

Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update



September 20, 2012

**Using EIA, AAR and individual railroad data sources,
a data table is assimilated, and from it.....**

Six coal-related dashboards, organized as follows:

1. Coal Production, Consumption, and Inventories Dashboard
2. Coal Exports Dashboard
3. Western Rail Coal Carloads Dashboard
4. Eastern Rail Coal Carloads Dashboard
5. Canadian Rail Coal Carloads Dashboard
6. Railroad Coal Train Speed Dashboard

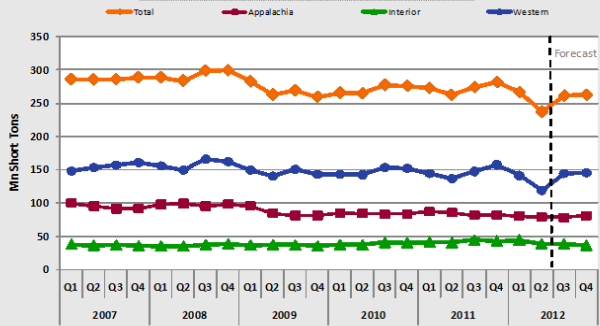
Also added new data beginning with Q1 2009 for coal generation and coal's % share of generation, and a dashboard of generation by fuel type

Most dashboards have three sections:

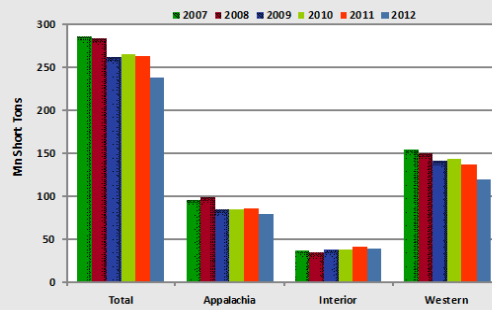
- a. Left - historical and forecasted data (no forecasts of rail metrics)
- b. Middle - comparison for the most recent quarter (in this case Q2)
- c. Right - current YTD comparison versus the 5-year range

