



Department of  
Job and Family Services

TO STRENGTHEN OHIO'S FAMILIES WITH SOLUTIONS TO TEMPORARY CHALLENGES

# State of Ohio Workforce

1<sup>ST</sup> QUARTER

2 0 0 9



# Quarterly Report on the State of Ohio's Workforce

Reference Period: First Quarter 2009

(Per Ohio Revised Code 6301.10)

- **Analyst Summary**
  
- **Unemployment Rates and Related Data**
  - Employment Situation: Ohio and U.S.
  - Ohio Monthly Unemployment Insurance Initial Claims
  - Average Duration of Unemployment: Ohio and U.S.
  - Unemployment Insurance Benefit Exhaustions: Ohio and U.S.
  
- **Employment Data**
  - Ohio Nonagricultural Wage and Salary Employment
  - Trends in Ohio Nonagricultural Wage and Salary Employment
  - Ohio Leading Indicators
  - Jobs Gained or Lost
  
- **Related Information**
  - IHS Global Insight analysis
  - Other Economic Indicators
  
- **Technical Notes**

Ohio Department of Job and Family Services  
Office of Workforce Development  
Bureau of Labor Market Information  
Release date: June 3, 2009

## Analyst Summary

Ohio's unemployment rate increased to 9.3 percent during the first quarter of 2009, up from 7.1 percent during the fourth quarter of 2008 and higher than the 5.9 percent for the first quarter of 2008. The average number of Ohioans unemployed per month increased over the quarter from 426,000 to 557,000.

The U.S. unemployment rate for the first quarter averaged 8.1 percent, up from 6.9 percent during the fourth quarter of 2008 and higher than the 4.9 percent of one year ago.

Ohio's nonagricultural wage and salary employment fell 118,600 over the first quarter, from 5,305,600 to 5,187,000 on a seasonally adjusted basis. During the first quarter, service-providing industries declined by 48,700 jobs. Professional and business services led the decline with a loss of 18,600 jobs. Trade, transportation, and utilities lost 11,200 jobs. Losses in goods-producing industries were higher, with 69,900 jobs lost during the first quarter. Manufacturing lost 59,800 jobs, and construction employment was down 9,700.

Compared to the first quarter of 2008, Ohio's nonagricultural wage and salary employment declined by 224,900 jobs. Goods-producing industries fell 127,900 jobs. Service-providing industries dropped 97,000 compared to the first quarter of 2008.

# Unemployment Rates and Related Data

## Employment Situation: Ohio and U.S. (Seasonally Adjusted)

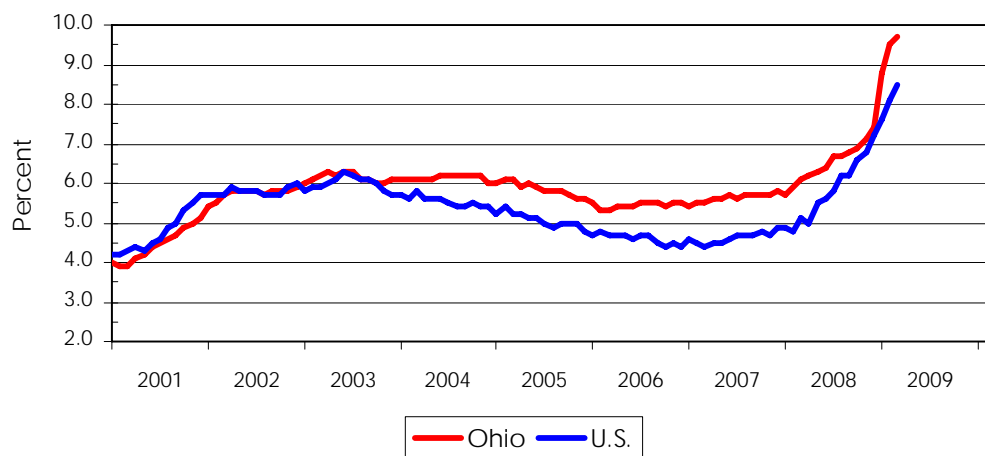
Ohio's unemployment rate for the first quarter of 2009 was 9.3 percent, up from the fourth quarter 2008 rate of 7.1 percent and up from 5.9 a year ago. The U.S. unemployment rate for the first quarter was 8.1 percent, up from the fourth quarter 2008 rate of 6.9 percent and up from 4.9 a year ago. The average number of Ohioans unemployed per month has increased over the quarter from 426,000 to 557,000.

### Employment Situation Indicators for Ohio and U.S.

	Quarterly Data (in thousands)			Change (in thousands)		Percent Change	
	1st Qtr. 2009	4th Qtr. 2008	1st Qtr. 2008	From Last Quarter	From Last Year	From Last Quarter	From Last Year
Seasonally Adjusted							
	<b>Ohio</b>						
Civilian Labor Force	5,969	5,971	5,968	-2	0	0.0%	0.0%
Employment	5,412	5,544	5,615	-133	-204	-2.4%	-3.6%
Unemployment	557	426	353	131	204	30.8%	57.8%
Unemployment Rate	9.3%	7.1%	5.9%	2.2%	3.4%		
	<b>U.S.</b>						
Civilian Labor Force	153,993	154,648	153,738	-655	255	-0.4%	0.2%
Employment	141,578	144,046	146,138	-2468	-4,560	-1.7%	-3.1%
Unemployment	12,415	10,602	7,599	1813	4815	17.1%	63.4%
Unemployment Rate	8.1%	6.9%	4.9%	1.2%	3.1%		

- Ohio and U.S. unemployment rates closely mirrored each other through mid-2003.
- During the latter half of 2003, the rates began to diverge as Ohio's unemployment rate remained high while the U.S. unemployment rate steadily declined.
- During the last six months, Ohio's unemployment rate has average 0.8 percentage point higher than the U.S. rate.

