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# **Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting**

## **Performance Measures Subcommittee Update**



April 6, 2011



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

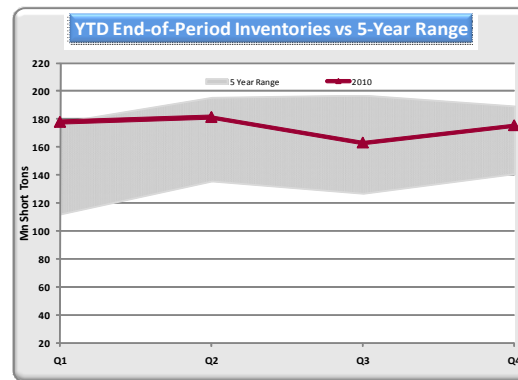
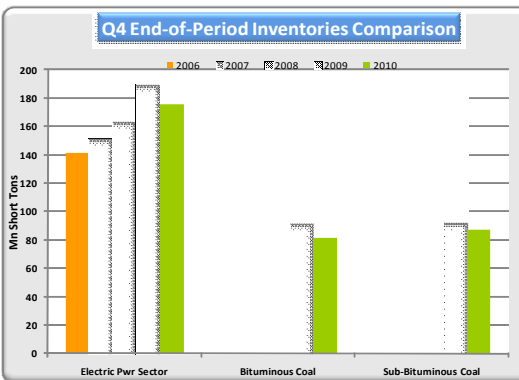
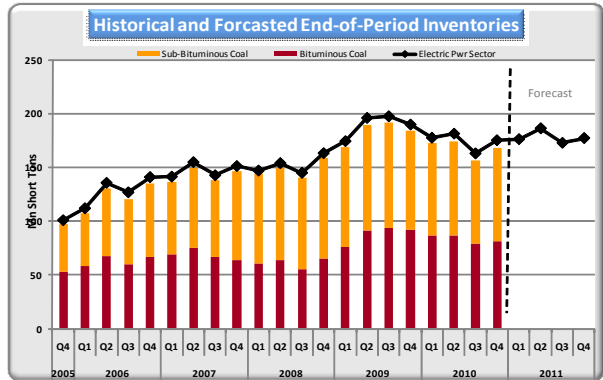
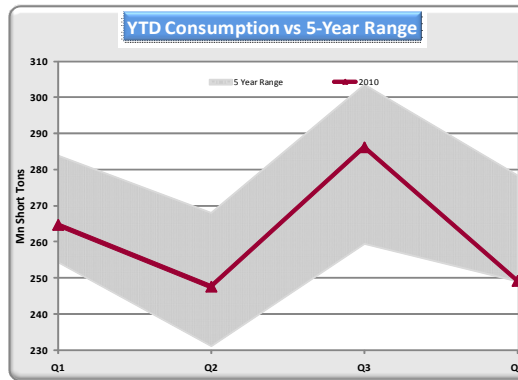
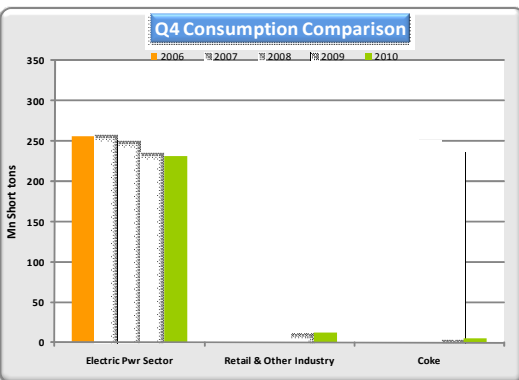
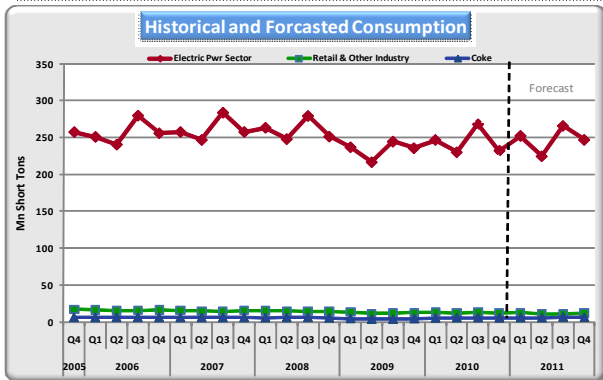
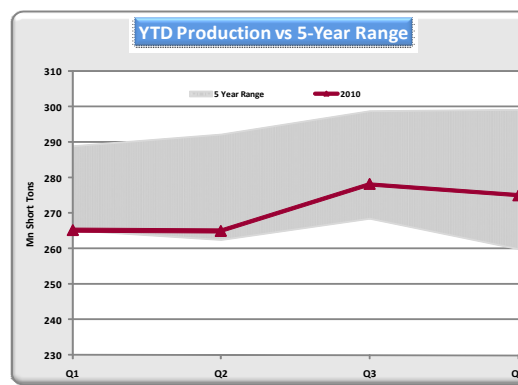
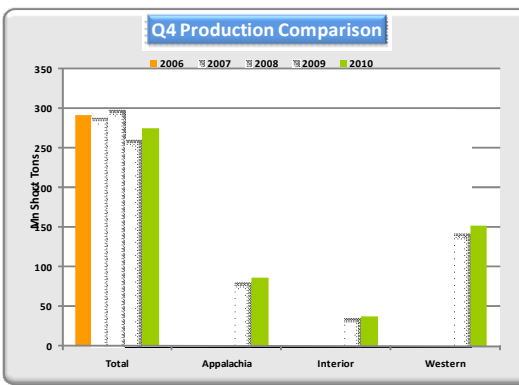
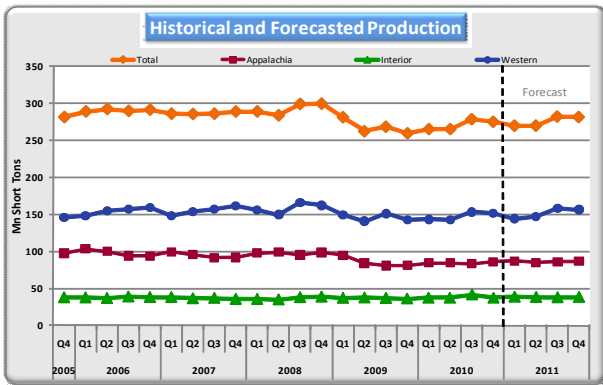
**Five coal-related dashboards, organized as follows:**