U.S. COAL PRODUCTION, CONSUMPTION, AND INVENTORIES DASHBOARD

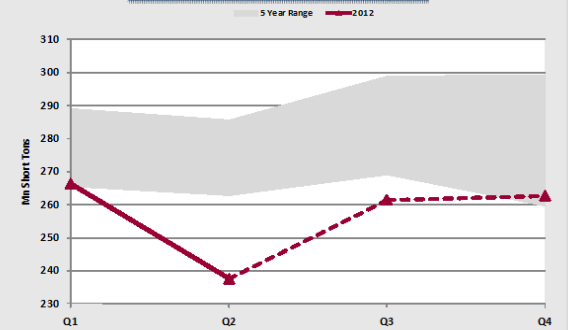
Historical and Forecasted Production



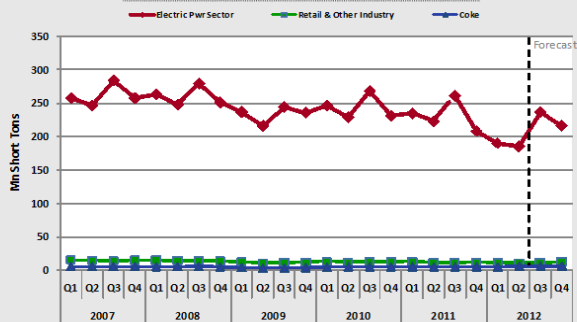
Q2 Production Comparison



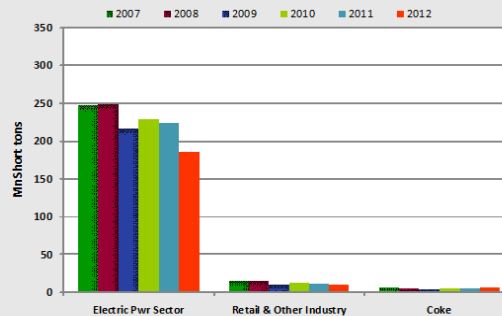
2012 Production vs 5-Year Range



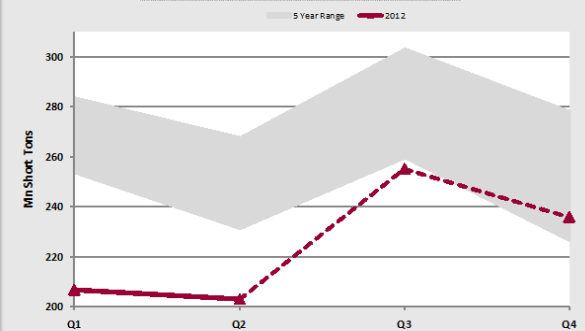
Historical and Forecasted Consumption



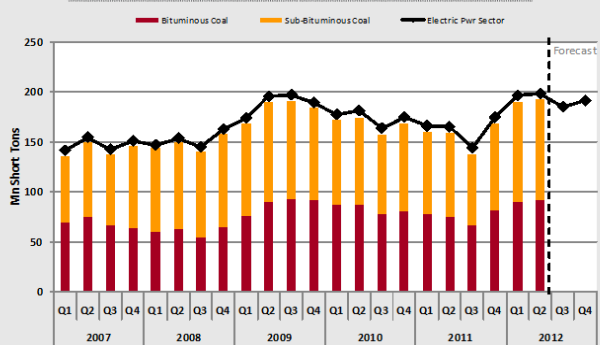
Q2 Consumption Comparison



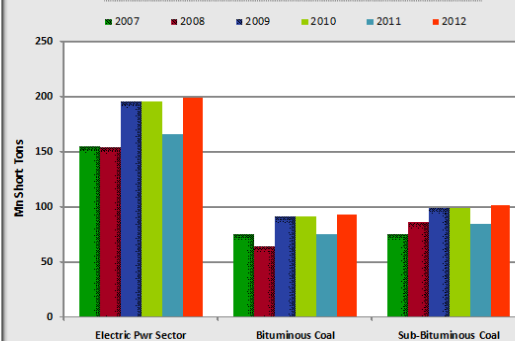
2012 Consumption vs 5-Year Range



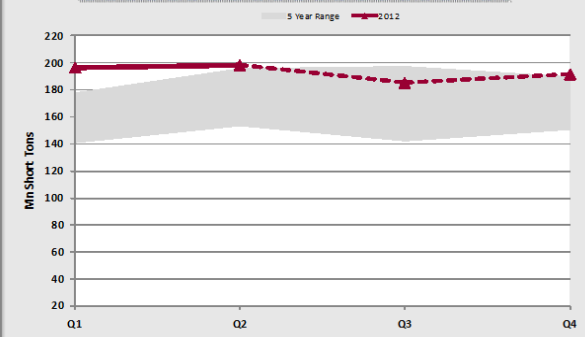
Historical and Forecasted End-of-Period Inventories



