



Oil and Gas Infrastructure Services

Paul Gregory, President – Oil & Gas Division and Chief Strategy Officer

Key Takeaways



Believe we are in early stages of a multiyear, active pipeline construction market in North America

North America's unconventional oil and gas formations and industry technological advancements are game changers and require significant development of midstream infrastructure

Quanta's leadership and comprehensive service offerings position us well to capitalize on near- and long-term opportunities

Focused on achieving appropriate margins for the risk profile of the segment

Segment Overview



Service Offering

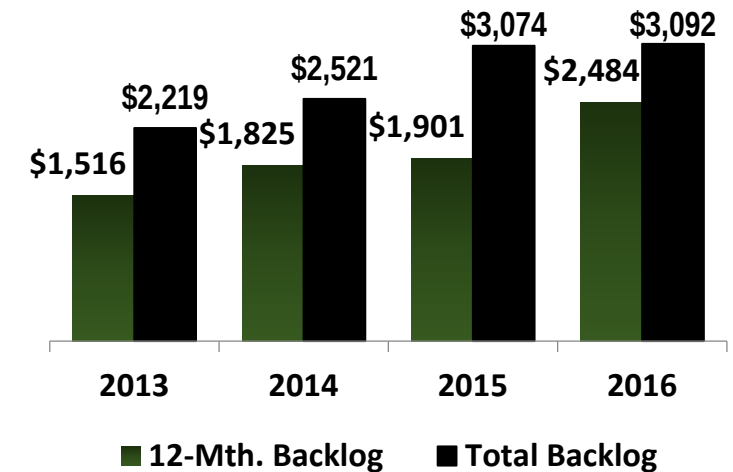
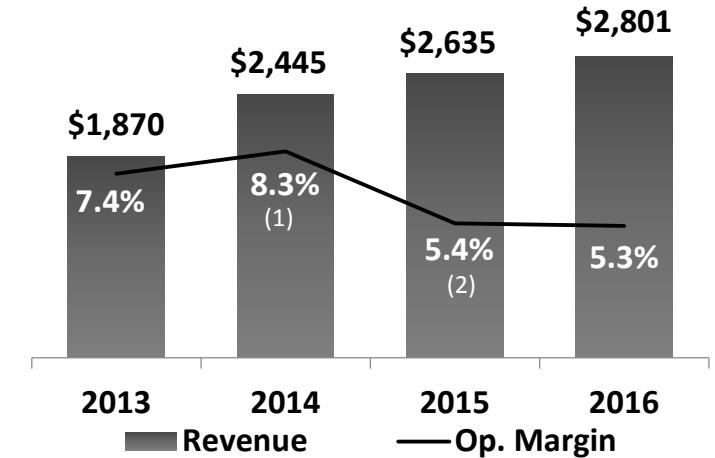
- Larger midstream gathering pipeline
- Mainline Pipeline
- Compression, Metering and Pumping Stations
- Natural Gas Distribution
- Pipeline Integrity
- Pipeline Logistics Management
- Horizontal Directional Drilling
- Downstream Services
- Storage Facilities

Differentiators

- Largest Pipeline Solutions Provider in North America
- Reputation & Track Record
- Safe Project Execution
- Turnkey Solutions
- EPC Capabilities
- In-House Mechanized Welding
- In-House Pigging Technology
- Pipe Logistics Management
- Infrastructure and Capital Solutions