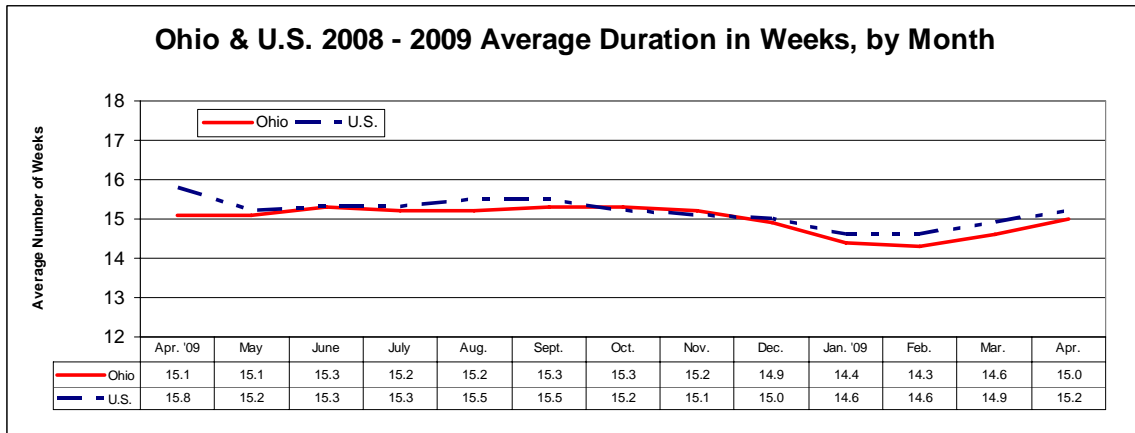
Ohio and U.S. Seasonally Adjusted Unemployment Rates





## Average Duration of Unemployment: Ohio and U.S.

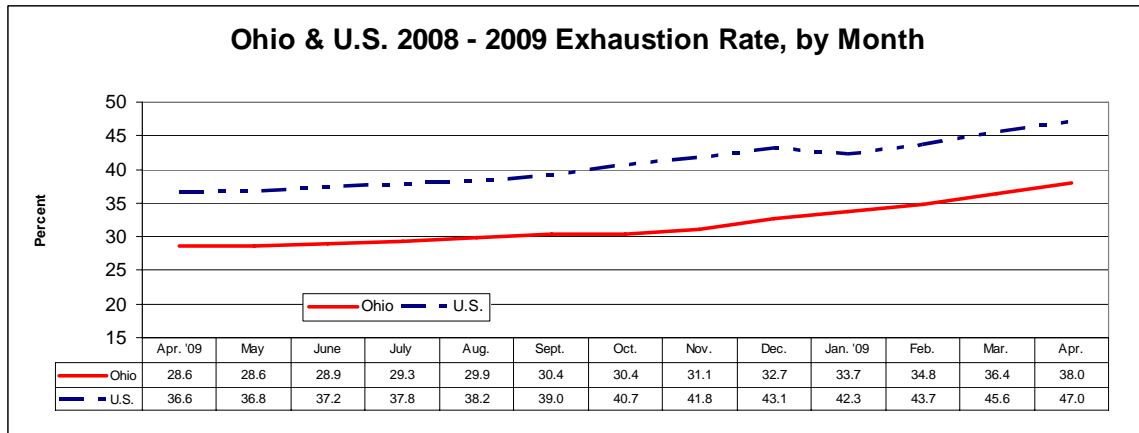
Average duration represents the average number of weeks of compensation received by unemployed claimants during the represented period.



- Ohio's average duration of unemployment closely mirrored the U.S. for the past 12 months.
- The Ohio average duration increased to 15.0 weeks for April 2009 while the U.S. average increased to 15.2 weeks for the same period.

## Unemployment Insurance Benefit Exhaustions: Ohio and U.S.

The exhaustion rate represents a measure of the proportion of unemployment insurance recipients who ultimately exhaust their benefits.



- Ohio and national exhaustion rates have been increasing over the past 12 months.
- Ohio's exhaustion rate stayed consistently lower than that of the U.S.
- Ohio's exhaustion rate increased to 38.0 percent, while the U.S. rate increased to 47.0 percent in April 2009.



# Employment Data

## **Ohio Nonagricultural Wage and Salary Employment (Seasonally Adjusted)**

Ohio's nonagricultural wage and salary employment fell 118,600 over the quarter, from 5,305,600 in the fourth quarter of 2008 to 5,187,000 in the first quarter of 2009.

Employment in goods-producing industries, at 858,700, was 69,900 lower. Declines in durable goods (-42,700) and nondurable goods (-17,100) lowered manufacturing employment 59,800. Construction was down 9,700, while mining and logging dropped 400. Service-providing industries declined 48,700 to 4,328,300. The largest losses were in professional and business services (-18,600) and trade, transportation, and utilities (-11,200). Also down were financial activities (-7,700), government (-5,400), information (-3,300), educational and health services (-2,000), and other services (-900). Leisure and hospitality rose 400.

Over the year, nonfarm wage and salary employment decreased 224,900. Goods-producing industries fell 127,900. The loss was concentrated in manufacturing (-98,600) due to declines in durable goods (-71,900) and nondurable goods (-26,700). Construction lost 29,100 jobs. Mining and logging slipped 200. Service-providing industries dropped 97,000 from first quarter 2008. Professional and business services were down 45,300, while trade, transportation, and utilities fell 39,100. Employment was also reduced in financial activities (-11,400), government (-9,100), information (-4,800), and other services (-3,600). Educational and health services rose 13,700. Leisure and hospitality added 2,600 jobs.

