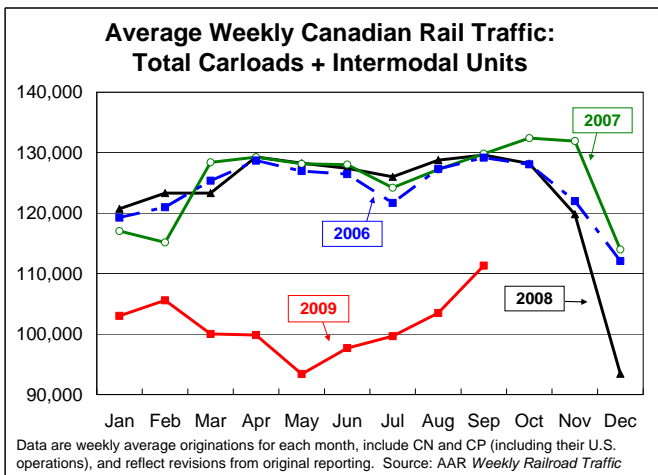


CANADIAN RAIL TRAFFIC*
(5 weeks ending October 3, 2009)

Commodity	Sept. 09	Sept. 08	Differ.	% Chng	YTD 2009	YTD 2008	Differ.	% Chng
Agricultural & food products	77,101	83,695	-6,594	-7.9%	609,939	601,211	8,728	1.5%
Grain	45,014	48,410	-3,396	-7.0%	362,210	364,313	-2,103	-0.6%
Farm products excl. grain	13,781	17,691	-3,910	-22.1%	110,049	90,334	19,715	21.8%
Grain mill products (1)	7,226	7,347	-121	-1.6%	54,616	63,766	-9,150	-14.3%
Food products	11,080	10,247	833	8.1%	83,064	82,798	266	0.3%
Chemicals	66,139	72,720	-6,581	-9.0%	479,876	609,611	-129,735	-21.3%
Chemicals	62,617	69,425	-6,808	-9.8%	455,204	583,694	-128,490	-22.0%
Petroleum products	3,522	3,295	227	6.9%	24,672	25,917	-1,245	-4.8%
Coal	38,392	41,694	-3,302	-7.9%	260,318	317,162	-56,844	-17.9%
Forest products	34,869	44,174	-9,305	-21.1%	270,049	348,474	-78,425	-22.5%
Primary forest products (2)	7,873	9,669	-1,796	-18.6%	56,541	69,518	-12,977	-18.7%
Lumber & wood products	10,304	13,138	-2,834	-21.6%	78,544	105,827	-27,283	-25.8%
Pulp & paper products	16,692	21,367	-4,675	-21.9%	134,964	173,129	-38,165	-22.0%
Metallic ores and metals	64,583	84,578	-19,995	-23.6%	386,134	652,921	-266,787	-40.9%
Metallic ores (3)	52,895	68,984	-16,089	-23.3%	307,781	526,079	-218,298	-41.5%
Coke	2,701	2,652	49	1.8%	15,541	16,908	-1,367	-8.1%
Primary metal products (4)	8,987	12,942	-3,955	-30.6%	62,812	109,934	-47,122	-42.9%
Motor vehicles & parts	21,474	24,388	-2,914	-11.9%	138,903	213,593	-74,690	-35.0%
Nonmetallic minerals & prod.	25,896	30,084	-4,188	-13.9%	154,551	210,730	-56,179	-26.7%
Crushed stone, gravel, sand	12,806	13,324	-518	-3.9%	60,421	87,507	-27,086	-31.0%
Nonmetallic minerals (5)	5,779	7,916	-2,137	-27.0%	46,849	61,202	-14,353	-23.5%
Stone, clay & glass prod. (6)	7,311	8,844	-1,533	-17.3%	47,281	62,021	-14,740	-23.8%
Other	10,613	12,579	-1,966	-15.6%	78,026	101,275	-23,249	-23.0%
Waste & scrap materials (7)	6,524	7,861	-1,337	-17.0%	41,620	65,659	-24,039	-36.6%
All other carloads	4,089	4,718	-629	-13.3%	36,406	35,616	790	2.2%
TOTAL ALL CARLOADS	339,067	393,912	-54,845	-13.9%	2,377,796	3,054,977	-677,181	-22.2%
Trailers	8,564	10,112	-1,548	-15.3%	62,681	77,973	-15,292	-19.6%
Containers	208,888	245,375	-36,487	-14.9%	1,526,133	1,819,058	-292,925	-16.1%
TOTAL ALL INTERMODAL	217,452	255,487	-38,035	-14.9%	1,588,814	1,897,031	-308,217	-16.2%

- (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. Source: AAR Weekly Railroad Traffic



COMBINED U.S. AND CANADIAN RAIL TRAFFIC

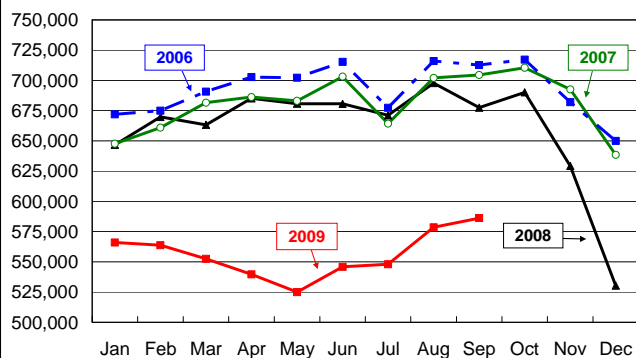
(5 weeks ending October 3, 2009)

Commodity	Sept. 09	Sept. 08	Differ.	% Chng	YTD 2009	YTD 2008	Differ.	% Chng
Agricultural & food products	260,472	284,425	-23,953	-8.4%	1,995,735	2,263,480	-267,745	-11.8%
Grain	147,099	160,451	-13,352	-8.3%	1,103,954	1,301,253	-197,299	-15.2%
Farm products excl. grain	17,977	22,116	-4,139	-18.7%	140,127	129,263	10,864	8.4%
Grain mill products (1)	45,852	49,068	-3,216	-6.6%	367,493	404,552	-37,059	-9.2%
Food products	49,544	52,790	-3,246	-6.1%	384,161	428,412	-44,251	-10.3%
Chemicals	228,668	235,260	-6,592	-2.8%	1,713,402	2,042,738	-329,336	-16.1%
Chemicals	199,012	203,773	-4,761	-2.3%	1,478,100	1,773,586	-295,486	-16.7%
Petroleum products	29,656	31,487	-1,831	-5.8%	235,302	269,152	-33,850	-12.6%
Coal	684,235	786,825	-102,590	-13.0%	5,314,058	5,913,216	-599,158	-10.1%
Forest products	82,800	106,768	-23,968	-22.4%	644,089	861,853	-217,764	-25.3%
Primary forest products (2)	15,903	20,633	-4,730	-22.9%	115,544	154,790	-39,246	-25.4%
Lumber & wood products	21,568	29,014	-7,446	-25.7%	170,726	251,697	-80,971	-32.2%
Pulp & paper products	45,329	57,121	-11,792	-20.6%	357,819	455,366	-97,547	-21.4%
Metallic ores and metals	136,629	199,653	-63,024	-31.6%	853,868	1,559,855	-705,987	-45.3%
Metallic ores (3)	74,883	108,666	-33,783	-31.1%	432,239	797,741	-365,502	-45.8%
Coke	16,458	20,644	-4,186	-20.3%	122,183	164,330	-42,147	-25.6%
Primary metal products (4)	45,288	70,343	-25,055	-35.6%	299,446	597,784	-298,338	-49.9%
Motor vehicles & parts	87,912	100,353	-12,441	-12.4%	511,440	858,685	-347,245	-40.4%
Nonmetallic minerals & prod.	162,608	198,498	-35,890	-18.1%	1,187,803	1,533,349	-345,546	-22.5%
Crushed stone, gravel, sand	89,428	109,005	-19,577	-18.0%	656,065	849,856	-193,791	-22.8%
Nonmetallic minerals (5)	32,479	37,083	-4,604	-12.4%	227,975	291,058	-63,083	-21.7%
Stone, clay & glass prod. (6)	40,701	52,410	-11,709	-22.3%	303,763	392,435	-88,672	-22.6%
Other	76,427	90,651	-14,224	-15.7%	539,306	704,793	-165,487	-23.5%
Waste & scrap materials (7)	47,467	56,616	-9,149	-16.2%	311,021	467,883	-156,862	-33.5%
All other carloads	28,960	34,035	-5,075	-14.9%	228,285	236,910	-8,625	-3.6%
TOTAL ALL CARLOADS	1,719,751	2,002,433	-282,682	-14.1%	12,759,701	15,737,969	-2,978,268	-18.9%
Trailers	164,700	255,033	-90,333	-35.4%	1,293,160	1,981,616	-688,456	-34.7%
Containers	1,045,987	1,163,601	-117,614	-10.1%	7,642,953	8,743,072	-1,100,119	-12.6%
TOTAL ALL INTERMODAL	1,210,687	1,418,634	-207,947	-14.7%	8,936,113	10,724,688	-1,788,575	-16.7%

- (1) - flour, animal feed, corn syrup, corn starch, soybean meal, etc. (5) - phosphate rock, rock salt, crude sulphur, clay, etc.
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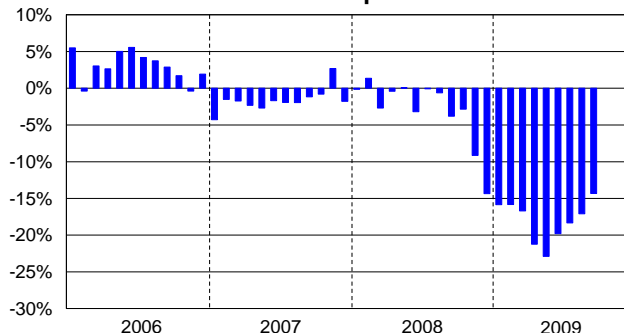
Data are originations. Source: AAR Weekly Railroad Traffic

