

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

## **Performance Measures Subcommittee Update**



March 6, 2014

## **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 (Q3 or Q4 as noted)
- c. Right - current YTD comparison versus the 5-year range

## Performance Summary

### Coal Production (CY 2013 estimate versus CY 2012)

Appalachia:	Decreased 15.5 million tons	<b>(-5.3%)</b>
Interior:	Increased 5.1 million tons	<b>(+2.8%)</b>
Western:	Decreased 10.2 million tons	<b>(-1.9%)</b>
Total Production:	Decreased 20.6 million tons	<b>(-2.0%)</b>

### Coal Consumption (CY 2013 estimate versus CY 2012)

Electricity/Power	Increased 31.5 million tons	<b>(+3.8%)</b>
Retail/Other	Decreased 0.8 million tons	<b>(-1.8%)</b>
Met/Coke	Increased 0.4 million tons	<b>(+1.9%)</b>
Total Consumption	Increased 31.1 million tons	<b>(+3.5%)</b>

### Coal Exports (CY 2013 estimate versus CY 2012)

Met Coal:	Decreased 2.9 million net tons	<b>(-4.1%)</b>
Steam Coal:	Decreased 4.1 million net tons	<b>(-7.3%)</b>
Total Exports:	Decreased 7.0 million net tons	<b>(-5.6%)</b>

Coal Production MM Tons				
CY 2012	Appalachia	Interior	Western	Total
Q1	81	44	142	266
Q2	76	44	121	241
Q3	69	46	143	259
Q4	68	45	137	250
	294	180	543	1,016
CY 2013	Appalachia	Interior	Western	Total
Q1	70	46	129	245
Q2	71	45	127	243
Q3	66	48	142	257
Q4E	71	46	134	251
	279	185	533	996
Tonnage	-15.5	5.1	-10.2	-20.6
Percent	-5.3%	2.8%	-1.9%	-2.0%

Coal Consumption MM Tons				
CY 2012	Power	Other	Met/Coke	Total
Q1	191	12	5	208
Q2	186	11	5	202
Q3	238	11	5	254
Q4	209	12	5	226
	824	45	21	889
CY 2013	Power	Other	Met/Coke	Total
Q1	212	12	5	229
Q2	200	11	6	217
Q3	237	11	5	253
Q4E	206	11	5	221
	855	44	21	920
Tonnage	31.5	-0.8	0.4	31.1
Percent	3.8%	-1.8%	1.9%	3.5%

Coal Exports MM Tons			
CY 2012	Met	Steam	Total
Q1	18	11	29
Q2	20	17	38
Q3	17	15	32
Q4	15	13	28
	70	56	126
CY 2013	Met	Steam	Total
Q1	18	14	32
Q2	16	13	29
Q3	16	13	29
Q4E	17	12	29
	67	52	119
Tonnage	-2.9	-4.1	-7.0
Percent	-4.1%	-7.3%	-5.6%

Coal Inventories MM Tons				
CY 2012	Power	Mines	Other	Total
Q1	195	51	7	253
Q2	198	50	7	256
Q3	182	46	8	236
Q4	185	46	8	239
CY 2013	Power	Mines	Other	Total
Q1	172	41	7	219
Q2	171	42	7	219
Q3	152	40	7	200
Q4E	--	--	--	--
YTD NT	-32.9	-6.1	-0.2	-39.2
YTD %	-17.8%	-13.2%	-2.6%	-16.4%

