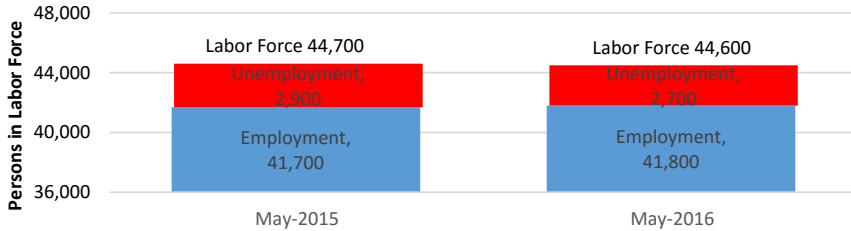


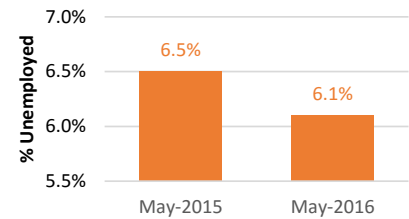
**Summary**

Ashtabula County resident employment averaged 41,700 in May 2016, about the same level of average employment as 2010. However, employment began to grow in early 2016, a potentially positive sign. The current labor force average was 44,700, about 5,600 lower than 2007. The rate of labor force contraction has slowed since mid-2014 and the labor force had a small increase in early 2016. The unemployment picture has improved over the past several years as the number of unemployed and the unemployment rate has decreased. Unfortunately, the unemployment rate improvement has primarily been due to labor force contraction, rather than employment growth.

**Employment, Unemployment (May 2016)**



**Unemployment Rate**



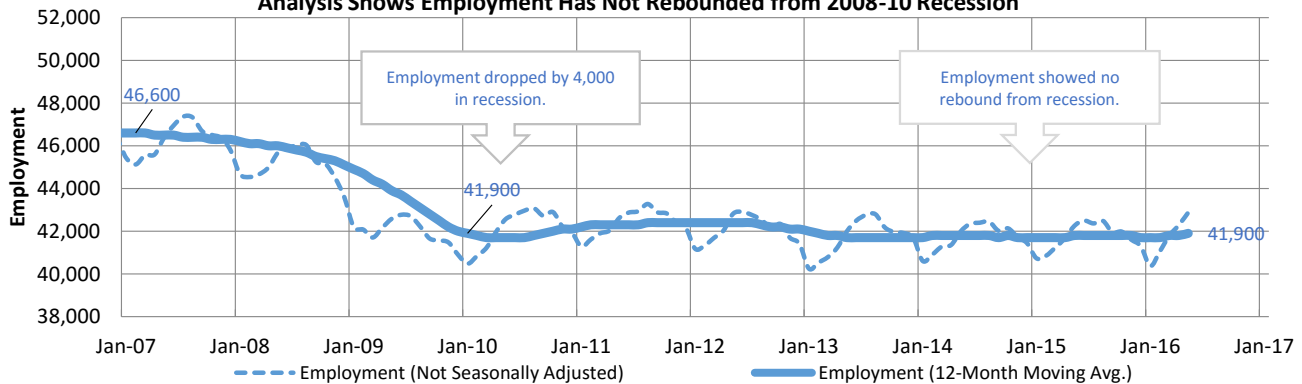
Source: Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics. 12-month Moving Average.

**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 May 2016 increased to 41,876, about 600 better than May 2015. The growth in early 2016 will begin to affect average employment if sustained in coming months.

**Employment (12-month Moving Average)**

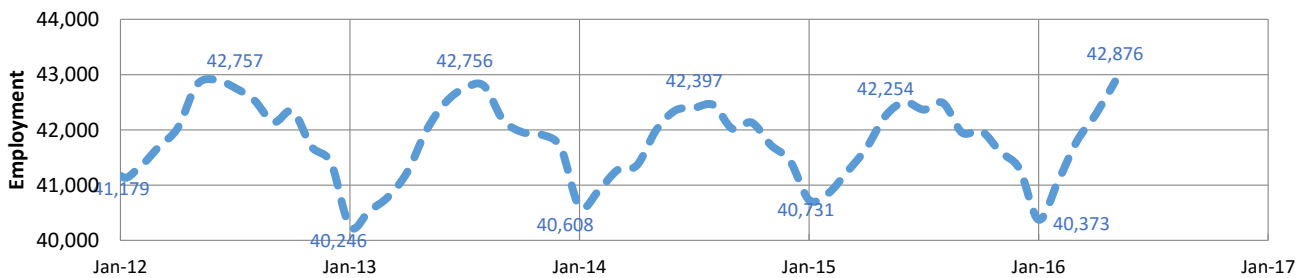
Analysis Shows Employment Has Not Rebounded from 2008-10 Recession



