

8-1-2013

Policy Profiles Vol. 12 No. 2 August 2013

Northern Illinois University Center for Government Studies

Andy Blanke

Norman Walzer

Follow this and additional works at: <https://huskiecommons.lib.niu.edu/ctrgovernment-policyprofiles>

Recommended Citation

Northern Illinois University Center for Government Studies; Blanke, Andy; and Walzer, Norman, "Policy Profiles Vol. 12 No. 2 August 2013" (2013). *Policy Profiles*. 18.

<https://huskiecommons.lib.niu.edu/ctrgovernment-policyprofiles/18>

This Working Paper is brought to you for free and open access by the Center for Governmental Studies at Huskie Commons. It has been accepted for inclusion in Policy Profiles by an authorized administrator of Huskie Commons. For more information, please contact jschumacher@niu.edu.

policy *profiles*

CENTER FOR GOVERNMENTAL STUDIES Northern Illinois University

issue: *Workforce Status in Downstate Illinois*

by Andy Blanke and Norman Walzer

- *The workforce in rural Illinois has grown at a rate less than half that of other midwestern states and it is projected to shrink through 2030*
- *Although it faces the same demographic changes, rural Illinois is expected to experience a higher rate of population decline than other midwestern states between now and 2030*
- *Immigration to rural Illinois will not stop the decline in the area's working-age population*
- *Even in rural areas of high unemployment, many jobs remain unfilled because of a shortage of applicants qualified in advanced manufacturing techniques*
- *Promising models for workforce development programs could be more widely utilized in Illinois*
- *Community colleges can play a major role in providing education and training programs targeted to local needs, but many rural Illinois colleges will need financial help to respond to this challenge*
- *Private-public partnerships may be rural Illinois' best hope for rebuilding the prosperity of many counties and regions in Illinois*

Editor's Note: As Illinois struggles with myriad economic problems—high unemployment, high taxes, severe underfunding of state pension funds, millions of dollars in unpaid state bills, and relentless competition nationally and regionally for new business development—the status of the state's workforce demands close scrutiny. Plans for strengthening Illinois' economy cannot succeed if the state's workforce is not capable of competing in the evolving national business climate. This *Policy Profiles*, another in the series of *Profiles* dealing with the economic health of rural Illinois, offers an important perspective on the status of the workforce in Illinois counties outside of metropolitan Chicago.

Illinois's efforts to recover from the national recession may be hindered by a business vicious cycle: workers may avoid living in states with high unemployment rates, and businesses may avoid states where they will have trouble finding suitable employees.

Illinois is already at a competitive disadvantage: its unemployment rate (9.3%) is higher than in neighboring states such as Iowa (4.7 percent) or Minnesota (5.3 percent),¹ and there is still concern about the size of Illinois' workforce in the future as the baby boom population retires. Adding to this concern is the resurgence in manufacturing and increased use of advanced manufacturing techniques that are increasing the level of skills sought by growing businesses in job applicants.

To attract industry, Illinois must have a competitive business climate as well as highly qualified workers in sufficient numbers to meet industry demands. If Illinois' population shrinks during the next two decades, it will have to compete for both workers and businesses.

In rural Illinois, the job outlook is especially bleak: the growing wage gap between metro and non-metro areas will likely increase the outmigration from rural areas to the cities, further aggravating the on-going population declines in remote areas.

Illinois' workforce concerns are pressuring the state's business leaders, educational personnel, and policymakers to find ways to upgrade the skills of students and workers displaced during the recent recession. A major movement involving community colleges, trade schools, and business leaders is seeking ways to link industry needs and educational offerings to help meet job vacancies. But the problem persists and more attention is needed.

policyprofiles

How severe is Illinois' workforce problem?

