2015 Wisconsin Crop Management Conference



Transportation: Rail, Barge, & Truck

Dan Mack: vice president transportation and terminal operations – CHS Inc.

DISCUSSION TOPICS

- Rail
 - Macro rail industry view
 - Key longer term drivers for rail
 - Items to watch
- Barge
- Truck





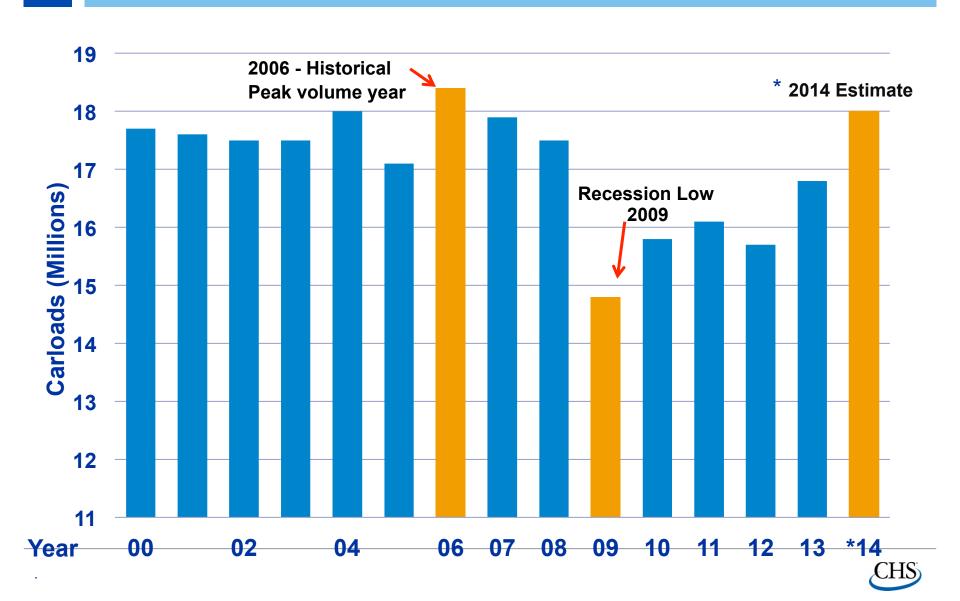






HISTORICAL US CARLOAD VOLUME

(LESS INTERMODAL UNITS)



US AND CANADIAN 2014 YEAR OVER YEAR RAIL VOLUME GROWTH



Carload YTD: +3.69% Intermodal YTD: +0%

Total YTD: +1.9%

Petroleum & sand: +17.9%



Carload YTD: +6.7%

Intermodal YTD: +11.5%

Total YTD: +8.4%

Grain: +22.6%



How tomorrow move

Carload YTD: +6.1%

Intermodal YTD: +5.7%

Total YTD: +6.0%

Petroleum: +60.4



Carload YTD: +4.4%

Intermodal YTD: +5.8%

Total YTD: +5.0%

Grain: +19.6



Carload YTD: +1.2%

Intermodal YTD: -3.0%

Total YTD: -0.4%

Sand: +77.2



Carload YTD: +5.8%

Intermodal YTD: +7.9%

Total YTD: +6.7%

Grain: +25.7



Carload YTD: +1.8ne line, infinite possibilities

Intermodal YTD: +7.7%

Total YTD: +4.7%

Petroleum: +30.6%

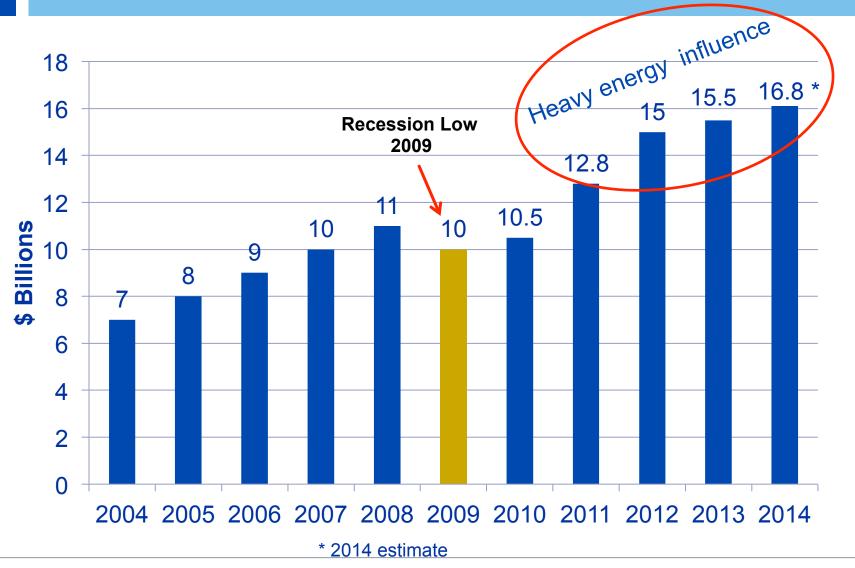
All Class 1's YTD: Carload: +4.5% (+ 1.1 million cars)

Intermodal: +5.2% (+ 1 million units)

Total: +4.8% (+2.1 million cars/units)



CLASS 1 RAILROAD ANNUAL CAPITAL INVESTMENT (\$ BILLIONS)



