





## **Oil Industry Segment Update**





Vice President, Operations and Projects Hess Midstream Partners







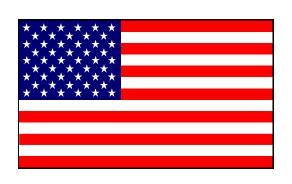


Rail Energy Transportation Advisory Committee
Surface Transportation Board

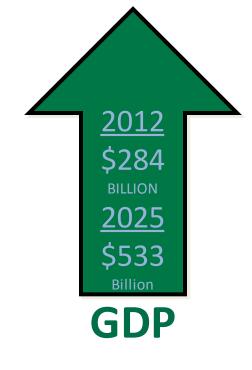
**April 14, 2015** 

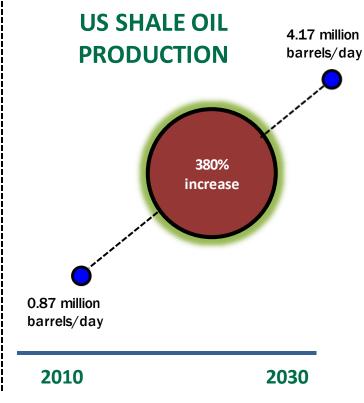
# **Economic Contribution/Growth**

2.5 million jobs are supported by the unconventional development of crude oil fields in 2015, and by 2025 the US GDP estimated to increase by \$533 billion



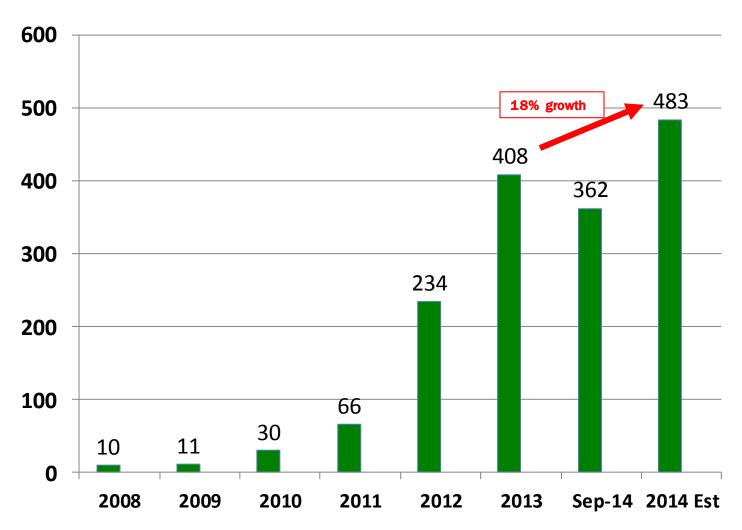
2.5 MILLION J O B S





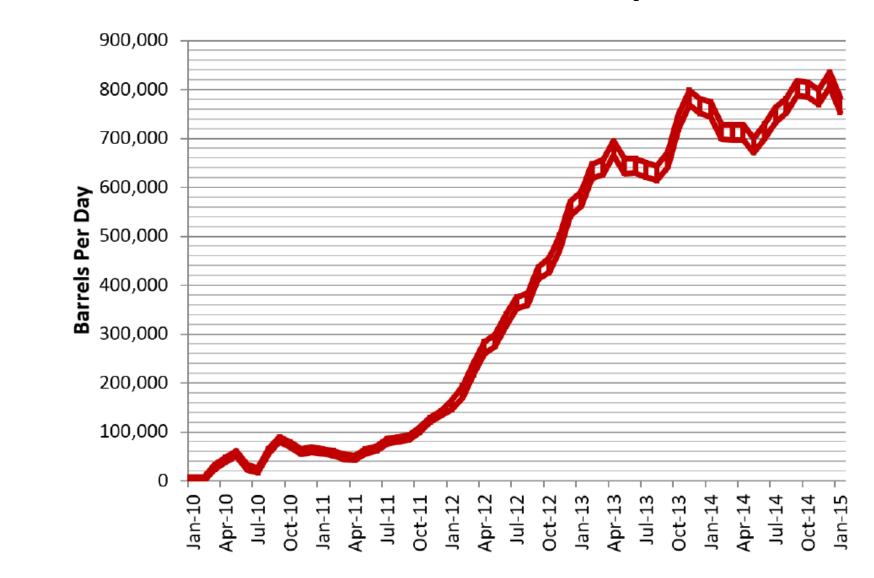
# **Growth of Crude by Rail Carloads**

Originated Carloads on Class I Railroads (1,000's)