## Performance Summary

### Railroad Carloads (CY 2013 estimate versus CY 2012)

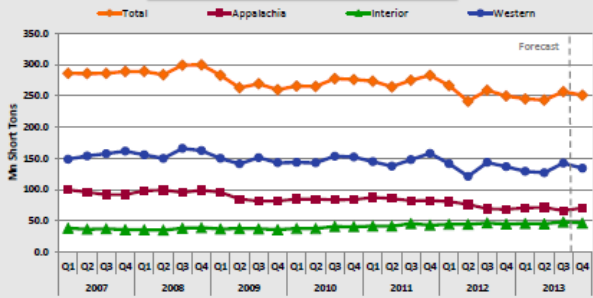
Burlington (BNSF):	Increased 63,900 carloads	<b>(+3.0%)</b>
Union Pacific:	Decreased 165,900 carloads	<b>(-9.8%)</b>
Kansas City Southern:	Decreased 8,100 carloads	<b>(-4.0%)</b>
Norfolk Southern:	Decreased 54,200 carloads	<b>(-5.0%)</b>
CSX Transportation:	Decreased 115,000 carloads	<b>(-11.1%)</b>
Canadian National:	Increased 10,800 carloads	<b>(+4.8%)</b>
Canadian Pacific:	Increased 15,500 carloads	<b>(+6.9%)</b>
<b>Total Carloads:</b>	<b>Decreased 253,000 carloads</b>	<b>(-3.8%)</b>

Car Originations / * KCS Receipts (000 Carloads)								
CY 2012	BNSF	UP	* KCS	NS	CSX	CN	CP	Total
Q1	555	444	51	273	267	55	53	1,698
Q2	481	378	45	276	276	64	54	1,574
Q3	563	454	57	260	259	56	59	1,707
Q4E	540	416	50	267	238	49	58	1,619
	2,139	1,692	203	1,075	1,040	224	225	6,598
CY 2013	BNSF	UP	* KCS	NS	CSX	CN	CP	Total
Q1	542	364	49	266	235	58	60	1,573
Q2	513	373	48	262	239	61	55	1,552
Q3	592	419	57	252	230	59	65	1,674
Q4E	556	370	41	241	221	57	60	1,546
	2,203	1,526	195	1,021	925	235	240	6,345
Carloads	63.9	-165.9	-8.1	-54.2	-115.0	10.8	15.5	-253.0
Percent	3.0%	-9.8%	-4.0%	-5.0%	-11.1%	4.8%	6.9%	-3.8%

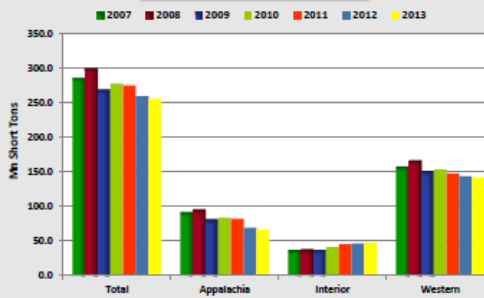
Average Train Speeds (MPH)								
CY 2012	BNSF	UP	* KCS	NS	CSX	CN	CP	Avg
Q1	23.2	27.0	27.3	17.2	18.4	24.2	20.5	22.5
Q2	23.8	27.6	27.8	17.9	18.2	25.3	19.9	22.9
Q3	21.6	26.7	26.4	17.6	18.2	25.3	21.6	22.5
Q4E	22.4	27.5	27.2	18.2	19.3	25.1	19.9	22.8
CY 2013	BNSF	UP	* KCS	NS	CSX	CN	CP	Avg
Q1	23.4	27.9	28.1	17.8	19.6	25.1	21.2	23.3
Q2	20.7	27.1	26.6	17.5	19.3	25.6	22.1	22.7
Q3	19.3	26.9	25.1	17.9	19.9	26.3	--	22.6
Q4E	18.9	26.3	27.0	18.1	19.9	25.5	--	22.6

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

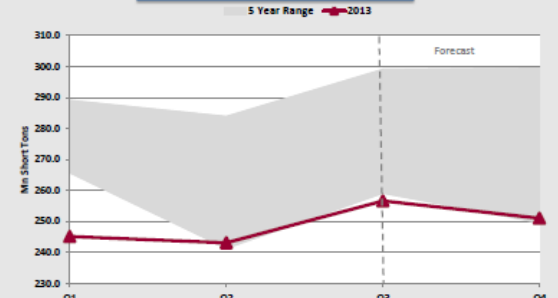
### Historical and Forecasted Production



