



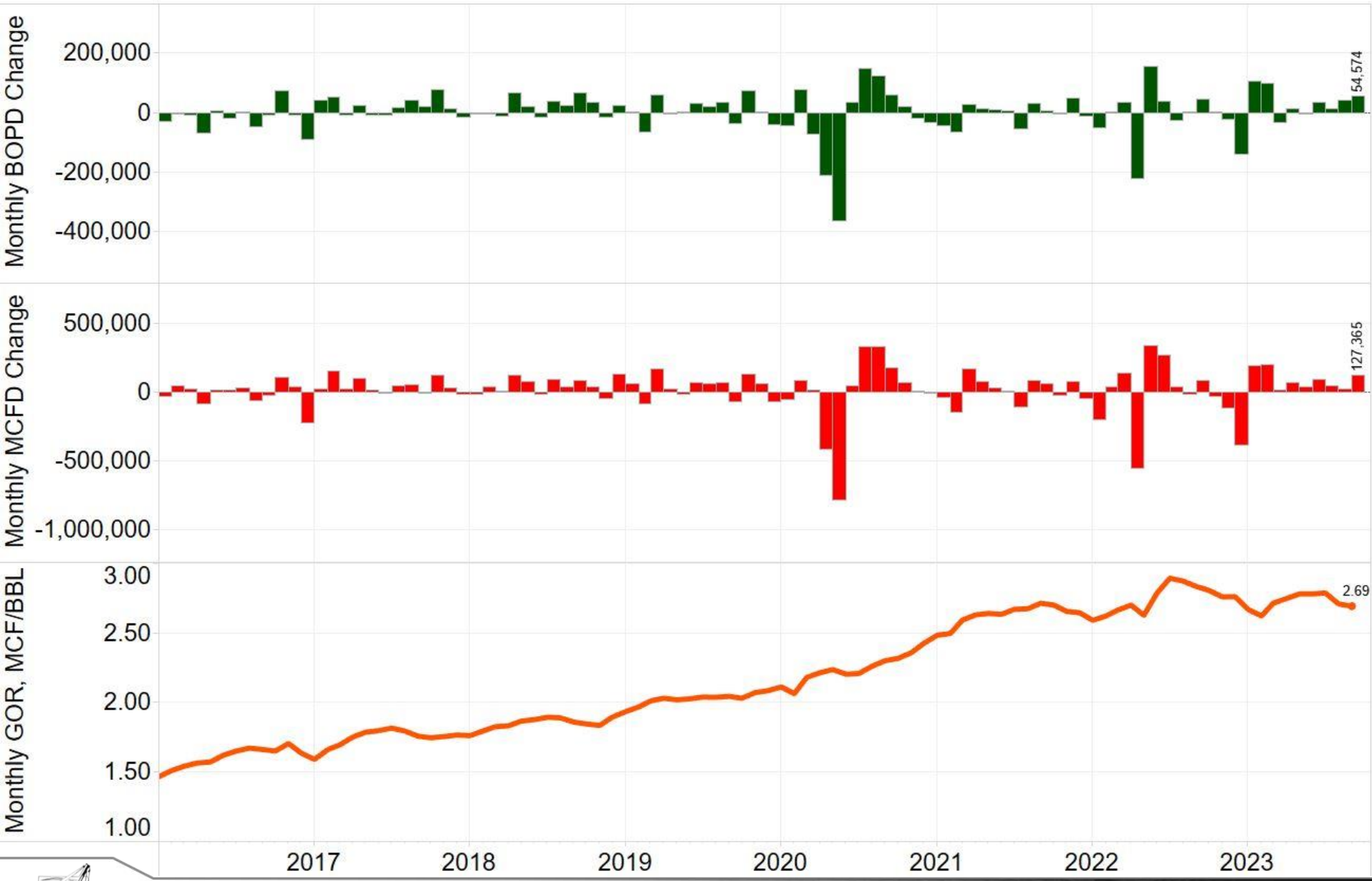
November 2023 Monthly Update
North Dakota Pipeline Authority
Justin J. Kringstad
November 14, 2023

US Williston Basin Oil Production - 2023

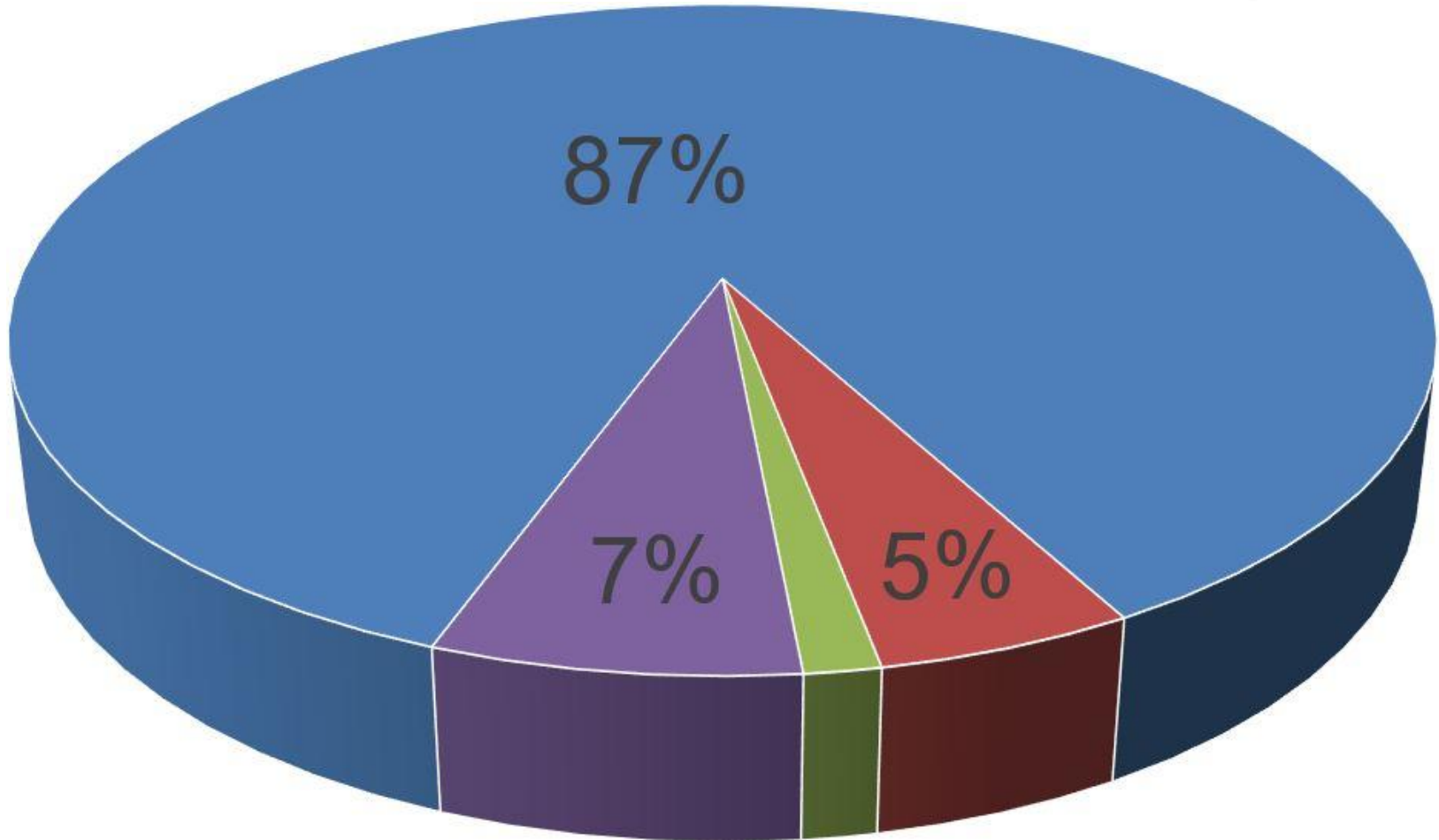
| MONTH | ND | Eastern MT* | SD | TOTAL |
|--------------|-----------|--------------------|-----------|--------------|
| January | 1,062,880 | 62,094 | 2,610 | 1,127,584 |
| February | 1,159,036 | 63,536 | 2,475 | 1,225,047 |
| March | 1,124,897 | 64,580 | 2,652 | 1,192,129 |
| April | 1,135,840 | 61,897 | 2,557 | 1,200,294 |
| May | 1,135,761 | 60,760 | 2,560 | 1,199,081 |
| June | 1,168,269 | 58,889 | 2,274 | 1,229,432 |
| July | 1,181,513 | | 2,310 | |
| August | 1,223,617 | | | |
| September | 1,278,190 | | | |
| October | | | | |
| November | | | | |
| December | | | | |