A previous issue of *Policy Profiles* and a *Rural Research Report*² documented population decreases in Illinois between 2000 and 2010, especially in working-age population cohorts. This population decrease was consistent with decreases in employment as Illinois lost jobs in most industries at a faster rate than in neighboring states, suggesting that individuals may have left Illinois in search of employment opportunities. This issue of *Policy Profiles* examines projected workforce trends comparing the Chicago Metropolitan Area with downstate Illinois counties. It also examines the potential for immigration to replace some of the retiring workers. Attention then turns to programs underway in Illinois and elsewhere to address both the skill levels of workers and the number of workers available.

How does Illinois compare with the Midwest in population changes?

The working-age population (20-59 years) increased in rural Illinois between 1990 and 2010 reflecting similar trends in other midwestern states.³ However, the workforce in rural Illinois grew at less than half the rate in other midwestern states, and the Illinois workforce is projected to shrink through 2030.⁴ The Chicago Metropolitan Area, on the other hand, is projected to gain working-age individuals through 2030, partly stemming from rural migration to urban areas.

In the 12 census designated midwestern states, the working-age population has grown at approximately the same rate as the total population. In both 1990 and 2010, the population between 20 and 59 years represented the same percentage of total population in metropolitan and rural counties, including in Illinois. However,

Woods & Poole Economics forecasts that this age cohort will become a smaller percentage of the total population in the next 20 years.⁵ In fact, the 20 to 59 year-olds are forecast to represent less than half the total population in both rural Illinois and in the overall midwest in 2030. The projected decrease in percentage of population between 20 and 59 is consistent with the expected decreases in total population in this cohort. Rural Illinois will have a smaller working-age population in both relative and absolute terms because of trends affecting similar counties across the Midwest.⁶

The civilian labor force, as measured by the Bureau of Labor Statistics (BLS), is a broader measure of a county's workforce than the population aged 20 to 59 since it includes individuals with a minimum age of 16 as well as individuals over age 60 but not retired.⁷ By the BLS measure, the labor force in Illinois and the Midwest grew at comparable rates (11.3 percent versus 12.7 percent), but the labor force in

rural Illinois counties grew at less than half the rate of rural counties elsewhere in the Midwest (4.7 percent versus 12.2 percent).⁸ The slower growth in rural Illinois' labor force resulted from slower total population growth as discussed earlier.

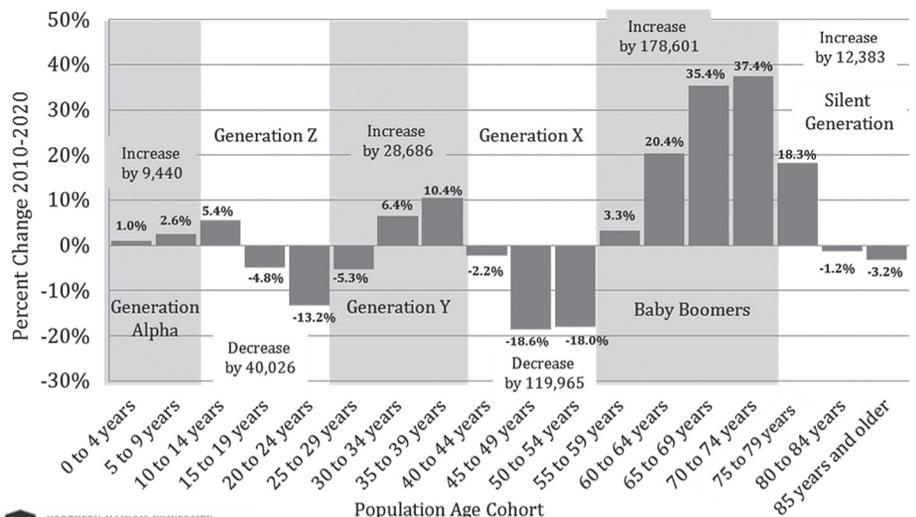
In short, rural Illinois is predicted to experience a higher rate of population decline than rural areas in other midwestern states between now and 2030.

How will the core workforce groups change?

