

Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update



September 19, 2013

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

Six coal-related dashboards, organized as follows:

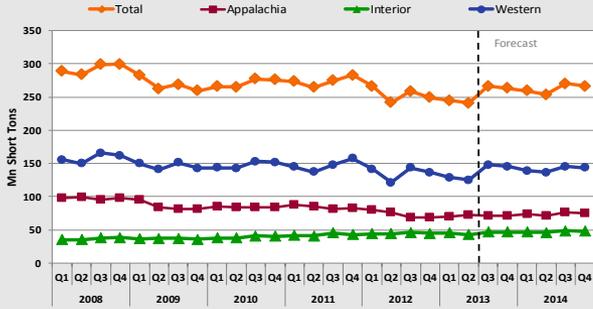
1. Coal Production, Consumption, and Inventories Dashboard
2. Net Generation by Fuel Type Dashboard
3. Coal Exports Dashboard
4. Western Rail Coal Carloads Dashboard
5. Eastern Rail Coal Carloads Dashboard
6. Canadian Rail Coal Carloads Dashboard
7. Railroad Coal Train Speed Dashboard

Most dashboards have three sections:

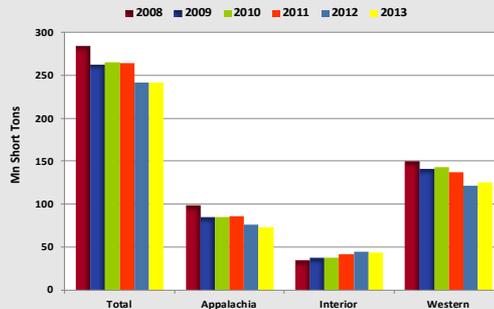
- a. Left - historical and forecasted data (no forecasts of rail metrics)
- b. Middle - comparison for the most recent quarter (in this case Q1)
- c. Right - current YTD comparison versus the 5-year range