North Dakota Monthly Production Change



Estimated Williston Basin Oil Transportation



■ Pipeline Export

■ Refined

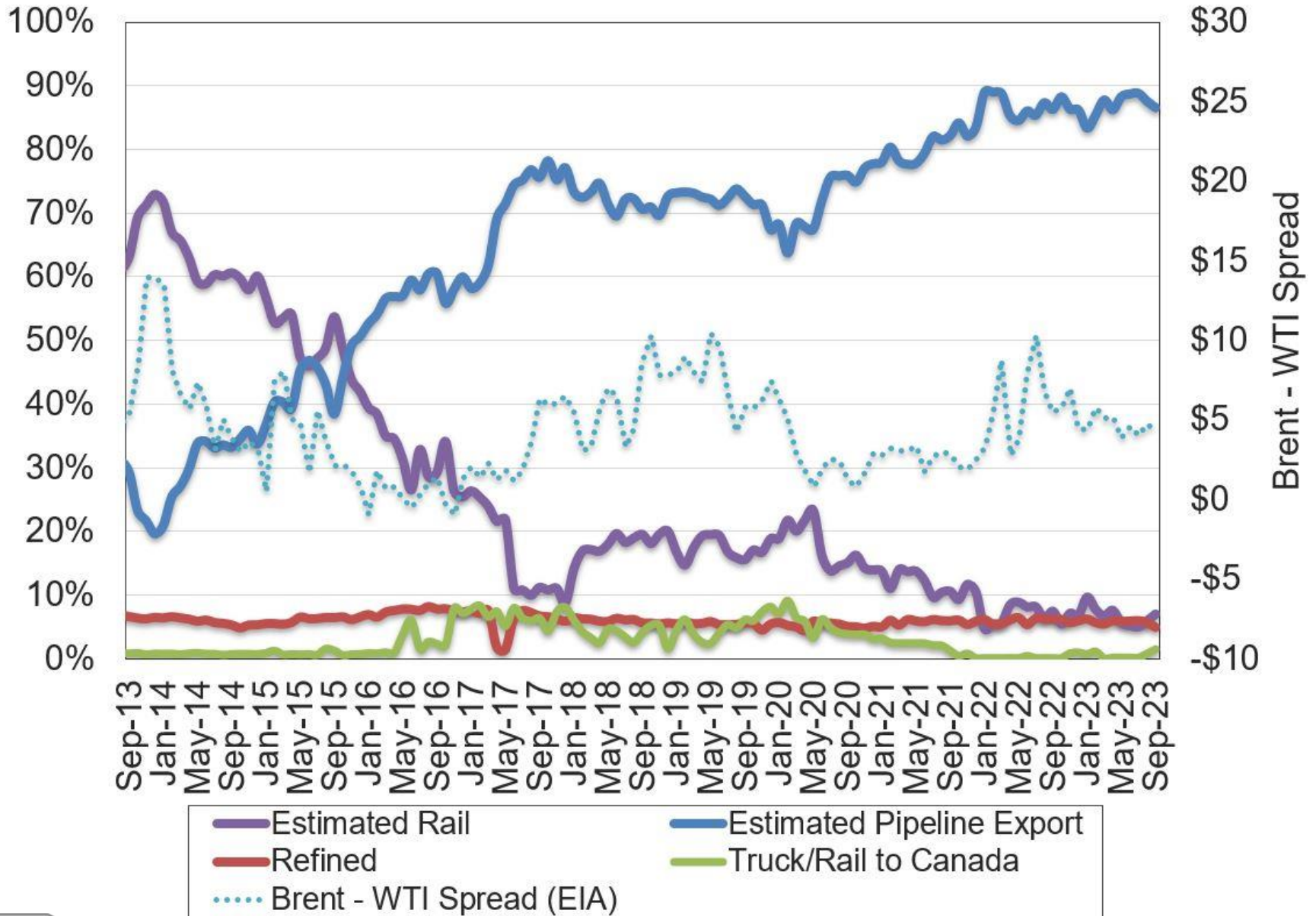
■ Truck/Rail to Canada

■ Estimated Rail

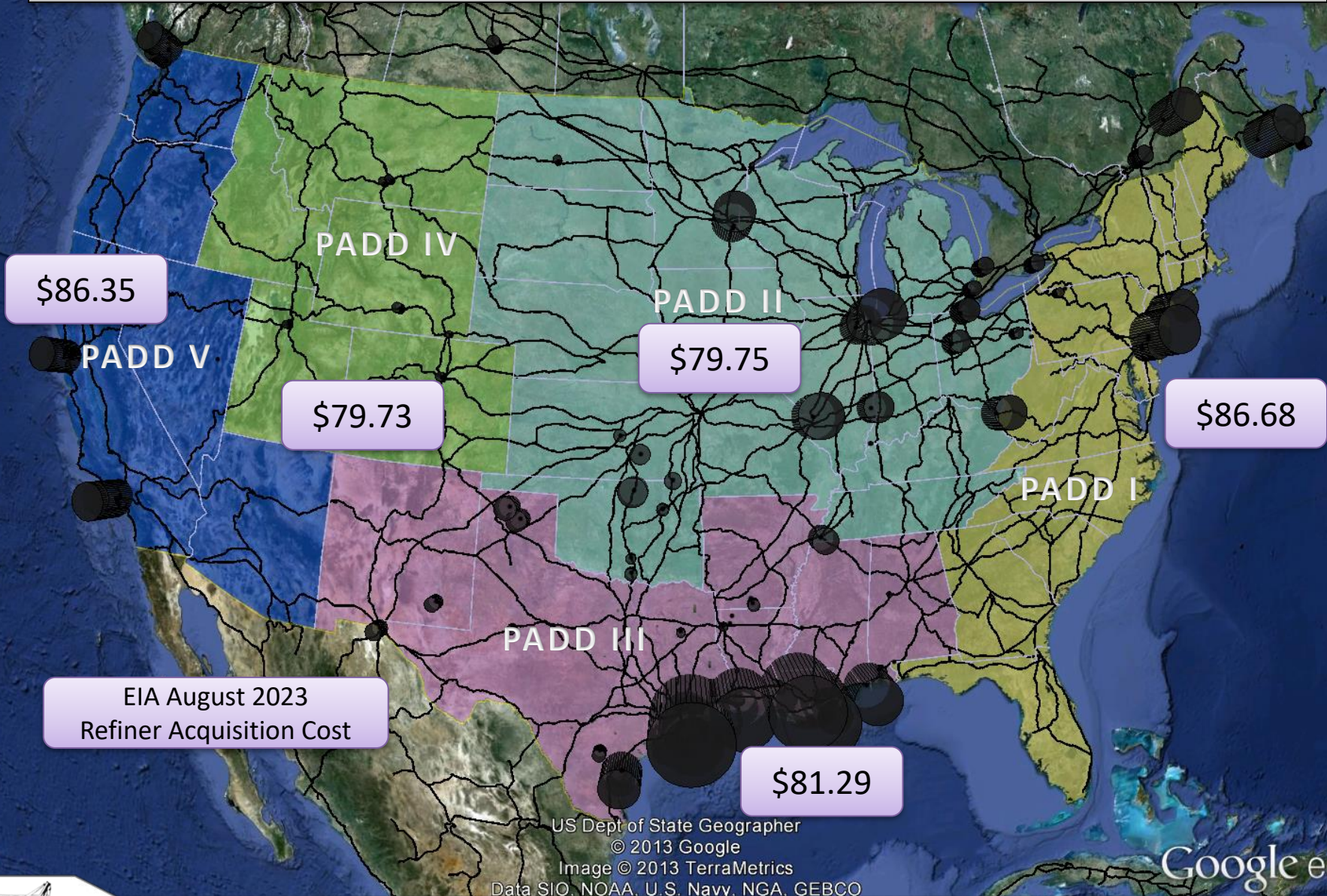
Sep 2023



