



**Economic Research
Institute of Erie**

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ELI Erie
Leading
Index

4TH QUARTER 2017 REPORT

Santa Delivered an Early Present As ELI Rebounded to Spread a Little Holiday Cheer

The Stock Market, Freight Shipments,
and PA Average Weekly Hours in
Manufacturing All Contributed to
Giving ELI a Boost



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ELI Recovers, But Sluggish Job Growth Remains the Ebenezer Scrooge in the Local Economy

After making a list and checking it twice, Santa must have found out that Erie is nice! So Santa has delivered an early present: the Erie Leading Index (ELI) has recovered since last quarter's decline. ELI registered a slight gain in every month of the third quarter and rose by 1.8% overall between June and September. ELI's quick recovery is welcome news, since its movements provide important clues about the future path of the local economy. Let's hope ELI's upward trajectory continues into the new year and beyond!

ELI's rebound is consistent with other indicators that suggest Erie's economy is holding its own in the face of recent job losses in the local manufacturing sector. For example, according to the U.S. Bureau of Economic Analysis (BEA), real per capita personal income in Erie inched up by 0.2% between 2015 and 2016 to \$38,995 (in 2012 inflation-adjusted dollars). Over a longer time span, Erie's real per capita personal income has risen by 7.6% since 2010, after having fallen by 1.6% between 2009 and 2010 as a result of the Great

Recession. Additionally, the latest statistics from the U.S. Census Bureau indicate that, between 2015 and 2016, real median household income in Erie increased by 2.4%.

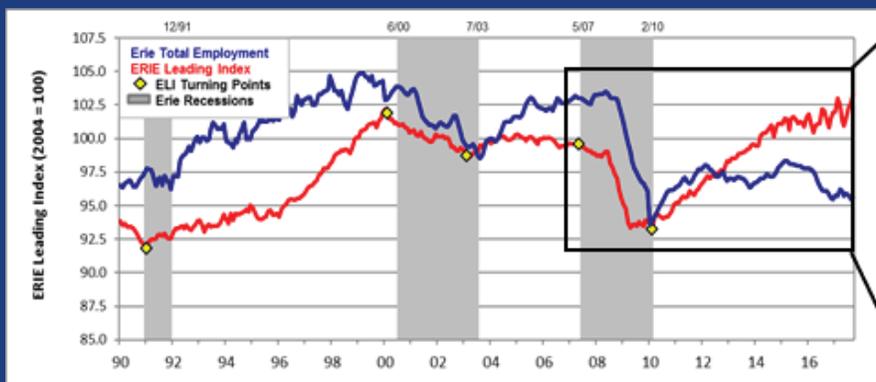
Of course, these local income gains are still relatively modest, and real median household income in Erie (\$47,094) continues to lag behind that in Pennsylvania (\$54,895) and the nation as a whole (\$55,322).

The Ebenezer Scrooge in the local economy continues to be the sluggish labor market with its somewhat anemic job growth. According to the Pennsylvania Department of Labor and Industry, total nonfarm jobs in Erie fell between September and October by 0.5% (700 jobs) on a seasonally adjusted basis to its current level of 129,200.

Nonfarm jobs in Erie did grow by 1.0% (1,300 jobs) on a seasonally adjusted basis year-over-year in October, but this was slightly less than the 1.1% growth statewide and the 1.4% growth for the nation as a whole.

The following sectors in the local economy experienced job growth year-over-year in October: *federal government* (+6.7% or 100 jobs); *local government* (+4.9% or 500 jobs); *retail trade* (+3.3% or 500 jobs); *financial activities* (+3.2% or 200 jobs); *wholesale trade* (+2.7% or 100 jobs); *mining, logging, and construction* (+2.3% or 100 jobs); and *education and health services* (+0.3% or 100 jobs). Sectors experiencing job losses during the year were *other services* (-1.7% or 100 jobs); *professional and business services* (-1.0% or 100 jobs); and *manufacturing* (-0.5% or 100 jobs).

Erie's seasonally adjusted unemployment rate has continued to fall, reaching 5.3% in October compared to 6.9% a year ago. However, this has been mainly due to a reduction in the size of the local labor force, which shrank by 1.9% (2,600 individuals) year-over-year in October. Erie's seasonally adjusted unemployment rate in October remained higher than that in Pennsylvania (4.7%) and the nation as a whole (4.1%).



