

Surface Transportation Board – Rail Energy Transportation Advisory Committee Meeting

Performance Measures Subcommittee Update



Oct 15, 2015

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 (2015 vs 2014)

Appalachia:	Decreased 17.2 million tons	(-25.5%)
Interior:	Decreased 6.2 million tons	(-13.4%)
Western:	Decreased 16.9 million tons	(-12.9%)
Total Production:	Decreased 40.3 million tons	(-16.5%)

Coal Consumption (2015 vs 2014)

Electricity/Power	Decreased 56.2 million tons	(-13.2%)
Retail/Other	Decreased 1.1 million tons	(-4.8%)
Met/Coke	Decreased 1.1 million tons	(-11.1%)
Total Consumption	Decreased 58.4 million tons	(-12.7%)

Coal Exports (2015 vs 2014)

Met Coal:	Decreased 5.6 million net tons	(-35%)
Steam Coal:	Decreased 4.9 million net tons	(-42%)
Total Exports:	Decreased 10 million net tons	(-38%)

Coal Production MM Tons				
2014	Appalachia	Interior	Western	Total
Q1	67.5	46.3	131.4	245.2
Q2	69.7	44.8	131.4	245.9
Sum:	137.2	91.1	262.8	491.1
2015	Appalachia	Interior	Western	Total
Q1	62.3	45.2	132.7	240.2
Q2	57.7	39.7	113.2	210.6
Sum:	120	84.9	245.9	450.8
Tonnage	-17.2	-6.2	-16.9	-40.3
Percent	-25.48%	-13.39%	-12.86%	-16.44%

Coal Consumption MM Tons				
2014	Electric Pwr	Other	Coke	Total
Q1	231.3	12	4.8	248.1
Q2	196	10.9	5.1	212
Sum:	427.3	22.9	9.9	460.1
2015	Electric Pwr	Other	Coke	Total
Q1	196.5	11.4	4.4	212.3
Q2	174.6	10.4	4.4	189.4
Sum:	371.1	21.8	8.8	401.7
Tonnage	-56.2	-1.1	-1.1	-58.4
Percent	-13.15%	-4.80%	-11.11%	-12.69%

Coal Inventories MM Tons				
2014 YTD	Electric Pwr	Bit	Sub-Bit	Total
Q1	118	174.8	182.2	475
Sum:	118	174.8	182.2	475
2015 YTD	Electric Pwr	Bit	Sub-Bit	Total
Q1	156	200.8	244.3	601.1
Sum:	156	200.8	244.3	601.1
Tonnage	38	26	62.1	126.1
Percent	32.2%	14.9%	34.1%	26.5%

Coal Exports MM Tons			
2014	Met	Steam	Total
Q1	16	11.6	27.6
Q2	15.8	8.8	24.6
Sum:	31.8	20.4	52.2
2015	Met	Steam	Total
Q1	13.5	8.5	22
Q2	12.7	7	19.7
Sum:	26.2	15.5	41.7
Tonnage	-5.6	-4.9	-10.5
Percent	-35.00%	-42.24%	-38.04%

Performance Summary

Railroad Carloads (2015 estimate versus 2014)

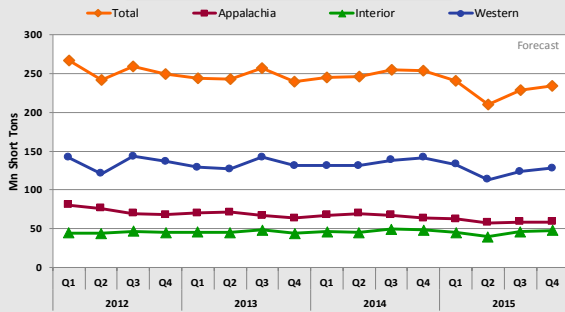
Burlington (BNSF):	Increased 30,000 carloads	(+2.7%)
Union Pacific:	Decreased 137,000 carloads	(-18%)
Kansas City Southern:	Decreased 28,000 carloads	(-30%)
Norfolk Southern:	Decreased 90,000 carloads	(-18%)
CSX Transportation:	Decreased 73,000 carloads	(-15.8%)
Canadian National:	Decreased 27,000 carloads	(-23.9%)
Canadian Pacific:	No Change	-
Total Carloads:	Decreased 325,000 carloads	(-10.2%)