Financial Snapshot

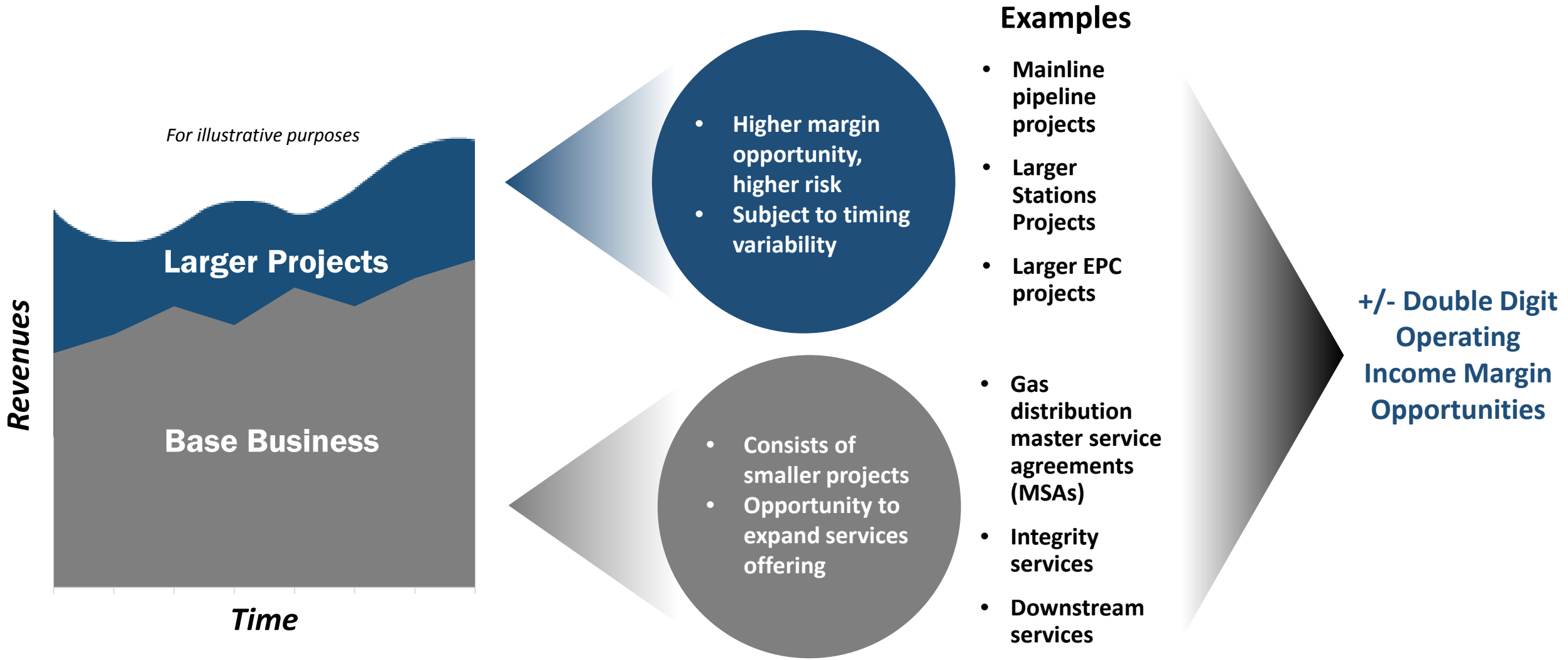
For the years ended Dec. 31, (\$ in millions)



(1) Excludes a \$38.8 million expense associated with an arbitration decision. Refer to appendix for non-GAAP reconciliation

(2) Includes \$7.3 million of project losses.

Larger Projects Complement Base Business

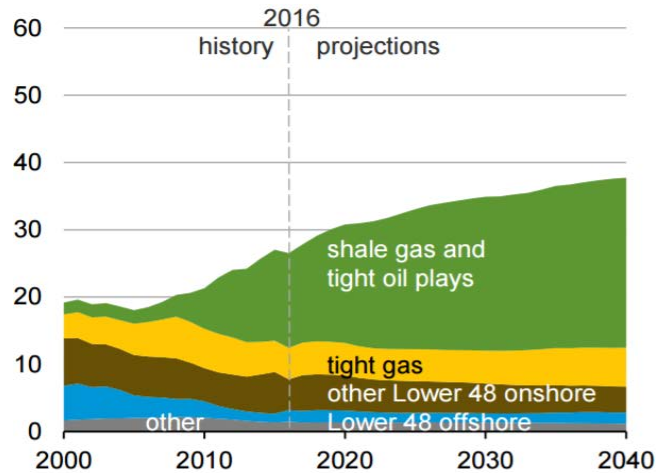


Grow Recurring Business While Remaining Well Positioned to Capture Larger Project Opportunities When They Occur