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

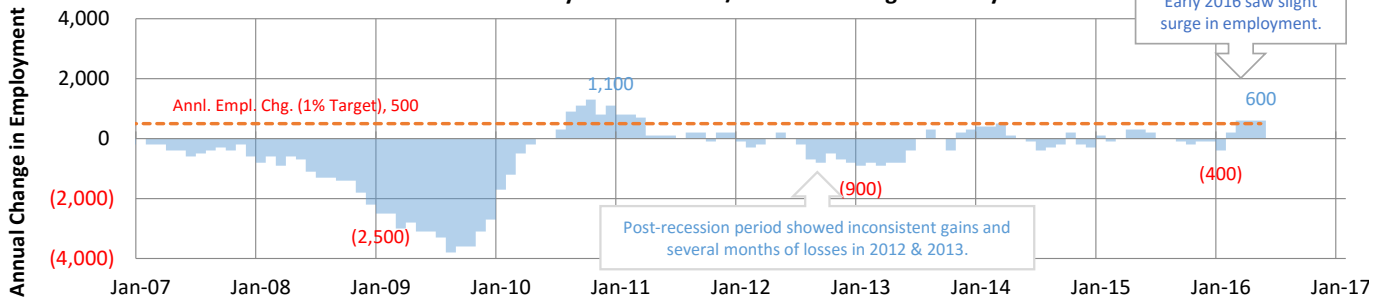


Source: Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS)

\*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 change in employment months showed that the local economy did not have a sustained period of post-recession employment growth or a satisfactory recovery from recessionary job losses. The growth in early 2016 was an encouraging sign of a strengthening economy, however.

**Annual Change in Employment (Same Month/Previous Year)**  
**Post Recession Growth Finally Reached +500/1% Annual Target In Early 2016**

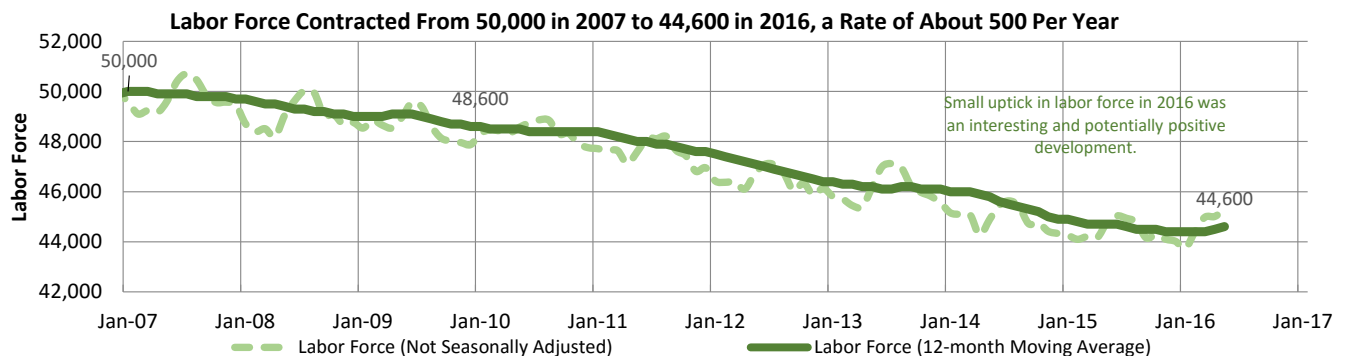


Note: Annual change in employment is based on the rounded twelve-month change in BLS, LAUS data. Successive monthly calculations show trend of employment gains or losses over preceding 12 months. A 1% annual employment growth target for Ashtabula County represents about 500 jobs. A 1% average employment 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 early 2016, a loss of 5,600. The recession may have accelerated the contraction and the weak recovery led to some discouraged workers who stopped efforts to gain employment. The county's labor force has been contracting for a decade, but the rate of loss has slowed since late 2014. The labor force grew slightly in preliminary 2016 estimates.