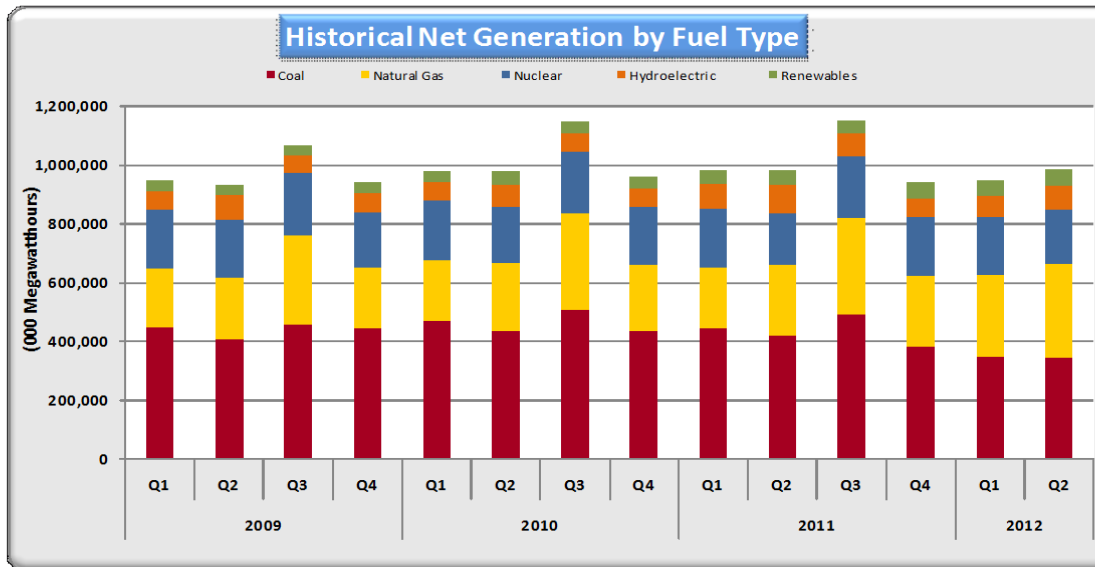
Q2 End-of-Period Inventories Comparison



2012 End-of-Period Inventories vs 5-Year Range



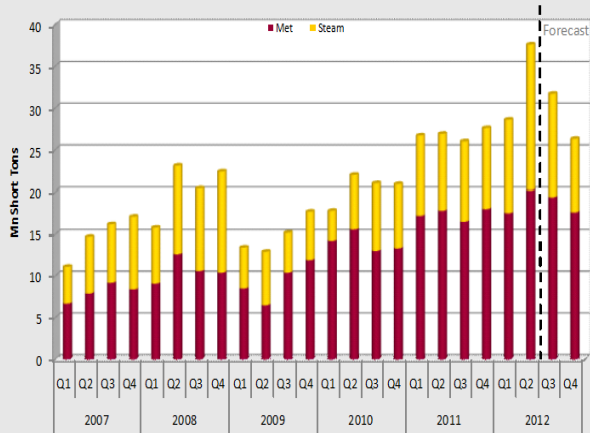
NET GENERATION BY FUEL TYPE DASHBOARD



Source Data: EIA

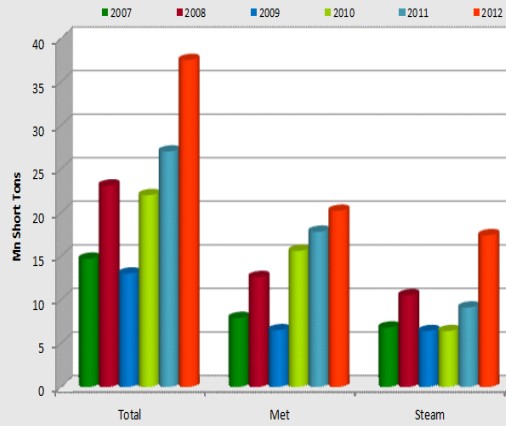
U.S. COAL EXPORTS DASHBOARD

Historical and Forecasted Exports

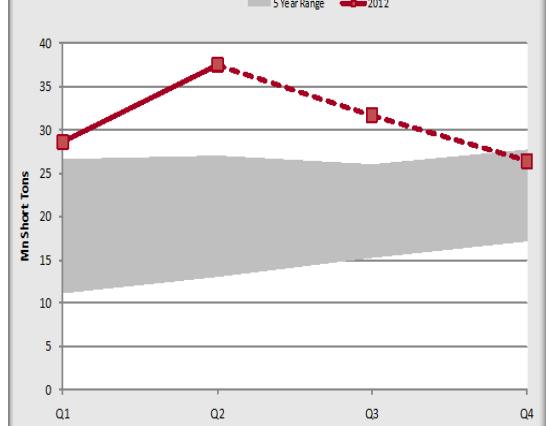


Source Data: EIA

Q2 Exports Comparison

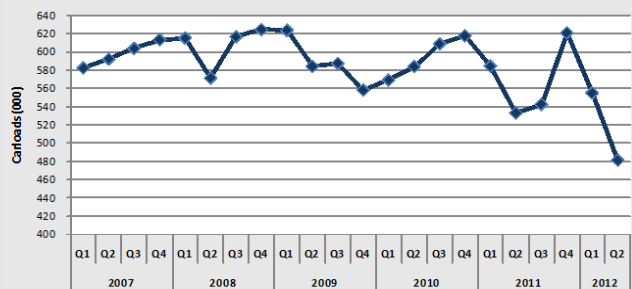


2012 Exports vs 5-Year Range

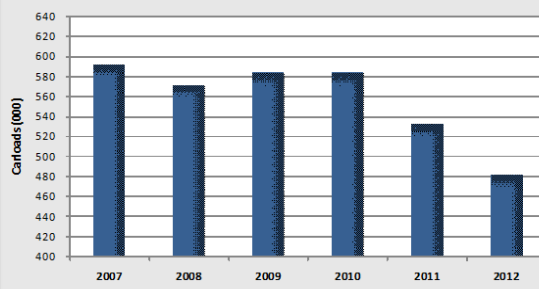


