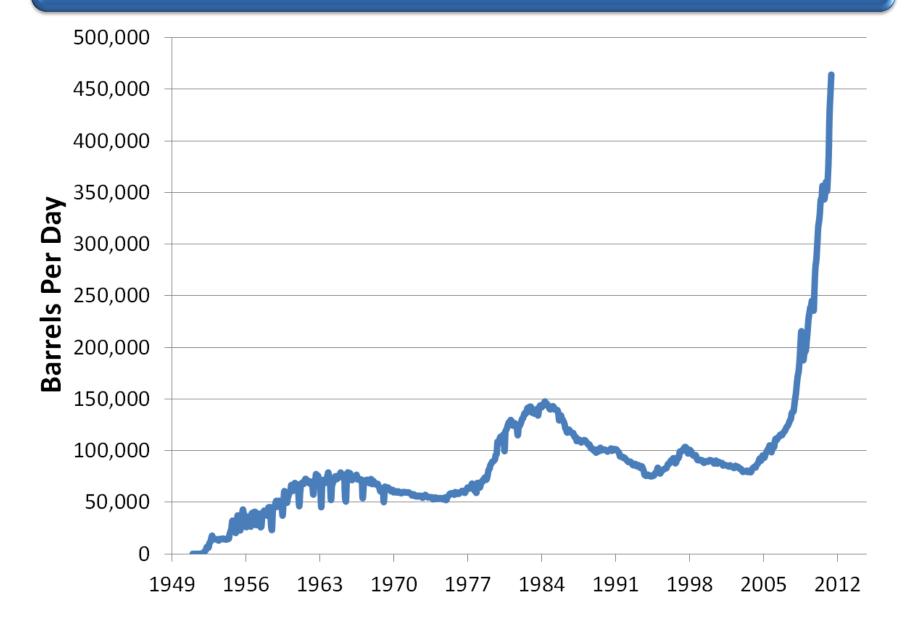


North Dakota Pipeline Authority Energy Development and Transmission Committee Justin J. Kringstad November 29, 2011 – Bismarck, ND

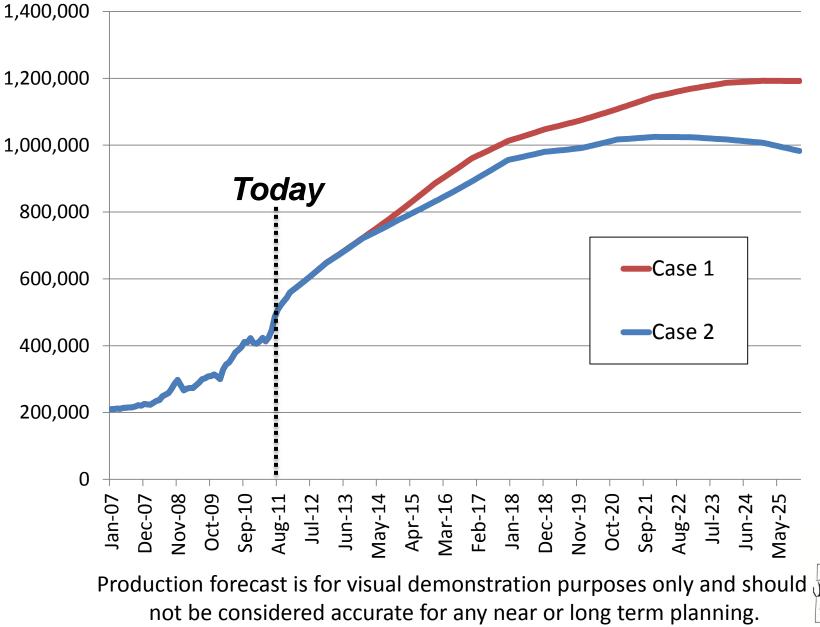
"Goldman Sachs predicted that the U.S. will overtake Russia and Saudi Arabia in six years. Producers and industry insiders noted the untapped reserves in the liquidsrich **Bakken Play of North Dakota** and Montana, the Granite Wash of western Oklahoma and Texas Panhandle and other previously uneconomical plays."

<u>Tulsa World</u> October 8, 2011

North Dakota Crude Oil

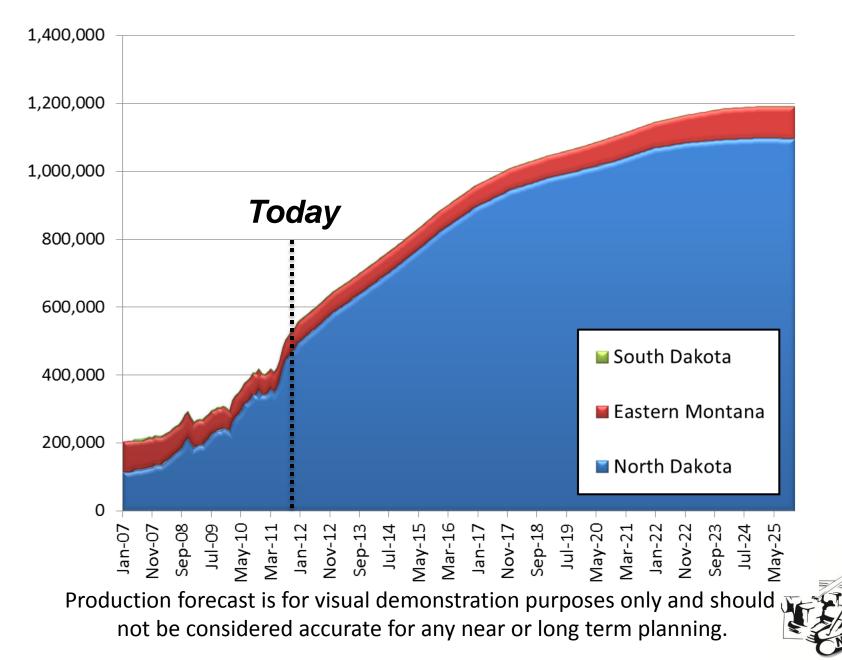


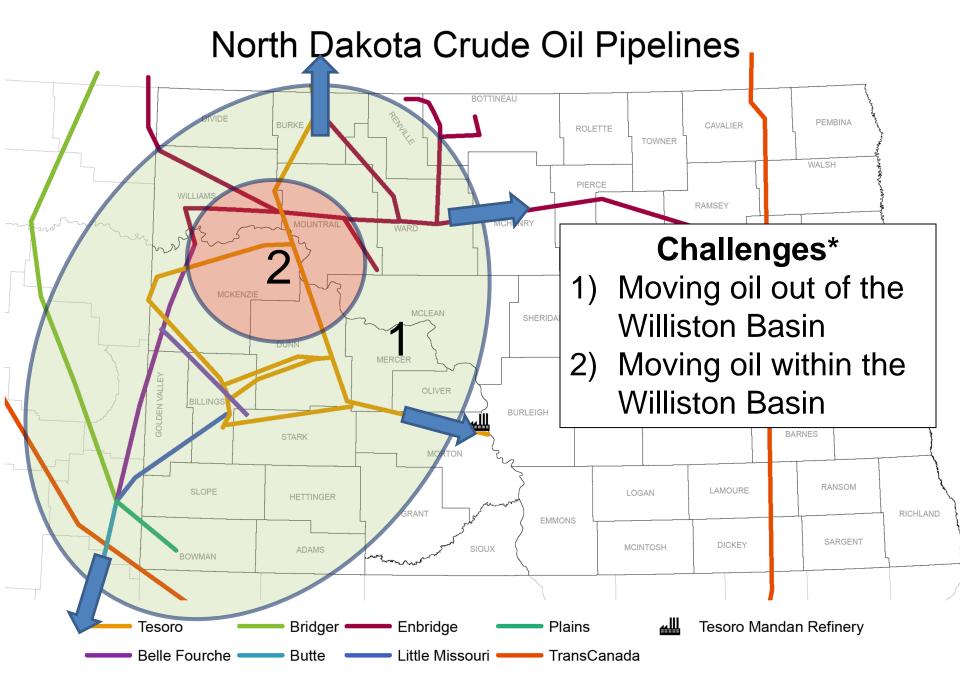
Forecasting Williston Basin Oil Production, BOPD