Oil & Gas Infrastructure Investment Drivers

Shale Gas & Tight Oil Plays Drive U.S. Natural Gas Production

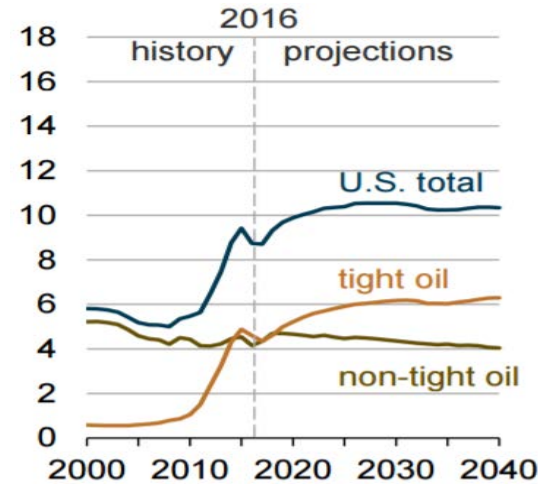
2000-2040 (trillion cubic feet)



Source: EIA, Annual Energy Outlook 2017

Tight Oil Drives U.S. Oil Production

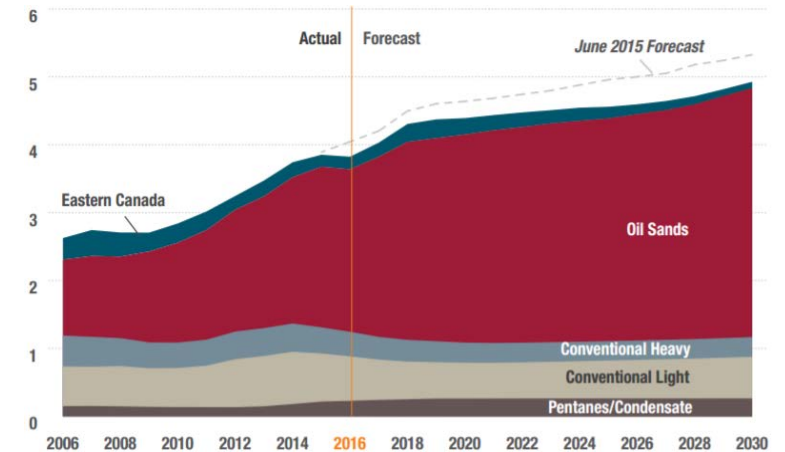
2000-2040 (millions of barrels per day)



Source: EIA, Annual Energy Outlook 2015

Canadian Oil Sands & Conventional Oil Production

(Millions of barrels per day)



Source: Canadian Assoc. of Petroleum Producers

- Production of shale natural gas, oil and natural gas liquids has grown dramatically and is expected to remain at high levels for the foreseeable future
- Much of these resources are in areas that have not been traditional hydrocarbon fuel sources and do not have adequate infrastructure in place to gather, store, process and transport product
- Canadian oil production lacks adequate takeaway pipeline infrastructure
 - Economics of pipeline transportation is increasingly attractive versus rail in a low oil price environment
 - Pipeline construction capacity is more limited in Canada versus the U.S. and construction capacity constraints could be significant
- It will take many years and significant energy infrastructure investment to harvest these resources

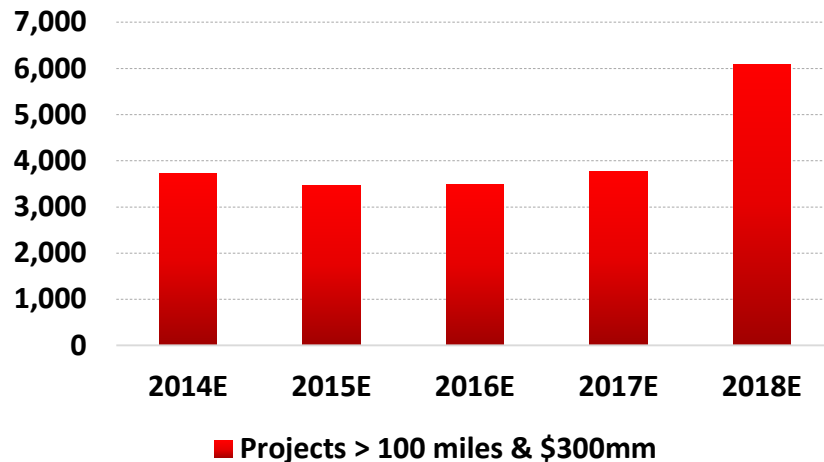
Oil & Gas Infrastructure Investment Drivers



