

Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update



March 14, 2013

**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

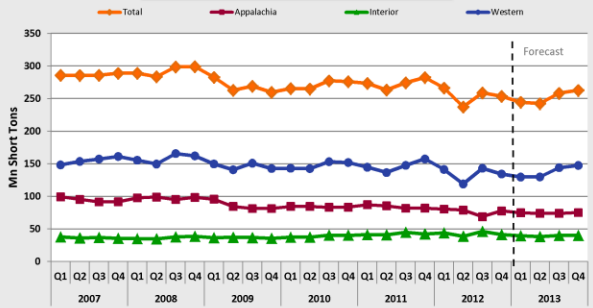
Also added new data beginning with Q1 2009 for coal generation and coal's % share of generation, and a dashboard of generation by fuel type

Most dashboards have three sections:

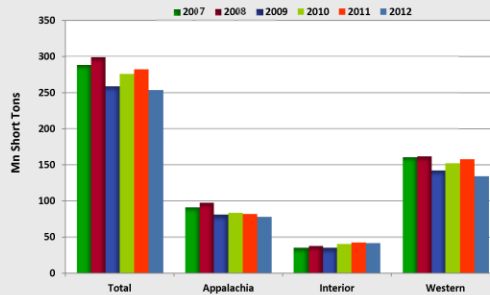
- a. Left - historical and forecasted data (no forecasts of rail metrics)
- b. Middle - comparison for the most recent quarter (in this case Q4)
- c. Right - current YTD comparison versus the 5-year range