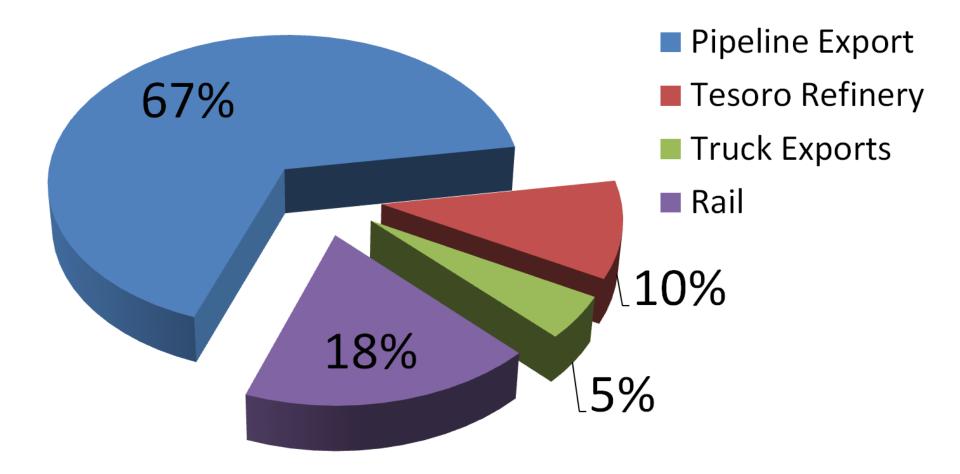
Forecasting Williston Basin Oil Production, BOPD





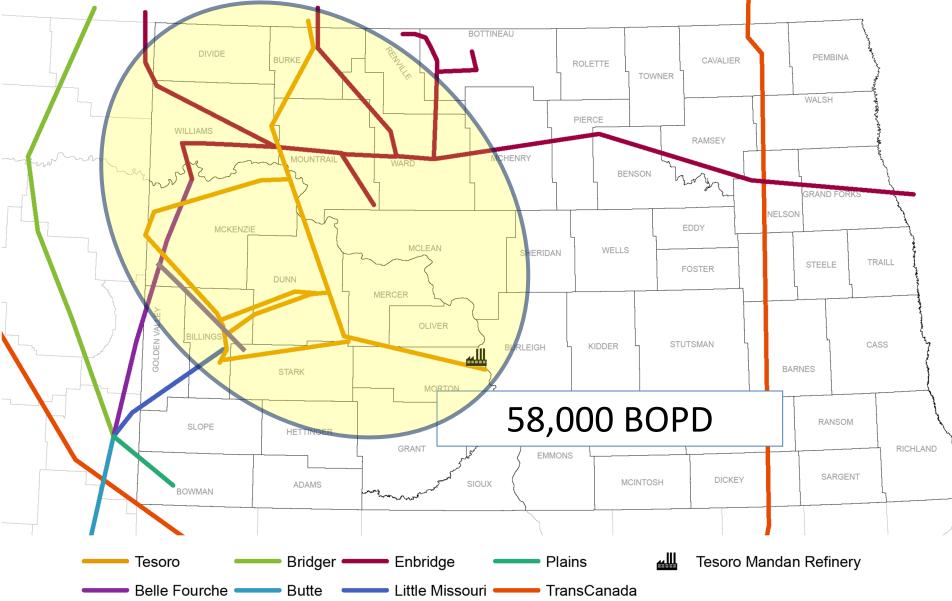
*Modified from Bridger and Belle Fourche Pipelines

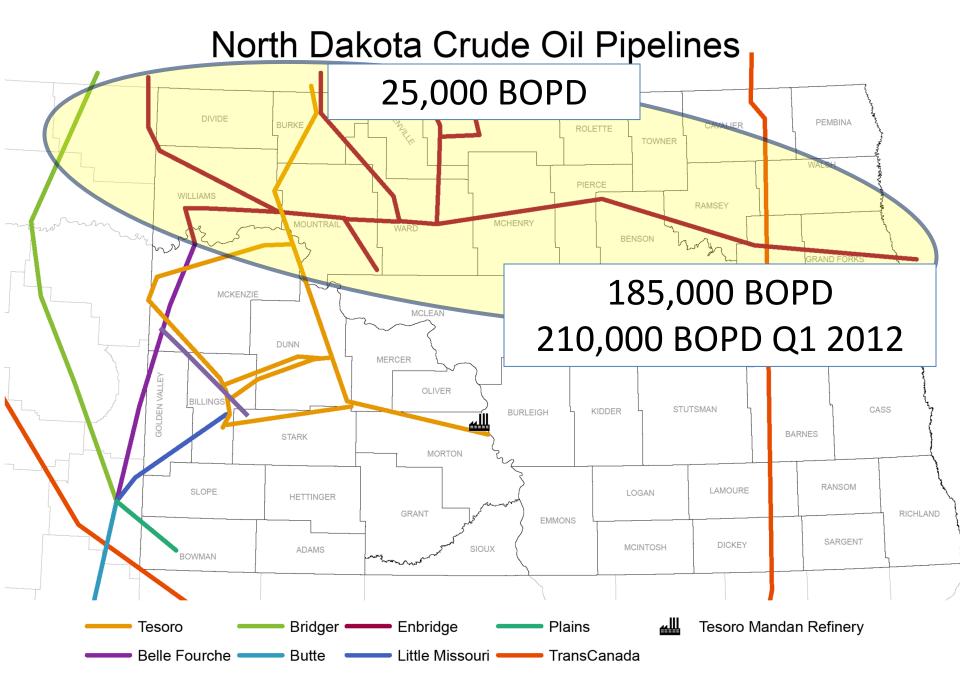
Williston Basin Oil Transportation

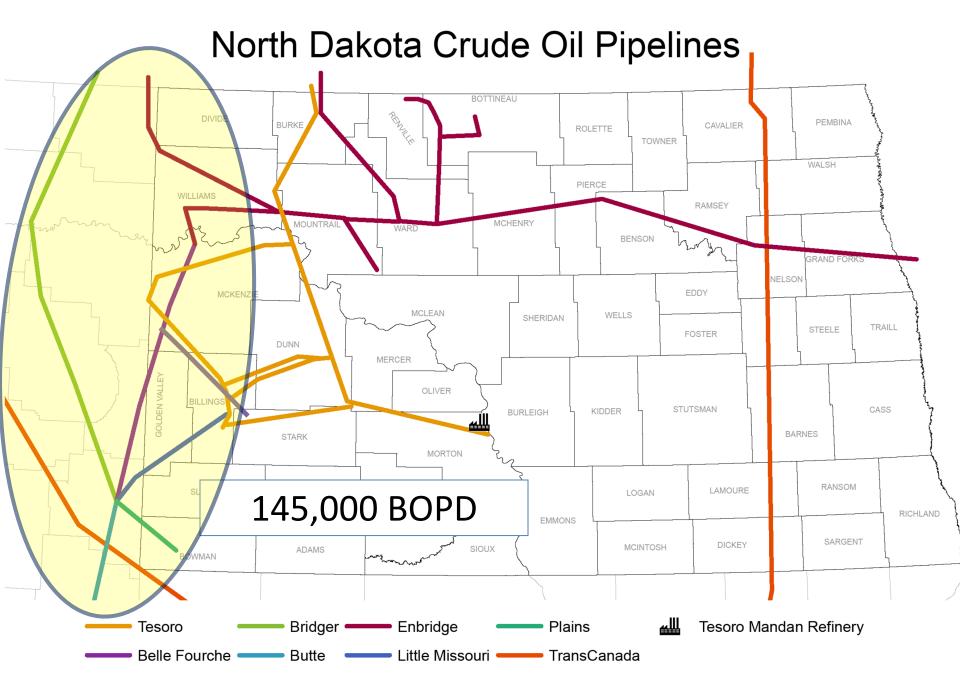


September 2011 Estimates

North Dakota Crude Oil Pipelines







Recent Developments For Post 2011 Crude Oil Transport...

