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# ECONOMIC BENEFITS OF THE MOUNTAIN VALLEY PIPELINE PROJECT IN VIRGINIA

## EXECUTIVE SUMMARY

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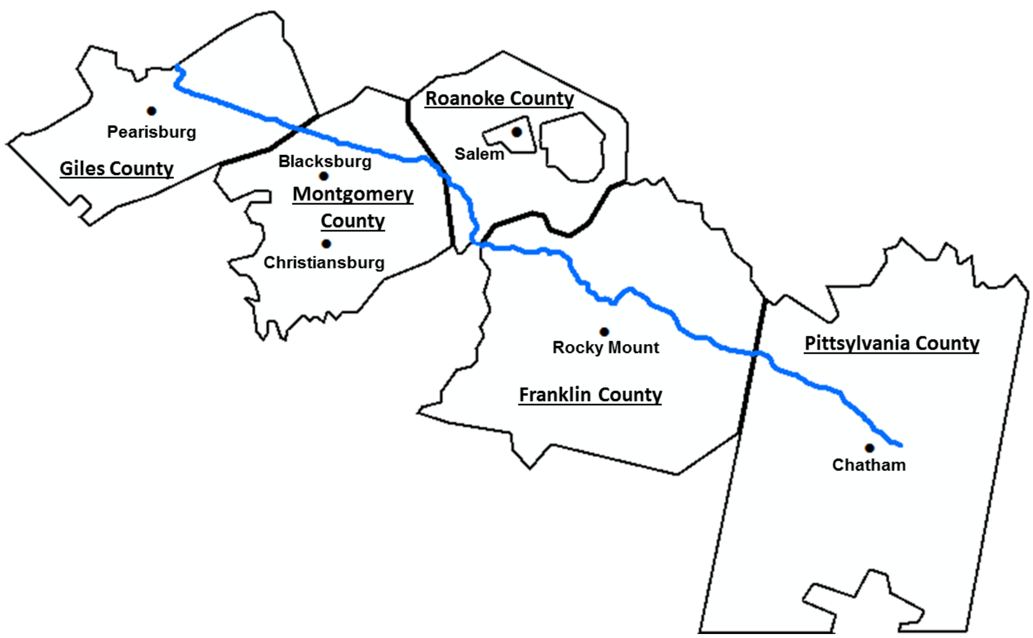
# Executive Summary

EQT Corporation retained FTI Consulting ("FTI") to examine the potential economic benefits of the Mountain Valley Pipeline ("MVP") project to the Commonwealth of Virginia and the five counties through which the project is proposed. The MVP is a natural gas pipeline that will traverse approximately 300 miles across West Virginia and Virginia, including the Virginia counties of Franklin, Giles, Montgomery, Pittsylvania, and Roanoke, as shown below in Figure 1.

**Figure 1 – Proposed Mountain Valley Pipeline through Virginia**



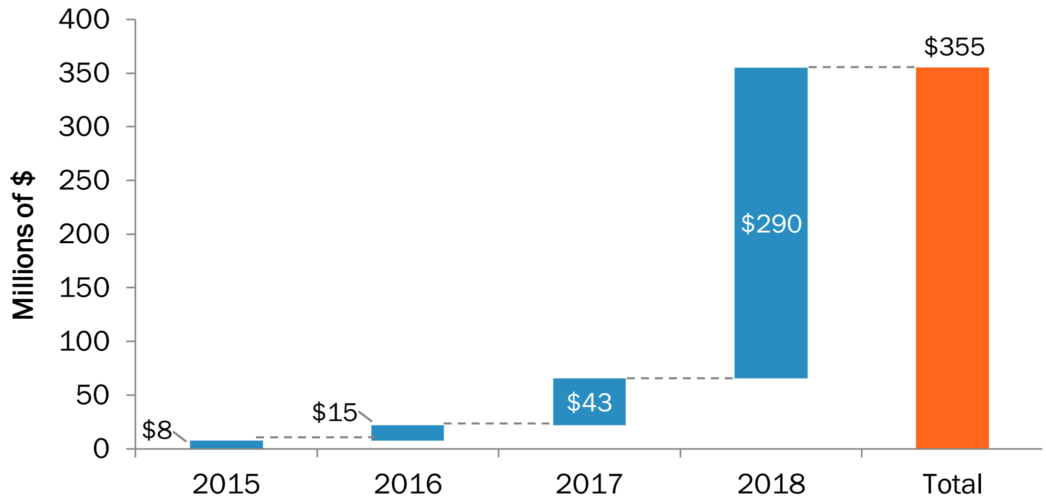

Three types of economic benefits would occur from the construction and operation of the MVP project. These benefits include:

- **Construction Spending Benefits:** Expenditures on goods and services in the Commonwealth would translate into job creation along with economic benefits to Virginia suppliers, their employees, and the overall economy.
- **Operational Benefits:** Once in service, the project would require a skilled workforce to operate and maintain the pipeline. Also, it would generate annual property tax revenues for the counties, providing an additional stream of funds.
- **Direct-Use Benefits:** The Commonwealth and counties would benefit from the potential direct use of gas from the MVP project. The project would enhance gas service already available, help enable new gas service, and expand opportunities for commercial and manufacturing activities.

## Construction Spending Benefits

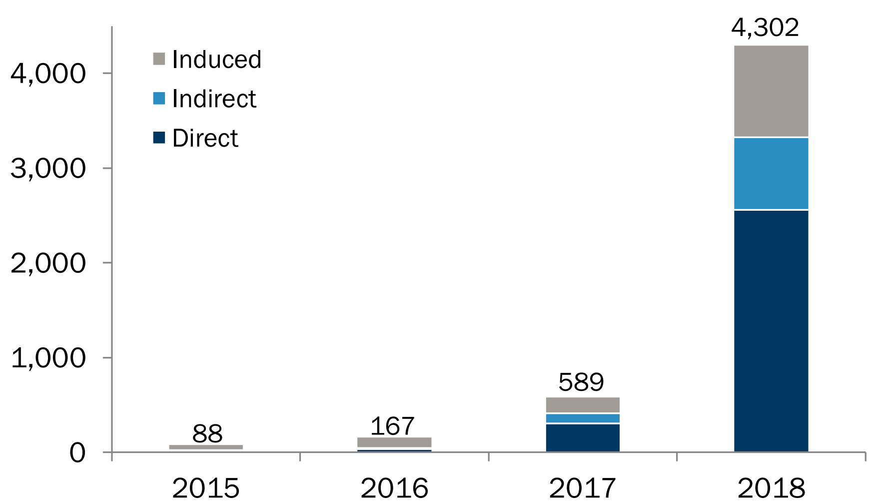
From 2015 to 2018, the MVP project owners plan to spend $396 million directly on resources (equipment, materials, labor, and services) in Virginia. This direct spending would translate into $355 million in cumulative Gross Regional Product over the four-year period, as summarized in Figure 2.

Figure 2 – MVP Additions to Virginia's Gross Regional Product




The MVP project would create almost 4,300 jobs at the peak of construction in 2018. 2,555 of these jobs would be directly associated with the project (labeled "direct" in Figure 3); 765 jobs would be created along the supply-chain ("indirect"); and 975 jobs would be created in the general economy.

Figure 3 – MVP Jobs Created in Virginia by Year

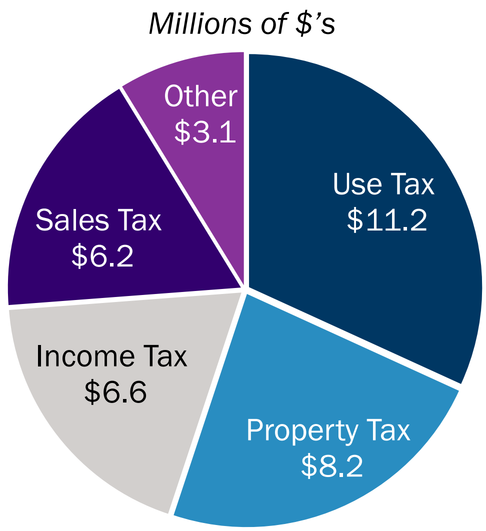



Cumulatively, the MVP project would create 5,146 job-years over the course of construction.[1]

[1] The MVP employment contributions are directly tied to the capital spending in each year and are best expressed in 'job-years'. A job-year is the equivalent of one full-time job lasting a single year.

Another benefit of the MVP project is the increased state and local tax revenues that result from the economic ripple effect of construction expenditures. As shown in Figure 4, the project would generate $35 million in aggregate tax revenues from 2015 to 2018 during construction.

