2025 June

Midland & Permian Basin Economic Indices

The Perryman Group

Effective economics, accessible analysis

1.800.749.8705 | info@perrymangroup.com | www.perrymangroup.com

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OVERVIEW

The Perryman Midland and Permian Basin Indices increased slightly in June. Energy was up, and several other sectors experienced notable gains resulting in an overall increase in the composite index.

In spite of uncertainty from geopolitical tension, tariffs, and other challenges, the US economy continues to hold fairly steady, with job gains month after month (although they have been relatively small of late). Over the twelve-month period ending July, almost 1.5 million jobs were added, an annual growth rate of 0.92%. The unemployment rate is trending just over 4%.

The Federal Reserve continues to hold target interest rates steady, though at the most recent meeting two officials were in favor of a cut. Much of the costs of tariffs have so far been borne by importing companies rather than consumers, limiting inflationary pressures. However, if tariffs in effect are sustained or increase, it is likely that a greater proportion of the resulting costs would ultimately be passed on to consumers, leading to price increases. Fed officials are noting weaker employment, and they will be balancing job market indicators against inflation in the months ahead.

Indicators released since the meeting have been even weaker, with downward adjustments to estimates for May and June. Some monetary easing is anticipated in the coming months, but the pace will depend on future information related to inflation and growth.

The Texas economy gained 232,500 net new jobs over the twelve-month period ending July 2025, a growth rate of 1.6% (significantly above the national pace of 0.6%). Employment gains by industry in recent months have been broad based, a positive signal for future expansion. The past two months, however, have been sluggish.

Oil prices are currently trending below $65, notably higher than in early May, but still well below the levels of a few years ago. Key factors include the ongoing uncertainty in the global economy and the fear of slow economic growth or even a recession and the resulting effects on demand, as well as increasing supply as OPEC+ increases production. Ongoing potential for escalation of the conflict in the Middle East will also continue to affect energy markets.

Selected economic indicators and June results for the Midland and Permian Basin indices are summarized in the following pages, with additional detail in the accompanying workbook.

SELECTED MIDLAND ECONOMIC INDICATORS: JUNE 2025

Indicator	2023	2024	2025	2024-25 % Change
Permian Basin Rig Count				
June	344	308	272	-11.61%
Average Year to Date	352	312	292	-6.55%
WTI Oil Price				
June	$ 70.25	$ 79.77	$ 68.17	-14.54%
Average Year to Date	$ 74.92	$ 79.65	$ 68.23	-14.34%
Henry Hub Natural Gas Price				
June	$ 2.18	$ 2.53	$ 3.02	+19.37%
Average Year to Date	$ 2.41	$ 2.11	$ 3.67	+74.05%
Housing Permits				
June	64	102	147	+44.12%
Total Year to Date	282	678	757	+11.65%
Average Housing Permit Value				
June	$ 233,155	$ 195,119	$ 201,420	+3.23%
Average Year to Date	$ 257,994	$ 202,965	$ 207,470	+2.22%
Airline Boardings				
May	59,412	71,804	70,742	-1.48%
Total Year to Date	260,095	297,523	300,061	+0.85%
Hotel Receipts				
June	$ 12,586,997	$ 12,788,026	$ 13,742,623	+7.46%
Total Year to Date	$ 70,922,339	$ 73,591,757	$ 79,783,049	+8.41%
Employment (Seasonally Adjusted)				
June	121,600	124,900	127,200	+1.84%
Average Year to Date	120,133	124,550	126,600	+1.65%
Unemployment Rate				
June	2.83%	2.91%	+2.95%	N/A
Average Year to Date	2.91%	2.83%	+2.96%	N/A
Midland Index (2021=100)				
June	125.9	126.7	125.9	N/A
Average Year to Date	124.8	125.7	125.2	N/A

Source: Baker-Hughes, Energy Information Administration, Census Bureau, Bureau of Transportation Statistics, Texas Comptroller of Public Accounts, Bureau of Labor Statistics, The Perryman Group

MIDLAND MSA

The Midland Economic Index measured 125.9 in June, up by 1.3. The Construction industry increased by (+18.9), along with several others, including Real Estate (+8.3) and Health Care (+3.6). However, losses occurred in Financial Services, (-5.5), as well as Hospitality & Tourism (-2.1).