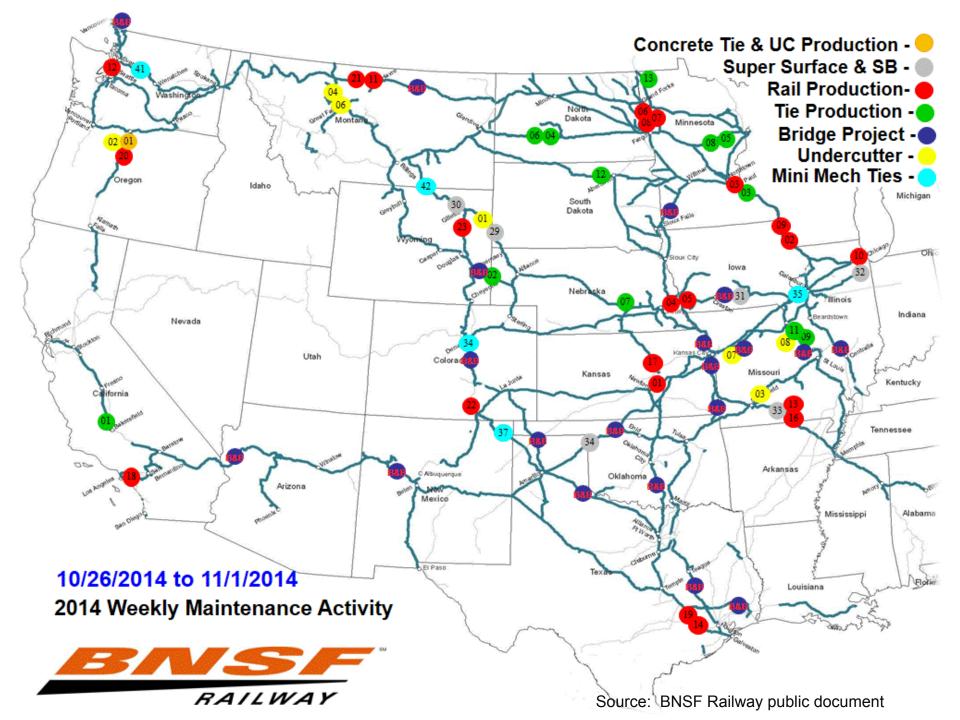


KEY DRIVERS OF CURRENT & FUTURE RAIL CHALLENGES





- 1) Demand Growth & Mix
- 2) Infrastructure expansion
- 3) Resources
- 4) Unpredictable events
- 5) Private rail car challenges



CURRENT RAIL SERVICE SITUATION

- Overall, service has improved over the past few months, however, expectation is for some continued variability in service and logistics
 - Market circumstances have also changed significantly
- Resource deployment is improving with strong hiring and locomotive purchasing initiatives, but more yet to be completed
- Significant incremental infrastructure has been put to use.
- Cycle times are improving; but still not back to normal units, privates, etc.



WHAT TO KEEP YOUR EYE ON IN 2015

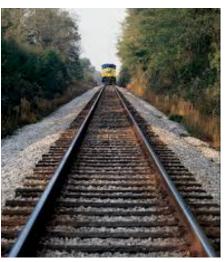
- Service volatility Units vs. singles
- Rail economics
 - Rates
 - Capacity valuation volatility
 - Accessorial charges
- Chicago gateway
- Rail infrastructure expansion continues into 2015.....
- Rail car availability railroad and private
- Areas of demand growth North is the key barometer
- Shipper/receiver facility development costs
- Canadian rail situation

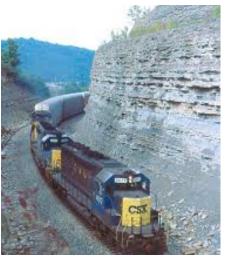


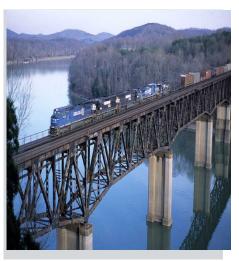
POLICY AND POLITICAL ACTIVITY – NORTH AMERICA

- ☐ Federal and state legislator engagement
- **☐** Surface Transportation Board
- ☐ Industry association engagement
- ☐ Canadian government











WHAT IS GOING ON WITH THE RIVER?

 Recent awakening that the river system is vital to a robust US economy

- Investment in the river system
 - Historical challenges of investment in infrastructure
 - Barge user fee/fuel use tax increase of \$.09/gallon

Lock & dam work



TRUCKING: TIGHT U.S. TRANSPORTATION CAPACITY

- Underinvestment during recession
- More than 10% of workforce left industry (2008 2012)
- National shortage of transportation employees at over 125,000 and growing
- Changing regulatory climate
 - HOS rules adding to capacity constraints
 - Potential to weed out 5%-10% of labor force









SUPPLY CHAIN TRENDS

- Fundamental shifts in supply chains
- Infrastructure not keeping up
- Creating logistics imbalances and increased risk











DEMAND GROWTH: RETURN OF U.S. MANUFACTURING

- U.S. Industrial Production Growth
 - 4.7% in 2014
 - 2-3% in 2012-2013
- U.S. Manufacturing Activity at Three-Year High
- Global manufacturing also shifting to Mexico









CHANGING AGRICULTURAL LOGISTICS

Supply chains increasingly truck dependent

- Rail challenges
- Pipeline infrastructure
- Lower pipeline system inventories

Increased demand volatility

- Larger farming equipment; higher yields
- Shorter, more intense harvest seasons
- Concurrent with peak logistics season









MANAGING SUPPLY CHAIN RISK

- Growing importance of what is done <u>before</u> the season
- Emphasis on planning, forecasting, and risk management
- Must look at all aspects of supply chain: supply, inventory, transportation
- Develop partnerships . . . before you need them
- Review operations and business practices
- Local and producer inventory investments critical

HEEDING OUR OWN ADVICE...

- Capital investments
 - Transportation assets
 - Grain, fertilizer and energy terminals and storage
- Investments in human resources
 - Growing focus on logistics management









