

# THE STATE OF THE UNIONS 2016

*A Profile of Unionization in Chicago, in Illinois, and in America*

May 16, 2016

Frank Manzo IV, M.P.P.  
Illinois Economic Policy Institute

Robert Bruno, Ph.D.  
University of Illinois at Urbana-Champaign

Virginia Parks, Ph.D.  
Occidental College

## Research Report

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**THE STATE OF THE UNIONS 2016***A Profile of Unionization in Chicago, in Illinois, and in America***About the Authors**

**Frank Manzo IV, M.P.P.** is the Policy Director of the Illinois Economic Policy Institute (ILEPI). His research focuses on labor market policies, income inequality, community and economic development, infrastructure investment, and public finance. He earned his Master of Public Policy from the University of Chicago Harris School of Public Policy and his Bachelor of Arts in Economics and Political Science from the University of Illinois at Urbana-Champaign. He can be contacted at [fmanzo@illinoisepi.org](mailto:fmanzo@illinoisepi.org).

**Robert Bruno, Ph.D.** is a Professor at the University of Illinois at Urbana-Champaign School of Labor and Employment Relations and is the Director of the School's Labor Education Program. He also serves as Director of the Project for Middle Class Renewal at the University of Illinois at Urbana-Champaign. His research focuses broadly on working-class and union studies issues. He earned his Doctor of Philosophy in Political Theory from New York University and his Master of Arts in Political Science from Bowling Green State University. He can be contacted at [bbruno@illinois.edu](mailto:bbruno@illinois.edu).

**Virginia Parks, Ph.D.** is the Madeline McKinnie Professor of Urban & Environmental Policy at Occidental College. Formerly, she was a Professor at the University of Chicago School of Social Service Administration. Her research focuses on labor, employment, and inequality in cities. Her fields of special interest include urban geography, urban labor markets, immigration, racial and gender inequality, and community organizing and development. She earned her Doctor of Philosophy in Geography and her Master of Arts in Urban Planning from the University of California, Los Angeles. She can be contacted at [vparks@uchicago.edu](mailto:vparks@uchicago.edu).



ILLINOIS ECONOMIC POLICY INSTITUTE

"A Higher Road for a  
Better Tomorrow"

P.O. Box 2378  
La Grange, Illinois 60525  
Phone: 708-375-1002  
[www.illinoisepi.org](http://www.illinoisepi.org)



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Labor Education Program &  
Project for Middle Class Renewal

815 W. Van Buren Street, Suite 110  
Chicago, Illinois 60607  
Phone: 312-996-2624  
[www.illinoislabored.org](http://www.illinoislabored.org)



OCCIDENTAL COLLEGE

Urban & Environmental  
Policy Department

1600 Campus Road  
Los Angeles, California 90041  
Phone: 323-259-2500  
[www.oxy.edu](http://www.oxy.edu)

## **EXECUTIVE SUMMARY**

Since 2006, unionization has declined in Illinois, in the Chicago region, and in America. There are approximately 84,000 fewer union members in Illinois today than there were in 2006, contributing to the 573,000-member drop in union workers across the nation over that time. Declining union membership in Illinois has primarily been the result of decreases in male unionization and private sector unionization.

Consequently, the total number of labor unions and similar labor organizations has declined over the past decade. There are 891 labor unions and similar organizations in Illinois, a decline of nearly 100 worker establishments over the past ten years. There are also 1,063 fewer individuals working for labor unions and similar organizations today than there were one decade ago.

Despite the long-term downward trends, however, there has been some good news for the Illinois labor movement.

- The unionization rate has improved from a 2012 low of 14.6 percent to 15.2 percent in 2015;
- Union members increased from 800,000 in 2012 to about 847,000 in 2015;
- From 2014 to 2015, unionization rates marginally increased for female workers, Latino and Latina workers, workers between the ages of 55 and 64, private sector workers, and the aggregated educational and health services industry.

Over half of all public sector workers continue to be unionized in both Illinois and the Chicago metropolitan area. Meanwhile, slightly more than one-third of all public sector workers are unionized across the nation. In comparison, one-in-ten (9.6 percent) of Illinois workers in the private sector are union members while just 6.7 percent of private sector workers are now unionized across America.

Union membership is influenced by a number of factors. Employment in the public sector, construction, transportation and utilities, mining, and leisure and hospitality industries all raise the chances that a given worker is a union member. African-American workers are also statistically more likely to be union members than their racial or ethnic counterparts. On the other hand, workers employed in management, business, and financial occupations, workers employed sales and related occupations, and those with professional or doctorate degrees are less likely to be unionized.

Labor unions increase individual incomes by lifting hourly wages - particularly for low-income workers. In Illinois, unions raise worker wages by an average of 10.1 percent. The state's union wage effect is the 17<sup>th</sup>-highest in the nation. The union wage differential is higher for the bottom 10 percent of workers (10.4 percent) than the richest 10 percent of workers (8.4 percent), helping to reduce income inequality.

Unions play a vital role in Illinois' economy and communities. The Illinois labor movement, however, will continue to face both short- and long-term challenges. Labor's response to these challenges could define its influence and effectiveness in the decades to come.

**TABLE OF CONTENTS**

Executive Summary	ii
Introduction	1
Data and Limitations	1
Unionization Rates and Trends	2
Unionization by Demographics	3
Unionization by Education	8
Unionization by Sector, Industry, and Occupation	9
Predicting Union Membership in Illinois	13
Union Wages	14
Union and Nonunion Wages by Demographic Group	17
New in 2016: Recent Data on Labor Union Establishments	17
Conclusions	18
References	19
Cover Photo Credits	20
Appendix	21
Industry Profiles: Union and Nonunion Workers in Illinois, 2013-2015	23

## **INTRODUCTION**

Organized labor has been the country's principal institution in fostering a middle-class society that protects the dignity of all work. Unions have fought on behalf of workers for better pay and fringe benefits, worked to increase health and safety conditions in U.S. workplaces, and provided workers with a voice in the direction of the economy and in the creation of public policy. Over the long run, the labor movement has contributed substantially to American families and communities.

A recent report finds that for every \$1 paid in membership dues and fees, an estimated \$6.12 in after-tax income is returned to union members in Illinois (Manzo & Bruno, 2016). Unions also increase the likelihood that an Illinois worker has health insurance by 14 percentage points. These benefits translate into 43,000 additional jobs that are independently created by the higher earnings and increased consumer spending of union households.

Nevertheless, the labor movement has endured a gradual decline in both membership and influence. Almost one-in-four American workers (23.0 percent) were members of labor unions in 1980. Three and a half decades later, in 2015, only one-in-nine employed persons in America (11.1 percent) are unionized (Hirsch & Macpherson, 2016). Concurrently, as unionization rates have waned, income inequality has soared. Declining unionization and polarizing worker incomes are linked: The decline of organized labor accounts for between one-fifth and one-third of the growth in inequality (Western & Rosenfeld, 2011). The divergence between worker productivity and worker pay has also been largest in states where collective bargaining coverage has declined the most (Cooper & Mishel, 2015).

Illinois has not been immune to these trends. From 2009 to 2012, earnings for the top 1 percent increased by 34.5 percent, while incomes grew by just 0.2 percent for the bottom 99 percent of workers in Illinois—making the state the 8<sup>th</sup>-most unequal in America (Sommeiller & Price, 2015). In addition, inequality has increased to Great Depression-era levels in Illinois, driven by a redistribution of wealth from labor to capital (Manzo, 2016). Illinois has experienced a 7 percent redistribution of wealth from labor to capital since 1980, while the share of Illinois' workers covered by a labor union has fallen by over 11 percentage points. As a result, income inequality between the Top 1 Percent of workers and the median worker has risen by 173 percent in Illinois (Manzo, 2016).

This report, conducted by researchers at the Illinois Economic Policy Institute, the University of Illinois Project for Middle Class Renewal, and Occidental College, analyzes the course of unionization in Illinois, in the Chicago metropolitan statistical area (MSA), and in the United States from 2006 to 2015. It is the third annual report of its kind for union members in the Chicago area and in Illinois, following the May 2015 release of *The State of the Unions 2015: A Profile of Unionization in Chicago, in Illinois, and in America* (Manzo et al., 2015). The report is modeled off of *The State of the Unions 2015: A Profile of Organized Labor in New York City, New York State, and the United States* by the Joseph S. Murphy Institute for Worker Education and Labor Studies at the City University of New York Graduate Center (Milkman & Luce, 2015) and *From '15 to \$15: The State of the Unions in California and its Key Cities in 2015* by the Institute for Research on Labor and Employment at the University of California, Los Angeles (Adler et al., 2015). The report tracks unionization rates and investigates union membership across demographic, educational, sectoral, industry, and occupational classifications. The study subsequently evaluates the impact that labor union membership has on a worker's hourly wage in Illinois, in the Chicago MSA, and in America. Additionally, data on labor unions and similar labor organizations are included and analyzed, new for the 2016 version of this report. The report concludes by recapping key findings.

## **DATA AND LIMITATIONS**

Except in one section, this Research Report exclusively utilizes data from the *Current Population Survey Outgoing Rotation Groups* (CPS-ORG). The CPS-ORG is collected, analyzed, and released by the U.S.

Department of Labor Bureau of Labor Statistics (BLS). CPS-ORG data reports individual-level information on 25,000 respondents nationwide each month. The records include data on wages, unionization, hours worked, sector, industry, and occupation, as well as other demographic, geographic, education, and work variables. The data was extracted from the user-friendly Center for Economic and Policy Research Uniform Data Extracts (CEPR, 2016).

The 10-year dataset from 2006 to 2015 captures information on 3,180,524 individuals aged 16 to 85 in the United States. These observations include 1,914,358 persons with a job, of whom 199,670 reported that they were union members. Survey responses include information from 58,379 employed individuals in Illinois and 38,783 employed persons in the Chicago MSA since 2006. In 2015, respondents with at least one job totaled 5,565 in Illinois, 3,921 in the Chicago MSA, and 184,915 nationwide. “Chicago MSA” workers are defined as only those who live in the Illinois component of the Chicago-Naperville-Joliet Metropolitan Statistical Area (i.e., no Indiana or Wisconsin residents are included).

Analytic weights are provided by the Department of Labor to match the sample to the actual U.S. population 16 years of age or greater. These weights adjust the influence of an individual respondent’s answers on a particular outcome to compensate for demographic groups that are either underrepresented or overrepresented compared to the total population. The weights are applied throughout the analysis.

There are limitations to the CPS-ORG dataset. First, the data reports a worker’s state of residence rather than state of employment, so the results may be biased by workers who live in one state but work in another (e.g., living in Illinois but working in Missouri) and vice-versa. CPS-ORG data is also based on household survey responses, so the potential exists for respondents to be untruthful. Certain individuals such as undocumented workers may also be underreported if they are more difficult to reach by survey officials. Finally, every surveyed worker does not reply to the union membership question. For example, in 2015, union membership data was only available for 5,034 of the 5,565 surveyed workers (90.5 percent) in Illinois. While this does not impact unionization *rates*, estimates are underreported for both total union workers and total nonunion employees.

New in 2016 is economic data from the *County Business Patterns* (CBP) series from the U.S. Census Bureau (Census, 2016). The CBP provides annual statistics for businesses with paid employees that are used to study economic activity and market trends. The data are published between 18 months and 24 months after the reference year, so there is a longer time lag compared to the release of CPS-ORG information.