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



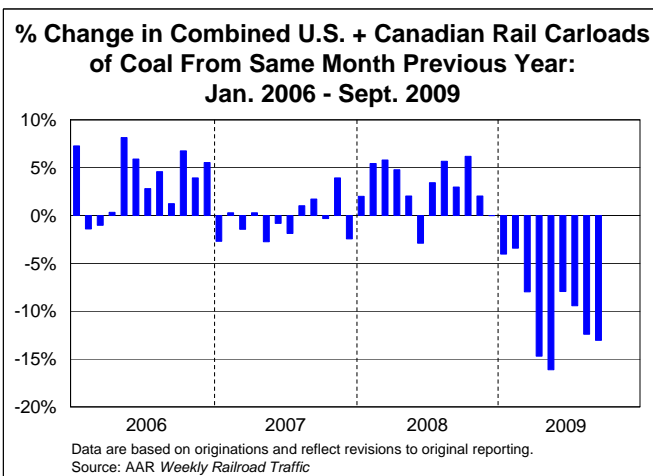
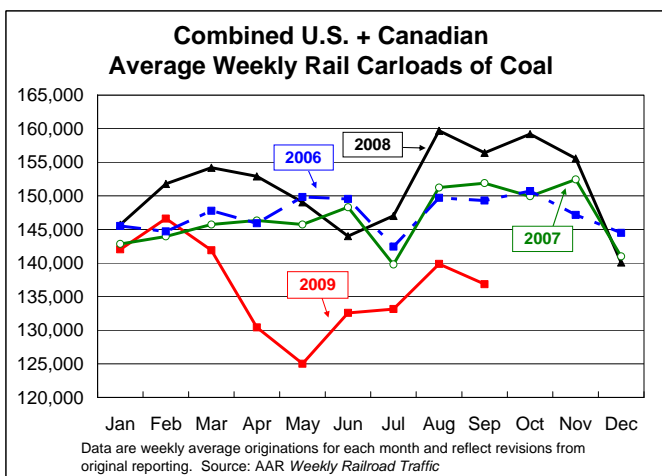
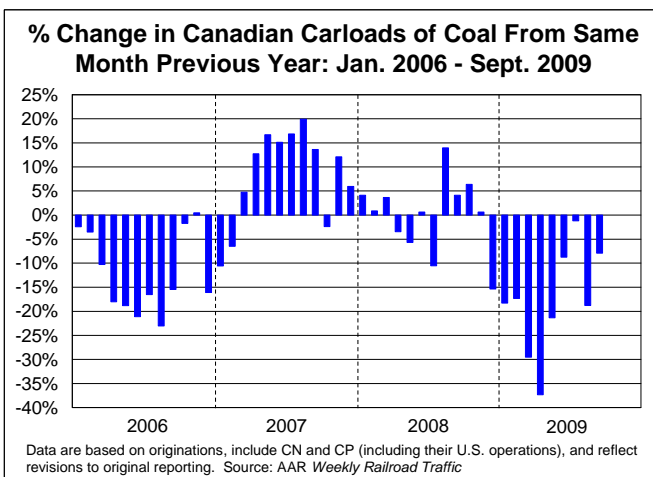
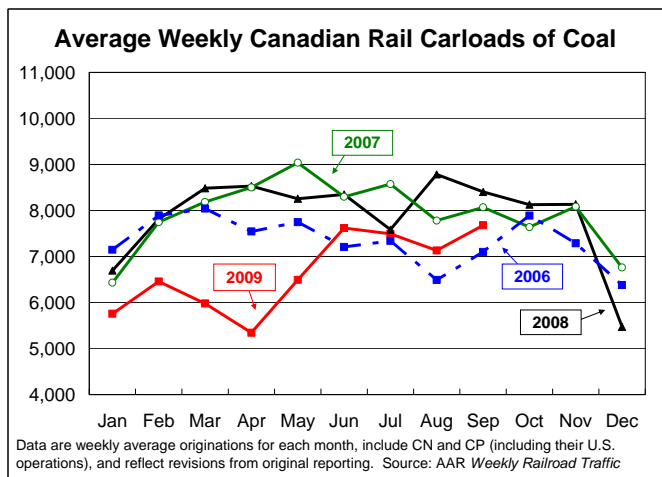
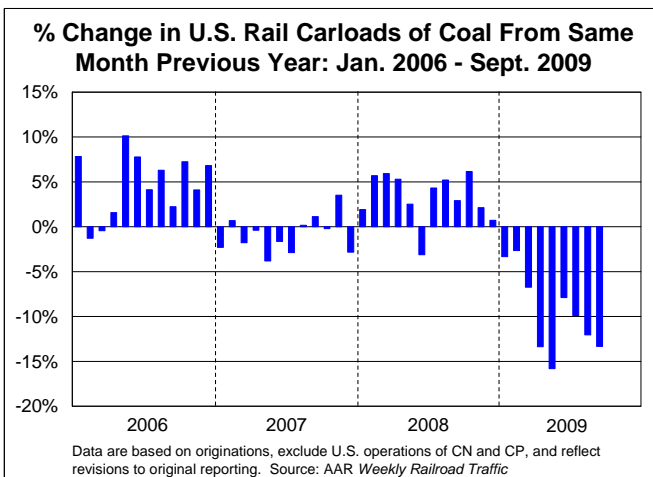
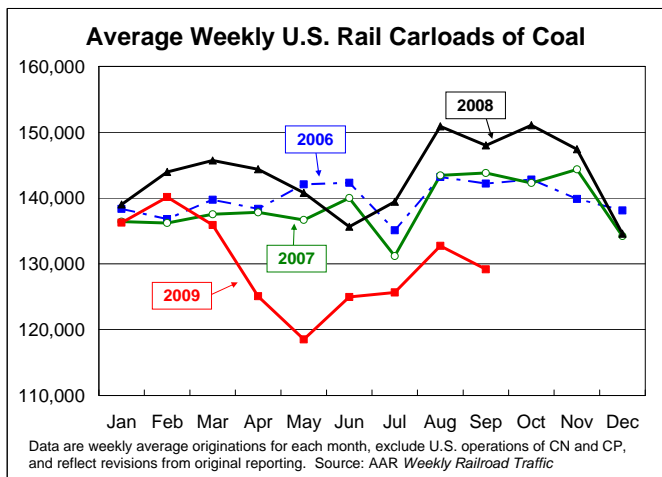
Data are weekly average originations for each month and reflect revisions from original reporting. Source: AAR Weekly Railroad Traffic

**% Change in Combined U.S. + Canadian Rail Carloads
+ Intermodal Units From Same Month Prev. Year:
Jan. 2006 - Sept. 2009**

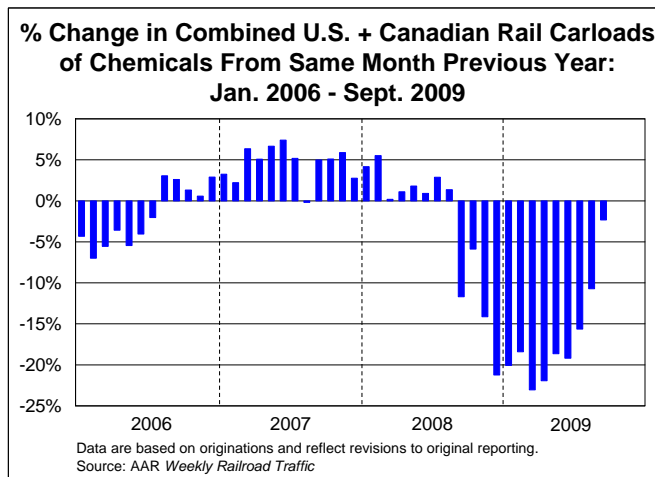
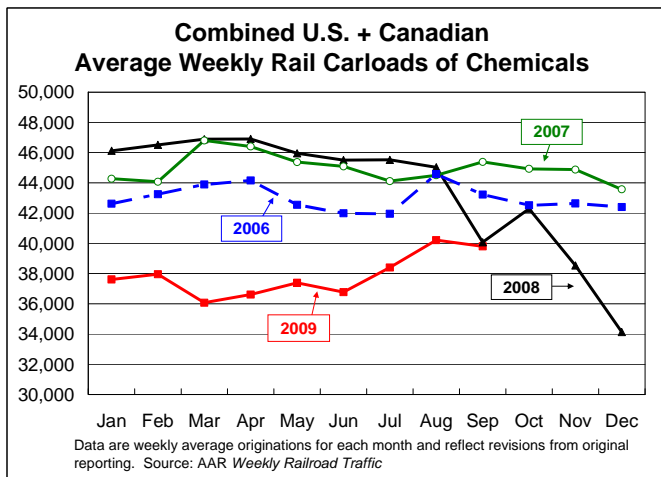
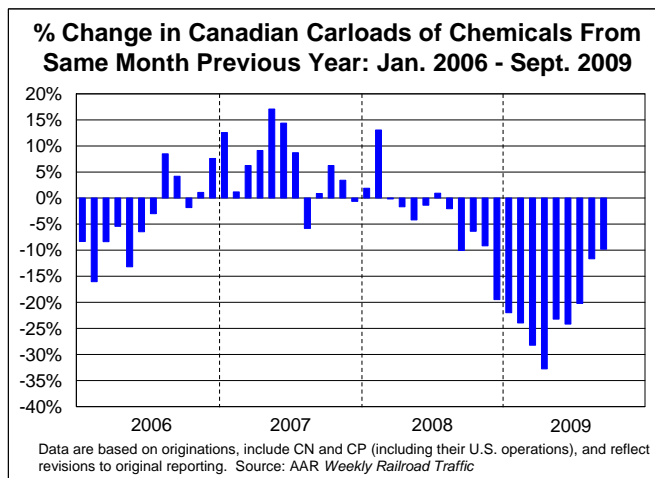
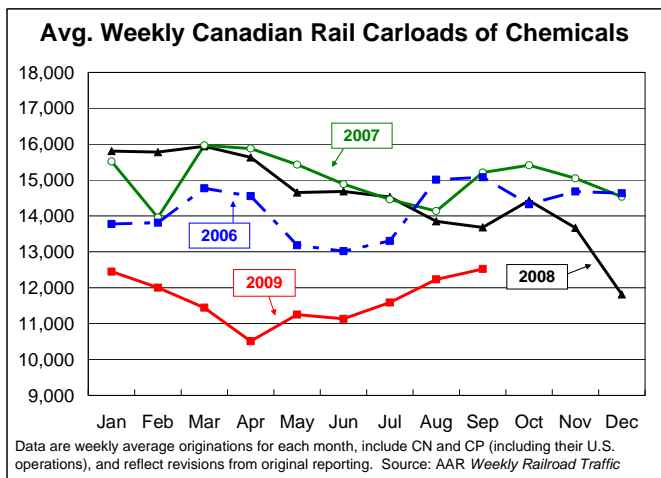
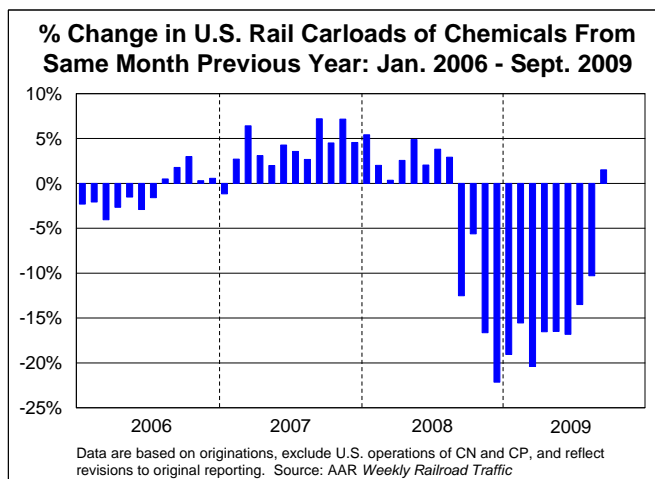
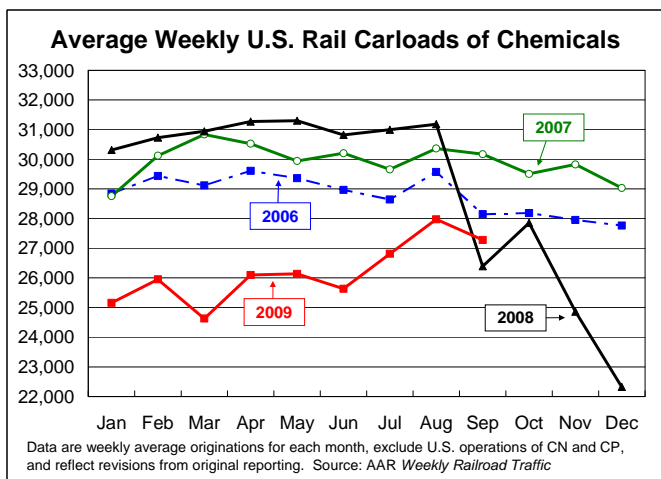


Data are based on originations and reflect revisions to original reporting. Source: AAR Weekly Railroad Traffic

