

# North Dakota Midstream Update



Image: Library of Congress

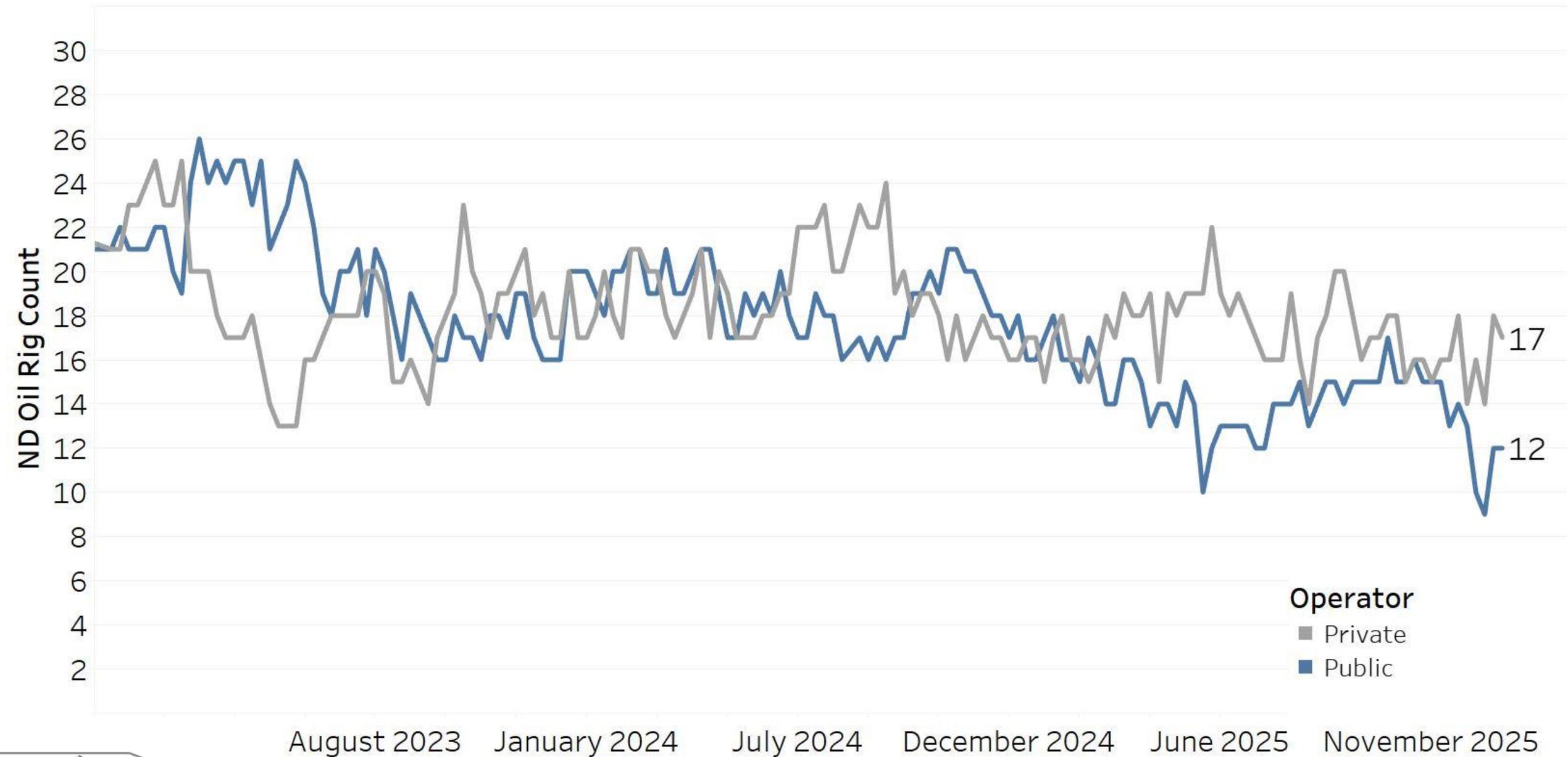
January 27, 2026



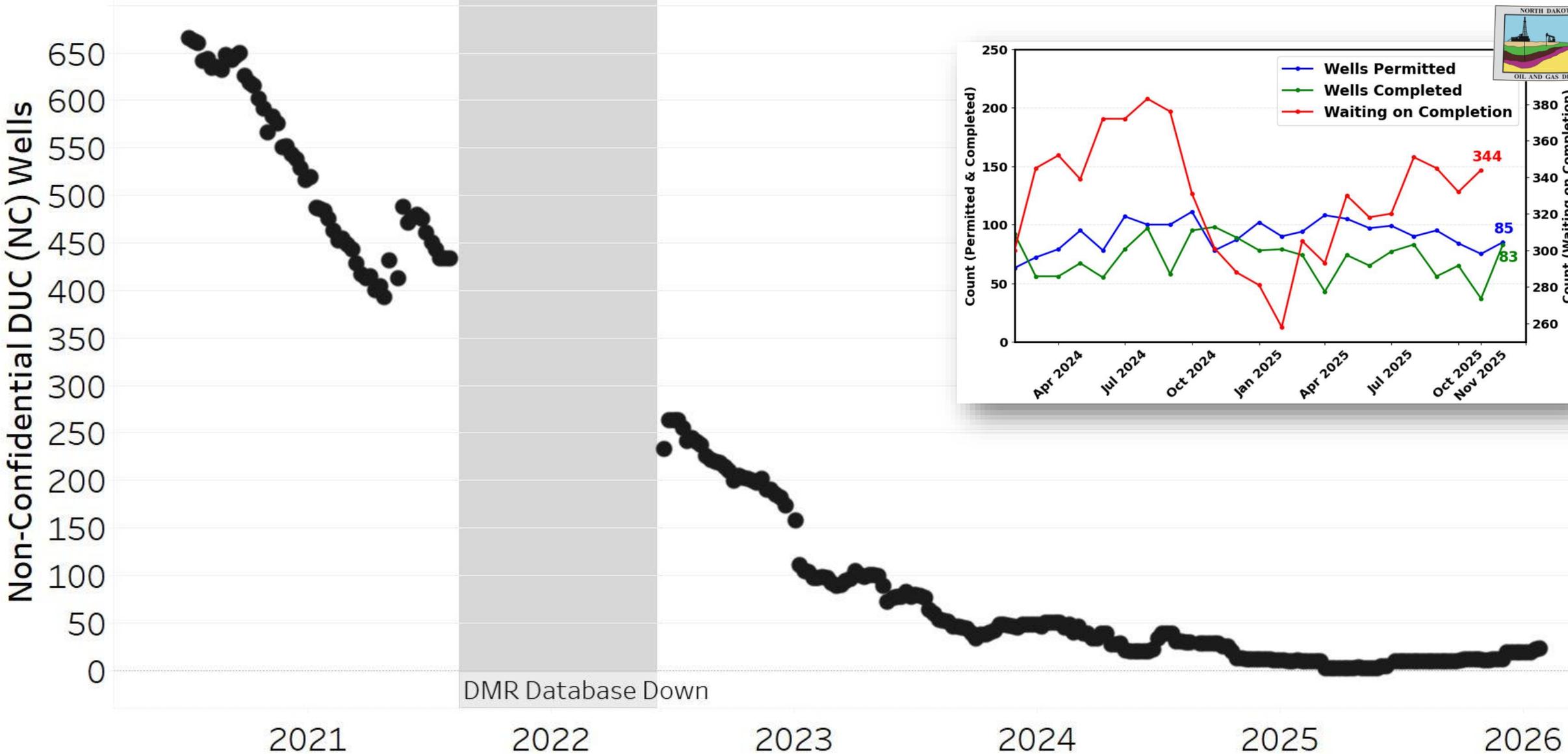
Justin J. Kringstad - North Dakota Pipeline Authority



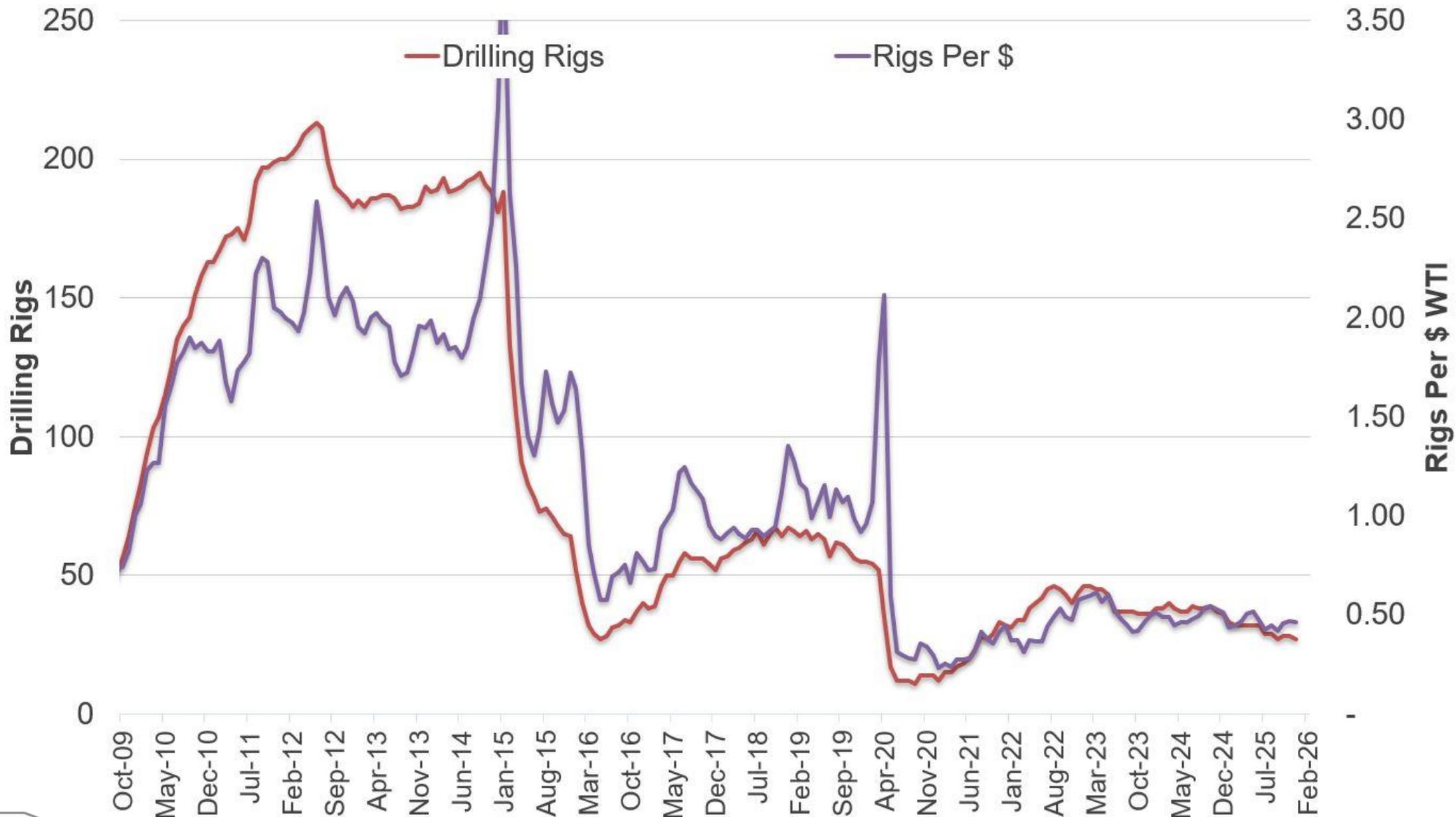
# North Dakota Drilling Rigs By Operator Type



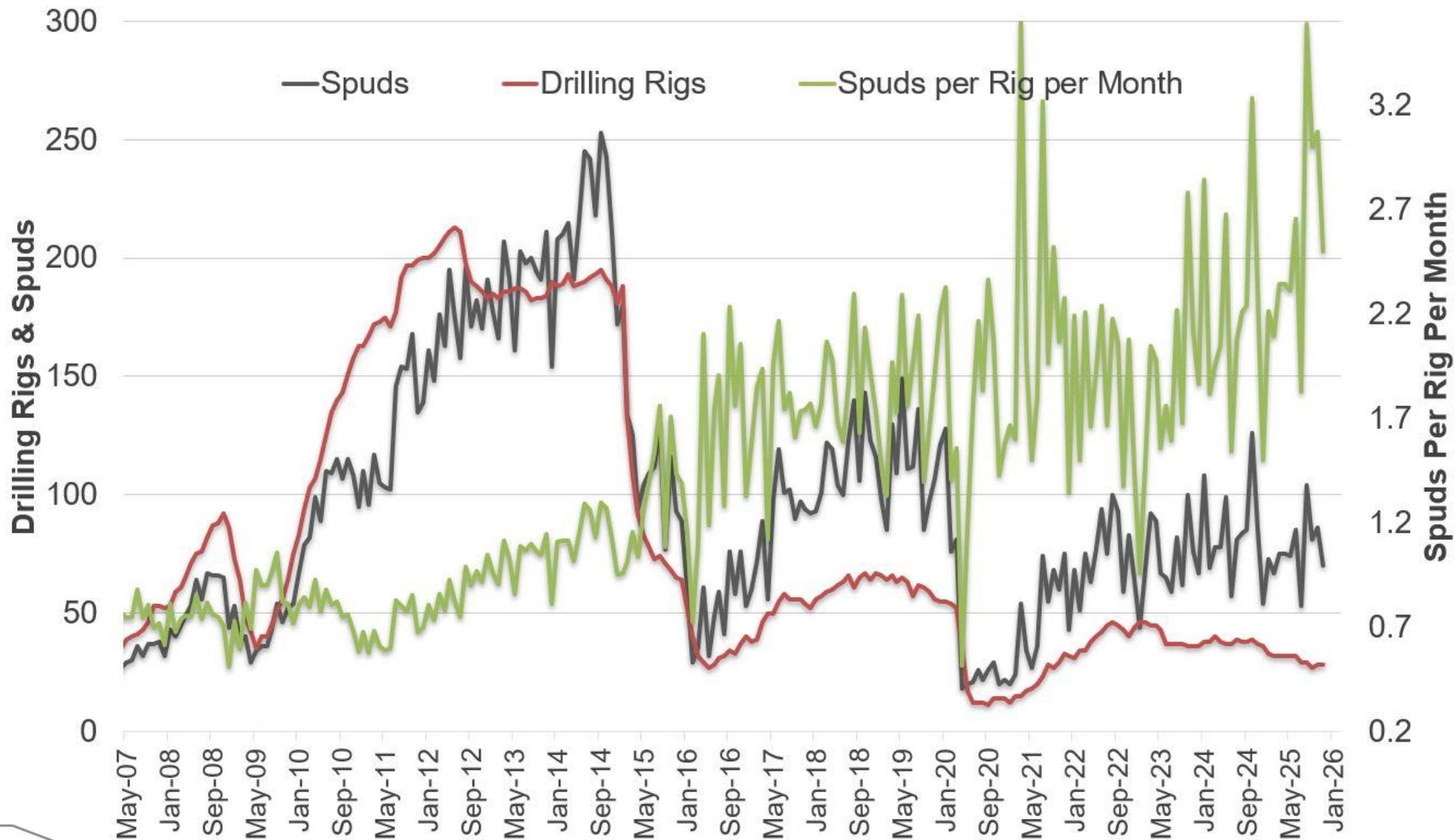
# North Dakota DUC/NC Well Counts



# North Dakota Drilling Rig Relationship With Oil Price



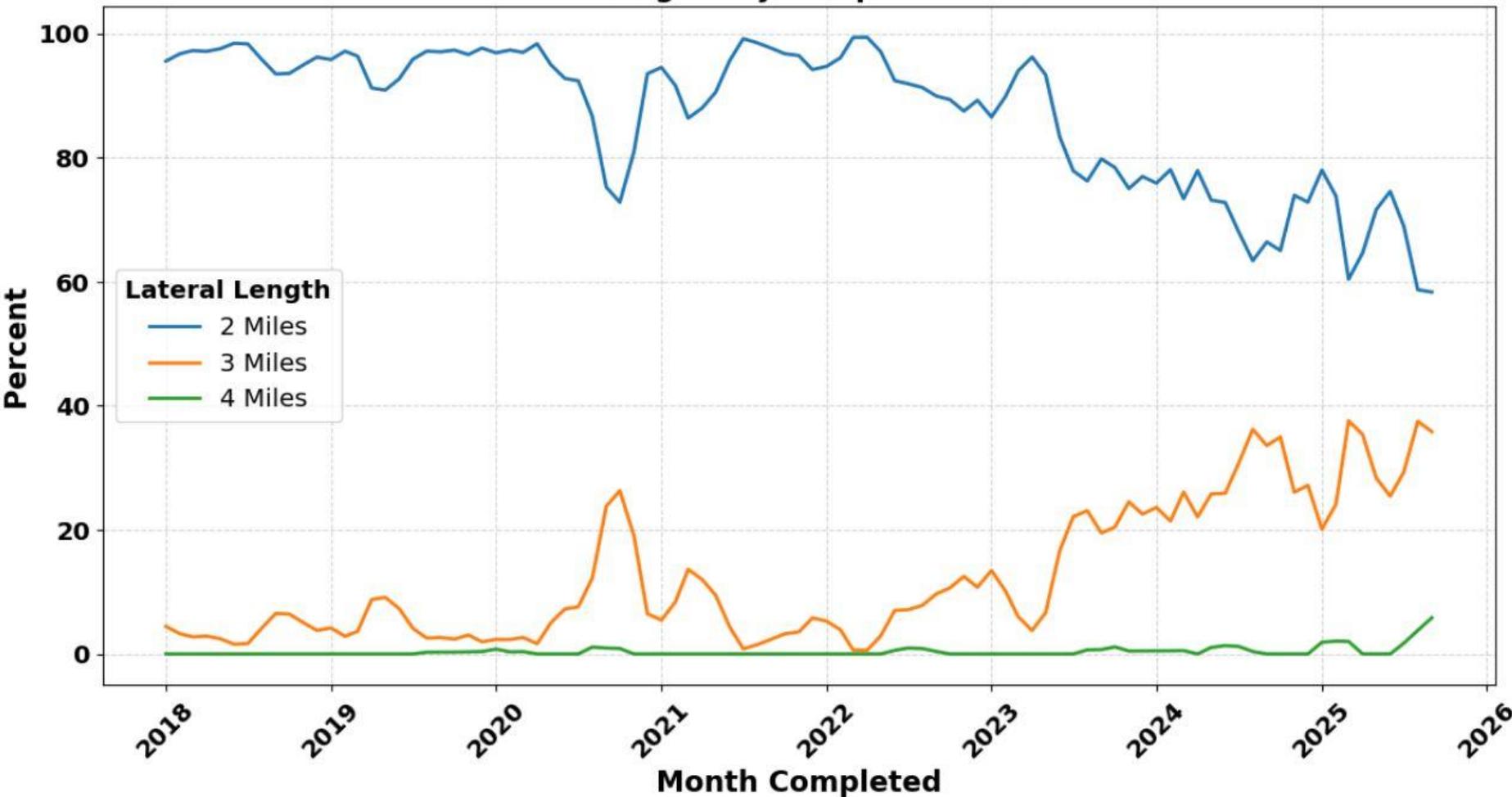
# North Dakota Drilling Rig Efficiency



# LATERAL LENGTHS OVER TIME



### Well Lengths by Completion Month



### Total Percentage of Permits by Lateral Length

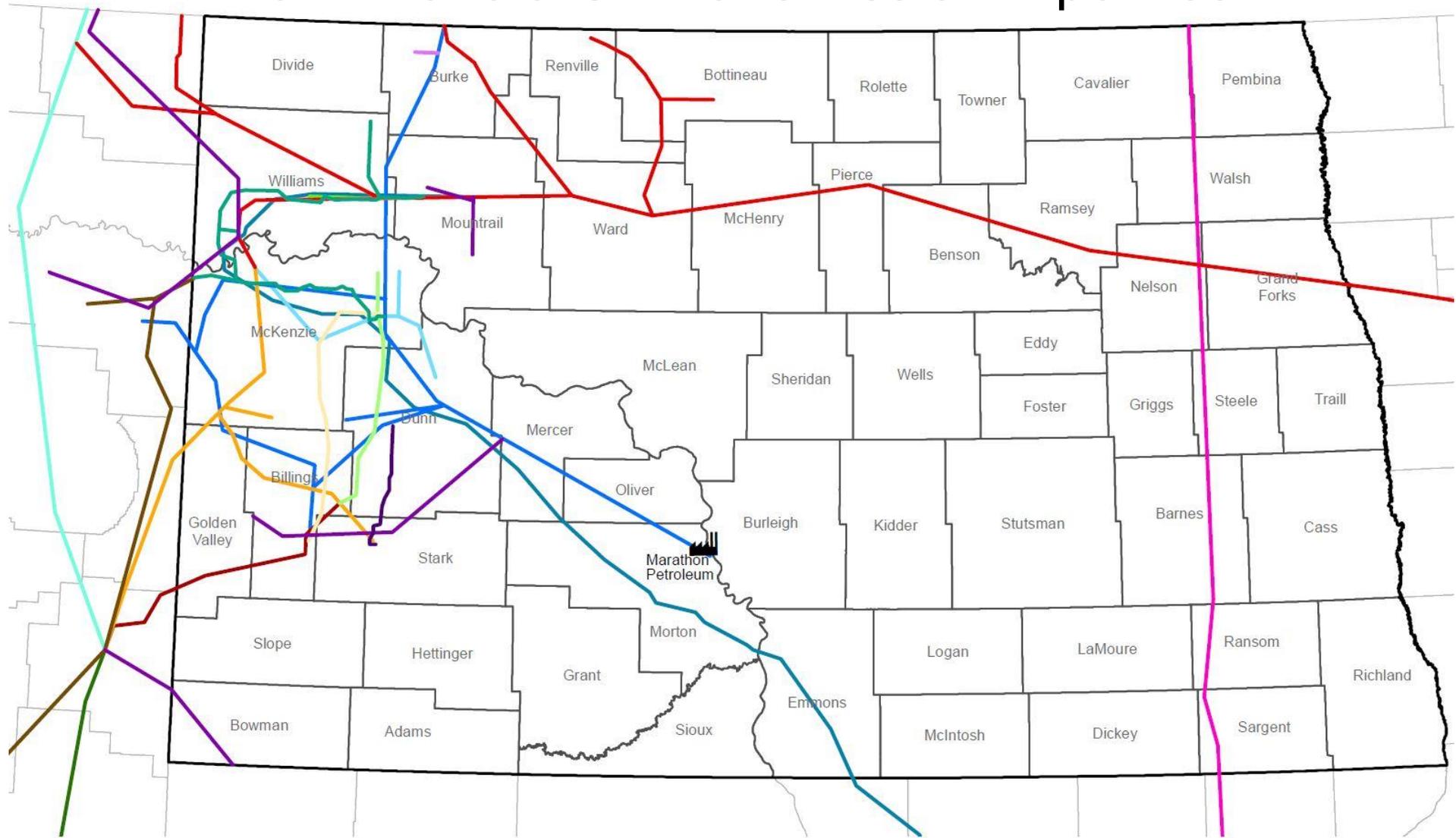
- ~60% = 2-mile
- ~35% = 3-mile
- ~5% = 4-mile

### Lateral Length Categorization:

*(First to last perforation)*

- 1.5-2.24 miles = 2-mile
- 2.25-3.24 miles = 3-mile
- 3.25-4.24 miles = 4-mile

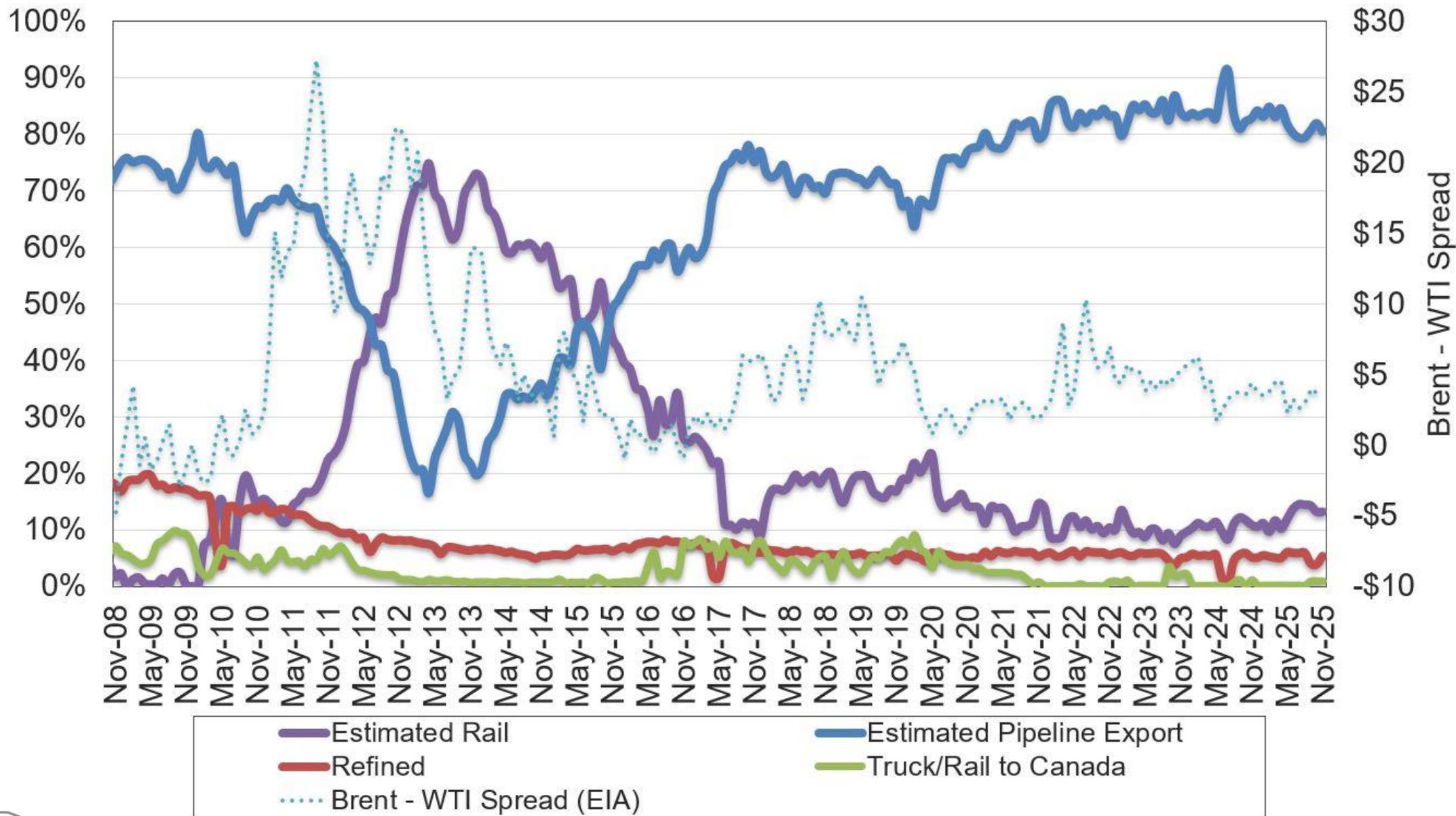
# North Dakota Oil Transmission Pipelines