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

Each dashboard has 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 - YTD comparison versus the 5-year range

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

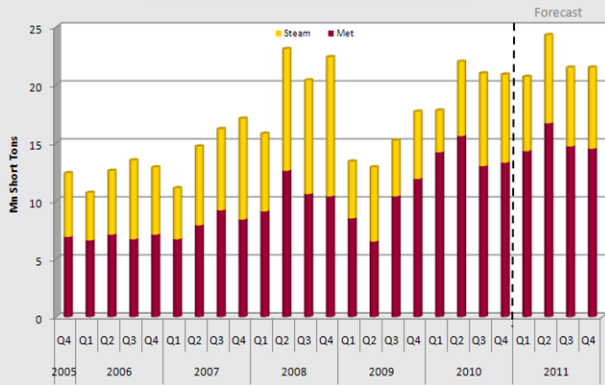


Source Data: EIA

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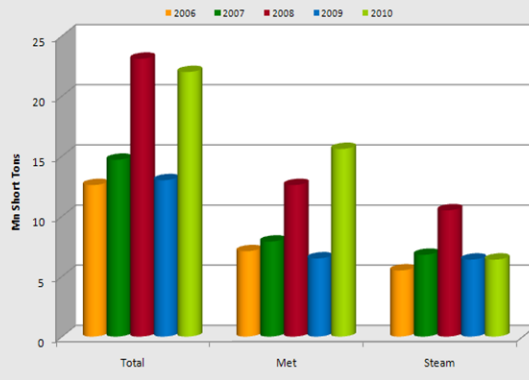
## U.S. COAL EXPORTS DASHBOARD