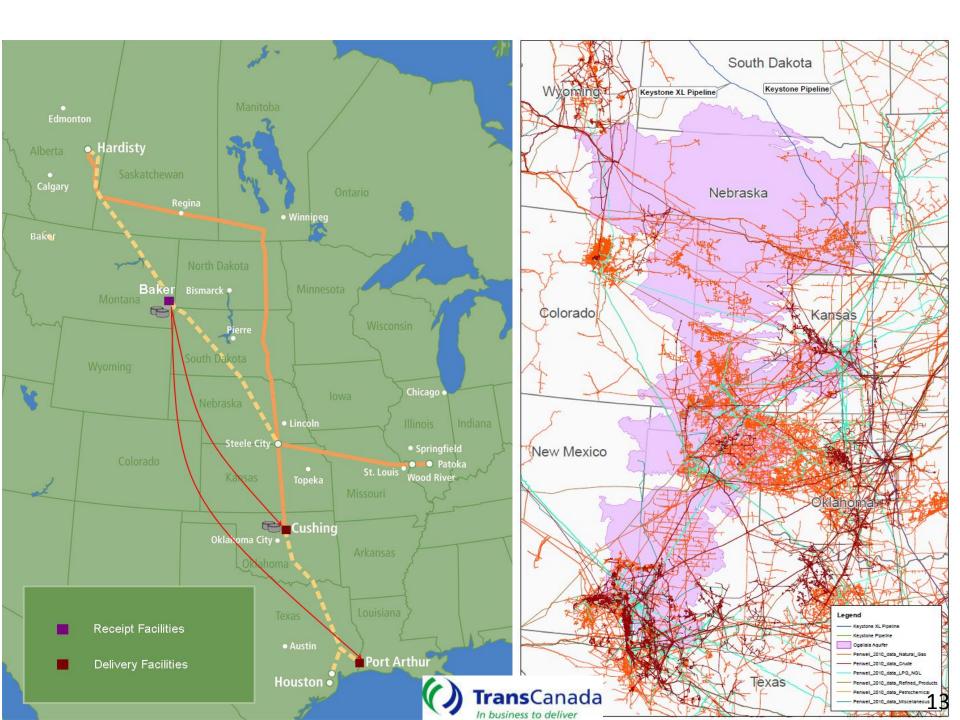
Proposed TransCanada Marketlink

- Successful Open
 Season in 2010
- 2015? Startup

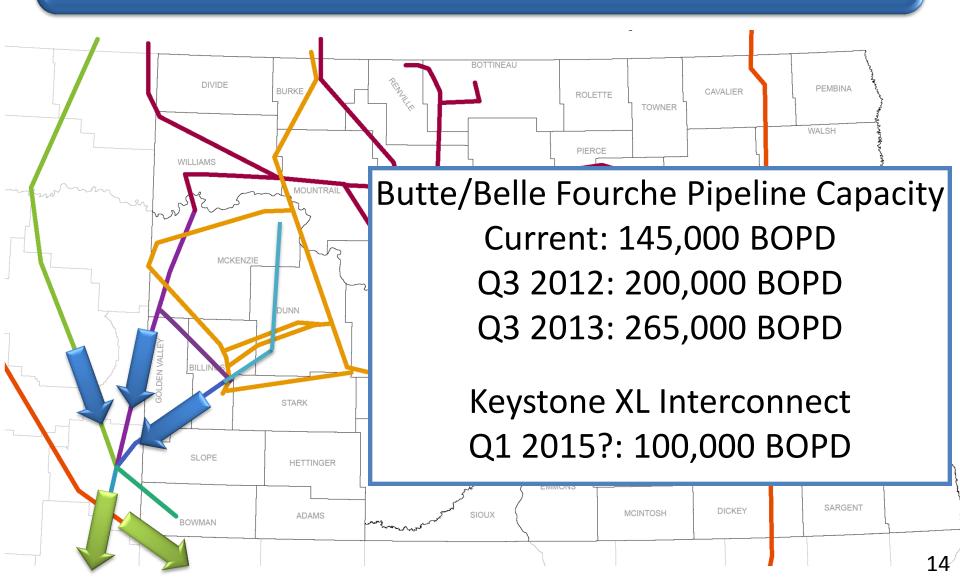
 (Subject to
 Presidential Permit
 Q1 2013)

Image: TransCanada Notice of Open Season

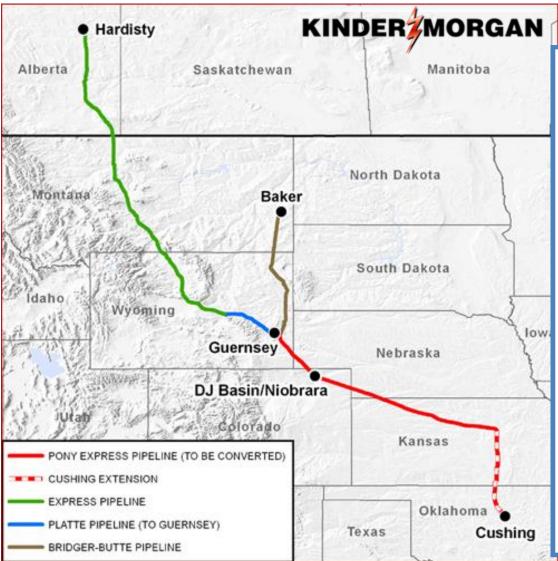




True Co.'s Proposed "Baker 300"



Pony Express Conversion

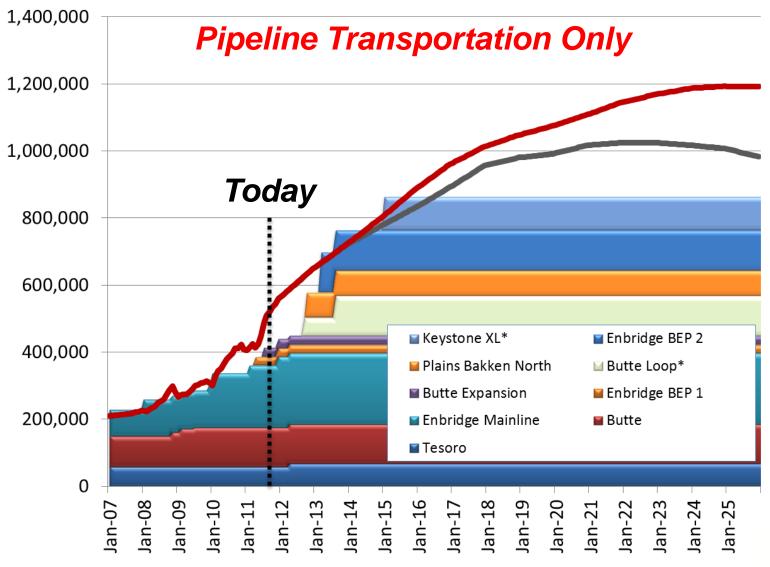


Proposed Capacity 210,000 BOPD Q1 2014

Convert 500 miles of natural gas pipeline to oil service

210 miles of new pipe to Cushing, OK

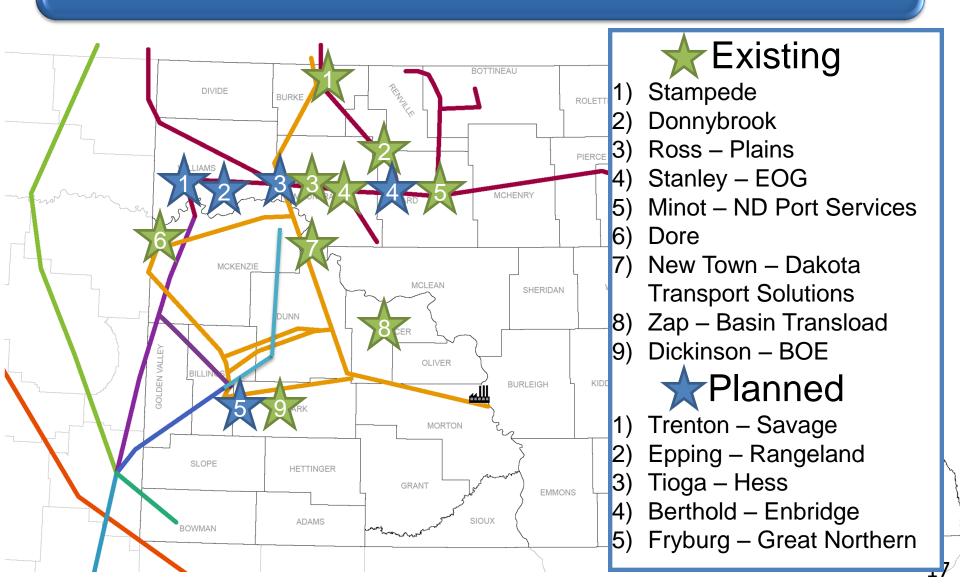
Williston Basin Oil Production & Export Capacity, BOPD