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

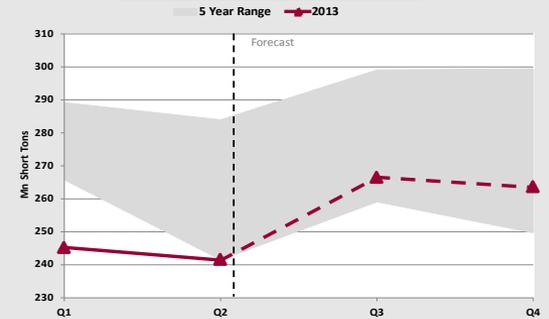
Historical and Forecasted Production



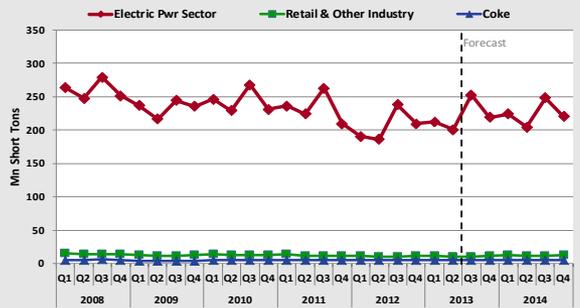
Q2 Production Comparison



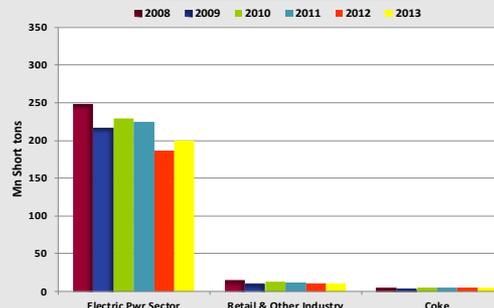
2013 Production vs 5-Year Range



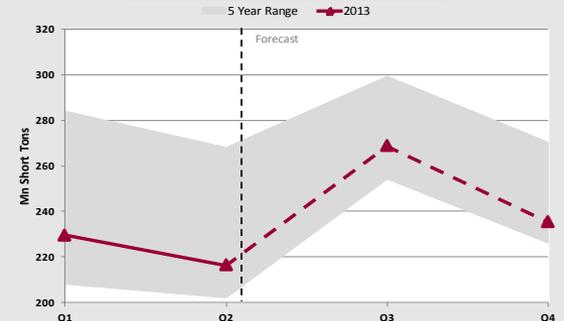
Historical and Forecasted Consumption



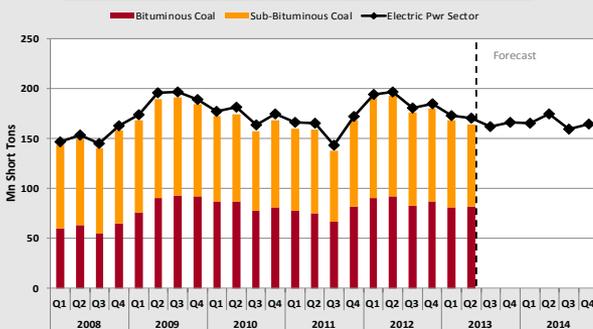
Q2 Consumption Comparison



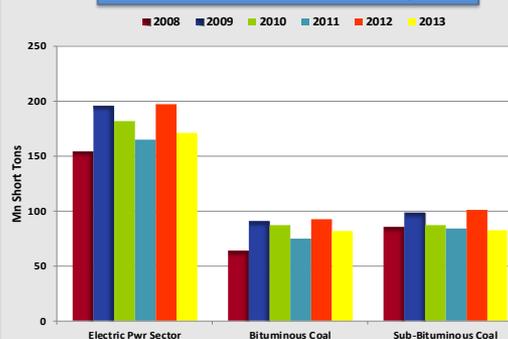
2013 Consumption vs 5-Year Range



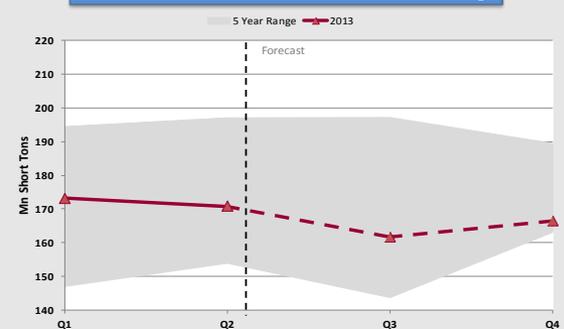
Historical and Forecasted End-of-Period Inventories