An examination of expected workforce changes in Illinois during the rest of this decade offers insights into the ability of Illinois to attract and accommodate industry. An overview of expected changes in the size of different age groups and different generations during the current decade is presented in Figure 1 below.

Several age groups are especially important to consider. First, as can be seen in Figure 1, the number of residents between 55 and

Figure 1. Projected Population Trends in Downstate Illinois, 2010-2020

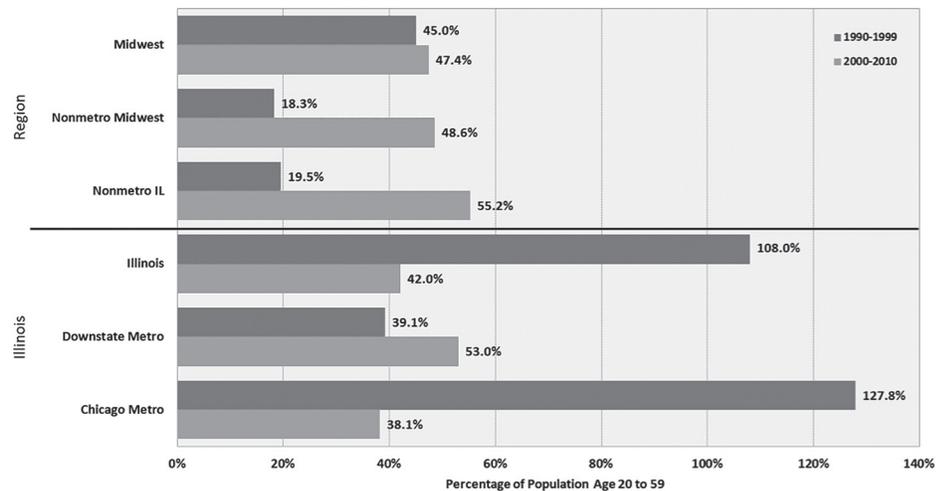


65 years of age will increase substantially during the remainder of this decade. Across Illinois, 15.8 percent of all employed people are between 55 and 64 years of age.⁹ This means that one in eight of the people currently employed in Illinois are approaching traditional retirement age. Retirements by this group will leave many vacancies to fill, especially in skilled and experienced positions. At the same time, because of better health and poorer financial conditions, these people are expected to work longer than recent retirees which will make the 65 to 69 year age group more the norm for retirement.

Surveys of baby boomers have shown a clear intention to work beyond traditional retirement ages. These plans will be affected by several factors including the status of their investments. The stock market has rebounded and, in some instances, has regained much of the past net wealth even though interest rates are still low. Depressed housing values, another form of investment, may also encourage residents to work longer. The need for health insurance has encouraged people to continue working, but the Affordable Care Act may present lower cost options to obtain insurance. At the same time, employers may be uncertain about the potential liabilities with older workers and whether they are able to keep pace with technology advances in the work place. Thus, overall, it is difficult to say with any certainty how decisions to work longer will affect the labor force, but they will definitely be important in the next decade or so.

Nevertheless, the number of residents in these age groups will increase substantially in the next few years, and they represent a significant, but fleeting part of the workforce.

Figure 2. Recent Immigrants as a Percentage of Decline in Working Age Population*



*In counties that lost population aged 20 to 59, the numbers of immigrants arriving in each county over the decade were calculated as a percent of the working age population lost. Counties that did not lose working age populations over the decade were omitted.

Source: U.S. Census Bureau, 1990 & 2000 Decennial Census; 2010 American Community Survey 5-Year Estimates.

Second, the populations between 20 and 59 years are the main age groups used to analyze the potential for incoming industries and expansions.¹⁰ In Illinois, the projections for each cohort in this age group between 2010 and 2020 differ. The 40-59 year group, including seasoned and experienced workforce participants, will decline substantially—by as much as 18 percent in some instances. These trends may indicate less availability of candidates for senior and leadership positions in both the private and public sectors.