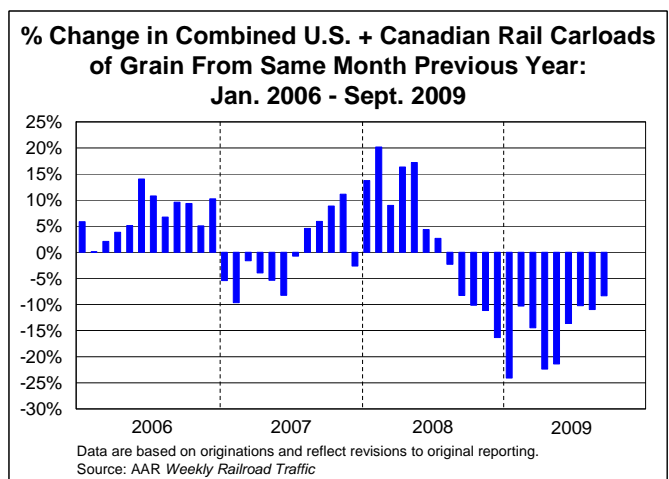
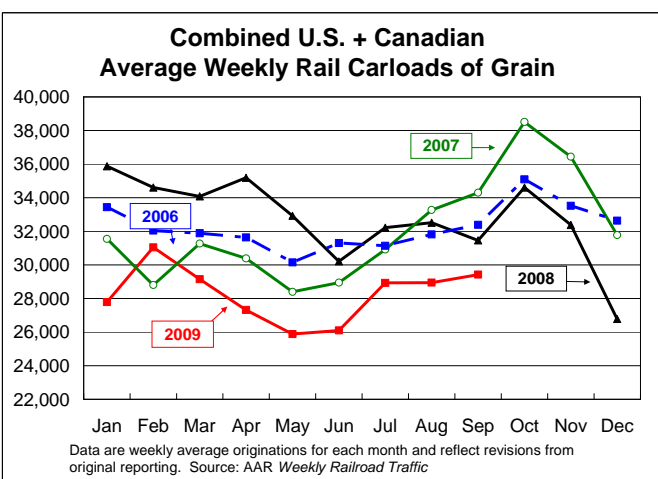
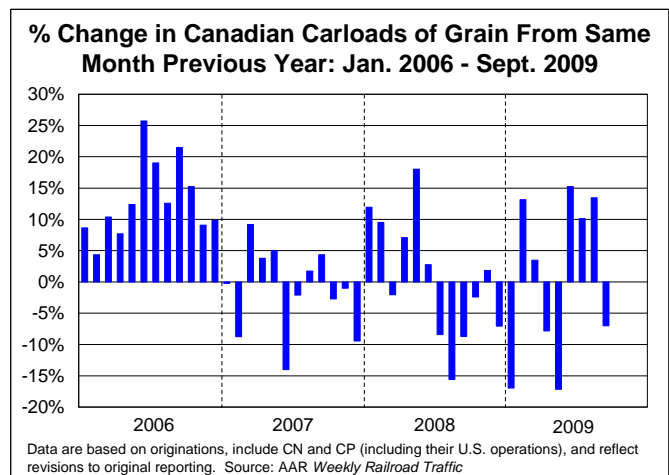
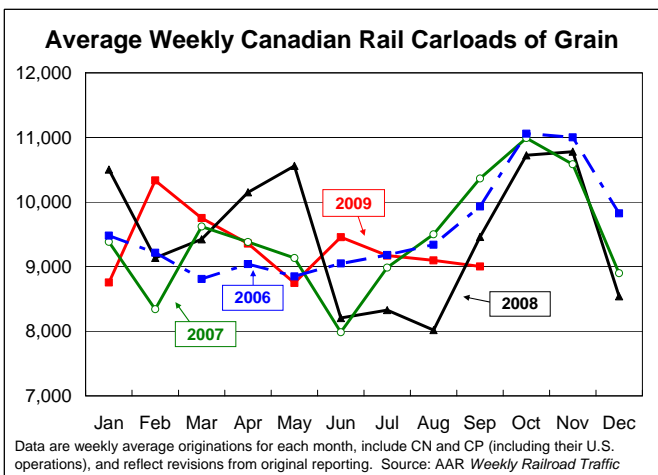
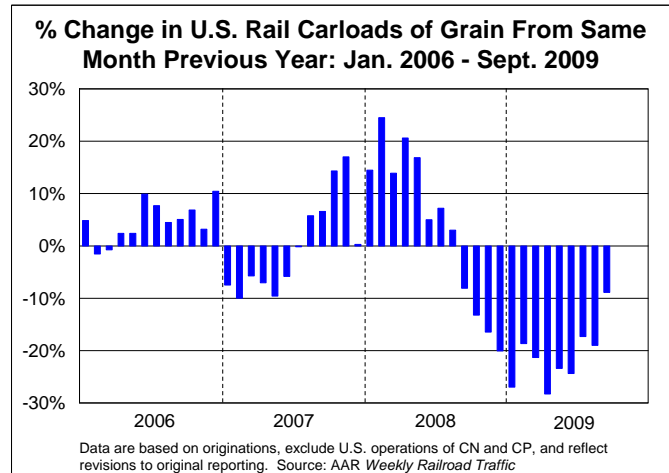
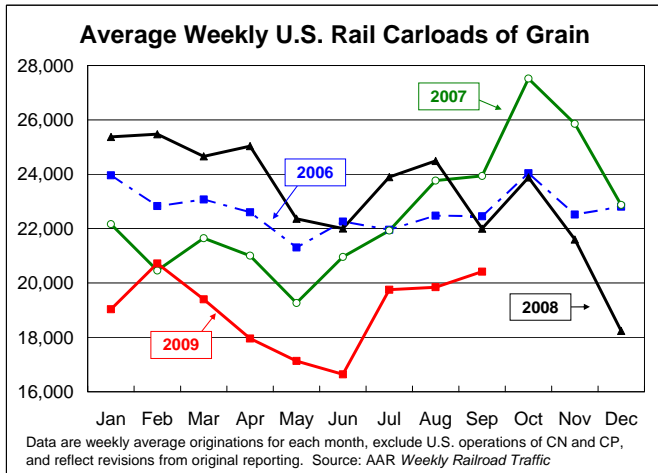
Coal, which accounts for around half of U.S. electricity generation, is the single most important commodity carried by U.S. railroads. In 2008, it accounted for 45% of rail tonnage, 25% of carloads, and 23% of gross revenue. Rail coal traffic in 2009 had been holding up well until April, when it dropped sharply. Three reasons for the decline: reduced electricity demand (for example, due to factory shut downs and mild summers in areas heavily reliant on electricity generated from coal); lower coal exports, in part due to lower demand abroad and in part due to a higher-valued dollar (see page 25); and lower natural gas prices, which make electricity generated by natural gas more competitive compared to electricity generated from coal.

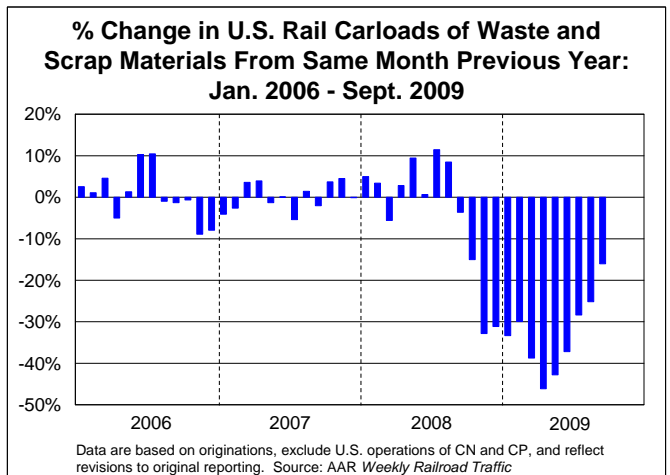
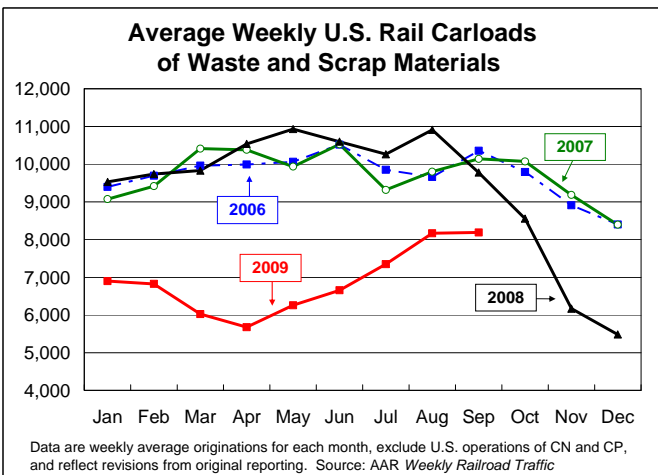
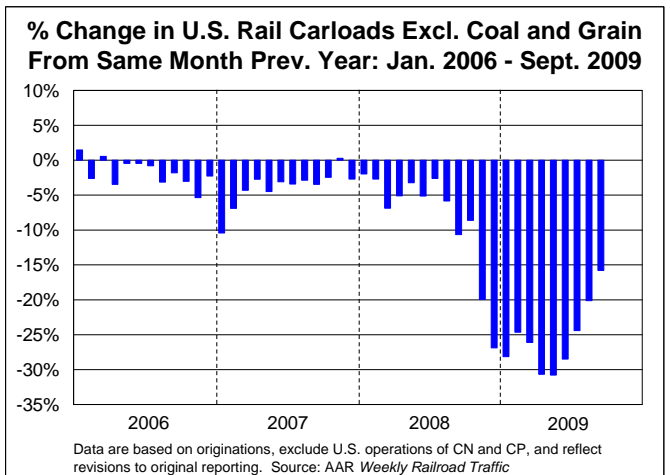
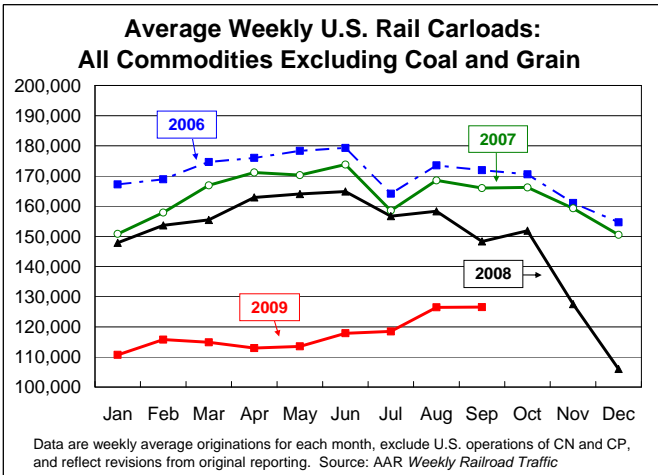
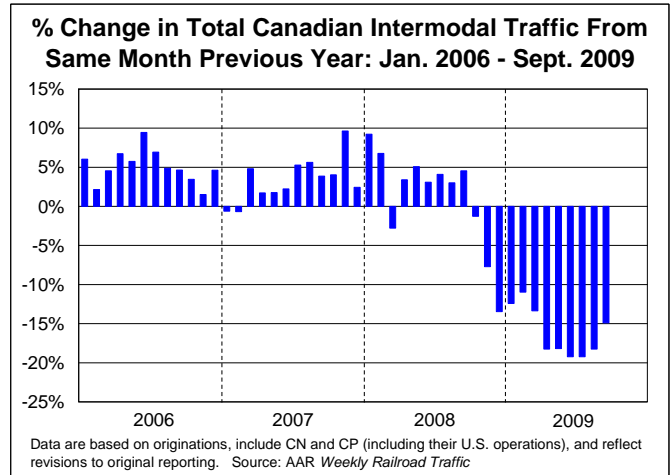
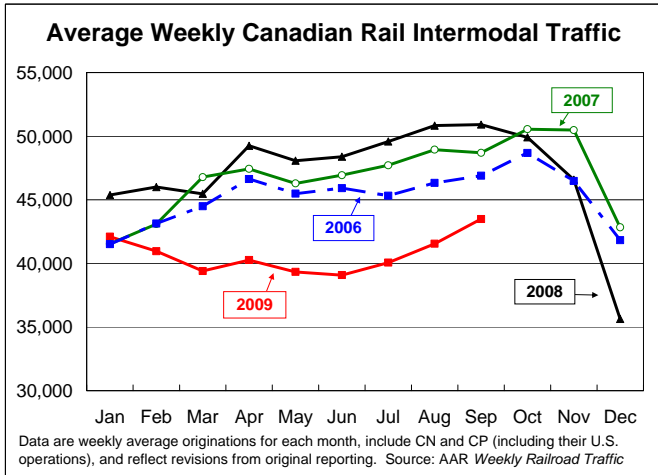