**Nonagricultural Wage and Salary Employment Estimates for Ohio<sup>a</sup>**

Seasonally Adjusted

**Employer Survey Data<sup>b</sup>**

	Employment (in thousands)			Change (in thousands)		Percent Change	
	1st Qtr. 2009	4th Qtr. 2008	1st Qtr. 2008	From Last Quarter	From Last Year	From Last Quarter	From Last Year
<b>Total</b>	5,187.0	5,305.6	5,411.9	-118.6	-224.9	-2.2%	-4.2%
<b>Goods-Producing Industries</b>	858.7	928.6	986.6	-69.9	-127.9	-7.5%	-13.0%
Mining and Logging	11.5	11.9	11.7	-0.4	-0.2	-3.4%	-1.7%
Construction	189.2	198.9	218.3	-9.7	-29.1	-4.9%	-13.3%
Manufacturing	658.0	717.8	756.6	-59.8	-98.6	-8.3%	-13.0%
Durable Goods	446.8	489.5	518.7	-42.7	-71.9	-8.7%	-13.9%
Nondurable Goods	211.2	228.3	237.9	-17.1	-26.7	-7.5%	-11.2%
<b>Service-Providing Industries</b>	4,328.3	4,377.0	4,425.3	-48.7	-97.0	-1.1%	-2.2%
Trade, Transportation, and Utilities	1,007.1	1,018.3	1,046.2	-11.2	-39.1	-1.1%	-3.7%
Wholesale Trade	228.7	233.3	237.4	-4.6	-8.7	-2.0%	-3.7%
Retail Trade	582.1	580.5	595.7	1.6	-13.6	0.3%	-2.3%
Transportation, Warehousing, and Utilities	196.3	204.5	213.1	-8.2	-16.8	-4.0%	-7.9%
Information	82.0	85.3	86.8	-3.3	-4.8	-3.9%	-5.5%
Financial Activities	282.1	289.8	293.5	-7.7	-11.4	-2.7%	-3.9%
Finance and Insurance	220.3	227.1	229.0	-6.8	-8.7	-3.0%	-3.8%
Real Estate and Rental and Leasing	61.8	62.7	64.5	-0.9	-2.7	-1.4%	-4.2%
Professional and Business Services	630.5	649.1	675.8	-18.6	-45.3	-2.9%	-6.7%
Professional and Technical Services	242.9	248.4	250.0	-5.5	-7.1	-2.2%	-2.8%
Management of Companies and Enterprises	106.4	107.7	109.4	-1.3	-3.0	-1.2%	-2.7%
Administrative, Support, and Waste Services	281.2	293.0	316.4	-11.8	-35.2	-4.0%	-11.1%
Educational and Health Services	823.1	825.1	809.4	-2.0	13.7	-0.2%	1.7%
Educational Services	107.3	110.8	106.7	-3.5	0.6	-3.2%	0.6%
Health Care and Social Assistance	715.8	714.3	702.7	1.5	13.1	0.2%	1.9%
Leisure and Hospitality	498.7	498.3	496.1	0.4	2.6	0.1%	0.5%
Arts, Entertainment, and Recreation	67.5	68.1	65.6	-0.6	1.9	-0.9%	2.9%
Accommodation and Food Services	431.2	430.2	430.5	1.0	0.7	0.2%	0.2%
Other Services	216.9	217.8	220.5	-0.9	-3.6	-0.4%	-1.6%
Government	787.9	793.3	797.0	-5.4	-9.1	-0.7%	-1.1%
Federal Government	77.5	77.4	77.1	0.1	0.4	0.1%	0.5%
State Government	163.3	166.0	167.0	-2.7	-3.7	-1.6%	-2.2%
Local Government	547.1	549.9	552.9	-2.8	-5.8	-0.5%	-1.0%

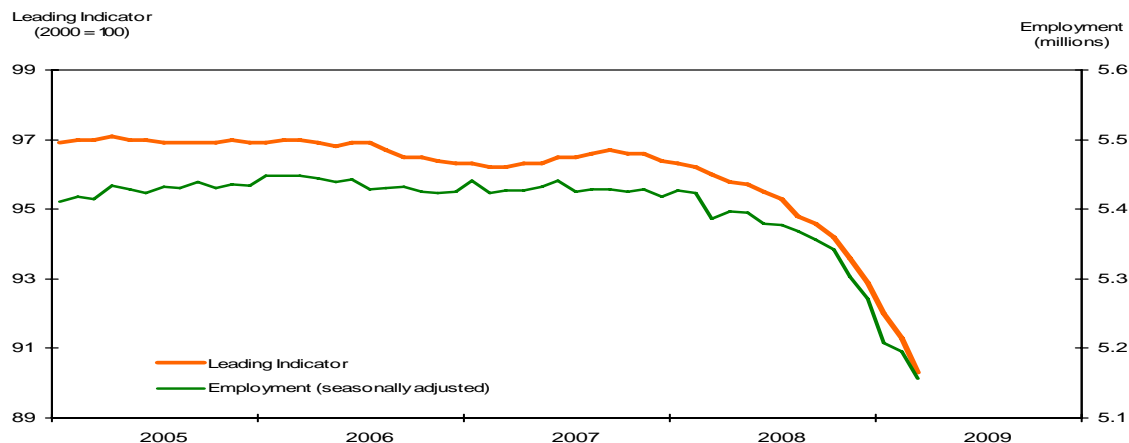
<sup>a</sup>Subtotals may not add to totals due to rounding. All data exclude military personnel.

<sup>b</sup>From the Current Employment Statistics Survey, a monthly survey of approximately 12,100 employers conducted by ODJFS in cooperation with the U.S. Bureau of Labor Statistics. Estimates represent nonagricultural wage and salary jobs by place of work.