The young professional age group, Generation Y, show projected increases but they are smaller in total numbers than the percentage declines in the preceding group. The so-called Generation Z group (10 to 24 years) also shows declines in some age cohorts, and the total projected losses in Generation Z exceed the projected growth in Generation Y. Thus, these figures project a smaller workforce for Illinois in the years just ahead.

Complicating this situation is that other states are experiencing the same general trends which will increase competition between states for workers, especially those with better technical and soft skills.

Can immigration fill the void?

In the past two decades, the natural aging process has made immigration more important in stabilizing populations, especially in rural counties.¹¹ A U.S. Department of Agriculture study reported total population in the Midwest would have decreased in the 1990's if not for a surge in immigration from Mexico.¹² Census data show that, in the 1990's, the number of individuals moving to Illinois from other countries exceeded the number of working-age individuals leaving the state.¹³ For each person exiting the state's working-age population due to aging, mortality, or migration, an immigrant entered the state. See Figure 2 above. It should be noted, however, that immigrants to Illinois do

policy profiles

not perfectly replace Illinois' lost working-age population since some immigrants are not of working age, and the skills of working-age immigrants do not necessarily match the skills of Illinoisans leaving the working-age group. Regardless, when the state lost prime working-age individuals in the 1990's, they were mostly replaced by people in the same age categories.

The situation was very different in the 2000's, however, and Illinois did not attract enough immigrants to come close to replacing its losses in number of working-age individuals. The number entering the state between 2000 and 2010 was less than half the number leaving the working age cohort. See Figure 2.

This trend was consistent across the Midwest.¹⁴ In part, this trend can be attributed to the movement of the large, aging baby boom generation out of the category of "prime working-age population" since that large group is reaching pre-retirement age. In part, too, the immigration rates decreased nationally at the end of the decade because of the recession.¹⁵ Regardless, the net effect has been a loss of potential workers in the prime working age population in Illinois.

These data also suggest that communities in Illinois cannot depend solely on immigration to expand the supply of labor. Even if every immigrant to the state was ready to fill a position in demand, more than half the state's job vacancies would remain unfilled. In Illinois counties that lost working-age individuals between 2000 and 2010, 130,000 immigrants arrived in that decade compared to a decline in working-age population of 308,500 workers.

How will the workforce changes affect manufacturing?

Manufacturing remains a core industry in Illinois, representing 10.7 percent of the state's employment.¹⁶ While manufacturing productivity as measured by the industry's Real Gross Domestic Product per employee in Illinois increased 52.4 percent between 2000 and 2010,¹⁷ the employment in manufacturing declined 35.4 percent, more than the 30.4 percent average in surrounding states.¹⁸

Estimates of the future manufacturing employment in Illinois differ. A Georgetown University study (2013) projects manufacturing employment to increase 2 percent statewide by 2020.¹⁹ Woods and Poole Economics, on the other hand, forecasts manufacturing employment in Illinois outside of the Chicago region to decrease by 9.6 percent.²⁰ Regardless, it is unlikely that the total number of manufacturing jobs will return to pre-recession levels for reasons discussed earlier.

The declines in manufacturing employment are explained by at least two factors. First, manufacturing has become more productive with the introduction of advanced manufacturing techniques which require fewer workers, but with more advanced training and skills. This, in turn, requires higher wages to attract workers.

Increased productivity is evident when the Real Gross Domestic Product for Manufacturing in Illinois is divided by the number employed in the industry. This measure of productivity per employee increased more than 50 percent in the past decade. Metropolitan areas outside the Chicago region had the highest productivity increases at 69.3 percent.

A second factor involves the outmigration of manufacturing companies to lower cost offshore locations. This movement has brought plant closures and considerable strife, especially to smaller cities in rural areas. The recent recession, in many instances, compounded these employment declines. Fortunately, there is some evidence of a reversal of this trend and, in the past several years, Illinois has shown growth in manufacturing employment.

