

The Barge Industry: Are We At Major Inflection Point?

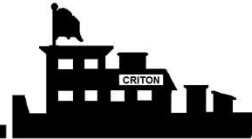
Sandor Toth

President
Criton Corporation



Waterways Council Inc.
Washington, DC
February 13, 2018

Criton Corp: What We Do



RIVER TRANSPORT NEWS

- Data Provider
- Commissioned Consulting Work
 - Market Analysis
 - Financial Due Diligence
 - Forecasting
- Policy Analysis



Prospects for the Dry Cargo Inland Barge Market through 2022

Photo by Dan O'Leary

Prepared by

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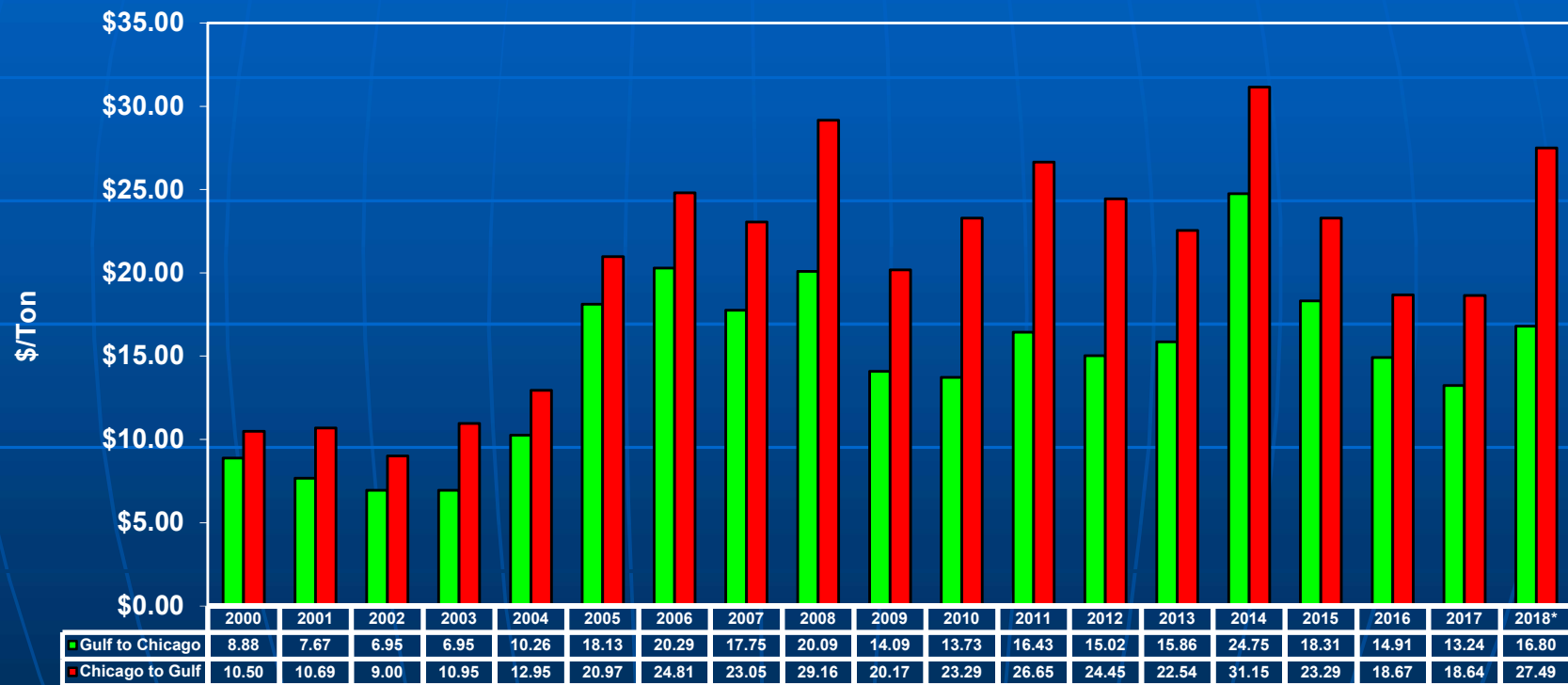
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The Inland River System