## Leading Indicators: Ohio and U.S. (Seasonally Adjusted)

Ohio's composite index of leading indicators declined from 93.6 to 91.2 for the first quarter of 2009. The composite index was lower than for the first quarter of 2008. The national composite index of leading economic indicators decreased from 99.1 to 98.4, and this was lower than the first quarter of 2008.

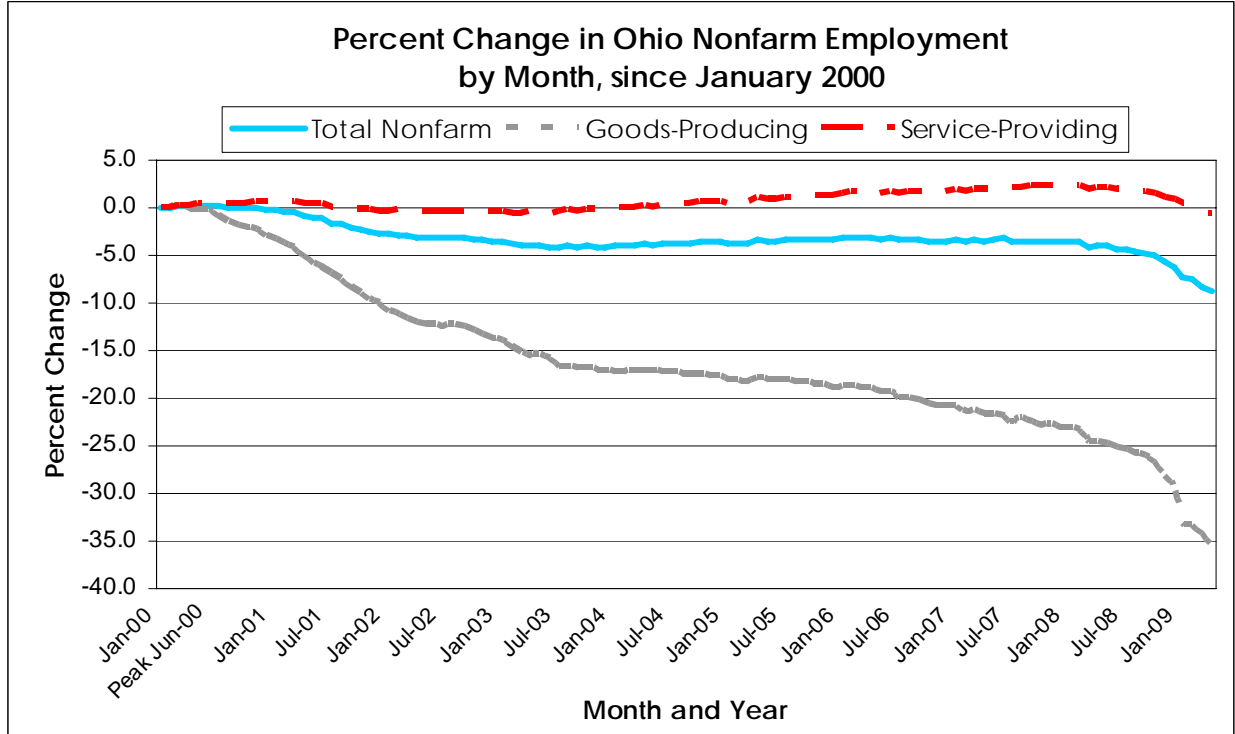
### Ohio Leading Indicator and Employment



The first quarter averages of individual Ohio index components (not seasonally adjusted) were poorer than one year ago. Permits and valuation for new housing construction were lower, initial claims for unemployment insurance were higher, and the average weekly hours for manufacturing production workers were lower than for the first quarter of 2008.

Economic Indicators	Data			Change		Percent Change	
	1st Qtr. 2009	4th Qtr. 2008	1st Qtr. 2008	From Last Quarter	From Last Year	From Last Quarter	From Last Year
<b>Ohio</b>							
Leading Indicator Index (2000=100)	91.2	93.6	96.2	-2.4	-5.0	-2.6%	-5.2%
Average Initial Claims for Unemployment Insurance	128,263	113,215	67,489	15,048	60,774	13.3%	90.1%
Average Weekly Hours for Manufacturing	38.0	40.2	41.1	-2.2	-3.1	-5.5%	-7.5%
Average Valuation of Housing Permits (millions of dollars)	131.043	203.386	233.952	-72.343	-102.909	-35.6%	-44.0%
Average Number of Housing Permits	793	1,419	1,374	-626	-581	-44.1%	-42.3%
<b>National Data</b>							
National Composite Index of Leading Economic Indicators (1996=100)	98.4	99.1	102.2	-0.7	-3.8	-0.7%	-3.7%
U.S. Domestic Auto Production (annualized in millions)	1.702	3.254	4.118	-1.552	-2.416	-47.7%	-58.7%
Difference between 10-Year and 1-Year Treasuries, Constant Maturities	2.17	2.26	1.56	-0.09	0.61	-4.0%	39.1%
Average Number of Housing Permits	39,412	47,273	75,568	-7,861	-36,156	-16.6%	-47.8%

## Trends in Ohio Nonagricultural Wage and Salary Employment



- Since January 2000, Ohio's goods-producing industries (manufacturing, construction and natural resources and mining) have lost 35.7 percent of their employment while service-providing industries have dropped 0.6 percent.
- In comparison, the U.S. has lost 21.9 percent of the employment in goods-producing industries while service-providing industries increased 6.6 percent.