Wages paid to manufacturing employees are increasing as industries' overall productivity has increased. Between 2000 and 2011, however, the average manufacturing employee's weekly wages in Illinois increased 41 percent compared to an increase of 33 percent in wages in industries in other states.²¹ By contrast, Iowa and Wisconsin were identified in a previous issue of *Policy Profiles* as states with a competitive advantage in manufacturing.²² These states had productivity increases in manufacturing of 46 percent and 37 percent, respectively, but their manufacturing wages increased at the same rate as wages in industries elsewhere.

Can changes in education and training resolve Illinois' workforce issues?

Even in areas of Illinois with relatively high unemployment, many high quality jobs remain unfilled allegedly because applicants are not adequately qualified for advanced manufacturing techniques. A 2011 survey of business owners in northwest Illinois, for instance, identified teamwork and problem-solving, as well as supervisory or management skills, as the most commonly-cited training needs.²³ More than 60 percent of respondents also rated advanced computer skills and skills in specialized technology either as important in the workplace now or expected to be important in the next three years.

This realization has brought attempts by secondary schools, community colleges, and other educational institutions to design new programs and outreach efforts specific to the jobs skills needed in the region. Educational opportunities available to the workforce will be key to resolving the workforce skills shortage issue.

Overall, the Illinois workforce has an educational level consistent with, if not slightly higher, than other midwestern states. In April 2012, nearly a third (32 percent) of Illinois residents between 18 and 64 years had at least a four-year college degree, compared to 27 percent in the 12 midwestern states. Since 2007, the share of working-age residents with four-year degrees has increased slightly across the Midwest, perhaps because more high school graduates have been pursuing higher education in light of declining job opportunities. However, the increase in number of potential workers with bachelor's degrees is not unique to the recession. Nationally, the share of the population completing college has gradually increased since the 1970's.²⁴

Education will be especially important in the coming years since some of the fastest-growing occupations in Illinois will be in the social sciences, engineering, and healthcare that require advanced degrees. Occupations in these categories are forecast to grow by more than 15 percent between 2010 and 2020.²⁵

The workforce in Illinois has a larger proportion of college degree holders than either Iowa or Minnesota, two neighboring states with lower unemployment rates. While higher education typically leads to a greater likelihood of securing employment, this is not always the case. In Illinois, for

example, more residents have bachelor's degrees, but these residents also have higher unemployment rates. In fact, in April 2012, the unemployment rate for residents aged 18 to 64 with bachelor's degrees was higher in Illinois (4.6 percent) than in the Midwest (3.3 percent) or in the U.S. overall (4.1 percent).²⁶

Part of the explanation may be the impact of the recession on various industries. For instance, if professional and business services were adversely affected more than industries that do not require degrees, the unemployment rate of college-educated residents would be higher.

Regardless, the workforce is still recovering from the recession. In 2007, prior to the recession, the Midwest's overall average unemployment rate was 5.2% and 2.1% for people with bachelor's degrees.²⁷ In 2012, the average unemployment rate was 7.9% overall and 3.3% for those who had completed college.²⁸

How are other states addressing pending skills shortages?

The need to update the inventory of skills available is not limited to Illinois and many states are addressing the same question. Following are several promising practices in workforce development which could be more widely utilized in Illinois.

Michigan Advanced Technician Training (MAT2).

Michigan offers a training program specifically designed to prepare young adults for careers in advanced manufacturing.²⁹ Called MAT2, the program enrolls high school graduates of students currently enrolled in a community college or four-year institution. The MAT2 curriculum helps students develop the mechanical, electronic, and communication

skills they will need to diagnose and solve problems related to the operation of automated manufacturing equipment. While completing an associate's degree, students participate in paid apprenticeships with one of six international manufacturers of automotive components. Participating students are paid a stipend and provided a tuition reimbursement. Upon completing the program, students are offered full-time positions as manufacturing technicians, on the condition that they commit to staying with the company for two years. The MAT2 program began accepting students in January 2013.