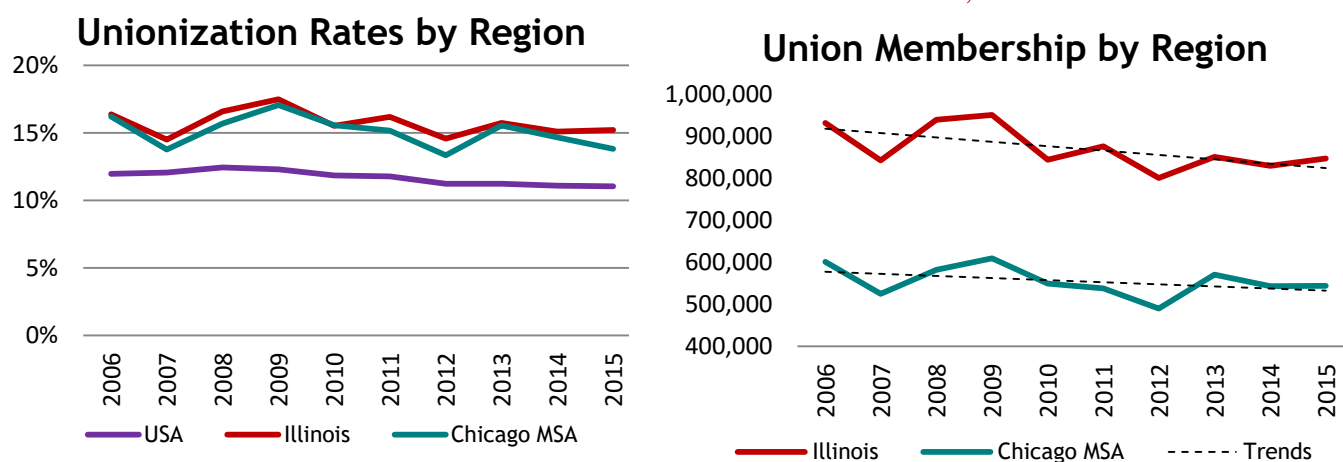
## **UNIONIZATION RATES AND TRENDS**

Since 2006, unionization has declined in Illinois, the Chicago metropolitan area, and the United States (Figure 1). The total union membership rate was 16.4 percent in Illinois, 16.2 percent in the Chicago region, and 12.0 percent nationwide in 2006. Ten years later, all three rates have fallen to 15.2 percent, 13.8 percent, and 11.1 percent, respectively. The gradual decline in the unionization rate has translated into a decrease in union membership of about 84,000 workers in Illinois since 2006, contributing to the 573,000-member national decline in union workers over that time (Figure 2).

News for the Illinois labor movement has not been all bad, however. Despite the long-term downward trends, unionization rates and total membership were higher in 2015 than they were in 2012 for both Illinois and the Chicago region (Figure 1). The unionization rate has risen to 15.2 percent in Illinois, up from 14.6 percent in 2012. This upward movement was the result of an estimated 46,000 increase in union members throughout the state over the past three years. Additionally, the statewide increase was driven predominately by improvement in the Chicago metropolitan area, which saw a 54,000-member growth and a 0.5 percentage-point increase in the unionization rate to 13.8 percent. Finally, despite fluctuations in unionization, Illinois’ union membership rate has consistently been above the national

average. The 10-year combined Illinois unionization rate was 15.7 percent, 4.0 percentage points higher than the 11.7 percent national rate. On a year-by-year basis, Illinois' union membership rate has ranged from 2.4 to 5.2 percentage points higher than the national average (Figure 2).

**FIGURE 1: UNIONIZATION RATES AND TOTAL UNION MEMBERSHIP BY REGION, 2006-2015**



**FIGURE 2: TOTAL UNION MEMBERS AND OVERALL UNIONIZATION RATES BY REGION, 2006-2015**

Year	Illinois		Chicago MSA		USA	
	Members	Rate	Members	Rate	Members	Rate
2006	931,165	16.38%	601,518	16.22%	15,359,108	11.98%
2007	842,189	14.51%	525,343	13.77%	15,670,352	12.08%
2008	939,212	16.59%	581,955	15.70%	16,097,535	12.44%
2009	950,586	17.49%	609,460	17.06%	15,327,280	12.31%
2010	843,807	15.53%	549,528	15.57%	14,715,061	11.86%
2011	875,891	16.19%	537,637	15.18%	14,754,673	11.78%
2012	800,434	14.58%	490,023	13.36%	14,349,358	11.25%
2013	850,557	15.74%	570,390	15.55%	14,515,755	11.24%
2014	829,757	15.09%	543,428	14.67%	14,569,936	11.08%
2015	846,984	15.22%	544,064	13.82%	14,786,281	11.05%
<b>Totals</b>	<b>8,710,582</b>	<b>15.73%</b>	<b>5,553,346</b>	<b>15.07%</b>	<b>150,145,339</b>	<b>11.70%</b>

## UNIONIZATION BY DEMOGRAPHICS

Falling rates of unionization have reflected steep declines in union membership among men (Figure 3). An estimated 19.7 percent of employed men were unionized in 2006, but the 2015 male unionization rate in Illinois fell to 15.6 percent. The male unionization rate has also decreased in both the Chicago region and the nation as a whole. Since 2006, male union density has dropped by 5.3 percentage points in the Chicago area and by 1.5 percentage points in the United States.

In Illinois, a significant portion of the male drop in unionization has been offset by an increase in the female union membership rate (Figure 3). Female union density in both Illinois and Chicago was higher in 2015 than at any other point over the past decade, except for 2013. As of 2015, the female unionization rate is 14.8 percent in Illinois and 13.7 percent in the Chicago area. Nationwide, female union membership has dipped slightly, from 10.9 percent in 2006 to 10.6 percent today.

FIGURE 3: GRAPHS OF UNIONIZATION RATES BY GENDER, 2006-2015

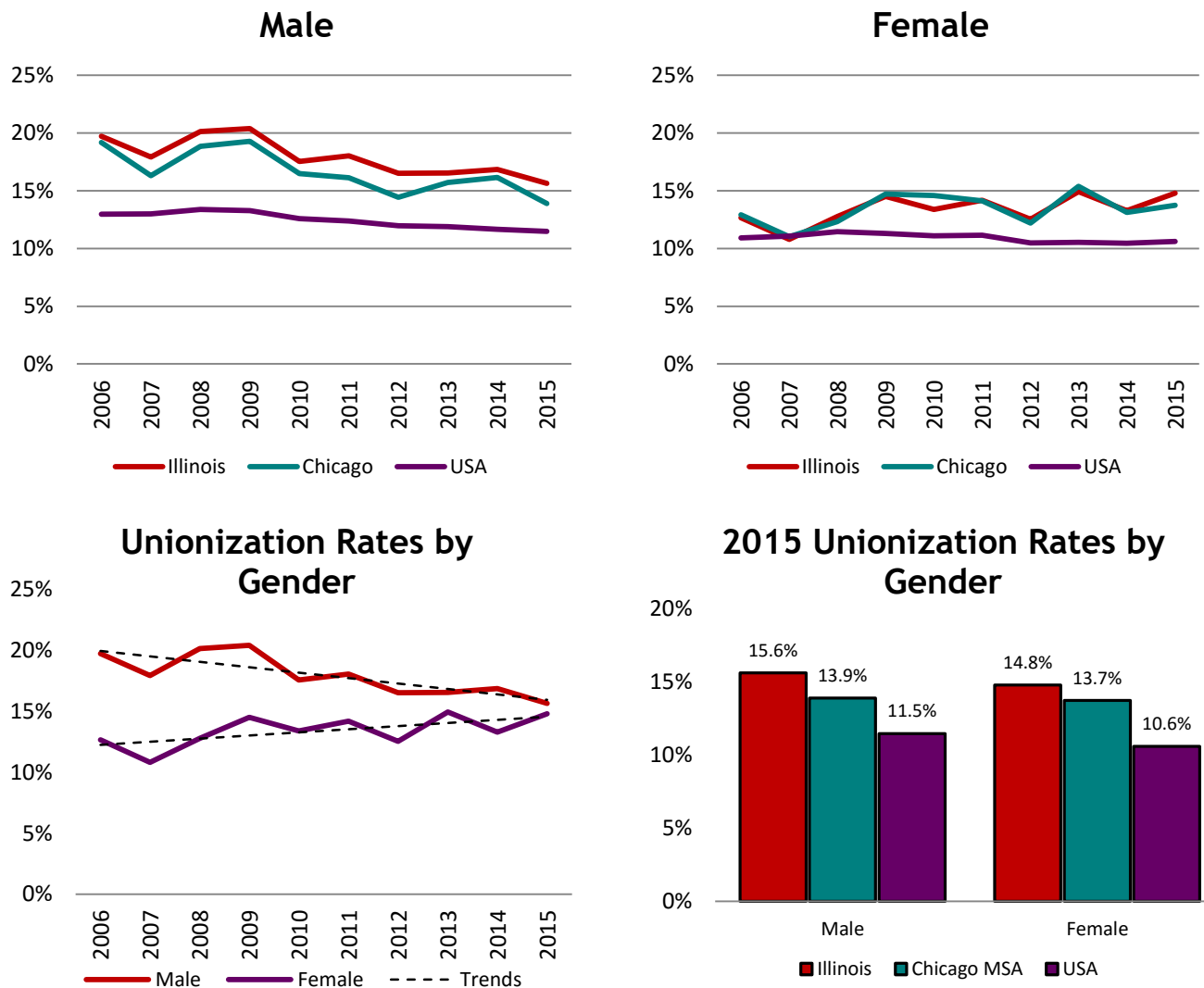
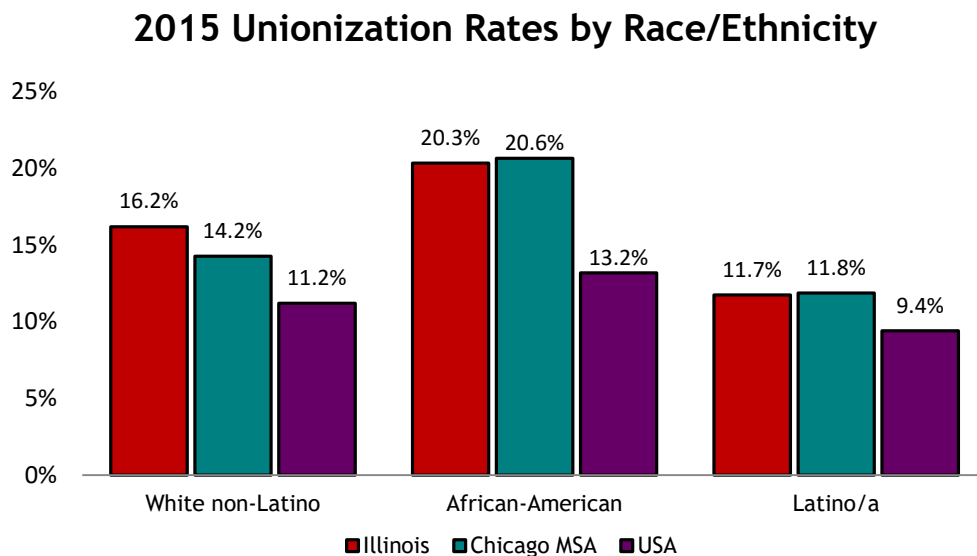


