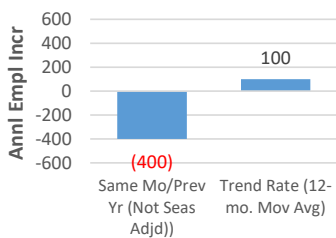


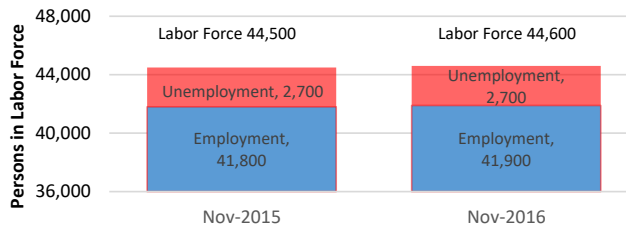
Summary

Ashtabula County resident employment averaged 41,900 in November 2016, about 100 more than the November 2015 average. Employment grew more strongly in early 2016 than in previous years but growth weakened in recent months and November 2016 employment was actually 400 (Not Seasonally Adjusted) lower than last November. The current labor force average was 44,600, about 5,400 lower than 2007. The rate of labor force contraction slowed in mid-2014 and the labor force grew slightly in 2016. The unemployment picture has improved over the past several years as the number of unemployed has dropped to under 3,000 and the unemployment rate has decreased to about 6%. Unfortunately, the unemployment rate improvement has been due to labor force contraction, rather than employment growth.

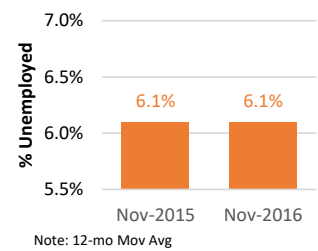
Annual Job Creation Rate



Employment, Unemployment (Nov 2016)



Unemployment Rate



Source: Bureau of Labor Statistics (BLS), Local Area Unempl Statistics. 12-mo Moving Average.

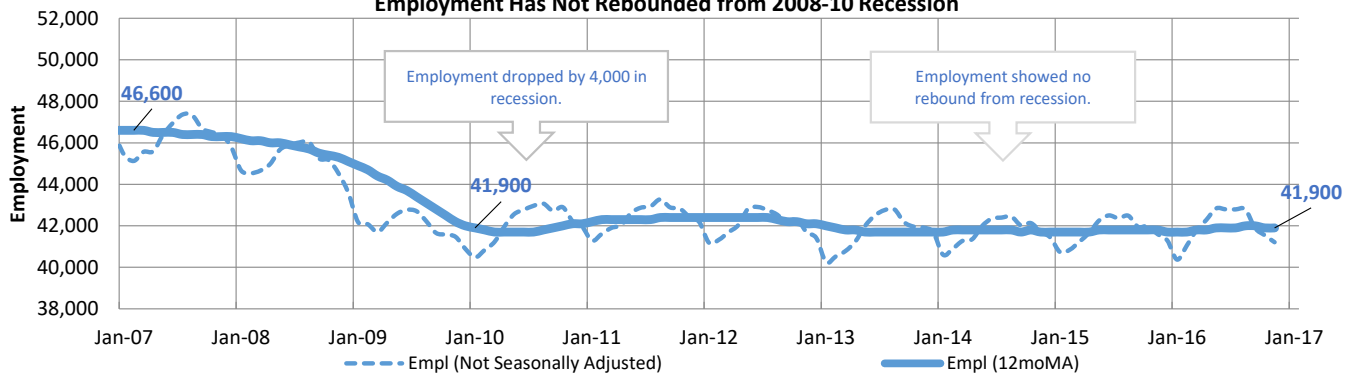
Note: 12-mo Mov Avg

Employment

The Bureau of Labor Statistics provides monthly estimates of resident employment (16 years & older) & unemployed residents seeking employment. The twelve-month moving average of employment in the county decreased from 46,600 in 2007 to 41,900 in 2010 and has remained close to that level during the national economic recovery. However, the volatile "not seasonally adjusted" employment estimate for November 2016 decreased to 41,210, lower than last month and 400 less than November 2015. Monthly employment is likely to decrease as winter approaches.