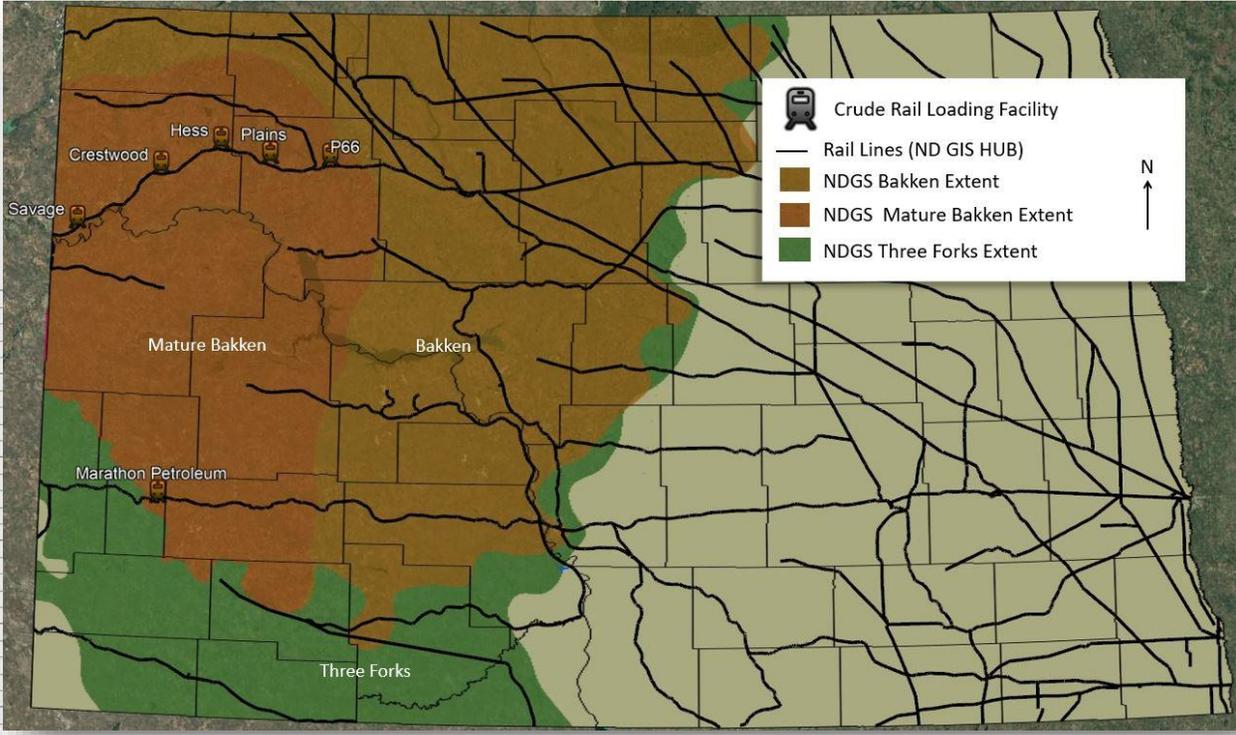
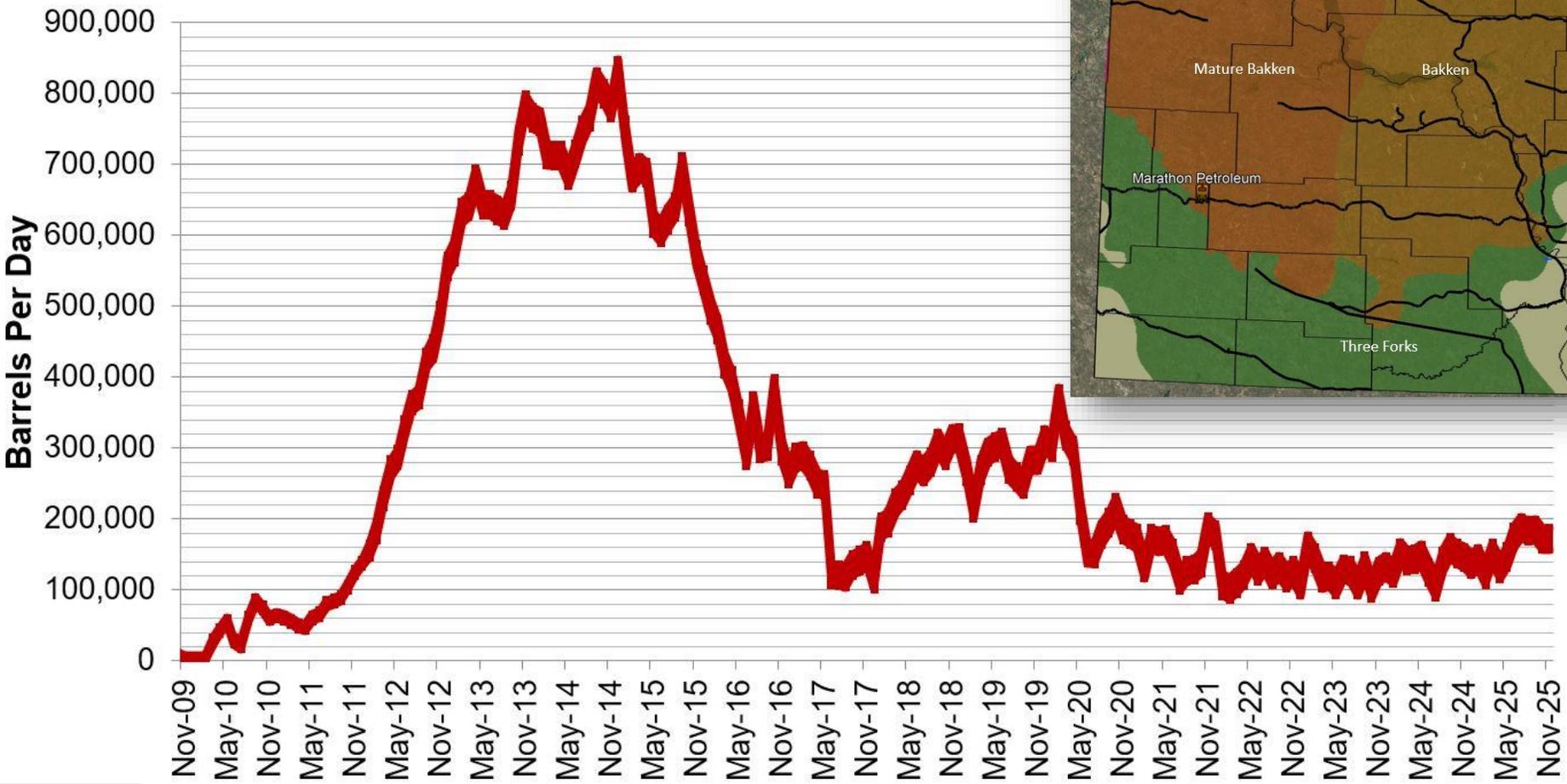
- |                    |                 |               |            |                   |          |
|--------------------|-----------------|---------------|------------|-------------------|----------|
| Refinery           | Basin Transload | Butte         | Double H   | Hiland            | Bridger  |
| Bakken Oil Express | Belle Fourche   | Crestwood     | Enbridge   | Keystone Pipeline | Targa    |
| BakkenLink         | Bridger         | Dakota Access | Four Bears | Little Missouri   | Marathon |



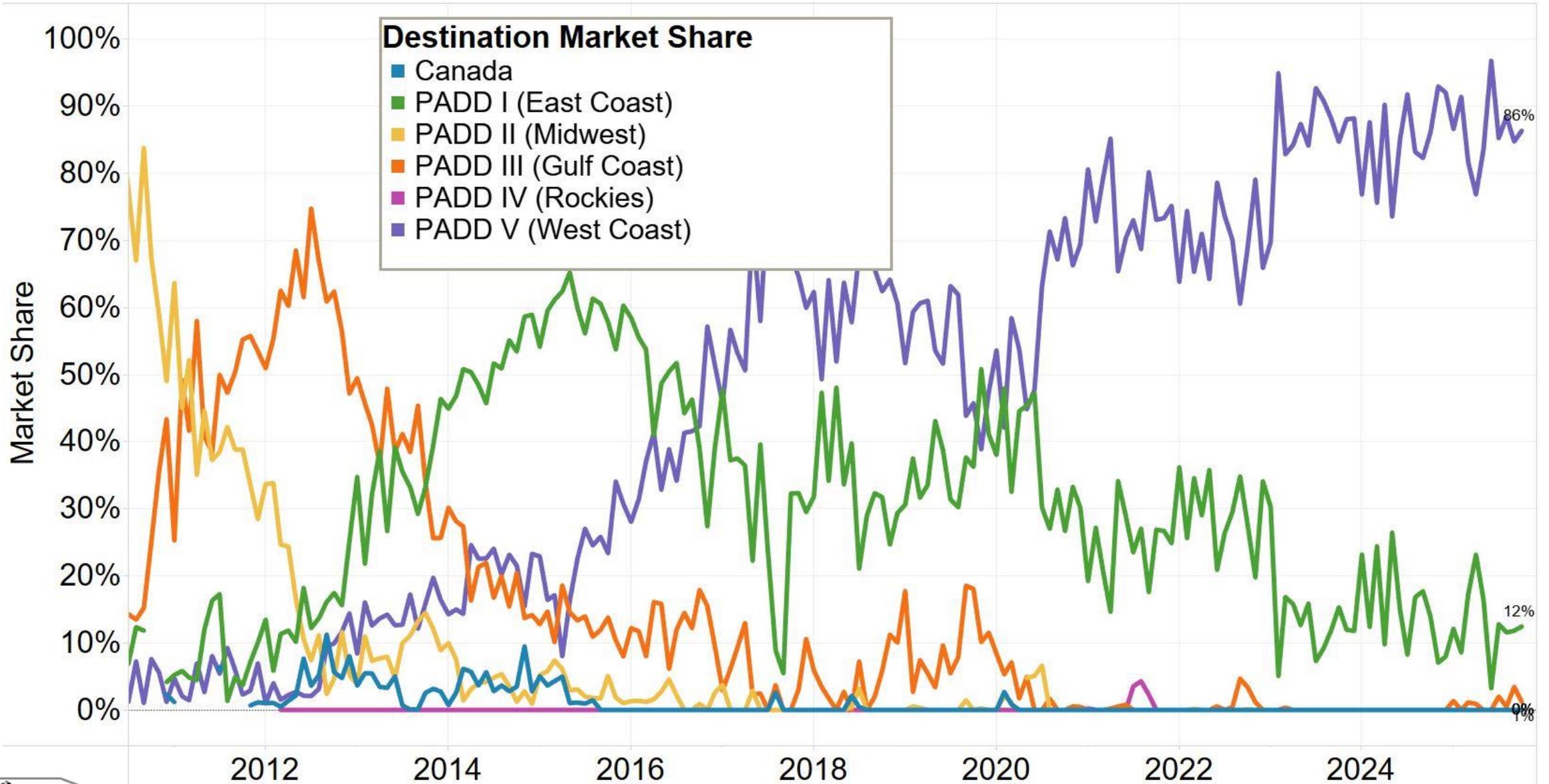
# Estimated Williston Basin Oil Transportation



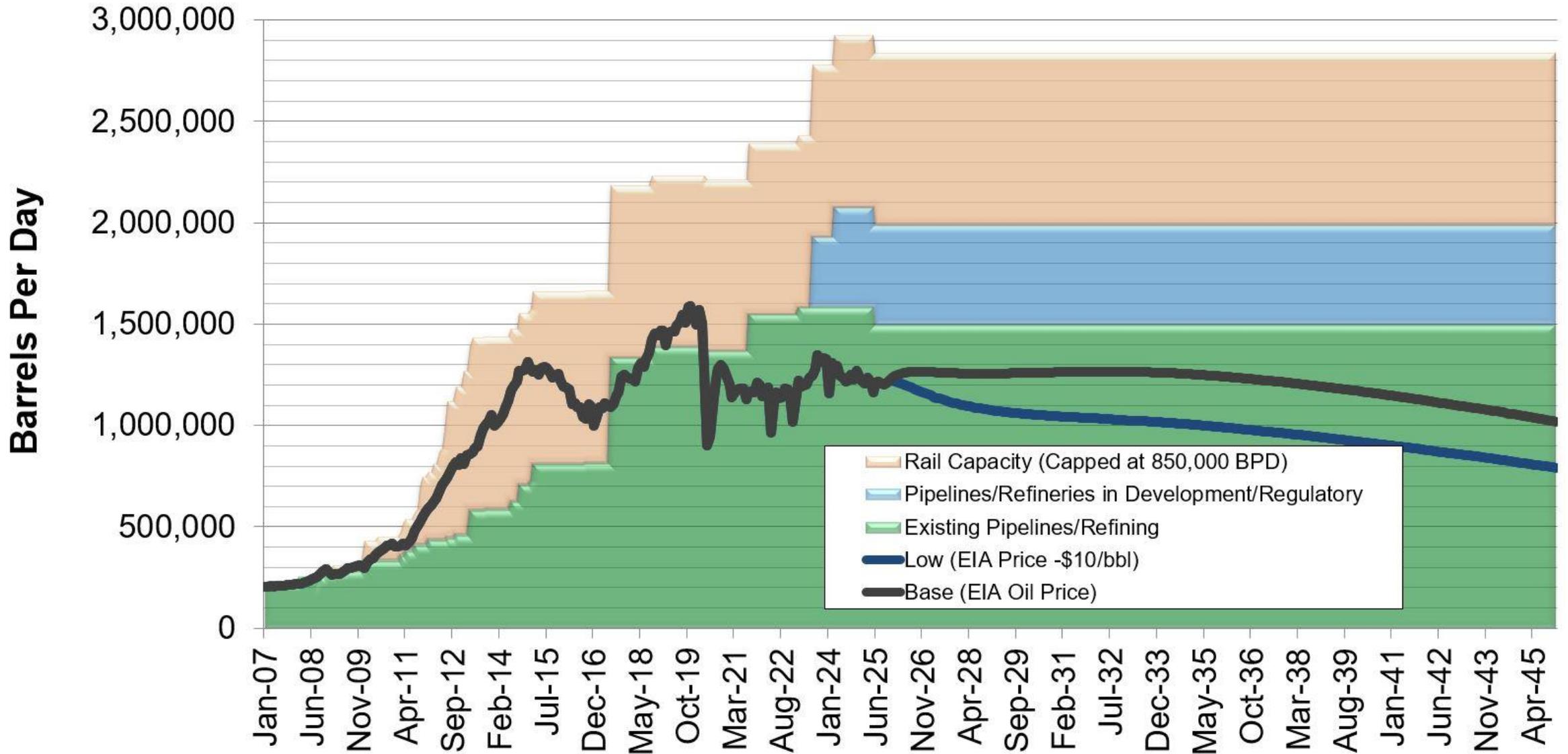
# Estimated ND Rail Export Volumes



# Rail Destinations Market Share (Oct. 2025)



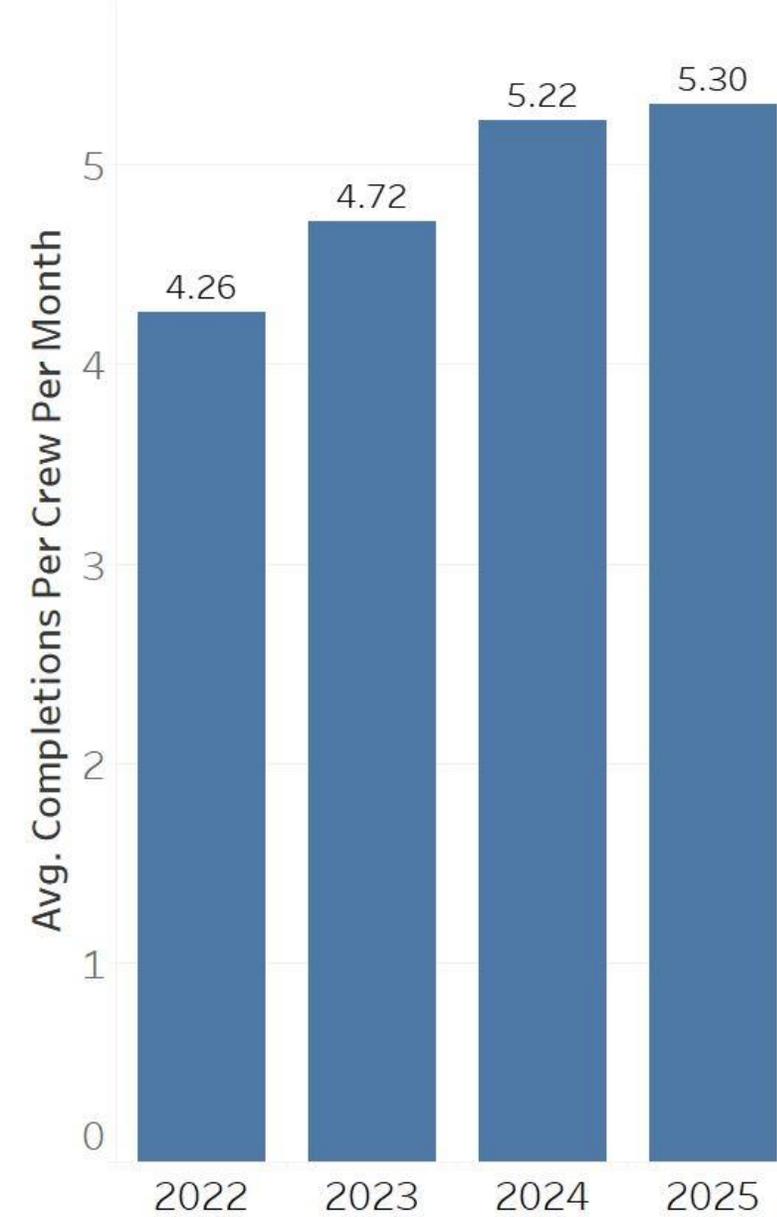
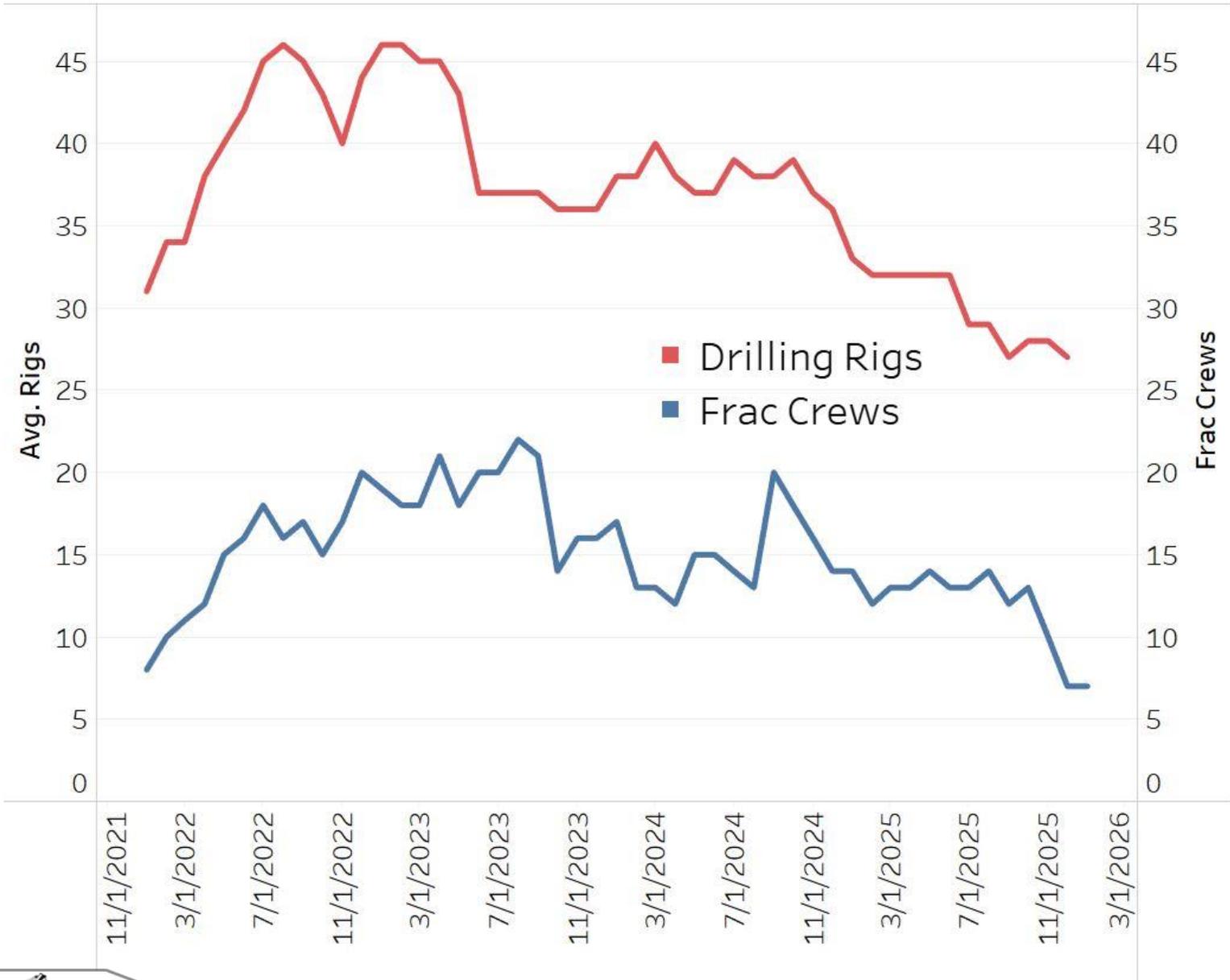
# Williston Basin Oil Production & Export Capacity, BOPD