MIDLAND MSA ECONOMIC INDEX

RECENT RESULTS (2012=100)

Current Index Reading	125.9
Change from Previous Month	Up 1.3

MIDLAND MSA ECONOMIC INDEX

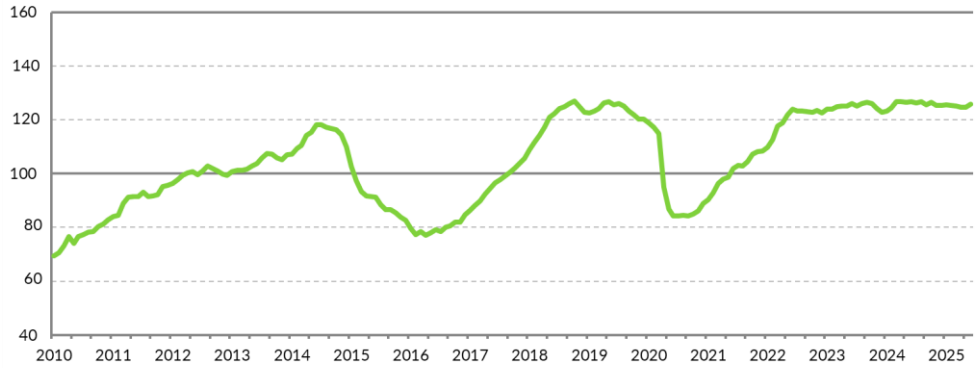
RESULTS BY INDUSTRY (2012=100)

Industry	May	June	Change
Energy	115.4	116.2	+0.8
Construction	183.6	202.5	+18.9
Manufacturing	138.1	137.6	-0.5
Retail	129.1	129.7	+0.6
Financial Services	215.3	209.8	-5.5
Real Estate	146.5	154.8	+8.3
Professional & Business Services	132.5	131.5	-1.0
Health Care	137.5	141.1	+3.6
Hospitality & Tourism	161.0	158.9	-2.1
Other Activity	144.6	144.6	+0.0
Midland Composite	**124.6**	**125.9**	**+1.3**

Note: Industries are not weighted equally in calculating the Industry Composite; see the Appendix for further explanation. The Midland Metropolitan Statistical Area (MSA) includes Midland and Martin counties.
Source: The Perryman Group

Midland Economic Index

(Index adjusted such that 100 represents economic status in 2012)