U.S. Inland & Intracoastal Waterways



Annual Average Dry Spot Rates



Barge Industry Inflection Point 2004-2006

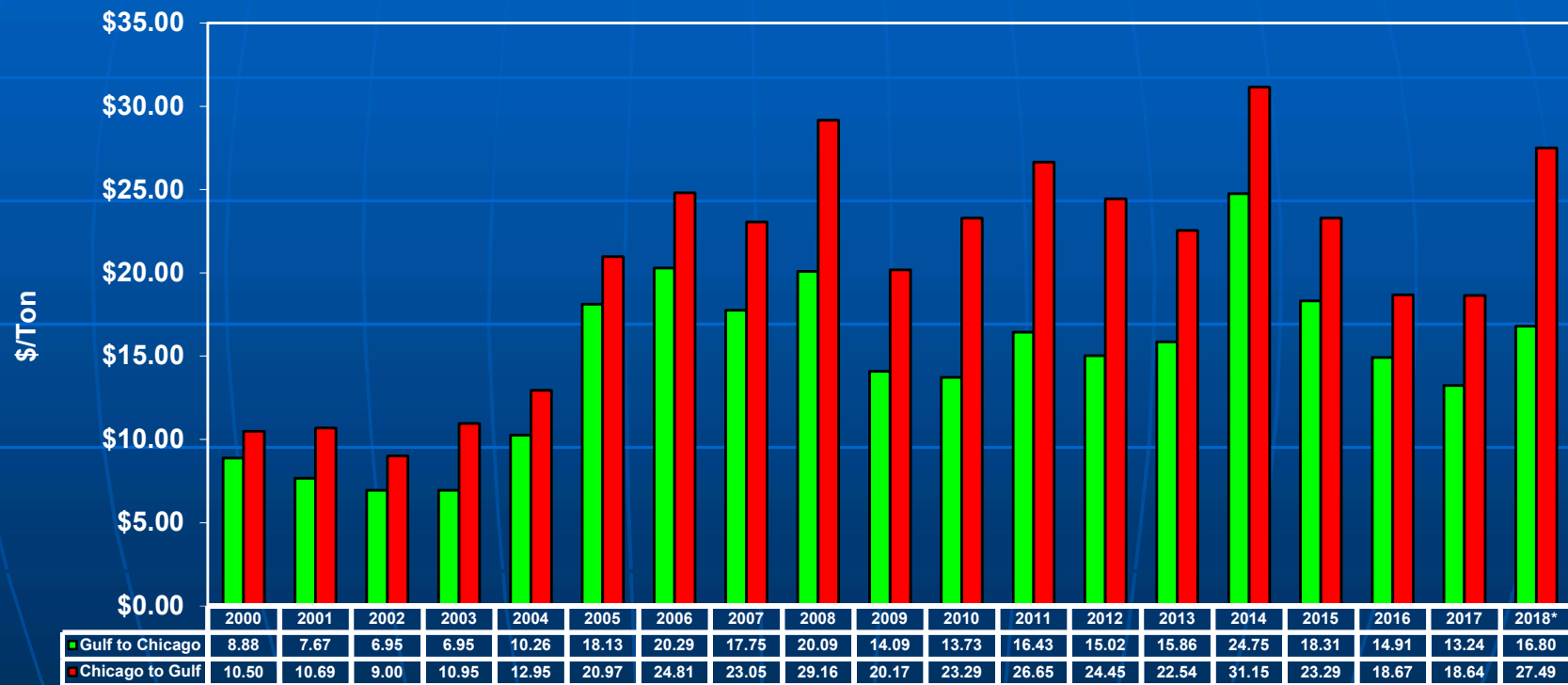
- Permanent Shift in Pricing
- Steel Industry Recovery
 - High Scrap Prices
 - Surging Raw Material Imports
 - High Finished Steel Prices
 - Dramatic Increase in New Barge Pricing
- Permanent Increase in Labor Costs
 - Effects both Towing and Harbor Services
 - Strong Economic Growth
 - Hurricane Katrina

Dry: What's Moving by Barge?

(Millions of Short Tons - 2017)

Commodity	Total	Export	Import	Trade Share (%)
Coal	107.4	6.8	**	6.3
Petroleum Coke	15.2	10.3	**	67.8
Farm Products				
Corn	32.7	31.2	**	95.4
Soybeans	34.8	33.3	**	95.7
Wheat	4.7	4.3	**	91.5
Other Grains	2.4	2.2	**	91.7
Feed/Meal	12.3	11.6	**	94.3
Subtotal	86.9	82.6	**	95.1
Fertilizer	17.8	**	8.7	48.9
Finished Steel	6.8	**	2.0	29.4
Semi-Finished Steel	3.8	**	3.5	92.1
Pig/DRI/Scrap	12.4	**	6.1	49.2
Ferroalloys	1.3	**	1.2	92.3
Iron Ore	0.7	0.1	0.6	100.0
Alum. Ore	1.6	**	1.6	100.0
Limestone	25.2	**	**	**
Sand/Gravel	33.9	**	**	**
Cement	8.4	**	0.2	2.4
Salt	6.3	**	0.3	4.8
Gypsum	2.3	**	**	**
Total	345.8	99.7	24.2	35.8