**Historical and Forecasted Exports**

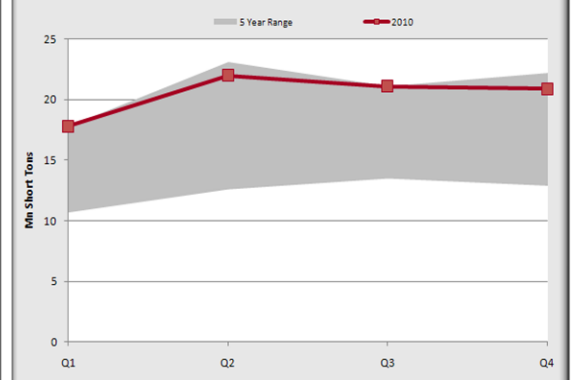


Source Data: EIA

**Q4 Exports Comparison**

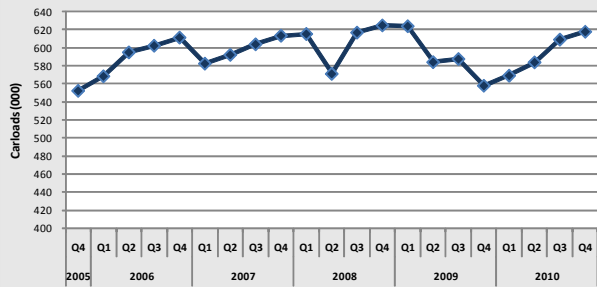


**YTD Exports vs 5-Year Range**

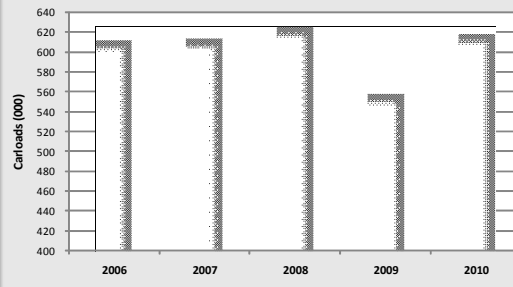


## WESTERN RAILROAD COAL CARLOADS DASHBOARD

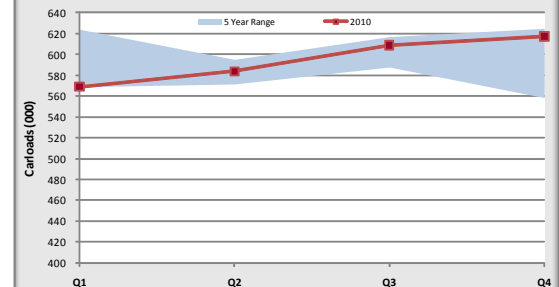
**BNSF Historical Originations**



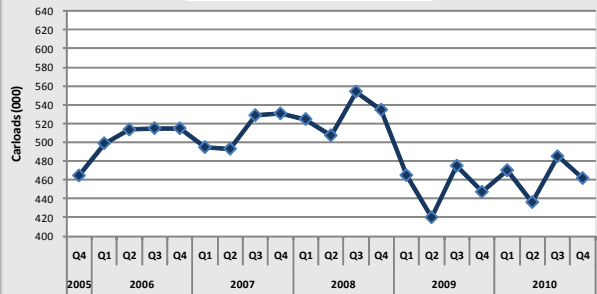
**BNSF Q4 Originations Comparison**



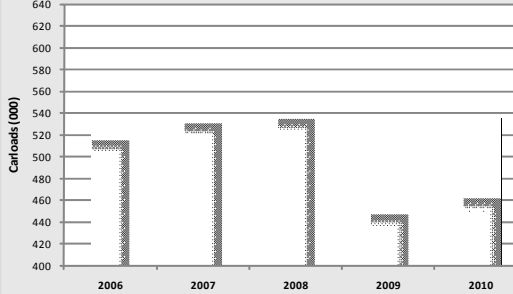
**BNSF YTD Originations vs 5-Year Range**