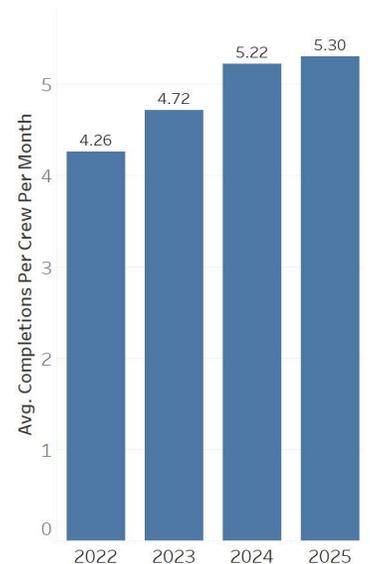
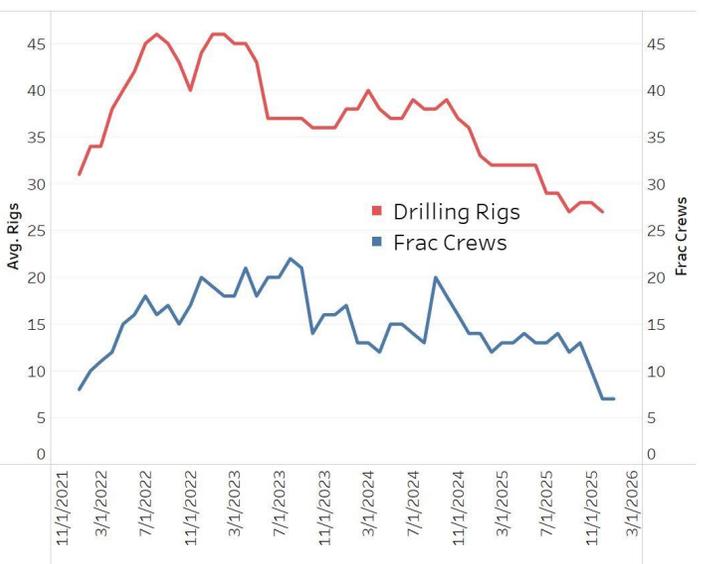
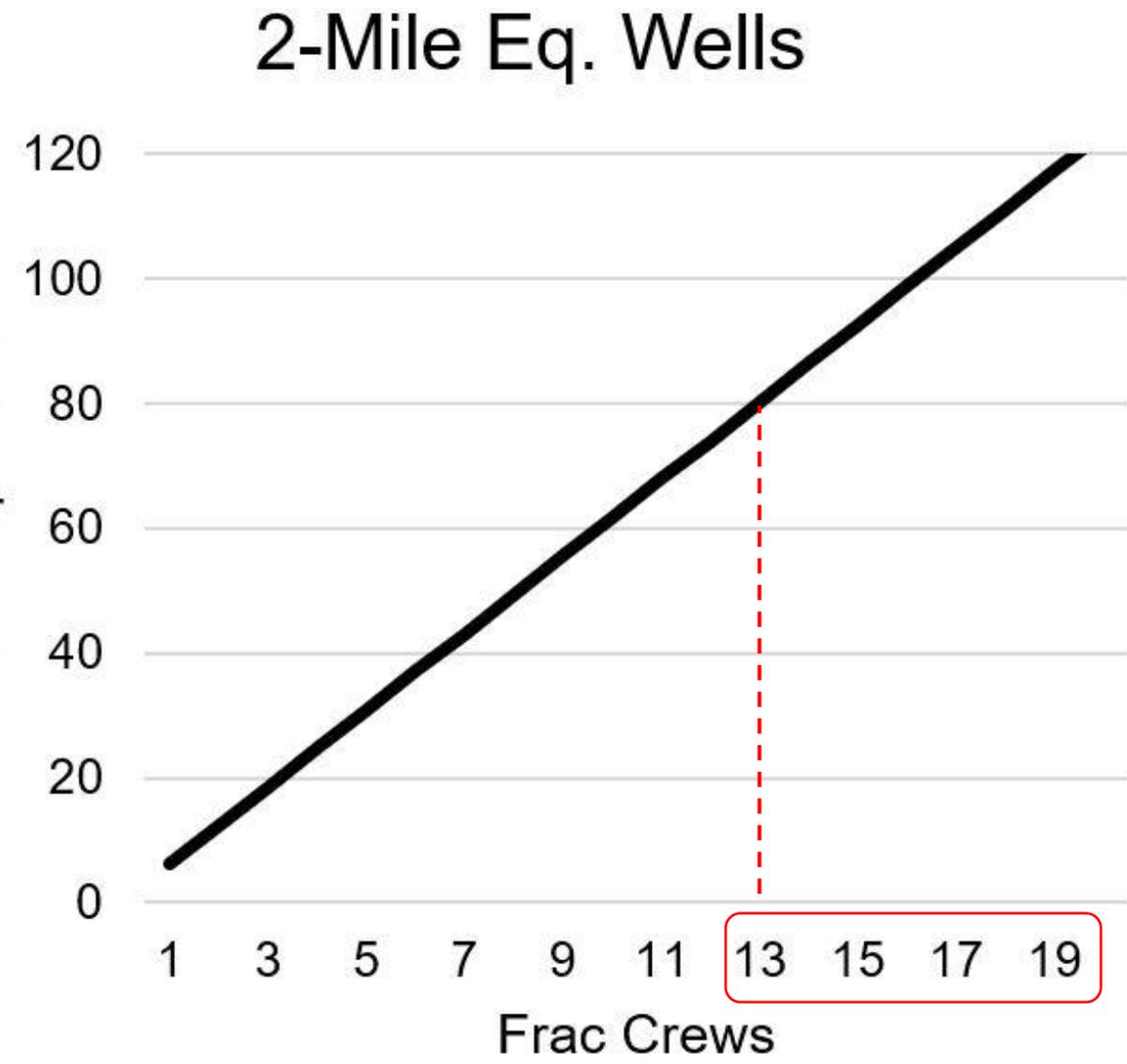
# Monthly Completion\* Scenarios - Oil



# North Dakota Frac Crew Efficiency

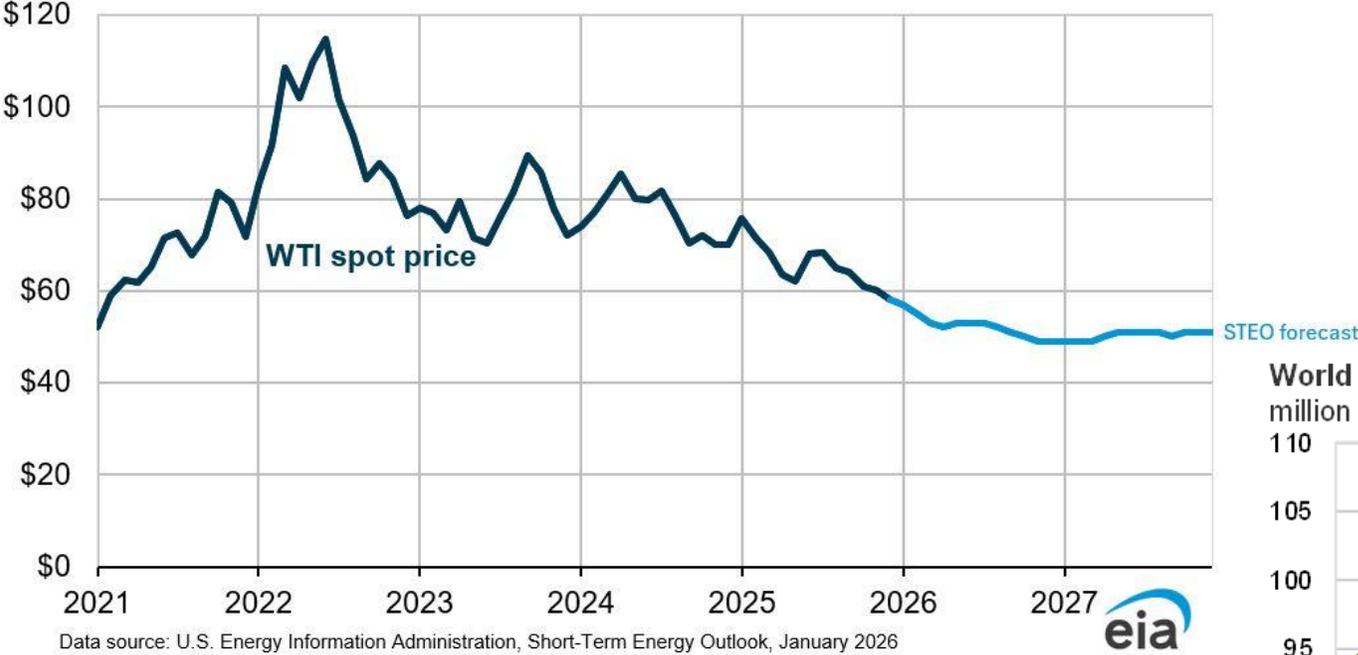


# What is the Optimal Frac Crew Count? (Assuming 30% 3-Mile & 5% 4-Mile)

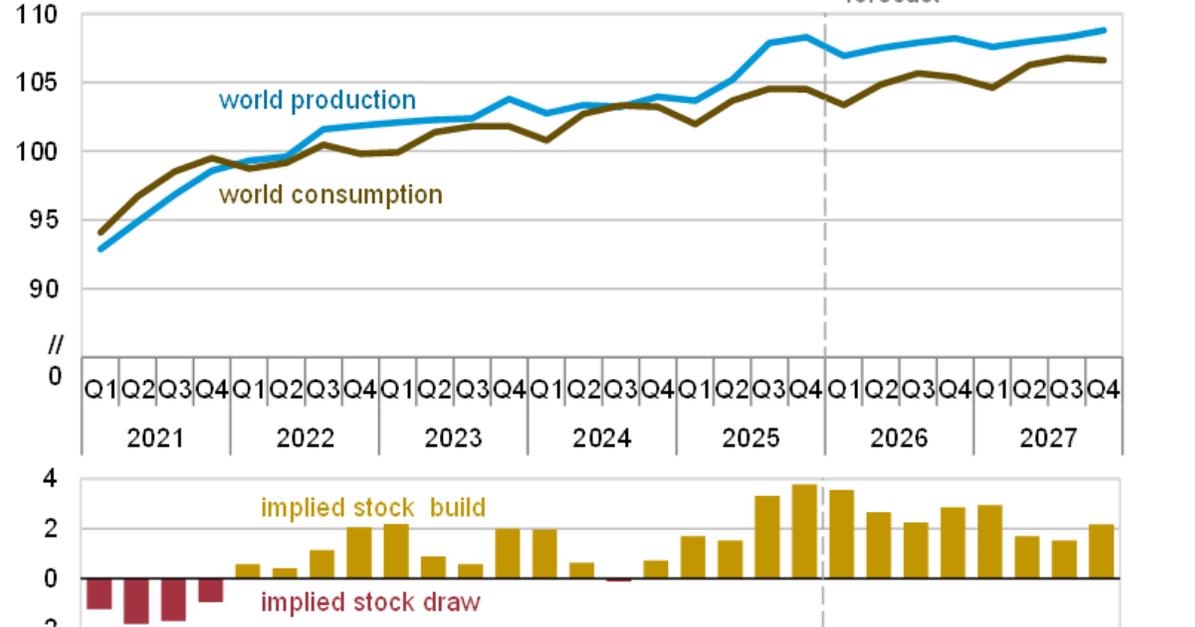


# EIA Oil Price Outlook (January 2026)

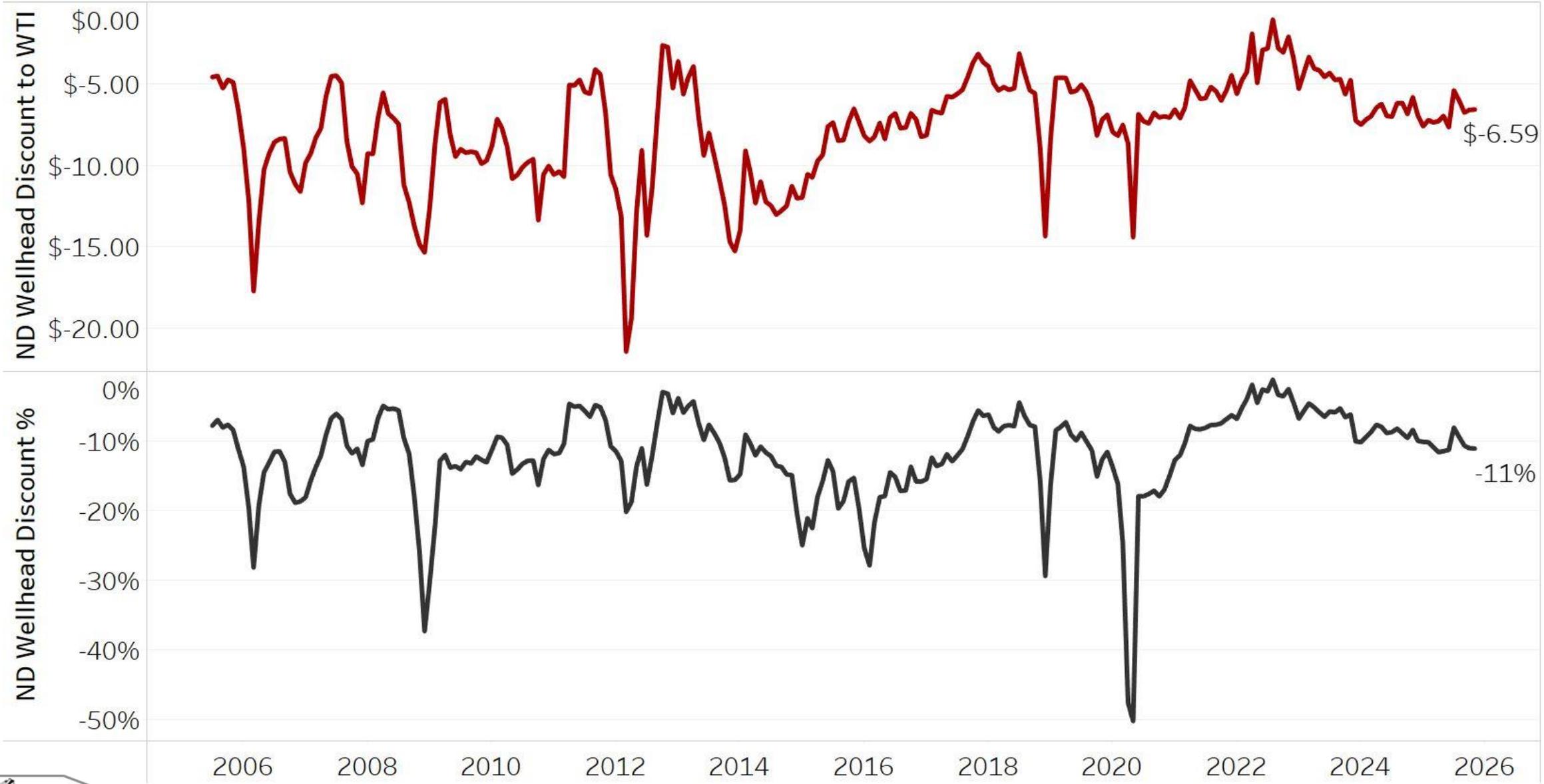
West Texas Intermediate (WTI) crude oil price  
dollars per barrel



World liquid fuels production and consumption balance  
million barrels per day



# Average North Dakota Oil “Discount” to WTI



# A Complete Natural Gas Solution



## Production

- Technology
- Markets
- Forecasting



## Gathering

- Capacity
- Connections
- Compression



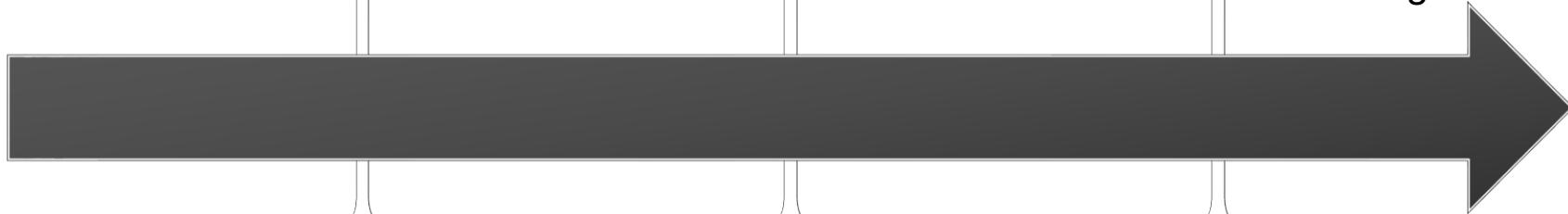
## Processing

- Capacity
- Location
- Configuration

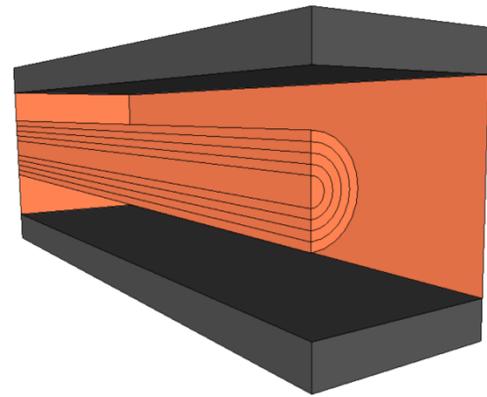


## Transmission

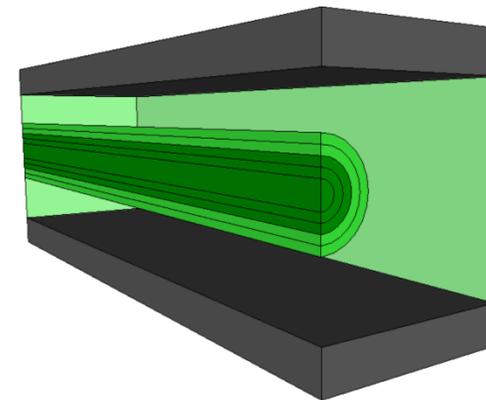
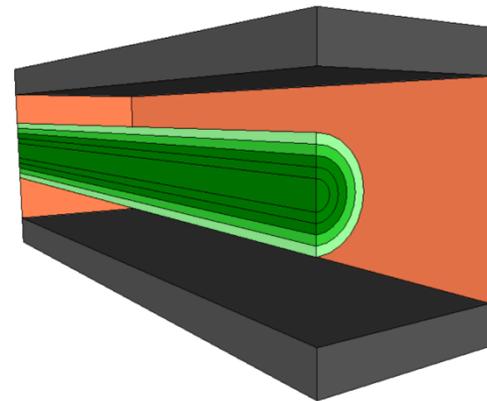
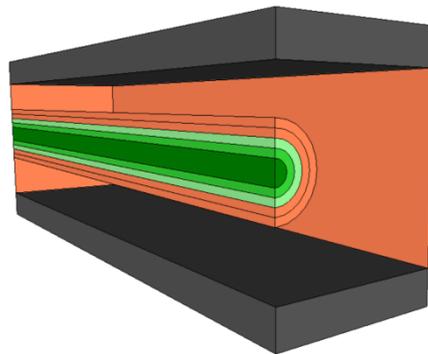
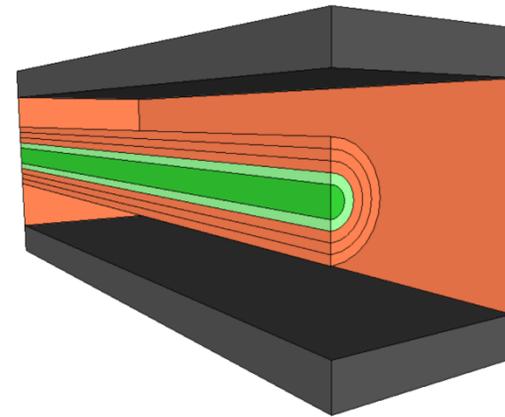
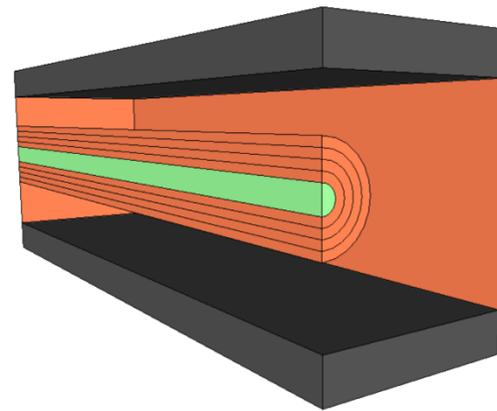
- Dry Gas
- Natural Gas Liquids
- Storage



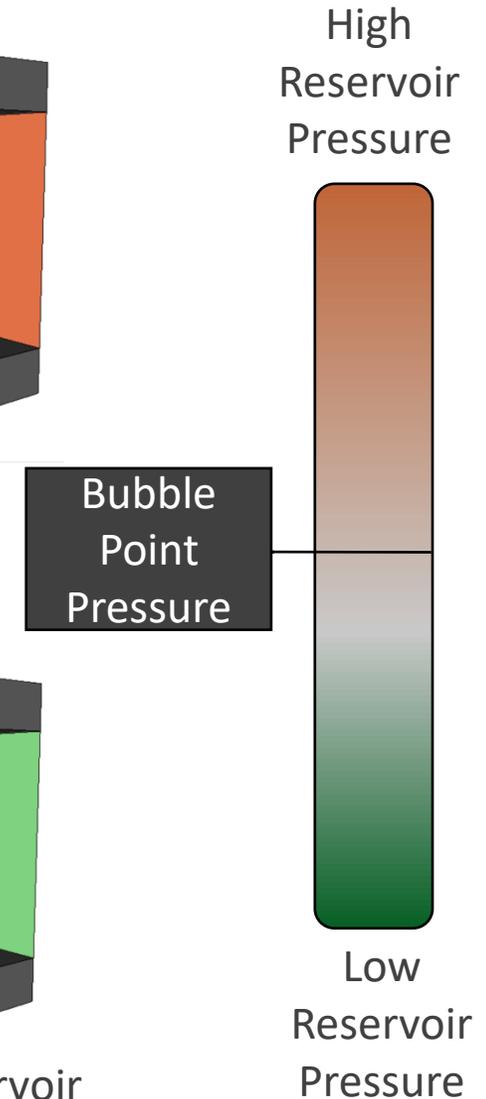
# Statewide Bakken Gas/Oil Ratios



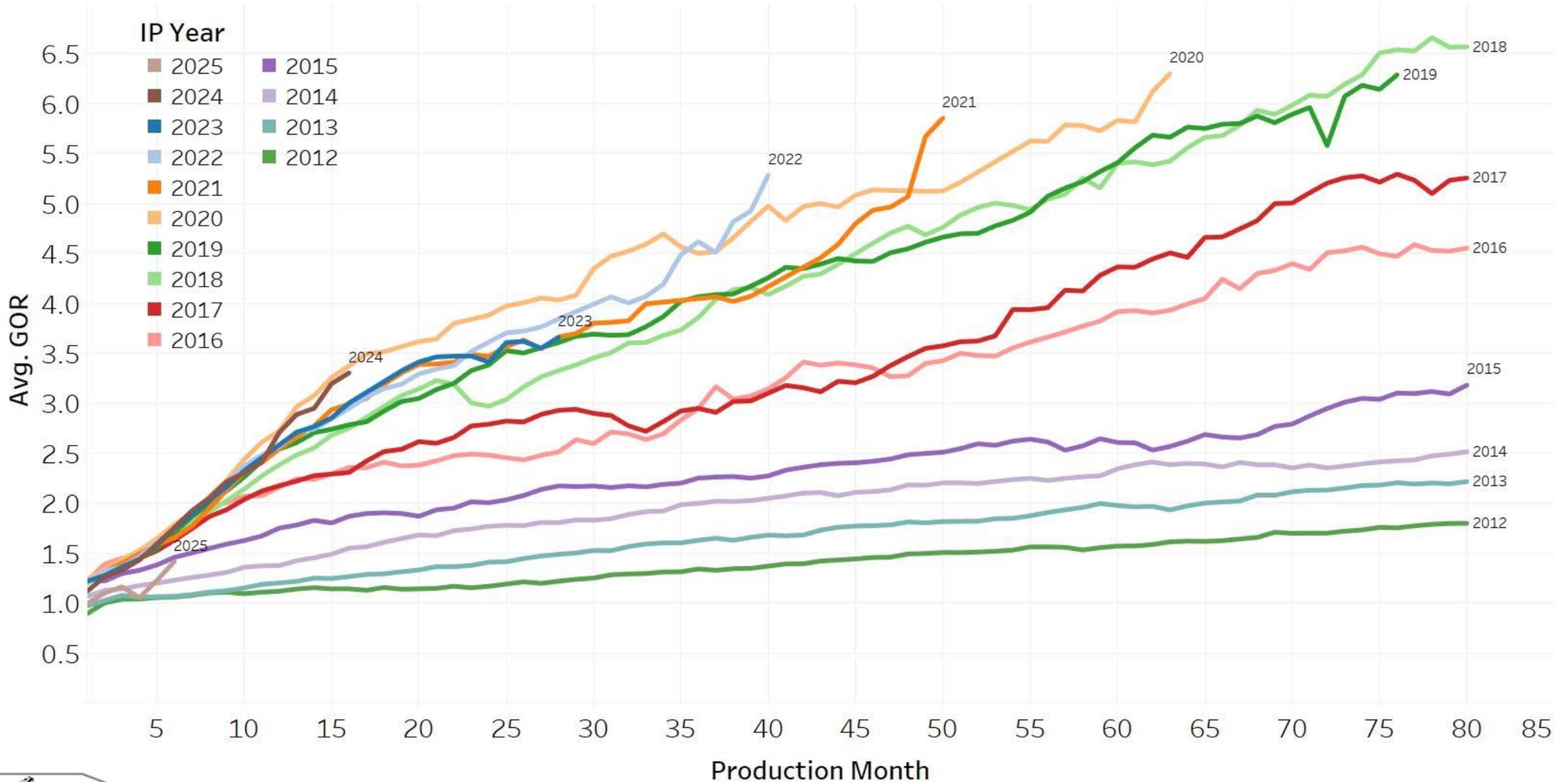
New Parent Well - Original Reservoir Pressure