Employment (12-month Moving Average)

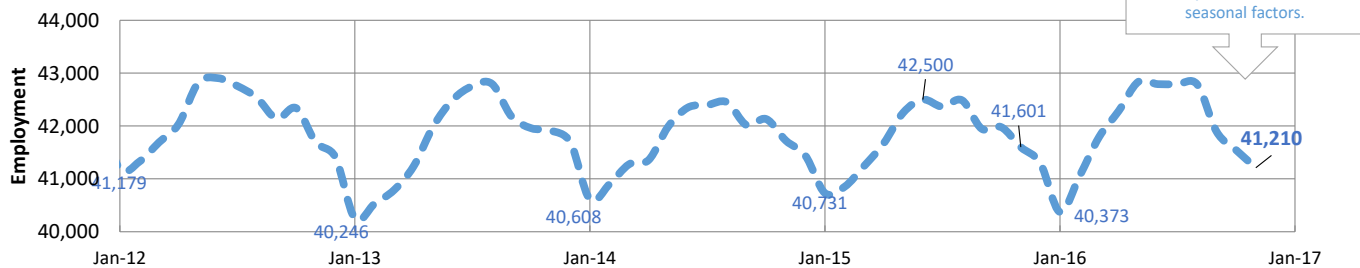
Employment Has Not Rebounded from 2008-10 Recession



Source: BLS, Local Area Unemployment Statistics. A twelve-month moving average is a statistical technique commonly used with time series data to smooth out seasonal fluctuations and to reveal longer-term trends.

Employment (*Not Seasonally Adjusted)

Employment Typically Varies By 2,000 Between Summer Peaks and Winter Valleys



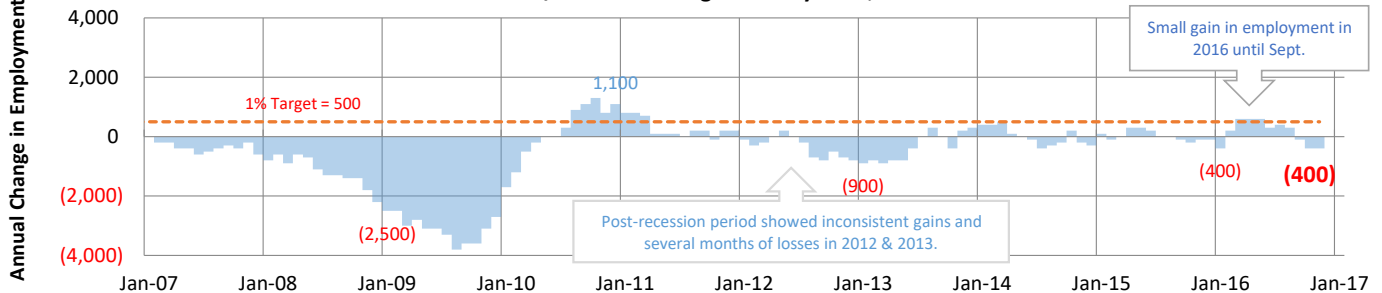
Source: Bureau of Labor Statistics (BLS). Local Area Unemployment Statistics (LAUS)

*Not Seasonally Adjusted: Ashtabula County employment and unemployment data are reported in the Local Area Unemployment Statistics series on a "Not Seasonally Adjusted" basis. It is more difficult to interpret economic data that is "not seasonally adjusted" because of data fluctuations due to weather, holidays, the opening and closing of schools, and other recurring seasonal events. A statistical technique known as twelve-month moving averages will be used in this analysis to smooth out seasonal fluctuations in Ashtabula's employment estimates and improve analysis of long-term trends.

An analysis of the annual change in employment (same month, previous year) showed that the local economy has not had a continuous period of post-recession employment growth since 2010. Employment growth in early 2016 was the best since 2014, but the growth was not sustained or strong enough to reverse recessionary job losses.