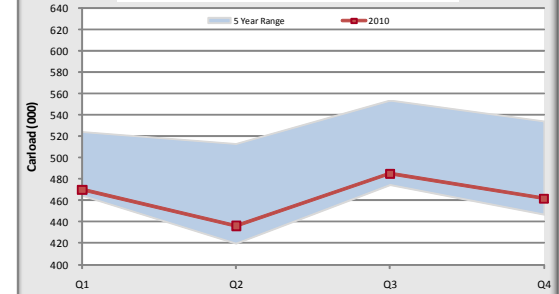
**UP Historical Originations**



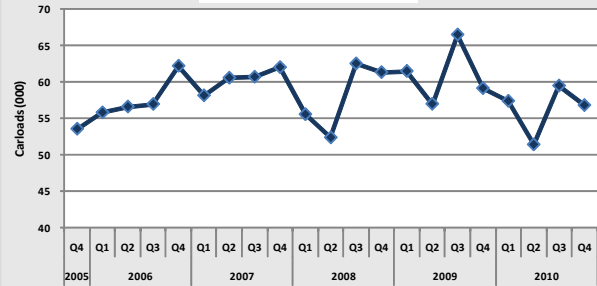
**UP Q4 Originations Comparison**



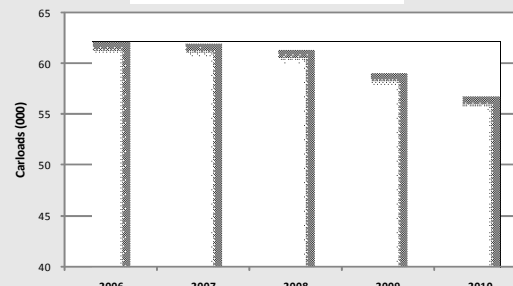
**UP YTD Originations vs 5-Year Range**



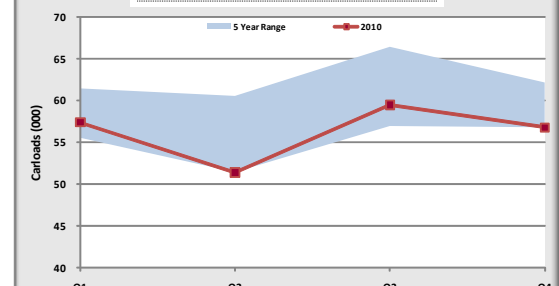
**KCS Historical Receipts**



**KCS Q4 Receipts Comparison**



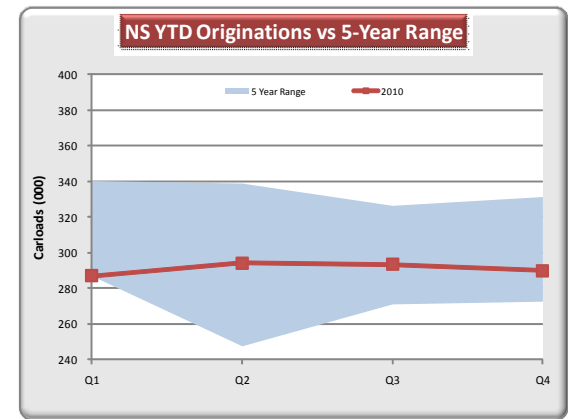
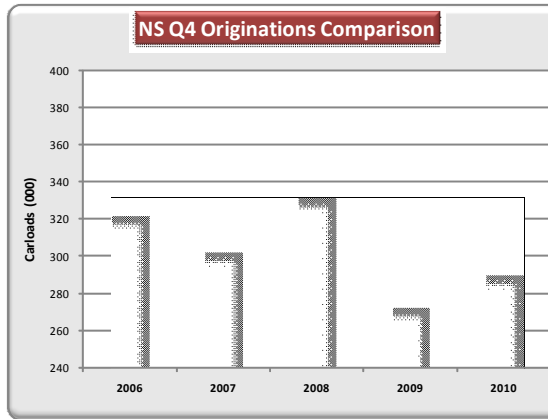
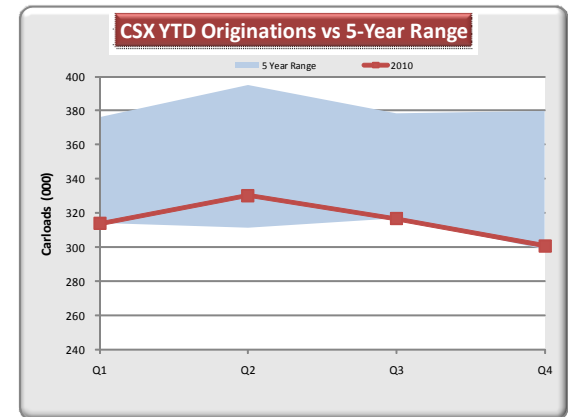
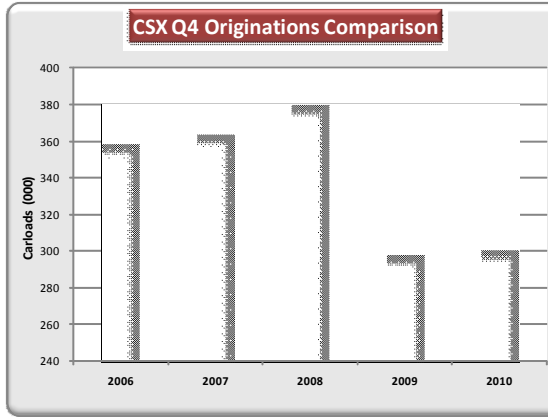
**KCS YTD Receipts vs 5-Year Range**