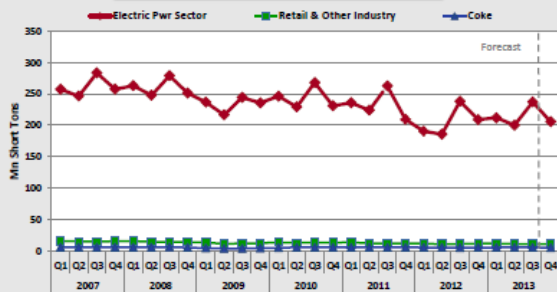
### Q3 Production Comparison



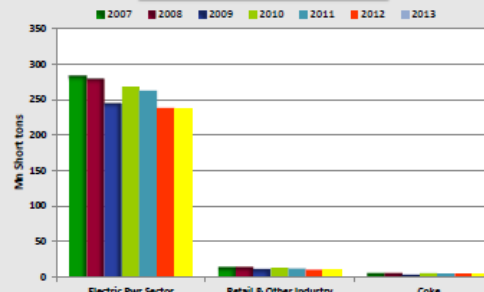
### 2013 Production vs 5-Year Range



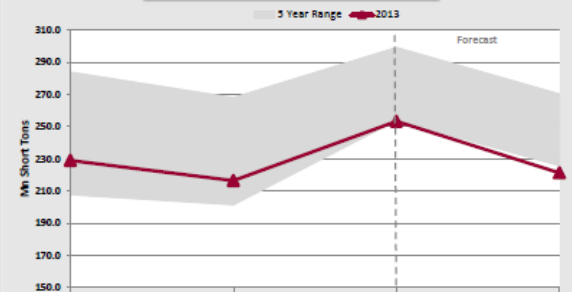
### Historical and Forecasted Consumption



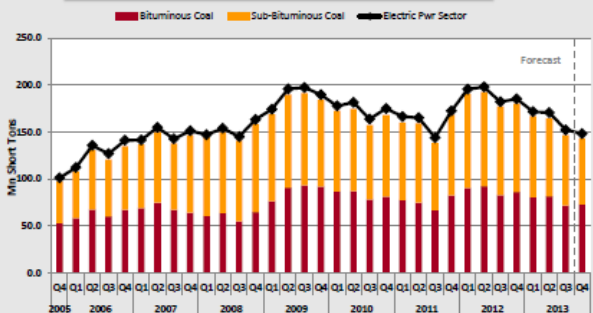
### Q3 Consumption Comparison



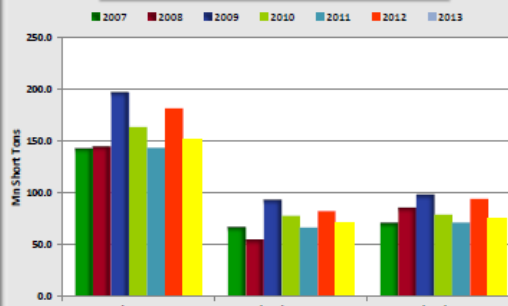
### 2013 Consumption vs 5-Year Range



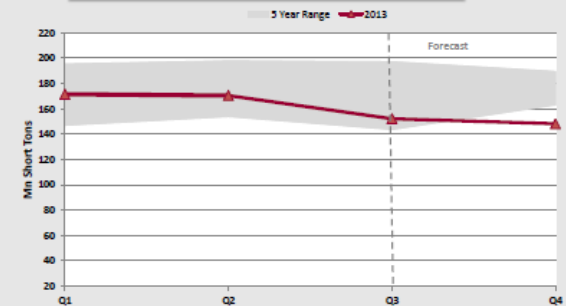
### Historical and Forecasted End-of-Period Inventories



