



**Economic Research  
Institute of Erie**

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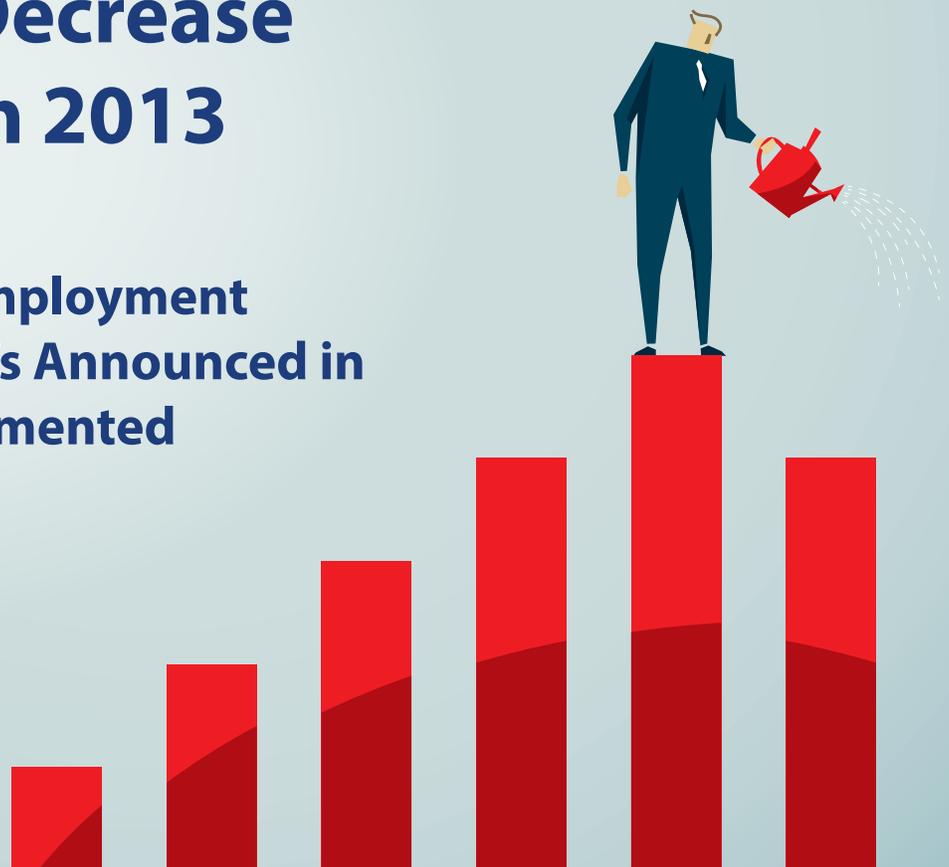
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**ELI** Erie  
Leading  
Index

**2<sup>ND</sup> QUARTER 2016 REPORT**

# ELI Shows First Quarterly Decrease Since March 2013

## Manufacturing Employment Declines as Layoffs Announced in the Fall Are Implemented



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# Summer Heat Rises, but ELI Falls as Manufacturing Job Cuts Are Implemented

While temperatures are climbing with the arrival of summer, the Erie Leading Index (ELI) has registered its first full-quarter decline in three years. After remaining steady for the past few quarters, ELI fell by 1.1% between December and March. The last time ELI decreased quarter-on-quarter was in the first three months of 2013.

ELI started out strong in January, but over the next two months, layoffs announced in the fall by local manufacturers began to be implemented. For example, GE began to phase in the layoffs of up to 1,500 workers that had been announced back in November. Between January and March, manufacturing employment in Erie County fell by 4.2% (900 jobs). It fell by another 1.0% (200 jobs) between March and April, according to the latest data released June 1 by the Pennsylvania Department of Labor and Industry. And year-on-year, Erie manufacturing employment fell in

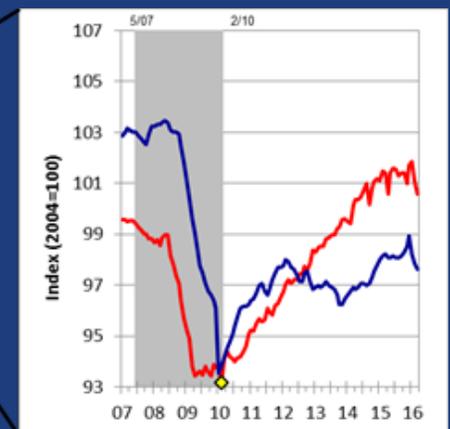
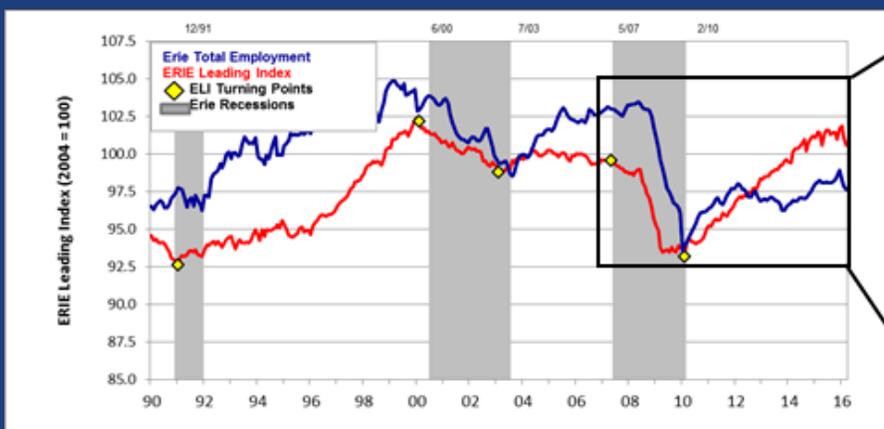
March by 7.6% (1,700 jobs). In addition to these manufacturing job losses, employment in the local retail trade sector, though not a component of ELI, fell by 4.8% (700 jobs) in the first quarter. Overall, despite job gains in other sectors of the local economy, total nonfarm jobs in Erie County declined between January and March, on a seasonally adjusted basis, by 0.7% (900 jobs) to 127,800.