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

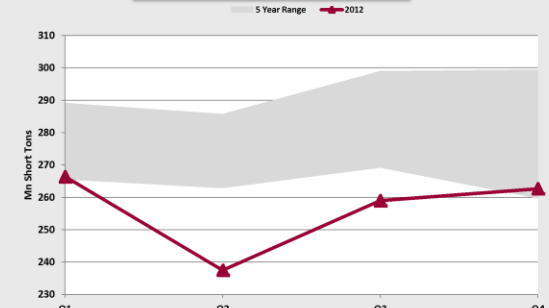
Historical and Forecasted Production



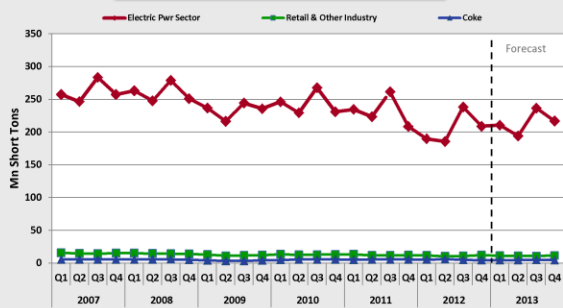
Q4 Production Comparison



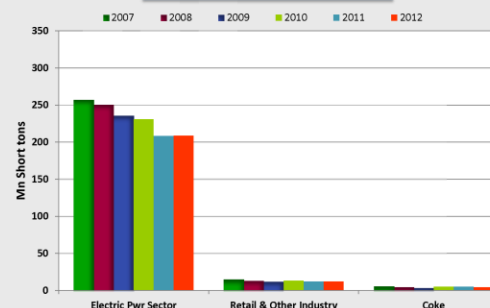
2012 Production vs 5-Year Range



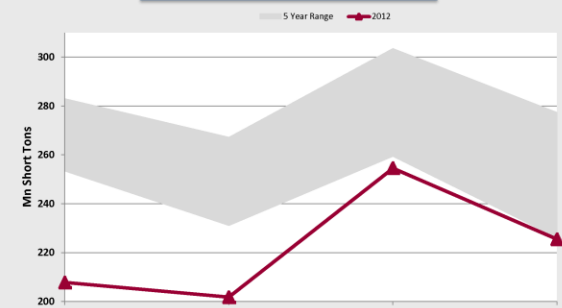
Historical and Forecasted Consumption



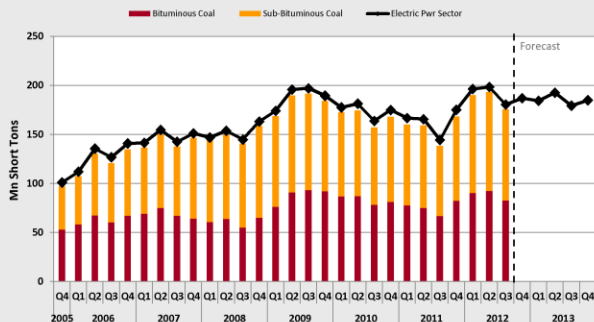
Q4 Consumption Comparison



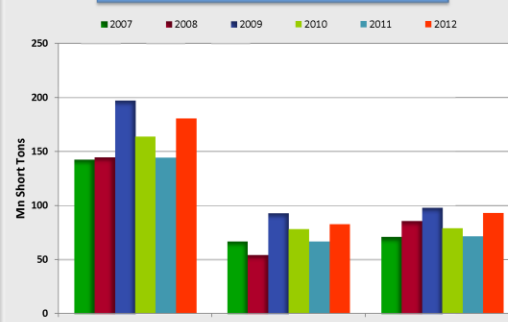
2012 Consumption vs 5-Year Range



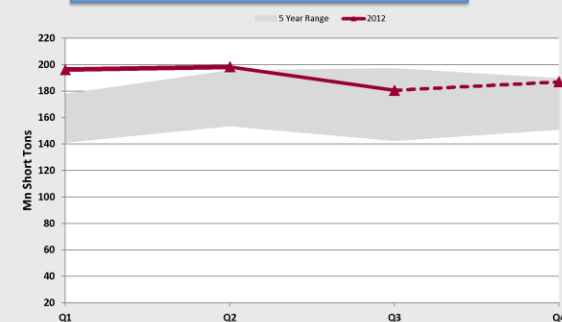
Historical and Forecasted End-of-Period Inventories