### Q3 End-of-Period Inventories Comparison

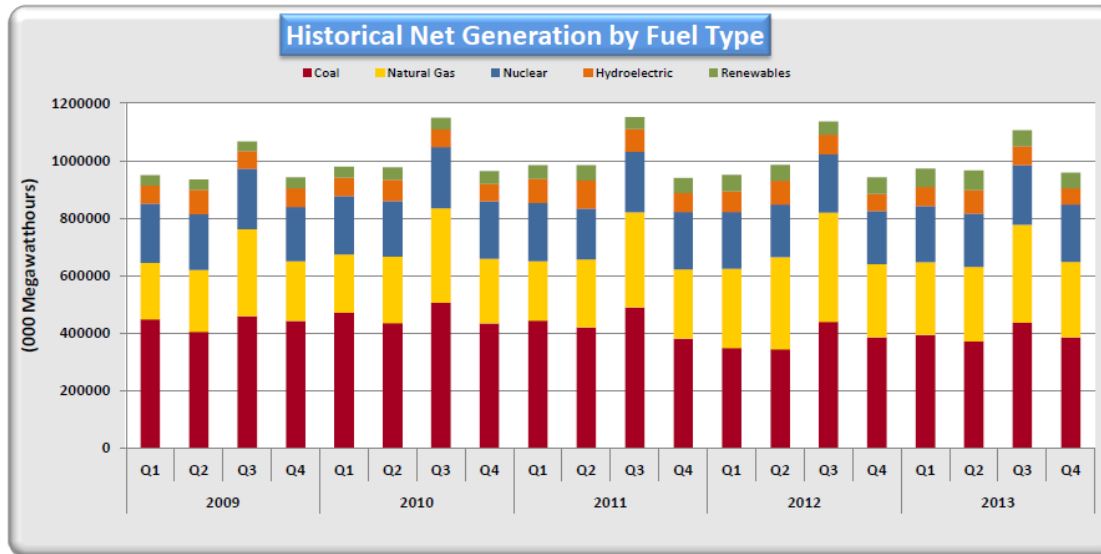


### 2013 End-of-Period Inventories vs 5-Year Range



Source Data: EIA

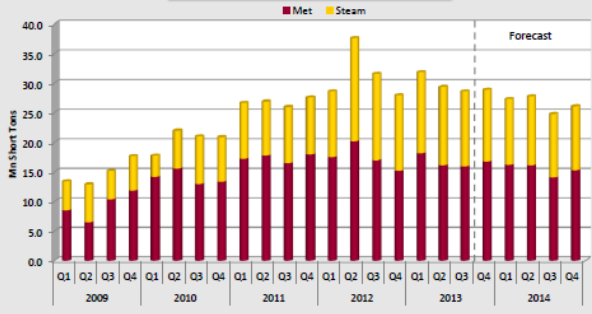
# NET GENERATION BY FUEL TYPE DASHBOARD



Source Data: EIA

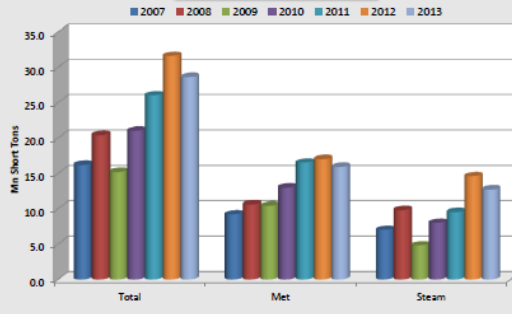
# U.S. COAL EXPORTS DASHBOARD

### Historical and Forecasted Exports

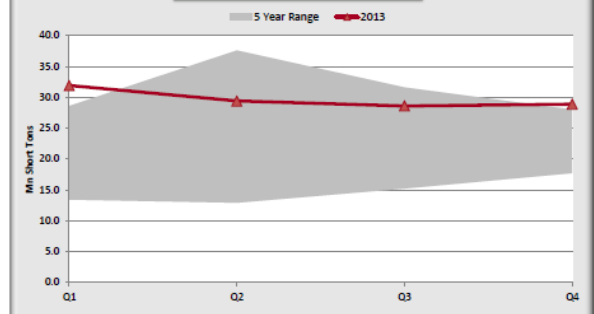


Source Data: EIA