Source Data: AAR, BNSF, UP, KCS

Source data: AAR, BNSF, UP, KCS

## EASTERN RAILROAD COAL CARLOADS DASHBOARD

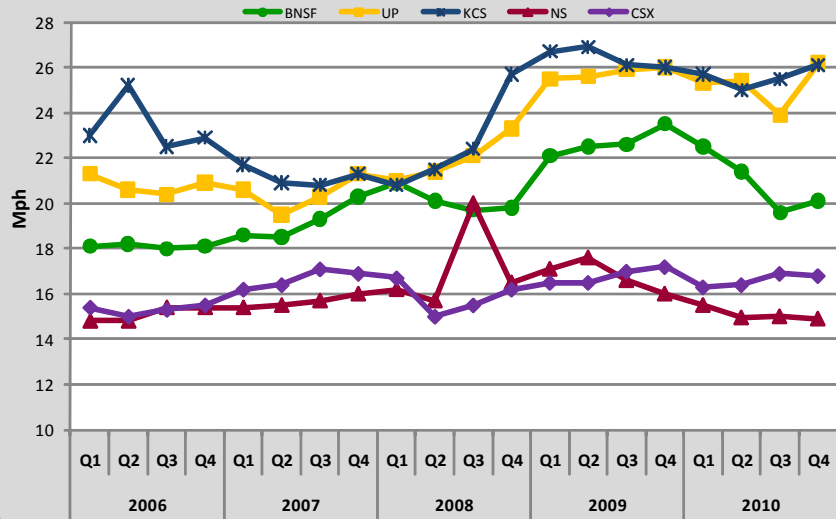


Source data: AAR, CSX, NS

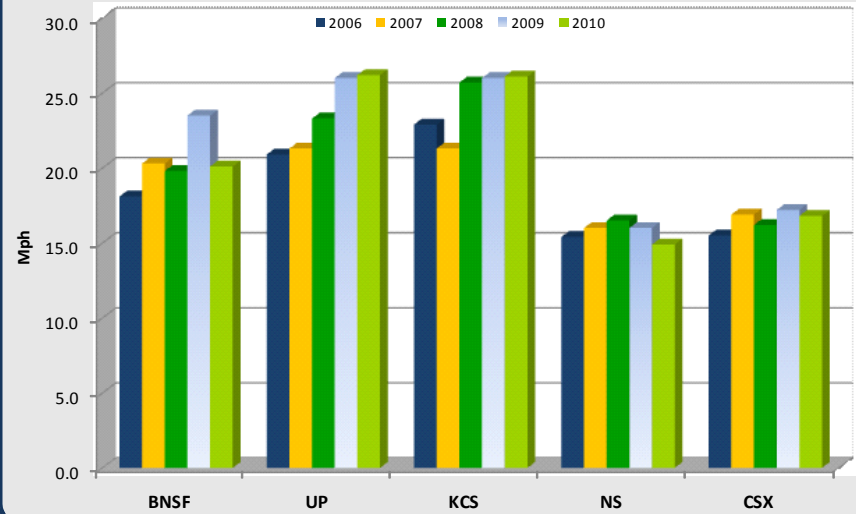
Source data: AAR, CSX, NS

# RAILROAD COAL TRAIN SPEED DASHBOARD

## Historical Coal Train Speed



## Q4 Coal Train Speed Comparison



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

Source data: AAR, BNSF, CSX, KCS, NS, UP

## Key points from data and dashboards, and general trends

### Coal Production, Consumption, Inventories and Exports:

- ❑ **Coal Production:** 2010 fairly flat at 1.08 bn tons. 2011 is projected by EIA to increase by 1.9% or 20 mn tons, with most of this coming from western production.
- ❑ **Coal Consumption:** 2010 EIA Electric Power Sector consumption up 4.5 % or 42 mn tons. Hot summer and some economic recovery contributed, though natural gas continued to displace some coal in the generation mix. 2011 EIA projection is fairly flat at 989 mn tons, due to slow growth in power demand and projected increases in hydro and wind generation.
- ❑ **Coal Inventories:** down from excessively high 2009 levels. Electric Power Sector ended 2010 at 182.5 mn tons, a more normalized level which equates to about 66 days burn. EIA projects 2011 Electric Power Sector inventories to finish near the same level.
- ❑ **Coal Exports:** rebounded strongly and ended 2010 at 82 mn tons, up 38% versus 2009. Particularly high demand for metallurgical coal for steel making from developing economies including China and other Asian countries, a trend continuing in 2011. EIA projects 2011 exports at 88 mn tons. Recent global events including severe flooding in Australia, above average rainfall in Columbia and South Africa, and the earthquake and tsunami in Japan may result in even higher 2011 U.S. demand.



