ILLINOIS' FORGOTTEN MIDDLE-SKILL JOBS: 2009

AN UPDATED LOOK AT EMPLOYMENT AND EDUCATION PATTERNS IN ILLINOIS

In September 2008, the *Skills2Compete-Illinois* campaign released *Illinois' Forgotten Middle-Skill Jobs*. The report countered deeply held assumptions that a four-year college degree is the only ticket to a stable economic future in Illinois, finding that the state could expect nearly one million openings in middle-skill jobs between 2004 and 2014. Middle-skill jobs require more than a high school diploma, but less than a four-year degree. According to the report, middle-skill job openings (including new jobs and replacement) would account for almost half of all job openings in Illinois during the decade. Low- and high-skill jobs were expected to account for 23 and 30 percent of total openings respectively.

The 2008 report signaled new opportunities for Illinois' workforce, but at the same time found troubling trends in the state's education patterns, which suggested that there would not be an adequate number of skilled Illinois workers to fill these positions. At the time, there was a

downward trend in state and federal funding for middle-skill education and training, combined with an accelerating retirement of middle-skill workers. This did not bode well for Illinois' workers, employers, or economy. The report's 2008 release was heralded by employers throughout the state who were struggling to find skilled workers. In response, the Illinois House of Representatives passed House Resolution 50, stating that a two-year skill guarantee should be the goal driving Illinois' economic development, workforce development and postsecondary education strategies.



Illinois' Middle-Skill Challenge Today

Since the release of *Illinois' Forgotten Middle-Skill Jobs*, the nation's and Illinois' economic situation has changed dramatically. The recession has led to record job loss and unemployment. But the need to invest in the skills of Illinois' workers has not changed. And the share of middle-skill jobs in the labor market has held steady. **New data show that in 2008, 52 percent of all jobs were classified as middle-skill** (Figure 1).

When we compare the most recently available data on the educational attainment of Illinois' workers to labor market demand, we find that Illinois' skill gap is at the middle-skill level.

In 2007, there was a 9 percent gap in the percentage of workers with the education and training required to fill middle-skill positions (Figure 2). In reality, the gap was likely even greater in certain industries because many workers trained to the middle-skill level—and even those with bachelor's degrees—did not have the specific technical skills needed. This means that thousands of well-paid and rewarding jobs were going unfilled in the state, in industries that are and will be essential to Illinois' economic portfolio.

Illinois' Middle-Skill Challenge Tomorrow

When we look at new data on Illinois' future job openings, we see the same challenge as in our original report. Middle-skill jobs will remain essential to Illinois' economy into the foreseeable future, accounting for over one million jobs openings in Illinois—some 45 percent through 2016 (Figure 3). While this is a slight decrease in the percentage of middle-skill openings projected from 2004-2014 in our 2008 report, it represents an increase in the total number of openings. More importantly from an education policy standpoint, middle-skill jobs will still represent the largest share of openings in Illinois.

What's more, as the American Recovery and Reinvestment Act (Recovery Act) invests in saving and creating jobs to get the nation's economy back on track, most of those positions in Illinois will be middle-skill jobs: In construction, manufacturing, and transportation, including "green jobs" across a broad range of occupations and industries. Developing the skills of Illinois' workforce to meet this demand will help the economy recover more quickly and prepare the state for better times ahead.¹

Unfortunately, as we learned in the 2008 report, Illinois' educational projections suggest that the shortage of workers to fill middle-skill jobs that our state was experiencing prior to the recession is likely to worsen in the future. During the fifteen years between 1990 and 2005, Illinois saw an increase in residents with educational attainment at the high-skill level and middle-skill level. Residents with low-skill education levels fell. **But Illinois will see a reversal of these education trends through 2020, when the proportion of low-skill workers in the workforce is expected to increase while the percentage of middle- and high-skill workers is projected to decline (Figures 4, 5 and 6).**

And as we learned in the 2008 report, addressing the need for middle-skill workers will require attention not only to educational opportunities for young people, but also for those already in the workforce. **Two-thirds of the people who will be in Illinois' workforce in the year 2020 were already working adults in 2005—long past the traditional high school-to college pipeline** (Figure 7). For this reason, to meet the demand for middle-skill workers we must target training and education to people who are working or could be working today.