Future – Entire Reservoir Below Bubble Point



# Statewide Bakken Gas/Oil Ratios



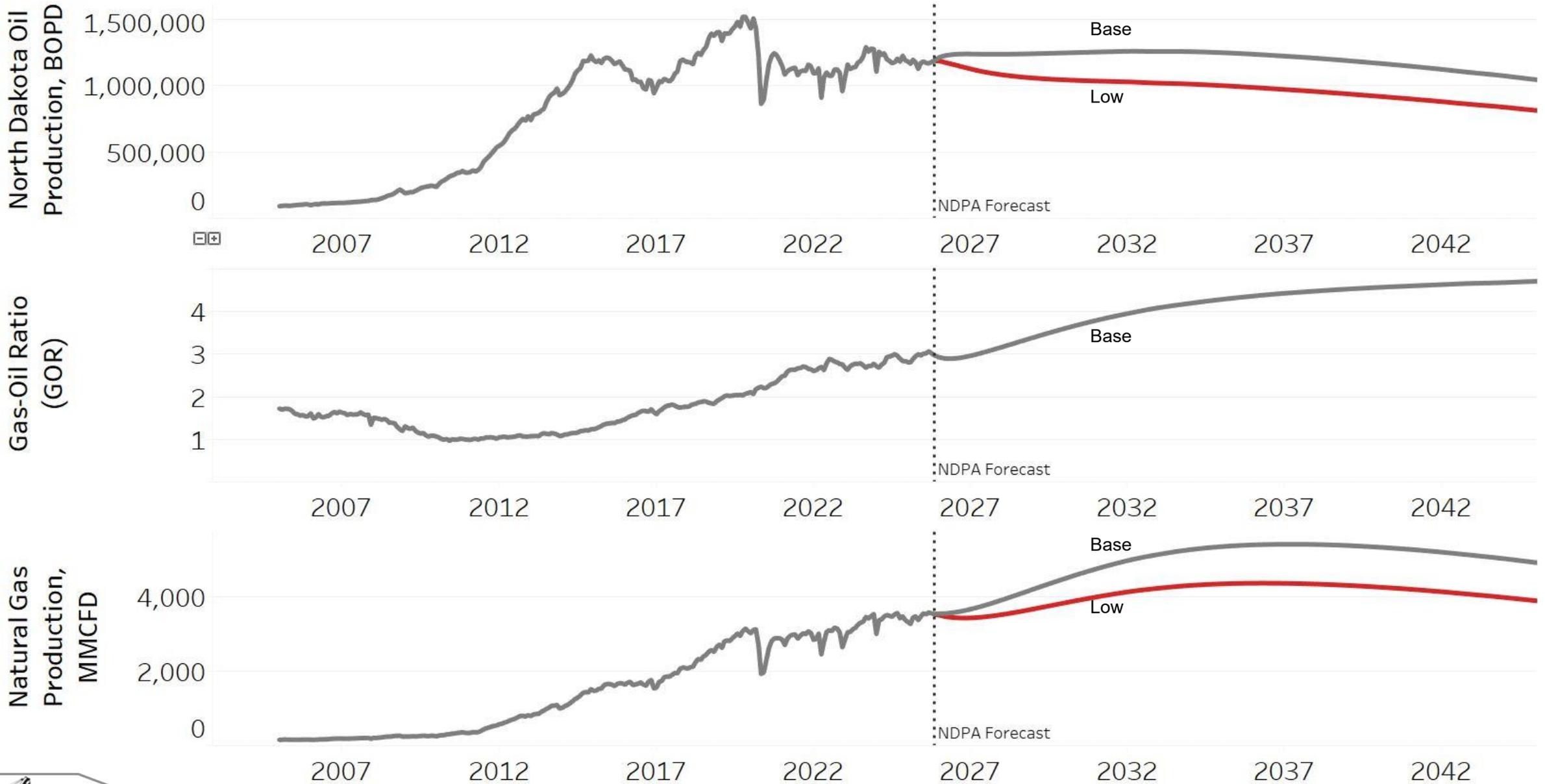
# Monthly Completion\* Scenarios - Gas



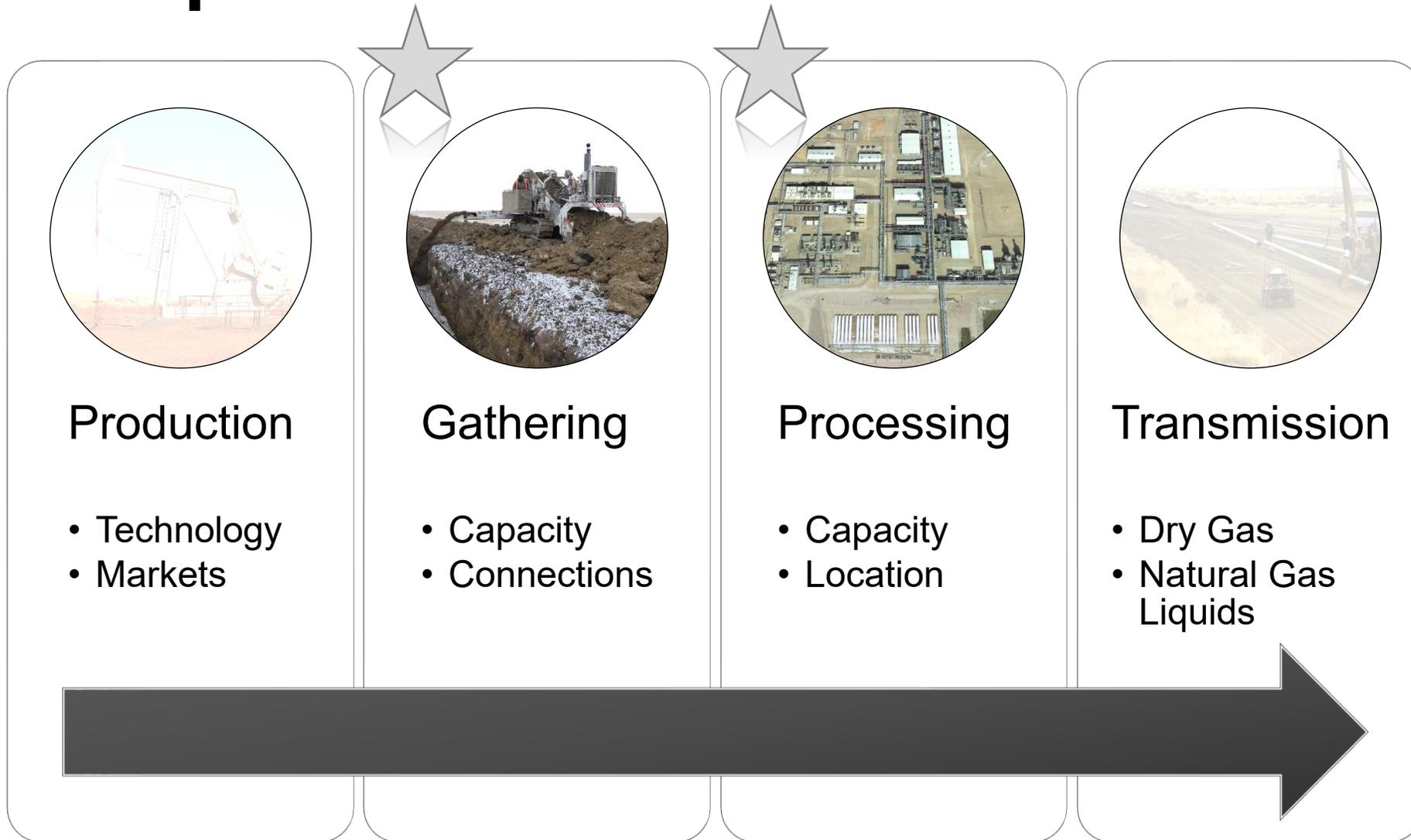
November 2025



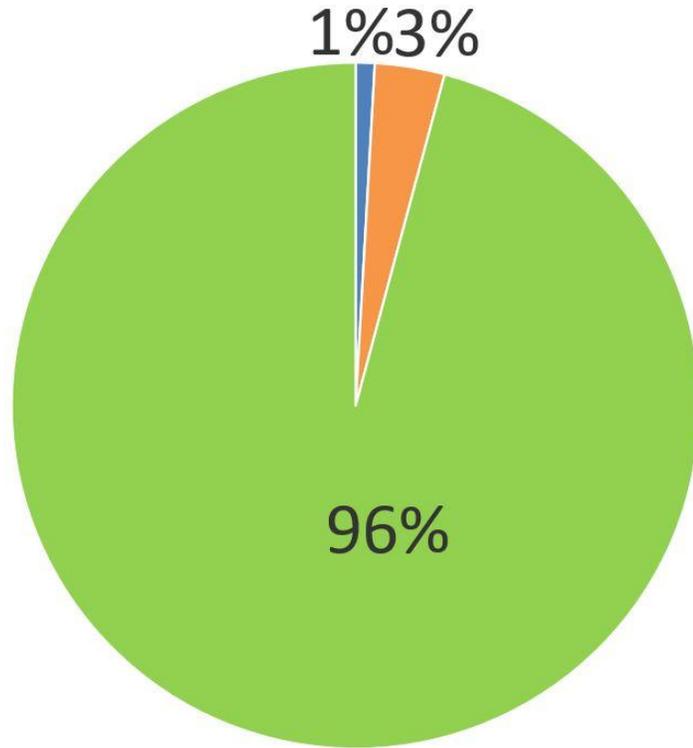
# ND Production Forecast: EIA Price Deck



# A Complete Natural Gas Solution



# 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.

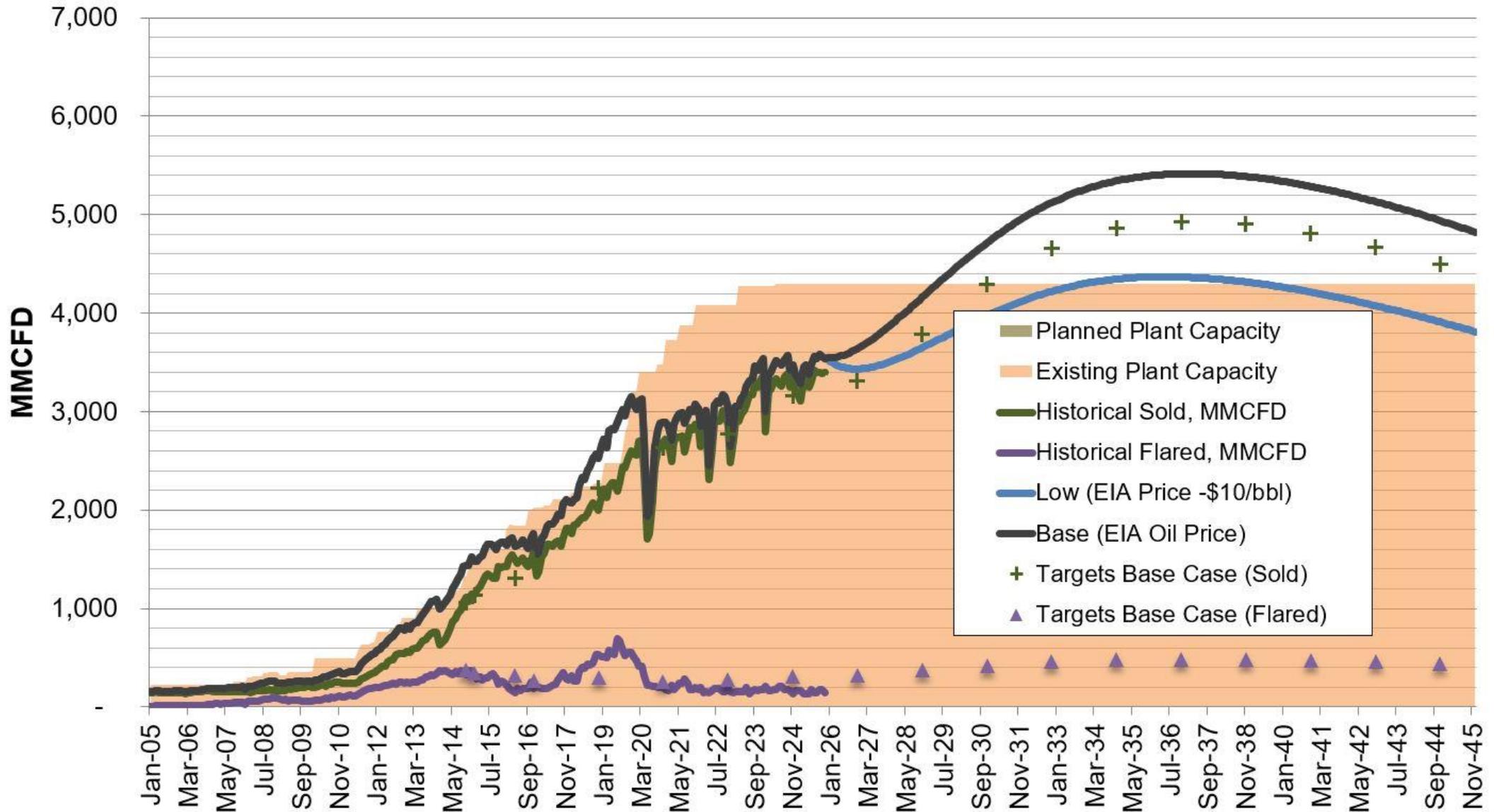
## Simple Terms

**Blue** – Lack of pipelines  
**Orange** – Challenges on existing infrastructure

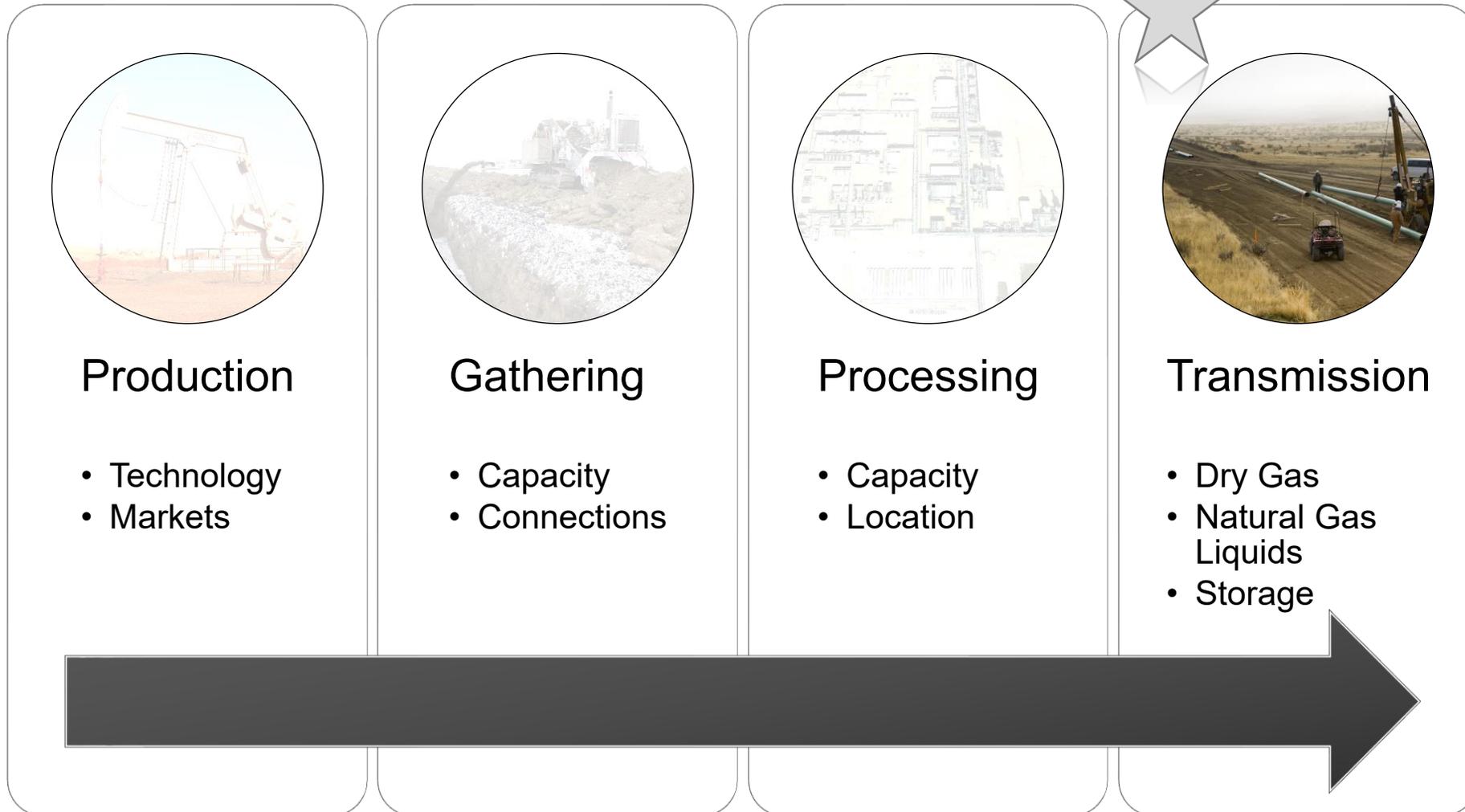
Nov. 2025 Data – Non-Confidential Wells



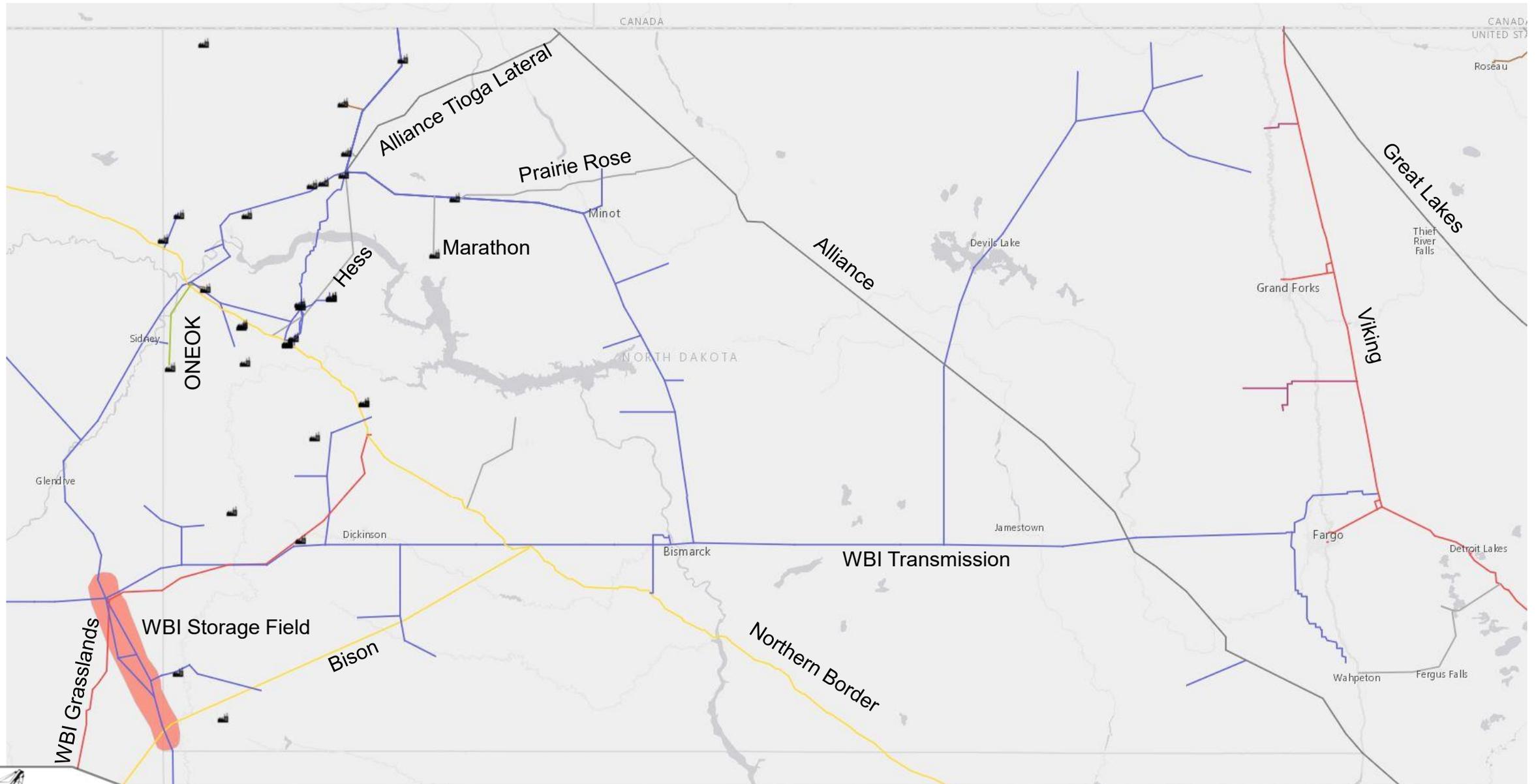
# North Dakota Gas Processing Outlook



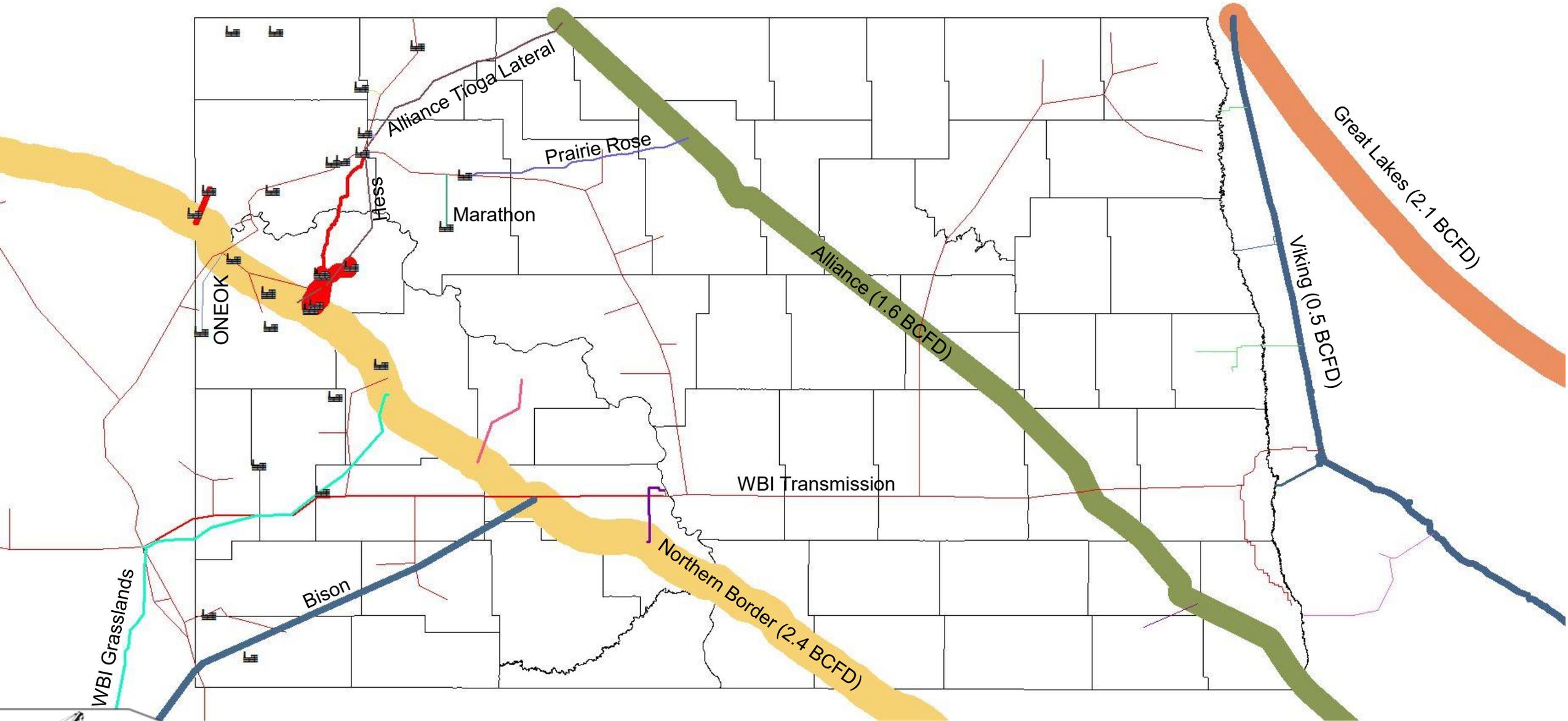
# A Complete Natural Gas Solution



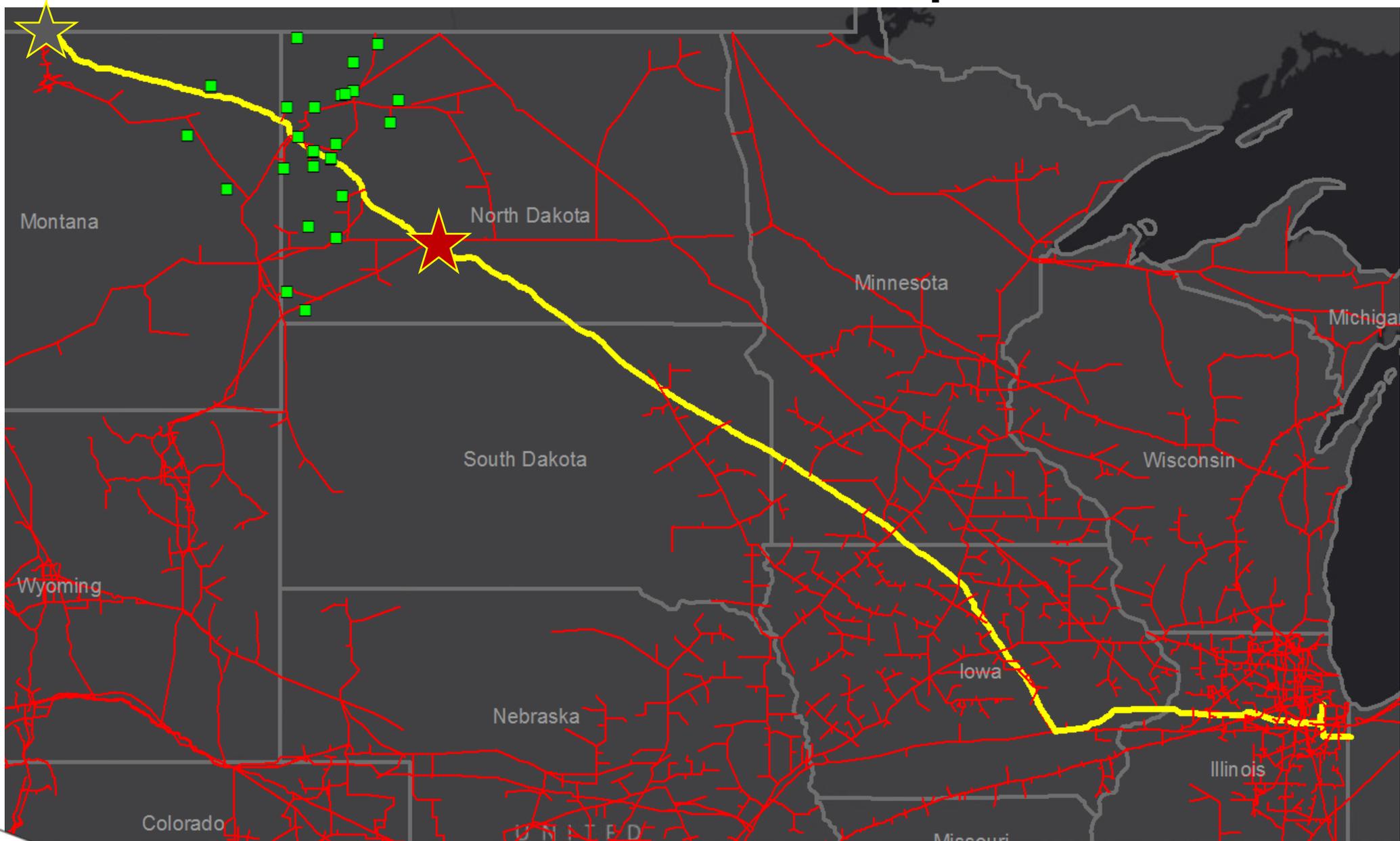
# Major Residue Gas Pipeline Infrastructure