Q3 End-of-Period Inventories Comparison

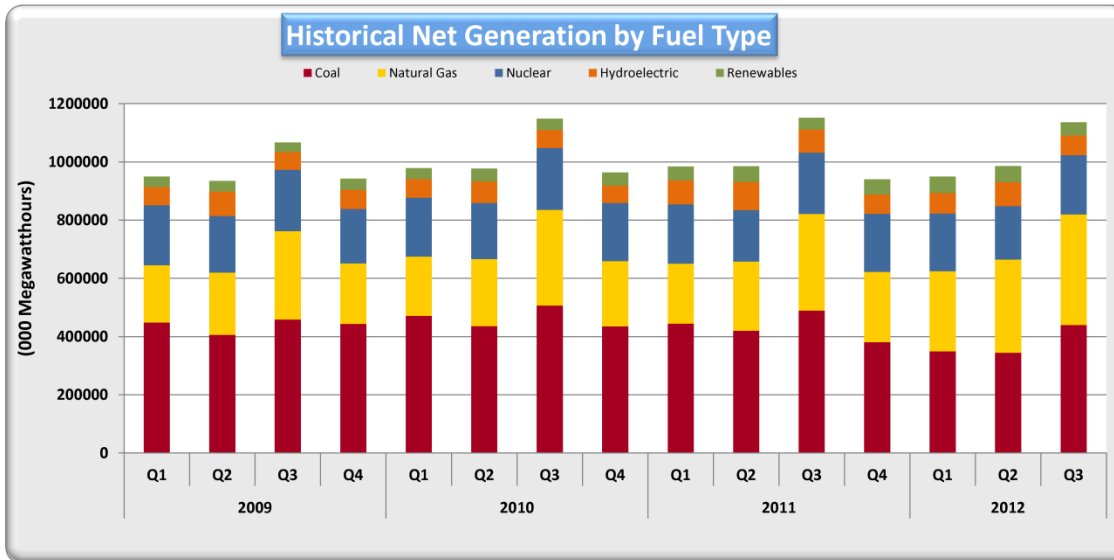


2012 End-of-Period Inventories vs 5-Year Range



Source Data: EIA

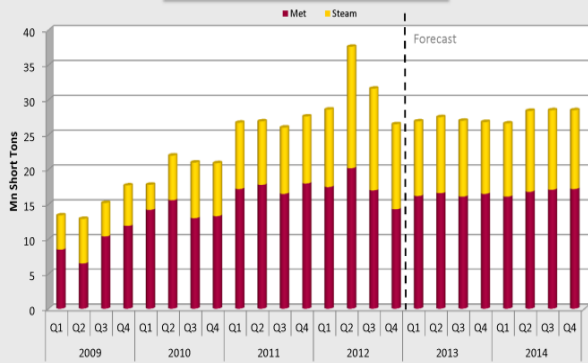
NET GENERATION BY FUEL TYPE DASHBOARD



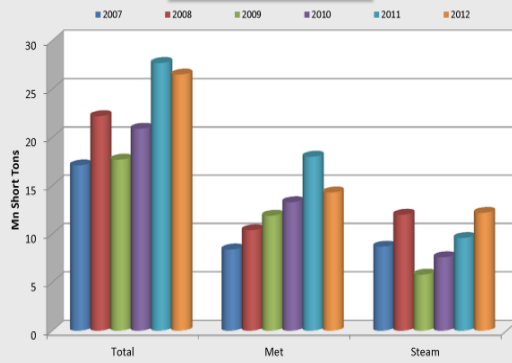
Source Data: EIA

U.S. COAL EXPORTS DASHBOARD

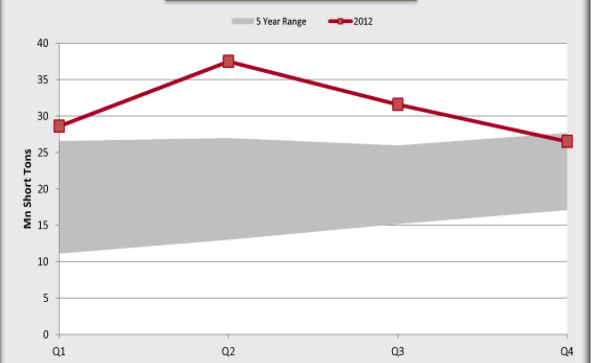
Historical and Forecasted Exports



Q4 Exports Comparison



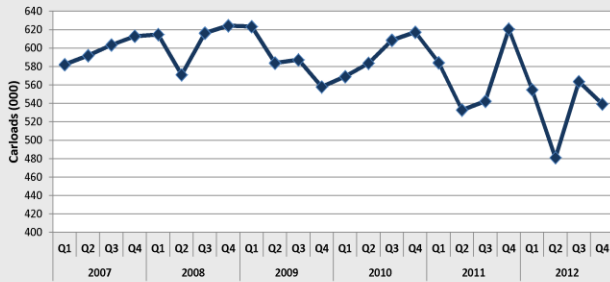
2012 Exports vs 5-Year Range



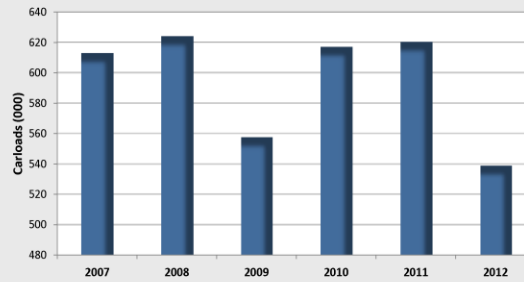
Source Data: EIA

WESTERN RAILROAD COAL CARLOADS DASHBOARD

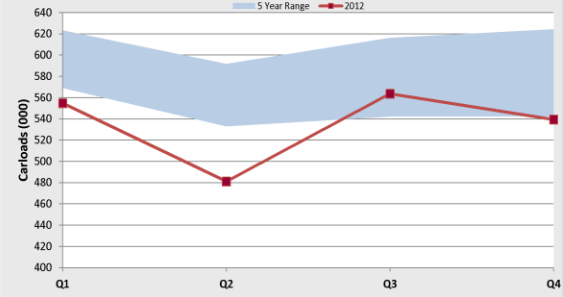
BNSF Historical Originations



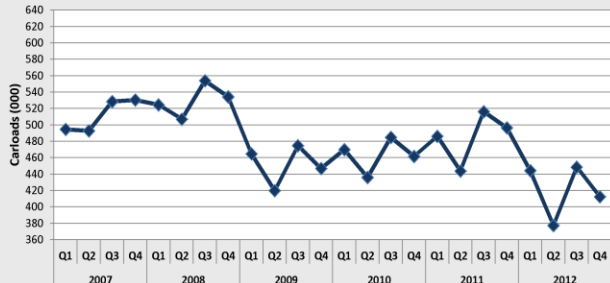
BNSF Q4 Originations Comparison



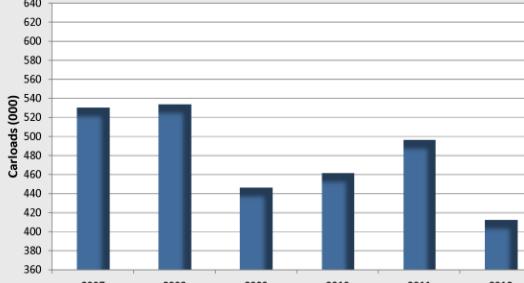
2012 BNSF Originations vs 5-Year Range



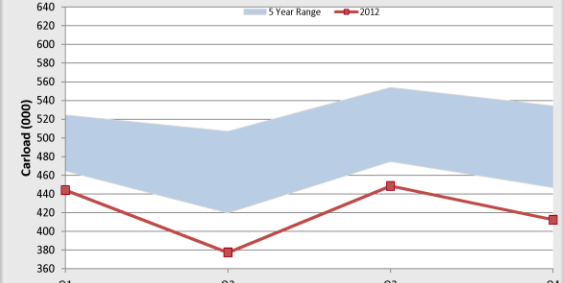
UP Historical Originations



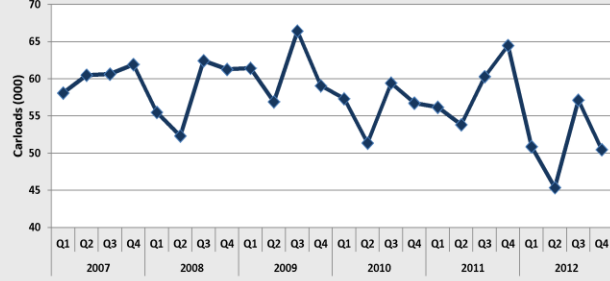
UP Q4 Originations Comparison