**Figure 4 – Virginia State and Local Tax Revenues Generated during Construction, 2015–2018**




## Operational Benefits

Once in service, the MVP project would continue to benefit Virginia's economy along three main areas. The first is in operational employment and spending. Ongoing operation and maintenance of the pipeline would support a total of 34 jobs across the state with average annual wages and benefits of almost $67,000.

Annual tax revenues through ad valorem taxes (property taxes) represent the second area of operational benefits. Based on the estimated pipeline investments and county property tax rates, the MVP project owners would pay up to $7.7 million in taxes annually.

Direct-use benefits of the pipeline's natural gas represent the third area where the Commonwealth and counties potentially could benefit from the project and are discussed in further detail below.

## Direct-Use Benefits

In terms of direct gas-use benefits, the MVP project could provide $5.6 million in annual savings from fuel switching (i.e., switching from propane, fuel oil, diesel, or electricity to natural gas) across the five counties, with a large portion of this savings occurring in Franklin County. A detailed demand analysis identified $2.6 million of annual potential savings in the Rocky Mount area of the county (see Table 1) since the area is not served by natural gas. The MVP project represents a unique opportunity as it would run within four miles of Rocky Mount, which is the largest town in Franklin County and serves as the county's manufacturing hub.

**Table 1 –Savings from Fuel Switching to Natural Gas in the Rocky Mount Area**

| Sector | Annual Savings (thousands of $'s) |
|---|---|
| Residential & Commercial | $1,264 |
| Municipal (buildings) | $725 |
| Municipal (fleet vehicles) | $325 |
| Manufacturing | $266 |
| **Total Annual Savings** | **$2,580** |

Beyond Franklin County, the other four counties currently have varying degrees of natural gas access. Table 2 provides estimates of the potential fuel-switching savings for the residential, commercial, and municipal sectors in these counties, totaling $3.1 million annually.

**Table 2 – Fuel-Switching Opportunities and Savings in Four Other Virginia Counties**

| County | Fuel-Switching Opportunities | Annual Savings (thousands of $'s) |
|---|---|---|
| Pittsylvania | • The Town of Gretna<br>• > 450 municipal and private fleet vehicles<br>• 18 public schools | $1,370 |
| Roanoke | • >500 municipal and private fleet vehicles | $620 |
| Montgomery | • >300 municipal and private fleet vehicles | $570 |
| Giles | • The Town of Pembroke<br>• Part of the Town of Narrows<br>• 100 municipal and private fleet vehicles<br>• Eastern Elementary | $500 |
| **Total** | | **$3,060** |

In addition to the Table 2 savings, the MVP project could provide economic benefits to existing manufactures. FTI's interviews with county leaders indicated that natural gas access can play a major role in business decisions to expand operations. For example, global technology and specialty materials company Celanese was considering re-locating its Giles County facility due to the impact of EPA regulations. Natural gas access enabled Celanese to retain its operations without moving, by replacing its coal boilers with natural gas boilers and having a 16-mile natural gas pipeline constructed, thereby keeping 600 high-paying jobs.

Access to natural gas also can draw new businesses, particularly energy-intensive and advanced technology manufacturing. These manufacturers can provide significant economic benefits to communities from an employment, wage, and tax revenue perspective. Celanese and industrial and mineral resources company LHoist in Giles County serve as examples. The average annual manufacturing wage in Giles County is $61,400 or 61% more than the average annual wage of $38,100 for all jobs in the county in 2013.

Altogether, the proposed MVP project would provide a number of economic and employment benefits to Virginia and the counties along the proposed route. During construction, these benefits would result from capital spent directly within Virginia and the jobs created. Once in service, MVP will employ people within the state to help operate and maintain the pipeline. Also, counties will collect property taxes from the pipeline. Finally, the pipeline would provide sizable opportunities for direct gas-use in areas with and without gas access. These opportunities include additional supply reliability, fuel-switching savings, and new energy-intensive and advanced technology businesses started in Virginia.

***DISCLAIMER***

***The information contained herein has been prepared based upon financial and other data provided to FTI from the management and staff of EQT Corporation and from public sources. There is no assurance by anyone that this information is accurate or complete. FTI has not subjected the information contained herein to an audit in accordance with generally accepted auditing standards. Accordingly, FTI cannot express an opinion or any other form of assurance on, and assumes no responsibility for, the accuracy or correctness of the historical information or the completeness and achievability of the projected financial data, information and assessments upon which the enclosed report is presented.***

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