Annual Change in Employment (Same Month/Previous Year)

Post Recession Growth Reached +500/1% Annual Target In Early 2016, But Weakened Since Summer



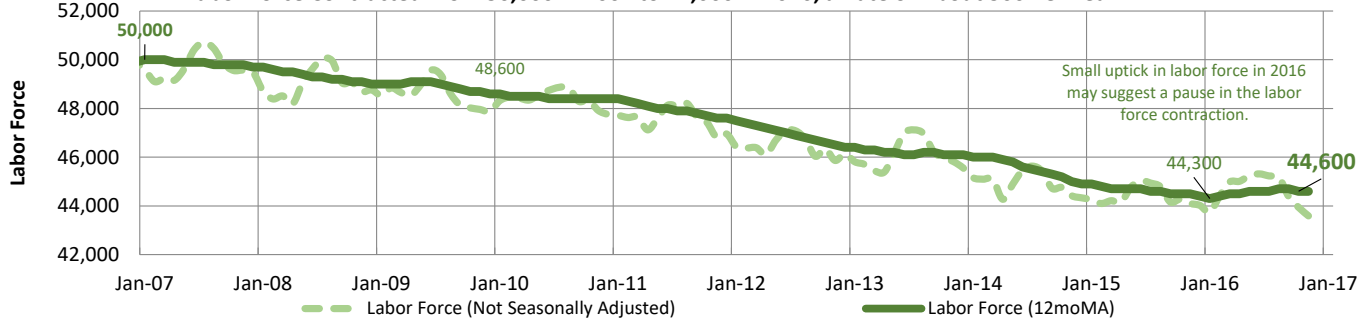
Note: Annual change in employment is based on the rounded twelve-month change in BLS, LAUS data. Successive monthly calculations show trend of employment gains or losses over preceding 12 months. A 1% annual employment growth target for Ashtabula County represents about 500 jobs. A 1% average employment growth rate is roughly the rate Ohio employment has grown over the past 50 years.

Labor Force

The labor force includes all persons at least 16 years old with a job or seeking a job, and excludes persons in the military or institutionalized. In Ashtabula County, the labor force has decreased from 50,000 in 2007 to 44,600 in November 2016, a loss of over 5,400 (-10.8%). The recession and the weak recovery discouraged workers who stopped efforts to gain employment and left the labor force. The rate of long-term contraction of the labor force began to slow in late 2014 and the labor force finally grew slightly in early 2016.

Labor Force

Labor Force Contracted From 50,000 in 2007 to 44,600 in 2016, a Rate of About 500 Per Year

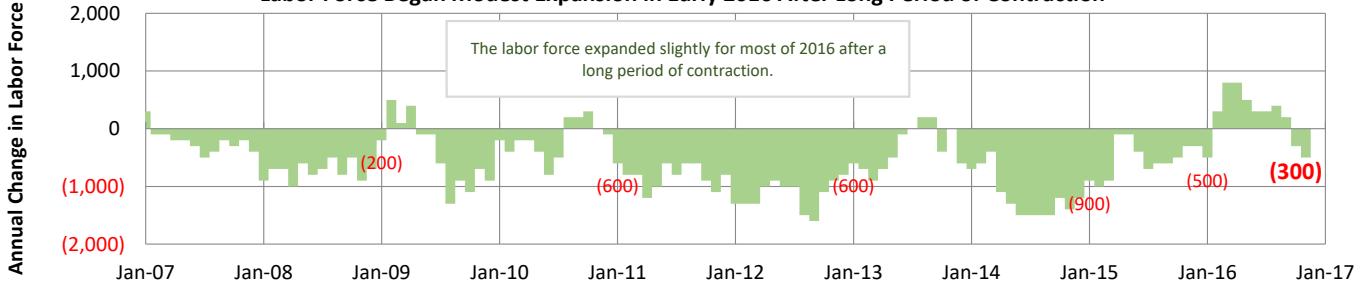


Source: BLS, Local Area Unemployment Statistics (LAUS). A twelve-month moving average is a statistical technique commonly used with time series data to smooth out seasonal fluctuations and to reveal longer-term trends.

Since 2007, the annual rate of change in the labor force has typically been negative with loss rates of -300 to -700. However, the rate of loss has been decreasing since mid-2014 and the labor force expanded slightly in early 2016, the first period of sustained growth since 2007. Unfortunately, the labor force began to contract again in late 2016.

