TC PipeLines, LP

RESILIENT ASSETS,
DISCIPLINED GROWTH

January 2020

Highlights

Solid performance in third quarter 2019

- EBITDA of $100 million for third quarter
- Solid commercial fundamentals continue to support our regionally-diverse asset portfolio
- Third quarter results benefited from continued strong demand from shippers looking to access valuable markets

Healthy leverage ratio as debt repayment continues

- Bank leverage ratio approximately 2.8X at September 30, 2019

Continued strong contracting levels

- Demand for transportation services continued at a robust level across our natural gas systems
- PNGTS' volumes ramping up as expansion projects went into service starting in 2018 and continuing through 2022

Organic growth progressing

- Phase II of Portland XPress Project in-service November 1, 2019
- Phase I of Westbrook XPress Project in-service November 1, 2019
- Announced two new projects: GTN XPress to be fully in-service in November 2023 and Tuscarora XPress to be completed in November 2021

Stable distribution

- Maintaining distribution of $0.65 per common unit for third quarter

Financial highlights for third quarter 2019

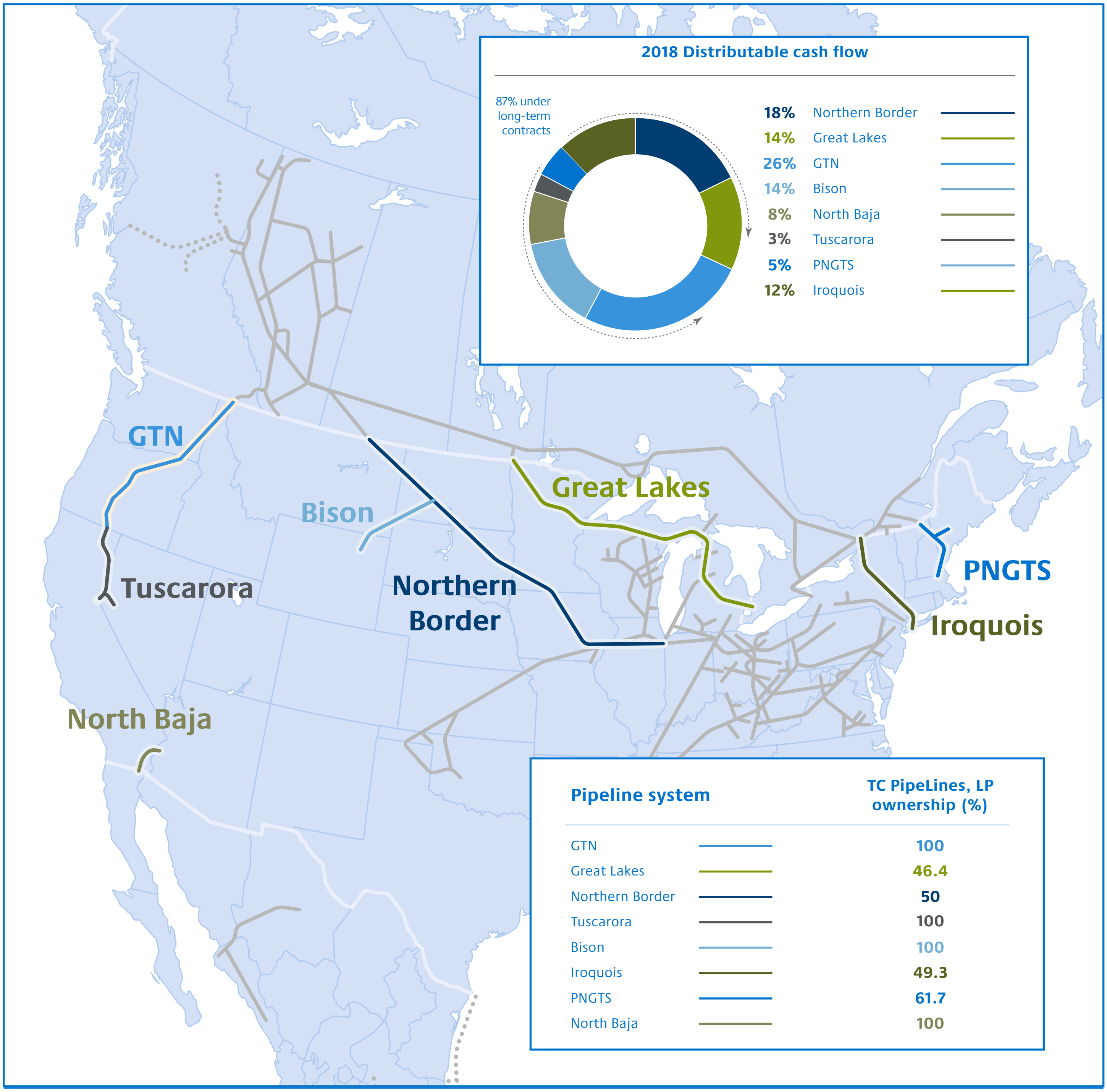
ENHANCING AND MODERNIZING OUR NATURAL GAS INFRASTRUCTURE TO HELP BUILD A CLEANER ENERGY FUTURE

	Three months ended 30-Sept	
	2019	2018
Net income	**59**	**65**
Net income attributable to controlling interests	**56**	**62**
Net income per common unit – *basic and diluted* [(a)]	**$0.76**	**$0.79**
EBITDA [(b)]	**100**	**113**
Cash distributions paid	**(47)**	**(47)**
Distributable cash flow [(b)]	**78**	**83**
Cash distribution declared per common unit	**$0.65**	**$0.65**
Weighted average common units outstanding *(millions)* [(c)]	**71.3**	**71.3**
Common units outstanding, end of period *(millions)*[(c)]	**71.3**	**71.3**

a. Net income per common unit is computed by dividing net income attributable to controlling interests, after deduction of net income attributable to the General Partner, by the weighted average number of common units outstanding.
b. EBITDA and Distributable cash flow are non-GAAP financial measures. The reconciliations of these measures to the most directly comparable GAAP measure, Net Income, are available on our website under the supplemental schedules published as part of our third quarter earnings release.
c. Under the ATM program, no common units were issued during the three months ended September 30, 2019 (September 30, 2018 – nil).

Cover photo: Conservation organizations, community volunteers, biology students and employees came together along Great Lakes' right of way near Big Rapids, Michigan with the common goal of restoring habitat for the monarch butterfly – one of North America's important pollinators.