*Data through September 2017

Components of ELI

| Variable | June | July | August | Sept. | Jun.-Sept. | % Change* | Weights |
|---|---------------|---------------|---------------|---------------|-------------|-------------|--------------|
| ERIE Leading Index | 101.53 | 102.33 | 102.61 | 103.32 | 1.79 | 1.77 | 1.000 |
| U.S. Interest Rate Spread (%) | 1.2 | 1.2 | 1.1 | 1.1 | -0.10 | -8.70 | 0.331 |
| U.S. Index of Coincident Indicators (2004=100) | 115.5 | 115.6 | 115.6 | 115.7 | 0.20 | 0.17 | 0.264 |
| U.S. Real Money Supply (M2) (bill of chained 2009 \$) | 12,046.1 | 12,101.8 | 12,119.3 | 12,111.7 | 65.60 | 0.54 | 0.144 |
| PA Avg Weekly Hours in Manufacturing (hours) | 41.0 | 40.9 | 41.3 | 41.7 | 0.73 | 1.77 | 0.085 |
| Erie Manufacturing Employment (thou of jobs) | 19.4 | 19.4 | 19.4 | 19.3 | -0.05 | -0.28 | 0.075 |
| U.S. TS Freight Index (2000=100) | 126.2 | 128.8 | 129.0 | 129.2 | 3.00 | 2.38 | 0.059 |
| S&P 500 Stock Index (1941-43=10) | 2,434.0 | 2,454.1 | 2,456.2 | 2,492.8 | 58.85 | 2.42 | 0.025 |
| U.S. Building Permits (thou of units) | 1,275 | 1,230 | 1,272 | 1,215 | -60.00 | -4.71 | 0.018 |

*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.

Five ELI components increased between June and September, helping the index grow by 1.8%. Some components may rise further if holiday spending is strong.

As in the previous quarter, the ELI component with the biggest gain was the S&P 500 Stock Index, which rose by 2.4%. Along with the Dow and the NASDAQ Composite, the S&P 500 hit record highs. Moreover, U.S. stock markets may further rise if the much-debated \$1.5 trillion tax overhaul plan (which was nearing a final vote in the House and Senate at press time) is passed, since one of its key provisions is to cut the corporate tax rate to 21% from 35%. In turn, that could also help ELI.

Some uncertainty and debate remain regarding the tax plan, including its distributional consequences, the impact on federal budget deficits, the behavioral responses to the changes on the part of different economic actors, and the net effect on the economy.

Also helping boost ELI in the 3rd quarter was the U.S. Transportation Services

Freight Index, which rose by 2.4%. This component may remain positive if holiday shipping increases as Rudolph guides Santa to deliver presents on time.

Santa's Elves were also working hard to gear up for the holiday season, as Pennsylvania Average Weekly Hours in Manufacturing edged up by 1.8% in the 3rd quarter, despite a seasonally-adjusted 0.3% drop in Erie Manufacturing Employment and a 4.7% decrease in U.S. Building Permits.

Further contributing to ELI's rise was a slight (0.5%) increase in the U.S. Real Money Supply, though this was a smaller increase than the 1.2% and 0.8% increase in the 1st and 2nd quarter, respectively. This gradual slowing in the growth of the money supply reflects the Fed's policy stance of gradual monetary tightening, and suggests the Fed remains confident in the national economy. This has been reinforced by new commerce department estimates indicating that the U.S. gross domestic product (GDP), a measure of the nation's total output of goods and services, had risen at an

inflation-adjusted annual rate of 3.3% in the 3rd quarter (the highest in three years), following a 3.1% increase in the 2nd quarter. Thus, the Fed raised its benchmark federal funds rate for the third time in 2017 as it works toward its dual mandate of promoting sustainable employment while maintaining price stability.

The potential Grinch in the picture is the U.S. Interest Rate Spread, which decreased for the third straight quarter, falling by 8.7%. Partly due to the Fed's monetary tightening, the continued narrowing of the spread, which measures the difference between the 10-year Treasury bond yield and the short-term federal funds rate, is concerning because the ghosts of recessions past show that a negative interest rate spread may signal an economic downturn. A slowdown in the U.S. economy, which tends to lead the local economy, may in turn have adverse spillover effects locally.

Bah! Humbug!
The interest rate spread fell 8.7% this quarter, though five ELI components rose!

Trends and Implications for Different Sectors of the Erie Economy

Goods-Producing Sectors

Mining, Logging, and Construction:

As winter approaches, employment in this sector is beginning to decrease. Between August and October, employment fell by 4.4% (200 jobs), and this is unlikely to be reversed until the spring. The good news is that employment is up by 2.4% (100 jobs) year-over-year in October and currently stands at 4,300. This sector will continue to be affected by U.S. fiscal, regulatory, and environmental policy.