- Need for pipeline and related infrastructure driven by the significant increase in North American unconventional natural gas and oil production – *not commodity prices*
- Takeaway pipelines have not been built fast enough to keep pace with hydrocarbon production – significant pipeline development needed
- Large pipeline construction industry capacity is currently tight, but could get significantly strained over the next several years

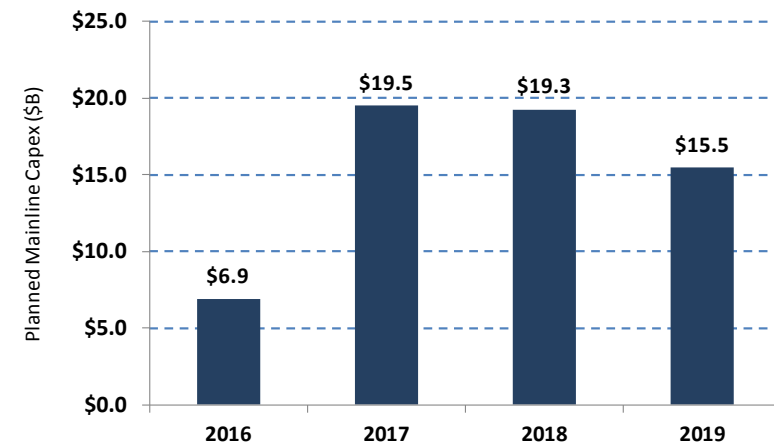
- Quanta is the largest pipeline construction company in North America
- This positions Quanta to provide significant large diameter pipe construction capacity to the industry while remaining active in select shales
- We are ready to assist our customers in meeting their development goals in what could be a resource challenged environment

North America Large Pipelines – In Miles



Source: Avondale Partners

North America Major Planned Mainline Project Capex



Source: KeyBanc Capital Markets

Quanta Is the Largest Pipeline Construction Company in North America

Engineer, Procure, Construct (EPC) Is A Differentiator



EPC Drivers

- Like electric power ... Customers' capital programs are at historic levels and growing. Projects are getting larger and more complex
- Many customers have limited internal resources and expertise to manage these dynamics and are turning to Quanta for solutions
- Evolution of regulatory demands, competition and alternative pricing models
- Project cost certainty becoming increasingly important
- Quanta is increasingly performing select projects on an EPC basis

Integrated Services



Assessment, Planning
& Development



Engineering & Design



Procurement



Construction &
Installation



Operation and
Maintenance

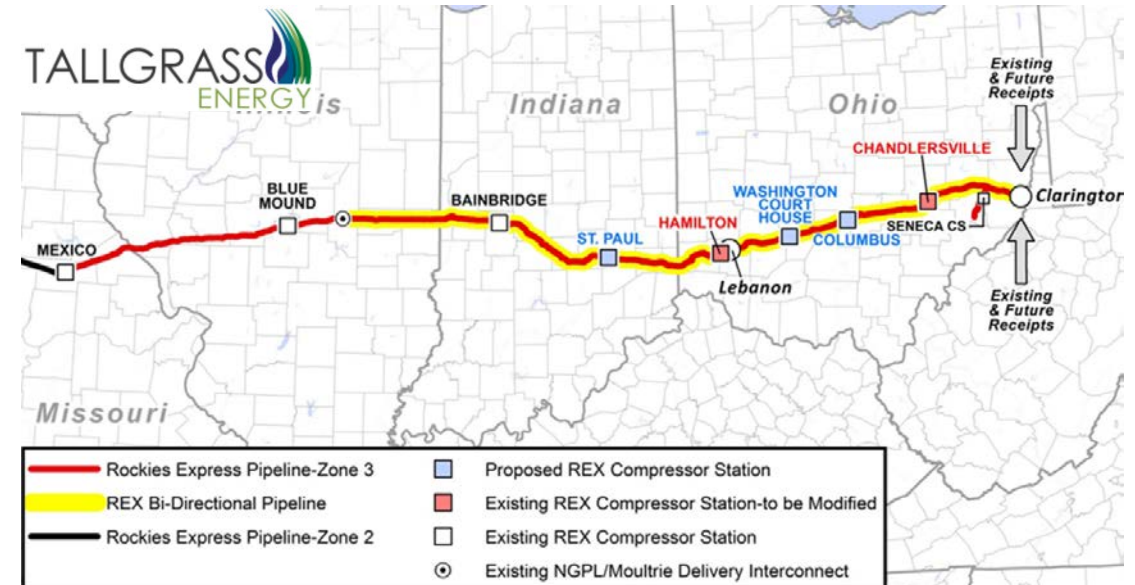
Engineer, Procure, Construct (EPC) – Case Study