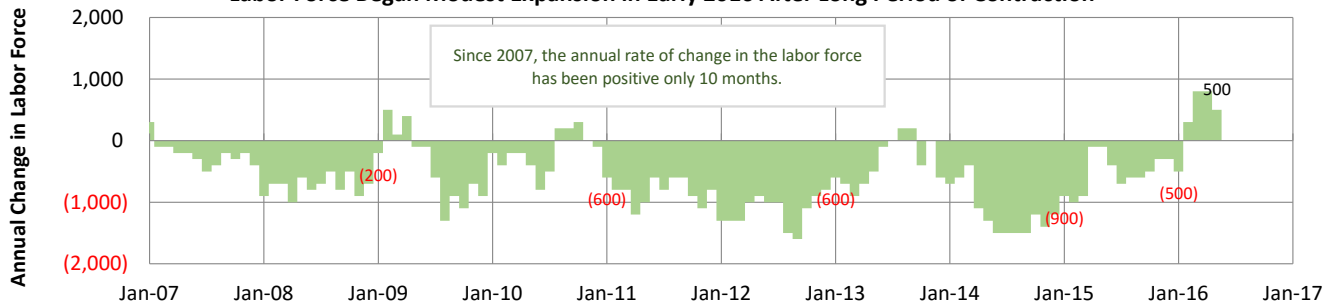
**Labor Force**



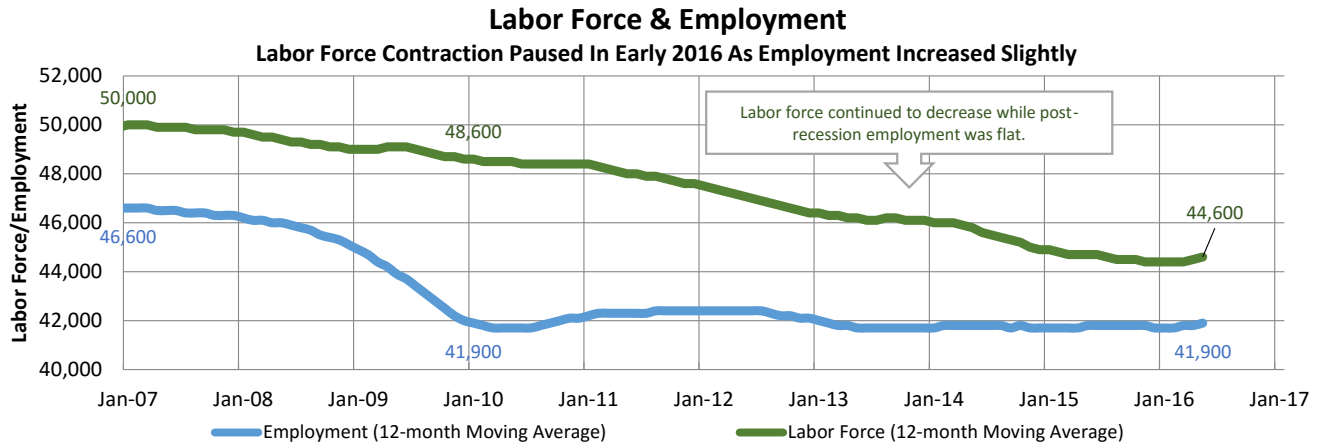
Source: BLS, Local Area Unemployment Statistics (LAUS). A twelve-month moving average is a statistical technique commonly used with time series data to smooth out seasonal fluctuations and to reveal longer-term trends.

Since 2007, the annual rate of change in the labor force has typically been negative with varying 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, possibly due to the mild winter or better economic conditions.

**Annual Change in Labor Force (Same Month/Previous Year)**  
**Labor Force Began Modest Expansion in Early 2016 After Long Period of Contraction**