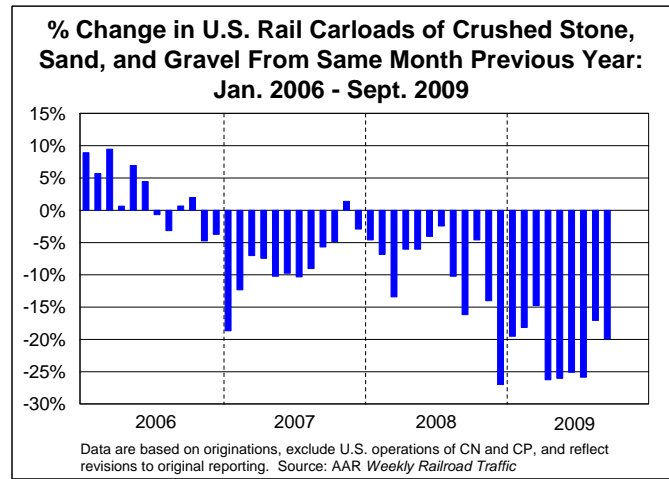
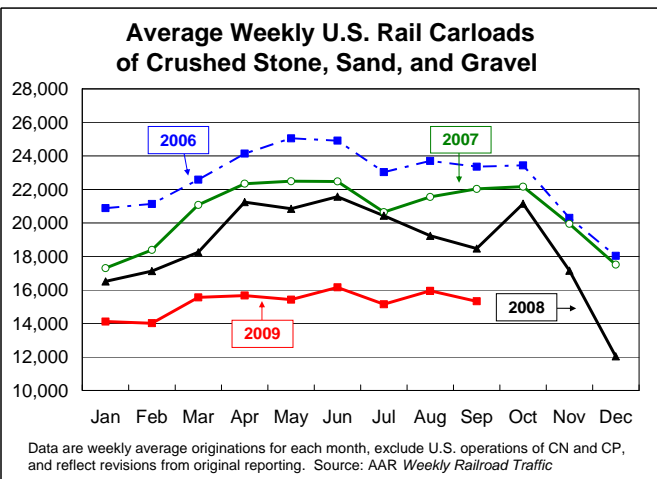
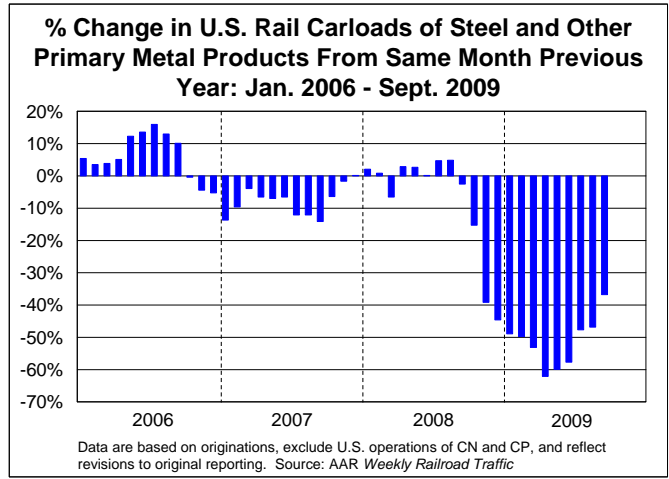
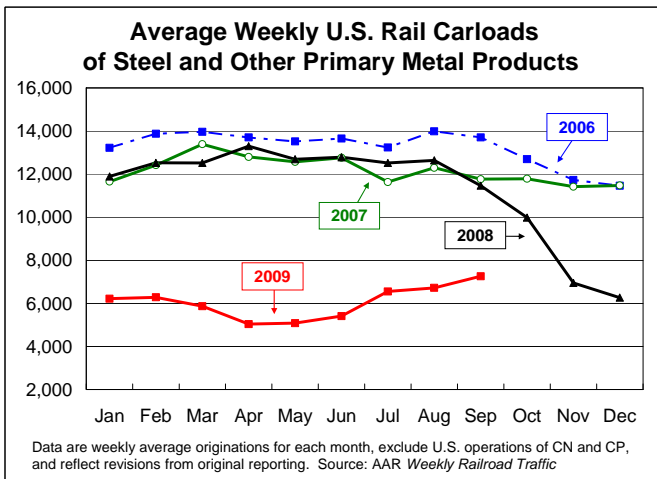
Chemicals accounted for 9% of rail tonnage, 7% of rail carloads, and 13% of gross rail revenue in 2008. More than half of rail chemical tonnage consists of various industrial chemicals, such as potassium chloride, sodium carbonate (soda ash), sodium hydroxide (caustic soda), sulfuric acid, urea, anhydrous ammonia, and many others. Plastic materials and synthetic resins — including large quantities of polyethylene, polypropylene, polyvinyl chloride, and similar products — account for more than one-fourth of rail chemical tonnage. Most of the rest consist of various types of fertilizers and other agricultural chemicals. U.S. carloads of chemicals in September 2009 were higher than in September 2008, though September 2008's chemical carloadings were sharply reduced due to Hurricane Ike.



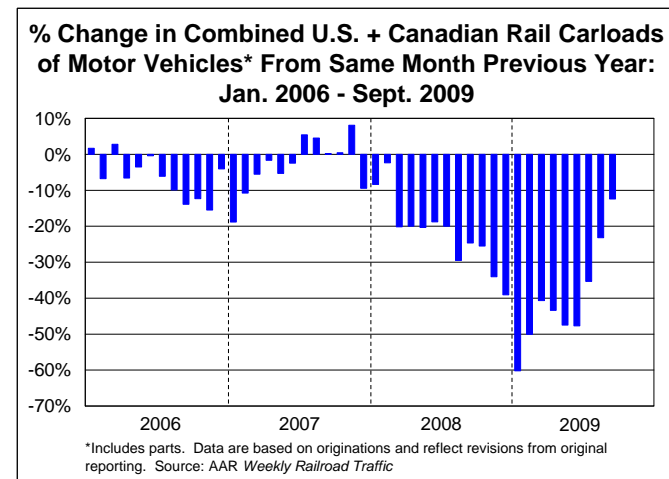
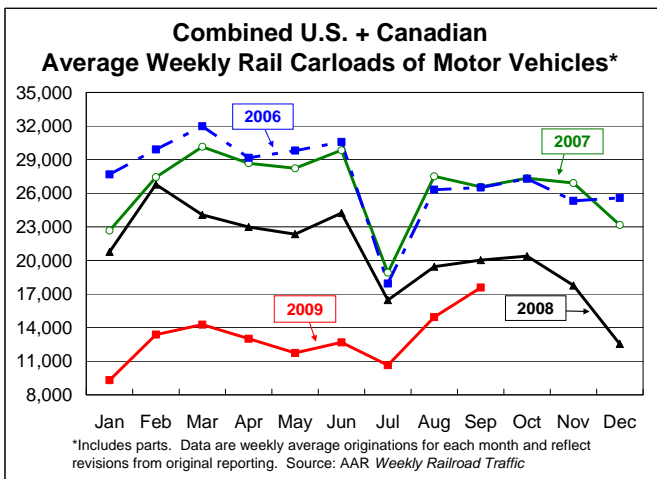
In 2008, **grain** accounted for 8% of rail tonnage, 5% of carloads, and 8% of revenue. Corn accounted for 51% of rail grain tonnage in 2008, followed by wheat (27%), soybeans (15%), and much smaller amounts of sorghum, barley, oats, and other grains. The United States is the world's top grain producer, but from year to year U.S. grain production — and rail grain movements — can fluctuate widely in response to weather, government policies, fertilizer use and prices, the financial condition of the farm sector, trends in markets overseas (the U.S. is the world's top grain exporter), and many other factors.

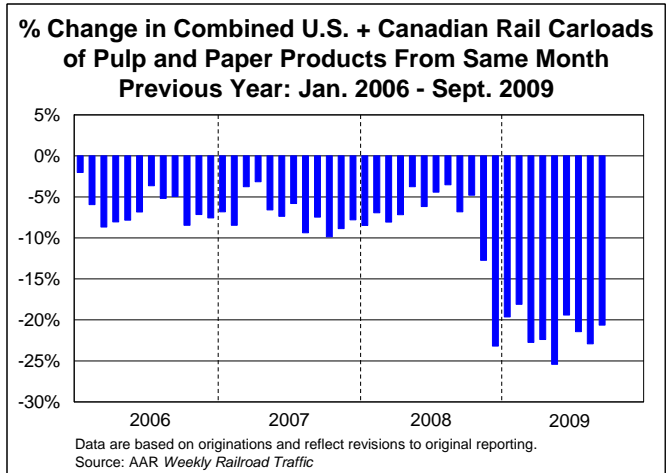
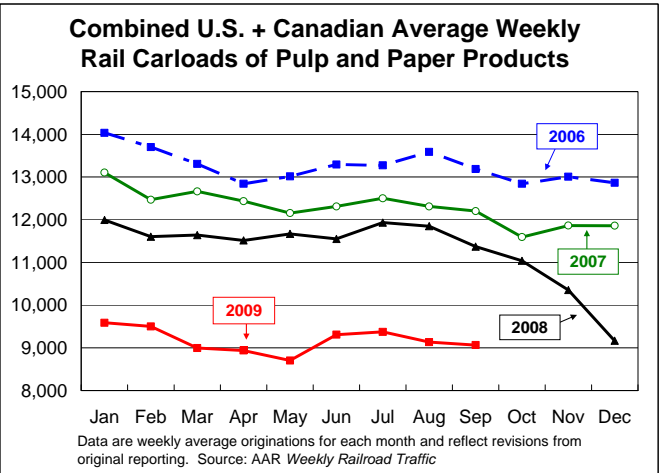
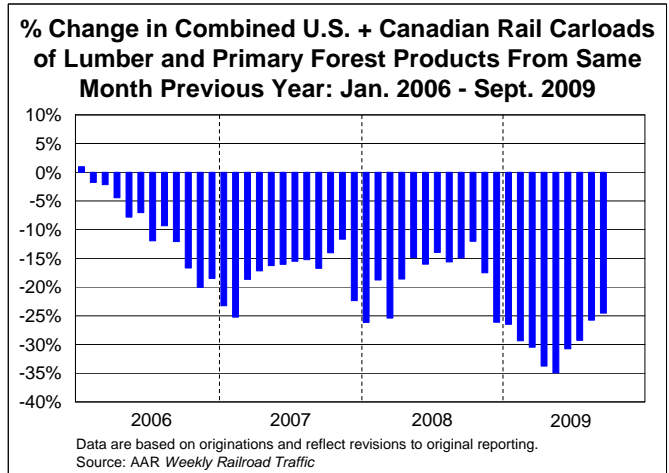
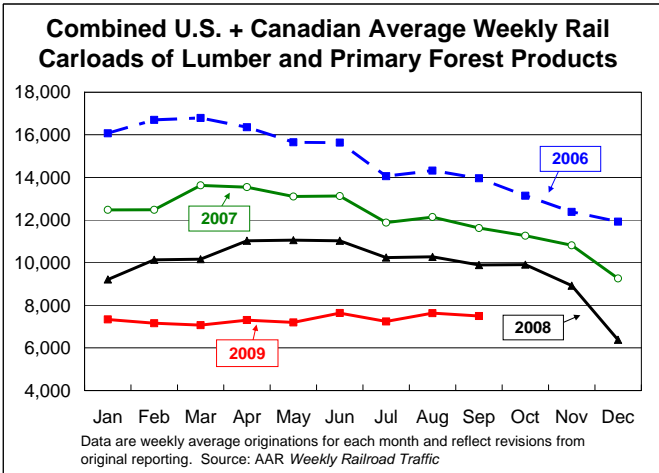
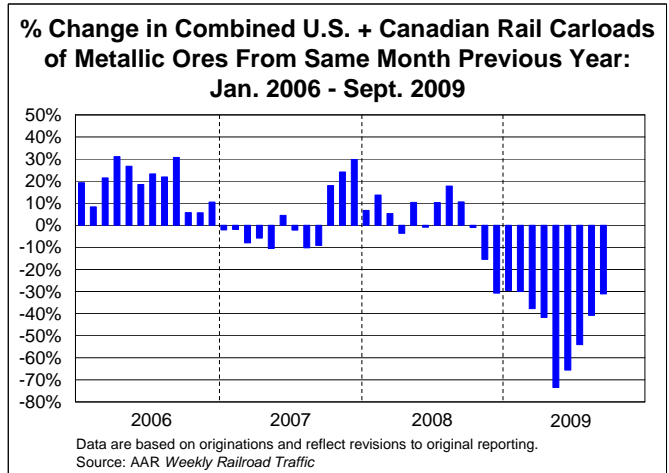
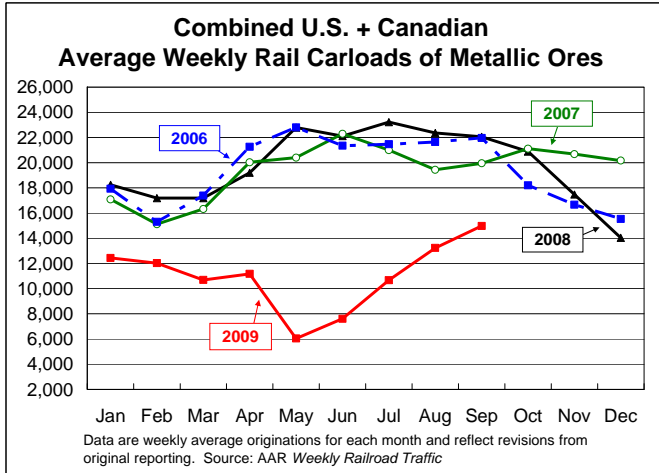






For some commodities, including those in the next four sets of charts, it makes most sense to combine U.S. and Canadian carloads into a single aggregate. The U.S. and Canadian auto industries, for example, are fully integrated. Likewise, much of the paper and lumber consumed in the United States is carried by Canadian railroads, either in Canada or in the United States.