Manufacturing:

Though this sector accounts for 22% of the local economy's real output (in contrast to the 12% for the state and nation), it continues to shed jobs. October employment was at 19,400, down 0.5% (100 jobs) compared to a year ago. A further decline will occur next year as GE shifts locomotive production out of Erie. Rapid changes in technology, globalization, and government policy continue to affect this sector.

Plastics & Rubber Products Mfg:

This sector has been fairly stable. After rising by 2.3% (100 jobs) from June to July, employment in this sector settled back to 4,400, where it has remained stable since September, and which is the same level compared to a year ago. Just as for the manufacturing sector overall, changes in technology, globalization, and government policy can affect this sector.

Private Service-Providing Sectors

Wholesale Trade:

The wholesale trade sector continues to be relatively stable. As of October, employment in this sector stands at 3,800, up 2.7% (100 jobs) from last year. The holiday shopping season may provide a boost to this sector, which can also be affected by government fiscal and trade policies as well as by events that affect the global supply chain.

Information:

This broad sector encompasses the following industries: publishing (including software, traditional, and Internet publishing), motion picture and sound recording, broadcasting (both traditional and Internet), data processing, and information services. The number of jobs has remained steady at 1,100, the same level compared to a year ago. This sector will continue to be affected by rapid changes in technology.

Education and Health Services:

After decreasing 2.4% (700 jobs) between May and June, employment in this sector has bounced back, increasing by 3.5% (1,000 jobs) between August and October. The current employment level of 29,400 jobs represents a year-over-year increase of 0.3% (100 jobs). Locally, this is the largest sector (by employment). Education and health care policy, educational and medical technology, and shifting demographics in the local region, are all likely to affect this sector.

Retail Trade:

Employment in this sector picked up mid-year, rising by 5.4% (800 jobs) between May and June. Employment also increased by 3.3% (500 jobs) year-over-year in October to its current level of 15,600. Jobs may increase during the holidays, but continued manufacturing job losses and government policies that affect household disposable incomes can influence this sector.

Financial Activities:

This sector has remained relatively stable. As of October, employment in this sector stands at 6,400, which represents an increase of 3.2% (200 jobs) compared to a year ago. Innovations in data and information processing, as well as changes in U.S. fiscal, monetary, and regulatory policies that affect household and corporate financial decisions (such as the proposed tax overhaul plan) will affect this sector.

Leisure and Hospitality:

Recreational and tourist activities helped to lift employment in this sector during the summer months. However, employment has declined as summer gave way to fall, decreasing by 10.8% (1,700 jobs) between August and October. The current employment level of 14,100 is unchanged compared to a year ago. In addition to picking back up when the warm weather returns, this sector is likely to expand as efforts to promote the region accelerate.

Transportation, Warehousing, Utilities:

Employment in this sector fluctuated over the course of the year between 3,200 and 3,400 jobs. After dipping in August, employment has recovered to 3,400 in October, the same level compared to a year ago. Changes in U.S. fiscal, trade, regulatory, and environmental policy, as well as events that affect the global supply chain, can influence this sector.

Professional and Business Services:

After falling below 10,000 at the beginning of the year, employment in this sector has rebounded and stands at 10,300 as of October. However, this represents a year-over-year decrease of 1.0% (100 jobs). As in most other sectors, employment in this sector can be affected by government fiscal and regulatory policies, such as the proposed tax overhaul plan.

Other Services:

After rising to 6,000 jobs in April, where it remained until August, employment in this sector has fallen back down by 1.7% (100 jobs) and stands at 5,900 as of October. The current level of employment also represents a year-over-year decrease of 1.7% (100 jobs). Changes in government policy as well as other events affecting household disposable incomes are likely to influence this sector.

Government Sector

As of October 2017, Erie employment in the government sector stood at 17,000, up 16.4% (2,400 jobs) compared to August, and up 3.7% (600 jobs) compared to a year ago. Federal government employment remained unchanged between August and October, but increased by 6.7% (100 jobs) to 1,600 compared to a year ago. Changes in state and local government employment normally occur over the course of the school year. For example, between August and October, state government employment increased by 23.7% (900 jobs) to 4,700, while local government employment rose by 16.3% (1,500 jobs) to 10,700. Compared to a year ago, state government employment remained unchanged while local government employment rose by 4.9% (500 jobs). Federal as well as state education, fiscal, and regulatory policies may also affect local government employment at all three levels.



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