Indiana Economic Development Corporation Skills Enhancement Fund.

Indiana funds incentives for resident businesses to train and retain employees as an alternative to outsourcing.³⁰ Manufacturing, transportation, and logistics companies are eligible for reimbursement of employee training costs from the state's Skills Enhancement Fund (SEF) for up to two years. Areas of training covered by the SEF include literacy, communication skills, computer skills, and other subjects at the economic development corporation's discretion. Businesses that leave Indiana within five years of receiving reimbursement from the SEF are required to return the reimbursed amount. Start-ups are also eligible for SEF reimbursement. More than 900 contracts have been accepted under the SEF since 2005.

The average business approved under the SEF program had 270 employees, expected to create 80 jobs, and would receive \$89,000 in reimbursements for training expenses. Since the recession, SEF approved more than 200 contracts for training in companies with at least 100 employers.³¹

policy profiles

Austin Polytechnical Academy (APA) in Chicago.

APA is a preparatory high school for college and careers in manufacturing and engineering. The Academy was founded in 2007 by the Chicago Manufacturing Renaissance Council with the intent to prepare youth for an evolving manufacturing sector. In 2010, the Academy opened the Manufacturing Technology Center, a laboratory where students operate the same equipment that is used by manufacturers today and earn certification from the National Institute for Metalworking Skills (NIMS). Since the Technology Center opened, 140 students have earned NIMS certification. Subject areas in which students commonly received certification include metalforming, CNC turning operations, and milling operations.

In APA's career preparation program, students spend their freshman and sophomore years gaining NIMS certification and making field trips to the sites of manufacturing companies such as Winzeler Gear and C. Cretors Company. Students complete one or two jobs shadowing experiences in their junior and senior years and hold summer internships with one of over 60 manufacturers partnered with the Academy.³²

Student-run Machine Shop in New London, Wisconsin.

The New London School District in Wisconsin offers a program in which high school students in metalworking classes complete projects for local businesses. One project involved students in designing and manufacturing stands to display the work of an area art dealer. In another project, students used stop watches to test and identify the most efficient ways to complete procedures using CNC

equipment. Students receive compensation for their work in credits for student activity fees such as field trip costs. In some cases, students received scholarships in return for their work.

This initiative provides students with opportunities to gain experience in the manufacturing industry before starting college or entering the job market.

Joint Institute of Engineering and Technology-Aerospace (JIET-A) in Rockford, Illinois.

JIET-A is a partnership including higher education institutions and aerospace manufacturers in northern Illinois.³³ The Institute was stated to recruit talented young engineers for Rockford's 200 aerospace companies which were anticipating a need to replace experienced employees nearing retirement.) The program was funded in part with a U.S. Economic Development Administration grant.

Students in the program participate in paid internships at aerospace companies such as Woodward and GE Aviation while taking courses in engineering, mathematics, and information technology. Students may enroll in JIET-A through several institutions including Northern Illinois University, Rock Valley College, and Rockford University. The academy began accepting applicants in September 2012 and has attracted more than 100 applicants in the first six months.³⁴

What has been learned from workplace studies and data?

The resurgence in manufacturing in the U.S. and, to a lesser extent, in Illinois brings many opportunities to create quality jobs, reconnect displaced workers

to the economic mainstream, and strengthen state and national economies. However, for this to happen, substantial challenges must be met. Business leaders must work with educational personnel to craft programs that not only interest students and displaced workers, but, more importantly, will prepare them to work in increasingly complex manufacturing environments. Significantly, discussions of these challenges, meetings between manufacturers, and effective work-based training programs are springing up across the country. Several examples of such programs in the Midwest are described above.