GROSS DOMESTIC PRODUCT (GDP)

Who releases it and when?

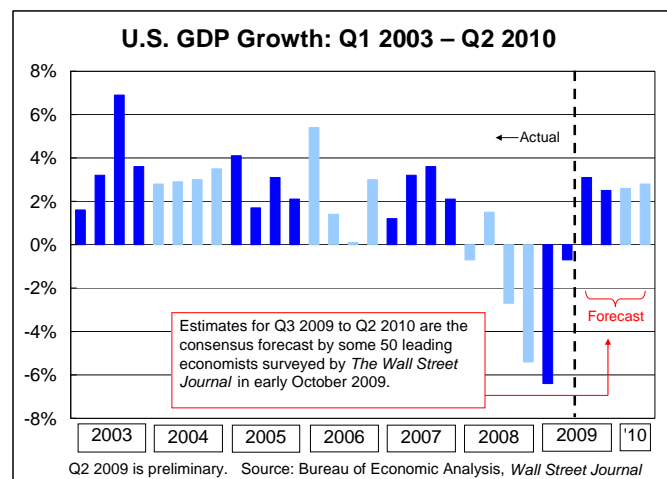
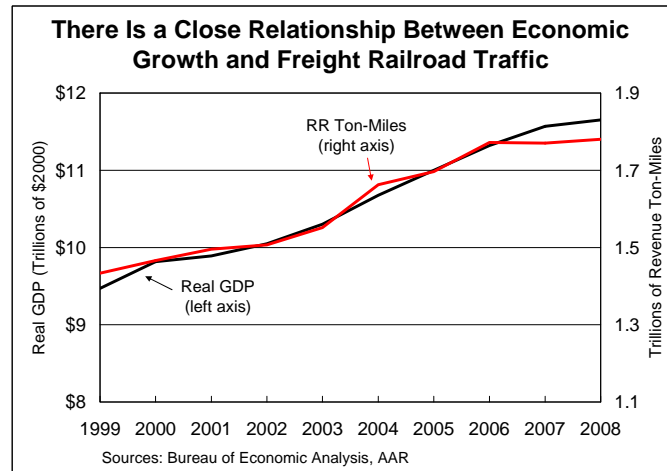
- U.S. Bureau of Economic Analysis (BEA), measured quarterly and revised as better data become available.

What is it and why is it important?

- GDP measures the size of the economy and how fast it's growing. It's the single most conclusive piece of information on the health of an economy.
- On a broad level, GDP growth and freight rail traffic are closely related (see chart at right).

What are the latest numbers?

- **U.S. GDP fell 0.7% in Q2 2009** compared with Q1 2009, according to final estimates released by the BEA on September 30. In the first quarter, real GDP fell 6.4%.
- What the BEA said on September 30: "The decrease in real GDP [in Q2 2009] primarily reflected negative contributions from private inventory investment, nonresidential fixed investment, residential fixed investment, personal consumption expenditures, and exports that were partly offset by positive contributions from federal government spending and state and local government spending." Translation: GDP fell because higher government spending (which increases GDP) was more than offset by a number of factors that cause GDP to decline, including consumers spending less (including on housing); businesses investing in fewer machines, computers, and other equipment; businesses reducing their inventories, and lower exports.



- Each month, *The Wall Street Journal* surveys some 50 leading economists. In the most recent survey, released October 8, the view was that "The worst recession since the Great Depression has left a scorched landscape that will weigh on the labor market and the broader economy for years to come."
- What the WSJ said: "The 48 surveyed economists expect the economy to bounce back from four quarters of contraction with 3.1% growth in [GDP] in the just-ended third quarter. Expansion is seen continuing through the first half of 2010, though at a slower rate."
- The consensus of the WSJ economists in the October survey called for **3.1% GDP growth in Q3 2009, 2.5% in Q4 2009, 2.6% in Q1 2010, and 2.8% in Q2 2010.**

Where to go for more information:

- The most recent BEA news release on GDP, including links to detailed data tables, is [here](#). The BEA will release its first estimate of Q3 GDP on October 29, 2009. Click [here](#) for more on the October *Wall Street Journal* economic survey.

PURCHASING MANAGERS INDEX (PMI)

Who releases it and when?

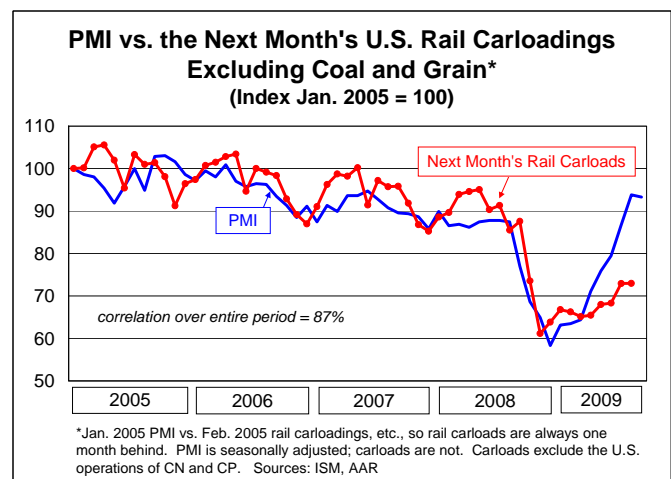
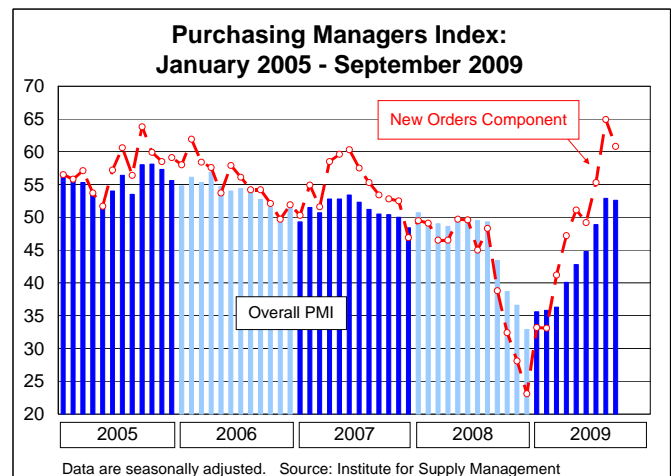
- Institute for Supply Management (ISM – formerly the National Association of Purchasing Managers), near the beginning of each month.

What is it and why is it important?

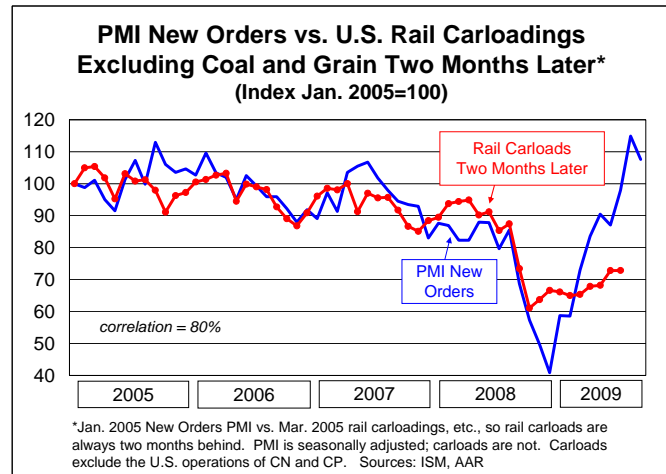
- The PMI is a compilation of data on new orders, inventory, production, supplier deliveries, and employment, based on a survey of several hundred supply managers at manufacturers throughout the United States. (Supply managers are typically in charge of purchasing/procurement, inventory control and management, physical distribution and warehousing, and other key functions.) The PMI is considered a key indicator both of actual “on-the-ground” conditions as well as sentiment for what the near- to medium-term will hold.
- 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 ISM, a **PMI > 50** indicates that overall **manufacturing is expanding**; a **PMI < 50** indicates that **manufacturing is contracting**. Also according to 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 fell to 52.6 in September 2009** from 52.9 in August 2009, marking the first decrease in the PMI since December 2008. The “new orders” component of the PMI **fell to 60.8 in September 2009** from 64.9 in August 2009.
- For several months, the PMI has been suggesting a far more optimistic outlook than most other economic indicators. The decline in September makes the PMI less of an outlier compared to other indicators, but it is still an outlier.
- What the ISM said regarding the September data: “The manufacturing sector grew for the second consecutive month in September. ...[T]he recovery broadened as the number of industries reporting growth increased from 11 to 13. Both new orders and production are growing, but at a slower rate when compared to August. It appears the fundamentals for continuing recovery are still at work as inventories and sales are gaining balance. ...[I]f the PMI for September (52.6 percent) is annualized, it corresponds to a 3.6 percent increase in real GDP annually.”



- Since January 2005, **PMI has corresponded closely with the following month's U.S. rail carloads** excluding coal and grain¹ — though that relationship has become less robust since late 2008, when PMI first fell much farther and has now risen much more rapidly than rail carloads. (See chart on previous page.) That's another reason to suspect that the PMI might be overstating the magnitude of a turnaround in manufacturing and the economy.
- Likewise, over the past few years, the **new orders** component of PMI has been **closely correlated with U.S. rail carloadings** excluding coal and grain two months in the future, but that relationship too has cooled since new orders began surging rapidly.



Where to go for more information:

- The press release for the September PMI is [here](#) – it includes much more detail than the summary above. The October PMI will be released on November 2, 2009.

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 October has data covering August.)

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. Units may be divisions of diversified large companies, large homogenous companies, or single-unit manufacturers in 89 industry categories. Figures are adjusted for seasonal and trading-day differences but not for price changes.
- 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.
- Conversely, 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.