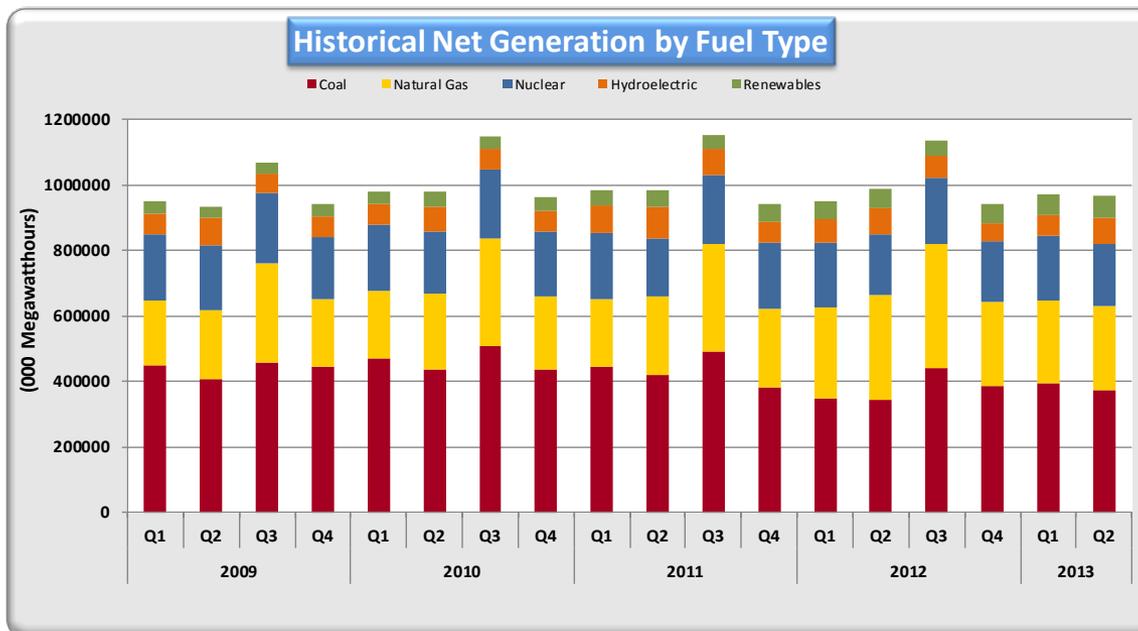
Q2 End-of-Period Inventories Comparison



2013 End-of-Period Inventories vs 5-Year Range



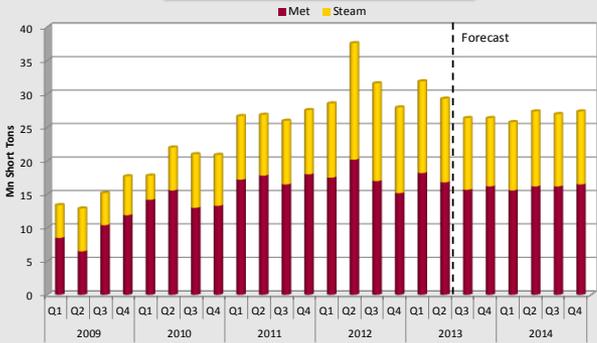
NET GENERATION BY FUEL TYPE DASHBOARD



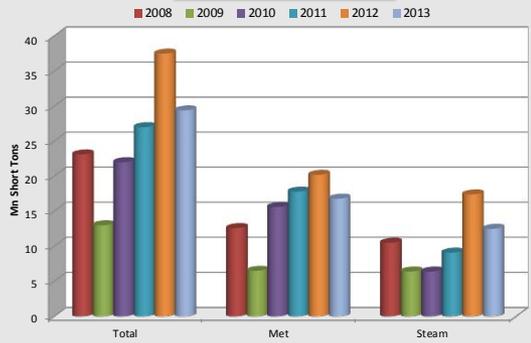
Source Data: EIA

U.S. COAL EXPORTS DASHBOARD

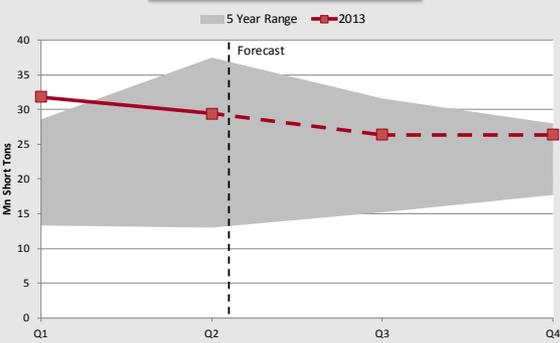
Historical and Forecasted Exports



Q2 Exports Comparison



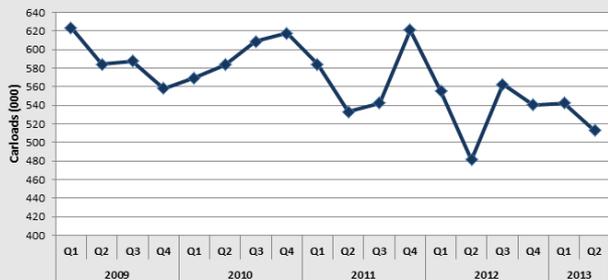
2013 Exports vs 5-Year Range



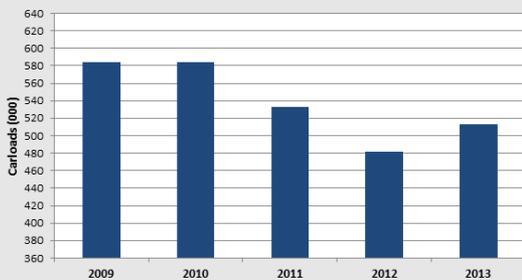
Source Data: EIA

WESTERN RAILROAD COAL CARLOADS DASHBOARD

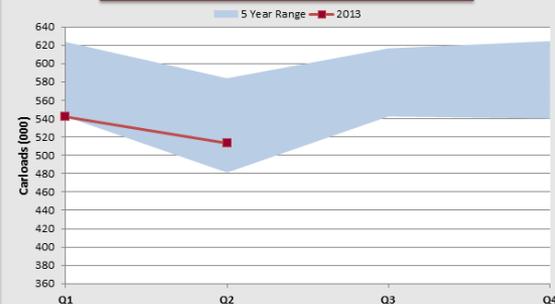
BNSF Historical Originations



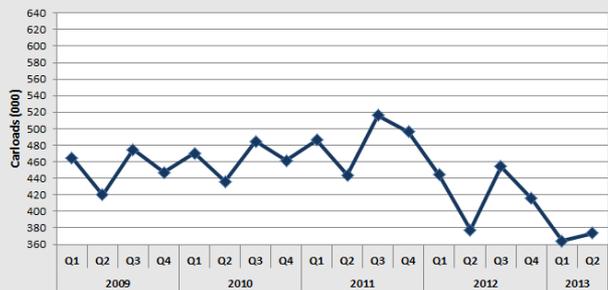
BNSF Q2 Originations Comparison



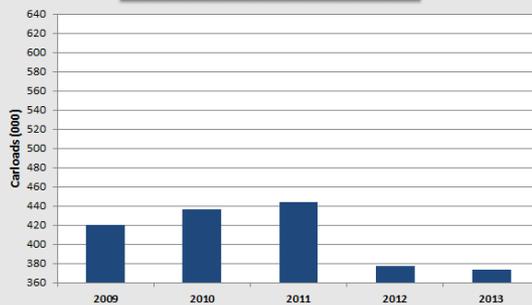
2013 BNSF Originations vs 5-Year Range



UP Historical Originations



UP Q2 Originations Comparison



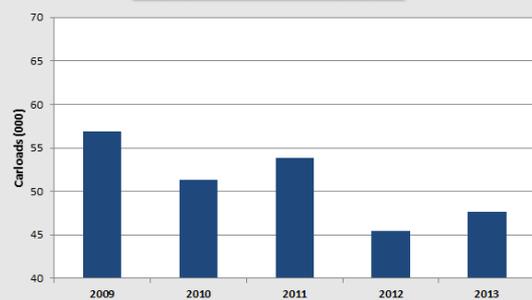
2013 UP Originations vs 5-Year Range



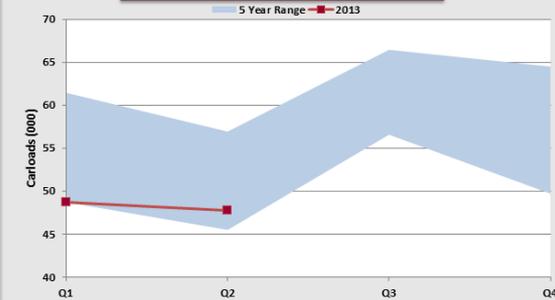
KCS Historical Receipts



KCS Q2 Receipts Comparison

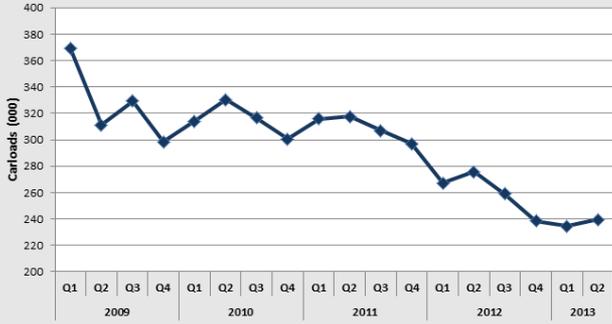