### Q3 Exports Comparison

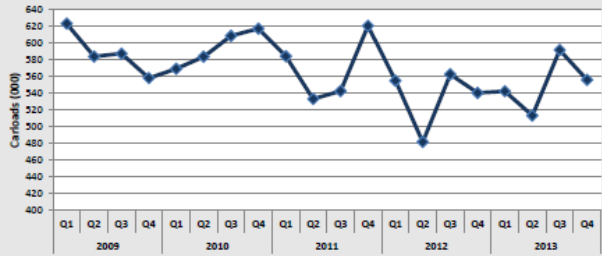


### 2013 Exports vs 5-Year Range

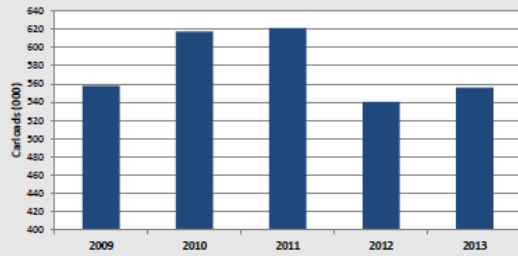


# WESTERN RAILROAD COAL CARLOADS DASHBOARD

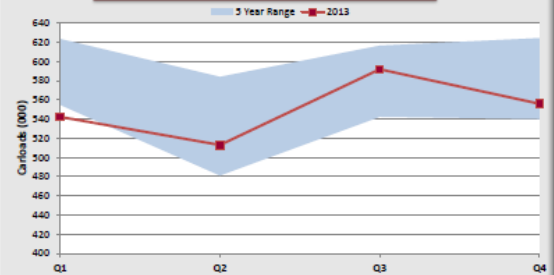
**BNSF Historical Originations**



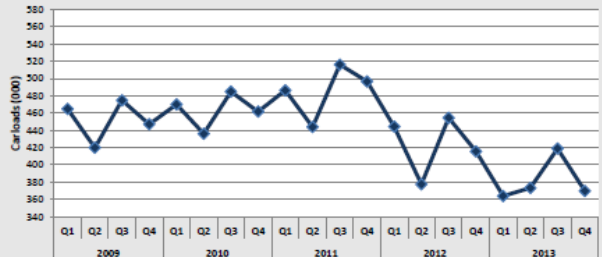
**BNSF Q4 Originations Comparison**



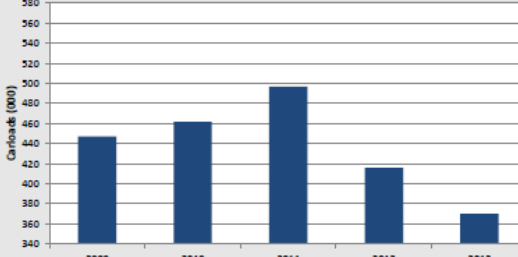
**2013 BNSF Originations vs 5-Year Range**