Car Originations / *KCS Receipts (000 Carloads)								
<u>2014</u>	<u>BNSF</u>	<u>UP</u>	<u>*KCS</u>	<u>NS</u>	<u>CSX</u>	<u>CN</u>	<u>CP</u>	<u>Total</u>
Q1	565	388	48	229	218	53	60	1,561
Q2	547	373	46	270	246	61	65	1,607
Sum:	1,112	761	94	499	463	114	125	3,168
<u>2015</u>	<u>BNSF</u>	<u>UP</u>	<u>*KCS</u>	<u>NS</u>	<u>CSX</u>	<u>CN</u>	<u>CP</u>	<u>Total</u>
Q1	601	355	41	209	202	46	64	1,518
Q2	541	269	25	200	188	41	61	1,325
Sum:	1,142	624	66	409	390	87	125	2,843
Carloads	30	-137	-28	-90	-73	-27	0	-325
Percent	2.7%	-18.0%	-30.0%	-18.0%	-15.8%	-23.9%	0.4%	-10.2%

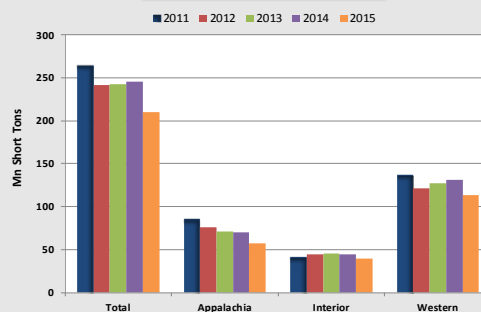
Average Train Speeds (MPH)							
<u>2014</u>	<u>BNSF</u>	<u>UP</u>	<u>*KCS</u>	<u>NS</u>	<u>CSX</u>	<u>CN</u>	<u>Avg</u>
Q1	18.8	25.6	26	17.1	18.2	24.9	21.8
Q2	17.5	24.3	25.1	16.6	16.6	25.5	20.9
<u>2015</u>	<u>BNSF</u>	<u>UP</u>	<u>*KCS</u>	<u>NS</u>	<u>CSX</u>	<u>CN</u>	<u>Avg</u>
Q1	18.9	26.2	26.3	16.1	17.8	25.6	21.8
Q2	20.3	25.7	26.8	16.1	17.8	25.8	22.1