Quanta is a best-in-class EPC provider for our customers

- Successful and impressive resume of EPC projects (electric, oil & gas and telecom)
- Self-perform capabilities
- Unique approach and skillset
 - Construction-centric approach forces upfront involvement in project scoping, planning and pricing
 - Construction expertise leads engineering process for risk management and efficiency
 - Quanta's deep understanding of risk and cost
 - Quanta's extensive database and knowledge from previous projects and self-perform capabilities allow scope and risk to be quickly and accurately defined

Rockies Express Zone 3 Capacity Enhancement Project



Location: Indiana & Ohio

Scope: EPC'ed the addition of three new compressor stations and modified two existing compressor stations

Completed: 4Q16

Quanta Team:

QPSE, Price Gregory Intl., MJ Electric, Mercer Technical Services, Enscope Australia and QPS Environmental

Oil & Gas Infrastructure Investment Drivers



Natural Gas Distribution & Pipeline Integrity

- U.S. pipeline infrastructure is getting older
 - PHMSA estimates more than 470K miles (37%) of U.S. gas distribution mains and 171K miles (57%) of gas transmission pipelines were installed before 1970 or in an undocumented year.
- Local Distribution Companies (LDCs) continue increased spend on pipe inspection and replacement
 - Replacement programs ramped up after San Bruno incident in 2010. Utilities are spending \$22B a year on transmission and distribution systems.⁽²⁾
- Regulations push for expanding inspection programs and accelerating replacement work
 - PHMSA will require more inspection and corrosion control activity, which will require additional excavations and integrity work. DOE's Quadrennial Energy Review emphasizes the need to accelerate pipe replacement to curb emissions from leak-prone pipe.
- Long timelines for some replacement plans will push spend acceleration
 - Current projections are over 20 years for many large utilities, a few more than 50 years⁽³⁾. Replacement activities will have to be accelerated to address risk.
- State regulators establishing cost recovery mechanisms to accelerate replacement programs

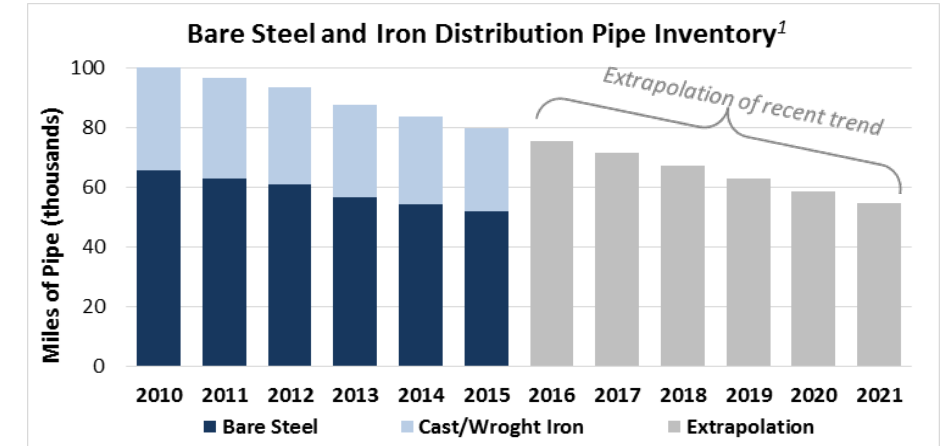
(1) PHMSA pipe inventory reports 2011-2015