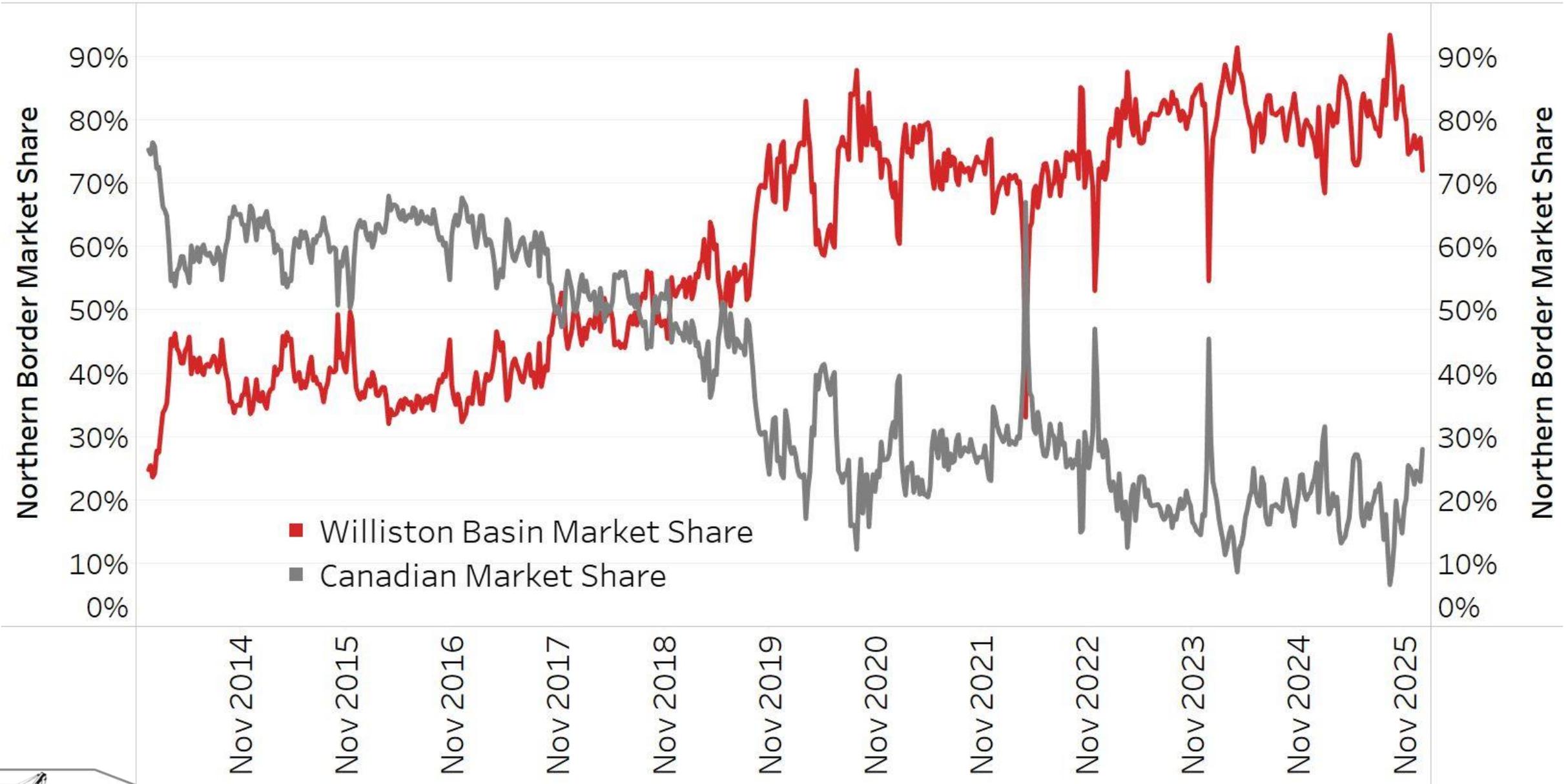
# Residue Gas Pipeline Capacity Visualization



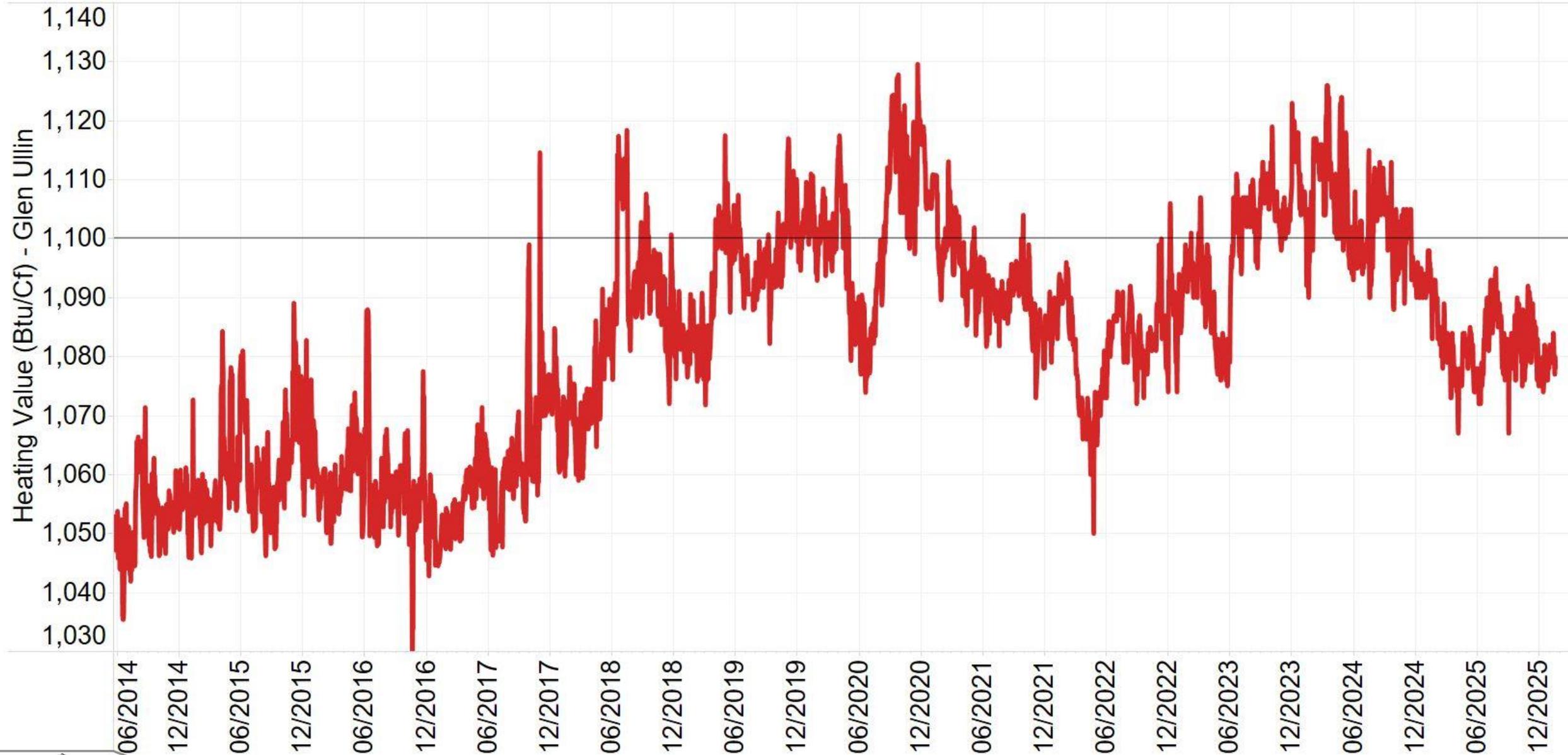
# Northern Border Pipeline



# Northern Border Pipeline Market Share



# Northern Border BTU at Glen Ullin, ND



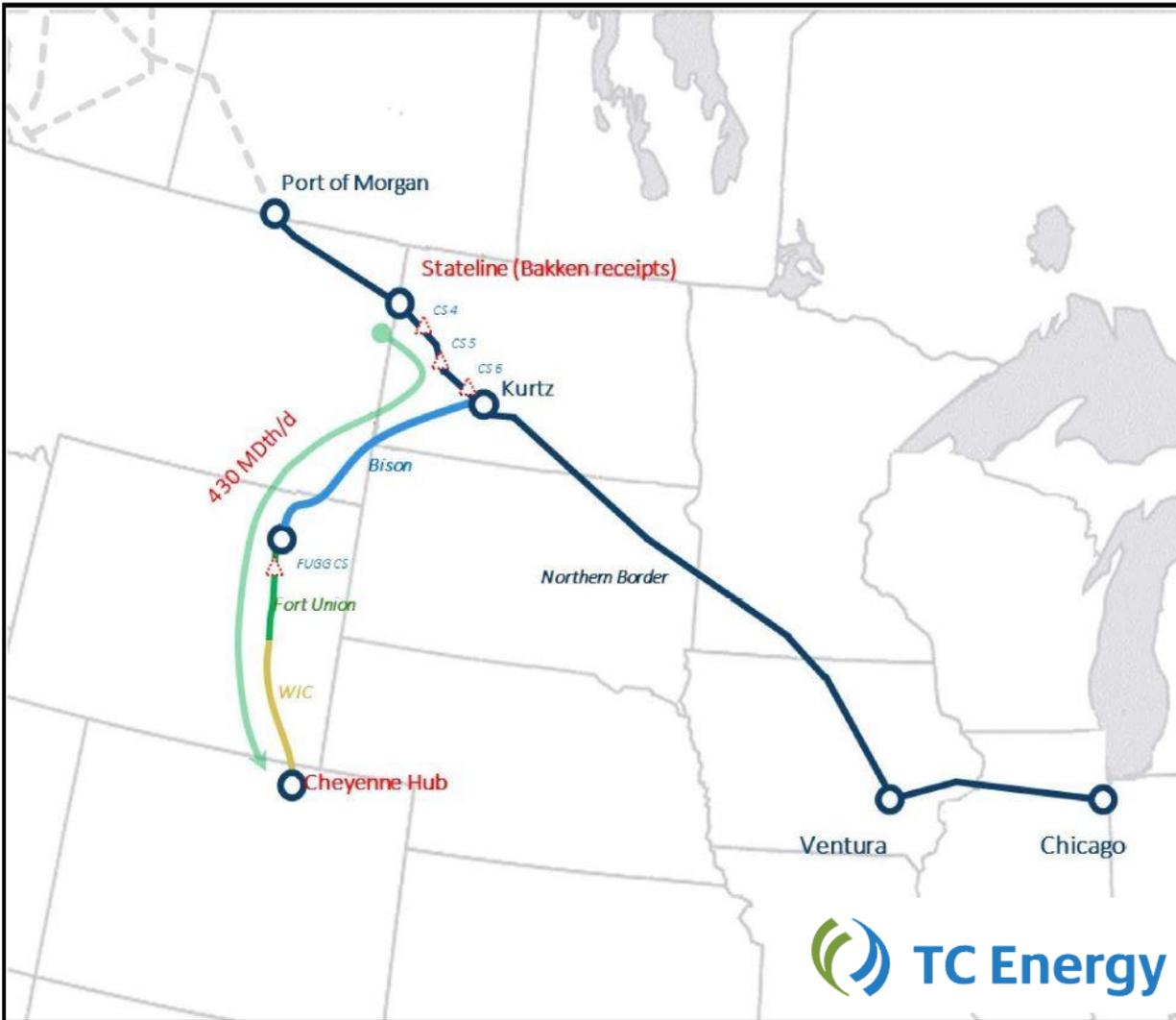
# TC Energy / Kinder Morgan: Bakken xPress Project

## Project Highlights

- Non-binding open season April 4 - May 6, 2022
- Binding Open Season: June 1-30, 2023
- Three compressor upgrades in North Dakota
- Reverse the idle Bison Pipeline (30" – 302 Mile)
- Capacity 300,000 Dth/Day (430,000 Offered)
- **May 2026** targeted in-service date
- Fort Union Gas Gathering and Wyoming Interstate Company provide further transport to Cheyenne hub.
- Seeking commitments 10yrs or Longer
- \$555 million: \$347 Replacement/\$208 Expansion

## Proposed Rates

- NBPL/Bison \$0.45/Dth + Fuel/Elec to WIC/FUG Interconnect
- WIC/FUG to Cheyenne \$0.30/Dth + Fuel/Elec
- Anchor Shipper Minimum: 50,000 Dth/Day



# Options Beyond 2026: The 5 “C’s”

## Construction (Interstate)

- Long-haul Pipe to New or Expanded Markets

## Compete

- Price Canadian Volumes to Flow Elsewhere

## Compression

- Increase Capacity on Existing Interstate Systems

## Consumption

- Intra Region Gas Demand Expansion

## Contraction

- Reduce E&P Activity to Meet Limited Gas Options



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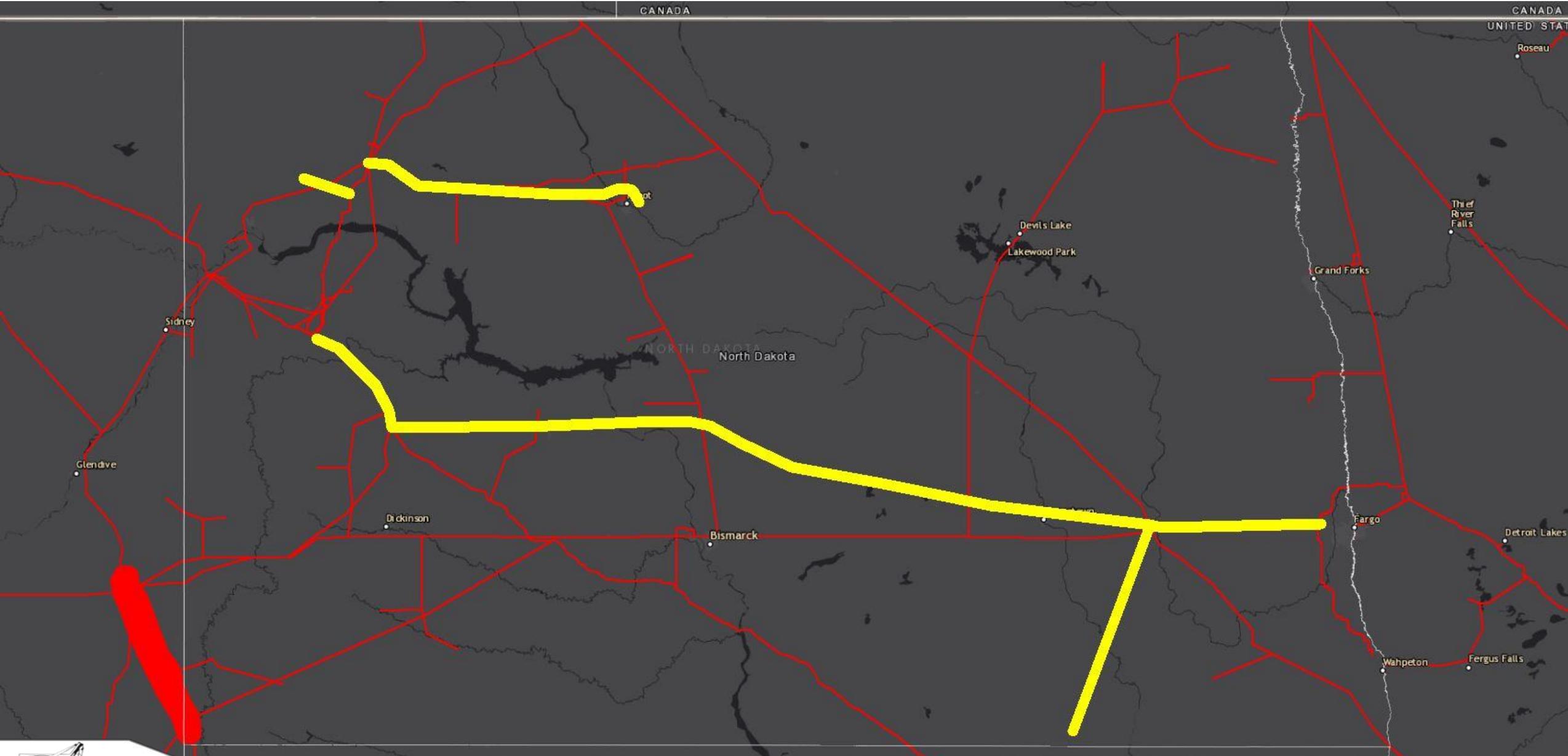
- Intra Region Gas Demand Expansion

## Contraction

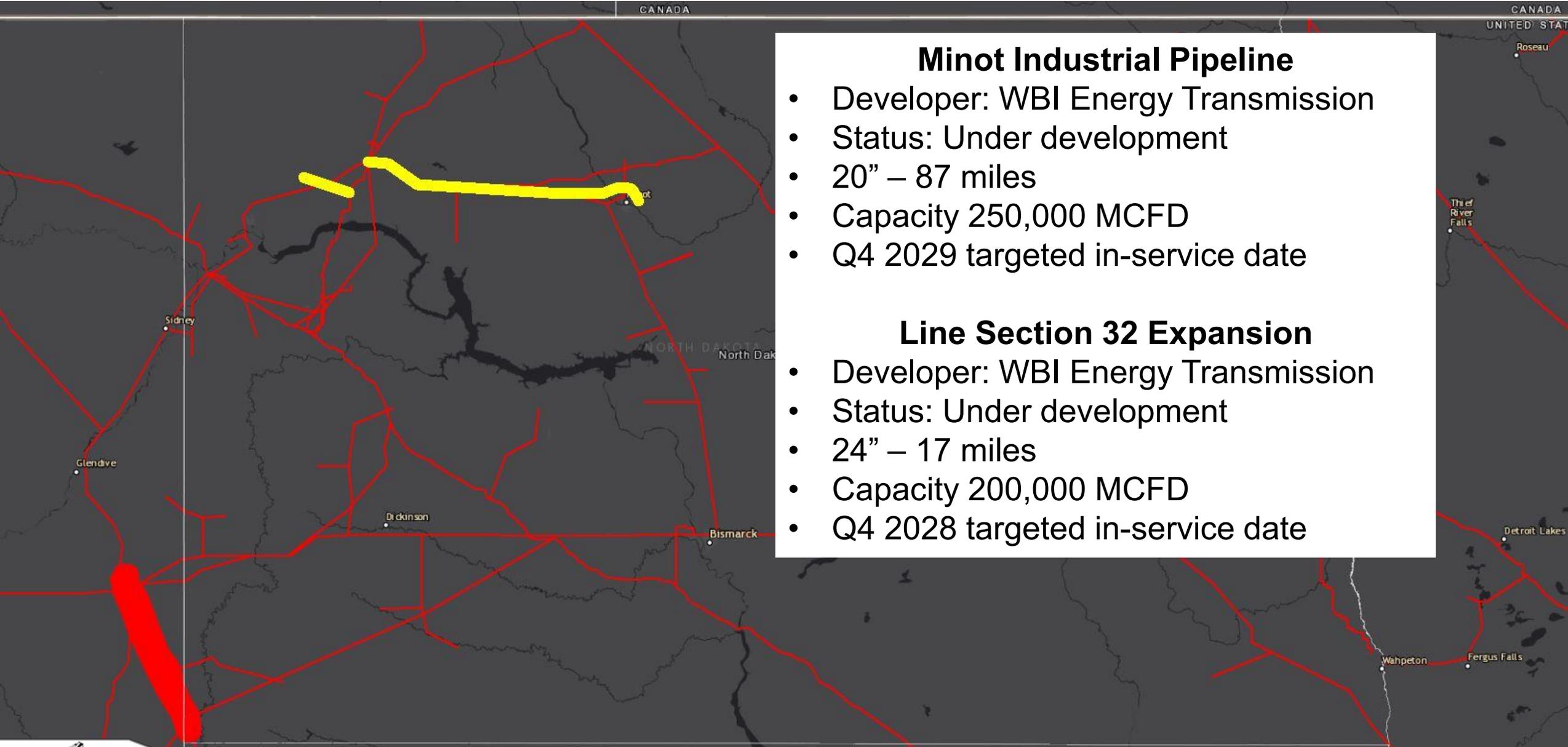
- Reduce E&P Activity to Meet Limited Gas Options



# Beyond 2026: Gas Transmission Projects



# Beyond 2026: Gas Transmission Projects



## Minot Industrial Pipeline

- Developer: WBI Energy Transmission
- Status: Under development
- 20" – 87 miles
- Capacity 250,000 MCFD
- Q4 2029 targeted in-service date

## Line Section 32 Expansion

- Developer: WBI Energy Transmission
- Status: Under development
- 24" – 17 miles
- Capacity 200,000 MCFD
- Q4 2028 targeted in-service date



# WBI Energy: Proposed Bakken East Project

## Natural Gas Pipeline Project Highlights

- Non-binding open season Dec 16 – Jan 31, 2025
- 455 Miles: 36", 30", & 20" Pipe
- Proposed Capacity (East) 1,000,000 Dth/Day
- Phase 1 (West) : Nov 2029 targeted in-service
- Phase 2 (East) : Nov 2030 targeted in-service
- Seeking commitments 20yrs or Longer

## Estimated Rates

- \$0.85 to \$0.90/Dth + Fuel/Electric/Commodity
- Anchor Shipper Minimum: 100,000 Dth/Day
- Foundation Shipper Minimum: 250,000 Dth/Day



# Intensity Infrastructure Partners Proposed Pipeline



## Phase 1 Project Highlights

- Non-binding open season Feb 3 – Mar 7, 2025
- 136 Miles: 36" Pipe
- Proposed Capacity 1,100,000 Dth/Day
- July 2029 targeted in-service
- Seeking commitments 10yrs or Longer

## Phase 1 Estimated Rates

- Sub- $\$0.40/\text{Dth}$  + Fuel/Electric/Commodity
- Anchor Shipper Minimum: 100,000 Dth/Day
- Foundation Shipper Minimum: 250,000 Dth/Day