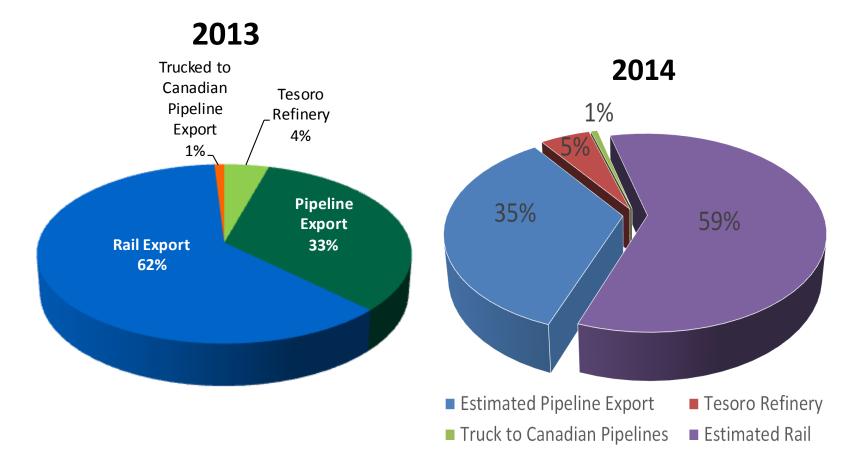


Source: US - Association of American Railroads

## **Estimated North Dakota Rail Export Volumes**



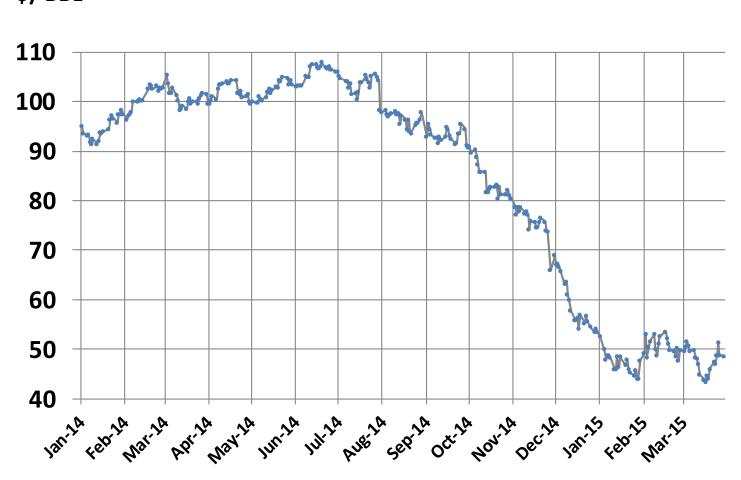
# Williston Basin Crude Oil Transportation