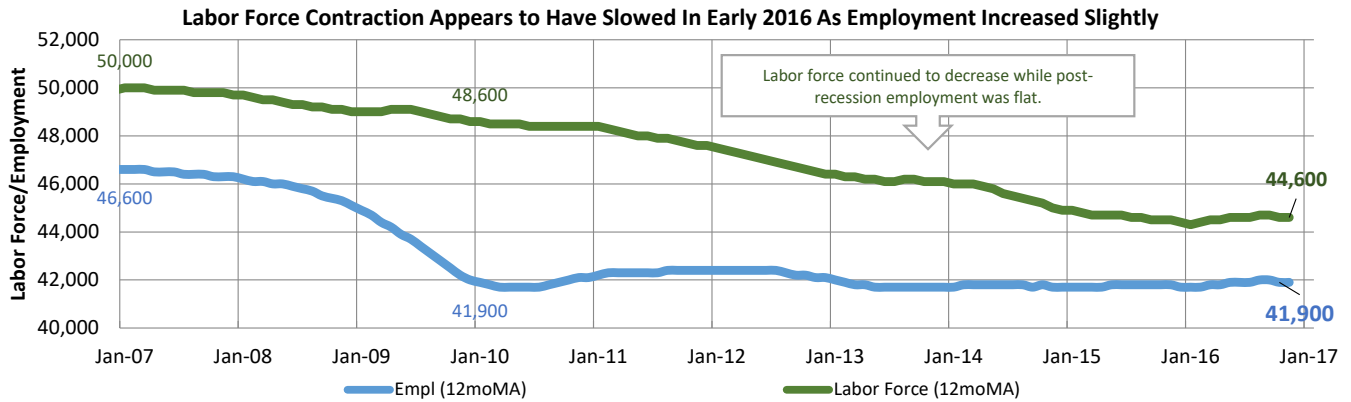
Annual Change in Labor Force (Same Month/Previous Year)

Labor Force Began Modest Expansion in Early 2016 After Long Period of Contraction



Note: Annual change in labor force is based on rounded twelve-month change of BLS, LAUS data. Successive monthly calculations show trend of labor force gains or losses over preceding 12 months.

Labor Force & Employment



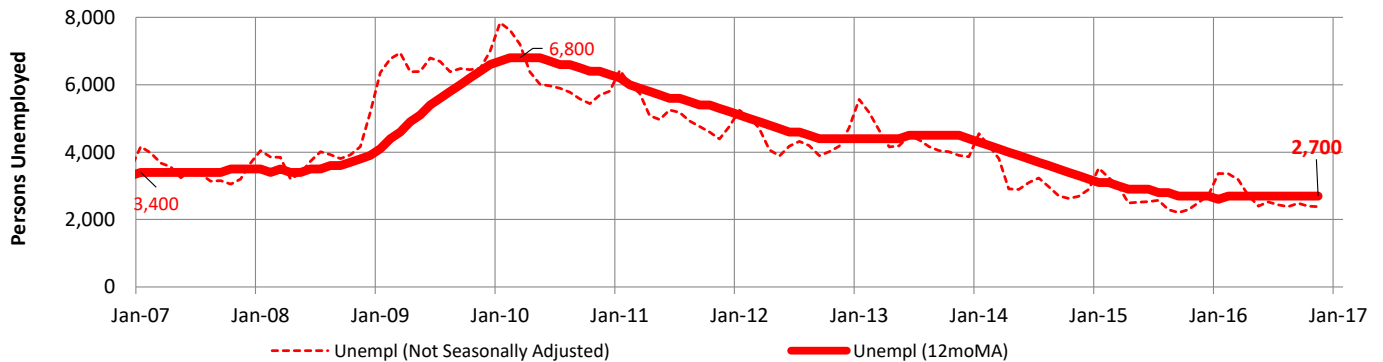
Source: BLS, Local Area Unemployment Statistics (LAUS). A twelve-month moving average is a statistical technique commonly used with time series data to smooth out seasonal fluctuations and to reveal long-term trends.