## Phase 2 Project Highlights

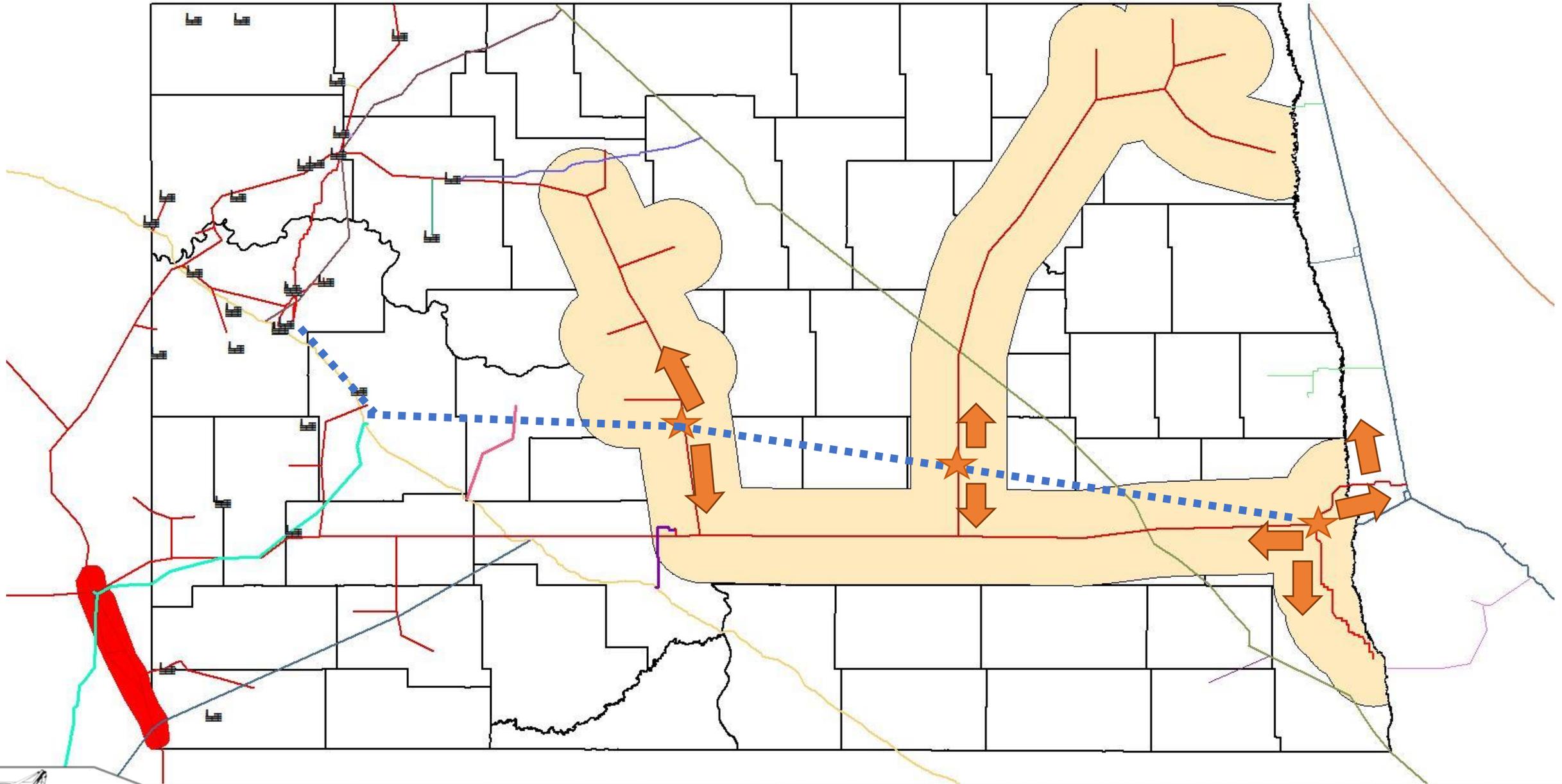
- Non-binding open season Apr 17 – May 23, 2025
- 208 Miles: 30" Pipe
- Proposed Capacity 430,000 Dth/Day
- January 2030 targeted in-service
- Seeking commitments 10yrs or Longer

## Phase 2 Estimated Rates

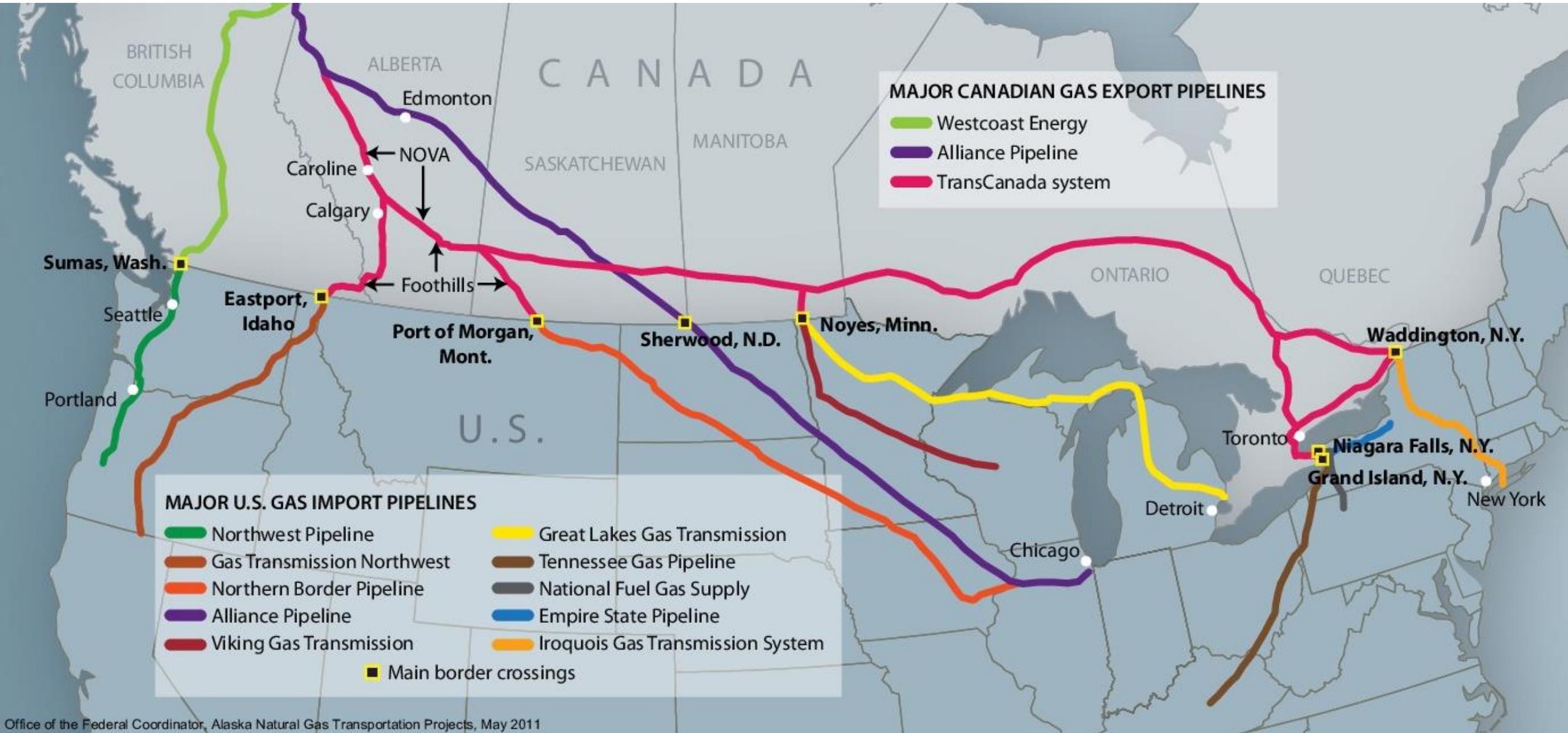
- $\$0.80/\text{Dth}$  + Fuel/Electric/Commodity
- Anchor Shipper Minimum: 100,000 Dth/Day
- Foundation Shipper Minimum: 250,000 Dth/Day



# Going East: Statewide Benefits of Interconnections



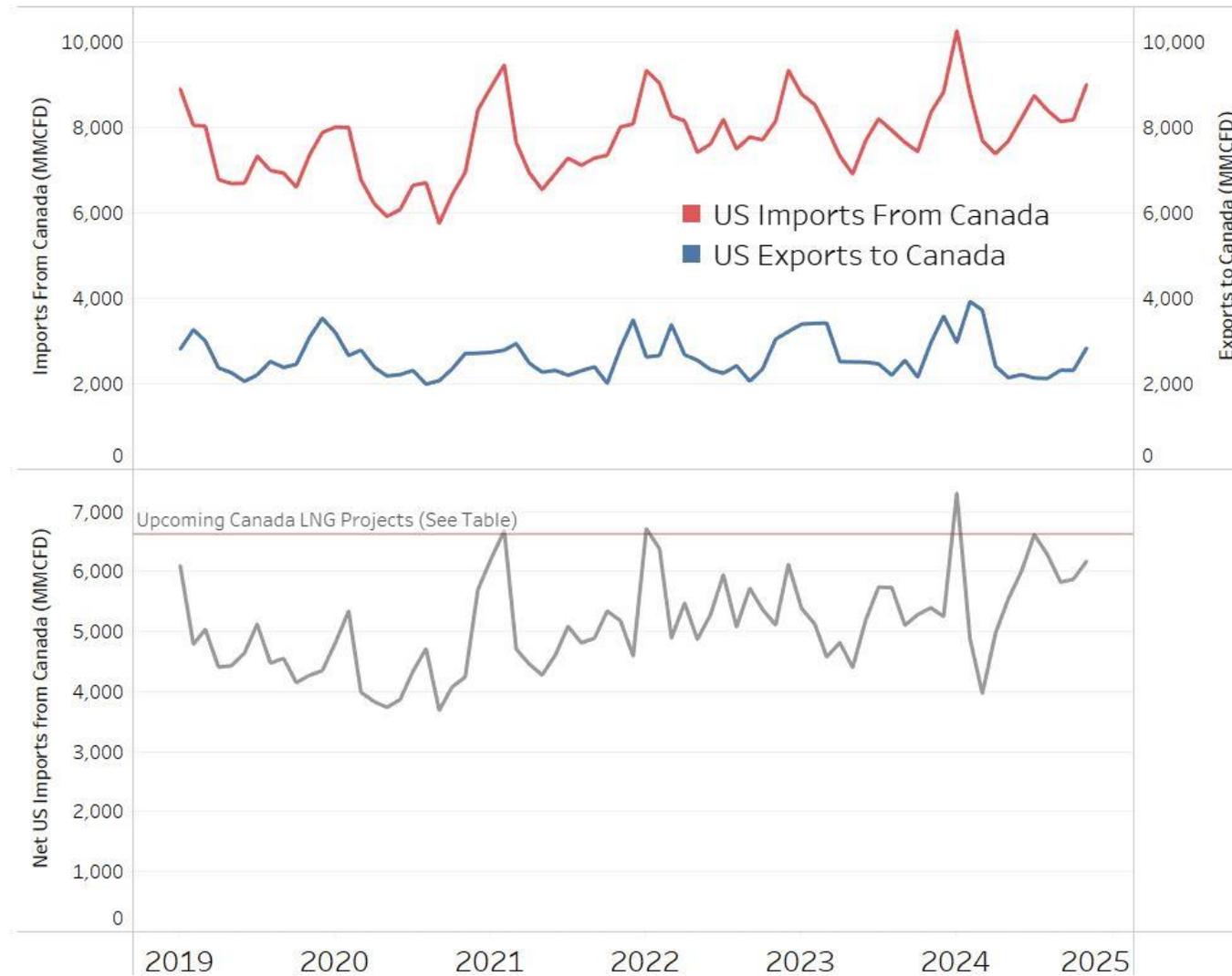
# Canadian Gas Pipeline Connectivity



Office of the Federal Coordinator, Alaska Natural Gas Transportation Projects, May 2011



# United States Canada Gas Movements & LNG



## Projects proposed and under construction

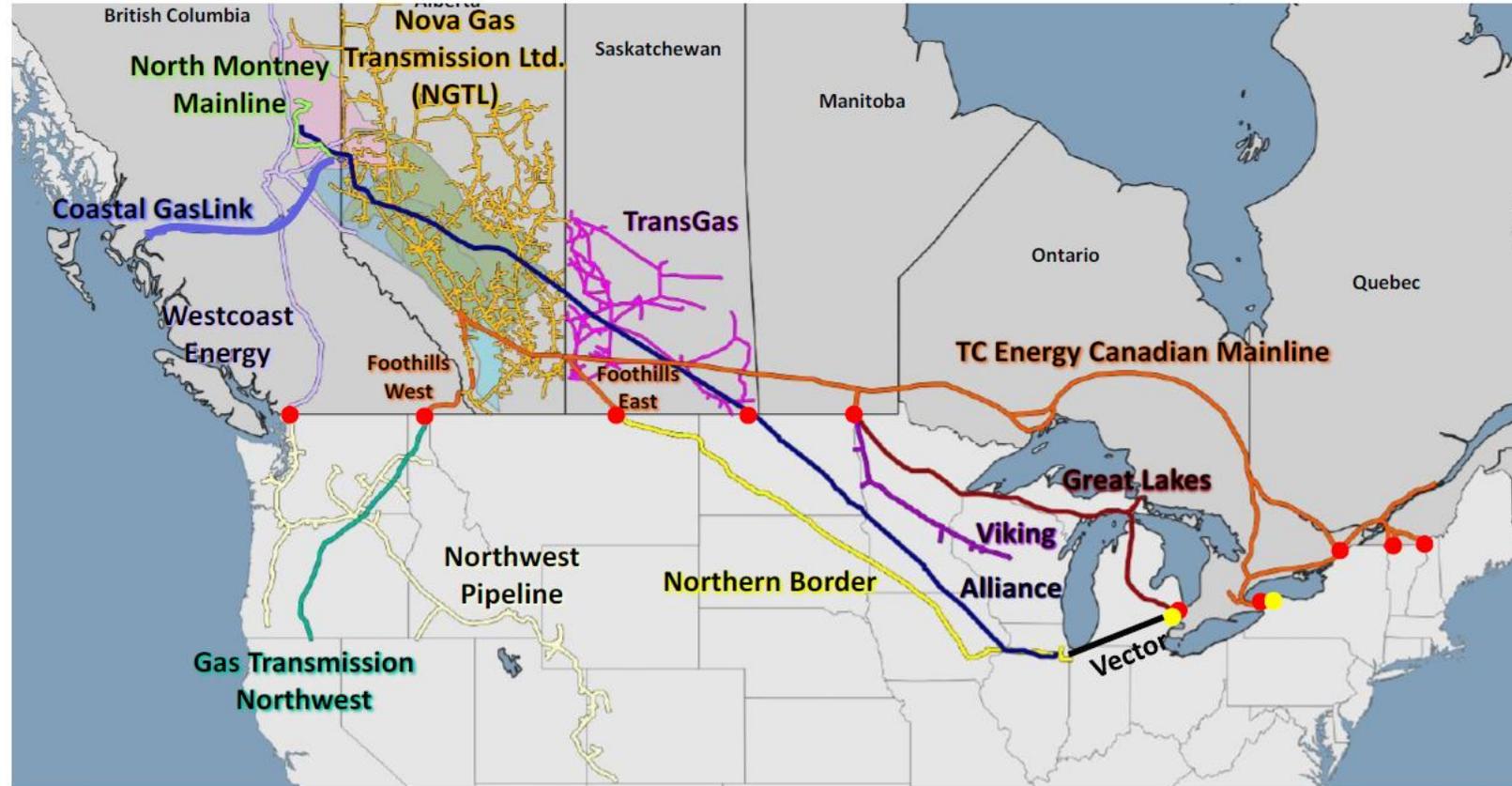
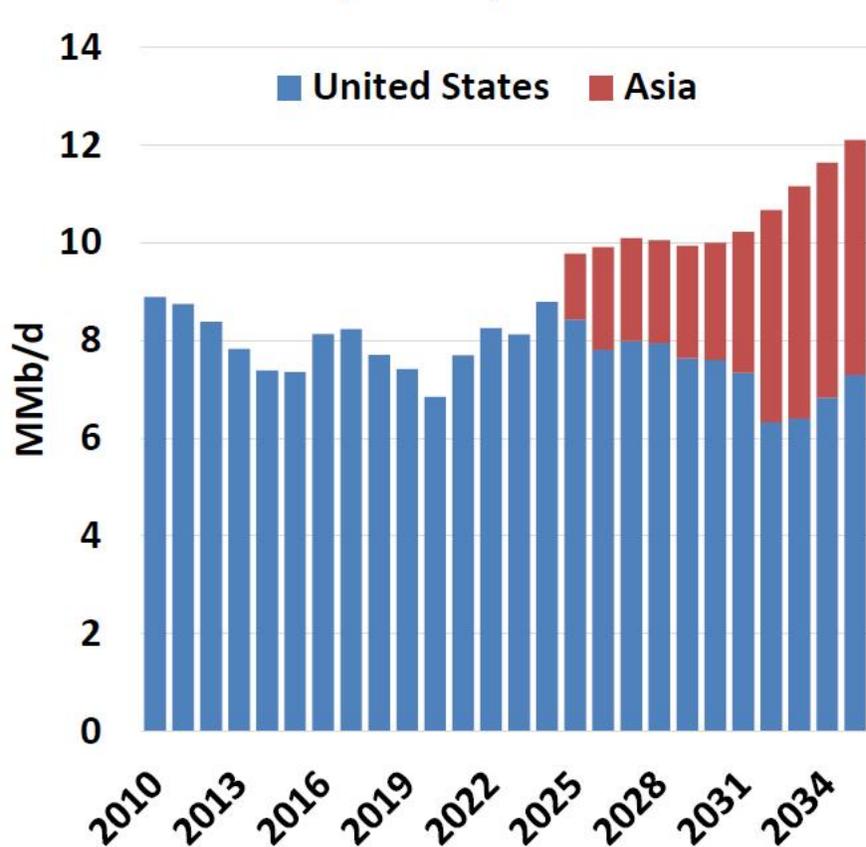
Project	LNG Export Volumes, Million Tonnes per Annum (MTPA)	LNG Export Volumes, Billion Cubic Feet per Day (Bcf/d)
<b>Export Licence - 40 years</b>		
LNG Canada Phase 1 Kitimat, BC	14	1.84
LNG Canada Phase 2 Kitimat, BC	14	1.84
Woodfibre LNG Squamish, BC	2.1	0.28
Ksi Lisims LNG Gingolx, BC	12	1.58
<b>Export Licence - 25 years</b>		
Tilbury LNG Phase 2 Delta, B.C.	2.5	0.33
Cedar LNG Kitimat, BC	3	0.39
<b>Yet to apply for an Export Licence</b>		
Summit Lake PG LNG Prince George, BC	2.7	0.36
<b>Export Licence Not applicable (n/a)</b>		
Tilbury Marine Jetty Delta, BC	n/a	n/a
<b>Total</b>	<b>50.3</b>	<b>6.62</b>



# Natural Gas Exports and Export Options

- Gas production growth is insufficient to meet a combination of LNG export needs, Alberta demand growth and sustaining pipeline exports.

NG Exports by Destination



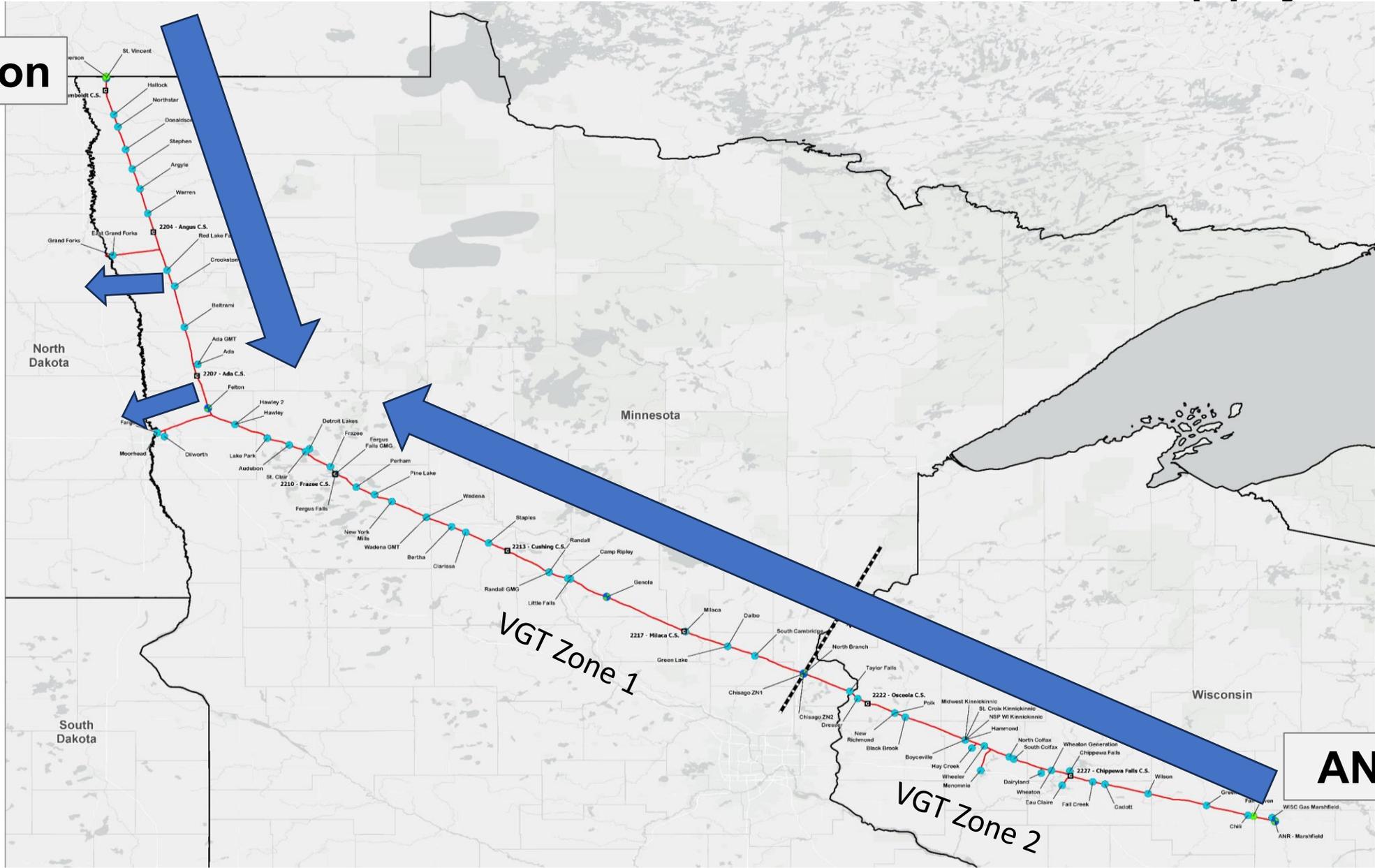
- Potential end result is a reduction in gas pipeline exports to the U.S. as LNG and Alberta demand will take precedence.