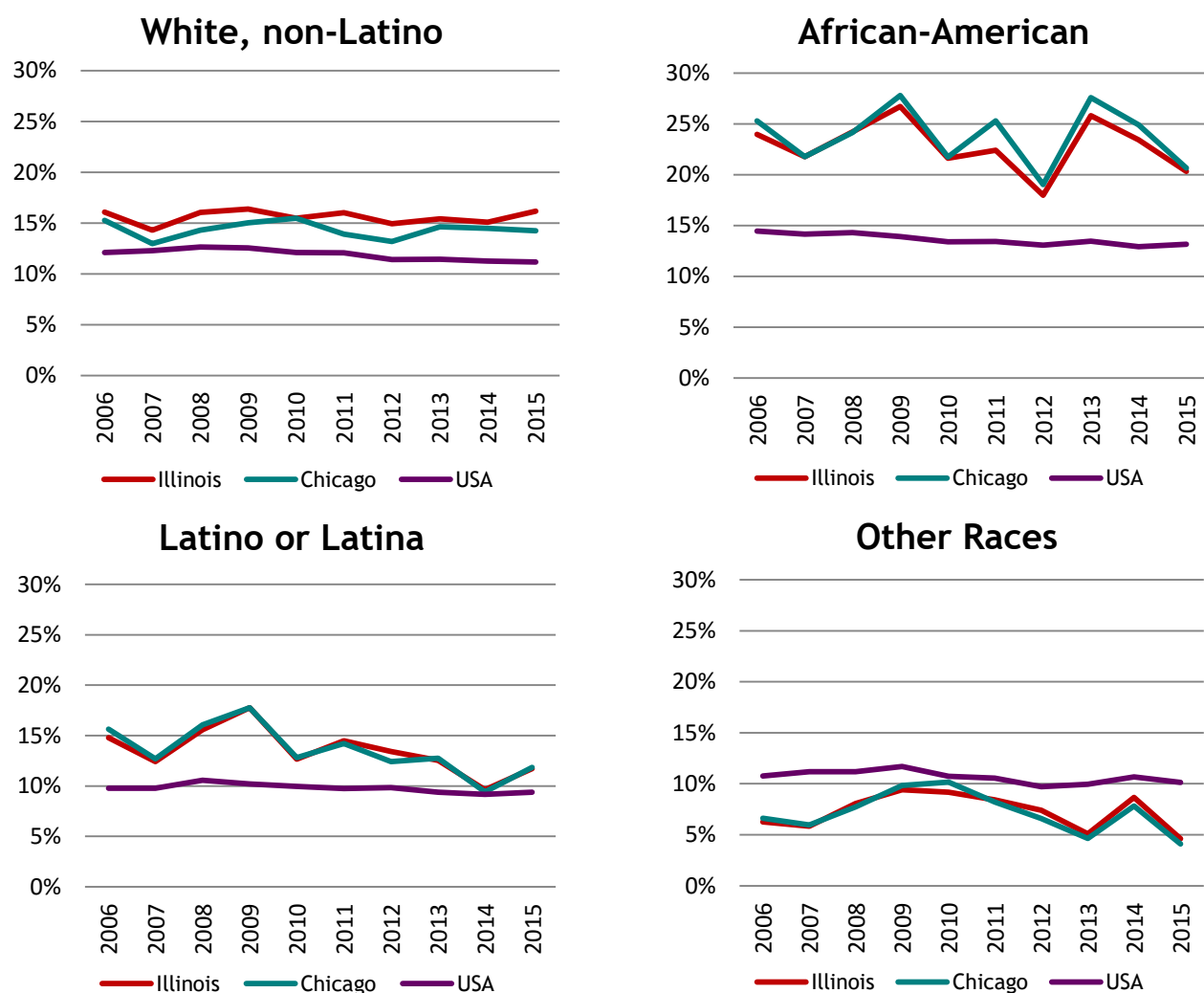
FIGURE 4: UNIONIZATION RATES BY RACIAL OR ETHNIC IDENTIFICATION BY REGION, 2015



The gap between male and female union membership rates is shrinking (Figure 3). In 2015, male union membership exceeded its female equivalent by just 0.8 percentage points in Illinois. But in 2006, the Illinois gap was 7.1 percentage points. If current (linearized) trends in unionization continue in the state, the difference between male and female unionization rates will be eliminated by 2017, converging at 15.1 percent.

African-Americans are the most unionized racial or ethnic identity group (Figure 4). The unionization rate for African-American workers is 20.3 percent in Illinois, 20.6 percent in the Chicago MSA, and 13.2 percent in the United States. In comparison, white non-Latino union density is 16.2 percent in the state, 14.2 percent in Illinois' largest metropolitan area, and 11.2 percent across the nation. Respective unionization rates for Latino and Latina workers are currently much lower, at 11.7 percent, 11.8 percent, and 9.4 percent.

FIGURE 5: GRAPHS OF UNIONIZATION RATES BY RACIAL OR ETHNIC IDENTIFICATION, 2006-2015



Over time, union membership has fallen for every racial or ethnic identity group except for white, non-Latino workers in Illinois (Figure 5). From 2006 to 2015, unionization in Illinois fell by 3.7 percentage points for African-American workers and 3.1 percentage points for Latino/a workers. The white, non-Latino union membership rate, however, was essentially unchanged with a 0.1 percentage point increase. In the Chicago area, trends have mirrored the overall state labor market. Over the 10-year period of analysis, the African-American union membership rate has generally been higher in the

Chicago area than in the rest of the state. It is worth noting, however, that African-American union membership estimates can fluctuate from year to year due to relatively smaller sample sizes.

Unionization rates are much higher for middle-aged workers than young workers (Figure 6). Regardless of region studied, unionization rates are highest for workers between the ages of 45 and 64 years old. Specifically, the most unionized age groups are those aged 55 to 64. Of workers in this age cohort, 20.0 percent are unionized in Illinois, 19.1 percent are unionized in the Chicago MSA, and 14.3 percent are unionized across the United States. For young workers aged 16-24, unionization rates are less than 6 percent for Illinois, the Chicago MSA, and the nation.

FIGURE 6: UNIONIZATION RATES BY AGE GROUP BY REGION, 2015

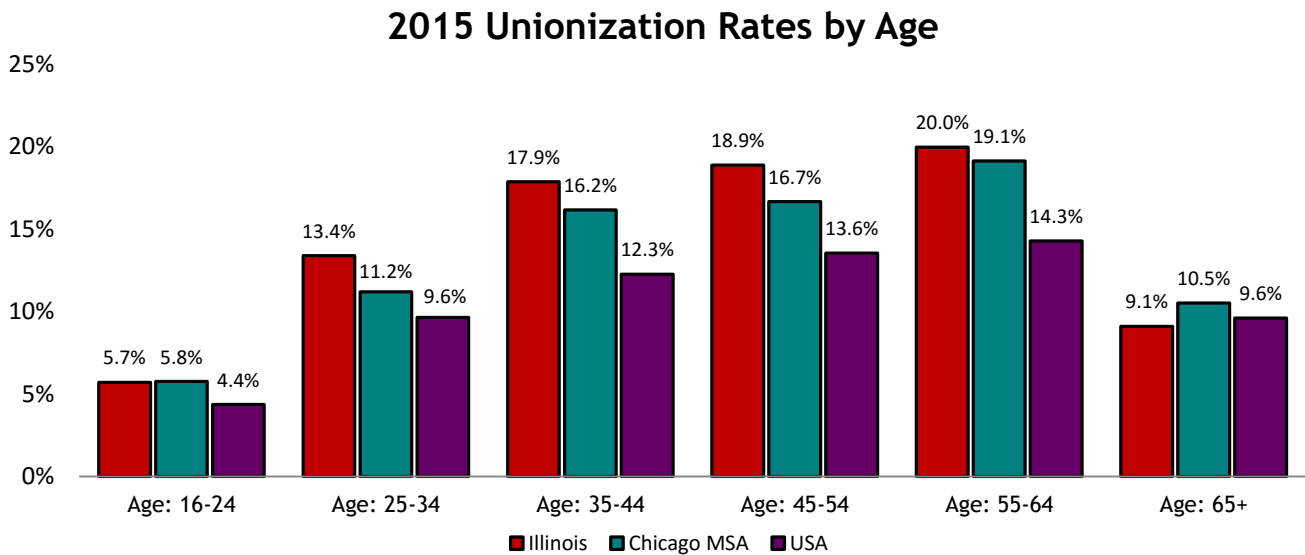
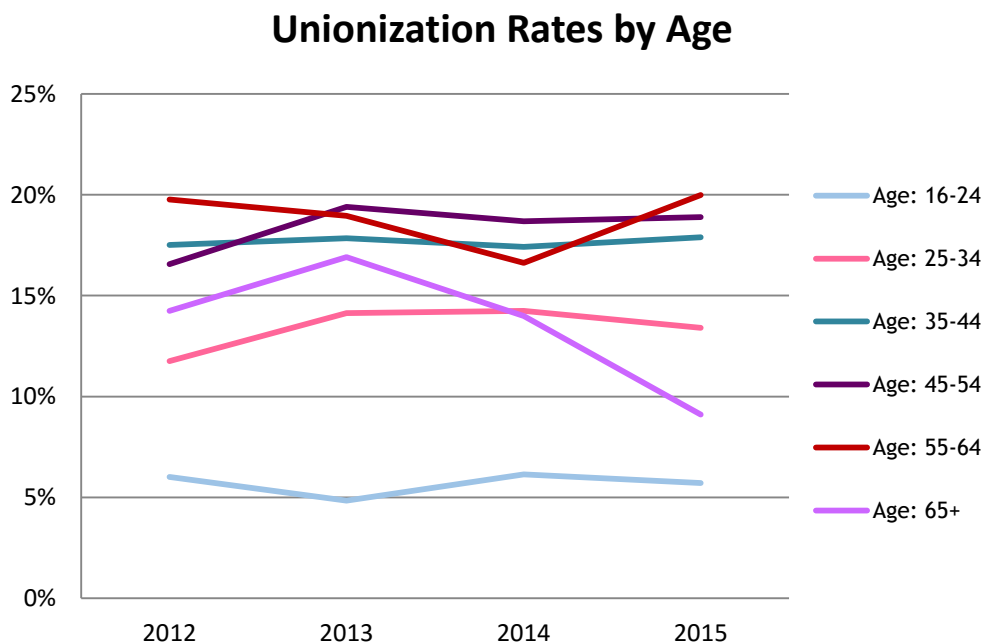


FIGURE 7: ILLINOIS UNIONIZATION RATES BY AGE GROUP, 2012-2015



Over the past four years, unionization rates have only significantly decreased for one age group: workers aged 65 and older. From 2012 to 2015, the unionization rate of those at least 65 years old declined by 5.1 percentage points. Unionization rates increased, on the other hand, for workers between the ages of 25 and 34 (1.7 percentage points) and between the ages of 45 and 54 (2.3 percentage points) (Figure 7). Overall, the average age of union workers is slightly over 44 years old and the average age of nonunion workers is just under 41 years old, regardless of region studied (Figure 8). The findings generally indicate that union organizing of new workers in the labor force has been limited.

**FIGURE 8: AVERAGE AGE OF UNION AND NONUNION WORKERS BY REGION, 2015**

2015	Age (Years)	
Variable	Nonunion	Union
Illinois	40.60	44.19
Chicago MSA	40.57	44.75
USA	40.94	44.51

Union membership varies across other demographic classifications as well (Figure 9). Among the most unionized socioeconomic groups are military veterans. Over one-in-five employed veterans are unionized in the Chicago area (22.7 percent) and in Illinois (22.4 percent). For the United States, approximately 15.1 percent of employed veterans are members of unions. The unionization rate for married workers is also above the overall average for each of the Chicago MSA, Illinois, and the United States. Conversely, foreign-born immigrant workers experience lower union membership rates than their respective regional averages. Foreign-born workers across America are more likely to be union members than those in the Chicago region and in Illinois. Native-born and naturalized citizens are more likely to be union members than foreign-born workers.