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

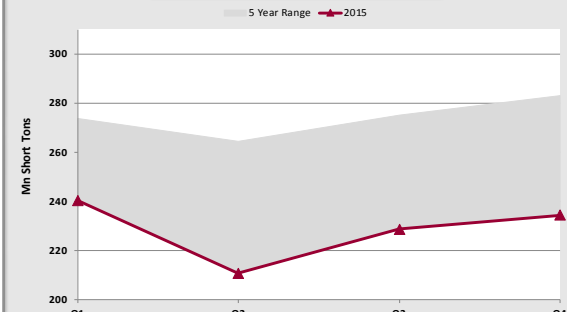
Historical and Forecasted Production



Q2 Production Comparison



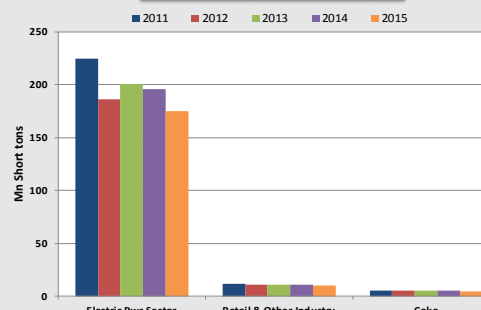
2015 Production vs 5-Year Range



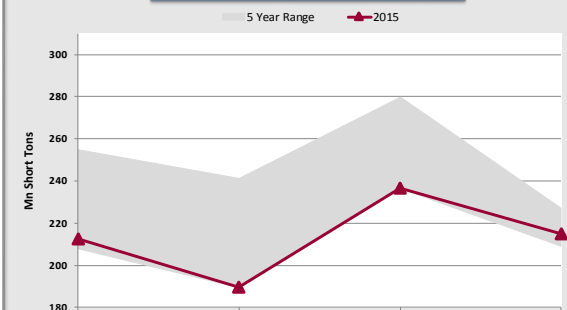
Historical and Forecasted Consumption



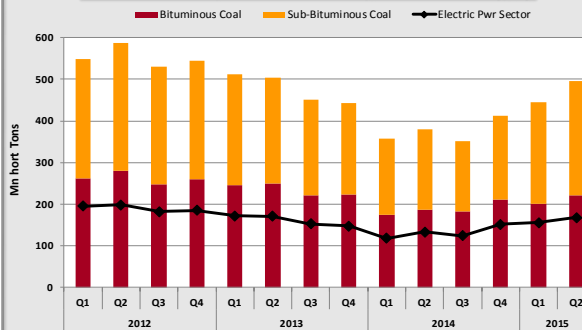
Q2 Consumption Comparison



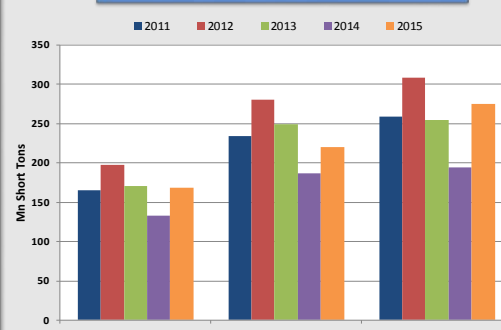
2015 Consumption vs 5-Year Range



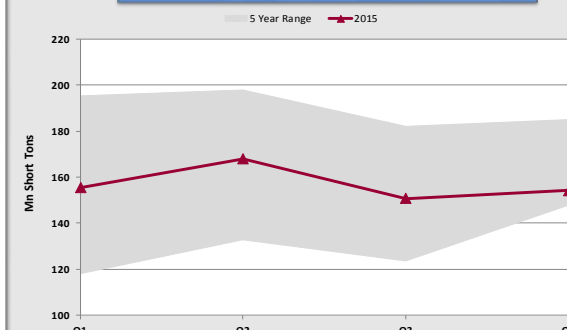
Historical and Forecasted End-of-Period Inventories



