



Oil Industry Segment Update

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**Rail Energy Transportation Advisory Committee
Surface Transportation Board**

April 6, 2017

US Crude Oil Market Environment

- **Global crude oil inventories at high levels** [Source: EIA Weekly Report]
- **Prices remain low and volatile**
 - **Cushing WTI Spot** [Source: EIA Daily Reports]
 - April 4, 2014 = \$101.46
 - April 3, 2015 = \$48.91
 - April 6, 2016 = \$36.82
 - March 27, 2017 = \$47.02
- **US land rig count down 61% from 2014 peak** [Source: Baker Hughes]
- **US production declined (-3.1%) from 3/'15 to 3/'17** [Source: EIA]
- **Saudis overtook U.S. as #1 producer in 2016** [Source: EIA]
- **Current economics favor pipe over rail** [Source: RBN Energy]
- **CBR volumes have declined to below 2012 levels** [Source: AAR]

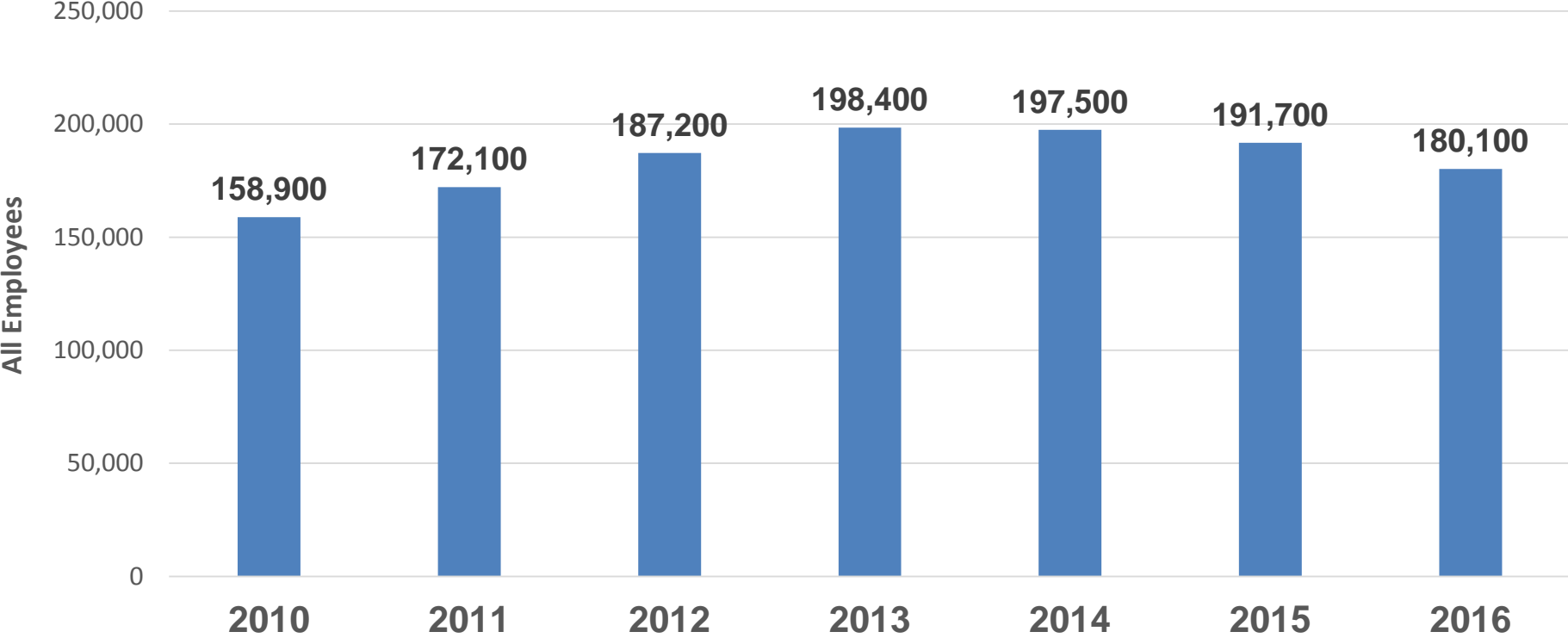
Land Oil Rig Count

Region	2014 Peak (October)	March 2016	March 24 2017	Count '16/'17 Change	% '16/'17 Change	% Change From Peak
US	1,551	392	652	+260	+66%	-58%
Eagleford	202	40	72	+32	+80%	-64%
Permian	36% of US 560	156	48% of US 315	+159	+102%	-44%
Williston	194	33	43	+10	+30%	-78%
All Other	595	163	222	+59	+36%	-63%