Annual Average Dry Spot Rates

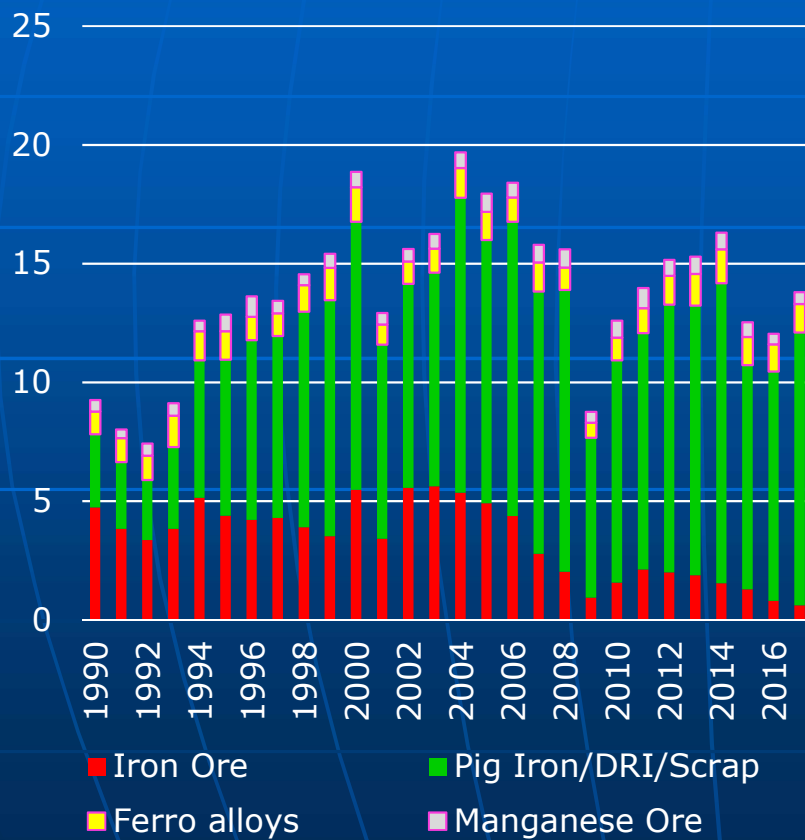


2018 Dry Market Developments

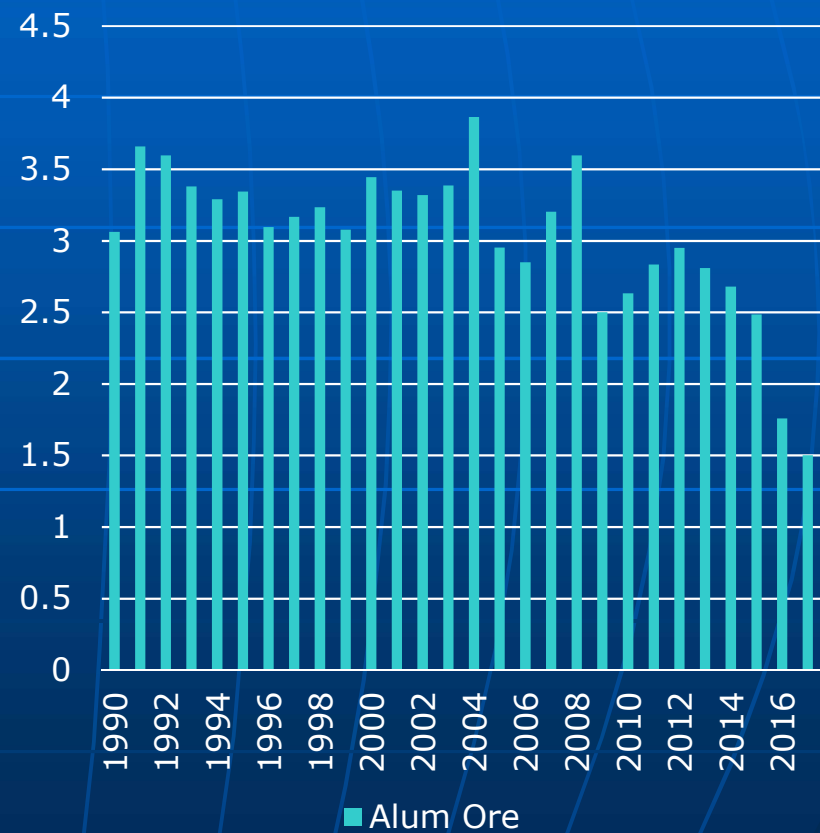
- 1st Half Flooding
 - Supply Restriction
 - Cost Increases
- S. American Harvest Losses (Spring)
- Chinese Tariffs on Soybeans, DDGS
- U.S. Tariffs on Steel, Aluminum
- General Strength in Steel Industry
 - Higher Scrap Prices
 - Higher Finished Steel Prices
 - Higher Barge Demand
- Increase in Coal Exports

Steel and Aluminum Sectors

Steel Sector



Aluminum Ore



Steel and Aluminum

■ JSW Steel

- Acquires Former W-P Mill
 - Restart Existing EAF
 - Add New EAF
 - 3+ Million tons Add'l Raw Material Demand

■ Big River Steel

- New Steel Mill Startup 2017
- Announces Major Expansion
 - Doubling Melt Shop to 3.2 million tons per year capacity

■ Nucor

- Announced Doubling of Capacity of Gallatin, KY Mill
 - Add'l 1.5 million tons per year of raw material demand.

■ Alcoa

- Restarting 3 of 5 potlines at Warrick

■ Magnitude 7 Metals

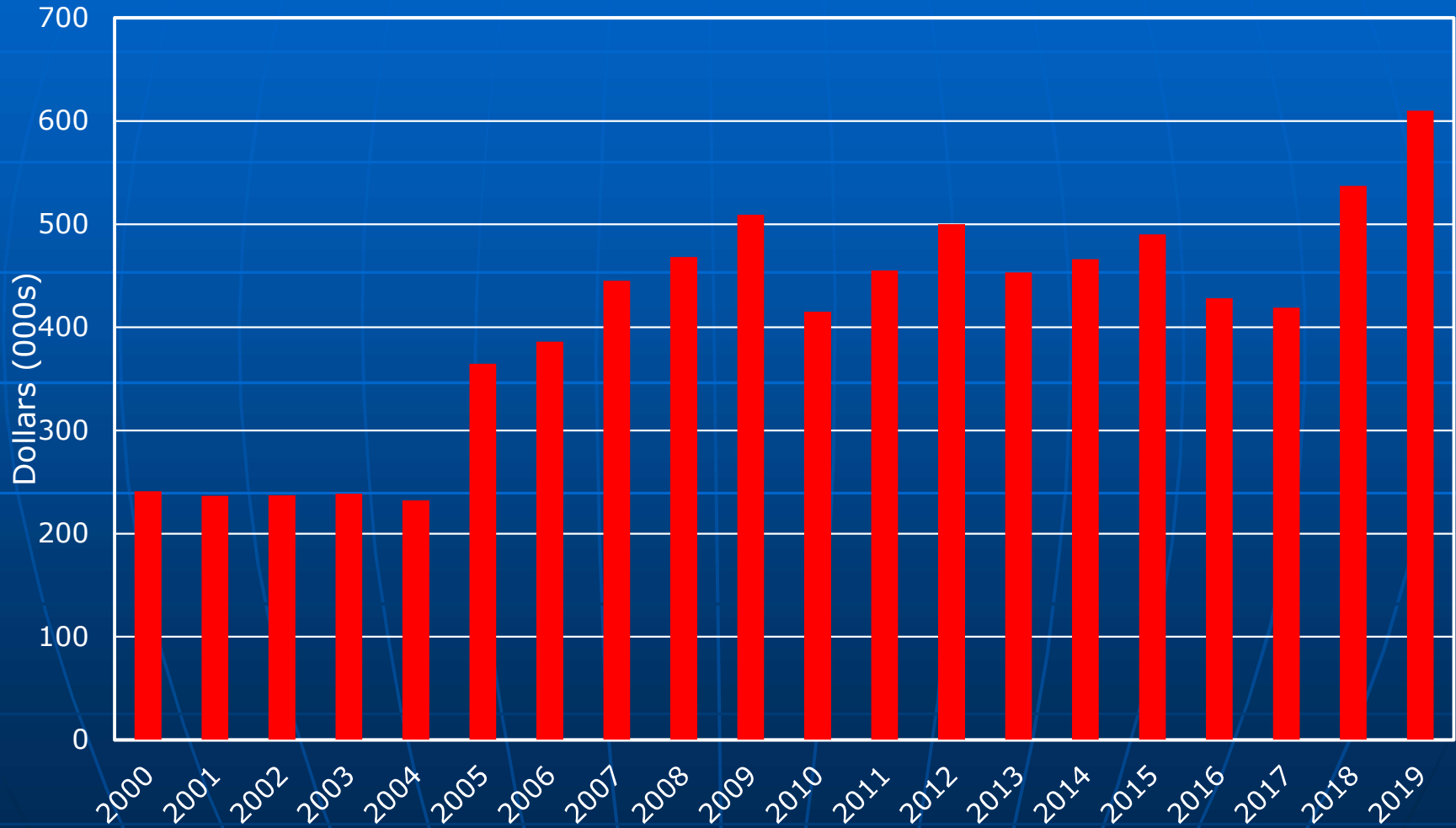
- Acquires Idled New Madrid Primary Aluminum Plant from Noranda
- Restarting 2 of 3 Potlines