Source: North Dakota Pipeline Authority, January 2014 and February 2015 Updates

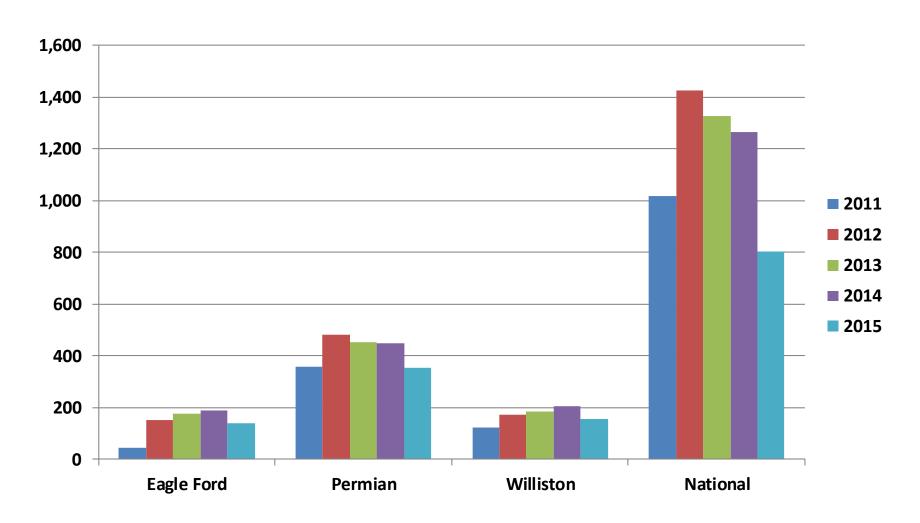
#### **WTI Price Decline**





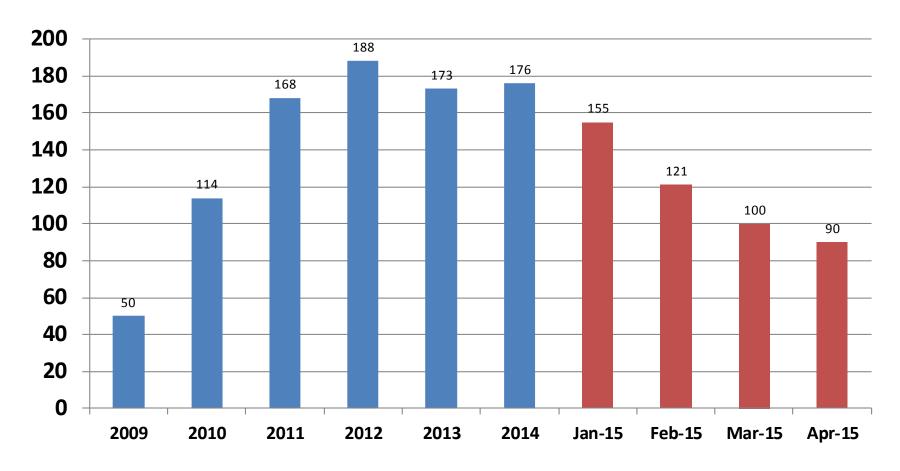
# **US Rig Count**

#### February Year-to-Year Comparison



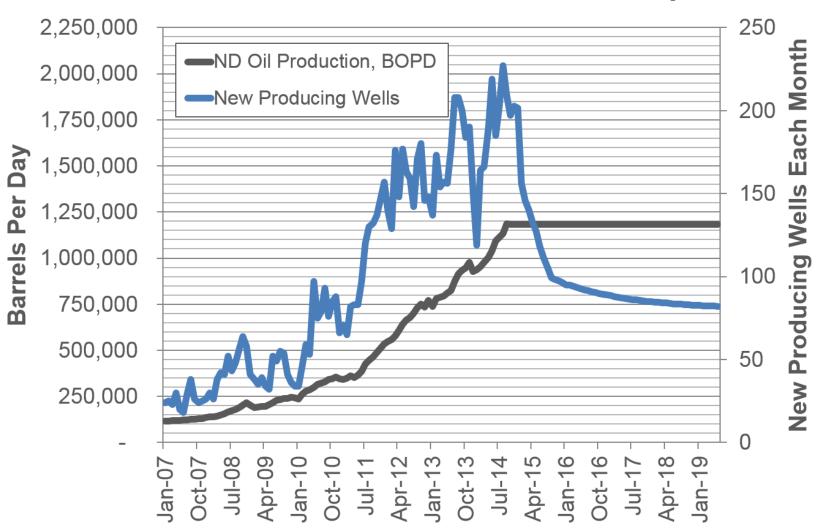
Source: Baker Hughes

# North Dakota Rig Count Are We Approaching the Bottom?



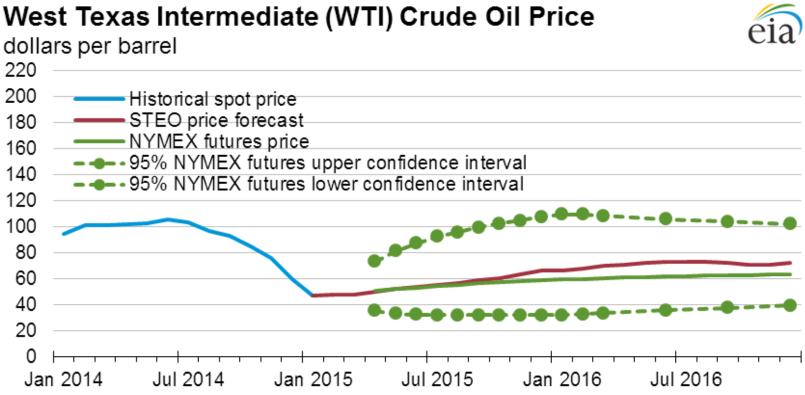
Source: Baker Hughes Annual and Monthly Averages