## Jobs Gained or Lost

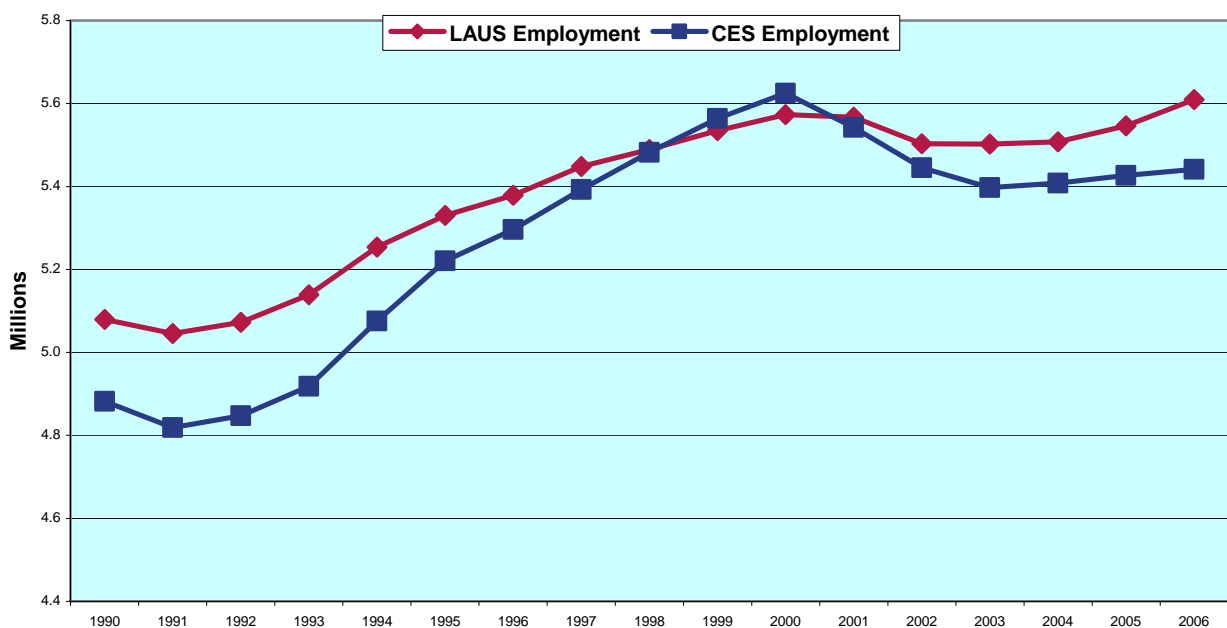
### Current Employment Survey (CES)

The most reliable and most easily understood statistic on jobs is the nonagricultural wage and salary employment which comes from the Current Employment Survey (see the Technical Notes section for more detail). This business establishment survey tracks most closely with business cycle changes and is the statistical source most heavily relied on by labor economists, including those at the Bureau of Labor Statistics. It provides information on jobs lost or gained from month-to-month and over the year. The trend in nonagricultural employment is CES data. Of course, there is considerable dynamic activity behind these figures in respect to job changes, layoffs and hiring activity, which in themselves are not represented in the net job statistic.

### Local Area Unemployment Statistics (LAUS) and Current Population Survey (CPS)

The employment numbers published under the Employment Situation Indicators chart for Ohio (LAUS data) earlier in this packet are heavily dependent on the Current Population Survey (often referred to as the "Household" survey). These figures are useful for understanding the unemployment rate and can be useful for the labor economist's analysis of what is happening in the labor market. However, as a general measure of job growth or decline and corresponding public announcements, it has proven problematic. The CPS for Ohio contains a small sample of households, tends to be highly volatile and is benchmarked (i.e., controlled to a known universe) only once every 10 years with the decennial census. It has not proven to be a good measure of business cycles. For example, the LAUS employment numbers showed only a slight decline at the onset of the 2001 recession and a much more rapid recovery in 2005 and 2006 than indicated by the CES data (see chart below). The LAUS data have no measure of job loss or gain by industry.

**Ohio LAUS and CES Employment Trends, 1990-2006**



## Mass Layoff Announcements

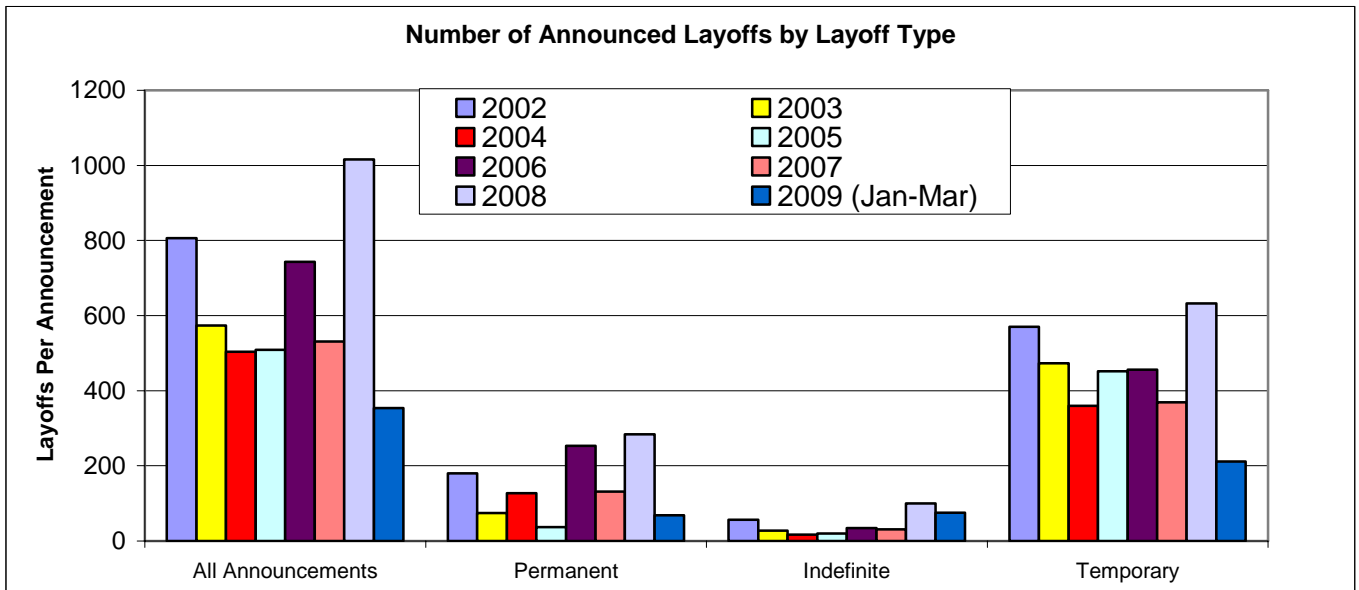
Mass layoff announcements are reported by the business entity. These statistics have proven useful to explain major shifts in the employment situation that may occur at the local level from one month to another. However, they must be used with caution, particularly when considering them at a summary level or as a state-wide indicator. These statistics have the following caveats.