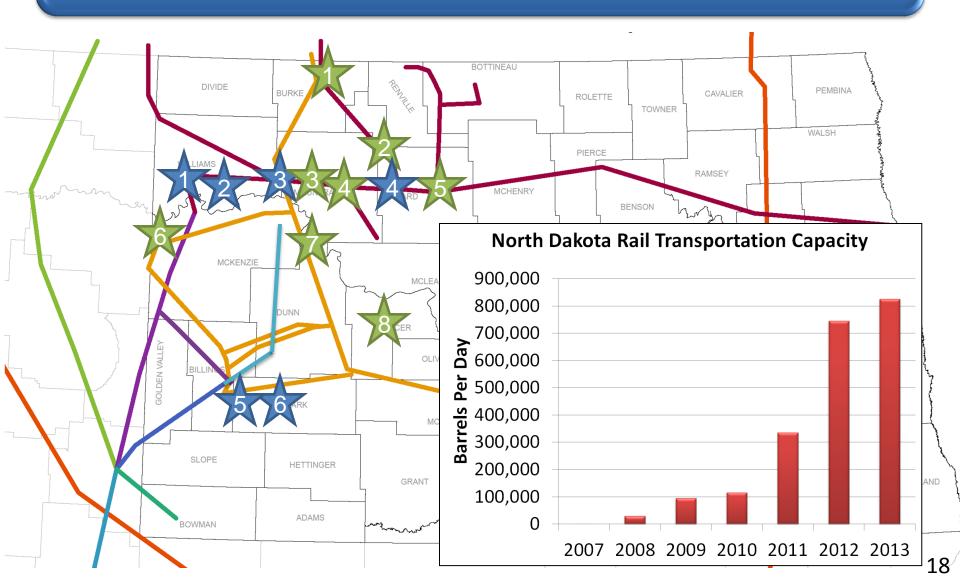
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning. *Projects still in the proposed or internal review process



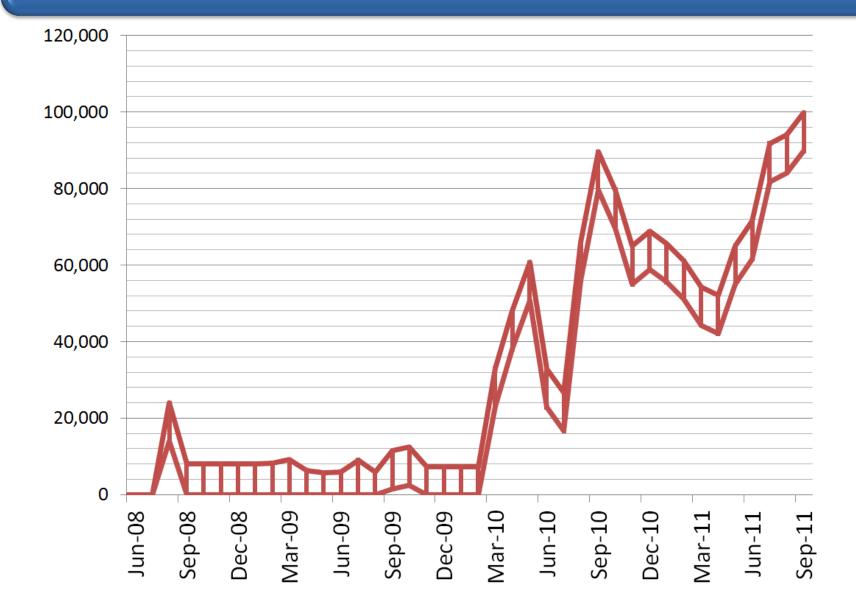
Existing & Planned Rail Locations



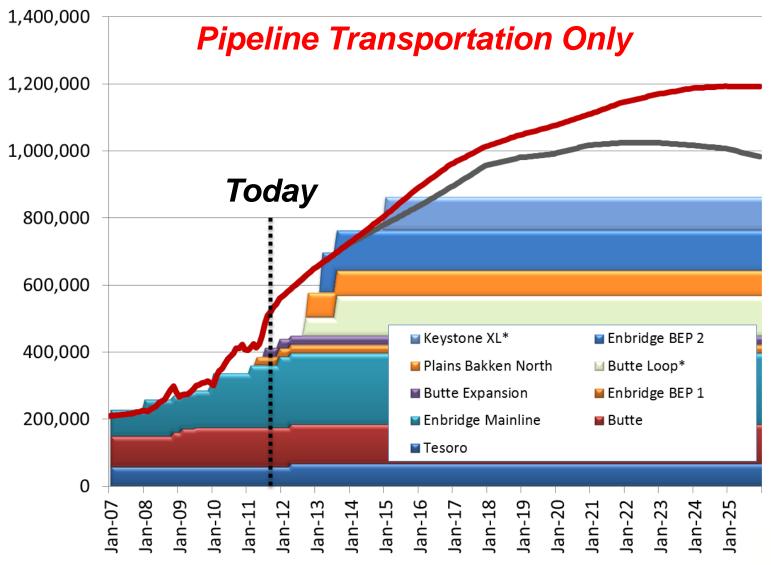
Existing & Planned Rail Locations



High-Low Rail Estimate, BOPD



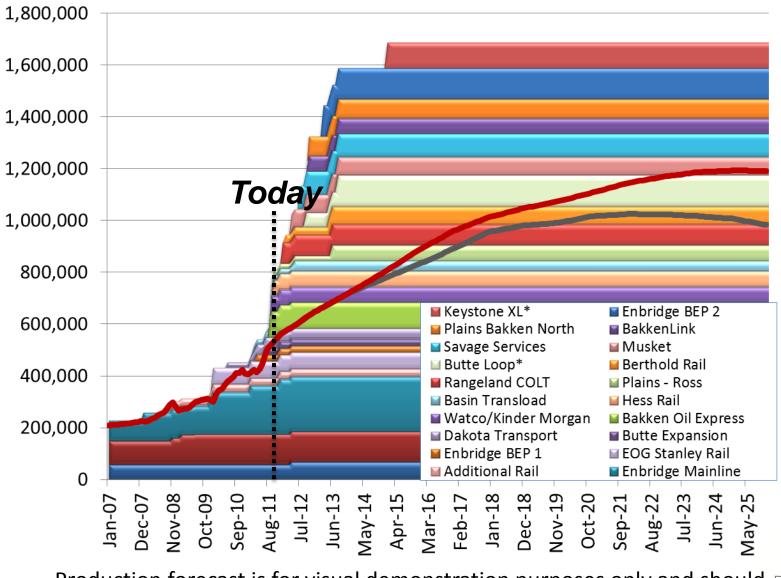
Williston Basin Oil Production & Export Capacity, BOPD



Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning. *Projects still in the proposed or internal review process