Source: Baker Hughes

Oil and Gas Average Annual Employment

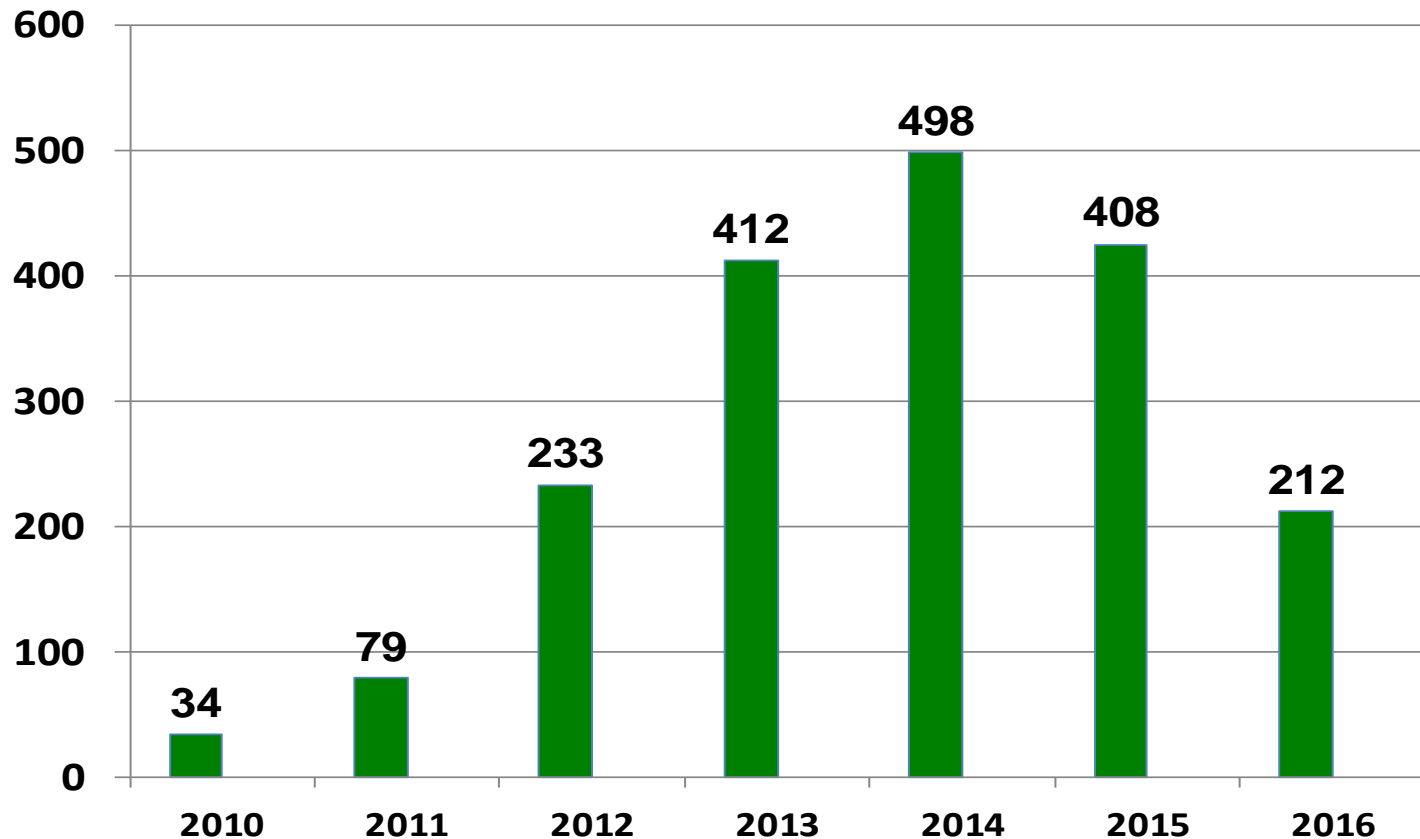
(Seasonally Adjusted)



