

# EMPLOYMENT in New York State

David A. Paterson, Governor

September 2008

M. Patricia Smith, Commissioner

## Department Introduces New Economic Index (Part 2)...

### Tracking the New York State Economy

Last month, we discussed how the National Bureau of Economic Research (NBER) determines the starting and ending dates of U.S. recessions. We also reviewed some of the challenges involved in measuring state-level economies, and saw that recessions in New York State have tended to last much longer than their national counterparts. Here, we focus our attention on a new monthly economic index developed by the New York State Department of Labor, which serves as the trigger for transfers from the state "rainy day" reserve fund.

#### Composite Economic Indexes

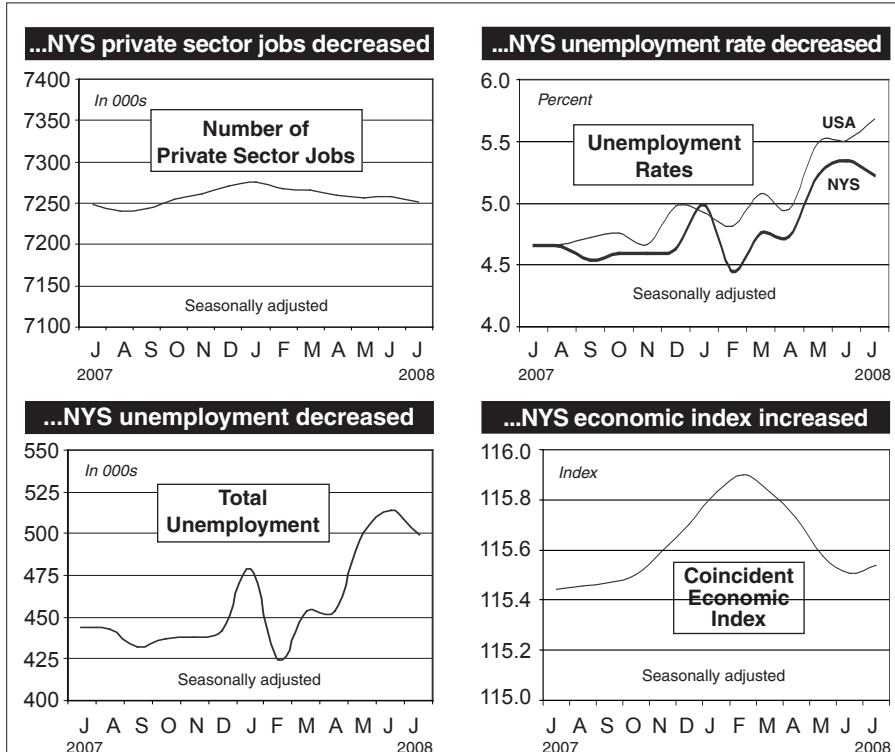
As noted in our last issue, economic data often provide conflicting signals about

the current health of the economy. To remedy this shortcoming, analysts often use a composite index, which combines at least two economic indicators into a single measure. There are a number of well-known composite indexes for the U.S. economy, such as those published by the Conference Board. However, the federal government does not publish official composite indexes for individual states, making it difficult to track the direction and strength of current economic activity.

The State Labor Department developed a new economic index, more formally known as the Index of Coincident Economic Indicators (ICEI). A coincident index is comprised of economic indicators whose

*Continued on page 2*

### IN JULY...



#### At a Glance

In July 2008, New York's seasonally adjusted unemployment rate was 5.2 percent, down from 5.3 percent in June 2008. The nation's unemployment rate was 5.7 percent in July. In July 2008, the state had 8,771,800 nonfarm jobs, including 7,251,300 private sector jobs, after seasonal adjustment. The number of private sector jobs in the state decreased by 0.1 percent from June. The U.S. private sector job count decreased by 0.1 percent over the month. From July 2007 to July 2008, the number of private sector jobs increased by 0.2 percent in the state and decreased by 0.5 percent in the U.S. (not seasonally adjusted). In addition, New York State's Index of Coincident Economic Indicators increased in July.