- ODJFS requests employers to provide the greatest number of workers potentially affected and actual numbers are normally less.
- Any employer may announce mass layoffs multiple times and/or for multiple locations over the year.
- There is no formal process or monitoring to assure consistent reporting.
- These numbers are reported “intent” and are never independently verified.
- They may be reported but then circumstances change that decrease the size of the layoff or eliminate the need for a layoff.
- Even if a layoff materializes, it does not necessarily mean people are unemployed as a result. They may retire, work part time, take severance pay or find another job.
- A number of the reported layoffs are part of a normal business cycle, where the business normally restricts operations for product change-over, inventory processes or because of seasonal demand cycles.
- Some layoffs are very short lived, while others could take a year or more to complete. There is no precise measure of timing.

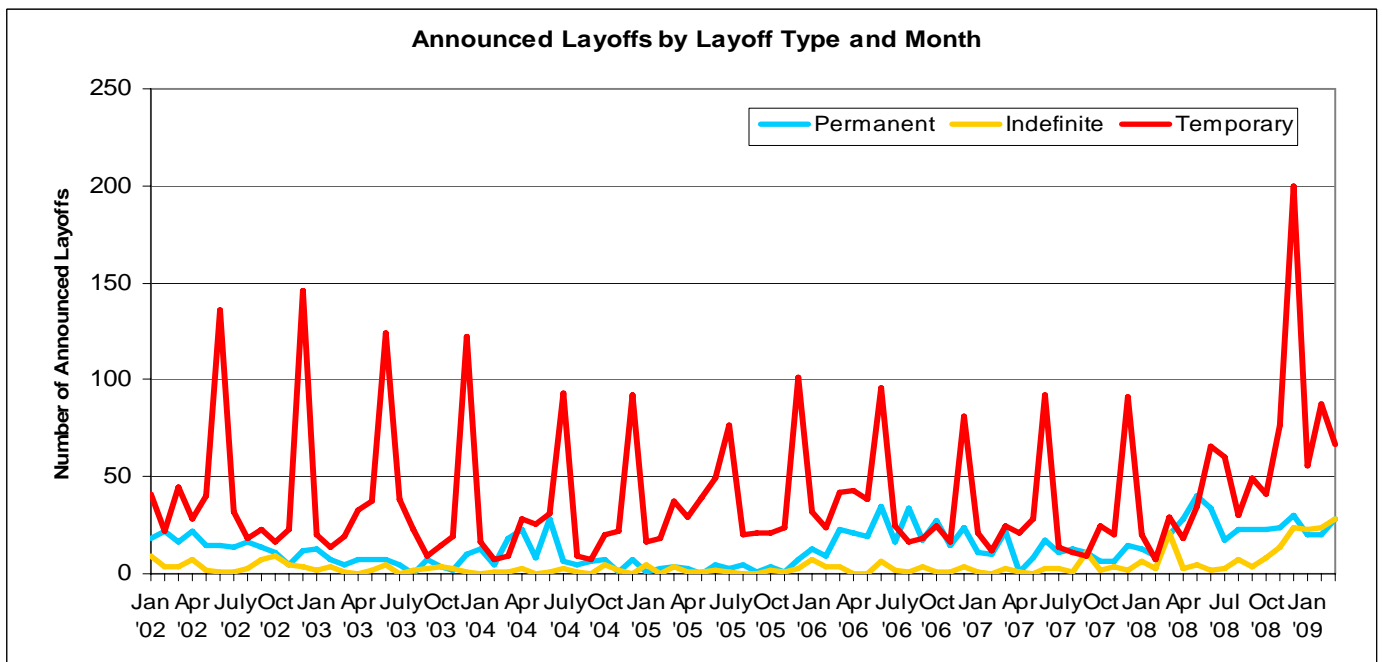
See Mass Layoff Announcements table and graph on next page.

## Mass Layoff Announcements, 2002 to March 2009

Year	Layoff Announcements	Announced Laid Off	Permanent Layoffs		Indefinite Layoffs		Temporary Layoffs	
			Events	Employees	Events	Employees	Events	Employees
2002	806	147,385	180	14,563	56	6,969	570	125,853
2003	574	128,497	74	9,187	27	3,201	473	116,109
2004	504	100,098	127	12,240	17	1,781	360	86,077
2005	509	131,712	37	4,894	20	2,072	452	124,746
2006	743	131,628	253	13,481	34	3,224	456	114,923
2007	531	95,454	131	6,822	31	3,331	369	85,301
2008	1,016	202,657	284	12,305	100	20,671	632	169,681
2009 (Jan-Mar)	354	66,882	68	4,135	75	11,630	211	51,117



The graph below is an example of the highly seasonal nature of these mass layoff announcements.