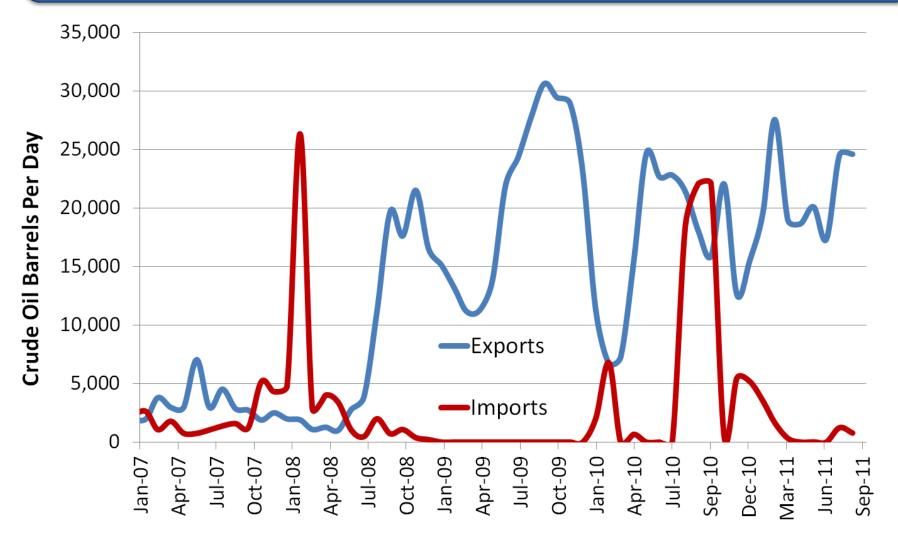
Williston Basin Oil Production & Export Capacity, BOPD



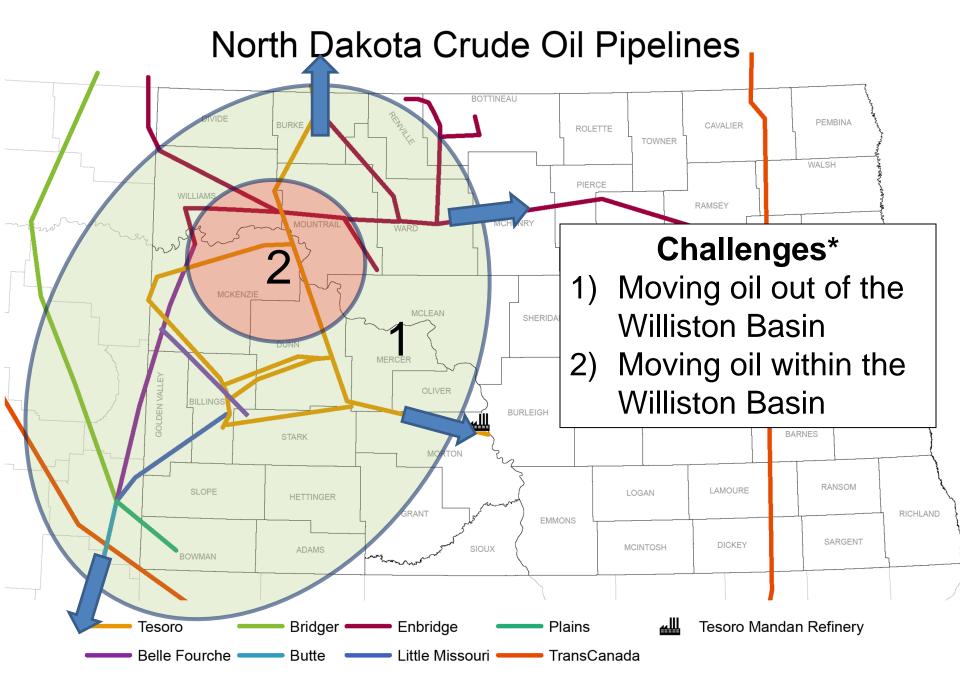
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning. *Projects still in the proposed or internal review process



Williston Basin Truck Imports/Exports

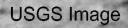


Information collected through the United States International Trade Commission's Interactive Tariff and Trade DataWeb



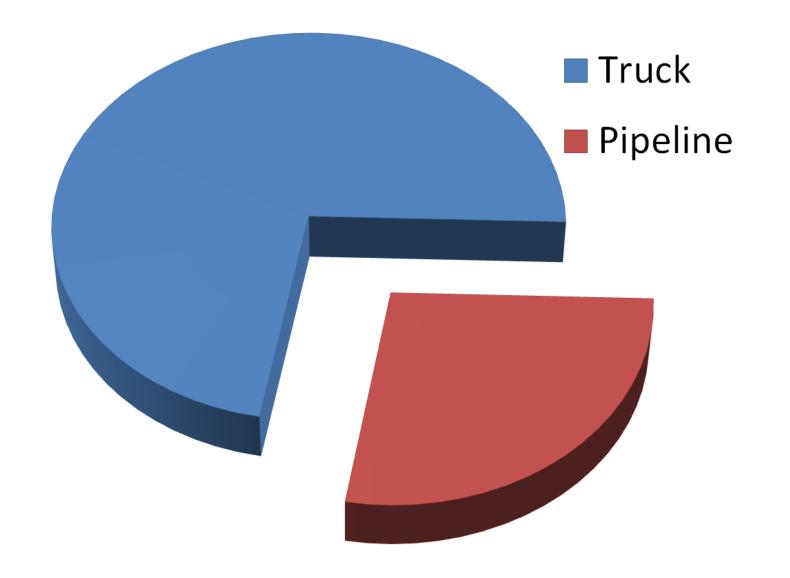
*Modified from Bridger and Belle Fourche Pipelines