New Education Vision Remains Crucial to Illinois' Economic Future

Illinois' economic future rests in part on strong policies and the required investments to address our middle-skill challenge. One-time investments through the Recovery Act have helped bolster a state workforce system that has been stretched by diminishing federal resources and increased demand as unemployment rises. But, despite these one-time investments, Illinois' state budget crisis continues to limit the state's response to the demands for middle-skill workers. Most importantly:

Without any new revenue for the state budget, two state-funded workforce training programs will be dramatically reduced. The Employment Opportunities Grant Program that prepares women and minorities for jobs in the building trades and the Job Training and Economic Development program that funds partnerships with businesses will be cut by at least 50 percent.

¹ Mark Zandi, Chief Economist at Moody's, projects that by the fourth quarter of 2012, stimulus spending from ARRA will substantially improve employment nationwide in several industries dominated by middle-skill jobs, including construction (802,800 jobs), manufacturing (589,700) and transportation and warehousing (129,600).Zandi, Mark. *The Economic Impact of the American Recovery and Reinvestment Act.* Available at http://www.economy.com/mark-zandi/documents/Economic_Stimulus_House_Plan_012109.pdf. (West Chester, PA, 2009).

- ♦ Efforts to ensure low-income workers can access postsecondary education and training at community colleges and other institutions were undercut when funding for the primary financial aid program for low-income students was cut by \$200 million. Unless funds are restored, 138,000 students will not receive aid for their second semester. An estimated 130,000 additional eligible students have been denied financial aid altogether. Those denied aid were primarily community college students, and more likely to be women with children.
- ♦ Adult Education funds were reduced by almost 20 percent even after external advocacy prevented a much steeper cut when the state budget did not include sufficient funds to draw down any federal matching funds.
- ♦ Without sufficient state-level revenue, the state has been unable to maximize 80 percent federal matching funds for transitional jobs programs for low-income, unemployed parents that are available under the Temporary Assistance for Needy Families Emergency Contingency Fund created by the Recovery Act.

As the economy begins to recover these cuts make it harder for Illinois to provide its residents with the education and training opportunities they need to prepare for middle-skill jobs. Despite an unstable funding environment, Illinois has important opportunities to improve workforce and education strategies to reach more workers. Most importantly:

- ♦ The Illinois Department of Commerce and Economic Opportunity and the Illinois Community College Board have new policies and funding priorities to expand "bridge" educational strategies. A proven approach for adults with limited reading, math, and English skills, bridge programs integrate basic education and occupational skills training and provide opportunities for Illinois adults to get middle-skill credentials.
- ♦ Legislation to create the structure for a state-level "21st Century Workforce Development Fund" passed into law this year and sets the stage for ensuring sustainable, flexible funding to support innovative workforce strategies that reduce skill gaps in industries facing critical skills shortages across the state.

With high unemployment in the state, this is precisely the time to ensure we are training the middle-skill workforce that will be critical to our economic recovery and long-term success. It is these jobs that *Skills2Compete-Illinois* wants to lift up in the state's and nation's policy debates to ensure that Illinois has the workforce to compete in a 21st-century economy.

When newly trained medical researchers find cures for illnesses, we need an even larger number of laboratory technicians, pharmacy technicians, and nurses to produce and administer those remedies. When newly trained computer engineers develop advanced means to produce goods, we need an even larger number of engineering and manufacturing technicians to harness and maintain this technology on evolving production and logistics platforms. Middle-skill workers are highly skilled technical and trade workers at the heart of the state's economy.