TC PipeLines, LP



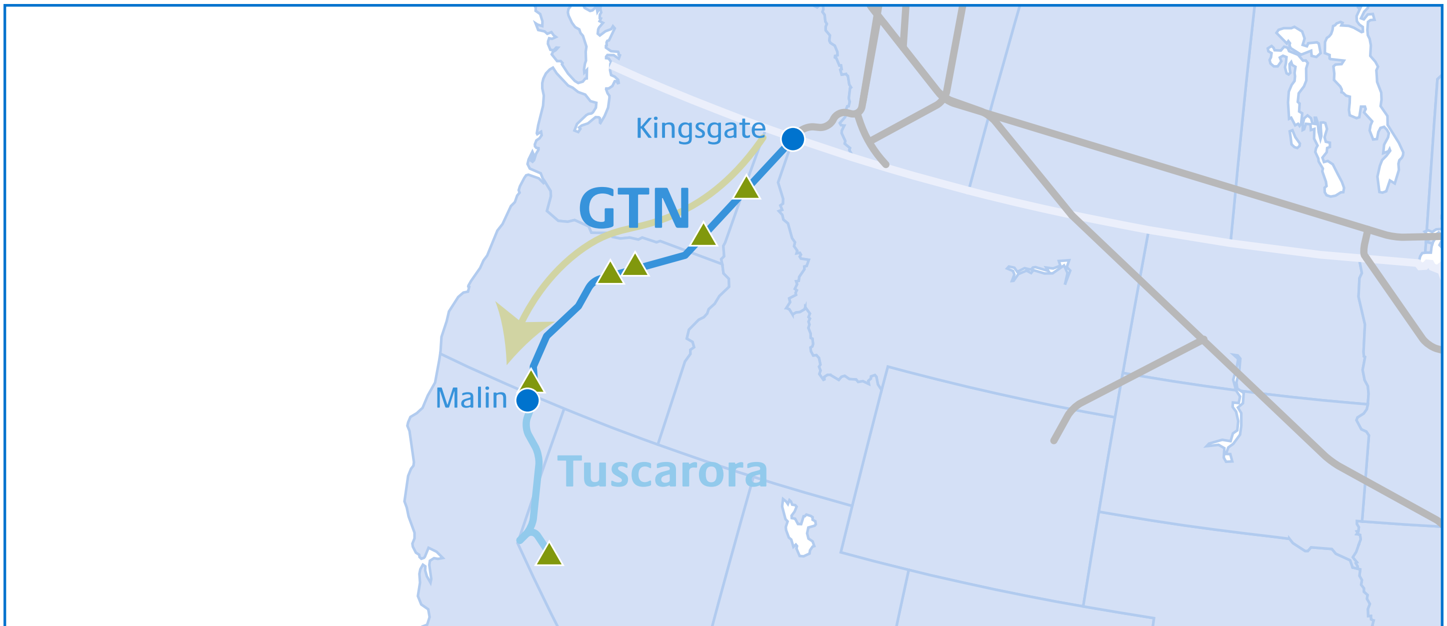
Pipeline system	TC PipeLines, LP ownership (%)
GTN	100
Great Lakes	46.4
Northern Border	50
Tuscarora	100
Bison	100
Iroquois	49.3
PNGTS	61.7
North Baja	100

Forward Looking Information and Non-GAAP Measures

This presentation may include forward-looking statements regarding future events and the future financial performance of TC PipeLines, LP. Words such as "believes," "expects," "intends," "forecasts," "projects," and similar expressions identify forward-looking statements. All forward-looking statements are based on the Partnership's current beliefs as well as assumptions made by and information currently available to the Partnership. These statements reflect the Partnership's current views with respect to future events. The Partnership assumes no obligation to update any such forward-looking statement to reflect events or circumstances occurring after the date hereof. Important factors that could cause actual results to materially differ from the Partnership's current expectations include the impact of the Tax Cuts and Jobs Act of 2017 (the Tax Act) and the FERC orders issued on March 15, 2018 and July 18, 2018 (2018 FERC Actions) on our pipelines' rates and the Partnership's revenues, cash flow and cash available for distributions and debt payments and covenant compliance, ability to mitigate the impact of the Tax Act and 2018 FERC Actions, initiation of Section 5 proceedings or other acceleration of rate resets, availability of drop downs, non-renewal or replacement of expiring transportation agreements, ability to identify, negotiate and finance potential business opportunities, market conditions, and other risks inherent in an investment in us as discussed in the Partnership's filings with the Securities and Exchange Commission, including the Partnership's Annual Report on Form 10-K for the year ended Dec. 31, 2018, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

We use the non-GAAP financial measures "Adjusted earnings", "EBITDA", "Adjusted EBITDA" and "Distributable cash flow" as a supplement to our GAAP financial statements. Adjusted earnings and Adjusted EBITDA exclude the impact of certain non-recurring items from earnings and EBITDA, respectively, during the current earnings period. "EBITDA" is an approximate measure of our operating cash flow during the current earnings period. "Distributable cash flow" provides a measure of distributable cash generated during the current earnings period. These measures are performance measures presented to assist investors in the evaluation of our business performance. We believe these measures provide additional meaningful information in evaluating our financial performance and cash generating capacity. These non-GAAP financial measures are provided as a supplement to GAAP financial results and are not meant to be considered in isolation or as a substitute for financial results prepared in accordance with GAAP. The reconciliations of these measures to the most directly comparable GAAP measure, Net Income, are available on our website under the supplemental schedules published as part of our quarterly earnings releases. These measures do not have any standardized meaning prescribed by GAAP. They are, therefore, considered to be non-GAAP measures and are unlikely to be comparable to similarly titled measures presented by other entities.

Announced GTN XPress and Tuscarora XPress projects



ENHANCES NATURAL GAS INFRASTRUCTURE TO HELP TRANSITION TO A CLEANER AND MORE RENEWABLE FUTURE

GTN XPress

- Approximately $335 million project consisting of horsepower replacement and other reliability work, together with incremental compression capability at existing stations
- 250,000 Dth/d of firm capacity to be commercially phased into service November of 2022 and 2023
- More than three quarters of the total project cost is related to the reliability and horsepower replacement program and is expected to be recovered in recourse rates

Contractual underpinnings and expected revenue

- The incremental firm capacity is underpinned by fixed negotiated rate contracts for an average term in excess of 30 years and is expected to generate approximately $25 million in incremental revenue on an annualized basis when fully in service

Project funding

- Funding will include new term debt at GTN together with equity contributions from TCP, the latter of which is expected to come from the Partnership's existing cash and borrowings under its revolving credit facility