## Key points from data and dashboards, and general trends cont.

### Railroads:

- ❑ **General:** AAR volumes continued to show growth versus 2009, up 7.3% on carloads and 14.2% on intermodal, but down 10% and 1.9% respectively from 2008
- ❑ **COAL CARLOADS:** AAR's 2010 originated coal carloads for major U.S. railroads up 1.2% in the aggregate
  - 2010 individual railroad YOY coal comparisons:
    - BNSF originations: up 26,166 carloads, or 1.1%
    - UP originations: up 46,000 carloads, or 2.6%
    - CSX originations: down 47,000 carloads, or (3.6)%
    - NS originations: up 73,000 carloads, or 6.7%
    - KCS received: down 19,000 carloads, or (7.8)%

## Key points from data and dashboards, and general trends cont

### Railroads continued:

- ❑ **COAL TRAIN SPEEDS:** down in 2010 on YOY basis, with some network fluidity challenges and resource constraints (crews, locomotives, and/or railcars) occurring as railroads strived to meet improving demand following resource reductions made during the weak 2009 period
  - 2010 individual coal trains speed performance by railroad:
    - BNSF: average 20.9 mph -- 1.8 mph slower, or (7.8)%
    - UP: average 25.2 mph -- 0.6 mph slower, or (2.1)%
    - CSX: average 16.6 mph -- 0.2 mph slower, or (1.2)%
    - NS: average 15.1 mph -- 1.7 mph slower, or (10.3)%
    - KCS: average 25.6 mph -- 0.8 mph slower, or (3.2)%
  
- ❑ **2011 YTD RAIL TRENDS:** through week 12 of 2011, AAR reported YOY carload volume up 5% or 3.5 mn carloads, and intermodal volume up 7.9% or 2.6 mn trailers and containers
  - Coal carload volume up 4% YTD