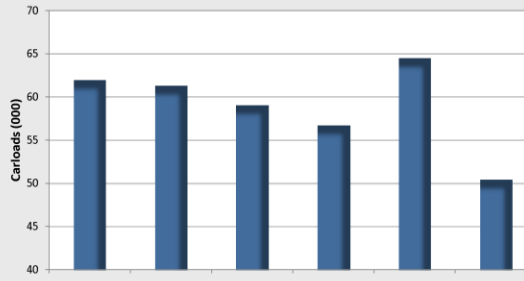
2012 UP Originations vs 5-Year Range



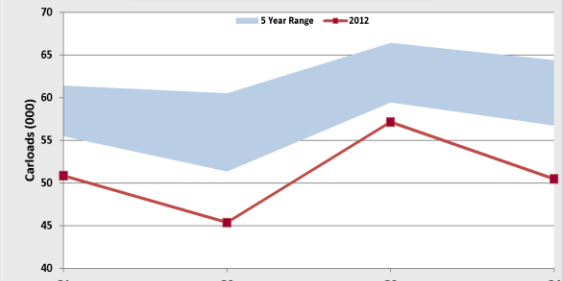
KCS Historical Receipts



KCS Q4 Receipts Comparison



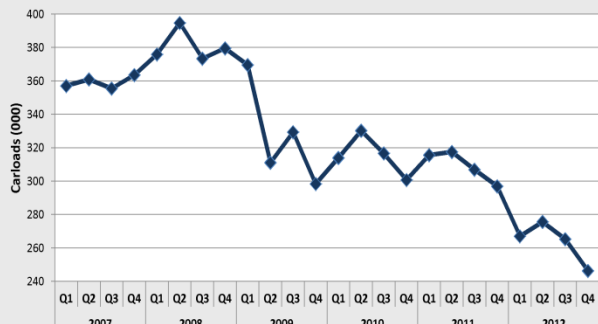
2012 KCS Receipts vs 5-Year Range



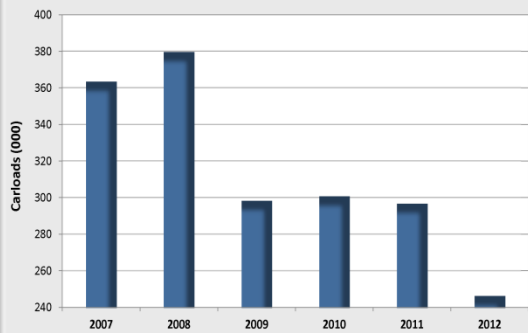
Source Data: AAR, BNSF, UP, KCS

EASTERN RAILROAD COAL CARLOADS DASHBOARD

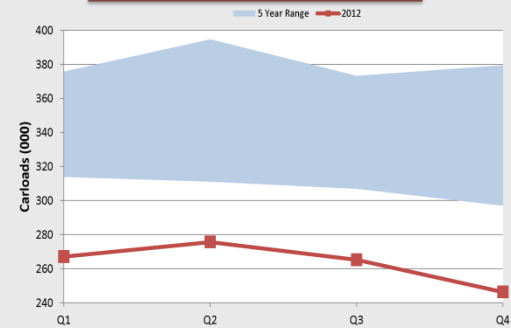
CSX Historical Originations



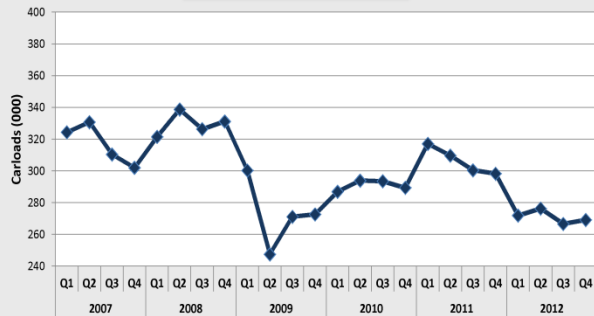
CSX Q4 Originations Comparison



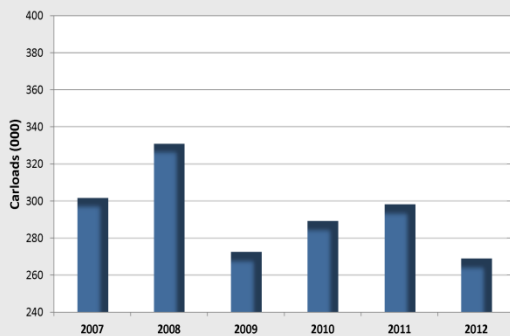
2012 CSX Originations vs 5-Year Range



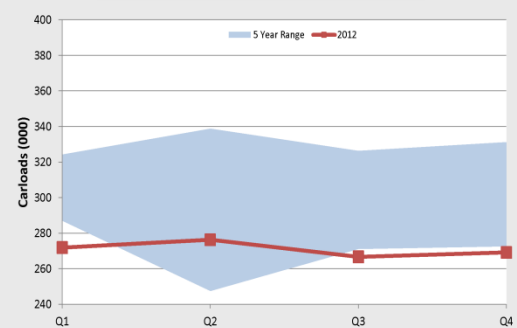
NS Historical Originations



NS Q4 Originations Comparison



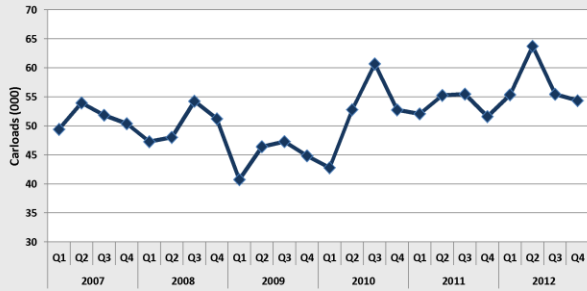
2012 NS Originations vs 5-Year Range



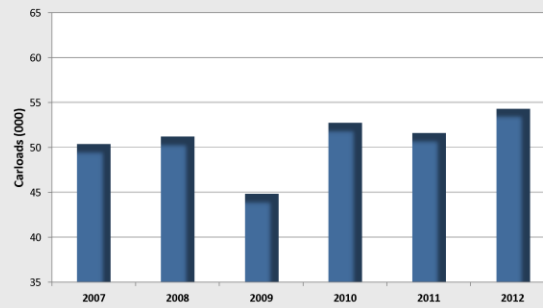
Source data: AAR, CSX, NS

CANADIAN RAILROAD COAL CARLOADS DASHBOARD

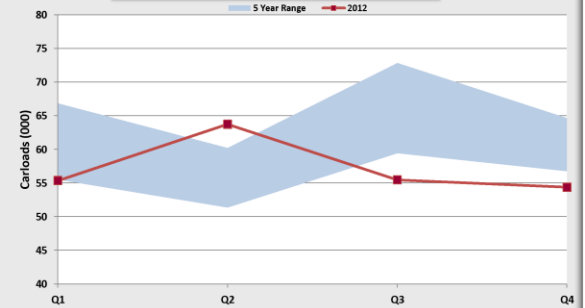
CN Historical Originations