North Dakota Crude Gathering

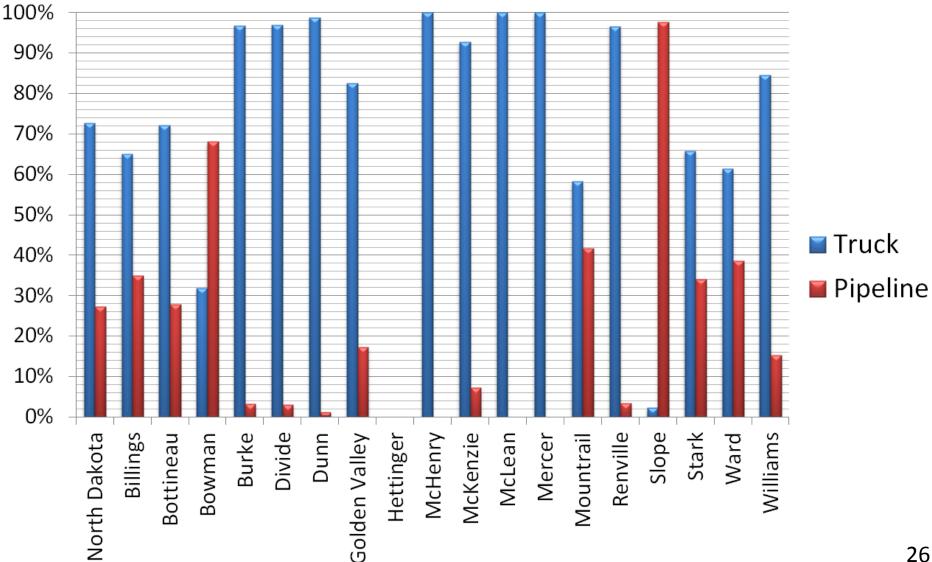




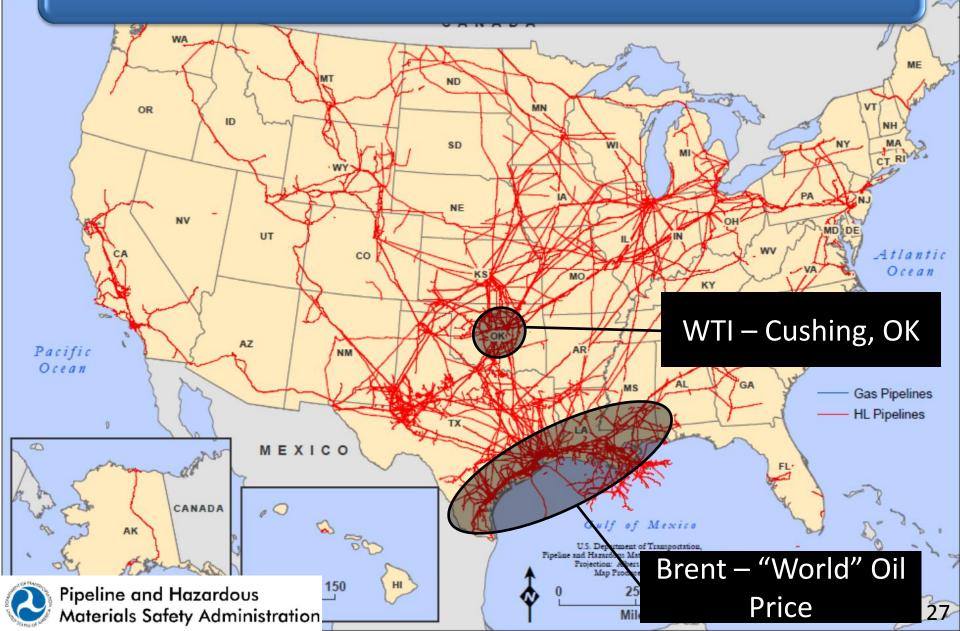
North Dakota Crude Gathering



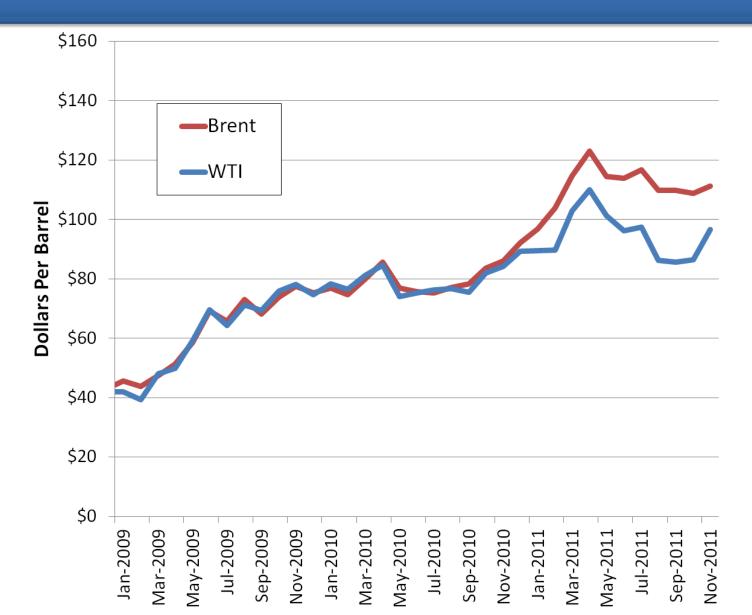
Crude Gathering By County



Brent-WTI Crude Pricing

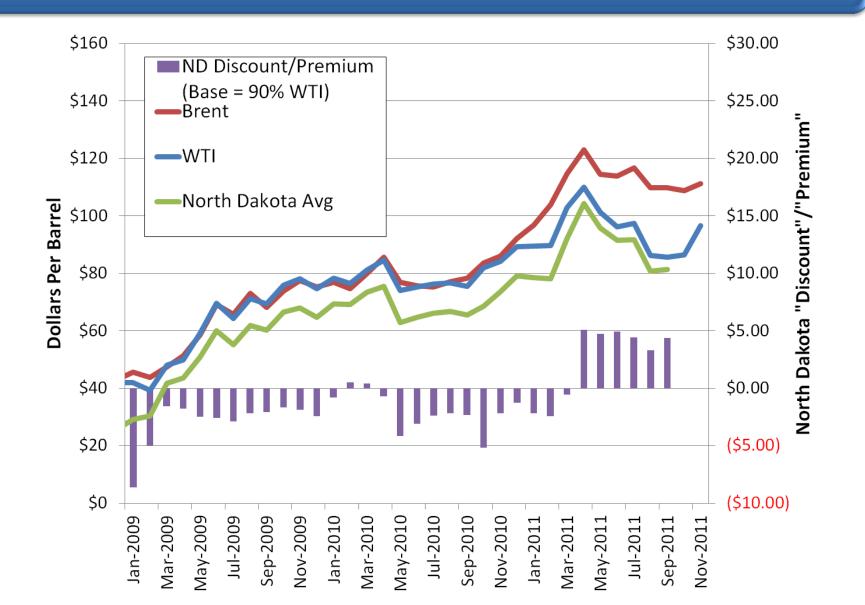


Brent-WTI Crude Pricing



28

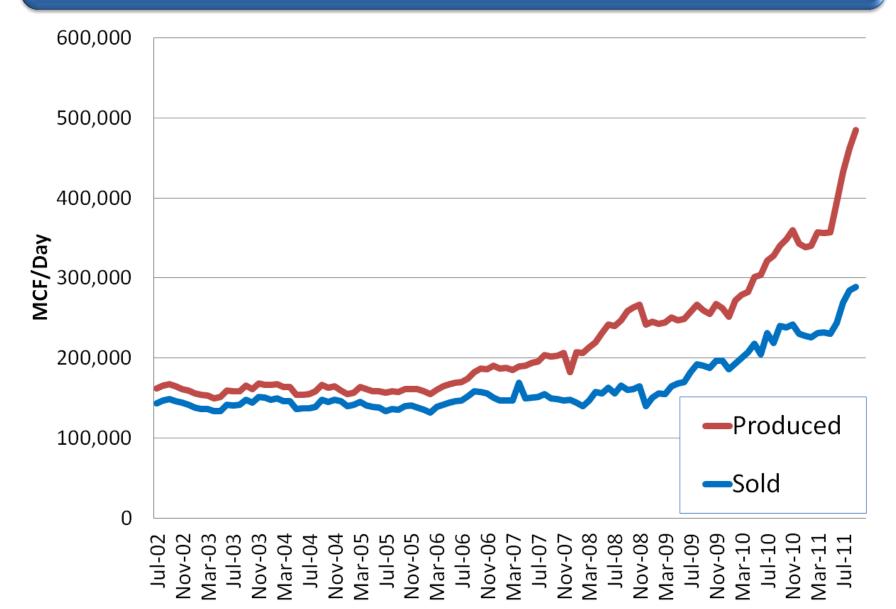
Brent-WTI-ND Crude Pricing



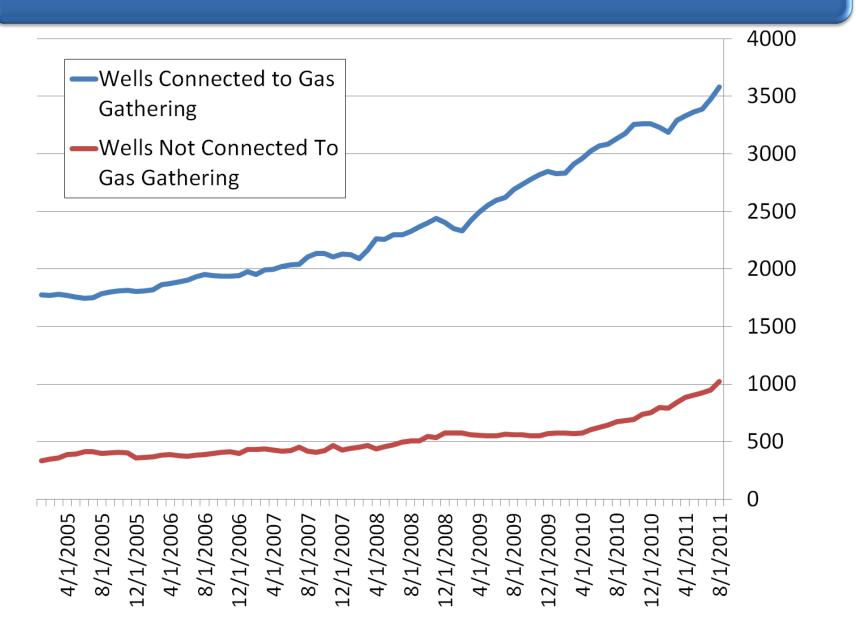
Natural Gas Projects



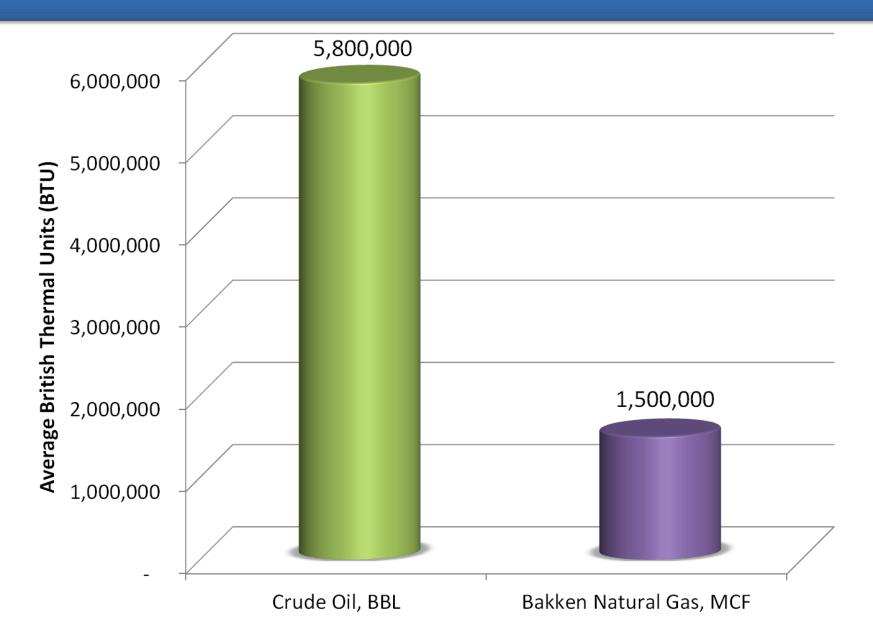
