Pipe Dreams
Turning Over a New Leaf
Part 2: October 2017

Taking a deep dive into midstream companies, shining a light on both the upside and downside of their natural gas pipeline assets

PARTIAL REPORT - CONTACT EAST DALEY FOR THE FULL REPORT: 303-499-5940 OR insight@eastdaley.com
Recent shifts in natural gas supply and demand will significantly reduce contracted volumes and rates on legacy pipelines, leading to a forecasted ~$825 million reduction in legacy contract annual EBITDA.

East Daley quantifies interstate pipeline risk which allows readers to combat the idea that pipelines are “toll roads”, whose income is risk free.

“At risk” contracts are not evenly spread among midstream companies. Companies like KMI, ETP, and BWP are forecast to see their overall interstate pipeline EBITDA shrink over $100 million annually, while other companies are poised to grow.

The most risky pipelines like Fayetteville Express, Gulf Crossing, ETC Tiger, and Midcontinent Express are facing serious rate and volume risk which we forecast will reduce their combined EBITDA by $482 million annually.

## 1 Introduction

Midstream companies often use the term “toll-road” to describe their interstate pipelines as stable money-makers which are supported by long-term contracts and a captive customer base. However, the “toll-road” phrase is too often used as a blanket, leading many to assume all interstate pipeline risk to be low. This assumption is especially dangerous today, as the industry is on the verge of a wave of contract expirations which will reduce earnings of many interstate pipelines. Without digging deep into the pipeline contracts, “toll-road investors” are likely to underestimate the upcoming recontracting risks. Expiring contracts can cause large earnings declines on legacy assets which could mitigate or completely negate benefits from planned future expansions. Between now and 2021, over 74 Bcf/d of firm transport contracts owned by the companies covered in this report are set to expire, putting at risk billions in earnings from these midstream company’s “toll roads”.

To illustrate, Figure 1.1 below shows historical and East Daley (EDC) forecasted EBITDA for Kinder Morgan’s (KMI) Tennessee Gas Pipeline (TGP) which many, including East Daley, consider as one of the best positioned gas pipelines in the US. However, even well positioned assets are not always immune to recontracting risk. In TGP’s case, the pipeline has a large block of Gulf Coast to Northeast contracts from the pre-Marcellus era nearing expiration which are very unlikely to be renewed given the unfavorable Gulf to Northeast price spreads. Factoring in this forecasted contract attrition erodes TGP’s EBITDA growth wedge by about $70 million annually by 2021. While $70 million in annual EBITDA is not significant to a company the size of KMI, many of KMI’s other interstate pipelines face similar recontracting risk. Analyzed collectively, forecasted contract attrition on all KMI’s pipelines create a significant growth headwind for the company. The headwind slows company-level EBITDA growth materially compared to a flat legacy pipeline EBITDA contribution assumption.
In Part 2 of Pipe Dreams, East Daley has pivoted the focus from the producer perspective (examined in Part 1, Pipe Dreams: The E&P Money Tree) to the midstream, by taking a deep dive into companies whose pipelines are most impacted by the contract expirations. **Pipe Dreams: Turning Over a New Leaf** dissects eight midstream companies who have significant exposure to natural gas interstate pipelines. Together these companies hold 11.4 Bcf/d of firm transportation contracts that EDC forecasts will be completely terminated at expiration and additional volumes that will be recontracted at lower rates. The result is a combined $825 million in reduced EBITDA to legacy pipelines. To calculate this downside, and to achieve the deepest possible level of understanding of these assets, East Daley individually examines over 7,000 contracts held by over 50 interstate pipelines.

East Daley evaluates pipeline risk based on two major categories: rate risk and volume risk. Rate risk refers to the likelihood of a pipeline being forced to discount rates when recontracting to maintain market share. Higher rate risk typically occurs for pipelines traversing routes where spreads have shrunk due to pipeline overbuilds. Three aspects of rate risk were considered for each pipeline: spread collapse, competition, and shipper composition. The other major risk category, volume risk, refers to the risk of supply decreases putting the quantity of legacy contracted volumes in jeopardy. Volume is also evaluated based on three key factors: declining basins, logistics, and over-commitment.