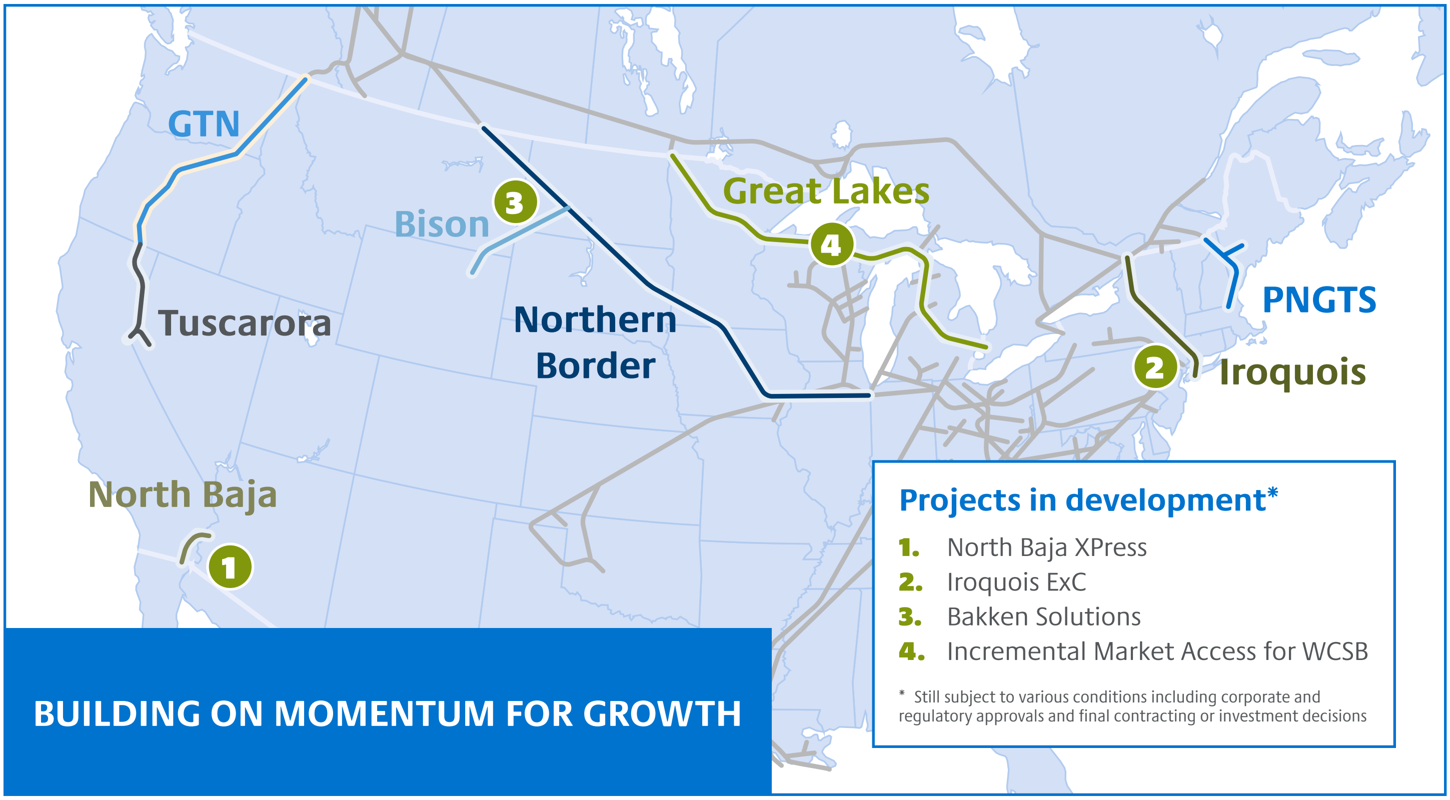
Tuscarora XPress

- $13 million expansion project involving additional compression capability at an existing Tuscarora facility
- Will transport approximately 15,000 Dth/day of additional volumes of natural gas when completed in November 2021

Contractual underpinnings and expected revenue

- The project is 100% underpinned by a 20-year contract
- Expected to generate approximately $2 million in revenue on an annualized basis when fully in service

Future opportunities



North Baja XPress connects to new demand

- Potential $90 million North Baja expansion project provides the Partnership with the opportunity to benefit from LNG exports

Iroquois ExC enhances gas deliverability into New York City

- Iroquois working to develop and permit upgrades to its compression facilities
- Responding to increasing demand for cleaner energy from fuel switching and economic growth, this project offers a sensible approach and an orderly transition towards a renewable energy future

Strategic connections to WCSB and Bakken supply basins offer potential growth opportunities

- Producer demand has sparked the development of potential expansion projects on Northern Border, Bison and Great Lakes

Capture synergies with TC Energy’s natural gas pipelines in Canada and with ANR in the U.S.

- GTN will continue to benefit from upstream debottlenecking activities enabling increased gas supplies to flow out of Canada onto the GTN system
- Great Lakes positioned to benefit from additional long-term contracting as TC Energy’s ANR pipeline secures expansion projects
- TC Energy’s Canadian Mainline long-term toll settlement announced on December 20, 2019 provides toll certainty and further enhances the competitiveness of this market path

Key focus areas

Complete Portland XPress Project

- Low-cost, brownfield compression to increase capacity by almost 195 MDth/d
- Capex approximately $85 million
- In-service dates phased-in over 3 years beginning November 1, 2018 and continuing annually to November 1, 2020

Execute Westbrook XPress Project

- Proceeding with Westbrook XPress Project, a second expansion project on PNGTS
- Further low-cost, brownfield compression to add incremental capacity of approximately 125 MDth/d by 2022
- Capex approximately $125 million
- Multi-phase project with phases 1, 2 and 3 in-service dates of Nov. 2019, 2021 and 2022

Maximize the benefit of market opportunities

- Pipeline assets well situated to benefit from short-term and interruptible sales opportunities due to connectivity to low cost supply basins (WCSB and Bakken) and to key demand markets in New England, Atlantic Canada and the Pacific Northwest

Continue to advance alternatives for our Bison pipeline

- Potential alternatives include repurposing or reversing the pipeline to transport growing associated gas supplies from the Bakken

Financial discipline

Healthy balance sheet maximizes value over the long term

- Bank leverage ratio targeted in the high 3.0 to low 4.0 times range
- Distribution coverage ratio targeted at approximately 1.3 to 1.4 times
- Self-fund growth - deleveraging program has created liquidity and provided capacity
- No need to access equity capital markets

Confident that our high quality assets will generate strong cash flows

- EBITDA derived from stable assets substantially backed by long-term, ship-or-pay contracts
- Strong competitive position