#### Change in Nonfarm Jobs July 2007 - July 2008 (Data not seasonally adjusted, numbers in thousands)

	Net	%
Total Nonfarm Jobs	22.4	0.3
Private Sector	13.9	0.2
Goods-producing	-21.0	-2.3
Nat. res. & mining	0.2	2.9
Construction	-2.9	-0.8
Manufacturing	-18.3	-3.3
Durable gds.	-7.4	-2.3
Nondurable gds.	-10.9	-4.8
Service-providing	43.4	0.6
Trade, trans., & util.	-3.6	-0.2
Wholesale trade	-3.3	-0.9
Retail trade	-4.2	-0.5
Trans., whrs., & util.	3.9	1.5
Information	3.9	1.5
Financial activities	-10.6	-1.4
Prof. & bus. svcs.	0.0	0.0
Educ. & health svcs.	32.2	2.1
Leisure & hospitality	8.8	1.2
Other services	4.2	1.2
Government	8.5	0.6

# Focus on the Capital Region

## "Significant Industries" in the Capital Region

by Jim Ross, Labor Market Analyst, Capital Region

**T**ight money makes for tough choices. A recurring challenge facing the workforce development system is how to encourage local workforce investment boards (LWIBs) to use current labor market information to select priority industries (and priority occupations within them) in which to invest their limited funds. The significant federal funding cutbacks New York State has experienced in recent years make this task critical; Workforce Investment Act (Title I) funding in the state fell 48 percent -- from \$305.0 million in 2000 to \$159.2 million in 2008.

To help LWIB officials make informed workforce development policy and investment decisions, labor market analysts in the Division of Research and Statistics developed lists of "Significant Industries." We used several factors to compile these lists, including overall industry size, average wage level, and job growth (both net and percent) between the first half of 2003 and the first half of 2007. Industries that ranked highly on these measures went on statewide and regional lists of significant industries and we included industries identified as priorities of local economic development or workforce development officials.

We identified 10 "Significant Industries" in the Capital Region. They are presented in the table that follows.



**"The Department of Labor has advanced workforce development efforts in New York by identifying regional "Significant Industries" throughout the state."**

*Bruce Herman,  
Deputy Commissioner  
for Workforce Development*

NAICS Code	Industry Name
236	Construction of buildings
238	Specialty trade contractors
325	Chemical mfg.
334	Computer & electronic product mfg.
541	Professional, scientific & tech. services
551	Mgmt. of companies & enterprises
611	Educational services
621	Ambulatory health care services
622	Hospitals
922	Justice, public order & safety activities

### Data Highlights

Stability and slow but steady, long-term growth are the hallmarks of the Capital Region's labor market. Much of this is accounted for by the fact that public ad-

ministration, health care, and education -- sectors often insulated from the business cycle -- account for relatively large shares of the area's employment base.

"Significant Industries" accounted for about one-third (33 percent) of all jobs in the Capital Region in the first half of 2007. During that period, jobs in those industries paid, on average, \$928 per week. This was almost 20 percent higher than the \$783 average for all industries (public and private) in the region. Between the first half of 2003 and the first half of 2007, the job count in the region's 10 significant industries grew by 7.7 percent. In contrast, total combined employment in all other industries not deemed to be "significant" actually declined by 0.2 percent over this period.

Educational services is the region's largest "Significant Industry", with almost 56,800 jobs in 2007. It was also one of the region's top job generators, as its employment count grew by 2,600 from 2003 to 2007. Many elementary and secondary school teachers are on the verge of retirement. Thus, educating and training our next generation of teachers may be the most important priority for the region's future economic development. In addition, the area's colleges and universities have helped to attract many high-tech firms, drawn by

*Continued on page 3*

### Tracking the NYS Economy... from page 1

movements historically tend to move in conjunction and coincide with overall economic activity. The other types of economic indicators are leading and lagging. As far back as the 1930s, NBER economists Arthur Burns and Wesley Mitchell developed a list of almost 500 indicators that fell into one of these three categories.

The ICEI is the equivalent of a weather report -- it indicates how New York State's economy is performing today. (However, it does not predict how New York State's economy may be performing in the future -- that is the job of an index of leading economic indicators.) Leading indicators, which typically include housing permits, initial claims for unemployment, stock prices, and interest rate spread, forecast economic conditions approximately 12 months into the future.

The four indicators that comprise the department's ICEI and their statistical contribution to changes in the monthly index include: private sector employment (76%); average weekly hours of manufacturing workers (13%); unemployment rate (9%); and sales tax collections (3%). All four indicators are adjusted for seasonal variation. These calculated statistical contributions are not unusual; employment is typically the most important contributor to monthly changes in this type of statistical model. As noted last month, when a detailed composite economic index is not available, a common default strategy is to use payroll employment as a proxy for overall economic activity in a region or state.