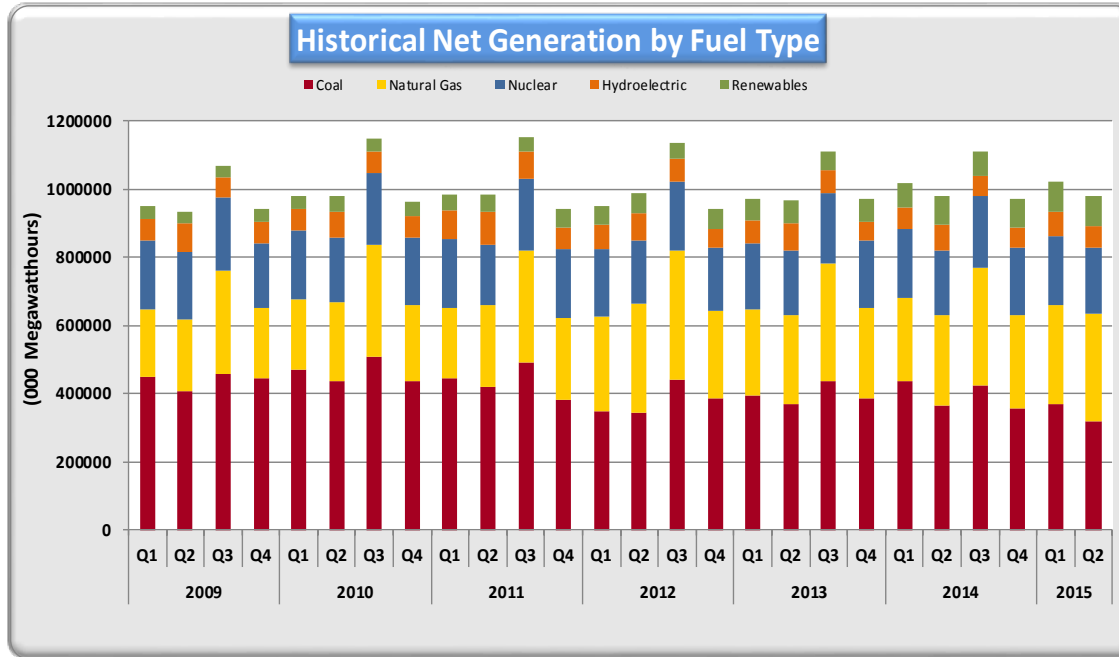
Q2 End-of-Period Inventories Comparison



2015 End-of-Period Inventories vs 5-Year Range



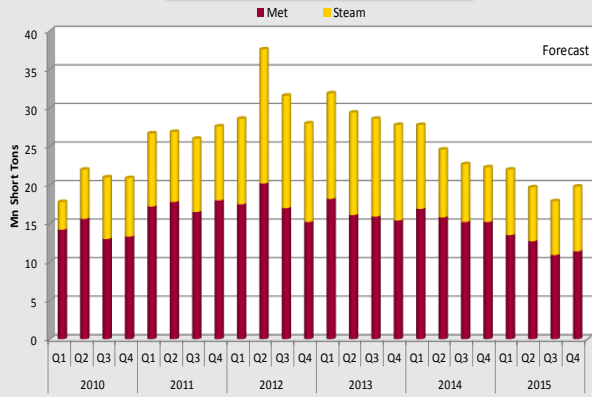
NET GENERATION BY FUEL TYPE DASHBOARD



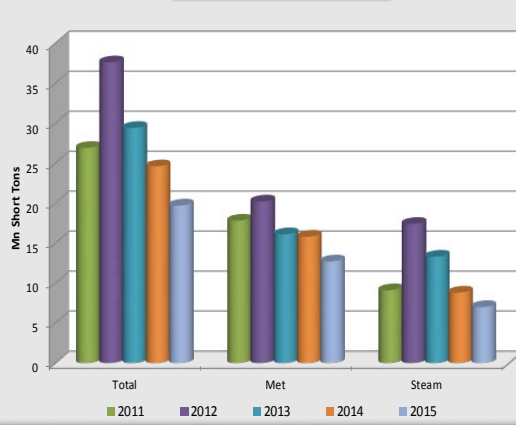
Source Data: EIA

U.S. COAL EXPORTS DASHBOARD

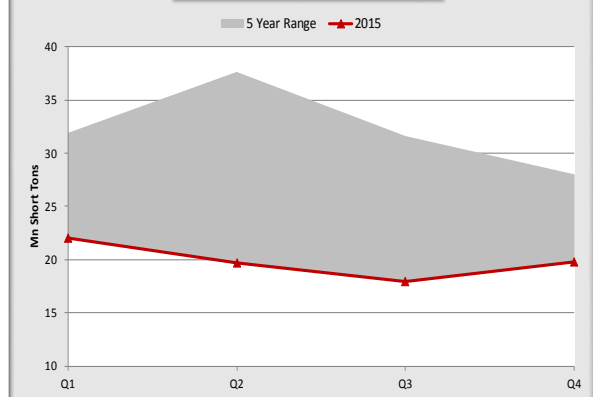
Historical and Forecasted Exports



Q2 Exports Comparison



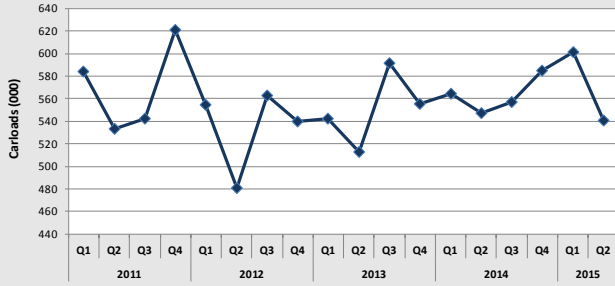
2015 Exports vs 5-Year Range



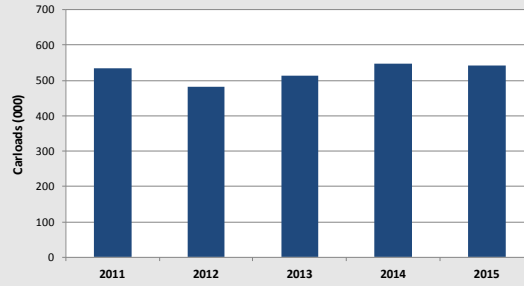
