

Ohio's Shale Economy: What the Research Says



\$93

BILLION

Shale-related
investment in Ohio
from 2011 through
December 2020



\$63.7

BILLION

Total Estimated
Upstream
Investments in Ohio
from 2011 through
June 2020



Strong Utica and Marcellus Shale development continues to bring new opportunities to Ohio and the Ohio Valley Region. Abundant and low-cost natural gas and natural gas liquids (NGLs) consisting of ethane, propane, butane, and condensate, are being extracted in massive quantities and continue to be leveraged by Ohio's significant manufacturing and chemical industries. A new study by IHS Market estimates that by 2040, the region will supply nearly half of all U.S. natural gas production. These critical and affordable feedstocks continue to attract large-scale investments from across the globe interested in Ohio's close proximity to the U.S. and Canadian marketplace, well developed logistics networks, and business friendly environment.

JobsOhio engaged Cleveland State University's (CSU) Maxine Goodman Levin College of Urban Affairs – one of the pre-eminent academic bodies providing objective and independent analyses of the energy economy – to track and report on the development of the shale gas industry in Ohio. The first analysis was released in May 2017. The most recent update was released in November 2021 and included data through December 2020.

While other studies have attempted to estimate the economic impact of shale related activity, CSU's work contains data provided directly by companies that are prominent in upstream activities such as drilling and midstream activities such as processing and pipeline construction. This brief overview provides a summary of what the researchers found. As this information is indicative of Utica Shale development, JobsOhio anticipates continuing to work with CSU to report this valuable data.

The study reveals that shale-related investment in Ohio totaled an estimated \$93 billion from 2011 through December 2020.

Of this amount, \$63.7 billion represented upstream investment (drilling, roads and lease-related investment). This amount has helped foster the abundant presence of low-cost natural gas and NGLs available to current and future downstream job-generators such as petrochemical plants, plastics manufacturers, natural gas power plants and manufacturers. Upstream shale investment remained active, particularly in southern Ohio counties, with 63 new wells drilled, drilling or producing during the first half of 2020.

Significant midstream developments include transmission and gathering pipelines, additional investments in storage facilities and investments in compressor stations.

More than \$21 billion has now been invested in Ohio midstream activities. The first half of 2020 saw continued investment in pipelines and related infrastructure. These projects are critical because they move valuable feedstocks from the production region to the marketplace, providing greater access across Ohio for existing companies and new opportunities for companies interested in building on one of Ohio's development sites.



**Cumulative Utica-Related
Upstream Investments in Ohio** Through December 2020

Estimated Investments	Total Amount
Mineral Rights	\$25,420,005,000
Drilling	\$27,474,000,000
Roads	\$1,088,020,000
Lease Operating Expenses	\$2,121,012,000
Royalties	\$7,619,278,000
Total Estimated Upstream Investments	\$ 63,722,315,000

**Cumulative Utica-Related
Midstream Investments in Ohio** Through December 2020

Estimated Investments	Total Amount
Midstream Gathering	\$7,659,287,000
Processing Plants	\$1,259,300,000
Fractionation Plants	\$1,697,360,000
NGL Storage	\$261,000,000
Rail Loading Terminals	\$145,000,000
Transmission Pipelines	\$10,303,128,000
Total Estimated Midstream Investments	\$21,325,075,000

**Cumulative Utica-Related
Downstream Investments in Ohio** Through December 2020

Estimated Investments	Total Amount
Petrochemical Plants and Refineries	\$618,885,000
Other Industrial Plants	\$760,000,000
Natural Gas Refueling Stations	\$47,375,000
Natural Gas Power Plants	\$6,442,500,000
Combined Heat and Power (CHP) Plants	\$87,470,000
Total Estimated Downstream Investments	\$7,956,230,000

Upstream investment continues to shift into southern parts of the Utica formation. In the first half of 2020, activity was focused in Belmont, Harrison, and Jefferson counties. The ongoing mid-stream investment is adding to a growing system of natural gas, NGL, and oil pipeline transmission systems, providing Ohio industry with a competitive advantage based on low-cost, reliable energy, and feedstock resources. Downstream developments continued and included 10 new natural gas power plants and processing facilities at various stages in the permitting and construction process.

Over \$90 billion of capital has been deployed in Ohio since 2011 in this industry alone. This demonstrates the business-friendly environment that exists within the state. JobsOhio and its regulatory partners remain committed to growing this capital investment and the quality jobs that come with it.

Let's talk about how the \$90+ billion in investments in Ohio can help your company succeed here.

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