Estimated Williston Basin Oil Transportation



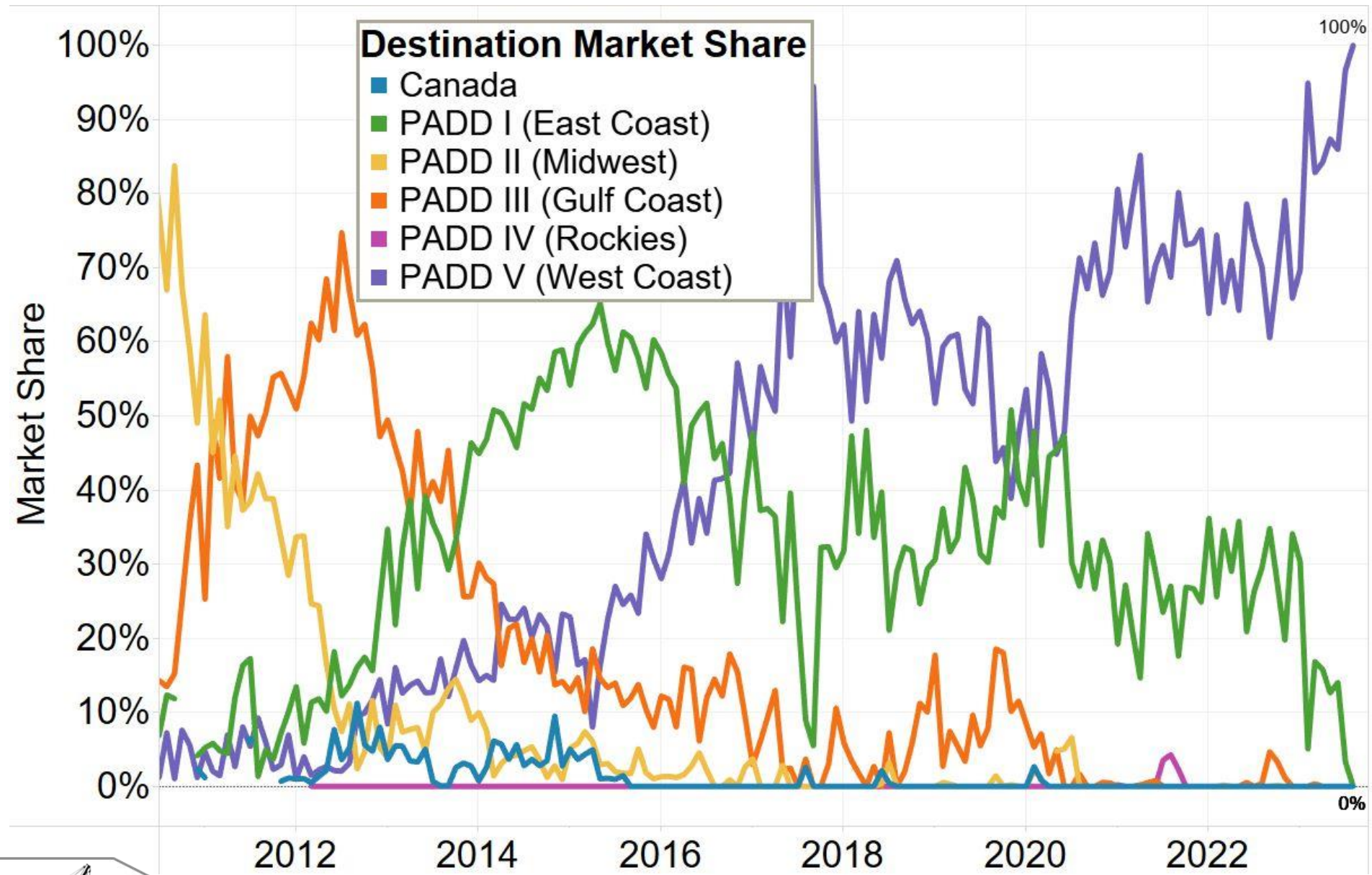
Major Rail Lines and Refineries



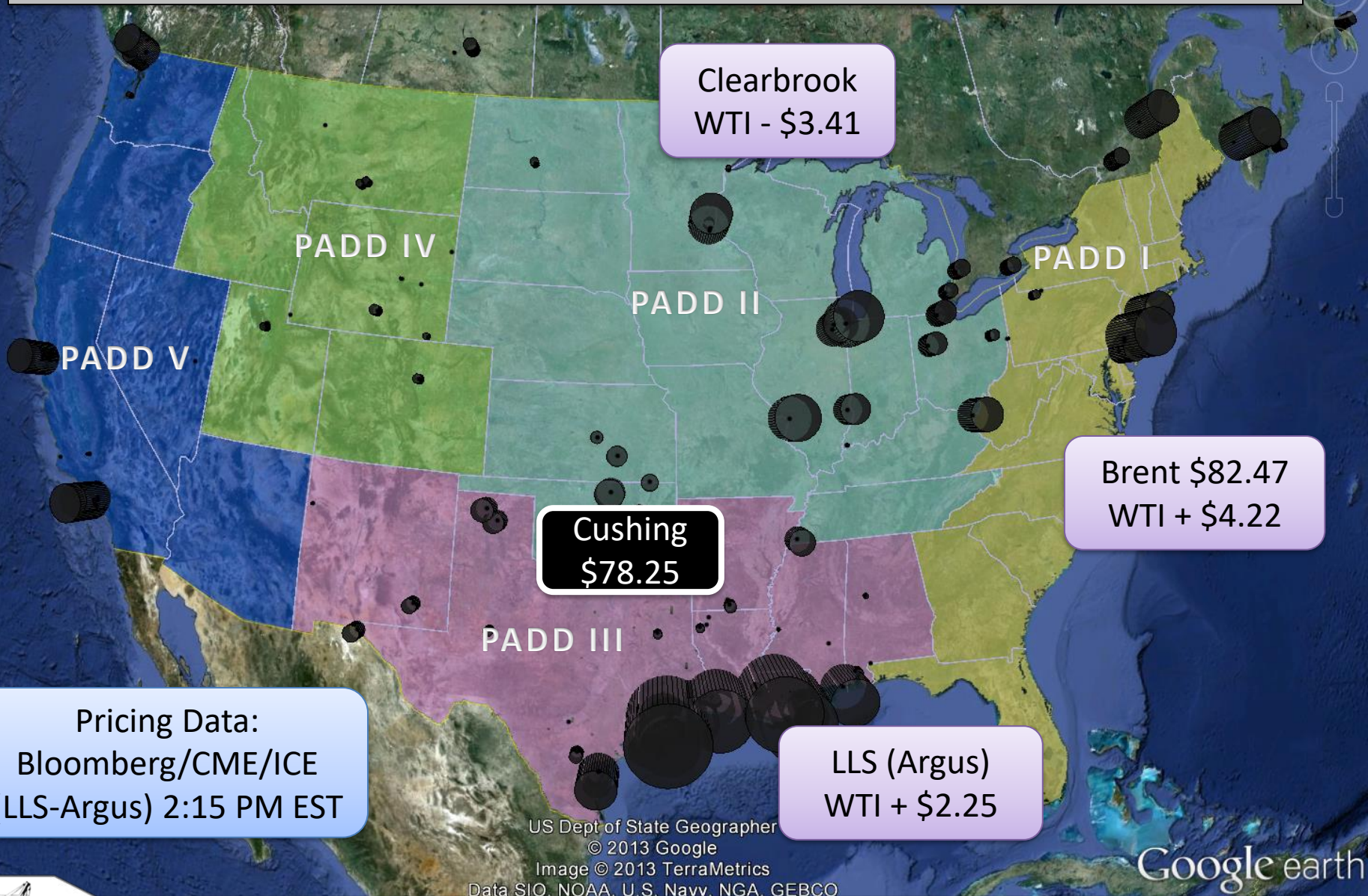
Estimated ND Rail Export Volumes



Rail Destinations Market Share (Aug. 2023)