Key to the success of such ventures is engaging local business in helping to plan and evaluate the effectiveness of education and training programs targeted to local needs. In many ways, such discussions bring community colleges to the forefront in responding to local economic development opportunities. However, an important challenge faces community colleges in some rural areas because their shrinking tax bases make it financially difficult for them to respond as quickly as needed or as they would like. Purchasing specialized equipment on which to train students, finding experienced instructors to teach required classes, and researching changing workplace skills are all expensive. Funds are desperately needed to support these vital services.

Excellent opportunities exist to build the private-public partnerships needed to prepare local workforces for high quality jobs. In light of the projected shrinking workforce facing rural Illinois, such partnerships may be rural Illinois' best hope for rebuilding the prosperity of many counties and regions in Illinois.

Endnotes

¹Bureau of Labor Statistics. Regional and State Employment and Unemployment Summary, May 17, 2013. Retrieved from: <http://www.bls.gov/news.release/laus.nr0.htm>

²Norman Walzer, Andrew Blanke, and Brian Harger. Employment Changes in Downstate Illinois and Business Climate Perceptions. *Policy Profiles* vol. 12, no 1. DeKalb, IL: Northern Illinois University, 2013; Norman Walzer and Brian Harger. “The Rural Midwest: How Is It Faring?” *Rural Research Report*, vol. 23, Issue 1. Macomb, IL: Illinois Institute for Rural Affairs. 2012.

³U.S. Census Bureau. 1990 Decennial Census, Summary File 1; U.S. Census Bureau. 2010 Decennial Census, Summary File 1.

⁴Woods & Poole Economics, Inc. 2012. *Complete Economic & Demographic Data Source*. Washington D.C.

⁵See note 4.

⁶See note 4.

⁷The Bureau of Labor Statistics defines the civilian labor force as all employed individuals over age 16 as well as all unemployed people who sought work in the last four weeks. This includes people at or near retirement age that are still working. For more information see: <http://www.bls.gov/cps/lfcharacteristics.htm#laborforce>

⁸U.S. Bureau of Labor Statistics. April 2013 Current Population Survey.

⁹U.S. Census Bureau. 2010 Local Employment Dynamics.

¹⁰Studies of workforce development vary in the age range used to define the workforce. For example, in annual progress reports, the Illinois Workforce Investment Board defines working-age adults as those over age 25. For another example, the Wisconsin Department of Workforce Development defines the workforce as those aged 16 or higher, with those aged 55 or higher set aside as the cohort representing pre-retirees. We used the population aged 20 to 59 since many people aged 16 to 20 are students not in the workforce and that people aged 60 and above are nearing retirement age. Illinois Workforce

Investment Board. 2012. Measuring Progress: Benchmarking Workforce Development in Illinois. Retrieved from: <http://www.ildceo.net/NR/rdonlyres/F7AA22AF-14C4-4094-802B-D19C218F825E/0/IWIBBenchmarkReportIWIApproved2013.pdf>; Wisconsin Department of Workforce Development, Office of Economic Advisors. 2008. Wisconsin’s Job Outlook 2006-2016. Retrieved from: <http://www.ssc.wisc.edu/~bhansen/390/WiscJobOutlook.pdf>.

¹¹Paul Lasley and Margaret Hanson. “The Changing Population of the Midwest: A Reflection on Opportunities” in Norman Walzer, ed. *The American Midwest: Managing Change in Rural Transition*. Armonk, NY: Sharpe Publications, pp. 16-40.

¹²William Kandel and Constance Newman. “Rural Hispanics: Employment and Residential Trends.” *Amber Waves* (June 2004). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Retrieved from: <http://ideas.repec.org/a/ags/uersaw/129607.html>

¹³See note 3.

¹⁴See note 3.

¹⁵Kristen McCabe and Doris Meissner. 2010. Immigration and the United States: Recession Affects Flows, Prospects for Reform. Washington DC: Migration Policy Institute. Retrieved from: <http://www.migrationinformation.org/Profiles/display.cfm?ID=766#8>

¹⁶U.S. Census Bureau, 2011 *County Business Patterns*.