(2) AGA 2016 Playbook

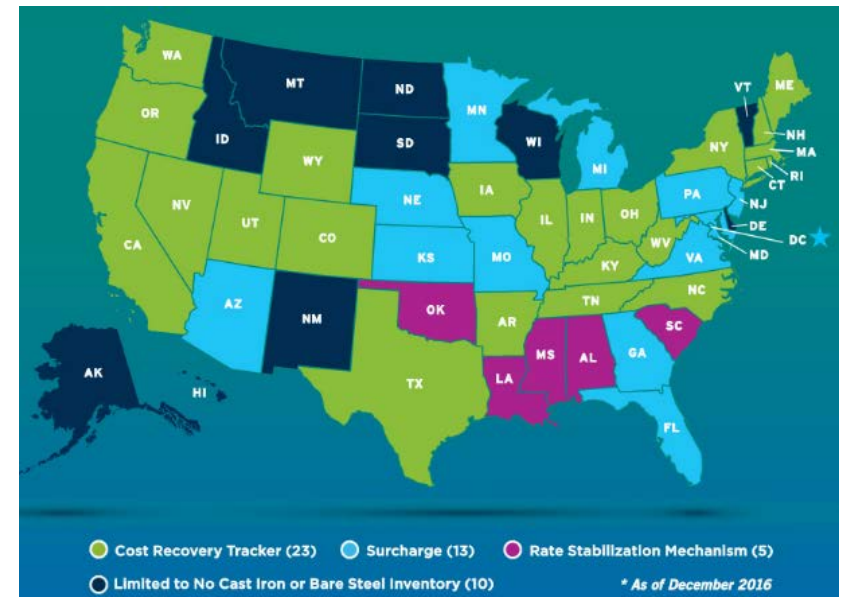
(3) Department of Energy Quadrennial Energy Review – Energy Transmission, Storage and Distribution Infrastructure, April 2015

(4) American Gas Association Playbook 2017

Significant Inventory Remains for Replacement



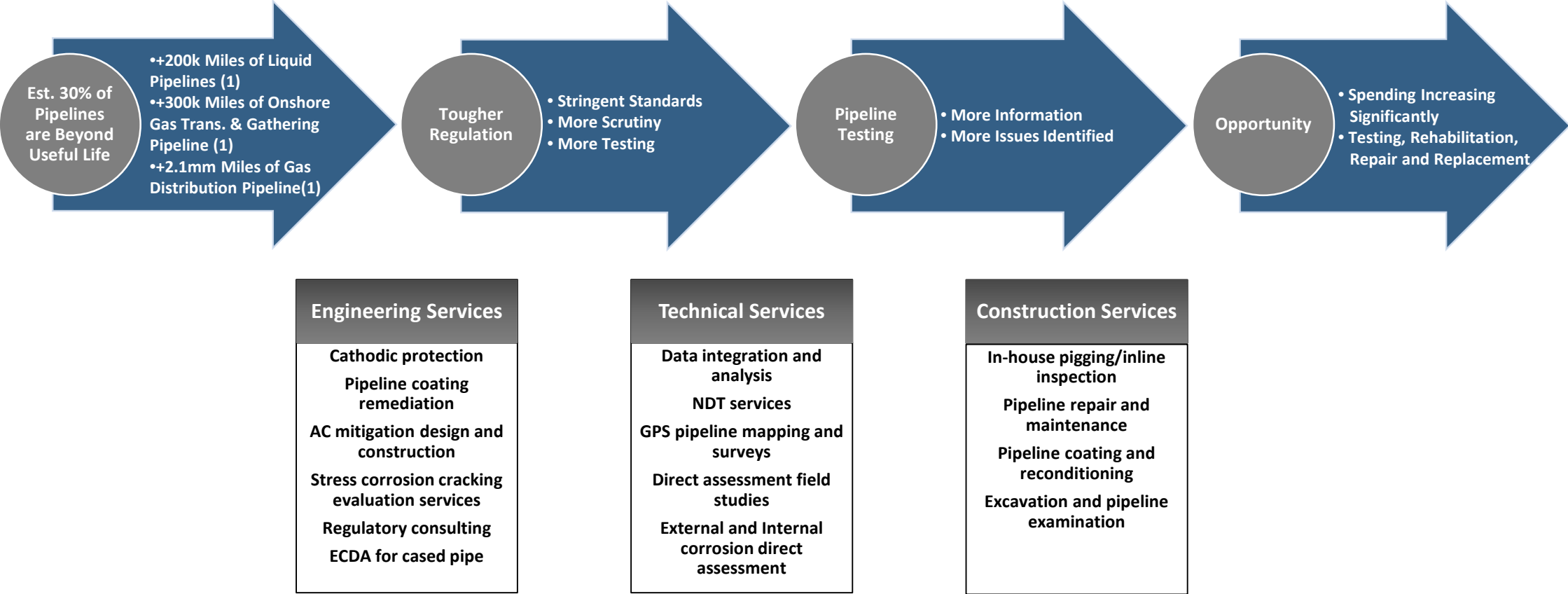
States with Gas Utility Cost Recovery Mechanisms⁽⁴⁾