Source: U.S. Bureau of Labor Statistics

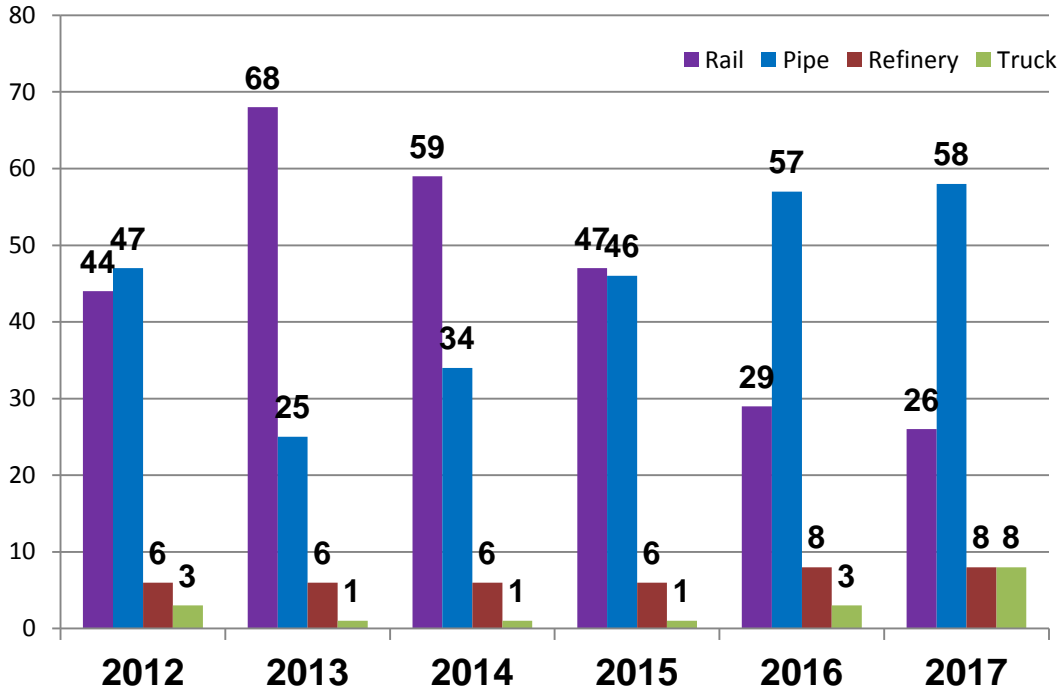
Volume of Crude by Rail Carloads

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

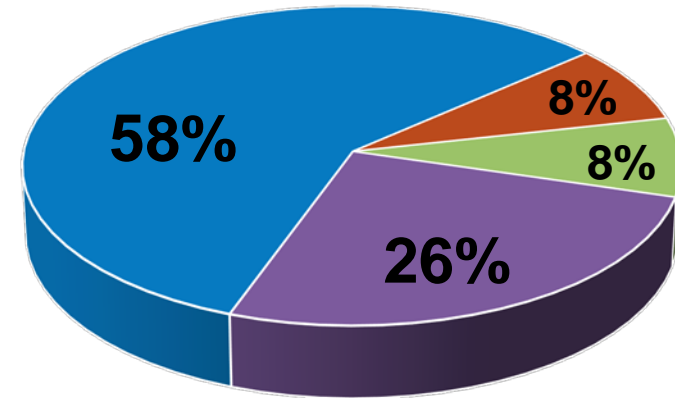


Source: AAR

Williston Basin Crude Oil Modal Share