Unemployment

Unemployment includes persons who are currently jobless, available for work and actively seeking a job in the past four weeks. A jobless person not seeking work is not considered part of the labor force and not counted as unemployed. The total number of unemployed persons has been roughly the same since early 2015. As of November 2016, 2,700 were considered unemployed in Ashtabula County. The post-recession decrease of 4,000 in unemployment would normally be regarded as a favorable occurrence, but the same number stopped actively seeking work and left the labor force.

Unemployment

Unemployment Decreased By 4,000 From 2010 to 2016 & Is Below Pre-Recession Average



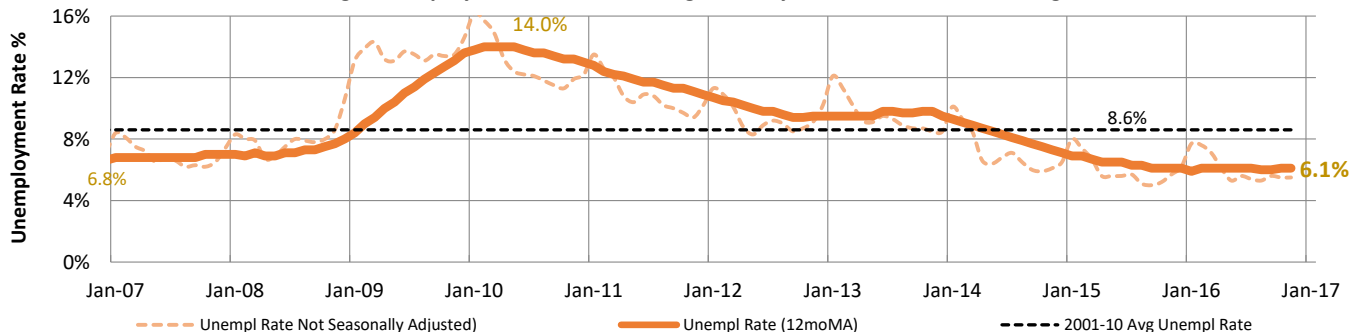
Source: BLS, Local Area Unemployment Statistics (LAUS)

Unemployment Rate

Ashtabula County's unemployment rate began to decrease in 2010 and has been below 7% since early 2015. In November 2016, the average unemployment rate in Ashtabula County for the past 12 months averaged 6.1%, the same as a year earlier but below the long-term average rate of 8.6%.

Unemployment Rates

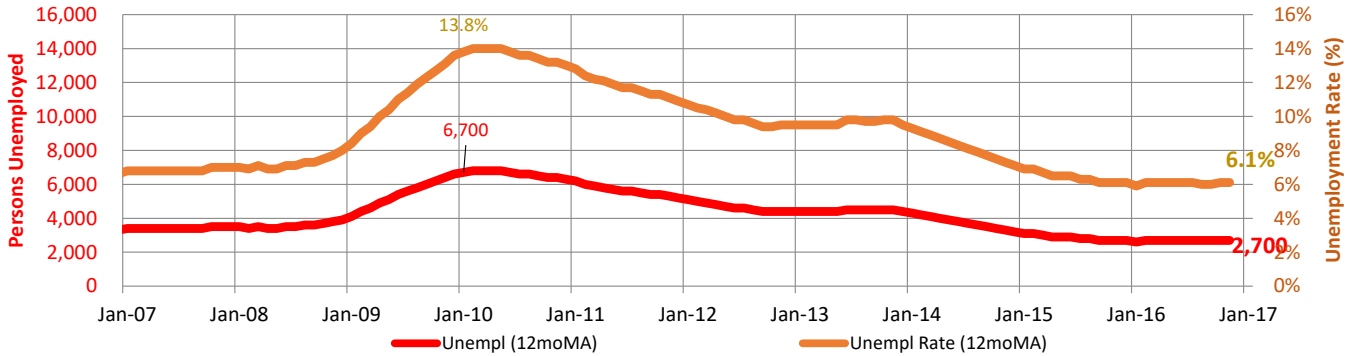
Current Average Unemployment Rate Is 6.1%, Significantly Below the 2001-15 Average of 8.6%



Source: BLS, Local Area Unemployment Statistics (LAUS).