# Eastern North Dakota Interstate Pipeline Interconnection Options



# Current Eastern North Dakota Gas Supply

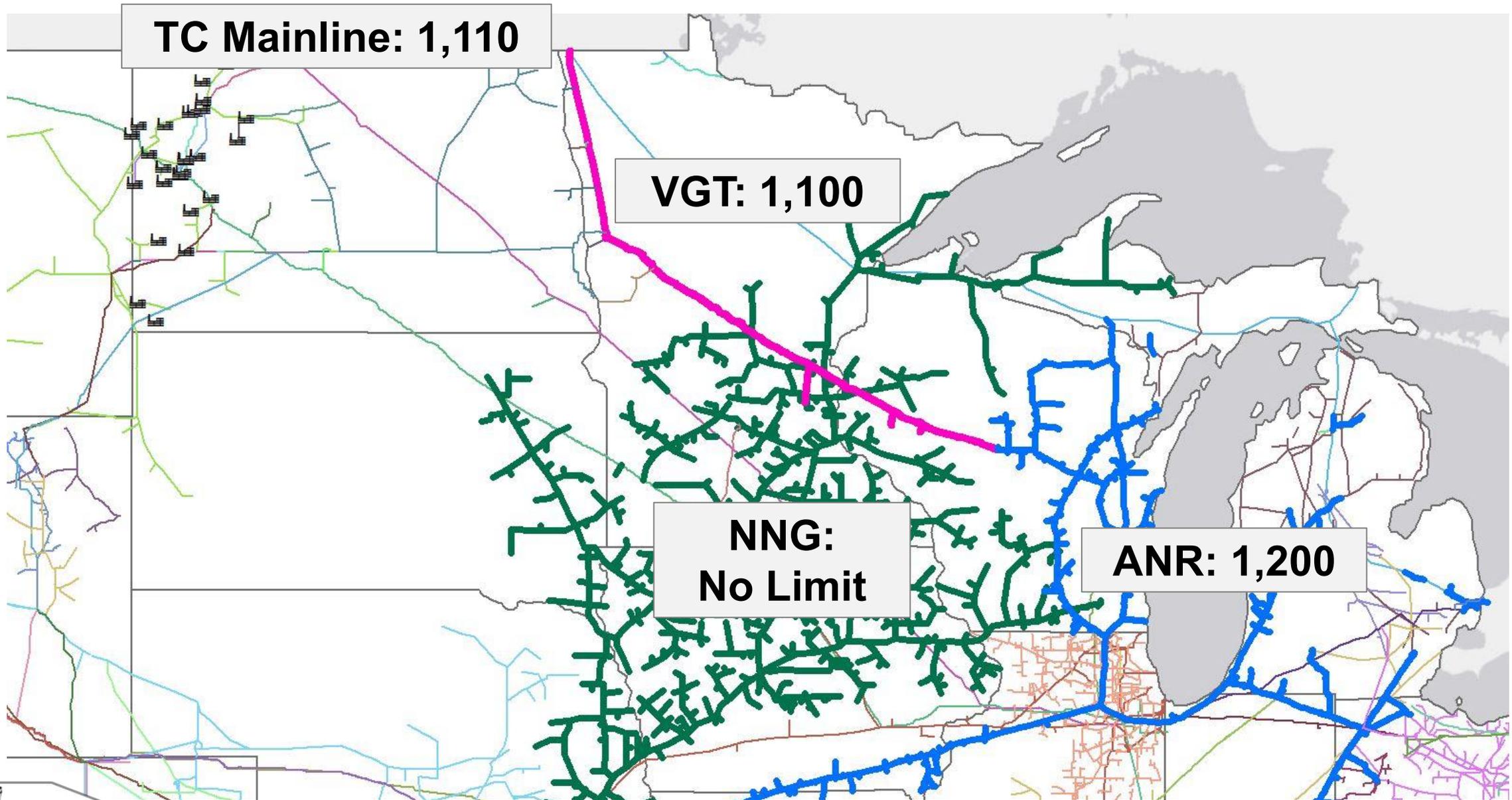
Emerson



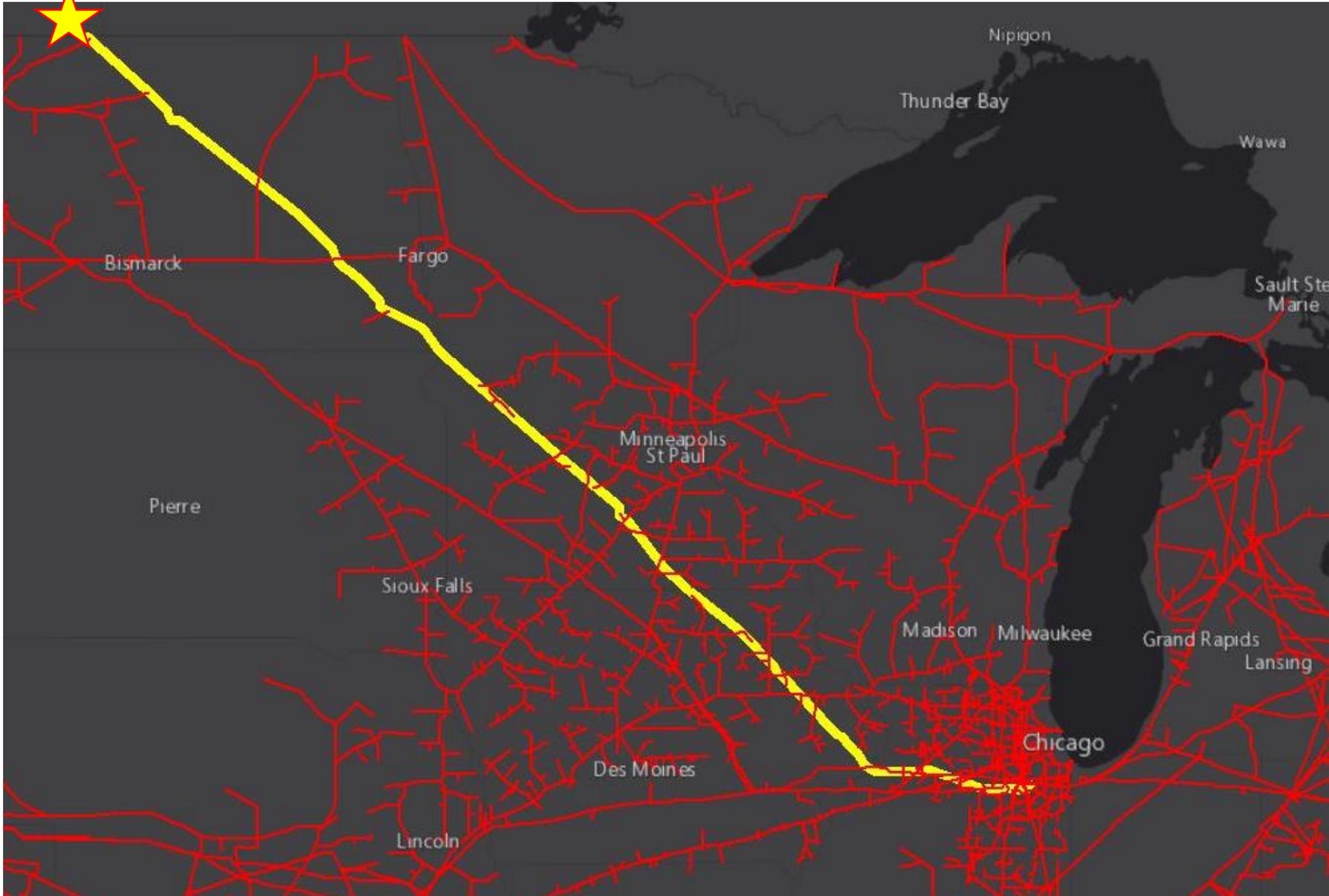
ANR



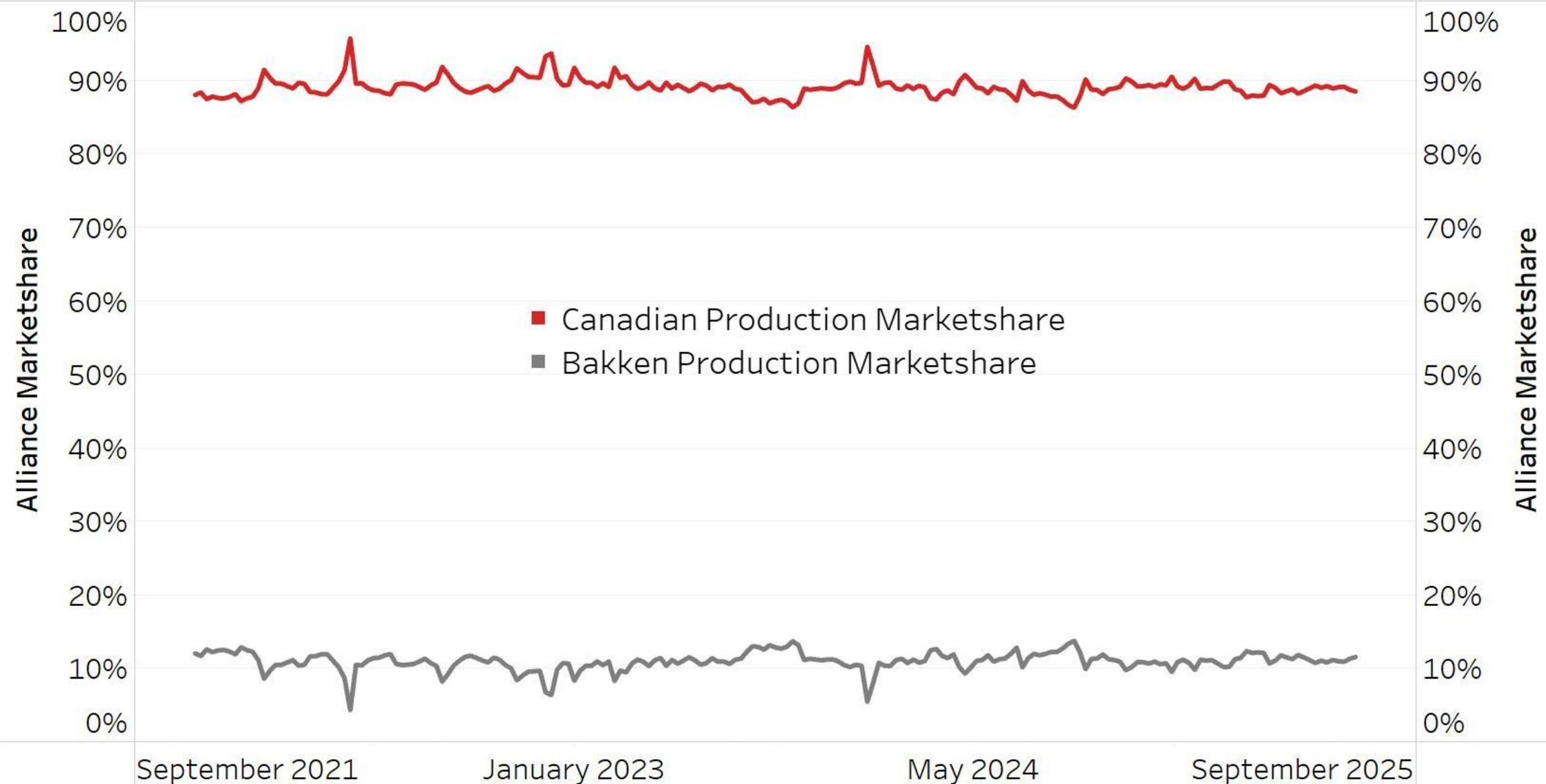
# The Need to Modernize Viking's BTU Limit



# Alliance Pipeline US



# Alliance Pipeline Market Share: ~1.6 BCFD Capacity



# Signing Up For Pipeline Capacity

## Shippers Types



Producers/Midstream



Marketing Firms



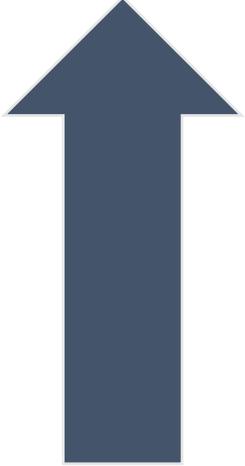
Industrial Consumers/LDC



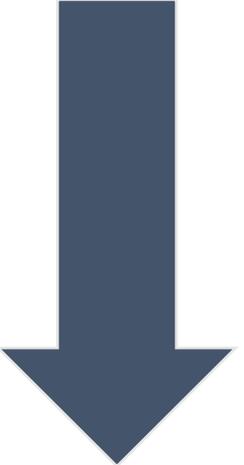
State of North Dakota (PA/IC)



# How Will NDPA Manage Contracted Capacity?



Most  
Desirable



Least  
Desirable

Release capacity to replacement shipper(s)  
in increments greater than one year at  
FERC required rate structure

Release capacity to replacement shipper(s)  
in increments less than one year at bid  
rates (*Limited by 54-17.7-04 Subsection 3*)

Release of capacity to an asset manager for  
an appropriate term length

Pay obligated precedent agreement rates  
until a release or asset management  
agreement is established



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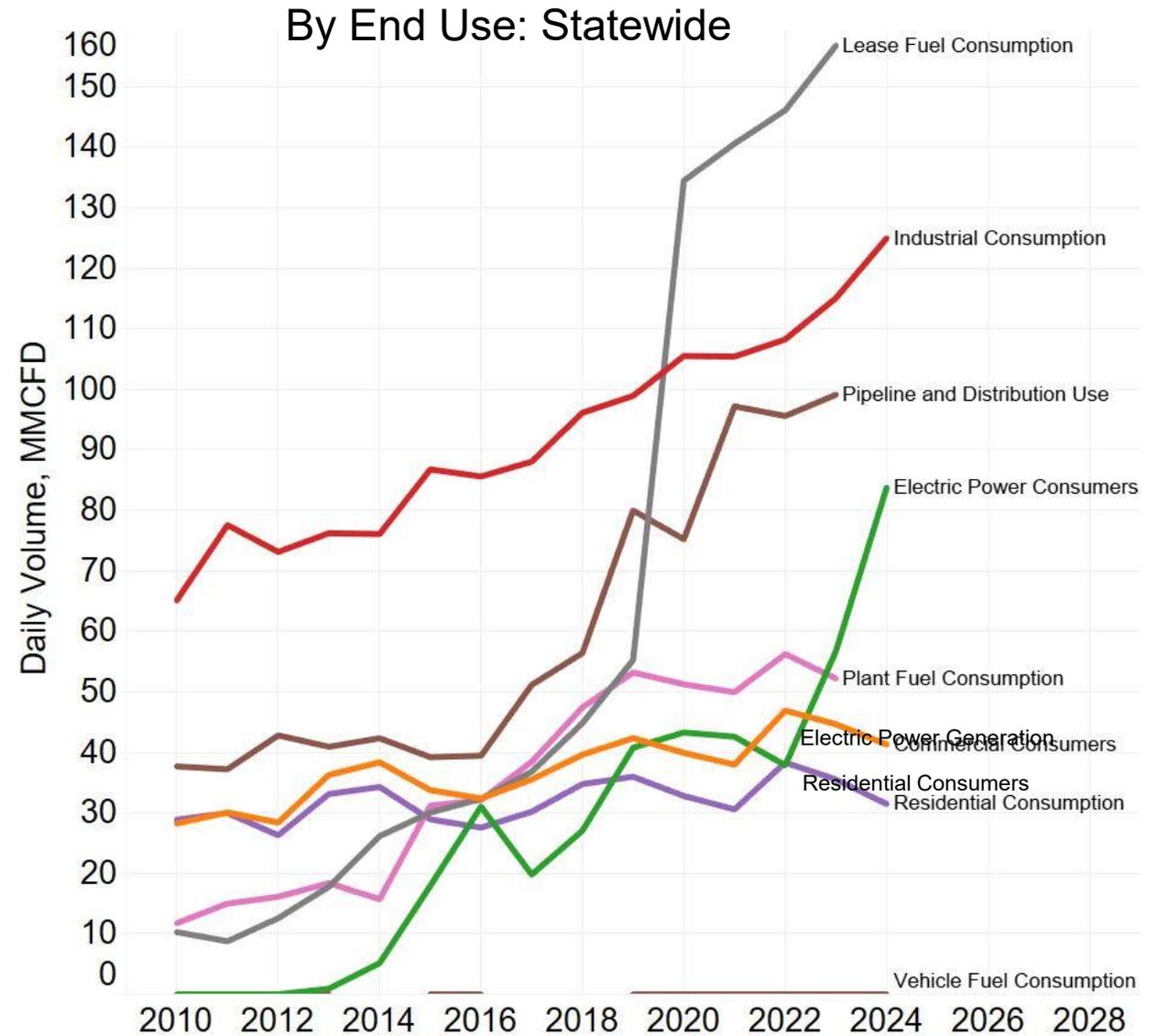
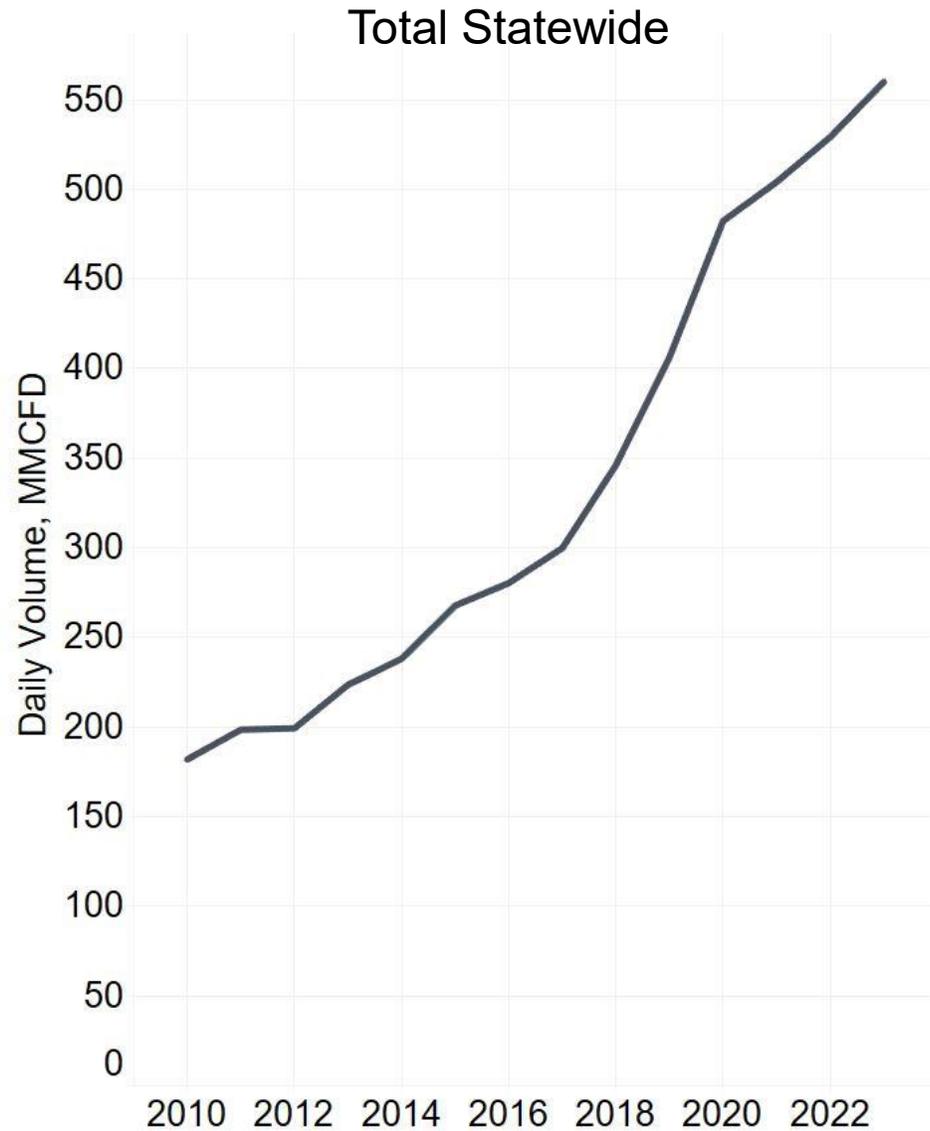
- Intra Region Gas Demand Expansion

## Contraction

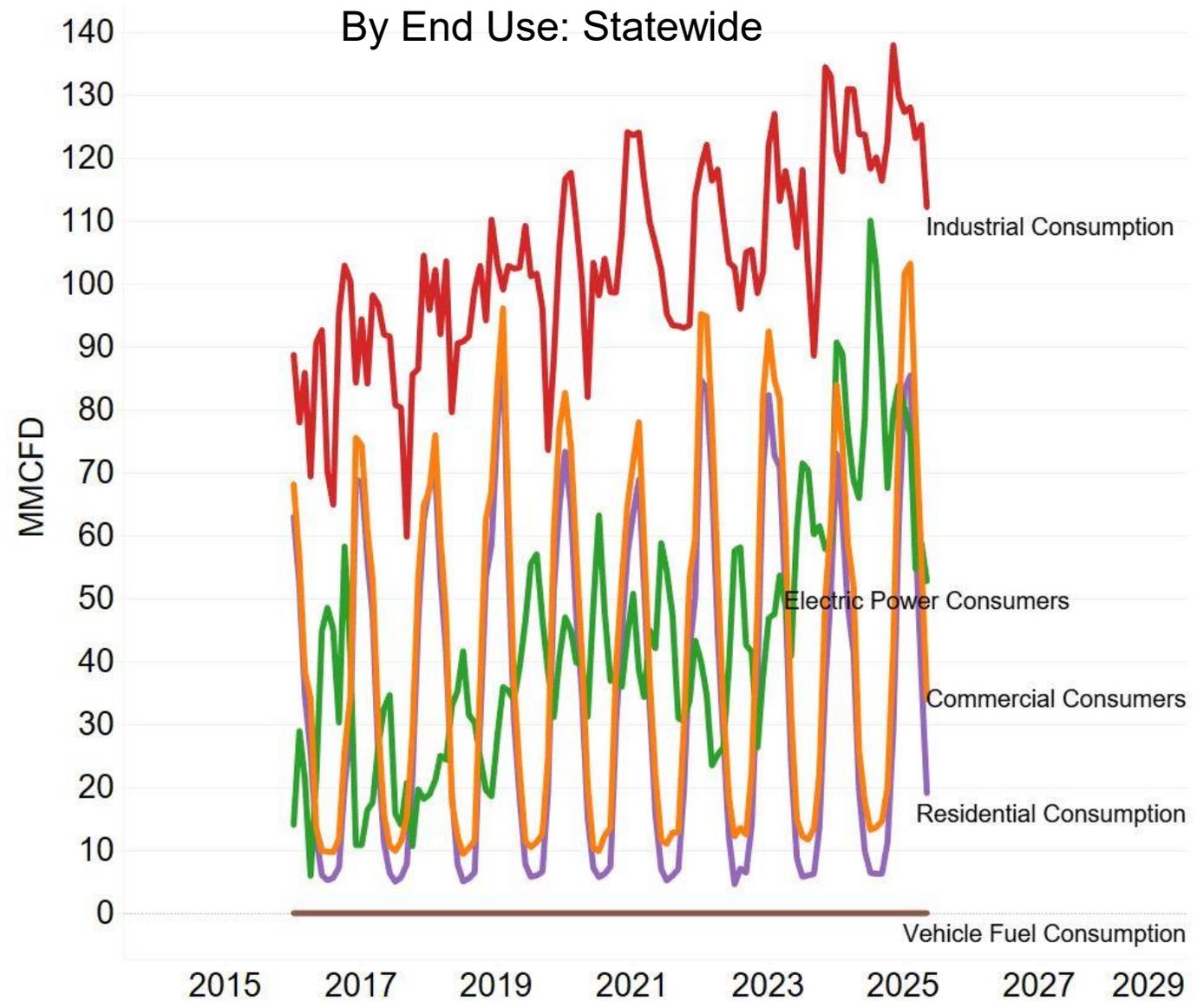
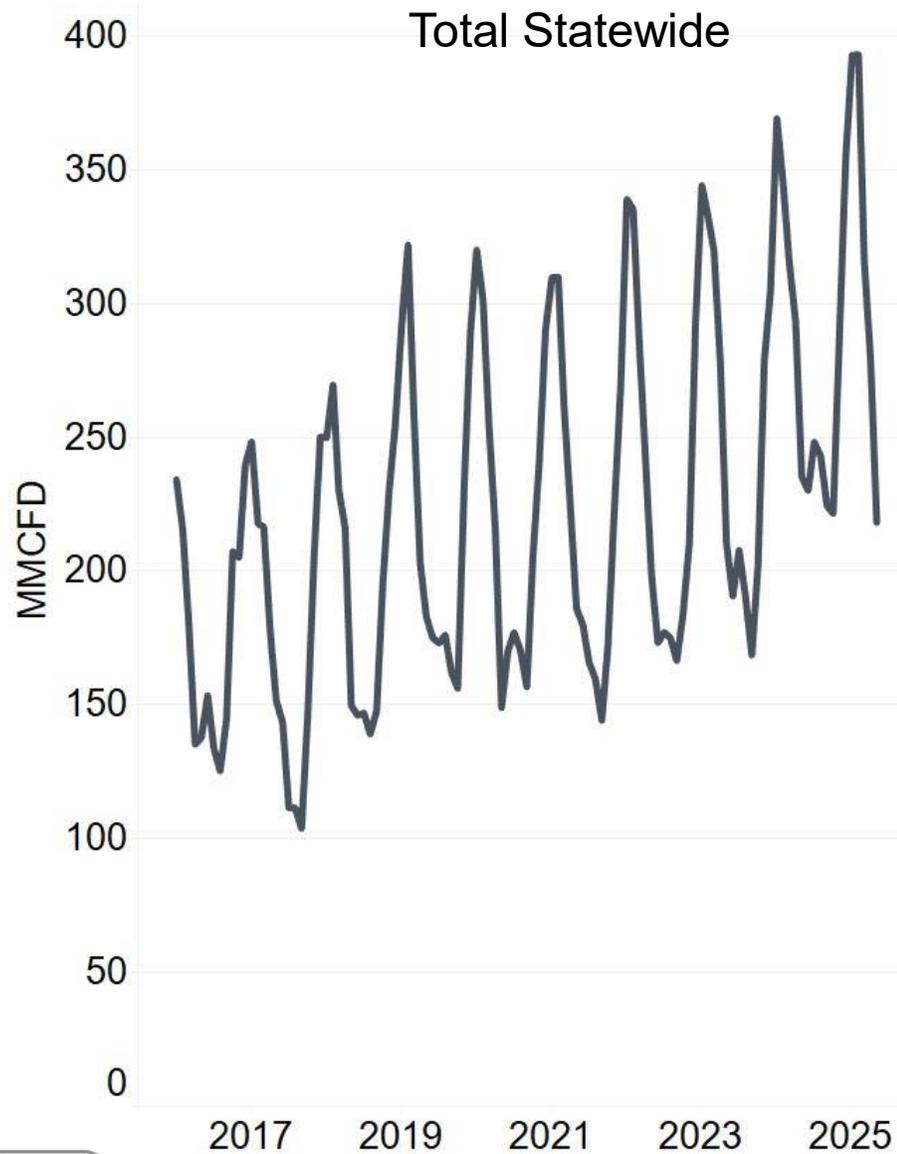
- Reduce E&P Activity to Meet Limited Gas Options



# North Dakota Gas Consumption (Annual)



# Non-Midstream Consumption (Monthly)



# Regional Gas Demand Outlook Changing Rapidly

AI Agenda

## Two AI Developers Are Plotting \$125 Billion Supercomputers



Photo via Adobe Stock

## Company announces plan for \$3 billion data center north of Fargo

By JEFF BEACH - AUGUST 18, 2025 11:50 AM



A rendering of the planned data center near Harwood, North Dakota. (Courtesy of Applied Digital)

North Dakota Monitor

## Company proposes to upcycle Minnesota iron mine waste in central North Dakota

\$10M in state funding awarded to effort to produce low-carbon pig iron

By JEFF BEACH - FEBRUARY 8, 2024 5:00 AM



North Dakota Monitor

## Natural gas conversion project near Williston also includes carbon capture

By JEFF BEACH - JUNE 17, 2024 9:00 AM



North Dakota Monitor

## North Dakota green lights natural gas power plant

By JEFF BEACH - AUGUST 8, 2025 4:30 AM



North Dakota Monitor

## The Information

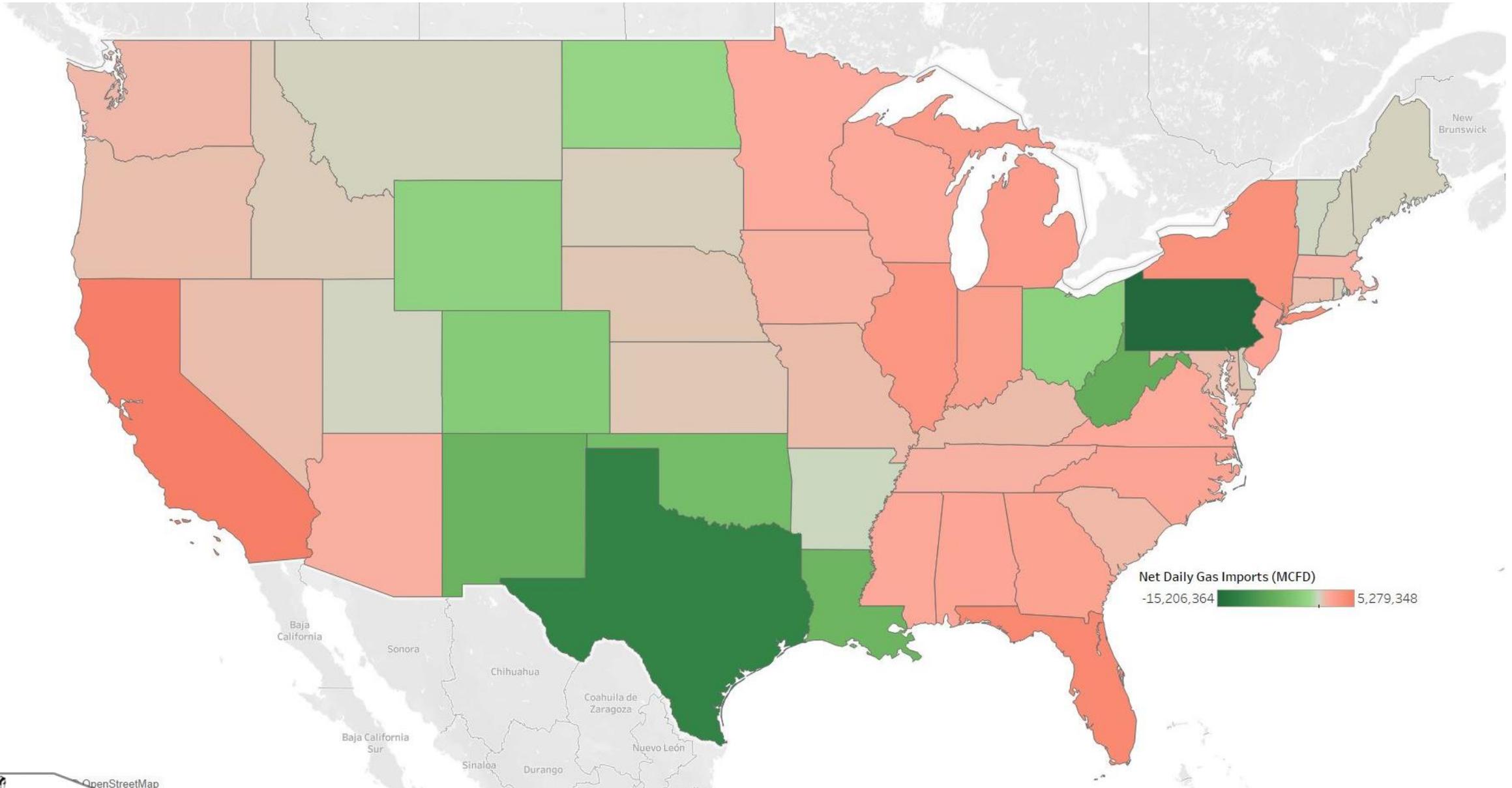
Sep 3, 2024, 7:00am PDT

Developers of artificial intelligence say they need bigger and bigger data centers to concentrate processing power so that it produces better versions of the technology.