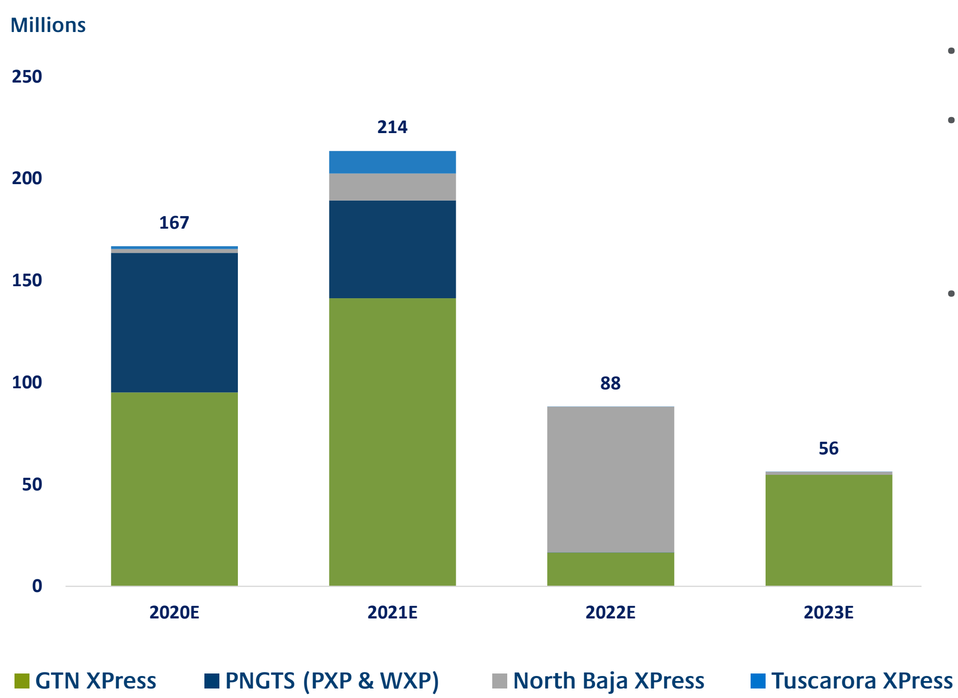
Working to deliver significant growth across our portfolio

- Visible growth from current organic expansion projects
- Line of sight to additional growth opportunities

CAPITAL DISCIPLINE SETS US UP FOR SELF-FUNDED ORGANIC GROWTH

Capital expenditure outlook 2020-2023

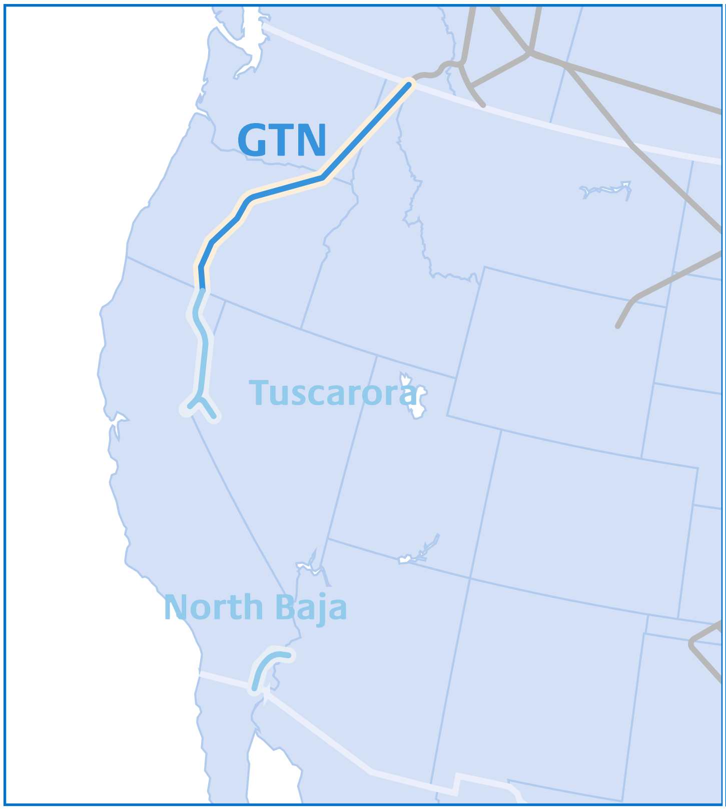
Estimated project capital expenditures[1] as at January 1, 2020



- Funded through asset level debt and TCP contributions
- TCP has capacity to make contributions from cash from operations and our revolving credit facility – no new equity issuances anticipated
- In 2019, TCP invested about $78 million into maintenance of existing assets and $30 million into growth projects[2]. All capex is expected to be recovered through fixed negotiated rate contracts and/or recourse rates over time

[1] Values represent TCP's proportionate share of estimated capex based on ownership. Capex is subject to change as projects are developed. North Baja XPress is subject to shipper FID. Numbers are inclusive of AFUDC.
[2] As per TCP's Q3 2019 disclosure. Represents TCP's proportionate share of total maintenance and growth capex of $97 and $45 million, respectively.

Gas Transmission Northwest (100% TCP ownership)



In-service date
1961

Length
1,377 Miles

Capacity
2.9 Bcf/d

Primary supply source
Kingsgate interconnect

Primary markets served
Pacific Northwest
Malin interconnect

Contracts, customers, and details

Contract profile

- Substantially fully contracted
- About 7 year remaining weighted average contract length, trending to longer average term when GTN XPress contracts come into service
- Currently, about 65% at max firm rate and 35% at negotiated rates

Customer profile

- Approximately 50% of the total contract portfolio is contracted by residential/commercial LDCs and power generators
- Approximately 30% contracted by marketers
- Approximately 20% contracted by producers

Other details

- Upstream debottlenecking on TC Energy's NGTL system has allowed for additional firm subscription contracts for 700 MMcf/d with in-service dates between 2016 and 2020
- All of these volumes came with terms of at least 15 years with about half at negotiated rates
- Potential for incremental revenue generation from ambient transport opportunities, as weather effects on demand will drive basis spread between Kingsgate and Malin

Notes:
All contract data subject to change based on contract additions and expirations; negotiated rate contracts include some with negotiated rates at the current max firm rate

Tuscarora Gas Pipeline Company (100% TCP ownership)

In-service date
1995

Length
305 Miles

Capacity
230 MMcf/d

Primary supply source
Malin interconnect

Primary markets served
Northeast California
Northwest Nevada

Contracts, customers, and details

Contract profile

- Substantially fully contracted through 2020
- Approximately 5 year remaining weighted average contract length
- 100% at max firm rate