Unfortunately, these job losses suggest that the temperature isn't the only thing that's rising in Erie. After falling to 4.9% in December, Erie's seasonally adjusted unemployment rate shot back up to 6.2% in March, the highest level since July 2014. This contrasts sharply with the lower rates for Pennsylvania (4.9%) and the nation as a whole (5.0%).

Moreover, the latest data indicate that Erie's unemployment rate has risen further to 6.8% in April, much higher than the rate for Pennsylvania (5.3%) and the U.S. (5.0%).

Unfortunately, the weakness in the local labor market may persist if other manufacturers in the area follow through with all of the layoffs that they have announced in recent months, and if these are not offset by job gains in other sectors of the local economy. If the Erie economy continues to suffer net job losses, especially in the manufacturing sector, this may put further downward pressure on ELI.

Is the current decline in ELI sufficient to warrant sounding the alarm bells alerting us to an impending recession in the local economy? It is perhaps still too early to tell. Previous research by ERIE suggests that, among many other factors including the state of the national economy, ELI is likely to signal a turning point in the local economy if its 3-month moving average declines for at least 5 consecutive months. That hasn't happened yet, but we will be monitoring the situation carefully.



\*Data through March 2016

## Components of ELI

Variable	Dec	Jan	Feb	March	Dec-Mar	% Change*	Weights
<b>ERIE Leading Index</b>	<b>101.69</b>	<b>101.85</b>	<b>101.08</b>	<b>100.56</b>	<b>-1.13</b>	<b>-1.11</b>	<b>1.000</b>
U.S. Interest Rate Spread (%)	2.00	1.75	1.40	1.53	-0.47	-23.50	0.331
U.S. Index of Coincident Indicators (2004=100)	112.9	113.2	113.3	113.3	0.40	0.35	0.247
U.S. Real Money Supply (M2) (bill of chained 2009 \$)	11,213.7	11,307.7	11,360.2	11,434.9	221.20	1.97	0.149
PA Avg Weekly Hours in Manufacturing (hours)	41.2	41.3	41.2	41.3	0.09	0.22	0.083
Erie Manufacturing Employment (thou of jobs)	22.1	21.7	21.0	20.8	-1.34	-6.07	0.093
U.S. TS Freight Index (2000=100)	121.4	122.9	121.1	120.0	-1.40	-1.15	0.056
S&P 500 Stock Index (1941-43=10)	2,054.1	1,918.6	1,904.4	2,022.0	-32.13	-1.56	0.024
U.S. Building Permits (thou of units)	1,201	1,188	1,162	1,077	-124.00	-10.32	0.017

\*Symmetric % change, using the average value of the series in the last quarter as the base. \*Changes may differ from hand calculations due to rounding.

In addition to the decline in Erie manufacturing employment, four of the remaining seven components that make up the Erie Leading Index showed a decrease in the first quarter. Like a bad sunburn, these components collectively put a sting on ELI, dropping it by 1.1% over the quarter.

The U.S. Interest Rate Spread (which measures the difference between the 10-year Treasury bond yield and the short-term Federal Funds rate) took the largest hit percentage wise, dropping 23.5%, nearly 16 times more than the decrease during the previous quarter. The drop in the interest rate spread is of concern because past trends suggest that when the interest rate spread becomes negative, it may be an indicator of an impending recession.

The other components of ELI that decreased include the U.S. Transportation Services Freight Index (down 1.2%), the S&P 500 Stock Index (down 1.6%), and the number of U.S. Building Permits (down 10.3%).

The stock market has been somewhat volatile during the first few months of 2016. After rising 5.6% over the fourth quarter of 2015, the S&P 500 trended downward from January to February before recovering in March to hover above 2,000.

On a more positive note, Pennsylvania Average Weekly Hours in Manufacturing inched up ever so slightly by 0.2%, despite the drop in Erie Manufacturing Employment by 6.1% on a seasonally adjusted basis.