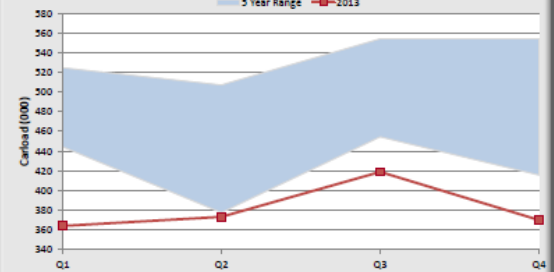
**UP Historical Originations**



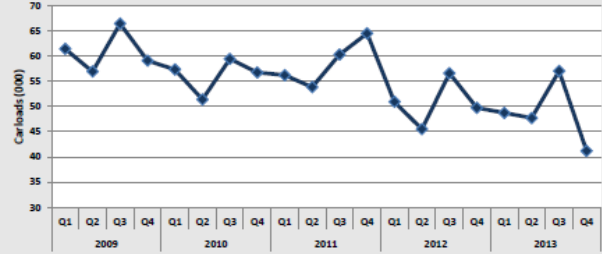
**UP Q4 Originations Comparison**



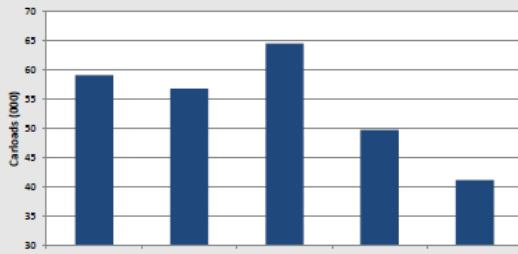
**2013 UP Originations vs 5-Year Range**