Customer profile

- Approximately 85% of the total contract portfolio is contracted by residential/commercial LDCs and power generators
- Approximately 15% contracted by industrial load and marketers

Other details

- Serves a stable market with moderate growth potential

Notes:
All contract data subject to change based on contract additions and expirations

Northern Border Pipeline Company (50% TCP ownership)

In-service date
1982

Length
1,412 Miles

Capacity
2.5 Bcf/d

Primary supply source
Monchy (Port of Morgan) interconnect
Williston, Bakken basins

Primary markets served
Ventura interconnect
Chicago Citygates

Contracts, customers, and details

Contract profile

- Fully contracted for 2019 and 2020
- About 60% at max firm rate and 40% at negotiated rates
- Approximately 3 year remaining weighted average contract length, generally with 5 year ROFRs

Customer profile

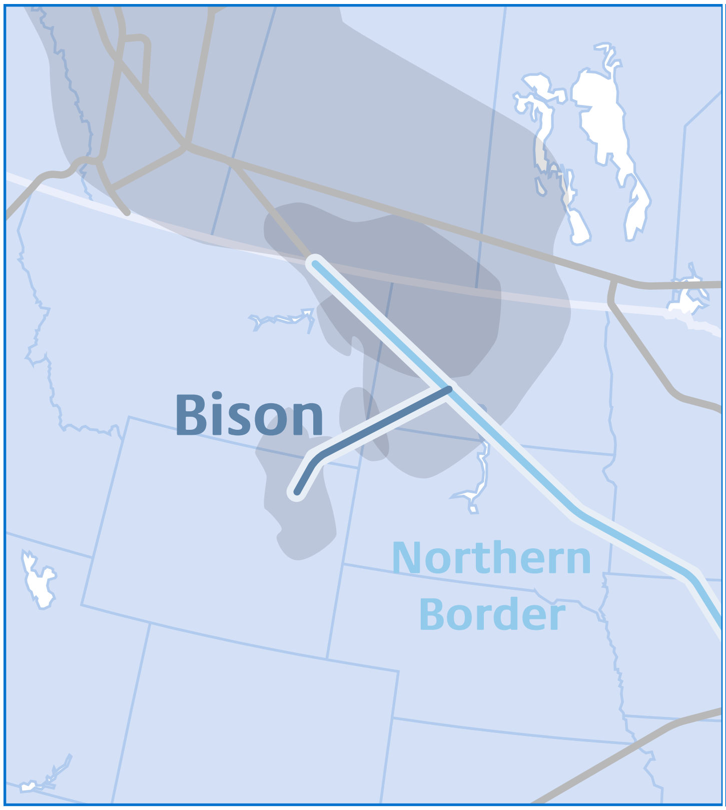
- Approximately 70% of the total contract portfolio is contracted by marketers
- Approximately 20% contracted by utilities and industrial load
- Approximately 10% contracted by producers

Other details

- WCSB production competes for pipeline capacity with the Bakken basin – currently flowing about 1.5 Bcf/d of Bakken receipts
- Potential for incremental revenue generation from ambient transport opportunities as weather effects on demand will drive basis spread between Port of Morgan, Ventura, and Chicago Citygates

Notes:
All contract data subject to change based on contract additions and expirations; negotiated rate contracts include some with negotiated rates at the current max firm rate

Bison Pipeline (100% TCP ownership)



In-service date
2011

Length
303 Miles

Capacity
407 MMcf/d

Primary supply source
Powder River Basin - Wyoming

Primary markets served
Ventura interconnect - via NBPL
Chicago Citygates - via NBPL

Contracts, customers, and details

Contract profile

- Contracts through January 2021
- 100% at negotiated rates

Customer profile

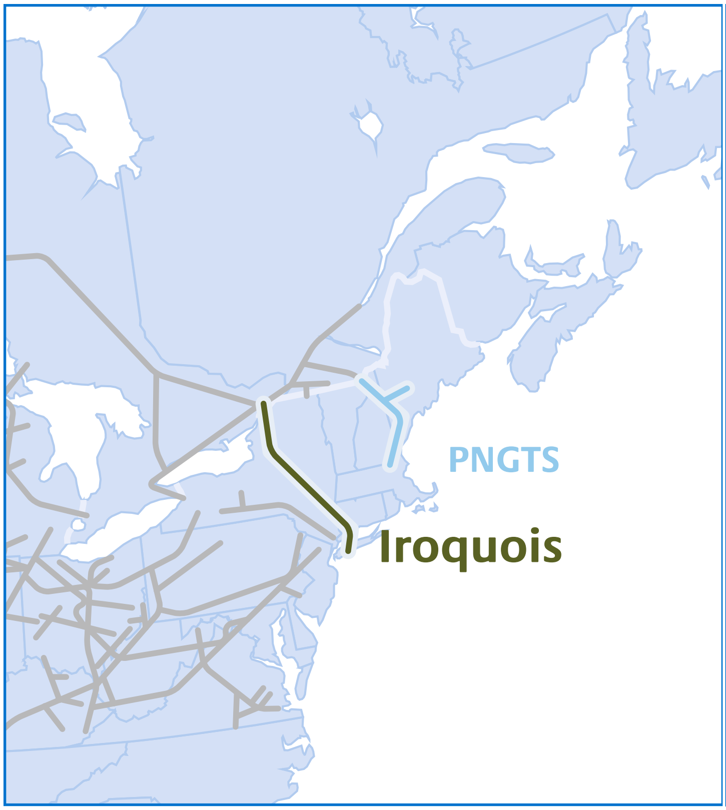
- Two shippers

Other details

- Natural gas is currently not flowing on this pipeline in response to relative cost advantages in the WCSB and Bakken basins
- Two shippers agreed to buyout of their obligations at the end of 2018 at commercially favorable terms (~$97 million lump sum payment) generating further financial capacity for TC PipeLines to pursue future organic growth
- Remaining revenue fully contracted on a take or pay basis through January of 2021
- Business development activities underway to determine the best use for Bison in future, including if the asset can be reversed, re-directed or re-purposed

Notes:
All contract data subject to change based on contract additions and expirations

Iroquois Gas Transmission System (49.3% TCP ownership)



In-service date
1992

Length
416 Miles

Capacity
1.5 Bcf/d

Primary supply source
Iroquois/Waddington interconnect

Primary markets served
Iroquois Zone 2 interconnect
New York/Long Island, and Connecticut

Contracts, customers, and details

Contract profile

- Highly contracted for 2019 with certain contracts extending through to 2023
- Approximately 3 year remaining weighted average contract length
- About 60% at max firm rate and 40% at negotiated rates