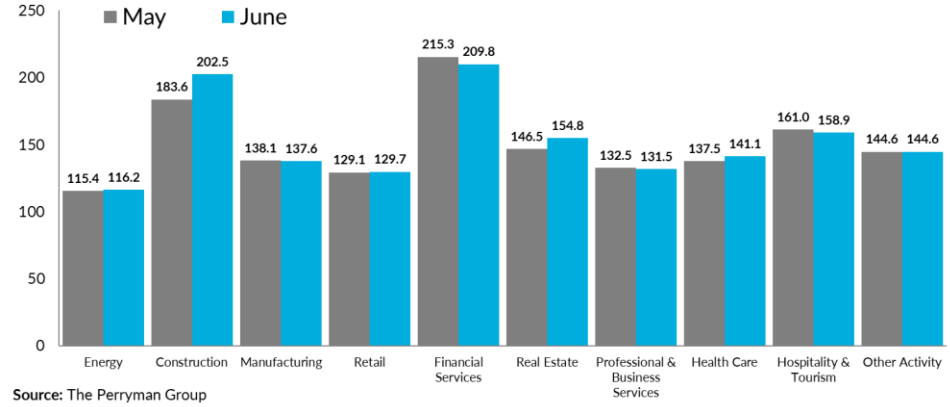


Source: The Perryman Group

Midland Economic Index

Recent values by sector

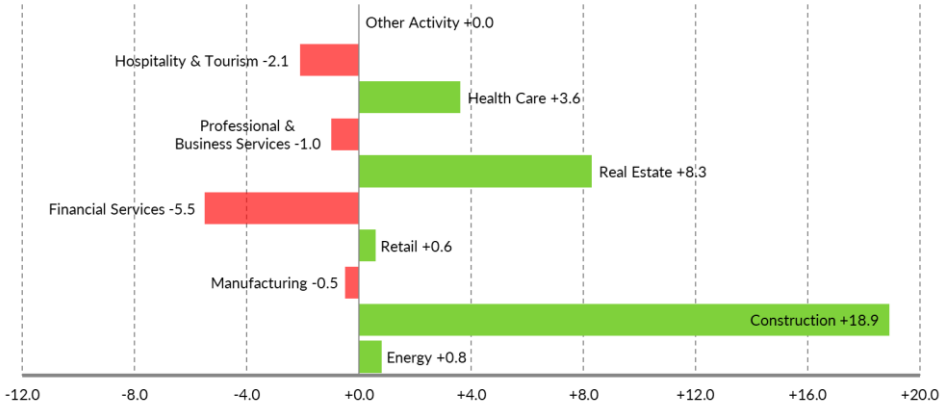
(Index adjusted such that 100 represents economic status in 2012)



Source: The Perryman Group

Midland Economic Index

Change from previous month by sector



Source: The Perryman Group

PERMIAN BASIN REGION

The Permian Basin Economic Index for June measured 115.0, indicating an increase from the prior month of 1.5.

The Construction industry increased by (+12.5). Performance across other industry groups was mixed, with increases in Real Estate (+7.9), Health Care (+2.3), and several other industries while losses occurred in Financial Services (-2.1), Hospitality & Tourism (-1.4), Retail (-0.4), and Professional & Business Services (-0.4).

Current Index Reading	115.0
Change from Previous Month	Up 1.5

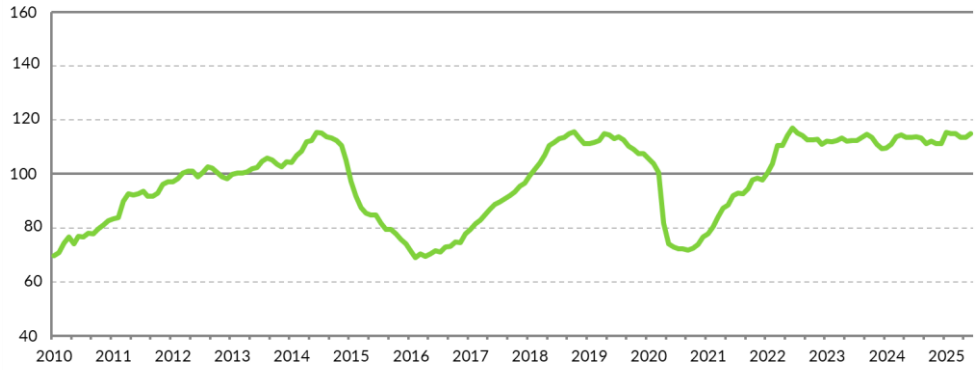
PERMIAN BASIN ECONOMIC INDEX

RESULTS BY INDUSTRY (2012=100)

Industry	May	June	Change
Energy	105.0	106.4	+1.4
Construction	183.3	195.8	+12.5
Manufacturing	100.8	99.5	-1.3
Retail	137.9	137.5	-0.4
Financial Services	135.7	133.6	-2.1
Real Estate	141.5	149.4	+7.9
Professional & Business Services	131.9	131.5	-0.4
Health Care	127.9	130.2	+2.3
Hospitality & Tourism	158.7	157.3	-1.4
Other Activity	140.3	141.2	+0.9
Permian Basin Composite	**113.5**	**115.0**	**+1.5**