Figure 10 reveals that geographic distance from an urban core is a minor factor in union membership. In Chicago, workers who reside in the central city are more likely to be unionized (14.5 percent) than those who live in the suburbs (13.3 percent). In Illinois overall, 14.3 percent of urban workers are members of unions, 13.7 percent of suburban workers are unionized, and 18.2 percent of rural workers belong to a union. The comparable figures for the United States are respectively 11.3 percent, 11.5 percent, and 9.3 percent.

**FIGURE 9: UNIONIZATION RATES OF SELECT DEMOGRAPHIC VARIABLES BY REGION, 2015**

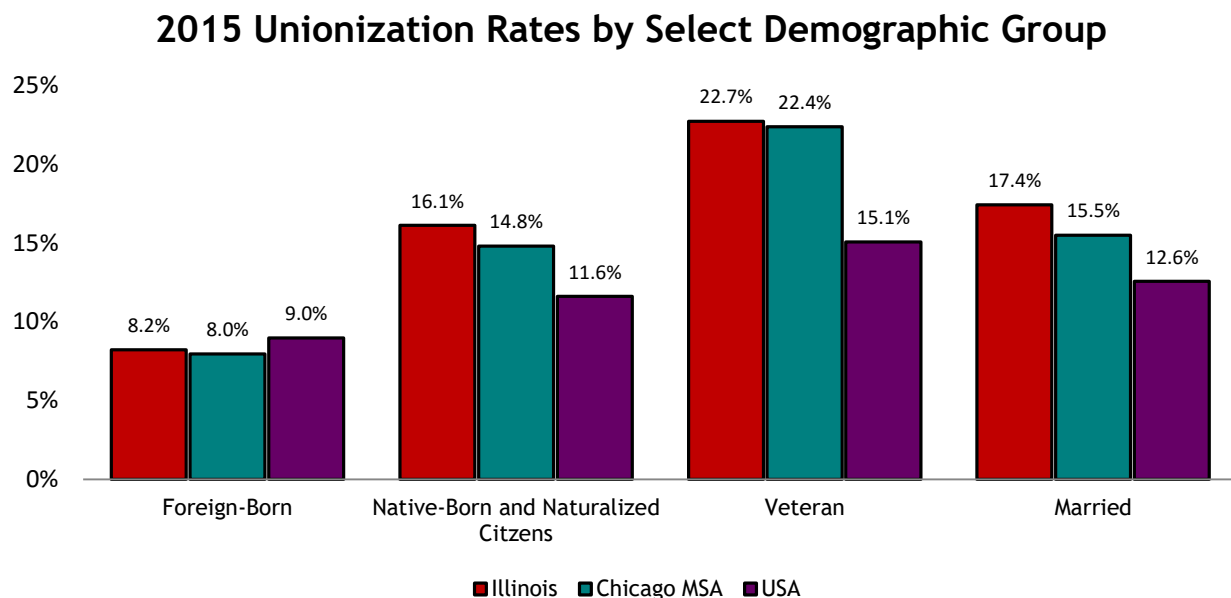
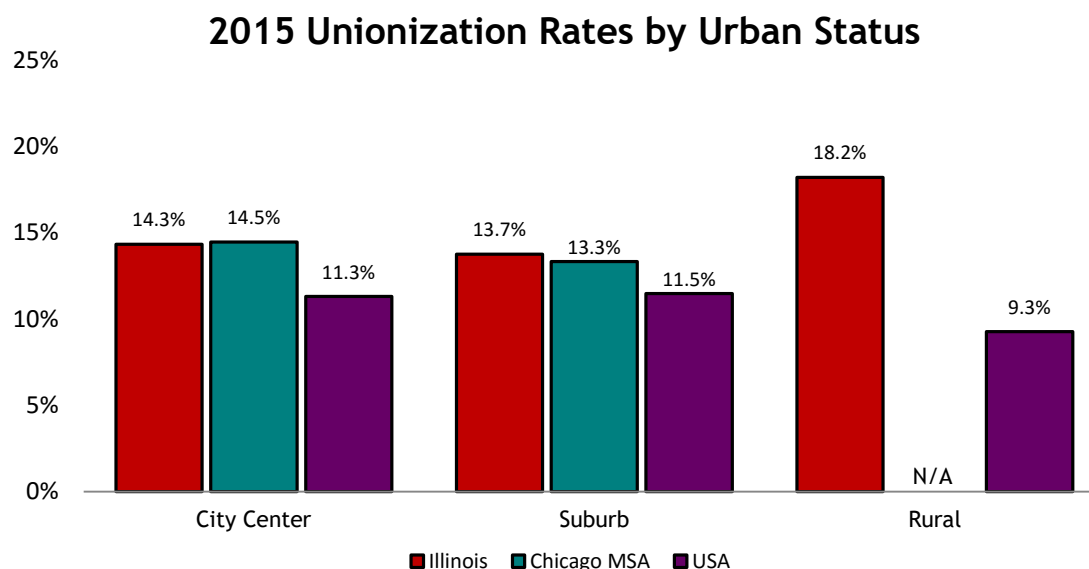


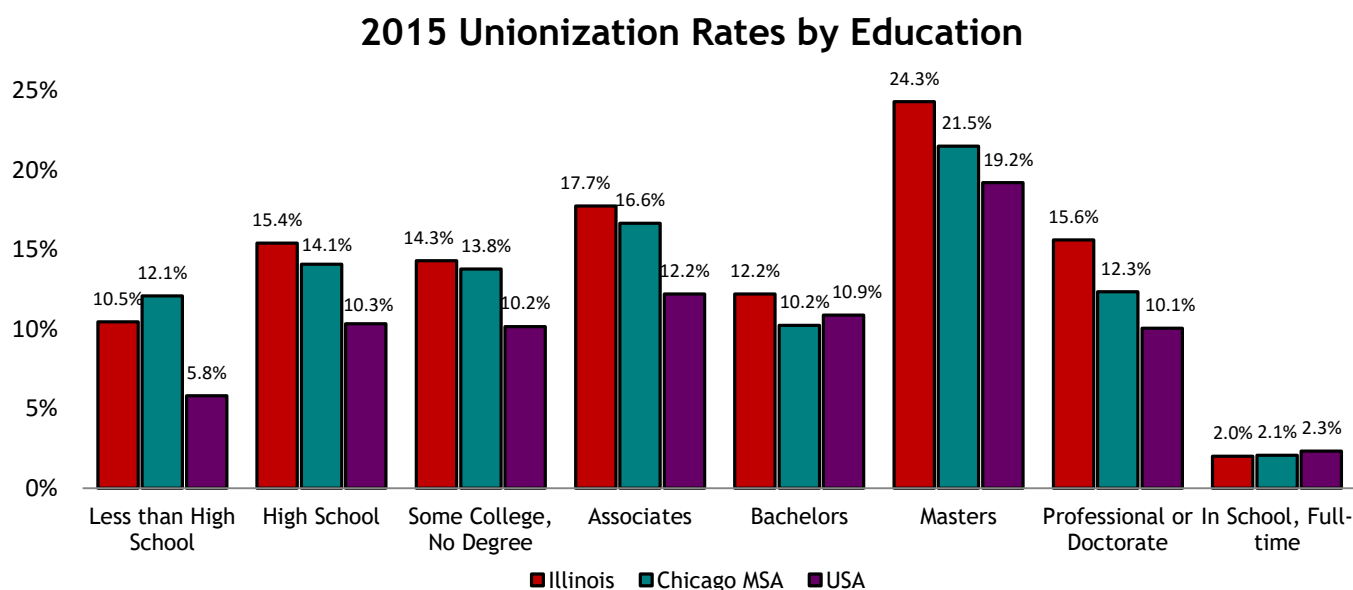
FIGURE 10: UNIONIZATION RATES BY URBAN STATUS BY REGION, 2015



## UNIONIZATION BY EDUCATION

Workers with master's degrees are the most unionized educational group in America (Figure 11). At 24.3 percent, unionization among master's degree holders in Illinois largely towers over the rates of all other educational attainment groups in each region studied. In Illinois, the Chicago area, and the United States, the second-most unionized employees by educational attainment are those with associate's degrees. Those without a high school degree and those with a bachelor's degree comprise the two least unionized educational groups. In Illinois, only 10.5 percent of workers without a high school degree and 12.2 percent of workers with a bachelor's degree are union members. According to the data, the only educational groups in which employed workers nationwide have higher union membership rates than Chicago are for workers who are also enrolled full-time in school and for those with a bachelor's degree.

FIGURE 11: UNIONIZATION RATES BY EDUCATIONAL ATTAINMENT OR STATUS BY REGION, 2015



Over the past six years, unionization rates have slightly increased for most educational groups (Figure 12). To ensure statistical significance, Figure 12 compares the three-year averages of union membership rates of educational attainment groups in Illinois for 2010-2012 and 2013-2015. Across the seven educational classifications, the union membership rate has increased in four cases: Workers with less than a high school degree (1.1 percentage points), with some college but no degree (1.4 percentage points), with associate's degrees (1.1 percentage points) and with a professional or doctorate degree (1.9 percentage points). The largest decline in unionization was for individuals with only a high school diploma or equivalent (-1.4 percentage points).

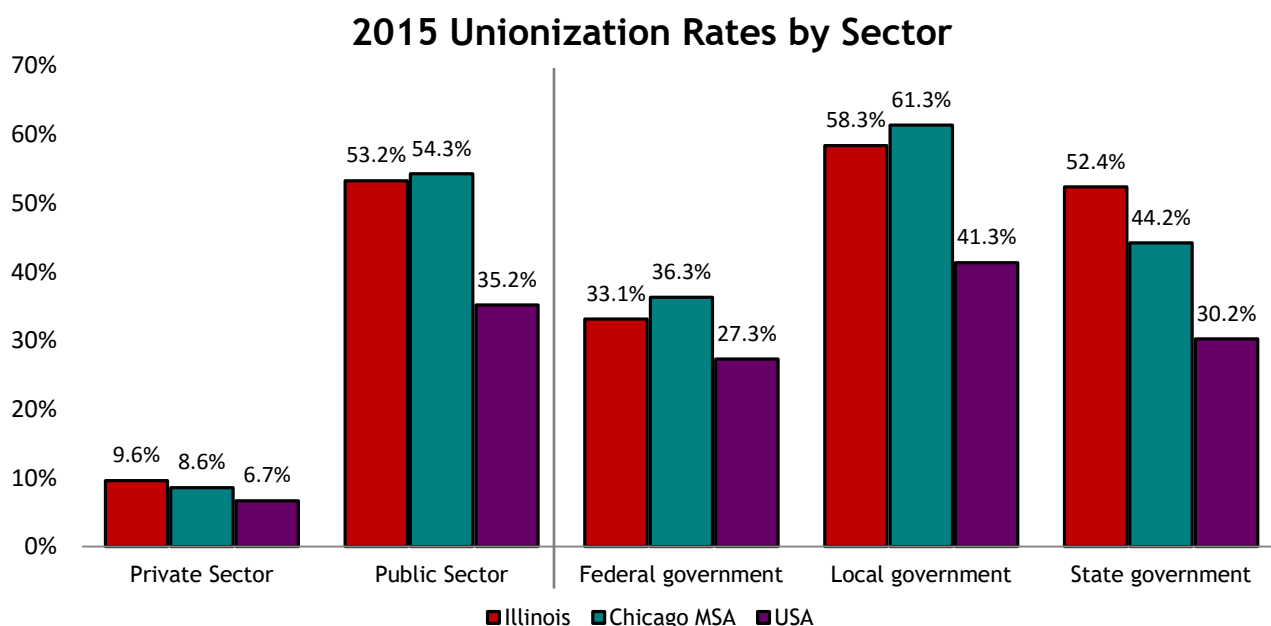
FIGURE 12: CHANGE IN UNIONIZATION RATES BY EDUCATION, THREE-YEAR AVERAGES, 2010-2015

Variable	Illinois		
	2010-12	2013-15	Change
Less than High School	8.9%	10.0%	+1.1%
High School	17.4%	15.9%	-1.4%
Some College, No Degree	14.0%	15.4%	+1.4%
Associates	16.2%	17.4%	+1.1%
Bachelors	13.4%	12.5%	-0.9%
Masters	24.4%	24.2%	-0.2%
Professional/Doctorate	9.1%	11.0%	+1.9%

## UNIONIZATION BY SECTOR, INDUSTRY, AND OCCUPATION

Unionization rates are significantly higher for public sector workers (Figure 13). Over half of all public sector workers are unionized in both Illinois (53.2 percent) and the Chicago region (54.3 percent), as are over one-third nationwide (35.2 percent). In comparison, fewer than one-in-ten private sector workers is now a union member in both Illinois (9.6 percent) and the Chicago MSA (8.6 percent) and 6.7 percent of the private sector is unionized in America.