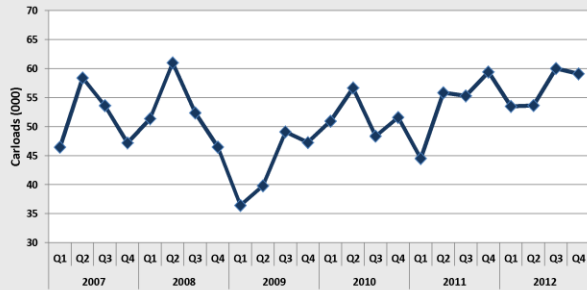
CN Q4 Originations Comparison



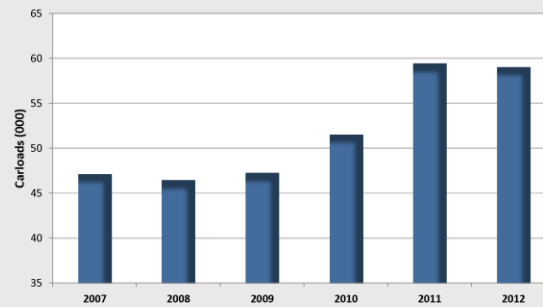
2012 CN Originations vs 5-Year Range



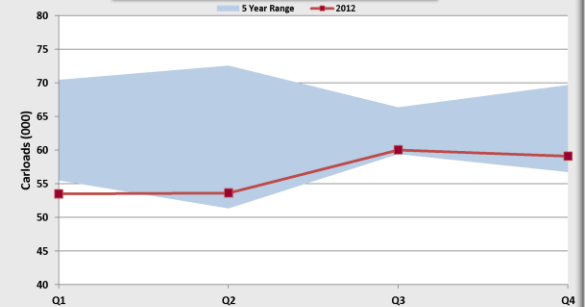
CP Historical Originations



CP Q4 Originations Comparison



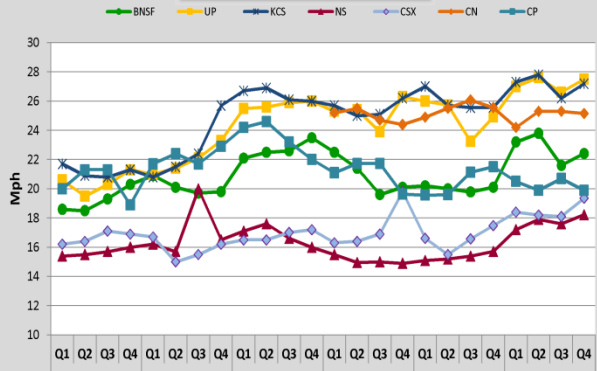
2012 CP Originations vs 5-Year Range



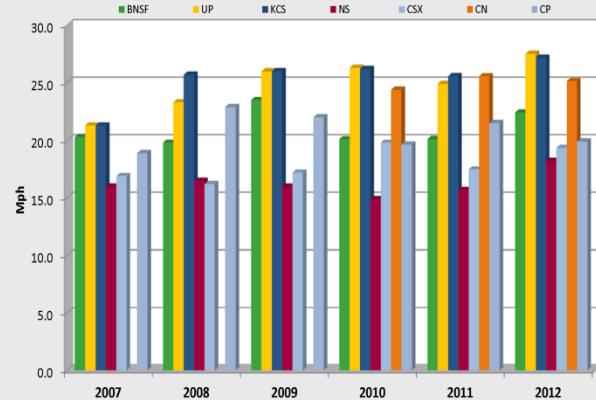
Source Data: AAR, CN, CP

RAILROAD COAL TRAIN SPEED DASHBOARD

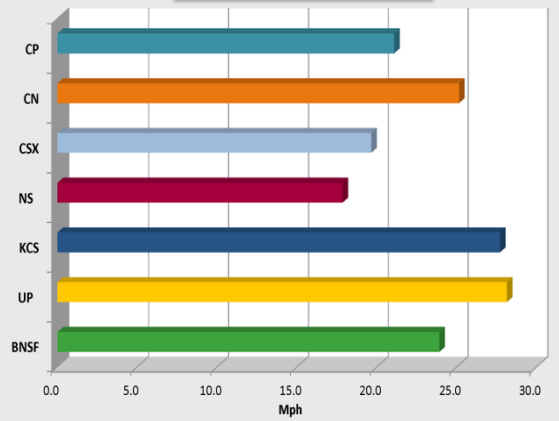
Historical Coal Train Speed



Q4 Coal Train Speed Comparison



2013 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 7.1% or -77.7 mn tons for FY 2012. By region, on a YOY basis:
 - Western decreased 8.3% or -48.5 mn tons
 - Appalachia decreased 9.0% or -30.3 mn tons
 - Interior increased 0.5% or 0.9 mn tons

EIA forecasts total coal production declining by 0.8% or -8 mn tons in 2013

❑ **Coal Consumption/Generation:**

- Electric Power Sector consumption down by 5.3%, or -26.9 mn tons second half 2012