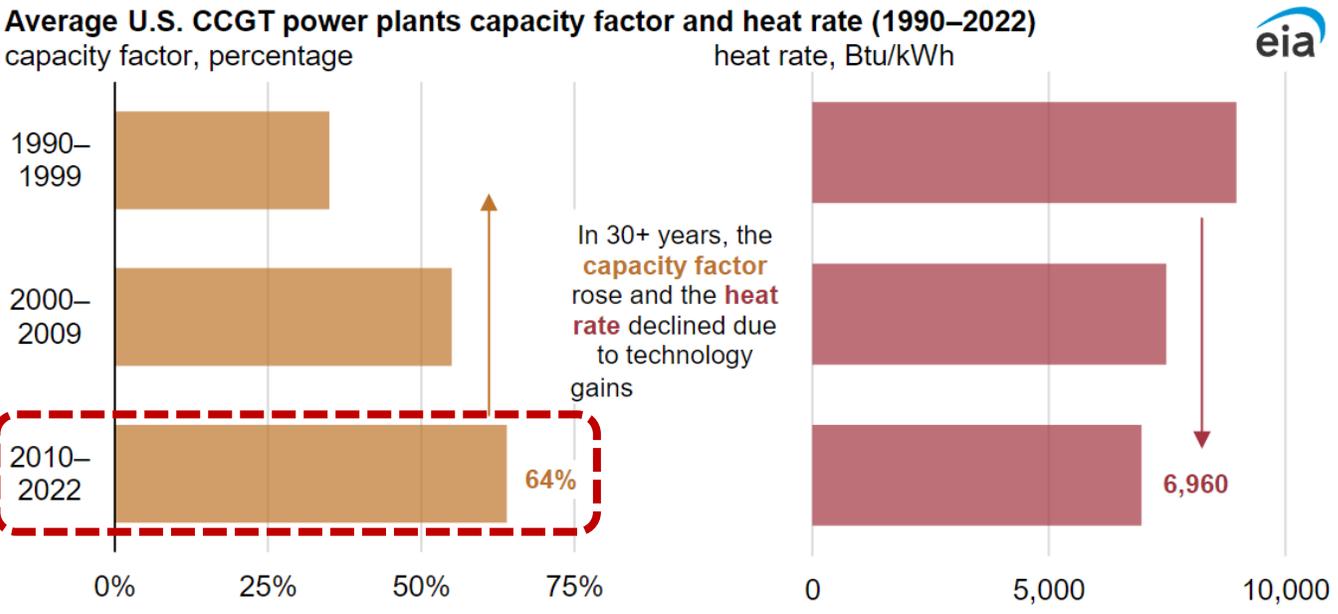
The companies are notoriously secretive about the details of those plans, though, which is



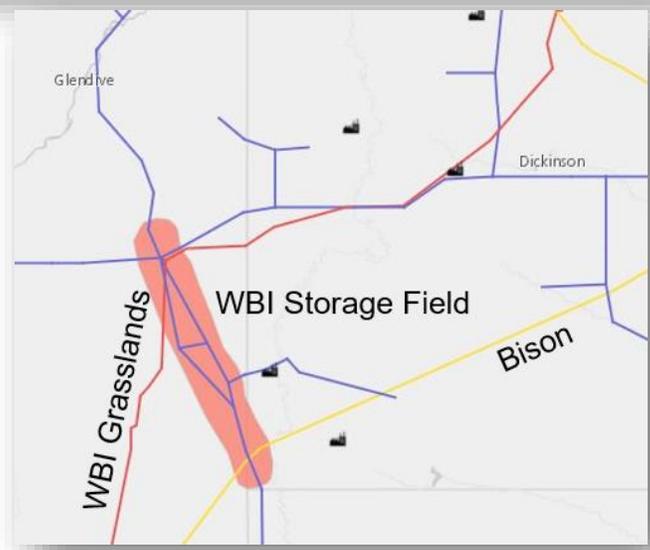
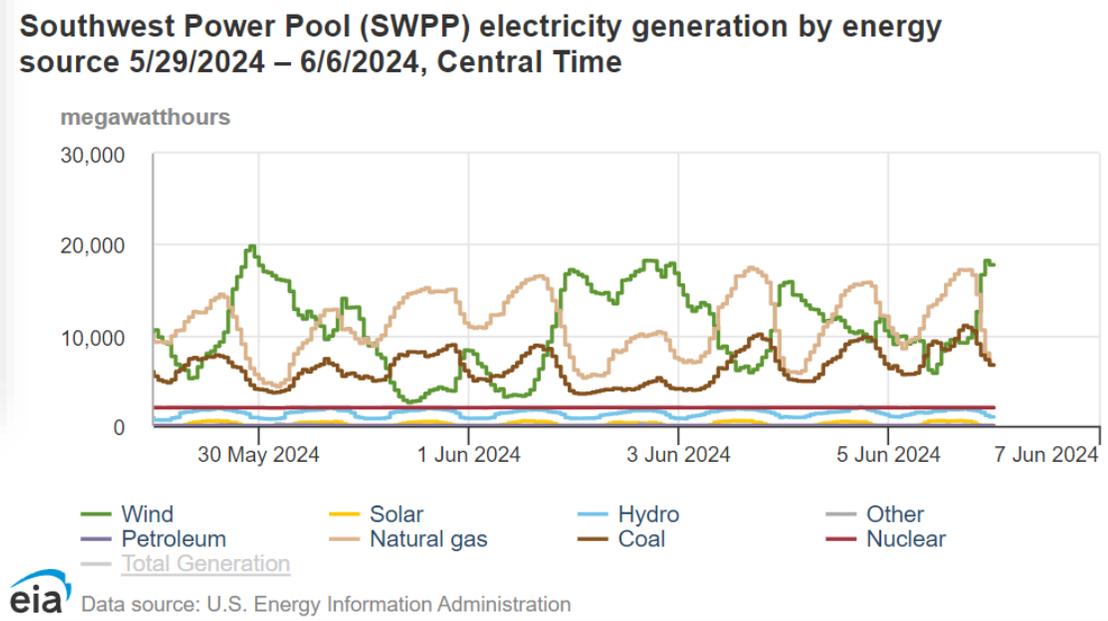
# Natural Gas Production/Consumption



# Intermittent Gas-Fired Generation Challenging to Match Oilfield Output

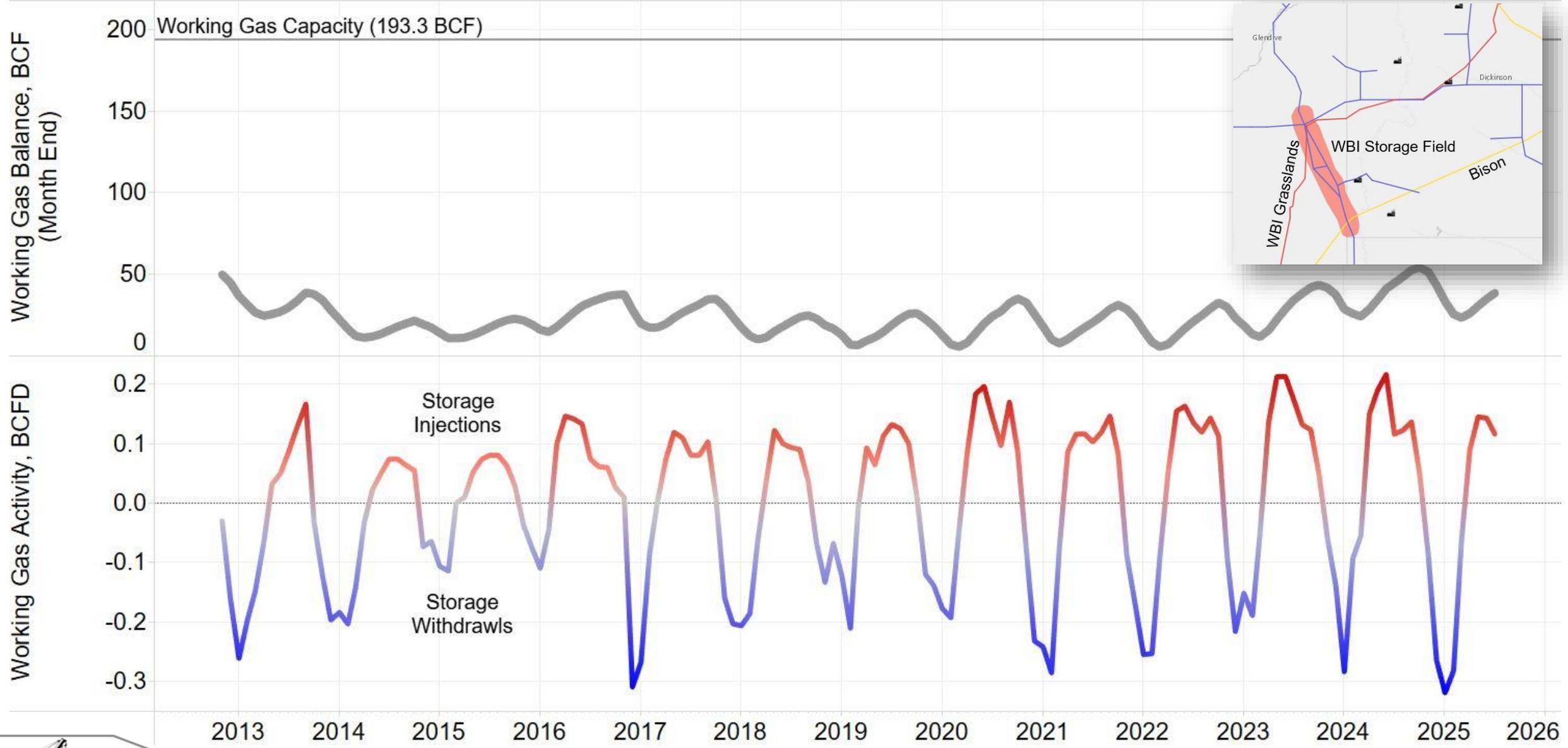


Gas-fired demand can fluctuate hourly, daily, and weekly, depending on system load, weather, etc.

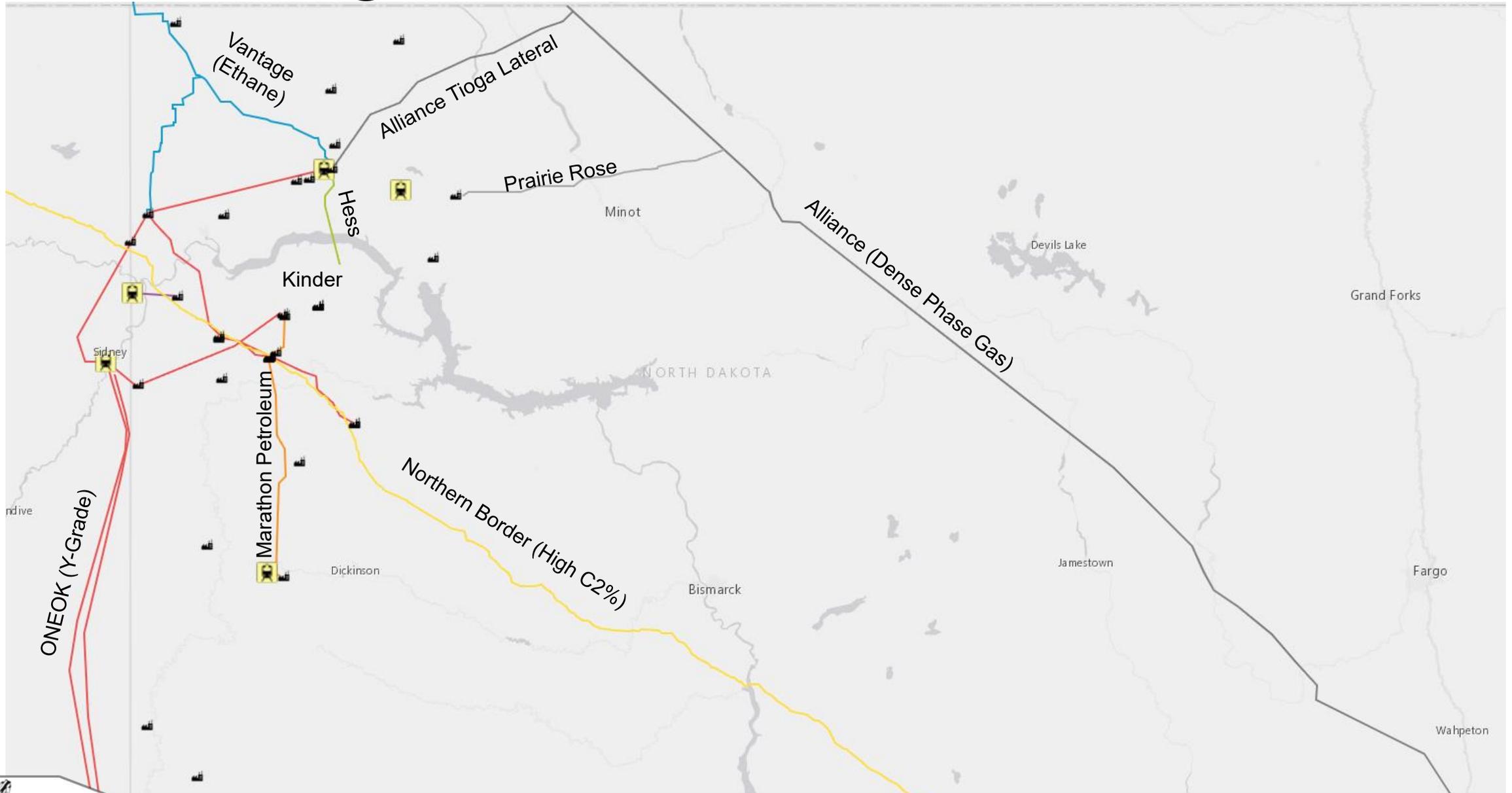


Regional gas storage could provide a balancing solution for intermittent generation, but who pays for the required expansion?

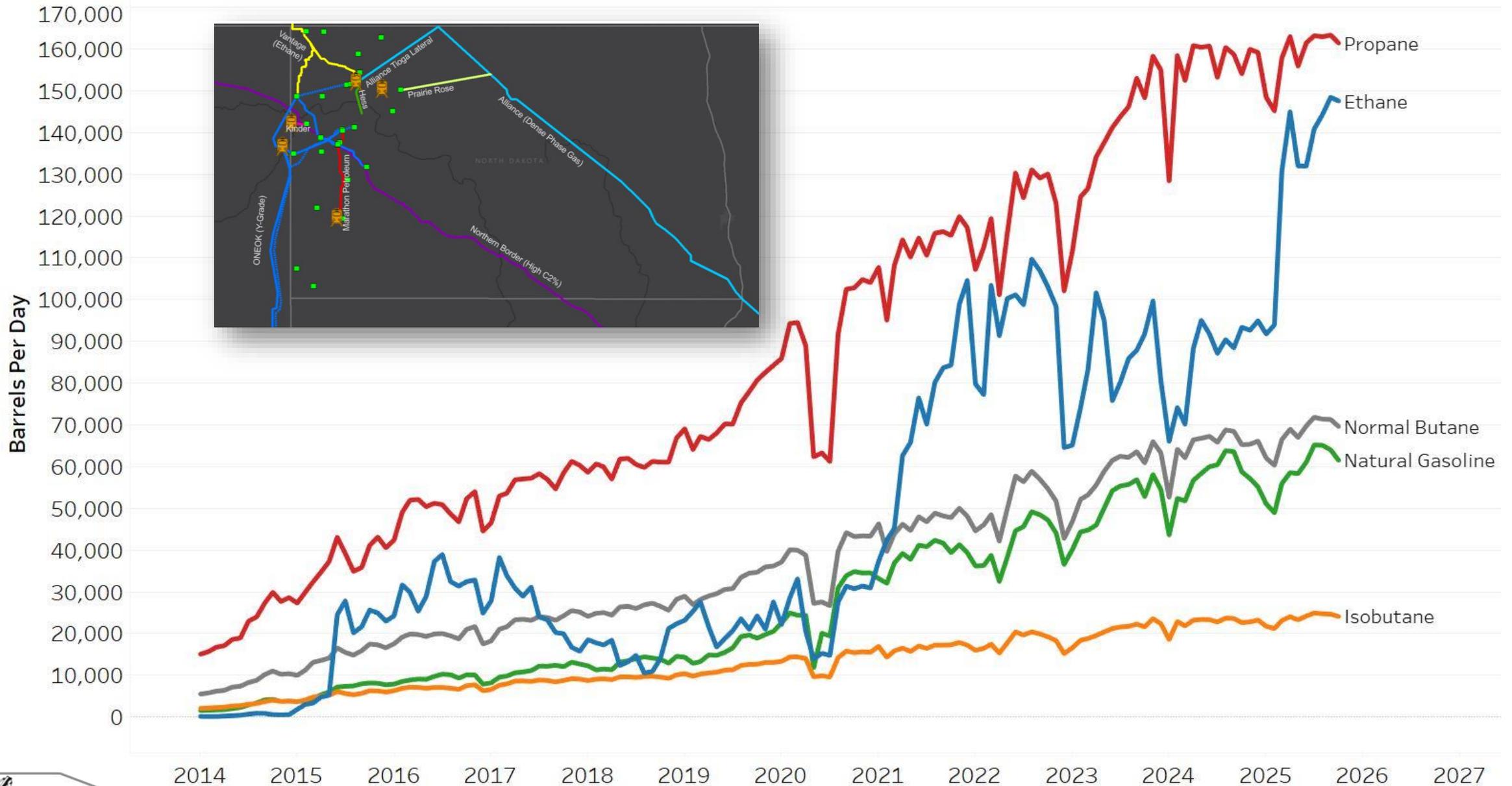
# Residue Gas Storage – WBI Energy\*



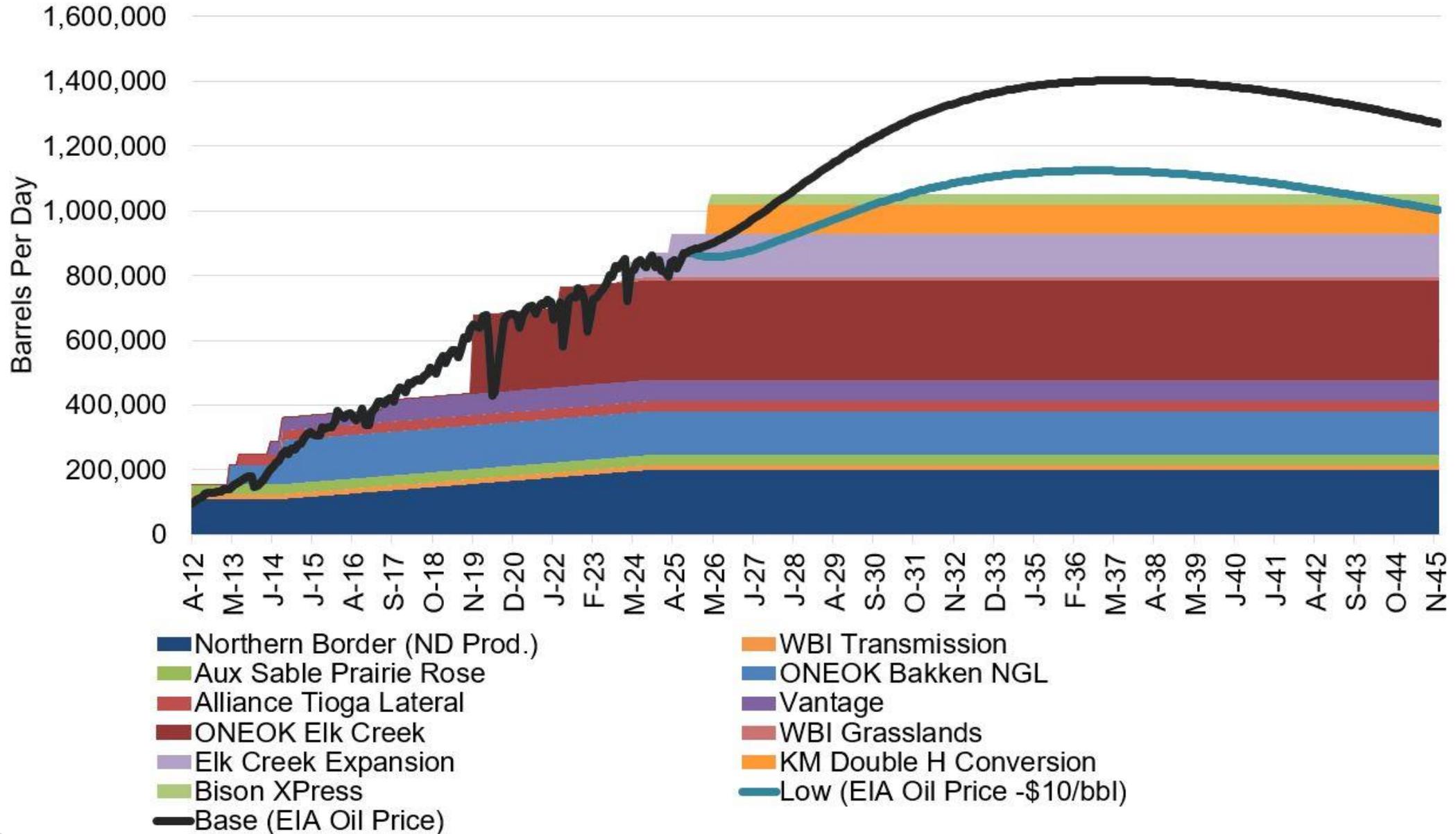
# Regional NGL Infrastructure



# PADD II to PADD IV NGL Pipeline Flows



# NGL Transport Needs\* – With New Cheyenne Pipes



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