Crude Oil Prices – Nov. 14, 2023



Clearbrook
WTI - \$3.41

Cushing
\$78.25

Brent \$82.47
WTI + \$4.22

LLS (Argus)
WTI + \$2.25

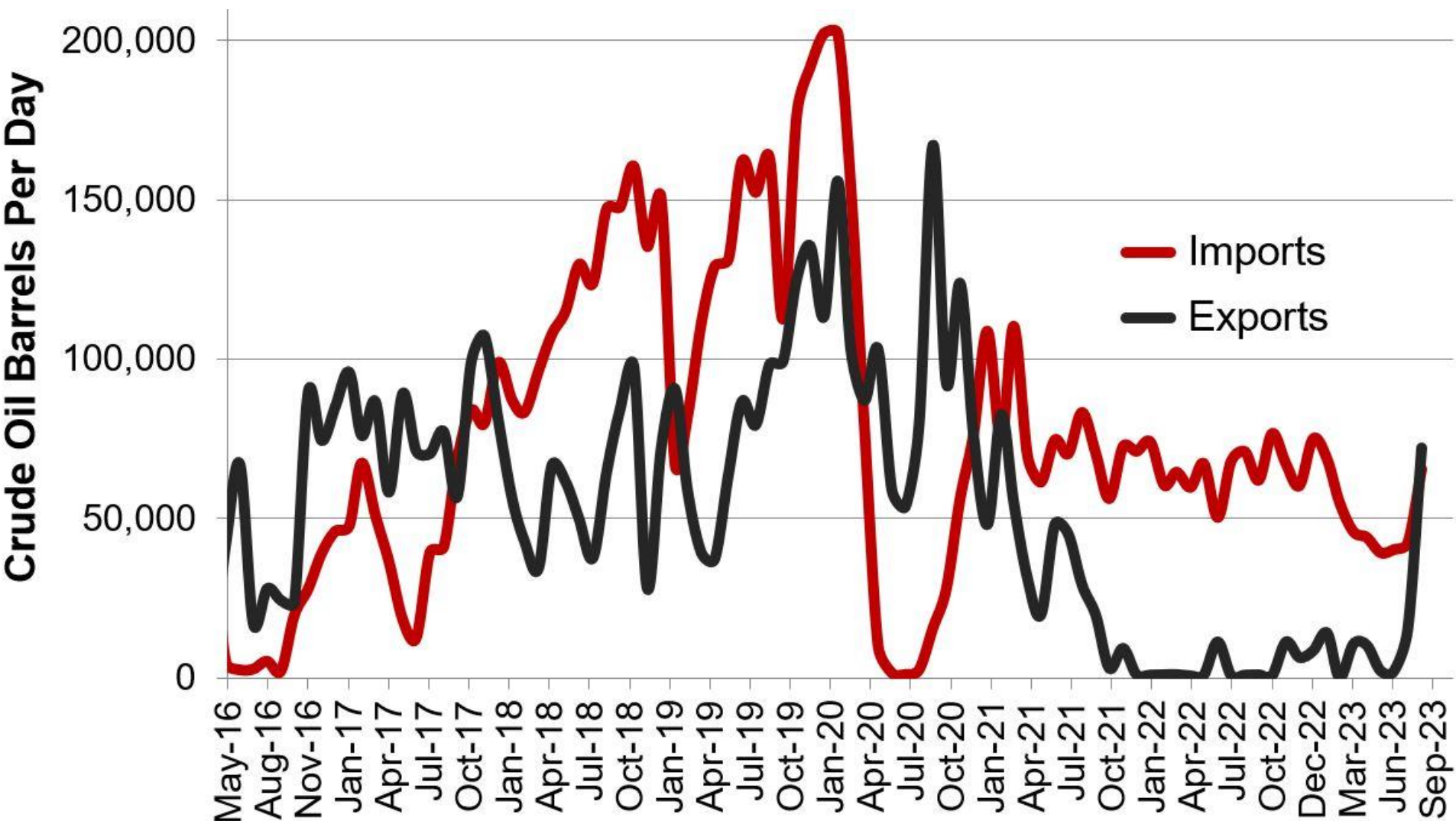
Pricing Data:
Bloomberg/CME/ICE
(LLS-Argus) 2:15 PM EST

US Dept of State Geographer
© 2013 Google
Image © 2013 TerraMetrics
Data SIO, NOAA, U.S. Navv, NGA, GEBCO

Google earth



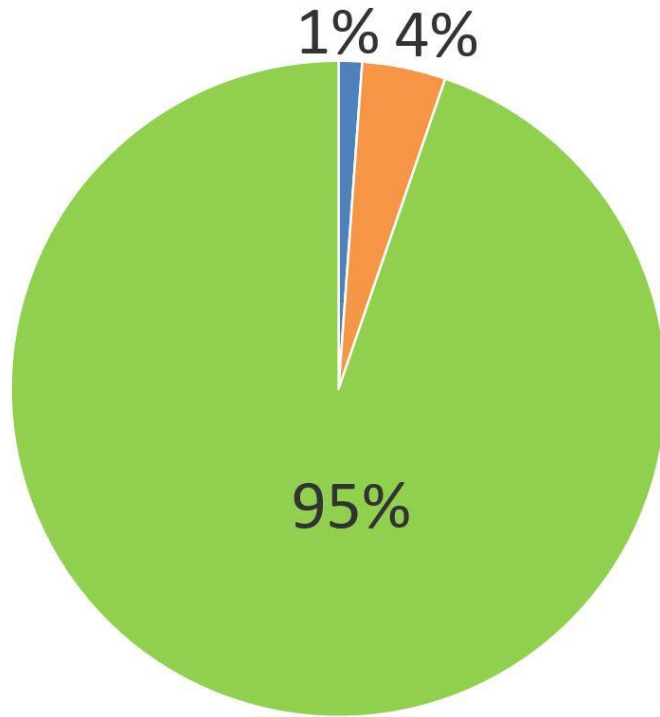
Williston Basin Truck/Rail Imports and Exports with Canada



Data for imports/exports chart is provided by the US International Trade Commission and represents traffic across US/Canada border in the Williston Basin area.



Solving the Flaring Challenge



Statewide

GREEN – % of gas captured and sold
Blue – % flared from zero sales wells
Orange – % flared from wells with at least one mcf sold.