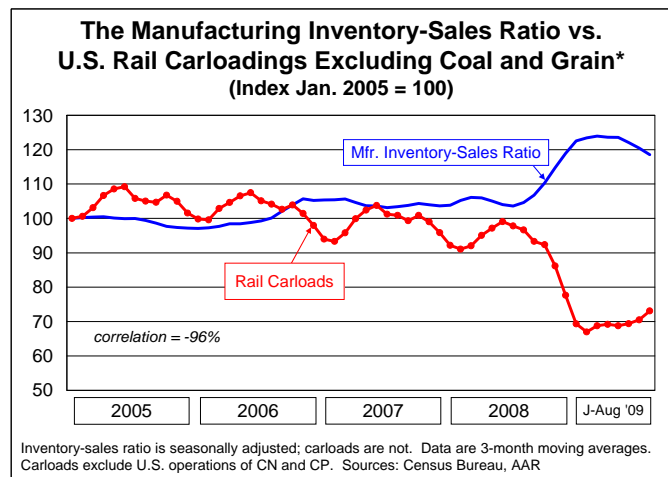
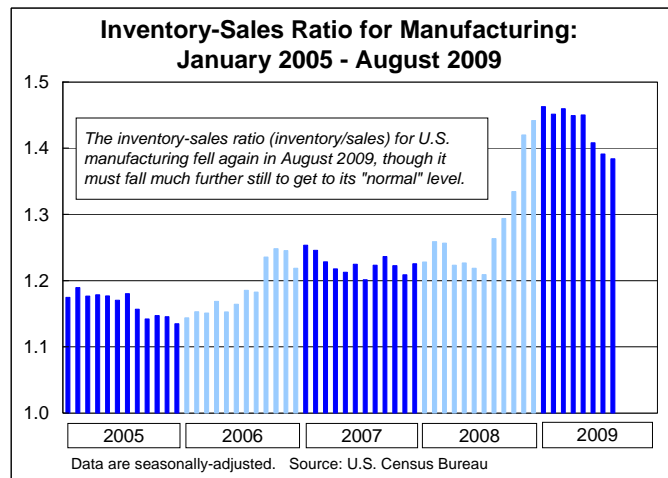
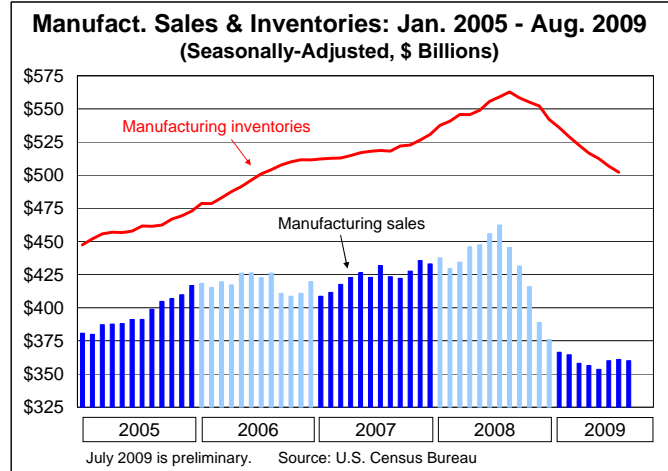
¹ Due to seasonality issues such as harvests, the role of exports, and other factors, rail carloads of coal and grain are more volatile and less closely tied to manufacturing than other commodity categories. And since PMI focuses on manufacturing, it makes sense to exclude coal and grain when comparing rail traffic to the PMI.

What are the latest numbers?

- Seasonally-adjusted **manufacturing sales were basically flat** in August 2009 for the second straight month. In fact, manufacturing sales have been more or less flat for all of 2009.
- Seasonally-adjusted **manufacturers' inventories fell 0.8%** in August 2009 from July 2009, marking the 12th straight monthly decrease. Inventories in August 2009 were 11% below their year-earlier level.
- The **inventory-to-sales ratio fell 0.5%** in August 2009 from July 2009 to 1.38. That's down from a peak of 1.46 in January 2009 and March 2009.
- The inventory-to-sales ratio lends itself to a much less optimistic outlook for U.S. manufacturing than the purchasing managers index does (PMI — see page 14). Given how much higher the manufacturing inventory-to-sales ratio is relative to its recent norms, it seems unlikely that inventory "re-stocking" will provide a significant boost to U.S. manufacturing in the near term. (Some industries will fare better or worse than others, of course.) Things are headed in the right direction — just not terribly quickly.
- Since January 2005, there has been a very close negative correlation (*i.e.*, when one goes up, the other goes down) between the inventory-to-sales ratio for manufacturing and rail carloads excluding coal and grain (see chart at right). This inverse relationship has not always been as close as it is now and might not be as close in the future, but current data continue to provide a great illustration of the "derived-demand" nature of freight railroading.

Where to go for more information:

- The Census Bureau's full report on manufacturing sales and inventories in August is [here](#). Figures for September will be released on November 3.



INDEX OF 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?

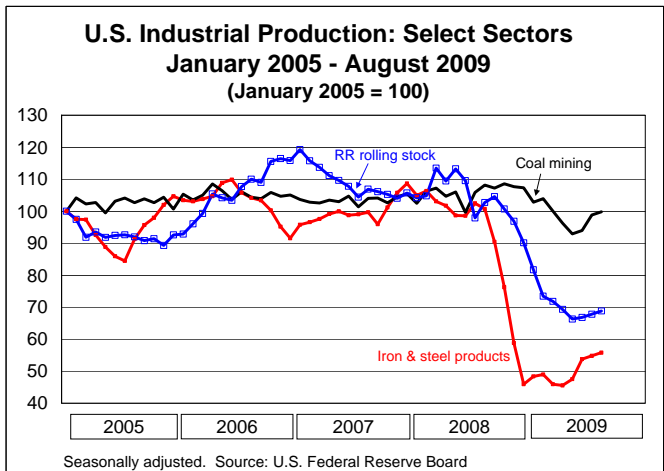
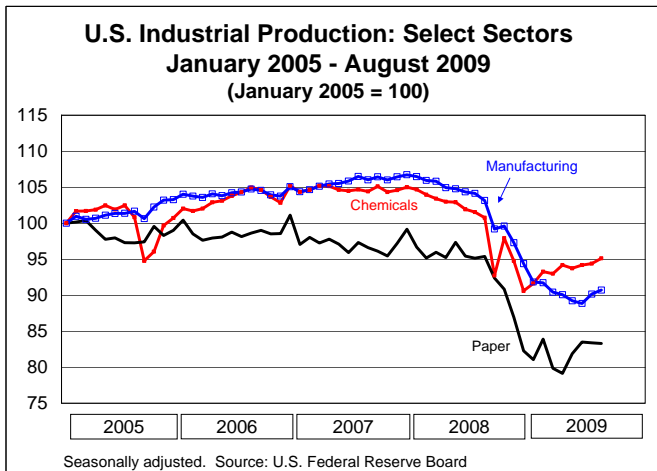
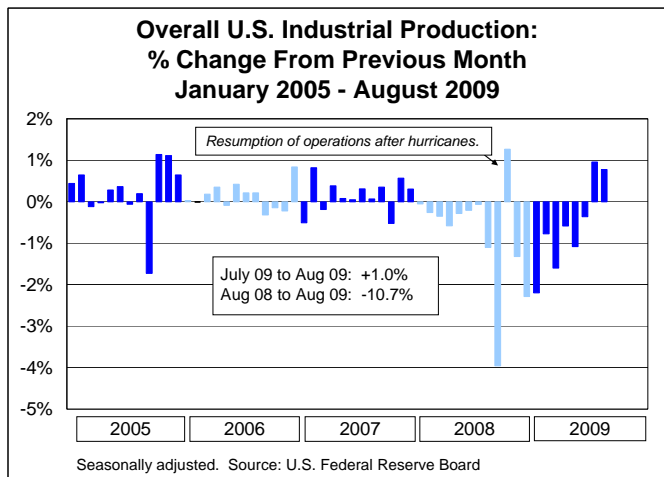
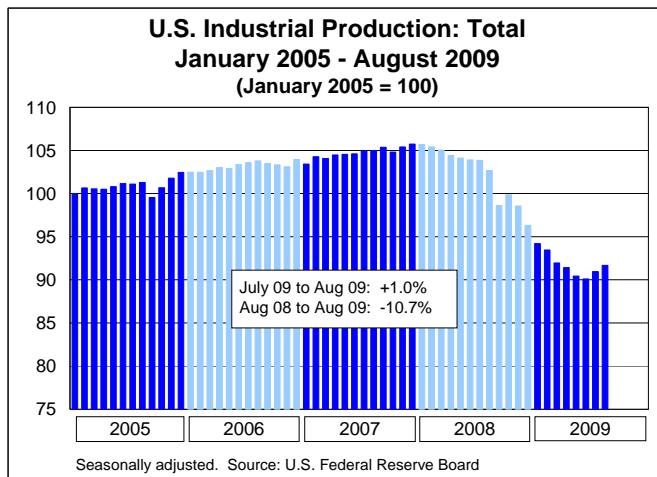
- Industrial production figures are based on the monthly raw volume of goods produced by U.S. industrial firms such as factories, mines, and electric utilities. Sector breakdowns are available. The industrial sector generally exhibits the most volatility in output during a business cycle. Large changes in industrial output can mean that a business cycle has reached an inflection point.

What are the latest numbers?

- Seasonally-adjusted **total industrial production rose 0.8% in August 2009** from July 2009. Nothing earth shattering, but it is the second straight monthly increase following a revised 1.0% increase in July 2009.
- Industrial production has fallen so much since the recession started that if industrial production grew the same 0.8% each month going forward, it would take about 1½ years just to get back to the level it was at in late 2007/early 2008.

Where to go for more information:

- The Federal Reserve release on industrial production in August is [here](#). September data will be released on October 16, 2009.



CAPACITY UTILIZATION

Who releases it and when?

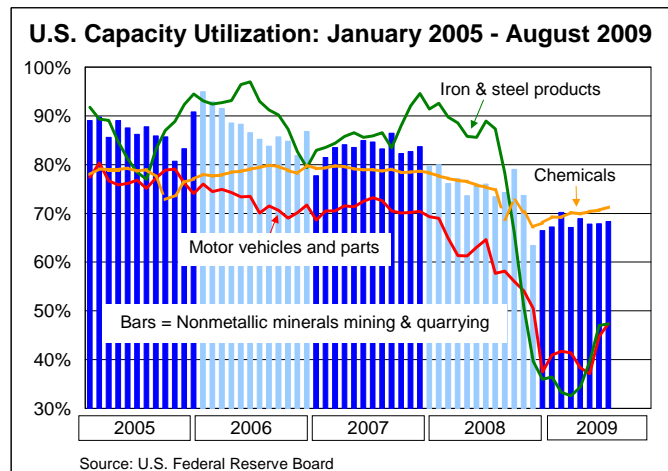
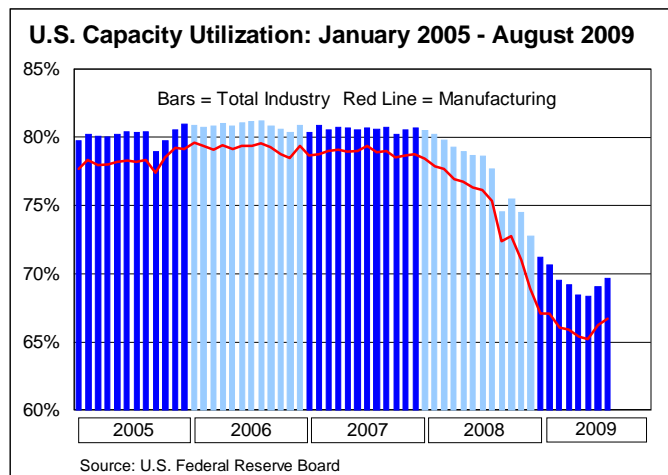
- The U.S. Federal Reserve Board, around the middle of each month.

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. The Fed provides capacity indexes for 87 industries (69 in manufacturing, 16 in mining, and 2 in utilities).
- 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.

What are the latest numbers?

- **Capacity utilization for total industry** (mining, manufacturing, and gas and electric utilities) **rose to 69.6% in August 2009, up 0.6%** from the 69.0% in July 2009. This marks the second straight monthly increase and the highest level since February 2009.
- Capacity utilization in June 2009 was the lowest ever recorded (the series began in 1967). Thus, there's an element of "there's nowhere to go but up" to the figures for July and August.
- Capacity utilization for **manufacturing** was 66.7% in August 2009, up from a revised 66.2% in July 2009 and also the highest since February 2009.
- The capacity utilization rates of different industrial sectors vary widely. The chart at right shows capacity utilization for four important industrial sectors. Note how capacity utilization for iron and steel products neared or exceeded 90% in late 2007 and early 2008 and then fell off a cliff in late 2008. It has been slowly recovering over the past couple of months. It's not a coincidence that the producer price index for iron and steel products (not shown on graph) surged sharply in early and mid-2008 and then fell sharply in late 2008.



Where to go for more information:

- The Federal Reserve release on capacity utilization in August is [here](#). September data will be released on October 16, 2009.

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?