### Index Interpretation

The department's ICEI model provides a composite reading on the overall health of

the state's economy in a single measure. In general, when it demonstrates a prolonged upward trend, we believe the New York State economy is expanding. An occasional month or two of downward movement in the ICEI does not indicate a recession or even deteriorating economic conditions. However, a sustained downward trend does indicate a probable recession.

Changes in the value of the ICEI have important financial implications for the state. Five consecutive monthly declines in the Index serve as the trigger for the release of money from the State's "rainy day" reserve fund, which was created to respond to an economic downturn. Transfers from the "rainy day" fund end when either the ICEI increases in value for five consecutive months or 12 months

*Continued on page 3*

## Unemployment Rates in New York State

Data Not Seasonally Adjusted

	JUL '07	JUL '08		JUL '07	JUL '08		JUL '07	JUL '08
<b>New York State</b>	<b>4.9</b>	<b>5.4</b>	<b>Hudson Valley</b>	<b>4.1</b>	<b>5.1</b>	<b>Finger Lakes</b>	<b>4.5</b>	<b>5.5</b>
<b>Capital District</b>	<b>4.0</b>	<b>5.0</b>	Dutchess	4.1	5.3	Genesee	4.1	4.9
Albany	4.1	5.0	Orange	4.5	5.6	Livingston	4.5	5.7
Columbia	3.9	4.9	Putnam	3.5	4.6	Monroe	4.6	5.6
Greene	4.7	5.8	Rockland	4.2	5.1	Ontario	3.8	4.7
Rensselaer	4.3	5.3	Sullivan	4.7	5.9	Orleans	5.9	7.1
Saratoga	3.6	4.4	Ulster	4.6	5.5	Seneca	4.0	5.1
Schenectady	4.3	5.2	Westchester	3.9	4.9	Wayne	4.4	5.4
Warren	3.7	4.7	<b>Mohawk Valley</b>	<b>4.5</b>	<b>5.5</b>	Wyoming	4.2	5.1
Washington	4.0	5.1	Fulton	5.2	6.1	Yates	3.9	4.3
<b>Central New York</b>	<b>4.4</b>	<b>5.5</b>	Herkimer	4.2	5.4	<b>Western New York</b>	<b>4.9</b>	<b>5.9</b>
Cayuga	4.4	5.3	Montgomery	5.9	6.7	Allegany	5.8	6.6
Cortland	4.8	5.9	Oneida	4.2	5.2	Cattaraugus	5.1	5.8
Madison	4.3	5.6	Otsego	4.2	5.3	Chautauqua	4.4	5.4
Onondaga	4.1	5.3	Schoharie	5.4	6.1	Erie	4.9	5.8
Oswego	5.3	6.7	<b>North Country</b>	<b>5.2</b>	<b>6.1</b>	Niagara	5.2	6.6
<b>Southern Tier</b>	<b>4.5</b>	<b>5.5</b>	Clinton	5.6	6.3	<b>Long Island</b>	<b>4.0</b>	<b>5.0</b>
Broome	4.5	5.6	Essex	4.6	5.1	Nassau	3.9	4.9
Chemung	4.7	5.7	Franklin	5.0	6.1	Suffolk	4.1	5.2
Chenango	4.6	5.9	Hamilton	2.8	3.3	<b>New York City</b>	<b>5.8</b>	<b>5.4</b>
Delaware	4.2	5.8	Jefferson	4.7	5.8	Bronx	7.8	7.2
Schuyler	4.6	5.2	Lewis	4.5	5.6	Kings	6.4	5.9
Steuben	4.9	5.9	St. Lawrence	5.9	6.9	New York	5.0	4.6
Tioga	4.5	4.9				Queens	5.1	4.8
Tompkins	3.8	4.6				Richmond	5.6	5.2

### Capital Region..

from page 2

the region's record of quality scientific research and high concentration of educated and skilled workers.

Professional, scientific and technical (PS&T) services accounted for 29,500 jobs in 2007, making it the second largest "Significant Industry" in the Capital District. PS&T services includes much of the region's high-technology employment. Occupations within the industry include a significant number of STEM (science, technology, engineering and math) titles, most of which pay well above average wages.