Simple Terms

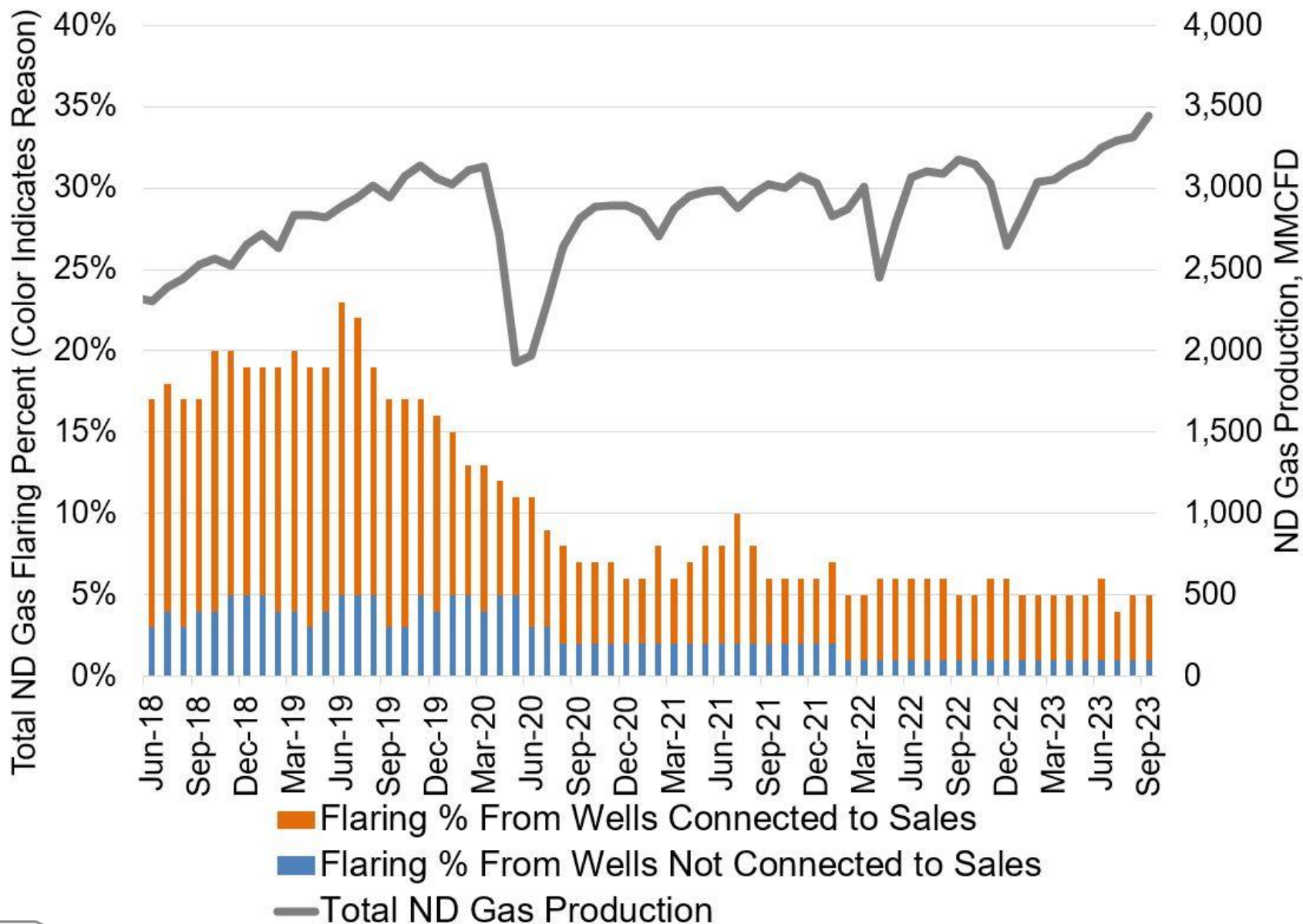
Blue – Lack of pipelines

Orange – Challenges on existing infrastructure

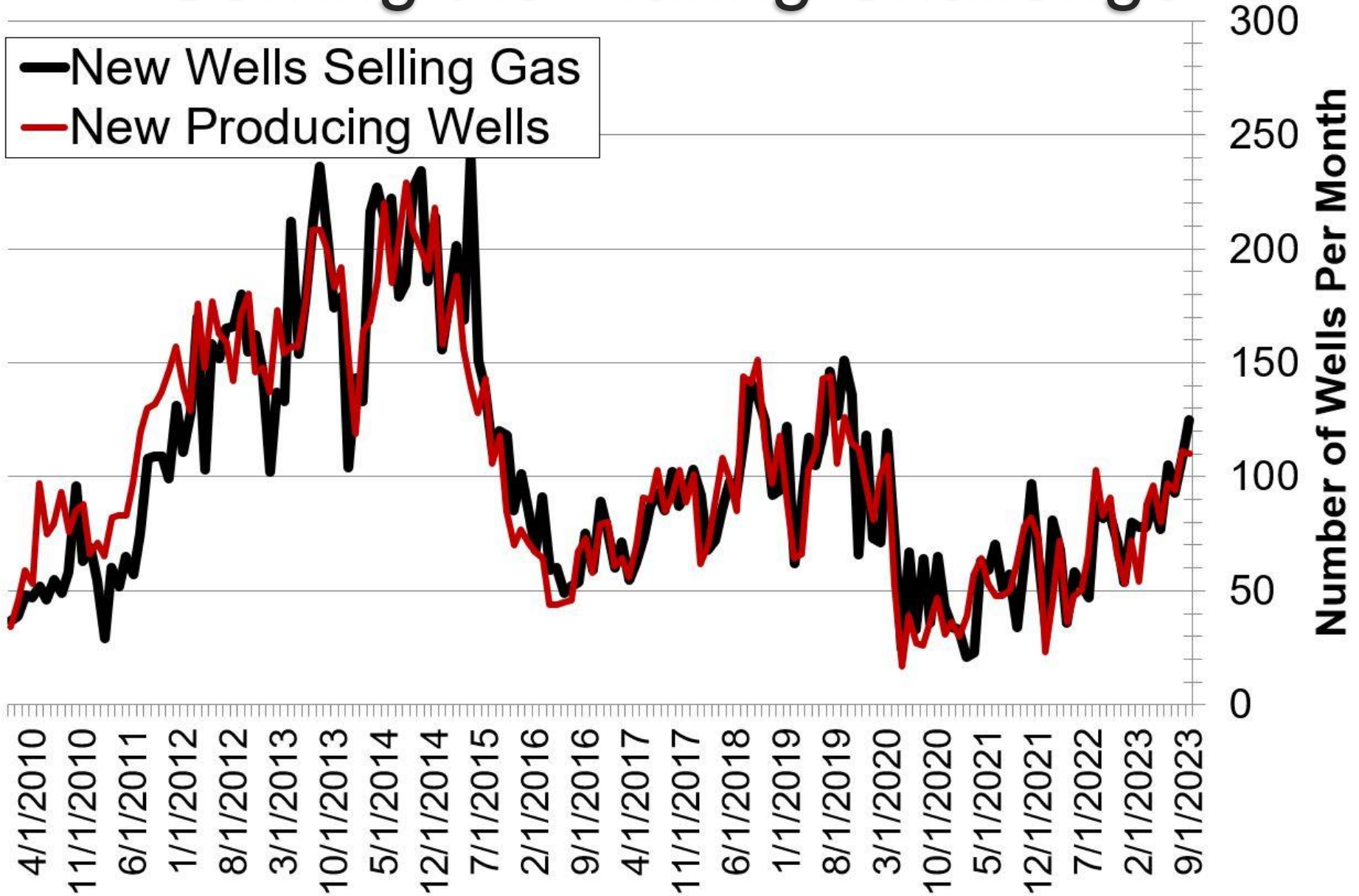
Sep. 2023 Data – Non-Confidential Wells



Solving the Flaring Challenge