Customer profile

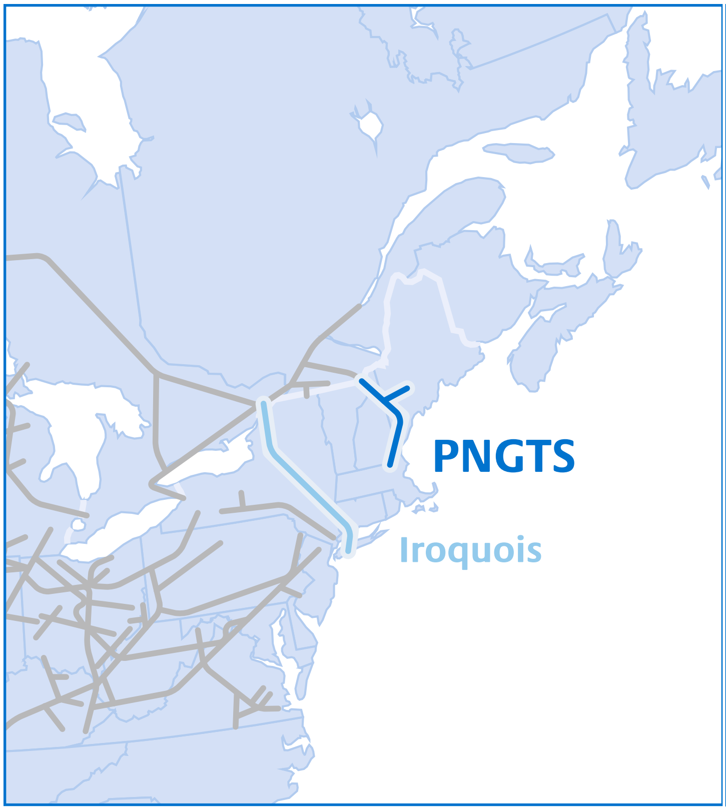
- Approximately 70% of the total contract portfolio is contracted by residential/commercial LDCs and power generators
- Approximately 20% contracted by marketers
- Approximately 10% contracted by producers and industrial load

Other details

- Discretionary transportation opportunities can generate incremental revenue (short-term firm and interruptible transportation)
    - Approximately 10% of revenues are from discretionary services
- "Steel in the ground" advantage

Notes:
All contract data subject to change based on contract additions and expirations

Portland Natural Gas Transmission System (61.7% TCP ownership)



In-service date
1999

Length
295 Miles

Capacity
290 MDth/d

Primary supply source
East Hereford interconnect

Primary markets served
Dracut interconnect
New England, Vermont,
and New Hampshire

Contracts, customers, and details

Contract profile

- Highly contracted for 2019
- Currently approximately 15 year remaining weighted average contract length, trending to longer average term when Portland XPress Phase III and Westbrook XPress contracts come into service
- Currently about 10% at max firm rate and 90% at negotiated rates, trending to 100% negotiated rates

Customer profile

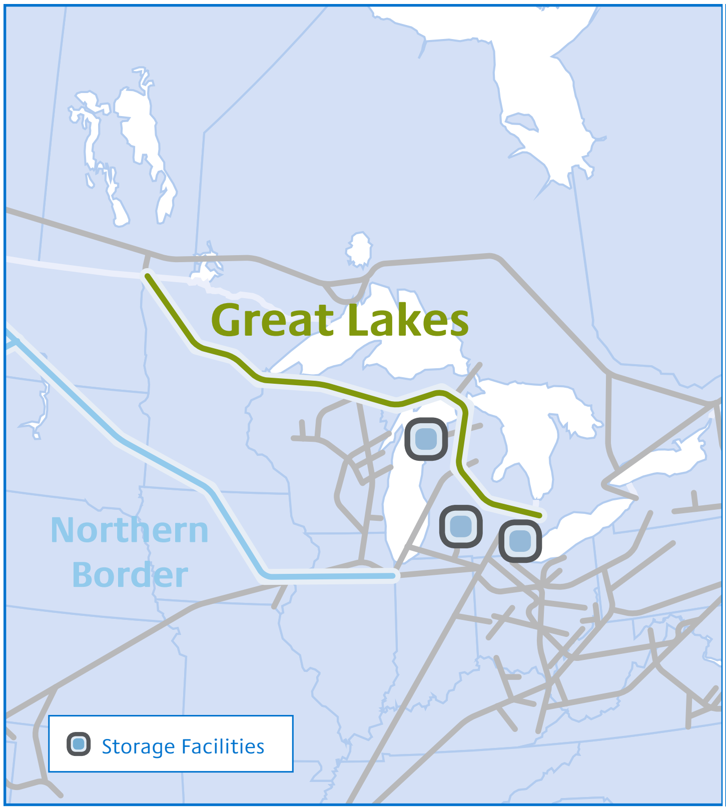
- 70% of the total contract portfolio is contracted by residential/commercial LDCs and power generators
- 30% contracted by marketers and industrial load

Other details

- When the current expansion projects are completed and in-service, total capacity will be approximately 400 MDth/d
- “Steel in the ground” advantage in Northeast U.S.; also serves Atlantic Canada’s gas needs

Notes:
All contract data subject to change based on contract additions and expirations

Great Lakes Gas Transmission (46.4% TCP ownership)



In-service date
1967

Length
2,115 Miles

Capacity
2.4 Bcf/d

Primary supply source
Emerson 2 interconnect

Primary markets served
Union Dawn interconnect
Minnesota, Wisconsin, and Michigan

Contracts, customers, and details

Contract profile

- Highly contracted for 2019
- Approximately 3 year remaining weighted average contract length
- 55% at max firm rate and 45% at negotiated rates