## **Related Information**

## Related Information

**IHS Global Insight Analysis:** IHS Global Insight, an international economic analysis firm, reports that the rate of decline appears to be slowing. They now predict that U.S. GDP will decline 3.1 percent in 2009 and increase 1.5 percent in 2010. Consumer spending is expected to be flat through the second quarter. Business inventories are declining, which is necessary for future growth. Key indicators of housing activity are stabilizing, but tight credit is still a problem. Business investment took a steep drop during the first quarter. Business equipment expenditures are expected to increase late in 2009, but investment in structures will decline until mid-2010. Employment will lag the recovery and is not expected to rebound until the second quarter of 2010. IHS Global Insight expects national unemployment to peak at 10.2 percent; Ohio unemployment is expected to peak at about 11.6 percent.

**Other Economic Indicators:** The Conference Board's Help-Wanted Online Data Series increased by 250,000 ads in May. This was the largest increase in online job vacancies since October 2006. Ohio had a small increase of 800 posted vacancies. Ohio's supply/demand rate, the ratio of the number of unemployed to the number of advertised job vacancies, was 6.16 in May, above the national average of 4.40 and seventh highest rate among the states.

Consumer confidence increased in May according to the Conference Board. The Consumer Confidence Index rose to 54.9 in May from 40.8 in April. The Present Situation Index increased to 28.9 from 25.5, and the Expectations Index increased to 72.3 from 51.0. The percentage of consumers expecting more jobs in the months ahead increased to 20.0 percent from 14.2 in April.

# Technical Notes

## Data Sources and Additional Resources Links

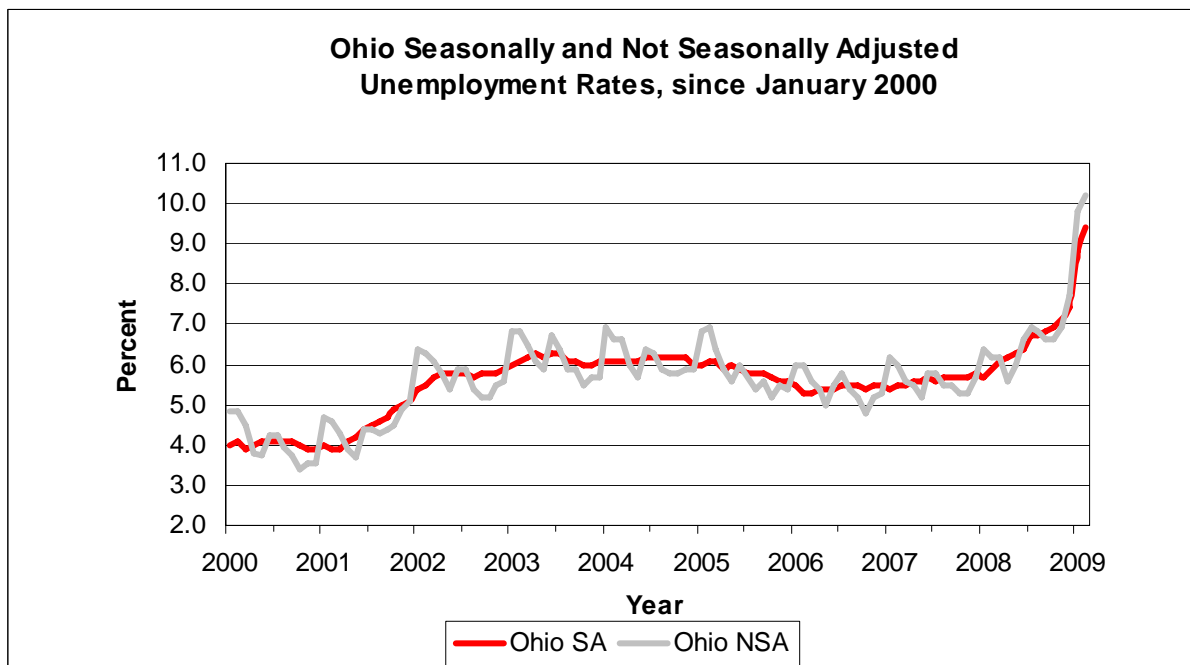
### Seasonal Adjustment

Ohio and U.S. unemployment rates and labor force data are published monthly by the BLS. Two sets of data are published: seasonally adjusted data and not seasonally adjusted data. County data are not seasonally adjusted because seasonal adjustment factors tend to be unreliable for small areas.

Seasonal adjustment is used to remove fluctuations in unemployment and labor force trends that normally occur with changes in the season. The removal of seasonal variation allows evaluation of the unemployment rates as an indicator of economic change.

Seasonal variation in the employment situation occurs for a variety of natural and institutional reasons. Examples include reduction of employment involving outdoor activities during winter, large changes in labor force and unemployment levels with opening and closing of schools, and employment reductions during the automobile model changeover period. The overall impact of such events is a seasonal rise in unemployment rates during the winter months, usually peaking in January and February, and a drop in unemployment rates during the spring and late summer with May and September typically the low months.

The graph below presents the wide month-to-month changes that occur in the not seasonally adjusted data which reinforces our use of seasonally adjusted data, when available.



## Unemployment Rates and Related Data

### Employment Situation: Ohio and U.S

U.S. data are derived from a national household survey known as the Current Population Survey (CPS). This survey is conducted monthly by the U.S. Bureau of the Census for the U.S. Bureau of Labor Statistics (BLS). The survey collects data on the demographic characteristics and labor force status of household members, including employment and unemployment from approximately 60,000 households.