ND Gas Production



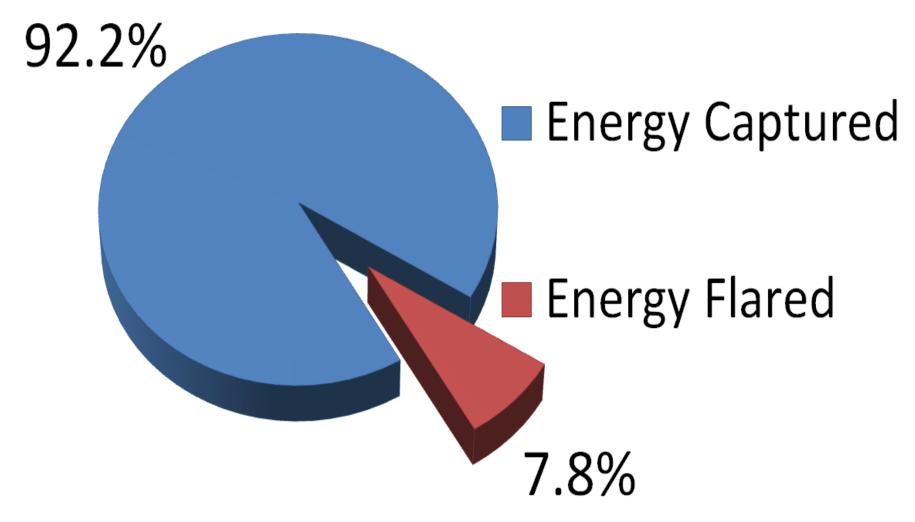
ND Gas Gathering Statistics



Bakken Resource Energy Content



ND Oil & Gas Development Efficiency



September 2011 Data

ND Oil & Gas Development Efficiency



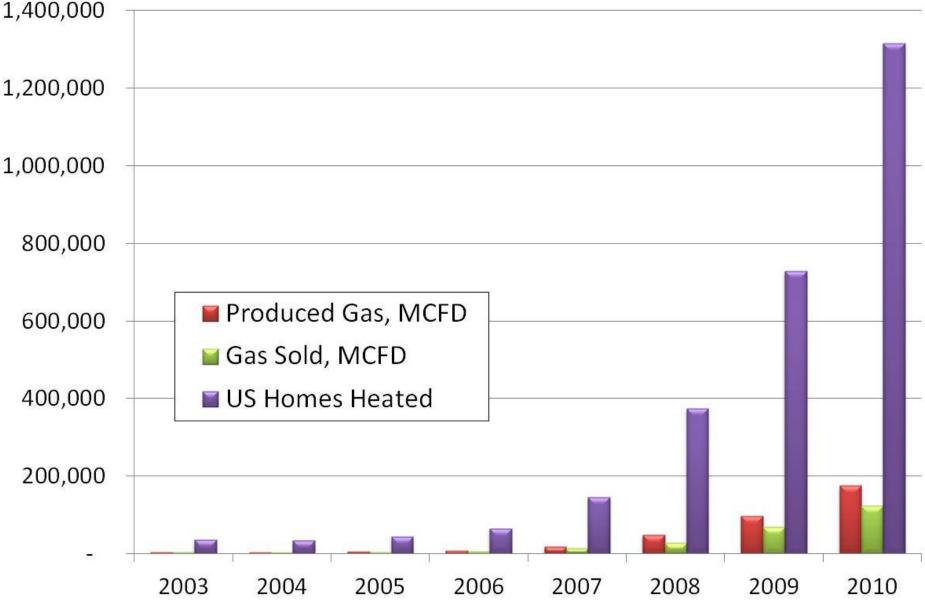
Economic Value Captured

Economic Value Flared

4.2%

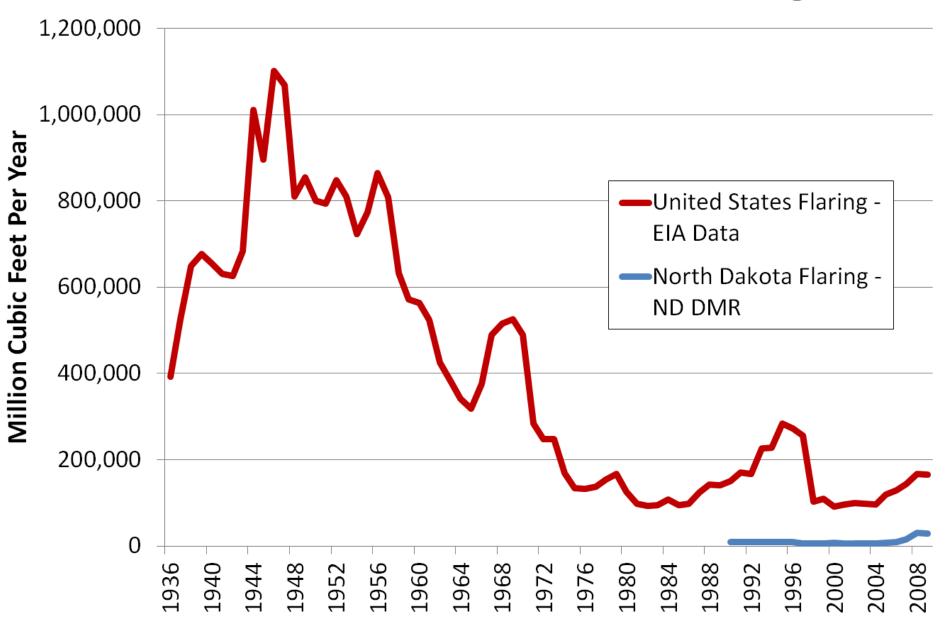
September 2011 Production Data, Oil Price of \$81.38/bbl, Est. Natural Gas/NGL Wellhead Price of \$10.00/MCF 35