Source Data: EIA

WESTERN RAILROAD COAL CARLOADS DASHBOARD

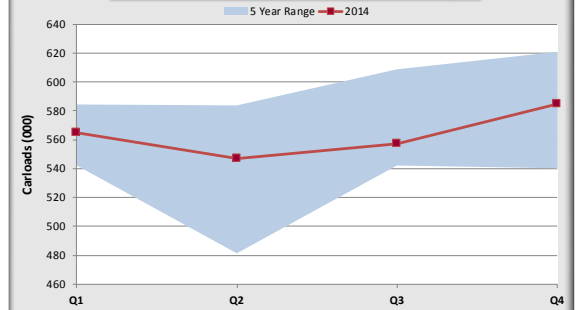
BNSF Historical Originations



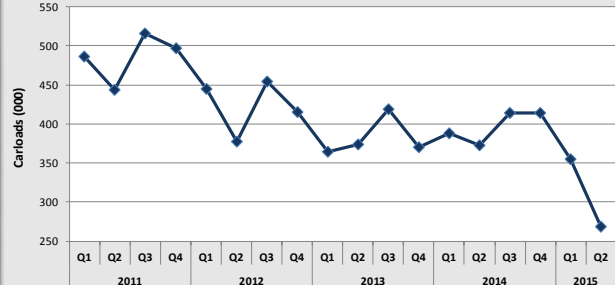
BNSF Q2 Originations Comparison



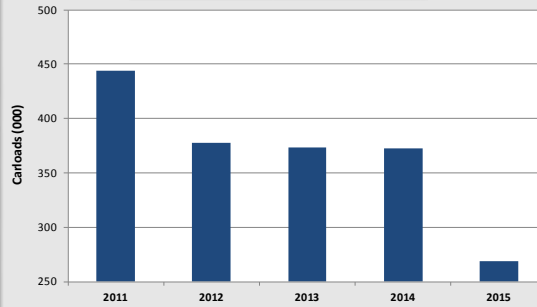
2014 BNSF Originations vs 5-Year Range



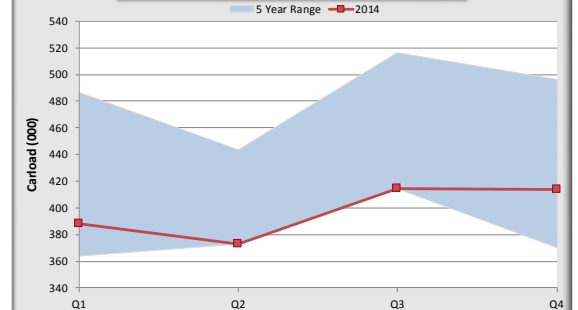
UP Historical Originations



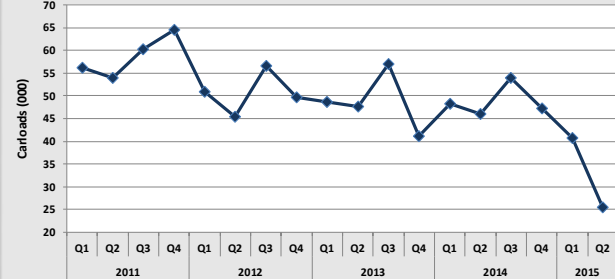
UP Q2 Originations Comparison



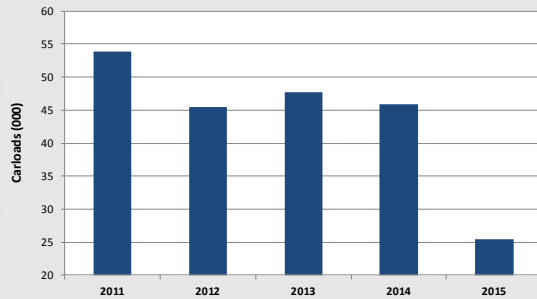
2014 UP Originations vs 5-Year Range