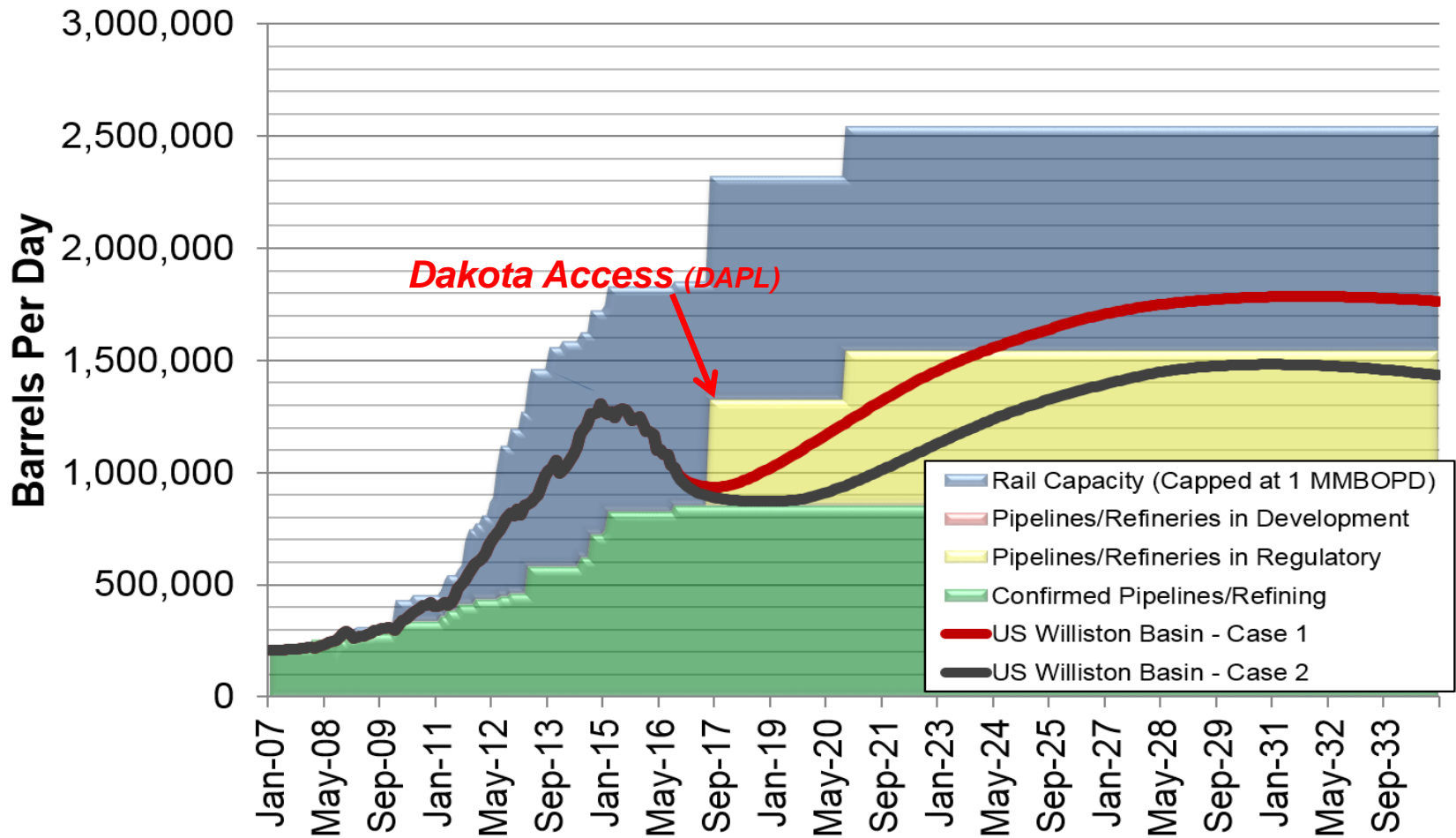
January 2017 Estimated



	Average Production/BOPD	Rail/BOPD est.
1/2013	814,301	553,725
1/2014	1,013,929	730,029
1/2015	1,274,173	739,020
1/2016	1,189,142	475,657
1/2017	980,294 *	254,876 *