The interaction between educational services and PS&T services is beginning to transform the region into a more dynamic labor market. This is perhaps best exemplified by the ongoing expansion of SEMATECH at the University at Albany campus. SEMATECH is a consortium of the world's leading semiconductor companies, whose aim is to pool resources for early-stage research in key areas of semiconductor technology. The consortium announced plans to create the United Nanoelectronics Institute for Technology and Education, a joint partnership with UAlbany's College of Nanoscale Science and Engineering.

The complete "Significant Industries" report is available online at: [www.labor.ny.gov/workforceindustry-data/PDFs/Significant%20Industries%20Report\\_0508.pdf](http://www.labor.ny.gov/workforceindustry-data/PDFs/Significant%20Industries%20Report_0508.pdf).

### Tracking the NYS Economy...

from page 2

from the date when transfers initially commenced, whichever occurs earlier. However, for each additional, consecutive monthly decline that follows the initial five-month drop, we extend the 12-month lapse date by another month.

After backtesting of almost 40 years of data, we found that when the ICEI initially declined for at least five consecutive months, the New York State economy had always entered into a recession. If the trigger requirement was set at less than five straight down months, it is possible that "rainy day" fund transfers would have occurred when the state's economy was not actually in recession. After declining for four straight months through June, the ICEI registered a small increase in July 2008.

### Index Construction

The ICEI utilizes an advanced time-series statistical methodology developed by James Stock of Harvard University and Mark Watson of Princeton University. The basic assumption underlying Stock-Watson models is that each indicator in a model contains some useful information about current economic conditions. However, no single indicator provides a clear and immediate signal of where the state's economy is within the business cycle.

All four indicators in the ICEI are assumed to be influenced by a single, unobserved factor, known as the "state of the economy." This unobserved factor is what the coincident index attempts to measure.

The statistical inter-correlations of the four economic indicators over time suggest the optimal weighting of variables that best represents the "state of the economy" in any given month.

### Summary

The department's new Index of Coincident Economic Indicators appears to effectively detect monthly fluctuations in the New York State economy. It is based on a sophisticated statistical model that combines the latest available economic indicators for the state into a single composite measure. For more information on the department's new ICEI, please visit [www.labor.ny.gov](http://www.labor.ny.gov), click on "Labor Statistics" and then click on "Economic Index" in the left-hand menu bar.

by Kevin Jack

### Employment in New York State

is published 12 times a year. For a change of address, write to the Publications Unit at the address below and provide your old as well as new address.

Division of Research and Statistics  
New York State Department of Labor  
Building 12, State Office Campus  
Albany, N.Y. 12240

Director	Peter A. Neenan
Editor	Kevin Jack
Director of Communications	Leo Rosales
Graphic Design	Jeff Mosher
Labor Publications Supervisor	Christine Perham





OFFICIAL BUSINESS

**FIRST-CLASS MAIL**  
**U.S. POSTAGE PAID**  
 Albany, NY  
 Permit No. 365

## REGIONAL ANALYSTS' CORNER

### FINGER LAKES Tammy Marino 585-258-8870

Private sector employment in the Rochester metropolitan area declined by 3,500, or 0.8 percent, over the year to 434,400 in July 2008. Job gains occurred in educational and health services (+2,500). Employment declines were largest in manufacturing (-2,900), trade, transportation and utilities (-1,400), leisure and hospitality (-500) and construction (-400).

### CENTRAL NY Roger Evans 315-479-3388

For the 12-month period ending July 2008, the private sector job count in the Syracuse metro area fell 500, or 0.2 percent, to 266,300. Job growth was concentrated in educational and health services (+700) and leisure and hospitality (+200). Employment losses were greatest in manufacturing (-700) and trade, transportation and utilities (-600).

### MOHAWK VALLEY Mark Barbano 315-793-2282

For the 12-month period ending July 2008, the private sector job count in the Utica-Rome metropolitan area decreased by 1,400, or 1.4 percent, to 100,100. The largest job gain occurred in educational and health services (+400). Job losses were greatest in manufacturing (-600), trade, transportation and utilities (-500), and financial activities (-400).

### NORTH COUNTRY Alan Beideck 518-891-6680

Private sector jobs in the North Country rose over the year by 700, or 0.6 percent, to 121,600 in July 2008. The largest gains were in trade, transportation and utilities (+500), natural resources, mining and construction (+400), and educational and health services (+400). Financial activities, manufacturing, and other services declined.

### CAPITAL DISTRICT James Ross 518-462-7600

From July 2007 to July 2008, private sector jobs in the Albany-Schenectady-Troy metro area fell 1,000, or 0.3 percent, to 342,300. Gains were focused in educational and health services (+1,600) and professional and business services (+800). Losses were largest in trade, transportation and utilities (-1,300) and leisure and hospitality (-800).