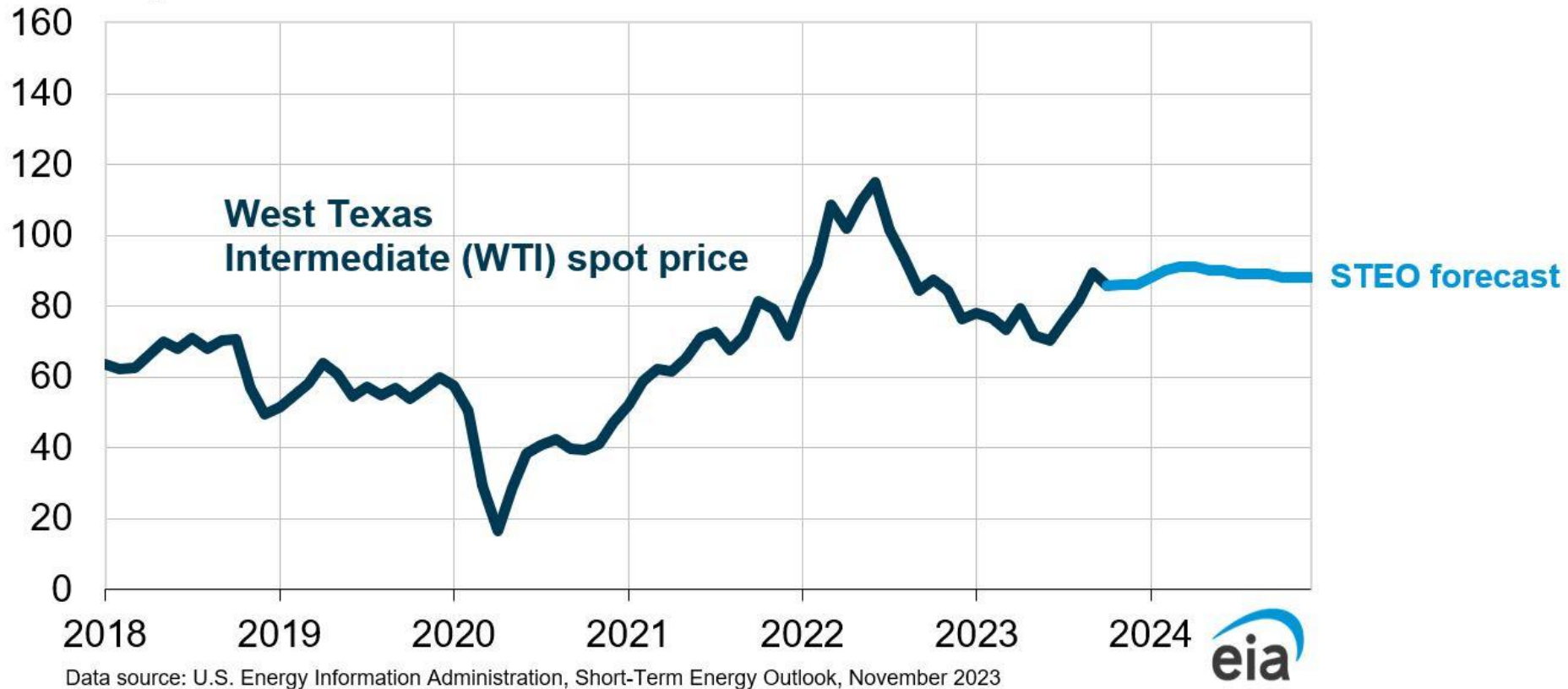


Solving the Flaring Challenge

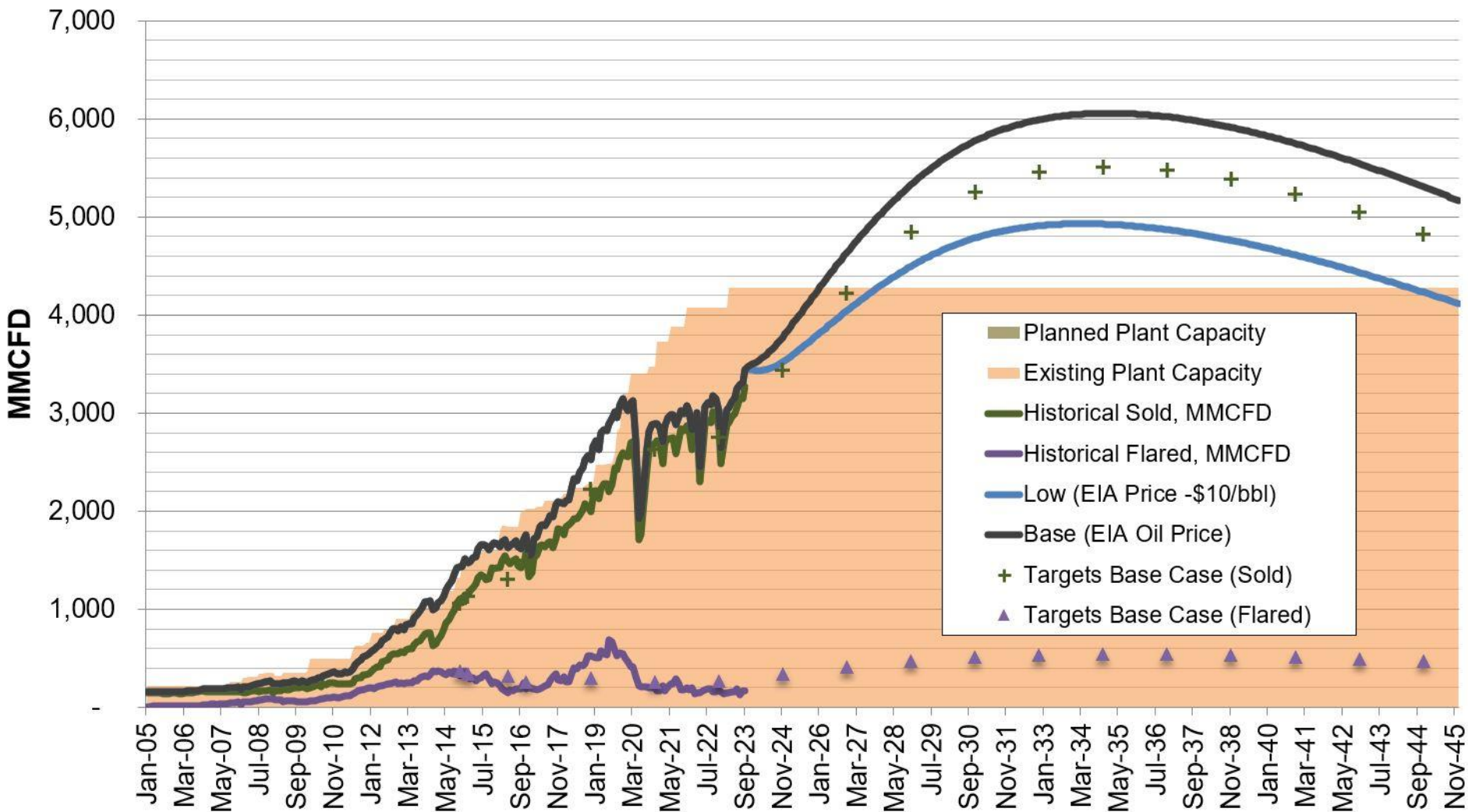


EIA Oil Price Forecast: Nov. 2023

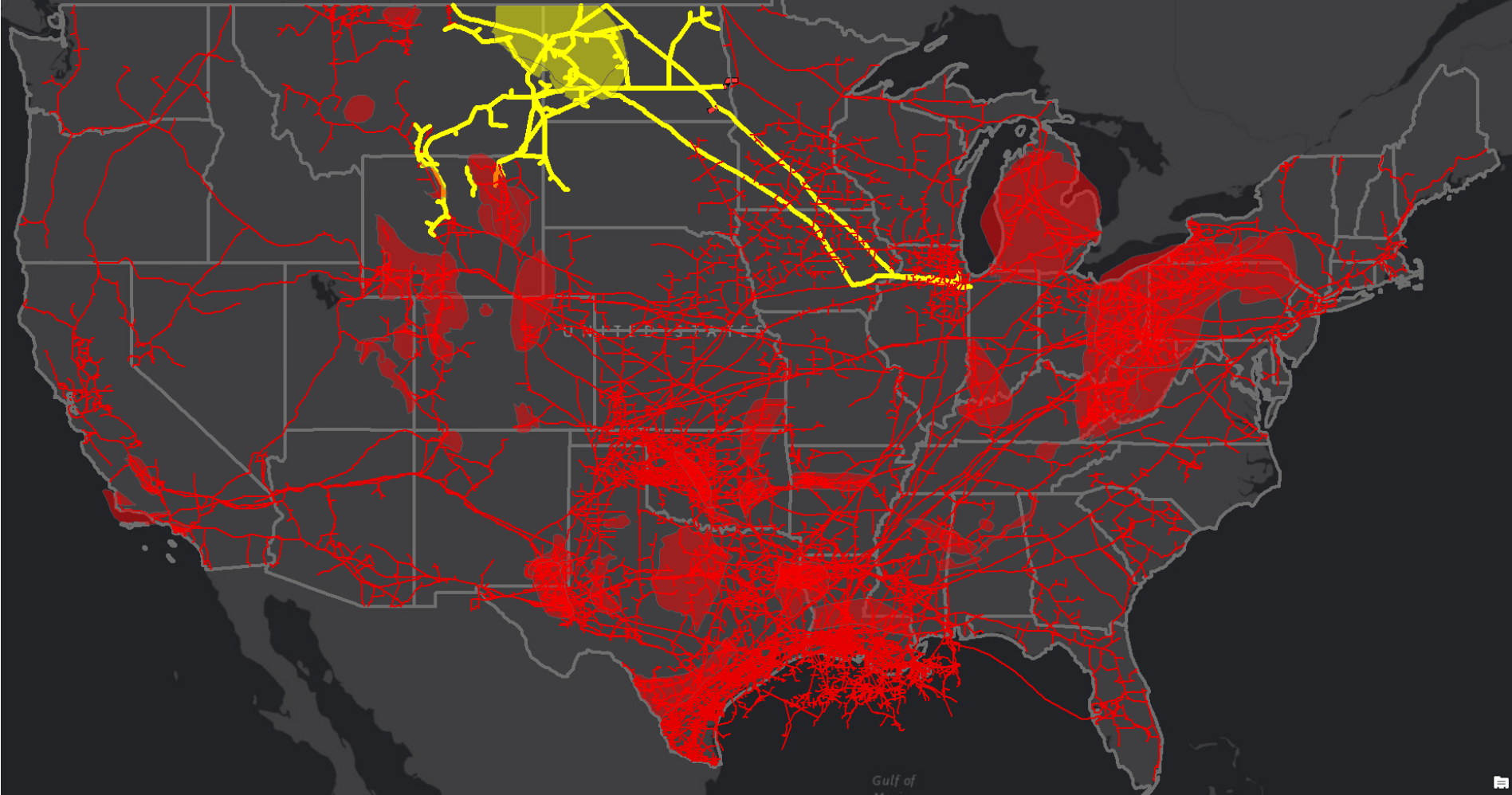
West Texas Intermediate (WTI) crude oil price dollars per barrel