For all of these reasons, the *Skills2Compete-Illinois* campaign is re-issuing the call it put before the state in September, 2008. If we are to realize our state's full economic potential, educational access must reflect the demands of a 21st-century economy and the realities of the 21st-century workforce. The following vision can shape our state's workforce and education policies and investments to meet these 21st-century realities:

Every Illinois worker should have access to the equivalent of at least two years of education or training past high school—leading to a vocational credential, industry certification, or one's first two years of college—to be pursued at whatever point and pace makes sense for individual workers and industries. Every person must also have access to the basic skills needed to pursue such education.

Illinois has adopted the vision in House Resolution 50. Now businesses, labor, educators, community-based organizations and others must work together to ensure Illinois makes the investments necessary to deliver on this ambitious goal. Policymakers must step in with strong political leadership and commitment to ensure that Illinois has the middle-skill workforce we need to recover and thrive.

FIGURES AND TABLES

Illinois' Middle-Skill Challenge Today

Demand for Middle-Skill Jobs is Strong in Illinois

FIGURE 1. Illinois Jobs by Skill Level, 2008

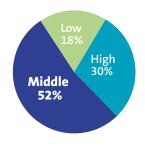


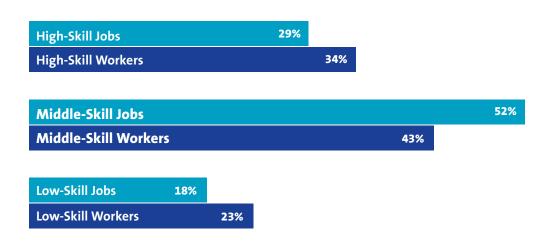
TABLE 1. Illinois Jobs by Skill Level, 2008

	Employment	Percent
Total, All Occupations	5,910,630	100%
Management	287,290	4.9%
Business and Financial	329,630	5.6%
Professional and Related	1,165,340	19.7%
Total, High Skill	1,782,260	30.2%
Sales and Related	611,130	10.3%
Office and Administrative Support	993,580	16.8%
Construction	249,320	4.2%
Installation and Repair	206,650	3.5%
Production	512,300	8.7%
Transportation and Material Moving	470,710	8.0%
Total, Middle Skill	3,043,690	51.5%
Service Occupations	1,078,400	18.2%
Farming/Fishing/Forestry Occupations	6,300	0.1%
Total, Low Skill	1,084,700	18.4%

Source for Figure 1, Table 1: Calculated by TWA from the Bureau of Labor Statistics website.

Illinois' Skills Mismatch: A Middle-Skill Gap

FIGURE 2. Illinois' Jobs and Workers by Skill Level, 2007

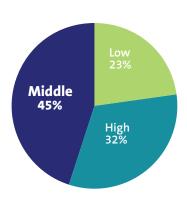


Source: Illinois Department of Employment Security and US Bureau of the Census.

Illinois' Middle-Skill Challenge Tomorrow

Demand for Middle-Skill Jobs Will Remain Strong in Illinois

FIGURE 3. Illinois' Total Job Openings by Skill Level, 2006-2016



Source: Calculated by TWA from Illinois Department of Employment Security data.

TABLE 2. Illinois Jobs and Total Job Openings by Skill Level, 2006-2016

	Employment		Job Openings	
	2006	2016	Number	%
Total, All Occupations	6,354,095	7,094,886	2,226,900	100%
Management	374,944	396,739	100,150	4.5%
Business and Financial	335,549	391,360	114,410	5.1%
Professional and Related	1,213,241	1,451,653	490,600	22.0%
Total, High Skill	1,923,734	2,239,752	705,160	31.7%
Sales and Related Office and Administrative Support Construction Installation and Repair Production Transportation and Material Moving Total, Middle Skill	673,933 1,045,034 276,407 222,975 540,382 491,095 3,249,826	724,442 1,125,779 301,460 242,723 535,459 532,072 3,461,935	251,810 328,970 74,090 55,880 132,520 159,260 1,002,530	11.3% 14.8% 3.3% 2.5% 6.0% 7.2% 45.0%
Service Occupations Farming/Fishing/Forestry Occupations Total, Low Skill	1,165,304 15,231 1,180,535	1,378,026 15,173 1,393,199	515,440 3,810 <i>519,250</i>	23.1% 0.2% <i>23.3%</i>

Source: Calculated by TWA from Illinois Department of Employment Security data.