WESTERN RAILROAD COAL CARLOADS DASHBOARD

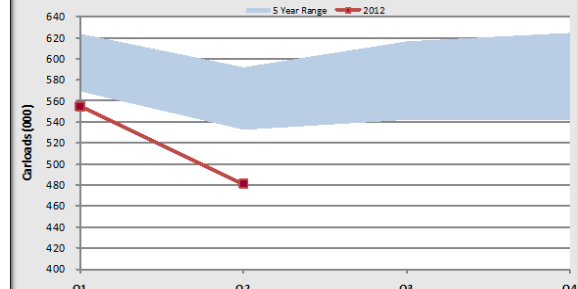
BNSF Historical Originations



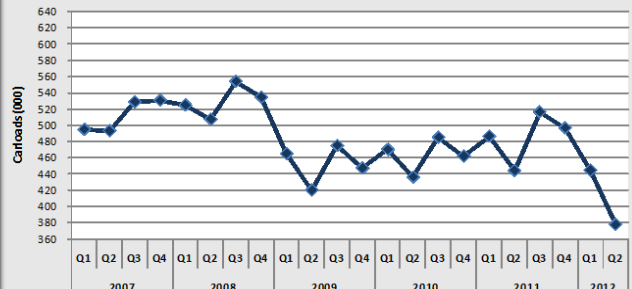
BNSF Q2 Originations Comparison



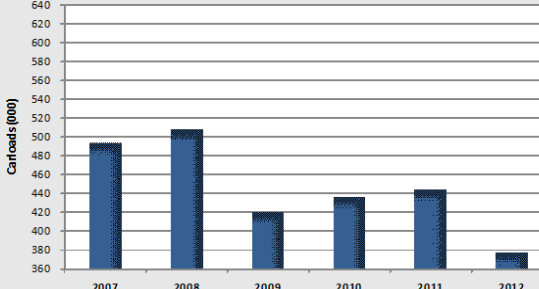
2012 BNSF Originations vs 5-Year Range



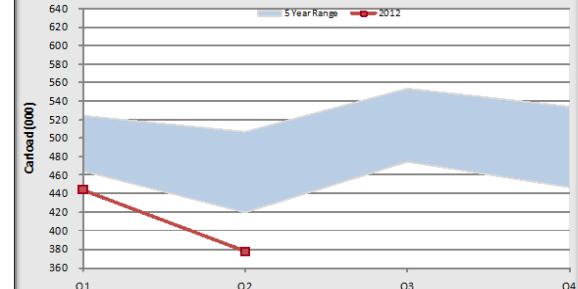
UP Historical Originations



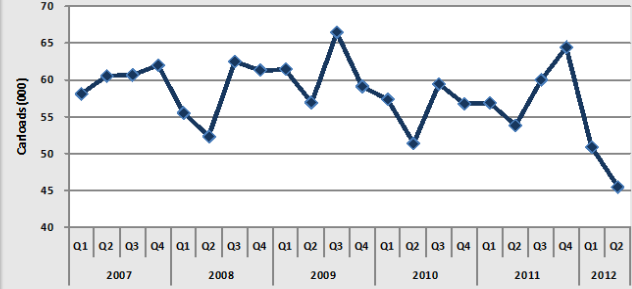
UP Q2 Originations Comparison



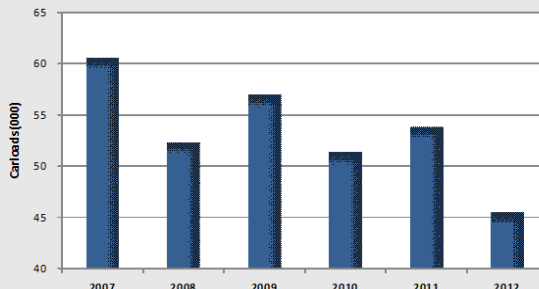
2012 UP Originations vs 5-Year Range