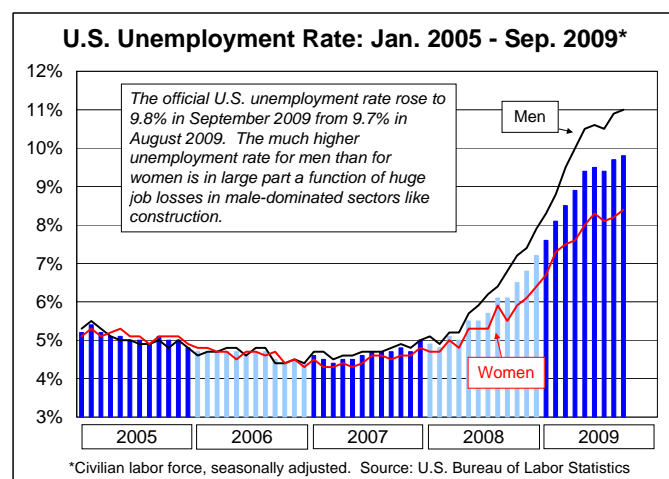
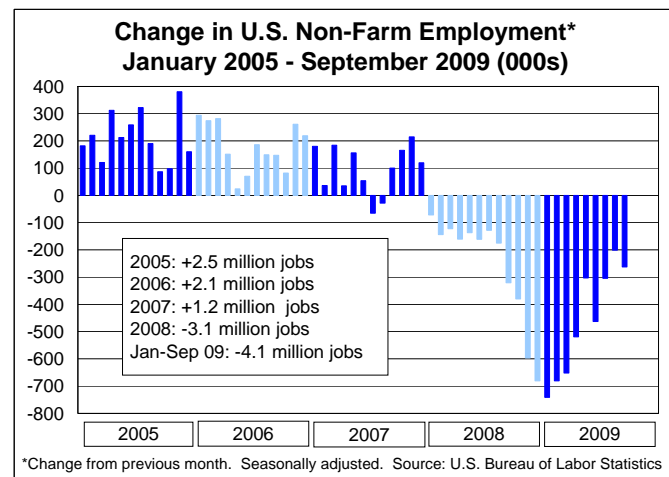
- The figures provide a snapshot of the strength of the U.S. labor market and are based on surveys of tens of thousands of households and businesses. In the United States, a gain of at least **150,000 or more jobs from one month to the next is generally considered solid job growth.** (Average monthly U.S. job growth from September 2003 through December 2007 was 159,000 jobs.) Anything less constitutes a weak job market.
- 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 **263,000 in September 2009** from August 2009. The decline in September was low by 2009 standards, but was an increase from 216,000 net jobs lost in August.
- The U.S. **unemployment rate in September 2009 rose to 9.8%**, up from 9.7% in August. In the 21 months from January 2008, the U.S. economy has **lost 7.2 million** net jobs.
- It is widely expected that the unemployment rate will stay high for several more years. The consensus of the panel of economists surveyed by *The Wall Street Journal* in early October 2009 was that unemployment won't fall below 6% — where it was for several years prior to mid-2008 — until 2013.
- Some jobs might not come back even in a strong recovery if employers decide that, thanks to productivity gains, they can return to or even exceed previous levels of output with fewer employees than they had before.

Where to go for more information:

- The BLS press release on the employment situation in September 2009 is [here](#). Data for October 2009 will be released on November 6, 2009.



CLASS I RAILROAD EMPLOYMENT

Who releases it and when?

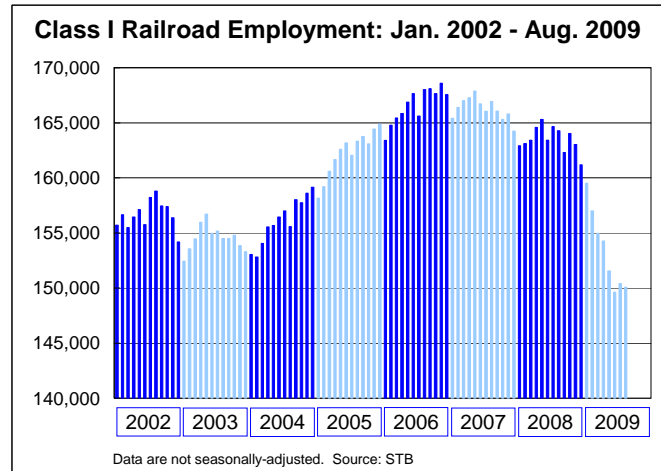
- Surface Transportation Board (STB), around the middle of the month.

What is it and why is it important?

- Report showing the average number of Class I employees at mid-month. 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 railroad employment **fell to 150,064 in August 2009, down 336 employees** from July's 150,400. Class I employment is now more than 18,500 employees below the recent peak of 168,582 in November 2006. The subcategory "train and engine" employees — consisting mainly of engineers and conductors that actually run the trains — showed an increase of 353 employees in August 2009.



Where to go for more information:

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

INDEX OF CONSUMER CONFIDENCE

Who releases it and when?

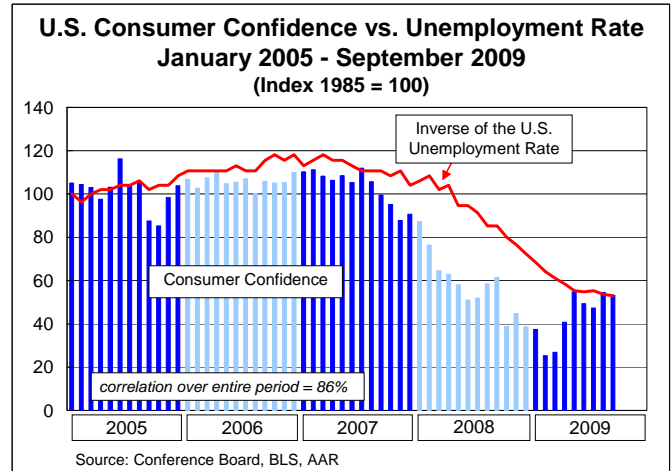
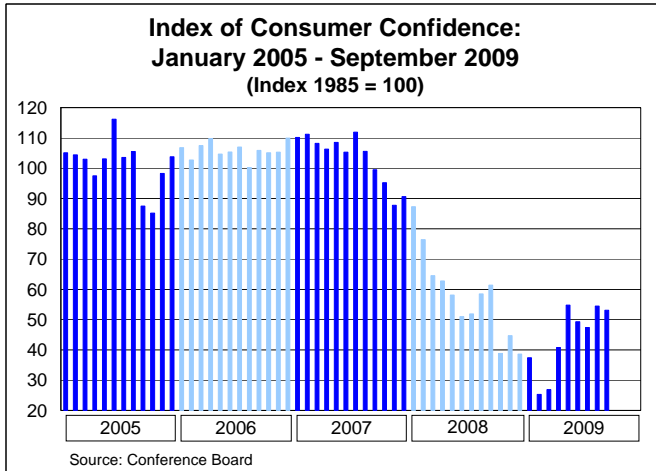
- The Conference Board, last Tuesday of the month.

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 and their expectations for the next six months.
- The index is used mainly to predict future consumer spending, on the theory that **consumers who are confident** about their job prospects, income, etc. **are more likely to make purchases** (especially big-ticket purchases) **than pessimistic consumers**.

What are the latest numbers?

- On September 29, the Conference Board reported that the consumer confidence index **fell in September 2009 to 53.1**, down from a revised 54.5 in August 2009.
- What the Conference Board said on September 29: "Consumer confidence, which had improved in August, retreated slightly in September. The Present Situation Index decreased, as consumers viewed both current business conditions and the labor market less favorably than last month. While not as pessimistic as earlier this year, consumers remain quite apprehensive about the short-term outlook and their incomes. With the holiday season quickly approaching, this is not very encouraging news."



- There is a close correlation between consumer confidence and the unemployment rate (see chart above right), suggesting that if predictions that unemployment will remain near 10% for the foreseeable future hold true, it could be a while before consumer confidence recovers to where it was in 2006 and 2007.

Where to go for more information:

- The Conference Board's press release on the consumer confidence index in September is [here](#).

RETAIL SALES

Who releases it and when?

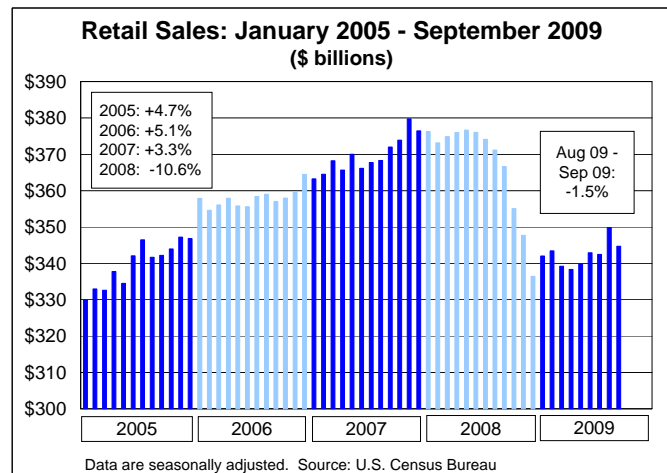
- The U.S. Census Bureau, around the ninth business day of each month.

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 subject to sometimes-large revisions and are not adjusted for inflation.
- 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 fell 1.5% (\$5.2 billion) in September 2009 from August 2009. Sales at motor vehicles and parts dealers fell \$6.5 billion in September, more than accounting for the overall decline. Excluding motor



vehicles and parts, retail sales in September were up 0.5%, or \$1.3 billion, including a 0.9% increase (\$440 million) at general merchandise stores (e.g., department stores, warehouse stores, supercenters).

- It's worth highlighting again that personal consumption contributes about 70% of GDP. That's why continued weakness in retail sales highlights one of the major threats to economic recovery. Without vibrant consumer spending, it will be difficult for the economy to consistently improve. And as *The Wall Street Journal* recently pointed out, "Savings by suddenly frugal U.S. households soared to an annualized \$566 billion in the second quarter, more than quadruple the rate at the start of 2008." Money saved is money not spent.

Where to go for more information:

- The Census Bureau's press release on September retail sales is [here](#). October retail sales will be released November 16, 2009.

LIGHT VEHICLE SALES

Who releases it and when?

- The U.S. Bureau of Economic Analysis.

What is it and why is it important?

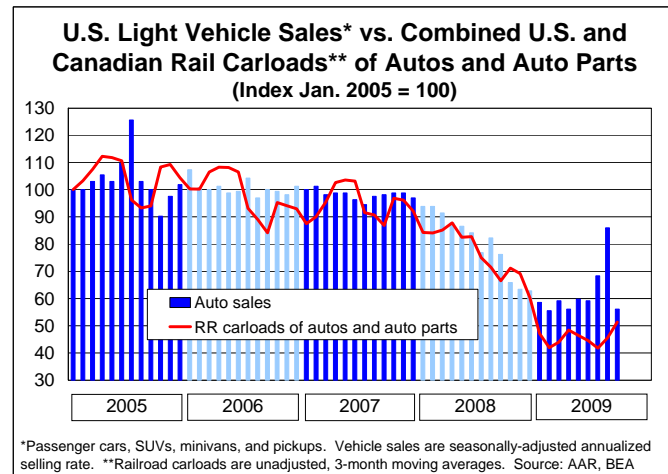
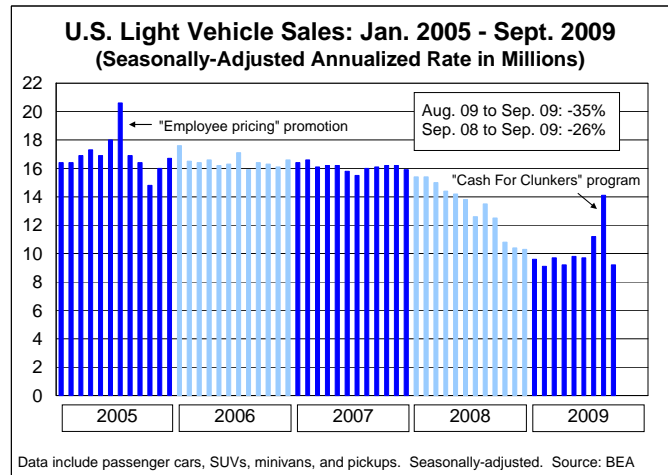
- Covers U.S. sales of cars and light trucks, including pickups and SUVs. Over the past 50 years, spending on motor vehicles has accounted, on average, for about 3.7% of U.S. GDP.
- In 2008, 6% of U.S. Class I railroad revenue came from hauling autos and auto parts.

What are the latest numbers?