■ Century Aluminum

- Maintaining Sebree Plant at 100 Percent
- Boosting Hawesville, KY Plant from 40% to 100%

Dry Cargo Hull Pricing

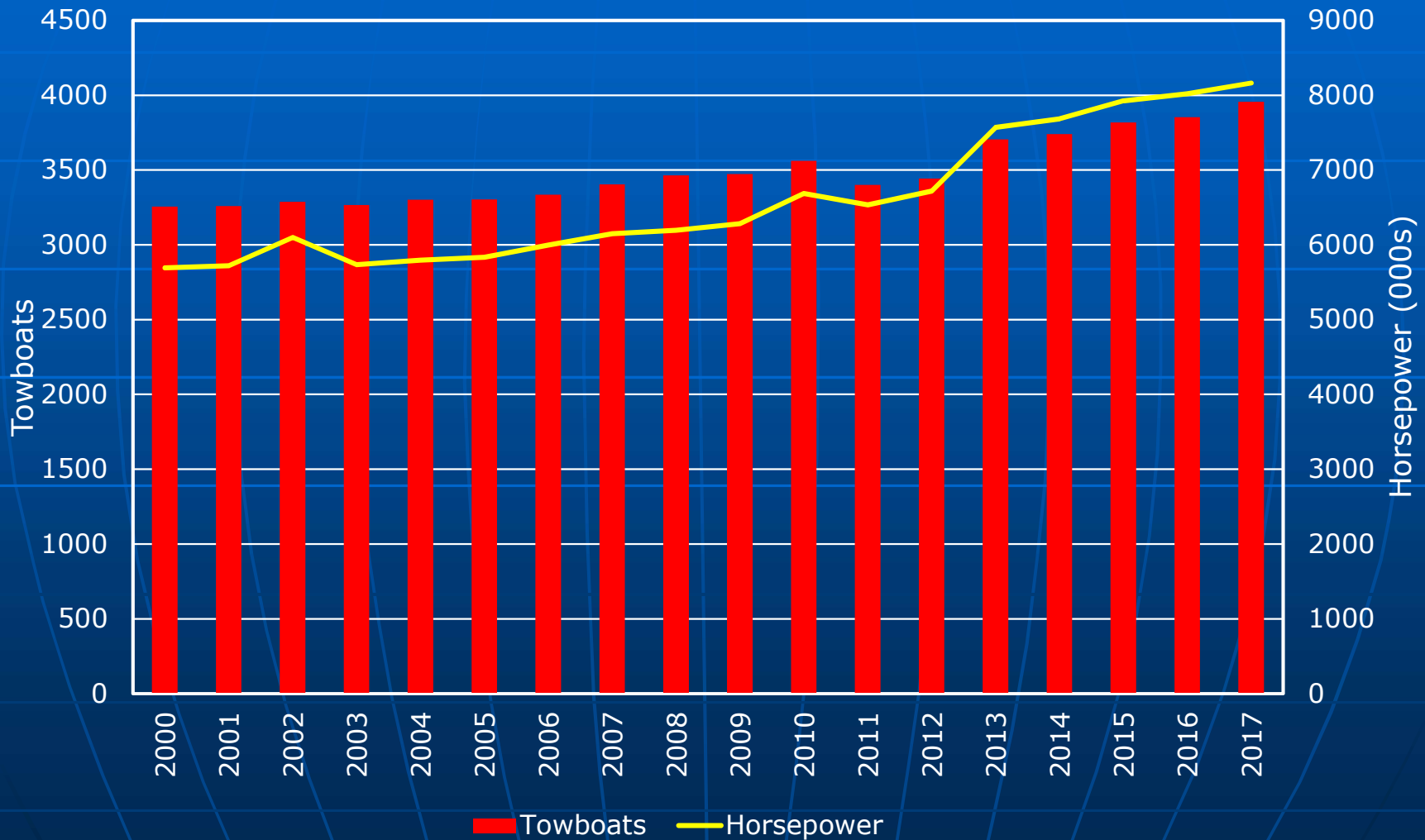
(Excludes Covers)



Other Cost Pressures Going Forward

- Towing Costs
 - Subchapter M
 - Added Costs For Compliance
 - Numbers Leaving the Fleet?
 - Tier 4 Diesel Emission Limits
 - Dramatic Increase In New Towboat Costs