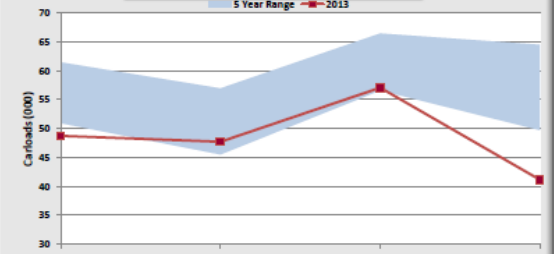
**KCS Historical Receipts**



**KCS Q4 Receipts Comparison**



**2013 KCS Receipts vs 5-Year Range**

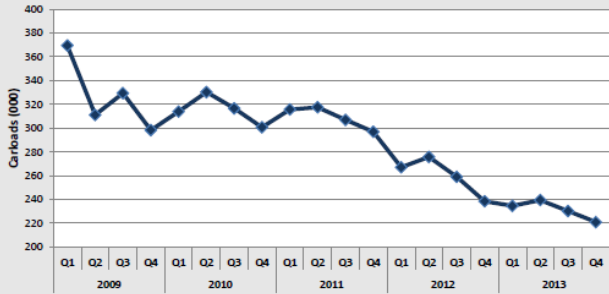


Source Data: AAR, BNSF, UP, KCS

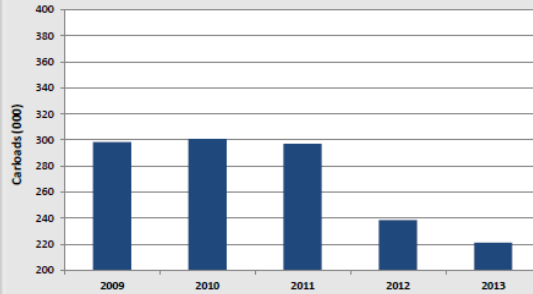


# EASTERN RAILROAD COAL CARLOADS DASHBOARD

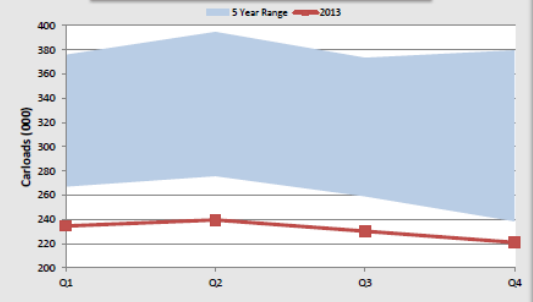
**CSX Historical Originations**



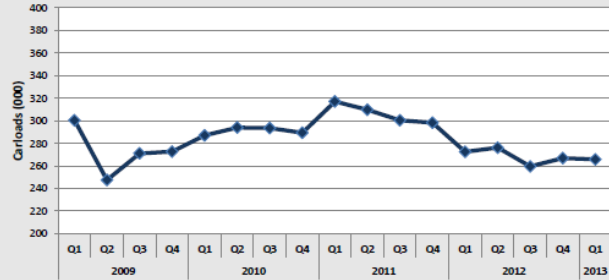
**CSX Q4 Originations Comparison**



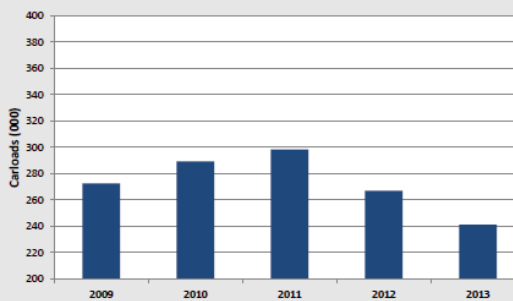
**2013 CSX Originations vs 5-Year Range**



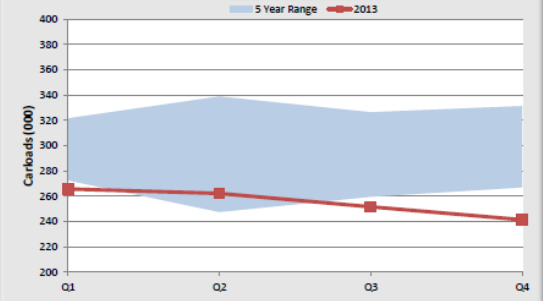
**NS Historical Originations**



**NS Q4 Originations Comparison**



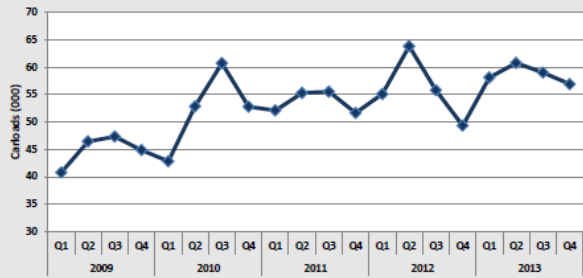
**2013 NS Originations vs 5-Year Range**