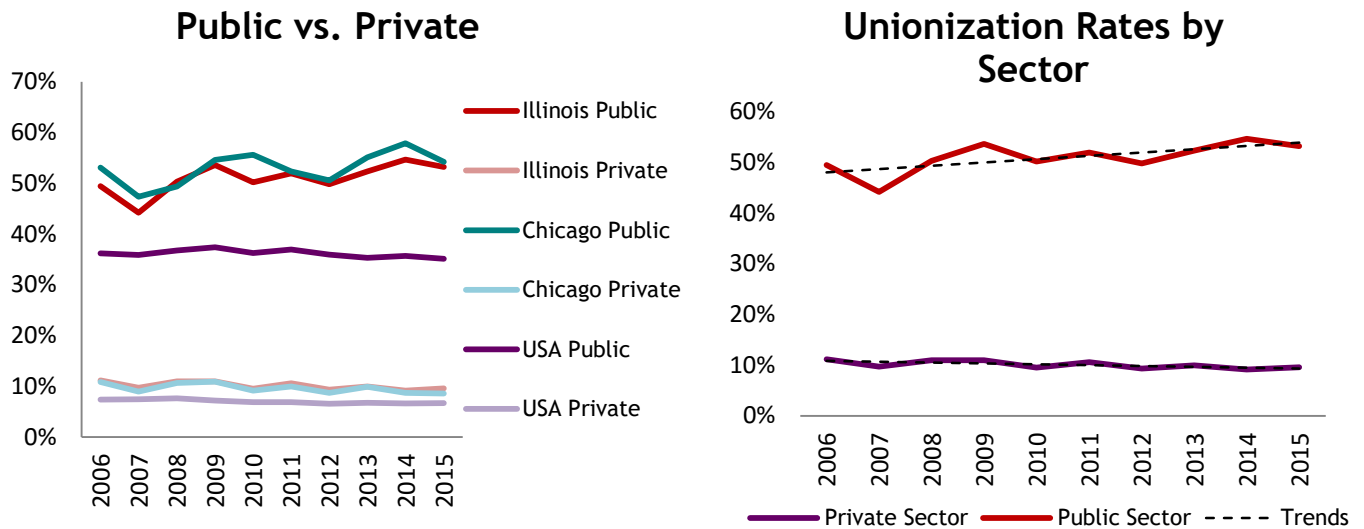
FIGURE 13: UNIONIZATION RATES BY SECTOR OR LEVEL OF GOVERNMENT BY REGION, 2015



Across all regions studied, the most unionized public sector group is local government employees, with approximately six-in-ten workers belonging to a union in Illinois (58.3 percent) and the Chicago MSA (61.3 percent). State government commands the second-highest unionization rate among workers in the three levels of American government. Among public sector workers in Illinois, the unionization rate is lowest for federal government employees. Federal government union membership rates are still over three times as high as the private sector workforce, however, at 33.1 percent in Illinois.

Public sector unionization in Illinois has increased over time (Figure 14). While private sector unionization has gradually decreased in Illinois, the Chicago metropolitan area, and the United States, public sector union membership has experienced gains in Illinois and in the Chicago area (nationwide, public sector unionization has marginally declined). In Illinois, 2006 union membership rates were 49.5 percent for public sector workers and 11.1 percent for private sector workers. The rates experienced a trough in 2007, at 44.2 percent and 9.7 percent, respectively, before rebounding. Today, the union membership rate for private sector workers is 1.6 percentage points lower than it was in 2006 but 3.8 percentage points higher for public sector workers.

FIGURE 14: UNIONIZATION RATES BY SECTOR BY REGION, 2006 TO 2015



Union membership varies significantly by industry of employment (Figure 15). The top five industries by unionization rates in Illinois are public administration (51.3 percent); construction (36.0 percent); transportation and warehousing (30.7 percent); the combined educational and health services industry (26.2 percent); and mining (18.2 percent). The national manufacturing workforce, associated historically as a leader in industrial unionization, is now only 9.4 percent organized, compared to 7.4 percent in the Chicago region and 10.6 percent across Illinois. The least-unionized industries generally are professional and business services; financial activities; and leisure and hospitality.

Figures 16 and 17 present industry breakdowns of total union membership in Illinois compared to total employment in the state. In Figure 16, industries are organized in descending order by unionization rate and weighted estimates are rounded to the nearest thousand. Note that the estimates include all *occupations* within an industry. The construction industry, for example, includes white-collar workers who typically are not union members, such as lawyers, office support workers, and architects. The top five industries with the most union members in Illinois are educational and health services (344,000 members), public administration (119,000 members), transportation and warehousing (98,000 members), construction (87,000 members), and manufacturing (72,000 members) (Figure 16). Together, union members from these five industries account for 85.1 percent of all union workers in Illinois (Figure 17). For more information, the Appendix includes profiles of unionization for these five largest Illinois industries by union membership.

FIGURE 15: UNIONIZATION RATES BY INDUSTRY BY REGION, 2015

## 2015 Unionization Rates by Industry

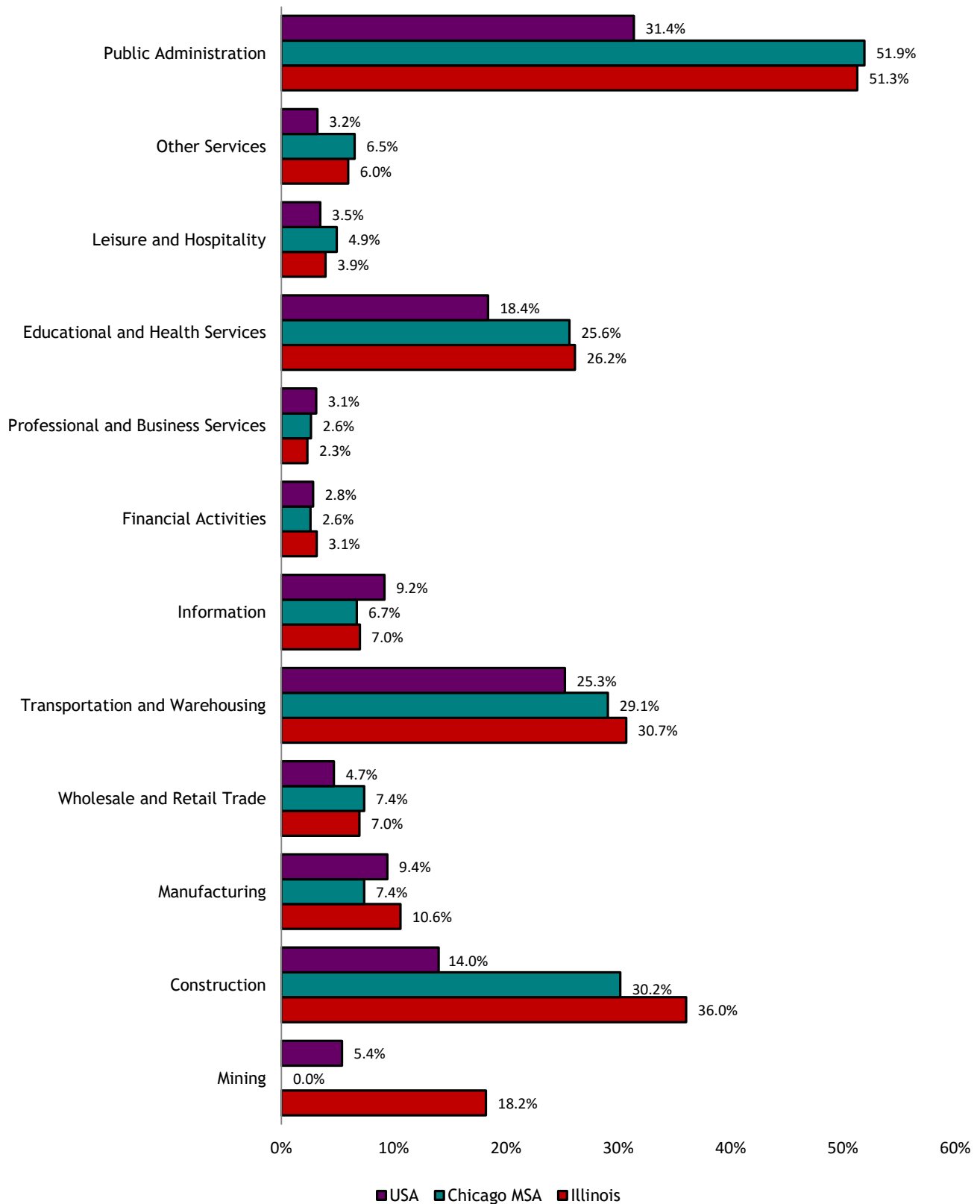
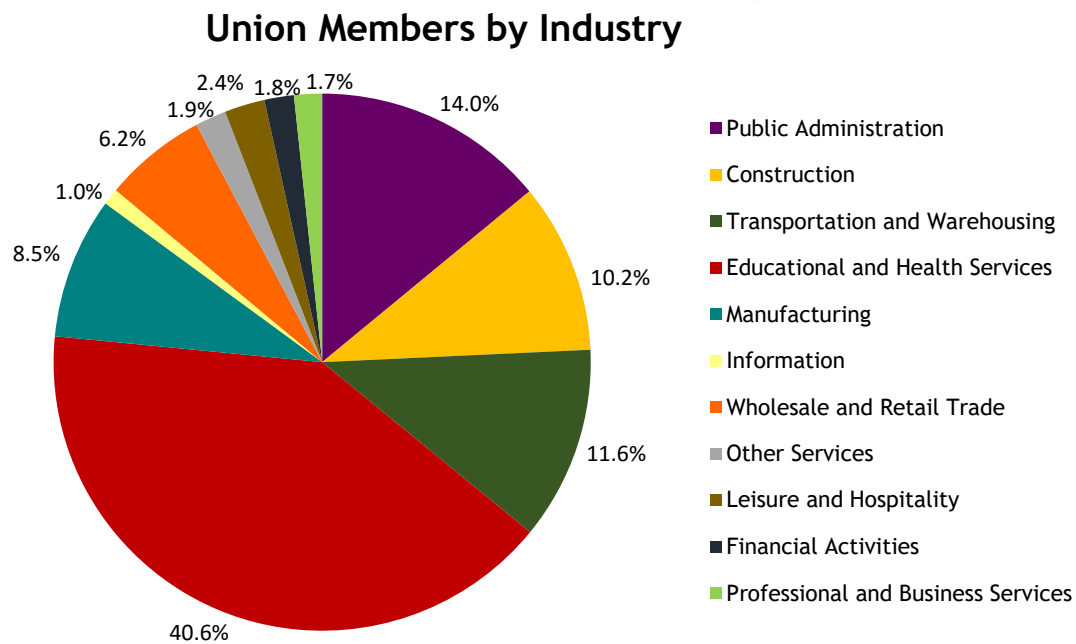