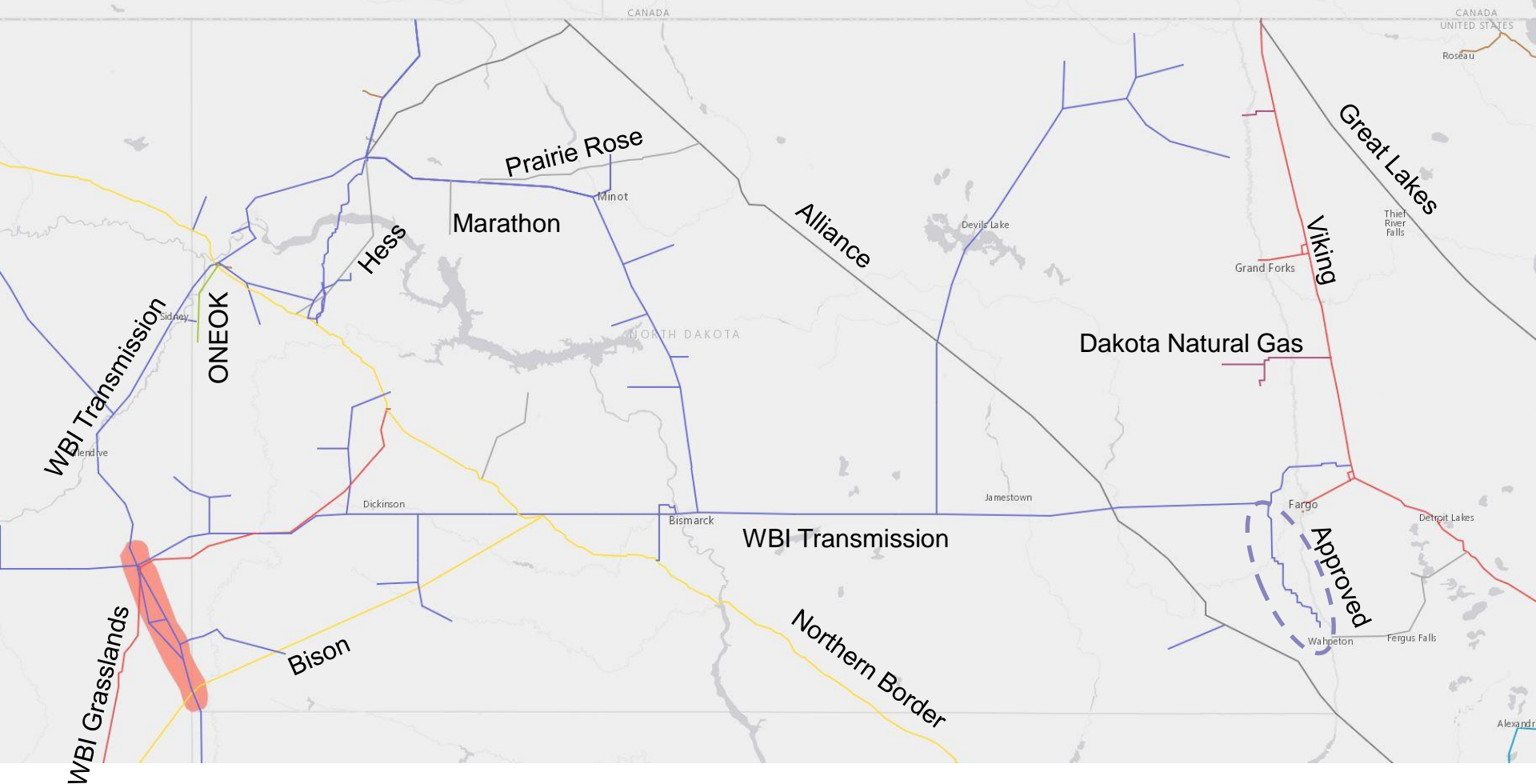
Solving the Flaring Challenge



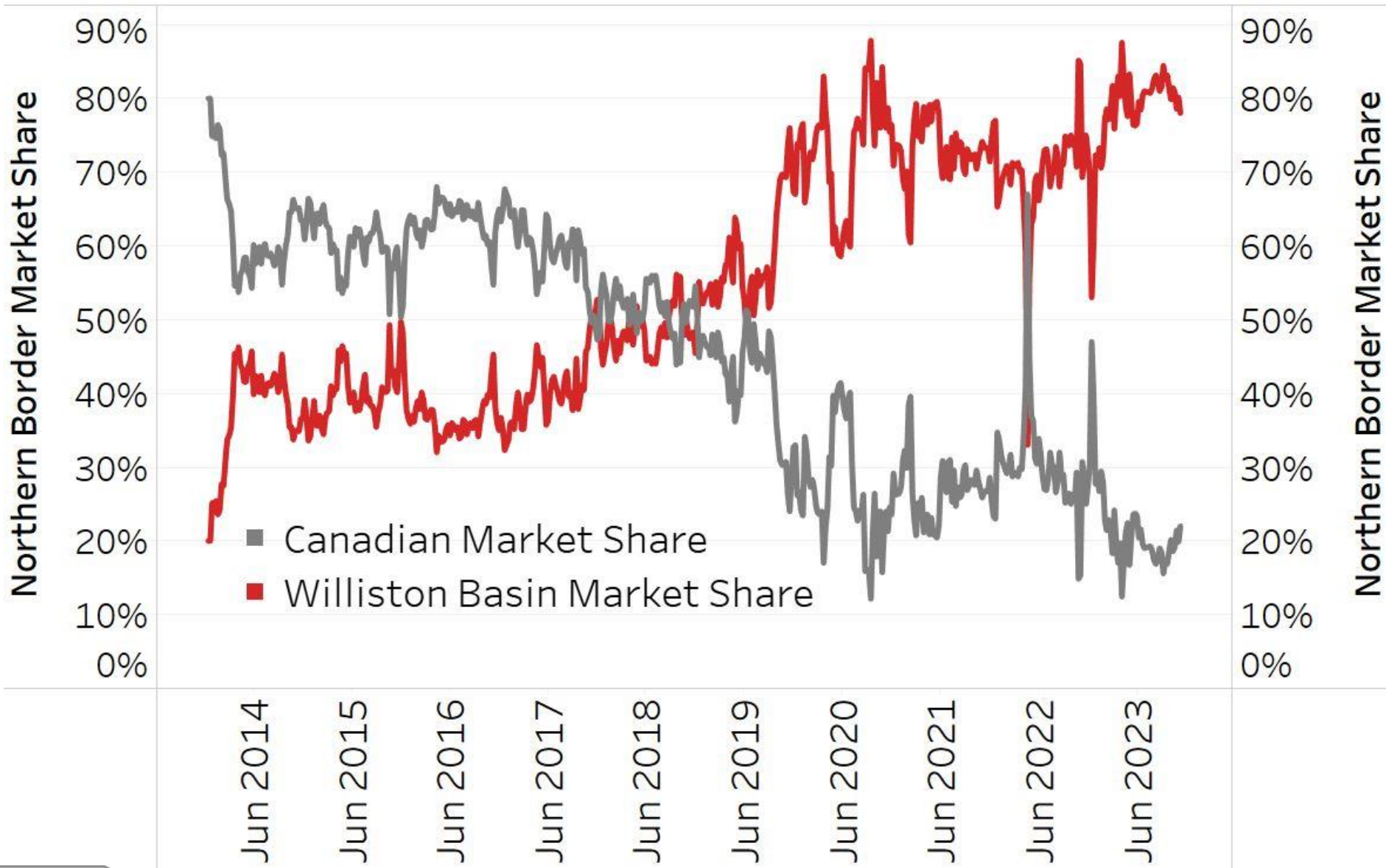
Bakken Natural Gas Infrastructure



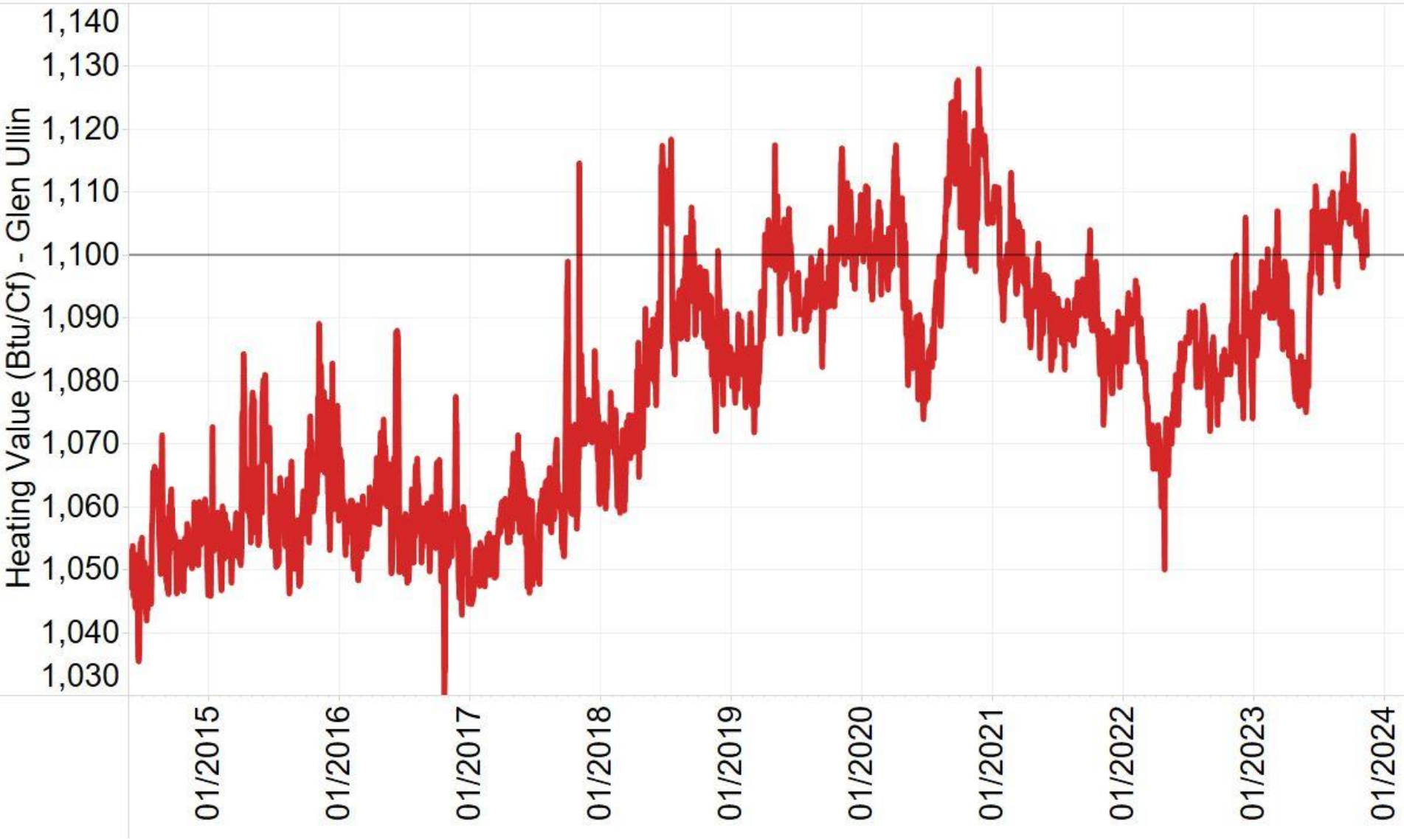
Bakken Natural Gas Infrastructure



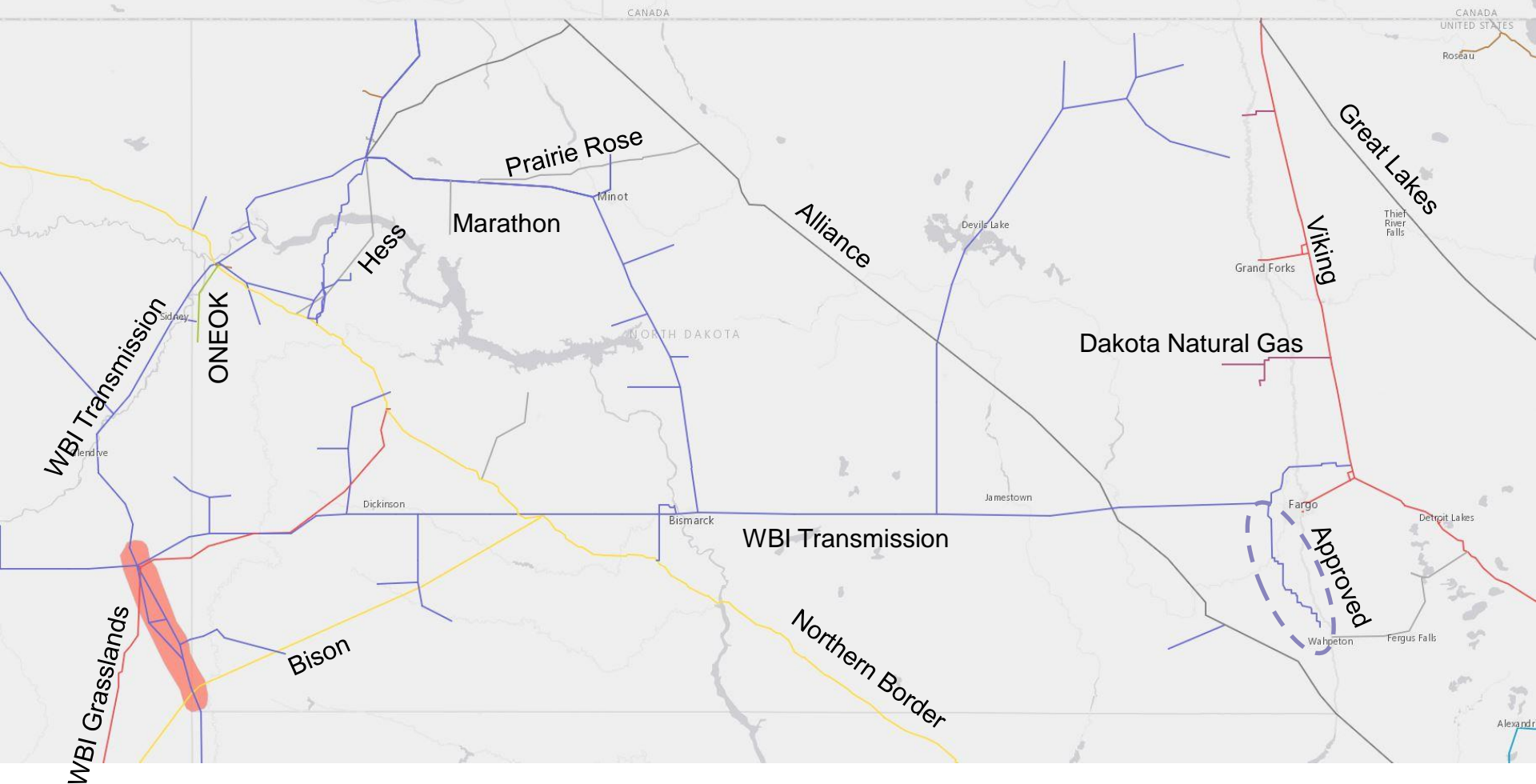
Northern Border Pipeline Market Share



Northern Border BTU at Glen Ullin, ND



Bakken Natural Gas Infrastructure



WBI Energy – Wahpeton Expansion

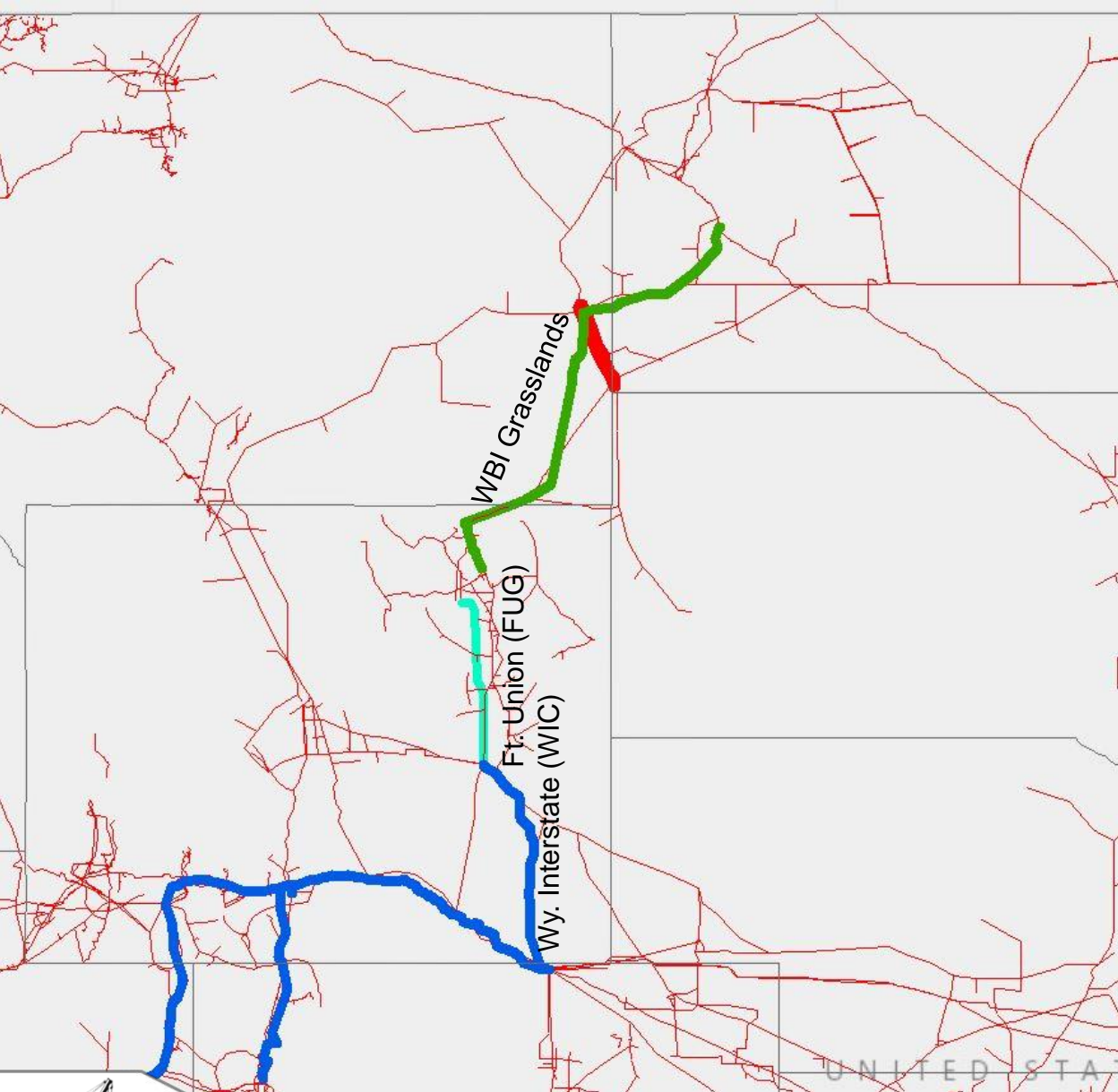


Project Highlights

- \$75 million, 60.5 miles of 12-inch diameter natural gas pipeline
- Providing up to 20 million cubic feet of natural gas per day to southeastern North Dakota
- Starting point: WBI Energy's existing Mapleton Compressor Station near Mapleton, North Dakota
- End point: A new delivery station near Wahpeton, North Dakota
- Also provide natural gas service for the first time to Kindred, North Dakota.
- The Project may include the installation of farm taps along the pipeline route.
- FERC approval granted Oct 19, 2023
- Projected in-service, late 2024



WBI Energy – Grasslands South Project



Project Highlights

- Binding open season Jan 10 – Feb 25, 2022
- Repurpose Grasslands Pipeline (16")
- Capacity 94,000 Dth/Day
- Access to Baker storage
- Fort Union Gas Gathering and Wyoming Interstate Company provide further transport to Cheyenne hub.



Contact Information

Justin J. Kringstad, Director
North Dakota Pipeline Authority

600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

Phone: (701)220-6227
Fax: (701)328-2820
E-mail: jjkringstad@ndpipelines.com

Websites:

www.pipeline.nd.gov
www.northdakotapipelines.com



**Know what's below.
Call before you dig.**