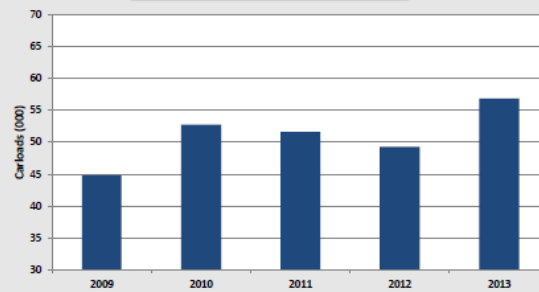
Source data: AAR, CSX, NS

# CANADIAN RAILROAD COAL CARLOADS DASHBOARD

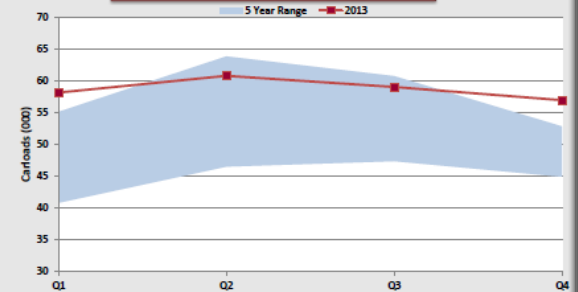
**CN Historical Originations**



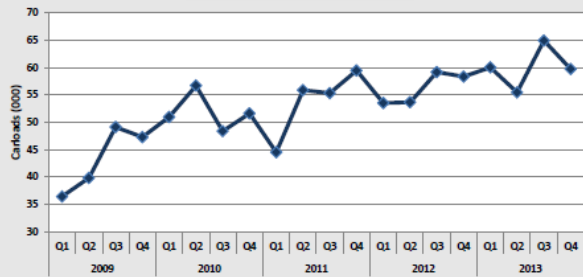
**CN Q4 Originations Comparison**



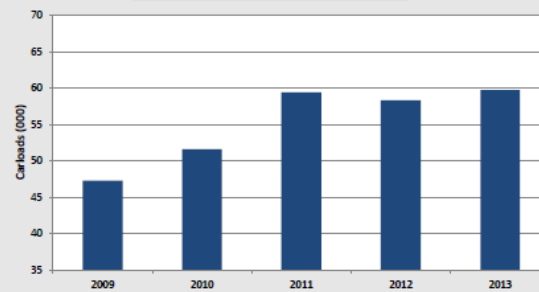
**2013 CN Originations vs 5-Year Range**



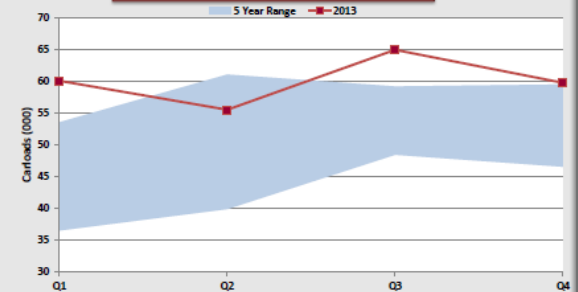
**CP Historical Originations**



**CP Q4 Originations Comparison**

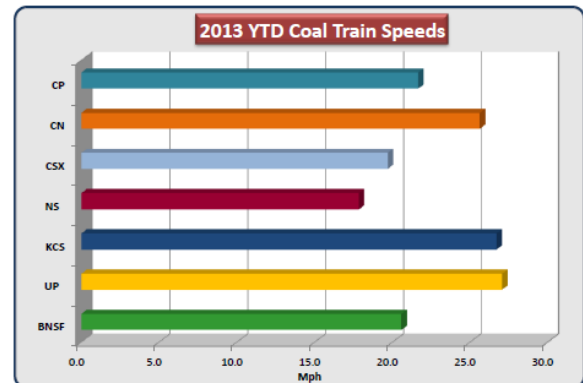
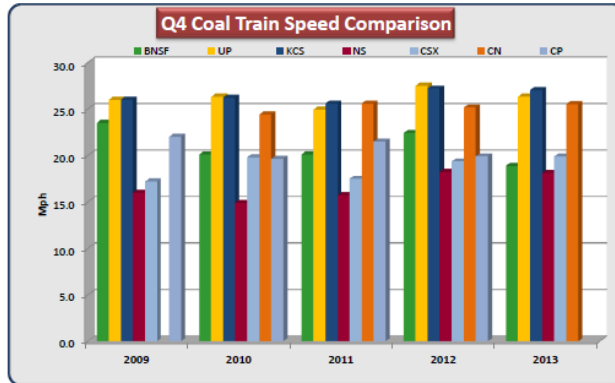
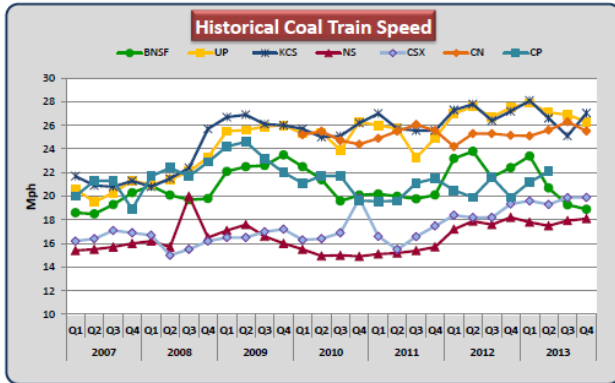


**2013 CP Originations vs 5-Year Range**



Source Data: AAR, CN, CP

## RAILROAD COAL TRAIN SPEED DASHBOARD



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