

Northeast  
Ohio  
Economic  
Review

December 2007

*Northeast Ohio's  
economy up 31%  
from 15 years ago.*

Welcome to the fourth edition of our quarterly regional Economic Review for Northeast Ohio, the only publication that describes the state of the economy in the 16-county Cleveland Plus™ region. This installment takes a deeper look at the occupations that are growing and the effect our mix of jobs has on the standard of living in Northeast Ohio.

## Economic Review Highlights for 2007

2007 marked the launch of the Northeast Ohio Economic Review. The publication was established to provide an aggregate look at Northeast Ohio's economy. This 2007 overview offers a comprehensive understanding of our region's economy and guided direction for economic growth as we move into 2008.

### Growing Economy

This may seem surprising to some, but our economy has grown 14 of the past 15 years. It is actually 31% higher in real dollars than it was in 1992.

### Stronger Manufacturing Sector

Despite strong global competition, manufacturing output is 6% higher than in 1992, driven by strong productivity gains. Most Northeast Ohio manufacturing sectors have grown in double digits. This diversification is changing the face of manufacturing and our region's economic fabric.

### Diversified Economy

Manufacturing output accounts for only 20% of Northeast Ohio's economy. The majority of our economy is comprised of a wide range of growing high-tech, health care and service industries. For instance, the professional, scientific and technical services sector has grown 74% throughout the past 15 years, and strong growth is expected to continue.

### Expanding Industry Sectors and High-Paying Occupations

Evidence of the region's growth in technology and entrepreneurship is shown on the first graph in this report. Computer, math, business, finance and legal jobs have significantly grown in our region since 1992. Growth in these fields is being further accelerated by Ohio's \$300 million Third Frontier grants to Northeast Ohio.

Health care has grown 38% since 1992. With some of the world's best hospitals and research institutions, Northeast Ohio is an exporter of health care services and a producer of next-generation commercialized technologies that are changing the field of medicine. In 2007, the Global Cardiovascular Innovation Center, a new \$250 million research and product development consortium led by the Cleveland Clinic, was launched to attract, incubate and assist companies to commercialize cardiovascular products. Plus, Northeast Ohio is leading the Midwest in biomedical venture investment.

Other growing sectors include retail/wholesale trade, finance, insurance, real estate and management of companies, which have grown up to 88% throughout the past 15 years. Businesses are proving they can succeed globally operating in Northeast Ohio. Goodyear's recommitment to Akron is the latest example. The region's resurgence in entrepreneur activity was highlighted when *Entrepreneur* magazine named Northeast Ohio better for business start-ups than Boston and San Francisco.

### Higher Standard of Living

Educated professionals and executives are finding increased opportunity in Northeast Ohio as many high-paying occupations are increasing in the region. Plus, with the nation's second largest theater district, one of the world's top three orchestras, newly renovated world-class art museums, three major sports teams and miles of lakefront to enjoy, the region is receiving increased interest. Coupled with a cost of living more than 10% lower than the national average, professionals are enjoying increased per capita personal income, and therefore a higher standard of living here in Northeast Ohio.