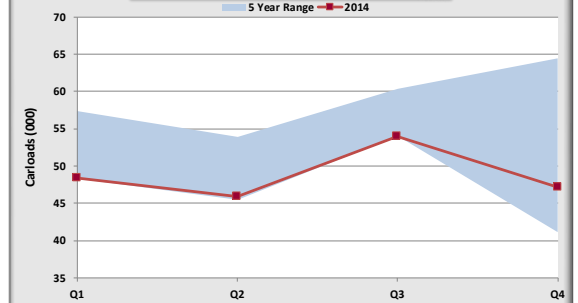
KCS Historical Receipts



KCS Q2 Receipts Comparison



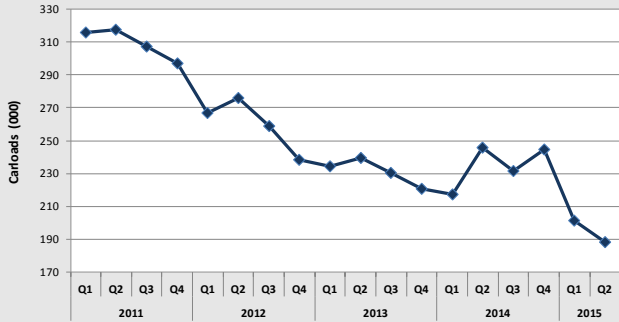
2014 KCS Receipts vs 5-Year Range



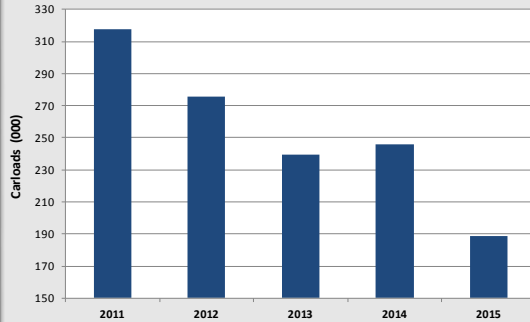
Source Data: AAR, BNSF, UP, KCS

EASTERN RAILROAD COAL CARLOADS DASHBOARD

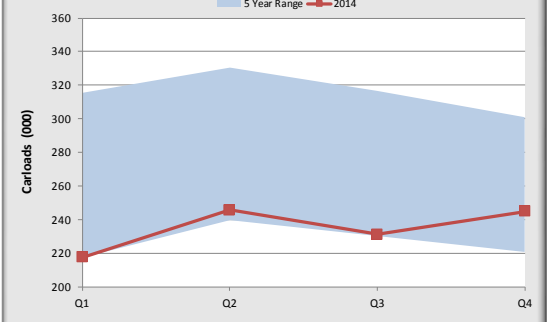
CSX Historical Originations



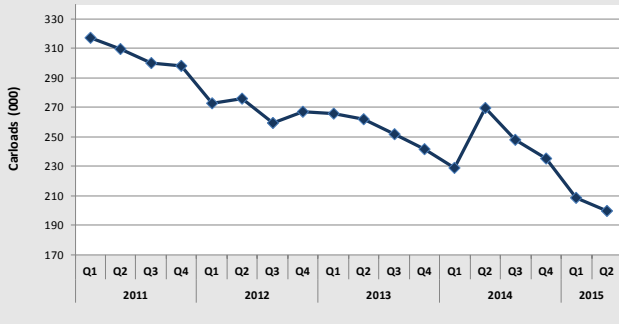
CSX Q2 Originations Comparison



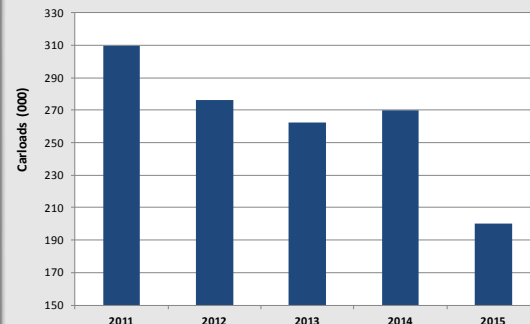