- Pipeline Export
- Refined
- Truck to Canadian Pipelines
- Estimated Rail

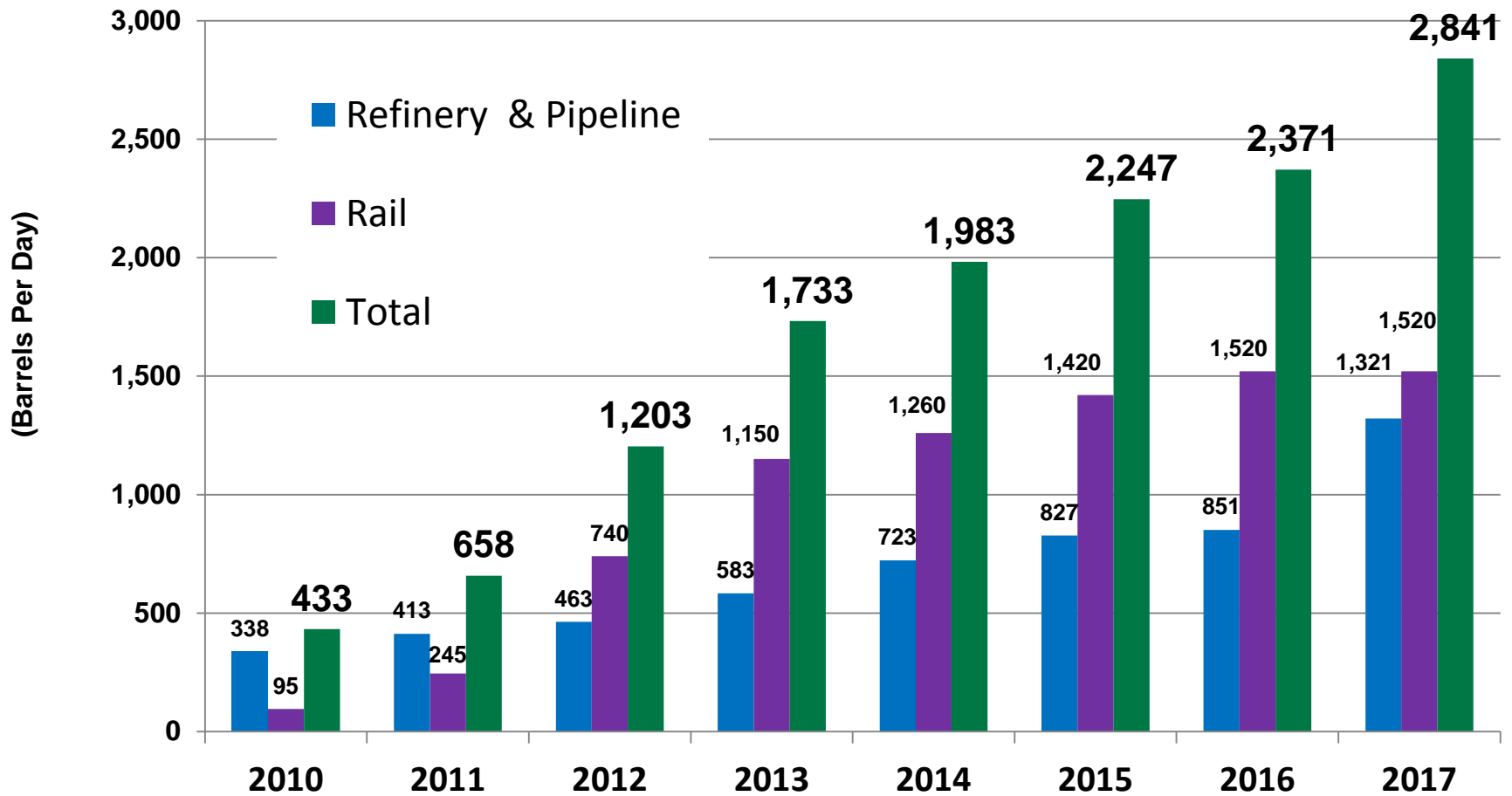
Williston Basin Crude Oil Production and Export Capacity, BOPD



Source: North Dakota Pipeline Authority

Williston Basin Crude Oil Export Options

(Reported Capacity – Not Market Share)



Rail: Loading terminal capacity/not railroad

Closing Thoughts

- **Oil shippers continue the pursuit of zero defects in the safe and compliant shipping of crude oil by rail**
- **Marketplace continues adapting to the effects of high global inventories and instability at low price levels**
- **US unconventional oil producers continue responding to market realities with an efficiency/productivity focus**
- **US crude oil production has declined since 2015 but is gradually recovering**
- **The most rapid production growth is in the Permian**
- **Surplus capacity remains in the crude-by-rail marketplace**
- **Additional pipeline capacity is coming on line**