Customer profile

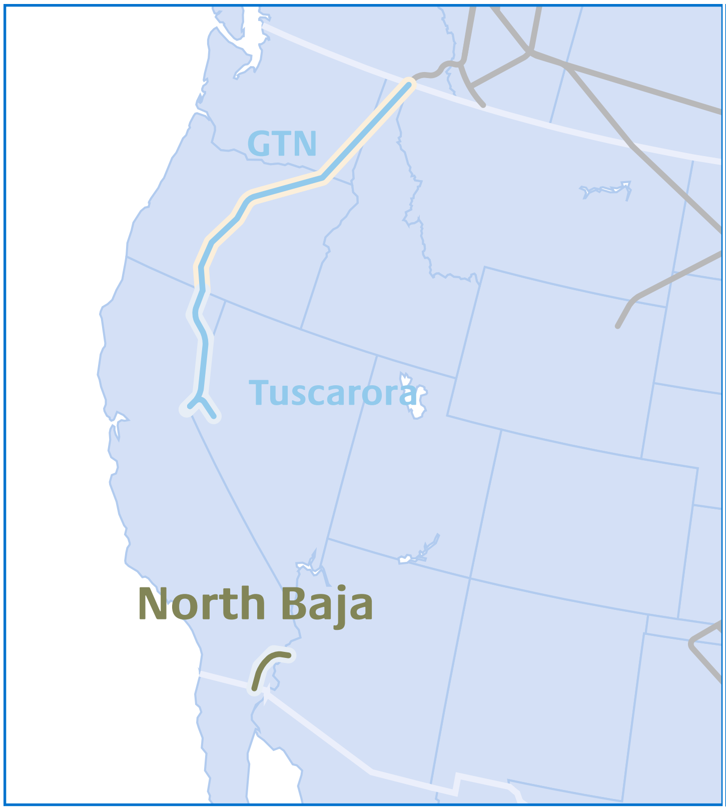
- Approximately 80% of the total contract portfolio is contracted by transportation by others with affiliates and residential/commercial LDCs
- Approximately 20% contracted by marketers and industrial load

Other details

- Contract mix of long-term, short-term as well as both long-haul and short-haul services with long-term contracts including 10 year TC Energy Mainline agreement for 711 MMcf/d (TBO for TC Energy's Long Term Fixed Price offering)
- Provides access to Ontario markets including Dawn storage
- Gas storage interconnections with total regional storage capacity of roughly 650 Bcf drives most demand in summer seasons
- Significant backhaul capabilities
- Multiple ANR interconnects; provides an essential link between WCSB gas and U.S. markets

Notes:
All contract data subject to change based on contract additions and expirations

North Baja Pipeline (100% TCP ownership)



In-service date
2002

Length
86 Miles

Capacity
600 MMcf/d North
500 MMcf/d South

Primary supply source
El Paso Pipeline interconnect
Gasoducto pipeline interconnect

Primary markets served
Southwest California - SoCal LDC

Contracts, customers, and details

Contract profile

- Highly contracted for 2019
- About 7 year remaining weighted average contract length
- About 95% at negotiated rates and 5% at max firm rates

Customer profile

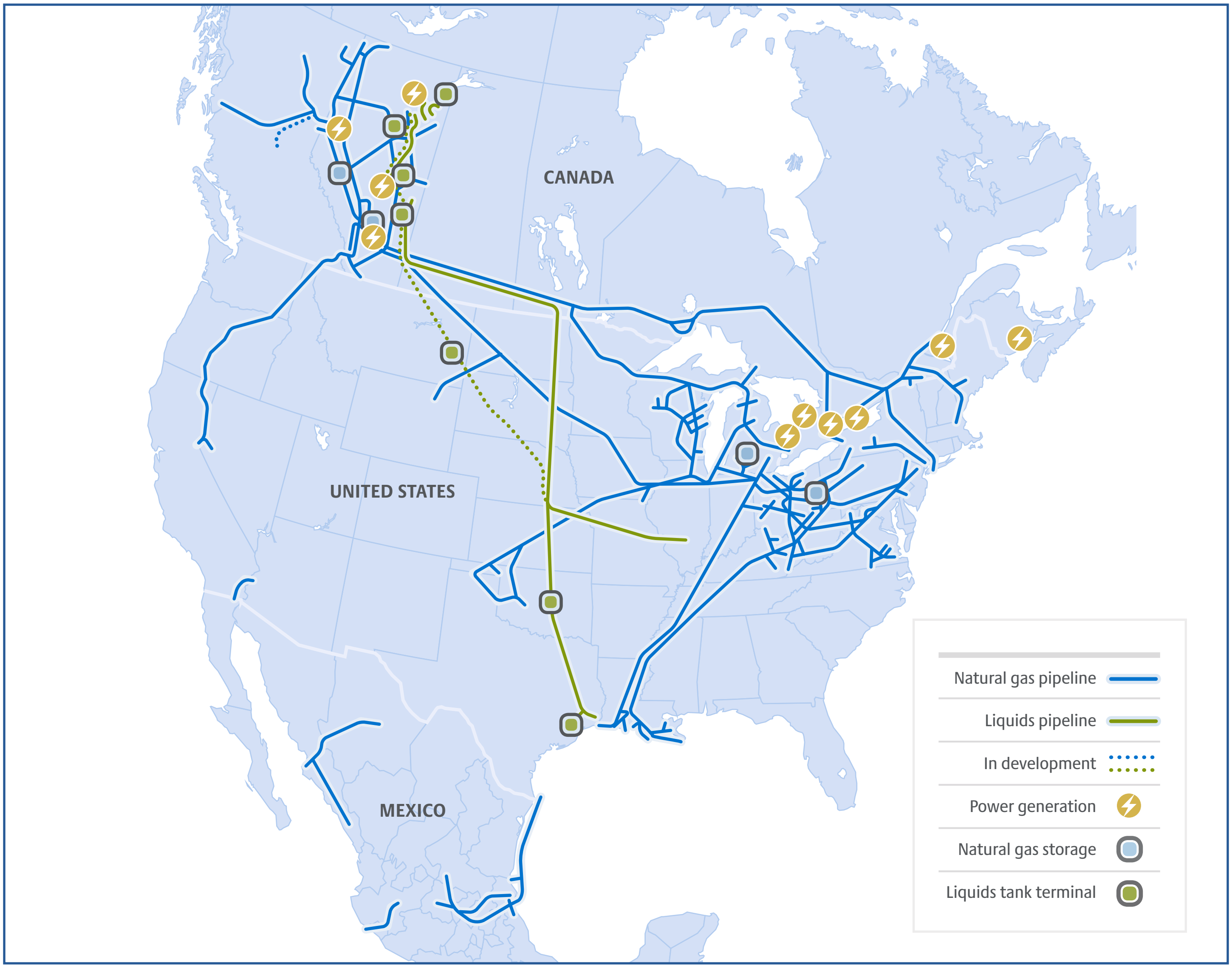
- Approximately 80% of the total contract portfolio is contracted by marketers
- Approximately 10% contracted by industrial load
- Approximately 10% contracted by utilities

Other details

- Opportunities to capture incremental revenue generation as 'make-up' transportation is required in the region
- Sources supply from U.S. basins, including low cost Permian region, and well suited to supply LNG exports from Baja Mexico and power plants
- Recently filed FERC application for North Baja XPress; project is subject to positive FID

Notes:
All contract data subject to change based on contract additions and expirations

MLP of TC Energy Corporation (TSX, NYSE:TRP)



One of North America's largest natural gas pipeline networks

- 57,500 miles of pipeline
- 653 Bcf of storage capacity
- Transports approximately 25% of North America's natural gas demand
- 65 year history of safe, reliable operatorship

Premier liquids pipeline system

- 3,000 miles of pipeline
- Transports approximately 20% of Western Canadian exports

One of the largest private sector power generators in Canada

- 10 power plants, 6,000 MW*

Enterprise value ~ C$115 billion

* Includes Napanee (under construction), Halton Hills and Portlands with a combined capacity of ~1,850MW subject to sale agreement.