2013 KCS Receipts vs 5-Year Range

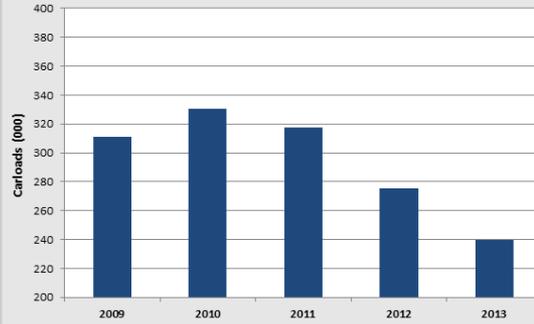


EASTERN RAILROAD COAL CARLOADS DASHBOARD

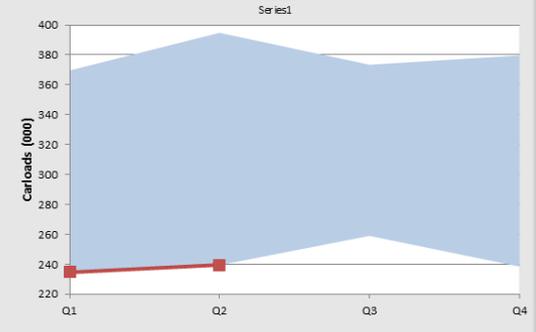
CSX Historical Originations



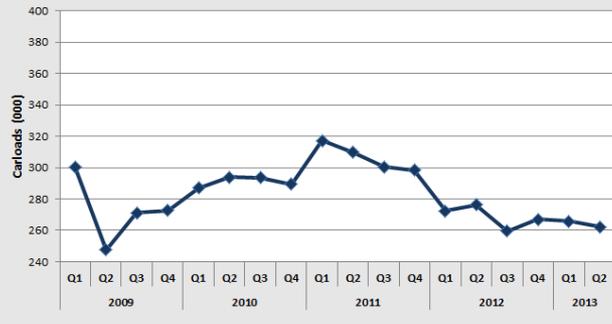
CSX Q2 Originations Comparison



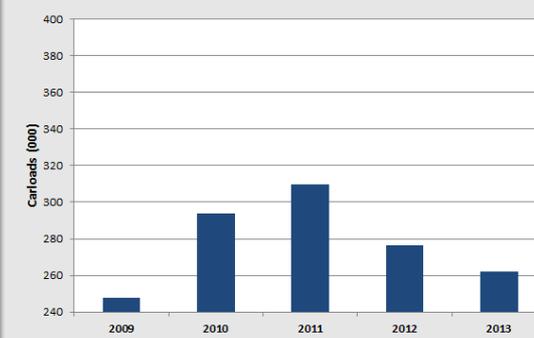
2013 CSX Originations vs 5-Year Range



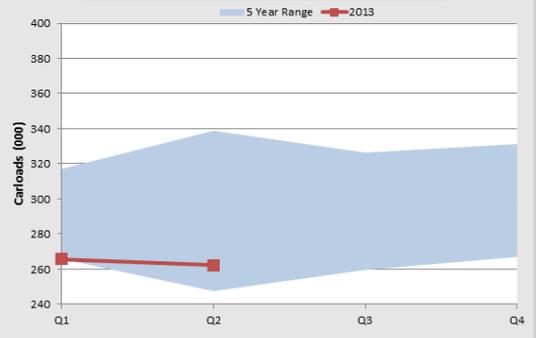
NS Historical Originations



NS Q2 Originations Comparison



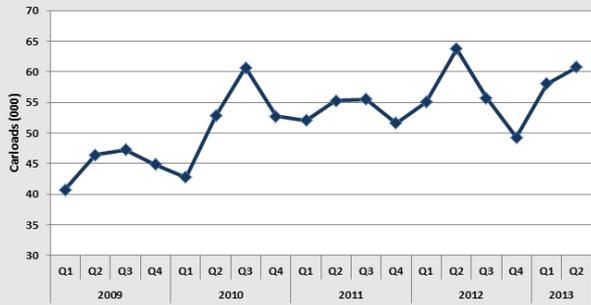
2013 NS Originations vs 5-Year Range



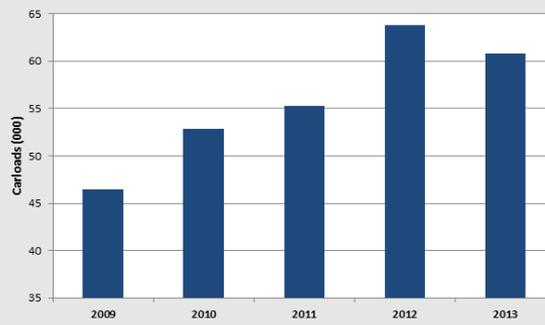
Source data: AAR, CSX, NS

CANADIAN RAILROAD COAL CARLOADS DASHBOARD

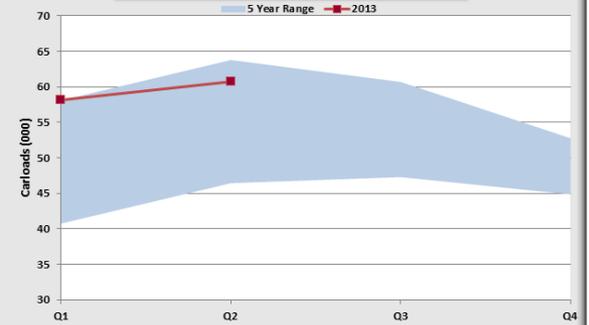
CN Historical Originations



CN Q2 Originations Comparison



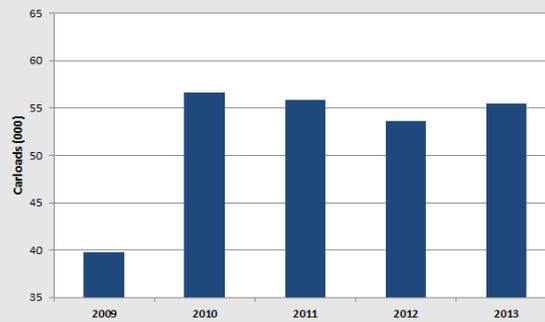
2013 CN Originations vs 5-Year Range



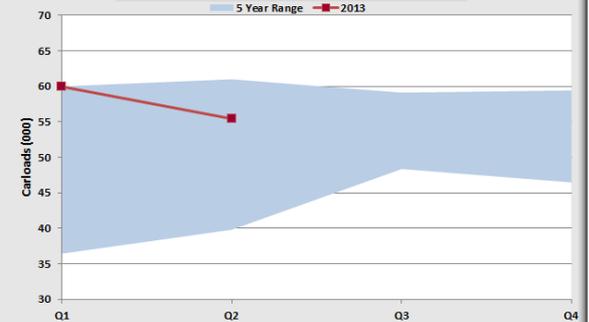
CP Historical Originations



CP Q2 Originations Comparison



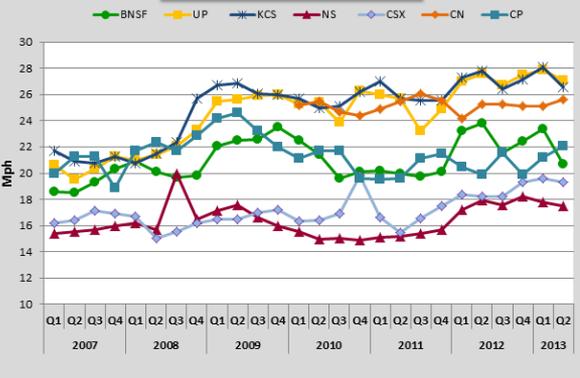
2013 CP Originations vs 5-Year Range



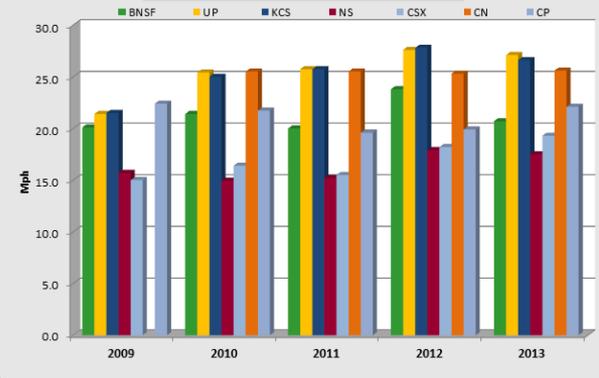
Source Data: AAR, CN, CP

RAILROAD COAL TRAIN SPEED DASHBOARD