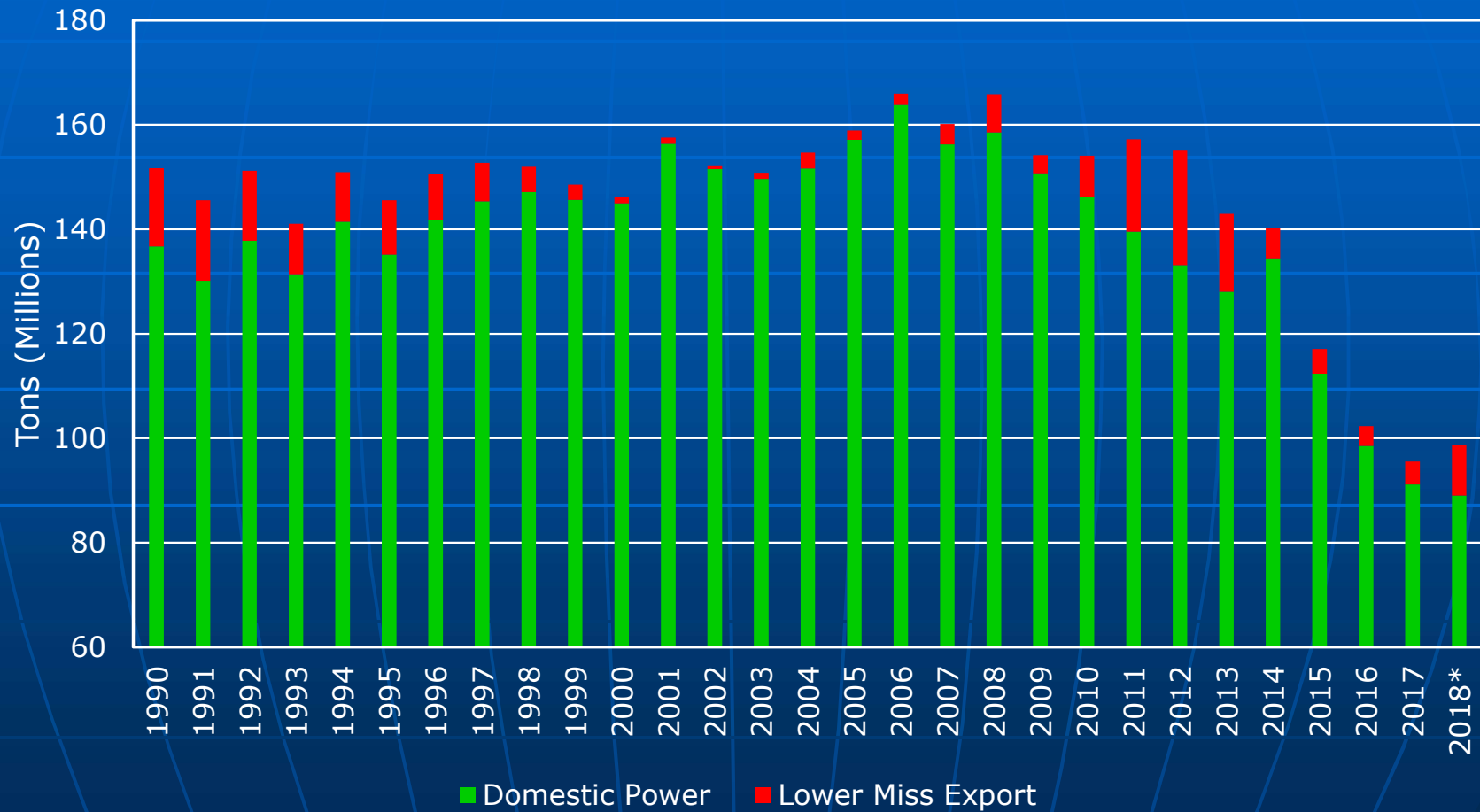
Mississippi River/Gulf Coast Towboat Fleet