Environmental, Social and Governance commitment

E S G

Safety and reliability are critical priorities

- Pipelines monitored from control centers 24/7/365
- Holistic safety culture and zero-incident target

Long history of working collaboratively with stakeholders

- Industry-leading community, landowner and workforce engagement
- Active engagement with customers, Indigenous groups, governments and regulators

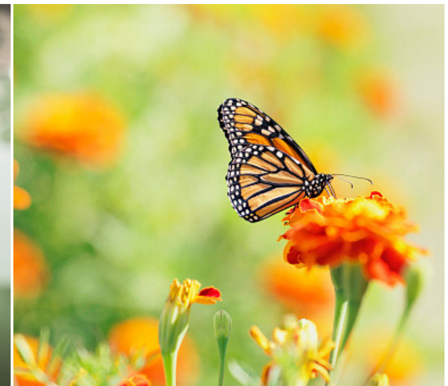
Adhere to the highest standards of corporate governance

- Consistent top-tier performance
- Rigorous Board oversight of risk management, including health, safety, sustainability and environment

Committed to protecting the environment

- Regular communication with landowners along pipeline routes
- Environmental partnerships to conserve natural habitats
- Focusing on emissions-reduction opportunities

TC PipeLines, LP key takeaways



WORKING TO MAXIMIZE THE LONG-TERM VALUE OF OUR ASSETS ANG DELIVER MEANINGFUL GROWTH ACROSS OUR PORTFOLIO

Confident that our high quality assets will generate strong cash flows

- EBITDA derived from stable assets substantially backed by long-term, ship-or-pay contracts with creditworthy shippers
- Strong competitive position

Healthy balance sheet maximizes value over the long term

- Bank leverage ratio targeted in the high 3.0 to low 4.0 times range
- Distribution coverage ratio targeted at approximately 1.3 to 1.4 times
- Investment-grade MLP with low IDRs
- Self-fund growth – no need to access equity capital markets

Delivering significant growth across our portfolio

- “Steel-in-the-ground” advantage provides a strong platform for future growth
- Assets highly connected to TC Energy’s asset portfolio and benefit from TC Energy projects up and downstream
- Visible growth from current projects on PNGTS, GTN and Tuscarora
- Line of sight to additional organic growth opportunities
- Low-risk, value-creating projects supported by long-term contracts
- Disciplined approach to growth, with near-term opportunities sized and sequenced to meet goal to self-fund

TC PipeLines, LP Supplemental Schedule

Non-GAAP Measures
Reconciliations of Net income to Distributable Cash Flow

(unaudited) (millions of dollars)	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Net income	**59**	65	**216**	241
Add:				
Interest expense [(a)]	**22**	23	**66**	71
Depreciation and amortization	**19**	25	**58**	73
Income taxes	**-**	-	**1**	1
EBITDA	**100**	113	**341**	386
Add:				
Distributions from equity investments[(b)(f)]				
Northern Border [(c)]	**21**	22	**69**	60
Great Lakes	**7**	10	**39**	49
Iroquois [(d)]	**28**	14	**56**	42
	56	46	**164**	151
Less:				
Equity earnings:				
Northern Border	**(15)**	(16)	**(50)**	(49)
Great Lakes	**(8)**	(9)	**(37)**	(45)
Iroquois	**(8)**	(9)	**(28)**	(35)
	(31)	(34)	**(115)**	(129)
Less:				
AFUDC equity	**-**	-	**(1)**	-
Interest expense [(a)]	**(22)**	(23)	**(66)**	(71)
Income taxes	**-**	-	**(1)**	(1)
Distributions to non-controlling interest [(e)]	**(4)**	(3)	**(14)**	(12)
Maintenance capital expenditures [(f)]	**(19)**	(11)	**(40)**	(21)
	(45)	(37)	**(122)**	(105)
Total Distributable Cash Flow	**80**	88	**268**	303
General Partner distributions declared [(g)]	**(1)**	(1)	**(3)**	(3)
Distributions allocable to Class B units [(h)]	**(1)**	(4)	**(1)**	(4)
Distributable Cash Flow	**78**	83	**264**	296

a. Interest expense as presented includes net realized loss related to the interest rate swaps.

b. Amounts are calculated in accordance with the cash distribution policies of each of our equity investments. Distributions from our equity investments represent our respective share of these entities' quarterly distributable cash for the current reporting period.

c. Excludes the $50 million additional distribution received from Northern Border. The entire proceeds were used by the Partnership to partially repay our 2013 Term Loan Facility.

d. This amount represents our proportional 49.34 percent share of the distribution declared by our equity investee, Iroquois, for the current reporting period and includes our 49.34 percent share of the Iroquois unrestricted cash distribution amounting to approximately $2.6 million and $7.8 million, respectively, for both the three and nine months ended September 30, 2019, and September 30, 2018, and an additional cash distribution we received amounting to approximately $11 million for both the three and nine months ended September 30, 2019, (2018-none) related to the increase in the cash it generated from prior period's higher net income.

e. Distributions to non-controlling interests represent the respective share of our consolidated entities' distributable cash from earnings not owned by us for the periods presented.

f. The Partnership's maintenance capital expenditures include cash expenditures made to maintain, over the long term, the operating capacity, system integrity and reliability of our pipeline assets. This amount represents the Partnership's and its consolidated subsidiaries' maintenance capital expenditures and does not include the Partnership's share of maintenance capital expenditures for our equity investments. Such amounts are reflected in "Distributions from equity investments" as those amounts are withheld by those entities from their quarterly distributable cash.

g. No incentive distributions were declared to the General Partner for the nine months ended September 30, 2019 and 2018.

h. Distributions allocable to the Class B units are based on 30 percent of GTN's distributable cash flow during the current reporting period but declared and paid in the subsequent reporting period. For the three and nine months ended September 30, 2019 and 2018, $1 million and $4 million was allocated to the Class B units, respectively. Please read Notes 8 and 9 within Item 1. "Financial Statements" for additional disclosures on the Class B units.

TC PipeLines, LP

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