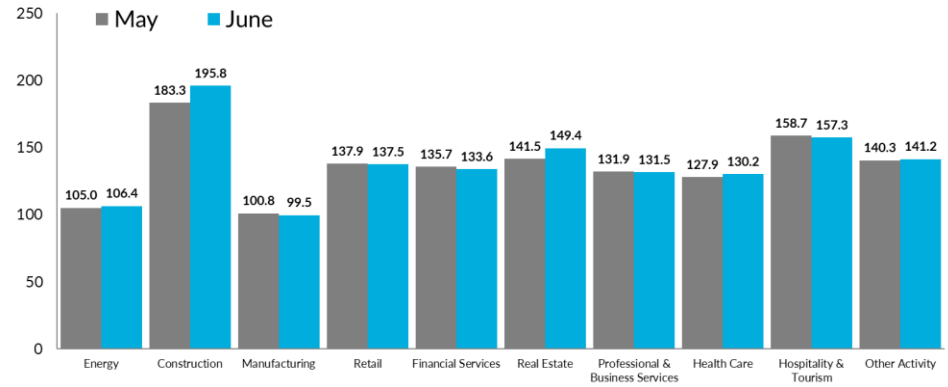
Note: Industries are not weighted equally in calculating the Industry Composite; see the Appendix for further explanation. The Permian Basin Region includes Andrews, Borden, Crane, Dawson, Ector, Gaines, Glasscock, Howard, Loving, Martin, Midland, Pecos, Reeves, Terrell, Upton, Ward, and Winkler counties.
Source: The Perryman Group

Permian Basin Economic Index
(Index adjusted such that 100 represents economic status in 2012)



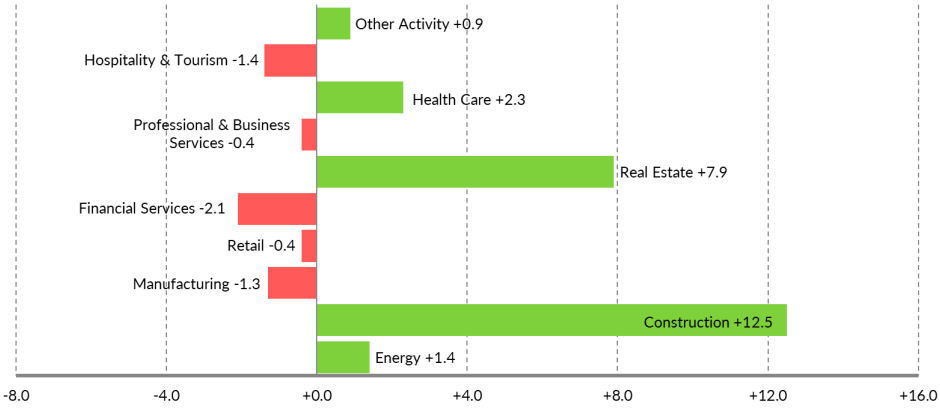
Source: The Perryman Group

Permian Basin Economic Index
Recent values by sector
(Index adjusted such that 100 represents economic status in 2012)



Source: The Perryman Group

Permian Basin Economic Index
Change from previous month by sector



Source: The Perryman Group

METHODOLOGY

The goal of the Midland and Permian Basin indices is to encapsulate, in a single measure, the current status of the local and regional economy, how it is changing, and what is driving the change. The indices include measures of industrial performance, with sub-indices for the various components to indicate the role they play in overall performance. The indices are based on complex economic modeling processes, but it provides a simple measure of the health of the local and regional economy and how and why it is changing.

The indices reflect shifts in key industries and performance. The relative weights of each component were determined based on typical patterns in the relationships of variables to overall economic performance. The indices include variables ranging from oil prices to construction which describe the evolving status of key industries. These measures reflect analysis of numerous indicators of the level of activity and how it is changing. Beginning with the May 2025 report, an extensive revision of historical employment data from the Bureau of Labor Statistics in reflected in the Index values.