2014 CSX Originations vs 5-Year Range



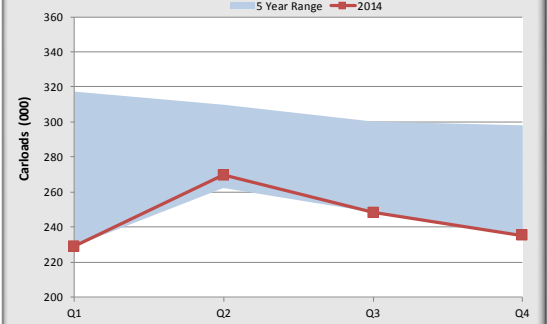
NS Historical Originations



NS Q2 Originations Comparison



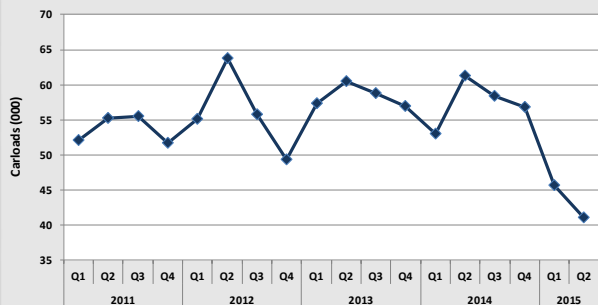
2014 NS Originations vs 5-Year Range



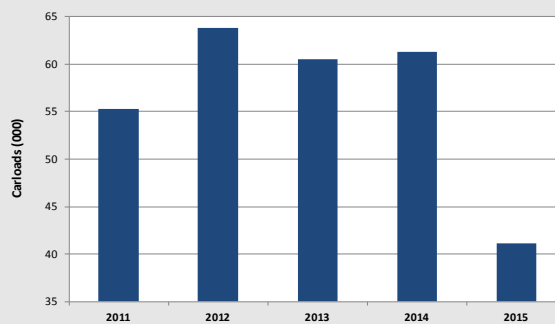
Source data: AAR, CSX, NS

CANADIAN RAILROAD COAL CARLOADS DASHBOARD

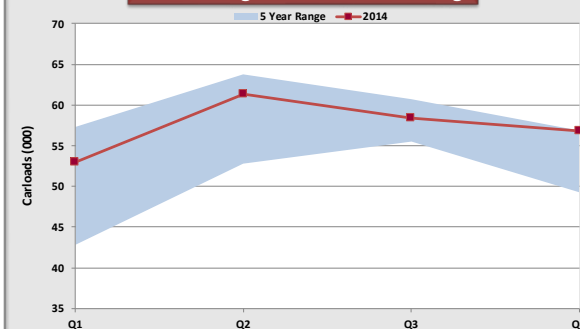
CN Historical Originations



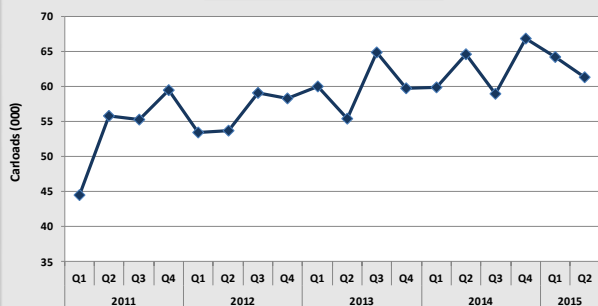
CN Q2 Originations Comparison



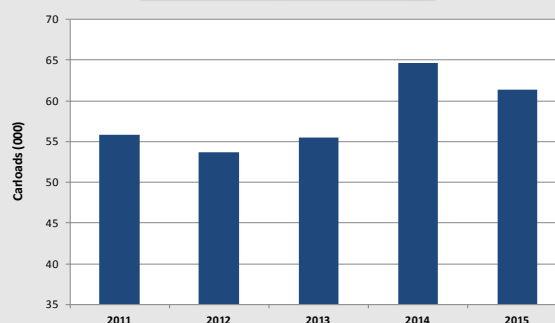