- EIA reports full year 2012 consumption in the Electric Power Sector is down by 11.3% or -113.1 mn tons, due to mild winter and natural gas displacement in the generation mix.
- Coal's share of net generation decreased to 38% in Q3 2012, versus 42% for the same period in 2011. Gas's share increased to 33% in Q3 2012, compared with 28.5% for Q3 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 Q3 2012 at 180.6 mn tons per EIA, up 20.7% or an average of 33 mn tons YTD Q3 2012 versus YTD Q3 2011
- EIA forecasts year-end 2012 inventories at 187.1 mn tons, compared with ending 2011 inventories of 175.1 mn tons

❑ Coal Exports:

- 2012 exports totaled 124.2 mn tons, up 16.9 mn tons or 15.8% YOY.
 - Metallurgical coal exports decreased 0.7% or -0.5 mn tons vs 2011
 - Steam coal exports increased 46.7% or nearly 18 mn tons vs 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 2013 Trend:** latest YTD data through week 9 of 2013 - AAR reported volumes for major U.S. railroads down 4.0% for carloads and up 7.6% for intermodal YOY
- ❑ **COAL CARLOADS:** through week 36, AAR's originated coal carloads for major U.S. railroads down 9.3% in the aggregate.

2012 vs 2011 coal comparisons:

- BNSF originations: --141,000 carloads, or -6.2%
- UP originations: -260,000 carloads, or -13.4%
- CSX originations: -182,500 carloads, or -14.8%
- NS originations: -141,500 carloads, or -11.5%
- CN originations: +14,500 carloads, or +6.7%
- CP originations: +11,000 carloads, or +5.2%
- KCS received: -31,000 carloads, or -13.2%

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 22.8 mph -- 2.7 mph faster, or +13.6%
- UP: average 27.2 mph -- 2.2 mph faster, or +8.8%

- CSX: average 18.5 mph -- 2.0 mph faster, or +11.9%
- NS: average 17.7 mph -- 2.4 mph faster, or +15.5%

- CN: average 25.0 mph -- 0.5 mph slower, or -2.1%
- CP: average 20.3 mph -- 0.2 mph slower, or -1.0%

- KCS: average 27.1 mph -- 1.2 mph faster, or +4.5%