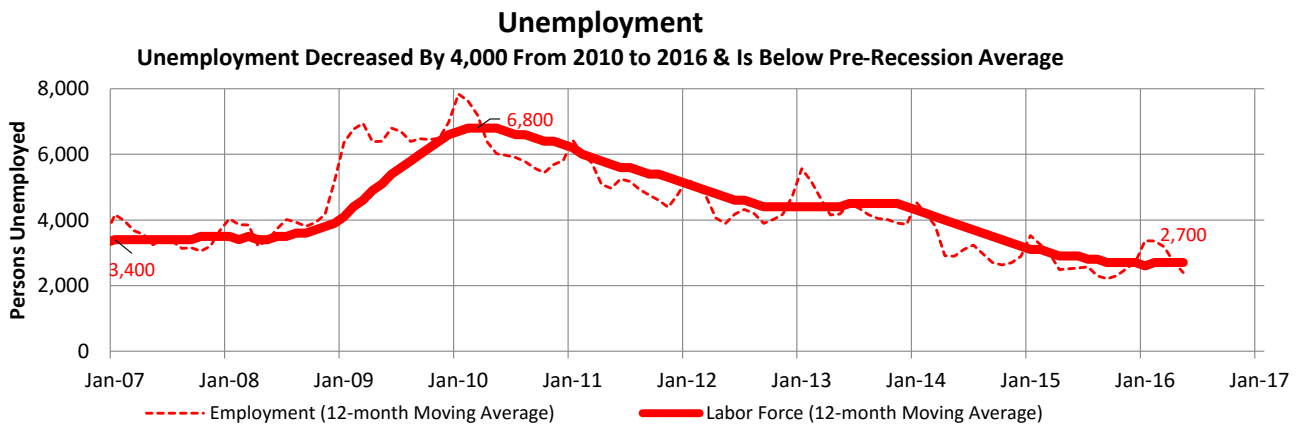
Note: Annual change in labor force is based on rounded twelve-month change of BLS, LAUS data. Successive monthly calculations show trend of labor force gains or losses over preceding 12 months.



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

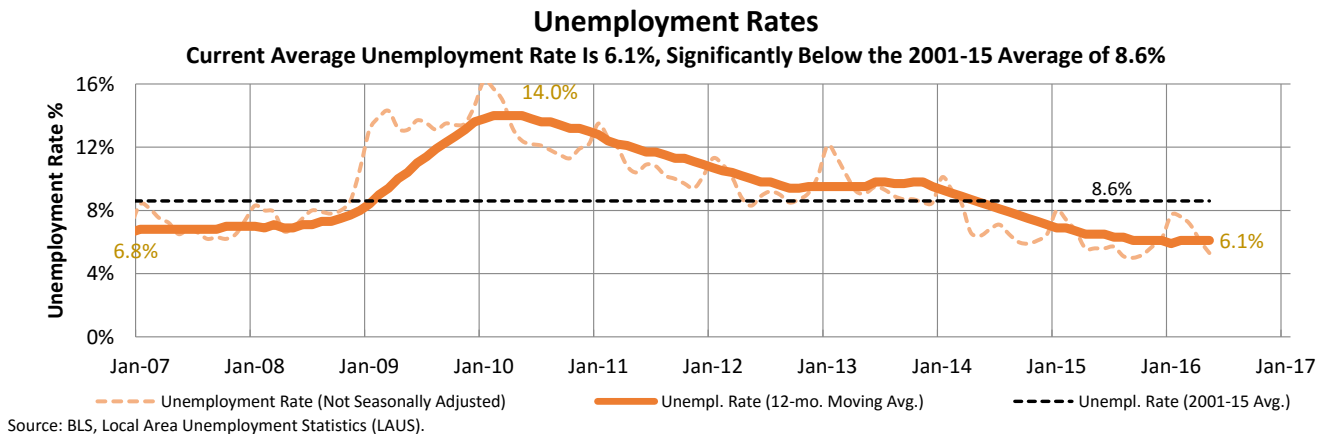
Unemployment includes persons who are currently jobless, available for work and actively seeking for work in the past four weeks. A jobless person not seeking work is not considered part of the labor force and not counted as unemployed. The post-recession decrease of 4,000 in Ashtabula County unemployment would normally be regarded as a favorable occurrence, but nearly the same number stopped actively seeking work.