The Midland and Permian Basin indices were developed and are maintained by The Perryman Group, an economic and financial analysis firm based in Waco, Texas with decades of experience in analyzing the local and regional economies. Dr. M. Ray Perryman, President and CEO of The Perryman Group, has more than 40 years of experience in index construction and regional economic modeling. In particular, Dr. Perryman derived the indices of monetary policy that are used by the Federal Reserve System and more than 60 other central banks around the world. He also developed regional and small-area indices of Industrial Production and Unit Labor Costs that are widely used on a global basis, as well as measures of systematic risk for non-homogenous assets and the degree of trade integration among nations. Dr. Perryman has been an advisor to the US Department of Labor on the Consumer Price Index as well as numerous other governmental entities on index-related issues. He has also developed the world's largest regional econometric modeling system and has been analyzing the economy of Midland and the Permian Basin on an ongoing basis since the mid-1970s.

Index Construction

Economic indices are typically constructed in one of two ways, both of which are widely used and have been successfully employed by Dr. Perryman over the course of his career. One common method is to identify a set of relevant variables and then use principal component analysis (PCA) or a variation (such as a factor rotation) to assign weights to the individual components on an empirical basis. In essence, this process converts a set of variables into an equal number of new measures such that each of the new variables is (1) a linear combination of the original ones and (2) orthogonal to each of the others. The new measures also have the property of collectively containing all of the information in the original variables. When this approach is used, the first principal component (the one which explains the largest percentage of the variation) is typically used to determine the weights in the indices. This approach has advantages in that (1) weights are empirically generated based on their explanatory power and (2) it is relatively simple to implement. Its major disadvantages are (1) in many instances, particularly where a large number of variables are being examined (as in the current analysis), spurious correlations with relatively minor factors that are unlikely to be sustained over time can occur; (2) the first principle component, despite exhibiting the largest explanatory power, often accounts for only a small amount of the total variation, thus failing to incorporate a substantial portion of the available information.

The second approach is to rely on economic data, theory, and models to develop an index of the desired phenomena. The primary difficulty with this method is the fact that it can become complex in its execution. The advantages are the ability to (1) systematically incorporate very large sets of variables without loss of underlying information, (2) develop sub-indices to provide a focus on specific index elements, and (3) incorporate specific economic content in a detailed and systematic manner.

In the present instance, the second option appeared to be more appropriate in that the process included the incorporation of a complex multi-dimensional framework which allows both individual and integrated consideration of a variety of segments that span multiple sectoral components. Nonetheless, a principal components model was originally attempted for purposes of completeness and to meet the conditions for statistical efficiency. As anticipated, the resulting assessment across a broad spectrum of variables across industries resulted in both weighting on relatively minor variables which were not stable across sub-periods and relatively

little (less than 10 percent) information capture by the primary principal components. Consequently, the Midland and Permian Basin indices were developed using a more formal and comprehensive data and modeling effort. This process is described below.

Industrial Variations

As noted, the indices seek to encapsulate, in a single measure, the many facets of the local and regional economy. Sub-indices are also generated for key industries in order to examine the various components and the role that they play in overall performance. Aggregates available on a monthly basis are incorporated into the indices in order to permit regular monitoring of changes in business activity. Broader measures (such as total expenditures and gross product by industry) which have greater information content but less frequent periodicity are used in defining the relative weights. In this manner, it is possible to enhance the comprehensiveness of the indices.

The segments of the economy that are included in the indices are:

- Energy,
- Construction (residential and non-residential),
- Manufacturing,
- Retail,
- Financial Services,
- Real Estate,
- Professional & Business Services,
- Health Care,
- Hospitality & Tourism, and
- Other Activity

The relative weights to be applied to each segment were derived based on the stabilized percentage of each sector of a relevant overall aggregate (gross area product).