2014 CN Originations vs 5-Year Range



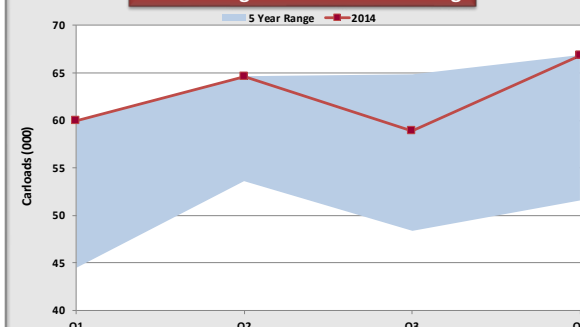
CP Historical Originations



CP Q2 Originations Comparison



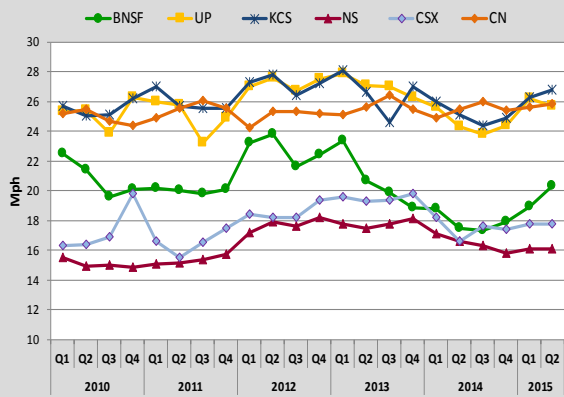
2014 CP Originations vs 5-Year Range



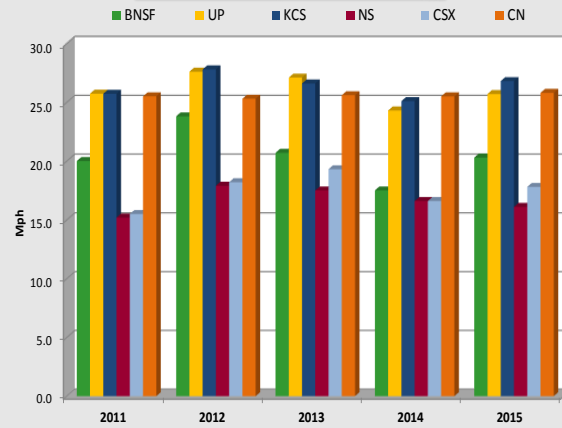
Source Data: AAR, CN, CP

RAILROAD COAL TRAIN SPEED DASHBOARD

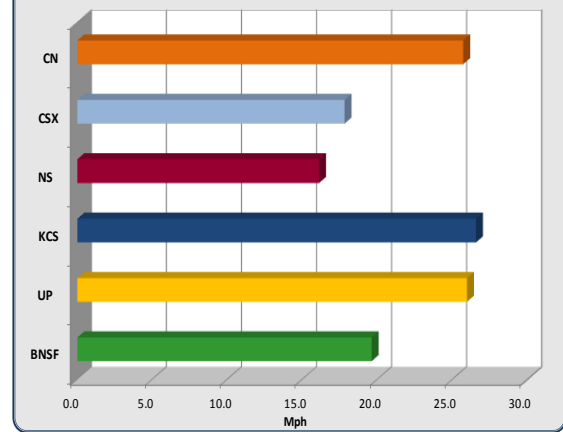
Historical Coal Train Speed



Q2 Coal Train Speed Comparison



2015 Average Coal Train Speeds



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