Source: BLS, Local Area Unemployment Statistics (LAUS)

## Unemployment Rate

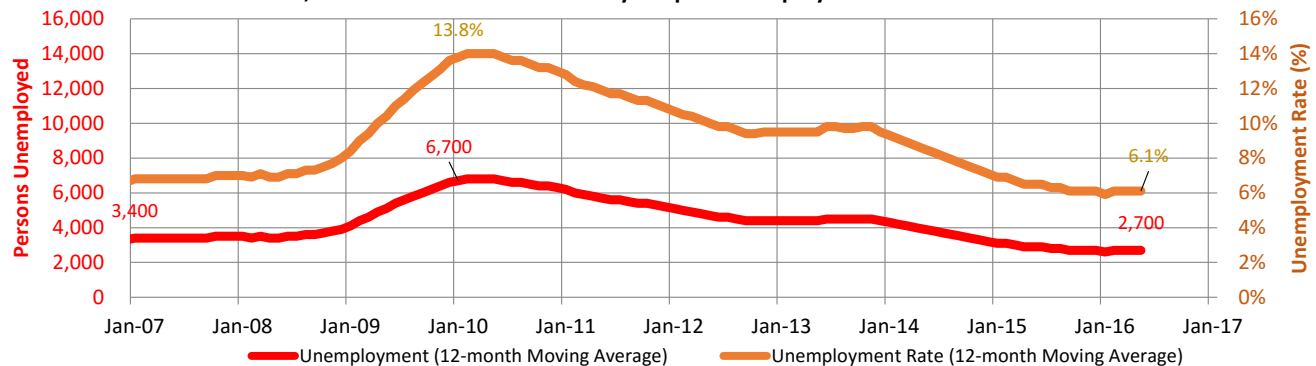
Ashtabula County's unemployment rate has been decreasing since 2010. The average unemployment rate in Ashtabula County for the past 12 months averaged 6.1%, which was below the long-term average rate of 8.6%.



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

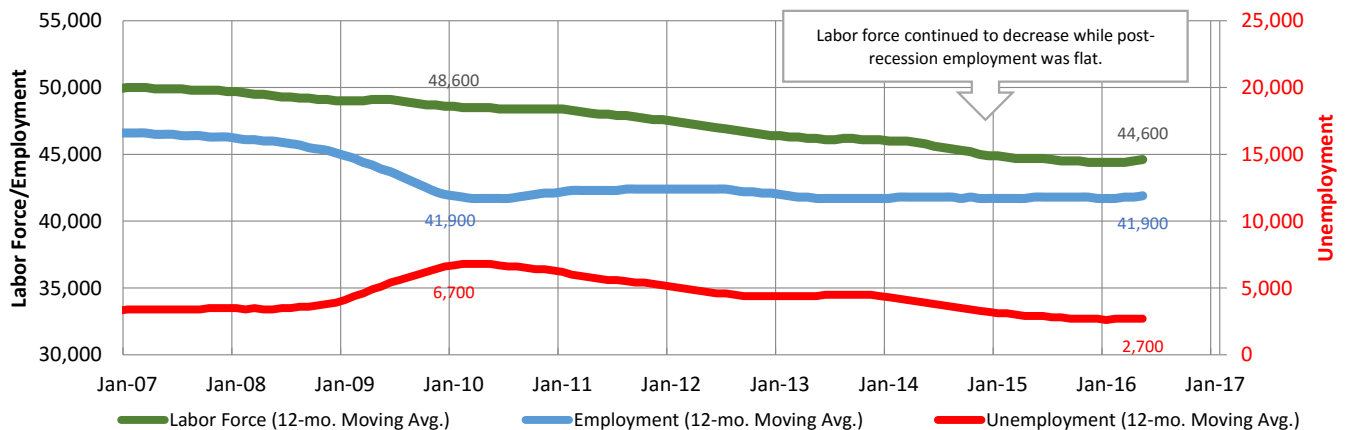


Source: BLS, Local Area Unemployment Statistics (LAUS)

### 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 unemployment rate drops and the number of unemployed persons decreases, it may be because more persons are hired, or because persons stop seeking work, or both. Since employment was not growing since 2010, the falling unemployment rate in Ashtabula County was largely 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 (May 2016)

	May-2016 (*Not Seas. Adj'd)	May-2016 12-mo. Moving Avg.	Change from Year Ago	% Chg from Year Ago	May-2015 12-mo. Moving Avg.
Labor Force	45,275	44,600	(100)	-0.2%	44,700
Employment	42,876	41,900	100	0.2%	41,800
Unemployment	2,399	2,700	(200)	-6.9%	2,900
Unemployment Rate (%)	5.3%	6.1%	-0.4%		6.5%

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

Note: A 12-month moving average is a statistical technique used to smooth out seasonal fluctuations & 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.