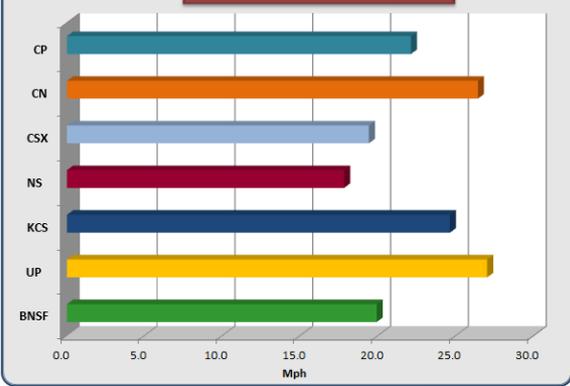
Historical Coal Train Speed



Q2 Coal Train Speed Comparison



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 4.2% or -21.4mn tons for 1st half 2013. By region, on a YOY basis:
 - Appalachia decreased 8.6% or -13.5. mn tons
 - Western decreased 3.0% or -8.0 mn tons
 - Interior increased 0.2% or 0.2 mn tons

EIA projects that coal production will remain flat until the end of 2013

❑ **Coal Consumption/Generation:**

- Electric Power Sector consumption up by 10.3%, or 38.7 mn tons first half 2013
- EIA expects full year 2013 consumption in the Electric Power Sector to be up by 7.6%, or 62.3 MMst, due to higher electricity demand and higher natural gas prices.
- Coal's share of net generation increased to 39.2% in first half 2013, versus 35.4% in first half 2012. Coal's recent gains in fuel share are expected to slow during the second half of 2013 when coal's projected share of total generation is forecasted to average 41.4 %

Key points from data and dashboards, and general trends

Coal Inventories, Exports, and a 2014 Forward Look:

❑ Coal Inventories:

- Electric Power Sector ended Q2 2013 at 170.8 mn tons per EIA, down 13.3% from Q2 2012.
- EIA forecasts year-end 2013 inventories at 166.5 mn tons, compared with ending 2012 inventories of 184.9 mn tons

❑ Coal Exports:

- First half 2012 down 5.0 mn tons in total, or -7.4% YOY, despite record monthly exports of 13.6 mn tons in March.
 - Metallurgical coal exports down 7.2% or 2.7 mn tons vs first half 2012
 - Steam coal exports down 8.1% or 2.3 mn tons vs first half 2012

- ❑ **2014 Forward Look:** EIA Expects coal consumption to rise 1.4% versus 2013. Production is expected to increase by 3.3% as inventories stabilize and consumption increases. Exports are projected to fall 5.7%, as continuing economic weakness in Europe, slowing Asian demand growth, increasing supply in other coal-exporting countries, and falling international coal prices are expected to lower the demand for U.S. coal exports.

Key points from data and dashboards, and general trends continued

Railroad volumes:

- ❑ **General 2013 Trend:** Latest YTD data through week 31 of 2013 - AAR reported volumes for major U.S. railroads down 1.3% for carloads and up 3.5% for intermodal, YOY.
- ❑ **COAL CARLOADS:** Through week 31, AAR's originated coal carloads for major U.S. railroads down 4.5% in the aggregate.
- ❑ **2013 vs 2012 YTD Week 31 coal comparisons:**
 - ❑ BNSF originations: +31,500 carloads, or +2.5%
 - ❑ UP originations: -96,400 carloads, or -9.7%
 - ❑ CSX originations: -85,700 carloads, or -13.5%
 - ❑ NS originations: -27,500 carloads, or -4.2%
 - ❑ CN originations: -2,800 carloads, or -2.0%
 - ❑ CP originations: +7,400 carloads, or +5.6%
 - ❑ KCS received: -600 carloads, or -0.5%

Key points from data and dashboards, and general trends continued

Railroad train speeds:

❑ COAL TRAIN SPEEDS:

Q2 2013 vs Q2 2012 coal train speed performance by railroad:

- BNSF: 20.7 mph -- 3.1 mph slower, or -13.0%
- UP: 27.1 mph -- 0.5 mph slower, or -1.8%

- CSX: 19.3 mph -- 1.1 mph faster, or +6.0%
- NS: 17.5 mph -- 0.4 mph slower, or -2.2%

- CN: 25.6 mph -- 0.3 mph faster, or +1.2%
- CP: 22.1 mph -- 2.2 mph faster, or +11.1%

- KCS: 26.6 mph -- 1.2 mph slower, or -4.3%