¹⁷U.S. Bureau of Economic Analysis. 2013 GDP-By-Industry Accounts

¹⁸Norman Walzer and Brian Harger. “The Rural Midwest: How Is It Faring?” *Rural Research Report*, vol. 23, Issue 1. Macomb, IL: Illinois Institute for Rural Affairs. 2012.

¹⁹Anthony Carnevale, Nicole Smith, and Jeff Strohl. 2013. Recovery: Projections of Jobs and Education Requirements Through 2020 State Report. Washington DC: Georgetown Public Policy Institute. Retrieved from: <http://cew.georgetown.edu/recovery2020/> Illinois data are on on pages 36 and 37.

²⁰See note 4.

²¹U.S. Bureau of Labor Statistics. 2000 & 2011 Quarterly Census of Employment and Wages.

²²Norman Walzer, Andrew Blanke, and Brian Harger. Employment Changes in Downstate Illinois and Business Climate Perceptions. *Policy Profiles* vol. 12, no 1. DeKalb, IL: Northern Illinois University, 2013.

²³Harger, Brian; Henriksen, Melissa; Walzer, Norman; Blanke, Andy. 2013. *Promoting Regional Prosperity in Northwest Illinois: Regional Focus, Regional Results*. DeKalb, IL: Northern Illinois University.

²⁴See note 4.

²⁵See note 19.

²⁶U.S. Census Bureau. 2012 Current Population Survey, Annual Social and Economic Supplement.

²⁷U.S. Census Bureau. 2007 Current Population Survey, Annual Social and Economic Supplement.

²⁸See note 20.

²⁹<http://www.annarbor.com/business-review/michigan-advanced-technician-training-program/>

³⁰<http://iedc.in.gov/programs-initiatives/skills-enhancement-fund>.

³¹<https://transparency.iedc.in.gov/Pages/ContractSearch.aspx> and <http://www.in.gov/legislative/ic/code/title5/ar28/ch7.html>

³²Austin Polytechnical Academy. 2013, Career Program. Retrieved from: <http://austinpolytech.org/career-program>

³³<http://northernpublicradio.org/post/jiet-building-aerospace-pipeline-rockford>

³⁴City of Rockford, IL. 2013. JiET-A Program Attracts Over 100 Applicants. Retrieved from: <http://www.kallman.com/press/PARISAIRSHOW13/Rockford-JiET-A%20Program%20Hits%20100%20Applicants%20release.pdf>

About the Authors

Andy Blanke, MPA, is a Research Associate at the Center for Governmental Studies at Northern Illinois University and is a graduate of NIU's Master of Public Administration degree program. He earned a B.S. in Political Science at the University of Wisconsin, Stevens Point.

Norman Walzer, Ph.D, is a Senior Research Scholar in the Center for Governmental Studies at NIU. An Emeritus Professor of Economics at Western Illinois University (WIU), he was the founder and, for 18 years, the director of the Illinois Institute for Rural Affairs at WIU.

policyprofiles

Policy Profiles is a publication of the Center for Governmental Studies, Northern Illinois University, and may be reproduced in its entirety with attribution to the Center for Governmental Studies, Northern Illinois University, DeKalb, Illinois.

Director:
Diana L. Robinson

Editor:
James M. Banovetz, Ph.D.

For more information contact:
Center for Governmental Studies
815-753-1907
fax 815-753-7278
www.cgs.niu.edu

The views expressed in this edition of *Policy Profiles* are those of the authors and do not necessarily represent the views of the Center for Governmental Studies or the officers and trustees of Northern Illinois University. For more information please contact James Banovetz at jbanovetz@niu.edu.

PRESORTED
FIRST CLASS MAIL
U.S. POSTAGE PAID
Northern Illinois
University

policyprofiles
Center for Governmental Studies
Northern Illinois University
DeKalb, Illinois 60115