### In Summary

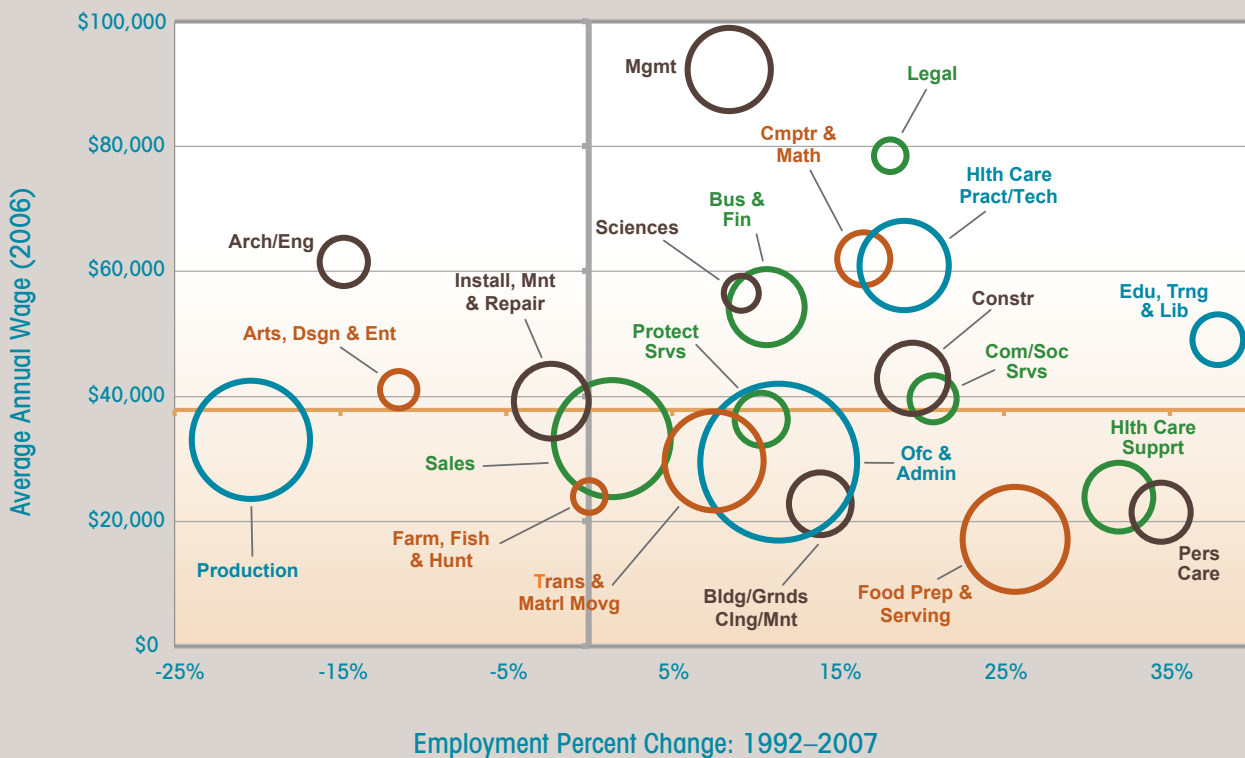
2007 proved to be a year of growth and dynamic transformation. On track for the sixth consecutive year of growth, with employment levels higher than five years ago, and double-digit growth in high tech, biomedical and professional services industries, Northeast Ohio has been successfully diversifying its economy.

# Higher-Paying Jobs Are Growing Faster

Since 1992, we have added 128,000 jobs to the region and the great majority of occupations have grown. Direct production workers, as generally recognized, have been the one large occupation that has declined. Note the average wage for production workers (\$33,000) is actually LESS than the average for all occupations (\$37,800). Total manufacturing employment does bring higher average wages because it also includes many higher-paying occupations, such as engineering, finance and management. Although we have lost 50,000 production workers, we have gained 60,000 new jobs with above average pay.

Viewing the occupations with above average pay, it is evident that they require either more education or higher levels of skill training. These jobs are growing faster, up over 10% since 1992, while below average wage jobs are up less than 6%. The region's mix of occupations is moving toward higher skill levels and higher pay. Higher skilled workers are necessary for the region to have an advantage when competing in a globalized economy.