FIGURE 16: ILLINOIS INDUSTRY UNIONIZATION RATES, EMPLOYMENT, AND UNION MEMBERS, 2015

Illinois (2015)	Unionization Rate	Total Employment	Total Union Members	Total Sample
Public Administration	51.3%	232,000	119,000	220
Construction	36.0%	240,000	87,000	223
Transportation & Warehousing	30.7%	321,000	98,000	282
Educational & Health Services	26.2%	1,314,000	344,000	1,203
Manufacturing	10.6%	679,000	72,000	619
Information	7.0%	121,000	8,000	110
Wholesale & Retail Trade	7.0%	753,000	52,000	674
Other Services	6.0%	265,000	16,000	239
Leisure & Hospitality	3.9%	521,000	21,000	455
Financial Activities	3.1%	478,000	15,000	443
Professional & Business Services	2.3%	612,000	14,000	549

FIGURE 17: COMPOSITION OF ILLINOIS UNION WORKFORCE BY INDUSTRY, 2015



One cautionary note must be mentioned, however. While the total sample included 5,565 respondents of persons living in Illinois who were employed (5,034 of whom offered their union membership status), cutting the data into industry-level investigations results in relatively small sample sizes. Thus, the statistics in Figure 16 are simply *estimates*. Nevertheless, they are informative in that they shed light on the state's union membership and provide, at the very least, general parameters on the composition of the union workforce.

Lastly, Figure 18 depicts unionization rates by occupation. Across all regions, the most unionized occupation groups are construction and extraction occupations such as carpenters and operating engineers (40.4 percent in Illinois); professional and related occupations including teachers (23.0 percent in Illinois); installation, maintenance, and repair occupations such as mechanics (22.6 percent in Illinois); and transportation and moving jobs such as public transit workers and truck drivers (20.9 percent in Illinois). Nevertheless, compared to the nation, unionization rates in these four occupations are significantly higher in Illinois. Union membership in construction and extraction occupations, as an example, is 23.2 percentage points higher in Illinois than the comparable United States average. The

least-unionized occupations are sales and related; management, business, and financial; and office and administrative support jobs in Illinois.

**FIGURE 18: UNIONIZATION RATES BY OCCUPATION BY REGION, 2015**

Occupation (2015)	Illinois	Chicago MSA	USA
<i>Management, Business, &amp; Financial</i>	4.8%	4.5%	4.4%
<i>Professional &amp; Related</i>	23.0%	21.4%	16.8%
<i>Service</i>	16.6%	16.3%	10.6%
<i>Sales &amp; Related</i>	4.1%	4.3%	3.2%
<i>Office &amp; Administrative Support</i>	9.9%	9.0%	9.3%
<i>Construction &amp; Extraction</i>	40.4%	33.4%	17.2%
<i>Installation, Maintenance, &amp; Repair</i>	22.6%	21.4%	14.7%
<i>Production</i>	15.6%	13.5%	12.6%
<i>Transportation &amp; Material Moving</i>	20.9%	18.5%	15.7%

## **PREDICTING UNION MEMBERSHIP IN ILLINOIS**

An advanced analytic model is developed to predict the chances that any given worker is a union member in Illinois, using data from 2013 through 2015. The model, which is detailed in the Table A of the Appendix, reports how statistically significant variables increase or decrease one's probability of being a union member. The analysis includes data on over 13,000 Illinois workers, and weights are applied to match the sample to the actual Illinois population. Given that Illinois averaged about 6 million workers over this time, the sample size would yield a normal  $\pm 1$  percent margin of error in a standard survey report.

Many factors increase the likelihood that an employed person is a union member in Illinois (Figure 19). Relative to workers in the private sector, employment in local government, the largest contributor to an individual's chances of being a union member, raises the probability by 21.7 percentage points on average. State and federal government employment respectively increase the union probability by 19.0 and 14.3 percentage points relative to private sector workers. Employment in the construction *industry* lifts the likelihood that a worker is a union member by 10.2 percentage points relative to workers in the manufacturing industry. There is also evidence that working in transportation and utilities, mining, and leisure and hospitality all improve the chances of being a union member by between 5 and 9 percentage points, relative to manufacturing. Note that the industry variables include both public and private sector workers, and the independent effects of public sector employment are captured in the local government, state government, and federal government variables. Ultimately, employment growth in the public sector or through infrastructure investment would likely increase unionization in Illinois.

Beyond sector and industry influencers, race and ethnicity factor into the chances that a given worker in Illinois is unionized. African-American workers are statistically the most likely racial or ethnic group to be union members in Illinois. African-Americans are 9.8 percentage points more likely, on average, to be union members than all other non-white groups. White, non-Latino workers are also 5.0 percentage points more likely to be unionized than all other non-black groups.

Some educational, occupational, and industry factors contribute negatively to the probability that a worker is in a union. Holding a professional or doctorate degree reduces the likelihood that a worker is a union member by 6.1 percentage points. Compared to the manufacturing industry, the educational and health services, professional and related services, and other services industries reduce the chances by between 6 and 7 percentage points. Additionally, workers in service, office, administrative support, farming, fishing, forestry, sales, management, business, and financial positions are all 6 to 18 percentage points less likely to be union members than similar workers in production occupations.

FIGURE 19: PROBABILITY OF BEING A UNION MEMBER IN ILLINOIS, LARGEST FACTORS, 2013-2015

Probability of Union Membership	Illinois Mean
<i>Predictor</i>	<i>Percentage Point Change</i>
Sector: Local government	+21.70%
Sector: State government	+18.98%
Sector: Federal government	+14.30%
Industry: Construction	+10.17%
Race: African-American	+9.75%
Industry: Transportation & utilities	+8.48%
Industry: Mining	+5.82%
Industry: Leisure & hospitality	+5.54%
Race: White	+5.03%
Education: Professional or doctorate degree	-6.14%
Occupation: Service	-6.17%
Industry: Other services	-6.27%
Industry: Professional & related services	-6.44%
Industry: Educational & health services	-6.79%
Occupation: Office & administrative support	-11.19%
Occupation: Farming, fishing, & forestry	-12.43%
Occupation: Sales & related	-13.97%
Occupation: Management, business, & financial	-18.27%
Constant	14.53%
Observations	13,196

Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. Only statistically significant variables with a coefficient over  $\pm 5.0$  percent are displayed in the figure. Occupation dummies are relative to “production” occupations and industry dummies are relative to “manufacturing.” For more, see the Appendix.

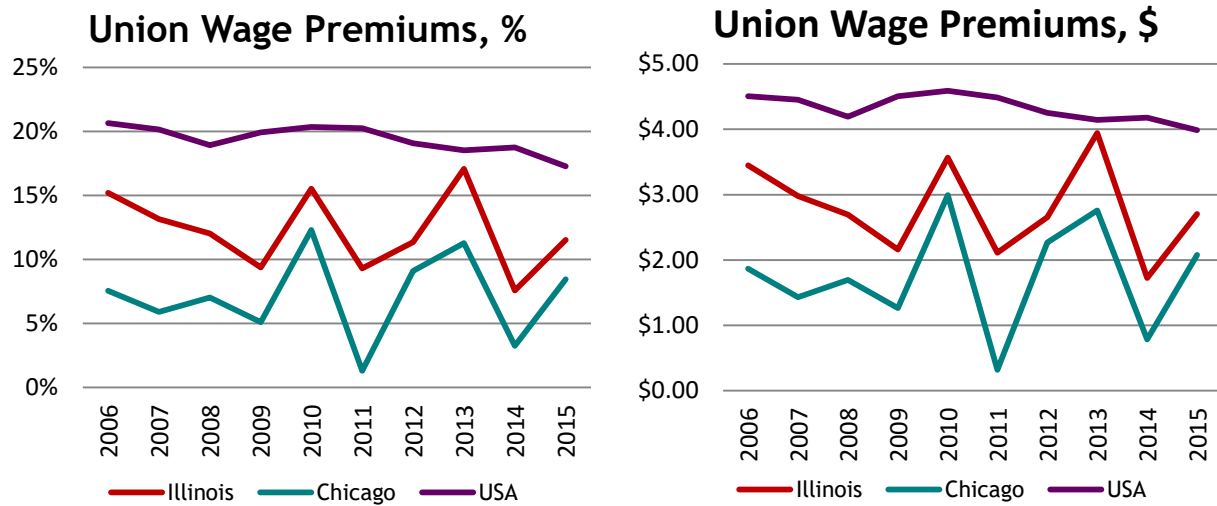
## UNION WAGES

Unionized workers typically earn more than their nonunion counterparts (Figure 20). Figure 20 graphically illustrates the difference between the average union wage and the average nonunion wage in Illinois, the Chicago MSA, and the United States by both percentage benefit and actual per-hour dollar benefit. The results do not control for other factors which may increase a worker’s wages (e.g., education, occupation, industry, age, etc.). The raw averages show that, regardless of geography and time, union membership has been positively correlated with increased worker wages. Nationwide, union membership continues to raise worker wages by about \$4.00 per hour, or by about 17 percent. The gap between union and nonunion wages appears to be smaller in Illinois and even less impactful in the Chicago metropolitan region. The differences increased over the past year, up from a \$1.72 hourly benefit in Illinois and a \$0.79 hourly benefit in the Chicago region in 2014. Today, the respective wage differences are \$2.71 per hour in Illinois and \$2.08 per hour in Chicago (Figure 21). Thus, unions raise individual incomes by lifting wages per hour.

The data presented in Figure 20 may overstate or understate the union wage effect because union members may be more or less likely to have characteristics associated with higher wages such as age, education, job experience, and geographic location. Regression analyses (OLS and quantile regressions) are utilized to control for these and similar factors in order to isolate the independent effect of unionization on wages and report them in Figure 21. The national average further controls for an individual respondent’s state of residence. Data are for employed persons aged 16 and older from 2013 through 2015 and are based on the natural logarithm of hourly wages to “normalize the data” and

analyze the results in percentage terms. For more on the union wage premium regressions, see Table B in the Appendix.

**FIGURE 20: UNION WAGE DIFFERENCES BY REGION, PERCENTAGE AND DOLLAR VALUES, 2006 TO 2015**



**FIGURE 21: WAGES OF UNION AND NONUNION WORKERS BY REGION, 2015**

	Illinois		Chicago MSA		USA	
Variable	Nonunion	Union	Nonunion	Union	Nonunion	Union
Wage	\$23.46	\$26.16	\$24.59	\$26.67	\$23.05	\$27.03
Union Difference, %		+11.53%		+8.45%		+17.29%
Union Difference, \$		+\$2.70		+\$2.08		+\$3.98

After controlling for education, demographics, and employment factors, the union wage premium generally aligns with the differences reported in Figures 20 and 21 (Figure 22). On average, unions are found to increase a worker's per-hour wage by 11.1 percent in the United States. In Illinois, the union wage premium is an estimated 10.1 percent on average, holding all else constant (including occupation and industry). Both results are statistically significant, even at the 1-percent level.