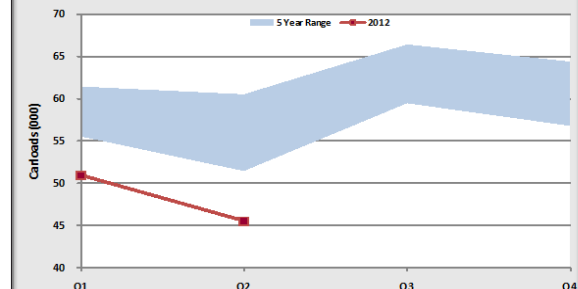
KCS Historical Receipts



KCS Q2 Receipts Comparison



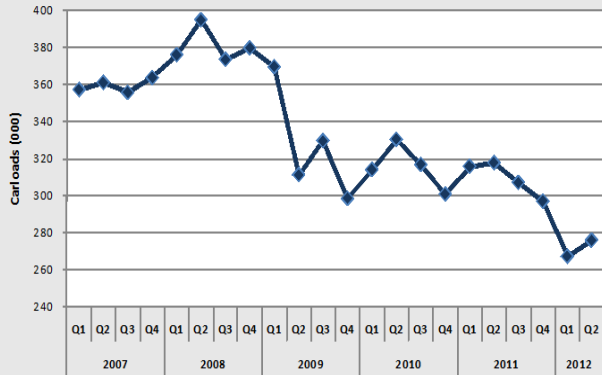
2012 KCS Receipts vs 5-Year Range



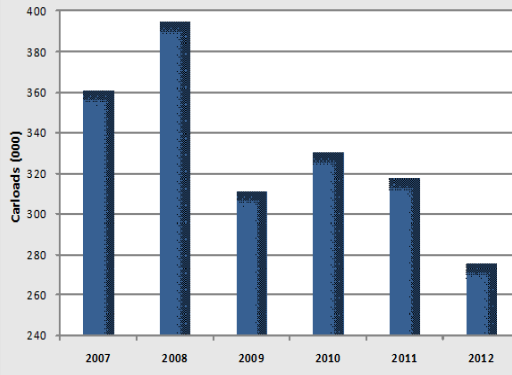
Source Data: AAR, BNSF, UP, KCS

EASTERN RAILROAD COAL CARLOADS DASHBOARD

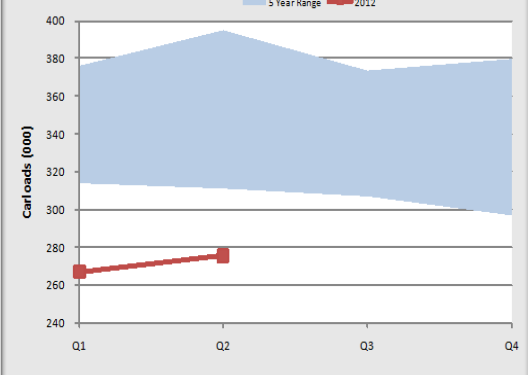
CSX Historical Originations



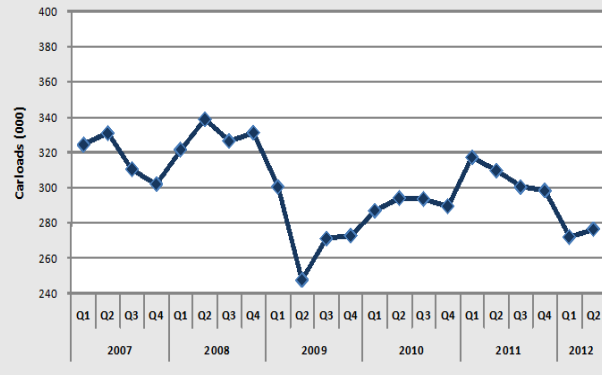
CSX Q2 Originations Comparison



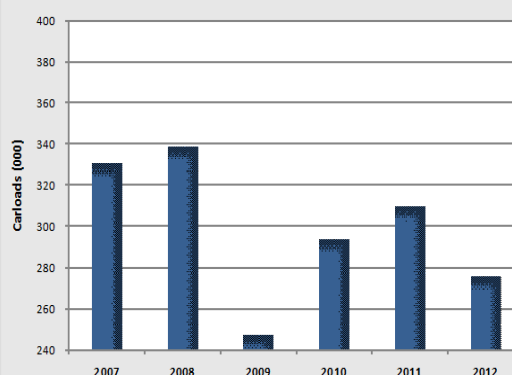
2012 CSX Originations vs 5-Year Range



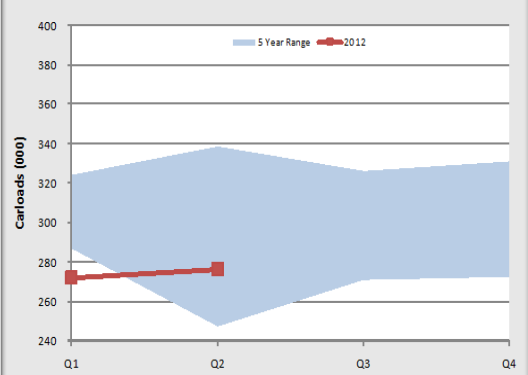