## Northeast Ohio: Occupational Change



**KEY:**

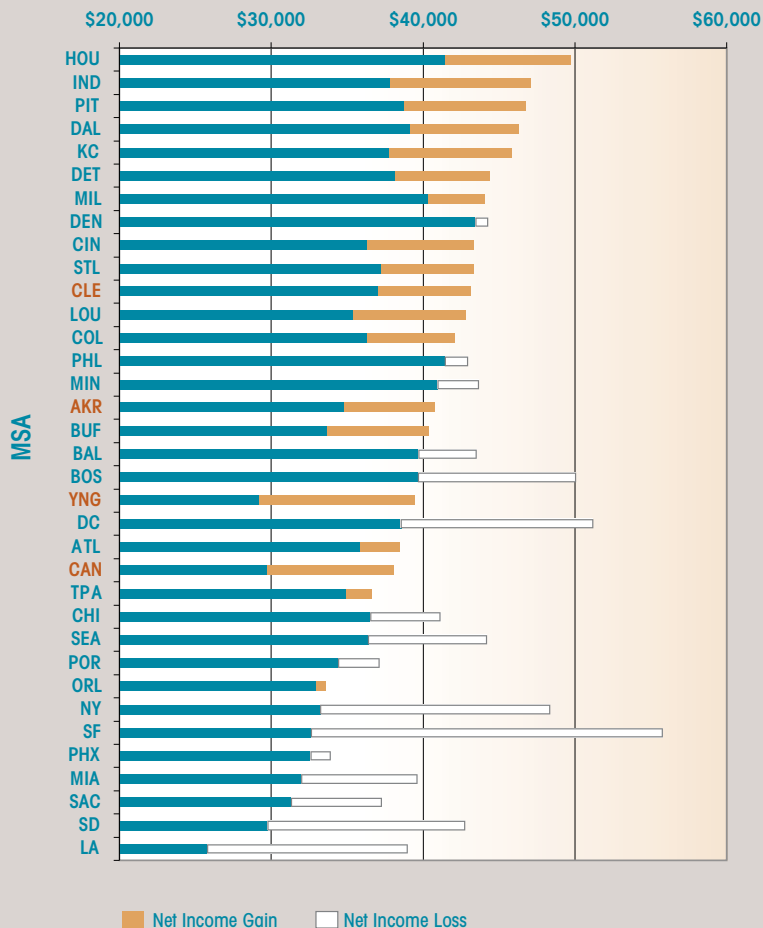
The size of the bubbles in the chart correlates to the size of the occupational group. The vertical scale shows the average annual wage for the occupation. The horizontal scale shows how much employment in that occupation has changed over the last 15 years.

Sources: Employment: Moody's Economy.com  
Average Annual Wage: U.S. Bureau of Labor Statistics (May 2006)

*Management, legal, health care and sciences fields are increasing.*

# You get more bang for your buck in Northeast Ohio.

2006 Per Capita Personal Income by Metropolitan Area  
Adjusted for Cost of Living



*Our cost of living is more than 10% lower than the national average.*

**KEY:**

This graph depicts per capita personal income as adjusted for the cost of living. The highest adjusted income is at the top of the graph. Cities that have a below average cost of living are adjusted upward by adding the orange bar to the teal. Cities with above average cost of living are adjusted downward by reducing the size of the teal bar.

**Sources:** Cost of Living Index: Sperling's Best Places  
Per Capita Personal Income: Bureau of Economic Analysis, Regional Economic Information System

## Cleveland Plus™ Region Outperforms Coastal Cities in Cost of Living Comparison

Per capita personal income is one of the most important economic indicators. We also know that our lower cost of living gives us an advantage. But how much? This chart adjusts the per capita personal income of major metro areas for differences in cost of living. Because the cost of living in Northeast Ohio is more than 10% lower than the national average, each dollar earned in the Cleveland Plus™ region stretches further.

Most notable is the higher reported per capita incomes on the East and West coasts do not make up for their higher living costs. The lowest of the four metro areas in Northeast Ohio has a higher adjusted income than New York City, Orlando, Phoenix, San Francisco and Seattle. In our region, we do world-class work and our pay goes further.