Illinois' Future Middle-Skill Gap: Educational Attainment Past and Future

TABLE 3. Actual and Projected Change in Illinois Workers' Educational Attainment, 1989-2020

				Change	Change
	1989	2004	2020	1989-2004	2004-2020
Low-Skill	30.3%	21.3%	22.8%	-9.0%	1.4%
Middle-Skill	41.1%	42.8%	40.5%	1.7%	-2.3%
High-Skill	28.5%	35.8%	36.7%	7.3%	0.9%
Low-Skill	1,822,576	1,360,581	1,700,303	-461,995	339,722
Middle-Skill	2,472,696	2,731,994	3,026,243	259,298	294,249
High-Skill	1,714,528	2,283,724	2,738,129	569,196	454,405
Total	6,009,800	6,376,300	7,464,676	366,499	1,088,377

FIGURE 4. Percentage Change in High-Skill Illinois Workers, 1989-2020

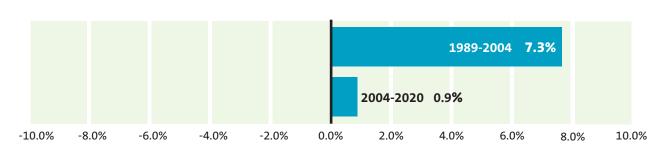


FIGURE 5. Percentage Change in Middle-Skill Illinois Workers, 1989-2020

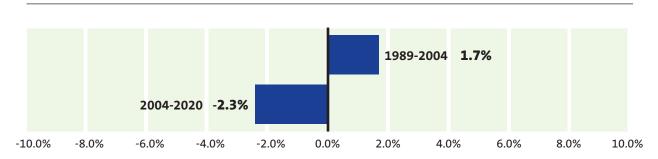


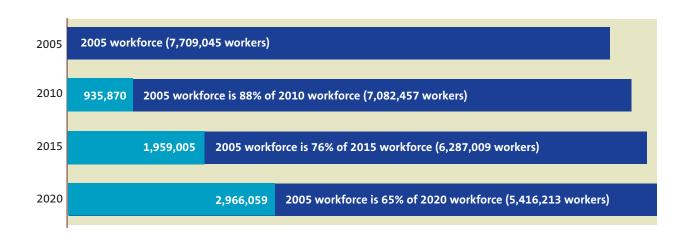
FIGURE 6. Percentage Change in Low-Skill Illinois Workers, 1989-2020



Source Figures 4-6, Table 3: Current and past attainment calculated by TWA using December 1989 and 2004 CPS data. Current and past total labor market estimated by the Illinois Department of Employment Security. 2020 attainment projected by TWA using demographic data from the December 2005 CPS data and population projections calculated by the Illinois Department of Commerce and Economic Opportunity.

Illinois' Workforce of Tomorrow is in the Workforce Today

FIGURE 7. Working Illinois Adults Age 20-64 in the Current and Projected Population, 2005-2020



Source: Calculated by TWA using population projections from RAND California Statistics.

Illinois' Forgotten Middle-Skill Jobs: 2009 was written for the Skills2Compete-Illinois campaign by The Workforce Alliance (TWA), Washington, DC, as part of its national Skills2Compete Campaign. To learn more about the Skills2Compete-Illinois campaign, go to www.Skills2Compete.org/Illinois. For a detailed explanation of the methodology used in this brief, please see the Appendix of the 2008 report.