**Figure 1.1 – TGP Historical and EDC Forecasted EBITDA**

![Tennessee Gas Pipeline Annual EBITDA](image1.png)
Figure 1.2 – Pipeline Risk Matrix

Figure 1.2 is a pipeline risk matrix that illustrates the results of our risk evaluation on a sample of the most relevant pipelines covered. The X-axis shows the weighted level of volume risk for each pipeline and the Y-axis shows the degree of rate risk. The top right quadrant is the highest risk section with pipelines that have both high volume and rate risk. Having elevated exposure to both types of risk are likely to result in reduced contract volumes and rates. The bottom left quadrant is the lowest risk section, with pipelines that have both low volume and rate risk. These pipelines typically are highly utilized and/or have a significant competitive advantages or moats which limits rate and volume risk.

The top right quadrant, containing the highest risk pipelines, is dominated by assets held by two companies: Energy Transfer Partners (ETP) and Kinder Morgan (KMI). This top right quadrant is forecast to lose $633 million in annual firm transport (FT) EBITDA, with KMI and ETP’s pipelines contributing to a combined $441 million, or 70%, of this downside. The most significant losses from this quadrant is forecast to come from Gulf Crossing (BWP), Fayetteville Express Pipeline (ETP/KMI), Midcontinent Express Pipeline (ETP/KMI), and ETC Tiger (ETP). East Daley’s base model forecasts each of these pipelines will see annual EBITDA reduced by at least $100 million between now and 2021, contributing significantly to the overall downside.

However, the reduction in EBITDA only represents one part of the future earnings outlook. Together, the eight companies in this report are forecast to grow EBITDA approximately $2.2 billion in expansion projects, a number that more than offsets the $825 million reduction in legacy EBITDA. However, this EBITDA uplift is not evenly allocated between companies, and economics for expansion projects can vary...
greatly. With the aim of combating “toll-road investing”, Pipe Dreams: Turning Over a New Leaf quantifies the exposure of each midstream company to contract cliffs and examines the 56 currently announced expansions, resulting in a complete picture of each company’s future interstate pipeline earnings. East Daley’s granular research, which evaluates each contract individually, results in a better understanding of the risk tied to legacy contracts for pipeline assets and their associated midstream companies.

The midstream companies featured in Pipe Dreams: Turning Over a New Leaf were analyzed both holistically and on a segment level, with a specific focus on the firm transportation contracts on interstate pipelines. The firm transportation contracts are especially important for this segment of the company, as the clear majority of the pipeline EBITDA stems from take-or-pay contracts. The midstream companies detailed are:

- Boardwalk Pipeline Partners (BWP)
- Enable Midstream Partners (ENBL)
- Energy Transfer Partners (ETP)
- Kinder Morgan (KMI)
- Spectra Energy Partners (SEP)
- Tallgrass Energy Partners (TEP)
- TC Pipelines (TCP)
- Williams Partners (WPZ)

Of these eight companies, three will see net growth in their interstate pipeline segment through 2021: Tallgrass Energy Partners (TEP), Williams Partners (WPZ), and Spectra Energy Partners (SEP). While these companies are not necessarily immune to declining EBITDA from some legacy assets, the losses that they experience will be more than offset by increased cash flow from expansion projects. The companies are highlighted in Table 2.1, later in the paper, that shows a combined net upside of $1.8 billion in EBITDA growth.

The remaining five companies, Boardwalk Midstream Partners (BWP), Kinder Morgan (KMI), Energy Transfer Partners (ETP), TC Pipelines (TCP), and Enable Midstream Partners (ENBL) will experience an overall decline in interstate pipeline EBITDA, even when factoring in their announced expansions. Combined, EDC forecasts these five companies will see a net $483 million reduction in interstate pipeline EBITDA between now and 2021.

1.1 About East Daley

East Daley Capital is an energy asset research firm that exposes the complex risks in the midstream energy market. In addition to using top-level financial data to forecast a company’s performance, East Daley delivers asset-level analysis that provides comprehensive, fact-based intelligence. Supported by a team of unbiased, experienced research analysts, East Daley provides its clients unparalleled insight into how midstream companies operate and generate cash flow. East Daley uses publicly available fundamental data and intersects that data with a company’s reported financials to break midstream companies down to asset-level cash flows. The result allows for more informed portfolio decisions.
**Exclusive Consultation**

**Pipe Dreams:**

For subscribers, in addition to this report, East Daley will provide an in-person or WebEx presentation for organizations interested in the findings discussed in this analysis. This presentation is generally 1-2 hours with several of the analysts available to answer any questions you have. For more information, contact:

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