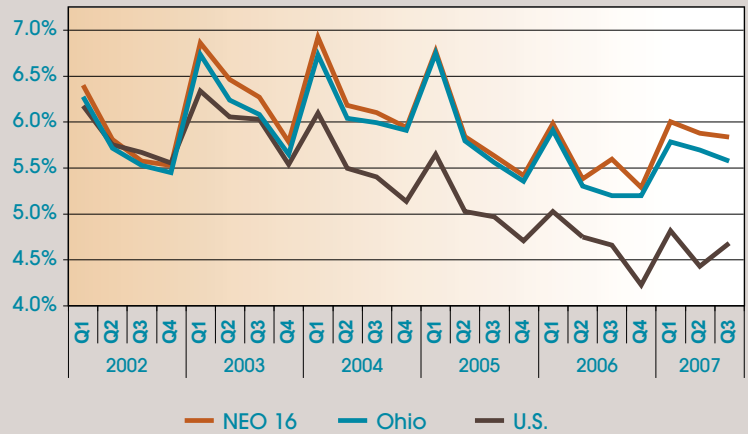
# Northeast Ohio Unemployment Rate Decreases, While U.S. Rate Is On the Rise

In recent quarters, the regional unemployment rate has been following the pattern of both the U.S. and Ohio. Although the trends have been similar, the U.S. rate was better than that of both Ohio and the 16-county Cleveland Plus™ region. In the third quarter the gap closed slightly as Northeast Ohio's unemployment rate decreased by 0.05% and the Ohio rate decreased by 0.12%, while the total U.S. rate increased by 0.23%.

The total number of participants in Northeast Ohio's labor force increased by 5,500 compared to a year ago, while the total number employed was the same as last year. Compared to unemployment rates from Q3 2006, Northeast Ohio increased by 0.24%, Ohio by 0.37% and the U.S. had an increase of 0.02%.

The slower economic growth across the country is evident as well in the Northeast Ohio unemployment picture. For the longer term, the increase in the labor force is positive for future growth.

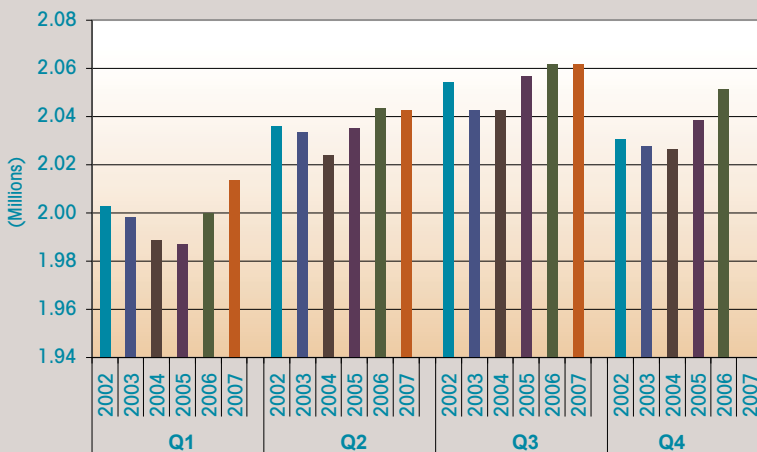
## Quarterly Unemployment Rate



Source: Ohio Labor Market Information (LAUS Data)

# Cleveland Plus™ Region Employment on Track to Be the Highest Since 2002

## Northeast Ohio Total Employment (Not Seasonally Adjusted)



Source: Ohio Labor Market Information (LAUS Data)  
 Note: Q4 2007 data was not available at time of production.

This chart shows the total jobs in Northeast Ohio without seasonal adjustment. Looking at the history for each quarter makes it easier to see year-to-year comparisons. The overall trend also illustrates the seasonal pattern in employment. Total jobs usually are highest in Q3 and lowest in Q1.