The next phase of the analysis is the construction of the various sectoral indices. Measures that were available on a monthly basis were employed and were selected based on their role in being reflective of aspects of the relevant segment. They were then tested relative to one another to assure that they were not subject to excessive multicollinearity. Once the final set was determined, each quarterly series was transformed into a common format in which 2012 was defined as equal to 100. The base year is consistent with most official economic series that are presented either as indices or on a constant-dollar basis. All monetary values were similarly expressed in constant 2012 dollars to avoid artificial growth generated by inflation. In a few instances, quarterly series were converted to monthly aggregates using a regression approach developed by Dr. Perryman that is widely utilized throughout the world.

The variables utilized in the indices include items such as oil and gas prices, rig counts, retail sales, single and multi-family housing permits and values, housing sales and values, bank loans and deposits, employment by detailed industrial category, and numerous other factors. Where appropriate, inputs were adjusted to eliminate seasonal patterns that are not reflective of underlying economic conditions.

In each of the indices, the weights assigned to the individual components are determined based on the relative standard errors of the normalized values. This approach allows greater weight to be assigned to those measures which exhibit more pronounced fluctuations to influence industry performance. These individual sectoral indices were aggregated into an overall Composite Index using the weighting described above. Separate individual sectoral measures and Composite Index values were generated for the Midland Metropolitan Statistical Area and the Permian Basin Region. It should be noted that the monthly indices always use the latest available economic data. Because much of the information normally is subject to both short-term revisions and periodic benchmarking, historical values will often change from month to month. These variations are typically minor.

Historical Performance

Historical performance of components of the Midland and Permian Basin indices are provided in the accompanying workbook.

Conclusion

The Midland and Permian Basin indices provide a measure of changes in the economy that is easy to grasp and compare over time. Although the modeling process that went into the indices was complex, the result is a simple and straightforward assessment of the direction of patterns in business activity and the reasons for changes in overall performance.

THE PERRYMAN GROUP

The Perryman Group is a focused team of analysts who know how to address complex economic information tasks and present our findings effectively.

Our in-house professionals bring expertise in economics, finance, statistics, mathematics, real estate, valuation, systems analysis, engineering, technical communications, and marketing. Dr. Ray Perryman, President and CEO, has 40 years of experience in developing systems, analyzing complex problems, and communicating effectively. We have considerable pride in what we do. Our enthusiasm is both unbridled and contagious; every day brings a new opportunity for us to tackle a different problem or create a product or service specifically tailored to our clients.

OUR SERVICES

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We have developed and continually maintain an extensive set of economic impact evaluation models that can be applied in a variety of contexts.

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We help clients analyze and communicate complex information in common-sense terms through comprehensive, objective analyses and clear, concise expert reports and presentations.

FORECASTING

We are at the cutting edge of econometrics and other advanced statistical methods and have provided innovative approaches for many complex applications.

SPEECHES

Dr. Perryman addresses dozens of audiences throughout the world every year, catering to a wide variety of events.

M. RAY PERRYMAN, PH.D.

Dr. Ray Perryman is President and CEO of The Perryman Group, an economic research and analysis firm based in Waco, Texas. His firm has served the needs of more than 3,000 clients, including two-thirds of the Global 25, over half of the Fortune 100, the 12 largest technology firms in the world, 12 US Cabinet Departments, the 9 largest firms in the US, the 6 largest energy companies operating in the US, and the 5 largest US banking institutions.

Dr. Perryman was named Outstanding Young Person of the World for Business and Economic Innovation in 1987 and was designated Texan of the Year by the Texas Legislative Conference in 2012. He received the Baylor University Distinguished Service Medal in 2013, was inducted into the Texas Leadership Hall of Fame in 2014, received the Cesar E. Chavez Conscience Builders Award in 2016 for his humanitarian efforts, and received the Lifetime Achievement Award for philanthropy from the Association of Fundraising Professionals in 2023. He dedicates a significant portion of his time to pro bono work aimed at helping to solve pressing social problems such as hunger, indigent healthcare, poverty, and child maltreatment.