NS Historical Originations



NS Q2 Originations Comparison



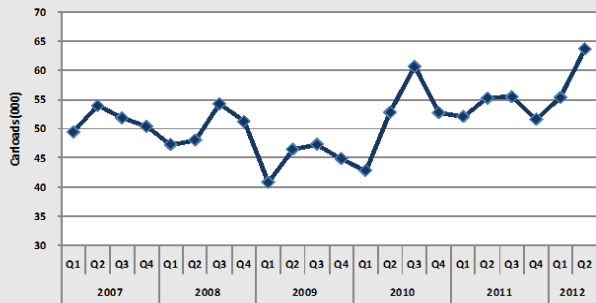
2012 NS Originations vs 5-Year Range



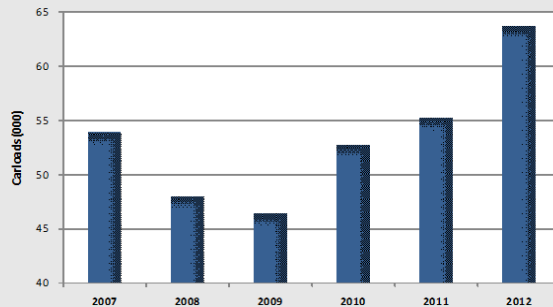
Source data: AAR, CSX, NS

CANADIAN RAILROAD COAL CARLOADS DASHBOARD

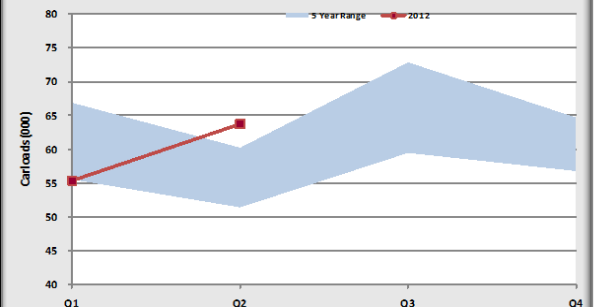
CN Historical Originations



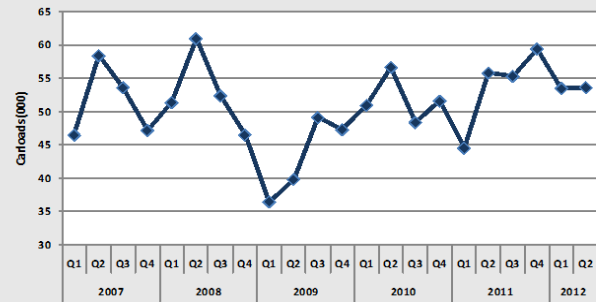
CN Q2 Originations Comparison



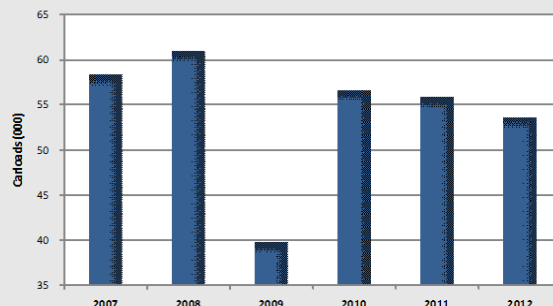
2012 CN Originations vs 5-Year Range



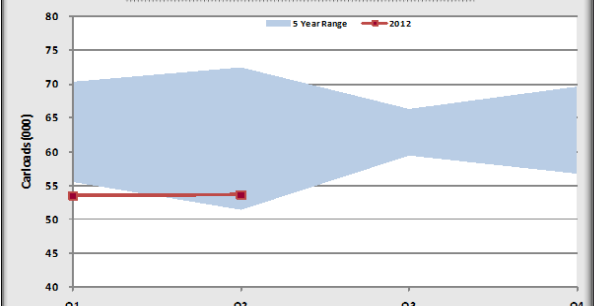