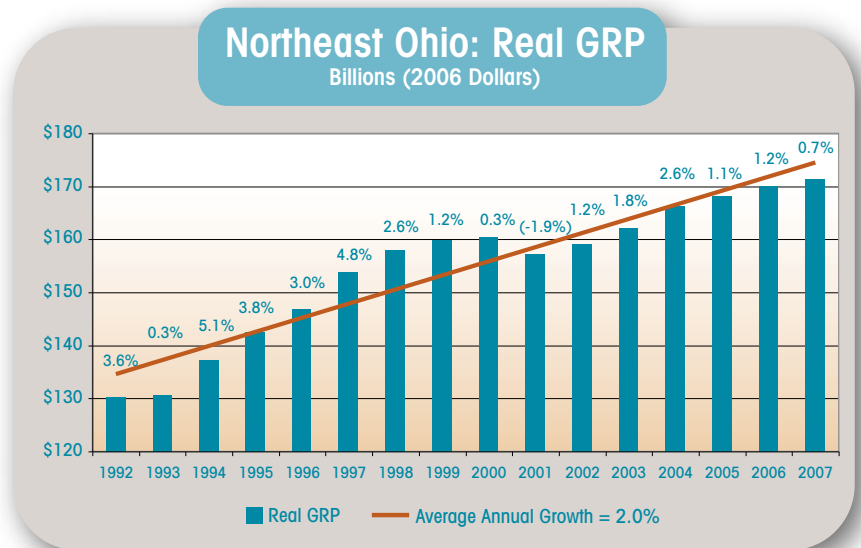
The employment levels for each quarter in 2007 have been above or generally equal to the comparable quarters in 2006. In every case, employment has been higher than five years ago.

Total employment has decreased from Q3 to Q4 in each year from 2002 to 2006, with 2006 having the smallest decrease of just 10,300. Assuming the Q4 2007 total employment change is within the "normal" range of the past five years, the full year of 2007 will outpace 2006 as the highest average annual employment since 2002.

# The economy in Northeast Ohio has grown in 14 of the last 15 years.

## Northeast Ohio Experiencing Sixth Consecutive Year of Growth

Northeast Ohio's economy is seeing its sixth consecutive year of growth and has grown in 14 of the last 15 years. Our GRP in real dollars has increased by \$41 billion or 31% from 1992–2007. Previous editions of this report have shown the biggest gains have come from service industries. Contrary to conventional wisdom, manufacturing output also is higher than 15 years ago. The Cleveland Plus™ economy is diversifying and becoming more technically oriented.



Source: Moody's Economy.com

Although we are seeing steady growth, the Northeast Ohio average annual growth rate of 2.0% lags behind the U.S. growth rate of 3.6%. This comparison is typical for states in the Great Lakes region. This GRP chart has been updated to reflect the most recent data available and therefore has been revised downward for 2006 (1.5% to 1.2%) and 2007 (1.0% to 0.7%).

## Data Sources

Team Northeast Ohio uses a number of data sources for the Regional Economic Review. One of the primary sources is the Moody's Economy.com ([www.economy.com](http://www.economy.com)) regional modeling system. This firm is the leading independent provider of economic, financial and industry research and data that specializes in national and metropolitan economic growth forecasts. Moody's Economy.com county level output, employment and payroll historical data are estimated from several publicly available sources and are summarized into the Team NEO regional footprint. It is important to understand data provided by Economy.com are estimates of economic activity.

Team NEO also uses data from federal and state sources as part of the report. As with Economy.com, the information for the Team NEO footprint is derived from data reported at either the county or metropolitan level. We rely heavily on data from the U.S. Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)) and Ohio's Labor Market Information ([www.lmi.state.oh.us](http://www.lmi.state.oh.us)) for information on wages, unemployment and both general and industry-specific employment. In addition, Team NEO uses data from the Census ([www.census.gov](http://www.census.gov)) to track housing-related activity including the number of single and multifamily permits, as well as their values.



This report made possible through the generous support of Charter One Foundation.

737 Bolivar Road, Suite 2000  
Cleveland, Ohio 44115  
[www.teamneo.org](http://www.teamneo.org)  
888.NEO.1411  
[www.clevelandplusbusiness.com](http://www.clevelandplusbusiness.com)