Ohio data are developed in cooperation with the BLS using the State Time Series Analysis and Review System (STARS). This method relies heavily on monthly unpublished CPS data as well as current wage and salary employment and unemployment insurance statistics. The time series model is designed to provide data on employment of all types of workers, based on place of residence.

### Ohio Monthly Unemployment Insurance Initial Claims

Initial claims information was obtained from administrative records of the Ohio unemployment compensation program, operated by the Ohio Department of Job and Family Services.

An initial claim is defined as any notice of unemployment filed to request a determination of entitlement to and eligibility for compensation, or to begin a second or subsequent period of eligibility within a benefit year. Initial claims counts presented in this report include new, additional, transitional, and interstate agent claims. Beginning in January 2005, transitional claims are excluded from counts since they do not represent newly unemployed workers.

### Average Duration of Unemployment and Unemployment Insurance Benefit Exhaustions: Ohio and U.S

Average duration of unemployment was calculated as the total number of weeks compensated for the previous 12 months divided by the total number of first payments for the same 12 month period. First payment is defined as the first payment in a benefit year for a week of unemployment.

Exhaustion rates were calculated as the number of claimants exhausting benefits divided by the number of claimants' first receiving benefits two quarters earlier.

Quarterly totals for average duration of unemployment and number of exhaustions in the U.S. and Ohio were obtained from the U.S. Department of Labor, Employment and Training Administration (ETA). The national ETA office collects unemployment data from the states, then compiles and redistributes state and national unemployment insurance statistics through a required reporting mechanism in which all states participate.

The Claims and Payment Activities report (ETA-5159) serves as the basis for these figures. The DOL-ETA site is listed below.

<http://workforcesecurity.doleta.gov/unemploy/content/data.asp>

### **Unemployment Rates for U.S. and Eight Largest States**

The unemployment rates presented are the most recent seasonally adjusted data available from BLS for the nation's eight most populated states. This graph includes data for the three months prior to the current reference month because some the states presented release data after the Ohio release date. URL web links for each State are present below and are the quickest source of the most current data.

California	<a href="http://www.labormarketinfo.edd.ca.gov">http://www.labormarketinfo.edd.ca.gov</a>
Florida	<a href="http://www.labormarketinfo.com/laus/">http://www.labormarketinfo.com/laus/</a>
Illinois	<a href="http://lmi.ides.state.il.us/laus/illaus_seasadj.htm">http://lmi.ides.state.il.us/laus/illaus_seasadj.htm</a>
Michigan	<a href="http://www.milmi.org/">http://www.milmi.org/</a>
New York	<a href="http://www.labor.state.ny.us/">http://www.labor.state.ny.us/</a>
Ohio	<a href="http://OhioLMI.com/LAUS/Current.htm">http://OhioLMI.com/LAUS/Current.htm</a>
Pennsylvania	<a href="http://www.paworkstats.state.pa.us">http://www.paworkstats.state.pa.us</a>
Texas	<a href="http://www.tracer2.com/?PAGEID=67&amp;SUBID=120">http://www.tracer2.com/?PAGEID=67&amp;SUBID=120</a>

### **Ohio County Unemployment Rates**

Ohio sub-state employment and unemployment estimates are developed using a complex "building-block" methodology, prescribed by BLS. The methodology creates first approximation estimates of the employed and unemployed which are then proportionately adjusted so that they add to the state totals. A more complete statement of methodology may be found at: <http://OhioLMI.com/LAUS/Concepts.htm>.

Data for Ohio's sub-state areas are not seasonally adjusted because seasonal adjustment factors for small areas tend to be unreliable.

## Employment Data

### **Ohio Nonagricultural Wage and Salary Employment**

Ohio nonfarm employment data are derived from an employer survey known as the Current Employment Survey (CES). This survey is conducted monthly by ODJFS/BLMI, in cooperation with the BLS. The data are compiled from voluntary reports from 11,800 Ohio employers. The employer survey provides data on total employment, and on hours and earnings of production workers, by type of industry.

The employer survey does not include the self-employed, unpaid family workers, private household workers, agricultural workers, or those on strike or unpaid vacation and are based on place of work. Analysts generally regard the nonfarm data as the most reliable indicator of the current economic conditions due to its large sample size and the fact that the data are benchmarked annually to the complete count of employment from administrative unemployment insurance records.

### **Trends in Ohio Nonagricultural Wage and Salary Employment**

Goods-producing industries include natural resources and mining, construction, and manufacturing. Service-providing industries include trade, transportation and utilities, information, financial activities, professional and business services, educational and health services, leisure and hospitality, other services, and government.

### **Web Links for additional information**

U.S. Bureau of Labor Statistics site: <http://www.bls.gov>

Ohio Bureau of Labor Market Information site: <http://OhioLMI.com>

**Office of Workforce Development  
P.O. Box 1618  
Columbus, OH 43216-1618**

**Bureau of Labor Market Information  
Business Principles for Workforce Development**

Partner with the workforce and economic development community.

Develop and deploy new information solution tools and systems for the workforce and economic development community.

Provide products and services that are customer and demand driven.

Be known as an important and reliable source for information solutions that support workforce development goals and outcomes.

This quarterly report was prepared by the Ohio Department of Job and Family Services to meet the requirements of the Ohio Revised Code 6301.10.

For further information, visit us on the web at <http://OhioLMI.com> or contact the Ohio Bureau of Labor Market Information at 1-888-296-7541.

**Ted Strickland**, Governor  
State of Ohio

**Douglas E. Lumpkin**, Director  
Ohio Department of Job and Family Services

Office of Workforce Development  
Bureau of Labor Market Information  
(6/2009)

Equal Opportunity Employer and Service Provider