CP Historical Originations



CP Q2 Originations Comparison



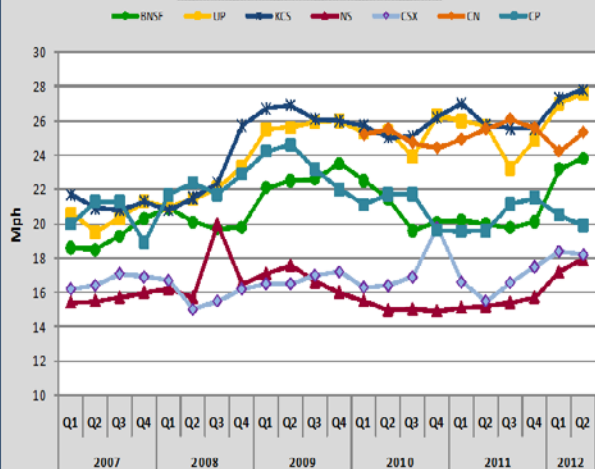
2012 CP Originations vs 5-Year Range



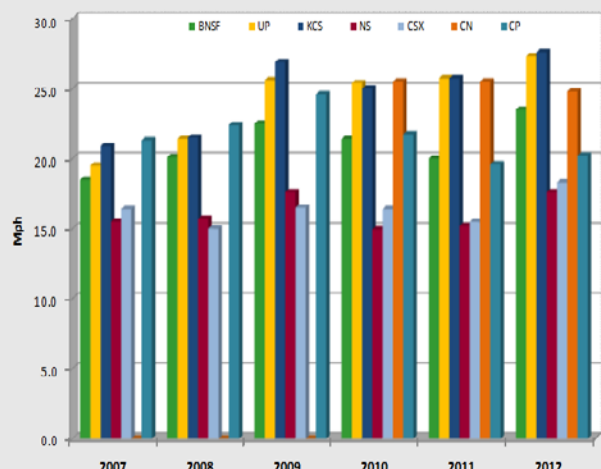
Source Data: AAR, CN, CP

RAILROAD COAL TRAIN SPEED DASHBOARD

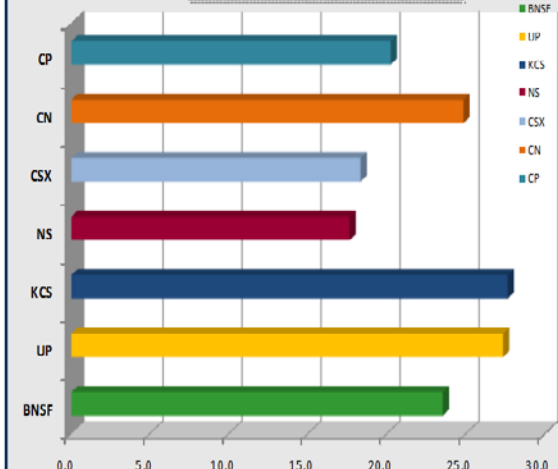
Historical Coal Train Speed



Q2 Coal Train Speed Comparison



2012 YTD Coal Train Speeds



Source Data: AAR, BNSF, UP, KCS, NS, CSX, CN, CP

Key points from data and dashboards, and general trends

Coal Production and Consumption:

- ❑ **Coal Production:** down 6.2% or -33.3 mn tons for first half 2012. By region, on a YOY basis:
 - Western decreased 7.4% or -20.8 mn tons
 - Appalachia decreased 7.6% or -13.2 mn tons
 - Interior increased 0.8% or 0.7 mn tons

EIA forecasts total coal production declining by 6% or -66 mn tons in 2012 despite higher coal exports

❑ **Coal Consumption/Generation:**

- Electric Power Sector consumption down by 18%, or -82.7 mn tons first half 2012
- EIA expects full year 2012 consumption in the Electric Power Sector to be down by nearly 11% or -100 mn tons, due to mild winter and natural gas displacement in the generation mix.
- Coal's share of net generation declined to 35% in first half 2012, versus 43% for the same period in 2011. Gas's share increased to 30% in first half 2012, compared with 22% for the first half of 2011.

Key points from data and dashboards, and general trends

Coal Inventories, Exports, and a 2013 Forward Look:

❑ Coal Inventories:

- Electric Power Sector ended Q2 2012 at 198.4 mn tons per EIA, up 18.8% or an average of 31mn tons first half of 2012 versus first half 2011
- EIA forecasts year-end 2012 inventories at 191.5 mn tons, compared with ending 2011 inventories of 175.1 mn tons

❑ Coal Exports:

- First half 2012 up 12.5 mn tons in total, or 23.3% YOY. At 66 mn tons, this is a record-setting first half level.
 - Metallurgical coal exports increased 7.7% or 2.7 mn tons vs first half 2011
 - Steam coal exports increased 53.2% or nearly 10 mn tons vs first half 2011
- EIA projects total 2012 exports to be up 23%, ending at 124 mn tons versus 107 mn in 2011

- ❑ **2013 Forward Look:** EIA expects coal production and consumption to rise versus 2012, due to increasing electricity consumption and higher natural gas prices. Electric Power Sector inventories will decline versus 2012, but will remain on the high side. Exports will decline due to slower economic growth in China and competition from Australia and Indonesia, but will be higher than during the decade preceding 2011.

Key points from data and dashboards, and general trends continued

Railroad volumes:

- ❑ **General 2012 Trend:** latest YTD data through week 36 of 2012 - AAR reported volumes for major U.S. railroads down 2.4% for carloads and up 3.7% for intermodal YOY
- ❑ **COAL CARLOADS:** through week 36, AAR's originated coal carloads for major U.S. railroads down 9.3% in the aggregate.

First half 2012 individual railroad YOY coal comparisons:

- BNSF originations: -81,000 carloads, or -7.3%
- UP originations: -108,000 carloads, or -11.6%
- CSX originations: -11,000 carloads, or -1.7%
- NS originations: -78,500 carloads, or -12.5%
- CN originations: +12,000 carloads, or +14.3%
- CP originations: +7,000 carloads, or +10.9%
- KCS received: -14,000 carloads, or -12.9%

Key points from data and dashboards, and general trends continued

Railroad train speeds:

❑ COAL TRAIN SPEEDS:

2012 first half coal train speed performance by railroad:

- BNSF: average 23.5 mph -- 3.4 mph faster, or +17%
- UP: average 27.3 mph -- 1.4 mph faster, or +5.5%
- CSX: average 18.3 mph -- 2.3 mph faster, or +14%
- NS: average 17.6 mph -- 2.4 mph faster, or +16%
- KCS: average 26.4 mph -- 2.0 mph faster, or +3.9%
- CN: average 24.8 mph -- 0.5 mph slower, or -1.8%
- CP: average 20.2 mph -- 0.6 mph slower, or -3.2%