# **Current Price Environment Impact**



**Source:** North Dakota Pipeline Authority

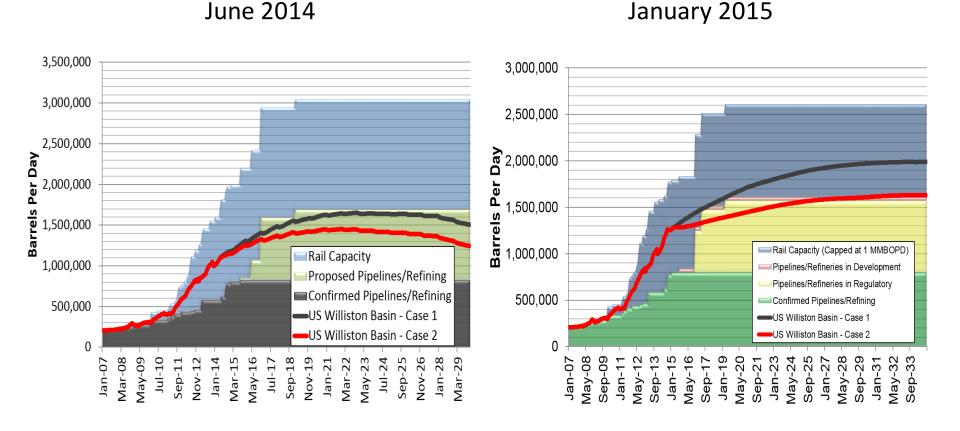
# So Where Are Prices Going?



Note: Confidence interval derived from options market information for the 5 trading days ending Feb. 5, 2015. Intervals not calculated for months with sparse trading in near-the-money options contracts.

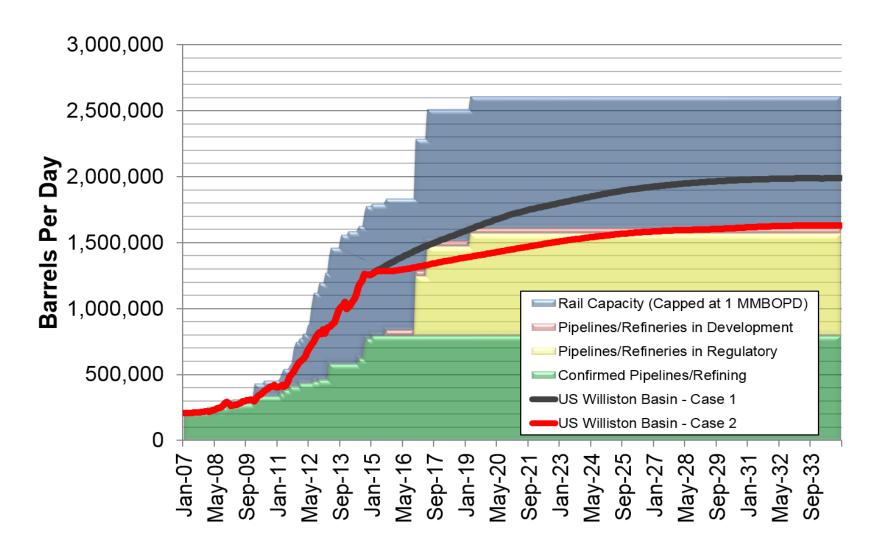
Source: Short-Term Energy Outlook, February 2015.