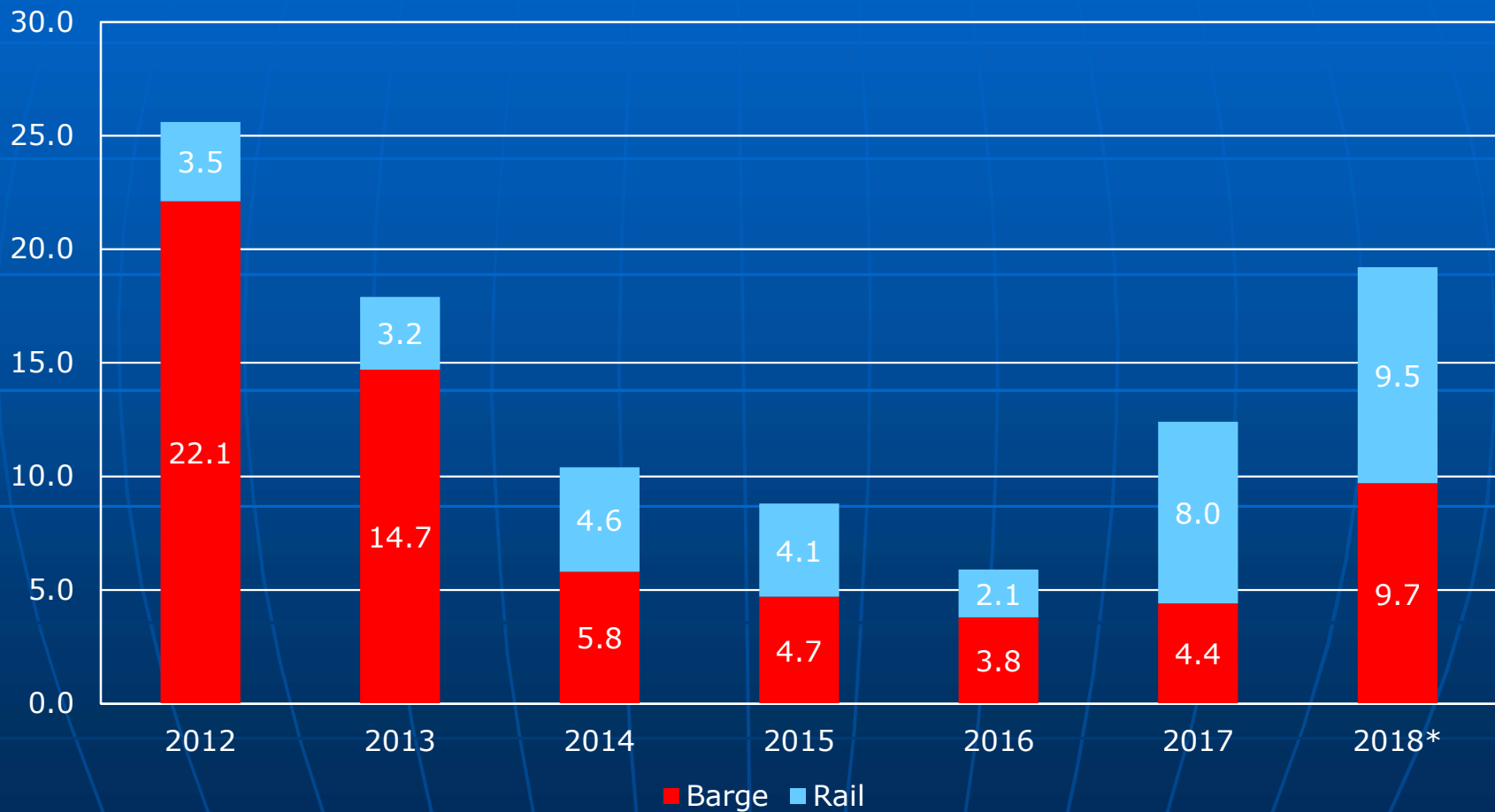
Covered Hopper Supply and Demand



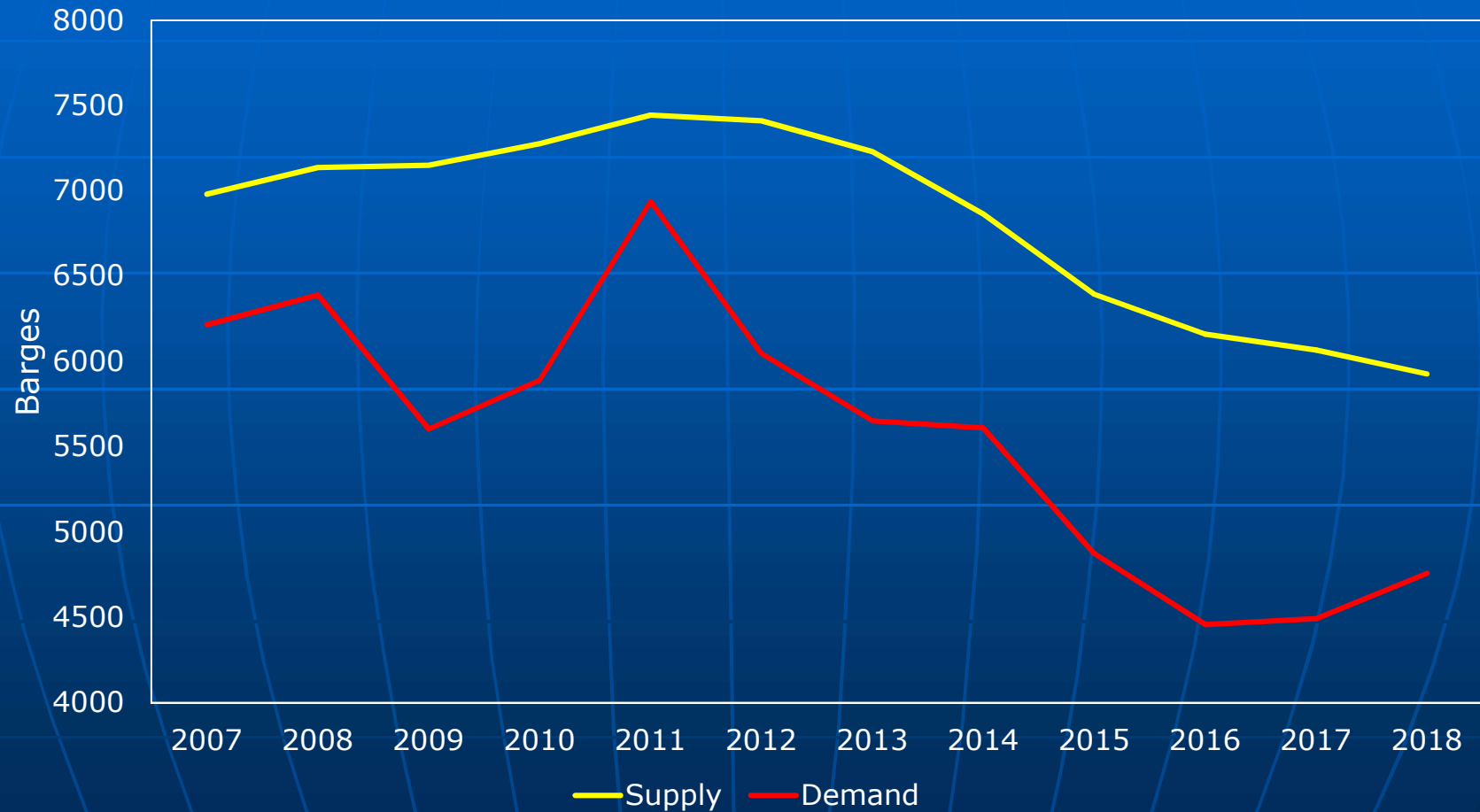
Barged Shipments of Coal



Lower Mississippi Coal Exports By Mode



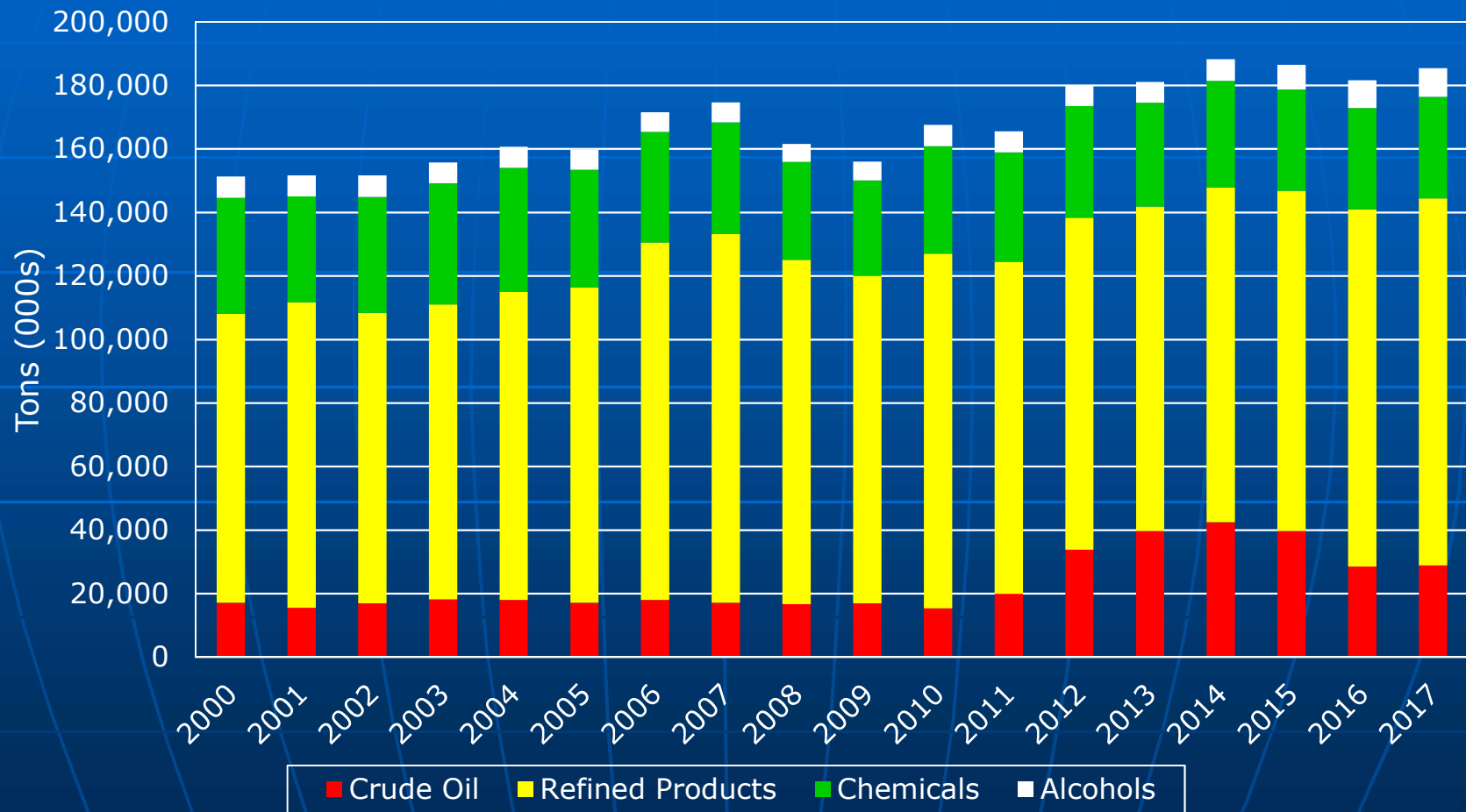
Open Hopper Supply/Demand



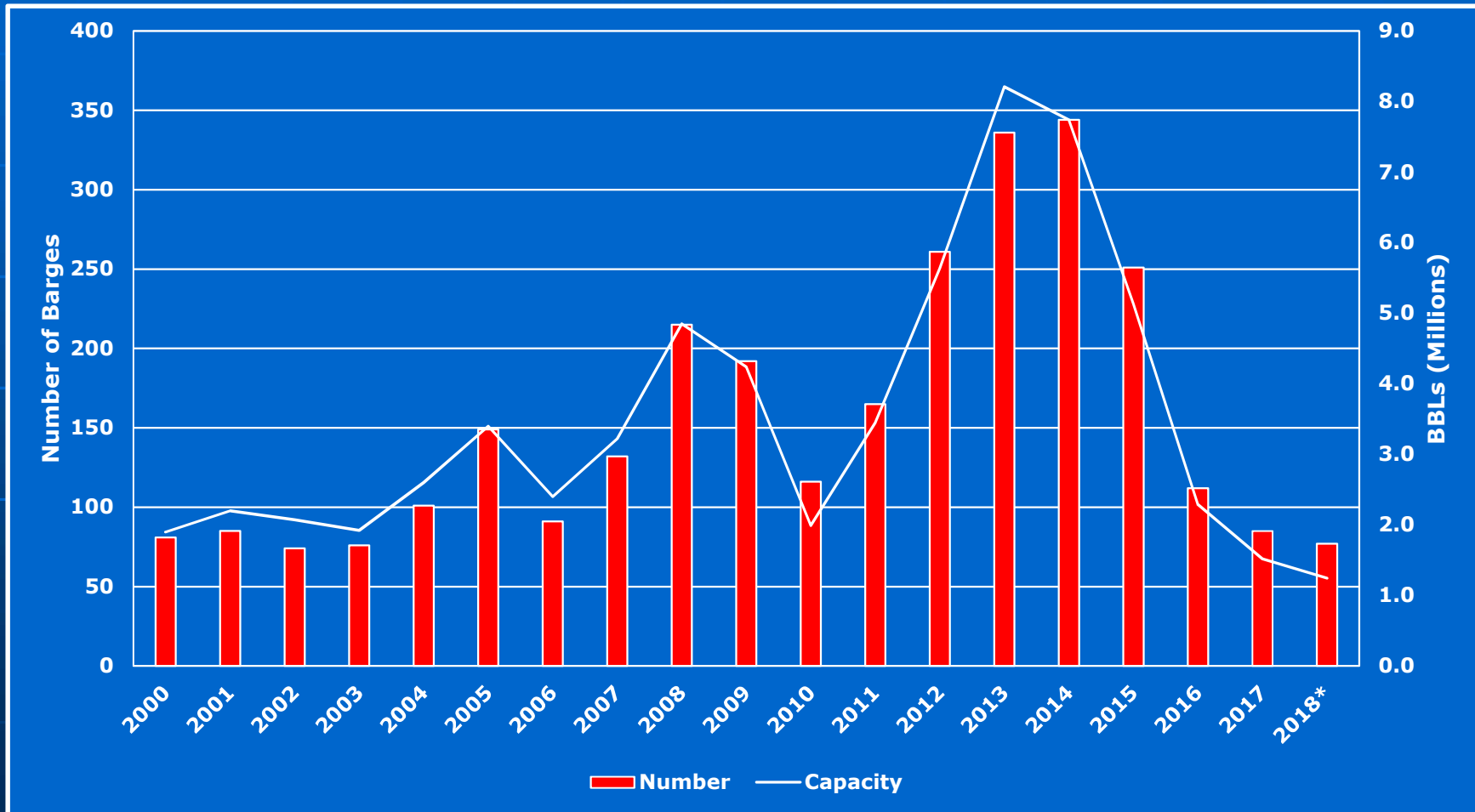
Coal Challenges Going Forward

- Domestic Demand Will Continue to Decline