**FIGURE 22: REGRESSIONS OF UNION WAGE PREMIUMS FOR THE UNITED STATES AND ILLINOIS, 2013-2015**

Union Wage Premium: Ordinary Least Squares (OLS) and Quantile Regressions, 2013-2015						
United States	Illinois					
Mean	Mean	Percentile: 10 <sup>th</sup>	Percentile: 25 <sup>th</sup>	Median	Percentile: 75 <sup>th</sup>	Percentile: 90 <sup>th</sup>
11.06%***	10.05%***	10.43%***	10.04%***	8.67%***	8.28%***	8.37%***
R <sup>2</sup> =0.456	R <sup>2</sup> =0.454	R <sup>2</sup> =0.173	R <sup>2</sup> =0.266	R <sup>2</sup> =0.309	R <sup>2</sup> =0.316	R <sup>2</sup> =0.307

Three asterisks (\*\*\*) indicate significance at the 1-percent level. Two asterisks (\*\*) indicates significance at the 5-percent level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. Statistics are adjusted by the outgoing rotation group earnings weight to match the total population 16 years of age or older. For more, see the Appendix.

A unique analytical tool, called a quantile regression, permits evaluation of the union wage premium across the wage distribution. While union membership is statistically associated with a 10.1 percent increase in the *average* Illinois worker's wage, the benefit is actually higher for those at the bottom of the state's hourly income distribution (Figure 22). In fact, over the past three years, the union wage effects produced raises of 10.4 percent for workers in the bottom 10 percent of wage earners. The union wage difference was smaller for the median worker, at 8.7 percent. The average union wage premium for the richest 10 percent of workers was lower still, at 8.4 percent. The estimates corroborate national findings from Schmitt (2008) in *The Union Wage Advantage for Low-Wage Workers*. The data strongly

indicate that unionization benefits low-income and middle-class workers most, helping to reduce income inequality.

How does the average Illinois union wage premium of 10.1 percent compare to the union effect in other states? Similar 2013-2015 ordinary least squares regression models are run to assess each of the 49 other states plus the District of Columbia against Illinois. The results, reported in Figure 23, lead to the conclusion that the Illinois union wage premium is the 17<sup>th</sup>-highest in the nation. Interestingly, the union wage premium is actually highest for Louisiana (16.3 percent), Indiana (15.1 percent), and Missouri (15.0 percent). A total of 12 states have union wage premiums that are found to be higher than the national average of 11.1 percent. Importantly, a positive union wage premium exists in every state.

The Illinois union wage premium (10.1 percent) is slightly lower than the national average (11.1 percent). This could be due to many reasons. As an example, because unionization is higher in Illinois relative to the nation, the “threat effect” could be stronger. That is, nonunion employers in Illinois may have raised wages to union standards to avert the threat of unionization, which benefits nonunion workers and closes the gap (Eren & Ozbeklik, 2014; Western & Rosenfeld, 2011). Regardless, estimates from 2013 through 2015 reveal that Illinois remains in the top half of states by union wage premium.

**FIGURE 23: UNION WAGE PREMIUMS BY STATE, OLS REGRESSIONS, 2013-2015**

Rank	State	Union Premium	Rank	State	Union Premium
	<i>United States</i>	<i>11.06%</i>	26	Arizona	9.38%
1	Louisiana	16.30%	27	Michigan	9.31%
2	Indiana	15.06%	28	Maryland	9.21%
3	Missouri	14.95%	29	Oregon	9.01%
4	Kansas	14.72%	30	Rhode Island	8.65%
5	Nevada	13.95%	31	West Virginia	8.35%
6	California	13.88%	32	Nebraska	8.23%
7	Arkansas	13.62%	33	Maine	8.20%
8	Idaho	11.94%	34	Kentucky	8.17%
9	Tennessee	11.68%	35	Georgia	7.91%
10	New Jersey	11.60%	36	Washington	7.64%
11	Minnesota	11.14%	37	Texas	7.54%
12	North Dakota	11.13%	38	Delaware	7.49%
13	Pennsylvania	11.02%	39	Connecticut	7.34%
14	Wisconsin	10.98%	40	District of Columbia	7.11%
15	Montana	10.75%	41	New Hampshire	6.46%
16	South Dakota	10.73%	42	Alaska	6.31%
17	Illinois	10.52%	43	North Carolina	5.48%
18	Hawaii	10.40%	44	Mississippi	5.20%
19	Alabama	10.19%	45	Vermont	5.15%
20	Oklahoma	10.14%	46	Florida	4.76%
21	Wyoming	10.13%	47	Iowa	4.75%
22	Ohio	9.75%	48	Colorado	3.83%
23	South Carolina	9.75%	49	Utah	1.75%
24	Massachusetts	9.55%	50	New Mexico	1.53%
25	New York	9.45%	51	Virginia	0.82%

All estimates are significant at least at the 5-percent level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. Statistics are adjusted by the outgoing rotation group earnings weight to match the total population 16 years of age or older. For more, see the Appendix.

## UNION AND NONUNION WAGES BY DEMOGRAPHIC GROUP

The union wage premium is positive in Illinois across both racial identification and gender identification. After controlling for education, demographics, and employment factors, the union wage premium is slightly higher for white, non-Latino workers in Illinois (Figure 24). The personal benefit to being a union member is 10.1 percent on average for white, non-Latino workers. The union wage premium is also a strong 9.6 percent advantage for non-white minority workers in Illinois. Accordingly, one of the most effective ways to reduce racial income inequality in the state would be to increase the unionization among non-white workers.

**FIGURE 24: REGRESSIONS OF UNION WAGE PREMIUMS BY RACIAL IDENTIFICATION, 2013-2015**

Union Wage Premium: Ordinary Least Squares (OLS), 2013-2015		
State Mean	Racial Identification: White	Racial Identification: Nonwhite
10.05%***	10.06%***	9.60%***
R <sup>2</sup> =0.454	R <sup>2</sup> =0.427	R <sup>2</sup> =0.466

Three asterisks (\*\*\*) indicate significance at the 1-percent level. Two asterisks (\*\*) indicates significance at the 5-percent level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. Statistics are adjusted by the outgoing rotation group earnings weight to match the total population 16 years of age or older. For more, see the Appendix.

Similarly the union wage premium is positive for both genders, after controlling for other observable factors (Figure 25). While the union wage premium is 10.1 percent in Illinois, the personal benefit to being a union member is 16.8 percent on average for men and 3.5 percent on average for women. Unionization thus helps female workers partially close the gender-based wage gap, especially compared to nonunion male workers.

**FIGURE 25: REGRESSIONS OF UNION WAGE PREMIUMS BY GENDER IDENTIFICATION, 2013-2015**

Union Wage Premium: Ordinary Least Squares (OLS), 2013-2015		
State Mean	Gender Identification: Male	Gender Identification: Female
10.05%***	16.85%***	3.49%***
R <sup>2</sup> =0.454	R <sup>2</sup> =0.477	R <sup>2</sup> =0.418

Three asterisks (\*\*\*) indicate significance at the 1-percent level. Two asterisks (\*\*) indicates significance at the 5-percent level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. Statistics are adjusted by the outgoing rotation group earnings weight to match the total population 16 years of age or older. For more, see the Appendix.

## NEW IN 2016: RECENT DATA ON LABOR UNION ESTABLISHMENTS

As a result of the gradual, long-term decline in union membership in Illinois, the total number of “labor unions and similar labor organizations” has declined over the past decade. Figure 26 presents *County Business Patterns* data on the number of establishments and paid employees in these organizations. An establishment is a single physical location where business is conducted or where services or operations are performed. Establishments include all the union halls, employees’ associations, worker centers, and similar offices of local or national labor unions, collective-bargaining units, and similar organizations.

The total number of establishments in 2014, the latest year for which data are available, was 891. This is down considerably from the 989 establishments of labor unions and similar labor organizations in Illinois in 2005. Over the past ten years, there has been a decline of 98 worker establishments (-9.9 percent) in Illinois - despite a rise in overall employment.

Consequently, the number of paid employees working directly for labor unions and similar labor organizations has fallen from 11,379 workers in 2005 to 10,316 workers in 2014 (-9.3 percent). There are thus 1,063 fewer individuals working for labor unions and similar organizations today than there were a decade ago. Note that employees of unions peaked in 2009, at 13,245 individuals employed at union halls and similar establishments. As unionization has decreased, revenue from membership dues has

relatively declined, resulting in these nonprofit organizations closing down and laying off their workers (Figure 26).

**FIGURE 26: UNIONS AND SIMILAR ORGANIZATIONS, ESTABLISHMENTS AND EMPLOYMENT, 2005-2014**

Illinois	NAICS Code: 81393 - Labor Unions and Similar Labor Organizations	
Year	Establishments	Paid Employees
2005	989	11,379
2006	950	12,043
2007	961	11,615
2008	937	13,059
2009	939	13,245
2010	942	11,304
2011	941	10,549
2012	918	10,546
2013	912	10,833
2014	891	10,316
2005-2014 Change	-98	-1,063

## **CONCLUSIONS**

Unionization has declined in Illinois, in the Chicago region, and in America. Today, there are approximately 84,000 fewer union members in Illinois than there were in 2006, contributing to the reduction of 573,000 union workers across the nation over the past ten years. Declining union membership in Illinois has primarily been the result of decreases in male unionization and private sector unionization.

Consequently, the total number of labor unions and similar labor organizations has declined over the past decade. There are 891 labor unions and similar organizations in Illinois, a decline of nearly 100 worker establishments over the past ten years. There are also 1,063 fewer individuals working for labor unions and similar organizations today than there were one decade ago.

Despite the long-term downward trends, both the unionization rate and total union membership have improved from their 2012 lows. Since 2012, the unionization rate increased from 14.6 percent to 15.2 percent, resulting in an estimated 46,000 new union members. These statewide increases were driven by 2014 to 2015 increases in the unionization of female workers, Latino and Latina workers, and the aggregated educational and health services industry.

Over half of all public sector workers continue to be unionized in both Illinois and the Chicago metropolitan area. Meanwhile, slightly more than one-third of all public sector workers are unionized across the nation. In comparison, one-in-ten (9.6 percent) of Illinois workers in the private sector are union members while just 6.7 percent of private sector workers are now unionized across America.

Union membership is influenced by a number of factors. Employment in the public sector, construction, transportation and utilities, mining, and leisure and hospitality all raise the chances that a given worker is a union member. African-American workers are also statistically more likely to be union members than their racial or ethnic counterparts. On the other hand, workers employed in management, business, and financial occupations, workers employed sales and related occupations, and those with professional or doctorate degrees are less likely to be unionized.

Labor unions increase individual incomes by lifting hourly wages - particularly for low-income workers. In Illinois, unions raise worker wages by an average of 10.1 percent. The state's union wage effect is the 17<sup>th</sup>-highest in the nation. The union wage differential is higher for the bottom 10 percent of workers (10.4 percent) than the richest 10 percent of workers (8.4 percent), helping to reduce income inequality.

Organized labor still plays a vital role in Illinois' economy and communities. The Illinois labor movement, however, will continue to face both short- and long-term challenges. In the short term, there are political pressures to weaken unions through various legislative and corporate measures. Over the long term, the trend of declining union membership rates may persist. Labor's response to these challenges could define its influence and effectiveness in the decades to come.