With a labor force of about 45,000, a change of 1% in the number of persons employed or unemployed in Ashtabula County represented a numerical change affecting 450 workers.

Unemployment & Unemployment Rate
4,000 Workers Were Affected By Drop In Unemployment Rate After 2010

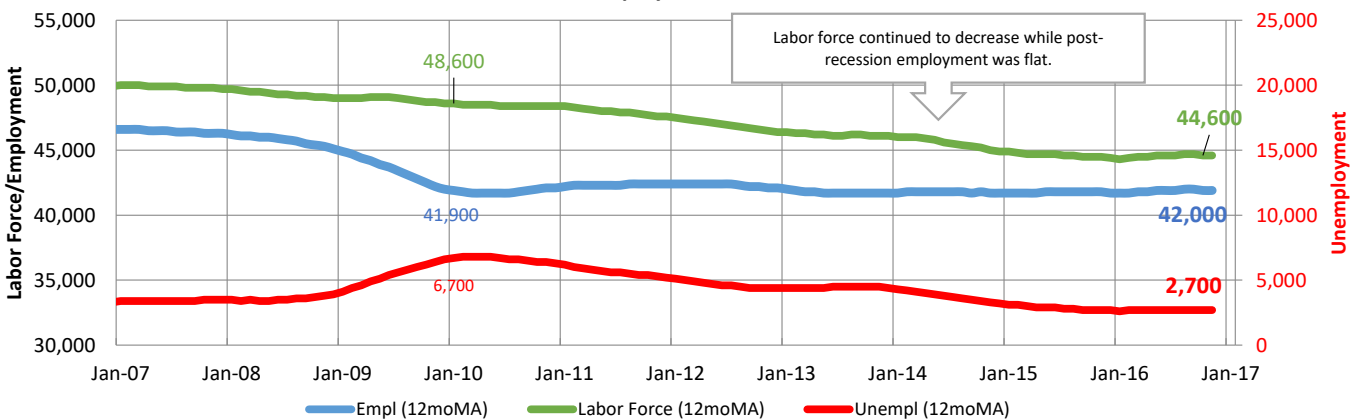


Source: BLS, Local Area Unemployment Statistics (LAUS)

Analyzing Changes in Unemployment and the Unemployment Rate

Unemployment and unemployment rates may be affected significantly by both hiring and labor force changes. When the number of unemployed persons decreases and the unemployment rate drops, it may be because more persons are hired, or because persons stop seeking work, or both. Since employment has remained virtually unchanged since 2010, but 4,000 persons left the labor force in Ashtabula County, the decrease of 4,000 unemployed persons and the falling unemployment rate was due to persons leaving the labor force.

Labor Force, Employment & Unemployment
Labor Force Contraction Caused Unemployment Decrease After 2010



Source: BLS, Local Area Unemployment Statistics (LAUS). A twelve-month moving average is a statistical technique commonly used with time series data to smooth out seasonal fluctuations and to reveal long-term trends.

Data Summary (Nov 2016)

	Nov-2016 (*Not Seas. Adj'd)	Nov-2016 12-mo. Moving Avg.	Change from Year Ago	% Chg from Year Ago	Nov-2015 12-mo. Moving Avg.
Labor Force	44,102	44,600	100	0.2%	44,500
Employment	41,601	41,900	100	0.2%	41,800
Unemployment	2,501	2,700	0	0.0%	2,700
Unemployment Rate (%)	5.7%	6.1%	0.0%		6.1%

Source: Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) The most recent data is preliminary Nov 2016 and is not seasonally adjusted.

Note: A 12-month moving average is a statistical technique used to smooth out seasonal fluctuations and reveal long term trends.

Data for Ashtabula County employment and unemployment comes from the Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) program and is not seasonally adjusted. LAUS provides official monthly and annual average estimates of civilian labor force, employment, unemployment, and unemployment rates for about 7,500 subnational areas, including Ashtabula County. LAUS estimates are based on individual place of residence. The Ashtabula County labor force includes all persons at least 16 years old with a job or seeking a job and excludes persons in the military or institutionalized.