#### Williston Basin Oil Production & Export Capacity, BOPD



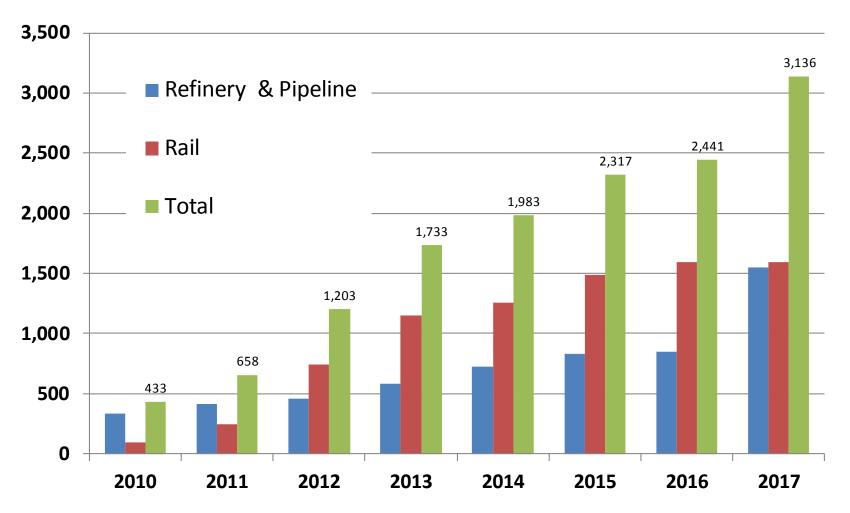
Source: North Dakota Pipeline Authority June 2014 and January 2015

#### Williston Basin Oil Production & Export Capacity, BOPD



# Williston Basin Crude Oil Export Options

(Capacity – Not Market Share)



Rail: Loading terminal capacity/not railroad

#### **Enhanced Rail Tank Car Standards**

#### **Proposed Rule**

- Issued on August 1, 2014
- Applies to trains carrying flammable liquids
- Proposed 3 options for car thickness for new and existing tank cars 2 shell options: 9/16- inch and 1 option: 7/16-inch
- New and existing cars to include jackets, full-height head shields, reconfigured bottom outlet valve handle, reclosing
  pressure relief valve, thermal protection system
- New cars must have top fittings protection; no additional top fittings protection required for existing cars
- Electronically controlled pneumatic brakes required for the Option 1 car
- Retrofit schedule for existing cars is staggered by Packing Group for material being transported beginning in 2017
- Sampling and testing program required
- 3 options for speed restrictions across the entire railroad network
- Additional reporting to assist emergency responders

#### **Issues with Rule**

- Modification timeline is unrealistic
- Proposal failed to account for repair shop ramp up period
- PHMSA's predicted modification rate is too high
- Reduction in tank car capacity = more trains on the tracks, increased use of other transport options or production cutbacks
- Harmonization with Canada's rule

#### **Final Rule Expectations**

- Under review at White House Office of Management & Budget; expected to be issued in May 2015
- Shell Thickness ?
- Enhancements ?
- Retrofit Schedule ?

### **Conclusions**

- All stakeholders are committed to the safe and compliant transport of crude oil by rail
- Unconventional production continues to contribute materially to employment, GDP & energy independence
- Oil has responded quickly to price pressure
- Unconventional production of crude oil is expected to grow slowly into 2Q 2015 then flatten
- Rail alternative will remain an important delivery mode particularly to the east and west coasts
- Marketplace awaits the finalization of the rulemaking