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**APPENDIX**

TABLE A: PROBIT REGRESSION ON PROBABILITY OF UNION MEMBERSHIP, AVERAGE MARGINAL EFFECTS, ILLINOIS WORKERS, 2013-2015

Illinois		
Prob(Union Member)	Coefficient	(St. Err.)
Age	0.0065***	(0.0001)
Age <sup>2</sup>	-0.0001***	(0.0000)
Female	-0.0102***	(0.0003)
Citizen	0.0492***	(0.0006)
White, non-Latino	0.0503***	(0.0007)
African-American	0.0975***	(0.0008)
Latino or Latina	0.0322***	(0.0008)
Center City	0.0168***	(0.0004)
Suburb	-0.0036***	(0.0004)
Federal government	0.1430***	(0.0009)
State government	0.1898***	(0.0006)
Local government	0.2170***	(0.0004)
Usual hours worked	0.0017***	(0.0000)
Less than high school	-0.0254***	(0.0006)
Some college, no degree	0.0002	(0.0004)
Associate's	-0.0012**	(0.0005)
Bachelor's	-0.0075***	(0.0005)
Master's	0.0277***	(0.0006)
Professional/Doctorate	-0.0614***	(0.0007)
Industry/Occupation Dummies	Y	Y
Constant	0.1453***	(0.0001)
R <sup>2</sup>	0.2810	
Observations	13,196	

A probit regression model allows for analysis of the probability of a “binary” yes-or-no variable occurring. In this case, the model reports the (positive or negative) direction of the effect that a factor has on the probability of being a union member and whether the output is statistically significant. To determine the magnitude of statistically significant factors, average marginal effects (AMEs) are generated and reported using the *dydx*, *margins* command in STATA. Importance weights to match the sample size to the actual population are applied.

Three asterisks (\*\*\*) indicate significance at the 1% level, two asterisks (\*\*) indicates significance at the 5% level, and one asterisk (\*) indicates significance at the 10% level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. The total number of observations of employed persons was 13,196 in Illinois. Importance weights are applied to the probit model.

TABLE B: OLS AND QUANTILE REGRESSIONS OF THE IMPACT OF UNION MEMBERSHIP ON THE NATURAL LOG OF REAL HOURLY WAGES, 2013-2015

Ln(Real Wage)	(1) USA Mean		(1) Illinois Mean		(2) Illinois Median, Q(.5)		(3) Indiana Mean	
	Coefficient	(St. Err.)	Coefficient	(St. Err.)	Coefficient	(St. Err.)	Coefficient	(St. Err.)
Union member	0.1106***	(0.0002)	0.1051***	(0.0007)	0.0867***	(0.0008)	0.1506***	(0.0011)
Age	0.0403***	(0.0000)	0.0390***	(0.0001)	0.0348***	(0.0001)	0.0399***	(0.0001)
Age <sup>2</sup>	-0.0004***	(0.0000)	-0.0004***	(0.0000)	-0.0003***	(0.0000)	-0.0004***	(0.0000)
Female	-0.1553***	(0.0001)	-0.1364***	(0.0005)	-0.1276***	(0.0005)	-0.1797***	(0.0007)
Veteran	0.0142***	(0.0002)	0.0585***	(0.0011)	0.0754***	(0.0012)	-0.0191***	(0.0013)
Citizen	0.0725***	(0.0002)	0.0256***	(0.0011)	0.0061***	(0.0012)	0.1479***	(0.0025)
Immigrant	-0.0224***	(0.0002)	-0.0766***	(0.0009)	-0.0808***	(0.0010)	-0.0258***	(0.0022)
White	0.0110***	(0.0002)	0.0038***	(0.0010)	0.0102***	(0.0011)	0.0318***	(0.0022)
African-American	-0.1039***	(0.0002)	-0.1408***	(0.0012)	-0.1129***	(0.0012)	-0.0784***	(0.0024)
Latino	-0.0701***	(0.0002)	-0.0665***	(0.0011)	-0.0589***	(0.0012)	-0.0033	(0.0023)
Chicago MSA			0.0066***	(0.0007)	0.0540***	(0.0008)		
Center City	0.0467***	(0.0001)	0.0255***	(0.0009)	0.0351***	(0.0010)	0.0258***	(0.0008)
Suburb	0.0650***	(0.0001)	0.0370***	(0.0008)	0.0520***	(0.0009)	0.0975***	(0.0007)
Federal government	0.0441***	(0.0003)	-0.0433***	(0.0019)	0.0283***	(0.0020)	0.1145***	(0.0026)
State government	-0.1060***	(0.0002)	-0.1169***	(0.0013)	-0.0799***	(0.0014)	-0.0985***	(0.0017)
Local government	-0.0932***	(0.0002)	-0.0771***	(0.0010)	-0.0830***	(0.0011)	-0.1130***	(0.0014)
Usual hours worked	0.0043***	(0.0000)	0.0053***	(0.0000)	0.0072***	(0.0000)	0.0033***	(0.0000)
Involuntarily part-time	-0.1454***	(0.0002)	-0.1579***	(0.0011)	-0.1504***	(0.0011)	-0.1400***	(0.0015)
Less than high school	-0.1411***	(0.0002)	-0.1125***	(0.0010)	-0.1092***	(0.0010)	-0.1265***	(0.0013)
Some college	0.0397***	(0.0001)	0.0576***	(0.0007)	0.0330***	(0.0007)	0.0391***	(0.0009)
Associate's	0.0919***	(0.0002)	0.0738***	(0.0009)	0.0546***	(0.0009)	0.0898***	(0.0011)
Bachelor's	0.3073***	(0.0001)	0.2946***	(0.0007)	0.2728***	(0.0008)	0.3058***	(0.0010)
Master's	0.4183***	(0.0002)	0.4259***	(0.0009)	0.4223***	(0.0010)	0.3949***	(0.0014)
Professional/Doctorate	0.5554***	(0.0003)	0.6318***	(0.0014)	0.6328***	(0.0015)	0.6151***	(0.0020)
Industry Dummies	Y		Y		Y		Y	
Occupation Dummies	Y		Y		Y		Y	
State Dummies	Y		N		N		N	
Constant	1.5691***	(0.0009)	1.4112***	(0.0048)	1.6745***	(0.0033)	1.5504***	(0.0049)
R <sup>2</sup>	0.4558		0.4538		0.3235		0.4311	
Observations	409,959		13,156		13,156		6,472	
Weighted	Y		Y		Y		Y	

Three asterisks (\*\*\*) indicate significance at the 1% level, two asterisks (\*\*) indicates significance at the 5% level, and one asterisk (\*) indicates significance at the 10% level. Source: CPS-ORG, Center for Economic and Policy Research Uniform Data Extracts, 2013-2015. The total number of observations of employed persons was 13,196 in Illinois. The data are adjusted by the outgoing rotation group earnings weight to match the total population 16 years of age or older.

Ordinary least squares and quantile regression models account for other variables to parse out the actual and unique causal effect that union membership has on hourly wages on average. The analyses control for a host of demographic, work, sector, industry, occupation, and education variables that could also have an impact a worker's wages. In the U.S. model, state indicator variables are included to factor in unmeasured state-specific characteristics. The sample, in all cases, is weighted to match the actual population. Regression (1) compares the impact of union membership on wages for Illinois compared to the nation from OLS analyses, regression (2) provides the median regression as an example of outputs from the quartile regressions for Illinois from Figure 22, and regression (3) uses Indiana as an example of OLS results from other states as in Figure 23. For full (2) and (3) regression outputs in a .txt format, please contact author Frank Manzo IV at [fmanzo@illinoisepi.org](mailto:fmanzo@illinoisepi.org).

**Industry Profiles: Union and Nonunion Workers in Illinois, 2013-2015**

2013-2015	Construction		Manufacturing		Transportation and Warehousing		Education, Health, and Social Services		Public Administration	
Variable	State Labor Market		State Labor Market		State Labor Market		State Labor Market		State Labor Market	
Employed	84.0%		91.4%		90.3%		91.8%		92.1%	
In Labor Force	96.6%		97.3%		96.5%		96.1%		95.7%	
Unemployment Rate	13.0%		6.1%		6.4%		4.4%		3.8%	
Unionization Rate	37.5%		11.4%		31.7%		24.5%		54.1%	
Share of Union Workforce	10.2%		8.5%		11.6%		40.6%		14.0%	
Total Observations	910		1,997		985		3,891		647	
Standard Margin of Error	±3.2%		±2.2%		±3.1%		±1.6%		±3.9%	
Variable	Nonunion	Union	Nonunion	Union	Nonunion	Union	Nonunion	Union	Nonunion	Union
Observations	420	258	1,724	218	630	291	2,759	917	299	348
<u>Employment</u>										
Average Workers Per Year	149,463	89,529	606,629	78,119	226,561	105,128	970,475	317,127	104,583	123,251
Hourly Wage	\$22.47	\$32.93	\$25.05	\$21.60	\$21.00	\$27.18	\$23.76	\$25.55	\$27.75	\$28.58
Union Wage Difference, %	--	+46.5%	--	-13.8%	--	+29.4%	--	+7.5%	--	+3.0%
Usual Hours Worked	39.5	39.7	41.4	40.0	40.9	40.4	35.9	40.5	38.8	40.6
<u>Education</u>										
Less than High School	16.9%	8.8%	11.2%	12.8%	8.0%	2.1%	2.6%	2.0%	0.8%	2.3%
High School	39.3%	49.9%	31.2%	42.9%	36.1%	28.3%	15.0%	11.6%	11.8%	15.7%
Some College, No Degree	16.7%	18.0%	16.8%	19.4%	21.3%	35.1%	19.0%	9.1%	19.6%	28.8%
Associates	9.8%	13.8%	7.3%	13.5%	9.2%	13.2%	12.6%	7.6%	14.8%	14.7%
Bachelors	15.9%	6.9%	22.4%	9.1%	19.1%	20.4%	28.3%	28.3%	33.6%	25.4%
Masters	1.2%	1.9%	9.0%	0.4%	5.9%	0.7%	14.8%	37.1%	11.2%	10.8%
Professional or Doctorate	0.2%	0.7%	2.1%	1.9%	0.4%	0.2%	7.7%	4.3%	8.2%	2.3%
<u>Gender</u>										
Male	86.4%	98.5%	65.1%	79.9%	72.9%	69.3%	24.7%	23.8%	49.9%	64.8%
Female	13.6%	1.5%	34.9%	20.1%	27.1%	30.7%	75.3%	76.2%	50.1%	35.2%
<u>Race/Ethnicity</u>										
White, non-Latino	67.3%	78.6%	62.3%	59.5%	60.7%	64.2%	69.3%	71.1%	71.3%	69.3%
African-American	4.7%	5.5%	7.1%	15.0%	21.5%	29.4%	14.4%	17.3%	16.9%	21.1%
Latino or Latina	25.2%	15.8%	22.5%	22.1%	14.1%	5.2%	8.5%	8.3%	7.5%	7.6%
<u>Other Information</u>										
Average Age	40.5	42.9	43.9	45.0	42.3	45.3	41.3	44.3	46.8	44.3
Lives in the Chicago MSA	70.2%	59.8%	68.6%	45.8%	75.8%	72.9%	64.8%	66.4%	61.1%	61.9%

Union workers in these five industries accounted for 85.1 percent of all union members in Illinois in 2013, 2014, and 2015, according to the data from the Bureau of Labor Statistics. Data from three years are used to increase statistical significance. Standard margins of error are reported as equivalents if data were obtained from a simple survey, based on total observations and estimated average population using the earnings weight provided. Note that all industry profiles are *estimates* and serve as general parameters, not exact figures.