Bakken & Three Forks Natural Gas



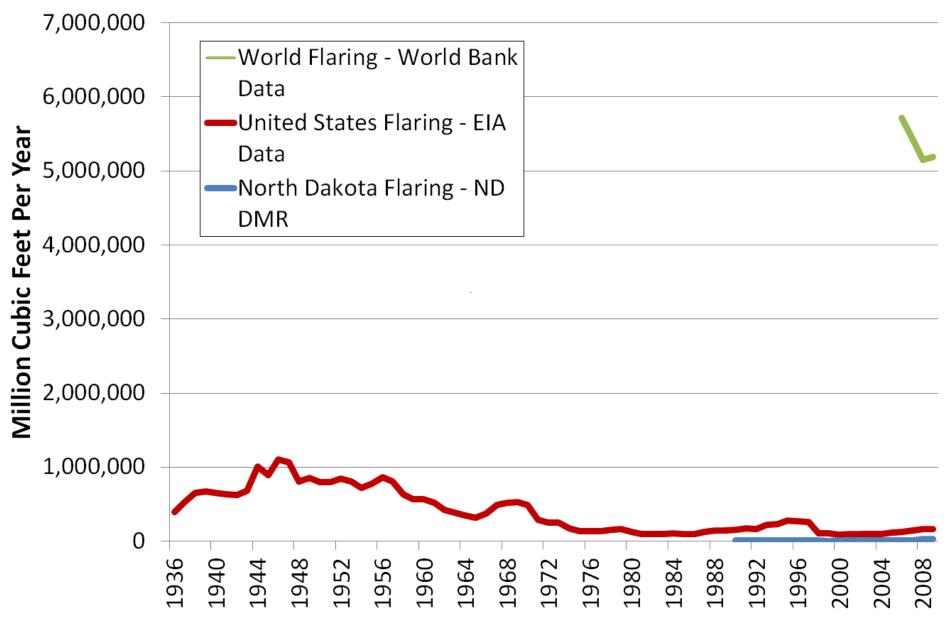
Assumes Avg Home Uses 72.4 Million BTU's Per Year - Source: AGA

United States - North Dakota Natural Gas Flaring



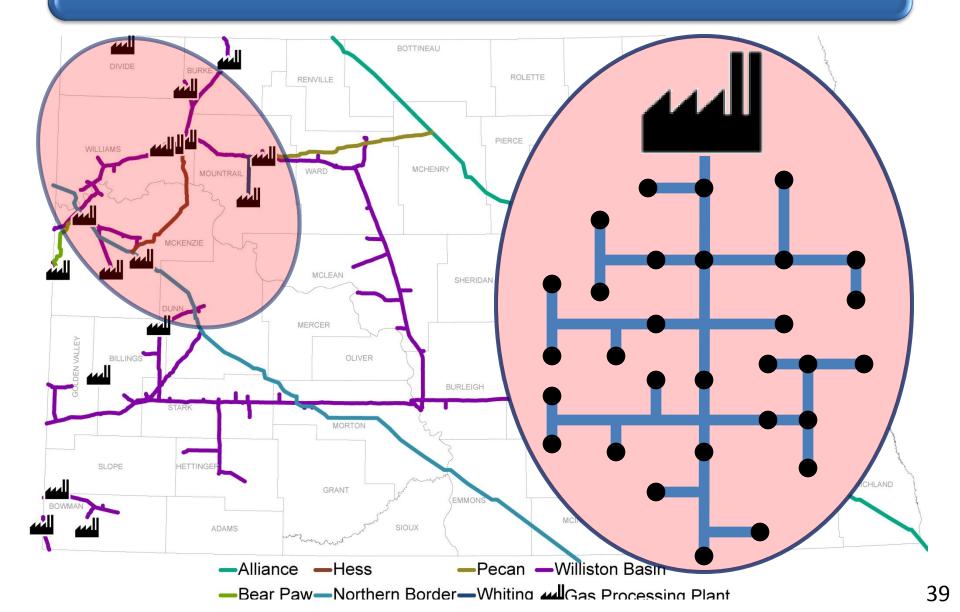
Data: Most Recently Available US EIA Data and ND Department of Mineral Resources

World Natural Gas Flaring

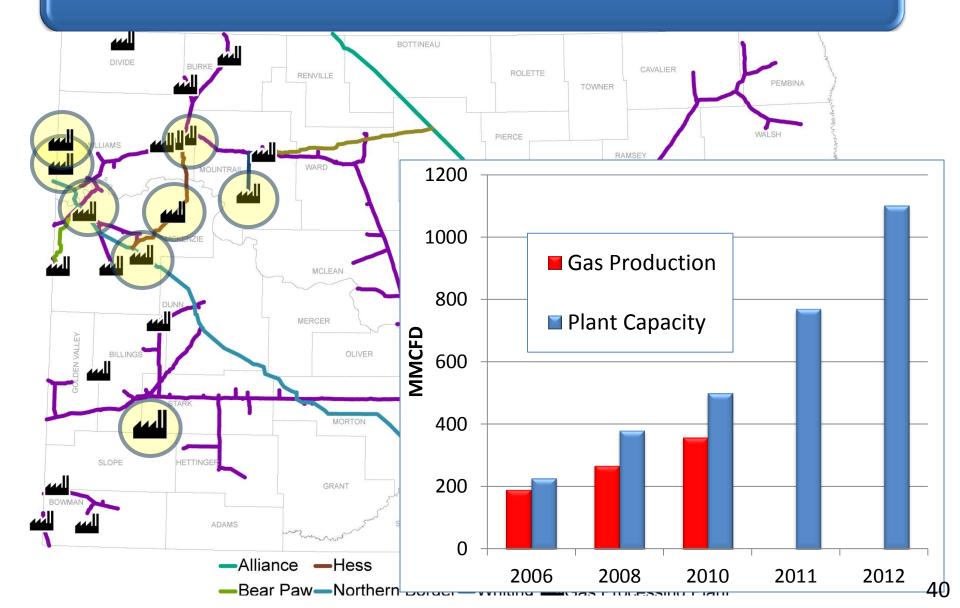


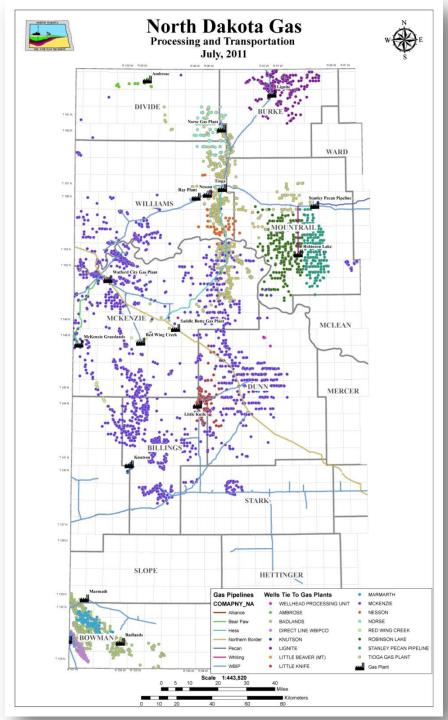
Data Source: World Bank, Most Recently Available US EIA Data, and ND Department of Mineral Resources

Natural Gas Challenge I



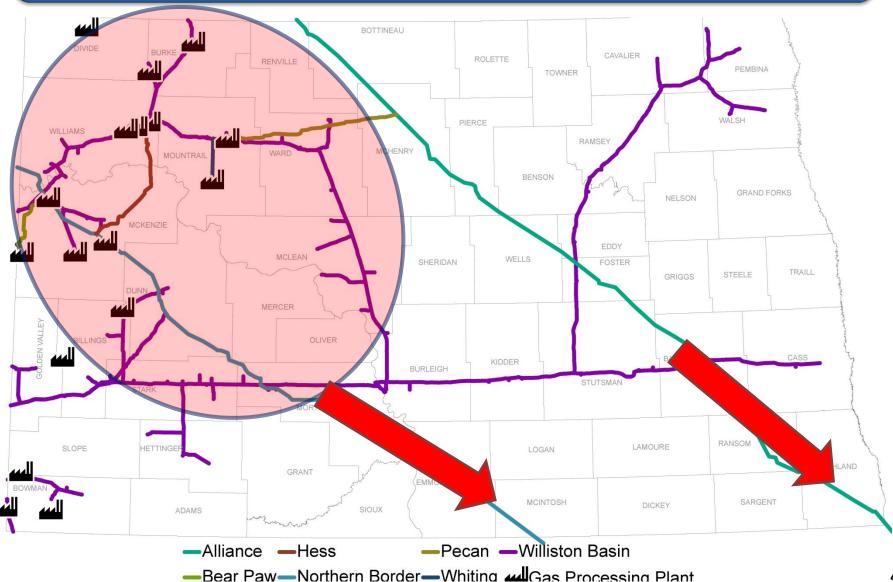
New or Expanding Gas Plants





North Dakota Natural Gas Processing and Gathering

Natural Gas Challenge II



NDPA Webinars





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



Website: www.pipeline.nd.gov