 - More Plant Closures Looming
 - Also Will Adversely Affect Limestone
 - Partial Offset: Gypsum (Covered)
- Coal Export Situation Uncertain
 - Good Volume at Noncompensatory Rates?

MS River/Gulf Coast Liquids Shipments



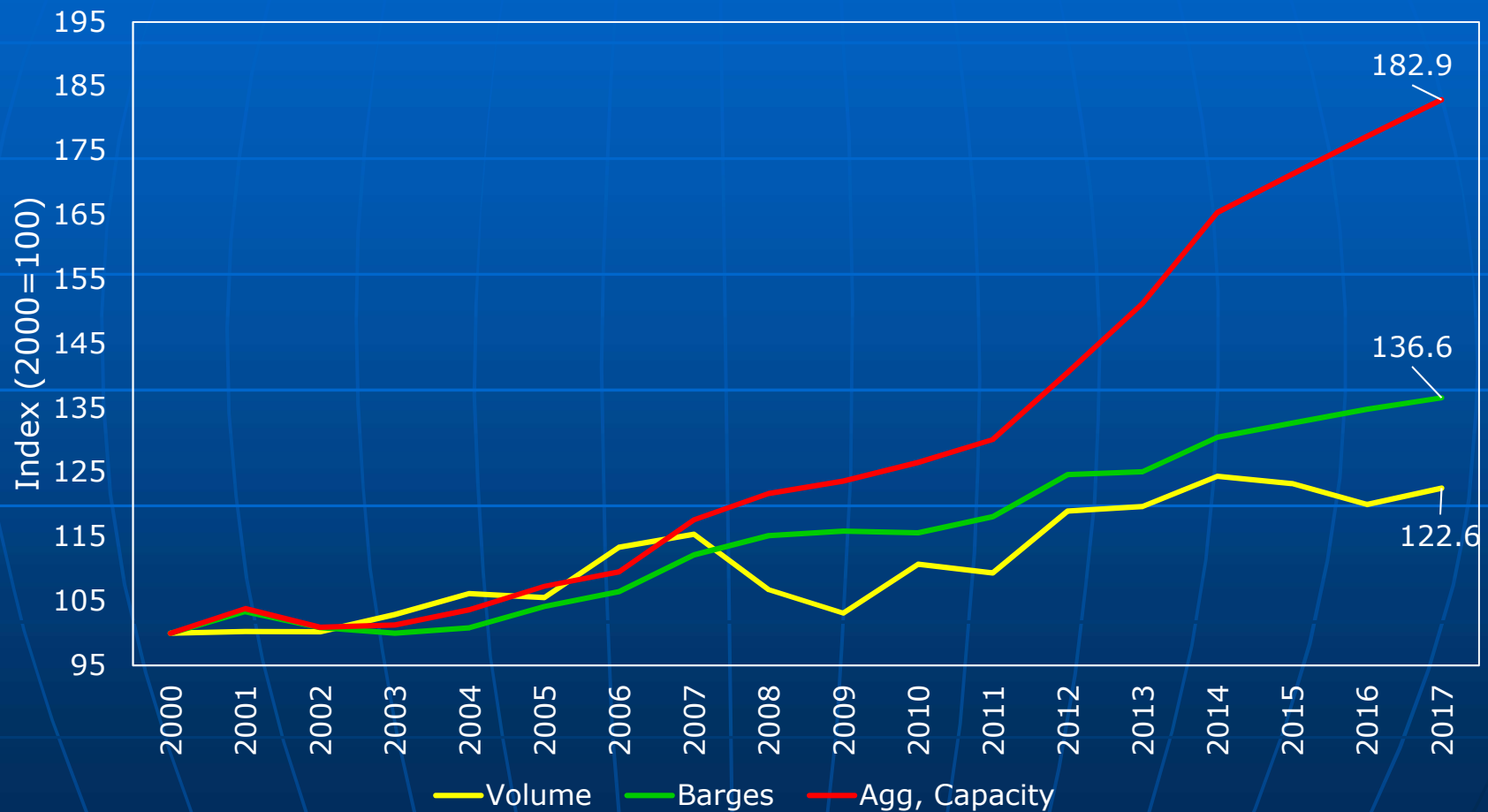
Recent History of New Tank Barge Construction



MS River/GC Tank Barge Fleet



Changes in Tank Fleet, Capacity and Volume



Issues Facing Liquids Sector

- Brief(?) Small Spike in Midwest Crude Volumes
- The Petrochemical Renaissance
 - 10K Segment
 - Primarily Export/Natural Gas Oriented
- Ethanol Segment Adds to Volatility
 - Global Sugar Prices – Brazil
 - Chinese Domestic Mandates
- Pipeline Developments
 - Capline Reversal
 - Seahorse, Swordfish, Enbridge Line 3, Bayou Bridge
- Markets Remain Generally Weak