### HUDSON VALLEY John Nelson 914-997-8798

Private sector jobs in the Hudson Valley increased over the year by 1,700, or 0.2 percent, to 767,000 in July 2008. Employment gains were largest in educational and health services (+3,500), natural resources, mining and construction (+1,000), and professional and business services (+1,000). Losses were centered in manufacturing (-1,700) and financial activities (-1,200).

### WESTERN NY John Slenker 716-851-2742

Private sector employment in the Buffalo-Niagara Falls metro area increased by 100 to 454,000 over the 12 months ending July 2008. Job gains were centered in leisure and hospitality (+3,500) and financial activities (+900). The greatest losses occurred in manufacturing (-1,800), natural resources, mining and construction (-1,400), and trade, transportation and utilities (-1,200).

### SOUTHERN TIER Christian Harris 607-741-4485

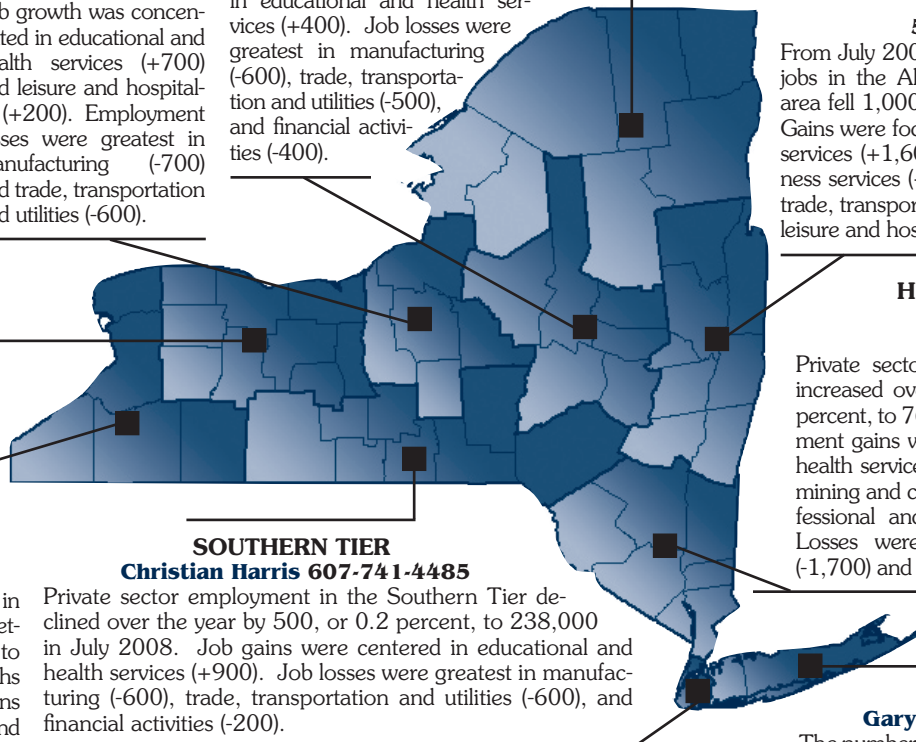
Private sector employment in the Southern Tier declined over the year by 500, or 0.2 percent, to 238,000 in July 2008. Job gains were centered in educational and health services (+900). Job losses were greatest in manufacturing (-600), trade, transportation and utilities (-600), and financial activities (-200).

### NEW YORK CITY James Brown 212-775-3330

Private sector employment in New York City rose 22,700, or 0.7 percent, to 3,199,800 for the 12-month period ending July 2008. Job growth was largest in leisure and hospitality (+8,800), information (+7,400), educational and health services (+7,300), and trade, transportation and utilities (+6,700). Manufacturing (-7,400) and financial activities (-5,100) lost jobs over the year.

### LONG ISLAND Gary Huth 516-934-8533

The number of private sector jobs on Long Island increased over the year by 2,800, or 0.3 percent, to 1,083,500 in July 2008. The largest gains occurred in educational and health services (+5,300), leisure and hospitality (+1,200), and trade, transportation and utilities (+1,200). Employment losses were greatest in financial activities (-3,200) and manufacturing (-2,500).



The New York State Department of Labor is an Equal Opportunity Employer/Program.

Auxiliary aids and services are available upon request to individuals with disabilities.