Oil & Gas Infrastructure Investment Drivers



Natural Gas Distribution & Pipeline Integrity



(1) Pipeline & Hazardous Materials Safety Administration

Oil & Gas Infrastructure – Comprehensive Services



Mainline Pipeline



- Largest contractor in North America with +13 “spreads” of capacity
- Experience and capabilities up to 48” diameter pipe
- Only contractor with owned automatic welding technology

Larger Midstream Gathering Pipeline



- Local presence in active shales, particularly Marcellus and Utica
- Industry leading field leadership and workforce with experience in safely executing projects over some of the most difficult terrain in North America

Natural Gas Distribution



- Underground capabilities span North America
- Complete system outsourcing capable
- Record management, permitting, underground installation, joint trench, system upgrades, design build capabilities, maintenance and emergency response.

Pipeline Integrity Solutions



- Turnkey pipeline integrity solutions, including EPC
- In house owned and operated smart pigging technology and services
- Including AC Mitigation, Direct Assessment, Cathodic Protection, Pipeline Recoating, NDT Services, Linear Anodes, In-Line Inspection, Hydrostatic Testing Services

Facilities Construction



- Development, design and installation of oil and gas pipeline systems and facilities
- Metering and mainline valve stations, gas & oil separation facilities, gas compressor stations, pump stations, petrochemical plant facilities, electrical power generation plants, tanks and terminals and gathering facilities

EPC & Other Services



- Full EPC capabilities for mainline and shale midstream pipeline,
- Industry leading HDD company with global experience and reach
- Pipeline logistics from rail spur to yard or yard to right-of-way, pipe storage and racking, etc.
- Trenching and rock removal services

Oil & Gas - Strategic Imperatives Alignment



Focus On Safety Excellence

- Drive safety culture throughout operations
- Lazy Q safety programs
- AEDs, specialty gloves, flame resistant clothing

Maintain High Performance Culture

- Entrepreneurial culture
- Developing regional structure
- Lazy Q training programs
- Leadership selection and development

Strengthen and Grow Our Core

- Organic growth coupled with select acquisitions
- Differentiating solutions to customers
- Move vertically up customer value chain

Continue to Innovate

- Build EPC capabilities
- Infrastructure Solutions
- Invest in R&D and Technology

Organic Growth & Strategic Acquisitions
Capitalize on End Market Trends
Execution Focused
Grow the Base

+/- Double Digit Operating Income Margin Opportunities

Strong Drivers, Comprehensive Solutions for Growth



- North America's unconventional oil and gas formations are energy resource game changers and require significant development of midstream infrastructure
- Believe we are in early stages of a multiyear, active pipeline construction market in North America
- Quanta's leadership and comprehensive service offerings position us well to capitalize on near- and long-term opportunities
- Focused on returning margins to historical profitability levels or better





Questions and Answers

Reconciliation of Oil & Gas Infrastructure Services Segment Operating Income, As Adjusted



<i>Amounts in millions, except percentages</i>	<i>Oil & Gas Infrastructure 12/31/2014</i>
Revenues	<u>\$ 2,444.6</u>
Operating Income (as reported)	162.8
Addback:	
Arbitration expense	<u>38.8</u>
Operating Income (as adjusted)	<u><u>\$ 201.6</u></u>
Operating income margin (as reported)	6.7%
Operating income margin (as adjusted)	8.3%