U.S. monetary policy continues to be modestly expansionary. After rising by 1.1% in the previous quarter, the U.S. Real Money Supply increased by almost 2% in the first quarter of this year. Furthermore, despite nudging up interest rates slightly back in December as well as facing expectations that it would continue to do so in 2016, the Fed has thus far (including at the most recent meeting of its Federal Open Market Committee this month) decided to keep interest rates unchanged.

This represents an attempt by the Fed to prevent the national economy from stalling and comes on the heel of the May jobs report by the Bureau of Labor Statistics indicating an apparent slowdown in the pace of job growth in the U.S. labor market.

Since the U.S. economy tends to lead the Erie economy, such monetary stimulus (or at least the lack of monetary contraction) in the form of continued low interest rates may provide some spillover relief for the local economy as long as it does not push the inflation rate above the Fed's target of 2%. For example, those looking to purchase a home may consider getting a mortgage sooner rather than later, as the cost of borrowing the funds will start to increase if the Fed decides to increase interest rates.

**5 out of the 8 ELI components fell in the first quarter, as ELI registers its first full-quarter decline in three years.**

# Trends and Implications for Different Sectors of the Erie Economy

## Goods-Producing Sectors

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### Mining, Logging, and Construction:

Partly due to its seasonal nature, this sector lost 600 jobs during the winter months between November 2015 and March 2016. However, jobs have already increased by 10.8% (400 jobs) between March and April of this year, and may continue to rise during the warm summer and fall months.

### Manufacturing:

This sector continues to shed jobs, with employment falling by 7.6% (1,700 jobs) year-on-year in March, and falling further by 1.0% (200 jobs) between March and April of this year alone. Such large job losses in this sector are likely to have negative effects on other parts of the local economy.

### Plastics & Rubber Products Mfg:

Employment in this sector has been growing compared to 2013 and 2014, when the number of jobs was below 4,000. However, the sector appears to have reached somewhat of a plateau, at least in the short run, with the number of jobs remaining unchanged at 4,300 every month since December.

## Private Service-Providing Sectors

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### Wholesale Trade:

This sector has remained fairly steady, hovering at 3,700 to 3,800 jobs for quite some time. The good news is that the sector appears to be picking up slightly, with the number of jobs rising by 2.6% (100 jobs) in March, and remaining steady at that level in April.

### Retail Trade:

Employment in this sector shrank during the past year, falling by 5.4% (800 jobs) year-on-year in March. Although it added back 300 jobs (an increase of 2.2%) between March and April, this sector may continue to face challenges associated with declining local manufacturing employment and sluggish household income growth.

### Transportation, Warehousing, Utilities:

The number of jobs in this sector hovered at 3,200 – 3,300 for most of 2015, and then increased by 6.1% (200 jobs) to 3,500 in December. However, the number of jobs fell back to 3,300 in January, where it has remained since.

### Information:

With rapid changes in technology, the number of jobs in this sector has fallen by 15.4% (200 jobs) from its 1,300 level in 2013-2014. However, the number of jobs has stabilized at the current level of 1,100 since December 2015.

### Financial Activities:

This sector remains steady, with employment growing modestly by 1.6% (100 jobs) year-on-year in April, but with the number of jobs remaining unchanged at 6,200 since November 2015.

### Professional and Business Services:

This sector has been somewhat volatile. The number of jobs surpassed 10,000 intermittently during the past two years, but employment in this sector fell to 9,900 (a decline of 4.8% or 500 jobs) between November 2015 and April 2016.

### Education and Health Services:

After losing 1,000 jobs between December and January, this sector has rebounded with the number of jobs increasing by 4.7% (1,300 jobs) in the first three months of 2016. This is already the largest sector (in terms of employment) in the local economy, so job growth here will continue to have a positive effect on vendors doing business with this sector.

### Leisure and Hospitality:

This sector lost 500 jobs (a decline of 3.7%) between October 2015 and January 2016, perhaps partly due to seasonal factors. However, there has been a recent resurgence, with employment increasing by 9.9% (1,300 jobs) between January and April. This positive trend is likely to continue as the summer season continues in full force.

### Other Services:

Employment remained relatively steady in service sectors other than those listed above. Although it increased modestly by 1.9% (100 jobs) year-on-year in March, employment in these sectors has remained at 6,000 since February.

## Government Sector

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Although the government sector experienced a slight decline in employment of 0.6% (100 jobs) year-on-year in April 2016 as well as an even bigger decline of 5.5% (900 jobs) between December and January, it has rebounded, with the number of jobs increasing by 5.2% (800 jobs) since January. All of the recently added jobs were at either the state government level (increase of 17.5% or 700 jobs) or the local government level (increase of 1.0% or 100 jobs).



## Black School of Business

Economic Research Institute of Erie  
Black School of Business  
Penn State Erie, The Behrend College

5101 Jordan Road • Erie, PA 16563  
814-898-7150 • ERIdata.org

Director: Dr. Kenneth Louie; [klouie@psu.edu](mailto:klouie@psu.edu)

Graduate Research Assistant: Dylan Rossi; [ddr5115@psu.edu](mailto:ddr5115@psu.edu)



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