- With the end of the "cash for clunkers" program, **U.S. light vehicle sales in September 2009 plunged 35%** from August 2009 to a seasonally-adjusted annualized selling rate (SAAR) of **9.2 million** — the same level it was back in April 2009. Light vehicle sales in September 2009 were 26% below September 2008.
- Rail carloads of motor vehicles and parts are closely correlated with motor vehicle sales. There was an uptick in rail carloads of autos and auto parts in September 2009, presumably in part a function of inventory replenishment efforts by auto dealers after cash-for-clunkers sales.

Where to go for more information:

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



HOUSING STARTS

Who releases it and when?

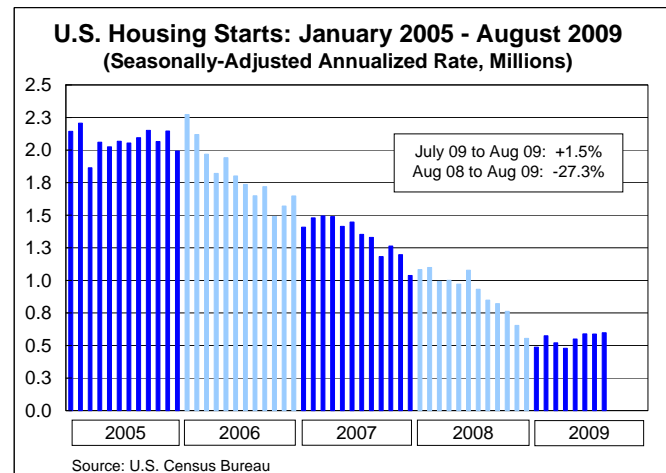
- Census Bureau, around the middle of each month.

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” — construction growth usually picks up at the beginning of a business cycle.

What are the latest numbers?

- On an annualized basis, seasonally-adjusted housing starts in August 2009 **were up 1.5% to 598,000** from July 2009. Housing starts have now shown a very slight upward trend over the past few months.



Where to go for more information:

- The Census Bureau's press release on housing starts in August is [here](#). September's housing starts will be released on October 20, 2009.

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, measuring the changes in the cost of a representative basket of consumer goods and services. Prices are collected in 87 urban areas throughout the country and from about 23,000 retail and service establishments.
- The “CPI for All Urban Consumers” (CPI-U) is the inflation index most often reported by the media, although BLS publishes hundreds of CPI indexes each month. The “core” CPI — CPI less food and energy — is also commonly used. Food and energy prices are typically more volatile than other prices due to their susceptibility to external shocks (e.g., oil price fluctuations).
- Among other uses, the CPI is the basis for cost-of-living adjustments for Social Security, federal retirement payments, many private pensions, and food stamps.

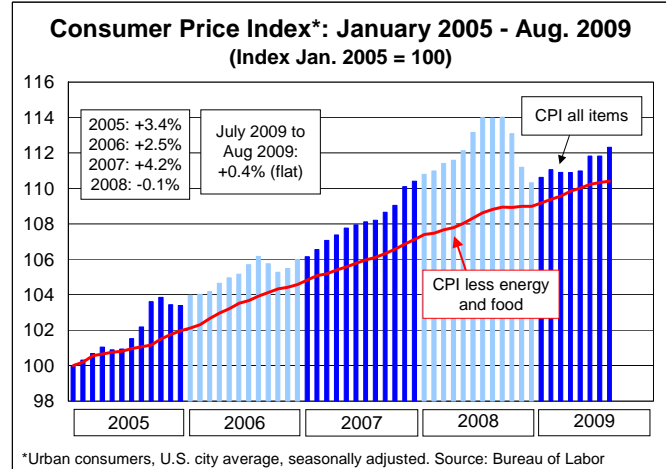
What are the latest numbers?

- **In August 2009, CPI-U was up 0.4%** on a seasonally-adjusted basis **compared with July 2009, but down 1.4%** on a **year-over-year** basis, due in part to sharply lower energy costs.
- On an unadjusted basis, CPI-U was down 1.5% in August 2009 compared with August 2008.

- What BLS said: “The 0.4 percent seasonally adjusted increase in the CPI-U was driven by a 9.1 percent rise in the gasoline index. This increase accounted for almost the entire advance in the energy index and over 80 percent of the overall increase. Despite the August increase, the gasoline index has fallen 30.0 percent over the last 12 months..”

Where to go for more information:

- The BLS press release on the July CPI is [here](#). September’s CPI will be released on October 15.



RAILROAD COST INDEXES

Who releases it and when?

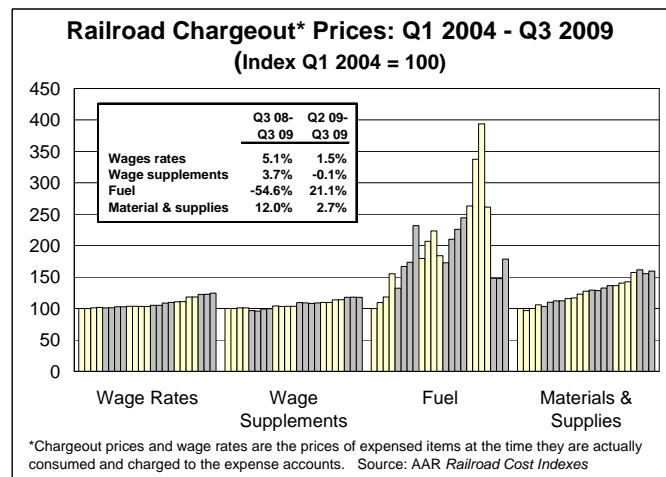
- The Association of American Railroads (AAR), quarterly.

What is it and why is it important?

- It details changes in the price level of inputs to freight railroad operations.

What are the latest numbers?

- From Q3 2008 to Q3 2009, railroad wage prices rose 5.1%; wage supplements (*i.e.*, fringe benefits) rose 3.7%; fuel fell 54.6%; and the price of materials and supplies in aggregate rose 12.0%. From Q2 2009 to Q3 2009, railroad wage prices rose 1.5%; wage supplements fell 0.1%; fuel rose 21.1%; and the price of materials and supplies in aggregate rose 2.7%.



Where to go for more information:

- See the AAR web site [here](#) or contact Clyde Crimmel at 202-639-2309 or cgrimel@aar.org. The next quarterly release will be near the end of December 2009.

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.

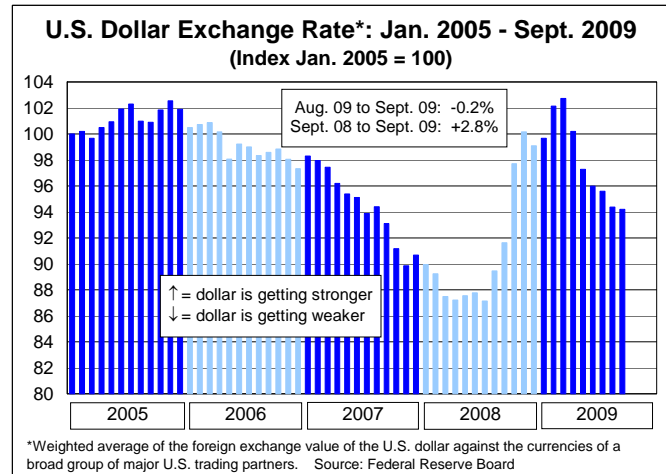
- An exchange rate is the **price of one currency against another**. A **weaker U.S. dollar** (“depreciation”) **means that U.S. imports become relatively more expensive and U.S. exports become relatively less expensive abroad.**² All else equal, that means fewer U.S. imports and more U.S. exports. U.S. exports of coal and grain rose substantially in 2007 and 2008, due in part to a lower-valued dollar that made these exports less expensive in global markets.
- 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 has been weakening since March 2009. It **fell another 0.2%** in September 2009 from August 2009.

Where to go for more information:

- Information from the Federal Reserve on exchange rates is [here](#).



DOW JONES ECONOMIC SENTIMENT INDICATOR (ESI)

Who releases it and when?

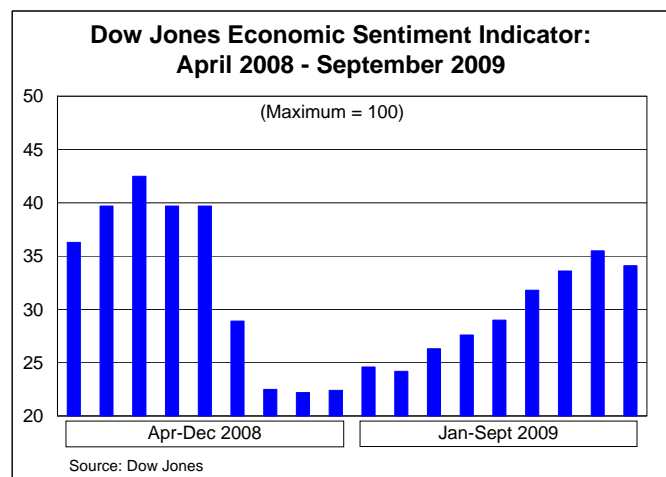
- Dow Jones, on the last business day of the month.

What is it and why is it important?

- The ESI was unveiled on April 30, 2009, so its long-term usefulness is not yet known. According to Dow Jones, the ESI “aims to predict the health of the U.S. economy by analyzing the coverage of 15 major daily newspapers in the U.S. It uses a numerical scale from 0 to 100 to express the balance of sentiment in articles about the economy. ...The ESI's back-testing to 1990 ...suggests the indicator can help predict economic turning points as much as seven months in advance of other indicators.”

What are the latest numbers?

- The ESI for September 2009 was **34.1**, down from 35.5 in August and the **first decline in seven months**.
- According to Dow Jones, “[M]edia coverage of a higher unemployment rate, continued weakness in the housing market and generally mixed economic news outpaced that of limited positive economic news for the month. ... While the ESI’s drop could be an early indication of the double dip some economists have been warning about,



² For example, suppose a U.S. coal mine wants to export a \$50 ton of coal to Germany. At \$1.50 per euro, the coal costs 33 euros (\$50/1.5) in Germany. If the dollar gets stronger so that one euro falls to \$1.20, the cost of the coal rises to 42 euros (\$50/1.2). If the dollar gets weaker so that one euro is, say, \$1.80, the coal falls to 28 euros (\$50/1.8).

any sentiment data can be expected to show some random volatility. ... The [ESI] has previously proved much less volatile than other sentiment indicators. The fall in September still leaves it above the level for July.”

Where to go for more information:

- Information on the Dow Jones ESI is [here](#). The October ESI will be released at the end of October.

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?

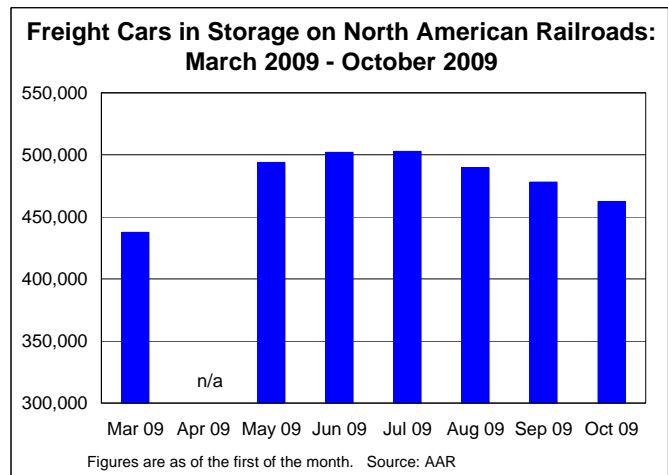
- The AAR began measuring this in March 2009. (Data for previous periods are not available.) A freight car is deemed to be “in storage” if it has not had a loaded revenue move in more than 60 days. Rail cars are stored when they are not needed; they come out of storage when they are. Figures are for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

What are the latest numbers?

- As of October 1, 2009, freight cars in storage fell to 462,410, or 29.4% of the North American fleet, down from 478,046 (30.4%) on September 1 and 489,469 (31.1%) on August 1. More than 15,000 cars came out of storage between September 1 and October 1.

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 to Beth Eagney at beagney@aar.org. If you have questions or comments about the content of Rail Time indicators, contact Dan Keen (dkeen@aar.org) or Shannon Stare (sstare@aar.org).

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

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